

Washington State  
**Vital Statistics**  
**2001**

**December 2002**



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*Acknowledgements:*

We gratefully acknowledge the contributions of the many individuals who participate in the reporting of vital statistics and the maintenance of these very important public health indicators. We thank physicians, hospital staff, midwives, funeral directors, coroners/medical examiners, local registrars, and all staff of the Center for Health Statistics. Most importantly, we appreciate the role families and individuals play by providing information about the very personal events of their daily lives to promote the health of the population of Washington State.

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## Washington State Vital Statistics Highlights for 2001

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- **More than 79,000 babies were born in 2001**  
Washington women had 79,542 babies in 2001, a decrease of 1,462 births compared to 2000. The birth rate also decreased, to 13.3 births per 1,000 population.
- **Most of the births were to women in their 20's and early 30's**  
Three-quarters (75.9%) of 2001 births were to women aged 20-34.
- **The percent low birth weight decreased in 2001**  
Low birth weight (<2500 grams) occurred in 5.1-5.3% of births in 1990-1994 and has increased slightly but steadily since then, reaching 5.9% of births in 1999. In 2001, it decreased to 5.8% of births.
- **Births to unmarried mothers increased over the decade but has not changed much recently**  
The percentage of births to unmarried mothers increased from 23.4% in 1989 to 28.0% in 1999 and 28.7% in 2001.
- **Over 44,000 residents died in 2001**  
There were 44,563 deaths of Washington State residents in 2001. Although the number of deaths has increased fairly steadily over the past decade, there has been a decline in the age-adjusted death rate since the state's population has also grown during this period.
- **Heart disease and cancer continued as the leading causes of death**  
Ranking of the top five causes of death remains the same as it was in 2001. In addition, the percent distribution of deaths among the leading causes has changed very little.
- **The infant death rate remains low**  
The infant death rate was 5.8 per 1,000 live births in 2001. For comparison, the infant death rate a decade ago (1991) was 7.5 per 1,000 live births.
- **The marriage rate did not change; the divorce rate decreased**  
The marriage rate was 7.0 per 1,000 population in both 2000 and 2001. The divorce rate was 4.4 per 1,000 population in 2001, a decrease from the rate of 4.6 in 2000 and 4.9 in 1999.
- **Emily and Jacob continued as the most popular baby names**  
The number of babies named Emily decreased from 566 in 1999 to 556 in 2000 to 514 in 2001 while the number of babies named Jacob decreased from 729 in 1999 to 659 in 2000 to 642 in 2001.

## Washington State Vital Statistics Highlights for 2001

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### **On an average day, these events occurred among Washington State Residents...**

- 218 births including:
  - 6 to teens <18
  - 6 to women aged 40+
  - 62 to unmarried women
  - 13 with low birth weight
  - 49 by Cesarean section
  - 27 to maternal smokers
- 114 marriages
- 122 deaths including:
  - 31 due to heart disease
  - 30 due to cancer
  - 6 due to unintentional injuries (accidents)
  - 2 due to suicide
- 72 divorces

### **Washington State outperformed the nation<sup>1</sup> by experiencing a...**

- lower percentage of low weight births
- lower proportion of Cesarean deliveries
- lower infant mortality rate
- lower crude and age-adjusted death rate for heart disease and cancer, the two leading causes of death
- higher life expectancy

### **Washington State fell below the nation<sup>1</sup> by experiencing a...**

- higher crude and age-adjusted death rate from cerebrovascular disease (strokes)
- higher crude and age-adjusted death rate from suicide
- much higher crude and age-adjusted death rate from Alzheimer's Disease

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<sup>1</sup>National data reported in "Births: Preliminary Data for 2001" *National Vital Statistics Reports*, Vol 50 No10 (June 6, 2002), available on the internet at [http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvs50\\_10.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvs50_10.pdf) and "Deaths: Preliminary Data for 2000" *National Vital Statistics Reports*, Vol 49 No 12 (October 9, 2001), available on the internet at <http://www.cdc.gov/nchs/products/pubs/pubd/nvsr/49/49-12.htm>

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# Introduction



# Washington Counties and County Seats



## **Introduction**

*Washington State Vital Statistics, 2001*, published by the Center for Health Statistics of the Washington State Department of Health, contains tables on births, deaths, marriages and dissolutions of marriage (i.e., divorces, annulments) that occurred during calendar year 2001.

Publication of vital statistics supports the mission of the Department of Health to protect and improve the health of people in Washington State. Timely and wide-ranging health information, such as that presented in *Washington State Vital Statistics*, is crucial to accomplishing this mission. Vital statistics data are used by policy makers, health professionals, community-based organizations, researchers, and citizens to understand trends in vital statistics, identify high risk populations (and geographic areas), set prevention priorities, and plan targeted health promotion strategies. This report is often the first resource used to identify problems related to prenatal care, maternal and infant health, family planning, and mortality due to various causes.

## **Source of Vital Statistics**

Data used to prepare this report come from Certificates of Live Birth, Certificates of Fetal Death, Certificates of Death, Certificates of Marriage, and Certificates of Dissolution. The forms for these certificates are provided by the Washington State Department of Health. The following table describes who completes the forms and where they are filed:

## Filing of Washington State Vital Statistics

| <b>Certificate</b> | <b>Completed by</b>   | <b>Initially Filed with</b> |
|--------------------|---|-----------------------------|
| Live Birth         | Hospital or Birth Attendant                                 | State Dept. of Health       |
| Fetal Death        | Hospital or Birth Attendant                                 | Local Health Jurisdiction   |
| Death              | Funeral Director and Physician, Coroner or Medical Examiner | Local Health Jurisdiction   |
| Marriage           | Person Performing the Marriage                              | County Auditor              |
| Dissolution        | Clerk of Court, Petitioner's Attorney                       | County Clerk                |

RCW 70.58 which governs the registration and reporting of vital statistics requires births, fetal deaths, deaths, marriages, and dissolutions of marriage to be reported within a timely fashion. Birth and death certificates are designed to gather information in a manner consistent with federal reporting requirements of the National Center for Health Statistics.

A formal interstate exchange agreement governs the mutual exchange of information on births, deaths and fetal deaths between states and other countries so that events occurring to Washington residents elsewhere are also reported to this state. Such an interstate exchange agreement does not exist, however, for marriages and divorces. Therefore, the Center for Health Statistics does not have the records for all of the state's residents since some may have gone elsewhere to be married or divorced.

Starting in 1992, hospitals or birth attendants use the Electronic Birth Certificate (EBC) system to send birth records directly to the Department of Health instead of to registrars of local health jurisdictions.

### How To Use Vital Statistics

Why Read this Section?

*Washington State Vital Statistics* presents commonly used vital statistics data. These data not only have a variety of uses, but also a variety of users ranging from the beginner to the sophisticated analyst. This section is intended primarily to help those who do not entirely understand how to use vital statistics data or are not aware of data limitations, especially limitations due to small numbers. Reading this section may help beginning users avoid

drawing incorrect conclusions from the data. For other users, this section may serve as a review.

#### Issues in Using the Data

Vital statistics pertain to basic events of life, typically birth, death, marriage, and divorce. They provide powerful indicators of health problems and, therefore, can help us to track progress toward health improvement goals. They can also provide information on what the health problem is, who has the problem, and when and where it occurs. Unfortunately, vital statistics cannot usually tell us why a problem occurs, which is what prevention programs really need to know. It is a common mistake to think that if two data items are associated or correlated (such as age of mother and low birth weight), then one causes the other. In reality, this could be a chance association (if you look at enough variables you find some relationship) or both items could be associated with a third, unmeasured factor (such as poverty or poor nutrition).

Mortality statistics are sometimes used as indicators of disease conditions within the population. They are very limited in this capacity, however, especially for illnesses that are not usually classified as the underlying cause of death. Hospital inpatient data from the Comprehensive Hospital Abstract Reporting System (CHARS) provide a somewhat better measure of morbidity, but even these data are limited to conditions that result in a hospital admission.

Users of vital statistics frequently ask questions about the issues discussed below.

#### *Residence vs. Occurrence*

What's the difference between residence and occurrence? In trying to locate topics of interest in this report, users may notice that tables contain tabulations in two ways: 1) by residence (where the person lived) or 2) by occurrence (where the event occurred). For example, a woman who lived in Olympia (Thurston County) but had her baby in Seattle (King County) would be counted in Thurston County on a residence table and in King County on an occurrence table. The Center for Health Statistics actually registers only those vital events occurring in Washington State. However, thanks to an interstate exchange agreement, we receive data on Washington residents having babies or dying in other states. Thus we have complete records on births, deaths and fetal deaths for residents of Washington State regardless of where the event took place.

Some users may be tempted to add residence and occurrence figures together to get a total for an area, but this would not be correct. There is a great deal

of overlap between these two, as most residents of a county also have their babies or die in the same county. Other users try to subtract residence and occurrence data to figure out how many residents are born or die outside of their county, but this is also incorrect. The only way to determine where county residents are having babies or dying is to tabulate births or deaths by place of residence relative to place of occurrence. For example, in *Natality Table C8* of this report the mother's county of residence is cross-tabulated by the county in which the birth occurred.

When should residence or occurrence data be used? Users generally need data about the residents of an area. Residents would be the target audience for any local health assessment or health promotion programs. Population figures, commonly used to calculate rates, are also based on a person's residence. Hospital planners might want to know both (where births occurred to residents of their area) so they can assess possible markets.

For certain events, particularly external causes of death such as motor vehicle accidents or drowning, prevention programs might instead want to know where the event occurred so they can identify potentially hazardous situations or areas. Unfortunately, there is no population base to use for calculating occurrence rates, which might tell if the numbers are unusually high or low. For example, a rural road might have a high number of motor vehicle accidents relative to the number of people living there, but there may be many more people driving that road on their way to work, so there would be more people at risk of getting in accidents. The effect of a variable population always needs to be considered when looking at occurrence data.

The decision to use residence or occurrence data should be based on the type of data needed and the way they will be used, given the above discussion as a guideline.

#### *Numbers vs. Crude or Age-Adjusted Rates*

When should numbers or rates be used? All tables in this summary give the number of events (e.g., the number of Washington residents dying of cancer). These numbers are used to determine the size of a problem in any area (e.g., how many people die of cancer) or to estimate population changes due to birth and death. But, using just numbers, we cannot readily compare two areas or two time periods. Such comparisons should take the size of the population into account to avoid erroneous conclusions.

To eliminate the effect of different sized populations, we compare rates. A rate is the number of vital events (such as deaths) in a specified time period divided by the number of people at risk of these events in that period (typically, a state or county population, or the number of births in the case of

infant death). This figure is generally multiplied by a constant such as 1,000 or 100,000 to get a number that is easy to read and compare and is reported as “per 1,000” or “per 100,000.”

Rates calculated in this manner are called *crude rates*. They adjust for differences in population size but not differences in population characteristics. These population characteristics also need to be considered in interpreting comparisons. For example, since death rates increase with increasing age, a county with an older population may have higher death rates just because its population is older.

To compare rates and see if the county is high just because of its older population, we need to use *age-adjusted death rates*. These rates are computed by taking a county's death rates for each age group and applying them to a standard population. The traditional standard has been the 1940 US population. However, in 1999 the standard changed and is now the 2000 US population (see Anderson, RN, and Rosenberg, HM. *Age standardization of death rates: implementation of the year 2000 standard*. National Center for Health Statistics. National Vital Statistics Report 3 (47), 1998.). The year 2000 population has a higher concentration of population in the age groups between 35 to 44 years and 65 and over. The population of age 65 years and over almost doubled during this period. Since age-adjusted rates using 2000 population give more weight to older age groups, the magnitude of age-adjusted rates using this standard will change considerably.

The age-adjusted death rate tells us what the county's death rate would be if it had the same age distribution as the standard population. The major use of age-adjusted death rates is to allow comparisons between different areas and/or over various periods of time. Users should be aware that an age-adjusted death rate has no absolute meaning; it is an artificial number based on a hypothetical population and is only useful for comparing with other rates calculated in the same manner. While age adjustment is the most common method for adjusting rates, a similar process can be used to adjust for other characteristics such as sex, education, or birth weight.

Although reports often focus on which population has the highest rate, one should remember that rates can mask differences in numbers that may be needed for policy decisions. For example, the infant mortality rate is considerably higher for many people of color than for whites. However, due to the state's racial composition, most infants who die in this state are white. To reduce racial disparity, one would focus on reducing infant mortality among people of color. Such a reduction, however, would not necessarily have much effect on the state's overall infant mortality rate. In determining the burden of a health problem in a community, numbers rather than rates are usually the most appropriate measure.

### *Standards for Comparison of Rates*

What are good standards for comparison of rates? To help interpret a particular rate, one may choose to compare it to rates for another county or similar geographical area, national or state data, or an independent goal or standard. Such issues as comparability of the population characteristics and stability of rates from year to year for the standard population should be considered when choosing a base for comparison.

In comparing rates from different sources, users should be sure that the same methods and definitions were used to calculate the rates. Otherwise, the rates are not truly comparable and may lead to incorrect conclusions. Some questions to ask might be: Are the rates crude or adjusted? Are they for the same time period? Is the definition of what constitutes an event the same? Are the same coding definitions used? Is the completeness of reporting events similar? Are the denominators taken from the same or similar data sources?

### *Unknowns*

Most vital statistics data are not 100% complete. Sometimes the information is not (or cannot be) collected, and then the item is reported as unknown. How should unknowns be handled? When the number of unknowns for a particular characteristic is large, it can affect rates or percentage distributions based on that characteristic. For example, in 2001, father's education was missing for about 22% of the births.

How should unknowns be handled in calculating percentages? If we include unknowns in the total, the percent in any category is smaller than it would be if we subtract unknowns from the total. For example, in the case of 2001 births, the percent of fathers with less than a high school education is 10.2% if unknowns are included in the total, but is 13.1% if unknowns are excluded from the total.

In deciding which method offers a "truer" representation of the population as a whole one needs to consider whether the cases with an unknown characteristic are similar to or different from those cases in which the characteristic is known. If it appears likely that the cases with the unknown characteristic are similar to those with the known values, then "unknowns" should be excluded from the total and percentages should be based on the "known" population. To the extent that this assumption seems unlikely, then other methods could be invoked to distribute the cases with unknown values.



Assumptions about the probable characteristics of the population with a given unknown attribute could be based on: 1) greater familiarity with local situations by persons in the county or city health community; or 2) on more in-depth analysis of the source of the unknowns in the reporting system. For example, if only a few hospitals or medical facilities fail to report a particular variable, one might examine information about the population served by those particular facilities or those living in the nearby community.

#### *Changes in Classification of Causes of Death (ICD-10)*

Beginning with deaths occurring in January 1999, the United States began using International Classification of Diseases (ICD-10) to classify causes of death reported on death certificates. ICD-9 had been used during 1979-1998. Implementation of ICD-10 has had an important impact on the presentation and interpretation of mortality statistics by cause-of-death. The change to ICD-10 created a discontinuity in trends that must be accounted for when comparing mortality during 1999 and later to prior years. To put it another way, ***cause-of-death data for 1999 and later years are not comparable to prior years***, unless adjustments are made for the coding and classification changes. Without adjustment, it is impossible to know whether an observed increase or decrease in deaths due to a particular cause is “real” or merely the result of the changes in classification and coding.

Some of the differences between ICD-10 and ICD-9 are:

- ICD-10 is far more detailed and has about 8,000 categories compared to ICD-9 with 5,000 categories.
- ICD-10 uses 4-digit alphanumeric codes that begin with a letter compared to ICD-9 which has 4-digit numeric codes.
- Additional chapters have been added and some have been rearranged. For example, myelodysplastic syndromes have been moved into the neoplasm chapter which has caused an increase in the number of benign neoplasms and neoplasms of uncertain or unknown behavior.
- Tabulation lists with groups of ICD codes have changed. More conditions are included in the lists used to determine leading causes of death and some of the groups of conditions have changed. For example, accidents and adverse effects were combined in ICD-9 tabulation lists. With ICD-10, accidents and adverse effects are now in separate categories.
- Coding rules for causes of death have changed. For example, pneumonia is now considered a direct sequel of more conditions which has led to a 30% decrease in pneumonia as an underlying cause-of-death.

To enable comparisons across the ICD-9 to ICD-10 transition, a preliminary comparability study was carried out by the National Center for Health Statistics (NCHS). NCHS double-coded a large sample of the 1996 national mortality file, once by ICD-9, and again by ICD-10. A **comparability ratio** was then calculated by dividing the number of deaths for a selected cause of death classified by ICD-10 by the number of deaths classified to the most nearly comparable cause of death by ICD-9. The resulting ratio can be used to *adjust* counts and rates for a given cause of death classified by ICD-9 so they are comparable to those for the most similar cause classified by ICD-10. The ratio will also allow users to estimate the extent of the discontinuity of the change to ICD-10 by showing the net effect of coding and classification changes. The preliminary comparability study will be followed by a comparability study based on the complete national mortality file in 2002.

In order to compare rates or counts coded by ICD-9 with rates or counts coded by ICD-10, multiply the ICD-9 count or rate by the cause specific comparability ratio. For example, there were 1,717 deaths due to pneumonia and influenza to residents of Washington State in 1998 (ICD-9 480-487). In 1999, 1,257 residents of Washington State died due to pneumonia and influenza (ICD-10 J10-J18). Comparing these counts leads to a conclusion that there was a very large drop in deaths due to pneumonia and influenza. This conclusion is incorrect: By multiplying the 1998 count of 1,717 times the comparability ratio of 0.70, the comparability modified number of deaths in 1998 would be 1,202. Comparing the modified count in 1998 of 1,202 to the ICD-10 count in 1999 of 1,257 shows an increase of only 55 deaths from 1998 to 1999 instead of a large decrease.

Because of the change to ICD-10, the Center for Health Statistics produced an additional report *Washington State Vital Statistics ICD-10 Supplement, 1990-1999*. This report provides more information about ICD-10 and includes tables with comparability ratios and tables with counts and age-adjusted mortality rates for 1990-1999.

### *Small Numbers*

How should small numbers be handled? If the state collects all births and deaths in a year, then aren't the birth and death rates exactly as calculated? It's certainly true that vital statistics are not based on samples of the population, as many research data are. We do know the actual number of births, deaths, and population (assuming complete reporting of events), so we can calculate an exact birth or death rate for any one year. However, the data may still be affected by random fluctuations in the number of events between successive measurements (e.g., for different years).

The effect of such random fluctuations on birth or death rates is proportionately larger when the number of events is small. For example, one

more infant death has a larger numerical impact on an area with three deaths than it does on an area with 300 deaths. Because of these random fluctuations, the rates based on small numbers may not be as reliable as those based on larger numbers in the sense that they may have limited predictive value. Specifically, knowing one year's rate in such instances may not allow one to reliably anticipate the rate for another year. This instability makes it difficult to use the rates for program planning or assessment purposes. In fact, considerable caution should be used in interpreting any data where the number of events is small.

There are no hard and fast rules as to when numbers are too small for rates to be stable predictors of what's happening. However, the Washington State Department of Health *Guidelines for Working With Small Numbers* call for suppressing calculation of rates when the number of events is less than five. In addition, tables should include a footnote indicating that rates based on fewer than 20 events are likely to be unstable and imprecise. To increase the stability of the rate, one can combine several years of data (as long as there is no strong temporal trend in rates) or one can group several counties in the same geographic area or with similar population characteristics. For more help in using small numbers consult the *Guidelines* at <http://www.doh.wa.gov/Data/guidelines/SmallNumbers.htm>.

### *Data Quality*

How does data quality affect the use of the data? Conclusions and health policy decisions are only as good as the data that go into making them. Vital statistics data quality has three major components: completeness, accuracy, and timeliness. Are vital statistics *complete*, i.e., do we have a record for each vital event? According to National Center for Health Statistics (NCHS) studies, registration of births and deaths is currently better than 99% complete. However, some records come in after the data files are prepared and thus are not included in the data presented in this report.

In addition to determining the completeness of a reporting system, researchers are often concerned with the degree to which people report what is actually happening. This characteristic of the data is called its *validity*. Studies of validity of reporting systems like the birth certificate system usually look for an independent source of the information and determine the consistency with data contained in the reporting system. A previous study of birth certificate data quality conducted by the Center for Health Statistics showed that validity of the item varied with the type of item. Legal information (e.g., names, addresses, ages) is very accurately reported. Unfortunately, medical information (e.g., menses date, prior pregnancy outcomes, complications, and malformations) is less accurate. Comparison

to what was actually found in patients' medical history records revealed error rates of 5-20%.

To improve data quality, both birth and death certificates are edited for accuracy of the data. Where possible, data are checked to see if they are within a reasonable range of values (e.g., mother's age must be 8-59, with warning notices for ages less than 14 or greater than 49). Data are also checked to see if there is internal consistency between items (e.g., a person is not expected to have more than one year of college education if he/she is less than 16 years old). Those who complete death certificates are queried if there is not enough information to establish an accurate and specific cause of death.

A factor that affects the completeness of the data is the number of *unknowns* among responses. Sometimes providers do not complete all items on a certificate. The information may be overlooked or refused by the informant, or the informant may not have been asked for the data. Missing data decrease the overall accuracy of an item because we don't know where they fit (e.g., are smokers less likely to respond to a question on smoking?). Periodic data quality analyses are done to help identify facilities with large amounts of missing data. These facilities are queried for more information. In order to help improve data completeness, the Center for Health Statistics provides annual feedback on data completeness to each birth hospital and also works intensively with the facilities throughout the year to help them improve their data collection procedures.

Finally, are vital statistics *timely*, i.e., are they registered early enough so that the data are available when needed to be most useful for planning and program assessment purposes? There is often a tradeoff between timeliness and accuracy. For example, if birth certificates are filed quickly, there may not be enough time for malformations or complications (such as fetal alcohol syndrome) to become evident. Similarly, if death certificates are filed quickly, there may not be time for autopsy results to be incorporated into the cause of death data. Despite the potential benefits of waiting for complete information, the main thrust--particularly for birth certificates--is to streamline the reporting process and to gather and report information as close to the event as possible. This has been accomplished by the Center for Health Statistics primarily by the development of the Electronic Birth Certificate System.

### *Confidentiality*

How do we ensure confidentiality of the data? All of the data in this report are presented in aggregate form so that individuals are not likely to be identified from the tables. However, it is important for potential data users

to be aware of confidentiality issues related to the data. The medical and health information on birth and fetal death certificates is confidential and is to be used only in aggregate statistics which do not enable the identification of specific individuals. Hence, such confidential data may not be linked to any identifying information except for research projects approved by the Human Research Review Board of the Department of Social and Health Services and the Department of Health. The sample birth and fetal death certificates in Appendix G delineate the portion that is confidential. Some death data (particularly causes of death such as suicide and AIDS), while not confidential by law, are extremely sensitive.

It is the responsibility of all data users to treat these data in such a way as to respect and protect the privacy of individuals who have allowed information about their personal lives to be used for the good of the public. To ensure continued reporting of important demographic, medical, and health information, data must be handled in a way that ensures the privacy of individuals as required by law.

### **Additional Services**

This annual report provides an overview of the types of data available through the Washington State Center for Health Statistics. Birth, death, and fetal death data are also available as raw data files on the Center's CD-ROM "*Vital Registration System Annual Statistical Files, Washington State.*" The CD-ROM contains data in ASCII format, detailed technical documentation, and annual summary tables for 1980-2001 in Excel format. To order a copy of the CD-ROM, call (360) 236-4327.

All of the information in this report is available on the Internet. To access this information, go to the DOH web page at: <http://www.doh.wa.gov/EHSPHL/CHS/CHS-Data/main.htm>. At that point a list of subject topics appears (e.g., "births," "deaths"). Click on any of these topics to locate a table or tables of particular interest. Tables are available not only for the current year but for previous years as well. Click on "publications" to download a PDF copy of this report.

The Center also works with data users on a variety of levels: 1) to help users formulate requests so they get the data they need; 2) to provide technical consultation about how to use or interpret data; 3) to perform special analyses to address a specific problem or need; and 4) to help users access data files. For more information, call the Manager of Research of the Center for Health Statistics at (360) 236-4321.

## **Annual Trends**

Overview Table 1 provides a historical context for interpreting 2001 vital statistics in Washington State. The crude birth rate declined again after a six-year period of relative stability. In contrast, the crude death rate has changed little since 1980.

Trends in vital statistics since the early part of the century have been dramatic. The state population increased more than five-fold from 1910-2001, while the number of fetal deaths is about half what it was and the number of infant deaths is about one-quarter what it was early in the century.

**Overview Table 1. Live Births, Deaths, Infant Deaths, Maternal Deaths, and Fetal Deaths Washington Residents, 1910-2001**

| Year | Population <sup>1</sup> | Live Births |                   | Deaths |                   | Infant Deaths |                   | Maternal Deaths     |                   | Fetal Deaths |                   |
|------|-------------------------|-------------|-------------------|--------|-------------------|---------------|-------------------|---------------------|-------------------|--------------|-------------------|
|      |                         | Number      | Rate <sup>2</sup> | Number | Rate <sup>2</sup> | Number        | Rate <sup>3</sup> | Number <sup>4</sup> | Rate <sup>5</sup> | Number       | Rate <sup>3</sup> |
| 1910 | 1,142,000               | 19,916      | 17.4              | 11,502 | 10.1              | 1,862         | 93.5              | 194                 | 974.1             | 705          | 35.4              |
| 1911 | 1,168,800               | 20,728      | 17.7              | 10,845 | 9.3               | 1,531         | 73.9              | 177                 | 853.9             | 699          | 33.7              |
| 1912 | 1,190,600               | 20,683      | 17.4              | 10,187 | 8.6               | 1,365         | 66.0              | 179                 | 865.4             | 724          | 35.0              |
| 1913 | 1,212,400               | 21,200      | 17.5              | 11,397 | 9.4               | 1,566         | 73.9              | 178                 | 839.6             | 688          | 32.5              |
| 1914 | 1,234,000               | 23,008      | 18.6              | 11,448 | 9.3               | 1,540         | 66.9              | 152                 | 660.6             | 783          | 34.0              |
| 1915 | 1,256,000               | 24,046      | 19.1              | 11,895 | 9.5               | 1,461         | 60.8              | 156                 | 648.8             | 779          | 32.4              |
| 1916 | 1,277,800               | 23,831      | 18.7              | 11,805 | 9.2               | 1,531         | 64.2              | 175                 | 734.3             | 705          | 29.6              |
| 1917 | 1,299,600               | 23,464      | 18.1              | 12,137 | 9.3               | 1,625         | 69.3              | 173                 | 737.3             | 691          | 29.4              |
| 1918 | 1,321,400               | 25,682      | 19.4              | 16,837 | 12.7              | 1,769         | 68.9              | 253                 | 985.1             | 730          | 28.4              |
| 1919 | 1,343,200               | 25,112      | 18.7              | 14,370 | 10.7              | 1,584         | 63.1              | 216                 | 860.1             | 730          | 29.1              |
| 1920 | 1,356,600               | 27,072      | 20.0              | 15,164 | 11.2              | 1,797         | 66.4              | 249                 | 919.8             | 888          | 32.8              |
| 1921 | 1,385,700               | 27,267      | 19.7              | 13,254 | 9.6               | 1,512         | 55.5              | 192                 | 704.1             | 852          | 31.2              |
| 1922 | 1,407,100               | 25,378      | 18.0              | 14,249 | 10.1              | 1,566         | 61.7              | 190                 | 748.7             | 731          | 28.8              |
| 1923 | 1,427,300               | 25,259      | 17.7              | 13,856 | 9.7               | 1,428         | 56.5              | 159                 | 629.5             | 680          | 26.9              |
| 1924 | 1,447,200               | 25,378      | 17.5              | 14,580 | 10.1              | 1,426         | 56.2              | 167                 | 658.1             | 711          | 28.0              |
| 1925 | 1,467,600               | 24,741      | 16.9              | 15,280 | 10.4              | 1,395         | 56.4              | 140                 | 565.9             | 667          | 27.0              |
| 1926 | 1,487,600               | 23,989      | 16.1              | 15,670 | 10.5              | 1,352         | 56.4              | 174                 | 725.3             | 719          | 30.0              |
| 1927 | 1,507,800               | 23,315      | 15.5              | 15,950 | 10.6              | 1,162         | 49.8              | 151                 | 647.7             | 650          | 27.9              |
| 1928 | 1,528,200               | 23,161      | 15.2              | 16,723 | 10.9              | 1,115         | 48.1              | 175                 | 755.6             | 641          | 27.7              |
| 1929 | 1,548,400               | 22,685      | 14.7              | 16,413 | 10.6              | 1,110         | 48.9              | 150                 | 661.2             | 572          | 25.2              |
| 1930 | 1,563,400               | 23,019      | 14.7              | 16,678 | 10.7              | 1,122         | 48.7              | 148                 | 642.9             | 601          | 26.1              |
| 1931 | 1,585,000               | 22,028      | 13.9              | 16,524 | 10.4              | 1,064         | 48.3              | 141                 | 640.1             | 591          | 26.8              |
| 1932 | 1,602,500               | 21,379      | 13.3              | 16,581 | 10.3              | 967           | 45.2              | 139                 | 650.2             | 530          | 24.8              |
| 1933 | 1,619,700               | 20,882      | 12.9              | 16,705 | 10.3              | 811           | 38.8              | 140                 | 670.4             | 446          | 21.4              |
| 1934 | 1,636,900               | 22,484      | 13.7              | 17,456 | 10.7              | 968           | 43.1              | 105                 | 467.0             | 520          | 23.1              |
| 1935 | 1,654,000               | 22,378      | 13.5              | 18,046 | 10.9              | 998           | 44.6              | 120                 | 536.2             | 469          | 21.0              |
| 1936 | 1,671,400               | 23,354      | 14.0              | 19,057 | 11.4              | 1,064         | 45.6              | 115                 | 492.4             | 468          | 20.0              |
| 1937 | 1,689,100               | 24,882      | 14.7              | 18,771 | 11.1              | 978           | 39.3              | 118                 | 474.2             | 495          | 19.9              |
| 1938 | 1,706,000               | 26,702      | 15.7              | 18,514 | 10.9              | 1,035         | 38.8              | 94                  | 352.0             | 440          | 16.5              |
| 1939 | 1,723,400               | 26,471      | 15.4              | 18,528 | 10.8              | 977           | 36.9              | 97                  | 366.4             | 450          | 17.0              |
| 1940 | 1,736,200               | 27,952      | 16.1              | 19,837 | 11.4              | 969           | 34.7              | 89                  | 318.4             | 459          | 16.4              |
| 1941 | 1,816,700               | 30,916      | 17.0              | 19,359 | 10.7              | 1,065         | 34.4              | 66                  | 213.5             | 445          | 14.4              |
| 1942 | 1,880,700               | 38,744      | 20.6              | 20,190 | 10.7              | 1,278         | 33.0              | 78                  | 201.3             | 606          | 15.6              |
| 1943 | 1,945,000               | 44,258      | 22.8              | 22,017 | 11.3              | 1,534         | 34.7              | 72                  | 162.7             | 575          | 13.0              |
| 1944 | 2,009,600               | 44,246      | 22.0              | 21,144 | 10.5              | 1,493         | 33.7              | 72                  | 162.7             | 607          | 13.7              |
| 1945 | 2,073,600               | 44,296      | 21.4              | 21,292 | 10.3              | 1,523         | 34.4              | 79                  | 178.3             | 672          | 15.2              |
| 1946 | 2,137,600               | 51,941      | 24.3              | 21,620 | 10.1              | 1,723         | 33.2              | 65                  | 125.1             | 869          | 16.7              |
| 1947 | 2,202,400               | 58,230      | 26.4              | 21,763 | 9.9               | 1,630         | 28.0              | 59                  | 101.3             | 907          | 15.6              |
| 1948 | 2,266,400               | 55,460      | 24.5              | 21,925 | 9.7               | 1,525         | 27.5              | 36                  | 64.9              | 776          | 14.0              |
| 1949 | 2,331,000               | 56,433      | 24.2              | 22,420 | 9.6               | 1,526         | 27.0              | 36                  | 63.8              | 850          | 15.1              |

**Overview Table 1 (Continued). Live Births, Deaths, Infant Deaths, Maternal Deaths, and Fetal Deaths  
Washington Residents, 1910-2001**

| Year | Population <sup>1</sup> | Live Births |                   | Deaths |                   | Infant Deaths |                   | Maternal Deaths     |                   | Fetal Deaths |                   |
|------|-------------------------|-------------|-------------------|--------|-------------------|---------------|-------------------|---------------------|-------------------|--------------|-------------------|
|      |                         | Number      | Rate <sup>2</sup> | Number | Rate <sup>2</sup> | Number        | Rate <sup>3</sup> | Number <sup>4</sup> | Rate <sup>5</sup> | Number       | Rate <sup>3</sup> |
| 1950 | 2,379,000               | 55,755      | 23.4              | 22,450 | 9.4               | 1,526         | 27.4              | 28                  | 50.2              | 799          | 14.3              |
| 1951 | 2,424,000               | 57,994      | 23.9              | 23,300 | 9.6               | 1,412         | 24.3              | 23                  | 39.7              | 852          | 14.7              |
| 1952 | 2,448,000               | 61,436      | 25.1              | 22,874 | 9.3               | 1,522         | 24.8              | 15                  | 24.4              | 857          | 13.9              |
| 1953 | 2,466,000               | 61,571      | 25.0              | 23,279 | 9.4               | 1,556         | 25.3              | 18                  | 29.2              | 834          | 13.5              |
| 1954 | 2,516,000               | 62,703      | 24.9              | 23,238 | 9.2               | 1,514         | 24.1              | 29                  | 46.2              | 829          | 13.2              |
| 1955 | 2,604,000               | 62,290      | 23.9              | 24,410 | 9.4               | 1,520         | 24.4              | 16                  | 25.7              | 806          | 12.9              |
| 1956 | 2,668,000               | 64,999      | 24.4              | 24,207 | 9.1               | 1,524         | 23.4              | 13                  | 20.0              | 777          | 12.0              |
| 1957 | 2,724,000               | 65,982      | 24.2              | 25,140 | 9.2               | 1,596         | 24.2              | 20                  | 30.3              | 793          | 12.0              |
| 1958 | 2,773,000               | 65,574      | 23.6              | 25,429 | 9.2               | 1,707         | 26.0              | 11                  | 16.8              | 764          | 11.7              |
| 1959 | 2,821,000               | 65,729      | 23.3              | 26,229 | 9.3               | 1,570         | 23.9              | 9                   | 13.7              | 749          | 11.4              |
| 1960 | 2,853,200               | 65,251      | 22.9              | 26,505 | 9.3               | 1,528         | 23.4              | 17                  | 26.1              | 738          | 11.3              |
| 1961 | 2,897,000               | 65,013      | 22.4              | 26,353 | 9.1               | 1,467         | 22.6              | 19                  | 29.2              | 756          | 11.6              |
| 1962 | 2,948,000               | 64,812      | 22.0              | 27,343 | 9.3               | 1,476         | 22.8              | 6                   | 9.3               | 704          | 10.9              |
| 1963 | 2,972,000               | 61,013      | 20.5              | 27,550 | 9.3               | 1,339         | 21.9              | 10                  | 16.4              | 657          | 10.8              |
| 1964 | 3,008,000               | 57,148      | 19.0              | 28,106 | 9.3               | 1,277         | 22.3              | 7                   | 12.2              | 637          | 11.1              |
| 1965 | 3,065,000               | 52,806      | 17.2              | 27,379 | 8.9               | 1,130         | 21.4              | 15                  | 28.4              | 639          | 12.1              |
| 1966 | 3,125,000               | 51,777      | 16.6              | 29,035 | 9.3               | 1,084         | 20.9              | 13                  | 25.1              | 554          | 10.7              |
| 1967 | 3,229,000               | 54,875      | 17.0              | 29,302 | 9.1               | 1,050         | 19.1              | 12                  | 21.9              | 573          | 10.4              |
| 1968 | 3,336,000               | 57,206      | 17.1              | 30,360 | 9.1               | 1,120         | 19.6              | 8                   | 14.0              | 620          | 10.8              |
| 1969 | 3,397,000               | 59,354      | 17.5              | 30,504 | 9.0               | 1,118         | 18.8              | 12                  | 20.2              | 651          | 11.0              |
| 1970 | 3,413,300               | 60,499      | 17.7              | 29,901 | 8.8               | 1,135         | 18.8              | 9                   | 14.9              | 640          | 10.6              |
| 1971 | 3,436,300               | 55,304      | 16.1              | 30,318 | 8.8               | 1,008         | 18.2              | 5                   | 9.0               | 574          | 10.4              |
| 1972 | 3,430,300               | 48,250      | 14.1              | 29,747 | 8.7               | 805           | 16.7              | 6                   | 12.4              | 428          | 8.9               |
| 1973 | 3,444,300               | 47,636      | 13.8              | 30,751 | 8.9               | 781           | 16.4              | 3                   | 6.3               | 430          | 9.0               |
| 1974 | 3,508,700               | 50,096      | 14.3              | 29,773 | 8.5               | 763           | 15.2              | 4                   | 8.0               | 450          | 9.0               |
| 1975 | 3,567,900               | 50,821      | 14.2              | 29,778 | 8.3               | 798           | 15.7              | 5                   | 9.8               | 421          | 8.3               |
| 1976 | 3,634,900               | 53,004      | 14.6              | 30,275 | 8.3               | 765           | 14.4              | 3                   | 5.7               | 439          | 8.3               |
| 1977 | 3,715,400               | 57,256      | 15.4              | 29,789 | 8.0               | 696           | 12.2              | 5                   | 8.7               | 426          | 7.4               |
| 1978 | 3,836,200               | 58,725      | 15.3              | 30,469 | 7.9               | 737           | 12.6              | 4                   | 6.8               | 465          | 7.9               |
| 1979 | 3,979,200               | 64,377      | 16.2              | 30,418 | 7.6               | 737           | 11.4              | 5 (8)               | 12.4              | 466          | 7.2               |
| 1980 | 4,132,400               | 67,989      | 16.5              | 32,049 | 7.8               | 802           | 11.8              | 1 (10)              | 14.7              | 533          | 7.8               |
| 1981 | 4,229,300               | 69,987      | 16.5              | 32,035 | 7.6               | 735           | 10.5              | 4 (7)               | 10.0              | 487          | 7.0               |
| 1982 | 4,276,500               | 69,681      | 16.3              | 32,316 | 7.6               | 755           | 10.8              | 4 (8)               | 11.5              | 499          | 7.2               |
| 1983 | 4,307,200               | 68,794      | 16.0              | 32,653 | 7.6               | 656           | 9.5               | 6                   | 8.7               | 473          | 6.9               |
| 1984 | 4,354,100               | 69,059      | 15.9              | 33,809 | 7.8               | 702           | 10.2              | 7                   | 10.1              | 444          | 6.4               |
| 1985 | 4,415,800               | 70,357      | 15.9              | 34,478 | 7.8               | 749           | 10.6              | 5                   | 7.1               | 403          | 5.7               |
| 1986 | 4,462,200               | 69,572      | 15.6              | 34,176 | 7.7               | 676           | 9.7               | 2                   | 2.9               | 445          | 6.4               |
| 1987 | 4,527,100               | 70,409      | 15.6              | 34,983 | 7.7               | 683           | 9.7               | 1                   | 1.4               | 411          | 5.8               |
| 1988 | 4,616,900               | 72,660      | 15.7              | 36,341 | 7.9               | 656           | 9.0               | 1                   | 1.4               | 381          | 5.2               |
| 1989 | 4,728,100               | 75,595      | 16.0              | 36,130 | 7.6               | 694           | 9.2               | 2                   | 2.6               | 388          | 5.1               |



**Overview Table 1 (Continued). Live Births, Deaths, Infant Deaths, Maternal Deaths, and Fetal Deaths  
Washington Residents, 1910-2001**

| Year | Population <sup>1</sup> | Live Births |                   | Deaths |                   | Infant Deaths |                   | Maternal Deaths     |                   | Fetal Deaths |                   |
|------|-------------------------|-------------|-------------------|--------|-------------------|---------------|-------------------|---------------------|-------------------|--------------|-------------------|
|      |                         | Number      | Rate <sup>2</sup> | Number | Rate <sup>2</sup> | Number        | Rate <sup>3</sup> | Number <sup>4</sup> | Rate <sup>5</sup> | Number       | Rate <sup>3</sup> |
| 1990 | 4,866,700               | 79,468      | 16.3              | 37,047 | 7.6               | 622           | 7.8               | 4 (5)               | 5.0               | 462          | 5.8               |
| 1991 | 5,021,335               | 79,962      | 15.9              | 37,028 | 7.4               | 603           | 7.5               | 3 (8)               | 3.8               | 426          | 5.3               |
| 1992 | 5,141,177               | 79,897      | 15.5              | 38,095 | 7.4               | 540           | 6.8               | 3 (6)               | 3.8               | 448          | 5.6               |
| 1993 | 5,265,688               | 78,771      | 15.0              | 40,380 | 7.7               | 495           | 6.3               | 6 (8)               | 7.6               | 396          | 5.0               |
| 1994 | 5,364,338               | 77,368      | 14.4              | 39,906 | 7.4               | 478           | 6.2               | 3 (4)               | 3.9               | 443          | 5.7               |
| 1995 | 5,470,104               | 77,240      | 14.1              | 40,729 | 7.4               | 449           | 5.8               | 0 (3)               | 0.0               | 419          | 5.4               |
| 1996 | 5,567,764               | 77,874      | 14.0              | 42,248 | 7.6               | 467           | 6.0               | 3 (6)               | 3.9               | 462          | 5.9               |
| 1997 | 5,663,763               | 78,141      | 13.8              | 41,429 | 7.3               | 440           | 5.6               | 2                   | 2.6               | 457          | 5.8               |
| 1998 | 5,750,033               | 79,640      | 13.9              | 42,585 | 7.4               | 452           | 5.7               | 3                   | 3.8               | 471          | 5.9               |
| 1999 | 5,830,835               | 79,577      | 13.6              | 43,793 | 7.5               | 401           | 5.0               | 6                   | 7.5               | 468          | 5.9               |
| 2000 | 5,894,121               | 81,004      | 13.7              | 43,904 | 7.4               | 423           | 5.2               | 3                   | 3.7               | 437          | 5.4               |
| 2001 | 5,974,900               | 79,542      | 13.3              | 44,563 | 7.5               | 461           | 5.8               | 9                   | 11.3              | 418          | 5.3               |

<sup>1</sup> Population figures for 1910-1950 ten year intervals and for 1950-2001 single years are from the Office of Financial Management, Forecasting Division, State of Washington 2000 Population Trends, October 2001.

<sup>2</sup> Rate per 1,000 population.

<sup>3</sup> Rate per 1,000 live births.

<sup>4</sup> Numbers in parentheses include maternal deaths that are based on 1979-1998 studies using links from birth and death certificates and 1990-1996 links of deaths and hospitalizations with birth and fetal deaths; Maternal deaths in other years are based only on the death certificate and may undercount deaths due to complications of pregnancy.

<sup>5</sup> Rate per 100,000 live births (change from previous reports).

Note: Rates based on fewer than 20 events are likely to be unstable and imprecise.



# Natality



## Natality

### A. Demographics

Demographics provide basic data (such as age and education) about the women who are having babies. As such they help health programs assess risks or needs in certain areas. For example, teenagers are more likely than older women to have low birth weight babies. When they become pregnant they may drop out of school and ultimately not be able to support themselves or their babies. Women of color often face language or cultural barriers getting the care and services they need. Education data are used to measure the socioeconomic status (SES) of new mothers. This measure is important because poverty can be a risk factor for many adverse health outcomes. Understanding the extent of these problems can help assure that services are available to help those who need them.

In addition, demographic birth data are used in conjunction with death and migration data to provide population estimates used in planning and resource allocation and for denominators of population-based rates.

**Natality Table A1. Demographic Summary Indicators for Residents, 1990-2001**

|      | Percent of Births <sup>1</sup> where Mother is... |           |                            |                               |
|------|---|-----------|----------------------------|-------------------------------|
|      | A Teenager (<20)                                  | Unmarried | Not a High School Graduate | A Woman of Color <sup>2</sup> |
| 1990 | 10.6  | 25.0      | Not Collected              | 17.8                          |
| 1991 | 10.6  | 25.0      | Not collected              | 19.3                          |
| 1992 | 10.8  | 25.3      | 17.5                       | 20.6                          |
| 1993 | 11.1  | 26.3      | 18.3                       | 22.2                          |
| 1994 | 11.1  | 26.0      | 18.5                       | 23.0                          |
| 1995 | 11.4  | 26.7      | 18.7                       | 23.7                          |
| 1996 | 11.2  | 27.2      | 18.3                       | 24.5                          |
| 1997 | 11.0  | 27.2      | 18.1                       | 25.1                          |
| 1998 | 10.9  | 27.9      | 18.1                       | 25.7                          |
| 1999 | 10.8  | 28.0      | 17.8                       | 26.9                          |
| 2000 | 10.2  | 28.3      | 17.4                       | 28.9                          |
| 2001 | 9.6   | 28.7      | 17.3                       | 29.3                          |

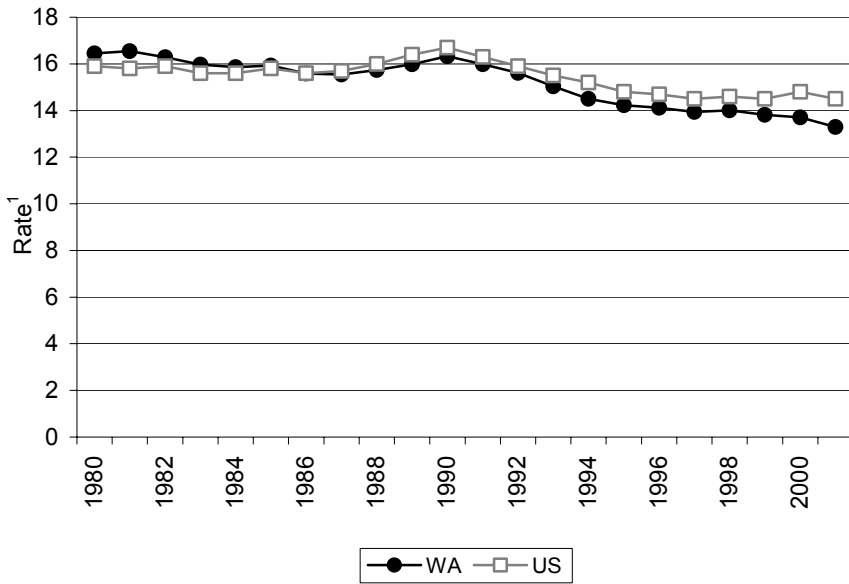
<sup>1</sup> Unknowns have been subtracted from total births in calculating percentages.

<sup>2</sup> Includes all but White Non-Hispanic births.

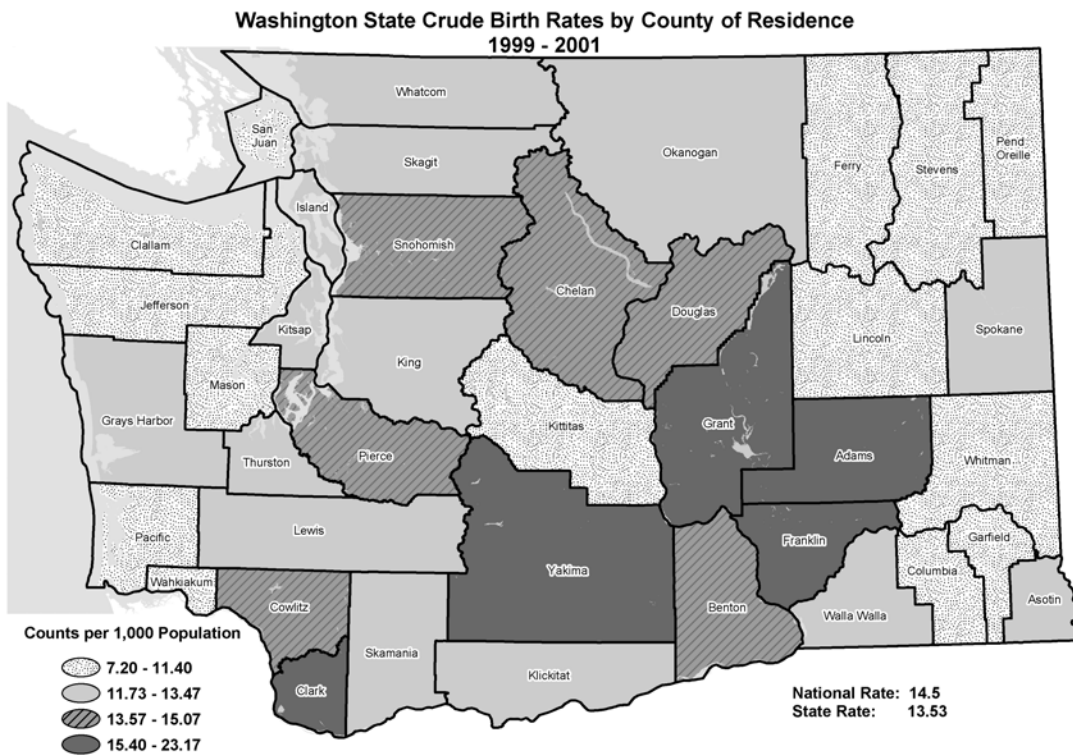
All of the groups shown in Table A1 have experienced disparities in health outcomes and/or service availability. The trend data show a steady increase in the percent of births to unmarried women, continuing a longstanding trend. The percent of births to teenagers and women with less than a high school education increased in the first half of the decade but has decreased or remained the same every year since 1995. The percent of births to women of color has increased by about 50% over the decade. These changing demographics reflect, to some extent, the changing demographics of the state's population.

**Nativity Figures 1 & 2.**

Crude Birth Rates<sup>1</sup>, Washington State Residents Compared to National, 1980-2001



<sup>1</sup> Rate per 1,000 population



**Nativity Table A2. Mother's Race/Ethnicity by Child's Sex<sup>1</sup> for Residents, 2001**

| Race/Ethnicity        | Total         |                      | Male          | Female        |
|-----------------------|---------------|----------------------|---------------|---------------|
|                       | Number        | Percent <sup>2</sup> |               |               |
| <b>State Total</b>    | <b>79,542</b> | <b>100.0</b>         | <b>40,621</b> | <b>38,920</b> |
| White                 | 65,308        | 82.1                 | 33,372        | 31,935        |
| African American      | 3,184         | 4.0                  | 1,596         | 1,588         |
| Native American       | 1,810         | 2.3                  | 895           | 915           |
| Japanese              | 316           | 0.4                  | 160           | 156           |
| Chinese               | 390           | 0.5                  | 211           | 179           |
| Filipino              | 1,064         | 1.3                  | 564           | 500           |
| Other Asian           | 4,869         | 6.1                  | 2,497         | 2,372         |
| Other                 | 71            | 0.1                  | 36            | 35            |
| Unknown               | 2,530         | 3.2                  | 1,290         | 1,240         |
| Hispanic <sup>3</sup> | 12,115        | 15.2                 | 6,196         | 5,918         |

<sup>1</sup>Total includes 1 birth for which sex is unknown.

<sup>2</sup>Percents may not add to 100% due to rounding.

<sup>3</sup>Persons of Hispanic Origin may be of any race. See Appendix A, "Hispanic Origin."

**Nativity Table A3. Mother's Age Group by Child's Sex<sup>1</sup> for Residents, 2001**

| Age                | Total         |                      | Male          | Female        |
|--------------------|---------------|----------------------|---------------|---------------|
|                    | Number        | Percent <sup>2</sup> |               |               |
| <b>State Total</b> | <b>79,542</b> | <b>100.0</b>         | <b>40,621</b> | <b>38,920</b> |
| Under 15           | 111           | 0.1                  | 49            | 62            |
| 15 - 17            | 2,251         | 2.8                  | 1,176         | 1,075         |
| 18 - 19            | 5,261         | 6.6                  | 2,693         | 2,568         |
| 20 - 24            | 19,823        | 24.9                 | 10,115        | 9,707         |
| 25 - 29            | 21,196        | 26.6                 | 10,868        | 10,328        |
| 30 - 34            | 19,328        | 24.3                 | 9,865         | 9,463         |
| 35 - 39            | 9,404         | 11.8                 | 4,779         | 4,625         |
| 40 - 44            | 2,027         | 2.5                  | 1,015         | 1,012         |
| 45 and Over        | 113           | 0.1                  | 48            | 65            |
| Unknown            | 28            | 0.0                  | 13            | 15            |

<sup>1</sup>Total includes 1 birth for which sex is unknown.

<sup>2</sup>Percents may not add to 100% due to rounding.

**Nativity Table A4. Child's Birth Order by Mother's Age Group for Residents, 2001**

| Order at Birth     | All Ages      | Under 15   | 15-17        | 18-19        | 20-24         | 25-29         | 30-34         | 35-39        | 40-44        | 45 and Over | Age Unk   |
|--------------------|---------------|------------|--------------|--------------|---------------|---------------|---------------|--------------|--------------|-------------|-----------|
| <b>State Total</b> | <b>79,542</b> | <b>111</b> | <b>2,251</b> | <b>5,261</b> | <b>19,823</b> | <b>21,196</b> | <b>19,328</b> | <b>9,404</b> | <b>2,027</b> | <b>113</b>  | <b>28</b> |
| 1st Child          | 32,045        | 104        | 2,007        | 4,017        | 9,581         | 7,646         | 5,865         | 2,357        | 424          | 35          | 9         |
| 2nd Child          | 25,383        | 5          | 196          | 993          | 6,768         | 7,142         | 6,680         | 2,985        | 577          | 30          | 7         |
| 3rd Child          | 12,414        | 0          | 20           | 164          | 2,401         | 3,843         | 3,680         | 1,918        | 366          | 19          | 3         |
| 4th Child          | 5,022         | 0          | 3            | 9            | 623           | 1,525         | 1,651         | 950          | 255          | 5           | 1         |
| 5th Child          | 1,865         | 0          | 0            | 0            | 128           | 491           | 637           | 479          | 122          | 6           | 2         |
| 6th Child          | 795           | 0          | 0            | 0            | 31            | 160           | 280           | 239          | 77           | 7           | 1         |
| 7th Child          | 374           | 0          | 0            | 0            | 6             | 44            | 136           | 141          | 46           | 1           | 0         |
| 8th Child          | 169           | 0          | 0            | 1            | 0             | 17            | 44            | 67           | 35           | 5           | 0         |
| 9th Child          | 96            | 0          | 0            | 0            | 1             | 3             | 28            | 43           | 21           | 0           | 0         |
| 10th or more       | 152           | 0          | 0            | 0            | 1             | 5             | 25            | 62           | 56           | 3           | 0         |
| Unknown            | 1,227         | 2          | 25           | 77           | 283           | 320           | 302           | 163          | 48           | 2           | 5         |

**Nativity Table A5. Mother's Education by Mother's Age Group for Residents, 2001**

| Education            | All Ages      | Under 15   | 15-17        | 18-19        | 20-24         | 25-29         | 30-34         | 35-39        | 40-44        | 45 and Over | Age Unk   |
|----------------------|---------------|------------|--------------|--------------|---------------|---------------|---------------|--------------|--------------|-------------|-----------|
| <b>State Total</b>   | <b>79,542</b> | <b>111</b> | <b>2,251</b> | <b>5,261</b> | <b>19,823</b> | <b>21,196</b> | <b>19,328</b> | <b>9,404</b> | <b>2,027</b> | <b>113</b>  | <b>28</b> |
| No Education         | 115           | 0          | 4            | 10           | 31            | 29            | 24            | 11           | 4            | 2           | 0         |
| 8th Grade or Less    | 3,563         | 61         | 247          | 345          | 1,053         | 906           | 619           | 276          | 53           | 2           | 1         |
| Some High School     | 9,210         | 29         | 1,498        | 1,820        | 3,230         | 1,484         | 777           | 297          | 72           | 0           | 3         |
| High School Graduate | 22,887        | 0          | 274          | 2,312        | 8,659         | 5,865         | 3,752         | 1,634        | 371          | 15          | 5         |
| Some College         | 18,590        | 0          | 7            | 362          | 4,598         | 6,102         | 4,751         | 2,243        | 498          | 24          | 5         |
| College Graduate     | 12,145        | 0          | 0            | 1            | 750           | 3,606         | 4,907         | 2,390        | 463          | 23          | 5         |
| Postgraduate Educ    | 8,132         | 0          | 0            | 0            | 200           | 1,932         | 3,488         | 2,032        | 437          | 41          | 2         |
| Unknown              | 4,900         | 21         | 221          | 411          | 1,302         | 1,272         | 1,010         | 521          | 129          | 6           | 7         |

**Nativity Table A6a. Top 100 Baby Names of Girls for Residents, 2001**

| Rank | First Name | N   | %   | Cumulative |      | Rank | First Name | N   | %   | Cumulative |      |
|------|------------|-----|-----|------------|------|------|------------|-----|-----|------------|------|
|      |            |     |     | N          | %    |      |            |     |     | N          | %    |
| 1    | EMILY      | 514 | 1.3 | 514        | 1.3  | 51   | ISABEL     | 107 | 0.3 | 10,627     | 27.3 |
| 2    | MADISON    | 458 | 1.2 | 972        | 2.5  | 52   | STEPHANIE  | 107 | 0.3 | 10,734     | 27.6 |
| 3    | HANNAH     | 438 | 1.1 | 1,410      | 3.6  | 53   | KATELYN    | 106 | 0.3 | 10,840     | 27.9 |
| 4    | EMMA       | 355 | 0.9 | 1,765      | 4.5  | 54   | TRINITY    | 105 | 0.3 | 10,945     | 28.1 |
| 5    | GRACE      | 342 | 0.9 | 2,107      | 5.4  | 55   | SHELBY     | 104 | 0.3 | 11,049     | 28.4 |
| 6    | OLIVIA     | 337 | 0.9 | 2,444      | 6.3  | 56   | DESTINY    | 101 | 0.3 | 11,150     | 28.6 |
| 7    | ELIZABETH  | 323 | 0.8 | 2,767      | 7.1  | 57   | GABRIELLE  | 101 | 0.3 | 11,251     | 28.9 |
| 8    | SAMANTHA   | 310 | 0.8 | 3,077      | 7.9  | 58   | ANDREA     | 100 | 0.3 | 11,351     | 29.2 |
| 9    | SARAH      | 294 | 0.8 | 3,371      | 8.7  | 59   | LILY       | 99  | 0.3 | 11,450     | 29.4 |
| 10   | ASHLEY     | 285 | 0.7 | 3,656      | 9.4  | 60   | REBECCA    | 97  | 0.2 | 11,547     | 29.7 |
| 11   | JESSICA    | 277 | 0.7 | 3,933      | 10.1 | 61   | BAILEY     | 93  | 0.2 | 11,640     | 29.9 |
| 12   | ALEXIS     | 273 | 0.7 | 4,206      | 10.8 | 62   | KAYLEE     | 93  | 0.2 | 11,733     | 30.1 |
| 13   | ABIGAIL    | 268 | 0.7 | 4,474      | 11.5 | 63   | LILLIAN    | 91  | 0.2 | 11,824     | 30.4 |
| 14   | ANNA       | 251 | 0.6 | 4,725      | 12.1 | 64   | MARY       | 88  | 0.2 | 11,912     | 30.6 |
| 15   | TAYLOR     | 251 | 0.6 | 4,976      | 12.8 | 65   | ERIN       | 87  | 0.2 | 11,999     | 30.8 |
| 16   | MEGAN      | 246 | 0.6 | 5,222      | 13.4 | 66   | AUTUMN     | 86  | 0.2 | 12,085     | 31.1 |
| 17   | ALYSSA     | 237 | 0.6 | 5,459      | 14.0 | 67   | DANIELLE   | 86  | 0.2 | 12,171     | 31.3 |
| 18   | ISABELLA   | 228 | 0.6 | 5,687      | 14.6 | 68   | VANESSA    | 86  | 0.2 | 12,257     | 31.5 |
| 19   | CHLOE      | 220 | 0.6 | 5,907      | 15.2 | 69   | CHRISTINA  | 85  | 0.2 | 12,342     | 31.7 |
| 20   | HAILEY     | 219 | 0.6 | 6,126      | 15.7 | 70   | KYLIE      | 85  | 0.2 | 12,427     | 31.9 |
| 21   | LAUREN     | 215 | 0.6 | 6,341      | 16.3 | 71   | AUDREY     | 84  | 0.2 | 12,511     | 32.1 |
| 22   | SOPHIA     | 204 | 0.5 | 6,545      | 16.8 | 72   | ANGELINA   | 83  | 0.2 | 12,594     | 32.4 |
| 23   | NATALIE    | 201 | 0.5 | 6,746      | 17.3 | 73   | PAIGE      | 82  | 0.2 | 12,676     | 32.6 |
| 24   | RACHEL     | 199 | 0.5 | 6,945      | 17.8 | 74   | KATIE      | 80  | 0.2 | 12,756     | 32.8 |
| 25   | SYDNEY     | 192 | 0.5 | 7,137      | 18.3 | 75   | SARA       | 79  | 0.2 | 12,835     | 33.0 |
| 26   | JASMINE    | 171 | 0.4 | 7,308      | 18.8 | 76   | ISABELLE   | 78  | 0.2 | 12,913     | 33.2 |
| 27   | MADLINE    | 163 | 0.4 | 7,471      | 19.2 | 77   | MICHELLE   | 78  | 0.2 | 12,991     | 33.4 |
| 28   | NICOLE     | 163 | 0.4 | 7,634      | 19.6 | 78   | MOLLY      | 78  | 0.2 | 13,069     | 33.6 |
| 29   | JENNIFER   | 161 | 0.4 | 7,795      | 20.0 | 79   | ALEXA      | 77  | 0.2 | 13,146     | 33.8 |
| 30   | KAYLA      | 158 | 0.4 | 7,953      | 20.4 | 80   | DIANA      | 77  | 0.2 | 13,223     | 34.0 |
| 31   | JULIA      | 153 | 0.4 | 8,106      | 20.8 | 81   | MAYA       | 76  | 0.2 | 13,299     | 34.2 |
| 32   | MORGAN     | 148 | 0.4 | 8,254      | 21.2 | 82   | ANGELA     | 75  | 0.2 | 13,374     | 34.4 |
| 33   | KATHERINE  | 144 | 0.4 | 8,398      | 21.6 | 83   | MARISSA    | 75  | 0.2 | 13,449     | 34.6 |
| 34   | MARIA      | 140 | 0.4 | 8,538      | 21.9 | 84   | RILEY      | 75  | 0.2 | 13,524     | 34.7 |
| 35   | BRIANNA    | 139 | 0.4 | 8,677      | 22.3 | 85   | JACQUELINE | 74  | 0.2 | 13,598     | 34.9 |
| 36   | KAITLYN    | 138 | 0.4 | 8,815      | 22.6 | 86   | MIA        | 73  | 0.2 | 13,671     | 35.1 |
| 37   | MACKENZIE  | 136 | 0.3 | 8,951      | 23.0 | 87   | AVA        | 72  | 0.2 | 13,743     | 35.3 |
| 38   | SAVANNAH   | 136 | 0.3 | 9,087      | 23.3 | 88   | BROOKE     | 72  | 0.2 | 13,815     | 35.5 |
| 39   | ZOE        | 133 | 0.3 | 9,220      | 23.7 | 89   | CAITLIN    | 72  | 0.2 | 13,887     | 35.7 |
| 40   | SIERRA     | 132 | 0.3 | 9,352      | 24.0 | 90   | COURTNEY   | 72  | 0.2 | 13,959     | 35.9 |
| 41   | FAITH      | 127 | 0.3 | 9,479      | 24.4 | 91   | JADE       | 72  | 0.2 | 14,031     | 36.1 |
| 42   | ALLISON    | 126 | 0.3 | 9,605      | 24.7 | 92   | CASSANDRA  | 71  | 0.2 | 14,102     | 36.2 |
| 43   | VICTORIA   | 126 | 0.3 | 9,731      | 25.0 | 93   | ALEXANDRIA | 68  | 0.2 | 14,170     | 36.4 |
| 44   | JENNA      | 117 | 0.3 | 9,848      | 25.3 | 94   | AMBER      | 68  | 0.2 | 14,238     | 36.6 |
| 45   | HALEY      | 116 | 0.3 | 9,964      | 25.6 | 95   | CASSIDY    | 68  | 0.2 | 14,306     | 36.8 |
| 46   | ALEXANDRA  | 115 | 0.3 | 10,079     | 25.9 | 96   | MIKAYLA    | 68  | 0.2 | 14,374     | 36.9 |
| 47   | MAKAYLA    | 113 | 0.3 | 10,192     | 26.2 | 97   | AMY        | 66  | 0.2 | 14,440     | 37.1 |
| 48   | AMANDA     | 111 | 0.3 | 10,303     | 26.5 | 98   | ELLA       | 66  | 0.2 | 14,506     | 37.3 |
| 49   | CLAIRE     | 109 | 0.3 | 10,412     | 26.8 | 99   | LEAH       | 65  | 0.2 | 14,571     | 37.4 |
| 50   | JORDAN     | 108 | 0.3 | 10,520     | 27.0 | 100  | PAYTON     | 65  | 0.2 | 14,636     | 37.6 |



**Nativity Table A6b. Top 100 Baby Names of Boys for Residents, 2001**

| Rank | First Name  | N   | %   | Cumulative |      | Rank | First Name | N   | %   | Cumulative |      |
|------|-------------|-----|-----|------------|------|------|------------|-----|-----|------------|------|
|      |             |     |     | N          | %    |      |            |     |     | N          | %    |
| 1    | JACOB       | 642 | 1.6 | 642        | 1.6  | 51   | CODY       | 163 | 0.4 | 14,915     | 36.7 |
| 2    | JOSHUA      | 480 | 1.2 | 1,122      | 2.8  | 52   | ROBERT     | 159 | 0.4 | 15,074     | 37.1 |
| 3    | ETHAN       | 470 | 1.2 | 1,592      | 3.9  | 53   | RILEY      | 157 | 0.4 | 15,231     | 37.5 |
| 4    | MICHAEL     | 442 | 1.1 | 2,034      | 5.0  | 54   | NATHANIEL  | 156 | 0.4 | 15,387     | 37.9 |
| 5    | ANDREW      | 432 | 1.1 | 2,466      | 6.1  | 55   | JASON      | 155 | 0.4 | 15,542     | 38.3 |
| 6    | ALEXANDER   | 408 | 1.0 | 2,874      | 7.1  | 56   | LUKE       | 155 | 0.4 | 15,697     | 38.6 |
| 7    | DANIEL      | 392 | 1.0 | 3,266      | 8.0  | 57   | CARSON     | 152 | 0.4 | 15,849     | 39.0 |
| 8    | NICHOLAS    | 386 | 1.0 | 3,652      | 9.0  | 58   | IAN        | 148 | 0.4 | 15,997     | 39.4 |
| 9    | TYLER       | 386 | 1.0 | 4,038      | 9.9  | 59   | AIDAN      | 147 | 0.4 | 16,144     | 39.7 |
| 10   | MATTHEW     | 384 | 0.9 | 4,422      | 10.9 | 60   | SEAN       | 147 | 0.4 | 16,291     | 40.1 |
| 11   | JOSEPH      | 375 | 0.9 | 4,797      | 11.8 | 61   | GAVIN      | 142 | 0.3 | 16,433     | 40.5 |
| 12   | RYAN        | 374 | 0.9 | 5,171      | 12.7 | 62   | COLBY      | 141 | 0.3 | 16,574     | 40.8 |
| 13   | BENJAMIN    | 357 | 0.9 | 5,528      | 13.6 | 63   | BLAKE      | 139 | 0.3 | 16,713     | 41.1 |
| 14   | ANTHONY     | 339 | 0.8 | 5,867      | 14.4 | 64   | ERIC       | 138 | 0.3 | 16,851     | 41.5 |
| 15   | SAMUEL      | 339 | 0.8 | 6,206      | 15.3 | 65   | TANNER     | 138 | 0.3 | 16,989     | 41.8 |
| 16   | WILLIAM     | 332 | 0.8 | 6,538      | 16.1 | 66   | JUAN       | 136 | 0.3 | 17,125     | 42.2 |
| 17   | DAVID       | 331 | 0.8 | 6,869      | 16.9 | 67   | SPENCER    | 130 | 0.3 | 17,255     | 42.5 |
| 18   | ZACHARY     | 328 | 0.8 | 7,197      | 17.7 | 68   | BRIAN      | 127 | 0.3 | 17,382     | 42.8 |
| 19   | DYLAN       | 326 | 0.8 | 7,523      | 18.5 | 69   | JARED      | 127 | 0.3 | 17,509     | 43.1 |
| 20   | AUSTIN      | 325 | 0.8 | 7,848      | 19.3 | 70   | ADAM       | 126 | 0.3 | 17,635     | 43.4 |
| 21   | NATHAN      | 320 | 0.8 | 8,168      | 20.1 | 71   | WYATT      | 125 | 0.3 | 17,760     | 43.7 |
| 22   | CHRISTOPHER | 310 | 0.8 | 8,478      | 20.9 | 72   | LUCAS      | 123 | 0.3 | 17,883     | 44.0 |
| 23   | LOGAN       | 302 | 0.7 | 8,780      | 21.6 | 73   | TREVOR     | 123 | 0.3 | 18,006     | 44.3 |
| 24   | CAMERON     | 293 | 0.7 | 9,073      | 22.3 | 74   | CHASE      | 121 | 0.3 | 18,127     | 44.6 |
| 25   | BRANDON     | 291 | 0.7 | 9,364      | 23.1 | 75   | GARRETT    | 115 | 0.3 | 18,242     | 44.9 |
| 26   | GABRIEL     | 279 | 0.7 | 9,643      | 23.7 | 76   | SETH       | 114 | 0.3 | 18,356     | 45.2 |
| 27   | JONATHAN    | 274 | 0.7 | 9,917      | 24.4 | 77   | TIMOTHY    | 114 | 0.3 | 18,470     | 45.5 |
| 28   | NOAH        | 270 | 0.7 | 10,187     | 25.1 | 78   | CHARLES    | 113 | 0.3 | 18,583     | 45.7 |
| 29   | JOHN        | 267 | 0.7 | 10,454     | 25.7 | 79   | DEVIN      | 112 | 0.3 | 18,695     | 46.0 |
| 30   | JAMES       | 257 | 0.6 | 10,711     | 26.4 | 80   | MAXWELL    | 112 | 0.3 | 18,807     | 46.3 |
| 31   | CHRISTIAN   | 237 | 0.6 | 10,948     | 27.0 | 81   | COLTON     | 109 | 0.3 | 18,916     | 46.6 |
| 32   | KYLE        | 236 | 0.6 | 11,184     | 27.5 | 82   | JADEN      | 108 | 0.3 | 19,024     | 46.8 |
| 33   | HUNTER      | 233 | 0.6 | 11,417     | 28.1 | 83   | ADRIAN     | 106 | 0.3 | 19,130     | 47.1 |
| 34   | JUSTIN      | 230 | 0.6 | 11,647     | 28.7 | 84   | TRISTAN    | 106 | 0.3 | 19,236     | 47.4 |
| 35   | CONNOR      | 224 | 0.6 | 11,871     | 29.2 | 85   | JESUS      | 103 | 0.3 | 19,339     | 47.6 |
| 36   | ISAAC       | 221 | 0.5 | 12,092     | 29.8 | 86   | LUIS       | 101 | 0.2 | 19,440     | 47.9 |
| 37   | CALEB       | 215 | 0.5 | 12,307     | 30.3 | 87   | MARK       | 99  | 0.2 | 19,539     | 48.1 |
| 38   | THOMAS      | 212 | 0.5 | 12,519     | 30.8 | 88   | CARTER     | 98  | 0.2 | 19,637     | 48.3 |
| 39   | JORDAN      | 209 | 0.5 | 12,728     | 31.3 | 89   | HENRY      | 98  | 0.2 | 19,735     | 48.6 |
| 40   | COLE        | 206 | 0.5 | 12,934     | 31.8 | 90   | ANGEL      | 97  | 0.2 | 19,832     | 48.8 |
| 41   | JOSE        | 201 | 0.5 | 13,135     | 32.3 | 91   | STEVEN     | 96  | 0.2 | 19,928     | 49.1 |
| 42   | ELIJAH      | 196 | 0.5 | 13,331     | 32.8 | 92   | JESSE      | 95  | 0.2 | 20,023     | 49.3 |
| 43   | AARON       | 193 | 0.5 | 13,524     | 33.3 | 93   | CARLOS     | 92  | 0.2 | 20,115     | 49.5 |
| 44   | ISAIAH      | 189 | 0.5 | 13,713     | 33.8 | 94   | JAYDEN     | 92  | 0.2 | 20,207     | 49.7 |
| 45   | MASON       | 184 | 0.5 | 13,897     | 34.2 | 95   | PARKER     | 92  | 0.2 | 20,299     | 50.0 |
| 46   | JACKSON     | 177 | 0.4 | 14,074     | 34.6 | 96   | HAYDEN     | 90  | 0.2 | 20,389     | 50.2 |
| 47   | JACK        | 173 | 0.4 | 14,247     | 35.1 | 97   | LEVI       | 90  | 0.2 | 20,479     | 50.4 |
| 48   | KEVIN       | 173 | 0.4 | 14,420     | 35.5 | 98   | JULIAN     | 87  | 0.2 | 20,566     | 50.6 |
| 49   | ALEX        | 166 | 0.4 | 14,586     | 35.9 | 99   | MARCUS     | 86  | 0.2 | 20,652     | 50.8 |
| 50   | EVAN        | 166 | 0.4 | 14,752     | 36.3 | 100  | BRYAN      | 85  | 0.2 | 20,737     | 51.1 |

**Nativity Table A7. County/City of Residence, Sex<sup>1</sup>, and County/City of Occurrence, 2001**

| County and City    | Residence     |                   |               | Occurrence    |               |
|--------------------|---------------|-------------------|---------------|---------------|---------------|
|                    | Total         | Rate <sup>2</sup> | Male          | Female        | Total         |
| <b>State Total</b> | <b>79,542</b> | <b>13.3</b>       | <b>40,621</b> | <b>38,920</b> | <b>79,101</b> |
| Adams              | 328           | 19.8              | 158           | 170           | 432           |
| Asotin             | 234           | 11.3              | 124           | 110           | 2             |
| Benton             | 2,215         | 15.3              | 1,176         | 1,039         | 3,031         |
| Kennewick          | 1,111         | 19.9              | 600           | 511           | 1,357         |
| Richland           | 530           | 13.5              | 275           | 255           | 1,302         |
| Chelan             | 971           | 14.5              | 508           | 463           | 1,403         |
| Wenatchee          | 480           | 17.2              | 247           | 233           | 1,316         |
| Clallam            | 606           | 9.4               | 308           | 298           | 569           |
| Port Angeles       | 217           | 11.8              | 114           | 103           | 477           |
| Clark              | 5,322         | 15.1              | 2,725         | 2,597         | 4,717         |
| Vancouver          | 3,512         | 24.2              | 1,801         | 1,711         | 4,692         |
| Columbia           | 35            | 8.5               | 18            | 17            | 1             |
| Cowlitz            | 1,229         | 13.1              | 613           | 616           | 1,257         |
| Longview           | 553           | 15.8              | 274           | 279           | 1,252         |
| Douglas            | 440           | 13.4              | 224           | 216           | 0             |
| Ferry              | 75            | 10.3              | 32            | 43            | 16            |
| Franklin           | 1,147         | 22.8              | 609           | 538           | 636           |
| Pasco              | 904           | 27.4              | 475           | 429           | 633           |
| Garfield           | 23            | 9.6               | 13            | 10            | 0             |
| Grant              | 1,313         | 17.3              | 680           | 633           | 1,009         |
| Moses Lake         | 332           | 21.8              | 178           | 154           | 884           |
| Grays Harbor       | 766           | 11.2              | 378           | 388           | 526           |
| Aberdeen           | 252           | 15.3              | 121           | 131           | 516           |
| Island             | 897           | 12.4              | 445           | 452           | 618           |
| Oak Harbor         | 473           | 23.6              | 230           | 243           | 397           |
| Jefferson          | 200           | 7.7               | 97            | 103           | 135           |
| King               | 21,778        | 12.4              | 11,106        | 10,672        | 26,197        |
| Auburn             | 906           | 20.9              | 469           | 437           | 716           |
| Bellevue           | 1,357         | 12.2              | 673           | 684           | 3,512         |
| Bothell part       | 287           | 17.6              | 143           | 144           | 5             |
| Burien             | 258           | 8.1               | 145           | 113           | 1,338         |
| Des Moines         | 364           | 12.3              | 196           | 168           | 1             |
| Federal Way        | 1,224         | 14.6              | 652           | 572           | 1,593         |
| Kenmore            | 182           | 9.7               | 101           | 81            | 4             |
| Kent               | 1,574         | 19.2              | 814           | 760           | 10            |
| Kirkland           | 789           | 17.2              | 406           | 383           | 3,969         |
| Mercer Island      | 132           | 6.0               | 68            | 64            | 0             |
| Redmond            | 722           | 15.9              | 362           | 360           | 636           |
| Renton             | 1,254         | 24.5              | 657           | 597           | 2,521         |
| Sammamish          | 518           | 15.0              | 266           | 252           | 0             |
| SeaTac             | 279           | 11.0              | 147           | 132           | 1             |
| Seattle            | 7,087         | 12.5              | 3,592         | 3,495         | 11,609        |
| Shoreline          | 426           | 8.0               | 210           | 216           | 6             |
| Tukwila            | 256           | 14.9              | 120           | 136           | 1             |

**Nativity Table A7 (Continued). County/City of Residence, Sex<sup>1</sup>, and County/City of Occurrence, 2001**

| County and City    | Residence |                   |       |        | Occurrence |
|--------------------|-----------|-------------------|-------|--------|------------|
|                    | Total     | Rate <sup>2</sup> | Male  | Female | Total      |
| Kitsap             | 2,946     | 12.6              | 1,518 | 1,428  | 2,497      |
| Bainbridge Island  | 132       | 6.4               | 63    | 69     | 8          |
| Bremerton          | 956       | 25.7              | 496   | 460    | 707        |
| Kittitas           | 371       | 10.9              | 181   | 190    | 337        |
| Ellensburg         | 194       | 12.5              | 100   | 94     | 336        |
| Klickitat          | 221       | 11.5              | 108   | 113    | 138        |
| Lewis              | 856       | 12.3              | 423   | 433    | 604        |
| Lincoln            | 92        | 9.0               | 52    | 40     | 16         |
| Mason              | 543       | 10.9              | 284   | 259    | 305        |
| Okanogan           | 518       | 13.0              | 267   | 251    | 505        |
| Pacific            | 203       | 9.7               | 109   | 94     | 58         |
| Pend Oreille       | 124       | 10.5              | 65    | 59     | 91         |
| Pierce             | 10,052    | 14.1              | 5,097 | 4,955  | 10,237     |
| Lakewood           | 981       | 16.9              | 490   | 491    | 731        |
| Puyallup           | 866       | 25.5              | 432   | 434    | 1,396      |
| Tacoma             | 3,823     | 19.7              | 1,916 | 1,907  | 7,905      |
| University Place   | 210       | 7.0               | 117   | 93     | 5          |
| San Juan           | 104       | 7.2               | 62    | 42     | 6          |
| Skagit             | 1,383     | 13.3              | 711   | 672    | 1,588      |
| Mount Vernon       | 574       | 21.7              | 285   | 289    | 1,316      |
| Skamania           | 109       | 11.0              | 59    | 50     | 2          |
| Snohomish          | 8,703     | 14.1              | 4,399 | 4,304  | 5,601      |
| Edmonds            | 433       | 10.9              | 227   | 206    | 1,540      |
| Everett            | 2,150     | 22.4              | 1,106 | 1,044  | 3,129      |
| Lynnwood           | 936       | 27.5              | 477   | 459    | 9          |
| Marysville         | 611       | 22.8              | 275   | 336    | 8          |
| Mountlake Terrace  | 266       | 13.1              | 136   | 130    | 1          |
| Mukilteo           | 185       | 10.1              | 100   | 85     | 0          |
| Spokane            | 5,414     | 12.8              | 2,800 | 2,614  | 6,250      |
| Spokane (city)     | 3,204     | 16.4              | 1,638 | 1,566  | 6,248      |
| Stevens            | 449       | 11.1              | 231   | 218    | 278        |
| Thurston           | 2,606     | 12.4              | 1,332 | 1,274  | 2,755      |
| Lacey              | 543       | 17.2              | 270   | 273    | 8          |
| Olympia            | 946       | 22.2              | 502   | 444    | 2,735      |
| Wahkiakum          | 29        | 7.6               | 18    | 11     | 1          |
| Walla Walla        | 714       | 12.9              | 359   | 355    | 941        |
| Walla Walla (city) | 467       | 15.8              | 226   | 241    | 941        |
| Whatcom            | 1,965     | 11.5              | 1,008 | 957    | 1,920      |
| Bellingham         | 883       | 12.8              | 450   | 433    | 1,897      |
| Whitman            | 375       | 9.3               | 182   | 193    | 349        |
| Pullman            | 234       | 9.5               | 109   | 125    | 294        |
| Yakima             | 4,186     | 18.6              | 2,142 | 2,043  | 4,073      |
| Yakima (city)      | 1615      | 22.1              | 841   | 774    | 2972       |

<sup>1</sup>Total includes 1 birth for which sex is unknown.

<sup>2</sup>Rate per 1,000 population.

Note: Occurrence represents all births which occur in Washington State regardless of the mother's residence.

Residence represents all births to residents of Washington State regardless of where the birth occurred.

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**Natality Table A8. Month of Birth by County of Residence, 2001**

| County             | Total         | Jan          | Feb          | Mar          | Apr          | May          | Jun          | Jul          | Aug          | Sep          | Oct          | Nov          | Dec          |
|--------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>State Total</b> | <b>79,542</b> | <b>6,476</b> | <b>6,006</b> | <b>6,938</b> | <b>6,630</b> | <b>7,121</b> | <b>6,837</b> | <b>7,037</b> | <b>6,983</b> | <b>6,483</b> | <b>6,455</b> | <b>6,255</b> | <b>6,321</b> |
| Adams              | 328           | 29           | 29           | 23           | 21           | 20           | 23           | 32           | 34           | 32           | 30           | 29           | 26           |
| Asotin             | 234           | 17           | 16           | 27           | 18           | 17           | 10           | 21           | 28           | 17           | 22           | 16           | 25           |
| Benton             | 2,215         | 171          | 176          | 201          | 174          | 207          | 183          | 197          | 191          | 186          | 164          | 182          | 183          |
| Chelan             | 971           | 82           | 62           | 84           | 89           | 84           | 84           | 94           | 103          | 81           | 71           | 67           | 70           |
| Clallam            | 606           | 41           | 47           | 59           | 49           | 66           | 45           | 51           | 47           | 50           | 59           | 43           | 49           |
| Clark              | 5,322         | 429          | 399          | 474          | 429          | 482          | 455          | 479          | 444          | 458          | 417          | 428          | 428          |
| Columbia           | 35            | 6            | 4            | 1            | 4            | 0            | 2            | 1            | 5            | 3            | 7            | 2            | 0            |
| Cowlitz            | 1,229         | 107          | 90           | 102          | 111          | 110          | 92           | 112          | 88           | 112          | 122          | 81           | 102          |
| Douglas            | 440           | 40           | 27           | 36           | 41           | 40           | 32           | 42           | 36           | 33           | 38           | 31           | 44           |
| Ferry              | 75            | 5            | 9            | 7            | 5            | 7            | 7            | 6            | 8            | 3            | 9            | 6            | 3            |
| Franklin           | 1,147         | 84           | 76           | 86           | 93           | 103          | 104          | 112          | 101          | 95           | 104          | 110          | 79           |
| Garfield           | 23            | 4            | 0            | 2            | 4            | 2            | 3            | 0            | 3            | 2            | 1            | 1            | 1            |
| Grant              | 1,313         | 113          | 94           | 122          | 126          | 106          | 118          | 106          | 117          | 117          | 107          | 88           | 99           |
| Grays Harbor       | 766           | 55           | 61           | 74           | 65           | 69           | 62           | 58           | 58           | 79           | 53           | 50           | 82           |
| Island             | 897           | 60           | 66           | 80           | 76           | 86           | 71           | 77           | 70           | 77           | 74           | 73           | 87           |
| Jefferson          | 200           | 8            | 16           | 14           | 13           | 16           | 16           | 23           | 21           | 20           | 20           | 14           | 19           |
| King               | 21,778        | 1,728        | 1,677        | 1,918        | 1,816        | 1,964        | 1,833        | 1,920        | 1,932        | 1,790        | 1,752        | 1,713        | 1,735        |
| Kitsap             | 2,946         | 223          | 227          | 252          | 229          | 250          | 241          | 250          | 278          | 249          | 236          | 256          | 255          |
| Kittitas           | 371           | 33           | 32           | 38           | 20           | 25           | 34           | 30           | 33           | 40           | 37           | 14           | 35           |
| Klickitat          | 221           | 18           | 16           | 17           | 20           | 25           | 17           | 20           | 24           | 19           | 16           | 15           | 14           |
| Lewis              | 856           | 77           | 68           | 84           | 72           | 88           | 77           | 73           | 59           | 65           | 69           | 69           | 55           |
| Lincoln            | 92            | 12           | 9            | 5            | 6            | 9            | 8            | 7            | 4            | 8            | 9            | 7            | 8            |
| Mason              | 543           | 44           | 38           | 43           | 49           | 51           | 48           | 48           | 40           | 48           | 45           | 45           | 44           |
| Okanogan           | 518           | 42           | 30           | 57           | 44           | 49           | 43           | 47           | 53           | 48           | 39           | 39           | 27           |
| Pacific            | 203           | 18           | 17           | 19           | 17           | 20           | 24           | 19           | 11           | 8            | 19           | 15           | 16           |
| Pend Oreille       | 124           | 12           | 8            | 8            | 11           | 13           | 14           | 10           | 9            | 12           | 10           | 7            | 10           |
| Pierce             | 10,052        | 850          | 753          | 860          | 838          | 897          | 849          | 891          | 834          | 850          | 806          | 841          | 783          |
| San Juan           | 104           | 7            | 6            | 8            | 12           | 8            | 16           | 5            | 11           | 9            | 11           | 4            | 7            |
| Skagit             | 1,383         | 115          | 106          | 110          | 129          | 124          | 125          | 136          | 109          | 104          | 111          | 106          | 108          |
| Skamania           | 109           | 11           | 5            | 6            | 6            | 9            | 8            | 6            | 11           | 15           | 7            | 13           | 12           |
| Snohomish          | 8,703         | 702          | 676          | 753          | 747          | 753          | 756          | 748          | 822          | 660          | 727          | 683          | 676          |
| Spokane            | 5,414         | 474          | 384          | 481          | 426          | 499          | 483          | 475          | 501          | 407          | 451          | 410          | 423          |
| Stevens            | 449           | 31           | 47           | 31           | 33           | 32           | 49           | 39           | 45           | 36           | 33           | 38           | 35           |
| Thurston           | 2,606         | 220          | 208          | 264          | 225          | 228          | 254          | 213          | 201          | 191          | 199          | 206          | 197          |
| Wahkiakum          | 29            | 6            | 2            | 0            | 2            | 5            | 4            | 2            | 3            | 2            | 2            | 1            | 0            |
| Walla Walla        | 714           | 57           | 52           | 62           | 68           | 70           | 52           | 60           | 51           | 50           | 61           | 61           | 70           |
| Whatcom            | 1,965         | 157          | 136          | 146          | 174          | 166          | 176          | 201          | 195          | 167          | 138          | 156          | 153          |
| Whitman            | 375           | 29           | 29           | 31           | 29           | 40           | 33           | 36           | 25           | 25           | 34           | 28           | 36           |
| Yakima             | 4,186         | 359          | 308          | 353          | 339          | 381          | 386          | 390          | 378          | 315          | 345          | 307          | 325          |

**Nativity Table A9. Mother's Age Group by County of Residence, 2001**

| County             | All Ages      | Under 15   | 15-19        | 15-17        | 18-19        | 20-24         | 25-29         | 30-34         | 35-39        | 40-44        | 45 and Over | Age Unk   |
|--------------------|---------------|------------|--------------|--------------|--------------|---------------|---------------|---------------|--------------|--------------|-------------|-----------|
| <b>State Total</b> | <b>79,542</b> | <b>111</b> | <b>7,512</b> | <b>2,251</b> | <b>5,261</b> | <b>19,823</b> | <b>21,196</b> | <b>19,328</b> | <b>9,404</b> | <b>2,027</b> | <b>113</b>  | <b>28</b> |
| Adams              | 328           | 1          | 59           | 23           | 36           | 102           | 97            | 50            | 15           | 4            | 0           | 0         |
| Asotin             | 234           | 1          | 34           | 11           | 23           | 68            | 60            | 41            | 27           | 3            | 0           | 0         |
| Benton             | 2,215         | 3          | 261          | 79           | 182          | 646           | 580           | 459           | 217          | 46           | 2           | 1         |
| Chelan             | 971           | 1          | 122          | 39           | 83           | 259           | 252           | 198           | 118          | 20           | 1           | 0         |
| Clallam            | 606           | 1          | 75           | 23           | 52           | 210           | 154           | 91            | 54           | 18           | 3           | 0         |
| Clark              | 5,322         | 1          | 508          | 109          | 399          | 1,379         | 1,503         | 1,230         | 570          | 126          | 5           | 0         |
| Columbia           | 35            | 0          | 4            | 0            | 4            | 13            | 9             | 4             | 4            | 1            | 0           | 0         |
| Cowlitz            | 1,229         | 3          | 153          | 43           | 110          | 429           | 320           | 223           | 82           | 18           | 1           | 0         |
| Douglas            | 440           | 1          | 55           | 20           | 35           | 134           | 127           | 81            | 37           | 5            | 0           | 0         |
| Ferry              | 75            | 0          | 17           | 5            | 12           | 23            | 14            | 9             | 10           | 1            | 0           | 1         |
| Franklin           | 1,147         | 5          | 167          | 67           | 100          | 367           | 317           | 190           | 88           | 13           | 0           | 0         |
| Garfield           | 23            | 0          | 1            | 0            | 1            | 6             | 9             | 3             | 3            | 1            | 0           | 0         |
| Grant              | 1,313         | 2          | 204          | 66           | 138          | 384           | 385           | 214           | 97           | 24           | 1           | 2         |
| Grays Harbor       | 766           | 3          | 113          | 38           | 75           | 259           | 198           | 120           | 63           | 9            | 1           | 0         |
| Island             | 897           | 0          | 70           | 18           | 52           | 283           | 237           | 186           | 92           | 27           | 2           | 0         |
| Jefferson          | 200           | 0          | 32           | 12           | 20           | 48            | 47            | 33            | 33           | 7            | 0           | 0         |
| King               | 21,778        | 26         | 1,227        | 359          | 868          | 3,690         | 5,381         | 6,848         | 3,731        | 819          | 47          | 9         |
| Kitsap             | 2,946         | 0          | 286          | 65           | 221          | 847           | 762           | 641           | 326          | 78           | 5           | 1         |
| Kittitas           | 371           | 0          | 34           | 8            | 26           | 118           | 103           | 79            | 30           | 5            | 2           | 0         |
| Klickitat          | 221           | 0          | 33           | 13           | 20           | 61            | 63            | 40            | 21           | 3            | 0           | 0         |
| Lewis              | 856           | 2          | 123          | 33           | 90           | 314           | 208           | 150           | 46           | 12           | 1           | 0         |
| Lincoln            | 92            | 0          | 13           | 7            | 6            | 26            | 21            | 25            | 6            | 1            | 0           | 0         |
| Mason              | 543           | 1          | 84           | 22           | 62           | 180           | 129           | 89            | 48           | 12           | 0           | 0         |
| Okanogan           | 518           | 2          | 86           | 25           | 61           | 161           | 119           | 104           | 36           | 10           | 0           | 0         |
| Pacific            | 203           | 0          | 30           | 12           | 18           | 63            | 63            | 28            | 16           | 3            | 0           | 0         |
| Pend Oreille       | 124           | 1          | 16           | 5            | 11           | 40            | 17            | 29            | 17           | 4            | 0           | 0         |
| Pierce             | 10,052        | 20         | 1,075        | 299          | 776          | 2,821         | 2,831         | 2,136         | 972          | 180          | 12          | 5         |
| San Juan           | 104           | 0          | 6            | 2            | 4            | 19            | 31            | 17            | 22           | 9            | 0           | 0         |
| Skagit             | 1,383         | 4          | 204          | 76           | 128          | 381           | 361           | 285           | 126          | 19           | 3           | 0         |
| Skamania           | 109           | 1          | 13           | 3            | 10           | 39            | 24            | 21            | 5            | 6            | 0           | 0         |
| Snohomish          | 8,703         | 5          | 674          | 191          | 483          | 1,957         | 2,452         | 2,324         | 1,048        | 234          | 5           | 4         |
| Spokane            | 5,414         | 1          | 525          | 165          | 360          | 1,560         | 1,545         | 1,172         | 493          | 108          | 9           | 1         |
| Stevens            | 449           | 0          | 55           | 16           | 39           | 142           | 122           | 79            | 37           | 12           | 2           | 0         |
| Thurston           | 2,606         | 1          | 227          | 63           | 164          | 672           | 726           | 644           | 261          | 67           | 4           | 4         |
| Wahkiakum          | 29            | 0          | 2            | 1            | 1            | 8             | 7             | 9             | 2            | 1            | 0           | 0         |
| Walla Walla        | 714           | 0          | 114          | 42           | 72           | 209           | 168           | 143           | 67           | 13           | 0           | 0         |
| Whatcom            | 1,965         | 7          | 148          | 51           | 97           | 500           | 568           | 471           | 219          | 49           | 3           | 0         |
| Whitman            | 375           | 0          | 19           | 3            | 16           | 86            | 123           | 99            | 43           | 5            | 0           | 0         |
| Yakima             | 4,186         | 18         | 643          | 237          | 406          | 1,319         | 1,063         | 763           | 322          | 54           | 4           | 0         |

**Nativity Table A10. Age-Specific Live Birth Rates<sup>1</sup> by County of Residence, 2001**

| County             | All         |             |             |             |              |              |             |             |            |
|--------------------|-------------|-------------|-------------|-------------|--------------|--------------|-------------|-------------|------------|
|                    | Ages        | 15-19       | 15-17       | 18-19       | 20-24        | 25-29        | 30-34       | 35-39       | 40-44      |
| <b>State Total</b> | <b>61.2</b> | <b>35.6</b> | <b>17.7</b> | <b>62.8</b> | <b>100.8</b> | <b>110.2</b> | <b>88.9</b> | <b>40.1</b> | <b>8.2</b> |
| Adams              | 99.4        | 84.3        | 51.0        | 144.6       | 193.2        | 191.3        | 95.8        | 29.7        | --*        |
| Asotin             | 56.5        | 42.8        | 21.6        | 80.7        | 115.8        | 106.2        | 64.2        | 36.0        | --*        |
| Benton             | 72.8        | 45.3        | 21.2        | 89.4        | 152.4        | 139.5        | 95.5        | 39.4        | 7.7        |
| Chelan             | 73.7        | 49.9        | 25.1        | 93.5        | 142.9        | 135.5        | 97.2        | 49.5        | 7.6        |
| Clallam            | 57.8        | 36.6        | 17.3        | 71.8        | 163.0        | 121.3        | 62.8        | 26.9        | 7.4        |
| Clark              | 69.7        | 41.3        | 14.0        | 88.2        | 129.0        | 132.6        | 93.1        | 39.9        | 8.7        |
| Columbia           | 50.4        | --*         | --*         | --*         | 135.4        | 111.1        | --*         | --*         | --*        |
| Cowlitz            | 66.0        | 46.3        | 20.5        | 90.6        | 161.8        | 119.6        | 73.7        | 24.6        | 5.0        |
| Douglas            | 66.4        | 42.9        | 23.9        | 78.3        | 151.2        | 143.0        | 81.2        | 29.9        | 3.7        |
| Ferry              | 57.3        | 58.2        | 24.9        | 131.9       | 145.6        | 88.1         | 48.4        | 43.5        | --*        |
| Franklin           | 110.2       | 78.8        | 50.0        | 128.4       | 210.3        | 185.9        | 117.6       | 53.0        | 8.3        |
| Garfield           | 57.8        | --*         | --*         | --*         | 171.4        | 230.8        | --*         | --*         | --*        |
| Grant              | 86.5        | 66.1        | 33.4        | 124.5       | 163.8        | 167.2        | 89.9        | 39.2        | 9.3        |
| Grays Harbor       | 58.8        | 44.6        | 23.5        | 82.0        | 148.9        | 114.5        | 60.4        | 26.9        | 3.3        |
| Island             | 64.0        | 31.1        | 12.5        | 64.4        | 139.9        | 119.8        | 79.8        | 34.3        | 9.8        |
| Jefferson          | 50.0        | 43.8        | 24.0        | 87.3        | 123.7        | 112.4        | 55.7        | 42.8        | 6.4        |
| King               | 53.6        | 22.8        | 11.3        | 39.3        | 61.5         | 80.0         | 91.8        | 50.1        | 10.7       |
| Kitsap             | 61.5        | 35.2        | 12.3        | 77.6        | 126.1        | 120.0        | 82.2        | 36.2        | 7.9        |
| Kittitas           | 44.0        | 20.4        | 12.9        | 24.8        | 43.4         | 108.9        | 88.6        | 29.0        | 4.3        |
| Klickitat          | 62.6        | 49.3        | 27.6        | 100.5       | 151.7        | 137.0        | 77.2        | 31.3        | --*        |
| Lewis              | 65.4        | 47.4        | 19.7        | 98.4        | 168.5        | 122.6        | 78.2        | 19.4        | 4.5        |
| Lincoln            | 53.6        | 36.0        | 26.8        | 60.0        | 155.7        | 115.4        | 95.8        | 18.0        | --*        |
| Mason              | 62.7        | 50.5        | 19.8        | 112.5       | 170.6        | 119.7        | 69.9        | 28.7        | 6.2        |
| Okanogan           | 69.6        | 56.4        | 24.7        | 118.7       | 180.9        | 121.3        | 93.4        | 27.6        | 6.1        |
| Pacific            | 63.2        | 48.0        | 28.6        | 87.8        | 172.1        | 171.2        | 58.5        | 27.1        | --*        |
| Pend Oreille       | 59.7        | 35.8        | 15.6        | 87.3        | 224.7        | 77.6         | 96.7        | 38.8        | --*        |
| Pierce             | 63.3        | 40.9        | 18.8        | 75.0        | 118.2        | 122.8        | 79.4        | 33.5        | 6.0        |
| San Juan           | 48.1        | 17.2        | --*         | --*         | 94.5         | 136.6        | 57.2        | 49.1        | 14.1       |
| Skagit             | 67.2        | 53.4        | 31.7        | 90.0        | 130.3        | 126.3        | 87.3        | 34.7        | 4.6        |
| Skamania           | 55.4        | 34.7        | --*         | 80.0        | 195.0        | 100.8        | 71.2        | 12.5        | 13.1       |
| Snohomish          | 63.1        | 31.3        | 14.0        | 61.0        | 110.1        | 123.4        | 96.3        | 38.8        | 8.5        |
| Spokane            | 59.2        | 32.0        | 17.7        | 50.7        | 100.1        | 121.2        | 84.7        | 31.2        | 6.3        |
| Stevens            | 60.0        | 34.1        | 13.9        | 85.2        | 180.9        | 148.6        | 70.5        | 27.5        | 6.7        |
| Thurston           | 57.3        | 29.2        | 13.1        | 55.3        | 97.2         | 115.3        | 90.6        | 31.8        | 7.3        |
| Wahkiakum          | 48.2        | --*         | --*         | --*         | 135.6        | 100.0        | 96.8        | --*         | --*        |
| Walla Walla        | 63.8        | 47.0        | 34.6        | 59.4        | 95.1         | 126.9        | 89.4        | 39.3        | 6.7        |
| Whatcom            | 50.4        | 20.1        | 14.5        | 25.3        | 56.9         | 112.6        | 87.4        | 36.5        | 7.6        |
| Whitman            | 31.9        | 7.1         | --*         | 8.0         | 19.2         | 94.7         | 87.6        | 40.9        | 4.5        |
| Yakima             | 90.7        | 71.8        | 41.8        | 123.6       | 178.2        | 148.1        | 105.4       | 42.5        | 6.9        |

<sup>1</sup> The general fertility rate shown under "All Ages" equals total live births per 1,000 women of childbearing age (15-44). Age-specific rates equal the number of live births to women in a specific age group per 1,000 women in that age group.

\* Rate not calculated because number of events was less than 5.

Population Data: Office of Financial Management, Forecasting Division, "Population Estimates by Age and Sex, 1980-2001, Washington State," December 2001.

**Nativity Table A11. Single Mothers, Mother's Age Group by County of Residence, 2001**

| County             | All Ages      | Under 15   | 15-17        | 18-19        | 20-24        | 25-29        | 30-34        | 35-39        | 40-44      | 45 and Over | Age Unk  |
|--------------------|---------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|-------------|----------|
| <b>State Total</b> | <b>22,806</b> | <b>107</b> | <b>1,968</b> | <b>3,729</b> | <b>8,825</b> | <b>4,251</b> | <b>2,470</b> | <b>1,113</b> | <b>320</b> | <b>16</b>   | <b>7</b> |
| Adams              | 113           | 0          | 16           | 18           | 43           | 27           | 7            | 2            | 0          | 0           | 0        |
| Asotin             | 73            | 1          | 7            | 13           | 31           | 11           | 7            | 2            | 1          | 0           | 0        |
| Benton             | 644           | 3          | 69           | 122          | 250          | 123          | 41           | 29           | 6          | 0           | 1        |
| Chelan             | 306           | 1          | 34           | 54           | 116          | 54           | 28           | 14           | 5          | 0           | 0        |
| Clallam            | 236           | 1          | 22           | 38           | 105          | 36           | 24           | 5            | 3          | 2           | 0        |
| Clark              | 1,323         | 1          | 85           | 271          | 542          | 231          | 125          | 58           | 10         | 0           | 0        |
| Columbia           | 14            | 0          | 0            | 4            | 6            | 2            | 2            | 0            | 0          | 0           | 0        |
| Cowlitz            | 455           | 3          | 42           | 84           | 192          | 69           | 40           | 21           | 4          | 0           | 0        |
| Douglas            | 160           | 1          | 18           | 24           | 67           | 29           | 14           | 5            | 2          | 0           | 0        |
| Ferry              | 30            | 0          | 4            | 6            | 14           | 1            | 2            | 2            | 1          | 0           | 0        |
| Franklin           | 443           | 5          | 60           | 67           | 165          | 87           | 36           | 19           | 4          | 0           | 0        |
| Garfield           | 7             | 0          | 0            | 1            | 4            | 1            | 1            | 0            | 0          | 0           | 0        |
| Grant              | 433           | 2          | 47           | 91           | 155          | 85           | 37           | 9            | 5          | 0           | 2        |
| Grays Harbor       | 342           | 3          | 36           | 55           | 146          | 50           | 36           | 12           | 3          | 1           | 0        |
| Island             | 187           | 0          | 16           | 27           | 86           | 25           | 20           | 7            | 6          | 0           | 0        |
| Jefferson          | 70            | 0          | 11           | 15           | 19           | 16           | 5            | 3            | 1          | 0           | 0        |
| King               | 5,002         | 25         | 311          | 633          | 1,785        | 1,080        | 699          | 353          | 108        | 7           | 1        |
| Kitsap             | 758           | 0          | 63           | 142          | 304          | 133          | 59           | 41           | 15         | 0           | 1        |
| Kittitas           | 86            | 0          | 6            | 15           | 39           | 16           | 9            | 1            | 0          | 0           | 0        |
| Klickitat          | 68            | 0          | 12           | 10           | 32           | 12           | 2            | 0            | 0          | 0           | 0        |
| Lewis              | 307           | 2          | 31           | 63           | 121          | 45           | 34           | 8            | 3          | 0           | 0        |
| Lincoln            | 20            | 0          | 6            | 3            | 5            | 4            | 2            | 0            | 0          | 0           | 0        |
| Mason              | 224           | 0          | 22           | 43           | 95           | 32           | 18           | 12           | 2          | 0           | 0        |
| Okanogan           | 234           | 2          | 21           | 38           | 87           | 45           | 27           | 11           | 3          | 0           | 0        |
| Pacific            | 72            | 0          | 9            | 14           | 24           | 16           | 6            | 3            | 0          | 0           | 0        |
| Pend Oreille       | 45            | 1          | 5            | 6            | 22           | 4            | 3            | 4            | 0          | 0           | 0        |
| Pierce             | 3,234         | 19         | 261          | 563          | 1,237        | 615          | 346          | 150          | 40         | 2           | 1        |
| San Juan           | 27            | 0          | 2            | 3            | 10           | 3            | 4            | 3            | 2          | 0           | 0        |
| Skagit             | 490           | 4          | 70           | 83           | 181          | 87           | 45           | 16           | 4          | 0           | 0        |
| Skamania           | 31            | 1          | 3            | 8            | 13           | 3            | 2            | 1            | 0          | 0           | 0        |
| Snohomish          | 2,167         | 5          | 170          | 357          | 834          | 380          | 273          | 115          | 30         | 2           | 1        |
| Spokane            | 1,684         | 1          | 147          | 258          | 710          | 324          | 166          | 63           | 15         | 0           | 0        |
| Stevens            | 156           | 0          | 15           | 32           | 60           | 29           | 13           | 4            | 2          | 1           | 0        |
| Thurston           | 753           | 1          | 58           | 116          | 312          | 135          | 78           | 36           | 17         | 0           | 0        |
| Wahkiakum          | 9             | 0          | 1            | 1            | 6            | 1            | 0            | 0            | 0          | 0           | 0        |
| Walla Walla        | 274           | 0          | 35           | 59           | 108          | 35           | 19           | 14           | 4          | 0           | 0        |
| Whatcom            | 539           | 7          | 46           | 72           | 236          | 95           | 49           | 23           | 10         | 1           | 0        |
| Whitman            | 49            | 0          | 1            | 8            | 23           | 8            | 6            | 3            | 0          | 0           | 0        |
| Yakima             | 1,741         | 18         | 206          | 312          | 640          | 302          | 185          | 64           | 14         | 0           | 0        |



**Nativity Table A12. Father's Age Group by County of Residence, 2001**

| County             | All Ages      | Under 15 | 15-17      | 18-19        | 20-24         | 25-29         | 30-34         | 35-39         | 40-44        | 45 and Over  | Age Unk      |
|--------------------|---------------|----------|------------|--------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|
| <b>State Total</b> | <b>79,542</b> | <b>7</b> | <b>389</b> | <b>1,803</b> | <b>12,442</b> | <b>18,167</b> | <b>19,435</b> | <b>12,164</b> | <b>4,893</b> | <b>1,936</b> | <b>8,306</b> |
| Adams              | 328           | 0        | 4          | 9            | 71            | 89            | 48            | 35            | 13           | 6            | 53           |
| Asotin             | 234           | 0        | 3          | 9            | 36            | 53            | 52            | 32            | 9            | 2            | 38           |
| Benton             | 2,215         | 0        | 7          | 71           | 413           | 551           | 487           | 294           | 118          | 45           | 229          |
| Chelan             | 971           | 0        | 4          | 35           | 179           | 258           | 220           | 133           | 63           | 18           | 61           |
| Clallam            | 606           | 0        | 3          | 22           | 105           | 176           | 112           | 62            | 31           | 18           | 77           |
| Clark              | 5,322         | 0        | 18         | 84           | 765           | 1,218         | 1,285         | 736           | 327          | 109          | 780          |
| Columbia           | 35            | 0        | 1          | 2            | 6             | 10            | 8             | 1             | 4            | 0            | 3            |
| Cowlitz            | 1,229         | 0        | 7          | 40           | 273           | 302           | 245           | 140           | 45           | 24           | 153          |
| Douglas            | 440           | 0        | 3          | 18           | 94            | 111           | 97            | 47            | 19           | 14           | 37           |
| Ferry              | 75            | 0        | 0          | 7            | 16            | 15            | 13            | 9             | 7            | 0            | 8            |
| Franklin           | 1,147         | 0        | 15         | 52           | 249           | 286           | 238           | 112           | 62           | 15           | 118          |
| Garfield           | 23            | 0        | 0          | 0            | 4             | 7             | 1             | 4             | 1            | 1            | 5            |
| Grant              | 1,313         | 0        | 8          | 41           | 253           | 349           | 277           | 141           | 66           | 26           | 152          |
| Grays Harbor       | 766           | 0        | 2          | 33           | 176           | 209           | 158           | 75            | 25           | 14           | 74           |
| Island             | 897           | 0        | 4          | 20           | 219           | 239           | 174           | 117           | 50           | 16           | 58           |
| Jefferson          | 200           | 0        | 1          | 7            | 37            | 32            | 39            | 36            | 19           | 12           | 17           |
| King               | 21,778        | 0        | 60         | 269          | 2,111         | 4,125         | 6,244         | 4,576         | 1,822        | 695          | 1,876        |
| Kitsap             | 2,946         | 0        | 10         | 66           | 627           | 700           | 639           | 432           | 152          | 60           | 260          |
| Kittitas           | 371           | 0        | 2          | 6            | 83            | 95            | 93            | 39            | 16           | 15           | 22           |
| Klickitat          | 221           | 0        | 2          | 7            | 37            | 55            | 50            | 25            | 14           | 8            | 23           |
| Lewis              | 856           | 0        | 3          | 27           | 167           | 214           | 157           | 74            | 28           | 13           | 173          |
| Lincoln            | 92            | 0        | 0          | 5            | 14            | 22            | 18            | 15            | 9            | 2            | 7            |
| Mason              | 543           | 0        | 4          | 17           | 125           | 124           | 105           | 54            | 38           | 8            | 68           |
| Okanogan           | 518           | 0        | 9          | 14           | 122           | 132           | 97            | 62            | 33           | 13           | 36           |
| Pacific            | 203           | 0        | 1          | 7            | 46            | 51            | 40            | 19            | 7            | 4            | 28           |
| Pend Oreille       | 124           | 0        | 1          | 5            | 27            | 17            | 22            | 22            | 13           | 6            | 11           |
| Pierce             | 10,052        | 2        | 64         | 293          | 1,910         | 2,413         | 2,251         | 1,281         | 483          | 214          | 1,141        |
| San Juan           | 104           | 0        | 0          | 1            | 11            | 19            | 25            | 18            | 13           | 11           | 6            |
| Skagit             | 1,383         | 1        | 8          | 44           | 228           | 337           | 298           | 160           | 73           | 30           | 204          |
| Skamania           | 109           | 0        | 2          | 1            | 13            | 29            | 30            | 11            | 7            | 2            | 14           |
| Snohomish          | 8,703         | 0        | 26         | 147          | 1,150         | 2,048         | 2,383         | 1,429         | 547          | 189          | 784          |
| Spokane            | 5,414         | 0        | 29         | 138          | 1,023         | 1,405         | 1,232         | 678           | 279          | 114          | 516          |
| Stevens            | 449           | 0        | 5          | 17           | 79            | 113           | 92            | 64            | 22           | 13           | 44           |
| Thurston           | 2,606         | 0        | 9          | 61           | 456           | 614           | 647           | 377           | 132          | 66           | 244          |
| Wahkiakum          | 29            | 0        | 0          | 1            | 4             | 7             | 6             | 4             | 1            | 2            | 4            |
| Walla Walla        | 714           | 1        | 11         | 32           | 132           | 176           | 132           | 93            | 34           | 18           | 85           |
| Whatcom            | 1,965         | 2        | 11         | 39           | 285           | 519           | 517           | 265           | 127          | 40           | 160          |
| Whitman            | 375           | 0        | 3          | 12           | 62            | 97            | 109           | 60            | 22           | 5            | 5            |
| Yakima             | 4,186         | 1        | 49         | 144          | 834           | 950           | 794           | 432           | 162          | 88           | 732          |

**Nativity Table A13. Mother's Race/Ethnicity by County of Residence, 2001**

| County             | Total         | White         | African American | Native American | Japanese   | Chinese    | Filipino     | Other Asian  | Other     | Unk          | Hispanic Origin <sup>1</sup> |
|--------------------|---------------|---------------|------------------|-----------------|------------|------------|--------------|--------------|-----------|--------------|------------------------------|
| <b>State Total</b> | <b>79,542</b> | <b>65,308</b> | <b>3,184</b>     | <b>1,810</b>    | <b>316</b> | <b>390</b> | <b>1,064</b> | <b>4,869</b> | <b>71</b> | <b>2,530</b> | <b>12,115</b>                |
| Adams              | 328           | 321           | 0                | 1               | 0          | 0          | 0            | 3            | 0         | 3            | 230                          |
| Asotin             | 234           | 227           | 2                | 2               | 0          | 1          | 0            | 2            | 0         | 0            | 7                            |
| Benton             | 2,215         | 2,079         | 28               | 17              | 2          | 4          | 9            | 52           | 0         | 24           | 549                          |
| Chelan             | 971           | 940           | 0                | 10              | 1          | 0          | 1            | 9            | 0         | 10           | 402                          |
| Clallam            | 606           | 518           | 3                | 65              | 1          | 1          | 4            | 8            | 0         | 6            | 42                           |
| Clark              | 5,322         | 4,863         | 97               | 48              | 18         | 21         | 40           | 217          | 0         | 18           | 470                          |
| Columbia           | 35            | 35            | 0                | 0               | 0          | 0          | 0            | 0            | 0         | 0            | 5                            |
| Cowlitz            | 1,229         | 1,182         | 7                | 19              | 1          | 2          | 0            | 11           | 1         | 6            | 106                          |
| Douglas            | 440           | 431           | 1                | 2               | 0          | 0          | 0            | 1            | 0         | 5            | 168                          |
| Ferry              | 75            | 55            | 0                | 20              | 0          | 0          | 0            | 0            | 0         | 0            | 0                            |
| Franklin           | 1,147         | 1,103         | 14               | 4               | 0          | 0          | 4            | 13           | 0         | 9            | 780                          |
| Garfield           | 23            | 23            | 0                | 0               | 0          | 0          | 0            | 0            | 0         | 0            | 3                            |
| Grant              | 1,313         | 1,261         | 8                | 14              | 4          | 0          | 3            | 5            | 0         | 18           | 636                          |
| Grays Harbor       | 766           | 664           | 1                | 57              | 0          | 0          | 6            | 12           | 0         | 26           | 86                           |
| Island             | 897           | 759           | 40               | 10              | 12         | 4          | 37           | 17           | 0         | 18           | 72                           |
| Jefferson          | 200           | 189           | 1                | 3               | 0          | 0          | 1            | 1            | 0         | 5            | 11                           |
| King               | 21,778        | 15,346        | 1,613            | 295             | 159        | 277        | 473          | 2,576        | 36        | 1,003        | 2,471                        |
| Kitsap             | 2,946         | 2,479         | 110              | 64              | 18         | 2          | 96           | 120          | 1         | 56           | 206                          |
| Kittitas           | 371           | 347           | 1                | 6               | 0          | 1          | 2            | 7            | 0         | 7            | 60                           |
| Klickitat          | 221           | 193           | 0                | 12              | 0          | 0          | 1            | 6            | 0         | 9            | 37                           |
| Lewis              | 856           | 803           | 1                | 17              | 0          | 0          | 4            | 10           | 0         | 21           | 104                          |
| Lincoln            | 92            | 87            | 0                | 3               | 0          | 0          | 0            | 0            | 0         | 2            | 1                            |
| Mason              | 543           | 471           | 3                | 31              | 0          | 0          | 1            | 12           | 1         | 24           | 65                           |
| Okanogan           | 518           | 413           | 2                | 84              | 0          | 1          | 0            | 3            | 0         | 15           | 165                          |
| Pacific            | 203           | 192           | 1                | 4               | 0          | 0          | 0            | 4            | 0         | 2            | 26                           |
| Pend Oreille       | 124           | 118           | 1                | 2               | 0          | 0          | 0            | 2            | 0         | 1            | 6                            |
| Pierce             | 10,052        | 7,737         | 843              | 256             | 32         | 9          | 150          | 715          | 24        | 286          | 956                          |
| San Juan           | 104           | 99            | 0                | 1               | 0          | 0          | 0            | 2            | 0         | 2            | 1                            |
| Skagit             | 1,383         | 1,310         | 5                | 39              | 3          | 1          | 5            | 12           | 0         | 8            | 418                          |
| Skamania           | 109           | 104           | 0                | 5               | 0          | 0          | 0            | 0            | 0         | 0            | 6                            |
| Snohomish          | 8,703         | 7,159         | 169              | 170             | 37         | 34         | 135          | 614          | 4         | 381          | 791                          |
| Spokane            | 5,414         | 4,797         | 125              | 145             | 10         | 7          | 27           | 166          | 2         | 135          | 226                          |
| Stevens            | 449           | 400           | 1                | 29              | 0          | 0          | 0            | 11           | 0         | 8            | 17                           |
| Thurston           | 2,606         | 2,121         | 57               | 48              | 9          | 6          | 32           | 125          | 1         | 207          | 173                          |
| Wahkiakum          | 29            | 27            | 0                | 1               | 0          | 0          | 0            | 0            | 0         | 1            | 0                            |
| Walla Walla        | 714           | 677           | 8                | 5               | 1          | 1          | 6            | 14           | 0         | 2            | 208                          |
| Whatcom            | 1,965         | 1,745         | 6                | 81              | 3          | 1          | 11           | 71           | 1         | 46           | 207                          |
| Whitman            | 375           | 325           | 5                | 2               | 2          | 12         | 2            | 24           | 0         | 3            | 17                           |
| Yakima             | 4,186         | 3,708         | 31               | 238             | 3          | 5          | 14           | 24           | 0         | 163          | 2,387                        |

<sup>1</sup>Persons of Hispanic Origin may be of any race. See Appendix A, "Hispanic Origin."

**Nativity Table A14. Mother's Education by County of Residence, 2001**

| County             | Total         | No Education | 8th Grade or less | Some High School | High School Grad | Some College  | College Grad  | Postgrad Educ | Unknown      |
|--------------------|---------------|--------------|-------------------|------------------|------------------|---------------|---------------|---------------|--------------|
| <b>State Total</b> | <b>79,542</b> | <b>115</b>   | <b>3,563</b>      | <b>9,210</b>     | <b>22,887</b>    | <b>18,590</b> | <b>12,145</b> | <b>8,132</b>  | <b>4,900</b> |
| Adams              | 328           | 5            | 62                | 85               | 93               | 50            | 13            | 17            | 3            |
| Asotin             | 234           | 0            | 4                 | 45               | 94               | 51            | 23            | 17            | 0            |
| Benton             | 2,215         | 4            | 139               | 279              | 674              | 483           | 304           | 166           | 166          |
| Chelan             | 971           | 2            | 203               | 162              | 244              | 187           | 91            | 64            | 18           |
| Clallam            | 606           | 0            | 18                | 99               | 216              | 179           | 47            | 38            | 9            |
| Clark              | 5,322         | 4            | 157               | 673              | 1,962            | 1,282         | 783           | 353           | 108          |
| Columbia           | 35            | 0            | 0                 | 5                | 13               | 12            | 1             | 1             | 3            |
| Cowlitz            | 1,229         | 2            | 55                | 208              | 452              | 365           | 76            | 43            | 28           |
| Douglas            | 440           | 2            | 64                | 85               | 140              | 89            | 41            | 14            | 5            |
| Ferry              | 75            | 0            | 2                 | 13               | 36               | 19            | 3             | 1             | 1            |
| Franklin           | 1,147         | 5            | 246               | 256              | 262              | 148           | 80            | 29            | 121          |
| Garfield           | 23            | 0            | 2                 | 3                | 5                | 7             | 1             | 4             | 1            |
| Grant              | 1,313         | 9            | 253               | 295              | 364              | 234           | 87            | 54            | 17           |
| Grays Harbor       | 766           | 1            | 49                | 171              | 265              | 166           | 50            | 40            | 24           |
| Island             | 897           | 0            | 9                 | 72               | 351              | 248           | 123           | 59            | 35           |
| Jefferson          | 200           | 0            | 6                 | 25               | 62               | 46            | 29            | 23            | 9            |
| King               | 21,778        | 32           | 551               | 1,437            | 4,294            | 4,473         | 5,122         | 3,758         | 2,111        |
| Kitsap             | 2,946         | 2            | 29                | 296              | 1,142            | 787           | 368           | 260           | 62           |
| Kittitas           | 371           | 0            | 22                | 39               | 90               | 96            | 71            | 47            | 6            |
| Klickitat          | 221           | 0            | 13                | 39               | 75               | 51            | 18            | 19            | 6            |
| Lewis              | 856           | 1            | 45                | 159              | 362              | 167           | 52            | 29            | 41           |
| Lincoln            | 92            | 0            | 1                 | 13               | 29               | 28            | 10            | 9             | 2            |
| Mason              | 543           | 7            | 30                | 92               | 209              | 124           | 39            | 13            | 29           |
| Okanogan           | 518           | 0            | 73                | 105              | 190              | 92            | 22            | 24            | 12           |
| Pacific            | 203           | 0            | 14                | 34               | 78               | 42            | 18            | 10            | 7            |
| Pend Oreille       | 124           | 0            | 1                 | 17               | 41               | 42            | 5             | 9             | 9            |
| Pierce             | 10,052        | 3            | 268               | 1,250            | 3,428            | 2,675         | 1,237         | 672           | 519          |
| San Juan           | 104           | 0            | 0                 | 5                | 19               | 24            | 20            | 10            | 26           |
| Skagit             | 1,383         | 5            | 107               | 213              | 422              | 201           | 150           | 58            | 227          |
| Skamania           | 109           | 0            | 2                 | 16               | 48               | 19            | 17            | 6             | 1            |
| Snohomish          | 8,703         | 7            | 204               | 812              | 2,646            | 2,271         | 1,384         | 873           | 506          |
| Spokane            | 5,414         | 0            | 66                | 617              | 1,626            | 1,681         | 721           | 579           | 124          |
| Stevens            | 449           | 0            | 10                | 61               | 194              | 111           | 29            | 31            | 13           |
| Thurston           | 2,606         | 0            | 49                | 232              | 822              | 759           | 380           | 256           | 108          |
| Wahkiakum          | 29            | 0            | 0                 | 3                | 16               | 4             | 3             | 2             | 1            |
| Walla Walla        | 714           | 2            | 52                | 139              | 213              | 142           | 71            | 51            | 44           |
| Whatcom            | 1,965         | 4            | 64                | 215              | 541              | 572           | 306           | 219           | 44           |
| Whitman            | 375           | 0            | 1                 | 18               | 58               | 99            | 105           | 91            | 3            |
| Yakima             | 4,186         | 18           | 692               | 922              | 1,111            | 564           | 245           | 183           | 451          |

## B. Behavioral and Health Characteristics

Behaviors such as smoking during pregnancy and medical risk factors such as diabetes and hypertension may affect the health of both the mother and her infant. Infants born to mothers who smoke are more likely to have low birth weight and to die of Sudden Infant Death Syndrome (SIDS) in infancy. Both diabetes and hypertension need to be carefully monitored and controlled if necessary to avoid possible fetal, maternal, or neonatal morbidity or mortality. Birth data on these risk factors help to identify problem areas and to track changes over time, especially if new prevention programs have been started.

**Nativity Table B1. Behavioral and Health Summary Indicators for Residents, 1990-2001**

|      | Percent of Births where Mother... |                          |                                       |
|------|-----------------------------------|--------------------------|---------------------------------------|
|      | Smokes <sup>1</sup>               | Has Gestational Diabetes | Has Pregnancy-Associated Hypertension |
| 1990 | 20.1                              | 2.0                      | 4.0                                   |
| 1991 | 19.4                              | 2.1                      | 4.1                                   |
| 1992 | 20.0                              | 2.7                      | 3.9                                   |
| 1993 | 17.9                              | 2.5                      | 4.0                                   |
| 1994 | 17.0                              | 2.4                      | 4.3                                   |
| 1995 | 16.1                              | 2.4                      | 4.1                                   |
| 1996 | 16.0                              | 2.6                      | 4.2                                   |
| 1997 | 14.6                              | 2.5                      | 4.5                                   |
| 1998 | 14.6                              | 2.6                      | 4.5                                   |
| 1999 | 14.2                              | 2.7                      | 4.7                                   |
| 2000 | 13.5                              | 3.1                      | 5.1                                   |
| 2001 | 12.6                              | 3.5                      | 5.1                                   |

<sup>1</sup>Unknowns have been subtracted from total births in calculating percentages.

One encouraging trend is the fairly steady decrease in the percentage of women who smoke during pregnancy. On the other hand, the incidence of both gestational diabetes and pregnancy-associated hypertension appears to be on the increase. However, unknowns cannot be subtracted from the total in calculating percentages for these items the way they were for the smoking data. To collect medical data, a provider just marks a box to indicate, for example, that the mother had diabetes. If the box is not checked, it could mean either that the mother did not have diabetes (a 'no' response) or that the provider did not know (an 'unknown' response). Thus, at least part of this trend could reflect better reporting due to aggressive attempts to encourage hospitals to improve in this area. The data, though flawed, are presented here as a first attempt to show the potential usefulness of the data and thus encourage better reporting.

**Nativity Table B2. Mother's Age Group by Maternal Smoking for Residents, 2001**

| <b>Age</b>         | <b>Total</b>  | <b>Maternal Smoking</b> | <b>No Maternal Smoking</b> | <b>Unknown</b> |
|--------------------|---------------|-------------------------|----------------------------|----------------|
| <b>State Total</b> | <b>79,542</b> | <b>9,808</b>            | <b>67,779</b>              | <b>1,955</b>   |
| Under 15           | 111           | 11                      | 90                         | 10             |
| 15 - 17            | 2,251         | 484                     | 1,702                      | 65             |
| 18 - 19            | 5,261         | 1,169                   | 3,948                      | 144            |
| 20 - 24            | 19,823        | 3,607                   | 15,731                     | 485            |
| 25 - 29            | 21,196        | 2,129                   | 18,582                     | 485            |
| 30 - 34            | 19,328        | 1,505                   | 17,355                     | 468            |
| 35 - 39            | 9,404         | 704                     | 8,468                      | 232            |
| 40 - 44            | 2,027         | 192                     | 1,774                      | 61             |
| 45 and Over        | 113           | 5                       | 108                        | 0              |
| Unknown            | 28            | 2                       | 21                         | 5              |

**Nativity Table B3. Mother's Education by Maternal Smoking for Residents, 2001**

| <b>Education</b>     | <b>Total</b>  | <b>Maternal Smoking</b> | <b>No Maternal Smoking</b> | <b>Unknown</b> |
|----------------------|---------------|-------------------------|----------------------------|----------------|
| <b>State Total</b>   | <b>79,542</b> | <b>9,808</b>            | <b>67,779</b>              | <b>1,955</b>   |
| No Education         | 115           | 7                       | 104                        | 4              |
| 8th Grade or Less    | 3,563         | 310                     | 3,157                      | 96             |
| Some High School     | 9,210         | 2,677                   | 6,333                      | 200            |
| High School Graduate | 22,887        | 4,141                   | 18,337                     | 409            |
| Some College         | 18,590        | 1,816                   | 16,456                     | 318            |
| College Graduate     | 12,145        | 258                     | 11,718                     | 169            |
| Postgraduate Educ    | 8,132         | 121                     | 7,901                      | 110            |
| Unknown              | 4,900         | 478                     | 3,773                      | 649            |

**Nativity Table B4. Maternal Smoking During Pregnancy by County of Residence, 2001**

| County             | Total Births  | Maternal Smoking |                      | No Maternal Smoking |                      | Unknown      |                      |
|--------------------|---------------|------------------|----------------------|---------------------|----------------------|--------------|----------------------|
|                    |               | Number           | Percent <sup>1</sup> | Number              | Percent <sup>1</sup> | Number       | Percent <sup>1</sup> |
| <b>State Total</b> | <b>79,542</b> | <b>9,808</b>     | <b>12.3</b>          | <b>67,779</b>       | <b>85.2</b>          | <b>1,955</b> | <b>2.5</b>           |
| Adams              | 328           | 16               | 4.9                  | 311                 | 94.8                 | 1            | 0.3                  |
| Asotin             | 234           | 58               | 24.8                 | 175                 | 74.8                 | 1            | 0.4                  |
| Benton             | 2,215         | 244              | 11.0                 | 1,946               | 87.9                 | 25           | 1.1                  |
| Chelan             | 971           | 50               | 5.1                  | 919                 | 94.6                 | 2            | 0.2                  |
| Clallam            | 606           | 153              | 25.2                 | 447                 | 73.8                 | 6            | 1.0                  |
| Clark              | 5,322         | 857              | 16.1                 | 4,457               | 83.7                 | 8            | 0.2                  |
| Columbia           | 35            | 7                | 20.0                 | 28                  | 80.0                 | 0            | 0.0                  |
| Cowlitz            | 1,229         | 284              | 23.1                 | 945                 | 76.9                 | 0            | 0.0                  |
| Douglas            | 440           | 25               | 5.7                  | 414                 | 94.1                 | 1            | 0.2                  |
| Ferry              | 75            | 18               | 24.0                 | 56                  | 74.7                 | 1            | 1.3                  |
| Franklin           | 1,147         | 43               | 3.7                  | 1,071               | 93.4                 | 33           | 2.9                  |
| Garfield           | 23            | 7                | 30.4                 | 16                  | 69.6                 | 0            | 0.0                  |
| Grant              | 1,313         | 117              | 8.9                  | 1,181               | 89.9                 | 15           | 1.1                  |
| Grays Harbor       | 766           | 224              | 29.2                 | 530                 | 69.2                 | 12           | 1.6                  |
| Island             | 897           | 101              | 11.3                 | 779                 | 86.8                 | 17           | 1.9                  |
| Jefferson          | 200           | 27               | 13.5                 | 173                 | 86.5                 | 0            | 0.0                  |
| King               | 21,778        | 1,664            | 7.6                  | 19,340              | 88.8                 | 774          | 3.6                  |
| Kitsap             | 2,946         | 479              | 16.3                 | 2,434               | 82.6                 | 33           | 1.1                  |
| Kittitas           | 371           | 42               | 11.3                 | 327                 | 88.1                 | 2            | 0.5                  |
| Klickitat          | 221           | 36               | 16.3                 | 184                 | 83.3                 | 1            | 0.5                  |
| Lewis              | 856           | 195              | 22.8                 | 641                 | 74.9                 | 20           | 2.3                  |
| Lincoln            | 92            | 20               | 21.7                 | 71                  | 77.2                 | 1            | 1.1                  |
| Mason              | 543           | 135              | 24.9                 | 400                 | 73.7                 | 8            | 1.5                  |
| Okanogan           | 518           | 79               | 15.3                 | 432                 | 83.4                 | 7            | 1.4                  |
| Pacific            | 203           | 46               | 22.7                 | 154                 | 75.9                 | 3            | 1.5                  |
| Pend Oreille       | 124           | 28               | 22.6                 | 93                  | 75.0                 | 3            | 2.4                  |
| Pierce             | 10,052        | 1,305            | 13.0                 | 8,574               | 85.3                 | 173          | 1.7                  |
| San Juan           | 104           | 1                | 1.0                  | 102                 | 98.1                 | 1            | 1.0                  |
| Skagit             | 1,383         | 193              | 14.0                 | 1,087               | 78.6                 | 103          | 7.4                  |
| Skamania           | 109           | 26               | 23.9                 | 82                  | 75.2                 | 1            | 0.9                  |
| Snohomish          | 8,703         | 1,020            | 11.7                 | 7,463               | 85.8                 | 220          | 2.5                  |
| Spokane            | 5,414         | 1,094            | 20.2                 | 4,285               | 79.1                 | 35           | 0.6                  |
| Stevens            | 449           | 86               | 19.2                 | 357                 | 79.5                 | 6            | 1.3                  |
| Thurston           | 2,606         | 393              | 15.1                 | 2,091               | 80.2                 | 122          | 4.7                  |
| Wahkiakum          | 29            | 11               | 37.9                 | 18                  | 62.1                 | 0            | 0.0                  |
| Walla Walla        | 714           | 95               | 13.3                 | 611                 | 85.6                 | 8            | 1.1                  |
| Whatcom            | 1,965         | 245              | 12.5                 | 1,545               | 78.6                 | 175          | 8.9                  |
| Whitman            | 375           | 16               | 4.3                  | 358                 | 95.5                 | 1            | 0.3                  |
| Yakima             | 4,186         | 368              | 8.8                  | 3,682               | 88.0                 | 136          | 3.2                  |

<sup>1</sup> Percents may not add to 100% due to rounding.

**Nativity Table B5. Selected Medical Risk Factors<sup>1</sup> by County of Residence, 2001**

| County             | Total Births  | Diabetes     |             | Chronic    | Hypertension           |            |
|--------------------|---------------|--------------|-------------|------------|------------------------|------------|
|                    |               | Gestational  | Established |            | Pregnancy - Associated | Eclampsia  |
| <b>State Total</b> | <b>79,542</b> | <b>2,791</b> | <b>378</b>  | <b>902</b> | <b>4,058</b>           | <b>355</b> |
| Adams              | 328           | 13           | 2           | 1          | 12                     | 2          |
| Asotin             | 234           | 1            | 13          | 0          | 11                     | 3          |
| Benton             | 2,215         | 77           | 29          | 16         | 132                    | 27         |
| Chelan             | 971           | 29           | 5           | 7          | 33                     | 1          |
| Clallam            | 606           | 18           | 2           | 11         | 40                     | 0          |
| Clark              | 5,322         | 184          | 22          | 69         | 347                    | 6          |
| Columbia           | 35            | 1            | 0           | 0          | 3                      | 0          |
| Cowlitz            | 1,229         | 34           | 9           | 15         | 72                     | 4          |
| Douglas            | 440           | 10           | 2           | 3          | 18                     | 1          |
| Ferry              | 75            | 5            | 0           | 0          | 8                      | 0          |
| Franklin           | 1,147         | 45           | 9           | 1          | 46                     | 9          |
| Garfield           | 23            | 0            | 1           | 0          | 1                      | 0          |
| Grant              | 1,313         | 55           | 7           | 11         | 66                     | 4          |
| Grays Harbor       | 766           | 28           | 4           | 12         | 44                     | 0          |
| Island             | 897           | 22           | 2           | 15         | 64                     | 12         |
| Jefferson          | 200           | 3            | 1           | 0          | 14                     | 0          |
| King               | 21,778        | 808          | 110         | 250        | 891                    | 43         |
| Kitsap             | 2,946         | 103          | 16          | 53         | 153                    | 21         |
| Kittitas           | 371           | 13           | 1           | 2          | 32                     | 1          |
| Klickitat          | 221           | 9            | 5           | 2          | 12                     | 2          |
| Lewis              | 856           | 13           | 3           | 2          | 19                     | 5          |
| Lincoln            | 92            | 1            | 0           | 0          | 6                      | 1          |
| Mason              | 543           | 22           | 0           | 6          | 38                     | 10         |
| Okanogan           | 518           | 13           | 0           | 6          | 34                     | 2          |
| Pacific            | 203           | 6            | 0           | 5          | 10                     | 0          |
| Pend Oreille       | 124           | 1            | 1           | 2          | 4                      | 3          |
| Pierce             | 10,052        | 269          | 21          | 141        | 347                    | 79         |
| San Juan           | 104           | 2            | 0           | 1          | 5                      | 0          |
| Skagit             | 1,383         | 66           | 4           | 19         | 82                     | 4          |
| Skamania           | 109           | 2            | 2           | 1          | 7                      | 0          |
| Snohomish          | 8,703         | 361          | 44          | 120        | 657                    | 13         |
| Spokane            | 5,414         | 188          | 14          | 45         | 356                    | 28         |
| Stevens            | 449           | 12           | 3           | 2          | 39                     | 6          |
| Thurston           | 2,606         | 84           | 6           | 31         | 107                    | 25         |
| Wahkiakum          | 29            | 2            | 0           | 1          | 2                      | 0          |
| Walla Walla        | 714           | 21           | 4           | 9          | 26                     | 3          |
| Whatcom            | 1,965         | 39           | 12          | 9          | 124                    | 1          |
| Whitman            | 375           | 17           | 2           | 1          | 17                     | 0          |
| Yakima             | 4,186         | 214          | 22          | 33         | 179                    | 39         |

<sup>1</sup>Numbers may be underestimated by about 15% because of missing medical risk factor data.

### C. Health Service Utilization

The health service utilization data in this section describe the prenatal care and delivery services the mother received. If a woman gets timely prenatal care, her provider can assess her health status, reinforce her good habits, and help her detect and assess possible problems so that she can have a safe pregnancy and deliver a healthy baby. Prenatal care data help health programs assess whether women are receiving timely prenatal care. Data on the birth attendant, birth facility, and method of delivery help to assure that appropriate delivery services will be available. Appropriate services include ‘low tech’ services such as midwife delivery at home as well as ‘high tech’ services such as physician delivery in a hospital with special facilities available for high risk mothers.

**Nativity Table C1. Health Service Utilization Summary Indicators for Residents, 1990-2001**

|      | Percent of Births <sup>1</sup> where Mother has... |                                    | Primary C-Section Delivery |
|------|--|------------------------------------|----------------------------|
|      | 1st Trimester Prenatal Care                        | Late/No Prenatal Care <sup>2</sup> |                            |
| 1990 | 77.6   | 4.4                                | 12.4                       |
| 1991 | 79.0   | 4.1                                | 11.9                       |
| 1992 | 79.8   | 4.0                                | 10.9                       |
| 1993 | 80.7   | 3.7                                | 11.2                       |
| 1994 | 82.5   | 3.4                                | 11.1                       |
| 1995 | 82.6   | 3.5                                | 11.2                       |
| 1996 | 83.3   | 3.6                                | 11.2                       |
| 1997 | 83.3   | 3.4                                | 11.3                       |
| 1998 | 83.0   | 3.2                                | 12.2                       |
| 1999 | 82.8   | 3.1                                | 12.3                       |
| 2000 | 82.6   | 3.3                                | 13.1                       |
| 2001 | 83.2   | 3.0                                | 14.0                       |

<sup>1</sup>Unknowns have been subtracted from total births in calculating percentages.

<sup>2</sup>Includes no care or care beginning in third trimester.

The percent of women receiving first trimester prenatal care reached a peak in the late 1990s, dropped off slightly since then but increased again in 2001. Some, if not much, of the improvement in timeliness of care over the decade is likely due to programs such as the First Steps program begun in 1989, which expanded maternity care coverage for low-income women. The percent of women having late or no care continues to fluctuate with a general downward trend. Primary C-section deliveries were fairly constant through much of the 1990s but they have begun to be more frequent in recent years. The significance of this change cannot be assessed without more detailed analysis of possible indications for C-sections.



**Nativity Table C2. Month Prenatal Care Began by Mother's Age Group for Residents, 2001**

| Month<br>Care Began | All<br>Ages   | Under<br>15 | 15-17        | 18-19        | 20-24         | 25-29         | 30-34         | 35-39        | 40-44        | 45 and<br>Over | Unk       |
|---------------------|---------------|-------------|--------------|--------------|---------------|---------------|---------------|--------------|--------------|----------------|-----------|
| <b>State Total</b>  | <b>79,542</b> | <b>111</b>  | <b>2,251</b> | <b>5,261</b> | <b>19,823</b> | <b>21,196</b> | <b>19,328</b> | <b>9,404</b> | <b>2,027</b> | <b>113</b>     | <b>28</b> |
| First               | 13,948        | 8           | 191          | 503          | 2,736         | 3,903         | 4,168         | 2,020        | 386          | 25             | 8         |
| Second              | 30,888        | 18          | 633          | 1,661        | 7,193         | 8,674         | 8,020         | 3,842        | 804          | 37             | 6         |
| Third               | 15,935        | 18          | 476          | 1,234        | 4,262         | 4,141         | 3,599         | 1,792        | 386          | 24             | 3         |
| Fourth              | 5,745         | 16          | 290          | 564          | 1,796         | 1,432         | 1,026         | 484          | 131          | 6              | 0         |
| Fifth               | 2,778         | 8           | 180          | 321          | 914           | 611           | 449           | 222          | 69           | 2              | 2         |
| Sixth               | 1,536         | 5           | 110          | 178          | 511           | 357           | 235           | 107          | 32           | 1              | 0         |
| Seventh             | 1,011         | 8           | 63           | 113          | 312           | 263           | 136           | 89           | 24           | 3              | 0         |
| Eighth              | 625           | 5           | 37           | 90           | 186           | 125           | 114           | 49           | 17           | 2              | 0         |
| Ninth +             | 262           | 2           | 14           | 22           | 89            | 61            | 45            | 26           | 2            | 1              | 0         |
| No Care             | 310           | 2           | 24           | 39           | 107           | 55            | 50            | 28           | 5            | 0              | 0         |
| Unknown             | 6,504         | 21          | 233          | 536          | 1,717         | 1,574         | 1,486         | 745          | 171          | 12             | 9         |

**Nativity Table C3. Number of Prenatal Visits by Month Prenatal Care Began for Residents, 2001**

| Number of<br>Prenatal Visits | Total         | 1 - 3         | 4 - 6         | 7 - 9+       | No Care    | Unk          |
|------------------------------|---------------|---------------|---------------|--------------|------------|--------------|
| <b>State Total</b>           | <b>79,542</b> | <b>60,771</b> | <b>10,059</b> | <b>1,898</b> | <b>310</b> | <b>6,504</b> |
| 9 or More                    | 56,832        | 50,386        | 4,999         | 237          | 0          | 1,210        |
| 5 - 8                        | 12,088        | 7,090         | 3,910         | 709          | 0          | 379          |
| 1 - 4                        | 2,509         | 664           | 790           | 834          | 0          | 221          |
| No Visits                    | 312           | 0             | 0             | 1            | 310        | 1            |
| Unknown                      | 7,801         | 2,631         | 360           | 117          | 0          | 4,693        |

**Nativity Table C4. Month Prenatal Care Began by County of Residence, 2001**

| County             | Total         | 1st           | 2nd           | 3rd           | 4th          | 5th          | 6th          | 7th          | 8th        | 9th+       | No Care    | Unk          |
|--------------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|------------|------------|------------|--------------|
| <b>State Total</b> | <b>79,542</b> | <b>13,948</b> | <b>30,888</b> | <b>15,935</b> | <b>5,745</b> | <b>2,778</b> | <b>1,536</b> | <b>1,011</b> | <b>625</b> | <b>262</b> | <b>310</b> | <b>6,504</b> |
| Adams              | 328           | 19            | 164           | 77            | 32           | 17           | 6            | 4            | 3          | 0          | 3          | 3            |
| Asotin             | 234           | 35            | 101           | 58            | 20           | 9            | 3            | 0            | 0          | 0          | 4          | 4            |
| Benton             | 2,215         | 323           | 686           | 499           | 297          | 125          | 83           | 41           | 43         | 17         | 5          | 96           |
| Chelan             | 971           | 25            | 467           | 284           | 97           | 37           | 20           | 8            | 10         | 3          | 1          | 19           |
| Clallam            | 606           | 40            | 311           | 144           | 49           | 19           | 16           | 6            | 3          | 2          | 1          | 15           |
| Clark              | 5,322         | 931           | 2,343         | 1,116         | 420          | 238          | 116          | 80           | 38         | 6          | 25         | 9            |
| Columbia           | 35            | 5             | 13            | 10            | 4            | 0            | 0            | 1            | 1          | 0          | 0          | 1            |
| Cowlitz            | 1,229         | 108           | 567           | 302           | 136          | 50           | 24           | 18           | 10         | 3          | 10         | 1            |
| Douglas            | 440           | 18            | 210           | 133           | 32           | 17           | 11           | 11           | 2          | 2          | 1          | 3            |
| Ferry              | 75            | 13            | 31            | 17            | 7            | 1            | 1            | 1            | 0          | 0          | 0          | 4            |
| Franklin           | 1,147         | 90            | 272           | 276           | 160          | 101          | 68           | 56           | 33         | 14         | 7          | 70           |
| Garfield           | 23            | 4             | 11            | 3             | 0            | 0            | 1            | 2            | 1          | 1          | 0          | 0            |
| Grant              | 1,313         | 103           | 491           | 363           | 146          | 74           | 47           | 26           | 19         | 2          | 6          | 36           |
| Grays Harbor       | 766           | 118           | 263           | 147           | 56           | 32           | 27           | 16           | 16         | 0          | 8          | 83           |
| Island             | 897           | 100           | 418           | 197           | 53           | 21           | 16           | 11           | 5          | 9          | 0          | 67           |
| Jefferson          | 200           | 12            | 95            | 46            | 22           | 10           | 2            | 3            | 0          | 1          | 0          | 9            |
| King               | 21,778        | 4,923         | 8,335         | 3,641         | 1,110        | 514          | 310          | 222          | 120        | 68         | 77         | 2,458        |
| Kitsap             | 2,946         | 354           | 1,114         | 809           | 296          | 117          | 85           | 37           | 32         | 2          | 9          | 91           |
| Kittitas           | 371           | 52            | 227           | 58            | 16           | 7            | 2            | 1            | 0          | 0          | 1          | 7            |
| Klickitat          | 221           | 28            | 88            | 57            | 22           | 6            | 2            | 5            | 2          | 1          | 5          | 5            |
| Lewis              | 856           | 182           | 302           | 170           | 44           | 43           | 11           | 6            | 6          | 3          | 1          | 88           |
| Lincoln            | 92            | 24            | 38            | 16            | 5            | 5            | 1            | 0            | 0          | 0          | 2          | 1            |
| Mason              | 543           | 65            | 231           | 99            | 37           | 22           | 15           | 9            | 9          | 1          | 5          | 50           |
| Okanogan           | 518           | 32            | 250           | 113           | 47           | 22           | 17           | 13           | 7          | 0          | 3          | 14           |
| Pacific            | 203           | 33            | 80            | 47            | 16           | 10           | 4            | 3            | 3          | 1          | 1          | 5            |
| Pend Oreille       | 124           | 27            | 43            | 26            | 6            | 6            | 2            | 4            | 0          | 0          | 3          | 7            |
| Pierce             | 10,052        | 803           | 3,738         | 2,381         | 803          | 440          | 222          | 172          | 109        | 49         | 32         | 1,303        |
| San Juan           | 104           | 7             | 39            | 33            | 11           | 7            | 1            | 0            | 1          | 0          | 1          | 4            |
| Skagit             | 1,383         | 65            | 549           | 353           | 140          | 81           | 47           | 42           | 30         | 16         | 13         | 47           |
| Skamania           | 109           | 13            | 47            | 25            | 13           | 4            | 2            | 2            | 0          | 0          | 1          | 2            |
| Snohomish          | 8,703         | 2,665         | 3,190         | 1,452         | 378          | 201          | 99           | 62           | 31         | 8          | 31         | 586          |
| Spokane            | 5,414         | 1,440         | 2,451         | 800           | 270          | 143          | 64           | 38           | 24         | 19         | 27         | 138          |
| Stevens            | 449           | 98            | 178           | 98            | 39           | 16           | 6            | 1            | 3          | 0          | 2          | 8            |
| Thurston           | 2,606         | 444           | 849           | 375           | 159          | 50           | 37           | 14           | 9          | 5          | 3          | 661          |
| Wahkiakum          | 29            | 3             | 8             | 9             | 1            | 4            | 1            | 1            | 1          | 0          | 1          | 0            |
| Walla Walla        | 714           | 86            | 293           | 198           | 56           | 25           | 23           | 8            | 3          | 5          | 0          | 17           |
| Whatcom            | 1,965         | 28            | 645           | 616           | 355          | 106          | 59           | 28           | 19         | 7          | 0          | 102          |
| Whitman            | 375           | 41            | 166           | 96            | 36           | 12           | 8            | 5            | 4          | 1          | 0          | 6            |
| Yakima             | 4,186         | 591           | 1,584         | 791           | 354          | 186          | 77           | 54           | 28         | 16         | 21         | 484          |

**Natality Table C5. Birth Facility by County of Occurrence, 2001**

| County             | Total         | Hospital      | Birth Center | Federal Facility | Home         | Born On Arrival | Other     | Unknown  |
|--------------------|---------------|---------------|--------------|------------------|--------------|-----------------|-----------|----------|
| <b>State Total</b> | <b>79,101</b> | <b>74,563</b> | <b>561</b>   | <b>2,826</b>     | <b>1,052</b> | <b>49</b>       | <b>49</b> | <b>1</b> |
| Adams              | 432           | 430           | 0            | 0                | 2            | 0               | 0         | 0        |
| Asotin             | 2             | 0             | 0            | 0                | 2            | 0               | 0         | 0        |
| Benton             | 3,031         | 2,994         | 15           | 0                | 22           | 0               | 0         | 0        |
| Chelan             | 1,403         | 1,382         | 11           | 0                | 8            | 2               | 0         | 0        |
| Clallam            | 569           | 551           | 0            | 0                | 16           | 1               | 1         | 0        |
| Clark              | 4,717         | 4,660         | 0            | 0                | 55           | 2               | 0         | 0        |
| Columbia           | 1             | 1             | 0            | 0                | 0            | 0               | 0         | 0        |
| Cowlitz            | 1,257         | 1,251         | 0            | 0                | 6            | 0               | 0         | 0        |
| Douglas            | 0             | 0             | 0            | 0                | 0            | 0               | 0         | 0        |
| Ferry              | 16            | 15            | 0            | 0                | 0            | 1               | 0         | 0        |
| Franklin           | 636           | 630           | 0            | 0                | 5            | 1               | 0         | 0        |
| Garfield           | 0             | 0             | 0            | 0                | 0            | 0               | 0         | 0        |
| Grant              | 1,009         | 996           | 0            | 0                | 13           | 0               | 0         | 0        |
| Grays Harbor       | 526           | 512           | 0            | 0                | 12           | 2               | 0         | 0        |
| Island             | 618           | 181           | 19           | 395              | 23           | 0               | 0         | 0        |
| Jefferson          | 135           | 114           | 0            | 0                | 21           | 0               | 0         | 0        |
| King               | 26,197        | 25,689        | 195          | 0                | 294          | 18              | 1         | 0        |
| Kitsap             | 2,497         | 1,733         | 14           | 695              | 52           | 3               | 0         | 0        |
| Kittitas           | 337           | 330           | 0            | 0                | 7            | 0               | 0         | 0        |
| Klickitat          | 138           | 137           | 0            | 0                | 1            | 0               | 0         | 0        |
| Lewis              | 604           | 557           | 0            | 0                | 10           | 1               | 36        | 0        |
| Lincoln            | 16            | 16            | 0            | 0                | 0            | 0               | 0         | 0        |
| Mason              | 305           | 302           | 0            | 0                | 3            | 0               | 0         | 0        |
| Okanogan           | 505           | 499           | 0            | 0                | 6            | 0               | 0         | 0        |
| Pacific            | 58            | 46            | 0            | 0                | 11           | 1               | 0         | 0        |
| Pend Oreille       | 91            | 87            | 0            | 0                | 4            | 0               | 0         | 0        |
| Pierce             | 10,237        | 8,161         | 181          | 1,736            | 149          | 6               | 4         | 0        |
| San Juan           | 6             | 0             | 0            | 0                | 5            | 0               | 1         | 0        |
| Skagit             | 1,588         | 1,571         | 0            | 0                | 16           | 1               | 0         | 0        |
| Skamania           | 2             | 0             | 0            | 0                | 2            | 0               | 0         | 0        |
| Snohomish          | 5,601         | 5,405         | 126          | 0                | 68           | 1               | 1         | 0        |
| Spokane            | 6,250         | 6,167         | 0            | 0                | 79           | 3               | 0         | 1        |
| Stevens            | 278           | 263           | 0            | 0                | 14           | 1               | 0         | 0        |
| Thurston           | 2,755         | 2,686         | 0            | 0                | 68           | 1               | 0         | 0        |
| Wahkiakum          | 1             | 0             | 0            | 0                | 1            | 0               | 0         | 0        |
| Walla Walla        | 941           | 924           | 0            | 0                | 13           | 0               | 4         | 0        |
| Whatcom            | 1,920         | 1,870         | 0            | 0                | 48           | 1               | 1         | 0        |
| Whitman            | 349           | 346           | 0            | 0                | 3            | 0               | 0         | 0        |
| Yakima             | 4,073         | 4,057         | 0            | 0                | 13           | 3               | 0         | 0        |

**Nativity Table C6. Method of Delivery<sup>1</sup> by County of Occurrence, 2001**

| County             | Total         | Vaginal Deliveries |              |              |              | Primary C-Section | Repeat C-Section |              | Unk      |
|--------------------|---------------|--------------------|--------------|--------------|--------------|-------------------|------------------|--------------|----------|
|                    |               | Spontaneous        | Forceps      | Vacuum       | VBAC         |                   | With Labor       | No Labor     |          |
| <b>State Total</b> | <b>79,101</b> | <b>53,945</b>      | <b>1,089</b> | <b>4,649</b> | <b>1,417</b> | <b>10,991</b>     | <b>1,097</b>     | <b>5,904</b> | <b>9</b> |
| Adams              | 432           | 255                | 1            | 55           | 8            | 44                | 11               | 58           | 0        |
| Asotin             | 2             | 2                  | 0            | 0            | 0            | 0                 | 0                | 0            | 0        |
| Benton             | 3,031         | 1,926              | 34           | 204          | 104          | 403               | 81               | 279          | 0        |
| Chelan             | 1,403         | 1,007              | 0            | 35           | 17           | 218               | 3                | 123          | 0        |
| Clallam            | 569           | 440                | 2            | 17           | 5            | 55                | 7                | 43           | 0        |
| Clark              | 4,717         | 3,469              | 26           | 186          | 104          | 581               | 73               | 278          | 0        |
| Columbia           | 1             | 1                  | 0            | 0            | 0            | 0                 | 0                | 0            | 0        |
| Cowlitz            | 1,257         | 860                | 27           | 66           | 27           | 165               | 18               | 94           | 0        |
| Douglas            | 0             | 0                  | 0            | 0            | 0            | 0                 | 0                | 0            | 0        |
| Ferry              | 16            | 8                  | 0            | 0            | 0            | 6                 | 0                | 2            | 0        |
| Franklin           | 636           | 440                | 6            | 50           | 22           | 61                | 22               | 35           | 0        |
| Garfield           | 0             | 0                  | 0            | 0            | 0            | 0                 | 0                | 0            | 0        |
| Grant              | 1,009         | 676                | 5            | 53           | 9            | 126               | 21               | 119          | 0        |
| Grays Harbor       | 526           | 344                | 1            | 4            | 17           | 98                | 14               | 48           | 0        |
| Island             | 618           | 377                | 12           | 39           | 3            | 124               | 12               | 51           | 0        |
| Jefferson          | 135           | 92                 | 0            | 3            | 2            | 23                | 3                | 12           | 0        |
| King               | 26,197        | 16,813             | 402          | 2,153        | 401          | 4,123             | 320              | 1,983        | 2        |
| Kitsap             | 2,497         | 1,741              | 47           | 118          | 19           | 326               | 40               | 206          | 0        |
| Kittitas           | 337           | 235                | 6            | 11           | 4            | 50                | 6                | 25           | 0        |
| Klickitat          | 138           | 95                 | 0            | 10           | 0            | 15                | 2                | 16           | 0        |
| Lewis              | 604           | 457                | 1            | 25           | 4            | 64                | 6                | 47           | 0        |
| Lincoln            | 16            | 11                 | 0            | 0            | 0            | 3                 | 0                | 2            | 0        |
| Mason              | 305           | 218                | 2            | 13           | 11           | 40                | 11               | 10           | 0        |
| Okanogan           | 505           | 338                | 0            | 27           | 12           | 85                | 12               | 30           | 1        |
| Pacific            | 58            | 39                 | 0            | 2            | 5            | 11                | 1                | 0            | 0        |
| Pend Oreille       | 91            | 59                 | 0            | 0            | 2            | 16                | 6                | 8            | 0        |
| Pierce             | 10,237        | 7,304              | 256          | 331          | 158          | 1,295             | 73               | 819          | 1        |
| San Juan           | 6             | 6                  | 0            | 0            | 0            | 0                 | 0                | 0            | 0        |
| Skagit             | 1,588         | 1,157              | 3            | 70           | 36           | 187               | 23               | 112          | 0        |
| Skamania           | 2             | 2                  | 0            | 0            | 0            | 0                 | 0                | 0            | 0        |
| Snohomish          | 5,601         | 3,946              | 33           | 273          | 116          | 759               | 63               | 411          | 0        |
| Spokane            | 6,250         | 4,278              | 116          | 285          | 101          | 883               | 115              | 472          | 0        |
| Stevens            | 278           | 208                | 3            | 7            | 6            | 31                | 2                | 21           | 0        |
| Thurston           | 2,755         | 1,954              | 25           | 127          | 32           | 431               | 28               | 158          | 0        |
| Wahkiakum          | 1             | 1                  | 0            | 0            | 0            | 0                 | 0                | 0            | 0        |
| Walla Walla        | 941           | 667                | 6            | 67           | 21           | 105               | 9                | 66           | 0        |
| Whatcom            | 1,920         | 1,373              | 25           | 61           | 33           | 258               | 36               | 131          | 3        |
| Whitman            | 349           | 204                | 9            | 35           | 5            | 63                | 6                | 27           | 0        |
| Yakima             | 4,073         | 2,942              | 41           | 322          | 133          | 342               | 73               | 218          | 2        |

<sup>1</sup>Based on first or second methods given. See Appendix A for details.

**Nativity Table C7. Birth Attendant by County of Occurrence, 2001**

| County             | Total         | MD            | DO           | Cert<br>Midwife | Lic<br>Midwife | Other<br>Midwife | Nurse      | Hosp<br>Admin | Father    | Other      | Unk       |
|--------------------|---------------|---------------|--------------|-----------------|----------------|------------------|------------|---------------|-----------|------------|-----------|
| <b>State Total</b> | <b>79,101</b> | <b>67,211</b> | <b>1,953</b> | <b>6,721</b>    | <b>1,763</b>   | <b>98</b>        | <b>473</b> | <b>489</b>    | <b>71</b> | <b>310</b> | <b>12</b> |
| Adams              | 432           | 402           | 0            | 0               | 0              | 0                | 1          | 0             | 1         | 28         | 0         |
| Asotin             | 2             | 0             | 0            | 0               | 0              | 0                | 0          | 0             | 2         | 0          | 0         |
| Benton             | 3,031         | 2,492         | 42           | 466             | 0              | 3                | 1          | 14            | 3         | 10         | 0         |
| Chelan             | 1,403         | 502           | 837          | 19              | 17             | 0                | 27         | 0             | 1         | 0          | 0         |
| Clallam            | 569           | 378           | 0            | 93              | 4              | 0                | 2          | 0             | 3         | 89         | 0         |
| Clark              | 4,717         | 3,170         | 1            | 1,486           | 4              | 4                | 4          | 0             | 15        | 32         | 1         |
| Columbia           | 1             | 0             | 0            | 0               | 1              | 0                | 0          | 0             | 0         | 0          | 0         |
| Cowlitz            | 1,257         | 1,251         | 0            | 0               | 2              | 0                | 0          | 0             | 1         | 3          | 0         |
| Douglas            | 0             | 0             | 0            | 0               | 0              | 0                | 0          | 0             | 0         | 0          | 0         |
| Ferry              | 16            | 12            | 0            | 0               | 0              | 0                | 0          | 0             | 0         | 4          | 0         |
| Franklin           | 636           | 577           | 0            | 17              | 37             | 3                | 0          | 0             | 0         | 1          | 1         |
| Garfield           | 0             | 0             | 0            | 0               | 0              | 0                | 0          | 0             | 0         | 0          | 0         |
| Grant              | 1,009         | 894           | 4            | 99              | 1              | 0                | 0          | 2             | 6         | 2          | 1         |
| Grays Harbor       | 526           | 370           | 0            | 5               | 146            | 0                | 0          | 0             | 1         | 4          | 0         |
| Island             | 618           | 566           | 6            | 0               | 40             | 0                | 5          | 1             | 0         | 0          | 0         |
| Jefferson          | 135           | 93            | 20           | 1               | 19             | 0                | 1          | 0             | 0         | 1          | 0         |
| King               | 26,197        | 23,405        | 169          | 1,604           | 782            | 22               | 62         | 93            | 6         | 46         | 8         |
| Kitsap             | 2,497         | 2,279         | 41           | 64              | 41             | 7                | 52         | 5             | 4         | 4          | 0         |
| Kittitas           | 337           | 330           | 0            | 0               | 2              | 0                | 0          | 0             | 4         | 1          | 0         |
| Klickitat          | 138           | 123           | 0            | 0               | 0              | 1                | 0          | 9             | 0         | 5          | 0         |
| Lewis              | 604           | 378           | 161          | 17              | 47             | 0                | 0          | 0             | 1         | 0          | 0         |
| Lincoln            | 16            | 13            | 3            | 0               | 0              | 0                | 0          | 0             | 0         | 0          | 0         |
| Mason              | 305           | 246           | 0            | 54              | 2              | 0                | 2          | 0             | 1         | 0          | 0         |
| Okanogan           | 505           | 415           | 0            | 71              | 5              | 1                | 0          | 0             | 0         | 13         | 0         |
| Pacific            | 58            | 0             | 46           | 0               | 0              | 9                | 0          | 0             | 1         | 2          | 0         |
| Pend Oreille       | 91            | 87            | 0            | 0               | 0              | 0                | 1          | 0             | 3         | 0          | 0         |
| Pierce             | 10,237        | 8,578         | 352          | 936             | 206            | 2                | 58         | 72            | 3         | 30         | 0         |
| San Juan           | 6             | 0             | 0            | 0               | 4              | 1                | 1          | 0             | 0         | 0          | 0         |
| Skagit             | 1,588         | 1,414         | 0            | 12              | 44             | 2                | 114        | 0             | 2         | 0          | 0         |
| Skamania           | 2             | 0             | 0            | 0               | 0              | 0                | 0          | 0             | 2         | 0          | 0         |
| Snohomish          | 5,601         | 4,806         | 142          | 302             | 189            | 27               | 97         | 28            | 2         | 8          | 0         |
| Spokane            | 6,250         | 5,549         | 6            | 592             | 55             | 1                | 24         | 2             | 5         | 16         | 0         |
| Stevens            | 278           | 207           | 26           | 3               | 6              | 2                | 1          | 29            | 1         | 3          | 0         |
| Thurston           | 2,755         | 2,459         | 0            | 224             | 54             | 2                | 6          | 9             | 1         | 0          | 0         |
| Wahkiakum          | 1             | 0             | 0            | 0               | 1              | 0                | 0          | 0             | 0         | 0          | 0         |
| Walla Walla        | 941           | 825           | 0            | 103             | 9              | 1                | 1          | 0             | 1         | 1          | 0         |
| Whatcom            | 1,920         | 1,604         | 0            | 114             | 41             | 4                | 1          | 152           | 0         | 4          | 0         |
| Whitman            | 349           | 343           | 0            | 0               | 3              | 0                | 3          | 0             | 0         | 0          | 0         |
| Yakima             | 4,073         | 3,443         | 97           | 439             | 1              | 6                | 9          | 73            | 1         | 3          | 1         |

Nativity Table C8. County of Residence by County of Occurrence, 2001

| County of Residence | County of Occurrence |        |        |        |         |       |          |         |         |       |          |          |       |              |        |           |        |        |          |  |
|---------------------|----------------------|--------|--------|--------|---------|-------|----------|---------|---------|-------|----------|----------|-------|--------------|--------|-----------|--------|--------|----------|--|
|                     | Adams                | Asotin | Benton | Chelan | Clallam | Clark | Columbia | Cowlitz | Douglas | Ferry | Franklin | Garfield | Grant | Grays Harbor | Island | Jefferson | King   | Kitsap | Kittitas |  |
| Adams               | 217                  |        | 18     |        |         |       |          |         |         |       | 2        |          | 49    |              |        |           | 1      |        |          |  |
| Asotin              |                      | 2      | 1      |        |         |       |          |         |         |       |          |          |       |              |        |           |        |        |          |  |
| Benton              | 1                    |        | 2,012  |        |         |       |          |         |         |       | 115      |          | 1     |              |        |           | 8      |        |          |  |
| Chelan              |                      |        |        | 923    |         |       |          |         |         |       | 1        |          |       |              | 1      |           | 28     |        |          |  |
| Clallam             |                      |        |        |        | 553     | 1     |          |         |         |       |          |          |       | 2            |        | 4         | 36     | 2      |          |  |
| Clark               |                      |        |        |        |         | 4,495 |          | 16      |         |       |          |          |       |              |        |           | 2      |        |          |  |
| Columbia            |                      |        | 1      |        |         |       | 1        |         |         |       |          |          |       |              |        |           |        |        |          |  |
| Cowlitz             |                      |        |        |        |         | 101   |          | 1,057   |         |       |          |          |       |              |        |           | 1      |        |          |  |
| Douglas             |                      |        |        | 370    |         |       |          |         |         |       |          |          | 1     |              |        |           | 9      |        |          |  |
| Ferry               |                      |        |        |        |         |       |          |         |         | 16    |          |          | 8     |              |        |           |        |        |          |  |
| Franklin            | 32                   |        | 604    |        |         |       |          |         |         |       | 498      |          | 3     |              |        |           |        |        |          |  |
| Garfield            |                      |        |        |        |         |       |          |         |         |       |          |          |       |              |        |           |        |        |          |  |
| Grant               | 175                  |        | 15     | 95     |         | 1     |          |         |         |       | 1        |          | 902   |              |        |           | 8      | 1      | 6        |  |
| Grays Harbor        |                      |        | 1      |        | 1       |       |          | 1       |         |       |          |          | 474   |              |        |           | 10     |        |          |  |
| Island              |                      |        |        |        |         |       |          |         |         |       |          |          |       |              | 589    |           | 44     | 1      |          |  |
| Jefferson           |                      |        |        |        | 9       |       |          |         |         |       |          |          |       | 2            |        | 128       | 16     | 36     |          |  |
| King                |                      |        |        |        |         | 1     |          | 1       |         | 1     |          |          | 1     |              |        |           | 21,027 | 2      | 2        |  |
| Kitsap              |                      |        |        |        | 3       |       |          |         |         |       |          |          |       |              |        | 2         | 249    | 2,330  |          |  |
| Kittitas            | 3                    |        |        |        |         | 2     |          |         |         |       |          |          | 1     |              |        |           | 12     |        | 325      |  |
| Klickitat           |                      |        | 1      |        |         | 3     |          |         |         |       |          |          |       |              |        |           | 1      |        | 1        |  |
| Lewis               |                      |        |        |        |         | 3     |          | 35      |         |       |          |          | 1     |              |        |           | 4      | 1      |          |  |
| Lincoln             |                      |        | 1      |        |         |       |          |         |         |       |          |          | 6     |              |        |           |        |        |          |  |
| Mason               |                      |        |        |        | 1       |       |          |         |         |       |          |          |       | 1            |        |           | 7      | 81     |          |  |
| Okanogan            |                      |        |        | 12     |         |       |          |         |         |       |          |          | 32    |              |        |           | 5      |        |          |  |
| Pacific             |                      |        |        |        |         | 1     |          | 2       |         |       |          |          |       | 43           |        |           | 2      |        |          |  |
| Pend Oreille        |                      |        |        |        |         |       |          |         |         |       |          |          |       |              |        |           |        |        |          |  |
| Pierce              |                      |        | 1      |        | 1       |       |          | 2       |         |       |          |          | 1     |              |        |           | 1,180  | 32     |          |  |
| San Juan            |                      |        |        |        |         |       |          |         |         |       |          |          |       |              | 2      |           | 10     |        |          |  |
| Skagit              |                      |        |        |        |         |       |          |         |         | 2     |          |          |       |              | 18     | 1         | 37     |        |          |  |
| Skamania            |                      |        | 1      |        |         | 40    |          |         |         |       |          |          |       |              |        |           |        |        |          |  |
| Snohomish           | 1                    |        |        |        |         | 1     |          |         |         |       |          |          |       |              | 3      |           | 3,294  | 2      |          |  |
| Spokane             | 1                    |        |        | 1      |         | 1     |          |         |         |       |          |          | 3     |              | 1      |           | 3      | 1      |          |  |
| Stevens             |                      |        |        |        |         |       |          |         |         |       |          |          |       |              |        |           | 1      |        |          |  |
| Thurston            | 1                    |        | 1      |        | 1       | 1     |          |         |         |       |          |          |       | 2            |        |           | 40     | 2      | 1        |  |
| Wahkiakum           |                      |        |        |        |         |       |          | 22      |         |       |          |          |       |              |        |           |        |        |          |  |
| Walla Walla         |                      |        | 46     |        |         |       |          |         |         |       | 13       |          |       |              |        |           |        |        |          |  |
| Whatcom             |                      |        | 1      |        |         |       |          |         |         |       |          |          |       |              | 3      |           | 65     |        |          |  |
| Whitman             |                      |        |        |        |         |       |          |         |         |       |          |          |       |              |        |           |        |        |          |  |
| Yakima              |                      |        | 246    |        |         |       |          |         |         |       |          |          |       |              |        |           | 17     | 1      | 2        |  |
| Out of State        | 1                    |        | 81     | 2      |         | 66    |          | 121     |         |       | 3        |          | 1     | 1            | 1      |           | 80     | 5      |          |  |
| Occurrence Total    | 432                  | 2      | 3,031  | 1,403  | 569     | 4,717 | 1        | 1,257   | 0       | 16    | 636      | 0        | 1,009 | 526          | 618    | 135       | 26,197 | 2,497  | 337      |  |

Note: Cells in table are shaded where county of occurrence and county of residence are the same

Nativity Table C8 (Continued) County of Residence by County of Occurrence, 2001

|           |       | County of Occurrence |       |          |         |              |        |          |        |          |           |         |         |          |           |             |         |         | Out-of-State | Residence Total |        |        |
|-----------|-------|----------------------|-------|----------|---------|--------------|--------|----------|--------|----------|-----------|---------|---------|----------|-----------|-------------|---------|---------|--------------|-----------------|--------|--------|
| Klickitat | Lewis | Lincoln              | Mason | Okanogan | Pacific | Pend Oreille | Pierce | San Juan | Skagit | Skamania | Snohomish | Spokane | Stevens | Thurston | Wahkiakum | Walla Walla | Whatcom | Whitman |              |                 | Yakima |        |
|           |       |                      |       |          |         |              |        |          |        |          |           | 39      |         |          |           |             |         | 1       |              | 1               | 328    |        |
|           |       |                      |       |          |         |              |        |          |        |          |           | 11      |         |          |           |             |         | 6       |              | 214             | 234    |        |
|           |       |                      |       |          |         |              | 1      |          |        |          | 1         | 10      |         |          |           | 7           |         |         | 53           | 6               | 2,215  |        |
|           |       |                      |       | 8        |         |              | 1      |          |        |          | 1         | 5       |         |          |           |             |         |         | 1            | 2               | 971    |        |
|           |       |                      | 1     |          |         |              | 2      |          |        |          | 1         |         |         | 2        |           |             | 1       |         |              | 1               | 606    |        |
|           |       |                      |       |          |         |              | 5      |          |        |          |           |         |         | 1        |           |             |         |         |              |                 | 803    | 5,322  |
|           |       |                      |       |          |         |              |        |          |        |          |           |         |         |          |           | 33          |         |         |              |                 | 35     |        |
|           | 8     |                      |       |          |         |              | 4      |          |        |          |           |         |         |          |           |             |         |         |              |                 | 58     | 1,229  |
|           |       |                      |       | 49       |         |              |        |          |        |          |           | 8       |         |          |           |             |         |         |              |                 | 3      | 440    |
|           |       |                      |       | 7        |         |              |        |          |        |          |           | 11      | 32      |          |           |             |         |         |              |                 | 1      | 75     |
|           |       |                      |       |          |         |              |        |          |        |          | 1         | 8       |         |          |           |             |         |         |              |                 | 1      | 1,147  |
|           |       |                      |       |          |         |              |        |          |        |          |           | 1       |         |          |           | 1           |         | 3       |              |                 | 18     | 23     |
|           |       |                      |       |          |         |              | 1      |          |        |          |           | 43      |         | 1        |           |             |         |         |              | 62              | 2      | 1,313  |
|           | 7     |                      | 5     | 15       |         |              | 19     |          |        |          |           |         |         | 232      |           |             |         |         |              |                 | 1      | 766    |
|           |       |                      |       |          |         |              | 17     | 136      |        |          | 103       | 1       |         |          |           |             |         |         |              |                 | 6      | 897    |
|           |       |                      | 5     |          |         |              | 3      | 1        |        |          |           |         |         |          |           |             |         |         |              |                 |        | 200    |
|           | 2     |                      |       | 1        |         |              | 534    | 1        |        | 145      | 1         |         |         | 7        |           | 1           | 2       |         | 4            | 45              | 21,778 |        |
|           |       |                      | 2     |          |         |              | 341    | 1        |        | 4        |           |         |         |          |           |             |         |         |              | 14              | 2,946  |        |
|           |       |                      |       |          |         |              | 2      |          |        | 1        | 1         | 1       |         |          |           |             |         |         | 23           |                 | 371    |        |
| 107       |       |                      |       |          |         |              |        |          |        |          |           |         |         |          |           |             |         |         | 11           | 97              | 221    |        |
|           | 533   |                      |       |          |         |              | 36     |          |        | 2        |           |         |         | 236      |           |             |         |         | 1            | 4               | 856    |        |
|           |       | 15                   |       |          |         |              |        |          |        | 1        | 67        |         |         |          |           |             |         |         |              |                 | 2      | 92     |
|           |       |                      | 278   |          | 2       |              | 42     |          |        | 1        |           |         |         | 130      |           |             |         |         |              |                 |        | 543    |
|           |       |                      |       | 438      |         |              |        |          | 1      |          |           | 27      |         |          |           |             |         |         |              |                 | 3      | 518    |
|           | 4     |                      |       | 40       |         |              | 3      |          |        |          |           |         |         | 20       |           |             |         |         |              |                 | 88     | 203    |
|           |       |                      |       |          | 54      |              |        |          |        |          |           | 58      | 9       |          |           |             |         |         |              |                 | 3      | 124    |
|           | 4     |                      | 1     |          |         | 8,734        |        |          |        | 6        | 1         |         |         | 69       |           |             |         |         |              |                 | 20     | 10,052 |
|           |       |                      |       | 1        |         |              | 1      | 6        | 79     |          |           |         |         |          |           |             |         | 5       |              |                 |        | 104    |
| 1         |       |                      |       |          |         |              | 3      |          | 1,261  |          | 21        |         |         |          |           |             | 35      |         | 1            | 3               | 1,383  |        |
| 27        |       |                      |       |          |         |              |        |          |        | 2        |           |         |         |          |           | 1           |         |         |              |                 | 38     | 109    |
|           |       |                      |       |          |         |              | 9      | 77       |        | 5,292    |           | 2       |         | 1        |           |             | 8       |         |              |                 | 13     | 8,703  |
|           |       | 1                    | 1     |          |         | 2            | 3      |          |        | 4        | 5,364     | 5       |         |          |           | 1           |         |         |              |                 | 22     | 5,414  |
|           |       |                      |       |          |         |              | 1      |          |        |          | 217       | 230     |         |          |           |             |         |         |              |                 |        | 449    |
|           | 43    |                      | 8     |          |         |              | 438    |          |        | 2        | 3         |         | 2,056   |          |           |             |         |         |              |                 | 7      | 2,606  |
|           |       |                      |       |          |         |              |        |          |        |          |           |         |         |          | 1         |             |         |         |              |                 | 6      | 29     |
|           |       |                      |       |          |         |              | 1      |          |        |          |           | 3       |         |          |           | 650         |         |         |              |                 | 1      | 714    |
|           |       |                      |       |          |         |              | 2      | 29       |        | 6        |           |         |         |          |           |             | 1,857   |         |              |                 | 2      | 1,965  |
|           |       |                      |       |          |         |              |        |          |        |          |           | 39      |         |          |           |             |         | 306     |              |                 | 30     | 375    |
|           |       |                      |       |          |         |              | 1      |          |        | 1        | 1         |         |         |          |           |             |         |         | 3,911        | 6               | 4,186  |        |
| 3         | 3     |                      | 4     | 2        | 35      | 33           |        | 2        |        | 8        | 329       | 1       |         |          | 247       | 12          | 33      | 6       |              |                 | 1,080  |        |
| 138       | 604   | 16                   | 305   | 505      | 58      | 91           | 10,237 | 6        | 1,588  | 2        | 5,601     | 6,250   | 278     | 2,755    | 1         | 941         | 1,920   | 349     | 4,073        | 1,521           | 80,622 |        |

## D. Infant Health

The items in this section are used to assess the health of infants born in Washington State and their chances for survival. Infants with low birth weight and/or short gestational age (i.e., preterm infants) generally have higher mortality rates than infants who are heavier or full term. The data are also used to track progress towards reducing infant health problems and to identify areas where more work is still needed.

**Nativity Table D1. Infant Health Summary Indicators for Residents, 1990-2001**

|      | Percent of Births <sup>1</sup> that are... |                               |                 |                     |
|------|--|-------------------------------|-----------------|---------------------|
|      | Low Birth Weight                           | Low Birth Weight - Singletons | Plural (Twins+) | Preterm (<37 weeks) |
| 1990 | 5.3  | 4.3                           | 2.4             | 10.5                |
| 1991 | 5.1  | 4.2                           | 2.1             | 10.7                |
| 1992 | 5.3  | 4.3                           | 2.2             | 10.5                |
| 1993 | 5.2  | 4.2                           | 2.2             | 10.6                |
| 1994 | 5.3  | 4.3                           | 2.2             | 10.8                |
| 1995 | 5.5  | 4.4                           | 2.3             | 11.1                |
| 1996 | 5.6  | 4.4                           | 2.5             | 11.1                |
| 1997 | 5.6  | 4.5                           | 2.5             | 11.7                |
| 1998 | 5.7  | 4.5                           | 2.6             | 12.3                |
| 1999 | 5.9  | 4.5                           | 2.8             | 12.8                |
| 2000 | 5.6  | 4.3                           | 2.7             | 12.6                |
| 2001 | 5.8  | 4.5                           | 2.9             | 12.9                |

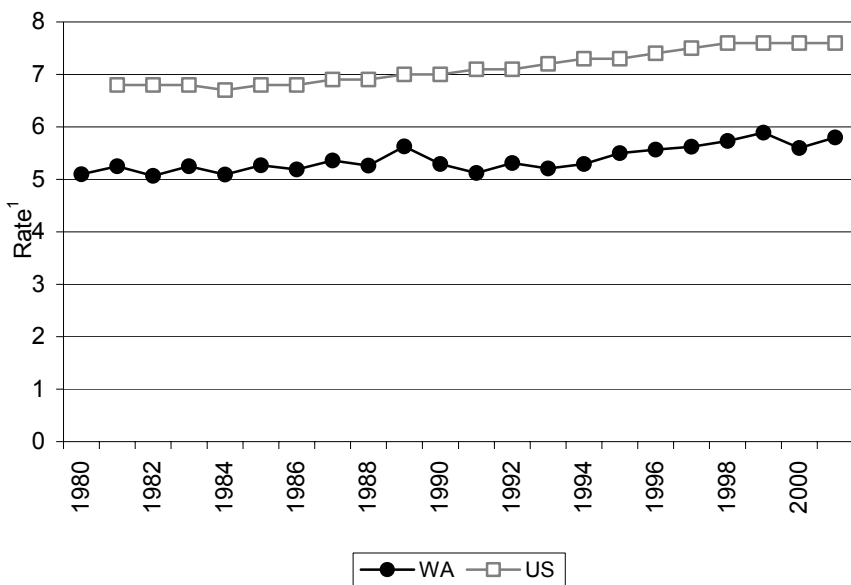
<sup>1</sup>Unknowns have been subtracted from total births in calculating percentages.

These indicators are all interrelated; low birth weight is associated with plural births and short gestational age. Thus all of the indicators have similar variation over time, with a general increase since the middle of the decade. One possible reason for the change is the increasing use of assisted reproductive technologies (ART) such as infertility treatment, which increases a woman's chances of having a plural birth. When plurality is controlled for by tabulating low birth weight for singleton births, a smaller change is seen, but low birth weight still increased slightly towards the end of the 1990s.

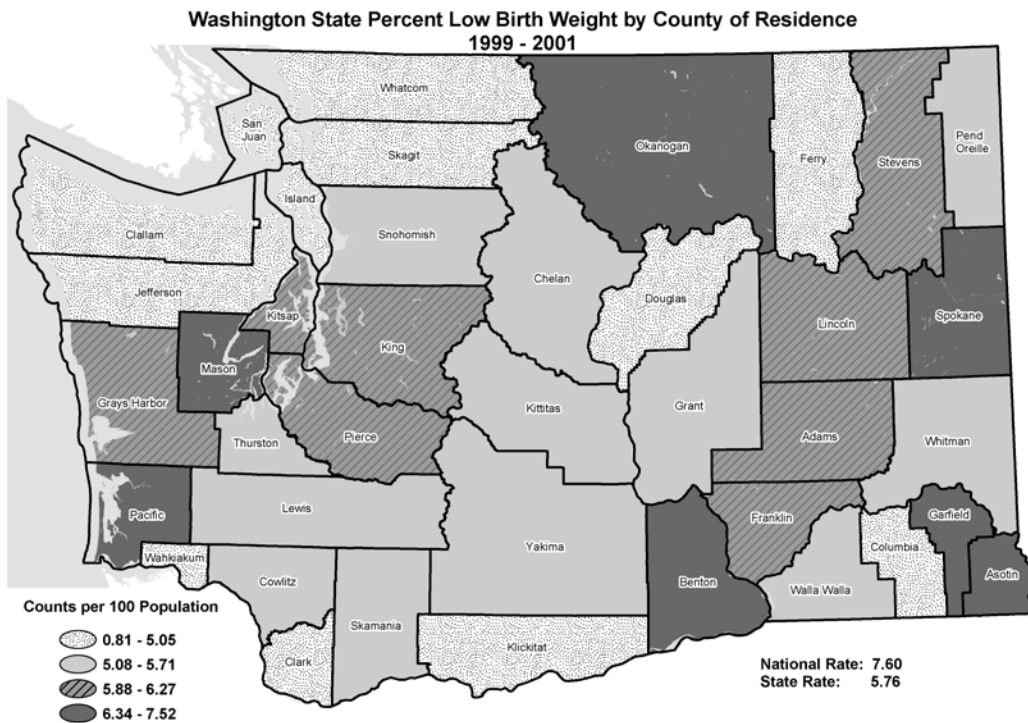


### Nativity Figures 3 & 4

Percent Low Birth Weight<sup>1</sup>, Washington State Residents compared to National, 1980-2001



<sup>1</sup> Number of births per 100 births for which birth weight status is known.



**Nativity Table D2. Birth Weight in Grams by Mother's Race for Residents, 2001**

| Birth Weight<br>in Grams | Total         | White         | African      | Native       | Japanese   | Chinese    | Filipino     | Other        |           | Unk          | Hispanic <sup>1</sup> |
|--------------------------|---------------|---------------|--------------|--------------|------------|------------|--------------|--------------|-----------|--------------|-----------------------|
|                          |               |               | Amer.        | Amer.        |            |            |              | Asian        | Other     |              |                       |
| <b>State Total</b>       | <b>79,542</b> | <b>65,308</b> | <b>3,184</b> | <b>1,810</b> | <b>316</b> | <b>390</b> | <b>1,064</b> | <b>4,869</b> | <b>71</b> | <b>2,530</b> | <b>12,115</b>         |
| Under 1,000              | 378           | 284           | 35           | 16           | 1          | 3          | 5            | 23           | 0         | 11           | 56                    |
| 1,000 - 1,499            | 447           | 357           | 25           | 18           | 2          | 2          | 8            | 24           | 0         | 11           | 61                    |
| 1,500 - 1,999            | 896           | 725           | 45           | 39           | 1          | 5          | 13           | 45           | 0         | 23           | 126                   |
| 2,000 - 2,499            | 2,867         | 2,233         | 207          | 78           | 11         | 15         | 49           | 192          | 7         | 75           | 390                   |
| 2,500 - 2,999            | 10,878        | 8,330         | 630          | 237          | 51         | 56         | 227          | 980          | 5         | 362          | 1,824                 |
| 3,000 - 3,499            | 28,086        | 22,604        | 1,173        | 609          | 148        | 158        | 429          | 2,019        | 29        | 917          | 4,796                 |
| 3,500 - 3,999            | 25,565        | 21,705        | 765          | 573          | 79         | 118        | 262          | 1,233        | 21        | 809          | 3,623                 |
| 4,000 - 4,499            | 8,372         | 7,286         | 240          | 195          | 21         | 26         | 56           | 290          | 7         | 251          | 1,006                 |
| 4,500 and Over           | 1,653         | 1,454         | 35           | 45           | 0          | 4          | 11           | 51           | 2         | 51           | 205                   |
| Unknown                  | 400           | 330           | 29           | 0            | 2          | 3          | 4            | 12           | 0         | 20           | 28                    |

<sup>1</sup>Persons of Hispanic Origin may be of any race. See Appendix A, "Hispanic Origin."

**Nativity Table D3. Birth Weight in Grams by Mother's Age Group for Residents, 2001**

| Birth Weight<br>in Grams | Total         | Under      | 15-17        | 18-19        | 20-24         | 25-29         | 30-34         | 35-39        | 40-44        | 45 and     | Age       |
|--------------------------|---------------|------------|--------------|--------------|---------------|---------------|---------------|--------------|--------------|------------|-----------|
|                          |               | 15         |              |              |               |               |               |              |              | Over       | Unk       |
| <b>State Total</b>       | <b>79,542</b> | <b>111</b> | <b>2,251</b> | <b>5,261</b> | <b>19,823</b> | <b>21,196</b> | <b>19,328</b> | <b>9,404</b> | <b>2,027</b> | <b>113</b> | <b>28</b> |
| Under 1,000              | 378           | 4          | 19           | 40           | 104           | 75            | 80            | 42           | 13           | 1          | 0         |
| 1,000 - 1,499            | 447           | 1          | 12           | 24           | 107           | 99            | 114           | 70           | 17           | 3          | 0         |
| 1,500 - 1,999            | 896           | 1          | 30           | 58           | 216           | 198           | 222           | 127          | 41           | 3          | 0         |
| 2,000 - 2,499            | 2,867         | 7          | 118          | 196          | 735           | 673           | 645           | 384          | 94           | 14         | 1         |
| 2,500 - 2,999            | 10,878        | 16         | 398          | 928          | 2,969         | 2,643         | 2,395         | 1,228        | 283          | 16         | 2         |
| 3,000 - 3,499            | 28,086        | 49         | 888          | 2,093        | 7,271         | 7,475         | 6,568         | 3,049        | 648          | 31         | 14        |
| 3,500 - 3,999            | 25,565        | 22         | 609          | 1,507        | 6,181         | 7,154         | 6,389         | 3,032        | 631          | 33         | 7         |
| 4,000 - 4,499            | 8,372         | 10         | 148          | 354          | 1,854         | 2,297         | 2,340         | 1,135        | 225          | 7          | 2         |
| 4,500 and Over           | 1,653         | 0          | 20           | 44           | 315           | 480           | 478           | 257          | 57           | 2          | 0         |
| Unknown                  | 400           | 1          | 9            | 17           | 71            | 102           | 97            | 80           | 18           | 3          | 2         |

**Natality Table D4. Birth Weight in Grams by Calculated Gestational Age<sup>1</sup> for Residents, 2001**

| Birth Weight<br>in Grams | Total  | Preterm<br>(<37 wks) | Term<br>(37-41 wks) | Postterm<br>(42+ wks) | Unknown |
|--------------------------|--------|----------------------|---------------------|-----------------------|---------|
| <b>State Total</b>       | 79,542 | 10,230               | 63,283              | 5,872                 | 157     |
| Under 1,000              | 378    | 330                  | 8                   | 1                     | 39      |
| 1,000 - 1,499            | 447    | 425                  | 19                  | 3                     | 0       |
| 1,500 - 1,999            | 896    | 783                  | 102                 | 11                    | 0       |
| 2,000 - 2,499            | 2,867  | 1,815                | 985                 | 67                    | 0       |
| 2,500 - 2,999            | 10,878 | 3,827                | 6,560               | 491                   | 0       |
| 3,000 - 3,499            | 28,086 | 1,956                | 24,119              | 2,011                 | 0       |
| 3,500 - 3,999            | 25,565 | 793                  | 22,546              | 2,226                 | 0       |
| 4,000 - 4,499            | 8,372  | 209                  | 7,312               | 851                   | 0       |
| 4,500 and over           | 1,653  | 35                   | 1,428               | 190                   | 0       |
| Unknown                  | 400    | 57                   | 204                 | 21                    | 118     |

<sup>1</sup>See Appendix A for method used to calculate gestational age.

**Natality Table D5. Birth Weight in Grams by Plurality for Residents, 2001**

| Birth Weight<br>in Grams | Total  | Single | Twin  | Triplet | Quadruplet+ | Unknown |
|--------------------------|--------|--------|-------|---------|-------------|---------|
| <b>State Total</b>       | 79,542 | 77,242 | 2,174 | 110     | 8           | 8       |
| Under 1,000              | 378    | 307    | 58    | 9       | 4           | 0       |
| 1,000 - 1,499            | 447    | 304    | 114   | 27      | 2           | 0       |
| 1,500 - 1,999            | 896    | 592    | 261   | 41      | 2           | 0       |
| 2,000 - 2,499            | 2,867  | 2,251  | 586   | 30      | 0           | 0       |
| 2,500 - 2,999            | 10,878 | 10,088 | 788   | 1       | 0           | 1       |
| 3,000 - 3,499            | 28,086 | 27,782 | 300   | 1       | 0           | 3       |
| 3,500 - 3,999            | 25,565 | 25,528 | 36    | 0       | 0           | 1       |
| 4,000 - 4,499            | 8,372  | 8,366  | 5     | 0       | 0           | 1       |
| 4,500 and over           | 1,653  | 1,651  | 2     | 0       | 0           | 0       |
| Unknown                  | 400    | 373    | 24    | 1       | 0           | 2       |

**Nativity Table D6. Mother's Age Group by Plurality for Residents, 2001**

| <b>Age</b>         | <b>Total</b> | <b>Single</b> | <b>Twin</b> | <b>Triplet</b> | <b>Quadruplet+</b> | <b>Unknown</b> |
|--------------------|--------------|---------------|-------------|----------------|--------------------|----------------|
| <b>State Total</b> | 79,542       | 77,242        | 2,174       | 110            | 8                  | 8              |
| Under 15           | 111          | 107           | 4           | 0              | 0                  | 0              |
| 15 - 17            | 2,251        | 2,226         | 24          | 0              | 0                  | 1              |
| 18 - 19            | 5,261        | 5,187         | 70          | 3              | 0                  | 1              |
| 20 - 24            | 19,823       | 19,380        | 430         | 9              | 0                  | 4              |
| 25 - 29            | 21,196       | 20,669        | 504         | 18             | 4                  | 1              |
| 30 - 34            | 19,328       | 18,640        | 634         | 54             | 0                  | 0              |
| 35 - 39            | 9,404        | 8,999         | 377         | 23             | 4                  | 1              |
| 40 - 44            | 2,027        | 1,916         | 111         | 0              | 0                  | 0              |
| 45 and Over        | 113          | 90            | 20          | 3              | 0                  | 0              |
| Unknown            | 28           | 28            | 0           | 0              | 0                  | 0              |

**Nativity Table D7. Birth Weight in Grams by County of Residence, 2001**

| County             | Total         | Under 1000 | 1000-1499  | 1500-1999  | 2000-2499    | 2500-2999     | 3000-3499     | 3500-3999     | 4000-4499    | 4500+        | Unk        |
|--------------------|---------------|------------|------------|------------|--------------|---------------|---------------|---------------|--------------|--------------|------------|
| <b>State Total</b> | <b>79,542</b> | <b>378</b> | <b>447</b> | <b>896</b> | <b>2,867</b> | <b>10,878</b> | <b>28,086</b> | <b>25,565</b> | <b>8,372</b> | <b>1,653</b> | <b>400</b> |
| Adams              | 328           | 1          | 2          | 5          | 17           | 49            | 123           | 99            | 28           | 4            | 0          |
| Asotin             | 234           | 4          | 0          | 3          | 9            | 22            | 71            | 48            | 16           | 4            | 57         |
| Benton             | 2,215         | 9          | 11         | 28         | 84           | 313           | 768           | 747           | 211          | 42           | 2          |
| Chelan             | 971           | 3          | 8          | 16         | 28           | 138           | 358           | 304           | 99           | 17           | 0          |
| Clallam            | 606           | 3          | 3          | 9          | 17           | 87            | 196           | 199           | 69           | 22           | 1          |
| Clark              | 5,322         | 20         | 29         | 45         | 149          | 645           | 1,769         | 1,832         | 618          | 126          | 89         |
| Columbia           | 35            | 0          | 0          | 0          | 1            | 5             | 11            | 14            | 4            | 0            | 0          |
| Cowlitz            | 1,229         | 3          | 8          | 11         | 43           | 163           | 414           | 396           | 159          | 26           | 6          |
| Douglas            | 440           | 0          | 3          | 3          | 13           | 56            | 153           | 155           | 50           | 7            | 0          |
| Ferry              | 75            | 0          | 0          | 0          | 1            | 10            | 29            | 26            | 8            | 1            | 0          |
| Franklin           | 1,147         | 9          | 6          | 13         | 32           | 162           | 450           | 369           | 86           | 20           | 0          |
| Garfield           | 23            | 0          | 0          | 1          | 1            | 3             | 7             | 4             | 3            | 0            | 4          |
| Grant              | 1,313         | 3          | 9          | 11         | 41           | 191           | 503           | 411           | 124          | 20           | 0          |
| Grays Harbor       | 766           | 5          | 5          | 8          | 25           | 104           | 283           | 235           | 80           | 21           | 0          |
| Island             | 897           | 4          | 6          | 8          | 31           | 91            | 299           | 315           | 124          | 18           | 1          |
| Jefferson          | 200           | 0          | 1          | 1          | 7            | 24            | 75            | 65            | 19           | 5            | 3          |
| King               | 21,778        | 97         | 110        | 231        | 820          | 3,086         | 7,736         | 6,810         | 2,266        | 474          | 148        |
| Kitsap             | 2,946         | 16         | 21         | 29         | 112          | 358           | 998           | 1,016         | 322          | 69           | 5          |
| Kittitas           | 371           | 3          | 2          | 3          | 10           | 56            | 136           | 120           | 35           | 6            | 0          |
| Klickitat          | 221           | 1          | 2          | 3          | 5            | 25            | 81            | 66            | 31           | 2            | 5          |
| Lewis              | 856           | 6          | 5          | 9          | 28           | 130           | 307           | 270           | 83           | 18           | 0          |
| Lincoln            | 92            | 0          | 0          | 0          | 0            | 14            | 34            | 33            | 9            | 2            | 0          |
| Mason              | 543           | 4          | 2          | 6          | 25           | 97            | 196           | 141           | 59           | 13           | 0          |
| Okanogan           | 518           | 1          | 4          | 12         | 29           | 88            | 178           | 156           | 44           | 6            | 0          |
| Pacific            | 203           | 0          | 1          | 4          | 3            | 30            | 76            | 49            | 27           | 3            | 10         |
| Pend Oreille       | 124           | 2          | 2          | 1          | 5            | 21            | 43            | 34            | 11           | 3            | 2          |
| Pierce             | 10,052        | 63         | 58         | 117        | 379          | 1,427         | 3,461         | 3,192         | 1,118        | 221          | 16         |
| San Juan           | 104           | 0          | 1          | 1          | 3            | 6             | 32            | 42            | 15           | 3            | 1          |
| Skagit             | 1,383         | 4          | 2          | 10         | 47           | 186           | 531           | 431           | 145          | 22           | 5          |
| Skamania           | 109           | 0          | 1          | 0          | 4            | 10            | 35            | 41            | 14           | 1            | 3          |
| Snohomish          | 8,703         | 36         | 46         | 107        | 321          | 1,129         | 3,012         | 2,894         | 956          | 176          | 26         |
| Spokane            | 5,414         | 37         | 46         | 75         | 213          | 744           | 1,951         | 1,748         | 505          | 91           | 4          |
| Stevens            | 449           | 1          | 2          | 15         | 17           | 56            | 146           | 168           | 36           | 8            | 0          |
| Thurston           | 2,606         | 15         | 18         | 22         | 77           | 316           | 946           | 862           | 289          | 60           | 1          |
| Wahkiakum          | 29            | 0          | 0          | 0          | 0            | 3             | 9             | 10            | 5            | 0            | 2          |
| Walla Walla        | 714           | 2          | 1          | 12         | 30           | 112           | 263           | 206           | 77           | 11           | 0          |
| Whatcom            | 1,965         | 10         | 7          | 24         | 67           | 234           | 639           | 670           | 260          | 52           | 2          |
| Whitman            | 375           | 0          | 0          | 2          | 13           | 45            | 130           | 121           | 48           | 11           | 5          |
| Yakima             | 4,186         | 16         | 25         | 51         | 160          | 642           | 1,637         | 1,266         | 319          | 68           | 2          |

**Nativity Table D8. Calculated Gestational Age<sup>1</sup> by County of Residence, 2001**

| County             | Total         | Preterm<br>(<37 wks) | Term<br>(37-41 wks) | Postterm<br>(42+ wks) | Unknown    |
|--------------------|---------------|----------------------|---------------------|-----------------------|------------|
| <b>State Total</b> | <b>79,542</b> | <b>10,230</b>        | <b>63,283</b>       | <b>5,872</b>          | <b>157</b> |
| Adams              | 328           | 45                   | 265                 | 18                    | 0          |
| Asotin             | 234           | 41                   | 172                 | 20                    | 1          |
| Benton             | 2,215         | 312                  | 1,753               | 149                   | 1          |
| Chelan             | 971           | 109                  | 777                 | 85                    | 0          |
| Clallam            | 606           | 63                   | 481                 | 61                    | 1          |
| Clark              | 5,322         | 501                  | 4,397               | 415                   | 9          |
| Columbia           | 35            | 2                    | 28                  | 5                     | 0          |
| Cowlitz            | 1,229         | 105                  | 1,012               | 111                   | 1          |
| Douglas            | 440           | 48                   | 350                 | 42                    | 0          |
| Ferry              | 75            | 3                    | 62                  | 10                    | 0          |
| Franklin           | 1,147         | 153                  | 914                 | 79                    | 1          |
| Garfield           | 23            | 4                    | 15                  | 4                     | 0          |
| Grant              | 1,313         | 147                  | 1,069               | 97                    | 0          |
| Grays Harbor       | 766           | 93                   | 599                 | 73                    | 1          |
| Island             | 897           | 87                   | 719                 | 90                    | 1          |
| Jefferson          | 200           | 22                   | 164                 | 12                    | 2          |
| King               | 21,778        | 2,868                | 17,234              | 1,591                 | 85         |
| Kitsap             | 2,946         | 330                  | 2,474               | 140                   | 2          |
| Kittitas           | 371           | 34                   | 308                 | 28                    | 1          |
| Klickitat          | 221           | 37                   | 168                 | 16                    | 0          |
| Lewis              | 856           | 100                  | 677                 | 78                    | 1          |
| Lincoln            | 92            | 11                   | 73                  | 8                     | 0          |
| Mason              | 543           | 88                   | 424                 | 31                    | 0          |
| Okanogan           | 518           | 81                   | 407                 | 30                    | 0          |
| Pacific            | 203           | 34                   | 144                 | 22                    | 3          |
| Pend Oreille       | 124           | 21                   | 97                  | 5                     | 1          |
| Pierce             | 10,052        | 1,443                | 7,920               | 674                   | 15         |
| San Juan           | 104           | 8                    | 87                  | 8                     | 1          |
| Skagit             | 1,383         | 150                  | 1,115               | 116                   | 2          |
| Skamania           | 109           | 9                    | 88                  | 11                    | 1          |
| Snohomish          | 8,703         | 1,086                | 6,876               | 725                   | 16         |
| Spokane            | 5,414         | 760                  | 4,264               | 388                   | 2          |
| Stevens            | 449           | 64                   | 343                 | 42                    | 0          |
| Thurston           | 2,606         | 360                  | 2,043               | 201                   | 2          |
| Wahkiakum          | 29            | 2                    | 24                  | 3                     | 0          |
| Walla Walla        | 714           | 89                   | 544                 | 81                    | 0          |
| Whatcom            | 1,965         | 345                  | 1,572               | 46                    | 2          |
| Whitman            | 375           | 28                   | 329                 | 18                    | 0          |
| Yakima             | 4,186         | 547                  | 3,295               | 339                   | 5          |

<sup>1</sup>See Appendix A for method used to calculate gestational age.

**Nativity Table D9. Plurality by County of Residence, 2001**

| <b>County</b>      | <b>Total</b>  | <b>Single</b> | <b>Twin</b>  | <b>Triplet</b> | <b>Quadruplet+</b> | <b>Unknown</b> |
|--------------------|---------------|---------------|--------------|----------------|--------------------|----------------|
| <b>State Total</b> | <b>79,542</b> | <b>77,242</b> | <b>2,174</b> | <b>110</b>     | <b>8</b>           | <b>8</b>       |
| Adams              | 328           | 316           | 12           | 0              | 0                  | 0              |
| Asotin             | 234           | 227           | 3            | 0              | 4                  | 0              |
| Benton             | 2,215         | 2,128         | 84           | 3              | 0                  | 0              |
| Chelan             | 971           | 941           | 30           | 0              | 0                  | 0              |
| Clallam            | 606           | 580           | 20           | 6              | 0                  | 0              |
| Clark              | 5,322         | 5,200         | 119          | 3              | 0                  | 0              |
| Columbia           | 35            | 35            | 0            | 0              | 0                  | 0              |
| Cowlitz            | 1,229         | 1,211         | 18           | 0              | 0                  | 0              |
| Douglas            | 440           | 430           | 10           | 0              | 0                  | 0              |
| Ferry              | 75            | 75            | 0            | 0              | 0                  | 0              |
| Franklin           | 1,147         | 1,127         | 20           | 0              | 0                  | 0              |
| Garfield           | 23            | 21            | 2            | 0              | 0                  | 0              |
| Grant              | 1,313         | 1,286         | 24           | 3              | 0                  | 0              |
| Grays Harbor       | 766           | 737           | 26           | 3              | 0                  | 0              |
| Island             | 897           | 879           | 18           | 0              | 0                  | 0              |
| Jefferson          | 200           | 192           | 8            | 0              | 0                  | 0              |
| King               | 21,778        | 21,081        | 681          | 15             | 0                  | 1              |
| Kitsap             | 2,946         | 2,869         | 68           | 9              | 0                  | 0              |
| Kittitas           | 371           | 357           | 14           | 0              | 0                  | 0              |
| Klickitat          | 221           | 216           | 5            | 0              | 0                  | 0              |
| Lewis              | 856           | 834           | 22           | 0              | 0                  | 0              |
| Lincoln            | 92            | 92            | 0            | 0              | 0                  | 0              |
| Mason              | 543           | 523           | 20           | 0              | 0                  | 0              |
| Okanogan           | 518           | 498           | 16           | 3              | 0                  | 1              |
| Pacific            | 203           | 196           | 4            | 3              | 0                  | 0              |
| Pend Oreille       | 124           | 120           | 4            | 0              | 0                  | 0              |
| Pierce             | 10,052        | 9,738         | 297          | 15             | 0                  | 2              |
| San Juan           | 104           | 100           | 4            | 0              | 0                  | 0              |
| Skagit             | 1,383         | 1,355         | 28           | 0              | 0                  | 0              |
| Skamania           | 109           | 109           | 0            | 0              | 0                  | 0              |
| Snohomish          | 8,703         | 8,455         | 236          | 12             | 0                  | 0              |
| Spokane            | 5,414         | 5,243         | 142          | 24             | 4                  | 1              |
| Stevens            | 449           | 437           | 12           | 0              | 0                  | 0              |
| Thurston           | 2,606         | 2,539         | 62           | 5              | 0                  | 0              |
| Wahkiakum          | 29            | 29            | 0            | 0              | 0                  | 0              |
| Walla Walla        | 714           | 696           | 18           | 0              | 0                  | 0              |
| Whatcom            | 1,965         | 1,915         | 48           | 0              | 0                  | 2              |
| Whitman            | 375           | 365           | 10           | 0              | 0                  | 0              |
| Yakima             | 4,186         | 4,090         | 89           | 6              | 0                  | 1              |





# Mortality



## Mortality

### A. Demographics

Demographics provide basic data (such as gender and age) about people who have died. Information about patterns of mortality by demographic characteristics is important for understanding the health of the citizens of Washington State. As such, they help health programs assess risks or needs in certain areas. For example, age at death is used to compute life expectancy. Life expectancy combines rates of mortality at different age groups and determines how long a person of a specified age is expected to live.

In addition, demographic death data are used in conjunction with birth and migration data to provide population estimates used in resource allocation and planning as well as denominators of population-based rates.

**Mortality Table A1. Age-Adjusted Mortality Rates and Life Expectancy by Sex for Residents, 1990-2001**

| Year | Age-Adjusted Rate <sup>1</sup> |         |        |                            |         |        | Infant Life Expectancy <sup>2</sup> |      |        |                            |      |        |
|------|--------------------------------|---------|--------|----------------------------|---------|--------|-------------------------------------|------|--------|----------------------------|------|--------|
|      | Washington State               |         |        | United States <sup>3</sup> |         |        | Washington State                    |      |        | United States <sup>3</sup> |      |        |
|      | Total                          | Male    | Female | Total                      | Male    | Female | Total                               | Male | Female | Total                      | Male | Female |
| 1990 | 876.5                          | 1,093.0 | 715.5  | 938.7                      | 1,202.8 | 750.9  | 76.9                                | 73.8 | 79.9   | 75.4                       | 71.8 | 78.8   |
| 1991 | 850.0                          | 1,056.3 | 697.7  | 925.5                      | 1,182.6 | 741.6  | 77.2                                | 74.3 | 80.1   | 75.5                       | 72.0 | 78.9   |
| 1992 | 849.5                          | 1,063.1 | 691.3  | 910.9                      | 1,161.2 | 731.2  | 77.3                                | 74.2 | 80.3   | 75.8                       | 72.3 | 79.1   |
| 1993 | 879.5                          | 1,094.8 | 718.4  | 931.5                      | 1,181.8 | 751.0  | 77.0                                | 74.0 | 80.0   | 75.5                       | 72.2 | 78.8   |
| 1994 | 845.3                          | 1,044.6 | 694.1  | 920.2                      | 1,160.9 | 745.0  | 77.4                                | 74.5 | 80.4   | 75.7                       | 72.4 | 79.0   |
| 1995 | 842.0                          | 1,030.4 | 699.8  | 918.5                      | 1,150.3 | 748.2  | 77.6                                | 74.7 | 80.3   | 75.8                       | 72.5 | 78.9   |
| 1996 | 850.0                          | 1,043.3 | 704.6  | 902.4                      | 1,117.5 | 742.8  | 77.5                                | 74.8 | 80.3   | 76.1                       | 73.1 | 79.1   |
| 1997 | 813.7                          | 992.5   | 681.1  | 887.3                      | 1,090.5 | 736.3  | 78.1                                | 75.5 | 80.6   | 76.5                       | 73.6 | 79.4   |
| 1998 | 815.0                          | 990.4   | 684.7  | 875.8                      | 1,064.6 | 732.7  | 78.2                                | 75.6 | 80.6   | 76.7                       | 73.8 | 79.5   |
| 1999 | 818.4                          | 988.7   | 692.1  | 881.9                      | 1,061.8 | 743.6  | 78.2                                | 75.6 | 80.6   | 76.7                       | 73.9 | 79.4   |
| 2000 | 803.6                          | 960.5   | 683.2  | 872.4                      | 1,042.7 | 739.8  | 78.4                                | 76.0 | 80.7   | 76.9                       | 74.1 | 79.5   |
| 2001 | 798.8                          | 944.7   | 685.6  |                            |         |        | 78.5                                | 76.2 | 80.7   |                            |      |        |

<sup>1</sup>Rate per 100,000 age-adjusted to U.S. 2000 population.

<sup>2</sup>Life expectancy is the average number of years an infant is expected to live.

<sup>3</sup>Sources for United States mortality are:

Anderson RN. United States Life Tables, 1998: National Vital Statistics Reports; Vol 48 No. 18. Hyattsville, Maryland: National Center for Health Statistics, 2001

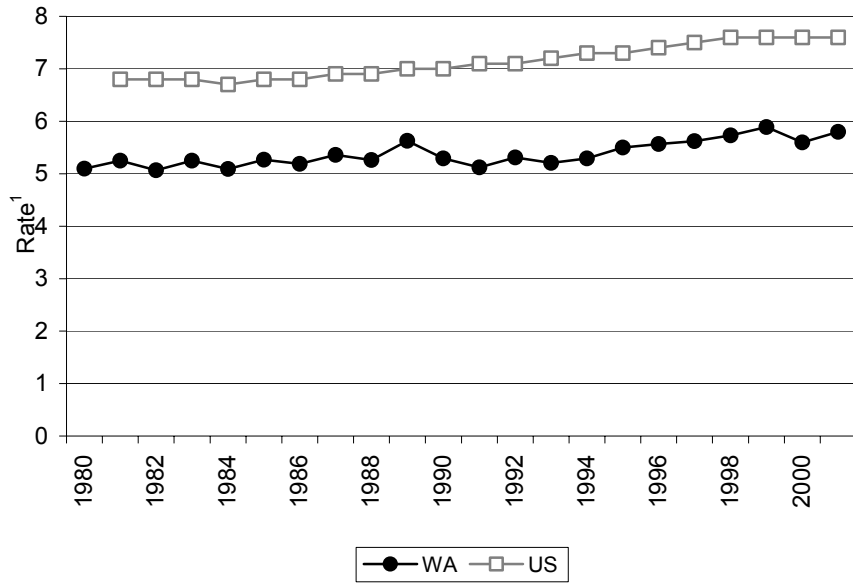
Hoyert DL, Anderson RN. Age-Adjusted Death Rates: Trend Data Based on the Year 2000 Standard Population: National Vital Statistics Reports; Vol 49 No 9. Hyattsville, Maryland: National Center for Health Statistics. 2001.

Minino AM, Smith BL. Deaths: Preliminary Data for 2000. National Vital Statistics Reports; Vol 49 No 12. Hyattsville, Maryland: National Center for Health Statistics. 2001.

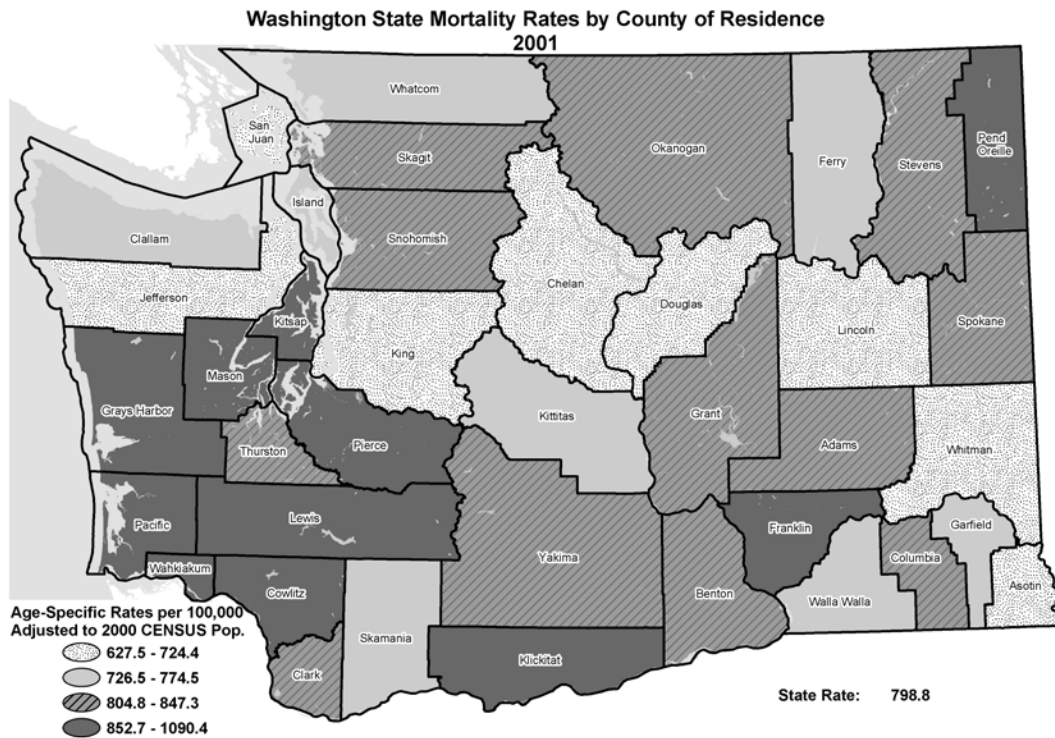
The mortality rate of 798.8 in 2001 is the lowest mortality rate ever reported and continues an almost steady decline in mortality over time. Mortality rates for males are much higher than females. This results in life expectancies of 76.2 years for males and 80.7 years for females. The differences between male and female life expectancies are decreasing over time, however. Mortality rates in Washington State are considerably lower than the U.S. as a whole.

## Mortality Figures 1 & 2

Mortality Rates<sup>1</sup>, Washington State Residents Compared to United States 1980-2001



<sup>1</sup> Rate per 100,000 age-adjusted to U.S. 2000 Population



**Mortality Table A2. Age by Race/Ethnicity for Residents, 2001**

| Age Group          | Total         | African       |              | Native     | Japa-      | Chi-       | Other      |            | Un-      |           | Hispanic <sup>1</sup> |
|--------------------|---------------|---------------|--------------|------------|------------|------------|------------|------------|----------|-----------|-----------------------|
|                    |               | White         | American     | American   | nese       | nese       | Filipino   | Asian      | Other    | known     |                       |
| <b>State Total</b> | <b>44,563</b> | <b>41,704</b> | <b>1,055</b> | <b>563</b> | <b>202</b> | <b>187</b> | <b>240</b> | <b>570</b> | <b>2</b> | <b>40</b> | <b>769</b>            |
| Under 1            | 461           | 383           | 44           | 15         | 2          | 1          | 3          | 10         | 0        | 3         | 73                    |
| 1-4                | 85            | 69            | 8            | 4          | 1          | 0          | 0          | 3          | 0        | 0         | 13                    |
| 5-14               | 126           | 107           | 6            | 6          | 0          | 1          | 1          | 5          | 0        | 0         | 14                    |
| 15-19              | 243           | 211           | 11           | 8          | 0          | 1          | 0          | 11         | 1        | 0         | 21                    |
| 20-24              | 333           | 280           | 24           | 11         | 0          | 0          | 6          | 12         | 0        | 0         | 49                    |
| 25-34              | 655           | 554           | 38           | 22         | 3          | 2          | 5          | 29         | 0        | 2         | 64                    |
| 35-44              | 1,470         | 1,265         | 94           | 53         | 6          | 11         | 6          | 31         | 1        | 3         | 58                    |
| 45-54              | 3,006         | 2,670         | 120          | 79         | 13         | 20         | 18         | 75         | 0        | 11        | 85                    |
| 55-64              | 4,331         | 3,914         | 168          | 101        | 9          | 10         | 35         | 82         | 0        | 12        | 88                    |
| 65-74              | 7,652         | 7,108         | 182          | 113        | 48         | 33         | 47         | 116        | 0        | 5         | 118                   |
| 75-84              | 13,381        | 12,722        | 243          | 98         | 71         | 56         | 55         | 132        | 0        | 4         | 112                   |
| 85-94              | 10,838        | 10,509        | 99           | 45         | 38         | 40         | 53         | 54         | 0        | 0         | 61                    |
| 95 and over        | 1,982         | 1,912         | 18           | 8          | 11         | 12         | 11         | 10         | 0        | 0         | 13                    |
| Unknown            | 0             | 0             | 0            | 0          | 0          | 0          | 0          | 0          | 0        | 0         | 0                     |

<sup>1</sup>Persons of Hispanic Origin may be of any race. See Appendix A, "Hispanic Origin."

**Mortality Table A3. Age by Sex for Residents, 2001**

| Age Group          | Total         |                      | Male          | Female        |
|--------------------|---------------|----------------------|---------------|---------------|
|                    | Number        | Percent <sup>1</sup> |               |               |
| <b>State Total</b> | <b>44,563</b> | <b>100.0</b>         | <b>21,987</b> | <b>22,575</b> |
| Under 1            | 461           | 1.0                  | 259           | 201           |
| 1 - 4              | 85            | 0.2                  | 44            | 41            |
| 5 - 14             | 126           | 0.3                  | 75            | 51            |
| 15 - 19            | 243           | 0.5                  | 162           | 81            |
| 20 - 24            | 333           | 0.7                  | 250           | 83            |
| 25 - 34            | 655           | 1.5                  | 439           | 216           |
| 35 - 44            | 1,470         | 3.3                  | 947           | 523           |
| 45 - 54            | 3,006         | 6.7                  | 1,876         | 1,130         |
| 55 - 64            | 4,331         | 9.7                  | 2,583         | 1,748         |
| 65 - 74            | 7,652         | 17.2                 | 4,276         | 3,376         |
| 75 - 84            | 13,381        | 30.0                 | 6,547         | 6,834         |
| 85 - 94            | 10,838        | 24.3                 | 4,073         | 6,765         |
| 95 and Over        | 1,982         | 4.4                  | 456           | 1,526         |
| Unknown            | 0             | 0.0                  | 0             | 0             |

<sup>1</sup>Percents may not add to 100% due to rounding.

Total includes 1 death for which sex is unknown.

**Mortality Table A4. Life Expectancy<sup>1</sup> by Age and Sex for Residents, 2001**

| <b>Age Group</b> | <b>Total</b> | <b>Male</b> | <b>Female</b> |
|------------------|--------------|-------------|---------------|
| Under 1          | 78.5         | 76.2        | 80.7          |
| 1-5              | 77.9         | 75.7        | 80.1          |
| 5-10             | 74.0         | 71.7        | 76.2          |
| 10-15            | 69.1         | 66.8        | 71.2          |
| 15-20            | 64.1         | 61.9        | 66.3          |
| 20-25            | 59.3         | 57.1        | 61.4          |
| 25-30            | 54.5         | 52.4        | 56.5          |
| 30-35            | 49.7         | 47.7        | 51.6          |
| 35-40            | 44.9         | 42.9        | 46.8          |
| 40-45            | 40.2         | 38.2        | 42.0          |
| 45-50            | 35.5         | 33.6        | 37.2          |
| 50-55            | 31.0         | 29.2        | 32.6          |
| 55-60            | 26.5         | 24.9        | 28.1          |
| 60-65            | 22.3         | 20.7        | 23.7          |
| 65-70            | 18.4         | 17.0        | 19.7          |
| 70-75            | 14.9         | 13.6        | 16.0          |
| 75-80            | 11.8         | 10.6        | 12.6          |
| 80-85            | 9.0          | 8.0         | 9.6           |
| 85 and Over      | 6.8          | 6.1         | 7.2           |

<sup>1</sup>Life expectancy is the average number of years a person at a given age is expected to live.

**Mortality Table A5. Marital Status by Sex for Residents, 2001**

| Marital Status     | Total         |                      | Male          | Female        |
|--------------------|---------------|----------------------|---------------|---------------|
|                    | Number        | Percent <sup>1</sup> |               |               |
| <b>State Total</b> | <b>44,563</b> | <b>100.0</b>         | <b>21,987</b> | <b>22,575</b> |
| Single             | 4,059         | 9.1                  | 2,660         | 1,398         |
| Married            | 17,830        | 40.0                 | 11,939        | 5,891         |
| Divorced           | 6,079         | 13.6                 | 3,164         | 2,915         |
| Widowed            | 16,451        | 36.9                 | 4,111         | 12,340        |
| Unknown            | 144           | 0.3                  | 113           | 31            |

<sup>1</sup>Percents may not add to 100% due to rounding.

Total includes 1 death for which sex is unknown.

**Mortality Table A6. Education by Age for Residents, 2001**

| Age                | Total         | No Education | 8th Grade or Less | Some High School | High School Grad | Some College | College Grad | Postgrad Education | Unknown    |
|--------------------|---------------|--------------|-------------------|------------------|------------------|--------------|--------------|--------------------|------------|
| <b>State Total</b> | <b>44,563</b> | <b>824</b>   | <b>5,269</b>      | <b>4,628</b>     | <b>18,191</b>    | <b>8,232</b> | <b>4,027</b> | <b>2,665</b>       | <b>727</b> |
| Under 1            | 461           | 461          | 0                 | 0                | 0                | 0            | 0            | 0                  | 0          |
| 1-4                | 85            | 85           | 0                 | 0                | 0                | 0            | 0            | 0                  | 0          |
| 5-14               | 126           | 20           | 100               | 3                | 0                | 0            | 0            | 0                  | 3          |
| 15-19              | 243           | 3            | 10                | 124              | 83               | 20           | 0            | 0                  | 3          |
| 20-24              | 333           | 6            | 20                | 53               | 168              | 60           | 18           | 0                  | 8          |
| 25-34              | 655           | 8            | 38                | 107              | 281              | 141          | 46           | 25                 | 9          |
| 35-44              | 1,470         | 16           | 47                | 217              | 609              | 328          | 155          | 63                 | 35         |
| 45-54              | 3,006         | 20           | 98                | 251              | 1,156            | 831          | 341          | 241                | 68         |
| 55-64              | 4,331         | 39           | 228               | 422              | 1,767            | 1,019        | 394          | 364                | 98         |
| 65-74              | 7,652         | 57           | 739               | 913              | 3,210            | 1,368        | 743          | 491                | 131        |
| 75-84              | 13,381        | 48           | 1,546             | 1,342            | 5,956            | 2,352        | 1,147        | 813                | 177        |
| 85-94              | 10,838        | 47           | 1,912             | 1,037            | 4,331            | 1,802        | 994          | 571                | 144        |
| 95 and over        | 1,982         | 14           | 531               | 159              | 630              | 311          | 189          | 97                 | 51         |
| Unknown            | 0             | 0            | 0                 | 0                | 0                | 0            | 0            | 0                  | 0          |

**Mortality Table A7-a. Residence and Occurrence by County and City, 2001**

| County and City    | Total         | Residence               |                           | Occurrence    |
|--------------------|---------------|-------------------------|---------------------------|---------------|
|                    |               | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | Total         |
| <b>State Total</b> | <b>44,563</b> | <b>7.5</b>              | <b>8.0</b>                | <b>44,652</b> |
| Adams              | 119           | 7.2                     | 8.5                       | 111           |
| Asotin             | 193           | 9.3                     | 7.2                       | 175           |
| Benton             | 989           | 6.8                     | 8.2                       | 951           |
| Kennewick          | 444           | 8.0                     | *                         | 541           |
| Richland           | 300           | 7.6                     | *                         | 309           |
| Chelan             | 549           | 8.2                     | 7.2                       | 685           |
| Wenatchee          | 278           | 10.0                    | *                         | 498           |
| Clallam            | 768           | 11.9                    | 7.7                       | 707           |
| Port Angeles       | 222           | 12.1                    | *                         | 409           |
| Clark              | 2,292         | 6.5                     | 8.0                       | 2,104         |
| Vancouver          | 1,341         | 9.2                     | *                         | 1,720         |
| Columbia           | 49            | 11.9                    | 8.3                       | 37            |
| Cowlitz            | 867           | 9.2                     | 8.6                       | 959           |
| Longview           | 399           | 11.4                    | *                         | 813           |
| Douglas            | 211           | 6.4                     | 6.5                       | 120           |
| Ferry              | 51            | 7.0                     | 7.5                       | 28            |
| Franklin           | 296           | 5.9                     | 8.5                       | 281           |
| Pasco              | 233           | 7.1                     | *                         | 266           |
| Garfield           | 31            | 12.9                    | 7.7                       | 24            |
| Grant              | 551           | 7.3                     | 8.2                       | 439           |
| Moses Lake         | 153           | 10.1                    | *                         | 213           |
| Grays Harbor       | 838           | 12.2                    | 10.4                      | 691           |
| Aberdeen           | 196           | 11.9                    | *                         | 376           |
| Island             | 571           | 7.9                     | 7.6                       | 419           |
| Oak Harbor         | 112           | 5.6                     | *                         | 125           |
| Jefferson          | 263           | 10.1                    | 6.8                       | 188           |
| King               | 11,531        | 6.6                     | 7.2                       | 12,909        |
| Auburn             | 424           | 9.8                     | *                         | 512           |
| Bellevue           | 760           | 6.8                     | *                         | 1,121         |
| Bothell part       | 157           | 9.6                     | *                         | 131           |
| Burien             | 160           | 5.0                     | *                         | 399           |
| Des Moines         | 303           | 10.2                    | *                         | 321           |
| Federal Way        | 455           | 5.4                     | *                         | 484           |
| Kenmore            | 88            | 4.7                     | *                         | 34            |
| Kent               | 461           | 5.6                     | *                         | 246           |
| Kirkland           | 344           | 7.5                     | *                         | 744           |
| Mercer Island      | 158           | 7.2                     | *                         | 108           |
| Redmond            | 248           | 5.5                     | *                         | 272           |
| Renton             | 426           | 8.3                     | *                         | 724           |
| Sammamish          | 80            | 2.3                     | *                         | 30            |
| SeaTac             | 117           | 4.6                     | *                         | 56            |
| Seattle            | 4,758         | 8.4                     | *                         | 6,547         |
| Shoreline          | 411           | 7.7                     | *                         | 350           |
| Tukwila            | 73            | 4.2                     | *                         | 108           |
| Kitsap             | 1,836         | 7.9                     | 8.8                       | 1,725         |
| Bainbridge Island  | 141           | 6.8                     | *                         | 122           |
| Bremerton          | 447           | 12.0                    | *                         | 990           |



**Mortality Table A7-a (Continued). Residence and Occurrence by County and City, 2001**

| County and City    | Residence |                         |                           | Occurrence |
|--------------------|-----------|-------------------------|---------------------------|------------|
|                    | Total     | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | Total      |
| Kittitas           | 254       | 7.5                     | 7.6                       | 230        |
| Ellensburg         | 119       | 7.7                     | *                         | 177        |
| Klickitat          | 177       | 9.2                     | 8.6                       | 128        |
| Lewis              | 726       | 10.4                    | 8.6                       | 632        |
| Lincoln            | 107       | 10.5                    | 7.1                       | 90         |
| Mason              | 520       | 10.5                    | 9.0                       | 409        |
| Okanogan           | 365       | 9.2                     | 8.4                       | 309        |
| Pacific            | 310       | 14.8                    | 9.4                       | 243        |
| Pend Oreille       | 113       | 9.6                     | 9.1                       | 101        |
| Pierce             | 5,386     | 7.5                     | 9.0                       | 5,383      |
| Lakewood           | 460       | 7.9                     | *                         | 458        |
| Puyallup           | 349       | 10.3                    | *                         | 885        |
| Tacoma             | 2,032     | 10.4                    | *                         | 3,073      |
| University Place   | 186       | 6.2                     | *                         | 160        |
| San Juan           | 132       | 9.2                     | 6.3                       | 98         |
| Skagit             | 979       | 9.4                     | 8.1                       | 967        |
| Mount Vernon       | 230       | 8.7                     | *                         | 406        |
| Skamania           | 63        | 6.4                     | 7.3                       | 48         |
| Snohomish          | 3,967     | 6.4                     | 8.2                       | 3,513      |
| Edmonds            | 350       | 8.8                     | *                         | 485        |
| Everett            | 859       | 8.9                     | *                         | 1,353      |
| Lynnwood           | 368       | 10.8                    | *                         | 269        |
| Marysville         | 305       | 11.4                    | *                         | 294        |
| Mountlake Terrace  | 118       | 5.8                     | *                         | 44         |
| Mukilteo           | 90        | 4.9                     | *                         | 44         |
| Spokane            | 3,692     | 8.7                     | 8.4                       | 4,135      |
| Spokane (city)     | 2,158     | 11.0                    | *                         | 3,789      |
| Stevens            | 343       | 8.5                     | 8.1                       | 263        |
| Thurston           | 1,648     | 7.8                     | 8.3                       | 1,728      |
| Lacey              | 335       | 10.6                    | *                         | 309        |
| Olympia            | 486       | 11.4                    | *                         | 1,221      |
| Wahkiakum          | 54        | 14.2                    | 11.1                      | 35         |
| Walla Walla        | 499       | 9.0                     | 7.3                       | 586        |
| Walla Walla (city) | 294       | 10.0                    | *                         | 480        |
| Whatcom            | 1,231     | 7.2                     | 7.5                       | 1,261      |
| Bellingham         | 635       | 9.2                     | *                         | 968        |
| Whitman            | 221       | 5.5                     | 7.1                       | 199        |
| Pullman            | 74        | 3.0                     | *                         | 72         |
| Yakima             | 1,771     | 7.9                     | 8.4                       | 1,741      |
| Yakima (city)      | 780       | 10.7                    | *                         | 1,149      |

<sup>1</sup>Rate per 1,000 population.

<sup>2</sup>Rate per 1,000 age-adjusted to U.S. 2000 population. Does not include deaths where age is unknown.

\*Age by city population not available.

Note: Occurrence represents all deaths which occur in Washington State regardless of the decedent's residence. Residence represents all deaths to residents of Washington State regardless of where the death occurred.

**Mortality Table A7-b. Residence and Occurrence by County Listed by Age-Adjusted Rates for 1999-2001**

| County             | 1999-2001        |                         |                      | 2001            |                         |                      |
|--------------------|------------------|-------------------------|----------------------|-----------------|-------------------------|----------------------|
|                    | Total            | Crude Rate <sup>1</sup> | Age-Adj <sup>2</sup> | Total           | Crude Rate <sup>1</sup> | Age-Adj <sup>2</sup> |
| San Juan           | 352              | 8.3                     | 5.8                  | 132             | 9.2                     | 6.3                  |
| Jefferson          | 807              | 10.4                    | 7.1                  | 263             | 10.1                    | 6.8                  |
| Whitman            | 690              | 5.6                     | 7.2                  | 221             | 5.5                     | 7.1                  |
| Island             | 1,606            | 7.5                     | 7.3                  | 571             | 7.9                     | 7.6                  |
| Chelan             | 1,658            | 8.3                     | 7.3                  | 549             | 8.2                     | 7.2                  |
| Douglas            | 701              | 7.2                     | 7.3                  | 211             | 6.4                     | 6.5                  |
| King               | 35,024           | 6.7                     | 7.5                  | 11,531          | 6.6                     | 7.2                  |
| Kittitas           | 735              | 7.2                     | 7.5                  | 254             | 7.5                     | 7.6                  |
| Whatcom            | 3,610            | 7.2                     | 7.5                  | 1,231           | 7.2                     | 7.5                  |
| Walla Walla        | 1,564            | 9.5                     | 7.7                  | 499             | 9.0                     | 7.3                  |
| Lincoln            | 351              | 11.5                    | 7.8                  | 107             | 10.5                    | 7.1                  |
| Clallam            | 2,317            | 12.0                    | 7.8                  | 768             | 11.9                    | 7.7                  |
| Garfield           | 89               | 12.4                    | 7.8                  | 31              | 12.9                    | 7.7                  |
| Benton             | 2,786            | 6.5                     | 7.9                  | 989             | 6.8                     | 8.2                  |
| Skagit             | 2,822            | 9.1                     | 7.9                  | 979             | 9.4                     | 8.1                  |
| Grant              | 1,583            | 7.1                     | 8.0                  | 551             | 7.3                     | 8.2                  |
| Asotin             | 645              | 10.4                    | 8.0                  | 193             | 9.3                     | 7.2                  |
| <b>State Total</b> | <b>(132,260)</b> | <b>(7.5)</b>            | <b>(8.1)</b>         | <b>(44,563)</b> | <b>(7.5)</b>            | <b>(8.0)</b>         |
| Thurston           | 4,731            | 7.6                     | 8.1 Mean             | 1,648           | 7.8                     | 8.3                  |
| Ferry              | 162              | 7.4                     | 8.1 and              | 51              | 7.0                     | 7.5                  |
| Adams              | 336              | 6.8                     | 8.1 Median           | 119             | 7.2                     | 8.5                  |
| Snohomish          | 11,607           | 6.4                     | 8.2                  | 3,967           | 6.4                     | 8.2                  |
| Yakima             | 5,191            | 7.7                     | 8.3                  | 1,771           | 7.9                     | 8.4                  |
| Clark              | 6,870            | 6.6                     | 8.3                  | 2,292           | 6.5                     | 8.0                  |
| Okanogan           | 1,071            | 9.0                     | 8.4                  | 365             | 9.2                     | 8.4                  |
| Spokane            | 10,912           | 8.7                     | 8.4                  | 3,692           | 8.7                     | 8.4                  |
| Stevens            | 1,034            | 8.7                     | 8.4                  | 343             | 8.5                     | 8.1                  |
| Kitsap             | 5,274            | 7.6                     | 8.6                  | 1,836           | 7.9                     | 8.8                  |
| Skamania           | 219              | 7.5                     | 8.6                  | 63              | 6.4                     | 7.3                  |
| Klickitat          | 530              | 9.3                     | 8.7                  | 177             | 9.2                     | 8.6                  |
| Pend Oreille       | 323              | 9.2                     | 8.7                  | 113             | 9.6                     | 9.1                  |
| Franklin           | 890              | 6.0                     | 8.8                  | 296             | 5.9                     | 8.5                  |
| Lewis              | 2,206            | 10.7                    | 8.9                  | 726             | 10.4                    | 8.6                  |
| Pierce             | 15,706           | 7.5                     | 8.9                  | 5,386           | 7.5                     | 9.0                  |
| Mason              | 1,548            | 10.5                    | 9.1                  | 520             | 10.5                    | 9.0                  |
| Cowlitz            | 2,720            | 9.7                     | 9.1                  | 867             | 9.2                     | 8.6                  |
| Wahkiakum          | 141              | 12.3                    | 9.1                  | 54              | 14.2                    | 11.1                 |
| Pacific            | 899              | 14.3                    | 9.3                  | 310             | 14.8                    | 9.4                  |
| Columbia           | 164              | 13.2                    | 9.7                  | 49              | 11.9                    | 8.3                  |
| Grays Harbor       | 2,386            | 11.8                    | 10.1                 | 838             | 12.2                    | 10.4                 |

<sup>1</sup>Rate per 1,000 population.

<sup>2</sup>Rate per 1,000 age-adjusted to U.S. 2000 population. Does not include deaths where age is unknown.

Note: Mean 1999-2001 age-adjusted rate is 8.1; Median 1999-2001 age-adjusted rate is 8.1. State Total is not included in calculation of mean and median.

**Mortality Table A8. Sex and Race/Ethnicity by County/City of Residence, 2001**

| County & City      | Total         | Male          | Female        | White         | African Amer. | Native Amer. | Japa- nese | Chi- nese  | Fili- pino | Other Asian | Other    | Unk       | His- panic <sup>1</sup> |
|--------------------|---------------|---------------|---------------|---------------|---------------|--------------|------------|------------|------------|-------------|----------|-----------|-------------------------|
| <b>State Total</b> | <b>44,563</b> | <b>21,987</b> | <b>22,575</b> | <b>41,704</b> | <b>1,055</b>  | <b>563</b>   | <b>202</b> | <b>187</b> | <b>240</b> | <b>570</b>  | <b>2</b> | <b>40</b> | <b>769</b>              |
| Adams              | 119           | 70            | 49            | 118           | 1             | 0            | 0          | 0          | 0          | 0           | 0        | 0         | 34                      |
| Asotin             | 193           | 83            | 110           | 192           | 0             | 1            | 0          | 0          | 0          | 0           | 0        | 0         | 0                       |
| Benton             | 989           | 475           | 514           | 972           | 7             | 2            | 0          | 2          | 3          | 3           | 0        | 0         | 28                      |
| Kennewick          | 444           | 203           | 241           | 439           | 2             | 1            | 0          | 0          | 2          | 0           | 0        | 0         | 11                      |
| Richland           | 300           | 142           | 158           | 289           | 4             | 1            | 0          | 2          | 1          | 3           | 0        | 0         | 4                       |
| Chelan             | 549           | 264           | 285           | 548           | 0             | 1            | 0          | 0          | 0          | 0           | 0        | 0         | 12                      |
| Wenatchee          | 278           | 124           | 154           | 277           | 0             | 1            | 0          | 0          | 0          | 0           | 0        | 0         | 6                       |
| Clallam            | 768           | 392           | 376           | 737           | 2             | 25           | 2          | 1          | 0          | 1           | 0        | 0         | 4                       |
| Port Angeles       | 222           | 103           | 119           | 217           | 1             | 4            | 0          | 0          | 0          | 0           | 0        | 0         | 1                       |
| Clark              | 2,292         | 1,118         | 1,174         | 2,222         | 21            | 10           | 1          | 5          | 8          | 25          | 0        | 0         | 18                      |
| Vancouver          | 1,341         | 624           | 717           | 1,294         | 17            | 5            | 0          | 4          | 6          | 15          | 0        | 0         | 12                      |
| Columbia           | 49            | 22            | 27            | 49            | 0             | 0            | 0          | 0          | 0          | 0           | 0        | 0         | 1                       |
| Cowlitz            | 867           | 445           | 422           | 853           | 2             | 4            | 0          | 1          | 0          | 6           | 0        | 1         | 9                       |
| Longview           | 399           | 215           | 184           | 391           | 1             | 0            | 0          | 1          | 0          | 6           | 0        | 0         | 6                       |
| Douglas            | 211           | 100           | 111           | 210           | 0             | 0            | 0          | 0          | 1          | 0           | 0        | 0         | 1                       |
| Ferry              | 51            | 25            | 26            | 41            | 0             | 10           | 0          | 0          | 0          | 0           | 0        | 0         | 1                       |
| Franklin           | 296           | 148           | 148           | 279           | 13            | 1            | 1          | 0          | 1          | 1           | 0        | 0         | 38                      |
| Pasco              | 233           | 111           | 122           | 216           | 13            | 1            | 1          | 0          | 1          | 1           | 0        | 0         | 27                      |
| Garfield           | 31            | 17            | 14            | 30            | 0             | 1            | 0          | 0          | 0          | 0           | 0        | 0         | 0                       |
| Grant              | 551           | 308           | 243           | 531           | 8             | 9            | 0          | 1          | 0          | 2           | 0        | 0         | 41                      |
| Moses Lake         | 153           | 75            | 78            | 147           | 3             | 1            | 0          | 1          | 0          | 1           | 0        | 0         | 12                      |
| Grays Harbor       | 838           | 434           | 404           | 791           | 9             | 32           | 2          | 0          | 1          | 2           | 0        | 1         | 10                      |
| Aberdeen           | 196           | 98            | 98            | 186           | 2             | 7            | 0          | 0          | 1          | 0           | 0        | 0         | 3                       |
| Island             | 571           | 301           | 270           | 560           | 4             | 3            | 0          | 0          | 3          | 1           | 0        | 0         | 4                       |
| Oak Harbor         | 112           | 55            | 57            | 109           | 1             | 0            | 0          | 0          | 2          | 0           | 0        | 0         | 1                       |
| Jefferson          | 263           | 144           | 119           | 262           | 0             | 0            | 0          | 1          | 0          | 0           | 0        | 0         | 2                       |
| King               | 11,531        | 5,608         | 5,923         | 10,114        | 596           | 112          | 124        | 143        | 137        | 272         | 1        | 32        | 129                     |
| Auburn             | 424           | 192           | 232           | 397           | 13            | 3            | 3          | 0          | 2          | 6           | 0        | 0         | 7                       |
| Bellevue           | 760           | 365           | 395           | 688           | 16            | 3            | 14         | 17         | 1          | 20          | 0        | 1         | 7                       |
| Bothell part       | 157           | 66            | 91            | 151           | 3             | 0            | 0          | 2          | 0          | 1           | 0        | 0         | 1                       |
| Burien             | 160           | 81            | 79            | 152           | 1             | 1            | 0          | 1          | 2          | 2           | 0        | 1         | 5                       |
| Des Moines         | 303           | 126           | 177           | 284           | 5             | 4            | 0          | 0          | 1          | 9           | 0        | 0         | 4                       |
| Federal Way        | 455           | 221           | 234           | 398           | 22            | 5            | 4          | 5          | 5          | 16          | 0        | 0         | 6                       |
| Kenmore            | 88            | 46            | 42            | 83            | 2             | 0            | 0          | 0          | 2          | 1           | 0        | 0         | 0                       |
| Kent               | 461           | 261           | 200           | 402           | 26            | 3            | 4          | 4          | 7          | 14          | 0        | 1         | 3                       |
| Kirkland           | 344           | 134           | 210           | 322           | 3             | 3            | 3          | 2          | 3          | 7           | 0        | 1         | 2                       |
| Mercer Island      | 158           | 85            | 73            | 148           | 3             | 1            | 1          | 3          | 0          | 2           | 0        | 0         | 0                       |
| Redmond            | 248           | 111           | 137           | 237           | 4             | 0            | 0          | 1          | 1          | 5           | 0        | 0         | 3                       |
| Renton             | 426           | 219           | 207           | 368           | 22            | 7            | 6          | 4          | 8          | 11          | 0        | 0         | 6                       |
| Sammamish          | 80            | 38            | 42            | 75            | 1             | 0            | 1          | 1          | 1          | 1           | 0        | 0         | 2                       |
| SeaTac             | 117           | 59            | 58            | 102           | 5             | 2            | 0          | 0          | 4          | 3           | 0        | 1         | 2                       |
| Seattle            | 4,758         | 2,348         | 2,410         | 3,862         | 428           | 50           | 78         | 96         | 81         | 138         | 1        | 24        | 63                      |
| Shoreline          | 411           | 171           | 240           | 388           | 5             | 3            | 0          | 1          | 7          | 7           | 0        | 0         | 3                       |
| Tukwila            | 73            | 40            | 33            | 60            | 8             | 2            | 1          | 0          | 1          | 1           | 0        | 0         | 2                       |
| Kitsap             | 1,836         | 853           | 983           | 1,744         | 35            | 13           | 5          | 3          | 23         | 11          | 0        | 2         | 16                      |
| Bainbridge Island  | 141           | 54            | 87            | 137           | 0             | 1            | 1          | 0          | 1          | 1           | 0        | 0         | 0                       |
| Bremerton          | 447           | 210           | 237           | 415           | 15            | 7            | 1          | 0          | 6          | 1           | 0        | 2         | 5                       |

**Mortality Table A8. (Continued) Sex and Race/Ethnicity by County/City of Residence, 2001**

| County & City      | Total | Male  | Female | White | African Amer. | Native Amer. | Japa-nese | Chi-nese | Fili-pino | Other Asian | Other | Unk | His-panic <sup>1</sup> |
|--------------------|-------|-------|--------|-------|---------------|--------------|-----------|----------|-----------|-------------|-------|-----|------------------------|
| Kittitas           | 254   | 131   | 123    | 251   | 2             | 1            | 0         | 0        | 0         | 0           | 0     | 0   | 5                      |
| Ellensburg         | 119   | 47    | 72     | 117   | 2             | 0            | 0         | 0        | 0         | 0           | 0     | 0   | 0                      |
| Klickitat          | 177   | 105   | 72     | 170   | 0             | 3            | 3         | 0        | 0         | 1           | 0     | 0   | 7                      |
| Lewis              | 726   | 355   | 371    | 719   | 1             | 2            | 2         | 0        | 1         | 1           | 0     | 0   | 9                      |
| Lincoln            | 107   | 52    | 55     | 106   | 0             | 1            | 0         | 0        | 0         | 0           | 0     | 0   | 0                      |
| Mason              | 520   | 264   | 256    | 495   | 3             | 17           | 1         | 1        | 0         | 3           | 0     | 0   | 4                      |
| Okanogan           | 365   | 186   | 179    | 333   | 0             | 32           | 0         | 0        | 0         | 0           | 0     | 0   | 5                      |
| Pacific            | 310   | 180   | 130    | 303   | 0             | 2            | 0         | 0        | 0         | 5           | 0     | 0   | 0                      |
| Pend Oreille       | 113   | 59    | 54     | 110   | 0             | 3            | 0         | 0        | 0         | 0           | 0     | 0   | 0                      |
| Pierce             | 5,386 | 2,718 | 2,668  | 4,893 | 242           | 56           | 31        | 4        | 32        | 127         | 0     | 1   | 75                     |
| Lakewood           | 460   | 248   | 212    | 398   | 28            | 4            | 2         | 0        | 8         | 20          | 0     | 0   | 9                      |
| Puyallup           | 349   | 162   | 187    | 342   | 2             | 3            | 0         | 0        | 1         | 1           | 0     | 0   | 6                      |
| Tacoma             | 2,032 | 959   | 1,073  | 1,760 | 153           | 29           | 15        | 2        | 9         | 64          | 0     | 0   | 33                     |
| University Place   | 186   | 96    | 90     | 179   | 2             | 0            | 1         | 0        | 1         | 3           | 0     | 0   | 1                      |
| San Juan           | 132   | 64    | 68     | 132   | 0             | 0            | 0         | 0        | 0         | 0           | 0     | 0   | 1                      |
| Skagit             | 979   | 503   | 476    | 963   | 2             | 10           | 2         | 0        | 1         | 1           | 0     | 0   | 22                     |
| Mount Vernon       | 230   | 101   | 129    | 230   | 0             | 0            | 0         | 0        | 0         | 0           | 0     | 0   | 8                      |
| Skamania           | 63    | 35    | 28     | 63    | 0             | 0            | 0         | 0        | 0         | 0           | 0     | 0   | 1                      |
| Snohomish          | 3,967 | 1,915 | 2,052  | 3,809 | 33            | 32           | 6         | 13       | 15        | 59          | 0     | 0   | 48                     |
| Edmonds            | 350   | 170   | 180    | 339   | 1             | 1            | 0         | 2        | 1         | 6           | 0     | 0   | 0                      |
| Everett            | 859   | 406   | 453    | 815   | 10            | 10           | 0         | 5        | 2         | 17          | 0     | 0   | 14                     |
| Lynnwood           | 368   | 185   | 183    | 333   | 8             | 1            | 1         | 3        | 5         | 17          | 0     | 0   | 1                      |
| Marysville         | 305   | 146   | 159    | 299   | 1             | 2            | 0         | 0        | 2         | 1           | 0     | 0   | 7                      |
| Mountlake Terrace  | 118   | 52    | 66     | 109   | 1             | 2            | 1         | 1        | 1         | 3           | 0     | 0   | 3                      |
| Mukilteo           | 90    | 44    | 46     | 84    | 0             | 0            | 0         | 1        | 0         | 5           | 0     | 0   | 0                      |
| Spokane            | 3,692 | 1,767 | 1,925  | 3,582 | 35            | 38           | 12        | 6        | 3         | 13          | 0     | 3   | 22                     |
| Spokane (city)     | 2,158 | 1,023 | 1,135  | 2,080 | 25            | 26           | 10        | 4        | 1         | 10          | 0     | 2   | 14                     |
| Stevens            | 343   | 190   | 153    | 335   | 0             | 8            | 0         | 0        | 0         | 0           | 0     | 0   | 1                      |
| Thurston           | 1,648 | 805   | 843    | 1,588 | 15            | 16           | 3         | 2        | 3         | 20          | 1     | 0   | 17                     |
| Lacey              | 335   | 142   | 193    | 324   | 2             | 3            | 0         | 0        | 0         | 6           | 0     | 0   | 3                      |
| Olympia            | 486   | 219   | 267    | 463   | 6             | 3            | 2         | 2        | 2         | 7           | 1     | 0   | 4                      |
| Wahkiakum          | 54    | 27    | 27     | 54    | 0             | 0            | 0         | 0        | 0         | 0           | 0     | 0   | 0                      |
| Walla Walla        | 499   | 240   | 259    | 492   | 3             | 1            | 1         | 0        | 0         | 2           | 0     | 0   | 15                     |
| Walla Walla (city) | 294   | 143   | 151    | 290   | 3             | 1            | 0         | 0        | 0         | 0           | 0     | 0   | 10                     |
| Whatcom            | 1,231 | 583   | 648    | 1,182 | 3             | 34           | 1         | 0        | 1         | 10          | 0     | 0   | 12                     |
| Bellingham         | 635   | 286   | 349    | 622   | 1             | 9            | 0         | 0        | 0         | 3           | 0     | 0   | 5                      |
| Whitman            | 221   | 116   | 105    | 217   | 2             | 0            | 0         | 1        | 0         | 1           | 0     | 0   | 0                      |
| Pullman            | 74    | 36    | 38     | 71    | 2             | 0            | 0         | 1        | 0         | 0           | 0     | 0   | 0                      |
| Yakima             | 1,771 | 885   | 885    | 1,654 | 16            | 83           | 5         | 3        | 7         | 3           | 0     | 0   | 177                    |
| Yakima (city)      | 780   | 368   | 412    | 753   | 13            | 9            | 2         | 2        | 0         | 1           | 0     | 0   | 42                     |

<sup>1</sup>Persons of Hispanic Origin may be of any race. See Appendix A, "Hispanic Origin."

Total includes 1 death for which sex is unknown.

**Mortality Table A9. Age Group by County of Residence, 2001**

| County             | Total         | < 1        | 1-4       | 5-14       | 15-19      | 20-24      | 25-34      | 35-44        | 45-54        | 55-64        | 65-74        | 75-84         | 85 and Over   | Age Unk  |
|--------------------|---------------|------------|-----------|------------|------------|------------|------------|--------------|--------------|--------------|--------------|---------------|---------------|----------|
| <b>State Total</b> | <b>44,563</b> | <b>461</b> | <b>85</b> | <b>126</b> | <b>243</b> | <b>333</b> | <b>655</b> | <b>1,470</b> | <b>3,006</b> | <b>4,331</b> | <b>7,652</b> | <b>13,381</b> | <b>12,820</b> | <b>0</b> |
| Adams              | 119           | 4          | 1         | 0          | 1          | 3          | 4          | 4            | 6            | 9            | 28           | 32            | 27            | 0        |
| Asotin             | 193           | 1          | 0         | 0          | 0          | 1          | 1          | 4            | 15           | 13           | 40           | 63            | 55            | 0        |
| Benton             | 989           | 12         | 2         | 5          | 7          | 5          | 14         | 30           | 62           | 113          | 193          | 306           | 240           | 0        |
| Chelan             | 549           | 4          | 2         | 2          | 1          | 0          | 3          | 12           | 35           | 41           | 76           | 174           | 199           | 0        |
| Clallam            | 768           | 2          | 0         | 2          | 7          | 6          | 6          | 10           | 33           | 70           | 140          | 269           | 223           | 0        |
| Clark              | 2,292         | 29         | 7         | 7          | 12         | 22         | 36         | 71           | 182          | 257          | 380          | 665           | 624           | 0        |
| Columbia           | 49            | 0          | 0         | 0          | 0          | 0          | 0          | 1            | 1            | 3            | 6            | 21            | 17            | 0        |
| Cowlitz            | 867           | 10         | 2         | 2          | 5          | 2          | 14         | 30           | 54           | 96           | 152          | 249           | 251           | 0        |
| Douglas            | 211           | 1          | 0         | 0          | 2          | 3          | 4          | 7            | 12           | 11           | 38           | 74            | 59            | 0        |
| Ferry              | 51            | 0          | 0         | 0          | 0          | 1          | 1          | 2            | 6            | 6            | 13           | 12            | 10            | 0        |
| Franklin           | 296           | 9          | 1         | 4          | 4          | 3          | 8          | 10           | 19           | 24           | 55           | 90            | 69            | 0        |
| Garfield           | 31            | 0          | 0         | 0          | 1          | 0          | 0          | 0            | 1            | 1            | 4            | 10            | 14            | 0        |
| Grant              | 551           | 5          | 3         | 4          | 4          | 2          | 11         | 25           | 41           | 65           | 104          | 158           | 129           | 0        |
| Grays Harbor       | 838           | 8          | 2         | 4          | 1          | 2          | 8          | 22           | 54           | 94           | 173          | 265           | 205           | 0        |
| Island             | 571           | 6          | 0         | 0          | 0          | 2          | 6          | 13           | 34           | 47           | 87           | 210           | 166           | 0        |
| Jefferson          | 263           | 0          | 0         | 1          | 0          | 2          | 3          | 3            | 10           | 15           | 46           | 102           | 81            | 0        |
| King               | 11,531        | 109        | 16        | 28         | 53         | 90         | 170        | 416          | 779          | 1,073        | 1,788        | 3,494         | 3,515         | 0        |
| Kitsap             | 1,836         | 22         | 4         | 4          | 12         | 13         | 25         | 47           | 146          | 162          | 300          | 578           | 523           | 0        |
| Kittitas           | 254           | 1          | 0         | 0          | 2          | 4          | 3          | 5            | 13           | 32           | 41           | 72            | 81            | 0        |
| Klickitat          | 177           | 2          | 0         | 0          | 4          | 4          | 4          | 7            | 14           | 17           | 30           | 54            | 41            | 0        |
| Lewis              | 726           | 7          | 2         | 0          | 4          | 8          | 7          | 14           | 49           | 65           | 132          | 232           | 206           | 0        |
| Lincoln            | 107           | 0          | 1         | 0          | 1          | 1          | 0          | 3            | 3            | 9            | 17           | 37            | 35            | 0        |
| Mason              | 520           | 4          | 0         | 2          | 3          | 5          | 11         | 13           | 41           | 64           | 109          | 151           | 117           | 0        |
| Okanogan           | 365           | 3          | 0         | 1          | 3          | 2          | 5          | 8            | 25           | 51           | 65           | 105           | 97            | 0        |
| Pacific            | 310           | 0          | 0         | 1          | 3          | 0          | 2          | 6            | 21           | 26           | 83           | 90            | 78            | 0        |
| Pend Oreille       | 113           | 2          | 0         | 3          | 1          | 0          | 2          | 3            | 5            | 14           | 34           | 27            | 22            | 0        |
| Pierce             | 5,386         | 81         | 13        | 15         | 26         | 34         | 98         | 212          | 419          | 558          | 1,023        | 1,595         | 1,312         | 0        |
| San Juan           | 132           | 0          | 0         | 0          | 0          | 0          | 0          | 2            | 12           | 9            | 17           | 52            | 40            | 0        |
| Skagit             | 979           | 8          | 2         | 4          | 3          | 9          | 6          | 21           | 59           | 78           | 174          | 309           | 306           | 0        |
| Skamania           | 63            | 0          | 0         | 0          | 1          | 1          | 0          | 0            | 4            | 7            | 19           | 16            | 15            | 0        |
| Snohomish          | 3,967         | 45         | 7         | 12         | 24         | 33         | 64         | 158          | 285          | 431          | 652          | 1,169         | 1,087         | 0        |
| Spokane            | 3,692         | 31         | 8         | 9          | 19         | 19         | 49         | 122          | 218          | 300          | 645          | 1,074         | 1,198         | 0        |
| Stevens            | 343           | 3          | 0         | 1          | 0          | 3          | 2          | 13           | 26           | 49           | 64           | 85            | 97            | 0        |
| Thurston           | 1,648         | 15         | 5         | 3          | 12         | 11         | 32         | 48           | 107          | 165          | 288          | 470           | 492           | 0        |
| Wahkiakum          | 54            | 1          | 0         | 0          | 0          | 1          | 0          | 2            | 3            | 6            | 6            | 16            | 19            | 0        |
| Walla Walla        | 499           | 3          | 0         | 1          | 3          | 5          | 5          | 11           | 24           | 43           | 74           | 155           | 175           | 0        |
| Whatcom            | 1,231         | 9          | 3         | 4          | 6          | 11         | 20         | 44           | 88           | 104          | 199          | 355           | 388           | 0        |
| Whitman            | 221           | 2          | 0         | 0          | 0          | 2          | 5          | 11           | 7            | 19           | 39           | 63            | 73            | 0        |
| Yakima             | 1,771         | 22         | 4         | 7          | 18         | 23         | 26         | 60           | 93           | 184          | 318          | 482           | 534           | 0        |

**Mortality Table A10. Month of Death by County of Residence, 2001**

| County             | Total         | Jan          | Feb          | Mar          | Apr          | May          | Jun          | Jul          | Aug          | Sep          | Oct          | Nov          | Dec          |
|--------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>State Total</b> | <b>44,563</b> | <b>4,067</b> | <b>3,622</b> | <b>4,076</b> | <b>3,813</b> | <b>3,771</b> | <b>3,556</b> | <b>3,453</b> | <b>3,530</b> | <b>3,395</b> | <b>3,743</b> | <b>3,587</b> | <b>3,950</b> |
| Adams              | 119           | 13           | 9            | 8            | 10           | 15           | 7            | 7            | 11           | 7            | 7            | 13           | 12           |
| Asotin             | 193           | 20           | 19           | 25           | 19           | 6            | 11           | 18           | 16           | 23           | 11           | 11           | 14           |
| Benton             | 989           | 100          | 86           | 85           | 71           | 104          | 71           | 69           | 70           | 75           | 81           | 75           | 102          |
| Chelan             | 549           | 53           | 48           | 43           | 49           | 43           | 42           | 35           | 56           | 44           | 53           | 38           | 45           |
| Clallam            | 768           | 63           | 64           | 66           | 59           | 57           | 66           | 59           | 63           | 52           | 67           | 78           | 74           |
| Clark              | 2,292         | 202          | 194          | 202          | 216          | 209          | 173          | 180          | 166          | 186          | 185          | 174          | 205          |
| Columbia           | 49            | 4            | 4            | 7            | 2            | 4            | 3            | 2            | 5            | 5            | 2            | 5            | 6            |
| Cowlitz            | 867           | 73           | 60           | 72           | 82           | 86           | 64           | 74           | 64           | 60           | 83           | 70           | 79           |
| Douglas            | 211           | 22           | 12           | 16           | 17           | 18           | 21           | 15           | 11           | 15           | 21           | 22           | 21           |
| Ferry              | 51            | 2            | 7            | 4            | 9            | 3            | 6            | 1            | 5            | 1            | 4            | 4            | 5            |
| Franklin           | 296           | 27           | 26           | 30           | 29           | 18           | 28           | 20           | 22           | 21           | 19           | 21           | 35           |
| Garfield           | 31            | 1            | 1            | 4            | 2            | 6            | 3            | 2            | 4            | 2            | 3            | 1            | 2            |
| Grant              | 551           | 47           | 41           | 65           | 50           | 34           | 47           | 41           | 36           | 47           | 49           | 44           | 50           |
| Grays Harbor       | 838           | 77           | 69           | 89           | 85           | 67           | 78           | 51           | 66           | 56           | 63           | 72           | 65           |
| Island             | 571           | 61           | 46           | 56           | 33           | 51           | 38           | 50           | 46           | 51           | 37           | 56           | 46           |
| Jefferson          | 263           | 22           | 23           | 29           | 21           | 19           | 20           | 20           | 14           | 20           | 26           | 18           | 31           |
| King               | 11,531        | 1,108        | 944          | 1,062        | 957          | 974          | 909          | 925          | 912          | 868          | 935          | 942          | 995          |
| Kitsap             | 1,836         | 160          | 136          | 153          | 166          | 158          | 154          | 143          | 152          | 135          | 157          | 142          | 180          |
| Kittitas           | 254           | 16           | 29           | 24           | 27           | 21           | 21           | 19           | 20           | 16           | 26           | 19           | 16           |
| Klickitat          | 177           | 13           | 13           | 13           | 20           | 14           | 21           | 7            | 16           | 16           | 18           | 10           | 16           |
| Lewis              | 726           | 69           | 62           | 66           | 56           | 79           | 62           | 47           | 55           | 43           | 48           | 57           | 82           |
| Lincoln            | 107           | 10           | 6            | 11           | 10           | 12           | 11           | 8            | 9            | 5            | 12           | 6            | 7            |
| Mason              | 520           | 56           | 38           | 39           | 38           | 46           | 37           | 47           | 44           | 46           | 42           | 43           | 44           |
| Okanogan           | 365           | 31           | 25           | 36           | 34           | 26           | 24           | 24           | 26           | 33           | 30           | 36           | 40           |
| Pacific            | 310           | 25           | 23           | 28           | 28           | 22           | 31           | 20           | 25           | 29           | 29           | 24           | 26           |
| Pend Oreille       | 113           | 16           | 8            | 8            | 13           | 8            | 3            | 19           | 2            | 4            | 11           | 14           | 7            |
| Pierce             | 5,386         | 512          | 442          | 480          | 439          | 448          | 436          | 405          | 441          | 400          | 467          | 419          | 497          |
| San Juan           | 132           | 11           | 9            | 12           | 18           | 11           | 10           | 9            | 9            | 10           | 13           | 7            | 13           |
| Skagit             | 979           | 92           | 82           | 80           | 70           | 81           | 95           | 74           | 97           | 87           | 75           | 72           | 74           |
| Skamania           | 63            | 7            | 4            | 7            | 4            | 5            | 7            | 8            | 4            | 3            | 3            | 4            | 7            |
| Snohomish          | 3,967         | 323          | 321          | 384          | 332          | 343          | 312          | 327          | 342          | 301          | 335          | 323          | 324          |
| Spokane            | 3,692         | 327          | 284          | 361          | 335          | 336          | 294          | 262          | 289          | 275          | 316          | 295          | 318          |
| Stevens            | 343           | 29           | 32           | 38           | 25           | 29           | 33           | 32           | 33           | 19           | 19           | 22           | 32           |
| Thurston           | 1,648         | 134          | 128          | 153          | 136          | 127          | 135          | 151          | 114          | 144          | 164          | 116          | 146          |
| Wahkiakum          | 54            | 6            | 6            | 4            | 5            | 6            | 4            | 3            | 2            | 5            | 4            | 4            | 5            |
| Walla Walla        | 499           | 49           | 42           | 51           | 47           | 37           | 43           | 30           | 41           | 33           | 42           | 44           | 40           |
| Whatcom            | 1,231         | 111          | 119          | 95           | 112          | 95           | 107          | 91           | 93           | 103          | 104          | 98           | 103          |
| Whitman            | 221           | 17           | 22           | 20           | 27           | 19           | 15           | 15           | 17           | 14           | 13           | 17           | 25           |
| Yakima             | 1,771         | 158          | 138          | 150          | 160          | 134          | 114          | 143          | 132          | 141          | 169          | 171          | 161          |

**Mortality Table A11. Place Where Death Occurred by County of Occurrence, 2001**

| County             | Total         | General Hospital | Nursing Home  | Home          | Federal Facility | Psychiatric Hospital | State Facility | Dead on Arrival | Other & Unk  |
|--------------------|---------------|------------------|---------------|---------------|------------------|----------------------|----------------|-----------------|--------------|
| <b>State Total</b> | <b>44,652</b> | <b>15,607</b>    | <b>13,205</b> | <b>12,641</b> | <b>530</b>       | <b>55</b>            | <b>1</b>       | <b>29</b>       | <b>2,584</b> |
| Adams              | 111           | 45               | 37            | 16            | 0                | 0                    | 0              | 0               | 13           |
| Asotin             | 175           | 58               | 52            | 55            | 0                | 0                    | 0              | 0               | 10           |
| Benton             | 951           | 500              | 143           | 263           | 0                | 0                    | 0              | 1               | 44           |
| Chelan             | 685           | 319              | 176           | 159           | 0                | 0                    | 0              | 0               | 31           |
| Clallam            | 707           | 186              | 191           | 283           | 0                | 0                    | 0              | 1               | 46           |
| Clark              | 2,104         | 487              | 582           | 849           | 0                | 0                    | 0              | 1               | 185          |
| Columbia           | 37            | 15               | 13            | 7             | 0                | 0                    | 0              | 0               | 2            |
| Cowlitz            | 959           | 536              | 202           | 175           | 0                | 0                    | 0              | 2               | 44           |
| Douglas            | 120           | 0                | 56            | 54            | 0                | 0                    | 0              | 1               | 9            |
| Ferry              | 28            | 11               | 0             | 13            | 0                | 0                    | 0              | 0               | 4            |
| Franklin           | 281           | 98               | 80            | 78            | 0                | 0                    | 0              | 0               | 25           |
| Garfield           | 24            | 7                | 12            | 4             | 0                | 0                    | 0              | 0               | 1            |
| Grant              | 439           | 148              | 99            | 146           | 0                | 0                    | 0              | 1               | 45           |
| Grays Harbor       | 691           | 247              | 225           | 191           | 0                | 0                    | 0              | 2               | 26           |
| Island             | 419           | 84               | 115           | 185           | 1                | 0                    | 0              | 1               | 33           |
| Jefferson          | 188           | 51               | 50            | 76            | 0                | 0                    | 0              | 0               | 11           |
| King               | 12,909        | 5,116            | 3,729         | 3,042         | 225              | 0                    | 0              | 7               | 790          |
| Kitsap             | 1,725         | 543              | 634           | 460           | 14               | 0                    | 0              | 0               | 74           |
| Kittitas           | 230           | 43               | 80            | 74            | 0                | 0                    | 0              | 0               | 33           |
| Klickitat          | 128           | 37               | 9             | 61            | 0                | 0                    | 0              | 1               | 20           |
| Lewis              | 632           | 192              | 209           | 203           | 0                | 0                    | 0              | 2               | 26           |
| Lincoln            | 90            | 31               | 30            | 20            | 0                | 0                    | 0              | 0               | 9            |
| Mason              | 409           | 90               | 124           | 161           | 0                | 0                    | 0              | 0               | 34           |
| Okanogan           | 309           | 77               | 104           | 108           | 0                | 0                    | 0              | 0               | 20           |
| Pacific            | 243           | 79               | 61            | 82            | 0                | 0                    | 0              | 0               | 21           |
| Pend Oreille       | 101           | 44               | 20            | 33            | 0                | 0                    | 0              | 0               | 4            |
| Pierce             | 5,383         | 1,760            | 1,645         | 1,521         | 194              | 29                   | 0              | 4               | 230          |
| San Juan           | 98            | 0                | 40            | 43            | 0                | 0                    | 0              | 0               | 15           |
| Skagit             | 967           | 293              | 341           | 271           | 0                | 0                    | 0              | 1               | 61           |
| Skamania           | 48            | 0                | 0             | 29            | 0                | 0                    | 0              | 0               | 19           |
| Snohomish          | 3,513         | 985              | 1,116         | 1,178         | 0                | 0                    | 0              | 2               | 232          |
| Spokane            | 4,135         | 1,680            | 1,130         | 1,086         | 49               | 26                   | 1              | 0               | 163          |
| Stevens            | 263           | 70               | 75            | 96            | 0                | 0                    | 0              | 1               | 21           |
| Thurston           | 1,728         | 580              | 512           | 534           | 0                | 0                    | 0              | 1               | 101          |
| Wahkiakum          | 35            | 0                | 20            | 15            | 0                | 0                    | 0              | 0               | 0            |
| Walla Walla        | 586           | 203              | 195           | 117           | 47               | 0                    | 0              | 0               | 24           |
| Whatcom            | 1,261         | 343              | 422           | 416           | 0                | 0                    | 0              | 0               | 80           |
| Whitman            | 199           | 54               | 83            | 50            | 0                | 0                    | 0              | 0               | 12           |
| Yakima             | 1,741         | 595              | 593           | 487           | 0                | 0                    | 0              | 0               | 66           |

## B. Autopsy and Disposition

Death certificates collect information on whether or not an autopsy was performed and also collect information on the type of disposition. The use of an autopsy provides information about the quality of cause-of-death information on death certificates.

**Mortality Table B1. Percent Autopsy and Cremation for Residents, 1990-2001**

| <b>Year</b> | <b>Percent Autopsy</b> | <b>Percent Cremation</b> |
|-------------|------------------------|--------------------------|
| 1990        | 12.3                   | 41.9                     |
| 1991        | 12.1                   | 43.0                     |
| 1992        | 11.7                   | 44.8                     |
| 1993        | 10.9                   | 46.4                     |
| 1994        | 11.4                   | 49.4                     |
| 1995        | 11.1                   | 50.5                     |
| 1996        | 10.7                   | 52.0                     |
| 1997        | 10.1                   | 53.8                     |
| 1998        | 10.0                   | 55.0                     |
| 1999        | 10.1                   | 56.1                     |
| 2000        | 9.9                    | 57.6                     |
| 2001        | 9.7                    | 59.5                     |

The percent of deaths with an autopsy has steadily decreased since 1990. Rates of autopsy vary by age and by manner of death. Table B2 provides more detailed information on autopsies for 2001. The percent of total deaths with cremation as a disposition type have increased substantially since 1990.



**Mortality Table B2. Autopsy by Age and Manner of Death for Residents, 2001**

| Age Group          | Total Deaths  |              |                      | Natural or Disease |              |                      | External Causes (e.g., Accident, Suicide, Homicide, etc.) |              |                      |
|--------------------|---------------|--------------|----------------------|--------------------|--------------|----------------------|---|--------------|----------------------|
|                    | Total         | Autopsy      | Percent <sup>1</sup> | Total              | Autopsy      | Percent <sup>1</sup> | Total   | Autopsy      | Percent <sup>1</sup> |
| <b>State Total</b> | <b>44,563</b> | <b>4,328</b> | <b>9.7</b>           | <b>41,457</b>      | <b>2,208</b> | <b>5.3</b>           | <b>3,106</b>  | <b>2,120</b> | <b>68.3</b>          |
| Under 1            | 461           | 180          | 39.0                 | 429                | 152          | 35.4                 | 32  | 28           | 87.5                 |
| 1-4                | 85            | 50           | 58.8                 | 53                 | 25           | 47.2                 | 32  | 25           | 78.1                 |
| 5-14               | 126           | 67           | 53.2                 | 66                 | 22           | 33.3                 | 60  | 45           | 75.0                 |
| 15-19              | 243           | 167          | 68.7                 | 48                 | 15           | 31.3                 | 195   | 152          | 77.9                 |
| 20-24              | 333           | 228          | 68.5                 | 91                 | 41           | 45.1                 | 242   | 187          | 77.3                 |
| 25-34              | 655           | 417          | 63.7                 | 265                | 102          | 38.5                 | 390   | 315          | 80.8                 |
| 35-44              | 1,470         | 729          | 49.6                 | 932                | 279          | 29.9                 | 538   | 450          | 83.6                 |
| 45-54              | 3,006         | 877          | 29.2                 | 2,509              | 475          | 18.9                 | 497   | 402          | 80.9                 |
| 55-64              | 4,331         | 570          | 13.2                 | 4,071              | 384          | 9.4                  | 260   | 186          | 71.5                 |
| 65-74              | 7,652         | 433          | 5.7                  | 7,427              | 300          | 4.0                  | 225   | 133          | 59.1                 |
| 75-84              | 13,381        | 411          | 3.1                  | 13,066             | 286          | 2.2                  | 315   | 125          | 39.7                 |
| 85 and over        | 12,820        | 199          | 1.6                  | 12,500             | 127          | 1.0                  | 320   | 72           | 22.5                 |
| Unknown            | 0             | 0            | 0.0                  | 0                  | 0            | 0.0                  | 0   | 0            | 0.0                  |

<sup>1</sup>Percents may not add to 100% due to rounding.

Note:

Source for manner of death is the International Classification of Diseases (Tenth Revision): Natural or Disease (A00-R99); External Causes (V00-Y99).

**Mortality Table B3. Type of Disposition by County of Residence, 2001**

| County             | Total         | Burial        | Cremation     | Removal      | Medical Research | Body Not Recovered | Unknown   |
|--------------------|---------------|---------------|---------------|--------------|------------------|--------------------|-----------|
| <b>State Total</b> | <b>44,563</b> | <b>16,279</b> | <b>26,527</b> | <b>1,525</b> | <b>186</b>       | <b>18</b>          | <b>28</b> |
| Adams              | 119           | 76            | 34            | 8            | 1                | 0                  | 0         |
| Asotin             | 193           | 73            | 70            | 50           | 0                | 0                  | 0         |
| Benton             | 989           | 439           | 505           | 42           | 3                | 0                  | 0         |
| Chelan             | 549           | 247           | 280           | 21           | 0                | 0                  | 1         |
| Clallam            | 768           | 186           | 573           | 8            | 1                | 0                  | 0         |
| Clark              | 2,292         | 858           | 1,293         | 131          | 8                | 1                  | 1         |
| Columbia           | 49            | 21            | 27            | 1            | 0                | 0                  | 0         |
| Cowlitz            | 867           | 345           | 493           | 24           | 4                | 1                  | 0         |
| Douglas            | 211           | 95            | 112           | 2            | 1                | 0                  | 1         |
| Ferry              | 51            | 23            | 27            | 1            | 0                | 0                  | 0         |
| Franklin           | 296           | 133           | 142           | 21           | 0                | 0                  | 0         |
| Garfield           | 31            | 21            | 8             | 2            | 0                | 0                  | 0         |
| Grant              | 551           | 223           | 311           | 13           | 3                | 0                  | 1         |
| Grays Harbor       | 838           | 301           | 530           | 7            | 0                | 0                  | 0         |
| Island             | 571           | 142           | 410           | 15           | 4                | 0                  | 0         |
| Jefferson          | 263           | 46            | 212           | 5            | 0                | 0                  | 0         |
| King               | 11,531        | 3,832         | 7,174         | 410          | 97               | 6                  | 12        |
| Kitsap             | 1,836         | 521           | 1,239         | 65           | 10               | 1                  | 0         |
| Kittitas           | 254           | 109           | 143           | 2            | 0                | 0                  | 0         |
| Klickitat          | 177           | 70            | 80            | 26           | 1                | 0                  | 0         |
| Lewis              | 726           | 325           | 382           | 18           | 1                | 0                  | 0         |
| Lincoln            | 107           | 52            | 53            | 2            | 0                | 0                  | 0         |
| Mason              | 520           | 143           | 367           | 7            | 3                | 0                  | 0         |
| Okanogan           | 365           | 173           | 187           | 5            | 0                | 0                  | 0         |
| Pacific            | 310           | 96            | 209           | 4            | 0                | 0                  | 1         |
| Pend Oreille       | 113           | 38            | 68            | 7            | 0                | 0                  | 0         |
| Pierce             | 5,386         | 2,134         | 3,025         | 207          | 14               | 3                  | 3         |
| San Juan           | 132           | 22            | 106           | 2            | 2                | 0                  | 0         |
| Skagit             | 979           | 345           | 620           | 11           | 1                | 0                  | 2         |
| Skamania           | 63            | 13            | 48            | 2            | 0                | 0                  | 0         |
| Snohomish          | 3,967         | 1,279         | 2,521         | 147          | 16               | 1                  | 3         |
| Spokane            | 3,692         | 1,427         | 2,143         | 116          | 2                | 1                  | 3         |
| Stevens            | 343           | 144           | 183           | 15           | 1                | 0                  | 0         |
| Thurston           | 1,648         | 510           | 1,088         | 42           | 7                | 1                  | 0         |
| Wahkiakum          | 54            | 20            | 31            | 2            | 1                | 0                  | 0         |
| Walla Walla        | 499           | 222           | 266           | 10           | 1                | 0                  | 0         |
| Whatcom            | 1,231         | 475           | 725           | 24           | 4                | 3                  | 0         |
| Whitman            | 221           | 100           | 111           | 10           | 0                | 0                  | 0         |
| Yakima             | 1,771         | 1,000         | 731           | 40           | 0                | 0                  | 0         |

## C. Leading Causes of Death, Overview, and Selected Causes of Death

Leading causes of death are used to determine the relative ranking of specific causes of death. The rankings depend on how causes of death are categorized into groups. Leading causes of death for this report follow the guidelines established by the National Center for Health Statistics. See the introduction for more information about how a change in the classification of diseases (ICD-10) affects trends.

**Mortality Table C1. Age-Adjusted Rates<sup>1</sup> for 10 Leading Causes of Death for Residents, 1990-2001**

| Year                              | Heart Disease | Cancer | Strokes | COPD | Unintentional or Accident | Alzheimer's | Diabetes | Flu & Pneumonia | Intentional or Suicide | Liver Disease |
|-----------------------------------|---------------|--------|---------|------|---------------------------|-------------|----------|-----------------|------------------------|---------------|
| 1990                              | 274.2         | 206.8  | 68.1    | 45.4 | 37.0                      | 10.6        | 18.1     | 35.8            | 14.2                   | 9.2           |
| 1991                              | 263.1         | 206.6  | 67.7    | 44.8 | 32.9                      | 10.9        | 17.5     | 33.3            | 14.1                   | 8.9           |
| 1992                              | 255.8         | 209.2  | 68.9    | 46.9 | 33.8                      | 10.1        | 18.9     | 31.6            | 13.8                   | 10.3          |
| 1993                              | 264.9         | 212.4  | 72.6    | 48.6 | 32.5                      | 10.2        | 20.9     | 36.6            | 13.5                   | 9.6           |
| 1994                              | 242.1         | 205.2  | 69.1    | 48.2 | 33.0                      | 11.3        | 21.4     | 33.1            | 14.5                   | 9.6           |
| 1995                              | 239.4         | 205.0  | 70.5    | 45.2 | 34.2                      | 10.8        | 22.2     | 33.4            | 14.6                   | 8.8           |
| 1996                              | 241.4         | 202.9  | 73.0    | 45.8 | 34.8                      | 11.5        | 23.9     | 34.3            | 14.2                   | 9.2           |
| 1997                              | 221.2         | 196.6  | 67.6    | 46.5 | 34.0                      | 11.6        | 21.8     | 33.0            | 13.0                   | 9.6           |
| 1998                              | 222.0         | 196.0  | 66.3    | 46.5 | 33.9                      | 11.9        | 23.2     | 33.5            | 12.3                   | 8.5           |
| ***1998 Comparability Modified*** |               |        |         |      |                           |             |          |                 |                        |               |
|                                   | 218.9         | 197.3  | 70.2    | 48.7 | 34.9                      | 18.6        | 23.4     | 23.4            | 12.2                   | 8.8           |
| 1999                              | 216.4         | 198.9  | 70.2    | 51.4 | 33.5                      | 30.0        | 24.5     | 23.8            | 14.2                   | 9.5           |
| 2000                              | 209.3         | 195.6  | 68.6    | 49.3 | 35.5                      | 33.4        | 24.5     | 18.6            | 12.4                   | 8.7           |
| 2001                              | 202.4         | 194.2  | 67.9    | 48.2 | 35.2                      | 37.1        | 25.3     | 17.2            | 11.9                   | 9.8           |

<sup>1</sup>Rate per 100,000 age-adjusted to U.S. 2000 population.

**Note:**

Causes of death were coded with International Classification of Diseases, Ninth Revision (ICD-9) in 1990-1998 and with the Tenth Revision (ICD-10) during 1999-2000. Rates during 1998 have been multiplied by a comparability ratio (CR).

ICD codes and comparability ratios are:

Heart Disease: ICD-9: 390-398,402,404,410-429; ICD-10: I00-I09,I11,I13,I20-I51; CR=0.9858

Cancer: ICD-9: 140-208; ICD-10: C00-C97; CR=1.0068

Strokes or Cerebrovascular Disease: ICD-9: 430-434,436-438; ICD-10: I60-I69; CR=1.0588

COPD or Chronic Lower Respiratory Disease: ICD-9: 490-494,496; ICD-10: J40-J47; CR=1.0478

Unintentional Injury or Accident: ICD-9: E800-E869,E880-E929; ICD-10: V01-X59,Y85-Y86; CR=1.0305

Alzheimer's Disease: ICD-9: 331.0; ICD-10: G30; CR=1.5536

Diabetes Mellitus: ICD-9: 250; ICD-10: E10-E14; CR=1.0082

Influenza and Pneumonia: ICD-9: 480-487; ICD-10: J10-J18; CR=0.6982

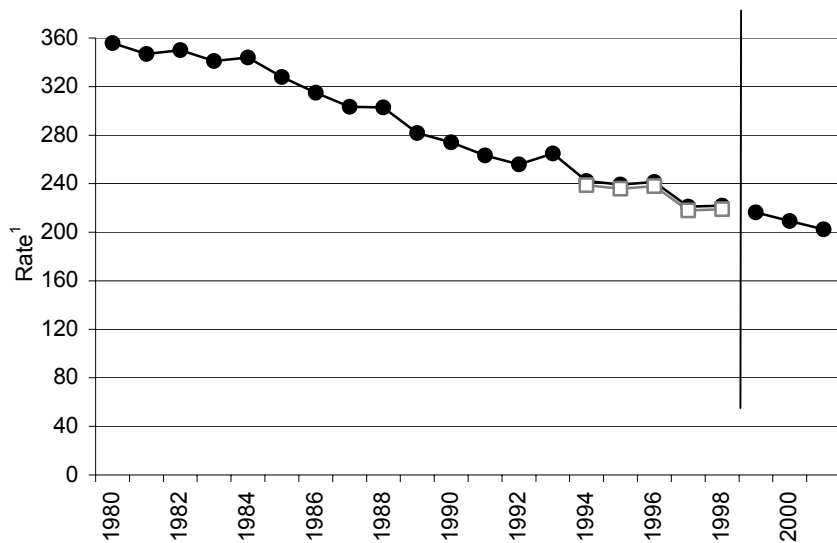
Intentional or Suicide: ICD-9: E950-E959; ICD-10: X60-X84,Y87.0; CR=0.9962

Chronic Liver Disease: ICD-9: 571; ICD-10: K70,K73-K74; CR=1.0367

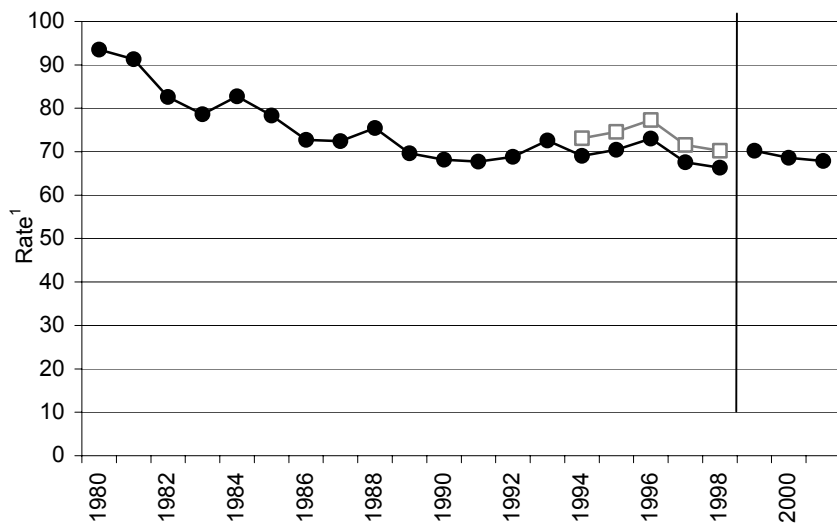
The ten leading causes of death accounted for 81.2% of all deaths to residents of Washington State in 2001. Heart disease and cancer alone account for 50% of all deaths. Alzheimer's disease and heart disease have the largest changes over time with heart disease decreasing and Alzheimer's disease increasing. There have been smaller increases in mortality due to diabetes during the last decade.

**Mortality Figure 3. Mortality Rates for Residents, 1980-2001**

**a. Heart Disease**



**b. Strokes**



<sup>1</sup> Rate per 100,000 age-adjusted to U.S. 2000 population.

- Unmodified Rates
- Comparability-Modified Rates

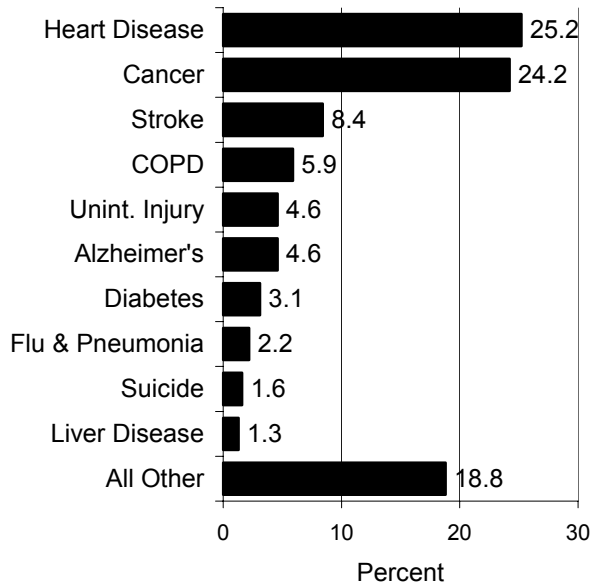
Note:  
 Causes of death were coded with ICD-9 in 1990-1998 and with ICD-10 in 1999-2001. Rates for years 1994-1998 have been multiplied by a comparability ratio (CR). ICD codes and comparability ratios are:  
 Heart Disease: ICD-9: 390-398,402,404,410-429; ICD-10: I00-I09,I11,I13,I20-I51; CR=0.9858  
 Strokes: ICD-9: 430-434,436-438; ICD-10: I60-I69; CR=1.0588

**Mortality Table C2. Leading Causes of Death for Residents, 2001**

| Rank | Causes of Death and ICD-10 Codes                  | Number        | Percent <sup>1</sup> | Cumulative Percent |
|------|---|---------------|----------------------|--------------------|
|      | <b>All Causes</b>                                 | <b>44,563</b> | <b>100.0</b>         |                    |
| 1    | Diseases of the Heart (I00-I09,I11,I13,I20-I51)   | 11,229        | 25.2                 | 25.2               |
| 2    | Malignant Neoplasms (C00-C97)                     | 10,780        | 24.2                 | 49.4               |
| 3    | Cerebrovascular Diseases (I60-I69)                | 3,760         | 8.4                  | 57.8               |
| 4    | Chronic Lower Respiratory Diseases (J40-J47)      | 2,636         | 5.9                  | 63.7               |
| 5    | Unintentional Injury (Accident) (V01-X59,Y85-Y86) | 2,064         | 4.6                  | 68.4               |
| 6    | Alzheimer's Disease (G30)                         | 2,051         | 4.6                  | 73.0               |
| 7    | Diabetes Mellitus (E10-E14)                       | 1,403         | 3.1                  | 76.1               |
| 8    | Influenza and Pneumonia (J10-J18)                 | 960           | 2.2                  | 78.3               |
| 9    | Intentional Self-Harm (Suicide) (X60-X84,Y87.0)   | 710           | 1.6                  | 79.9               |
| 10   | Chronic Liver Disease & Cirrhosis (K70,K73-K74)   | 571           | 1.3                  | 81.2               |
|      | All Other Causes                                  | 8,399         | 18.8                 | 100.0              |

<sup>1</sup>Percents may not add to 100% due to rounding.

**Mortality Figure 4. Leading Causes of Death for Residents, 2001**



**Mortality Table C3. Leading Causes by Age Group and Sex for Residents, 2001**

| Age Group with Causes and ICD-10 Codes            | Total  |                   |                  | Male   |                   |                  | Female |                   |                  |
|---|--------|-------------------|------------------|--------|-------------------|------------------|--------|-------------------|------------------|
|   | No.    | Rate <sup>1</sup> | Pct <sup>2</sup> | No.    | Rate <sup>1</sup> | Pct <sup>2</sup> | No.    | Rate <sup>1</sup> | Pct <sup>2</sup> |
| <b>All Ages</b> All Causes                        | 44,563 | 745.8             | 100.0            | 21,987 | 739.0             | 100.0            | 22,575 | 752.6             | 100.0            |
| Diseases of the Heart (I00-I09,I11,I13,I20-I51)   | 11,229 | 187.9             | 25.2             | 5,773  | 194.0             | 26.3             | 5,456  | 181.9             | 24.2             |
| Malignant Neoplasms (C00-C97)                     | 10,780 | 180.4             | 24.2             | 5,563  | 187.0             | 25.3             | 5,217  | 173.9             | 23.1             |
| Cerebrovascular Diseases (I60-I69)                | 3,760  | 62.9              | 8.4              | 1,455  | 48.9              | 6.6              | 2,305  | 76.8              | 10.2             |
| Chronic Lower Respiratory Diseases (J40-J47)      | 2,636  | 44.1              | 5.9              | 1,227  | 41.2              | 5.6              | 1,409  | 47.0              | 6.2              |
| Unintentional Injury (Accident) (V01-X59,Y85-Y86) | 2,064  | 34.5              | 4.6              | 1,318  | 44.3              | 6.0              | 746    | 24.9              | 3.3              |
| Alzheimer's Disease (G30)                         | 2,051  | 34.3              | 4.6              | 608    | 20.4              | 2.8              | 1,443  | 48.1              | 6.4              |
| Diabetes Mellitus (E10-E14)                       | 1,403  | 23.5              | 3.1              | 688    | 23.1              | 3.1              | 715    | 23.8              | 3.2              |
| Influenza and Pneumonia (J10-J18)                 | 960    | 16.1              | 2.2              | 442    | 14.9              | 2.0              | 518    | 17.3              | 2.3              |
| Intentional Self-Harm (Suicide)(X60-X84,Y87.0)    | 710    | 11.9              | 1.6              | 566    | 19.0              | 2.6              | 144    | 4.8               | 0.6              |
| Chronic Liver Disease & Cirrhosis (K70,K73-K74)   | 571    | 9.6               | 1.3              | 343    | 11.5              | 1.6              | 228    | 7.6               | 1.0              |
| All Other Causes                                  | 8,399  | 140.6             | 18.8             | 4,004  | 134.6             | 18.2             | 4,394  | 146.5             | 19.5             |
| <b>Under 1</b> All Causes                         | 461    | 579.6             | 100.0            | 259    | 637.6             | 100.0            | 201    | 516.4             | 100.0            |
| Congenital Malformations (Q00-Q99)                | 119    | 149.6             | 25.8             | 60     | 147.7             | 23.2             | 58     | 149.0             | 28.9             |
| Sudden Infant Death Syndrome (R95)                | 60     | 75.4              | 13.0             | 34     | 83.7              | 13.1             | 26     | 66.8              | 12.9             |
| Short Gestation & Low Birth Weight (P07)          | 49     | 61.6              | 10.6             | 27     | 66.5              | 10.4             | 22     | 56.5              | 10.9             |
| Maternal Complications of Pregnancy (P01)         | 28     | 35.2              | 6.1              | 20     | 49.2              | 7.7              | 8      | 20.6              | 4.0              |
| Unintentional Injury (Accident) (V01-X59,Y85-Y86) | 24     | 30.2              | 5.2              | 15     | 36.9              | 5.8              | 9      | 23.1              | 4.5              |
| All Other Causes                                  | 181    | 227.6             | 39.3             | 103    | 253.6             | 39.8             | 78     | 200.4             | 38.8             |
| <b>1-4</b> All Causes                             | 85     | 26.7              | 100.0            | 44     | 27.0              | 100.0            | 41     | 26.5              | 100.0            |
| Unintentional Injury (Accident) (V01-X59,Y85-Y86) | 27     | 8.5               | 31.8             | 19     | 11.7              | 43.2             | 8      | 5.2               | 19.5             |
| Malignant Neoplasms (C00-C97)                     | 13     | 4.1               | 15.3             | 6      | 3.7               | 13.6             | 7      | 4.5               | 17.1             |
| Congenital Anomalies (Q00-Q99)                    | 10     | 3.1               | 11.8             | 4      | *                 | 9.1              | 6      | 3.9               | 14.6             |
| Assault (Homicide) (X85-Y09,Y87.1)                | 5      | 1.6               | 5.9              | 3      | *                 | 6.8              | 2      | *                 | 4.9              |
| Diseases of the Heart (I00-I09,I11,I13,I20-I51)   | 4      | *                 | 4.7              | 2      | *                 | 4.5              | 2      | *                 | 4.9              |
| All Other Causes                                  | 26     | 8.2               | 30.6             | 10     | 6.1               | 22.7             | 16     | 10.3              | 39.0             |
| <b>5-14</b> All Causes                            | 126    | 14.6              | 100.0            | 75     | 17.0              | 100.0            | 51     | 12.2              | 100.0            |
| Unintentional Injury (Accident) (V01-X59,Y85-Y86) | 46     | 5.3               | 36.5             | 27     | 6.1               | 36.0             | 19     | 4.5               | 37.3             |
| Malignant Neoplasms (C00-C97)                     | 22     | 2.6               | 17.5             | 12     | 2.7               | 16.0             | 10     | 2.4               | 19.6             |
| Congenital Anomalies (Q00-Q99)                    | 12     | 1.4               | 9.5              | 6      | 1.4               | 8.0              | 6      | 1.4               | 11.8             |
| Assault (Homicide) (X85-Y09,Y87.1)                | 7      | 0.8               | 5.6              | 3      | *                 | 4.0              | 4      | *                 | 7.8              |
| Chronic Lower Respiratory Diseases (J40-J47)      | 5      | 0.6               | 4.0              | 5      | 1.1               | 6.7              | *      | *                 | *                |
| All Other Causes                                  | 34     | 3.9               | 27.0             | 22     | 5.0               | 29.3             | *      | *                 | *                |
| <b>15 - 19</b> All Causes                         | 243    | 55.9              | 100.0            | 162    | 72.3              | 100.0            | 81     | 38.4              | 100.0            |
| Unintentional Injury (Accident) (V01-X59,Y85-Y86) | 130    | 29.9              | 53.5             | 82     | 36.6              | 50.6             | 48     | 22.8              | 59.3             |
| Intentional Self-Harm (Suicide)(X60-X84,Y87.0)    | 35     | 8.0               | 14.4             | 29     | 12.9              | 17.9             | 6      | 2.8               | 7.4              |
| Assault (Homicide) (X85-Y09,Y87.1)                | 22     | 5.1               | 9.1              | 15     | 6.7               | 9.3              | 7      | 3.3               | 8.6              |
| Malignant Neoplasms (C00-C97)                     | 18     | 4.1               | 7.4              | 10     | 4.5               | 6.2              | 8      | 3.8               | 9.9              |
| Congenital Anomalies (Q00-Q99)                    | 5      | 1.1               | 2.1              | 4      | *                 | 2.5              | 1      | *                 | 1.2              |
| All Other Causes                                  | 33     | 7.6               | 13.6             | 22     | 9.8               | 13.6             | 11     | 5.2               | 13.6             |
| <b>20 - 24</b> All Causes                         | 333    | 82.3              | 100.0            | 250    | 120.3             | 100.0            | 83     | 42.2              | 100.0            |
| Unintentional Injury (Accident) (V01-X59,Y85-Y86) | 156    | 38.6              | 46.8             | 126    | 60.6              | 50.4             | 30     | 15.2              | 36.1             |
| Intentional Self-Harm (Suicide)(X60-X84,Y87.0)    | 50     | 12.4              | 15.0             | 42     | 20.2              | 16.8             | 8      | 4.1               | 9.6              |
| Assault (Homicide) (X85-Y09,Y87.1)                | 30     | 7.4               | 9.0              | 24     | 11.6              | 9.6              | 6      | 3.0               | 7.2              |
| Malignant Neoplasms (C00-C97)                     | 19     | 4.7               | 5.7              | 11     | 5.3               | 4.4              | 8      | 4.1               | 9.6              |
| Diseases of the Heart (I00-I09,I11,I13,I20-I51)   | 16     | 4.0               | 4.8              | 10     | 4.8               | 4.0              | 6      | 3.0               | 7.2              |
| All Other Causes                                  | 62     | 15.3              | 18.6             | 37     | 17.8              | 14.8             | 25     | 12.7              | 30.1             |
| <b>25 - 34</b> All Causes                         | 655    | 78.0              | 100.0            | 439    | 102.1             | 100.0            | 216    | 52.7              | 100.0            |
| Unintentional Injury (Accident) (V01-X59,Y85-Y86) | 215    | 25.6              | 32.8             | 161    | 37.5              | 36.7             | 54     | 13.2              | 25.0             |
| Intentional Self-Harm (Suicide)(X60-X84,Y87.0)    | 120    | 14.3              | 18.3             | 92     | 21.4              | 21.0             | 28     | 6.8               | 13.0             |
| Malignant Neoplasms (C00-C97)                     | 75     | 8.9               | 11.5             | 34     | 7.9               | 7.7              | 41     | 10.0              | 19.0             |
| Diseases of the Heart (I00-I09,I11,I13,I20-I51)   | 46     | 5.5               | 7.0              | 30     | 7.0               | 6.8              | 16     | 3.9               | 7.4              |
| Assault (Homicide) (X85-Y09,Y87.1)                | 36     | 4.3               | 5.5              | 28     | 6.5               | 6.4              | 8      | 2.0               | 3.7              |
| All Other Causes                                  | 163    | 19.4              | 24.9             | 94     | 21.9              | 21.4             | 69     | 16.8              | 31.9             |

**Mortality Table C3. Leading Causes by Age Group and Sex for Residents, 2001**

| Age Group with Causes and ICD-10 Codes            | Total  |                   |                  | Male  |                   |                  | Female |                   |                  |
|---|--------|-------------------|------------------|-------|-------------------|------------------|--------|-------------------|------------------|
|   | No.    | Rate <sup>1</sup> | Pct <sup>2</sup> | No.   | Rate <sup>1</sup> | Pct <sup>2</sup> | No.    | Rate <sup>1</sup> | Pct <sup>2</sup> |
| <b>35 - 44</b>                                    |        |                   |                  |       |                   |                  |        |                   |                  |
| All Causes  | 1,470  | 151.5             | 100.0            | 947   | 193.9             | 100.0            | 523    | 108.6             | 100.0            |
| Unintentional Injury (Accident) (V01-X59,Y85-Y86) | 332    | 34.2              | 22.6             | 240   | 49.1              | 25.3             | 92     | 19.1              | 17.6             |
| Malignant Neoplasms (C00-C97)                     | 276    | 28.4              | 18.8             | 128   | 26.2              | 13.5             | 148    | 30.7              | 28.3             |
| Diseases of the Heart (I00-I09,I11,I13,I20-I51)   | 211    | 21.7              | 14.4             | 143   | 29.3              | 15.1             | 68     | 14.1              | 13.0             |
| Intentional Self-Harm (Suicide)(X60-X84,Y87.0)    | 138    | 14.2              | 9.4              | 115   | 23.5              | 12.1             | 23     | 4.8               | 4.4              |
| Chronic Liver Disease & Cirrhosis (K70,K73-K74)   | 68     | 7.0               | 4.6              | 42    | 8.6               | 4.4              | 26     | 5.4               | 5.0              |
| All Other Causes                                  | 445    | 45.9              | 30.3             | 279   | 57.1              | 29.5             | 166    | 34.5              | 31.7             |
| <b>45 - 54</b>                                    |        |                   |                  |       |                   |                  |        |                   |                  |
| All Causes  | 3,006  | 341.4             | 100.0            | 1,876 | 428.7             | 100.0            | 1,130  | 255.1             | 100.0            |
| Malignant Neoplasms (C00-C97)                     | 937    | 106.4             | 31.2             | 473   | 108.1             | 25.2             | 464    | 104.8             | 41.1             |
| Diseases of the Heart (I00-I09,I11,I13,I20-I51)   | 553    | 62.8              | 18.4             | 418   | 95.5              | 22.3             | 135    | 30.5              | 11.9             |
| Unintentional Injury (Accident) (V01-X59,Y85-Y86) | 275    | 31.2              | 9.1              | 209   | 47.8              | 11.1             | 66     | 14.9              | 5.8              |
| Chronic Liver Disease & Cirrhosis (K70,K73-K74)   | 163    | 18.5              | 5.4              | 108   | 24.7              | 5.8              | 55     | 12.4              | 4.9              |
| Intentional Self-Harm (Suicide)(X60-X84,Y87.0)    | 159    | 18.1              | 5.3              | 122   | 27.9              | 6.5              | 37     | 8.4               | 3.3              |
| All Other Causes                                  | 919    | 104.4             | 30.6             | 546   | 124.8             | 29.1             | 373    | 84.2              | 33.0             |
| <b>55 - 64</b>                                    |        |                   |                  |       |                   |                  |        |                   |                  |
| All Causes  | 4,331  | 837.5             | 100.0            | 2,583 | 1,006.9           | 100.0            | 1,748  | 670.8             | 100.0            |
| Malignant Neoplasms (C00-C97)                     | 1,703  | 329.3             | 39.3             | 936   | 364.9             | 36.2             | 767    | 294.3             | 43.9             |
| Diseases of the Heart (I00-I09,I11,I13,I20-I51)   | 975    | 188.5             | 22.5             | 701   | 273.3             | 27.1             | 274    | 105.1             | 15.7             |
| Chronic Lower Respiratory Diseases (J40-J47)      | 237    | 45.8              | 5.5              | 121   | 47.2              | 4.7              | 116    | 44.5              | 6.6              |
| Diabetes Mellitus (E10-E14)                       | 191    | 36.9              | 4.4              | 107   | 41.7              | 4.1              | 84     | 32.2              | 4.8              |
| Cerebrovascular Diseases (I60-I69)                | 179    | 34.6              | 4.1              | 104   | 40.5              | 4.0              | 75     | 28.8              | 4.3              |
| All Other Causes                                  | 1,046  | 202.3             | 24.2             | 614   | 239.3             | 23.8             | 432    | 165.8             | 24.7             |
| <b>65 - 74</b>                                    |        |                   |                  |       |                   |                  |        |                   |                  |
| All Causes  | 7,652  | 2,261.8           | 100.0            | 4,276 | 2,703.6           | 100.0            | 3,376  | 1,874.0           | 100.0            |
| Malignant Neoplasms (C00-C97)                     | 2,778  | 821.1             | 36.3             | 1,502 | 949.7             | 35.1             | 1,276  | 708.3             | 37.8             |
| Diseases of the Heart (I00-I09,I11,I13,I20-I51)   | 1,820  | 538.0             | 23.8             | 1,171 | 740.4             | 27.4             | 649    | 360.2             | 19.2             |
| Chronic Lower Respiratory Diseases (J40-J47)      | 624    | 184.4             | 8.2              | 296   | 187.2             | 6.9              | 328    | 182.1             | 9.7              |
| Cerebrovascular Diseases (I60-I69)                | 444    | 131.2             | 5.8              | 226   | 142.9             | 5.3              | 218    | 121.0             | 6.5              |
| Diabetes Mellitus (E10-E14)                       | 334    | 98.7              | 4.4              | 187   | 118.2             | 4.4              | 147    | 81.6              | 4.4              |
| All Other Causes                                  | 1,652  | 488.3             | 21.6             | 894   | 565.2             | 20.9             | 758    | 420.8             | 22.5             |
| <b>75-84</b>                                      |        |                   |                  |       |                   |                  |        |                   |                  |
| All Causes  | 13,381 | 5,500.4           | 100.0            | 6,547 | 6,577.1           | 100.0            | 6,834  | 4,754.7           | 100.0            |
| Diseases of the Heart (I00-I09,I11,I13,I20-I51)   | 3,588  | 1,474.9           | 26.8             | 1,848 | 1,856.5           | 28.2             | 1,740  | 1,210.6           | 25.5             |
| Malignant Neoplasms (C00-C97)                     | 3,288  | 1,351.6           | 24.6             | 1,707 | 1,714.8           | 26.1             | 1,581  | 1,100.0           | 23.1             |
| Cerebrovascular Diseases (I60-I69)                | 1,318  | 541.8             | 9.8              | 554   | 556.5             | 8.5              | 764    | 531.5             | 11.2             |
| Chronic Lower Respiratory Diseases (J40-J47)      | 1,071  | 440.2             | 8.0              | 500   | 502.3             | 7.6              | 571    | 397.3             | 8.4              |
| Alzheimer's Disease (G30)                         | 692    | 284.5             | 5.2              | 254   | 255.2             | 3.9              | 438    | 304.7             | 6.4              |
| All Other Causes                                  | 3,424  | 1,407.5           | 25.6             | 1,684 | 1,691.7           | 25.7             | 1,740  | 1,210.6           | 25.5             |
| <b>85 and Over</b>                                |        |                   |                  |       |                   |                  |        |                   |                  |
| All Causes  | 12,820 | 14,662.0          | 100.0            | 4,529 | 16,395.0          | 100.0            | 8,291  | 13,862.0          | 100.0            |
| Diseases of the Heart (I00-I09,I11,I13,I20-I51)   | 4,003  | 4,578.3           | 31.2             | 1,446 | 5,234.6           | 31.9             | 2,557  | 4,275.2           | 30.8             |
| Cerebrovascular Diseases (I60-I69)                | 1,667  | 1,906.6           | 13.0             | 491   | 1,777.4           | 10.8             | 1,176  | 1,966.2           | 14.2             |
| Malignant Neoplasms (C00-C97)                     | 1,650  | 1,887.1           | 12.9             | 743   | 2,689.7           | 16.4             | 907    | 1,516.5           | 10.9             |
| Alzheimer's Disease (G30)                         | 1,240  | 1,418.2           | 9.7              | 300   | 1,086.0           | 6.6              | 940    | 1,571.6           | 11.3             |
| Chronic Lower Respiratory Diseases (J40-J47)      | 609    | 696.5             | 4.8              | 260   | 941.2             | 5.7              | 349    | 583.5             | 4.2              |
| All Other Causes                                  | 3,651  | 4,175.7           | 28.5             | 1,289 | 4,666.2           | 28.5             | 2,362  | 3,949.2           | 28.5             |

<sup>1</sup>Rate per 100,000 population in each age-sex group.

<sup>2</sup>Percent of total deaths in each age-sex group. Percents may not add to 100% due to rounding.

\*Rate not calculated because number of deaths was less than 5.

Note: Rates based on fewer than 20 deaths are likely to be unstable and imprecise.

Total includes 1 death for which sex is unknown.

**Mortality Table C4. Crude Rates for Selected Causes by Sex for Residents, 2001**

| Cause with ICD-10 Code   | Total    |                         | Male     |                         | Female   |                         |
|--|----------|-------------------------|----------|-------------------------|----------|-------------------------|
|  | Number   | Crude Rate <sup>2</sup> | Number   | Crude Rate <sup>2</sup> | Number   | Crude Rate <sup>2</sup> |
| <b>All Causes<sup>1</sup></b>                                    | (44,563) | (745.8)                 | (21,987) | (739.0)                 | (22,575) | (752.6)                 |
| <b>Certain Infectious &amp; Parasitic Disease (A00-B99)</b>      | (776)    | (13.0)                  | (421)    | (14.2)                  | (355)    | (11.8)                  |
| Tuberculosis (A16-A19)   | 12       | 0.2                     | 8        | 0.3                     | 4        | *                       |
| Septicemia (A40-A41)   | 349      | 5.8                     | 154      | 5.2                     | 195      | 6.5                     |
| Viral Hepatitis (B15-B19)  | 148      | 2.5                     | 88       | 3.0                     | 60       | 2.0                     |
| HIV (B20-B24)  | 114      | 1.9                     | 100      | 3.4                     | 14       | 0.5                     |
| Other (A00-A15,A20-A39,A42-B14,B25-B99)                          | 153      | 2.6                     | 71       | 2.4                     | 82       | 2.7                     |
| <b>Neoplasms (C00-D48)</b>                                       | (11,023) | (184.5)                 | (5,666)  | (190.4)                 | (5,357)  | (178.6)                 |
| Malignant Neoplasms (C00-C97)                                    | 10,780   | 180.4                   | 5,563    | 187.0                   | 5,217    | 173.9                   |
| In Situ & Benign Neoplasms (D00-D48)                             | 243      | 4.1                     | 103      | 3.5                     | 140      | 4.7                     |
| <b>Diseases of Blood &amp; Blood-Forming Organs (D50-D89)</b>    | (143)    | (2.4)                   | (72)     | (2.4)                   | (71)     | (2.4)                   |
| Anemias (D50-D64)  | 65       | 1.1                     | 30       | 1.0                     | 35       | 1.2                     |
| Other (D65-D89)  | 78       | 1.3                     | 42       | 1.4                     | 36       | 1.2                     |
| <b>Endocrine, Nutritional &amp; Metabolic Diseases (E00-E90)</b> | (1,875)  | (31.4)                  | (899)    | (30.2)                  | (976)    | (32.5)                  |
| Diabetes Mellitus (E10-E14)                                      | 1,403    | 23.5                    | 688      | 23.1                    | 715      | 23.8                    |
| Nutritional Diseases (E40-E64)                                   | 52       | 0.9                     | 20       | 0.7                     | 32       | 1.1                     |
| Other (E00-E09,E15-E39,E65-E90)                                  | 420      | 7.0                     | 191      | 6.4                     | 229      | 7.6                     |
| <b>Mental &amp; Behavioral Disorders (F01-F99)</b>               | (498)    | (8.3)                   | (233)    | (7.8)                   | (265)    | (8.8)                   |
| <b>Diseases of the Nervous System (G00-G98)</b>                  | (3,053)  | (51.1)                  | (1,122)  | (37.7)                  | (1,931)  | (64.4)                  |
| Meningitis (G00-G03)   | 15       | 0.3                     | 4        | *                       | 11       | 0.4                     |
| Amyotrophic Lateral Sclerosis (G12.2)                            | 138      | 2.3                     | 69       | 2.3                     | 69       | 2.3                     |
| Parkinson's Disease (G20-G21)                                    | 434      | 7.3                     | 252      | 8.5                     | 182      | 6.1                     |
| Alzheimer's Disease (G30)  | 2,051    | 34.3                    | 608      | 20.4                    | 1,443    | 48.1                    |
| Multiple Sclerosis (G35)   | 108      | 1.8                     | 46       | 1.5                     | 62       | 2.1                     |
| Other (G04-G12.1,G12.3-G19,G22-G29,G31-G34,G36-G98)              | 307      | 5.1                     | 143      | 4.8                     | 164      | 5.5                     |
| <b>Diseases of the Eye &amp; Ear (H00-H93)</b>                   | (4)      | (*)                     | (3)      | (*)                     | (1)      | (*)                     |
| <b>Diseases of the Circulatory System (I00-I99)</b>              | (16,214) | (271.4)                 | (7,818)  | (262.8)                 | (8,396)  | (279.9)                 |
| Major Cardiovascular Diseases (I00-I78)                          | (16,120) | (269.8)                 | (7,780)  | (261.5)                 | (8,340)  | (278.0)                 |
| Diseases of the Heart (I00-I09,I11,I13,I20-I51)                  | (11,229) | (187.9)                 | (5,773)  | (194.0)                 | (5,456)  | (181.9)                 |
| Acute & Chronic Rheumatic Disease (I00-I09)                      | 115      | 1.9                     | 35       | 1.2                     | 80       | 2.7                     |
| Hypertensive Heart Disease (I11)                                 | 386      | 6.5                     | 152      | 5.1                     | 234      | 7.8                     |
| Hypertensive Heart & Renal Disease (I13)                         | 56       | 0.9                     | 21       | 0.7                     | 35       | 1.2                     |
| Ischemic Heart Diseases (I20-I25)                                | (8,420)  | (140.9)                 | (4,626)  | (155.5)                 | (3,794)  | (126.5)                 |
| Acute Myocardial Infarction (I21-I22)                            | 2,781    | 46.5                    | 1,538    | 51.7                    | 1,243    | 41.4                    |
| Other Acute Ischemic Heart Disease (I24)                         | 19       | 0.3                     | 12       | 0.4                     | 7        | 0.2                     |
| Other Chronic Ischemic Heart Disease (I20,I25)                   | (5,620)  | (94.1)                  | (3,076)  | (103.4)                 | (2,544)  | (84.8)                  |
| Atherosclerotic Cardiovascular Disease (I25.0)                   | 1,757    | 29.4                    | 946      | 31.8                    | 811      | 27.0                    |
| All Other Chronic Disease (I20,I25.1-I25.9)                      | 3,863    | 64.7                    | 2,130    | 71.6                    | 1,733    | 57.8                    |
| Other Heart Diseases (I26-I51)                                   | (2,252)  | (37.7)                  | (939)    | (31.6)                  | (1,313)  | (43.8)                  |
| Acute & Subacute Endocarditis (I33)                              | 21       | 0.4                     | 11       | 0.4                     | 10       | 0.3                     |
| Disease Pericardium & Acute Myocarditis (I30-I31,I40)            | 16       | 0.3                     | 8        | 0.3                     | 8        | 0.3                     |
| Heart Failure (I50)  | 460      | 7.7                     | 158      | 5.3                     | 302      | 10.1                    |
| All Other Heart disease (I26-I28,I34-I38,I42-I49,I51)            | 1,755    | 29.4                    | 762      | 25.6                    | 993      | 33.1                    |
| Hypertension & Hypertensive Renal Disease (I10,I12)              | 270      | 4.5                     | 109      | 3.7                     | 161      | 5.4                     |
| Cerebrovascular Diseases (I60-I69)                               | 3,760    | 62.9                    | 1,455    | 48.9                    | 2,305    | 76.8                    |
| Atherosclerosis (I70)  | 348      | 5.8                     | 150      | 5.0                     | 198      | 6.6                     |
| Other Diseases of Circulatory System (I71-I78)                   | (513)    | (8.6)                   | (293)    | (9.8)                   | (220)    | (7.3)                   |
| Aortic Aneurysm & Dissection (I71)                               | 320      | 5.4                     | 199      | 6.7                     | 121      | 4.0                     |
| Other Disease of Arteries (I72-I78)                              | 193      | 3.2                     | 94       | 3.2                     | 99       | 3.3                     |
| Other (I80-I99)  | 94       | 1.6                     | 38       | 1.3                     | 56       | 1.9                     |



**Mortality Table C4. Crude Rates for Selected Causes by Sex for Residents, 2001**

| Cause with ICD-10 Code  | Total   |                         | Male    |                         | Female  |                         |
|---|---------|-------------------------|---------|-------------------------|---------|-------------------------|
|   | Number  | Crude Rate <sup>2</sup> | Number  | Crude Rate <sup>2</sup> | Number  | Crude Rate <sup>2</sup> |
| <b>Diseases of the Respiratory System (J00-J98)</b>               | (4,577) | (76.6)                  | (2,163) | (72.7)                  | (2,414) | (80.5)                  |
| Influenza and Pneumonia (J10-J18)                                 | (960)   | (16.1)                  | (442)   | (14.9)                  | (518)   | (17.3)                  |
| Influenza (J10-J11)   | 9       | 0.2                     | 5       | 0.2                     | 4       | *                       |
| Pneumonia (J12-J18)   | 951     | 15.9                    | 437     | 14.7                    | 514     | 17.1                    |
| Other Acute Lower Respiratory Infections (J20-J22)                | 9       | 0.2                     | 1       | *                       | 8       | 0.3                     |
| Chronic Lower Respiratory Disease (J40-J47)                       | (2,636) | (44.1)                  | (1,227) | (41.2)                  | (1,409) | (47.0)                  |
| Bronchitis, Chronic and Unspecified (J40-J42)                     | 12      | 0.2                     | 2       | *                       | 10      | 0.3                     |
| Emphysema (J43)   | 282     | 4.7                     | 130     | 4.4                     | 152     | 5.1                     |
| Asthma (J45-J46)  | 85      | 1.4                     | 30      | 1.0                     | 55      | 1.8                     |
| Other Chronic Lower Respiratory Disease (J44,J47)                 | 2,257   | 37.8                    | 1,065   | 35.8                    | 1,192   | 39.7                    |
| Pneumoconioses & Chemical Effects (J60-J66,J68)                   | 29      | 0.5                     | 26      | 0.9                     | 3       | *                       |
| Pneumonitis Due to Solids & Liquids (J69)                         | 447     | 7.5                     | 216     | 7.3                     | 231     | 7.7                     |
| Other (J00-J06,J30-J39,J67,J70-J98)                               | 496     | 8.3                     | 251     | 8.4                     | 245     | 8.2                     |
| <b>Diseases of the Digestive System (K00-K92)</b>                 | (1,646) | (27.5)                  | (768)   | (25.8)                  | (878)   | (29.3)                  |
| Peptic Ulcer (K25-K28)  | 117     | 2.0                     | 48      | 1.6                     | 69      | 2.3                     |
| Diseases of Appendix (K35-K38)                                    | 9       | 0.2                     | 7       | 0.2                     | 2       | *                       |
| Hernia (K40-K46)  | 24      | 0.4                     | 9       | 0.3                     | 15      | 0.5                     |
| Chronic Liver Disease & Cirrhosis (K70,K73-K74)                   | (571)   | (9.6)                   | (343)   | (11.5)                  | (228)   | (7.6)                   |
| Alcoholic Liver Disease (K70)                                     | 428     | 7.2                     | 287     | 9.6                     | 141     | 4.7                     |
| Other (K73-K74)   | 143     | 2.4                     | 56      | 1.9                     | 87      | 2.9                     |
| Cholelithiasis & Other Gallbladder Disease (K80-K82)              | 50      | 0.8                     | 22      | 0.7                     | 28      | 0.9                     |
| Other (K00-K24,K29-K34,K39,K47-K69,K71-K72,K75-K79,K83-K92)       | 875     | 14.6                    | 339     | 11.4                    | 536     | 17.9                    |
| <b>Diseases of Skin &amp; Subcutaneous Tissue (L00-L98)</b>       | (33)    | (0.6)                   | (16)    | (0.5)                   | (17)    | (0.6)                   |
| <b>Diseases Musculoskeletal &amp; Connective Tissue (M00-M99)</b> | (329)   | (5.5)                   | (96)    | (3.2)                   | (233)   | (7.8)                   |
| <b>Diseases of the Genitourinary System (N00-N98)</b>             | (613)   | (10.3)                  | (255)   | (8.6)                   | (358)   | (11.9)                  |
| Nephritis (N00-N07,N17-N19,N25-N27)                               | (281)   | (4.7)                   | (138)   | (4.6)                   | (143)   | (4.8)                   |
| Acute Nephrotic Syndrome (N00-N01,N04)                            | 0       | *                       | 0       | *                       | 0       | *                       |
| Chronic Nephritis & Unsp. Nephritis(N02-N03,N05-N07,N26)          | 19      | 0.3                     | 9       | 0.3                     | 10      | 0.3                     |
| Renal Failure (N17-N19)   | 261     | 4.4                     | 129     | 4.3                     | 132     | 4.4                     |
| Other Disorders of Kidney (N25,N27)                               | 1       | *                       | 0       | *                       | 1       | *                       |
| Infections of Kidney (N10-N12,N13.6,N15.1)                        | 12      | 0.2                     | 3       | *                       | 9       | 0.3                     |
| Hyperplasia of Prostate (N40)                                     | n/a     | n/a                     | 11      | 0.4                     | n/a     | n/a                     |
| Other(N13.0-N13.5,N13.7-N15.0,N15.8-N16,N20-N23,N28-N39,N41-N99)  | 309     | 5.2                     | 103     | 3.5                     | 206     | 6.9                     |
| <b>Pregnancy, Childbirth &amp; Puerperium (O00-O99)</b>           | n/a     | n/a                     | n/a     | n/a                     | (9)     | (0.3)                   |
| <b>Conditions Originating in Perinatal Period (P00-P96)</b>       | (202)   | (3.4)                   | (123)   | (4.1)                   | (79)    | (2.6)                   |
| <b>Congenital Anomalies (Q00-Q99)</b>                             | (238)   | (4.0)                   | (125)   | (4.2)                   | (112)   | (3.7)                   |
| <b>Symptoms &amp; Signs Not Elsewhere Classified (R00-R99)</b>    | (224)   | (3.7)                   | (110)   | (3.7)                   | (114)   | (3.8)                   |
| Sudden Infant Death Syndrome (R95)                                | 60      | 1.0                     | 34      | 1.1                     | 26      | 0.9                     |
| Other (R00-R94,R96-R99)   | 164     | 2.7                     | 76      | 2.6                     | 88      | 2.9                     |
| <b>External Causes of Mortality (V01-Y89)</b>                     | (3,106) | (52.0)                  | (2,097) | (70.5)                  | (1,009) | (33.6)                  |
| Unintentional Injury or Accident (V01-X59,Y85-Y86)                | (2,064) | (34.5)                  | (1,318) | (44.3)                  | (746)   | (24.9)                  |
| Transport Accidents (V01-V99,Y85)                                 | 836     | 14.0                    | 563     | 18.9                    | 273     | 9.1                     |
| Nontransport Accidents (W00-X59,Y86)                              | 1,228   | 20.6                    | 755     | 25.4                    | 473     | 15.8                    |
| Intentional Self-Harm (Suicide) (X60-X84,Y87.0)                   | 710     | 11.9                    | 566     | 19.0                    | 144     | 4.8                     |
| Assault (Homicide) (X85-Y09,Y87.1)                                | 192     | 3.2                     | 131     | 4.4                     | 61      | 2.0                     |
| Legal Intervention (Y35,Y89.0)                                    | 10      | 0.2                     | 8       | 0.3                     | 2       | *                       |
| Events of Undetermined Intent (Y10-Y34,Y87.2,Y89.9)               | 110     | 1.8                     | 66      | 2.2                     | 44      | 1.5                     |
| Operations of War & Sequelae (Y36,Y89.1)                          | 2       | *                       | 2       | *                       | 0       | *                       |
| Complications of Medical & Surgical Care (Y40-Y84,Y88)            | 18      | 0.3                     | 6       | 0.2                     | 12      | 0.4                     |

<sup>1</sup>Group totals are shown in parentheses.

<sup>2</sup>Rates per 100,000 population.

\* Rate not calculated because number of deaths was less than 5.

Note: Rates based on fewer than 20 deaths are likely to be unstable and imprecise.

**Mortality Table C5. Age-Adjusted Rates for Selected Causes by Sex for Residents, 2001**

| Cause with ICD-10 Code   | Total    |                          | Male     |                          | Female   |                          |
|--|----------|--------------------------|----------|--------------------------|----------|--------------------------|
|  | Number   | Age-Ad Rate <sup>2</sup> | Number   | Age-Ad Rate <sup>2</sup> | Number   | Age-Ad Rate <sup>2</sup> |
| <b>All Causes<sup>1</sup></b>                                    | (44,563) | (798.8)                  | (21,987) | (944.7)                  | (22,575) | (685.6)                  |
| <b>Certain Infectious &amp; Parasitic Disease (A00-B99)</b>      | (776)    | (13.6)                   | (421)    | (16.3)                   | (355)    | (11.1)                   |
| Tuberculosis (A16-A19)   | 12       | 0.2                      | 8        | 0.3                      | 4        | *                        |
| Septicemia (A40-A41)   | 349      | 6.3                      | 154      | 6.8                      | 195      | 6.1                      |
| Viral Hepatitis (B15-B19)  | 148      | 2.5                      | 88       | 3.0                      | 60       | 1.9                      |
| HIV (B20-B24)  | 114      | 1.9                      | 100      | 3.3                      | 14       | 0.5                      |
| Other (A00-A15,A20-A39,A42-B14,B25-B99)                          | 153      | 2.7                      | 71       | 2.9                      | 82       | 2.5                      |
| <b>Neoplasms (C00-D48)</b>                                       | (11,023) | (198.7)                  | (5,666)  | (239.1)                  | (5,357)  | (171.2)                  |
| Malignant Neoplasms (C00-C97)                                    | 10,780   | 194.2                    | 5,563    | 234.4                    | 5,217    | 166.9                    |
| In Situ & Benign Neoplasms (D00-D48)                             | 243      | 4.4                      | 103      | 4.7                      | 140      | 4.3                      |
| <b>Diseases of Blood &amp; Blood-Forming Organs (D50-D89)</b>    | (143)    | (2.5)                    | (72)     | (3.1)                    | (71)     | (2.2)                    |
| Anemias (D50-D64)  | 65       | 1.1                      | 30       | 1.4                      | 35       | 1.0                      |
| Other (D65-D89)  | 78       | 1.4                      | 42       | 1.7                      | 36       | 1.2                      |
| <b>Endocrine, Nutritional &amp; Metabolic Diseases (E00-E90)</b> | (1,875)  | (33.7)                   | (899)    | (37.8)                   | (976)    | (30.2)                   |
| Diabetes Mellitus (E10-E14)                                      | 1,403    | 25.3                     | 688      | 29.0                     | 715      | 22.3                     |
| Nutritional Diseases (E40-E64)                                   | 52       | 0.9                      | 20       | 1.0                      | 32       | 1.0                      |
| Other (E00-E09,E15-E39,E65-E90)                                  | 420      | 7.4                      | 191      | 7.8                      | 229      | 6.9                      |
| <b>Mental &amp; Behavioral Disorders (F01-F99)</b>               | (498)    | (8.8)                    | (233)    | (9.8)                    | (265)    | (7.7)                    |
| <b>Diseases of the Nervous System (G00-G98)</b>                  | (3,053)  | (55.0)                   | (1,122)  | (52.9)                   | (1,931)  | (55.6)                   |
| Meningitis (G00-G03)   | 15       | 0.3                      | 4        | *                        | 11       | 0.4                      |
| Amyotrophic Lateral Sclerosis (G12.2)                            | 138      | 2.5                      | 69       | 2.7                      | 69       | 2.2                      |
| Parkinson's Disease (G20-G21)                                    | 434      | 7.9                      | 252      | 12.1                     | 182      | 5.3                      |
| Alzheimer's Disease (G30)  | 2,051    | 37.1                     | 608      | 30.5                     | 1,443    | 40.4                     |
| Multiple Sclerosis (G35)   | 108      | 1.9                      | 46       | 1.7                      | 62       | 2.0                      |
| Other (G04-G12.1,G12.3-G19,G22-G29,G31-G34,G36-G98)              | 307      | 5.4                      | 143      | 5.7                      | 164      | 5.2                      |
| <b>Diseases of the Eye &amp; Ear (H00-H93)</b>                   | (4)      | (*)                      | (3)      | (*)                      | (1)      | (*)                      |
| <b>Diseases of the Circulatory System (I00-I99)</b>              | (16,214) | (292.5)                  | (7,818)  | (351.3)                  | (8,396)  | (246.8)                  |
| Major Cardiovascular Diseases (I00-I78)                          | (16,120) | (290.8)                  | (7,780)  | (349.8)                  | (8,340)  | (245.1)                  |
| Diseases of Heart (I00-I09,I11,I13,I20-I51)                      | (11,229) | (202.4)                  | (5,773)  | (256.3)                  | (5,456)  | (161.1)                  |
| Acute & Chronic Rheumatic Disease (I00-I09)                      | 115      | 2.1                      | 35       | 1.5                      | 80       | 2.5                      |
| Hypertensive Heart Disease (I11)                                 | 386      | 6.9                      | 152      | 6.5                      | 234      | 6.7                      |
| Hypertensive Heart & Renal Disease (I13)                         | 56       | 1.0                      | 21       | 1.0                      | 35       | 1.0                      |
| Ischemic Heart Diseases (I20-I25)                                | (8,420)  | (152.1)                  | (4,626)  | (205.0)                  | (3,794)  | (112.2)                  |
| Acute Myocardial Infarction (I21-I22)                            | 2,781    | 50.3                     | 1,538    | 67.4                     | 1,243    | 37.3                     |
| Other Acute Ischemic Heart Disease (I24)                         | 19       | 0.3                      | 12       | 0.5                      | 7        | 0.2                      |
| Other Chronic Ischemic Heart Disease (I20,I25)                   | (5,620)  | (101.4)                  | (3,076)  | (137.1)                  | (2,544)  | (74.7)                   |
| Atherosclerotic Cardiovascular Disease (I25.0)                   | 1,757    | 31.5                     | 946      | 40.1                     | 811      | 23.9                     |
| All Other Chronic Disease (I20,I25.1-I25.9)                      | 3,863    | 70.0                     | 2,130    | 97.0                     | 1,733    | 50.8                     |
| Other Heart Diseases (I26-I51)                                   | (2,252)  | (40.4)                   | (939)    | (42.2)                   | (1,313)  | (38.7)                   |
| Acute & Subacute Endocarditis (I33)                              | 21       | 0.4                      | 11       | 0.4                      | 10       | 0.3                      |
| Disease Pericardium & Acute Myocarditis (I30-I31,I40)            | 16       | 0.3                      | 8        | 0.3                      | 8        | 0.3                      |
| Heart Failure (I50)  | 460      | 8.3                      | 158      | 7.7                      | 302      | 8.5                      |
| All Other Heart disease (I26-I28,I34-I38,I42-I49,I51)            | 1,755    | 31.4                     | 762      | 33.7                     | 993      | 29.6                     |
| Hypertension & Hypertensive Renal Disease (I10,I12)              | 270      | 4.9                      | 109      | 5.1                      | 161      | 4.6                      |
| Cerebrovascular Diseases (I60-I69)                               | 3,760    | 67.9                     | 1,455    | 68.0                     | 2,305    | 67.1                     |
| Atherosclerosis (I70)  | 348      | 6.3                      | 150      | 7.3                      | 198      | 5.5                      |
| Other Diseases of Circulatory System (I71-I78)                   | (513)    | (9.3)                    | (293)    | (13.2)                   | (220)    | (6.8)                    |
| Aortic Aneurysm & Dissection (I71)                               | 320      | 5.8                      | 199      | 8.8                      | 121      | 3.8                      |
| Other Disease of Arteries (I72-I78)                              | 193      | 3.5                      | 94       | 4.4                      | 99       | 3.0                      |
| Other (I80-I99)  | 94       | 1.7                      | 38       | 1.5                      | 56       | 1.7                      |

**Mortality Table C5. Age-Adjusted Rates for Selected Causes by Sex for Residents, 2001**

| Cause with ICD-10 Code  | Total   |                          | Male    |                          | Female  |                          |
|---|---------|--------------------------|---------|--------------------------|---------|--------------------------|
|   | Number  | Age-Ad Rate <sup>2</sup> | Number  | Age-Ad Rate <sup>2</sup> | Number  | Age-Ad Rate <sup>2</sup> |
| <b>Diseases of the Respiratory System (J00-J98)</b>               | (4,577) | (83.1)                   | (2,163) | (99.0)                   | (2,414) | (73.4)                   |
| Influenza and Pneumonia (J10-J18)                                 | (960)   | (17.2)                   | (442)   | (21.1)                   | (518)   | (14.7)                   |
| Influenza (J10-J11)   | 9       | 0.2                      | 5       | 0.2                      | 4       | *                        |
| Pneumonia (J12-J18)   | 951     | 17.1                     | 437     | 20.8                     | 514     | 14.6                     |
| Other Acute Lower Respiratory Infections (J20-J22)                | 9       | 0.2                      | 1       | *                        | 8       | 0.2                      |
| Chronic Lower Respiratory Disease (J40-J47)                       | (2,636) | (48.2)                   | (1,227) | (55.2)                   | (1,409) | (44.2)                   |
| Bronchitis, Chronic and Unspecified (J40-J42)                     | 12      | 0.2                      | 2       | *                        | 10      | 0.3                      |
| Emphysema (J43)   | 282     | 5.2                      | 130     | 5.8                      | 152     | 4.9                      |
| Asthma (J45-J46)  | 85      | 1.5                      | 30      | 1.2                      | 55      | 1.7                      |
| Other Chronic Lower Respiratory Disease (J44,J47)                 | 2,257   | 41.3                     | 1,065   | 48.1                     | 1,192   | 37.2                     |
| Pneumoconioses & Chemical Effects (J60-J66,J68)                   | 29      | 0.5                      | 26      | 1.2                      | 3       | *                        |
| Pneumonitis Due to Solids & Liquids (J69)                         | 447     | 8.1                      | 216     | 10.5                     | 231     | 6.6                      |
| Other (J00-J06,J30-J39,J67,J70-J98)                               | 496     | 9.0                      | 251     | 11.0                     | 245     | 7.6                      |
| <b>Diseases of the Digestive System (K00-K92)</b>                 | (1,646) | (29.2)                   | (768)   | (31.4)                   | (878)   | (26.9)                   |
| Peptic Ulcer (K25-K28)  | 117     | 2.1                      | 48      | 2.2                      | 69      | 2.1                      |
| Diseases of Appendix (K35-K38)                                    | 9       | 0.2                      | 7       | 0.3                      | 2       | *                        |
| Hernia (K40-K46)  | 24      | 0.4                      | 9       | 0.4                      | 15      | 0.5                      |
| Chronic Liver Disease & Cirrhosis (K70,K73-K74)                   | (571)   | (9.8)                    | (343)   | (12.4)                   | (228)   | (7.5)                    |
| Alcoholic Liver Disease (K70)                                     | 428     | 7.3                      | 287     | 10.2                     | 141     | 4.6                      |
| Other (K73-K74)   | 143     | 2.6                      | 56      | 2.2                      | 87      | 2.9                      |
| Cholelithiasis & Other Gallbladder Disease (K80-K82)              | 50      | 0.9                      | 22      | 1.0                      | 28      | 0.8                      |
| Other (K00-K24,K29-K34,K39,K47-K69,K71-K72,K75-K79,K83-K92)       | 875     | 15.7                     | 339     | 15.2                     | 536     | 16.1                     |
| <b>Diseases of Skin &amp; Subcutaneous Tissue (L00-L98)</b>       | (33)    | (0.6)                    | (16)    | (0.7)                    | (17)    | (0.5)                    |
| <b>Diseases Musculoskeletal &amp; Connective Tissue (M00-M99)</b> | (329)   | (5.9)                    | (96)    | (4.3)                    | (233)   | (7.0)                    |
| <b>Diseases of the Genitourinary System (N00-N98)</b>             | (613)   | (11.0)                   | (255)   | (11.8)                   | (358)   | (10.5)                   |
| Nephritis (N00-N07, N17-N19, N25-N27)                             | (281)   | (5.0)                    | (138)   | (6.2)                    | (143)   | (4.3)                    |
| Acute Nephrotic Syndrome (N00-N01, N04)                           | 0       | *                        | 0       | *                        | 0       | *                        |
| Chronic Nephritis & Unsp. Nephritis(N02-N03,N05-N07,N26)          | 19      | 0.3                      | 9       | 0.4                      | 10      | 0.3                      |
| Renal Failure (N17-N19)   | 261     | 4.7                      | 129     | 5.9                      | 132     | 3.9                      |
| Other Disorders of Kidney (N25, N27)                              | 1       | *                        | 0       | *                        | 1       | *                        |
| Infections of Kidney (N10-N12, N13.6, N15.1)                      | 12      | 0.2                      | 3       | *                        | 9       | 0.3                      |
| Hyperplasia of Prostate (N40)                                     | n/a     | n/a                      | 11      | 0.6                      | n/a     | n/a                      |
| Other(N13.0-N13.5,N13.7-N15.0,N15.8-N16,N20-N23,N28-N39,N41-N99)  | 309     | 5.6                      | 103     | 4.8                      | 206     | 5.9                      |
| <b>Pregnancy, Childbirth &amp; Puerperium (O00-O99)</b>           | n/a     | n/a                      | n/a     | n/a                      | (9)     | (0.3)                    |
| <b>Conditions Originating in Perinatal Period (P00-P96)</b>       | (202)   | (3.5)                    | (123)   | (4.2)                    | (79)    | (2.8)                    |
| <b>Congenital Anomalies (Q00-Q99)</b>                             | (238)   | (4.1)                    | (125)   | (4.4)                    | (112)   | (3.8)                    |
| <b>Symptoms &amp; Signs Not Elsewhere Classified (R00-R99)</b>    | (224)   | (3.9)                    | (110)   | (4.1)                    | (114)   | (3.6)                    |
| Sudden Infant Death Syndrome (R95)                                | 60      | 1.0                      | 34      | 1.2                      | 26      | 0.9                      |
| Other (R00-R94,R96-R99)   | 164     | 2.9                      | 76      | 3.0                      | 88      | 2.7                      |
| <b>External Causes of Mortality (V01-Y89)</b>                     | (3,106) | (52.5)                   | (2,097) | (74.4)                   | (1,009) | (32.0)                   |
| Unintentional Injury or Accident (V01-X59,Y85-Y86)                | (2,064) | (35.2)                   | (1,318) | (47.7)                   | (746)   | (23.4)                   |
| Transport Accidents (V01-V99,Y85)                                 | 836     | 14.1                     | 563     | 19.2                     | 273     | 9.0                      |
| Nontransport Accidents (W00-X59, Y86)                             | 1,228   | 21.1                     | 755     | 28.5                     | 473     | 14.3                     |
| Intentional Self-Harm (Suicide) (X60-X84,Y87.0)                   | 710     | 11.9                     | 566     | 19.6                     | 144     | 4.7                      |
| Assault (Homicide) (X85-Y09,Y87.1)                                | 192     | 3.2                      | 131     | 4.3                      | 61      | 2.0                      |
| Legal Intervention (Y35,Y89.0)                                    | 10      | 0.2                      | 8       | 0.3                      | 2       | *                        |
| Events of Undetermined Intent (Y10-Y34,Y87.2,Y89.9)               | 110     | 1.8                      | 66      | 2.2                      | 44      | 1.4                      |
| Operations of War & Sequelae (Y36,Y89.1)                          | 2       | *                        | 2       | *                        | 0       | *                        |
| Complications of Medical & Surgical Care (Y40-Y84,Y88)            | 18      | 0.3                      | 6       | 0.2                      | 12      | 0.4                      |

<sup>1</sup>Group totals are shown in parentheses.

<sup>2</sup>Rate per 100,000 age-adjusted to U.S. 2000 population. Does not include deaths where age is unknown.

\* Rate not calculated because number of deaths was less than 5.

Note: Rates based on fewer than 20 deaths are likely to be unstable and imprecise.

**Mortality Table C6. Diabetes, Alzheimer's Disease, and Major Cardiovascular Disease by County of Residence, 2001**

| County             | Diabetes (E10-E14) |                         |                           | Alzheimer's Disease (G30) |                         |                           | Major Cardiovascular Disease (I00-I78) |                         |                           |
|--------------------|--------------------|-------------------------|---------------------------|---------------------------|-------------------------|---------------------------|--|-------------------------|---------------------------|
|                    | Number             | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | Number                    | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | Number                                 | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> |
| <b>State Total</b> | <b>1,403</b>       | <b>23.5</b>             | <b>25.3</b>               | <b>2,051</b>              | <b>34.3</b>             | <b>37.1</b>               | <b>16,120</b>                          | <b>269.8</b>            | <b>290.8</b>              |
| Adams              | 2                  | *                       | *                         | 2                         | *                       | *                         | 46                                     | 277.1                   | 338.1                     |
| Asotin             | 11                 | 53.1                    | 41.8                      | 9                         | 43.5                    | 29.7                      | 77                                     | 372.0                   | 279.7                     |
| Benton             | 25                 | 17.3                    | 20.1                      | 35                        | 24.2                    | 31.2                      | 363                                    | 250.7                   | 310.1                     |
| Chelan             | 12                 | 17.9                    | 15.9                      | 35                        | 52.2                    | 42.0                      | 229                                    | 341.3                   | 292.8                     |
| Clallam            | 36                 | 55.6                    | 34.8                      | 30                        | 46.3                    | 28.0                      | 288                                    | 444.4                   | 276.2                     |
| Clark              | 86                 | 24.4                    | 30.4                      | 97                        | 27.5                    | 36.7                      | 801                                    | 227.2                   | 292.2                     |
| Columbia           | 1                  | *                       | *                         | 0                         | *                       | *                         | 18                                     | 438.8                   | 304.2                     |
| Cowlitz            | 29                 | 30.9                    | 29.3                      | 43                        | 45.8                    | 40.8                      | 313                                    | 333.3                   | 303.5                     |
| Douglas            | 6                  | 18.3                    | 18.1                      | 6                         | 18.3                    | 19.4                      | 80                                     | 243.9                   | 249.7                     |
| Ferry              | 1                  | *                       | *                         | 1                         | *                       | *                         | 19                                     | 260.3                   | 301.6                     |
| Franklin           | 8                  | 15.9                    | 23.6                      | 21                        | 41.7                    | 69.9                      | 107                                    | 212.3                   | 332.4                     |
| Garfield           | 1                  | *                       | *                         | 0                         | *                       | *                         | 9                                      | 374.8                   | 205.1                     |
| Grant              | 13                 | 17.1                    | 19.3                      | 22                        | 29.0                    | 34.4                      | 186                                    | 245.1                   | 281.4                     |
| Grays Harbor       | 32                 | 46.7                    | 38.5                      | 29                        | 42.3                    | 35.4                      | 284                                    | 414.6                   | 347.5                     |
| Island             | 18                 | 24.9                    | 22.6                      | 40                        | 55.2                    | 55.4                      | 215                                    | 297.0                   | 286.1                     |
| Jefferson          | 7                  | 26.8                    | 16.7                      | 5                         | 19.2                    | 13.4                      | 124                                    | 475.1                   | 315.8                     |
| King               | 308                | 17.5                    | 19.5                      | 575                       | 32.7                    | 36.0                      | 4,050                                  | 230.3                   | 256.2                     |
| Kitsap             | 70                 | 30.0                    | 33.8                      | 125                       | 53.6                    | 61.9                      | 629                                    | 269.5                   | 306.5                     |
| Kittitas           | 9                  | 26.5                    | 27.3                      | 9                         | 26.5                    | 26.7                      | 86                                     | 252.9                   | 259.1                     |
| Klickitat          | 10                 | 51.8                    | 45.7                      | 6                         | 31.1                    | 27.4                      | 63                                     | 326.4                   | 300.1                     |
| Lewis              | 34                 | 48.9                    | 40.0                      | 37                        | 53.2                    | 41.0                      | 307                                    | 441.7                   | 354.2                     |
| Lincoln            | 3                  | *                       | *                         | 4                         | *                       | *                         | 48                                     | 470.5                   | 304.7                     |
| Mason              | 23                 | 46.4                    | 38.0                      | 20                        | 40.3                    | 36.1                      | 175                                    | 352.8                   | 298.1                     |
| Okanogan           | 15                 | 37.8                    | 34.2                      | 11                        | 27.7                    | 25.6                      | 134                                    | 337.5                   | 306.2                     |
| Pacific            | 7                  | 33.3                    | 19.4                      | 14                        | 66.7                    | 41.2                      | 123                                    | 585.7                   | 351.7                     |
| Pend Oreille       | 3                  | *                       | *                         | 3                         | *                       | *                         | 45                                     | 381.4                   | 387.4                     |
| Pierce             | 151                | 21.2                    | 24.8                      | 219                       | 30.7                    | 38.7                      | 2,026                                  | 284.0                   | 346.2                     |
| San Juan           | 2                  | *                       | *                         | 13                        | 90.3                    | 63.5                      | 48                                     | 333.3                   | 225.9                     |
| Skagit             | 45                 | 43.2                    | 36.8                      | 65                        | 62.4                    | 50.4                      | 322                                    | 309.3                   | 261.6                     |
| Skamania           | 6                  | 60.6                    | 67.5                      | 2                         | *                       | *                         | 19                                     | 191.9                   | 233.0                     |
| Snohomish          | 141                | 22.8                    | 28.8                      | 170                       | 27.5                    | 37.3                      | 1,403                                  | 226.8                   | 297.2                     |
| Spokane            | 105                | 24.9                    | 24.3                      | 145                       | 34.3                    | 31.2                      | 1,339                                  | 317.0                   | 298.5                     |
| Stevens            | 7                  | 17.4                    | 16.7                      | 8                         | 19.9                    | 19.1                      | 135                                    | 335.0                   | 320.1                     |
| Thurston           | 59                 | 28.1                    | 30.0                      | 91                        | 43.3                    | 46.3                      | 578                                    | 275.0                   | 291.4                     |
| Wahkiakum          | 3                  | *                       | *                         | 4                         | *                       | *                         | 17                                     | 447.3                   | 324.0                     |
| Walla Walla        | 17                 | 30.8                    | 25.4                      | 31                        | 56.2                    | 38.2                      | 169                                    | 306.2                   | 239.9                     |
| Whatcom            | 32                 | 18.8                    | 19.7                      | 50                        | 29.3                    | 30.0                      | 469                                    | 274.9                   | 284.1                     |
| Whitman            | 6                  | 14.9                    | 20.1                      | 6                         | 14.9                    | 18.7                      | 91                                     | 225.8                   | 288.3                     |
| Yakima             | 59                 | 26.3                    | 28.4                      | 68                        | 30.3                    | 31.3                      | 685                                    | 305.1                   | 323.3                     |

<sup>1</sup>Rate per 100,000 population.

<sup>2</sup>Rate per 100,000 age-adjusted to U.S. 2000 population. Does not include deaths where age is unknown.

\* Rate not calculated because number of deaths was less than 5.

Note: Codes for International Classification of Diseases, Tenth Revision (ICD-10) are in parentheses after each group heading. Rates based on fewer than 20 deaths are likely to be unstable and imprecise.

**Mortality Table C7. Diseases of the Heart, Ischemic Heart Diseases, and Cerebrovascular Diseases by County of Residence, 2001**

| County             | Diseases of the Heart<br>(I00-I09,I11,I13,I20-I51) |                         |                           | Ischemic Heart Disease<br>(I20-I25) |                         |                           | Cerebrovascular Disease<br>(I60-I69) |                         |                           |
|--------------------|--|-------------------------|---------------------------|-------------------------------------|-------------------------|---------------------------|--------------------------------------|-------------------------|---------------------------|
|                    | Number   | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | Number                              | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | Number                               | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> |
| <b>State Total</b> | <b>11,229</b>                                      | <b>187.9</b>            | <b>202.4</b>              | <b>8,420</b>                        | <b>140.9</b>            | <b>152.1</b>              | <b>3,760</b>                         | <b>62.9</b>             | <b>67.9</b>               |
| Adams              | 36   | 216.9                   | 262.7                     | 24                                  | 144.6                   | 177.5                     | 7                                    | 42.2                    | 52.7                      |
| Asotin             | 56   | 270.5                   | 207.2                     | 40                                  | 193.2                   | 150.2                     | 17                                   | 82.1                    | 59.1                      |
| Benton             | 257  | 177.5                   | 218.2                     | 178                                 | 122.9                   | 150.5                     | 81                                   | 55.9                    | 69.9                      |
| Chelan             | 166  | 247.4                   | 213.4                     | 129                                 | 192.3                   | 167.0                     | 50                                   | 74.5                    | 63.4                      |
| Clallam            | 189  | 291.7                   | 182.8                     | 131                                 | 202.2                   | 125.9                     | 76                                   | 117.3                   | 71.3                      |
| Clark              | 547  | 155.1                   | 198.5                     | 389                                 | 110.3                   | 141.2                     | 199                                  | 56.4                    | 73.6                      |
| Columbia           | 13   | 316.9                   | 219.3                     | 10                                  | 243.8                   | 165.5                     | 3                                    | *                       | *                         |
| Cowlitz            | 222  | 236.4                   | 215.7                     | 166                                 | 176.8                   | 161.4                     | 74                                   | 78.8                    | 71.4                      |
| Douglas            | 52   | 158.5                   | 162.0                     | 37                                  | 112.8                   | 115.1                     | 19                                   | 57.9                    | 59.7                      |
| Ferry              | 16   | 219.2                   | 252.2                     | 13                                  | 178.1                   | 192.8                     | 3                                    | *                       | *                         |
| Franklin           | 78   | 154.8                   | 239.7                     | 64                                  | 127.0                   | 198.5                     | 25                                   | 49.6                    | 78.6                      |
| Garfield           | 6  | 249.9                   | 137.5                     | 4                                   | *                       | *                         | 1                                    | *                       | *                         |
| Grant              | 132  | 173.9                   | 197.9                     | 111                                 | 146.2                   | 165.7                     | 43                                   | 56.7                    | 66.7                      |
| Grays Harbor       | 209  | 305.1                   | 256.4                     | 163                                 | 238.0                   | 199.0                     | 57                                   | 83.2                    | 69.2                      |
| Island             | 153  | 211.3                   | 202.1                     | 110                                 | 151.9                   | 143.6                     | 51                                   | 70.4                    | 69.2                      |
| Jefferson          | 89   | 341.0                   | 227.9                     | 61                                  | 233.7                   | 149.9                     | 27                                   | 103.4                   | 68.5                      |
| King               | 2,789  | 158.6                   | 176.5                     | 2,111                               | 120.1                   | 134.3                     | 976                                  | 55.5                    | 61.7                      |
| Kitsap             | 437  | 187.2                   | 212.8                     | 325                                 | 139.2                   | 158.8                     | 149                                  | 63.8                    | 73.0                      |
| Kittitas           | 59   | 173.5                   | 177.3                     | 36                                  | 105.9                   | 107.3                     | 22                                   | 64.7                    | 65.8                      |
| Klickitat          | 41   | 212.4                   | 193.0                     | 30                                  | 155.4                   | 141.9                     | 18                                   | 93.3                    | 87.8                      |
| Lewis              | 215  | 309.3                   | 249.3                     | 175                                 | 251.8                   | 202.6                     | 70                                   | 100.7                   | 80.0                      |
| Lincoln            | 30   | 294.1                   | 194.6                     | 28                                  | 274.5                   | 181.0                     | 7                                    | 68.6                    | 43.0                      |
| Mason              | 126  | 254.0                   | 212.6                     | 94                                  | 189.5                   | 156.5                     | 36                                   | 72.6                    | 62.3                      |
| Okanogan           | 91   | 229.2                   | 208.9                     | 71                                  | 178.8                   | 163.5                     | 40                                   | 100.8                   | 90.7                      |
| Pacific            | 92   | 438.1                   | 263.0                     | 65                                  | 309.5                   | 183.1                     | 19                                   | 90.5                    | 54.0                      |
| Pend Oreille       | 27   | 228.8                   | 223.3                     | 19                                  | 161.0                   | 153.5                     | 15                                   | 127.1                   | 138.3                     |
| Pierce             | 1,439  | 201.7                   | 244.7                     | 1,118                               | 156.7                   | 190.4                     | 427                                  | 59.9                    | 73.7                      |
| San Juan           | 34   | 236.1                   | 158.4                     | 18                                  | 125.0                   | 82.0                      | 11                                   | 76.4                    | 52.6                      |
| Skagit             | 216  | 207.5                   | 176.5                     | 172                                 | 165.2                   | 140.1                     | 91                                   | 87.4                    | 72.9                      |
| Skamania           | 15   | 151.5                   | 185.2                     | 10                                  | 101.0                   | 118.0                     | 3                                    | *                       | *                         |
| Snohomish          | 977  | 157.9                   | 205.7                     | 732                                 | 118.3                   | 154.3                     | 340                                  | 55.0                    | 72.9                      |
| Spokane            | 895  | 211.9                   | 201.3                     | 658                                 | 155.8                   | 148.9                     | 308                                  | 72.9                    | 67.6                      |
| Stevens            | 100  | 248.2                   | 234.0                     | 88                                  | 218.4                   | 206.3                     | 26                                   | 64.5                    | 63.5                      |
| Thurston           | 429  | 204.1                   | 215.8                     | 314                                 | 149.4                   | 157.9                     | 115                                  | 54.7                    | 58.4                      |
| Wahkiakum          | 15   | 394.6                   | 284.5                     | 13                                  | 342.0                   | 251.0                     | 2                                    | *                       | *                         |
| Walla Walla        | 101  | 183.0                   | 144.7                     | 72                                  | 130.4                   | 102.8                     | 53                                   | 96.0                    | 73.8                      |
| Whatcom            | 333  | 195.2                   | 201.6                     | 225                                 | 131.9                   | 136.5                     | 103                                  | 60.4                    | 62.2                      |
| Whitman            | 66   | 163.8                   | 211.6                     | 52                                  | 129.0                   | 167.3                     | 17                                   | 42.2                    | 51.9                      |
| Yakima             | 481  | 214.3                   | 227.6                     | 364                                 | 162.1                   | 173.5                     | 179                                  | 79.7                    | 83.8                      |

<sup>1</sup>Rate per 100,000 population.

<sup>2</sup>Rate per 100,000 age-adjusted to U.S. 2000 population. Does not include deaths where age is unknown.

\* Rate not calculated because number of deaths was less than 5.

Note: Codes for International Classification of Diseases, Tenth Revision (ICD-10) are in parentheses after each group heading. Rates based on fewer than 20 deaths are likely to be unstable and imprecise.

**Mortality Table C8. Influenza & Pneumonia, Chronic Lower Respiratory Disease, and Chronic Liver Disease & Cirrhosis by County of Residence, 2001**

| County             | Pneumonia and Influenza<br>(J10-J18) |                         |                           | Chronic Lower Resp. Dis.<br>(J40-J47) |                         |                           | Chronic Liver Disease &<br>Cirrhosis (K70,K73-K74) |                         |                           |
|--------------------|--------------------------------------|-------------------------|---------------------------|---------------------------------------|-------------------------|---------------------------|--|-------------------------|---------------------------|
|                    | Number                               | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | Number                                | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | Number   | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> |
| <b>State Total</b> | <b>960</b>                           | <b>16.1</b>             | <b>17.2</b>               | <b>2,636</b>                          | <b>44.1</b>             | <b>48.2</b>               | <b>571</b>   | <b>9.6</b>              | <b>9.8</b>                |
| Adams              | 1                                    | *                       | *                         | 7                                     | 42.2                    | 50.9                      | 3  | *                       | *                         |
| Asotin             | 2                                    | *                       | *                         | 10                                    | 48.3                    | 38.4                      | 1  | *                       | *                         |
| Benton             | 18                                   | 12.4                    | 15.9                      | 71                                    | 49.0                    | 60.2                      | 10   | 6.9                     | 8.2                       |
| Chelan             | 11                                   | 16.4                    | 14.0                      | 36                                    | 53.7                    | 47.3                      | 9  | 13.4                    | 13.2                      |
| Clallam            | 21                                   | 32.4                    | 19.3                      | 47                                    | 72.5                    | 43.0                      | 7  | 10.8                    | 7.3                       |
| Clark              | 36                                   | 10.2                    | 13.0                      | 149                                   | 42.3                    | 54.1                      | 28   | 7.9                     | 8.2                       |
| Columbia           | 2                                    | *                       | *                         | 7                                     | 170.6                   | 117.7                     | 0  | *                       | *                         |
| Cowlitz            | 19                                   | 20.2                    | 17.7                      | 61                                    | 65.0                    | 61.2                      | 14   | 14.9                    | 14.5                      |
| Douglas            | 7                                    | 21.3                    | 21.9                      | 23                                    | 70.1                    | 70.7                      | 1  | *                       | *                         |
| Ferry              | 0                                    | *                       | *                         | 1                                     | *                       | *                         | 2  | *                       | *                         |
| Franklin           | 3                                    | *                       | *                         | 14                                    | 27.8                    | 40.8                      | 4  | *                       | *                         |
| Garfield           | 2                                    | *                       | *                         | 3                                     | *                       | *                         | 1  | *                       | *                         |
| Grant              | 13                                   | 17.1                    | 20.3                      | 24                                    | 31.6                    | 35.5                      | 4  | *                       | *                         |
| Grays Harbor       | 31                                   | 45.3                    | 38.5                      | 70                                    | 102.2                   | 84.9                      | 8  | 11.7                    | 10.0                      |
| Island             | 15                                   | 20.7                    | 20.1                      | 22                                    | 30.4                    | 27.3                      | 3  | *                       | *                         |
| Jefferson          | 6                                    | 23.0                    | 15.0                      | 14                                    | 53.6                    | 32.6                      | 3  | *                       | *                         |
| King               | 273                                  | 15.5                    | 17.0                      | 567                                   | 32.2                    | 36.7                      | 145  | 8.2                     | 8.6                       |
| Kitsap             | 31                                   | 13.3                    | 15.3                      | 97                                    | 41.6                    | 48.1                      | 26   | 11.1                    | 11.7                      |
| Kittitas           | 15                                   | 44.1                    | 41.7                      | 20                                    | 58.8                    | 61.3                      | 2  | *                       | *                         |
| Klickitat          | 2                                    | *                       | *                         | 12                                    | 62.2                    | 57.1                      | 0  | *                       | *                         |
| Lewis              | 10                                   | 14.4                    | 11.6                      | 41                                    | 59.0                    | 47.4                      | 8  | 11.5                    | 10.2                      |
| Lincoln            | 1                                    | *                       | *                         | 9                                     | 88.2                    | 56.6                      | 0  | *                       | *                         |
| Mason              | 16                                   | 32.3                    | 28.5                      | 25                                    | 50.4                    | 43.1                      | 6  | 12.1                    | 10.3                      |
| Okanogan           | 12                                   | 30.2                    | 27.8                      | 34                                    | 85.6                    | 80.4                      | 6  | 15.1                    | 12.8                      |
| Pacific            | 9                                    | 42.9                    | 25.8                      | 26                                    | 123.8                   | 74.3                      | 12   | 57.1                    | 39.3                      |
| Pend Oreille       | 1                                    | *                       | *                         | 3                                     | *                       | *                         | 1  | *                       | *                         |
| Pierce             | 77                                   | 10.8                    | 13.3                      | 359                                   | 50.3                    | 61.0                      | 82   | 11.5                    | 12.8                      |
| San Juan           | 2                                    | *                       | *                         | 7                                     | 48.6                    | 33.3                      | 2  | *                       | *                         |
| Skagit             | 26                                   | 25.0                    | 20.5                      | 49                                    | 47.1                    | 40.0                      | 9  | 8.6                     | 8.0                       |
| Skamania           | 1                                    | *                       | *                         | 3                                     | *                       | *                         | 0  | *                       | *                         |
| Snohomish          | 93                                   | 15.0                    | 19.6                      | 232                                   | 37.5                    | 50.4                      | 69   | 11.2                    | 12.8                      |
| Spokane            | 67                                   | 15.9                    | 14.6                      | 249                                   | 58.9                    | 57.8                      | 42   | 9.9                     | 10.0                      |
| Stevens            | 7                                    | 17.4                    | 16.3                      | 26                                    | 64.5                    | 60.9                      | 3  | *                       | *                         |
| Thurston           | 34                                   | 16.2                    | 17.0                      | 118                                   | 56.1                    | 60.3                      | 20   | 9.5                     | 9.3                       |
| Wahkiakum          | 4                                    | *                       | *                         | 2                                     | *                       | *                         | 0  | *                       | *                         |
| Walla Walla        | 16                                   | 29.0                    | 22.9                      | 29                                    | 52.5                    | 43.8                      | 4  | *                       | *                         |
| Whatcom            | 24                                   | 14.1                    | 14.1                      | 68                                    | 39.9                    | 42.0                      | 13   | 7.6                     | 8.0                       |
| Whitman            | 11                                   | 27.3                    | 31.5                      | 10                                    | 24.8                    | 32.8                      | 1  | *                       | *                         |
| Yakima             | 41                                   | 18.3                    | 18.6                      | 91                                    | 40.5                    | 44.4                      | 22   | 9.8                     | 10.9                      |

<sup>1</sup>Rate per 100,000 population.

<sup>2</sup>Rate per 100,000 age-adjusted to U.S. 2000 population. Does not include deaths where age is unknown.

\* Rate not calculated because number of deaths was less than 5.

Note: Codes for International Classification of Diseases, Tenth Revision (ICD-10) are in parentheses after each group heading. Rates based on fewer than 20 deaths are likely to be unstable and imprecise.

## D. Cancer

Cancer is the second leading cause of death for residents of Washington State and comprised 24.2 percent of all deaths in 2001. Cancer may occur in many different sites and has many different risk factors, some of which include smoking, diet, exercise, and sun exposure.

**Mortality Table D1. Age-Adjusted Rates<sup>1</sup> for Leading Causes of Cancer for Residents, 1990-2001**

| Year                              | All Sites | Lung <sup>2</sup> | Colo-Rectal <sup>2</sup> | Female Breast | Prostate | Pancreas |
|-----------------------------------|-----------|-------------------|--------------------------|---------------|----------|----------|
| 1990                              | 206.8     | 59.9              | 20.5                     | 31.3          | 35.5     | 11.5     |
| 1991                              | 206.6     | 58.2              | 20.2                     | 31.7          | 41.3     | 10.4     |
| 1992                              | 209.2     | 60.9              | 21.3                     | 31.0          | 37.8     | 10.7     |
| 1993                              | 212.4     | 62.3              | 21.0                     | 31.4          | 40.0     | 10.8     |
| 1994                              | 205.2     | 58.7              | 21.4                     | 28.1          | 37.2     | 10.6     |
| 1995                              | 205.0     | 59.2              | 20.9                     | 30.2          | 34.2     | 10.5     |
| 1996                              | 202.9     | 58.6              | 20.7                     | 28.3          | 33.8     | 11.3     |
| 1997                              | 196.6     | 56.1              | 18.8                     | 27.9          | 30.9     | 10.6     |
| 1998                              | 196.0     | 58.1              | 18.6                     | 25.8          | 29.1     | 11.1     |
| ***1998 Comparability Modified*** |           |                   |                          |               |          |          |
|                                   | 197.3     | 57.2              | 18.6                     | 26.0          | 29.5     | 11.1     |
| 1999                              | 198.9     | 57.4              | 18.6                     | 24.0          | 29.8     | 10.5     |
| 2000                              | 195.6     | 57.4              | 18.3                     | 24.4          | 27.5     | 10.9     |
| 2001                              | 194.2     | 55.4              | 18.5                     | 24.3          | 27.9     | 11.7     |

<sup>1</sup>Rate per 100,000 age-adjusted to U.S. 2000 population.

<sup>2</sup>The ICD-10 codes selected for these groups differ slightly from Cancer Registry groups. See <http://www3.doh.wa.gov/WSCR/> to obtain reports of the Washington State Cancer Registry or to obtain information about other cancer sites.

Note:

Causes of death were coded with ICD-9 in 1990-1998 and with ICD-10 during 1999-2000. Rates during 1998 have been multiplied by a comparability ratio (CR). ICD codes and comparability ratios are:

All Sites: ICD-9: 140-208; ICD-10: C00-C97; CR=1.0068

Lung: ICD-9: 162; ICD-10: C33-C34; CR=0.9837

Colorectal: ICD-9: 153-154; ICD-10: C18-C21; CR=0.9993

Female Breast: ICD-9: 174; ICD-10: C50; CR=1.0056

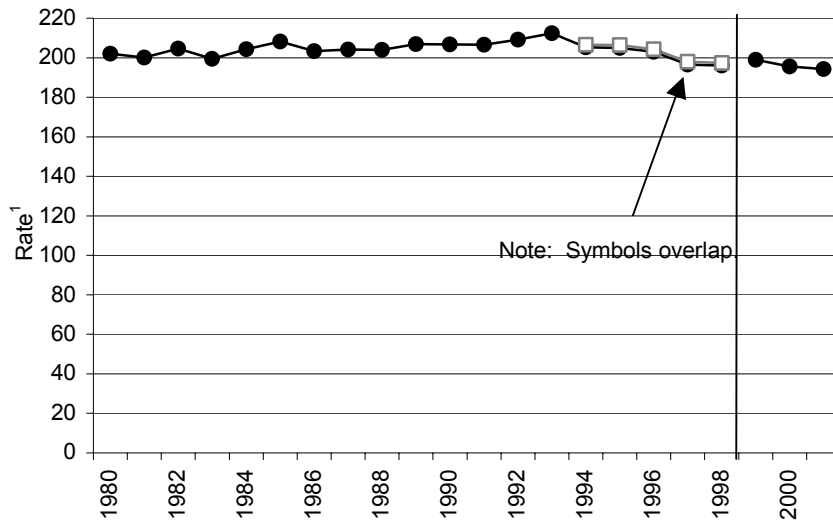
Prostate: ICD-9: 185; ICD-10: C61; CR=1.0134

Pancreas: ICD-9: 157; ICD-10: C25; CR=0.9980

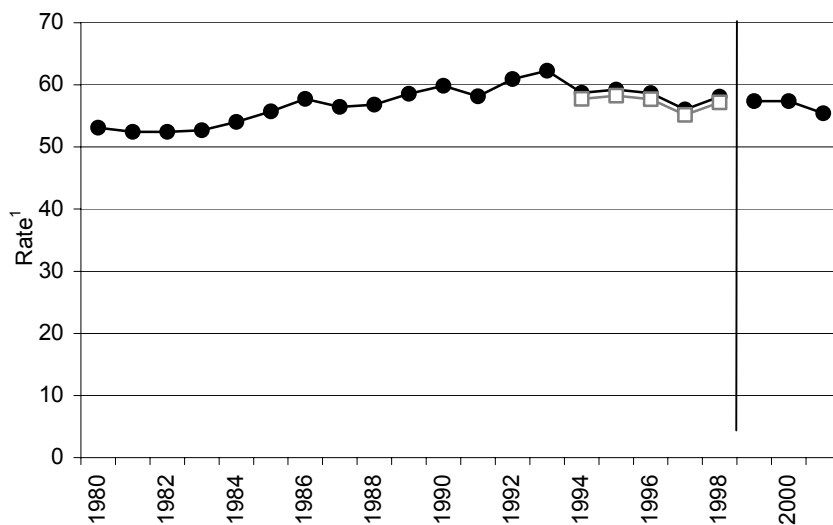
Mortality rates for all sites observed in Mortality Table D1 were lower in 2001 than 1990. Deaths due to female breast cancer and prostate cancer have had the largest decreases over time.

**Mortality Figure 6. Malignant Neoplasm (Cancer) Mortality Rates for Residents, 1980-2001**

a. Cancer, All Sites Combined



b. Lung Cancer



<sup>1</sup>Rate per 100,000 age-adjusted to U.S. 2000 population.

- Unmodified Rates
- Comparability-Modified Rates

Note:

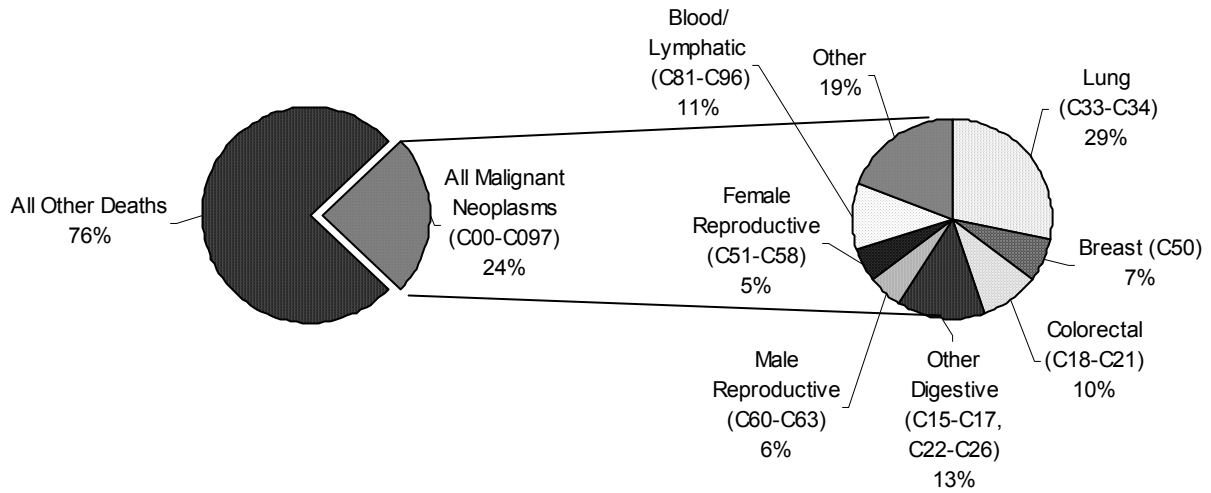
Causes of death were coded with ICD-9 in 1990-1998 and with ICD-10 in 1999-2000. Rates for 1994-1998 have been multiplied by a comparability ratio (CR). ICD codes and comparability ratios are:

All Sites: ICD-9: 140-208; ICD-10: C00-C97; CR=1.0068

Lung: ICD-9: 162; ICD-10: C33-C34; CR=0.9837



**Mortality Figure 7. Percent of Deaths Due to Malignant Neoplasms (Cancer) for Washington State Residents, 2001**



Note:

Percents may not add to 100% due to rounding.

International Classification of Diseases, Tenth Revision (ICD-10) codes are provided in parentheses.

**Mortality Table D2. Cancer by Primary Site by Sex for Residents, 2001**

| Cause with ICD-10 Codes                                       | Total         |                         |                            | Male         |                         |                            | Female       |                         |                            |
|---|---------------|-------------------------|----------------------------|--------------|-------------------------|----------------------------|--------------|-------------------------|----------------------------|
|   | No.           | Crude Rate <sup>1</sup> | Age-Adj. Rate <sup>2</sup> | No.          | Crude Rate <sup>1</sup> | Age-Adj. Rate <sup>2</sup> | No.          | Crude Rate <sup>1</sup> | Age-Adj. Rate <sup>2</sup> |
| <b>All Sites Combined (C00-C97)</b>                           | <b>10,780</b> | <b>180.4</b>            | <b>194.2</b>               | <b>5,563</b> | <b>187.0</b>            | <b>234.4</b>               | <b>5,217</b> | <b>173.9</b>            | <b>166.9</b>               |
| Bladder (C67)   | 263           | 4.4                     | 4.8                        | 191          | 6.4                     | 8.5                        | 72           | 2.4                     | 2.2                        |
| Brain, Meninges, & CNS (C70-C72) <sup>3</sup>                 | 332           | 5.6                     | 5.8                        | 187          | 6.3                     | 7.0                        | 145          | 4.8                     | 4.7                        |
| Brain (C71)   | 325           | 5.4                     | 5.6                        | 182          | 6.1                     | 6.8                        | 143          | 4.8                     | 4.6                        |
| Breast (C50)  | 761           | 12.7                    | 13.5                       | 5            | 0.2                     | 0.2                        | 756          | 25.2                    | 24.3                       |
| Cervix (C53)  | n/a           | n/a                     | n/a                        | n/a          | n/a                     | n/a                        | 55           | 1.8                     | 1.8                        |
| Colorectal (C18-C21) <sup>3</sup>                             | 1,029         | 17.2                    | 18.5                       | 526          | 17.7                    | 22.2                       | 503          | 16.8                    | 15.7                       |
| Colorectal (C18-C20,C26.0)                                    | 1,037         | 17.4                    | 18.7                       | 530          | 17.8                    | 22.3                       | 507          | 16.9                    | 15.9                       |
| Endometrium & Uterus (C54-C55) <sup>3</sup>                   | n/a           | n/a                     | n/a                        | n/a          | n/a                     | n/a                        | 148          | 4.9                     | 4.6                        |
| Endometrium (C54)   | n/a           | n/a                     | n/a                        | n/a          | n/a                     | n/a                        | 76           | 2.5                     | 2.4                        |
| Esophagus (C15)   | 261           | 4.4                     | 4.7                        | 198          | 6.7                     | 8.1                        | 63           | 2.1                     | 2.0                        |
| Hodgkin's Disease (C81)                                       | 27            | 0.5                     | 0.5                        | 15           | 0.5                     | 0.6                        | 12           | 0.4                     | 0.4                        |
| Kidney & Renal Pelvis (C64-C65)                               | 244           | 4.1                     | 4.3                        | 163          | 5.5                     | 6.7                        | 81           | 2.7                     | 2.5                        |
| Larynx (C32)  | 64            | 1.1                     | 1.2                        | 49           | 1.6                     | 2.1                        | 15           | 0.5                     | 0.5                        |
| Leukemia (C91-C95) <sup>3</sup>                               | 421           | 7.0                     | 7.6                        | 225          | 7.6                     | 9.3                        | 196          | 6.5                     | 6.2                        |
| Leukemia (C90.1,C91-C95)                                      | 421           | 7.0                     | 7.6                        | 225          | 7.6                     | 9.3                        | 196          | 6.5                     | 6.2                        |
| Liver (C22) <sup>3</sup>                                      | 270           | 4.5                     | 4.8                        | 182          | 6.1                     | 7.2                        | 88           | 2.9                     | 2.8                        |
| Liver (C22.0,C22.2-C22.4,C22.7,C22.9)                         | 199           | 3.3                     | 3.5                        | 145          | 4.9                     | 5.6                        | 54           | 1.8                     | 1.7                        |
| Lung, Bronchus & Trachea (C33-C34) <sup>3</sup>               | 3,045         | 51.0                    | 55.4                       | 1,644        | 55.3                    | 68.6                       | 1,401        | 46.7                    | 45.9                       |
| Lung & Bronchus (C34)   | 3,043         | 50.9                    | 55.4                       | 1,642        | 55.2                    | 68.6                       | 1,401        | 46.7                    | 45.9                       |
| Melanoma of Skin (C43)  | 181           | 3.0                     | 3.2                        | 123          | 4.1                     | 4.7                        | 58           | 1.9                     | 1.9                        |
| Multiple Myeloma & Immunoproliferative (C88,C90) <sup>3</sup> | 248           | 4.2                     | 4.5                        | 139          | 4.7                     | 5.9                        | 109          | 3.6                     | 3.5                        |
| Multiple Myeloma (C90.0,C90.2)                                | 236           | 3.9                     | 4.3                        | 133          | 4.5                     | 5.7                        | 103          | 3.4                     | 3.3                        |
| Non-Hodgkin's Lymphoma (C82-C85)                              | 471           | 7.9                     | 8.5                        | 258          | 8.7                     | 11.0                       | 213          | 7.1                     | 6.7                        |
| Oral Cavity & Pharynx (C00-C14)                               | 157           | 2.6                     | 2.8                        | 107          | 3.6                     | 4.2                        | 50           | 1.7                     | 1.6                        |
| Ovary (C56)   | n/a           | n/a                     | n/a                        | n/a          | n/a                     | n/a                        | 331          | 11.0                    | 10.7                       |
| Pancreas (C25)  | 646           | 10.8                    | 11.7                       | 329          | 11.1                    | 13.6                       | 317          | 10.6                    | 10.0                       |
| Prostate (C61)  | n/a           | n/a                     | n/a                        | 592          | 19.9                    | 27.9                       | n/a          | n/a                     | n/a                        |
| Stomach (C16)   | 223           | 3.7                     | 4.0                        | 130          | 4.4                     | 5.3                        | 93           | 3.1                     | 2.9                        |
| Testis (C62)  | n/a           | n/a                     | n/a                        | 10           | 0.3                     | 0.4                        | n/a          | n/a                     | n/a                        |
| Thyroid & Endocrine Glands (C73-C75) <sup>3</sup>             | 49            | 0.8                     | 0.9                        | 19           | 0.6                     | 0.8                        | 30           | 1.0                     | 1.0                        |
| Thyroid (C73)   | 31            | 0.5                     | 0.6                        | 12           | 0.4                     | 0.5                        | 19           | 0.6                     | 0.6                        |
| Site Unspecified (C80)  | 360           | 6.0                     | 6.5                        | 165          | 5.5                     | 7.1                        | 195          | 6.5                     | 6.1                        |
| All Other Sites <sup>4</sup>                                  | 574           | 9.6                     | 10.3                       | 298          | 10.0                    | 12.8                       | 276          | 9.2                     | 8.7                        |

<sup>1</sup>Rate per 100,000 population.

<sup>2</sup>Rate per 100,000 age-adjusted to U.S. 2000 population. Does not include deaths where age is unknown.

<sup>3</sup>The ICD-10 codes selected for these groups differ slightly from Cancer Registry groups. See <http://www3.doh.wa.gov/WSCR/> to obtain reports of the Washington State Cancer Registry or to obtain information about other cancer sites.

<sup>4</sup>ICD-10 Codes:C17,C23-C24,C26.1-C31,C37-C42,C44-C49,C51-C52,C57-C60,C63,C66,C68-C69,C76-C79,C88,C96-C97.

Note: Rates based on fewer than 20 deaths are likely to be unstable and imprecise.

**Mortality Table D3. Cancer for Total All Sites, Lung, and Colo-Rectal by County of Residence, 2001**

| County             | Malignant Neoplasms<br>Total All Sites (C00-C97) |                         |                           | Lung <sup>1</sup> (C33-C34) |                         |                           | Colo-Rectal <sup>1</sup> (C18-C21) |                         |                           |
|--------------------|--|-------------------------|---------------------------|-----------------------------|-------------------------|---------------------------|------------------------------------|-------------------------|---------------------------|
|                    | Number   | Crude Rate <sup>2</sup> | Age-Adj Rate <sup>3</sup> | Number                      | Crude Rate <sup>2</sup> | Age-Adj Rate <sup>3</sup> | Number                             | Crude Rate <sup>2</sup> | Age-Adj Rate <sup>3</sup> |
| <b>State Total</b> | <b>10,780</b>                                    | <b>180.4</b>            | <b>194.2</b>              | <b>3,045</b>                | <b>51.0</b>             | <b>55.4</b>               | <b>1,029</b>                       | <b>17.2</b>             | <b>18.5</b>               |
| Adams              | 25   | 150.6                   | 180.4                     | 9                           | 54.2                    | 63.2                      | 3                                  | *                       | *                         |
| Asotin             | 44   | 212.6                   | 168.3                     | 16                          | 77.3                    | 62.5                      | 3                                  | *                       | *                         |
| Benton             | 240  | 165.7                   | 192.3                     | 79                          | 54.6                    | 63.1                      | 20                                 | 13.8                    | 16.0                      |
| Chelan             | 120  | 178.8                   | 163.2                     | 36                          | 53.7                    | 50.0                      | 14                                 | 20.9                    | 18.4                      |
| Clallam            | 176  | 271.6                   | 174.1                     | 46                          | 71.0                    | 45.3                      | 20                                 | 30.9                    | 18.6                      |
| Clark              | 581  | 164.8                   | 200.0                     | 166                         | 47.1                    | 58.4                      | 50                                 | 14.2                    | 17.5                      |
| Columbia           | 16   | 390.1                   | 274.5                     | 3                           | *                       | *                         | 3                                  | *                       | *                         |
| Cowlitz            | 203  | 216.2                   | 203.7                     | 60                          | 63.9                    | 60.6                      | 20                                 | 21.3                    | 20.2                      |
| Douglas            | 54   | 164.6                   | 166.0                     | 9                           | 27.4                    | 27.0                      | 4                                  | *                       | *                         |
| Ferry              | 17   | 232.9                   | 214.3                     | 7                           | 95.9                    | 98.7                      | 3                                  | *                       | *                         |
| Franklin           | 73   | 144.8                   | 207.5                     | 30                          | 59.5                    | 87.8                      | 2                                  | *                       | *                         |
| Garfield           | 8  | 333.2                   | 207.7                     | 3                           | *                       | *                         | 3                                  | *                       | *                         |
| Grant              | 164  | 216.1                   | 239.1                     | 54                          | 71.1                    | 78.3                      | 11                                 | 14.5                    | 15.8                      |
| Grays Harbor       | 220  | 321.2                   | 268.7                     | 75                          | 109.5                   | 90.2                      | 24                                 | 35.0                    | 29.7                      |
| Island             | 136  | 187.8                   | 175.9                     | 32                          | 44.2                    | 41.0                      | 16                                 | 22.1                    | 21.3                      |
| Jefferson          | 58   | 222.2                   | 139.2                     | 12                          | 46.0                    | 27.5                      | 7                                  | 26.8                    | 16.6                      |
| King               | 2,853  | 162.3                   | 182.1                     | 761                         | 43.3                    | 49.5                      | 286                                | 16.3                    | 18.2                      |
| Kitsap             | 456  | 195.4                   | 217.1                     | 124                         | 53.1                    | 60.0                      | 41                                 | 17.6                    | 19.2                      |
| Kittitas           | 60   | 176.5                   | 185.0                     | 20                          | 58.8                    | 63.5                      | 5                                  | 14.7                    | 14.9                      |
| Klickitat          | 40   | 207.3                   | 184.4                     | 14                          | 72.5                    | 63.7                      | 3                                  | *                       | *                         |
| Lewis              | 156  | 224.5                   | 185.7                     | 45                          | 64.7                    | 54.0                      | 12                                 | 17.3                    | 13.8                      |
| Lincoln            | 19   | 186.2                   | 115.5                     | 5                           | 49.0                    | 29.4                      | 0                                  | *                       | *                         |
| Mason              | 143  | 288.3                   | 234.6                     | 57                          | 114.9                   | 92.2                      | 11                                 | 22.2                    | 19.6                      |
| Okanogan           | 76   | 191.4                   | 171.3                     | 22                          | 55.4                    | 48.9                      | 8                                  | 20.2                    | 17.9                      |
| Pacific            | 73   | 347.6                   | 215.0                     | 31                          | 147.6                   | 89.9                      | 10                                 | 47.6                    | 29.6                      |
| Pend Oreille       | 26   | 220.4                   | 185.3                     | 3                           | *                       | *                         | 2                                  | *                       | *                         |
| Pierce             | 1,256  | 176.1                   | 207.8                     | 367                         | 51.4                    | 60.8                      | 116                                | 16.3                    | 19.3                      |
| San Juan           | 33   | 229.2                   | 152.4                     | 9                           | 62.5                    | 41.3                      | 5                                  | 34.7                    | 24.0                      |
| Skagit             | 238  | 228.6                   | 199.6                     | 74                          | 71.1                    | 62.3                      | 19                                 | 18.3                    | 16.1                      |
| Skamania           | 19   | 191.9                   | 206.4                     | 5                           | 50.5                    | 58.6                      | 2                                  | *                       | *                         |
| Snohomish          | 960  | 155.2                   | 195.2                     | 266                         | 43.0                    | 54.4                      | 80                                 | 12.9                    | 16.7                      |
| Spokane            | 881  | 208.6                   | 207.5                     | 238                         | 56.3                    | 57.1                      | 100                                | 23.7                    | 23.3                      |
| Stevens            | 93   | 230.8                   | 217.4                     | 28                          | 69.5                    | 64.6                      | 7                                  | 17.4                    | 17.0                      |
| Thurston           | 406  | 193.2                   | 203.3                     | 114                         | 54.2                    | 57.8                      | 37                                 | 17.6                    | 18.6                      |
| Wahkiakum          | 10   | 263.1                   | 186.7                     | 3                           | *                       | *                         | 0                                  | *                       | *                         |
| Walla Walla        | 114  | 206.5                   | 177.4                     | 30                          | 54.3                    | 50.8                      | 13                                 | 23.6                    | 18.8                      |
| Whatcom            | 299  | 175.3                   | 184.5                     | 77                          | 45.1                    | 48.3                      | 19                                 | 11.1                    | 11.7                      |
| Whitman            | 52   | 129.0                   | 174.6                     | 11                          | 27.3                    | 37.0                      | 7                                  | 17.4                    | 24.2                      |
| Yakima             | 382  | 170.2                   | 187.6                     | 104                         | 46.3                    | 51.8                      | 43                                 | 19.2                    | 20.8                      |

<sup>1</sup>The ICD-10 codes selected for these groups differ slightly from Cancer Registry groups. See <http://www3.doh.wa.gov/WSCR/> to obtain reports of the Washington State Cancer Registry or to obtain information about other cancer sites.

<sup>2</sup>Rate per 100,000 population.

<sup>3</sup>Rate per 100,000 age-adjusted to U.S. 2000 population. Does not include deaths where age is unknown.

\* Rate not calculated because number of deaths was less than 5.

Note: Codes for International Classification of Diseases, Tenth Revision (ICD-10) are in parentheses after each group heading. Rates based on fewer than 20 deaths are likely to be unstable and imprecise.

**Mortality Table D4. Cancer for Female Breast, Prostate, and Pancreas by County of Residence, 2001**

| County             | Female Breast (C50) |                         |                           | Prostate (C61) |                         |                           | Pancreas (C25) |                         |                           |
|--------------------|---------------------|-------------------------|---------------------------|----------------|-------------------------|---------------------------|----------------|-------------------------|---------------------------|
|                    | Number              | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | Number         | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | Number         | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> |
| <b>State Total</b> | <b>756</b>          | <b>25.2</b>             | <b>24.3</b>               | <b>592</b>     | <b>19.9</b>             | <b>27.9</b>               | <b>646</b>     | <b>10.8</b>             | <b>11.7</b>               |
| Adams              | 2                   | *                       | *                         | 2              | *                       | *                         | 2              | *                       | *                         |
| Asotin             | 4                   | *                       | *                         | 3              | *                       | *                         | 2              | *                       | *                         |
| Benton             | 18                  | 24.7                    | 26.2                      | 9              | 12.5                    | 19.9                      | 11             | 7.6                     | 9.2                       |
| Chelan             | 7                   | 20.8                    | 17.7                      | 6              | 18.0                    | 19.8                      | 11             | 16.4                    | 15.1                      |
| Clallam            | 13                  | 39.9                    | 26.2                      | 10             | 31.1                    | 20.8                      | 9              | 13.9                    | 8.6                       |
| Clark              | 39                  | 22.0                    | 23.4                      | 29             | 16.6                    | 29.0                      | 40             | 11.3                    | 13.5                      |
| Columbia           | 1                   | *                       | *                         | 1              | *                       | *                         | 0              | *                       | *                         |
| Cowlitz            | 14                  | 29.6                    | 25.4                      | 13             | 27.9                    | 32.8                      | 16             | 17.0                    | 15.9                      |
| Douglas            | 3                   | *                       | *                         | 2              | *                       | *                         | 4              | *                       | *                         |
| Ferry              | 2                   | *                       | *                         | 0              | *                       | *                         | 0              | *                       | *                         |
| Franklin           | 3                   | *                       | *                         | 5              | 19.0                    | 35.0                      | 0              | *                       | *                         |
| Garfield           | 0                   | *                       | *                         | 0              | *                       | *                         | 2              | *                       | *                         |
| Grant              | 7                   | 18.9                    | 20.5                      | 13             | 33.5                    | 44.5                      | 12             | 15.8                    | 17.5                      |
| Grays Harbor       | 9                   | 26.1                    | 21.0                      | 7              | 20.6                    | 20.4                      | 17             | 24.8                    | 21.0                      |
| Island             | 11                  | 30.4                    | 25.9                      | 5              | 13.8                    | 13.0                      | 6              | 8.3                     | 7.9                       |
| Jefferson          | 1                   | *                       | *                         | 6              | 47.0                    | 34.2                      | 6              | 23.0                    | 14.8                      |
| King               | 213                 | 24.1                    | 23.8                      | 175            | 20.0                    | 30.3                      | 158            | 9.0                     | 10.1                      |
| Kitsap             | 26                  | 22.6                    | 21.9                      | 23             | 19.4                    | 31.8                      | 30             | 12.9                    | 13.8                      |
| Kittitas           | 3                   | *                       | *                         | 2              | *                       | *                         | 6              | 17.6                    | 17.5                      |
| Klickitat          | 1                   | *                       | *                         | 3              | *                       | *                         | 5              | 25.9                    | 22.0                      |
| Lewis              | 13                  | 37.1                    | 27.3                      | 15             | 43.5                    | 40.9                      | 9              | 12.9                    | 10.8                      |
| Lincoln            | 4                   | *                       | *                         | 2              | *                       | *                         | 0              | *                       | *                         |
| Mason              | 6                   | 25.0                    | 18.5                      | 4              | *                       | *                         | 2              | *                       | *                         |
| Okanogan           | 7                   | 35.1                    | 31.5                      | 6              | 30.3                    | 30.7                      | 5              | 12.6                    | 10.6                      |
| Pacific            | 3                   | *                       | *                         | 4              | *                       | *                         | 2              | *                       | *                         |
| Pend Oreille       | 5                   | 85.1                    | 67.0                      | 0              | *                       | *                         | 2              | *                       | *                         |
| Pierce             | 94                  | 26.2                    | 27.3                      | 68             | 19.2                    | 31.1                      | 83             | 11.6                    | 13.9                      |
| San Juan           | 2                   | *                       | *                         | 0              | *                       | *                         | 1              | *                       | *                         |
| Skagit             | 17                  | 32.4                    | 26.7                      | 12             | 23.3                    | 23.4                      | 11             | 10.6                    | 9.2                       |
| Skamania           | 2                   | *                       | *                         | 1              | *                       | *                         | 0              | *                       | *                         |
| Snohomish          | 72                  | 23.3                    | 25.1                      | 52             | 16.8                    | 29.6                      | 57             | 9.2                     | 11.8                      |
| Spokane            | 64                  | 29.8                    | 25.9                      | 43             | 20.7                    | 26.4                      | 54             | 12.8                    | 12.9                      |
| Stevens            | 6                   | 29.7                    | 29.1                      | 6              | 29.9                    | 36.9                      | 4              | *                       | *                         |
| Thurston           | 23                  | 21.4                    | 20.0                      | 18             | 17.5                    | 21.7                      | 28             | 13.3                    | 14.1                      |
| Wahkiakum          | 0                   | *                       | *                         | 2              | *                       | *                         | 0              | *                       | *                         |
| Walla Walla        | 6                   | 22.2                    | 19.6                      | 4              | *                       | *                         | 5              | 9.1                     | 7.4                       |
| Whatcom            | 27                  | 31.2                    | 30.0                      | 21             | 25.0                    | 32.8                      | 17             | 10.0                    | 10.4                      |
| Whitman            | 3                   | *                       | *                         | 6              | 29.4                    | 44.9                      | 5              | 12.4                    | 16.4                      |
| Yakima             | 25                  | 22.2                    | 23.0                      | 14             | 12.5                    | 17.2                      | 24             | 10.7                    | 11.5                      |

<sup>1</sup>Rate per 100,000 population.

<sup>2</sup>Rate per 100,000 age-adjusted to U.S. 2000 population. Does not include deaths where age is unknown.

\* Rate not calculated because number of deaths was less than 5.

Note: Codes for International Classification of Diseases, Tenth Revision (ICD-10) are in parentheses after each group heading. Rates based on fewer than 20 deaths are likely to be unstable and imprecise.

## E. External Causes or Injuries

In 2001, external causes of death accounted for 7% of all deaths to Washington resident, but 81% of deaths to people aged 15-24. A single event that causes a large number of deaths, such as the Alaska Airlines plane crash in 2000 or the 1980 eruption of Mt. Saint Helens may generate large annual variations in mortality due to unintentional injury.

Injuries do not “just happen” because of bad luck – many can be prevented. Information about the distribution of deaths due to injuries can be used to plan prevention strategies. External causes of death can be categorized by the intent (e.g., unintentional, suicide, homicide, undetermined) and by the mechanism (e.g., drowning, poisoning, cut/pierce, etc.).

**Mortality Table E1. Age-Adjusted Rates<sup>1</sup> for External Causes for Residents, 1990-2001**

| Year                              | Unintentional Injury (Accident) | Intentional Self-Harm (Suicide) | Assault (Homicide) | Undetermined | Drug-Induced <sup>2</sup> | Alcohol-Induced <sup>2</sup> | Motor Vehicle Traffic Accidents | Falls | Drowning, Accidental |
|-----------------------------------|---------------------------------|---------------------------------|--------------------|--------------|---------------------------|------------------------------|---------------------------------|-------|----------------------|
| 1990                              | 37.0                            | 14.2                            | 5.0                | 2.4          | 5.3                       | 7.4                          | 17.9                            | 5.8   | 2.7                  |
| 1991                              | 32.9                            | 14.1                            | 4.5                | 1.8          | 4.6                       | 7.2                          | 14.8                            | 6.0   | 2.2                  |
| 1992                              | 33.8                            | 13.8                            | 5.5                | 1.8          | 5.5                       | 8.5                          | 13.5                            | 6.2   | 2.4                  |
| 1993                              | 32.5                            | 13.5                            | 5.1                | 2.1          | 6.0                       | 9.9                          | 13.3                            | 6.2   | 1.8                  |
| 1994                              | 33.0                            | 14.5                            | 5.8                | 1.9          | 6.9                       | 11.0                         | 12.9                            | 6.3   | 1.9                  |
| 1995                              | 34.2                            | 14.6                            | 5.3                | 1.8          | 8.2                       | 10.4                         | 13.1                            | 6.6   | 2.1                  |
| 1996                              | 34.8                            | 14.2                            | 4.5                | 1.9          | 8.8                       | 11.0                         | 13.7                            | 7.2   | 1.8                  |
| 1997                              | 34.0                            | 13.0                            | 4.6                | 1.7          | 7.8                       | 10.8                         | 13.0                            | 5.9   | 2.1                  |
| 1998                              | 33.9                            | 12.3                            | 4.0                | 1.7          | 8.1                       | 10.0                         | 12.8                            | 6.4   | 1.9                  |
| ***1998 Comparability Modified*** |                                 |                                 |                    |              |                           |                              |                                 |       |                      |
| 1998                              | 34.9                            | 12.2                            | 4.0                | na           | 9.7                       | 9.7                          | na                              | na    | na                   |
| 1999                              | 33.5                            | 14.2                            | 3.2                | 1.7          | 10.0                      | 9.9                          | 12.2                            | 6.2   | 2.0                  |
| 2000                              | 35.5                            | 12.4                            | 3.4                | 2.2          | 9.9                       | 9.0                          | 11.8                            | 8.4   | 1.6                  |
| 2001                              | 35.2                            | 11.9                            | 3.2                | 1.8          | 9.0                       | 10.3                         | 12.0                            | 8.4   | 1.8                  |

<sup>1</sup>Rate per 100,000 age-adjusted to U.S. 2000 population.

<sup>2</sup>These categories include some causes that are classified as "natural" deaths (e.g., alcoholic cirrhosis of the liver).  
na: Comparability ratio not available.

**Note:**

Causes of death were coded with ICD-9 in 1990-1998 and with ICD-10 during 1999-2000. Rates during 1998 have been multiplied by a comparability ratio (CR). ICD codes and comparability ratios are:

Unintentional Injury (Accident): ICD-9: E800-E869,E880-E929; ICD-10: V01-X59,Y85-Y86; CR=1.0305

Intentional Self-Harm (Suicide): ICD-9: E950-E959; ICD-10: X60-X84,Y87.0; CR=0.9962

Assault (Homicide): ICD-9: E960-E969; ICD-10: X85-Y09,Y87.1; CR=0.9983

Undetermined: ICD-9: E980-E989; ICD-10: Y10-Y34,Y87.2,Y89.9; CR is not available.

Drug-Induced: ICD-9: 292,304,305.2-305.9,E850-E858,E950.0-E950.5,E962.0,E980.0-E980; ICD-10: F11.0-11.5, F11.7-F11.9,F12.0-F12.5,F12.7-F12.9,F13.0-F13.5,F13.7-F13.9,F14.0-F14.5,F14.7-F14.9,F15.0-F15.5,F15.7-F15.9, F16.0-F16.5,F16.7-F16.9,F17.0,F17.3-F17.5,F17.7-F17.9,F18.0-F18.5,F18.7-F18.9,F19.0-F19.5,F19.7-F19.9, X40-X44,X60-X64,X85,Y10-Y14; CR=1.1950

Alcohol-Induced: ICD-9: 291,303,305.0,357.5,425.5,535.3,571.0-571.3,790.3,E860; ICD-10: F10,G31.2,G62.1, I42.6,K29.2,K70,R78.0,X45,X65,Y15; CR=0.9682

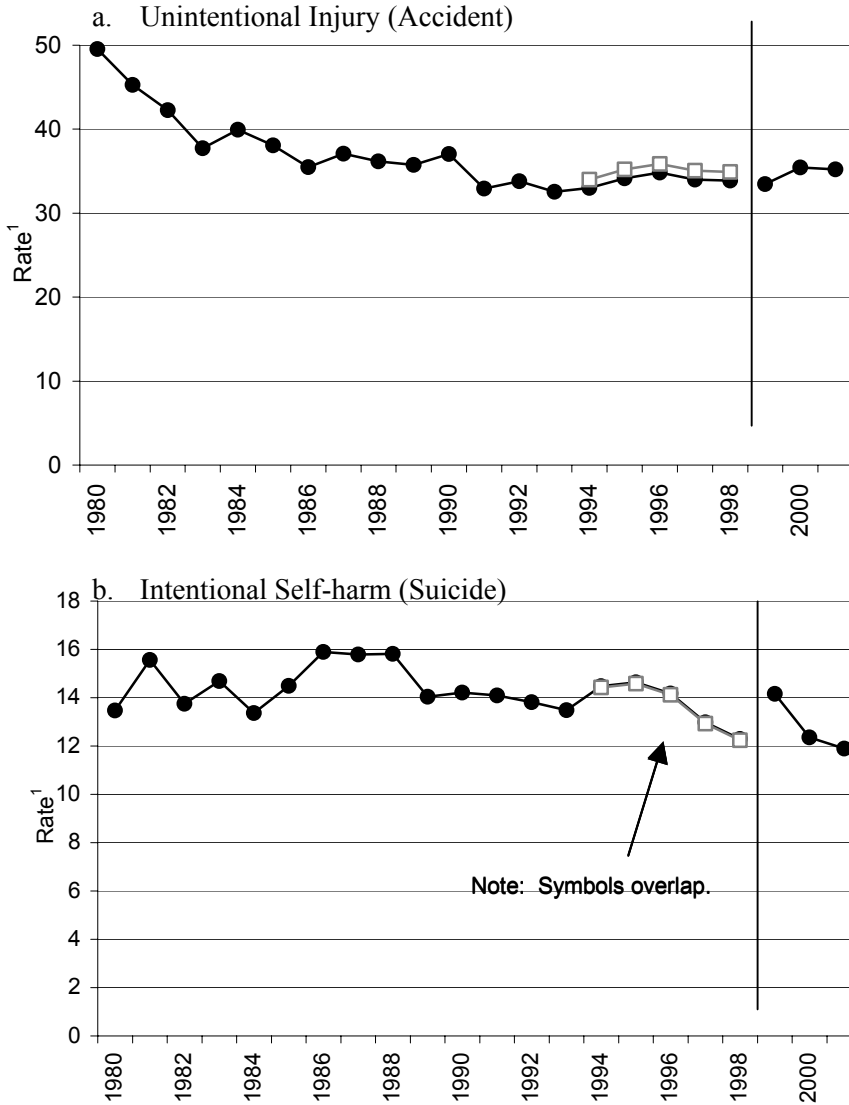
Motor Vehicle Traffic Accidents: ICD-9: E810-E819; ICD-10: V02-V04(.1,.9),V09.2,V12-V14(.3-.9), V19(.4-.6), V20-V28(.3-.9),V29-V79(.4-.9),V80(.3-.5),V81.1,V82.1,V83-V86(.0-.3),V87(.0-.8),V89.2; CR is not available.

Falls: ICD-9 E880-E886,E888; ICD-10 W00-W19; CR is not available.

Drowning, Accidental: ICD-9 E830,E832,E910; ICD-10 V90,V92,W65-W74; CR is not available.

Mortality from drug and alcohol-induced causes have both increased during the past decade while assaults and motor vehicle traffic accidents have declined during this time period.

**Mortality Figure 8. Mortality Rates for Residents, 1980-2001**



<sup>1</sup>Rate per 100,000 age-adjusted to U.S. 2000 population.

- Unmodified Rates
- Comparability-Modified Rates

Note:

Causes of death were coded with ICD-9 in 1990-1998 and with ICD-10 in 1999-2000. Rates for 1994-1998 have been multiplied by a comparability ratio (CR). ICD codes and comparability ratios are:

Unintentional Injury (Accident): ICD-9: I800-E869, E880-929; ICD-10: V01-X59, Y85-Y86; CR=1.0305

Intentional Self-Harm (Suicide): ICD-9: E950-E959; ICD-10: X60-X84, Y87.0; CR=0.9962

**Mortality Table E2-a. External Causes of Injury With Crude Rates for Residents, 2001**

| Cause                             | Total          |                   | Unintentional<br>or Accident |                   | Suicide      |                   | Homicide     |                   | Undeter-<br>mined |                   | Legal<br>Intervention<br>& War <sup>1</sup> |                   |
|-----------------------------------|----------------|-------------------|------------------------------|-------------------|--------------|-------------------|--------------|-------------------|-------------------|-------------------|---|-------------------|
|                                   | No.            | Rate <sup>2</sup> | No.                          | Rate <sup>2</sup> | No.          | Rate <sup>2</sup> | No.          | Rate <sup>2</sup> | No.               | Rate <sup>2</sup> | No.   | Rate <sup>2</sup> |
| <b>All Injuries<sup>3</sup></b>   | <b>(3,088)</b> | <b>(51.7)</b>     | <b>(2,064)</b>               | <b>(34.5)</b>     | <b>(710)</b> | <b>(11.9)</b>     | <b>(192)</b> | <b>(3.2)</b>      | <b>(110)</b>      | <b>(1.8)</b>      | <b>(12)</b>                                 | <b>(0.2)</b>      |
| Cut/Pierce                        | 36             | 0.6               | 0                            | *                 | 13           | 0.2               | 22           | 0.4               | 1                 | *                 | 0   | *                 |
| Drowning                          | (118)          | (2.0)             | (107)                        | (1.8)             | (1)          | (*)               | (1)          | (*)               | (9)               | (0.2)             | --  | --                |
| Boating-Related                   | 32             | 0.5               | 32                           | 0.5               | --           | --                | --           | --                | --                | --                | --  | --                |
| Other                             | 86             | 1.4               | 75                           | 1.3               | 1            | *                 | 1            | *                 | 9                 | 0.2               | --  | --                |
| Fall/Jump/Push                    | 496            | 8.3               | 469                          | 7.8               | 24           | 0.4               | 0            | *                 | 3                 | *                 | --  | --                |
| Fire/Hot Object or Substance      | (72)           | (1.2)             | (64)                         | (1.1)             | (2)          | (*)               | (0)          | (*)               | (6)               | (0.1)             | (0)   | (*)               |
| Fire/Flame                        | 71             | 1.2               | 63                           | 1.1               | 2            | *                 | 0            | *                 | 6                 | 0.1               | --  | --                |
| Hot Object/Substance              | 1              | *                 | 1                            | *                 | 0            | *                 | 0            | *                 | 0                 | *                 | --  | --                |
| Firearm                           | 508            | 8.5               | 4                            | *                 | 389          | 6.5               | 103          | 1.7               | 3                 | *                 | 9   | 0.2               |
| Machinery                         | 17             | 0.3               | 17                           | 0.3               | --           | --                | --           | --                | --                | --                | --  | --                |
| All Transport                     | (790)          | (13.2)            | (787)                        | (13.2)            | (2)          | (*)               | (1)          | (*)               | (0)               | (*)               | (0)   | (*)               |
| Motor Vehicle Traffic             | (714)          | (11.9)            | (714)                        | (11.9)            | --           | --                | --           | --                | --                | --                | --  | --                |
| Occupant                          | 551            | 9.2               | 551                          | 9.2               | --           | --                | --           | --                | --                | --                | --  | --                |
| Motorcyclist                      | 56             | 0.9               | 56                           | 0.9               | --           | --                | --           | --                | --                | --                | --  | --                |
| Pedal Cyclist                     | 8              | 0.1               | 8                            | 0.1               | --           | --                | --           | --                | --                | --                | --  | --                |
| Pedestrian                        | 80             | 1.3               | 80                           | 1.3               | --           | --                | --           | --                | --                | --                | --  | --                |
| Other                             | 0              | *                 | 0                            | *                 | --           | --                | --           | --                | --                | --                | --  | --                |
| Unspecified                       | 19             | 0.3               | 19                           | 0.3               | --           | --                | --           | --                | --                | --                | --  | --                |
| Pedal Cyclist, Other              | 3              | *                 | 3                            | *                 | --           | --                | --           | --                | --                | --                | --  | --                |
| Pedestrian, Other                 | 15             | 0.3               | 15                           | 0.3               | --           | --                | --           | --                | --                | --                | --  | --                |
| Other Land Transport              | 3              | *                 | 0                            | *                 | 2            | *                 | 1            | *                 | 0                 | *                 | 0   | *                 |
| Watercraft/Air/Space              | 30             | 0.5               | 30                           | 0.5               | --           | --                | --           | --                | --                | --                | --  | --                |
| Natural/Environmental             | (30)           | (0.5)             | (30)                         | (0.5)             | --           | --                | --           | --                | --                | --                | --  | --                |
| Bites/Stings                      | 4              | *                 | 4                            | *                 | --           | --                | --           | --                | --                | --                | --  | --                |
| Other                             | 26             | 0.4               | 26                           | 0.4               | --           | --                | --           | --                | --                | --                | --  | --                |
| Overexertion                      | 0              | *                 | 0                            | *                 | --           | --                | --           | --                | --                | --                | --  | --                |
| Poisoning                         | 578            | 9.7               | 381                          | 6.4               | 126          | 2.1               | 0            | *                 | 71                | 1.2               | 0   | *                 |
| Struck By or Against              | 35             | 0.6               | 25                           | 0.4               | 0            | *                 | 10           | 0.2               | 0                 | *                 | 0   | *                 |
| Suffocation                       | 241            | 4.0               | 87                           | 1.5               | 136          | 2.3               | 11           | 0.2               | 7                 | 0.1               | --  | --                |
| Other Specified, Classifiable     | (35)           | (0.6)             | (25)                         | (0.4)             | (7)          | (0.1)             | (1)          | (*)               | (1)               | (*)               | (1)   | (*)               |
| Sequelae (Late Effects)           | 17             | 0.3               | 17                           | 0.3               | --           | --                | --           | --                | --                | --                | --  | --                |
| Other                             | 17             | 0.3               | 8                            | 0.1               | 7            | 0.1               | 1            | *                 | 1                 | *                 | 0   | *                 |
| Other Specified, NEC <sup>4</sup> | (41)           | (0.7)             | (23)                         | (0.4)             | (5)          | (0.1)             | (9)          | (0.2)             | (2)               | (*)               | (2)   | (*)               |
| Sequelae (Late Effects)           | 28             | 0.5               | 23                           | 0.4               | 1            | *                 | 3            | *                 | 1                 | *                 | --  | --                |
| Other                             | 13             | 0.2               | 0                            | *                 | 4            | *                 | 6            | 0.1               | 1                 | *                 | 2   | *                 |
| Unspecified                       | 91             | 1.5               | 45                           | 0.8               | 5            | 0.1               | 34           | 0.6               | 7                 | 0.1               | 0   | *                 |
| Adverse Effects <sup>3</sup>      | (18)           | (0.3)             | --                           | --                | --           | --                | --           | --                | --                | --                | --  | --                |
| Drugs                             | 2              | *                 | --                           | --                | --           | --                | --           | --                | --                | --                | --  | --                |
| Medical Care                      | 16             | 0.3               | --                           | --                | --           | --                | --           | --                | --                | --                | --  | --                |

<sup>1</sup>The war-related categories include deaths due to late effects of injuries from war. Deaths occurring overseas during military activities are registered with the U.S. Department of State and are not reported to the Center for Health Statistics.

<sup>2</sup>Rate per 100,000 population.

<sup>3</sup>Group totals are shown in parentheses. Adverse Effects are not included in the total of All Injuries.

<sup>4</sup>NEC: Not elsewhere classified.

\* Rate not calculated because number of deaths was less than 5.

-- No ICD-10 codes available for this category.

Note: Rates based on fewer than 20 deaths are likely to be unstable and imprecise.

With the exception of drowning, bites/stings, all transport, and sequelae, cause-of-death categories for this table follow the guidelines of National Center for Health Statistics (NCHS) International Collaborative Effort (ICE) on Injury Statistics.

These groupings differ from previously published Vital Statistics reports and from other NCHS groupings.

More injury tables can be obtained from Injury Prevention Program, Washington State Department of Health web site:

<http://www.doh.wa.gov/cfh/Injury/Default.htm>

**Mortality Table E2-b. External Causes of Injury With Age-Adjusted Rates for Residents, 2001**

| Cause                             | Total          |                   | Unintentional or Accident |                   | Suicide      |                   | Homicide     |                   | Undetermined |                   | Legal Intervention & War <sup>1</sup> |                   |
|-----------------------------------|----------------|-------------------|---------------------------|-------------------|--------------|-------------------|--------------|-------------------|--------------|-------------------|---------------------------------------|-------------------|
|                                   | No.            | Rate <sup>2</sup> | No.                       | Rate <sup>2</sup> | No.          | Rate <sup>2</sup> | No.          | Rate <sup>2</sup> | No.          | Rate <sup>2</sup> | No.                                   | Rate <sup>2</sup> |
| <b>All Injuries<sup>3</sup></b>   | <b>(3,088)</b> | <b>(52.2)</b>     | <b>(2,064)</b>            | <b>(35.2)</b>     | <b>(710)</b> | <b>(11.9)</b>     | <b>(192)</b> | <b>(3.2)</b>      | <b>(110)</b> | <b>(1.8)</b>      | <b>(12)</b>                           | <b>(0.2)</b>      |
| Cut/Pierce                        | 36             | 0.6               | 0                         | *                 | 13           | 0.2               | 22           | 0.4               | 1            | *                 | 0                                     | *                 |
| Drowning                          | (118)          | (2.0)             | (107)                     | (1.8)             | (1)          | (*)               | (1)          | (*)               | (9)          | (0.1)             | --                                    | --                |
| Boating-Related                   | 32             | 0.5               | 32                        | 0.5               | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Other                             | 86             | 1.4               | 75                        | 1.3               | 1            | *                 | 1            | *                 | 9            | 0.1               | --                                    | --                |
| Fall/Jump/Push                    | 496            | 8.9               | 469                       | 8.4               | 24           | 0.4               | 0            | *                 | 3            | *                 | --                                    | --                |
| Fire/Hot Object or Substance      | (72)           | (1.2)             | (64)                      | (1.1)             | (2)          | (*)               | (0)          | (*)               | (6)          | (0.1)             | (0)                                   | (*)               |
| Fire/Flame                        | 71             | 1.2               | 63                        | 1.1               | 2            | *                 | 0            | *                 | 6            | 0.1               | --                                    | --                |
| Hot Object/Substance              | 1              | *                 | 1                         | *                 | 0            | *                 | 0            | *                 | 0            | *                 | --                                    | --                |
| Firearm                           | 508            | 8.5               | 4                         | *                 | 389          | 6.6               | 103          | 1.7               | 3            | *                 | 9                                     | 0.2               |
| Machinery                         | 17             | 0.3               | 17                        | 0.3               | --           | --                | --           | --                | --           | --                | --                                    | --                |
| All Transport                     | (790)          | (13.3)            | (787)                     | (13.2)            | (2)          | (*)               | (1)          | (*)               | (0)          | (*)               | (0)                                   | (*)               |
| Motor Vehicle Traffic             | (714)          | (12.0)            | (714)                     | (12.0)            | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Occupant                          | 551            | 9.3               | 551                       | 9.3               | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Motorcyclist                      | 56             | 0.9               | 56                        | 0.9               | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Pedal Cyclist                     | 8              | 0.1               | 8                         | 0.1               | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Other                             | 80             | 1.4               | 80                        | 1.4               | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Pedestrian                        | 0              | *                 | 0                         | *                 | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Unspecified                       | 19             | 0.3               | 19                        | 0.3               | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Pedal Cyclist, Other              | 3              | *                 | 3                         | *                 | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Pedestrian, Other                 | 15             | 0.3               | 15                        | 0.3               | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Other Land Transport              | 3              | *                 | 0                         | *                 | 2            | *                 | 1            | *                 | 0            | *                 | 0                                     | *                 |
| Watercraft/Air/Space              | 30             | 0.5               | 30                        | 0.5               | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Natural/Environmental             | (30)           | (0.5)             | (30)                      | (0.5)             | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Bites/Stings                      | 4              | *                 | 4                         | *                 | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Other                             | 26             | 0.4               | 26                        | 0.4               | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Overexertion                      | 0              | *                 | 0                         | *                 | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Poisoning                         | 578            | 9.4               | 381                       | 6.2               | 126          | 2.1               | 0            | *                 | 71           | 1.2               | 0                                     | *                 |
| Struck By or Against              | 35             | 0.6               | 25                        | 0.4               | 0            | *                 | 10           | 0.2               | 0            | *                 | 0                                     | *                 |
| Suffocation                       | 241            | 4.1               | 87                        | 1.5               | 136          | 2.2               | 11           | 0.2               | 7            | 0.1               | --                                    | --                |
| Other Specified, Classifiable     | (35)           | (0.6)             | (25)                      | (0.4)             | (7)          | (0.1)             | (1)          | (*)               | (1)          | (*)               | (1)                                   | (*)               |
| Sequelae (Late Effects)           | 17             | 0.3               | 17                        | 0.3               | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Other                             | 17             | 0.3               | 8                         | 0.1               | 7            | 0.1               | 1            | *                 | 1            | *                 | 0                                     | *                 |
| Other Specified, NEC <sup>4</sup> | (41)           | (0.7)             | (23)                      | (0.4)             | (5)          | (0.1)             | (9)          | (0.1)             | (2)          | (*)               | (2)                                   | (*)               |
| Sequelae (Late Effects)           | 28             | 0.5               | 23                        | 0.4               | 1            | *                 | 3            | *                 | 1            | *                 | --                                    | --                |
| Other                             | 13             | 0.2               | 0                         | *                 | 4            | *                 | 6            | 0.1               | 1            | *                 | 2                                     | *                 |
| Unspecified                       | 91             | 1.6               | 45                        | 0.8               | 5            | 0.1               | 34           | 0.6               | 7            | 0.1               | 0                                     | *                 |
| Adverse Effects <sup>3</sup>      | (18)           | (0.3)             | --                        | --                | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Drugs                             | 2              | *                 | --                        | --                | --           | --                | --           | --                | --           | --                | --                                    | --                |
| Medical Care                      | 16             | 0.3               | --                        | --                | --           | --                | --           | --                | --           | --                | --                                    | --                |

<sup>1</sup>The war-related categories include deaths due to late effects of injuries from war. Deaths occurring overseas during military activities are registered with the U.S. Department of State and are not reported to the Center for Health Statistics.

<sup>2</sup>Rate per 100,000 population.

<sup>3</sup>Group totals are shown in parentheses. Adverse Effects are not included in the total of All Injuries.

<sup>4</sup>NEC: Not elsewhere classified.

\* Rate not calculated because number of deaths was less than 5.

-- No ICD-10 codes available for this category.

Note: Rates based on fewer than 20 deaths are likely to be unstable and imprecise.

With the exception of drowning, bites/stings, all transport, and sequelae, cause-of-death categories for this table follow the guidelines of National Center for Health Statistics (NCHS) International Collaborative Effort (ICE) on Injury Statistics.

These groupings differ from previously published Vital Statistics reports and from other NCHS groupings.

More injury tables can be obtained from Injury Prevention Program, Washington State Department of Health web site:

<http://www.doh.wa.gov/cfh/Injury/Default.htm>



**Mortality Table E2-c. ICD-10 Codes for External Causes**

| Cause                                  | Unintentional or Accident  | Suicide        | Homicide          | Undetermined          | Legal Intervention & War     |
|--|--|----------------|-------------------|-----------------------|------------------------------|
| <b>All Injuries</b>                    | V01-X59, Y85-Y86   | X60-X84, Y87.0 | X85-Y09, Y87.1    | Y10-Y34, Y87.2, Y89.9 | Y35-Y36, Y89(.0,.1)          |
| Cut/Pierce                             | W25-W29, W45   | X78            | X99               | Y28                   | Y35.4                        |
| Drowning                               | W65-W74, V90, V92  | X71            | X92               | Y21                   |                              |
| Boating-Related                        | V90, V92   |                |                   |                       |                              |
| Other                                  | W65-W74  | X71            | X92               | Y21                   |                              |
| Fall/Jump/Push                         | W00-W19  | X80            | Y01               | Y30                   |                              |
| Fire/Hot Object or Substance           | X00-X19  | X76-X77        | X97-X98           | Y26-Y27               | Y36.3                        |
| Fire/Flame                             | X00-X09  | X76            | X97               | Y26                   |                              |
| Hot Object/Substance                   | X10-X19  | X77            | X98               | Y27                   |                              |
| Firearm                                | W32-W34  | X72-X74        | X93-X95           | Y22-Y24               | Y35.0                        |
| Machinery                              | W24, W30-W31   |                |                   |                       |                              |
| All Transport                          | V01-V89, V91, V93-V99  | X82            | Y03               | Y32                   | Y36.1                        |
| Motor Vehicle Traffic                  | Codes from 5 groups below  |                |                   |                       |                              |
| Occupant                               | V30-V39(.4-.9), V40-V49(.4-.9), V50-V59(.4-.9), V60-V69(.4-.9), V70-V79(.4-.9), V81.1, V82.1, V83-V86(.0-.3)   |                |                   |                       |                              |
| Motorcyclist                           | V20-V28(.3-.9), V29(.4-.9)   |                |                   |                       |                              |
| Pedal Cyclist                          | V12-V14(.3-.9), V19(.4-.6)   |                |                   |                       |                              |
| Pedestrian                             | V02-V04(.1,.9), V09.2  |                |                   |                       |                              |
| Other                                  | V80(.3-.5)   |                |                   |                       |                              |
| Unspecified                            | V87(.0-.8), V89.2  |                |                   |                       |                              |
| Pedal Cyclist, Other                   | V10-V11, V12-V14(.0-.2), V15-V18, V19(.0-.3,.8,.9)   |                |                   |                       |                              |
| Pedestrian, Other                      | V01, V02-V04(.0), V05, V06, V09(.0,.1,.3,.9)   |                |                   |                       |                              |
| Other Land Transport                   | V20-V28(.0-.2), V29(.0-.3), V30-V39(.0-.3), V40-V49(.0-.3), V50-V59(.0-.3), V60-V69(.0-.3), V70-V79(.0-.3), V80(.0-.2,.6-.9), V81-V82(.0,.2-.9), V83-V86(.4-.9), V83-V86(.4-.9), V87.9, V88(.0-.9), V89(.0,.1,.3,.9) | X82            | Y03               | Y32                   | Y36.1                        |
| Water/Air/Space                        | V91, V93-V99   |                |                   |                       |                              |
| Natural/Environmental                  | W42, W43, W53-W64, W92-W99, X20-X39, X51-X57   |                |                   |                       |                              |
| Bites/Stings                           | W53-W59, X20-X29   |                |                   |                       |                              |
| Other                                  | Residual, Natural/Environmental  |                |                   |                       |                              |
| Overexertion                           | X50  |                |                   |                       |                              |
| Poisoning                              | X40-X49  | X60-X69        | X85-X90           | Y10-Y19               | Y35.2                        |
| Struck By or Against                   | W20-W22, W50-W52   | X79            | Y00, Y04          | Y29                   | Y35.3                        |
| Suffocation                            | W75-W84  | X70            | X91               | Y20                   |                              |
| Other Specified, Classifiable          | W23, W35-W41, W44, W49, W85-W91, Y85   | X75, X81       | X96, Y02, Y05-Y07 | Y25, Y31              | Y35(.1,.5), Y36(.0,.2,.4-.8) |
| Sequelae (Late Effects)                | Y85  |                |                   |                       |                              |
| Other                                  | W49, W85-W91   | X75, X81       | X86, Y02, Y05-Y07 | Y25, Y31              | Y35(.1,.5), Y36(.0,.2,.4-.8) |
| Other Specified, NEC                   | X58, Y86   | X83, Y87.0     | Y08, Y87.1        | Y33, Y87.2            | Y35.6, Y89(.0,.1)            |
| Sequelae (Late Effects)                | Y86  | Y87.0          | Y87.1             | Y87.2                 |                              |
| Other                                  | X58  | X83            | Y08               | Y33                   | Y35.6, Y89(.0,.1)            |
| Unspecified                            | X59  | X84            | Y09               | Y34, Y89.9            | Y35.7, Y36.9                 |
| Adverse Effects: Y40-Y59, Y60-Y84, Y88 |  |                |                   |                       |                              |
| Drugs: Y40-Y59, Y88.0                  |  |                |                   |                       |                              |
| Medical Care: Y60-Y84, Y88(.1-.3)      |  |                |                   |                       |                              |

### Mortality Table E3. External Causes by Place of Injury for Residents, 2001

| Place of Injury <sup>1</sup> | Total        | Unintentional Injury (Accident), Non-Transport | Unintentional Injury (Accident), Transport | Intentional Self-Harm (Suicide) | Assault (Homicide) | Undetermined | Other     |
|------------------------------|--------------|--|--|---------------------------------|--------------------|--------------|-----------|
| <b>State Total</b>           | <b>3,106</b> | <b>1,228</b>                                   | <b>836</b>                                 | <b>710</b>                      | <b>192</b>         | <b>110</b>   | <b>30</b> |
| Home                         | 1,390        | 698  | 19   | 500                             | 97                 | 73           | 3         |
| Nursing Home                 | 130          | 124  | 0  | 5                               | 1                  | 0            | 0         |
| Agriculture                  | 15           | 6  | 6  | 2                               | 0                  | 1            | 0         |
| Industry                     | 121          | 59   | 5  | 40                              | 12                 | 3            | 2         |
| Prison                       | 14           | 3  | 0  | 10                              | 0                  | 0            | 1         |
| Public                       | 1,230        | 184  | 797  | 147                             | 72                 | 24           | 6         |
| Unknown                      | 206          | 154  | 9  | 6                               | 10                 | 9            | 18        |

<sup>1</sup>National Safety Council place of injury category definitions.

**Note:**

Source for groups is the International Classification of Diseases, Tenth Revision (ICD-10): Unintentional Injury (Accident), Non-Transport (ICD-10: W00-X59,Y86); Unintentional Injury (Accident), Transport (ICD-10: V01-V99,Y85); Intentional Self-Harm (Suicide) (ICD-10: X60-X84,Y87.0); Assault (Homicide) (ICD-10: X85-Y09,Y87.1); Undetermined (ICD-10: Y10-Y34,Y87.2,Y89.9); Other (ICD-10: Y35,Y36,Y40-Y84,Y88, Y89.0,Y89.1).

### Mortality Table E4. Type of Firearm by Intent for Residents, 2001

| Intent                          | Total      |                         |                           | Handgun    |                         |                           | Rifle or Shotgun |                         |                           | Other & Unspecified |                         |                           |
|---------------------------------|------------|-------------------------|---------------------------|------------|-------------------------|---------------------------|------------------|-------------------------|---------------------------|---------------------|-------------------------|---------------------------|
|                                 | No.        | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | No.        | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | No.              | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | No.                 | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> |
| <b>Total</b>                    | <b>508</b> | <b>8.5</b>              | <b>8.5</b>                | <b>293</b> | <b>4.9</b>              | <b>4.9</b>                | <b>103</b>       | <b>1.7</b>              | <b>1.7</b>                | <b>112</b>          | <b>1.9</b>              | <b>1.9</b>                |
| Unintentional Injury (Accident) | 4          | *                       | *                         | 1          | *                       | *                         | 1                | *                       | *                         | 2                   | *                       | *                         |
| Self-Harm (Suicide)             | 389        | 6.5                     | 6.6                       | 259        | 4.3                     | 4.4                       | 92               | 1.5                     | 1.5                       | 38                  | 0.6                     | 0.6                       |
| Assault (Homicide)              | 103        | 1.7                     | 1.7                       | 31         | 0.5                     | 0.5                       | 9                | 0.2                     | 0.2                       | 63                  | 1.1                     | 1.0                       |
| Undetermined                    | 3          | *                       | *                         | 2          | *                       | *                         | 1                | *                       | *                         | 0                   | *                       | *                         |
| Legal Intervention              | 9          | 0.2                     | 0.2                       | 0          | *                       | *                         | 0                | *                       | *                         | 9                   | 0.2                     | 0.2                       |

<sup>1</sup>Rate per 100,000 population.

<sup>2</sup>Rate per 100,000 age-adjusted to U.S. 2000 population. Does not include deaths where age is unknown.

\* Rate not calculated because number of deaths was less than 5.

**Note:**

Source for groups is the International Classification of Diseases, Tenth Revision (ICD-10): Unintentional Injury (Accident) (ICD-10: W32-W34); Self-Harm (Suicide) (ICD-10: X72-X74); Assault (Homicide) (ICD-10: X93-X95); Undetermined (ICD-10: Y22-Y24); Legal Intervention (ICD-10: Y35.0).

Rates based on fewer than 20 deaths are likely to be unstable and imprecise.

**Mortality Table E5. Poisoning by Intent and Substance for Residents, 2001**

| Substance and ICD-10 Code  | Total      |                         |                           | Unintentional Injury (Accident) |                         |                           | Self-Harm (Suicide) |                         |                           | Undetermined |                         |                           |
|--|------------|-------------------------|---------------------------|---------------------------------|-------------------------|---------------------------|---------------------|-------------------------|---------------------------|--------------|-------------------------|---------------------------|
|  | No.        | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | No.                             | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | No.                 | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | No.          | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> |
| <b>Total</b>   | <b>578</b> | <b>9.7</b>              | <b>9.4</b>                | <b>381</b>                      | <b>6.4</b>              | <b>6.2</b>                | <b>126</b>          | <b>2.1</b>              | <b>2.1</b>                | <b>71</b>    | <b>1.2</b>              | <b>1.2</b>                |
| Drugs (X40-X44,X60-X64,Y10-Y14) <sup>3</sup>   | (504)      | (8.4)                   | (8.2)                     | (360)                           | (6.0)                   | (5.9)                     | (81)                | (1.4)                   | (1.3)                     | (63)         | (1.1)                   | (1.0)                     |
| Non-Opioid Analgesics, Anti-Pyretics & Anti-Rheumatics (e.g., nonsteroidal anti-inflammatory drugs, salicylates, etc.) (X40, X60, Y10)         | 13         | 0.2                     | 0.2                       | 5                               | 0.1                     | 0.1                       | 4                   | *                       | *                         | 4            | *                       | *                         |
| Anti-Epileptic, Sedative-Hypnotic, Anti-Parkinson & Psychotropic (e.g., antidepressants, barbiturates, psychostimulants, etc.) (X41, X61, Y11) | 84         | 1.4                     | 1.4                       | 38                              | 0.6                     | 0.6                       | 29                  | 0.5                     | 0.5                       | 17           | 0.3                     | 0.3                       |
| Narcotics & Psychodysleptics (e.g., cannabis, cocaine, heroin, etc.) (X42, X62, Y12)   | 191        | 3.2                     | 3.1                       | 171                             | 2.9                     | 2.8                       | 8                   | 0.1                     | 0.1                       | 12           | 0.2                     | 0.2                       |
| Other Drugs Acting on Autonomic Nervous System (e.g., anticholinergics, cholinergics, antiadrenergics, etc.) (X43, X63, Y13)                   | 1          | *                       | *                         | 1                               | *                       | *                         | 0                   | *                       | *                         | 0            | *                       | *                         |
| Other, Unspecified, or Mixtures of Any of the Above (e.g., anaesthetics, hormones, antibiotics, etc.) (X44, X64, Y14)                          | 215        | 3.6                     | 3.5                       | 145                             | 2.4                     | 2.4                       | 40                  | 0.7                     | 0.7                       | 30           | 0.5                     | 0.5                       |
| Alcohol (X45, X65, Y15)  | 8          | 0.1                     | 0.1                       | 7                               | 0.1                     | 0.1                       | 0                   | *                       | *                         | 1            | *                       | *                         |
| Organic Solvents, Halogenated  |            |                         |                           |                                 |                         |                           |                     |                         |                           |              |                         |                           |
| Hydrocarbons, Vapors (e.g., benzene, petroleum, etc.) (X46, X66, Y16)  | 3          | *                       | *                         | 1                               | *                       | *                         | 0                   | *                       | *                         | 2            | *                       | *                         |
| Other Gases & Vapors(e.g., carbon monoxide, nitrogen oxides, etc.) (X47, X67, Y17)   | 58         | 1.0                     | 1.0                       | 9                               | 0.2                     | 0.2                       | 44                  | 0.7                     | 0.7                       | 5            | 0.1                     | 0.1                       |
| Pesticides (e.g., fumigants, herbicides, insecticides, wood preservatives, etc.) (X48, X68, Y18)   | 1          | *                       | *                         | 0                               | *                       | *                         | 1                   | *                       | *                         | 0            | *                       | *                         |
| Other & Unspecified Chemicals &  |            |                         |                           |                                 |                         |                           |                     |                         |                           |              |                         |                           |
| Noxious Substances (e.g., acids, glues, paints, soaps, etc.) (X49, X69, Y19)   | 4          | *                       | *                         | 4                               | *                       | *                         | 0                   | *                       | *                         | 0            | *                       | *                         |

<sup>1</sup>Rate per 100,000 population.

<sup>2</sup>Rate per 100,000 age-adjusted to U.S. 2000 population. Does not include deaths where age is unknown.

<sup>3</sup>Group totals are shown in parentheses.

\* Rate not calculated because number of deaths was less than 5.

Note: Rates based on fewer than 20 deaths are likely to be unstable and imprecise.

Poisoning due to homicides are not included in this table.

**Mortality Table E6. Suicide, Homicide, and Undetermined by County of Residence, 2001**

| County             | Intentional Self-Harm<br>(Suicide) (X60-X84,Y87.0) |                         |                           | Assault (Homicide)<br>(X85-Y09,Y87.1) |                         |                           | Undetermined (Y10-<br>Y34,Y87.2,Y89.9) |                         |                           |
|--------------------|--|-------------------------|---------------------------|---------------------------------------|-------------------------|---------------------------|--|-------------------------|---------------------------|
|                    | Number   | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | Number                                | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | Number                                 | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> |
| <b>State Total</b> | <b>710</b>   | <b>11.9</b>             | <b>11.9</b>               | <b>192</b>                            | <b>3.2</b>              | <b>3.2</b>                | <b>110</b>                             | <b>1.8</b>              | <b>1.8</b>                |
| Adams              | 0  | *                       | *                         | 0                                     | *                       | *                         | 0                                      | *                       | *                         |
| Asotin             | 4  | *                       | *                         | 0                                     | *                       | *                         | 1                                      | *                       | *                         |
| Benton             | 18   | 12.4                    | 12.9                      | 3                                     | *                       | *                         | 2                                      | *                       | *                         |
| Chelan             | 3  | *                       | *                         | 2                                     | *                       | *                         | 0                                      | *                       | *                         |
| Clallam            | 12   | 18.5                    | 19.0                      | 3                                     | *                       | *                         | 0                                      | *                       | *                         |
| Clark              | 49   | 13.9                    | 14.2                      | 13                                    | 3.7                     | 3.9                       | 3                                      | *                       | *                         |
| Columbia           | 0  | *                       | *                         | 0                                     | *                       | *                         | 0                                      | *                       | *                         |
| Cowlitz            | 9  | 9.6                     | 10.0                      | 3                                     | *                       | *                         | 2                                      | *                       | *                         |
| Douglas            | 1  | *                       | *                         | 1                                     | *                       | *                         | 0                                      | *                       | *                         |
| Ferry              | 0  | *                       | *                         | 0                                     | *                       | *                         | 1                                      | *                       | *                         |
| Franklin           | 4  | *                       | *                         | 4                                     | *                       | *                         | 0                                      | *                       | *                         |
| Garfield           | 1  | *                       | *                         | 0                                     | *                       | *                         | 0                                      | *                       | *                         |
| Grant              | 9  | 11.9                    | 13.0                      | 0                                     | *                       | *                         | 0                                      | *                       | *                         |
| Grays Harbor       | 12   | 17.5                    | 17.7                      | 1                                     | *                       | *                         | 4                                      | *                       | *                         |
| Island             | 6  | 8.3                     | 7.4                       | 1                                     | *                       | *                         | 1                                      | *                       | *                         |
| Jefferson          | 4  | *                       | *                         | 1                                     | *                       | *                         | 0                                      | *                       | *                         |
| King               | 180  | 10.2                    | 10.0                      | 61                                    | 3.5                     | 3.3                       | 38                                     | 2.2                     | 2.1                       |
| Kitsap             | 25   | 10.7                    | 10.4                      | 6                                     | 2.6                     | 2.6                       | 8                                      | 3.4                     | 3.5                       |
| Kittitas           | 5  | 14.7                    | 13.9                      | 0                                     | *                       | *                         | 0                                      | *                       | *                         |
| Klickitat          | 3  | *                       | *                         | 2                                     | *                       | *                         | 0                                      | *                       | *                         |
| Lewis              | 12   | 17.3                    | 15.8                      | 1                                     | *                       | *                         | 0                                      | *                       | *                         |
| Lincoln            | 0  | *                       | *                         | 2                                     | *                       | *                         | 2                                      | *                       | *                         |
| Mason              | 11   | 22.2                    | 21.6                      | 3                                     | *                       | *                         | 2                                      | *                       | *                         |
| Okanogan           | 6  | 15.1                    | 15.6                      | 1                                     | *                       | *                         | 1                                      | *                       | *                         |
| Pacific            | 3  | *                       | *                         | 0                                     | *                       | *                         | 0                                      | *                       | *                         |
| Pend Oreille       | 1  | *                       | *                         | 1                                     | *                       | *                         | 2                                      | *                       | *                         |
| Pierce             | 93   | 13.0                    | 13.4                      | 35                                    | 4.9                     | 5.0                       | 10                                     | 1.4                     | 1.4                       |
| San Juan           | 1  | *                       | *                         | 0                                     | *                       | *                         | 0                                      | *                       | *                         |
| Skagit             | 15   | 14.4                    | 14.0                      | 3                                     | *                       | *                         | 3                                      | *                       | *                         |
| Skamania           | 1  | *                       | *                         | 0                                     | *                       | *                         | 0                                      | *                       | *                         |
| Snohomish          | 70   | 11.3                    | 11.8                      | 14                                    | 2.3                     | 2.3                       | 15                                     | 2.4                     | 2.3                       |
| Spokane            | 59   | 14.0                    | 14.0                      | 13                                    | 3.1                     | 3.1                       | 10                                     | 2.4                     | 2.4                       |
| Stevens            | 8  | 19.9                    | 18.7                      | 0                                     | *                       | *                         | 0                                      | *                       | *                         |
| Thurston           | 22   | 10.5                    | 10.5                      | 5                                     | 2.4                     | 2.5                       | 1                                      | *                       | *                         |
| Wahkiakum          | 2  | *                       | *                         | 0                                     | *                       | *                         | 0                                      | *                       | *                         |
| Walla Walla        | 11   | 19.9                    | 18.9                      | 2                                     | *                       | *                         | 0                                      | *                       | *                         |
| Whatcom            | 23   | 13.5                    | 13.9                      | 1                                     | *                       | *                         | 4                                      | *                       | *                         |
| Whitman            | 2  | *                       | *                         | 0                                     | *                       | *                         | 0                                      | *                       | *                         |
| Yakima             | 25   | 11.1                    | 12.0                      | 10                                    | 4.5                     | 4.5                       | 0                                      | *                       | *                         |

<sup>1</sup>Rate per 100,000 population.

<sup>2</sup>Rate per 100,000 age-adjusted to U.S. 2000 population. Does not include deaths where age is unknown.

\* Rate not calculated because number of deaths was less than 5.

Note: Codes for International Classification of Diseases, Tenth Revision (ICD-10) are in parentheses after each group heading. Rates based on fewer than 20 deaths are likely to be unstable and imprecise.

**Mortality Table E7. Drug and Alcohol-Induced Causes for Residents, 2001**

| County             | Drug-Induced |                         |                           | Alcohol-Induced |                         |                           |
|--------------------|--------------|-------------------------|---------------------------|-----------------|-------------------------|---------------------------|
|                    | Number       | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | Number          | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> |
| <b>State Total</b> | <b>551</b>   | <b>9.2</b>              | <b>9.0</b>                | <b>605</b>      | <b>10.1</b>             | <b>10.3</b>               |
| Adams              | 0            | *                       | *                         | 2               | *                       | *                         |
| Asotin             | 4            | *                       | *                         | 2               | *                       | *                         |
| Benton             | 10           | 6.9                     | 6.7                       | 8               | 5.5                     | 6.5                       |
| Chelan             | 8            | 11.9                    | 12.1                      | 11              | 16.4                    | 16.0                      |
| Clallam            | 8            | 12.3                    | 13.9                      | 5               | 7.7                     | 5.5                       |
| Clark              | 27           | 7.7                     | 7.5                       | 29              | 8.2                     | 8.3                       |
| Columbia           | 0            | *                       | *                         | 0               | *                       | *                         |
| Cowlitz            | 12           | 12.8                    | 13.1                      | 16              | 17.0                    | 16.4                      |
| Douglas            | 3            | *                       | *                         | 1               | *                       | *                         |
| Ferry              | 0            | *                       | *                         | 4               | *                       | *                         |
| Franklin           | 0            | *                       | *                         | 2               | *                       | *                         |
| Garfield           | 0            | *                       | *                         | 2               | *                       | *                         |
| Grant              | 5            | 6.6                     | 7.5                       | 2               | *                       | *                         |
| Grays Harbor       | 11           | 16.1                    | 17.1                      | 10              | 14.6                    | 12.3                      |
| Island             | 2            | *                       | *                         | 2               | *                       | *                         |
| Jefferson          | 1            | *                       | *                         | 1               | *                       | *                         |
| King               | 156          | 8.9                     | 8.2                       | 160             | 9.1                     | 9.2                       |
| Kitsap             | 21           | 9.0                     | 9.0                       | 29              | 12.4                    | 13.2                      |
| Kittitas           | 1            | *                       | *                         | 3               | *                       | *                         |
| Klickitat          | 2            | *                       | *                         | 3               | *                       | *                         |
| Lewis              | 7            | 10.1                    | 10.5                      | 11              | 15.8                    | 14.0                      |
| Lincoln            | 2            | *                       | *                         | 0               | *                       | *                         |
| Mason              | 7            | 14.1                    | 13.6                      | 6               | 12.1                    | 10.0                      |
| Okanogan           | 5            | 12.6                    | 14.3                      | 7               | 17.6                    | 15.0                      |
| Pacific            | 2            | *                       | *                         | 12              | 57.1                    | 37.5                      |
| Pend Oreille       | 2            | *                       | *                         | 1               | *                       | *                         |
| Pierce             | 72           | 10.1                    | 10.0                      | 69              | 9.7                     | 10.3                      |
| San Juan           | 2            | *                       | *                         | 2               | *                       | *                         |
| Skagit             | 12           | 11.5                    | 10.9                      | 13              | 12.5                    | 11.5                      |
| Skamania           | 3            | *                       | *                         | 0               | *                       | *                         |
| Snohomish          | 44           | 7.1                     | 6.8                       | 64              | 10.3                    | 11.2                      |
| Spokane            | 54           | 12.8                    | 12.9                      | 48              | 11.4                    | 11.4                      |
| Stevens            | 6            | 14.9                    | 15.1                      | 4               | *                       | *                         |
| Thurston           | 8            | 3.8                     | 3.6                       | 29              | 13.8                    | 13.4                      |
| Wahkiakum          | 1            | *                       | *                         | 0               | *                       | *                         |
| Walla Walla        | 5            | 9.1                     | 10.0                      | 4               | *                       | *                         |
| Whatcom            | 25           | 14.7                    | 15.0                      | 16              | 9.4                     | 9.7                       |
| Whitman            | 1            | *                       | *                         | 1               | *                       | *                         |
| Yakima             | 22           | 9.8                     | 10.8                      | 26              | 11.6                    | 13.0                      |

<sup>1</sup>Rate per 100,000 population.

<sup>2</sup>Rate per 100,000 age-adjusted to U.S. 2000 population. Does not include deaths where age is unknown.

\* Rate not calculated because number of deaths was less than 5.

Note: Source for Selected Disease Conditions is International Classification of Diseases, Tenth Revision, (ICD-10): Drug-Induced:

F11.0-11.5,F11.7-F11.9,F12.0-F12.5,F12.7-F12.9,F13.0-F13.5,F13.7-F13.9,F14.0-F14.5,F14.7-F14.9,F15.0-F15.5,F15.7-F15.9,F16.0-F16.5,F16.7-F16.9,F17.0,F17.3,F16.9,F17.0,F17.3-F17.5,F17.7-F17.9,F18.0-F18.5,F18.7-F18.9,F19.0-F19.5,F19.7-F19.9,X40-X44,X60-X64,X85,Y10-Y14;

Alcohol-Induced: F10,G31.2,G62.1,I42.6, K29.2,K70, R78.0,X45,X65,Y15.

Rates based on fewer than 20 deaths are likely to be unstable and imprecise.

**Mortality Table E8. Unintentional Injury (Accident), Motor Vehicle Traffic, and Falls by County of Residence, 2001**

| County             | Unintentional Injury<br>(Accident)(V01-X59,Y85-Y86) |                         |                           | Motor Vehicle Traffic <sup>1</sup> |                         |                           | Falls (W00-W19) |                         |                           |
|--------------------|---|-------------------------|---------------------------|------------------------------------|-------------------------|---------------------------|-----------------|-------------------------|---------------------------|
|                    | Number  | Crude Rate <sup>2</sup> | Age-Adj Rate <sup>3</sup> | Number                             | Crude Rate <sup>2</sup> | Age-Adj Rate <sup>3</sup> | Number          | Crude Rate <sup>2</sup> | Age-Adj Rate <sup>3</sup> |
| <b>State Total</b> | <b>2,064</b>  | <b>34.5</b>             | <b>35.2</b>               | <b>714</b>                         | <b>11.9</b>             | <b>12.0</b>               | <b>469</b>      | <b>7.8</b>              | <b>8.4</b>                |
| Adams              | 16  | 96.4                    | 104.4                     | 10                                 | 60.2                    | 62.0                      | 2               | *                       | *                         |
| Asotin             | 8   | 38.6                    | 36.3                      | 1                                  | *                       | *                         | 2               | *                       | *                         |
| Benton             | 53  | 36.6                    | 39.7                      | 23                                 | 15.9                    | 16.3                      | 13              | 9.0                     | 11.0                      |
| Chelan             | 23  | 34.3                    | 32.6                      | 2                                  | *                       | *                         | 7               | 10.4                    | 8.8                       |
| Clallam            | 37  | 57.1                    | 46.1                      | 18                                 | 27.8                    | 23.7                      | 7               | 10.8                    | 6.7                       |
| Clark              | 87  | 24.7                    | 27.1                      | 34                                 | 9.6                     | 10.6                      | 13              | 3.7                     | 4.8                       |
| Columbia           | 1   | *                       | *                         | 1                                  | *                       | *                         | 0               | *                       | *                         |
| Cowlitz            | 38  | 40.5                    | 40.3                      | 11                                 | 11.7                    | 12.4                      | 8               | 8.5                     | 7.9                       |
| Douglas            | 12  | 36.6                    | 38.2                      | 5                                  | 15.2                    | 15.6                      | 2               | *                       | *                         |
| Ferry              | 2   | *                       | *                         | 1                                  | *                       | *                         | 0               | *                       | *                         |
| Franklin           | 16  | 31.7                    | 34.2                      | 13                                 | 25.8                    | 28.4                      | 0               | *                       | *                         |
| Garfield           | 1   | *                       | *                         | 1                                  | *                       | *                         | 0               | *                       | *                         |
| Grant              | 48  | 63.2                    | 68.4                      | 23                                 | 30.3                    | 32.8                      | 6               | 7.9                     | 8.9                       |
| Grays Harbor       | 39  | 56.9                    | 53.2                      | 11                                 | 16.1                    | 15.9                      | 12              | 17.5                    | 14.7                      |
| Island             | 24  | 33.1                    | 32.7                      | 11                                 | 15.2                    | 15.8                      | 4               | *                       | *                         |
| Jefferson          | 9   | 34.5                    | 36.8                      | 2                                  | *                       | *                         | 2               | *                       | *                         |
| King               | 478   | 27.2                    | 27.6                      | 155                                | 8.8                     | 8.9                       | 106             | 6.0                     | 6.6                       |
| Kitsap             | 63  | 27.0                    | 28.3                      | 30                                 | 12.9                    | 13.2                      | 16              | 6.9                     | 7.7                       |
| Kittitas           | 17  | 50.0                    | 49.1                      | 6                                  | 17.6                    | 16.6                      | 3               | *                       | *                         |
| Klickitat          | 15  | 77.7                    | 85.9                      | 8                                  | 41.5                    | 49.3                      | 3               | *                       | *                         |
| Lewis              | 39  | 56.1                    | 54.8                      | 14                                 | 20.1                    | 20.8                      | 10              | 14.4                    | 12.0                      |
| Lincoln            | 7   | 68.6                    | 69.6                      | 1                                  | *                       | *                         | 2               | *                       | *                         |
| Mason              | 28  | 56.5                    | 56.0                      | 11                                 | 22.2                    | 22.5                      | 5               | 10.1                    | 10.4                      |
| Okanogan           | 25  | 63.0                    | 62.6                      | 9                                  | 22.7                    | 22.8                      | 5               | 12.6                    | 12.0                      |
| Pacific            | 14  | 66.7                    | 72.0                      | 5                                  | 23.8                    | 30.1                      | 2               | *                       | *                         |
| Pend Oreille       | 7   | 59.3                    | 62.1                      | 2                                  | *                       | *                         | 2               | *                       | *                         |
| Pierce             | 260   | 36.4                    | 38.5                      | 94                                 | 13.2                    | 13.4                      | 60              | 8.4                     | 10.3                      |
| San Juan           | 4   | *                       | *                         | 0                                  | *                       | *                         | 1               | *                       | *                         |
| Skagit             | 48  | 46.1                    | 43.7                      | 17                                 | 16.3                    | 16.4                      | 13              | 12.5                    | 10.5                      |
| Skamania           | 5   | 50.5                    | 48.6                      | 1                                  | *                       | *                         | 0               | *                       | *                         |
| Snohomish          | 168   | 27.2                    | 29.7                      | 61                                 | 9.9                     | 10.0                      | 40              | 6.5                     | 8.7                       |
| Spokane            | 199   | 47.1                    | 45.5                      | 35                                 | 8.3                     | 8.0                       | 74              | 17.5                    | 16.4                      |
| Stevens            | 12  | 29.8                    | 29.5                      | 3                                  | *                       | *                         | 4               | *                       | *                         |
| Thurston           | 68  | 32.4                    | 33.1                      | 29                                 | 13.8                    | 13.8                      | 17              | 8.1                     | 8.7                       |
| Wahkiakum          | 2   | *                       | *                         | 0                                  | *                       | *                         | 0               | *                       | *                         |
| Walla Walla        | 22  | 39.9                    | 34.8                      | 8                                  | 14.5                    | 12.8                      | 7               | 12.7                    | 9.6                       |
| Whatcom            | 73  | 42.8                    | 42.7                      | 29                                 | 17.0                    | 16.7                      | 8               | 4.7                     | 4.7                       |
| Whitman            | 8   | 19.9                    | 23.0                      | 3                                  | *                       | *                         | 0               | *                       | *                         |
| Yakima             | 88  | 39.2                    | 40.1                      | 26                                 | 11.6                    | 11.3                      | 13              | 5.8                     | 6.0                       |

<sup>1</sup>ICD-10 codes are V02-V04(.1-.9),V09.2,V12-V14(.3-.9), V19(.4-.6),V20-V28(.3-.9),V29-V79(.4-.9), V80(.3-.5),V81.1,V82.1,V83-V86(.0-.3),V87(.0-.8),V89.2

<sup>2</sup>Rate per 100,000 population.

<sup>3</sup>Rate per 100,000 age-adjusted to U.S. 2000 population. Does not include deaths where age is unknown.

\* Rate not calculated because number of deaths was less than 5.

Note: Codes for International Classification of Diseases, Tenth Revision (ICD-10) are in parentheses after each group heading unless otherwise noted.

Rates based on fewer than 20 deaths are likely to be unstable and imprecise.

**Mortality Table E9. Drowning, Fires, and Other Unintentional Injury (Accident) by County of Residence, 2001**

| County             | Drownings (V90.V92.W65-W74) |                         |                           | Fires (X00-X09) |                         |                           | Other Inintentional Injury (Accident) (remainder) |                         |                           |
|--------------------|-----------------------------|-------------------------|---------------------------|-----------------|-------------------------|---------------------------|---|-------------------------|---------------------------|
|                    | Number                      | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | Number          | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> | Number  | Crude Rate <sup>1</sup> | Age-Adj Rate <sup>2</sup> |
| <b>State Total</b> | <b>107</b>                  | <b>1.8</b>              | <b>1.8</b>                | <b>63</b>       | <b>1.1</b>              | <b>1.1</b>                | <b>711</b>  | <b>11.9</b>             | <b>11.9</b>               |
| Adams              | 0                           | *                       | *                         | 1               | *                       | *                         | 3   | *                       | *                         |
| Asotin             | 0                           | *                       | *                         | 0               | *                       | *                         | 5   | 24.2                    | 24.5                      |
| Benton             | 3                           | *                       | *                         | 0               | *                       | *                         | 14  | 9.7                     | 10.4                      |
| Chelan             | 2                           | *                       | *                         | 1               | *                       | *                         | 11  | 16.4                    | 16.5                      |
| Clallam            | 1                           | *                       | *                         | 4               | *                       | *                         | 7   | 10.8                    | 11.2                      |
| Clark              | 6                           | 1.7                     | 1.8                       | 2               | *                       | *                         | 32  | 9.1                     | 9.2                       |
| Columbia           | 0                           | *                       | *                         | 0               | *                       | *                         | 0   | *                       | *                         |
| Cowlitz            | 3                           | *                       | *                         | 1               | *                       | *                         | 15  | 16.0                    | 16.0                      |
| Douglas            | 0                           | *                       | *                         | 0               | *                       | *                         | 5   | 15.2                    | 16.4                      |
| Ferry              | 0                           | *                       | *                         | 0               | *                       | *                         | 1   | *                       | *                         |
| Franklin           | 0                           | *                       | *                         | 0               | *                       | *                         | 3   | *                       | *                         |
| Garfield           | 0                           | *                       | *                         | 0               | *                       | *                         | 0   | *                       | *                         |
| Grant              | 4                           | *                       | *                         | 1               | *                       | *                         | 14  | 18.4                    | 20.6                      |
| Grays Harbor       | 2                           | *                       | *                         | 3               | *                       | *                         | 11  | 16.1                    | 15.5                      |
| Island             | 2                           | *                       | *                         | 1               | *                       | *                         | 6   | 8.3                     | 8.4                       |
| Jefferson          | 0                           | *                       | *                         | 3               | *                       | *                         | 2   | *                       | *                         |
| King               | 26                          | 1.5                     | 1.5                       | 11              | 0.6                     | 0.7                       | 180   | 10.2                    | 9.9                       |
| Kitsap             | 3                           | *                       | *                         | 2               | *                       | *                         | 12  | 5.1                     | 5.3                       |
| Kittitas           | 1                           | *                       | *                         | 1               | *                       | *                         | 6   | 17.6                    | 16.4                      |
| Klickitat          | 0                           | *                       | *                         | 0               | *                       | *                         | 4   | *                       | *                         |
| Lewis              | 1                           | *                       | *                         | 2               | *                       | *                         | 12  | 17.3                    | 18.2                      |
| Lincoln            | 1                           | *                       | *                         | 0               | *                       | *                         | 3   | *                       | *                         |
| Mason              | 1                           | *                       | *                         | 2               | *                       | *                         | 9   | 18.1                    | 16.8                      |
| Okanogan           | 0                           | *                       | *                         | 1               | *                       | *                         | 10  | 25.2                    | 25.7                      |
| Pacific            | 2                           | *                       | *                         | 0               | *                       | *                         | 5   | 23.8                    | 22.4                      |
| Pend Oreille       | 0                           | *                       | *                         | 2               | *                       | *                         | 1   | *                       | *                         |
| Pierce             | 15                          | 2.1                     | 2.1                       | 7               | 1.0                     | 1.0                       | 84  | 11.8                    | 11.8                      |
| San Juan           | 0                           | *                       | *                         | 1               | *                       | *                         | 2   | *                       | *                         |
| Skagit             | 3                           | *                       | *                         | 1               | *                       | *                         | 14  | 13.4                    | 12.8                      |
| Skamania           | 0                           | *                       | *                         | 0               | *                       | *                         | 4   | *                       | *                         |
| Snohomish          | 8                           | 1.3                     | 1.2                       | 5               | 0.8                     | 1.0                       | 54  | 8.7                     | 8.8                       |
| Spokane            | 8                           | 1.9                     | 1.9                       | 4               | *                       | *                         | 78  | 18.5                    | 18.2                      |
| Stevens            | 0                           | *                       | *                         | 0               | *                       | *                         | 5   | 12.4                    | 13.0                      |
| Thurston           | 4                           | *                       | *                         | 3               | *                       | *                         | 15  | 7.1                     | 7.2                       |
| Wahkiakum          | 0                           | *                       | *                         | 0               | *                       | *                         | 2   | *                       | *                         |
| Walla Walla        | 1                           | *                       | *                         | 0               | *                       | *                         | 6   | 10.9                    | 10.3                      |
| Whatcom            | 6                           | 3.5                     | 3.4                       | 0               | *                       | *                         | 30  | 17.6                    | 17.9                      |
| Whitman            | 0                           | *                       | *                         | 0               | *                       | *                         | 5   | 12.4                    | 16.9                      |
| Yakima             | 4                           | *                       | *                         | 4               | *                       | *                         | 41  | 18.3                    | 19.6                      |

<sup>1</sup>Rate per 100,000 population.

<sup>2</sup>Rate per 100,000 age-adjusted to U.S. 2000 population. Does not include deaths where age is unknown.

\* Rate not calculated because number of deaths was less than 5.

Note: Codes for International Classification of Diseases, Tenth Revision (ICD-10) are in parentheses after each group heading. Rates based on fewer than 20 deaths are likely to be unstable and imprecise.

**Mortality Table E10. Suicide, Homicide, and Undetermined to Residents by County of Injury, 2001**

| County of Injury   | Intentional Self-Harm<br>(Suicide) (X60-X84, Y87.0) | Assault (Homicide) (X85-<br>Y09, Y87.1) | Undetermined (Y10-Y34,<br>Y87.2, Y89.9) |
|--------------------|---|---|---|
| <b>State Total</b> | <b>710</b>  | <b>192</b>                              | <b>110</b>                              |
| Adams              | 0   | 0                                       | 0                                       |
| Asotin             | 4   | 0                                       | 1                                       |
| Benton             | 19  | 2                                       | 2                                       |
| Chelan             | 2   | 3                                       | 0                                       |
| Clallam            | 12  | 4                                       | 0                                       |
| Clark              | 43  | 10                                      | 1                                       |
| Columbia           | 0   | 0                                       | 0                                       |
| Cowlitz            | 8   | 2                                       | 2                                       |
| Douglas            | 2   | 0                                       | 0                                       |
| Ferry              | 0   | 0                                       | 1                                       |
| Franklin           | 4   | 5                                       | 0                                       |
| Garfield           | 1   | 0                                       | 0                                       |
| Grant              | 8   | 0                                       | 1                                       |
| Grays Harbor       | 15  | 1                                       | 5                                       |
| Island             | 8   | 1                                       | 1                                       |
| Jefferson          | 5   | 0                                       | 0                                       |
| King               | 168   | 60                                      | 34                                      |
| Kitsap             | 24  | 4                                       | 8                                       |
| Kittitas           | 5   | 1                                       | 0                                       |
| Klickitat          | 5   | 1                                       | 0                                       |
| Lewis              | 14  | 1                                       | 0                                       |
| Lincoln            | 0   | 1                                       | 2                                       |
| Mason              | 9   | 1                                       | 2                                       |
| Okanogan           | 4   | 1                                       | 1                                       |
| Pacific            | 2   | 0                                       | 0                                       |
| Pend Oreille       | 1   | 1                                       | 2                                       |
| Pierce             | 85  | 33                                      | 7                                       |
| San Juan           | 1   | 0                                       | 0                                       |
| Skagit             | 16  | 3                                       | 3                                       |
| Skamania           | 2   | 0                                       | 0                                       |
| Snohomish          | 73  | 13                                      | 13                                      |
| Spokane            | 59  | 12                                      | 9                                       |
| Stevens            | 6   | 1                                       | 0                                       |
| Thurston           | 24  | 5                                       | 2                                       |
| Wahkiakum          | 2   | 0                                       | 0                                       |
| Walla Walla        | 13  | 2                                       | 0                                       |
| Whatcom            | 22  | 1                                       | 2                                       |
| Whitman            | 3   | 0                                       | 0                                       |
| Yakima             | 24  | 9                                       | 0                                       |
| Unknown            | 13  | 5                                       | 1                                       |
| Out of State       | 4   | 9                                       | 10                                      |

Note: Codes for International Classification of Diseases, Tenth Revision (ICD-10) are in parentheses after each groupheading.



**Mortality Table E11. Unintentional Injury (Accident) to Residents by County of Injury, 2001**

| County of Injury   | All Unintentional Injury (Accident) | Motor Vehicle Traffic | Falls      | Drownings  | Fires     | Other Accidents |
|--------------------|-------------------------------------|-----------------------|------------|------------|-----------|-----------------|
| <b>State Total</b> | <b>2,064</b>                        | <b>714</b>            | <b>469</b> | <b>107</b> | <b>63</b> | <b>711</b>      |
| Adams              | 18                                  | 14                    | 2          | 0          | 1         | 1               |
| Asotin             | 7                                   | 3                     | 1          | 0          | 0         | 3               |
| Benton             | 40                                  | 17                    | 10         | 3          | 1         | 9               |
| Chelan             | 37                                  | 9                     | 10         | 4          | 1         | 13              |
| Clallam            | 34                                  | 15                    | 5          | 3          | 4         | 7               |
| Clark              | 57                                  | 19                    | 13         | 3          | 2         | 20              |
| Columbia           | 0                                   | 0                     | 0          | 0          | 0         | 0               |
| Cowlitz            | 30                                  | 7                     | 7          | 3          | 0         | 13              |
| Douglas            | 5                                   | 3                     | 1          | 0          | 0         | 1               |
| Ferry              | 3                                   | 1                     | 0          | 0          | 0         | 2               |
| Franklin           | 14                                  | 12                    | 0          | 0          | 0         | 2               |
| Garfield           | 1                                   | 1                     | 0          | 0          | 0         | 0               |
| Grant              | 44                                  | 22                    | 4          | 4          | 1         | 13              |
| Grays Harbor       | 38                                  | 8                     | 12         | 6          | 2         | 10              |
| Island             | 18                                  | 7                     | 4          | 3          | 1         | 3               |
| Jefferson          | 12                                  | 5                     | 1          | 1          | 3         | 2               |
| King               | 412                                 | 130                   | 106        | 19         | 10        | 147             |
| Kitsap             | 68                                  | 35                    | 17         | 3          | 2         | 11              |
| Kittitas           | 25                                  | 14                    | 3          | 2          | 0         | 6               |
| Klickitat          | 8                                   | 6                     | 1          | 0          | 0         | 1               |
| Lewis              | 33                                  | 14                    | 9          | 0          | 3         | 7               |
| Lincoln            | 9                                   | 4                     | 3          | 1          | 0         | 1               |
| Mason              | 22                                  | 12                    | 3          | 1          | 2         | 4               |
| Okanogan           | 18                                  | 4                     | 2          | 0          | 4         | 8               |
| Pacific            | 12                                  | 7                     | 1          | 3          | 0         | 1               |
| Pend Oreille       | 5                                   | 0                     | 2          | 0          | 2         | 1               |
| Pierce             | 219                                 | 77                    | 54         | 9          | 7         | 72              |
| San Juan           | 6                                   | 0                     | 0          | 0          | 1         | 5               |
| Skagit             | 42                                  | 23                    | 7          | 1          | 1         | 10              |
| Skamania           | 8                                   | 2                     | 0          | 1          | 0         | 5               |
| Snohomish          | 141                                 | 53                    | 38         | 3          | 5         | 42              |
| Spokane            | 170                                 | 24                    | 74         | 3          | 4         | 65              |
| Stevens            | 8                                   | 2                     | 1          | 2          | 0         | 3               |
| Thurston           | 66                                  | 30                    | 19         | 2          | 3         | 12              |
| Wahkiakum          | 1                                   | 0                     | 0          | 0          | 0         | 1               |
| Walla Walla        | 22                                  | 9                     | 7          | 1          | 0         | 5               |
| Whatcom            | 57                                  | 21                    | 9          | 5          | 0         | 22              |
| Whitman            | 9                                   | 7                     | 0          | 0          | 0         | 2               |
| Yakima             | 67                                  | 20                    | 12         | 4          | 1         | 30              |
| Unknown            | 104                                 | 69                    | 8          | 7          | 0         | 20              |
| Out of State       | 174                                 | 8                     | 23         | 10         | 2         | 131             |

Note: Source for Selected Accidents is International Classification of Diseases (Tenth): All Unintentional Injury (Accident) (ICD-10: V01-X59, Y85-Y86); Motor Vehicle Traffic (ICD-10: V02-V04(.1,.9), V09.2, V12-V14(.3-.9), V19(.4-.6), V20-V28(.3-.9), V29-V79(.4-.9), V80(.3-.5), V81.1, V82.1, V83-V86(.0-.3), V87(.0-.8), V89.2; Falls (ICD-10: W00-W19); Drownings (ICD-10: V90, V92, W65-W74); Fires (ICD-10: X00-X09); Other Accidents (remainder).

## F. Infant Mortality

Infant mortality data include all infants who died at less than one year of age. Information on the causes of infant death helps identify areas where special care or preventive measures may be needed.

To provide more information about infant death, the death data are linked to data about the infant's birth. This linkage provides demographic data such as the mother's age and race/ethnicity, behavioral data such as smoking during pregnancy, health service data such as prenatal care, and outcome data such as birth weight. Using this linked file, analysts can compare birth characteristics of infants who died to those of infants who survived to identify risk factors for infant mortality. Health care providers use this knowledge to help their patients have a healthy baby.

**Mortality Table F1. Selected Causes for Infants (< 1 Year) Residents, 1990-2001**

| Year                              | Total All Causes |                   | Perinatal Conditions |                   | Congenital Malformations |                   | SIDS   |                   | External Causes |                   |
|-----------------------------------|------------------|-------------------|----------------------|-------------------|--------------------------|-------------------|--------|-------------------|-----------------|-------------------|
|                                   | Number           | Rate <sup>1</sup> | Number               | Rate <sup>1</sup> | Number                   | Rate <sup>1</sup> | Number | Rate <sup>1</sup> | Number          | Rate <sup>1</sup> |
| 1990                              | 622              | 7.8               | 193                  | 2.4               | 152                      | 1.9               | 185    | 2.3               | 19              | 0.2               |
| 1991                              | 603              | 7.5               | 208                  | 2.6               | 138                      | 1.7               | 177    | 2.2               | 25              | 0.3               |
| 1992                              | 540              | 6.8               | 172                  | 2.2               | 140                      | 1.8               | 130    | 1.6               | 22              | 0.3               |
| 1993                              | 495              | 6.3               | 150                  | 1.9               | 117                      | 1.5               | 140    | 1.8               | 24              | 0.3               |
| 1994                              | 478              | 6.2               | 161                  | 2.1               | 130                      | 1.7               | 115    | 1.5               | 18              | 0.2               |
| 1995                              | 449              | 5.8               | 173                  | 2.2               | 118                      | 1.5               | 101    | 1.3               | 19              | 0.2               |
| 1996                              | 467              | 6.0               | 175                  | 2.2               | 144                      | 1.8               | 80     | 1.0               | 9               | 0.1               |
| 1997                              | 440              | 5.6               | 156                  | 2.0               | 117                      | 1.5               | 84     | 1.1               | 18              | 0.2               |
| 1998                              | 452              | 5.7               | 175                  | 2.2               | 120                      | 1.5               | 91     | 1.1               | 13              | 0.2               |
| ***1998 Comparability Modified*** | 452              | 5.7               | 185                  | 2.3               | 109                      | 1.4               | 94     | 1.1               | 13              | 0.2               |
| 1999                              | 401              | 5.0               | 172                  | 2.2               | 102                      | 1.3               | 69     | 0.9               | 13              | 0.2               |
| 2000                              | 423              | 5.2               | 172                  | 2.1               | 92                       | 1.1               | 76     | 0.9               | 27              | 0.3               |
| 2001                              | 461              | 5.8               | 200                  | 2.5               | 119                      | 1.5               | 60     | 0.8               | 32              | 0.4               |

<sup>1</sup>Rate per 1,000 live births.

**Note:**

Causes of death were coded with ICD-9 in 1990-1998 and with ICD-10 during 1999-2000. Rates during 1998

have been multiplied by a comparability ratio (CR). ICD codes and comparability ratios are:

Perinatal Conditions: ICD-9: 760-771.2,771.4-779; ICD-10: P00-P96; CR=1.0581

Congenital Malformations: ICD-9: 740-759; ICD-10: Q00-Q99; CR=0.9064

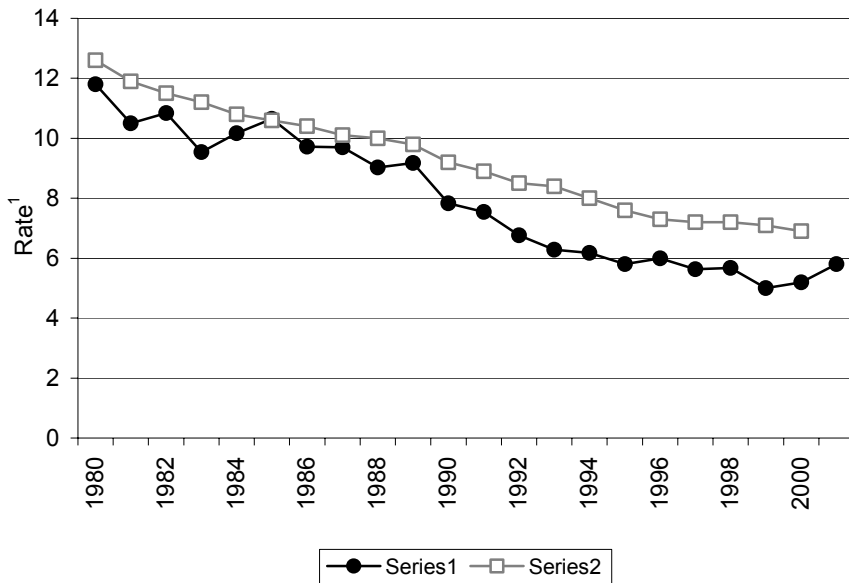
SIDS: ICD-9: 798.0; ICD-10: R95; CR=1.0362

External Causes: ICD-9: E800-E999; ICD-10: V01-Y89; CR=0.9932

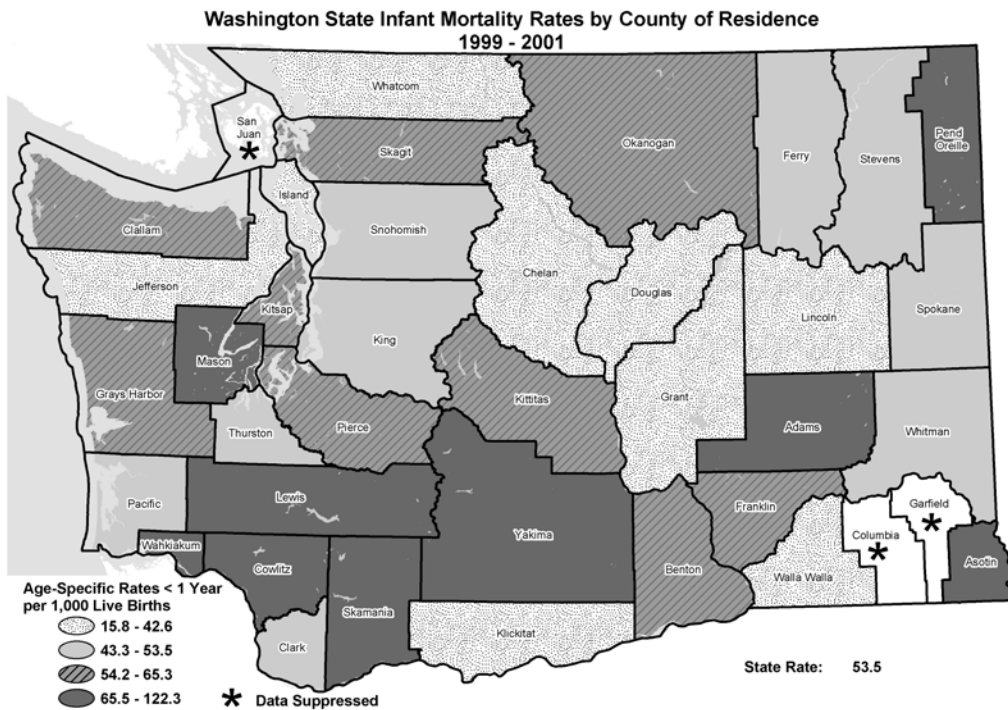
Total infant mortality has dramatically decreased since 1990. During this time period, SIDS deaths have declined by 59% and deaths from other causes have also decreased. Possible reasons for the change include emphasis on preventive measures such as proper sleep position (the 'Back to Sleep' campaign), use of folic acid before and during pregnancy to prevent neural tube defects, and smoking cessation.

**Mortality Figure 9 & 10**

Infant Mortality Rates<sup>1</sup>, Washington State Residents Compared to National, 1980-2001



<sup>1</sup> Rate per 1,000 live births

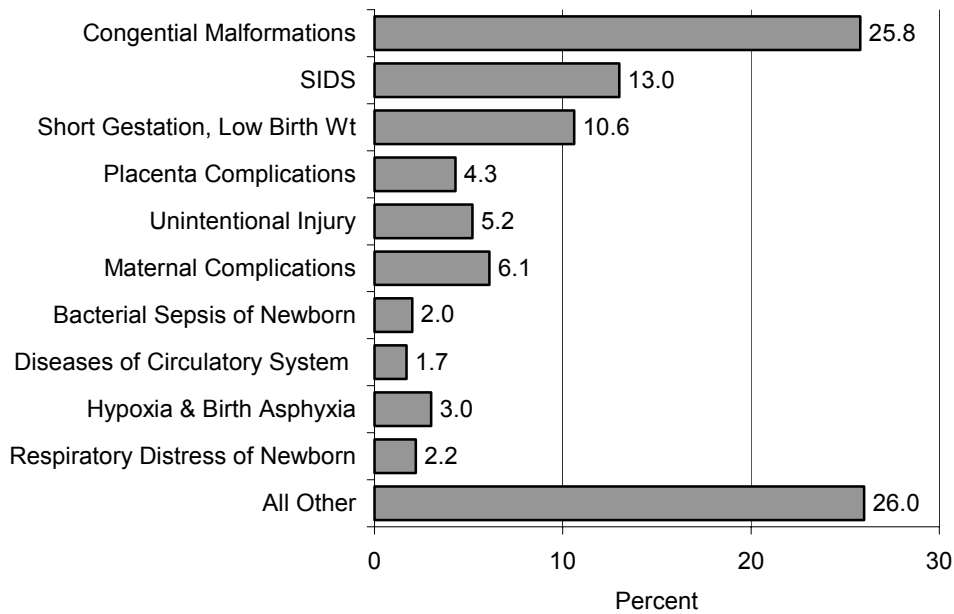


**Mortality Table F2. Leading Causes of Infant (Age < 1 Year) Death for Residents, 2001**

| Rank | Causes of Death and ICD-10 Codes                   | Number     | Percent <sup>1</sup> | Cumulative Percent |
|------|--|------------|----------------------|--------------------|
|      | <b>State Total</b>                                 | <b>461</b> | <b>100.0</b>         |                    |
| 1    | Congenital Malformations (Q00-Q99)                 | 119        | 25.8                 | 25.8               |
| 2    | Sudden Infant Death Syndrome (R95)                 | 60         | 13.0                 | 38.8               |
| 3    | Short Gestation & Low Birth Weight (P07)           | 49         | 10.6                 | 49.5               |
| 4    | Maternal Complications of Pregnancy (P01)          | 28         | 6.1                  | 55.5               |
| 5    | Unintentional Injury (Accident) (V01-X59, Y85-Y86) | 24         | 5.2                  | 60.7               |
| 6    | Complic. of Placenta, Cord & Membranes (P02)       | 20         | 4.3                  | 65.1               |
| 7    | Intrauterine Hypoxia & Birth Asphyxia (P20-P21)    | 14         | 3.0                  | 68.1               |
| 8    | Respiratory Distress of Newborn (P22)              | 10         | 2.2                  | 70.3               |
| 9    | Bacterial Sepsis of Newborn (P36)                  | 9          | 2.0                  | 72.2               |
| 10   | Atelectasis (P28.0-P28.1)                          | 8          | 1.7                  | 74.0               |
|      | All Other Causes                                   | 120        | 26.0                 | 100.0              |

<sup>1</sup>Percents may not add to 100% due to rounding.

**Mortality Figure 11. Leading Causes of Infant (Age <1 Year) Death for Residents, 2001**



**Mortality Table F3. Birth Weight and Age for Infant (Age < 1 Year) Residents, 2001**

| Birth Weight<br>in Grams | Total      |                   | 1 Day to   | 7 Days to | 28 Days to | 6 Months to |             |
|--------------------------|------------|-------------------|------------|-----------|------------|-------------|-------------|
|                          | Number     | Rate <sup>1</sup> | < 1 Day    | < 7 Days  | <28 Days   | < 6 Months  | < 12 Months |
| <b>State Totals</b>      | <b>461</b> | <b>5.8</b>        | <b>171</b> | <b>63</b> | <b>58</b>  | <b>121</b>  | <b>48</b>   |
| Under 500                | 76         | 791.7             | 71         | 0         | 0          | 4           | 1           |
| 500 - 749                | 77         | 546.1             | 41         | 16        | 14         | 5           | 1           |
| 750 - 999                | 15         | 106.4             | 3          | 5         | 2          | 4           | 1           |
| 1,000 - 1,499            | 29         | 64.9              | 9          | 2         | 5          | 10          | 3           |
| 1,500 - 1,999            | 29         | 32.4              | 10         | 4         | 3          | 7           | 5           |
| 2,000 - 2,499            | 32         | 11.2              | 7          | 4         | 5          | 9           | 7           |
| 2,500 - 2,999            | 60         | 5.5               | 5          | 14        | 11         | 22          | 8           |
| 3,000 - 3,499            | 69         | 2.5               | 10         | 11        | 8          | 28          | 12          |
| 3,500 - 3,999            | 45         | 1.8               | 6          | 3         | 4          | 25          | 7           |
| 4,000 - 4,499            | 13         | 1.6               | 1          | 2         | 2          | 6           | 2           |
| 4,500 and over           | 3          | *                 | 2          | 0         | 1          | 0           | 0           |
| Unknown                  | 13         | 32.5              | 6          | 2         | 3          | 1           | 1           |

<sup>1</sup>Rate per 1,000 live births.

\* Rate not calculated because number of deaths was less than 5.

**Mortality Table F4-a. Selected Causes by Age and Sex for Infant (Age < 1 Year) Residents, 2001**

| Cause and ICD-10 Code  | Total        |              |              | Under 1 Day  |             |             | 1 Day to Under 7 Days |             |             |
|--|--------------|--------------|--------------|--------------|-------------|-------------|-----------------------|-------------|-------------|
|  | Total        | Male         | Fem.         | Total        | Male        | Fem.        | Total                 | Male        | Fem.        |
| <b>Total All Causes<sup>1</sup></b>                            | <b>(461)</b> | <b>(259)</b> | <b>(201)</b> | <b>(171)</b> | <b>(96)</b> | <b>(74)</b> | <b>(63)</b>           | <b>(34)</b> | <b>(29)</b> |
| <b>Infectious &amp; Parasitic Diseases (A00-B99)</b>           | 5            | 2            | 3            | 0            | 0           | 0           | 0                     | 0           | 0           |
| <b>Diseases of the Nervous System (G00-G98)</b>                | 4            | 2            | 2            | 0            | 0           | 0           | 1                     | 0           | 1           |
| <b>Diseases of the Circulatory System (I00-I99)</b>            | 8            | 1            | 7            | 1            | 0           | 1           | 3                     | 1           | 2           |
| <b>Diseases of the Respiratory System (J00-J98)</b>            | 14           | 8            | 6            | 0            | 0           | 0           | 0                     | 0           | 0           |
| <b>Conditions Originating in Perinatal Period(P00-P96)</b>     | (200)        | (121)        | (79)         | (134)        | (77)        | (57)        | (29)                  | (20)        | (9)         |
| Newborn Affected by Maternal Factors (P00-P04)                 | (59)         | (40)         | (19)         | (53)         | (35)        | (18)        | (4)                   | (4)         | (0)         |
| Incompetent Cervix (P01.0)                                     | 12           | 10           | 2            | 12           | 10          | 2           | 0                     | 0           | 0           |
| Premature Rupture of Membranes (P01.1)                         | 12           | 7            | 5            | 12           | 7           | 5           | 0                     | 0           | 0           |
| Other Maternal Complications of Pregnancy (P01.2-P01.9)        | 4            | 3            | 1            | 4            | 3           | 1           | 0                     | 0           | 0           |
| Complications Involving Placenta (P02.0-P02.3)                 | 13           | 8            | 5            | 10           | 5           | 5           | 2                     | 2           | 0           |
| Complications of Cord & Membranes (P02.4-P02.9)                | 7            | 3            | 4            | 7            | 3           | 4           | 0                     | 0           | 0           |
| Other (P00,P03,P04)  | 11           | 9            | 2            | 8            | 7           | 1           | 2                     | 2           | 0           |
| Short Gestation & Low Birth Weight (P07)                       | 49           | 27           | 22           | 45           | 24          | 21          | 3                     | 2           | 1           |
| Intrauterine Hypoxia & Birth Asphyxia (P20-P21)                | 14           | 7            | 7            | 4            | 2           | 2           | 7                     | 4           | 3           |
| Respiratory Distress of Newborn (P22)                          | 10           | 4            | 6            | 6            | 2           | 4           | 1                     | 0           | 1           |
| Other Respiratory Conditions (P23-P28)                         | 26           | 15           | 11           | 13           | 6           | 7           | 4                     | 3           | 1           |
| Infections Specific to Perinatal Period (P35-P39)              | 10           | 7            | 3            | 3            | 2           | 1           | 1                     | 1           | 0           |
| Neonatal Hemorrhage (P50-P52,P54)                              | 8            | 6            | 2            | 1            | 0           | 1           | 5                     | 4           | 1           |
| Necrotizing Enterocolitis of Newborn (P77)                     | 6            | 3            | 3            | 0            | 0           | 0           | 1                     | 0           | 1           |
| Hydrops Fetalis Not Due to Hemolytic Disease (P83.2)           | 1            | 1            | 0            | 1            | 1           | 0           | 0                     | 0           | 0           |
| Other(P05-P06,P08-P15,P29-P34,P53,P55-P76,P78-P83.1,P83.3-P96) | 17           | 11           | 6            | 8            | 5           | 3           | 3                     | 2           | 1           |
| <b>Congenital Malformations (Q00-Q99)</b>                      | (119)        | (60)         | (58)         | (34)         | (19)        | (14)        | (29)                  | (13)        | (16)        |
| Anencephaly and Similar Malformations (Q00)                    | 3            | 0            | 3            | 2            | 0           | 2           | 1                     | 0           | 1           |
| Malformations of Heart (Q20-Q24)                               | 38           | 22           | 16           | 5            | 3           | 2           | 9                     | 5           | 4           |
| Other Malformations of Circulatory System (Q25-Q28)            | 3            | 1            | 2            | 0            | 0           | 0           | 2                     | 0           | 2           |
| Malformations of Respiratory System (Q30-Q34)                  | 8            | 5            | 3            | 3            | 3           | 0           | 3                     | 2           | 1           |
| Malformations of Genitourinary System (Q50-Q64)                | 3            | 2            | 1            | 1            | 1           | 0           | 0                     | 0           | 0           |
| Malform. of Musculoskeletal Sys. & Skin (Q65-Q85)              | 6            | 1            | 5            | 1            | 0           | 1           | 3                     | 1           | 2           |
| Down's Syndrome (Q90)  | 5            | 3            | 2            | 2            | 0           | 2           | 1                     | 1           | 0           |
| Edward's Syndrome (Q91.0-Q91.3)                                | 5            | 0            | 5            | 0            | 0           | 0           | 2                     | 0           | 2           |
| Patau's Syndrome (Q91.4-Q91.7)                                 | 13           | 8            | 5            | 8            | 6           | 2           | 4                     | 2           | 2           |
| Other (Q01-Q18,Q35-Q45,Q86-Q89)                                | 25           | 10           | 15           | 10           | 5           | 5           | 2                     | 0           | 2           |
| Other Chromosomal Abnormalities (Q92-Q99)                      | 10           | 8            | 1            | 2            | 1           | 0           | 2                     | 2           | 0           |
| <b>Sudden Infant Death Syndrome (R95)</b>                      | 60           | 34           | 26           | 0            | 0           | 0           | 0                     | 0           | 0           |
| <b>Other(C00-F99,H00-H99,K00-N99,R00-R94,R96-R99)</b>          | 19           | 12           | 7            | 1            | 0           | 1           | 1                     | 0           | 1           |
| <b>External Causes of Mortality (V01-Y89)</b>                  | (32)         | (19)         | (13)         | (1)          | (0)         | (1)         | (0)                   | (0)         | (0)         |
| Unintentional Injury (Accident) (V01-X59, Y85-Y86)             | (24)         | (15)         | (9)          | (0)          | (0)         | (0)         | (0)                   | (0)         | (0)         |
| Suffocation & Strangulation (W75-W77,W81-W84)                  | 13           | 8            | 5            | 0            | 0           | 0           | 0                     | 0           | 0           |
| Other (V00-W74,W78-W80,W85-X59,Y85-Y86)                        | 11           | 7            | 4            | 0            | 0           | 0           | 0                     | 0           | 0           |
| Assault (Homicide) (X85-Y09, Y87.1)                            | 2            | 0            | 2            | 1            | 0           | 1           | 0                     | 0           | 0           |
| Other (X60-X84,Y10-Y84,Y87.0,Y87.2-Y89)                        | 6            | 4            | 2            | 0            | 0           | 0           | 0                     | 0           | 0           |

<sup>1</sup>Group totals are shown in parentheses.

Total includes 1 death for which sex is unknown.

**Mortality Table F4-b. Selected Causes by Age and Sex for Infant (Age < 1 Year) Residents, 2001**

| Cause and ICD-10 Code  | 7 Days to Under |             |             | 28 Days to Under |             |             | 6 Months to Under |             |             |
|--|-----------------|-------------|-------------|------------------|-------------|-------------|-------------------|-------------|-------------|
|  | 28 Days         |             |             | 6 Months         |             |             | 12 Months         |             |             |
|  | Total           | Male        | Fem.        | Total            | Male        | Fem.        | Total             | Male        | Fem.        |
| <b>Total All Causes<sup>1</sup></b>                            | <b>(58)</b>     | <b>(35)</b> | <b>(23)</b> | <b>(121)</b>     | <b>(63)</b> | <b>(58)</b> | <b>(48)</b>       | <b>(31)</b> | <b>(17)</b> |
| <b>Infectious &amp; Parasitic Diseases (A00-B99)</b>           | 0               | 0           | 0           | 3                | 0           | 3           | 2                 | 2           | 0           |
| <b>Diseases of the Nervous System (G00-G98)</b>                | 1               | 1           | 0           | 2                | 1           | 1           | 0                 | 0           | 0           |
| <b>Diseases of the Circulatory System (I00-I99)</b>            | 2               | 0           | 2           | 1                | 0           | 1           | 1                 | 0           | 1           |
| <b>Diseases of the Respiratory System (J00-J98)</b>            | 1               | 1           | 0           | 12               | 7           | 5           | 1                 | 0           | 1           |
| <b>Conditions Originating in Perinatal Period(P00-P96)</b>     | (26)            | (18)        | (8)         | (6)              | (3)         | (3)         | (5)               | (3)         | (2)         |
| Newborn Affected by Maternal Factors (P00-P04)                 | (2)             | (1)         | (1)         | (0)              | (0)         | (0)         | (0)               | (0)         | (0)         |
| Incompetent Cervix (P01.0)                                     | 0               | 0           | 0           | 0                | 0           | 0           | 0                 | 0           | 0           |
| Premature Rupture of Membranes (P01.1)                         | 0               | 0           | 0           | 0                | 0           | 0           | 0                 | 0           | 0           |
| Other Maternal Pregnancy Complications (P01.2-P01.9)           | 0               | 0           | 0           | 0                | 0           | 0           | 0                 | 0           | 0           |
| Complications Involving Placenta (P02.0-P02.3)                 | 1               | 1           | 0           | 0                | 0           | 0           | 0                 | 0           | 0           |
| Complications of Cord & Membranes (P02.4-P02.9)                | 0               | 0           | 0           | 0                | 0           | 0           | 0                 | 0           | 0           |
| Other (P00,P03,P04)  | 1               | 0           | 1           | 0                | 0           | 0           | 0                 | 0           | 0           |
| Short Gestation & Low Birth Weight (P07)                       | 0               | 0           | 0           | 0                | 0           | 0           | 1                 | 1           | 0           |
| Intrauterine Hypoxia & Birth Asphyxia (P20-P21)                | 1               | 1           | 0           | 1                | 0           | 1           | 1                 | 0           | 1           |
| Respiratory Distress of Newborn (P22)                          | 3               | 2           | 1           | 0                | 0           | 0           | 0                 | 0           | 0           |
| Other Respiratory Conditions (P23-P28)                         | 4               | 2           | 2           | 3                | 2           | 1           | 2                 | 2           | 0           |
| Perinatal Infections (P35-P39)                                 | 5               | 3           | 2           | 1                | 1           | 0           | 0                 | 0           | 0           |
| Neonatal Hemorrhage (P50-P52,P54)                              | 2               | 2           | 0           | 0                | 0           | 0           | 0                 | 0           | 0           |
| Necrotizing Enterocolitis of Newborn (P77)                     | 5               | 3           | 2           | 0                | 0           | 0           | 0                 | 0           | 0           |
| Hydrops Fetalis Not Due to Hemolytic Disease (P83.2)           | 0               | 0           | 0           | 0                | 0           | 0           | 0                 | 0           | 0           |
| Other(P05-P06,P08-P15,P29-P34,P53,P55-P76,P78-P83.1,P83.3-P96) | 4               | 4           | 0           | 1                | 0           | 1           | 1                 | 0           | 1           |
| <b>Congenital Malformations (Q00-Q99)</b>                      | (19)            | (10)        | (9)         | (24)             | (11)        | (13)        | (13)              | (7)         | (6)         |
| Anencephaly and Similar Malformations (Q00)                    | 0               | 0           | 0           | 0                | 0           | 0           | 0                 | 0           | 0           |
| Malformations of Heart (Q20-Q24)                               | 10              | 6           | 4           | 11               | 6           | 5           | 3                 | 2           | 1           |
| Other Malformations of Circulatory System (Q25-Q28)            | 0               | 0           | 0           | 1                | 1           | 0           | 0                 | 0           | 0           |
| Malformations of Respiratory System (Q30-Q34)                  | 2               | 0           | 2           | 0                | 0           | 0           | 0                 | 0           | 0           |
| Malformations of Genitourinary System (Q50-Q64)                | 1               | 1           | 0           | 1                | 0           | 1           | 0                 | 0           | 0           |
| Malform. of Musculoskeletal Sys. & Skin (Q65-Q85)              | 0               | 0           | 0           | 1                | 0           | 1           | 1                 | 0           | 1           |
| Down's Syndrome (Q90)  | 0               | 0           | 0           | 2                | 2           | 0           | 0                 | 0           | 0           |
| Edward's Syndrome (Q91.0-Q91.3)                                | 0               | 0           | 0           | 3                | 0           | 3           | 0                 | 0           | 0           |
| Patau's Syndrome (Q91.4-Q91.7)                                 | 0               | 0           | 0           | 1                | 0           | 1           | 0                 | 0           | 0           |
| Other (Q01-Q18,Q35-Q45,Q86-Q89)                                | 3               | 0           | 3           | 3                | 2           | 1           | 7                 | 3           | 4           |
| Other Chromosomal Abnormalities (Q92-Q99)                      | 3               | 3           | 0           | 1                | 0           | 1           | 2                 | 2           | 0           |
| <b>Sudden Infant Death Syndrome (R95)</b>                      | 5               | 4           | 1           | 47               | 24          | 23          | 8                 | 6           | 2           |
| <b>Other(C00-F99,H00-H99,K00-N99,R00-R94,R96-R99)</b>          | 1               | 0           | 1           | 10               | 7           | 3           | 6                 | 5           | 1           |
| <b>External Causes of Mortality (V01-Y89)</b>                  | (3)             | (1)         | (2)         | (16)             | (10)        | (6)         | (12)              | (8)         | (4)         |
| Unintentional Injury (Accident) (V01-X59, Y85-Y86)             | (3)             | (1)         | (2)         | (11)             | (8)         | (3)         | (10)              | (6)         | (4)         |
| Suffocation & Strangulation (W75-W77,W81-W84)                  | 2               | 0           | 2           | 8                | 6           | 2           | 3                 | 2           | 1           |
| Other (V00-W74,W78-W80,W85-X59,Y85-Y86)                        | 1               | 1           | 0           | 3                | 2           | 1           | 7                 | 4           | 3           |
| Assault (Homicide) (X85-Y09, Y87.1)                            | 0               | 0           | 0           | 1                | 0           | 1           | 0                 | 0           | 0           |
| Other (X60-X84,Y10-Y84,Y87.0,Y87.2-Y89)                        | 0               | 0           | 0           | 4                | 2           | 2           | 2                 | 2           | 0           |

<sup>1</sup>Group totals are shown in parentheses.

Total includes 1 death for which sex is unknown.



**Mortality Table F5. Selected Causes for Infant (Age < 1 Year) by County of Residence, 2001**

| County             | Total All Causes | Maternal Factors | Hypoxia & Respiratory Conditions | Other Perinatal Conditions | Congenital Malformations | Sudden Infant Death | External Causes | All Other Causes |
|--------------------|------------------|------------------|----------------------------------|----------------------------|--------------------------|---------------------|-----------------|------------------|
| <b>State Total</b> | <b>461</b>       | <b>59</b>        | <b>50</b>                        | <b>91</b>                  | <b>119</b>               | <b>60</b>           | <b>32</b>       | <b>50</b>        |
| Adams              | 4                | 1                | 0                                | 0                          | 2                        | 0                   | 0               | 1                |
| Asotin             | 1                | 0                | 0                                | 1                          | 0                        | 0                   | 0               | 0                |
| Benton             | 12               | 1                | 1                                | 4                          | 1                        | 1                   | 2               | 2                |
| Chelan             | 4                | 0                | 0                                | 0                          | 3                        | 0                   | 1               | 0                |
| Clallam            | 2                | 0                | 0                                | 1                          | 1                        | 0                   | 0               | 0                |
| Clark              | 29               | 0                | 4                                | 7                          | 10                       | 4                   | 2               | 2                |
| Columbia           | 0                | 0                | 0                                | 0                          | 0                        | 0                   | 0               | 0                |
| Cowlitz            | 10               | 1                | 0                                | 2                          | 3                        | 0                   | 1               | 3                |
| Douglas            | 1                | 0                | 0                                | 0                          | 0                        | 1                   | 0               | 0                |
| Ferry              | 0                | 0                | 0                                | 0                          | 0                        | 0                   | 0               | 0                |
| Franklin           | 9                | 4                | 1                                | 2                          | 0                        | 1                   | 1               | 0                |
| Garfield           | 0                | 0                | 0                                | 0                          | 0                        | 0                   | 0               | 0                |
| Grant              | 5                | 1                | 0                                | 0                          | 2                        | 2                   | 0               | 0                |
| Grays Harbor       | 8                | 1                | 0                                | 0                          | 2                        | 5                   | 0               | 0                |
| Island             | 6                | 1                | 0                                | 2                          | 2                        | 0                   | 0               | 1                |
| Jefferson          | 0                | 0                | 0                                | 0                          | 0                        | 0                   | 0               | 0                |
| King               | 109              | 16               | 15                               | 21                         | 25                       | 16                  | 5               | 11               |
| Kitsap             | 22               | 4                | 2                                | 4                          | 3                        | 1                   | 5               | 3                |
| Kittitas           | 1                | 0                | 0                                | 1                          | 0                        | 0                   | 0               | 0                |
| Klickitat          | 2                | 1                | 0                                | 0                          | 0                        | 1                   | 0               | 0                |
| Lewis              | 7                | 0                | 1                                | 2                          | 1                        | 0                   | 2               | 1                |
| Lincoln            | 0                | 0                | 0                                | 0                          | 0                        | 0                   | 0               | 0                |
| Mason              | 4                | 1                | 0                                | 0                          | 1                        | 0                   | 2               | 0                |
| Okanogan           | 3                | 0                | 0                                | 1                          | 0                        | 0                   | 2               | 0                |
| Pacific            | 0                | 0                | 0                                | 0                          | 0                        | 0                   | 0               | 0                |
| Pend Oreille       | 2                | 0                | 0                                | 1                          | 1                        | 0                   | 0               | 0                |
| Pierce             | 81               | 6                | 12                               | 23                         | 15                       | 9                   | 3               | 13               |
| San Juan           | 0                | 0                | 0                                | 0                          | 0                        | 0                   | 0               | 0                |
| Skagit             | 8                | 1                | 1                                | 0                          | 3                        | 1                   | 1               | 1                |
| Skamania           | 0                | 0                | 0                                | 0                          | 0                        | 0                   | 0               | 0                |
| Snohomish          | 45               | 5                | 3                                | 7                          | 15                       | 10                  | 0               | 5                |
| Spokane            | 31               | 8                | 2                                | 3                          | 12                       | 3                   | 0               | 3                |
| Stevens            | 3                | 0                | 0                                | 0                          | 3                        | 0                   | 0               | 0                |
| Thurston           | 15               | 1                | 5                                | 1                          | 4                        | 1                   | 3               | 0                |
| Wahkiakum          | 1                | 0                | 0                                | 0                          | 0                        | 0                   | 1               | 0                |
| Walla Walla        | 3                | 0                | 0                                | 2                          | 0                        | 1                   | 0               | 0                |
| Whatcom            | 9                | 3                | 0                                | 2                          | 1                        | 2                   | 1               | 0                |
| Whitman            | 2                | 0                | 0                                | 0                          | 1                        | 0                   | 0               | 1                |
| Yakima             | 22               | 3                | 3                                | 4                          | 8                        | 1                   | 0               | 3                |

Note: Source for Selected Causes is International Classification of Diseases, Tenth Revision (ICD-10):

Maternal Factors (ICD-10: P00-P04); Hypoxia, and Respiratory Conditions (ICD-10: P20-P28);

Other Perinatal Conditions (ICD-10: P05-P15, P29-P96); Congenital Malformations (ICD-10: Q00-Q99);

Sudden Infant Death Syndrome (ICD-10: R95); External Causes (ICD-10: V01-Y89)

**Mortality Table F6. Mother's Race/Ethnicity<sup>1</sup> by Infant (Age < 1 Year) by County of Residence<sup>2</sup>, 2001**

| County                        | Total      | African    |             | Native      |            | Asian    | Other      | Unk        | Hispanic <sup>3</sup> |
|-------------------------------|------------|------------|-------------|-------------|------------|----------|------------|------------|-----------------------|
|                               |            | White      | American    | American    |            |          |            |            |                       |
| <b>State Total</b>            | <b>461</b> | <b>360</b> | <b>37</b>   | <b>19</b>   | <b>25</b>  | <b>0</b> | <b>20</b>  | <b>57</b>  |                       |
| <b>State Rate<sup>4</sup></b> | <b>5.8</b> | <b>5.5</b> | <b>11.6</b> | <b>10.5</b> | <b>3.8</b> | <b>*</b> | <b>n/a</b> | <b>4.7</b> |                       |
| Adams                         | 4          | 4          | 0           | 0           | 0          | 0        | 0          | 4          |                       |
| Asotin                        | 1          | 1          | 0           | 0           | 0          | 0        | 0          | 0          |                       |
| Benton                        | 12         | 12         | 0           | 0           | 0          | 0        | 0          | 5          |                       |
| Chelan                        | 4          | 3          | 0           | 0           | 0          | 0        | 1          | 2          |                       |
| Clallam                       | 2          | 1          | 0           | 1           | 0          | 0        | 0          | 0          |                       |
| Clark                         | 29         | 26         | 0           | 0           | 2          | 0        | 1          | 3          |                       |
| Columbia                      | 0          | 0          | 0           | 0           | 0          | 0        | 0          | 0          |                       |
| Cowlitz                       | 10         | 9          | 1           | 0           | 0          | 0        | 0          | 1          |                       |
| Douglas                       | 1          | 1          | 0           | 0           | 0          | 0        | 0          | 0          |                       |
| Ferry                         | 0          | 0          | 0           | 0           | 0          | 0        | 0          | 0          |                       |
| Franklin                      | 9          | 6          | 1           | 1           | 0          | 0        | 1          | 1          |                       |
| Garfield                      | 0          | 0          | 0           | 0           | 0          | 0        | 0          | 0          |                       |
| Grant                         | 5          | 4          | 0           | 1           | 0          | 0        | 0          | 2          |                       |
| Grays Harbor                  | 8          | 7          | 0           | 1           | 0          | 0        | 0          | 0          |                       |
| Island                        | 6          | 5          | 1           | 0           | 0          | 0        | 0          | 2          |                       |
| Jefferson                     | 0          | 0          | 0           | 0           | 0          | 0        | 0          | 0          |                       |
| King                          | 109        | 70         | 17          | 3           | 13         | 0        | 6          | 11         |                       |
| Kitsap                        | 22         | 20         | 0           | 1           | 0          | 0        | 1          | 1          |                       |
| Kittitas                      | 1          | 0          | 0           | 0           | 1          | 0        | 0          | 0          |                       |
| Klickitat                     | 2          | 2          | 0           | 0           | 0          | 0        | 0          | 0          |                       |
| Lewis                         | 7          | 7          | 0           | 0           | 0          | 0        | 0          | 0          |                       |
| Lincoln                       | 0          | 0          | 0           | 0           | 0          | 0        | 0          | 0          |                       |
| Mason                         | 4          | 4          | 0           | 0           | 0          | 0        | 0          | 0          |                       |
| Okanogan                      | 3          | 1          | 0           | 1           | 0          | 0        | 1          | 0          |                       |
| Pacific                       | 0          | 0          | 0           | 0           | 0          | 0        | 0          | 0          |                       |
| Pend Oreille                  | 2          | 2          | 0           | 0           | 0          | 0        | 0          | 0          |                       |
| Pierce                        | 81         | 58         | 15          | 3           | 2          | 0        | 3          | 5          |                       |
| San Juan                      | 0          | 0          | 0           | 0           | 0          | 0        | 0          | 0          |                       |
| Skagit                        | 8          | 8          | 0           | 0           | 0          | 0        | 0          | 3          |                       |
| Skamania                      | 0          | 0          | 0           | 0           | 0          | 0        | 0          | 0          |                       |
| Snohomish                     | 45         | 36         | 0           | 3           | 5          | 0        | 1          | 3          |                       |
| Spokane                       | 31         | 25         | 2           | 0           | 2          | 0        | 2          | 0          |                       |
| Stevens                       | 3          | 3          | 0           | 0           | 0          | 0        | 0          | 0          |                       |
| Thurston                      | 15         | 13         | 0           | 1           | 0          | 0        | 1          | 0          |                       |
| Wahkiakum                     | 1          | 1          | 0           | 0           | 0          | 0        | 0          | 0          |                       |
| Walla Walla                   | 3          | 3          | 0           | 0           | 0          | 0        | 0          | 2          |                       |
| Whatcom                       | 9          | 7          | 0           | 1           | 0          | 0        | 1          | 0          |                       |
| Whitman                       | 2          | 2          | 0           | 0           | 0          | 0        | 0          | 0          |                       |
| Yakima                        | 22         | 19         | 0           | 2           | 0          | 0        | 1          | 12         |                       |

<sup>1</sup>Infant deaths are matched with births to find mother's race/ethnicity.

<sup>2</sup>Residence is the infant's at the time of death.

<sup>3</sup>Persons of Hispanic Origin may be of any race. See Appendix A, "Hispanic Origin."

<sup>4</sup>Rate per 1,000 live births.

\*Rate not calculated because number of deaths was less than 5.

**Mortality Table F7. Mother's Age Group<sup>1</sup> by Infant (Age < 1 Year) by Place of Residence<sup>2</sup>, 2001**

| County                        | All Ages   | Under 15 | 15-17       | 18-19      | 20-24      | 25-29      | 30-34      | 35-39      | 40-44      | 45 and Over | Age Unk    |
|-------------------------------|------------|----------|-------------|------------|------------|------------|------------|------------|------------|-------------|------------|
| <b>State Total</b>            | <b>461</b> | <b>5</b> | <b>25</b>   | <b>51</b>  | <b>128</b> | <b>89</b>  | <b>87</b>  | <b>54</b>  | <b>18</b>  | <b>0</b>    | <b>4</b>   |
| <b>State Rate<sup>3</sup></b> | <b>5.8</b> | <b>*</b> | <b>11.1</b> | <b>9.7</b> | <b>6.5</b> | <b>4.2</b> | <b>4.5</b> | <b>5.7</b> | <b>8.9</b> | <b>*</b>    | <b>n/a</b> |
| Adams                         | 4          | 0        | 1           | 0          | 1          | 1          | 1          | 0          | 0          | 0           | 0          |
| Asotin                        | 1          | 0        | 0           | 0          | 0          | 1          | 0          | 0          | 0          | 0           | 0          |
| Benton                        | 12         | 0        | 0           | 1          | 5          | 3          | 2          | 0          | 1          | 0           | 0          |
| Chelan                        | 4          | 0        | 1           | 0          | 1          | 0          | 2          | 0          | 0          | 0           | 0          |
| Clallam                       | 2          | 0        | 1           | 0          | 0          | 0          | 1          | 0          | 0          | 0           | 0          |
| Clark                         | 29         | 0        | 1           | 8          | 6          | 3          | 6          | 2          | 3          | 0           | 0          |
| Columbia                      | 0          | 0        | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          |
| Cowlitz                       | 10         | 0        | 1           | 0          | 4          | 3          | 2          | 0          | 0          | 0           | 0          |
| Douglas                       | 1          | 0        | 0           | 1          | 0          | 0          | 0          | 0          | 0          | 0           | 0          |
| Ferry                         | 0          | 0        | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          |
| Franklin                      | 9          | 0        | 1           | 0          | 5          | 2          | 0          | 1          | 0          | 0           | 0          |
| Garfield                      | 0          | 0        | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          |
| Grant                         | 5          | 0        | 0           | 2          | 0          | 2          | 1          | 0          | 0          | 0           | 0          |
| Grays Harbor                  | 8          | 0        | 0           | 1          | 2          | 0          | 1          | 4          | 0          | 0           | 0          |
| Island                        | 6          | 0        | 0           | 1          | 1          | 0          | 3          | 1          | 0          | 0           | 0          |
| Jefferson                     | 0          | 0        | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          |
| King                          | 109        | 0        | 6           | 13         | 23         | 19         | 27         | 15         | 6          | 0           | 0          |
| Kitsap                        | 22         | 0        | 2           | 1          | 7          | 3          | 7          | 2          | 0          | 0           | 0          |
| Kittitas                      | 1          | 0        | 0           | 0          | 0          | 1          | 0          | 0          | 0          | 0           | 0          |
| Klickitat                     | 2          | 0        | 0           | 1          | 1          | 0          | 0          | 0          | 0          | 0           | 0          |
| Lewis                         | 7          | 0        | 1           | 0          | 2          | 0          | 4          | 0          | 0          | 0           | 0          |
| Lincoln                       | 0          | 0        | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          |
| Mason                         | 4          | 0        | 0           | 1          | 2          | 0          | 1          | 0          | 0          | 0           | 0          |
| Okanogan                      | 3          | 0        | 0           | 0          | 1          | 2          | 0          | 0          | 0          | 0           | 0          |
| Pacific                       | 0          | 0        | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          |
| Pend Oreille                  | 2          | 0        | 0           | 1          | 0          | 0          | 1          | 0          | 0          | 0           | 0          |
| Pierce                        | 81         | 2        | 2           | 6          | 25         | 18         | 13         | 11         | 1          | 0           | 3          |
| San Juan                      | 0          | 0        | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          |
| Skagit                        | 8          | 0        | 1           | 0          | 3          | 3          | 0          | 1          | 0          | 0           | 0          |
| Skamania                      | 0          | 0        | 0           | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0          |
| Snohomish                     | 45         | 0        | 1           | 5          | 8          | 12         | 8          | 8          | 3          | 0           | 0          |
| Spokane                       | 31         | 0        | 4           | 3          | 13         | 3          | 4          | 1          | 2          | 0           | 1          |
| Stevens                       | 3          | 0        | 0           | 0          | 0          | 1          | 0          | 2          | 0          | 0           | 0          |
| Thurston                      | 15         | 0        | 0           | 1          | 6          | 4          | 1          | 3          | 0          | 0           | 0          |
| Wahkiakum                     | 1          | 0        | 0           | 0          | 1          | 0          | 0          | 0          | 0          | 0           | 0          |
| Walla Walla                   | 3          | 0        | 1           | 0          | 0          | 0          | 2          | 0          | 0          | 0           | 0          |
| Whatcom                       | 9          | 0        | 0           | 2          | 2          | 3          | 0          | 1          | 1          | 0           | 0          |
| Whitman                       | 2          | 0        | 0           | 1          | 0          | 1          | 0          | 0          | 0          | 0           | 0          |
| Yakima                        | 22         | 3        | 1           | 2          | 9          | 4          | 0          | 2          | 1          | 0           | 0          |

<sup>1</sup>Infant deaths are matched with births to find mother's age.

<sup>2</sup>Residence is the infant's at the time of death.

<sup>3</sup>Rate per 1,000 live births.

\*Rate not calculated because number of deaths was less than 5.

**Mortality Table F8. Fetal Deaths, Perinatal, Neonatal, and Infant Mortality by County/City of Residence, 2001**

| County and City    | Fetal Deaths |                    | Perinatal Mortality |                   | Neonatal Mortality |                   | Infant Mortality |                   |
|--------------------|--------------|--------------------|---------------------|-------------------|--------------------|-------------------|------------------|-------------------|
|                    | Number       | Ratio <sup>1</sup> | Number              | Rate <sup>2</sup> | Number             | Rate <sup>3</sup> | Number           | Rate <sup>4</sup> |
| <b>State Total</b> | <b>418</b>   | <b>5.3</b>         | <b>652</b>          | <b>8.2</b>        | <b>292</b>         | <b>3.7</b>        | <b>461</b>       | <b>5.8</b>        |
| Adams              | 0            | *                  | 1                   | *                 | 3                  | *                 | 4                | *                 |
| Asotin             | 0            | *                  | 1                   | *                 | 1                  | *                 | 1                | *                 |
| Benton             | 7            | 3.2                | 13                  | 5.9               | 7                  | 3.2               | 12               | 5.4               |
| Kennewick          | 2            | *                  | 4                   | *                 | 2                  | *                 | 4                | *                 |
| Richland           | 2            | *                  | 5                   | 9.4               | 3                  | *                 | 4                | *                 |
| Chelan             | 10           | 10.3               | 13                  | 13.3              | 3                  | *                 | 4                | *                 |
| Wenatchee          | 6            | 12.5               | 7                   | 14.4              | 1                  | *                 | 2                | *                 |
| Clallam            | 4            | *                  | 4                   | *                 | 0                  | *                 | 2                | *                 |
| Port Angeles       | 0            | *                  | 0                   | *                 | 0                  | *                 | 0                | *                 |
| Clark              | 23           | 4.3                | 40                  | 7.5               | 19                 | 3.6               | 29               | 5.4               |
| Vancouver          | 17           | 4.8                | 29                  | 8.2               | 13                 | 3.7               | 19               | 5.4               |
| Columbia           | 0            | *                  | 0                   | *                 | 0                  | *                 | 0                | *                 |
| Cowlitz            | 7            | 5.7                | 11                  | 8.9               | 5                  | 4.1               | 10               | 8.1               |
| Longview           | 0            | *                  | 1                   | *                 | 2                  | *                 | 2                | *                 |
| Douglas            | 0            | *                  | 0                   | *                 | 0                  | *                 | 1                | *                 |
| Ferry              | 0            | *                  | 0                   | *                 | 0                  | *                 | 0                | *                 |
| Franklin           | 1            | *                  | 8                   | 7.0               | 7                  | 6.1               | 9                | 7.8               |
| Pasco              | 0            | *                  | 4                   | *                 | 4                  | *                 | 6                | 6.6               |
| Garfield           | 0            | *                  | 0                   | *                 | 0                  | *                 | 0                | *                 |
| Grant              | 7            | 5.3                | 10                  | 7.6               | 3                  | *                 | 5                | 3.8               |
| Moses Lake         | 0            | *                  | 1                   | *                 | 1                  | *                 | 1                | *                 |
| Grays Harbor       | 5            | 6.5                | 7                   | 9.1               | 2                  | *                 | 8                | 10.4              |
| Aberdeen           | 3            | *                  | 4                   | *                 | 1                  | *                 | 3                | *                 |
| Island             | 3            | *                  | 6                   | 6.7               | 3                  | *                 | 6                | 6.7               |
| Oak Harbor         | 1            | *                  | 1                   | *                 | 0                  | *                 | 1                | *                 |
| Jefferson          | 1            | *                  | 1                   | *                 | 0                  | *                 | 0                | *                 |
| King               | 116          | 5.3                | 170                 | 7.8               | 74                 | 3.4               | 109              | 5.0               |
| Auburn             | 4            | *                  | 8                   | 8.8               | 5                  | 5.5               | 8                | 8.8               |
| Bellevue           | 3            | *                  | 5                   | 3.7               | 2                  | *                 | 3                | *                 |
| Bothell part       | 2            | *                  | 3                   | *                 | 1                  | *                 | 4                | *                 |
| Burien             | 4            | *                  | 4                   | *                 | 0                  | *                 | 0                | *                 |
| Des Moines         | 3            | *                  | 4                   | *                 | 1                  | *                 | 1                | *                 |
| Federal Way        | 8            | 6.5                | 11                  | 8.9               | 3                  | *                 | 4                | *                 |
| Kenmore            | 0            | *                  | 0                   | *                 | 1                  | *                 | 1                | *                 |
| Kent               | 12           | 7.6                | 18                  | 11.3              | 8                  | 5.1               | 10               | 6.4               |
| Kirkland           | 1            | *                  | 5                   | 6.3               | 4                  | *                 | 4                | *                 |
| Mercer Island      | 0            | *                  | 0                   | *                 | 0                  | *                 | 0                | *                 |
| Redmond            | 4            | *                  | 4                   | *                 | 0                  | *                 | 1                | *                 |
| Renton             | 4            | *                  | 6                   | 4.8               | 3                  | *                 | 5                | 4.0               |
| Sammamish          | 3            | *                  | 3                   | *                 | 1                  | *                 | 2                | *                 |
| SeaTac             | 2            | *                  | 5                   | 17.8              | 3                  | *                 | 4                | *                 |
| Seattle            | 43           | 6.1                | 60                  | 8.4               | 25                 | 3.5               | 38               | 5.4               |
| Shoreline          | 0            | *                  | 1                   | *                 | 3                  | *                 | 3                | *                 |
| Tukwila            | 1            | *                  | 2                   | *                 | 1                  | *                 | 1                | *                 |
| Kitsap             | 19           | 6.4                | 33                  | 11.1              | 15                 | 5.1               | 22               | 7.5               |
| Bainbridge Island  | 0            | *                  | 0                   | *                 | 0                  | *                 | 0                | *                 |
| Bremerton          | 4            | *                  | 7                   | 7.3               | 3                  | *                 | 6                | 6.3               |

**Mortality Table F8. (Continued) Fetal Deaths, Perinatal, Neonatal, and Infant Mortality by County/City of Residence, 2001**

| County and City    | Fetal Deaths |                    | Perinatal Mortality |                   | Neonatal Mortality |                   | Infant Mortality |                   |
|--------------------|--------------|--------------------|---------------------|-------------------|--------------------|-------------------|------------------|-------------------|
|                    | Number       | Ratio <sup>1</sup> | Number              | Rate <sup>2</sup> | Number             | Rate <sup>3</sup> | Number           | Rate <sup>4</sup> |
| Kittitas           | 2            | *                  | 3                   | *                 | 1                  | *                 | 1                | *                 |
| Ellensburg         | 1            | *                  | 1                   | *                 | 0                  | *                 | 0                | *                 |
| Klickitat          | 0            | *                  | 1                   | *                 | 1                  | *                 | 2                | *                 |
| Lewis              | 3            | *                  | 6                   | 7.0               | 4                  | *                 | 7                | 8.2               |
| Lincoln            | 0            | *                  | 0                   | *                 | 0                  | *                 | 0                | *                 |
| Mason              | 6            | 11.0               | 7                   | 12.8              | 2                  | *                 | 4                | *                 |
| Okanogan           | 3            | *                  | 3                   | *                 | 1                  | *                 | 3                | *                 |
| Pacific            | 0            | *                  | 0                   | *                 | 0                  | *                 | 0                | *                 |
| Pend Oreille       | 2            | *                  | 4                   | *                 | 2                  | *                 | 2                | *                 |
| Pierce             | 60           | 6.0                | 103                 | 10.2              | 53                 | 5.3               | 81               | 8.1               |
| Lakewood           | 3            | *                  | 7                   | 7.1               | 5                  | 5.1               | 9                | 9.2               |
| Puyallup           | 4            | *                  | 5                   | 5.7               | 1                  | *                 | 1                | *                 |
| Tacoma             | 24           | 6.3                | 38                  | 9.9               | 20                 | 5.2               | 33               | 8.6               |
| University Place   | 0            | *                  | 2                   | *                 | 3                  | *                 | 3                | *                 |
| San Juan           | 0            | *                  | 0                   | *                 | 0                  | *                 | 0                | *                 |
| Skagit             | 9            | 6.5                | 12                  | 8.6               | 3                  | *                 | 8                | 5.8               |
| Mount Vernon       | 3            | *                  | 3                   | *                 | 0                  | *                 | 4                | *                 |
| Skamania           | 0            | *                  | 0                   | *                 | 0                  | *                 | 0                | *                 |
| Snohomish          | 54           | 6.2                | 75                  | 8.6               | 25                 | 2.9               | 45               | 5.2               |
| Edmonds            | 7            | 16.2               | 8                   | 18.2              | 2                  | *                 | 3                | *                 |
| Everett            | 15           | 7.0                | 18                  | 8.3               | 3                  | *                 | 11               | 5.1               |
| Lynnwood           | 8            | 8.5                | 10                  | 10.6              | 2                  | *                 | 2                | *                 |
| Marysville         | 7            | 11.5               | 10                  | 16.2              | 4                  | *                 | 4                | *                 |
| Mountlake Terrace  | 1            | *                  | 3                   | *                 | 3                  | *                 | 5                | 18.8              |
| Mukilteo           | 2            | *                  | 2                   | *                 | 0                  | *                 | 0                | *                 |
| Spokane            | 34           | 6.3                | 50                  | 9.2               | 20                 | 3.7               | 31               | 5.7               |
| Spokane (city)     | 25           | 7.8                | 37                  | 11.5              | 13                 | 4.1               | 18               | 5.6               |
| Stevens            | 1            | *                  | 3                   | *                 | 2                  | *                 | 3                | *                 |
| Thurston           | 13           | 5.0                | 19                  | 7.3               | 9                  | 3.5               | 15               | 5.8               |
| Lacey              | 2            | *                  | 2                   | *                 | 0                  | *                 | 0                | *                 |
| Olympia            | 5            | 5.3                | 8                   | 8.4               | 4                  | *                 | 6                | 6.3               |
| Wahkiakum          | 0            | *                  | 0                   | *                 | 0                  | *                 | 1                | *                 |
| Walla Walla        | 5            | 7.0                | 7                   | 9.7               | 2                  | *                 | 3                | *                 |
| Walla Walla (city) | 3            | *                  | 5                   | 10.6              | 2                  | *                 | 3                | *                 |
| Whatcom            | 7            | 3.6                | 11                  | 5.6               | 6                  | 3.1               | 9                | 4.6               |
| Bellingham         | 3            | *                  | 4                   | *                 | 1                  | *                 | 2                | *                 |
| Whitman            | 1            | *                  | 2                   | *                 | 1                  | *                 | 2                | *                 |
| Pullman            | 1            | *                  | 2                   | *                 | 1                  | *                 | 1                | *                 |
| Yakima             | 15           | 3.6                | 28                  | 6.7               | 18                 | 4.3               | 22               | 5.3               |
| Yakima (city)      | 5            | 3.1                | 10                  | 6.2               | 6                  | 3.7               | 7                | 4.3               |

<sup>1</sup>Fetal death ratio = fetal deaths per 1,000 live births.

<sup>2</sup>Perinatal mortality rate = fetal deaths plus deaths to infants within first 6 days of life per 1,000 live births plus fetal deaths.

<sup>3</sup>Neonatal mortality rate = deaths to infants within first 27 days of life per 1,000 live births.

<sup>4</sup>Infant mortality rate = deaths to infants under one year of age per 1,000 live births.

\*Rate or ratio not calculated because number of deaths was less than 5.

## G. Fetal Death

Fetal death data includes cases where the fetus shows no sign of life at delivery. Fetal death has also been called 'stillbirth.' Only fetal deaths of 20 or more weeks' gestation are required to be reported to the state. Thus, data for early fetal losses are not included in this report. Fetal deaths complete the picture: together with births and early infant deaths they are used to describe the perinatal period (i.e., the period surrounding the delivery).

**Mortality Table G1. Selected Causes of Fetal Deaths for Residents, 1992-2001**

| Year | Total All Causes |                    | Fetus Affected by Maternal Complications of Pregnancy |                    | Complications of Placenta, Cord, & Membrane |                    | Other Perinatal Conditions |                    | Congenital Anomalies |                    |
|------|------------------|--------------------|---|--------------------|---|--------------------|----------------------------|--------------------|----------------------|--------------------|
|      | Number           | Ratio <sup>1</sup> | Number  | Ratio <sup>1</sup> | Number                                      | Ratio <sup>1</sup> | Number                     | Ratio <sup>1</sup> | Number               | Ratio <sup>1</sup> |
| 1992 | 448              | 5.6                | 46  | 0.6                | 141   | 1.8                | 210                        | 2.6                | 46                   | 0.6                |
| 1993 | 396              | 5.0                | 33  | 0.4                | 147   | 1.9                | 170                        | 2.2                | 41                   | 0.5                |
| 1994 | 443              | 5.7                | 41  | 0.5                | 156   | 2.0                | 176                        | 2.3                | 66                   | 0.9                |
| 1995 | 419              | 5.4                | 44  | 0.6                | 145   | 1.9                | 171                        | 2.2                | 59                   | 0.8                |
| 1996 | 462              | 5.9                | 51  | 0.7                | 142   | 1.8                | 208                        | 2.7                | 58                   | 0.7                |
| 1997 | 457              | 5.8                | 43  | 0.6                | 144   | 1.8                | 186                        | 2.4                | 80                   | 1.0                |
| 1998 | 471              | 5.9                | 57  | 0.7                | 148   | 1.9                | 209                        | 2.6                | 55                   | 0.7                |
| 1999 | 468              | 5.9                | 52  | 0.7                | 125   | 1.6                | 213                        | 2.7                | 77                   | 1.0                |
| 2000 | 437              | 5.4                | 53  | 0.7                | 141   | 1.7                | 191                        | 2.4                | 51                   | 0.6                |
| 2001 | 418              | 5.3                | 52  | 0.7                | 116   | 1.5                | 185                        | 2.3                | 62                   | 0.8                |

<sup>1</sup>Ratio per 1,000 live births.

Note:

Causes of death were coded with ICD-9 in 1990-1998 and with ICD-10 during 1999-2000. Comparability ratios to adjust for the change in classification are not available for fetal death causes. ICD codes are:

Maternal Complications of Pregnancy: ICD-9: 761; ICD-10: P01

Complications of Placenta, Cord, & Membranes: ICD-9: 762; ICD-10: P02

Other Perinatal Conditions: ICD-9: 760,763-771.2,771.4-779; ICD-10: P00,P03-P96

Congenital Anomalies: ICD-9: 740-759; ICD-10: Q00-Q99

Fetal death ratios have fluctuated overtime. The most recent ratio (2001) is one of the lowest in the past decade. Data for future years will show if this is just another fluctuation or part of a downward trend. Trends in cause-specific fetal death ratios generally parallel the all-cause trend.

**Mortality Table G2. Fetal Deaths by Mother's Age Group by Place of Residence, 2001**

| County                         | All Ages   | Under 15 | 15-17      | 18-19      | 20-24      | 25-29      | 30-34      | 35-39      | 40-44       | 45 and Over | Unk        |
|--------------------------------|------------|----------|------------|------------|------------|------------|------------|------------|-------------|-------------|------------|
| <b>State Total</b>             | <b>418</b> | <b>1</b> | <b>17</b>  | <b>28</b>  | <b>104</b> | <b>90</b>  | <b>94</b>  | <b>51</b>  | <b>26</b>   | <b>4</b>    | <b>3</b>   |
| <b>State Ratio<sup>1</sup></b> | <b>5.3</b> | <b>*</b> | <b>7.6</b> | <b>5.3</b> | <b>5.2</b> | <b>4.2</b> | <b>4.9</b> | <b>5.4</b> | <b>12.8</b> | <b>*</b>    | <b>n/a</b> |
| Adams                          | 0          | 0        | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0          |
| Asotin                         | 0          | 0        | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0          |
| Benton                         | 7          | 0        | 0          | 0          | 1          | 1          | 4          | 1          | 0           | 0           | 0          |
| Chelan                         | 10         | 0        | 1          | 0          | 2          | 2          | 4          | 1          | 0           | 0           | 0          |
| Clallam                        | 4          | 0        | 0          | 0          | 0          | 1          | 1          | 1          | 1           | 0           | 0          |
| Clark                          | 23         | 0        | 0          | 2          | 9          | 4          | 5          | 1          | 2           | 0           | 0          |
| Columbia                       | 0          | 0        | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0          |
| Cowlitz                        | 7          | 0        | 0          | 0          | 0          | 2          | 1          | 2          | 2           | 0           | 0          |
| Douglas                        | 0          | 0        | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0          |
| Ferry                          | 0          | 0        | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0          |
| Franklin                       | 1          | 0        | 0          | 1          | 0          | 0          | 0          | 0          | 0           | 0           | 0          |
| Garfield                       | 0          | 0        | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0          |
| Grant                          | 7          | 0        | 1          | 1          | 1          | 2          | 2          | 0          | 0           | 0           | 0          |
| Grays Harbor                   | 5          | 0        | 0          | 1          | 1          | 1          | 2          | 0          | 0           | 0           | 0          |
| Island                         | 3          | 0        | 0          | 0          | 1          | 0          | 2          | 0          | 0           | 0           | 0          |
| Jefferson                      | 1          | 0        | 0          | 0          | 0          | 0          | 0          | 0          | 1           | 0           | 0          |
| King                           | 116        | 0        | 2          | 5          | 23         | 30         | 31         | 15         | 9           | 0           | 1          |
| Kitsap                         | 19         | 0        | 1          | 2          | 4          | 3          | 7          | 1          | 1           | 0           | 0          |
| Kittitas                       | 2          | 0        | 0          | 0          | 1          | 1          | 0          | 0          | 0           | 0           | 0          |
| Klickitat                      | 0          | 0        | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0          |
| Lewis                          | 3          | 0        | 1          | 1          | 0          | 0          | 0          | 0          | 0           | 1           | 0          |
| Lincoln                        | 0          | 0        | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0          |
| Mason                          | 6          | 0        | 0          | 0          | 2          | 2          | 0          | 0          | 0           | 2           | 0          |
| Okanogan                       | 3          | 0        | 0          | 0          | 2          | 0          | 0          | 0          | 0           | 1           | 0          |
| Pacific                        | 0          | 0        | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0          |
| Pend Oreille                   | 2          | 0        | 0          | 0          | 2          | 0          | 0          | 0          | 0           | 0           | 0          |
| Pierce                         | 60         | 1        | 2          | 6          | 21         | 11         | 9          | 7          | 2           | 0           | 1          |
| San Juan                       | 0          | 0        | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0          |
| Skagit                         | 9          | 0        | 1          | 1          | 4          | 0          | 3          | 0          | 0           | 0           | 0          |
| Skamania                       | 0          | 0        | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0          |
| Snohomish                      | 54         | 0        | 1          | 2          | 14         | 16         | 5          | 10         | 5           | 0           | 1          |
| Spokane                        | 34         | 0        | 1          | 2          | 9          | 6          | 8          | 7          | 1           | 0           | 0          |
| Stevens                        | 1          | 0        | 0          | 0          | 1          | 0          | 0          | 0          | 0           | 0           | 0          |
| Thurston                       | 13         | 0        | 0          | 2          | 2          | 4          | 3          | 1          | 1           | 0           | 0          |
| Wahkiakum                      | 0          | 0        | 0          | 0          | 0          | 0          | 0          | 0          | 0           | 0           | 0          |
| Walla Walla                    | 5          | 0        | 2          | 0          | 0          | 2          | 0          | 1          | 0           | 0           | 0          |
| Whatcom                        | 7          | 0        | 2          | 0          | 0          | 0          | 4          | 1          | 0           | 0           | 0          |
| Whitman                        | 1          | 0        | 0          | 0          | 0          | 0          | 1          | 0          | 0           | 0           | 0          |
| Yakima                         | 15         | 0        | 2          | 2          | 4          | 2          | 2          | 2          | 1           | 0           | 0          |

<sup>1</sup>Ratio of fetal deaths per 1,000 live births.

\* Ratio not calculated because number of deaths was less than 5.

### Mortality Table G3. Fetal Deaths for Residents by Cause, 2001

| Cause with ICD-10 Code  | Number     |
|---|------------|
| <b>All causes<sup>1</sup></b>   | <b>418</b> |
| <b>Perinatal conditions (P00-P96)</b>                                     | <b>353</b> |
| Fetus Affected by Maternal Conditions (P00) <sup>2</sup>                  | (25)       |
| Maternal Hypertensive Disorders (P00.0)                                   | 17         |
| Maternal Injury (P00.5)   | 4          |
| Other Maternal Conditions (P00.1-P00.4,P00.6-P00.9)                       | 4          |
| Fetus Affected by Maternal Complications of Pregnancy (P01)               | (52)       |
| Incompetent Cervix (P01.0)  | 11         |
| Premature Rupture of Membranes (P01.1)                                    | 30         |
| Multiple Pregnancy (P01.5)  | 6          |
| Other (P01.2-P01.4,P01.6-P01.9)   | 5          |
| Fetus Affected by Complications of Placenta, Cord & Membrane (P02)        | (116)      |
| Other Forms of Placental Separation & Hemorrhage (P02.1)                  | 24         |
| Other Morphological & Functional Abnormalities of Placenta (P02.2)        | 7          |
| Placental Transfusion Syndrome (P02.3)                                    | 8          |
| Other Compression of Umbilical Cord (P02.5)                               | 34         |
| Other & Unspecified Conditions of Umbilical Cord (P02.6)                  | 29         |
| Chorioamnionitis (P02.7)  | 12         |
| Other (P02.0,P02.4,P02.8-P02.9)   | 2          |
| Fetus Affected by Complications of Labor & Delivery (P03)                 | 2          |
| Fetus Affected by Noxious Influences Via Placenta (P04)                   | 5          |
| Slow Fetal Growth & Fetal Malnutrition (P05)                              | 2          |
| Disorders Related to Short Gestation, Low Birth Weight (P07)              | 28         |
| Disorders Related to Long Gestation & High Birth Weight (P08)             | 0          |
| Birth Trauma (P10-P15)  | 4          |
| Intrauterine Hypoxia and Birth Asphyxia (P20-P21)                         | 3          |
| Fetal Hemorrhage (P50-P54)  | 2          |
| Hydrops Fetalis Due to Hemolytic Disease (P56)                            | 0          |
| Transitory Endocrine & Metabolic Disorders (P70-P74)                      | 4          |
| Fetal Death of Unspecified Cause (P95)                                    | 93         |
| All other (P22-P26,P28,P30-P49,P55,P57-P69,P75-P94,P96)                   | 17         |
| <b>Congenital Malformations &amp; Chromosomal Abnormalities (Q00-Q99)</b> | <b>62</b>  |
| Congenital Malformations of Nervous System (Q00-Q07)                      | (9)        |
| Anencephaly & Similar Malformations (Q00)                                 | 5          |
| Other (Q01-Q07)   | 4          |
| Congenital Malformations of Heart (Q20-Q24)                               | 3          |
| Congenital Malformations of Urinary System (Q60-Q64)                      | 4          |
| Congenital Malformations Musculoskeletal & Integument (Q65-Q85)           | 4          |
| Chromosomal Abnormalities Not Elsewhere Classified, (Q90-Q99)             | (20)       |
| Down's Syndrome (Q90)   | 9          |
| Edward's Syndrome (Q91.0-Q91.3)   | 1          |
| Other (Q91.4-Q99)   | 10         |
| Other (Q08-Q18,Q25-Q56,Q86-Q89)   | 22         |
| <b>All Other Causes (A00-O00,R00-R99,V01-V84)</b>                         | <b>3</b>   |

<sup>1</sup>Group totals are shown in bold.

<sup>2</sup>Sub-group totals are shown in parentheses.



**Mortality Table G4. Fetal Deaths by Weight and Sex for Residents, 2001**

| <b>Weight in Grams</b> | <b>Total</b> | <b>Male</b> | <b>Female</b> | <b>Unknown</b> |
|------------------------|--------------|-------------|---------------|----------------|
| <b>State Totals</b>    | <b>418</b>   | <b>217</b>  | <b>195</b>    | <b>6</b>       |
| Under 250              | 27           | 13          | 12            | 2              |
| 250 - 499              | 94           | 56          | 38            | 0              |
| 500 - 749              | 61           | 31          | 30            | 0              |
| 750 - 999              | 13           | 5           | 8             | 0              |
| 1,000 - 1,499          | 31           | 19          | 12            | 0              |
| 1,500 - 1,999          | 19           | 9           | 10            | 0              |
| 2,000 - 2,499          | 19           | 11          | 8             | 0              |
| 2,500 - 2,999          | 40           | 18          | 22            | 0              |
| 3,000 - 3,499          | 17           | 11          | 6             | 0              |
| 3,500 - 3,999          | 14           | 5           | 9             | 0              |
| 4,000 - 4,499          | 1            | 0           | 1             | 0              |
| 4,500 and over         | 2            | 0           | 2             | 0              |
| Unknown                | 80           | 39          | 37            | 4              |



# Marriage



# Marriage

**Marriage Table 1. Marriages by County of Occurrence and County of Residence<sup>1</sup>, 2001**

| County             | Occurrence    |                      | Wife's Residence |                   | Husband's Residence |                   |
|--------------------|---------------|----------------------|------------------|-------------------|---------------------|-------------------|
|                    | Number        | Rate <sup>2, 3</sup> | Number           | Rate <sup>2</sup> | Number              | Rate <sup>2</sup> |
| <b>State Total</b> | <b>41,644</b> | <b>7.0</b>           | <b>38,527</b>    | <b>6.4</b>        | <b>38,082</b>       | <b>6.4</b>        |
| Adams              | 154           | 9.3                  | 124              | 7.5               | 124                 | 7.5               |
| Asotin             | 81            | 3.9                  | 47               | 2.3               | 42                  | 2.0               |
| Benton             | 968           | 6.7                  | 940              | 6.5               | 889                 | 6.1               |
| Chelan             | 768           | 11.4                 | 395              | 5.9               | 379                 | 5.6               |
| Clallam            | 411           | 6.3                  | 380              | 5.9               | 379                 | 5.8               |
| Clark              | 2,555         | 7.2                  | 2,088            | 5.9               | 2,049               | 5.8               |
| Columbia           | 19            | 4.6                  | 16               | 3.9               | 17                  | 4.1               |
| Cowlitz            | 688           | 7.3                  | 635              | 6.8               | 625                 | 6.7               |
| Douglas            | 114           | 3.5                  | 194              | 5.9               | 192                 | 5.9               |
| Ferry              | 39            | 5.3                  | 28               | 3.8               | 25                  | 3.4               |
| Franklin           | 519           | 10.3                 | 392              | 7.8               | 401                 | 8.0               |
| Garfield           | 14            | 5.8                  | 12               | 5.0               | 10                  | 4.2               |
| Grant              | 458           | 6.0                  | 480              | 6.3               | 475                 | 6.3               |
| Grays Harbor       | 553           | 8.1                  | 450              | 6.6               | 426                 | 6.2               |
| Island             | 571           | 7.9                  | 460              | 6.4               | 506                 | 7.0               |
| Jefferson          | 296           | 11.3                 | 163              | 6.2               | 170                 | 6.5               |
| King               | 11,996        | 6.8                  | 11,609           | 6.6               | 11,478              | 6.5               |
| Kitsap             | 1,729         | 7.4                  | 1,593            | 6.8               | 1,582               | 6.8               |
| Kittitas           | 227           | 6.7                  | 245              | 7.2               | 245                 | 7.2               |
| Klickitat          | 137           | 7.1                  | 109              | 5.6               | 106                 | 5.5               |
| Lewis              | 538           | 7.7                  | 484              | 7.0               | 468                 | 6.7               |
| Lincoln            | 53            | 5.2                  | 44               | 4.3               | 42                  | 4.1               |
| Mason              | 362           | 7.3                  | 374              | 7.5               | 363                 | 7.3               |
| Okanogan           | 296           | 7.5                  | 201              | 5.1               | 201                 | 5.1               |
| Pacific            | 192           | 9.1                  | 105              | 5.0               | 106                 | 5.0               |
| Pend Oreille       | 58            | 4.9                  | 40               | 3.4               | 41                  | 3.5               |
| Pierce             | 5,656         | 7.9                  | 5,089            | 7.1               | 5,142               | 7.2               |
| San Juan           | 387           | 26.9                 | 71               | 4.9               | 74                  | 5.1               |
| Skagit             | 907           | 8.7                  | 757              | 7.3               | 750                 | 7.2               |
| Skamania           | 104           | 10.5                 | 45               | 4.5               | 44                  | 4.4               |
| Snohomish          | 3,434         | 5.6                  | 3,993            | 6.5               | 3,923               | 6.3               |
| Spokane            | 2,297         | 5.4                  | 2,156            | 5.1               | 2,080               | 4.9               |
| Stevens            | 206           | 5.1                  | 163              | 4.0               | 146                 | 3.6               |
| Thurston           | 1,445         | 6.9                  | 1,399            | 6.7               | 1,385               | 6.6               |
| Wahkiakum          | 20            | 5.3                  | 11               | 2.9               | 13                  | 3.4               |
| Walla Walla        | 351           | 6.4                  | 282              | 5.1               | 277                 | 5.0               |
| Whatcom            | 1,247         | 7.3                  | 1,180            | 6.9               | 1,146               | 6.7               |
| Whitman            | 164           | 4.1                  | 183              | 4.5               | 186                 | 4.6               |
| Yakima             | 1,630         | 7.3                  | 1,590            | 7.1               | 1,575               | 7.0               |
| Tribal Authority   | *             | *                    | *                | *                 | *                   | *                 |
| Out of State       | *             | *                    | 3,117            | *                 | 3,562               | *                 |
| Unknown            |               |                      |                  |                   |                     |                   |

<sup>1</sup> Does not include marriages to Washington residents performed in other states or countries.

<sup>2</sup> Rates per 1,000 population.

<sup>3</sup> Exceptionally high rates by county of occurrence may reflect unique local circumstances, such as highly desirable locations for weddings. See pages 5-6 for a discussion of occurrence rates.

\*Marriages not available.

**Marriage Table 2. Marriages by Woman's Age and County where Ceremony was Performed, 2001**

| County             | Total         | Under 20     | 20-24         | 25-29        | 30-34        | 35-39        | 40-44        | 45-49        | 50-54        | 55-59      | 60-64      | 65 and Over | Unk       |
|--------------------|---------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|------------|-------------|-----------|
| <b>State Total</b> | <b>41,644</b> | <b>3,578</b> | <b>11,229</b> | <b>8,558</b> | <b>5,862</b> | <b>3,976</b> | <b>3,002</b> | <b>2,295</b> | <b>1,469</b> | <b>653</b> | <b>390</b> | <b>533</b>  | <b>99</b> |
| Adams              | 154           | 44           | 40            | 27           | 14           | 15           | 5            | 5            | 1            | 0          | 2          | 1           | 0         |
| Asotin             | 81            | 12           | 20            | 16           | 4            | 7            | 5            | 7            | 7            | 0          | 1          | 2           | 0         |
| Benton             | 968           | 115          | 336           | 172          | 106          | 86           | 51           | 47           | 24           | 12         | 6          | 11          | 2         |
| Chelan             | 768           | 65           | 202           | 143          | 102          | 71           | 63           | 54           | 33           | 18         | 4          | 9           | 4         |
| Clallam            | 411           | 29           | 105           | 65           | 43           | 40           | 41           | 31           | 25           | 12         | 7          | 13          | 0         |
| Clark              | 2,555         | 274          | 691           | 500          | 323          | 245          | 176          | 164          | 99           | 31         | 21         | 30          | 1         |
| Columbia           | 19            | 6            | 4             | 1            | 2            | 2            | 1            | 0            | 1            | 2          | 0          | 0           | 0         |
| Cowlitz            | 688           | 68           | 178           | 129          | 99           | 62           | 59           | 38           | 23           | 13         | 5          | 14          | 0         |
| Douglas            | 114           | 23           | 30            | 18           | 12           | 10           | 9            | 4            | 5            | 1          | 1          | 1           | 0         |
| Ferry              | 39            | 5            | 9             | 5            | 3            | 3            | 4            | 4            | 4            | 0          | 0          | 2           | 0         |
| Franklin           | 519           | 83           | 169           | 92           | 72           | 43           | 24           | 13           | 6            | 6          | 1          | 8           | 2         |
| Garfield           | 14            | 0            | 6             | 2            | 1            | 1            | 1            | 0            | 0            | 1          | 0          | 1           | 1         |
| Grant              | 458           | 66           | 174           | 70           | 45           | 34           | 19           | 20           | 15           | 2          | 6          | 6           | 1         |
| Grays Harbor       | 553           | 69           | 146           | 72           | 71           | 53           | 50           | 35           | 19           | 19         | 8          | 8           | 3         |
| Island             | 571           | 47           | 155           | 109          | 92           | 53           | 36           | 22           | 21           | 12         | 9          | 13          | 2         |
| Jefferson          | 296           | 14           | 52            | 51           | 50           | 34           | 28           | 31           | 24           | 3          | 3          | 5           | 1         |
| King               | 11,996        | 561          | 2,724         | 3,058        | 2,104        | 1,276        | 826          | 629          | 405          | 179        | 86         | 108         | 40        |
| Kitsap             | 1,729         | 183          | 538           | 296          | 210          | 153          | 128          | 92           | 55           | 36         | 18         | 17          | 3         |
| Kittitas           | 227           | 18           | 82            | 34           | 22           | 21           | 21           | 10           | 8            | 6          | 2          | 3           | 0         |
| Klickitat          | 137           | 17           | 35            | 18           | 19           | 13           | 11           | 7            | 8            | 3          | 3          | 3           | 0         |
| Lewis              | 538           | 65           | 162           | 88           | 58           | 49           | 34           | 38           | 13           | 9          | 7          | 11          | 4         |
| Lincoln            | 53            | 6            | 23            | 8            | 4            | 3            | 4            | 2            | 2            | 1          | 0          | 0           | 0         |
| Mason              | 362           | 41           | 92            | 51           | 53           | 32           | 35           | 18           | 19           | 7          | 5          | 9           | 0         |
| Okanogan           | 296           | 42           | 65            | 51           | 34           | 36           | 19           | 17           | 16           | 4          | 5          | 5           | 2         |
| Pacific            | 192           | 14           | 38            | 32           | 23           | 19           | 16           | 13           | 17           | 8          | 4          | 8           | 0         |
| Pend Oreille       | 58            | 7            | 14            | 10           | 5            | 6            | 4            | 4            | 3            | 2          | 1          | 1           | 1         |
| Pierce             | 5,656         | 580          | 1,606         | 1,084        | 767          | 513          | 424          | 288          | 186          | 78         | 53         | 61          | 16        |
| San Juan           | 387           | 8            | 42            | 81           | 90           | 57           | 41           | 27           | 20           | 11         | 4          | 4           | 2         |
| Skagit             | 907           | 103          | 251           | 165          | 107          | 81           | 67           | 51           | 40           | 16         | 5          | 19          | 2         |
| Skamania           | 104           | 6            | 19            | 16           | 11           | 13           | 12           | 6            | 9            | 4          | 5          | 2           | 1         |
| Snohomish          | 3,434         | 301          | 908           | 678          | 467          | 323          | 275          | 201          | 131          | 61         | 32         | 55          | 2         |
| Spokane            | 2,297         | 197          | 802           | 477          | 246          | 171          | 149          | 115          | 54           | 28         | 29         | 29          | 0         |
| Stevens            | 206           | 24           | 67            | 33           | 18           | 21           | 19           | 9            | 9            | 0          | 3          | 3           | 0         |
| Thurston           | 1,445         | 122          | 383           | 293          | 171          | 120          | 122          | 95           | 66           | 18         | 23         | 26          | 6         |
| Wahkiakum          | 20            | 1            | 3             | 6            | 2            | 3            | 2            | 1            | 0            | 0          | 1          | 1           | 0         |
| Walla Walla        | 351           | 42           | 123           | 54           | 38           | 27           | 19           | 13           | 7            | 8          | 4          | 16          | 0         |
| Whatcom            | 1,247         | 82           | 368           | 224          | 174          | 119          | 100          | 80           | 53           | 20         | 9          | 15          | 3         |
| Whitman            | 164           | 8            | 69            | 36           | 15           | 10           | 10           | 9            | 3            | 2          | 1          | 1           | 0         |
| Yakima             | 1,630         | 230          | 498           | 293          | 185          | 151          | 92           | 95           | 38           | 20         | 16         | 12          | 0         |
| Tribal Authority   | 0             | 0            | 0             | 0            | 0            | 0            | 0            | 0            | 0            | 0          | 0          | 0           | 0         |

**Marriage Table 3. Marriages by Man's Age and County where Ceremony was Performed, 2001**

| County             | Total         | Under 20     | 20-24        | 25-29        | 30-34        | 35-39        | 40-44        | 45-49        | 50-54        | 55-59       | 60-64      | 65 and Over | Unk       |
|--------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|------------|-------------|-----------|
| <b>State Total</b> | <b>41,644</b> | <b>1,236</b> | <b>9,589</b> | <b>9,226</b> | <b>6,749</b> | <b>4,414</b> | <b>3,475</b> | <b>2,524</b> | <b>1,801</b> | <b>1090</b> | <b>551</b> | <b>934</b>  | <b>55</b> |
| Adams              | 154           | 17           | 52           | 28           | 27           | 8            | 8            | 7            | 3            | 1           | 2          | 1           | 0         |
| Asotin             | 81            | 7            | 17           | 19           | 8            | 6            | 5            | 4            | 4            | 5           | 3          | 3           | 0         |
| Benton             | 968           | 50           | 303          | 198          | 124          | 87           | 72           | 51           | 35           | 17          | 16         | 14          | 1         |
| Chelan             | 768           | 29           | 161          | 173          | 103          | 83           | 71           | 57           | 42           | 23          | 10         | 15          | 1         |
| Clallam            | 411           | 14           | 86           | 71           | 43           | 39           | 40           | 37           | 26           | 22          | 13         | 20          | 0         |
| Clark              | 2,555         | 94           | 638          | 499          | 392          | 271          | 210          | 176          | 127          | 70          | 24         | 52          | 2         |
| Columbia           | 19            | 2            | 6            | 2            | 2            | 1            | 2            | 0            | 4            | 0           | 0          | 0           | 0         |
| Cowlitz            | 688           | 26           | 164          | 122          | 111          | 81           | 66           | 45           | 28           | 16          | 7          | 22          | 0         |
| Douglas            | 114           | 3            | 40           | 24           | 7            | 8            | 11           | 11           | 4            | 3           | 1          | 2           | 0         |
| Ferry              | 39            | 2            | 7            | 6            | 3            | 6            | 4            | 1            | 4            | 2           | 2          | 2           | 0         |
| Franklin           | 519           | 31           | 157          | 121          | 79           | 42           | 34           | 22           | 11           | 12          | 5          | 5           | 0         |
| Garfield           | 14            | 0            | 3            | 2            | 1            | 1            | 4            | 1            | 0            | 1           | 1          | 0           | 0         |
| Grant              | 458           | 29           | 146          | 107          | 54           | 44           | 18           | 19           | 10           | 9           | 7          | 13          | 2         |
| Grays Harbor       | 553           | 21           | 131          | 106          | 83           | 50           | 56           | 32           | 25           | 23          | 8          | 18          | 0         |
| Island             | 571           | 18           | 137          | 126          | 92           | 56           | 42           | 29           | 26           | 17          | 8          | 18          | 2         |
| Jefferson          | 296           | 8            | 35           | 50           | 50           | 32           | 30           | 34           | 19           | 20          | 8          | 9           | 1         |
| King               | 11,996        | 162          | 2,057        | 2,930        | 2,461        | 1,477        | 1,029        | 684          | 499          | 313         | 155        | 210         | 19        |
| Kitsap             | 1,729         | 65           | 485          | 372          | 211          | 180          | 130          | 119          | 62           | 46          | 22         | 34          | 3         |
| Kittitas           | 227           | 10           | 66           | 47           | 25           | 17           | 19           | 14           | 12           | 5           | 3          | 8           | 1         |
| Klickitat          | 137           | 7            | 28           | 26           | 25           | 13           | 12           | 7            | 6            | 6           | 5          | 2           | 0         |
| Lewis              | 538           | 25           | 151          | 99           | 87           | 42           | 41           | 34           | 20           | 12          | 12         | 15          | 0         |
| Lincoln            | 53            | 2            | 14           | 15           | 6            | 1            | 7            | 2            | 2            | 2           | 0          | 2           | 0         |
| Mason              | 362           | 18           | 84           | 57           | 54           | 37           | 27           | 32           | 28           | 8           | 4          | 13          | 0         |
| Okanogan           | 296           | 12           | 71           | 53           | 46           | 29           | 30           | 14           | 14           | 10          | 9          | 8           | 0         |
| Pacific            | 192           | 6            | 32           | 35           | 16           | 22           | 22           | 19           | 12           | 6           | 7          | 15          | 0         |
| Pend Oreille       | 58            | 5            | 14           | 10           | 8            | 6            | 5            | 1            | 1            | 5           | 0          | 3           | 0         |
| Pierce             | 5,656         | 165          | 1,502        | 1,238        | 821          | 561          | 496          | 328          | 225          | 137         | 59         | 115         | 9         |
| San Juan           | 387           | 1            | 20           | 76           | 90           | 57           | 57           | 26           | 26           | 13          | 12         | 9           | 0         |
| Skagit             | 907           | 41           | 227          | 204          | 122          | 79           | 69           | 55           | 43           | 21          | 16         | 29          | 1         |
| Skamania           | 104           | 1            | 18           | 12           | 13           | 7            | 17           | 11           | 12           | 6           | 2          | 5           | 0         |
| Snohomish          | 3,434         | 92           | 786          | 740          | 544          | 379          | 305          | 221          | 148          | 92          | 39         | 85          | 3         |
| Spokane            | 2,297         | 83           | 634          | 557          | 337          | 193          | 159          | 106          | 89           | 50          | 34         | 55          | 0         |
| Stevens            | 206           | 7            | 53           | 49           | 29           | 14           | 18           | 15           | 9            | 3           | 4          | 5           | 0         |
| Thurston           | 1,445         | 45           | 310          | 289          | 242          | 155          | 107          | 109          | 86           | 33          | 16         | 51          | 2         |
| Wahkiakum          | 20            | 0            | 4            | 4            | 2            | 2            | 3            | 0            | 2            | 1           | 0          | 2           | 0         |
| Walla Walla        | 351           | 15           | 115          | 68           | 44           | 34           | 16           | 17           | 12           | 8           | 4          | 18          | 0         |
| Whatcom            | 1,247         | 23           | 307          | 257          | 180          | 115          | 120          | 94           | 68           | 38          | 13         | 26          | 6         |
| Whitman            | 164           | 5            | 51           | 40           | 21           | 11           | 11           | 8            | 6            | 5           | 2          | 3           | 1         |
| Yakima             | 1,630         | 95           | 477          | 394          | 186          | 168          | 102          | 82           | 51           | 29          | 18         | 27          | 1         |
| Tribal Authority   | 0             | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0           | 0          | 0           | 0         |

# Divorce



## Divorce

**Divorce Table 1. Divorces and Annulments by County of Decree and County of Residence<sup>1</sup>, 2001**

| County             | Occurrence |                      | Wife's Residence |                   | Husband's Residence |                   |
|--------------------|------------|----------------------|------------------|-------------------|---------------------|-------------------|
|                    | Number     | Rate <sup>2, 3</sup> | Number           | Rate <sup>2</sup> | Number              | Rate <sup>2</sup> |
| <b>State Total</b> | 26,451     | 4.4                  | 24,442           | 4.1               | 23,542              | 3.9               |
| Adams              | 62         | 3.7                  | 63               | 3.8               | 57                  | 3.4               |
| Asotin             | 83         | 4                    | 75               | 3.6               | 61                  | 2.9               |
| Benton             | 679        | 4.7                  | 623              | 4.3               | 609                 | 4.2               |
| Chelan             | 376        | 5.6                  | 271              | 4                 | 245                 | 3.7               |
| Clallam            | 294        | 4.5                  | 291              | 4.5               | 286                 | 4.4               |
| Clark              | 1,576      | 4.5                  | 1,564            | 4.4               | 1,486               | 4.2               |
| Columbia           | 19         | 4.6                  | 20               | 4.9               | 19                  | 4.6               |
| Cowlitz            | 513        | 5.5                  | 499              | 5.3               | 510                 | 5.4               |
| Douglas            | 13         | 0.4                  | 125              | 3.8               | 111                 | 3.4               |
| Ferry              | 22         | 3                    | 18               | 2.5               | 24                  | 3.3               |
| Franklin           | 189        | 3.8                  | 186              | 3.7               | 168                 | 3.3               |
| Garfield           | 14         | 5.8                  | 15               | 6.3               | 15                  | 6.3               |
| Grant              | 263        | 3.5                  | 247              | 3.3               | 256                 | 3.4               |
| Grays Harbor       | 348        | 5.1                  | 316              | 4.6               | 354                 | 5.2               |
| Island             | 275        | 3.8                  | 315              | 4.4               | 332                 | 4.6               |
| Jefferson          | 144        | 5.5                  | 138              | 5.3               | 129                 | 4.9               |
| King               | 5,457      | 3.1                  | 5,933            | 3.4               | 5,808               | 3.3               |
| Kitsap             | 1,126      | 4.8                  | 1,118            | 4.8               | 1,076               | 4.6               |
| Kittitas           | 71         | 2.1                  | 79               | 2.3               | 75                  | 2.2               |
| Klickitat          | 80         | 4.1                  | 67               | 3.5               | 80                  | 4.1               |
| Lewis              | 309        | 4.4                  | 291              | 4.2               | 303                 | 4.4               |
| Lincoln            | 3,577      | 350.7                | 42               | 4.1               | 38                  | 3.7               |
| Mason              | 217        | 4.4                  | 234              | 4.7               | 234                 | 4.7               |
| Okanogan           | 156        | 3.9                  | 155              | 3.9               | 148                 | 3.7               |
| Pacific            | 71         | 3.4                  | 67               | 3.2               | 66                  | 3.1               |
| Pend Oreille       | 56         | 4.7                  | 59               | 5                 | 58                  | 4.9               |
| Pierce             | 2,478      | 3.5                  | 3,197            | 4.5               | 3,071               | 4.3               |
| San Juan           | 50         | 3.5                  | 51               | 3.5               | 51                  | 3.5               |
| Skagit             | 537        | 5.2                  | 499              | 4.8               | 476                 | 4.6               |
| Skamania           | 36         | 3.6                  | 26               | 2.6               | 26                  | 2.6               |
| Snohomish          | 2,383      | 3.9                  | 2,729            | 4.4               | 2,569               | 4.2               |
| Spokane            | 2,002      | 4.7                  | 2,110            | 5                 | 2,016               | 4.8               |
| Stevens            | 160        | 4                    | 202              | 5                 | 182                 | 4.5               |
| Thurston           | 1,042      | 5                    | 1,084            | 5.2               | 966                 | 4.6               |
| Wahkiakum          | 17         | 4.5                  | 21               | 5.5               | 16                  | 4.2               |
| Walla Walla        | 220        | 4                    | 210              | 3.8               | 197                 | 3.6               |
| Whatcom            | 595        | 3.5                  | 621              | 3.6               | 575                 | 3.4               |
| Whitman            | 113        | 2.8                  | 101              | 2.5               | 96                  | 2.4               |
| Yakima             | 789        | 3.5                  | 780              | 3.5               | 753                 | 3.4               |
| Tribal Authority   | 39         | *                    | *                | *                 | *                   | *                 |
| Out-of-State       | *          | *                    | 1,595            | *                 | 2,208               | *                 |
| Unknown            | *          | *                    | 414              | *                 | 701                 | *                 |

<sup>1</sup> Does not include divorces to Washington residents obtained in other states or countries.

<sup>2</sup> Rates per 1,000 population.

<sup>3</sup> Exceptionally high rates may reflect unique local circumstances, such as administrative procedures that make divorces for non-county residents easy. See pages 5-6 for a discussion of occurrence rates.

\*Dissolutions not available.



**Divorce Table 2. Divorces, Annulments, and Legal Separations by County of Decree, 2001**

| <b>County</b>      | <b>Total</b>  | <b>Divorce</b> | <b>Annulment</b> | <b>Legal Separation<sup>1</sup></b> |
|--------------------|---------------|----------------|------------------|-------------------------------------|
| <b>State Total</b> | <b>27,149</b> | <b>26,296</b>  | <b>155</b>       | <b>698</b>                          |
| Adams              | 63            | 62             | 0                | 1                                   |
| Asotin             | 84            | 83             | 0                | 1                                   |
| Benton             | 687           | 678            | 1                | 8                                   |
| Chelan             | 384           | 375            | 1                | 8                                   |
| Clallam            | 300           | 292            | 2                | 6                                   |
| Clark              | 1,609         | 1,569          | 7                | 33                                  |
| Columbia           | 19            | 19             | 0                | 0                                   |
| Cowlitz            | 521           | 512            | 1                | 8                                   |
| Douglas            | 13            | 13             | 0                | 0                                   |
| Ferry              | 22            | 22             | 0                | 0                                   |
| Franklin           | 193           | 185            | 4                | 4                                   |
| Garfield           | 14            | 14             | 0                | 0                                   |
| Grant              | 264           | 263            | 0                | 1                                   |
| Grays Harbor       | 352           | 346            | 2                | 4                                   |
| Island             | 281           | 273            | 2                | 6                                   |
| Jefferson          | 145           | 143            | 1                | 1                                   |
| King               | 5,670         | 5,421          | 36               | 213                                 |
| Kitsap             | 1,180         | 1,124          | 2                | 54                                  |
| Kittitas           | 72            | 71             | 0                | 1                                   |
| Klickitat          | 81            | 80             | 0                | 1                                   |
| Lewis              | 313           | 309            | 0                | 4                                   |
| Lincoln            | 3,664         | 3,531          | 46               | 87                                  |
| Mason              | 223           | 216            | 1                | 6                                   |
| Okanogan           | 158           | 155            | 1                | 2                                   |
| Pacific            | 71            | 71             | 0                | 0                                   |
| Pend Oreille       | 57            | 56             | 0                | 1                                   |
| Pierce             | 2,549         | 2,463          | 15               | 71                                  |
| San Juan           | 52            | 50             | 0                | 2                                   |
| Skagit             | 542           | 535            | 2                | 5                                   |
| Skamania           | 37            | 35             | 1                | 1                                   |
| Snohomish          | 2,452         | 2,374          | 9                | 69                                  |
| Spokane            | 2,034         | 1,992          | 10               | 32                                  |
| Stevens            | 162           | 157            | 3                | 2                                   |
| Thurston           | 1,086         | 1,039          | 3                | 44                                  |
| Wahkiakum          | 17            | 17             | 0                | 0                                   |
| Walla Walla        | 224           | 220            | 0                | 4                                   |
| Whatcom            | 601           | 594            | 1                | 6                                   |
| Whitman            | 116           | 112            | 1                | 3                                   |
| Yakima             | 798           | 786            | 3                | 9                                   |
| Tribal Authority   | 39            | 39             | 0                | 0                                   |

<sup>1</sup>Since legal separations are not final dissolutions of marriage they are excluded from the total.

**Divorce Table 3. Divorces and Annulments by Wife's Age and County of Decree, 2001**

| County             | Total         | Under      |              |              |              |              |              |              |              |            |            |            | 65 and Over | Unk |
|--------------------|---------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|------------|------------|-------------|-----|
|                    |               | 20         | 20-24        | 25-29        | 30-34        | 35-39        | 40-44        | 45-49        | 50-54        | 55-59      | 60-64      |            |             |     |
| <b>State Total</b> | <b>26,451</b> | <b>159</b> | <b>2,222</b> | <b>3,871</b> | <b>4,598</b> | <b>4,426</b> | <b>4,195</b> | <b>3,077</b> | <b>1,791</b> | <b>799</b> | <b>355</b> | <b>294</b> | <b>664</b>  |     |
| Adams              | 62            | 2          | 8            | 7            | 11           | 9            | 4            | 12           | 1            | 4          | 2          | 1          | 1           |     |
| Asotin             | 83            | 3          | 6            | 11           | 10           | 12           | 12           | 11           | 6            | 2          | 2          | 4          | 4           |     |
| Benton             | 679           | 3          | 81           | 125          | 110          | 118          | 97           | 73           | 30           | 24         | 7          | 3          | 8           |     |
| Chelan             | 376           | 5          | 40           | 52           | 57           | 61           | 60           | 46           | 30           | 10         | 5          | 4          | 6           |     |
| Clallam            | 294           | 0          | 29           | 34           | 36           | 51           | 45           | 38           | 25           | 11         | 4          | 8          | 13          |     |
| Clark              | 1,576         | 8          | 119          | 230          | 269          | 265          | 254          | 199          | 105          | 46         | 23         | 16         | 42          |     |
| Columbia           | 19            | 0          | 4            | 5            | 2            | 4            | 1            | 3            | 0            | 0          | 0          | 0          | 0           |     |
| Cowlitz            | 513           | 1          | 54           | 77           | 104          | 90           | 74           | 53           | 27           | 16         | 6          | 8          | 3           |     |
| Douglas            | 13            | 0          | 1            | 3            | 3            | 1            | 3            | 1            | 1            | 0          | 0          | 0          | 0           |     |
| Ferry              | 22            | 0          | 3            | 2            | 3            | 6            | 2            | 2            | 3            | 0          | 0          | 1          | 0           |     |
| Franklin           | 189           | 3          | 22           | 35           | 25           | 24           | 28           | 18           | 18           | 2          | 2          | 4          | 8           |     |
| Garfield           | 14            | 0          | 0            | 5            | 1            | 1            | 3            | 3            | 1            | 0          | 0          | 0          | 0           |     |
| Grant              | 263           | 3          | 30           | 50           | 40           | 44           | 40           | 22           | 16           | 1          | 6          | 6          | 5           |     |
| Grays Harbor       | 348           | 5          | 31           | 47           | 57           | 55           | 65           | 43           | 19           | 8          | 6          | 7          | 5           |     |
| Island             | 275           | 5          | 56           | 38           | 41           | 39           | 33           | 32           | 15           | 2          | 3          | 3          | 8           |     |
| Jefferson          | 144           | 1          | 7            | 13           | 23           | 28           | 29           | 18           | 8            | 7          | 5          | 5          | 0           |     |
| King               | 5,457         | 16         | 253          | 775          | 991          | 983          | 869          | 661          | 411          | 205        | 64         | 64         | 165         |     |
| Kitsap             | 1,126         | 6          | 144          | 166          | 177          | 161          | 182          | 144          | 82           | 31         | 12         | 10         | 11          |     |
| Kittitas           | 71            | 0          | 6            | 11           | 10           | 15           | 9            | 10           | 5            | 1          | 0          | 4          | 0           |     |
| Klickitat          | 80            | 2          | 9            | 9            | 9            | 17           | 8            | 13           | 9            | 1          | 1          | 1          | 1           |     |
| Lewis              | 309           | 2          | 33           | 48           | 51           | 49           | 53           | 31           | 18           | 10         | 7          | 5          | 2           |     |
| Lincoln            | 3,577         | 21         | 327          | 595          | 718          | 557          | 507          | 383          | 215          | 103        | 46         | 29         | 76          |     |
| Mason              | 217           | 0          | 19           | 22           | 34           | 30           | 51           | 26           | 12           | 10         | 1          | 3          | 9           |     |
| Okanogan           | 156           | 1          | 14           | 17           | 20           | 29           | 31           | 16           | 12           | 2          | 6          | 2          | 6           |     |
| Pacific            | 71            | 0          | 7            | 10           | 8            | 14           | 10           | 8            | 4            | 3          | 3          | 1          | 3           |     |
| Pend Oreille       | 56            | 1          | 4            | 3            | 7            | 16           | 8            | 9            | 2            | 4          | 1          | 1          | 0           |     |
| Pierce             | 2,478         | 18         | 225          | 360          | 453          | 443          | 398          | 263          | 156          | 60         | 31         | 18         | 53          |     |
| San Juan           | 50            | 1          | 2            | 4            | 7            | 5            | 12           | 12           | 5            | 1          | 1          | 0          | 0           |     |
| Skagit             | 537           | 2          | 63           | 67           | 82           | 91           | 92           | 60           | 35           | 18         | 8          | 6          | 13          |     |
| Skamania           | 36            | 0          | 1            | 2            | 5            | 8            | 7            | 4            | 8            | 1          | 0          | 0          | 0           |     |
| Snohomish          | 2,383         | 6          | 152          | 303          | 431          | 433          | 403          | 269          | 164          | 77         | 33         | 20         | 92          |     |
| Spokane            | 2,002         | 18         | 183          | 319          | 333          | 325          | 308          | 219          | 135          | 51         | 25         | 22         | 64          |     |
| Stevens            | 160           | 1          | 13           | 14           | 21           | 24           | 33           | 23           | 12           | 7          | 4          | 4          | 4           |     |
| Thurston           | 1,042         | 13         | 99           | 163          | 177          | 147          | 177          | 123          | 78           | 27         | 13         | 11         | 14          |     |
| Wahkiakum          | 17            | 0          | 2            | 5            | 3            | 1            | 3            | 3            | 0            | 0          | 0          | 0          | 0           |     |
| Walla Walla        | 220           | 0          | 22           | 29           | 43           | 32           | 37           | 30           | 10           | 6          | 4          | 6          | 1           |     |
| Whatcom            | 595           | 4          | 51           | 68           | 102          | 89           | 100          | 89           | 45           | 22         | 3          | 5          | 17          |     |
| Whitman            | 113           | 2          | 13           | 18           | 11           | 10           | 22           | 21           | 9            | 2          | 3          | 1          | 1           |     |
| Yakima             | 789           | 6          | 83           | 124          | 107          | 130          | 122          | 83           | 56           | 23         | 18         | 11         | 26          |     |
| Tribal Authority   | 39            | 0          | 6            | 5            | 6            | 9            | 3            | 3            | 3            | 1          | 0          | 0          | 3           |     |

**Divorce Table 4. Divorces and Annulments by Husband's Age and County of Decree, 2001**

| County             | Total         | Under<br>20 | 20-24        | 25-29        | 30-34        | 35-39        | 40-44        | 45-49        | 50-54        | 55-59        | 60-64      | 65 and<br>Over | Unk        |
|--------------------|---------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|----------------|------------|
| <b>State Total</b> | <b>26,451</b> | <b>57</b>   | <b>1,300</b> | <b>3,361</b> | <b>4,213</b> | <b>4,470</b> | <b>4,356</b> | <b>3,383</b> | <b>2,350</b> | <b>1,229</b> | <b>583</b> | <b>604</b>     | <b>545</b> |
| Adams              | 62            | 2           | 6            | 9            | 6            | 5            | 11           | 8            | 5            | 4            | 4          | 1              | 1          |
| Asotin             | 83            | 1           | 6            | 5            | 12           | 13           | 12           | 16           | 7            | 4            | 1          | 4              | 2          |
| Benton             | 679           | 3           | 46           | 102          | 115          | 101          | 115          | 84           | 55           | 29           | 11         | 11             | 7          |
| Chelan             | 376           | 1           | 29           | 57           | 52           | 54           | 54           | 56           | 40           | 9            | 8          | 8              | 8          |
| Clallam            | 294           | 1           | 10           | 35           | 36           | 40           | 54           | 52           | 23           | 16           | 11         | 10             | 6          |
| Clark              | 1,576         | 3           | 67           | 204          | 238          | 283          | 255          | 208          | 137          | 79           | 34         | 40             | 28         |
| Columbia           | 19            | 0           | 1            | 5            | 3            | 4            | 4            | 0            | 1            | 0            | 1          | 0              | 0          |
| Cowlitz            | 513           | 1           | 24           | 71           | 94           | 93           | 86           | 58           | 40           | 19           | 11         | 16             | 0          |
| Douglas            | 13            | 0           | 1            | 1            | 1            | 4            | 2            | 1            | 1            | 1            | 1          | 0              | 0          |
| Ferry              | 22            | 0           | 1            | 3            | 2            | 5            | 1            | 3            | 4            | 1            | 1          | 1              | 0          |
| Franklin           | 189           | 0           | 10           | 34           | 35           | 16           | 25           | 32           | 21           | 5            | 8          | 2              | 1          |
| Garfield           | 14            | 0           | 1            | 2            | 1            | 2            | 3            | 1            | 1            | 0            | 0          | 0              | 3          |
| Grant              | 263           | 1           | 23           | 43           | 42           | 44           | 35           | 28           | 19           | 7            | 7          | 7              | 7          |
| Grays Harbor       | 348           | 1           | 21           | 30           | 61           | 61           | 58           | 45           | 33           | 13           | 15         | 9              | 1          |
| Island             | 275           | 0           | 39           | 51           | 41           | 43           | 39           | 25           | 18           | 3            | 7          | 6              | 3          |
| Jefferson          | 144           | 1           | 4            | 10           | 15           | 23           | 25           | 28           | 14           | 12           | 4          | 7              | 1          |
| King               | 5,457         | 6           | 123          | 599          | 904          | 958          | 897          | 762          | 532          | 287          | 123        | 120            | 146        |
| Kitsap             | 1,126         | 2           | 82           | 171          | 169          | 189          | 168          | 135          | 106          | 52           | 19         | 21             | 12         |
| Kittitas           | 71            | 0           | 2            | 7            | 9            | 17           | 14           | 7            | 6            | 3            | 1          | 5              | 0          |
| Klickitat          | 80            | 0           | 2            | 15           | 12           | 8            | 11           | 9            | 9            | 7            | 4          | 3              | 0          |
| Lewis              | 309           | 0           | 17           | 40           | 50           | 57           | 57           | 33           | 23           | 13           | 8          | 10             | 1          |
| Lincoln            | 3,577         | 4           | 205          | 517          | 637          | 631          | 559          | 376          | 293          | 153          | 68         | 61             | 73         |
| Mason              | 217           | 0           | 13           | 20           | 28           | 36           | 47           | 31           | 13           | 13           | 3          | 9              | 4          |
| Okanogan           | 156           | 0           | 5            | 26           | 15           | 28           | 30           | 17           | 15           | 4            | 8          | 6              | 2          |
| Pacific            | 71            | 1           | 2            | 9            | 10           | 10           | 15           | 8            | 4            | 5            | 2          | 4              | 1          |
| Pend Oreille       | 56            | 1           | 4            | 1            | 5            | 8            | 15           | 10           | 3            | 4            | 3          | 2              | 0          |
| Pierce             | 2,478         | 8           | 143          | 304          | 415          | 453          | 427          | 269          | 214          | 104          | 50         | 42             | 49         |
| San Juan           | 50            | 0           | 1            | 3            | 4            | 5            | 8            | 17           | 6            | 3            | 0          | 3              | 0          |
| Skagit             | 537           | 1           | 33           | 66           | 70           | 99           | 80           | 77           | 51           | 29           | 9          | 14             | 8          |
| Skamania           | 36            | 0           | 0            | 2            | 6            | 6            | 5            | 6            | 7            | 3            | 1          | 0              | 0          |
| Snohomish          | 2,383         | 5           | 88           | 244          | 367          | 408          | 463          | 291          | 213          | 113          | 56         | 47             | 88         |
| Spokane            | 2,002         | 8           | 125          | 277          | 303          | 307          | 319          | 272          | 161          | 99           | 28         | 51             | 52         |
| Stevens            | 160           | 0           | 7            | 17           | 24           | 23           | 24           | 25           | 15           | 9            | 9          | 6              | 1          |
| Thurston           | 1,042         | 2           | 72           | 142          | 158          | 150          | 173          | 150          | 93           | 49           | 23         | 23             | 7          |
| Wahkiakum          | 17            | 0           | 0            | 5            | 3            | 4            | 2            | 1            | 1            | 0            | 0          | 1              | 0          |
| Walla Walla        | 220           | 1           | 10           | 27           | 33           | 39           | 38           | 34           | 12           | 9            | 5          | 9              | 3          |
| Whatcom            | 595           | 0           | 20           | 71           | 94           | 90           | 95           | 90           | 68           | 29           | 15         | 15             | 8          |
| Whitman            | 113           | 0           | 10           | 12           | 16           | 15           | 18           | 19           | 12           | 4            | 3          | 4              | 0          |
| Yakima             | 789           | 3           | 44           | 117          | 121          | 132          | 106          | 93           | 74           | 32           | 21         | 26             | 20         |
| Tribal Authority   | 39            | 0           | 3            | 7            | 6            | 6            | 6            | 6            | 0            | 3            | 0          | 0              | 2          |

**Divorce Table 5. Divorces and Annulments by Number of Children<sup>1</sup> and County of Wife's Residence<sup>2</sup>, 2001**

| County             | Total         | 0             | 1            | 2            | 3            | 4 +        | Unknown <sup>3</sup> |
|--------------------|---------------|---------------|--------------|--------------|--------------|------------|----------------------|
| <b>State Total</b> | <b>26,451</b> | <b>12,086</b> | <b>5,596</b> | <b>5,609</b> | <b>1,872</b> | <b>701</b> | <b>587</b>           |
| Adams              | 63            | 21            | 14           | 14           | 9            | 3          | 2                    |
| Asotin             | 75            | 38            | 15           | 12           | 3            | 4          | 3                    |
| Benton             | 623           | 242           | 144          | 137          | 67           | 25         | 8                    |
| Chelan             | 271           | 119           | 62           | 54           | 21           | 9          | 6                    |
| Clallam            | 291           | 132           | 51           | 65           | 18           | 9          | 16                   |
| Clark              | 1,564         | 705           | 331          | 337          | 134          | 35         | 22                   |
| Columbia           | 20            | 8             | 6            | 2            | 4            | 0          | 0                    |
| Cowlitz            | 499           | 209           | 123          | 117          | 28           | 18         | 4                    |
| Douglas            | 125           | 50            | 30           | 34           | 7            | 3          | 1                    |
| Ferry              | 18            | 7             | 4            | 4            | 2            | 1          | 0                    |
| Franklin           | 186           | 88            | 40           | 30           | 15           | 9          | 4                    |
| Garfield           | 15            | 5             | 3            | 5            | 2            | 0          | 0                    |
| Grant              | 247           | 97            | 52           | 54           | 26           | 15         | 3                    |
| Grays Harbor       | 316           | 131           | 73           | 70           | 27           | 10         | 5                    |
| Island             | 315           | 151           | 72           | 64           | 20           | 2          | 6                    |
| Jefferson          | 138           | 67            | 30           | 30           | 4            | 5          | 2                    |
| King               | 5,933         | 2,968         | 1,122        | 1,214        | 349          | 135        | 145                  |
| Kitsap             | 1,118         | 474           | 253          | 269          | 78           | 26         | 18                   |
| Kittitas           | 79            | 33            | 18           | 21           | 4            | 3          | 0                    |
| Klickitat          | 67            | 22            | 19           | 16           | 6            | 3          | 1                    |
| Lewis              | 291           | 121           | 65           | 62           | 27           | 12         | 4                    |
| Lincoln            | 42            | 21            | 7            | 11           | 2            | 1          | 0                    |
| Mason              | 234           | 94            | 53           | 58           | 14           | 5          | 10                   |
| Okanogan           | 155           | 70            | 30           | 28           | 14           | 9          | 4                    |
| Pacific            | 67            | 27            | 12           | 21           | 3            | 2          | 2                    |
| Pend Oreille       | 59            | 21            | 13           | 11           | 6            | 2          | 6                    |
| Pierce             | 3,197         | 1,447         | 717          | 693          | 226          | 86         | 28                   |
| San Juan           | 51            | 22            | 12           | 14           | 3            | 0          | 0                    |
| Skagit             | 499           | 211           | 107          | 121          | 43           | 16         | 1                    |
| Skamania           | 26            | 14            | 4            | 4            | 4            | 0          | 0                    |
| Snohomish          | 2,729         | 1,221         | 603          | 602          | 192          | 49         | 62                   |
| Spokane            | 2,110         | 880           | 510          | 466          | 175          | 50         | 29                   |
| Stevens            | 202           | 106           | 34           | 39           | 15           | 4          | 4                    |
| Thurston           | 1,084         | 442           | 250          | 230          | 97           | 27         | 38                   |
| Wahkiakum          | 21            | 6             | 4            | 7            | 3            | 1          | 0                    |
| Walla Walla        | 210           | 86            | 46           | 53           | 18           | 5          | 2                    |
| Whatcom            | 621           | 255           | 127          | 137          | 53           | 22         | 27                   |
| Whitman            | 101           | 40            | 20           | 30           | 7            | 3          | 1                    |
| Yakima             | 780           | 303           | 173          | 185          | 59           | 34         | 26                   |
| Out-of-State       | 1,595         | 937           | 280          | 221          | 61           | 48         | 48                   |
| Unknown            | 414           | 195           | 67           | 67           | 26           | 10         | 49                   |

<sup>1</sup>Certificate of dissolution records, "Children born alive of this marriage." All children are counted regardless of age.

<sup>2</sup>Does not include residents who obtain divorces or annulments outside of Washington State.

# Appendices



## **Appendix A. Technical Appendix**

### **Sources of Data**

#### Collection Year

Data for *Washington State Vital Statistics, 2001* are compiled from items on birth, death, fetal death, marriage, and dissolution certificates received before extraction of annual datafiles in 2002. (See Appendix F for samples of certificate forms used.)

#### Population

Population estimates in this report are from the Washington State Office of Financial Management, Forecasting Division, *Intercensal and Postcensal Estimates of County Population by Age and Sex: 1980-2001*, August 2001.

### **Classification of Data**

Classification and coding of data on Washington State vital records follow National Center for Health Statistics (NCHS) guidelines as defined in *Vital Statistics Instruction Manuals*, parts 1-20 (Published by U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Health Statistics, Hyattsville, Maryland).

#### Demographics

##### *Age*

The death certificate contains fields for reported age at death and also birth and death dates, which are used to calculate age at death. Where there is a discrepancy between the reported and calculated ages, the county (and ultimately the funeral director) is queried and most of the discrepancies are resolved. For the remaining discrepancies, where there is a difference of one year, the calculated age is used for age at death (which assumes that the informant made an arithmetic error). Where there is a difference of more than one year, the reported age is used.

For infant deaths (<1 year), age is measured in minutes, hours, days, or months. Some certificates may report a primary and secondary age, e.g., 1 month 2 weeks. This report uses only the primary age (e.g., 1 month). The secondary age (e.g., 2 weeks) is dropped off, so the infant's age is truncated at the primary age category.

## *Race*

Race data collected on vital statistics follow the definition established by the Census Bureau, as follows:

The concept of race as used by the Census Bureau reflects self-identification; it does not denote any clear-cut scientific definition of biological stock. The data for race represents self-classification by people according to the race with which they most closely identify. Furthermore, it is recognized that the categories of the race item include both racial and national origin or socio-cultural groups.<sup>1</sup>

Birth and death certificates use open-ended reporting of race, allowing for multiple racial entries. Reporting of race on birth certificates is based on information provided by the mother. Reporting of race on death certificates is sometimes based on observing the decedent, rather than questioning the next of kin. This procedure causes an underestimate of deaths for certain groups, particularly Native Americans, some of the Asian subgroups, and Hispanics. Thus, death rates based on death certificate data are lower than true death rates for these groups.

Because the denominator for infant mortality rates uses the race at birth, the most accurate race-specific infant mortality rates come from linked birth-infant death data files, where the mother's race can be used for both the numerator and the denominator. In this report, Mortality Table F6 tabulates data by the mother's race/ethnicity.

## *Hispanic Origin*

"Origin" as used by the Census Bureau refers to "the ancestry, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States." Persons of Hispanic Origin have their origins in a Hispanic or Spanish-speaking country such as Mexico, Cuba, or Puerto Rico, or the Spanish-speaking countries of Central or South America. Persons of Hispanic Origin may be of any race.

The certificates for live births, deaths, and fetal deaths in Washington State capture Hispanic Origin under two separate items, one to measure ethnicity and another to measure race. The item measuring ethnicity asks, [Is the person] "Of Hispanic Origin or descent (Ancestry)?" and permits a "Yes/No" response. The item measuring race on the birth and fetal death certificates says, "Race (American Indian, White, Black, Asian/Pacific Islander (Specify subgroup), etc.). On the death certificate, the item reads, "Race (Specify)."

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<sup>1</sup> U.S. Bureau of the Census, *1990 Census of Population: General Population Characteristics*, Washington, Report 1990 CP-1-49, Washington, D.C., June 1992.

Beginning in 1992, "Hispanic" was no longer listed as a sample response under "Race." Nonetheless, some people do report Hispanic Origin under the race item on birth, death, and fetal death certificates. To capture this information, separate codes are used to record Hispanic responses when provided under race, and this information is available on datafiles provided by the Center for Health Statistics.

The National Center for Health Statistics (NCHS), however, does not treat Hispanic Origin as a race and requires instead that persons reporting Hispanic as a race be counted as "White." Tables in this report use this NCHS convention for tabulations by race. In addition, at the end of each table on race, counts of persons identified as "Hispanic Origin" under the ethnicity item are provided as well.

### *County of Residence*

The county of residence data reported by the informant was verified by a process called geocoding using software that identifies county based on street address. When the reported county differed from the one assigned through geocoding, the address was located on a base map and the correct county was assigned to the record. In the rare instances in which a post office box was given as the address, the reported county of residence was retained since the software cannot assign county without a street address. The geocoding was done since 1987 for births, deaths, and fetal deaths. Geocoding could not be done prior to 1987 because address information is not available for many records in those years.

The county of residence assigned through geocoding matched the county originally reported by the informant in all but about 0.4% of the records. Most of the differences occurred in areas where zip codes cross county boundaries where informants may be less sure of whether an address is in one county or the other. In most instances where differences were found, the geocoded county was determined to be correct and, in these instances, it was used in place of the reported county. The differences amounted to very small proportions of births or deaths in the affected counties.

In the few instances when the county or city of residence or occurrence is unknown, the county/city is imputed using NCHS guidelines. For place of occurrence, if the county is known but the city is not, the place of occurrence is set to the rural county value (no defined city). If both county and city are unknown, the place of occurrence is set to the county and city of occurrence of the previous record. For place of residence, if the county is known but the city is not, the place of residence is set to the rural county value. If both county and city of residence are unknown but the event occurred in Washington, the place of residence is set to the



county/city of occurrence. If both county and city of residence are unknown and the event occurred outside Washington, the place of residence is set to the largest city in the state (Seattle).

### *City of Residence*

A city is given a separate code in the vital statistics system only if it has a population of at least 2,500. Vital events in cities smaller than 2,500 are assigned a place of residence code that represents other small and rural areas of a county, termed “balance of county.” Because of space considerations, only vital statistics for cities of 15,000 population or more are published in this report. Population estimates and information on the incorporation of cities provided by the Washington State Office of Financial Management are used to establish which cities meet the 2,500 minimum population criteria for receiving a separate place of residence code. New codes are implemented in January of each year based on population estimates and municipal incorporations published in the preceding year. Thus, an area that was incorporated in 1990 with a population of at least 2,500 would be coded as a distinct place of residence and would have separate vital statistics beginning with 1991 published data.

The city of residence assigned for a record is based on whether or not the person lived within city limits using responses to an item on the certificate: “Inside city limits - yes/no.” If the response to this item is “yes,” “unknown,” or blank, the place of residence is assigned to the reported city. If the response is “no,” the place of residence is assigned a “balance of county” code. Reporting on this item has been found to be somewhat unreliable when compared to locating addresses within city boundaries using geocoding software. For city of occurrence there is no “inside city limits” item to use for coding. If a city is given on the certificate, the event is coded as occurring within city limits of that city. However, if the place of occurrence lists a rural road, state park, or other remote location, the place of occurrence is coded to “balance of county.”

### *Birth Risk Factors*

#### *Method of Delivery*

The method of delivery is selected by the data provider from a list of possible methods. This list just gives common methods with no hierarchy assumed by the order of the methods on the list. The data provider can check all methods that apply, although it is rare to have more than two

methods given (<0.4% of births). For this report, the method of delivery was determined by the following algorithm: If there was a second method given and it was a 'higher technology' or more invasive method, it was assigned as the method of delivery. Otherwise, the first method was used. Thus, for example, if both vaginal and forceps were reported, forceps was the method chosen. This is a departure from previous tables where only the first method was used. Since vaginal delivery is numerically first on the check box list, using only the first method underestimates the use of other methods which appear later on the list, particularly forceps and vacuum delivery.

### *Low Birth Weight*

Traditionally, low birth weight has been defined as 2,500 grams or less. However, the International Classification of Diseases, Ninth Revision (ICD-9) redefines low birth weight as less than 2,500 grams. Thus, according to national and international guidelines, a birth weight equal to 2,500 grams has been shifted from the low birth weight category to the next higher weight category (i.e., 2,500-2,999). Other birth weight categories have been adjusted for consistency (e.g., the group that was 3,001-3,500 grams in earlier reports is now 3,000-3,499 grams). As of 1994, the birth weight categories published in this report were revised in accordance with these guidelines.

The impact of the change is small in the United States, where many weights are given in pounds and ounces. No weight of pounds and ounces converts exactly to 2,500 grams (5-lb 8-oz is 2,495 g and 5-lb 9-oz is 2,523 g). It is, therefore, unlikely that many weights of 2,500 grams are recorded. In fact, in Washington State before 1992, if a weight in grams were recorded on the birth certificate, it was converted to pounds and ounces at data entry, and then reconverted to grams for data analysis. Using this method, a weight of 2,500 grams was converted to 5-lb 8-oz, which was reconverted to 2,495 grams. Thus, no weights of exactly 2,500 grams were found. Starting in 1992, weights in grams could be directly entered into the computer. In 1992-1994, an average of 11 births per year were recorded with weights of exactly 2,500 grams (0.3% of the low birth weight births). Even though the impact of the change is very small at the state level, it could have a slightly greater effect on low birth weight rates for a small county, if the county has any births at 2,500 grams.

### *Calculated Gestational Age*

The gestational age is calculated by subtracting the date of last normal menses from the birth date, dividing by 7 and truncating the result to

eliminate decimal places. If the menses day is missing but the month and year are present, a value of '15' is used for the day. In cases where the menses month and/or year are missing or the calculated gestational age is beyond a reasonable range (<18 or >45 weeks), the gestational age is estimated from the child's birth weight. Overall, about 18% of the calculated gestational ages are estimated from the birth weight. This percentage varies by gestational age from 34% for preterm births to 17% for term births to 0% for postterm births.

#### *Increase in Unknowns*

Since 1995, the percent unknown for many birth risk factors has increased steadily. For example, the percent of birth certificates with unknown month prenatal care began was around 4.9% for 1990-1994. This percentage increased to 7.7% in 1995, was at an all-time high of 9.7% in 1998, and decreased slightly to 9.5% in 1999. The Center for Health Statistics has recently been working individually with hospitals to determine why unknowns are so high, with the eventual aim of improving reporting completeness. A key element of this work is a hospital profile sheet which shows the staff how the data they provide compares with state data for selected items, so that they can see where there are problems. Discussions with staff have revealed one possible reason for the increase in unknowns. With budget shortages, hospitals have decreased the amount of staff time available for completing birth certificates. This change means that, if the mother does not provide the information on her worksheet, the hospital staff no longer has time to look up missing information in the medical records.

#### *Cause of Death*

The causes of death presented in this report are classified in accordance with the International Classification of Diseases, Tenth Revision published by the World Health Organization. The State of Washington began using this revision on January 1, 1999. More information about the change to the new revision can be found in the introduction.

According to the National Center for Health Statistics, more than 99% of all deaths occurring in the United States are registered in the death certificate system. The accuracy of reporting specific causes of death may vary since classification of disease conditions is a medical-legal opinion subject to the best information available to the physician, medical examiner, or coroner certifying the cause of death.

### *Underlying Cause Of Death*

Tabulated causes of death in this report are based on the underlying cause of death. The underlying cause of death is defined as “(a) the disease or injury which initiated the train of events leading directly to death or (b) the circumstances of the accident or violence which produced the fatal injury.” International (World Health Organization) rules are used to determine the underlying cause of death using data supplied by the certifier in the “cause of death” and “other significant conditions” sections of the death certificate.

Information from other sources is used to supplement the cause of death data on the certificate to determine a more precise or more accurate cause of death. The following sources are used:

1. Queries: For about 8% of records, the certifier of the cause of death is asked for additional information because the cause of death data given are inaccurate, incomplete, or non-specific. About 93-98% of these queries are returned. The underlying cause of death may change minimally or substantially as a result of these queries. Query standards change over time, which can affect trends in cause of death and death rates for Washington compared to other states or to the United States.
2. State Patrol: The Washington State Patrol provides information on motor vehicle accidents which is used to refine or add a more complete cause of death for these deaths, particularly related to whether the decedent was the driver or a passenger.
3. Gun Surveillance: In many gun-related deaths, the gun is removed from the scene so the cause of death cannot be coded to the specific type of gun involved (such as handgun or rifle). Beginning in 1995, cause of death data have been supplemented with information on type of gun from a statewide reporting system for gun-related deaths operated by the Department of Health’s Injury Prevention Program. Beginning in 1999, cause of death information for legal intervention was updated using the gun surveillance data.
4. Labor and Industries (L&I): For injury deaths, the death certificate asks whether the injury occurred at work or not. This item is sometimes open to interpretation as to whether the injury occurred in the course of the person’s work or not. Beginning with 1996, death certificate data are supplemented with results of L&I investigations of work-related injuries.

### *Cause of Death Groupings*

Due to the detailed nature of this classification system, it is common to group ICD codes into more general categories for analysis and comparison purposes. The National Center for Health Statistics (NCHS) provides one of the most commonly used classification systems in which causes of deaths for adults are grouped into 113 separate groups and deaths for infants into 130 groups. NCHS groupings were used throughout this report with the exception of Mortality Section E which follows guidelines from the NCHS International Collaborative Effort (ICE) on Injury Statistics.

### *Maternal Death*

Maternal deaths are those for which a maternal condition (ICD-9 codes 630-676 and ICD-10 codes O00-O99) is given as the underlying cause of death. The World Health Organization defines a maternal death as:

The death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.

With ICD-10, an additional category was added for late maternal death (>42 days and > 1 year after termination of pregnancy). A death will be coded as maternal only if the death certificate notes pregnancy or a maternal condition.

In 1979-1988, Washington State supplemented reported maternal deaths with results from a special study. Death certificates for women ages 15-44 were linked to birth/fetal death certificates to see if the woman had a delivery within 42 days of the death. If so, the cause of death was examined to see if the death could have been related to the pregnancy. This special study added an average of two maternal deaths per year, a substantial change because only about three deaths per year are reported as maternal.

In 1990-1996, deaths to Washington resident women were linked to births, fetal deaths and obstetric hospitalizations within 365 days prior to death. Information from the linkages was provided to the Department of Health Maternal and Child Health Office. Three perinatologists, an obstetrician and an epidemiologist reviewed the information available on each death from the death certificate, birth/fetal death certificate and hospitalization information. All linked deaths were considered pregnancy-associated deaths (deaths which occurred within 365 days of pregnancy regardless of

cause) and were further classified as to pregnancy-related (deaths caused by pregnancy or by condition exacerbated by pregnancy) or not. Deaths considered not pregnancy-related included all deaths due to cancer, injury, or deaths with a vague or indefinite cause. Deaths due to epilepsy or seizures, deep vein thrombosis, infection, or intracerebral hemorrhage if they occurred  $\geq 42$  days post delivery were also considered not pregnancy-related. Deaths considered pregnancy-related included deaths due to deep vein thrombosis, pneumonia or aneurysm that occurred during pregnancy or less than 42 days post delivery. Cardiovascular deaths within three months of delivery, and deaths due to epilepsy/seizures or infection that occurred within 42 days of delivery were considered on a case by case basis.

Underreporting of maternal deaths may exist in years for which this linkage procedure has not been done. Further investigation of maternal deaths is currently underway within the Department of Health.

#### *Perinatal Death*

The perinatal period covers times shortly before and after birth. Thus, perinatal death includes both fetal and infant deaths. Perinatal death rates are generally more consistent between different sources than infant or fetal death rates because they eliminate the effect of judgments as to whether the fetus was alive at time of delivery. However, there are at least four definitions of perinatal death, using different combinations of fetal death gestational age and infant age at death. This report uses the following definition from the National Center for Health Statistics: “fetal deaths of 20 or more weeks’ gestation plus infant deaths of less than seven days.” This definition gives the second largest number of perinatal deaths among the four common definitions. Caution should be used in comparing perinatal death rates in this report with rates from other sources unless it is certain that the same definition has been used.

#### *Marriage and Divorce Data*

##### *Residence vs. Occurrence Data*

Information on the number of marriages or divorces for all residents of Washington State is not available since residents may go elsewhere to have a marriage performed or to obtain a divorce. For marriage and divorce statistics, unlike other vital records such as births, deaths, or fetal deaths, there is no interstate agreement for the exchange of information on marriages or divorces for residents of Washington State that occur in other states or countries. Marriages are tabulated in this report according to the county in which the marriage was performed. Divorces, annulments and legal separations also include tabulations

by the county in which the legal certificate was issued. Thus, statistics calculated with these data reflect the place of occurrence of the legal activity (e.g. marriage ceremony performed, divorce decree issued) rather than the place of residence of the individuals involved. Please note that tabulations by occurrence include events that were issued in Washington State for residents of other states.

Divorces and annulments issued in Washington State are also tabulated by wife's county of residence (Divorce Tables 1 and 5) and husband's county of residence (Divorce Table 1). These tables, unlike the other tables in this section, present information by place of residence rather than by the place (county) where the legal document was issued and recorded. As stated above, the data in these tables do not include divorces to Washington residents obtained in other states or countries.

### *Legal Separations*

In annual summaries for years prior to 1992, legal separations were included in divorce totals. Because legal separations are not final dissolutions of marriage, they have been excluded from divorce totals in annual summary tables beginning with 1992 data. This change makes Washington State's tabulations consistent with those contained in national publications by the National Center for Health Statistics. The impact of the change on trends is small, since legal separations reported to this office equal only about 1 to 2% of total dissolutions.

### *Court Orders*

Prior to 1996, a small number of divorces (between 32 and 145, see Vital Statistics 1994-95 – Table 50) were submitted to the Center for Health Statistics by county clerks as court orders without filing the certificate of dissolution with the Center as required by law (RCW 70.58.055(3)). The number of such court orders were reported in a footnote in those years but were not included in divorce totals. Beginning in 1996, this problem has been corrected through the cooperation of county clerks.

### *Number of Children*

Data on the number of children reported on the certificate of dissolution are captured by an item on the form labeled, "Children born alive of the marriage." Divorce Table 5 in this report presents the number of divorces and annulments tabulated by the number of children born to the couple regardless of the child's age (i.e., some of the children may be over 18 years of age).

Prior to 1997, in some cases, when the number of children was unknown, the number was erroneously recorded as none due to a data entry problem. Beginning in 1997, this problem was corrected. As a result, divorces for which the number of children is recorded as unknown is somewhat higher than in prior years.



## Definitions

*Birth Weight* - Weight of fetus or infant at time of delivery (normally recorded in pounds and ounces).

*Fetal Death* - Death prior to the complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy. The death is indicated by the fact that after such expulsion or extraction the fetus does not breathe or show any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. Reporting of fetal deaths to the state is required only when the gestational period is twenty weeks or more.

*Infant Death* - Death of a child under one year of age.

*Live Birth* - The complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy, which, after such expulsion or extraction, breathes, or shows any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached.

*Live Birth Order* - Total number of live births to a given mother, including current birth.

*Maternal Death* - Death attributed to complications of pregnancy, childbirth, or the puerperium (ICD-10 O00-O99) for women of childbearing age; includes abortion-related death.

*Neonatal Death* - Death of an infant within the first 27 days of life.

*Nulliparous* - Having never given birth to a liveborn infant.

*Occurrence Data* - Data allocated by place where the event occurred, regardless of the person's place of residence.

*Parity* - Total number of previous live births; does not include the current birth.

*Perinatal Death* - Fetal deaths plus deaths to infants within the first six days of life.

*Plurality* - The number of siblings born as the result of a single pregnancy (e.g., twins, triplets).

*Postneonatal Death* - Death of an infant of 28-364 days of age.

*Premature Birth* - A live birth weighing 2,500 grams (5-1/2 pounds) or less. If birth weight is not stated, length of gestation (under 37 weeks) is used.

*Residence Data* - Data allocated by place of residence of the child's mother (births, fetal deaths), or by place of residence of the decedent (deaths), regardless of where the event occurred.

*Underlying Cause – of – Death* - The disease or injury which initiated the train of morbid events leading directly or indirectly to death or the circumstances of the accident or violence which produced the fatal injury.

## Rates and Ratios

*Rounding of Rates* - Rates are rounded to the nearest tenth. When the rate or percent is less than one-tenth, the entry is 0. Rates are not calculated when the number of events is less than 5.

*Rates and Ratios Used in this Report* - Rates and ratios are calculated by dividing the number of events of concern by the population at risk (or a related population) and multiplying by a standard constant (i.e., 1,000 or 10,000 or 100,000).

$$\text{(Crude) Birth Rate} = \frac{\# \text{ Live Births}}{\text{Total Population}} \times 1,000$$

$$\text{Age - Specific Birth Rate} = \frac{\# \text{ Births for Specific Age Group}}{\text{Population for Same Age Group}} \times 1,000$$

$$\text{(Crude) Death Rate} = \frac{\# \text{ Deaths}}{\text{Total Population}} \times 1,000$$

$$\text{Age - Specific Death Rate} = \frac{\# \text{ Deaths for Specific Age Group}}{\text{Population for Same Age Group}} \times 100,000$$

$$\text{Cause - Specific Death Rate} = \frac{\# \text{ Deaths for Specific Cause}}{\text{Total Population}} \times 100,000$$

$$\text{Age - adjusted Death Rate} = \sum_i W_i \cdot \frac{\# \text{ Deaths}_i}{\text{Population}_i} \times 100,000$$

$$\text{where } W_i = \frac{\text{Standard Population}_i}{\text{Total Standard Population}}$$

and  $_i$  = agegroup

$$\text{Comparability Ratio} = \frac{\# \text{ Deaths Classified with ICD - 10}}{\# \text{ Deaths Classified with ICD - 9}}$$

*Comparability Modified Values* = Rate or Count  $\times$  Comparability Ratio

$$\text{Infant Death Rate} = \frac{\# \text{ Infant Deaths}}{\text{Total Live Births}} \times 1,000$$

$$\text{Neonatal Death Rate} = \frac{\# \text{ Neonatal Deaths}}{\text{Total Live Births}} \times 1,000$$

$$\text{Postneonatal Death Rate} = \frac{\# \text{ Postneonatal Deaths}}{\text{Total Live Births}} \times 1,000$$

$$\text{Maternal Death Rate} = \frac{\# \text{ Maternal Deaths}}{\text{Total Live Births}} \times 10,000$$

$$\text{Fetal Death Ratio} = \frac{\# \text{ Fetal Deaths}}{\text{Total Live Births}} \times 1,000$$

$$\text{Perinatal Death Rate} = \frac{\# \text{ Perinatal Deaths}}{\text{Live Births} + \text{Fetal Deaths}} \times 1,000$$

## Appendix B. Conversion of Birth Weight in Grams to Pounds and Ounces

| <b>Weight in Grams</b> | <b>Pounds and Ounces</b>      |
|------------------------|-------------------------------|
| Under 1,000            | 2lbs. 3 oz. and less          |
| 1,000 - 1,499          | 2 lbs. 4 oz. - 3 lbs. 4 oz.   |
| 1,500 - 1,999          | 3 lbs. 5 oz. - 4 lbs. 6 oz.   |
| 2,000 - 2,499          | 4 lbs. 7 oz. - 5 lbs. 8 oz.   |
| 2,500 - 2,999          | 5 lbs. 9 oz. - 6 lbs. 9 oz.   |
| 3,000 - 3,499          | 6 lbs. 10 oz. - 7 lbs. 11 oz. |
| 3,500 - 3,999          | 7 lbs. 12 oz. - 8 lbs. 13 oz. |
| 4,000 - 4,499          | 8 lbs. 14 oz. - 9 lbs. 14 oz. |
| 4,500 and over         | 9 lbs. 15 oz. and over        |

One pound = 453.59 grams

**Appendix C. Estimated Population, State of Washington, by Age Group by Sex, April 1, 2001**

| <b>Age Group</b>          | <b>Total</b> | <b>Male</b> | <b>Female</b> |
|---------------------------|--------------|-------------|---------------|
| <b>Total</b>              | 5,974,923    | 2,975,113   | 2,999,810     |
| Under 1 Year <sup>1</sup> | 79,541       | 40,621      | 38,920        |
| 1 - 4                     | 317,781      | 162,887     | 154,894       |
| 5 - 14                    | 861,581      | 442,002     | 419,579       |
| 15 - 19                   | 435,039      | 224,089     | 210,950       |
| 20 - 24                   | 404,507      | 207,760     | 196,747       |
| 25 - 34                   | 839,572      | 429,787     | 409,785       |
| 35 - 44                   | 970,133      | 488,438     | 481,695       |
| 45 - 54                   | 880,595      | 437,651     | 442,944       |
| 55 - 64                   | 517,139      | 256,545     | 260,594       |
| 65 - 74                   | 338,318      | 158,163     | 180,155       |
| 75 - 84                   | 243,281      | 99,544      | 143,737       |
| 85 and Over               | 87,436       | 27,626      | 59,810        |

<sup>1</sup>Population under 1 year is shown as births in current year, the denominator for infant mortality rates; other population estimates for children under 1 or aged 1-4 may differ.

Source: Washington State Office of Financial Management, Forecasting Division, Intercensal and Postcensal Estimates of County Population by Age and Sex: 1980-2001, August 2001.

## Appendix D. Estimated Population of Counties and Cities of 15,000 Population and Over, April 1, 2001

| Name               | City      | County    | Name               | City    | County  |
|--------------------|-----------|-----------|--------------------|---------|---------|
| <b>State Total</b> | 5,974,900 |           | Kenmore            | 18,790  |         |
|                    |           |           | Sammamish          | 34,560  |         |
| Adams              |           | 16,600    | Kitsap             |         | 233,400 |
| Asotin             |           | 20,700    | Bremerton          | 37,260  |         |
| Benton             |           | 144,800   | Bainbridge Island  | 20,740  |         |
| Kennewick          | 55,780    |           | Kittitas           |         | 34,000  |
| Richland           | 39,350    |           | Ellensburg         | 15,460  |         |
| Chelan             |           | 67,100    | Klickitat          |         | 19,300  |
| Wenatchee          | 27,930    |           | Lewis              |         | 69,500  |
| Clallam            |           | 64,800    | Lincoln            |         | 10,200  |
| Port Angeles       | 18,420    |           | Mason              |         | 49,600  |
| Clark              |           | 352,600   | Okanogan           |         | 39,700  |
| Vancouver          | 145,300   |           | Pacific            |         | 21,000  |
| Columbia           |           | 4,100     | Pend Oreille       |         | 11,800  |
| Cowlitz            |           | 93,900    | Pierce             |         | 713,400 |
| Longview           | 35,100    |           | Tacoma             | 194,500 |         |
| Douglas            |           | 32,800    | Puyallup           | 33,900  |         |
| Ferry              |           | 7,300     | Lakewood           | 58,190  |         |
| Franklin           |           | 50,400    | University Place   | 30,190  |         |
| Pasco              | 33,010    |           | San Juan           |         | 14,400  |
| Garfield           |           | 2,400     | Skagit             |         | 104,100 |
| Grant              |           | 75,900    | Mount Vernon       | 26,460  |         |
| Moses Lake         | 15,210    |           | Skamania           |         | 9,900   |
| Grays Harbor       |           | 68,500    | Snohomish          |         | 618,600 |
| Aberdeen           | 16,490    |           | Everett            | 95,990  |         |
| Island             |           | 72,400    | Edmonds            | 39,590  |         |
| Oak Harbor         | 20,060    |           | Lynnwood           | 34,010  |         |
| Jefferson          |           | 26,100    | Marysville         | 26,770  |         |
| King               |           | 1,758,300 | Mountlake Terrace  | 20,370  |         |
| Seattle            | 568,100   |           | Mukilteo           | 18,340  |         |
| Renton             | 51,140    |           | Spokane            |         | 422,400 |
| Auburn             | 43,420    |           | Spokane (city)     | 195,700 |         |
| Kent               | 81,900    |           | Stevens            |         | 40,300  |
| Kirkland           | 45,770    |           | Thurston           |         | 210,200 |
| Bellevue           | 111,500   |           | Olympia            | 42,530  |         |
| Mercer Island      | 21,970    |           | Lacey              | 31,600  |         |
| Redmond            | 45,490    |           | Wahkiakum          |         | 3,800   |
| Bothell part       | 16,310    |           | Walla Walla        |         | 55,200  |
| Des Moines         | 29,600    |           | Walla Walla (city) | 29,500  |         |
| Tukwila            | 17,230    |           | Whatcom            |         | 170,600 |
| Federal Way        | 83,890    |           | Bellingham         | 68,890  |         |
| SeaTac             | 25,380    |           | Whitman            |         | 40,300  |
| Burien             | 31,830    |           | Pullman            | 24,540  |         |
| Shoreline          | 53,150    |           | Yakima             |         | 224,500 |
|                    |           |           | Yakima (city)      | 73,040  |         |

Source: Population estimates in this report are from the Washington State Office of Financial Management, Forecasting Division, Intercensal and Postcensal Estimates of County Population by Age and Sex: 1980-2001, August 2001.

## Appendix E. Comparison Between Current and Previous Table Numbers

| 2000   | 1999 <sup>1</sup> | 1980-1998 <sup>2</sup> | Current Title  | Comments                                       |
|--|-------------------|------------------------|--|--|
| <b>Natality A: Demographics</b>                          |                   |                        |  |  |
| A1   | ---               | ---                    | Summary Indicators, Washington State Residents, 1990-2000      | New Table                                      |
| A2   | 1A                | 2A                     | Mother's Race/Ethnicity by Child's Sex, Residence              |  |
| A3   | 1C                | 2C                     | Mother's Age Group by Child's Sex, Residence                   |  |
| A4   | ---               | ---                    | Child's Birth Order by Mother's Age Group, Residence           | New Table                                      |
| A5   | ---               | ---                    | Mother's Education by Mother's Age Group, Residence            | New Table                                      |
| A6a  | Appendix E        |                        | Top 100 Baby Names of Girls, Residence                         |  |
| A6b  | Appendix E        |                        | Top 100 Baby Names of Boys, Residence                          |  |
| A7   | 7                 | 8                      | Place of Residence, Sex, and Place of Occurrence               |  |
| A8   | 12                | 13                     | Month of Birth by Place of Residence                           |  |
| A9   | 8                 | 9                      | Mother's Age Group by Place of Residence                       |  |
| A10  | ---               | ---                    | Age-Specific Live Birth Rates by Place of Residence            | New Table <sup>3</sup>                         |
| A11  | 9                 | 10                     | Single Mothers, Mother's Age Group by Place of Residence       |  |
| A12  | ---               | ---                    | Father's Age Group by Place of Residence                       | New Table                                      |
| A13  | 10                | 11                     | Mother's Race/Ethnicity by Place of Residence                  |  |
| A14  | ---               | ---                    | Mother's Education by Place of Residence                       | New Table                                      |
| <b>Natality B: Behavioral and Health Characteristics</b> |                   |                        |  |  |
| B1   | ---               | ---                    | Summary Indicators, Washington State Residents, 1990-2000      | New Table                                      |
| B2   | ---               | ---                    | Mother's Age Group by Maternal Smoking, Residence              | New Table                                      |
| B3   | ---               | ---                    | Mother's Education by Maternal Smoking, Residence              | New Table                                      |
| B4   | 16                | 17                     | Maternal Smoking During Pregnancy by Place of Residence        |  |
| B5   | ---               | ---                    | Selected Medical Risk Factors by Place of Residence            | New Table                                      |
| <b>Natality C: Health Service Utilization</b>            |                   |                        |  |  |
| C1   | ---               | ---                    | Summary Indicators, Washington State Residents, 1990-2000      | New Table                                      |
| C2   | 5                 | 6                      | Month Prenatal Care Began by Mother's Age Group, Residence     |  |
| C3   | 6                 | 7                      | Number of Prenatal Visits by Month Care Began, Residence       |  |
| C4   | 14                | 15                     | Month Prenatal Care Began by Place of Residence                |  |
| C5   | 17                | 18                     | Birth Facility by Place of Occurrence                          |  |
| C6   | ---               | ---                    | Method of Delivery by Place of Occurrence                      | New Table                                      |
| C7   | ---               | ---                    | Birth Attendant by Place of Occurrence                         | New Table                                      |
| C8   | 18                | 19                     | County of Residence by County of Occurrence                    |  |
| <b>Natality D: Infant Health</b>                         |                   |                        |  |  |
| D1   | ---               | ---                    | Summary Indicators, Washington State Residents, 1990-2000      | New Table                                      |
| D2   | 2                 | 3                      | Birth Weight in Grams by Mother's Race/Ethnicity, Residence    |  |
| D3   | 4                 | 5                      | Birth Weight in Grams by Mother's Age Group, Residence         |  |
| D4   | ---               | ---                    | Birth Weight in Grams by Calculated Gestational Age, Residence | New Table                                      |
| D5   | ---               | ---                    | Birth Weight in Grams by Plurality, Residence                  | New Table                                      |
| D6   | ---               | ---                    | Mother's Age Group by Plurality, Residence                     | New Table                                      |
| D7   | 13                | 14                     | Birth Weight in Grams by Place of Residence                    |  |
| D8   | ---               | ---                    | Calculated Gestational Age by Place of Residence               | New Table                                      |
| D9   | ---               | ---                    | Plurality by Place of Residence                                | New Table                                      |
| <b>Natality Tables Not Included in Current Report</b>    |                   |                        |  |  |
| ---  | 1B                | 2B                     | Residence, Child's Race/Ethnicity by Sex                       | Mother's race has been the standard since 1980 |
| ---  | 1D                | 2D                     | Residence, Order of Birth to Mother                            | See 'All ages' column of Table A4              |
| ---  | 1E                | 2E                     | Residence, Attendant at Birth                                  | See 'State total' row of Table C7              |



continued Appendix E. Comparison Between Current and Previous Table Numbers

| 2000   | 1999 <sup>1</sup> | 1980-1998 <sup>2</sup> | Current Title  | Comments   |
|--|-------------------|------------------------|--|--|
| <b>continued Natality Tables Not Included in Current Report</b>                    |                   |                        |  |  |
| ---  | 1F                | 2F                     | Residence, Maternal Smoking  | See 'State total' row of Table B4                  |
| ---  | 1G                | 2G                     | Residence and Occurrence, Birth Weight in Grams by Sex   | See 'State total' row of Table A8 (births)         |
| ---  | 1H                | 2H                     | Residence and Occurrence, Live Births and Fetal Deaths by Month  | See 'State total' row of Table D7 (residence data) |
| ---  | 1I                | 2I                     | Occurrence, Primary Method of Birth Delivery by Obstetric Procedures   | See 'State total' row of Table C6                  |
| ---  | 1J                | 2J                     | Occurrence, Type of Place  | See 'State total' row of Table C5                  |
| ---  | 3                 | 4                      | Live Births to Residents by Birth Weight in Grams by Child's Race/Ethnicity  | Mother's race has been the standard since 1980     |
| ---  | 11                | 12                     | Live Births by Child's Race/Ethnicity by Place of Residence  | Mother's race has been the standard since 1980     |
| ---  | 15                | 16                     | Live Births with Malformations by Place of Residence   | Malformation data are not very reliable            |
| <b>Mortality A: Demographics</b>   |                   |                        |  |  |
| A1   | --                | --                     | Age-Adjusted Mortality Rates and Life Expectancy by Sex for Residents, 1990-2000                                       | New Table  |
| A2   | 2                 | 20B                    | Age by Race/Ethnicity for Residents  |  |
| A3   | 3                 | 20C                    | Age by Sex for Residents   |  |
| A4   | 4                 | 20D                    | Life Expectancy by Age and Sex for Residents   |  |
| A5   | 7                 | 20H                    | Marital Status by Sex for Residents  |  |
| A6   | --                | --                     | Education by Age for Residents   | New Table  |
| A7-a   | 17A               | 25                     | Residence and Occurrence by County and City  |  |
| A7-b   | 17B               | --                     | Residence and Occurrence by County Listed by Age-Adjusted Rates for 1998-2000  |  |
| A8   | 18                | 26                     | Sex and Race/Ethnicity by County/City of Residence   |  |
| A9   | 19                | 27                     | Age Group by County of Residence   |  |
| A10  | 20                | 28                     | Month of Death by County of Residence  |  |
| A11  | 28                | 37                     | Place Where Death Occurred by County of Occurrence   |  |
| <b>Mortality B: Autopsy and Disposition</b>  |                   |                        |  |  |
| B1   | --                | --                     | Percent Autopsy and Cremation for Residents, 1990-2000   | New Table  |
| B2   | 9                 | --                     | Autopsy by Age and Manner of Death for Residents   |  |
| B3   | --                | --                     | Type of Disposition by County of Residence   | New Table  |
| <b>Mortality C: Leading Causes of Death, Overview and Selected Causes of Death</b> |                   |                        |  |  |
| C1   | --                | --                     | Age-Adjusted Rates <sup>1</sup> for 10 Leading Causes of Death for Residents, 1990-2000                                | New Table  |
| C2   | 5A                | 20E                    | Leading Causes of Death for Residents  |  |
| C3   | 10                | 21                     | Leading Causes by Age Group and Sex for Residents  |  |
| C4   | 11A               | 22                     | Crude Rates for Selected Causes by Sex for Residents   |  |
| C5   | 11B               | 22                     | Age-Adjusted Rates for Selected Causes by Sex for Residents  |  |
| C6   | 21A               | 29                     | Diabetes, Alzheimer's Disease, and Major Cardiovascular Disease by County of Residence                                 |  |
| C7   | 21B               | 29                     | Diseases of the Heart, Ischemic Heart Diseases, and Cerebrovascular Diseases by County of Residence                    |  |
| C8   | 21C               | 29                     | Influenza & Pneumonia, Chronic Lower Respiratory Disease, and Chronic Liver Disease & Cirrhosis by County of Residence |  |

continued Appendix E. Comparison Between Current and Previous Table Numbers

**Table Numbers**

| 2000   | 1999 <sup>1</sup> | 1980-1998 <sup>2</sup> | Current Title  | Comments                                       |
|--|-------------------|------------------------|--|--|
| <b>Mortality D: Cancer</b>                             |                   |                        |  |  |
| D1   | --                | --                     | Age-Adjusted Rates for Leading Causes of Cancer for Residents, 1990-                       | New Table                                      |
| D2   | 12                | 23                     | Cancer by Primary Site and Sex for Residents   |  |
| D3   | 23A               | 30A                    | Cancer for Total All Sites, Lung, and Colo-Rectal by County of Residence                   |  |
| D4   | 23B               | 30B                    | Cancer for Female Breast, Prostate, and Pancreas by County of Residence                    |  |
| <b>Mortality E: External Causes or Injuries</b>        |                   |                        |  |  |
| E1   | --                | --                     | Age-Adjusted Rates for External Causes for Residents, 1990-2000                            | New Table                                      |
| E2-a   | 13                | 24                     | External Causes of Injury With Crude Rates for Residents                                   |  |
| E2-b   | 13                | 24                     | External Causes of Injury With Age-Adjusted Rates for Residents                            |  |
| E2-c   | 13                | 24                     | ICD-10 Codes for External Causes   |  |
| E3   | 14                | --                     | External Causes by Place of Injury for Residents   |  |
| E4   | 15                | --                     | Type of Firearm by Intent for Residents  |  |
| E5   | 16                | --                     | Poisoning by Intent and Substance  |  |
| E6   | 25                | 33                     | Suicide, Homicide, Undetermined by County of Residence                                     |  |
| E7   | 22                | --                     | Drug and Alcohol-Induced Causes for Residents  |  |
| E8   | 24A               | 32A                    | Unintentional Injury (Accident), Motor Vehicle Traffic, and Falls by Place of Residence    |  |
| E9   | 24B               | 32B                    | Drowning Drowning, Fires, and Other Unintentional Injury (Accident) by County of Residence |  |
| E10  | 27                | 36                     | Suicide, Homicide, and Undetermined for Residents by County of Injury                      | Tables prior to 1999 used county of occurrence |
| E11  | 26                | 35                     | Unintentional Injury (Accident) to Residents by County of Injury                           | Tables prior to 1999 used county of occurrence |
| <b>Mortality F: Infant Deaths</b>                      |                   |                        |  |  |
| F1   | --                | --                     | Selected Causes for Infant (Age < 1 Year) Residents, 1990-2000                             | New Table                                      |
| F2   | 5B                | 20F                    | Leading Causes of Infant (Age < 1 Year) Death for Residents                                |  |
| F3   | 29                | --                     | Birth Weight and Age for Infant (Age < 1 Year) Residents                                   |  |
| F4-a   | 30A               | 38A                    | Selected Causes by Age and Sex for Infant (Age < 1 Year) Residents                         |  |
| F4-b   | 30B               | 38B                    | Selected Causes by Age and Sex for Infant (Age < 1 Year) Residents                         |  |
| F5   | 31                | 39                     | Selected Causes for Infant (Age < 1 Year) County of Residence                              |  |
| F6   | 32                | 40                     | Mother's Race/Ethnicity by Infant (Age < 1 Year) County of Residence                       |  |
| F7   | 34                | 42                     | Mother's Age Group by Infant (Age < 1 Year) County of Residence                            |  |
| F8   | 35                | 26                     | Fetal Deaths, Perinatal, Neonatal, and Infant Mortality by County/City of Residence        |  |
| <b>Mortality G: Fetal Deaths</b>                       |                   |                        |  |  |
| G1   | --                | --                     | Selected Causes of Fetal Death Residents   | New Table                                      |
| G2   | 36                | 45                     | Fetal Deaths by Mother's Age Group by Place of Residence                                   |  |
| G3   | 37                | 46                     | Fetal Deaths for Residents by Cause  |  |
| G4   | 38                | 47                     | Fetal Deaths by Weight in Grams and Sex for Residents                                      |  |
| <b>Mortality Tables Not Included in Current Report</b> |                   |                        |  |  |
| --   | 1                 | 20A                    | Deaths to Residents by Race/Ethnicity and Sex  | See 'State Total' row of Table A8              |
| --   | 6                 | 20G                    | Deaths to Residents and by Occurrence by Month of Death                                    | See 'State Total' row of Table A10             |
| --   | 8                 | 20I                    | Deaths by Occurrence by Type of Place  | See 'State Total' row of Table A11             |

**continued Appendix E. Comparison Between Current and Previous Table Numbers**

| 2000   | 1999 <sup>1</sup> | 1980-1998 <sup>2</sup> | Current Title   | Comments  |
|--|-------------------|------------------------|---|---|
| <b>continued Mortality Tables Not Included in Current Report</b> |                   |                        |   |   |
| --   | --                | 31                     | Deaths Due to Human Immunodeficiency Virus by Sex by Place of Residence       | Number of deaths have declined; Most cells are zero |
| --   | --                | 34                     | Deaths Due to Human Immunodeficiency Virus by Sex by Place of Occurrence      | Number of deaths have declined; Most cells are zero |
| --   | --                | 44                     | Fetal Deaths, Perinatal, Neonatal and Infant Mortality by Place of Occurrence | Place of Residence is used more often               |
| --   | 33                | 41                     | Infant (Age < 1 Year) Deaths by Child's Race/Ethnicity by Residence           | Mother's race has been the standard since 1980      |

<sup>1</sup>From *Washington State Vital Statistics, 1999*

<sup>2</sup>From *Washington State Vital Statistics Reports, 1980-1998*

<sup>3</sup>Also published as Table 19 in *Washington State Pregnancy and Induced Abortion Statistics*

## Appendix F. Sample Certificates

**Certificate of Live Birth**

## Certificate of Death

## **Certificate of Fetal Death**

## Certificate of Dissolution



# Certificate of Marriage



## CERTIFICATE OF MARRIAGE

Please type or print clearly in permanent black ink.

|  |  |                             |  |  |   |
|--|--|-----------------------------|--|--|---|
| COUNTY OF LICENSE  |  | DATE VALID                  |  | NOT VALID AFTER  |   |
| <b>OFFICIANT - I certify the persons named below were married on . . . .</b> |  |                             |  |  |   |
| 1. DATE OF MARRIAGE(MO/DAY/YR)   |  | 2. COUNTY OF CEREMONY       |  | 3. TYPE OF CEREMONY<br><input type="checkbox"/> Religious <input type="checkbox"/> Civil |   |
| 4. DATE SIGNED(MO/DAY/YR)  |  | 5. OFFICIANT'S NAME (PRINT) |  | 6. OFFICIANT'S SIGNATURE<br><b>X</b>   |   |
| 7. OFFICIANT'S ADDRESS (STREET, CITY, STATE & ZIP)                           |  |                             |  |  |   |
| <b>GROOM</b>   |  |                             |  |  |   |
| 8. GROOM'S NAME  |  | FIRST                       | MIDDLE   | LAST   |   |
| 9. USUAL RESIDENCE ADDRESS (NUMBER AND STREET)                               |  |                             | 10. DATE OF BIRTH(MO/DAY/YR)   |  | 11. BIRTHSTATE(IF NOT USA GIVE COUNTRY) |
| 12. CITY/TOWN/LOCATION   |  |                             | 13. INSIDE CITY LIMITS<br><input type="checkbox"/> Yes <input type="checkbox"/> No |  | 14. COUNTY                              |
| 15. STATE  |  |                             | 16. FATHER'S NAME (FIRST/LAST)   |  | 17. BIRTHSTATE(IF NOT USA GIVE COUNTRY) |
| 18. MOTHER'S MAIDEN NAME (FIRST/LAST)  |  |                             | 19. BIRTHSTATE(IF NOT USA GIVE COUNTRY)  |  | 20. GROOM'S SIGNATURE<br><b>X</b>       |
| 21. DATE SIGNED (MO/DAY/YR)  |  |                             | 22. BRIDE'S NAME   |  |   |
| FIRST  |  | MIDDLE                      | LAST   |  | 23. MAIDEN NAME                         |
| 24. USUAL RESIDENCE ADDRESS (NUMBER AND STREET)                              |  |                             | 25. DATE OF BIRTH(MO/DAY/YR)   |  | 26. BIRTHSTATE(IF NOT USA GIVE COUNTRY) |
| 27. CITY/TOWN/LOCATION   |  |                             | 28. INSIDE CITY LIMITS<br><input type="checkbox"/> Yes <input type="checkbox"/> No |  | 29. COUNTY                              |
| 30. STATE  |  |                             | 31. FATHER'S NAME (FIRST/LAST)   |  | 32. BIRTHSTATE(IF NOT USA GIVE COUNTRY) |
| 33. MOTHER'S MAIDEN NAME (FIRST/LAST)  |  |                             | 34. BIRTHSTATE(IF NOT USA GIVE COUNTRY)  |  | 35. BRIDE'S SIGNATURE<br><b>X</b>       |
| 36. DATE SIGNED (MO/DAY/YR)  |  |                             | 37. WITNESS' SIGNATURE<br><b>X</b>   |  |   |
| 38. WITNESS' SIGNATURE<br><b>X</b>   |  |                             | 39. COUNTY AUDITOR'S SIGNATURE<br><b>X</b>   |  |   |
| 40. DATE RECEIVED (MO/DAY/YR)  |  |                             |  |  |   |

DOH 110-009 FRONT (REV 2/2000)

**Department of Health is required to collect your Social Security Number in order to assist in enforcement of child support laws (Section 7, Chapter 160 Laws of 1998). If you do not have a Social Security Number, you are required to complete the Social Security Declaration.**

41. GROOM'S SOCIAL SECURITY NUMBER

42. BRIDE'S SOCIAL SECURITY NUMBER

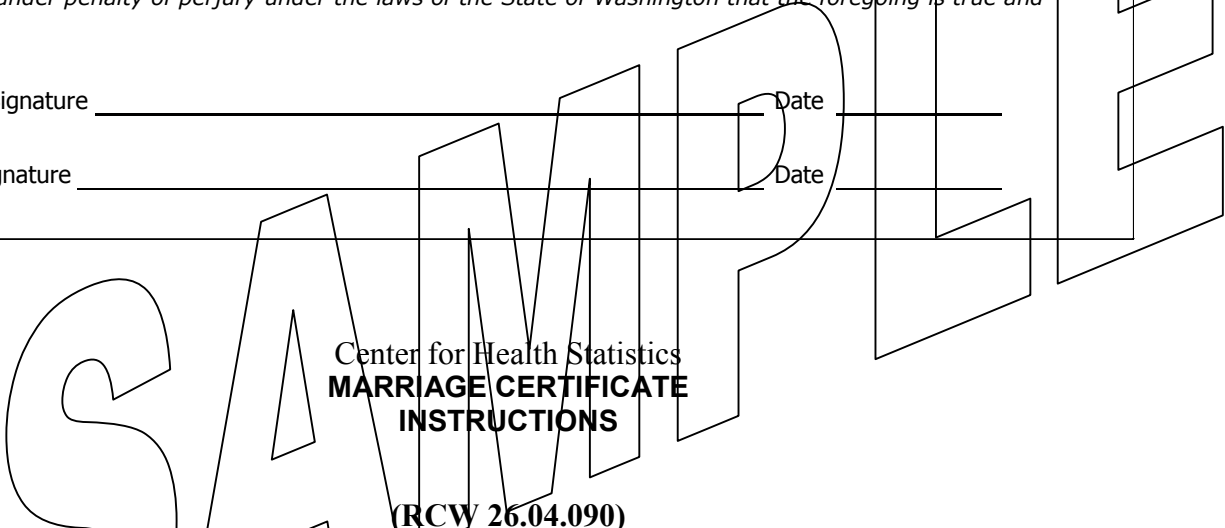
**SOCIAL SECURITY DECLARATION**

*I have not furnished a Social Security Number on my application for registration of a marriage certificate, because I do not have a Social Security Number.*

*I declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.*

Groom's Signature \_\_\_\_\_ Date \_\_\_\_\_

Bride's Signature \_\_\_\_\_ Date \_\_\_\_\_



- Items 1 - 7 ----- Completed by the Officiant. Signature and complete address required.
- Items 8 - 19 ----- Completed at the time the application for marriage license is filed.
- Items 20 - 21 ----- The signature of the groom and date signed is required.
- Items 22 - 34 ----- Completed at the time the application for marriage license is filed.
- Items 35 - 36 ----- The signature of the bride and date signed is required.
- Items 37 - 38 ----- Signatures of two witnesses are required by law.
- Items 39 - 40 ----- Completed by the county auditor when the certificate is filed.
- Items 41 - 42 ----- Completed at the time the application for marriage license is filed.

**NOTE: This form is to be transmitted to the county auditor for the county in which the license was obtained within thirty (30) days of the marriage.**