

# Washington State Vital Statistics 1999



Center for Health Statistics  
April 2001



Washington State  
**Vital Statistics 1999**

April 2001

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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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# Introduction



# Washington Counties and County Seats



## *Introduction*

*Washington State Vital Statistics, 1999*, 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 1999.

This report fulfills an important mission of the Department of Health--to help Washingtonians live healthier lives by enabling them to make informed choices about behaviors affecting their health and by insuring their access to high quality health care and preventive services. Timely and wide-ranging health information, such as that presented in *Washington State Vital Statistics*, is crucial to accomplishing this mission. 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.

### **Differences from Previous Reports**

The following describes changes made since the 1998 Vital Statistics Summary.

1. Most tables now show data by county only, rather than county and city. The number of events for most cities is small enough that they are likely to be unstable and imprecise. In addition, population by city and age are not available so age-adjusted mortality rates cannot be calculated.
2. The death section has been substantially revised: Age-adjusted rates have been added; many death summary tables have been changed, new tables have been added (Mortality Tables 9, 15, 16, 17b, 22, and 29), and a few tables have been deleted.
3. All tables have been renumbered. Appendix F lists the new table numbers with the table numbers used in previous reports so that you may compare the tables in this report with previous reports.
4. Beginning with deaths occurring in January 1999, the United States began using the International Classification of Diseases, Tenth Revision (ICD-10) to classify causes of death reported on death certificates. This is the first change in twenty years; ICD-9 codes have been in effect from 1979-1998. Implementation of ICD-10 will have an important impact on the presentation and interpretation of mortality statistics by cause-of-death. The change to ICD-10 will create a discontinuity in trends that must be accounted for when comparing 1999 mortality to prior years. To put it another way, **1999 cause-of-death 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 4,000 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, some diseases of the blood 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. Transient ischemic attacks (TIA) are now grouped with nervous system diseases rather than with strokes.
- Tabulation lists have changed. More conditions are included in the lists used to determine leading causes of death and 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 United States Department of Health and Human Services, National Center for Health Statistics (NCHS). NCHS double-coded a large sample of the 1996 national mortality file, once by the old revision (ICD-9), and again by the new revision (ICD-10). A **comparability ratio** was calculated by dividing the number of deaths for a selected cause of death classified by the 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** mortality statistics (counts and rates) for a given cause of death classified by ICD-9 so they are comparable to those for the same 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 the coding changes. The preliminary comparability study will be followed later by a comparability study based on the complete national mortality file.

The comparability ratio is multiplied by counts or rates calculated for time periods that are classified by ICD-9. For example, there were 1,717 deaths due to pneumonia and influenza (ICD-9 480-487) to residents of Washington State residents in 1998. Applying the comparability ratio of 0.70 to the 1998 number of deaths (1,717) will give the adjusted number of 1,202 deaths due to pneumonia and influenza. This modified count can be compared to the 1,258 deaths due to pneumonia and influenza (ICD-10 J10-J18) that occurred in 1999. Thus, after adjusting for the effects of the ICD revision change, there was only an increase of 56

deaths in 1999 (instead of a large decrease when comparing unadjusted counts).

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.

More information about ICD-10 can be obtained from the National Center for Health Statistics web site at:

<http://www.cdc.gov/nchs/about/major/dvs/icd10des.htm>

### 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

Certificate	Completed by	Initially Filed with
Live Birth	Hospital or Birth Attendant	State Dept. of Health
Fetal Death	Hospital or Birth Attendant	Local Health Jurisdiction
Death	Funeral Director, 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 and 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 the 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 and 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 18 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. Occurrence rates published in this report use residence population figures, so they are less meaningful than residence rates.

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. For more discussion of age-adjusted death rates, see the Center's report, *Washington State Age-Adjusted Death Rates and Years of Life Lost Rates* (April 1992). 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 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 as the Year 2010 goals). 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.

No matter what source for comparison is chosen, users should always find out how the rates were calculated, to see if the same methods and definitions were used. 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 1999, father's education was missing for about 23% 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 1999 births, the percent of fathers with less than a high school education is 9.9% if unknowns are included in the total, but the percentage is 12.9% 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.

#### *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 3 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 5. 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. Registration completeness may be slightly lower for births or infant deaths occurring outside of a hospital or for vital events among people of color. Also, 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?). Querying for missing data can help to provide more information.

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 1980-1999 in WORD, Excel, and print text format. To order a copy of the CD-ROM, call (360) 236-4327.

All of the tables in this report are available for prior years on the Internet, along with copies of the supplementary materials. To access this information, go to the DOH web page at [www.doh.wa.gov](http://www.doh.wa.gov), click on "Health Data" then click on "Vital Statistics." At that point a list of tables by type appears. Click on any of the following items to locate a topic of particular interest:

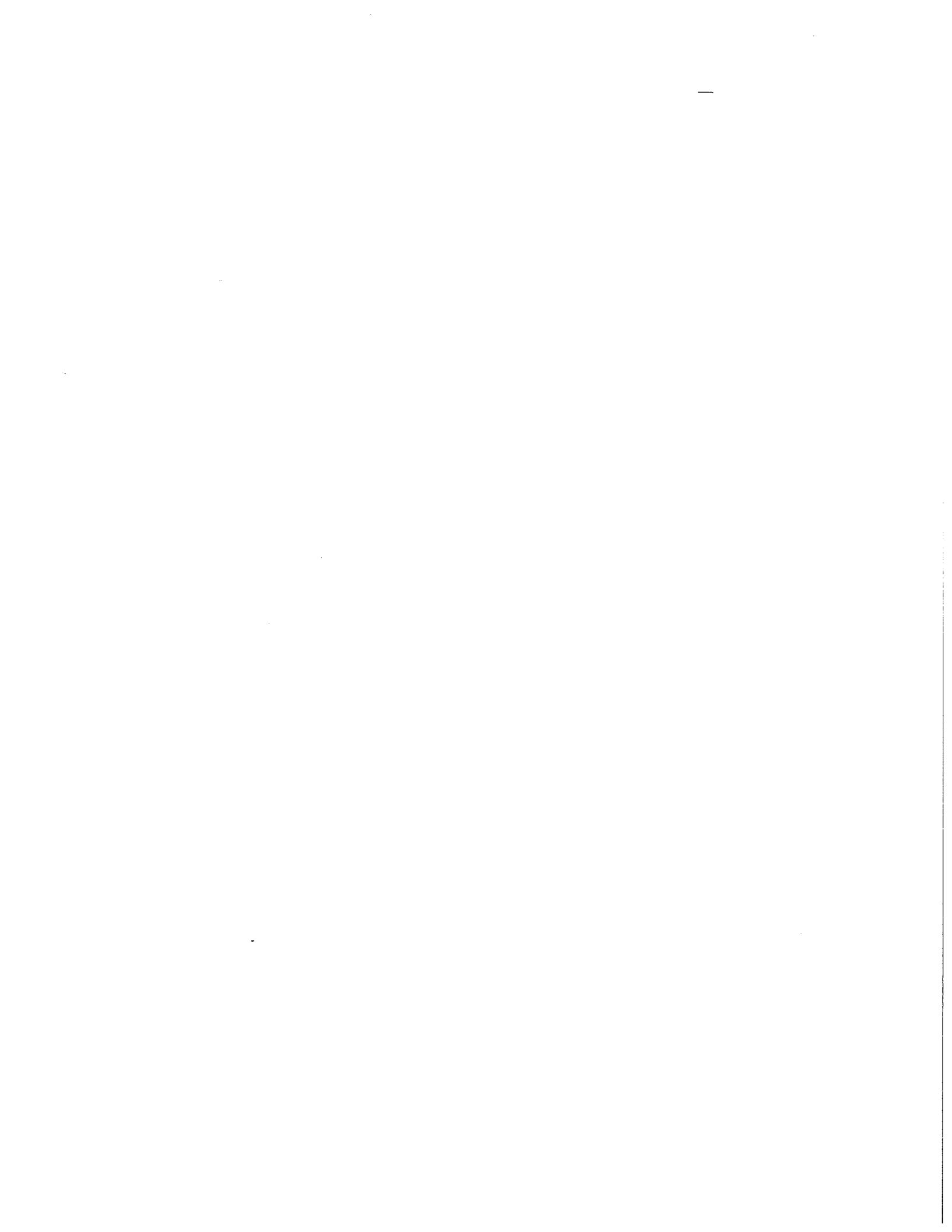
- "Vital Statistics Annual Summary Tables" for a description of how to read the tables.
- "Birth and Death Tables" for the annual tables for 1980-1999.
- "Marriage Tables" or "Divorce Tables" for tables for 1991-1999.
- "Information Sources for Vital Statistics" or "Frequently Asked Questions About Vital Statistics" to access the general information about using vital statistics (also contained in the Introduction of this report).
- "Data Classifications" or "Definition of Terms" to access the information in the Technical Appendix of this report.
- "Top 100 Baby Names" for lists of names by gender for 1994-1999

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 1999 vital statistics in Washington State. The crude birth rate has just begun to level off in the last four years, after a period of relatively steady decline. 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 more than quadrupled from 1910-1999, 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



**Overview Table 1. Live Births, Deaths, Infant Deaths, Maternal Deaths, and Fetal Deaths  
Washington Residents, 1910-1999**

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
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

**Overview Table 1. Live Births, Deaths, Infant Deaths, Maternal Deaths, and Fetal Deaths  
Washington Residents, 1910-1999**

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>
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	8	12.4	466	7.2
1980	4,132,400	67,989	16.5	32,049	7.8	802	11.8	10	14.7	533	7.8
1981	4,229,300	69,987	16.5	32,035	7.6	735	10.5	7	10.0	487	7.0
1982	4,276,500	69,681	16.3	32,316	7.6	755	10.8	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
1990	4,866,700	79,468	16.3	37,047	7.6	622	7.8	4	5.0	462	5.8
1991	5,000,400	79,962	16.0	37,028	7.4	603	7.5	3	3.8	426	5.3
1992	5,116,700	79,897	15.6	38,095	7.4	540	6.8	3	3.8	448	5.6
1993	5,240,900	78,771	15.0	40,380	7.7	495	6.3	6	7.6	396	5.0
1994	5,334,400	77,368	14.5	39,906	7.5	478	6.2	3	3.9	443	5.7
1995	5,429,900	77,240	14.2	40,729	7.5	449	5.8	0	0.0	419	5.4
1996	5,516,800	77,874	14.1	42,248	7.7	467	6.0	3	3.9	462	5.9
1997	5,606,800	78,141	13.9	41,429	7.4	440	5.6	2	2.6	457	5.8
1998	5,685,300	79,640	14.0	42,585	7.5	452	5.7	3	3.8	471	5.9
1999	5,757,000	79,577	13.8	43,793	7.6	401	5.0	6	7.5	468	5.9

<sup>1</sup>Population figures for 1910-1950 ten year intervals and for 1950-1999 single years are from the Office of Financial Management, Forecasting Division, *State of Washington 1999 Population Trends*, October 1999.

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

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

<sup>4</sup>1979-1988 maternal death figures are based on a study using both birth and death certificates; 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).

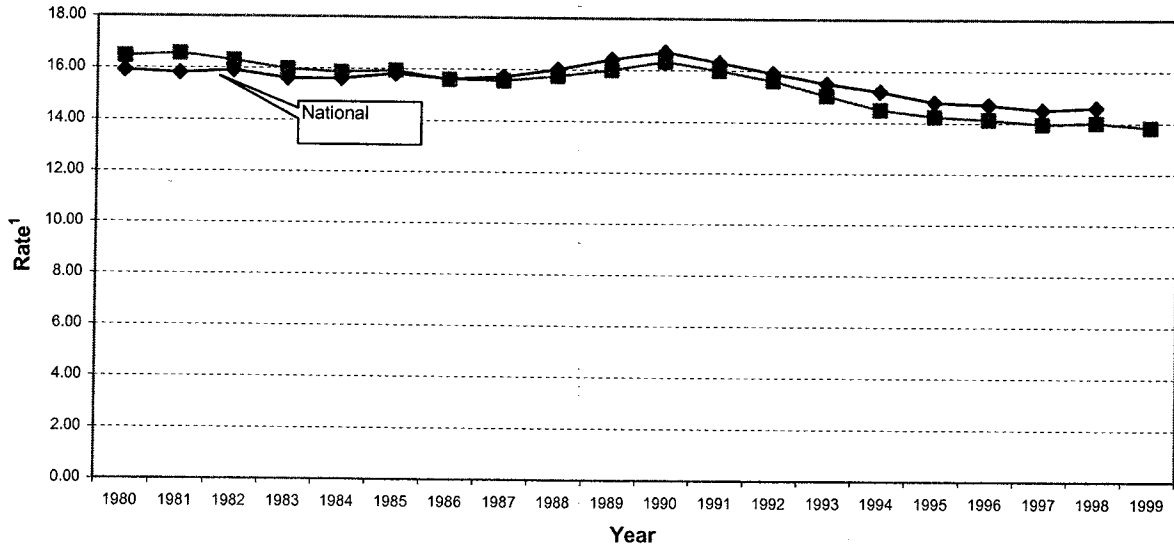
\*Rates based on fewer than 20 events are likely to be unstable and imprecise.



# Natality

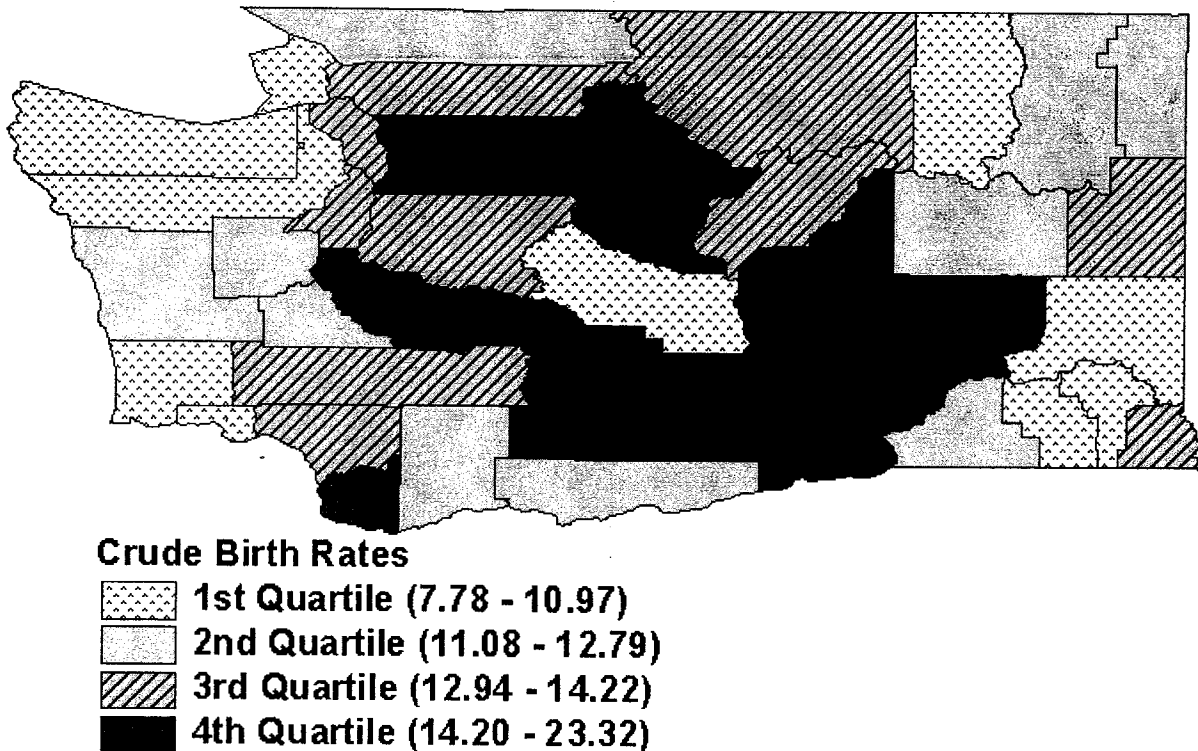


**Nativity Figure 1. Crude Birth Rates<sup>1</sup>, Washington State Residents Compared to National, 1980 - 1999**

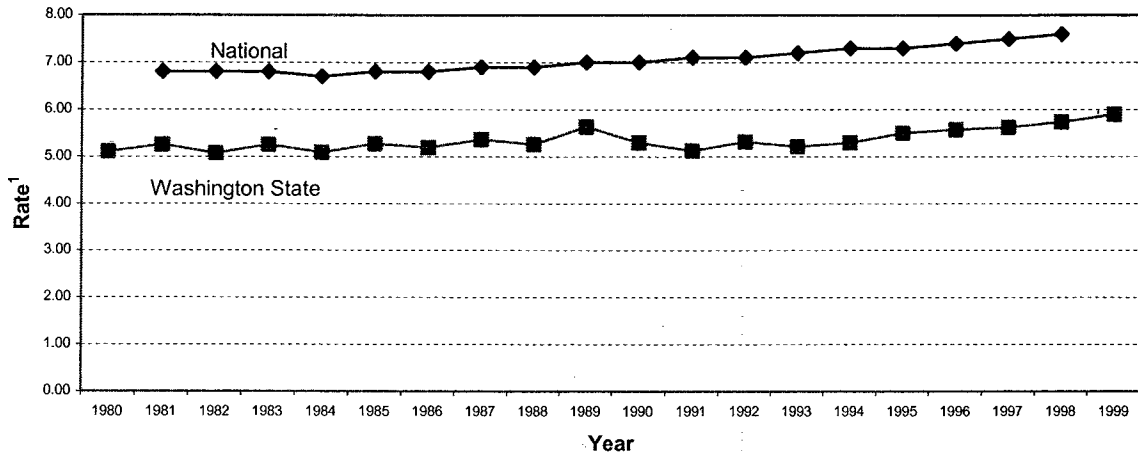


<sup>1</sup> Rate per 1,000 population

**Nativity Figure 2. Washington State Crude Birth Rates by County of Residence, 1997 - 1999 (Washington State Rate = 13.92)**

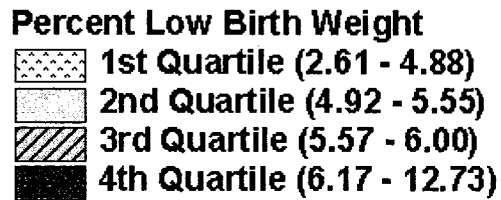
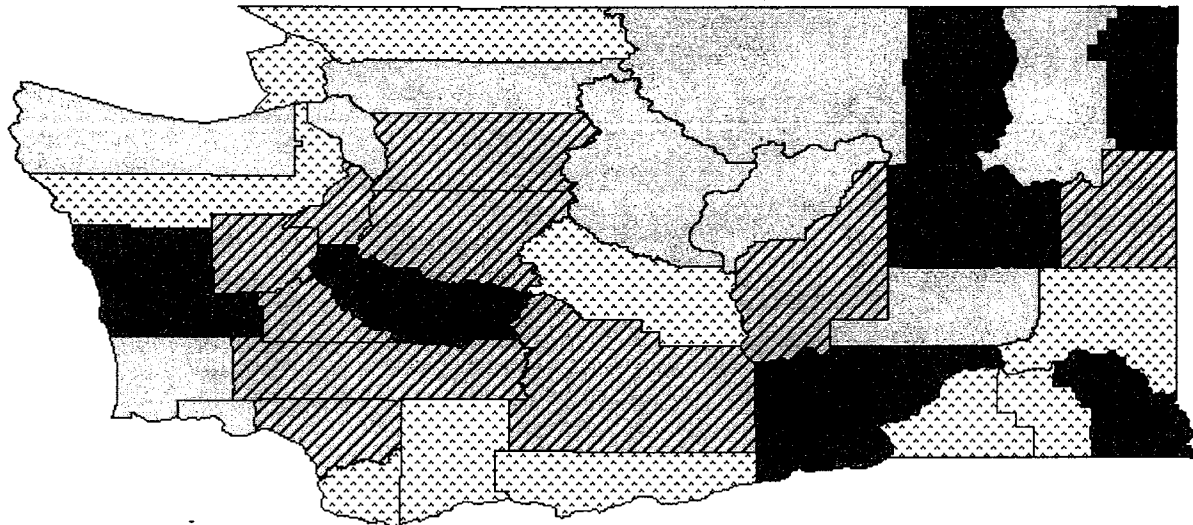


**Natality Figure 3. Percent Low Birth Weight<sup>1</sup>, Washington State Residents Compared to National, 1980 - 1999**



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

**Natality Figure 4. Washington State Percent Low Birth Weight by County of Residence, 1997 - 1999 (Washington State Rate = 5.75)**







### Natality Table 1. Births by Selected Topics, 1999

#### A. Residence, Mother's Race/Ethnicity by Sex

Race/Ethnicity	Total	Male	Female
<b>State Total</b>	<b>79,577</b>	<b>40,824</b>	<b>38,753</b>
White	65,069	33,389	31,680
African American	3,138	1,590	1,548
Native American	1,790	923	867
Japanese	307	149	158
Chinese	411	198	213
Filipino	1,021	509	512
Other Asian	4,028	2,100	1,928
Other	50	34	16
Unknown	3,763	1,932	1,831
Hispanic <sup>1</sup>	10,318	5,309	5,009

BIRA49M1

#### B. Residence, Child's Race/Ethnicity by Sex

Race/Ethnicity	Total	Male	Female
<b>State Total</b>	<b>79,577</b>	<b>40,824</b>	<b>38,753</b>
White	63,098	32,377	30,721
African American	4,764	2,403	2,361
Native American	2,254	1,159	1,095
Japanese	359	182	177
Chinese	467	228	239
Filipino	1,098	562	536
Other Asian	4,698	2,425	2,273
Other	73	49	24
Unknown	2,766	1,439	1,327
Hispanic <sup>1</sup>	13,052	6,696	6,356

BIRA49M1

#### C. Residence, Mother's Age Group by Sex

Age	Total	Male	Female
<b>State Total</b>	<b>79,577</b>	<b>40,824</b>	<b>38,753</b>
Under 15	138	74	64
15 - 17	2,699	1,376	1,323
18 - 19	5,736	2,880	2,856
20 - 24	19,302	9,895	9,407
25 - 29	22,176	11,446	10,730
30 - 34	18,329	9,410	8,919
35 - 39	9,149	4,684	4,465
40 - 44	1,909	988	921
45 and Over	115	65	50
Unknown	24	6	18

BIRA49M2

#### D. Residence, Order of Birth to Mother

Order at Birth	Number	Percent <sup>2</sup>
<b>State Total</b>	<b>79,577</b>	<b>100.0</b>
1st Child	31,491	39.5
2nd Child	24,691	31
3rd Child	12,010	15
4th Child	4,716	5.9
5th Child	1,766	2.2
6th Child	785	0.9
7th Child	365	0.4
8th Child	197	0.2
9th Child	114	0.1
10th or more	127	0.1
Unknown	3,315	4.1

BIRA49M3

#### E. Residence, Attendant at Birth

Attendant at Birth	Number	Percent <sup>2</sup>
<b>State Total</b>	<b>79,577</b>	<b>100.0</b>
Hospital Administrator	523	0.6
MD	68,029	85.4
Licensed Midwife	1,473	1.8
Osteopath	2,154	2.7
Father	59	0.0
Certified Midwife	6,368	8.0
Nurse	428	0.5
Other Midwife	36	0.0
Other	327	0.4
Unknown	180	0.2

BIRA49M2

#### F. Residence, Maternal Smoking

Maternal Smoking	Number	Percent <sup>2</sup>
<b>State Total</b>	<b>79,577</b>	<b>100.0</b>
Yes	10,586	13.3
No	63,824	80.2
Unknown	5,167	6.5

BIRA49M3

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

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

Nativity Table 1. Births by Selected Topics, 1999

G. Residence and Occurrence, Birth Weight in Grams by Sex

Gram Weight	Residence				Occurrence			
	Total	Male	Female	Unknown	Total	Male	Female	Unknown
<b>State Total</b>	<b>79,577</b>	<b>40,824</b>	<b>38,753</b>	<b>0</b>	<b>79,095</b>	<b>40,557</b>	<b>38,538</b>	<b>0</b>
Under 1,000	381	203	178	0	380	203	177	0
1,000 - 1,499	420	222	198	0	424	223	201	0
1,500 - 1,999	963	483	480	0	951	475	476	0
2,000 - 2,499	2,868	1,292	1,576	0	2,845	1,286	1,559	0
2,500 - 2,999	10,617	4,638	5,979	0	10,567	4,613	5,954	0
3,000 - 3,499	27,774	13,297	14,477	0	27,599	13,206	14,393	0
3,500 - 3,999	25,593	13,897	11,696	0	25,459	13,817	11,642	0
4,000 - 4,499	8,361	5,153	3,208	0	8,320	5,131	3,189	0
4,500 and over	1,689	1,167	522	0	1,678	1,153	525	0
Unknown	911	472	439	0	872	450	422	0

BIRA31M5

H. Residence and Occurrence, Live Births and Fetal Deaths by Month

Month	Live Births		Fetal Deaths	
	Residence	Occurrence	Residence	Occurrence
<b>State Total</b>	<b>79,577</b>	<b>79,095</b>	<b>468</b>	<b>467</b>
January	6,376	6,339	37	35
February	6,150	6,119	45	44
March	6,890	6,857	56	56
April	6,622	6,581	38	38
May	6,959	6,907	37	35
June	6,919	6,831	42	43
July	7,219	7,167	36	36
August	6,861	6,825	30	33
September	6,840	6,783	43	41
October	6,534	6,513	38	38
November	5,956	5,939	26	27
December	6,251	6,234	40	41

BIRA49P7

## Nativity Table 1. Births by Selected Topics, 1999

### I. Occurrence, Primary Method of Birth Delivery by Obstetric Procedures

Method of Delivery	Total <sup>1</sup> Births	Electronic		Stimulation			Ultra- sound	Other	Unk	
		Amnio- None	Fetal centesis Monitoring	Induction of Labor	of Labor	Toco- lysis				
<b>State Total</b>	<b>79,095</b>	<b>3,202</b>	<b>3,100</b>	<b>58,369</b>	<b>15,380</b>	<b>13,539</b>	<b>2,614</b>	<b>46,674</b>	<b>3,631</b>	<b>10,237</b>
Vaginal Delivery	61,178	2,381	1,938	45,490	12,464	11,285	1,746	35,868	2,646	7,905
Vaginal Del. After Prev. C-Section	2,120	46	98	1,786	538	532	89	1,416	109	119
Primary C-Section	9,643	349	586	7,011	1,976	1,376	541	5,765	518	1,392
Repeat C-Section w/o Trial Labor	4,107	257	359	2,533	66	62	127	2,539	229	638
Repeat C-Section with Trial Labor	1,297	58	83	1,042	246	185	51	845	70	93
Outlet Forceps	83	8	11	69	23	20	20	50	5	4
Vacuum Extraction	505	92	15	368	43	61	37	137	51	14
Other	18	4	3	12	3	1	1	6	2	1
Unknown	144	7	7	58	21	17	2	48	1	71

BIRA49P8

<sup>1</sup>Total births occurring in Washington, which will not equal the total number of obstetric procedures used since each birth may require more than one procedure.

### J. Occurrence, Type of Place

Type of Place	Number	Percent <sup>1</sup>
<b>State Total</b>	<b>79,095</b>	<b>100.0</b>
General Hospital	74,648	94.4
Federal Facility	2,880	3.6
Home	1,088	1.4
Birth Center	407	0.5
Born on Arrival	44	0.1
Other	28	0.0
Unknown	0	0.0

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

BIRA49P7

**Nativity Table 2. Live Births to Residents by Birth Weight in Grams by Mother's Race/Ethnicity, 1999**

Birth Weight in Grams	Total	African		Native		Other					Hispanic <sup>1</sup>
		White	Amer.	Amer.	Japanese	Chinese	Filipino	Asian	Other	Unk	
<b>State Total</b>	<b>79,577</b>	<b>65,069</b>	<b>3,138</b>	<b>1,790</b>	<b>307</b>	<b>411</b>	<b>1,021</b>	<b>4,028</b>	<b>50</b>	<b>3,763</b>	<b>10,318</b>
Under 1,000	381	282	37	9	1	1	9	19	0	23	50
1,000 - 1,499	420	312	31	10	7	2	7	28	0	23	54
1,500 - 1,999	963	742	77	30	1	0	15	49	0	49	114
2,000 - 2,499	2,868	2,188	187	64	12	13	52	190	1	161	331
2,500 - 2,999	10,617	8,189	621	206	54	60	195	785	7	500	1,531
3,000 - 3,499	27,774	22,306	1,209	598	127	184	395	1,609	12	1,334	3,940
3,500 - 3,999	25,593	21,674	709	594	83	114	252	1,005	19	1,143	3,152
4,000 - 4,499	8,361	7,225	196	218	16	30	72	233	5	366	863
4,500 and Over	1,689	1,465	41	39	2	4	12	48	2	76	159
Unknown	911	686	30	22	4	3	12	62	4	88	124

BIRA31P6

**Nativity Table 3. Live Births to Residents by Birth Weight in Grams by Child's Race/Ethnicity,<sup>2</sup> 1999**

Birth Weight in Grams	Total	African		Native		Other					Hispanic <sup>1</sup>
		White	Amer.	Amer.	Japanese	Chinese	Filipino	Asian	Other	Unk	
<b>State Total</b>	<b>79,577</b>	<b>63,098</b>	<b>4,764</b>	<b>2,254</b>	<b>359</b>	<b>467</b>	<b>1,098</b>	<b>4,698</b>	<b>73</b>	<b>2,766</b>	<b>13,052</b>
Under 1,000	381	271	47	11	1	1	9	20	0	21	64
1,000 - 1,499	420	300	43	14	6	1	6	28	0	22	67
1,500 - 1,999	963	720	95	37	1	0	13	58	0	39	144
2,000 - 2,499	2,868	2,114	236	90	24	11	55	210	3	125	424
2,500 - 2,999	10,617	7,897	845	289	56	72	225	864	6	363	1,900
3,000 - 3,499	27,774	21,611	1,775	747	137	211	416	1,869	21	987	4,949
3,500 - 3,999	25,593	21,018	1,253	733	100	128	265	1,236	31	829	4,037
4,000 - 4,499	8,361	7,058	357	249	26	33	82	288	6	262	1,112
4,500 and Over	1,689	1,434	70	58	4	5	12	54	2	50	200
Unknown	911	675	43	26	4	5	15	71	4	68	155

BIRA31P1

**Nativity Table 4. Live Births to Residents by Birth Weight in Grams by Mother's Age, 1999**

Birth Weight in Grams	Total	Age									Age Unk
		Under 15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 and Over	
<b>State Total</b>	<b>79,577</b>	<b>138</b>	<b>2,699</b>	<b>5,736</b>	<b>19,302</b>	<b>22,176</b>	<b>18,329</b>	<b>9,149</b>	<b>1,909</b>	<b>115</b>	<b>24</b>
Under 1,000	381	0	18	29	112	82	75	48	13	3	1
1,000 - 1,499	420	1	18	37	99	89	97	58	20	1	0
1,500 - 1,999	963	1	50	74	217	230	229	125	35	1	1
2,000 - 2,499	2,868	7	149	262	659	717	605	372	81	15	1
2,500 - 2,999	10,617	27	476	1,021	2,749	2,735	2,189	1,123	282	15	0
3,000 - 3,499	27,774	58	1,037	2,193	7,157	7,690	6,089	2,951	553	34	12
3,500 - 3,999	25,593	34	745	1,614	6,009	7,497	6,112	2,932	611	31	8
4,000 - 4,499	8,361	6	152	402	1,774	2,427	2,249	1,122	221	7	1
4,500 and Over	1,689	1	25	44	329	486	459	274	64	7	0
Unknown	911	3	29	60	197	223	225	144	29	1	0

BIRA31P3

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

<sup>2</sup>Child's race/ethnicity is determined from the race/ethnicity of the parents according to rules of the National Center for Health Statistics explained in Appendix A.

**Nativity Table 5. Live Births to Residents by Month Prenatal Care Began by Mother's Age, 1999**

Month Care Began	All Ages	Under 15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 & Over	Unk
<b>State Total</b>	<b>79,577</b>	<b>138</b>	<b>2,699</b>	<b>5,736</b>	<b>19,302</b>	<b>22,176</b>	<b>18,329</b>	<b>9,149</b>	<b>1,909</b>	<b>115</b>	<b>24</b>
First	14,935	9	232	630	2,889	4,568	4,222	1,948	405	28	4
Second	29,807	26	724	1,840	6,792	8,689	7,430	3,573	692	34	7
Third	14,886	23	592	1,185	4,019	3,997	3,028	1,651	366	18	7
Fourth	5,727	24	360	689	1,758	1,387	896	491	116	5	1
Fifth	2,802	19	229	362	905	650	405	185	43	3	1
Sixth	1,585	10	130	174	526	353	230	136	22	3	1
Seventh	1,034	6	85	126	314	244	160	82	15	2	0
Eighth	604	6	45	61	177	148	92	56	18	1	0
Ninth +	312	0	21	41	88	79	50	24	8	1	0
No Care	293	3	22	36	81	62	46	37	6	0	0
Unknown	7,592	12	259	592	1,753	1,999	1,770	966	218	20	3

BIRA68P1

**Nativity Table 6. Live Births to Residents by Number of Prenatal Visits by Month Care Began, 1999**

Number of Prenatal Visits	Total	1 - 3	4 - 6	7 - 9+	No Care	Unk
<b>State Total</b>	<b>79,577</b>	<b>59,628</b>	<b>10,114</b>	<b>1,950</b>	<b>293</b>	<b>7,592</b>
9 or More	54,097	48,192	4,857	266	0	782
5 - 8	11,725	6,743	3,887	712	0	383
1 - 4	2,378	573	767	847	0	191
No Visits	295	2	0	0	293	0
Unknown	11,082	4,118	603	125	0	6,236

BIRA68P1

**Nativity Table 7. Live Births by Sex and Place of Residence and  
by Place of Occurrence, 1999**

County and City	Residence				Occurrence	
	Number	Rate <sup>1</sup>	Male	Female	Number	Rate <sup>1</sup>
<b>State Total</b>	<b>79,577</b>	<b>13.8</b>	<b>40,824</b>	<b>38,753</b>	<b>79,095</b>	<b>13.7</b>
Adams	319	20.1	161	158	420	26.4
Asotin	263	13.2	139	124	2	--*
Benton	2,119	15.3	1,138	981	2,806	20.2
Kennewick	971	19.1	544	427	1,120	22.0
Richland	472	12.8	246	226	1,300	35.2
Chelan	964	15.3	475	489	1,449	23.0
Wenatchee	491	19.2	238	253	1,349	52.7
Clallam	617	9.2	301	316	593	8.9
Port Angeles	219	11.6	106	113	526	27.8
Clark	5,185	15.4	2,654	2,531	4,515	13.4
Vancouver	3,270	24.2	1,662	1,608	4,491	33.2
Columbia	27	6.4	11	16	0	--*
Cowlitz	1,286	13.7	659	627	1,320	14.0
Longview	573	16.8	277	296	1,318	38.5
Douglas	454	14.3	241	213	1	--*
Ferry	77	10.5	39	38	14	1.9
Franklin	1,104	24.5	592	512	766	17.0
Pasco	821	30.9	442	379	765	28.8
Garfield	27	11.3	13	14	1	--*
Grant	1,390	19.7	679	711	1,032	14.6
Grays Harbor	823	12.2	403	420	505	7.5
Aberdeen	264	16.1	129	135	501	30.5
Island	912	12.4	477	435	638	8.7
Oak Harbor	466	22.4	244	222	409	19.6
Jefferson	220	8.3	104	116	162	6.1
King	22,007	13.1	11,337	10,670	25,923	15.5
Auburn	833	21.4	436	397	775	19.9
Bellevue	1,271	12.0	680	591	3,389	31.9
Burien	177	5.9	86	91	1,122	37.7
Des Moines	331	12.2	180	151	4	--*
Federal Way	1,280	16.6	660	620	1,605	20.9
Kent	1,561	21.4	791	770	10	0.1
Kirkland	790	17.6	401	389	3,704	82.6
Mercer Island	121	5.6	58	63	1	--*
Redmond	853	19.6	456	397	834	19.1
Renton	1,085	22.8	559	526	2,886	60.6
Sea Tac	269	11.4	147	122	1	--*
Seattle	7,350	13.6	3,669	3,681	11,273	20.9
Shoreline	366	7.0	191	175	7	0.1

**Nativity Table 7. Live Births by Sex and Place of Residence and  
by Place of Occurrence, 1999**

County and City	Residence				Occurrence	
	Number	Rate <sup>1</sup>	Male	Female	Number	Rate <sup>1</sup>
Kitsap	2,893	12.6	1,495	1,398	2,370	10.3
Bainbridge Island	78	3.9	42	36	4	--*
Bremerton	821	22.6	428	393	2,318	63.9
Kittitas	364	11.2	183	181	325	10.0
Klickitat	229	11.9	123	106	166	8.6
Lewis	944	13.7	482	462	739	10.7
Lincoln	113	11.3	58	55	20	2.0
Mason	523	10.8	260	263	280	5.8
Okanogan	552	14.4	269	283	572	14.9
Pacific	163	7.6	81	82	70	3.3
Pend Oreille	134	12.1	72	62	96	8.6
Pierce	9,939	14.2	5,109	4,830	10,185	14.6
Lakewood	660	10.3	325	335	326	5.1
Puyallup	832	27.1	402	430	1,462	47.6
Tacoma	4,134	22.1	2,150	1,984	8,258	44.1
University Place	144	4.9	71	73	1	--*
San Juan	100	7.9	46	54	8	0.6
Skagit	1,359	13.5	700	659	1,544	15.3
Mount Vernon	520	22.9	282	238	1,270	55.9
Skamania	134	13.5	70	64	4	--*
Snohomish	8,496	14.6	4,376	4,120	5,862	10.0
Edmonds	411	10.6	224	187	1,672	43.3
Everett	2,109	24.3	1,066	1,043	3,164	36.5
Lynnwood	849	25.6	429	420	26	0.8
Marysville	646	31.2	345	301	2	--*
Mountlake Terrace	237	11.7	120	117	1	--*
Mukilteo	183	10.7	89	94	1	--*
Spokane	5,497	13.3	2,782	2,715	6,390	15.4
Spokane (City)	3,317	17.5	1,665	1,652	6,371	33.7
Stevens	456	12.0	239	217	283	7.4
Thurston	2,478	12.2	1,281	1,197	2,729	13.5
Lacey	530	18.3	253	277	6	0.2
Olympia	883	22.0	469	414	2,702	67.2
Wahkiakum	42	10.8	18	24	1	--*
Walla Walla	713	13.1	384	329	922	16.9
Walla Walla (City)	421	14.4	220	201	918	31.4
Whatcom	1,995	12.4	988	1,007	1,967	12.2
Bellingham	849	13.3	424	425	1,948	30.4
Whitman	422	10.1	225	197	342	8.2
Pullman	248	9.7	127	121	275	10.7
Yakima	4,237	20.0	2,160	2,077	4,073	19.2
Yakima (City)	1,569	24.0	800	769	2,972	45.4

<sup>1</sup>Rates per 1,000 population. See pages 5-6 for discussion of occurrence rates.

BIRA18M1

\*Rate not calculated because number of births was less than 5. Rates based on fewer than 20 events are likely to be unstable and imprecise.

**Nativity Table 8. Live Births by Mother's Age Group by Place of Residence, 1999**

<b>County</b>	<b>All Ages</b>	<b>Under 15</b>	<b>15-17</b>	<b>18-19</b>	<b>20-24</b>	<b>25-29</b>	<b>30-34</b>	<b>35-39</b>	<b>40-44</b>	<b>45 and Over</b>	<b>Age Unk</b>
<b>State Total</b>	<b>79,577</b>	<b>138</b>	<b>2,699</b>	<b>5,736</b>	<b>19,302</b>	<b>22,176</b>	<b>18,329</b>	<b>9,149</b>	<b>1,909</b>	<b>115</b>	<b>24</b>
Adams	319	4	20	33	105	91	37	23	6	0	0
Asotin	263	0	17	32	88	74	39	11	2	0	0
Benton	2,119	3	99	181	620	594	404	188	27	3	0
Chelan	964	0	28	87	289	280	174	83	22	1	0
Clallam	617	0	20	64	176	170	119	54	13	1	0
Clark	5,185	4	178	370	1,300	1,512	1,172	541	96	12	0
Columbia	27	0	0	2	10	6	7	1	1	0	0
Cowlitz	1,286	0	53	127	432	360	216	79	17	2	0
Douglas	454	1	18	46	149	123	66	41	8	2	0
Ferry	77	0	7	7	26	20	10	5	1	1	0
Franklin	1,104	3	74	115	350	298	163	84	14	3	0
Garfield	27	0	3	1	5	8	7	2	1	0	0
Grant	1,390	8	89	157	435	388	206	90	16	1	0
Grays Harbor	823	3	49	78	260	221	133	65	14	0	0
Island	912	0	18	64	264	279	195	72	13	7	0
Jefferson	220	0	11	14	61	55	46	23	10	0	0
King	22,007	24	451	968	3,610	5,751	6,592	3,758	799	42	12
Kitsap	2,893	8	82	227	814	764	589	325	77	5	2
Kittitas	364	1	5	25	105	111	74	38	5	0	0
Klickitat	229	2	14	21	74	55	35	22	6	0	0
Lewis	944	4	61	107	289	257	145	61	17	3	0
Lincoln	113	0	5	7	23	35	26	13	4	0	0
Mason	523	2	32	56	141	150	89	44	8	1	0
Okanogan	552	0	34	63	176	154	80	35	9	1	0
Pacific	163	0	8	17	48	49	25	14	2	0	0
Pend Oreille	134	0	13	8	39	31	21	19	2	1	0
Pierce	9,939	17	349	827	2,740	2,853	2,042	919	189	3	0
San Juan	100	0	3	4	17	23	24	24	5	0	0
Skagit	1,359	6	70	127	378	363	276	116	21	2	0
Skamania	134	1	9	16	35	36	20	16	1	0	0
Snohomish	8,496	9	216	514	1,857	2,474	2,219	1,000	195	3	9
Spokane	5,497	7	167	457	1,527	1,634	1,132	472	97	4	0
Stevens	456	2	17	43	138	122	78	39	17	0	0
Thurston	2,478	4	76	203	634	746	492	268	47	7	1
Wahkiakum	42	0	0	6	15	10	9	2	0	0	0
Walla Walla	713	3	36	57	215	173	149	63	17	0	0
Whatcom	1,995	2	76	128	472	588	467	207	52	3	0
Whitman	422	0	2	13	113	137	100	45	11	1	0
Yakima	4,237	20	289	464	1,272	1,181	651	287	67	6	0

BIRA41P1



**Nativity Table 9. Live Births to Single Mothers by Mother's Age Group  
by Place of Residence, 1999**

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>22,170</b>	<b>134</b>	<b>2,389</b>	<b>3,944</b>	<b>7,855</b>	<b>4,270</b>	<b>2,139</b>	<b>1,120</b>	<b>291</b>	<b>18</b>	<b>10</b>
Adams	100	4	16	16	36	21	3	2	2	0	0
Asotin	63	0	11	12	26	9	4	0	1	0	0
Benton	654	3	91	133	239	123	40	21	4	0	0
Chelan	304	0	23	56	114	55	33	20	2	1	0
Clallam	180	0	15	45	64	31	13	10	2	0	0
Clark	1,245	3	157	242	448	223	103	58	10	1	0
Columbia	11	0	0	2	5	0	3	0	1	0	0
Cowlitz	470	0	44	96	192	82	37	16	3	0	0
Douglas	130	1	12	31	53	24	3	2	3	1	0
Ferry	34	0	7	5	13	6	2	1	0	0	0
Franklin	411	3	64	66	147	74	39	15	3	0	0
Garfield	5	0	2	1	1	0	1	0	0	0	0
Grant	461	7	69	96	158	77	37	14	3	0	0
Grays Harbor	353	3	48	63	128	51	42	15	3	0	0
Island	180	0	15	37	74	28	19	3	4	0	0
Jefferson	64	0	9	8	25	12	8	1	1	0	0
King	5,035	24	404	718	1,653	1,106	668	351	98	8	5
Kitsap	777	8	75	140	298	129	59	49	17	1	1
Kittitas	76	1	5	15	26	21	6	2	0	0	0
Klickitat	79	2	13	9	25	14	8	6	2	0	0
Lewis	335	4	54	67	111	56	20	13	10	0	0
Lincoln	22	0	5	6	7	2	2	0	0	0	0
Mason	225	2	29	39	69	53	22	8	2	1	0
Okanogan	232	0	31	40	80	49	23	6	2	1	0
Pacific	44	0	4	10	20	6	2	2	0	0	0
Pend Oreille	51	0	12	5	20	7	3	4	0	0	0
Pierce	3,027	16	315	557	1,086	599	274	146	34	0	0
San Juan	25	0	2	2	8	7	2	4	0	0	0
Skagit	467	5	63	88	167	87	40	14	3	0	0
Skamania	38	1	7	10	12	6	0	2	0	0	0
Snohomish	1,969	9	201	364	692	362	202	109	25	1	4
Spokane	1,593	7	146	314	611	297	131	73	14	0	0
Stevens	136	2	11	29	56	25	6	4	3	0	0
Thurston	763	4	70	145	270	142	76	42	12	2	0
Wahkiakum	14	0	0	4	7	2	1	0	0	0	0
Walla Walla	222	3	32	37	86	36	19	4	5	0	0
Whatcom	534	2	70	86	199	92	52	27	6	0	0
Whitman	67	0	2	12	34	9	8	2	0	0	0
Yakima	1,774	20	255	338	595	347	128	74	16	1	0

BIRA67P1

Nativity Table 10. Live Births by Mother's Race/Ethnicity by Place of Residence, 1999

County	Total	White	African American	Native American	Japanese	Chinese	Filipino	Other Asian	Other	Unk	Hispanic Origin <sup>1</sup>
<b>State Total</b>	<b>79,577</b>	<b>65,069</b>	<b>3,138</b>	<b>1,790</b>	<b>307</b>	<b>411</b>	<b>1,021</b>	<b>4,028</b>	<b>50</b>	<b>3,763</b>	<b>10,318</b>
Adams	319	306	2	0	0	1	0	4	0	6	229
Asotin	263	257	1	4	0	0	1	0	0	0	7
Benton	2,119	1,979	30	15	1	4	6	39	0	45	436
Celan	964	934	1	6	1	0	1	3	0	18	384
Clallam	617	526	3	59	3	0	3	9	0	14	42
Clark	5,185	4,782	83	39	9	17	40	202	0	13	333
Columbia	27	25	0	0	0	0	0	2	0	0	3
Cowlitz	1,286	1,214	10	28	0	0	2	23	0	9	87
Douglas	454	438	2	6	1	0	1	2	0	4	181
Ferry	77	48	0	23	0	0	1	0	0	5	2
Franklin	1,104	1,044	13	5	1	0	3	14	1	23	666
Garfield	27	26	0	1	0	0	0	0	0	0	1
Grant	1,390	1,330	12	16	2	0	2	2	0	26	615
Grays Harbor	823	685	2	61	0	0	3	21	0	51	62
Island	912	750	36	12	6	2	44	26	1	35	50
Jefferson	220	197	0	9	0	0	1	1	1	11	5
King	22,007	15,459	1,527	306	181	303	492	2,120	39	1,580	1,846
Kitsap	2,893	2,437	115	61	15	2	85	103	1	74	155
Kittitas	364	343	1	5	1	1	1	5	0	7	36
Klickitat	229	200	0	15	0	0	0	2	0	12	41
Lewis	944	873	3	12	0	0	2	5	1	48	82
Lincoln	113	101	0	3	0	0	1	0	0	8	2
Mason	523	426	2	31	0	1	3	6	0	54	47
Okanogan	552	440	0	94	0	0	0	4	0	14	162
Pacific	163	143	3	5	0	0	3	4	0	5	23
Pend Oreille	134	126	0	4	0	0	0	1	0	3	4
Pierce	9,939	7,755	934	213	33	22	156	591	1	234	741
San Juan	100	89	0	0	1	1	0	1	0	8	4
Skagit	1,359	1,261	2	40	0	0	10	19	0	27	364
Skamania	134	123	0	6	0	0	0	2	0	3	5
Snohomish	8,496	6,911	140	174	32	27	88	471	3	650	574
Spokane	5,497	4,907	96	134	10	7	30	118	1	194	187
Stevens	456	404	1	33	0	0	1	3	0	14	11
Thurston	2,478	1,715	63	52	7	3	17	112	0	509	142
Wahkiakum	42	42	0	0	0	0	0	0	0	0	1
Walla Walla	713	682	4	7	0	2	0	9	0	9	223
Whatcom	1,995	1,794	9	90	0	6	13	60	0	23	181
Whitman	422	369	13	4	2	10	0	17	1	6	16
Yakima	4,237	3,928	30	217	1	2	11	27	0	21	2,368

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

Nativity Table 11. Live Births by Child's Race/Ethnicity<sup>1</sup> by Place of Residence, 1999

County	Total	White	African American	Native American	Japa- nese	Chinese	Filipino	Other Asian	Other	Unk	Hispanic Origin <sup>2</sup>
<b>State Total</b>	<b>79,577</b>	<b>63,098</b>	<b>4,764</b>	<b>2,254</b>	<b>359</b>	<b>467</b>	<b>1,098</b>	<b>4,698</b>	<b>73</b>	<b>2,766</b>	<b>13,052</b>
Adams	319	311	2	2	0	1	0	3	0	0	243
Asotin	263	255	3	4	0	0	1	0	0	0	9
Benton	2,119	1,967	56	22	2	4	8	46	0	14	547
Chelan	964	942	2	8	2	0	1	4	0	5	419
Clallam	617	508	4	77	3	0	6	15	0	4	57
Clark	5,185	4,653	134	64	10	21	46	245	0	12	450
Columbia	27	24	0	1	0	0	0	2	0	0	3
Cowlitz	1,286	1,195	17	36	1	0	6	26	0	5	136
Douglas	454	439	3	6	0	0	1	3	0	2	208
Ferry	77	46	1	24	0	0	1	2	0	3	2
Franklin	1,104	1,055	18	2	1	0	3	16	0	9	744
Garfield	27	26	0	0	0	0	1	0	0	0	1
Grant	1,390	1,331	18	23	4	0	4	4	0	6	691
Grays Harbor	823	673	8	78	0	0	2	22	0	40	131
Island	912	734	61	21	6	2	41	32	1	14	87
Jefferson	220	203	1	11	0	0	2	1	0	2	12
King	22,007	14,813	2,088	362	196	328	513	2,407	57	1,243	2,430
Kitsap	2,893	2,310	201	93	17	2	92	144	2	32	255
Kittitas	364	334	4	11	1	1	2	6	0	5	45
Klickitat	229	201	0	17	0	0	0	4	0	7	47
Lewis	944	857	5	26	0	0	2	13	1	40	142
Lincoln	113	102	1	6	0	0	1	0	0	3	6
Mason	523	411	9	44	2	1	4	9	0	43	81
Okanogan	552	430	3	103	0	1	1	6	0	8	194
Pacific	163	140	2	9	0	0	3	4	0	5	29
Pend Oreille	134	119	0	11	0	0	0	3	0	1	7
Pierce	9,939	7,275	1,307	270	48	28	161	665	2	183	1,077
San Juan	100	95	0	1	1	1	0	1	0	1	5
Skagit	1,359	1,254	16	41	1	0	12	25	0	10	414
Skamania	134	123	0	8	0	0	0	1	0	2	9
Snohomish	8,496	6,743	319	233	39	34	115	540	6	467	833
Spokane	5,497	4,778	221	193	14	10	29	149	1	102	336
Stevens	456	393	1	51	0	0	2	5	0	4	18
Thurston	2,478	1,645	119	72	7	5	21	149	0	460	219
Wahkiakum	42	40	2	0	0	0	0	0	0	0	2
Walla Walla	713	677	10	7	0	2	0	12	0	5	267
Whatcom	1,995	1,734	56	95	0	8	12	73	1	16	259
Whitman	422	361	16	6	2	15	0	20	1	1	25
Yakima	4,237	3,901	56	216	2	3	5	41	1	12	2,612

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<sup>1</sup>Child's race/ethnicity is determined from the race/ethnicity of the parents according to rules of the National Center for Health Statistics explained in Appendix A.

<sup>2</sup>Persons of Hispanic Origin may be of any race. See Appendix A, "Hispanic Origin."

**Nativity Table 12. Live Births by Month by Place of Residence, 1999**

County	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>State Total</b>	<b>79,577</b>	<b>6,376</b>	<b>6,150</b>	<b>6,890</b>	<b>6,622</b>	<b>6,959</b>	<b>6,919</b>	<b>7,219</b>	<b>6,861</b>	<b>6,840</b>	<b>6,534</b>	<b>5,956</b>	<b>6,251</b>
Adams	319	19	17	31	27	24	39	33	26	25	22	31	25
Asotin	263	26	17	22	20	24	27	25	17	24	23	14	24
Benton	2,119	168	166	183	176	182	177	202	184	188	168	169	156
Chelan	964	75	80	74	79	82	88	88	77	91	86	65	79
Clallam	617	35	51	61	53	56	51	63	59	45	53	48	42
Clark	5,185	432	408	432	441	416	450	451	468	444	439	385	419
Columbia	27	4	5	3	2	3	2	3	1	1	1	0	2
Cowlitz	1,286	118	98	118	98	121	112	109	115	106	94	107	90
Douglas	454	27	36	37	37	45	46	41	41	42	28	43	31
Ferry	77	6	3	8	2	9	9	8	9	5	7	6	5
Franklin	1,104	93	82	88	91	97	85	124	104	86	84	90	80
Garfield	27	3	1	1	4	5	4	5	1	2	1	0	0
Grant	1,390	92	97	128	115	133	122	142	131	123	107	91	109
Grays Harbor	823	69	55	67	63	75	74	73	74	88	67	54	64
Island	912	65	65	77	75	78	81	86	64	87	79	79	76
Jefferson	220	11	19	20	19	19	21	16	26	23	16	11	19
King	22,007	1,721	1,759	1,893	1,816	1,931	1,836	1,984	1,873	1,910	1,866	1,702	1,716
Kitsap	2,893	214	222	252	226	252	267	251	253	257	235	229	235
Kittitas	364	20	30	31	29	37	26	31	31	33	25	34	37
Klickitat	229	20	13	18	13	26	21	23	20	19	23	16	17
Lewis	944	80	56	94	96	85	56	100	84	72	72	66	83
Lincoln	113	8	7	11	8	14	11	11	9	7	7	8	12
Mason	523	33	34	34	49	57	49	56	51	46	42	44	28
Okanogan	552	51	35	37	51	54	55	46	45	40	50	38	50
Pacific	163	11	11	15	23	13	17	15	12	12	13	12	9
Pend Oreille	134	9	8	15	8	10	17	13	11	13	4	12	14
Pierce	9,939	862	765	822	815	876	892	873	888	876	816	658	796
San Juan	100	6	12	8	4	11	12	11	8	10	8	3	7
Skagit	1,359	123	100	119	121	107	108	132	121	102	113	100	113
Skamania	134	14	14	13	10	10	8	12	11	14	6	9	13
Snohomish	8,496	661	656	767	691	714	775	763	730	740	681	645	673
Spokane	5,497	449	433	485	498	442	493	524	449	434	441	444	405
Stevens	456	35	40	36	32	34	30	52	45	37	32	39	44
Thurston	2,478	193	182	215	208	246	238	234	200	201	182	185	194
Wahkiakum	42	4	3	4	3	2	3	6	1	6	4	3	3
Walla Walla	713	67	63	61	58	56	55	65	62	50	62	65	49
Whatcom	1,995	175	153	196	177	182	139	157	175	171	171	133	166
Whitman	422	32	30	42	36	46	44	34	28	27	43	26	34
Yakima	4,237	345	324	372	348	385	379	357	357	383	363	292	332

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Nativity Table 13. Live Births by Birth Weight in Grams by Place of Residence, 1999

County	Total	Under 1000	1000- 1499	1500- 1999	2000- 2499	2500- 2999	3000- 3499	3500- 3999	4000- 4499	4500- Over	Unk
<b>State Total</b>	<b>79,577</b>	<b>381</b>	<b>420</b>	<b>963</b>	<b>2,868</b>	<b>10,617</b>	<b>27,774</b>	<b>25,593</b>	<b>8,361</b>	<b>1,689</b>	<b>911</b>
Adams	319	0	1	4	14	52	120	97	24	5	2
Asotin	263	3	2	4	9	36	104	74	24	7	0
Benton	2,119	30	20	32	89	265	748	658	213	44	20
Chelan	964	5	1	10	36	96	358	298	103	24	33
Clallam	617	2	3	6	19	68	238	178	67	23	13
Clark	5,185	19	17	44	155	608	1,841	1,718	628	126	29
Columbia	27	0	0	1	1	1	13	7	3	1	0
Cowlitz	1,286	4	4	10	44	181	426	426	150	35	6
Douglas	454	0	0	5	7	58	171	124	63	9	17
Ferry	77	0	1	2	1	8	24	32	7	0	2
Franklin	1,104	9	9	16	46	150	383	363	89	24	15
Garfield	27	0	0	1	1	4	10	6	3	1	1
Grant	1,390	10	6	19	54	218	516	405	114	21	27
Grays Harbor	823	1	4	10	37	117	289	252	84	19	10
Island	912	3	7	8	28	121	280	310	128	25	2
Jefferson	220	0	1	1	5	25	83	74	20	10	1
King	22,007	96	121	252	818	2,916	7,642	6,979	2,299	477	407
Kitsap	2,893	21	13	33	125	380	921	947	322	87	44
Kittitas	364	1	1	5	10	70	125	111	31	5	5
Klickitat	229	2	0	0	5	25	79	80	23	2	13
Lewis	944	3	3	11	29	119	333	334	92	16	4
Lincoln	113	0	0	1	6	14	45	34	7	4	2
Mason	523	3	1	9	19	76	191	165	47	8	4
Okanogan	552	3	2	7	21	81	195	189	45	4	5
Pacific	163	0	0	3	9	18	57	53	19	2	2
Pend Oreille	134	0	1	4	2	17	61	35	10	2	2
Pierce	9,939	46	68	143	377	1,382	3,456	3,147	1,053	182	85
San Juan	100	1	0	1	3	14	29	38	12	1	1
Skagit	1,359	3	8	15	37	182	477	437	167	30	3
Skamania	134	0	2	3	4	19	49	36	18	2	1
Snohomish	8,496	39	43	112	315	1,135	2,870	2,861	876	182	63
Spokane	5,497	24	34	71	209	749	1,941	1,797	546	102	24
Stevens	456	1	1	10	10	56	162	141	56	16	3
Thurston	2,478	13	21	26	96	328	837	805	283	42	27
Wahkiakum	42	0	0	0	1	5	16	11	7	1	1
Walla Walla	713	4	1	5	21	87	243	247	81	23	1
Whatcom	1,995	10	12	18	59	229	614	716	254	63	20
Whitman	422	1	1	11	14	44	151	138	50	4	8
Yakima	4,237	24	11	50	132	663	1,676	1,270	343	60	8

BIRA40P1

Nativity Table 14. Live Births by Month Prenatal Care Began by Place of Residence, 1999

County	Total	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth+	No Care	Unk
<b>State Total</b>	<b>79,577</b>	<b>14,935</b>	<b>29,807</b>	<b>14,886</b>	<b>5,727</b>	<b>2,802</b>	<b>1,585</b>	<b>1,034</b>	<b>604</b>	<b>312</b>	<b>293</b>	<b>7,592</b>
Adams	319	12	129	84	43	20	12	7	5	1	2	4
Asotin	263	37	110	56	32	7	7	2	2	1	1	8
Benton	2,119	335	693	485	247	137	76	41	43	14	9	39
Chelan	964	34	397	318	81	54	31	18	15	2	0	14
Clallam	617	57	278	165	64	24	12	5	4	0	1	7
Clark	5,185	1,038	2,247	1,064	356	198	106	68	48	7	22	31
Columbia	27	3	7	12	2	1	2	0	0	0	0	0
Cowlitz	1,286	99	480	356	171	74	38	26	17	2	11	12
Douglas	454	10	212	119	45	23	14	12	7	2	0	10
Ferry	77	13	28	13	10	3	0	2	0	4	0	4
Franklin	1,104	138	273	269	160	111	54	40	29	7	1	22
Garfield	27	3	12	7	2	0	1	1	0	1	0	0
Grant	1,390	90	417	447	209	93	63	33	14	6	4	14
Grays Harbor	823	170	263	155	68	36	28	13	6	2	14	68
Island	912	166	411	164	59	24	12	5	5	4	1	61
Jefferson	220	16	77	78	18	13	2	5	1	1	1	8
King	22,007	4,629	8,251	3,237	1,132	538	312	197	108	79	65	3,459
Kitsap	2,893	510	1,110	638	229	137	56	50	26	9	8	120
Kittitas	364	88	191	45	16	11	2	2	1	0	2	6
Klickitat	229	24	84	61	26	13	3	1	2	2	0	13
Lewis	944	267	298	162	53	26	14	7	2	0	5	110
Lincoln	113	26	38	17	10	7	2	0	0	0	0	13
Mason	523	52	201	91	49	24	20	7	3	3	4	69
Okanogan	552	68	237	129	49	20	15	10	2	2	3	17
Pacific	163	21	52	38	21	11	3	4	1	1	1	10
Pend Oreille	134	27	33	28	14	14	4	4	0	1	0	9
Pierce	9,939	696	4,150	2,161	810	417	268	189	111	57	31	1,049
San Juan	100	5	25	32	14	3	6	4	2	0	0	9
Skagit	1,359	70	509	367	171	66	41	36	14	16	2	67
Skamania	134	19	58	22	23	0	6	3	0	2	1	0
Snohomish	8,496	2,553	3,335	1,206	377	179	100	65	30	26	33	592
Spokane	5,497	1,913	2,006	630	240	123	49	36	22	16	22	440
Stevens	456	147	163	68	25	11	9	5	4	3	3	18
Thurston	2,478	581	585	274	96	44	27	15	9	11	12	824
Wahkiakum	42	10	15	8	3	3	1	2	0	0	0	0
Walla Walla	713	61	261	216	87	38	16	15	6	1	4	8
Whatcom	1,995	10	583	669	295	101	40	23	14	6	6	248
Whitman	422	46	172	112	43	10	11	1	1	0	2	24
Yakima	4,237	891	1,416	883	377	188	122	80	50	23	22	185

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Nativity Table 15. Live Births with Malformations by Place of Residence, 1999

County	Total Births	Births with Malformations	Percent of Total Births	Total Malformations <sup>1</sup>
<b>State Total</b>	<b>79,577</b>	<b>2,070</b>	<b>2.6</b>	<b>2,341</b>
Adams	319	6	1.9	8
Asotin	263	3	1.1	6
Benton	2,119	71	3.4	83
Chelan	964	5	0.5	6
Clallam	617	10	1.6	13
Clark	5,185	117	2.3	154
Columbia	27	1	3.7	1
Cowlitz	1,286	10	0.8	16
Douglas	454	5	1.1	5
Ferry	77	2	2.6	2
Franklin	1,104	18	1.6	20
Garfield	27	0	0.0	0
Grant	1,390	19	1.4	21
Grays Harbor	823	8	1.0	10
Island	912	36	3.9	39
Jefferson	220	6	2.7	6
King	22,007	595	2.7	652
Kitsap	2,893	133	4.6	144
Kittitas	364	12	3.3	15
Klickitat	229	4	1.7	4
Lewis	944	11	1.2	13
Lincoln	113	0	0.0	0
Mason	523	13	2.5	13
Okanogan	552	11	2.0	18
Pacific	163	4	2.5	6
Pend Oreille	134	1	0.7	1
Pierce	9,939	357	3.6	408
San Juan	100	1	1.0	1
Skagit	1,359	25	1.8	28
Skamania	134	2	1.5	2
Snohomish	8,496	214	2.5	232
Spokane	5,497	140	2.5	156
Stevens	456	14	3.1	14
Thurston	2,478	27	1.1	31
Wahkiakum	42	0	0.0	0
Walla Walla	713	25	3.5	30
Whatcom	1,995	24	1.2	26
Whitman	422	11	2.6	13
Yakima	4,237	129	3.0	144

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<sup>1</sup>Individual births may have more than one malformation.

**Nativity Table 16. Live Births by Maternal Smoking During Pregnancy  
by Place of Residence, 1999**

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>79,577</b>	<b>10,586</b>	<b>13.3</b>	<b>63,824</b>	<b>80.2</b>	<b>5,167</b>	<b>6.5</b>
Adams	319	12	3.8	302	94.7	5	1.6
Asotin	263	52	19.8	210	79.8	1	0.4
Benton	2,119	277	13.1	1,815	85.7	27	1.3
Chelan	964	42	4.4	892	92.5	30	3.1
Clallam	617	143	23.2	414	67.1	60	9.7
Clark	5,185	931	18.0	4,211	81.2	43	0.8
Columbia	27	5	18.5	22	81.5	0	0.0
Cowlitz	1,286	307	23.9	964	75.0	15	1.2
Douglas	454	22	4.8	420	92.5	12	2.6
Ferry	77	17	22.1	58	75.3	2	2.6
Franklin	1,104	59	5.3	1,025	92.8	20	1.8
Garfield	27	4	14.8	23	85.2	0	0.0
Grant	1,390	148	10.6	1,219	87.7	23	1.7
Grays Harbor	823	234	28.4	533	64.8	56	6.8
Island	912	101	11.1	797	87.4	14	1.5
Jefferson	220	29	13.2	185	84.1	6	2.7
King	22,007	2,020	9.2	18,001	81.8	1,986	9.0
Kitsap	2,893	484	16.7	2,345	81.1	64	2.2
Kittitas	364	45	12.4	313	86.0	6	1.6
Klickitat	229	28	12.2	197	86.0	4	1.7
Lewis	944	208	22.0	667	70.7	69	7.3
Lincoln	113	23	20.4	87	77.0	3	2.7
Mason	523	135	25.8	338	64.6	50	9.6
Okanogan	552	86	15.6	445	80.6	21	3.8
Pacific	163	33	20.2	116	71.2	14	8.6
Pend Oreille	134	26	19.4	103	76.9	5	3.7
Pierce	9,939	1,663	16.7	7,989	80.4	287	2.9
San Juan	100	5	5.0	91	91.0	4	4.0
Skagit	1,359	169	12.4	1,109	81.6	81	6.0
Skamania	134	22	16.4	111	82.8	1	0.7
Snohomish	8,496	1,063	12.5	6,983	82.2	450	5.3
Spokane	5,497	1,098	20.0	4,221	76.8	178	3.2
Stevens	456	90	19.7	356	78.1	10	2.2
Thurston	2,478	316	12.8	1,535	61.9	627	25.3
Wahkiakum	42	7	16.7	35	83.3	0	0.0
Walla Walla	713	83	11.6	618	86.7	12	1.7
Whatcom	1,995	157	7.9	992	49.7	846	42.4
Whitman	422	17	4.0	397	94.1	8	1.9
Yakima	4,237	425	10.0	3,685	87.0	127	3.0

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

BIRA76M1



Nativity Table 17. Live Births by Institutions by Place of Occurrence, 1999

County	Total	Hospital	Birth Center	Federal Facility	Home	Born On Arrival	Other	Unknown
<b>State Total</b>	<b>79,095</b>	<b>74,648</b>	<b>407</b>	<b>2,880</b>	<b>1,088</b>	<b>44</b>	<b>28</b>	<b>0</b>
Adams	420	415	0	0	5	0	0	0
Asotin	2	0	0	0	2	0	0	0
Benton	2,806	2,772	5	0	29	0	0	0
Chelan	1,449	1,425	19	0	5	0	0	0
Clallam	593	580	0	0	12	0	1	0
Clark	4,515	4,469	0	0	44	1	1	0
Columbia	0	0	0	0	0	0	0	0
Cowlitz	1,320	1,314	0	0	5	1	0	0
Douglas	1	0	0	0	1	0	0	0
Ferry	14	14	0	0	0	0	0	0
Franklin	766	754	0	0	11	1	0	0
Garfield	1	0	0	0	1	0	0	0
Grant	1,032	1,023	0	0	7	1	1	0
Grays Harbor	505	498	0	0	6	1	0	0
Island	638	195	17	403	22	1	0	0
Jefferson	162	149	0	0	13	0	0	0
King	25,923	25,423	188	0	294	15	3	0
Kitsap	2,370	1,614	1	685	66	4	0	0
Kittitas	325	318	0	0	7	0	0	0
Klickitat	166	164	0	0	2	0	0	0
Lewis	739	699	2	0	26	1	11	0
Lincoln	20	19	0	0	1	0	0	0
Mason	280	272	0	0	8	0	0	0
Okanogan	572	563	0	0	9	0	0	0
Pacific	70	57	0	0	12	0	1	0
Pend Oreille	96	94	0	0	2	0	0	0
Pierce	10,185	8,171	85	1,792	128	6	3	0
San Juan	8	0	0	0	5	0	3	0
Skagit	1,544	1,519	0	0	25	0	0	0
Skamania	4	0	0	0	4	0	0	0
Snohomish	5,862	5,682	82	0	95	3	0	0
Spokane	6,390	6,302	7	0	75	6	0	0
Stevens	283	269	0	0	14	0	0	0
Thurston	2,729	2,662	0	0	66	1	0	0
Wahkiakum	1	0	0	0	1	0	0	0
Walla Walla	922	906	1	0	12	0	3	0
Whatcom	1,967	1,905	0	0	61	1	0	0
Whitman	342	336	0	0	6	0	0	0
Yakima	4,073	4,065	0	0	6	1	1	0

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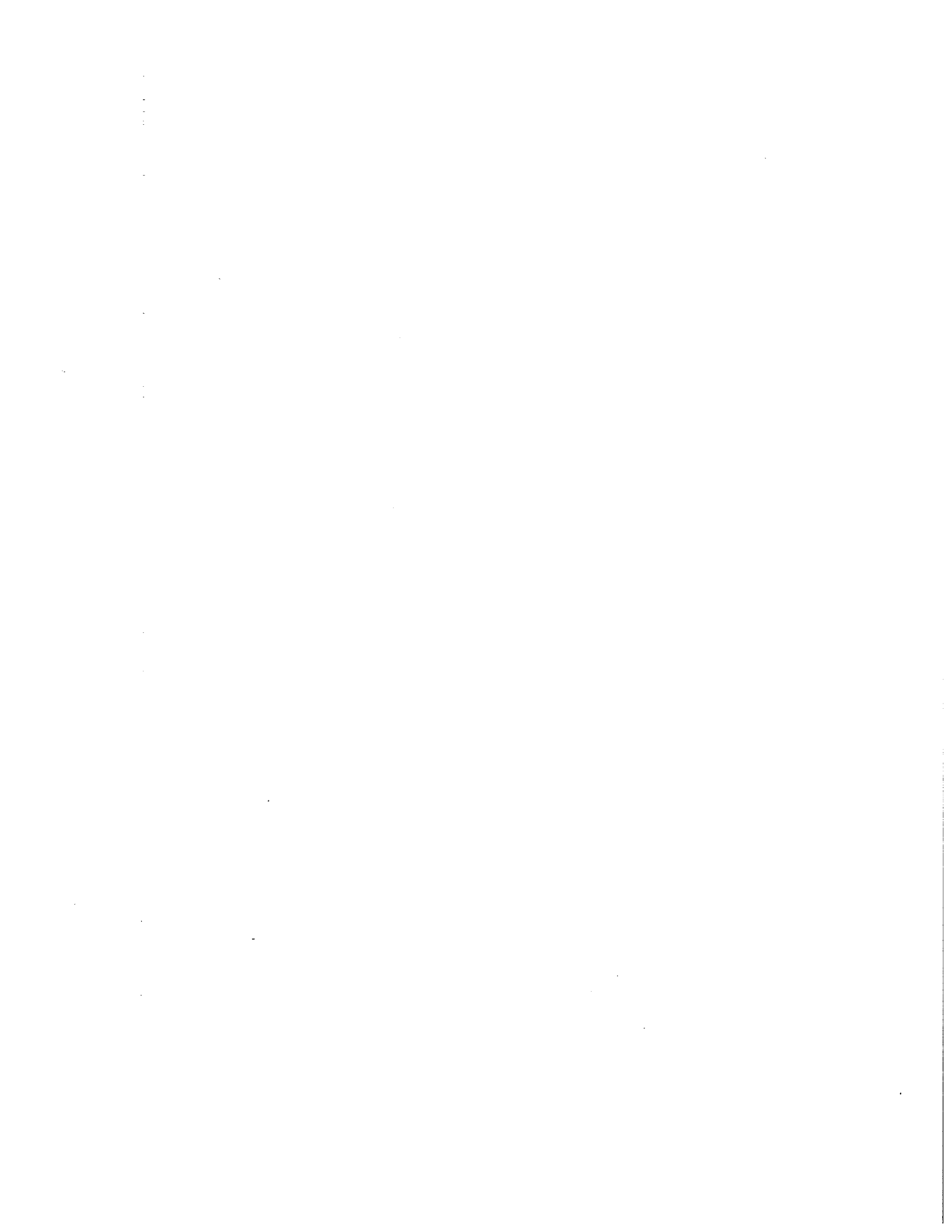
Nativity Table 18. Live Births, County of Residence by County of Occurrence, 1999

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	Klickitat
Adams	224		14								6		52				2			
Asotin		2																		
Benton	1		1,874			1					171						6		1	
Chelan			1	930							1		1				15			
Clallam					578			1						1		4	28	1		
Clark						4,291		9						1			6			1
Columbia																				
Cowlitz						105		1,097									5			
Douglas			1	371					1		1		1				4			
Ferry										12			3						1	
Franklin	29		504								552		6				1			
Garfield												1								
Grant	165		21	127	1						1		935				9		5	
Grays Harbor														483			9			
Island															611		48	1		
Jefferson					12									2	1	157	15	28		
King				2													21,189	6	2	
Kitsap					1	1									1	1	300	2,212		
Kittitas			1	3									1				25		314	
Klickitat			4	1		4														118
Lewis			1			1		39						2			2			
Lincoln													7							
Mason														1			12	65		
Okanogan				10					1				21				4			
Pacific								2						14						
Pend Oreille																	1			
Pierce				1		1											1,120	38		
San Juan															1		4			
Skagit															18		45			
Skamania						45														40
Snohomish									1						2		2,869	6		
Spokane			3	1									1				7	1		
Stevens																				
Thurston														1			27			
Wahkiakum								31												
Walla Walla			44								20						1			
Whatcom				1											1		38	1		
Whitman								1					1				3			
Yakima	1		274			1					2		1				19		2	
Out of State Occurrence			64	2		65		140			12		2		3		109	11		7
<b>Total</b>	<b>420</b>	<b>2</b>	<b>2,806</b>	<b>1,449</b>	<b>593</b>	<b>4,515</b>	<b>0</b>	<b>1,320</b>	<b>1</b>	<b>14</b>	<b>766</b>	<b>1</b>	<b>1,032</b>	<b>505</b>	<b>638</b>	<b>162</b>	<b>25,923</b>	<b>2,370</b>	<b>325</b>	<b>166</b>

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

Nativity Table 18. Live Births, County of Residence by County of Occurrence, 1999

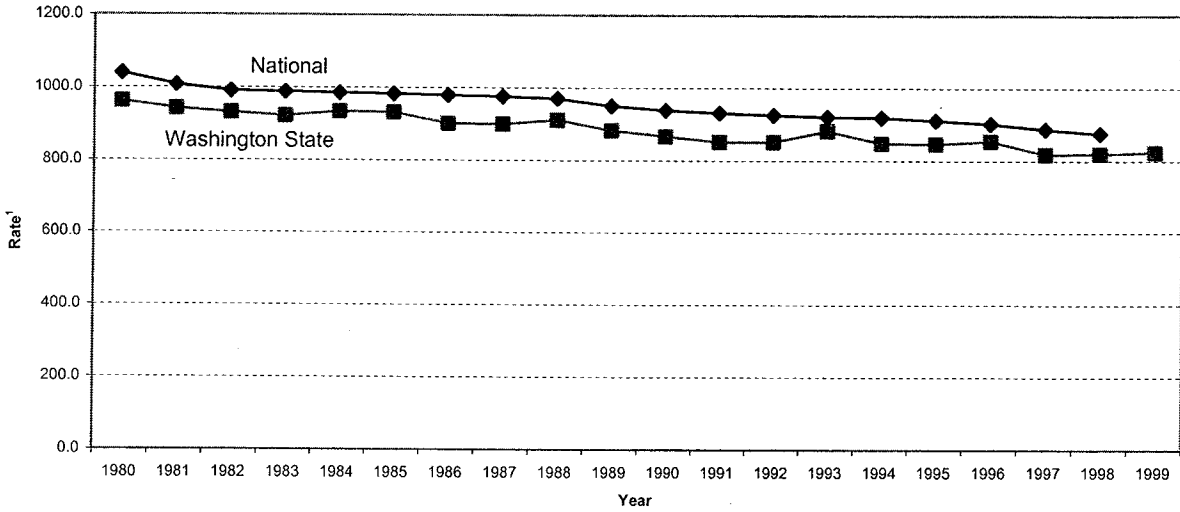
		County of Occurrence																				
	Lewis	Lincoln	Mason	Okanogan	Pacific	Pend Oreille	Pierce	San Juan	Skagit	Skamania	Snohomish	Spokane	Stevens	Thurston	Wahkiakum	Walla Walla	Whatcom	Whitman	Yakima	Out-of-State	Residence Total	
		1									1	17						1		1	319	
												7				2		3			249	263
							2					8				3			43		9	2,119
				11								3							2			964
							1							1							2	617
							5							1							871	5,185
																26					1	27
	5						4							2					1	67		1,286
				72								3										454
				5								20	36									77
				1			1					7				1			1	1	1	1,104
												1						4			21	27
				3			1		1			54							64	3		1,390
16		1			18		27				2			267							3	823
							28		115		101							1			7	912
		3					2															220
			1				583		4		176	1	1	9			3	1	1	28		22,007
		4					353				13	2						1		4		2,893
							1												19			364
												1							4	97		229
655		1		1			27							212						3		944
	19			1								85						1				113
		264					41				2			138								523
			474						1		1	39									1	552
2				49			1							19							76	163
					62							65	6									134
2						8,678			2		5	2		62					2	26		9,939
							8		77											10		100
							2		1,243		30							19		1	1	1,359
										4											45	134
1				1			8		73		5,515	1		1				6			12	8,496
				1		1	2				1	5,460	4						1		14	5,497
												220	235								1	456
54		6			1		368				1			2,009		1				2	8	2,478
														1	1						9	42
									1			4				640					3	713
							2		26		6							1,918			1	1,995
							1					58							307	1	50	442
				1			1									1	1		3,928	5		4,237
4		1	1	1	33		46		1		8	332	1	7	248	9	23	4				1,134
739	20	280	572	70	96	10,185	8	1,544	4	5,862	6,390	283	2,729	1	922	1,967	342	4,073	1,616			80,711



# Mortality

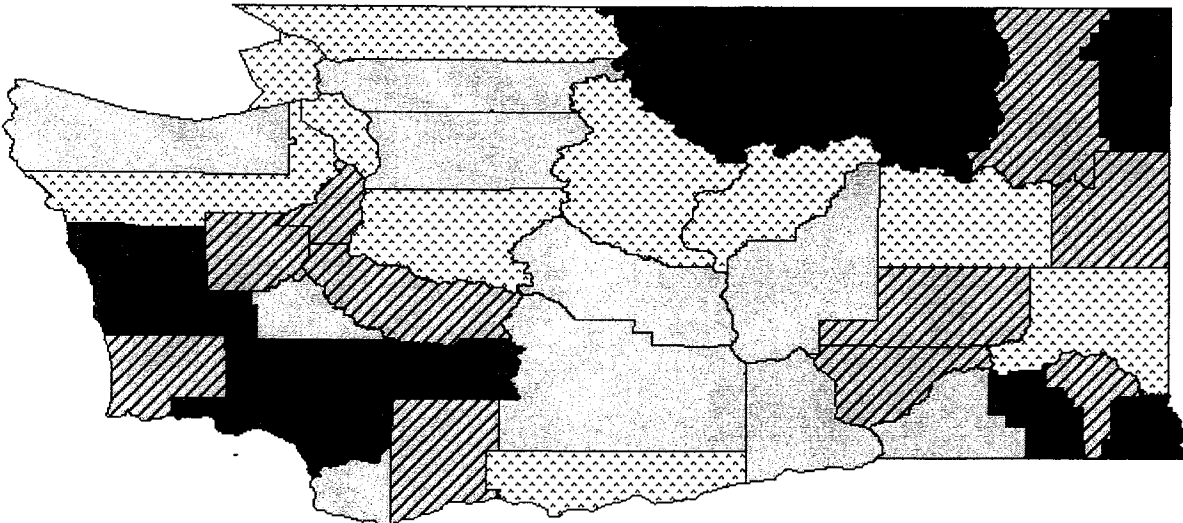


**Mortality Figure 5. Mortality Rates<sup>1</sup>, Washington State Residents Compared to National, 1980 - 1999**



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

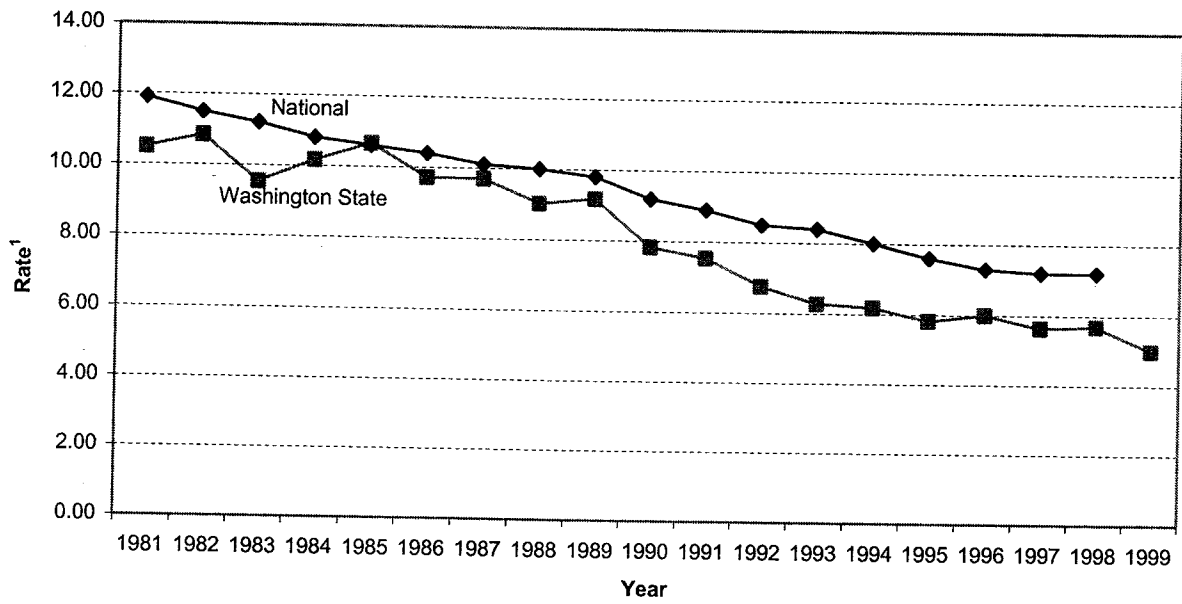
**Mortality Figure 6. Washington State Age-Adjusted Mortality Rates by County of Residence, 1997 - 1999 (Washington State Rate = 820.2)**



**Age-Adjusted Mortality Rates**

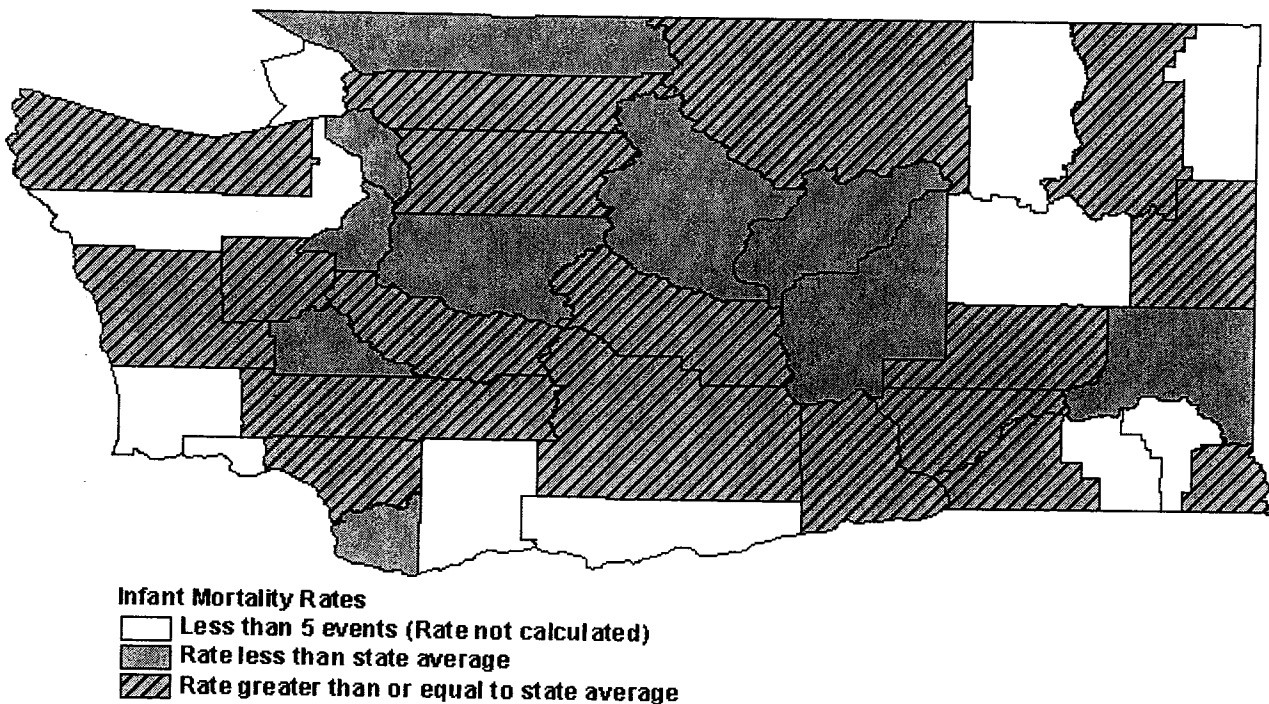
- 1st Quartile (646.60 - 792.20)
- 2nd Quartile (801.50 - 827.90)
- 3rd Quartile (831.00 - 905.10)
- 4th Quartile (913.70 - 1100.80)

**Mortality Figure 7. Infant Mortality Rates<sup>1</sup>, Washington State Residents Compared to National, 1981 - 1999**

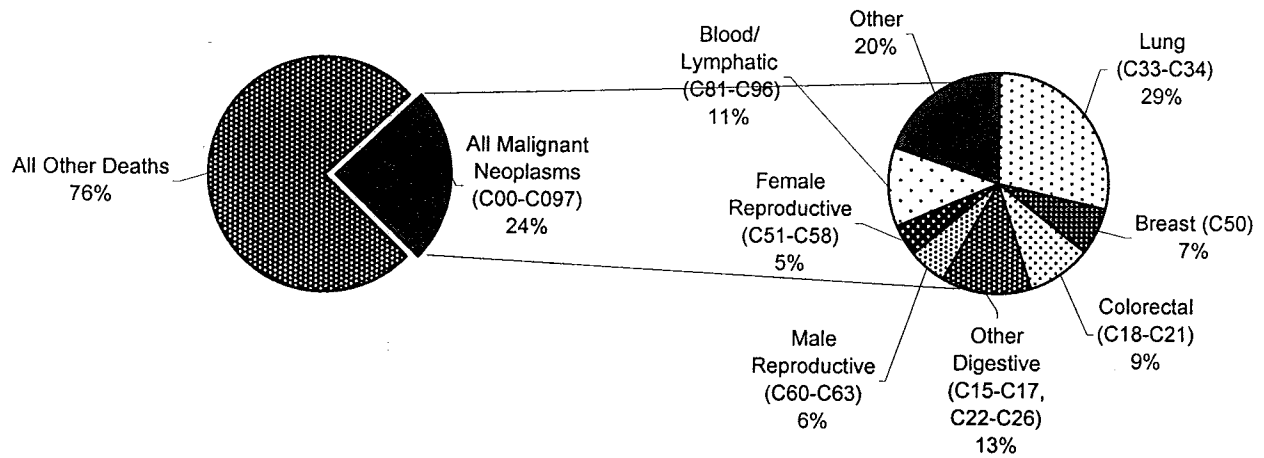


<sup>1</sup> Rate per 100,000 age-adjusted to U.S. 2000 population

**Mortality Figure 8. Washington State Infant Mortality Rates by County of Residence, 1997 - 1999 (Washington State Rate = 5.45)**



**Mortality Figure 9. Percent of Deaths Due to Malignant Neoplasms, Washington State Residents, 1999**



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



**Mortality Table 1. Deaths to Residents by Race/Ethnicity and Sex, 1999**

Race/Ethnicity	Total		Male	Female
	Number	Percent <sup>1</sup>		
<b>State Total</b>	<b>43,793</b>	<b>100.0</b>	<b>21,824</b>	<b>21,969</b>
White	41,048	93.7	20,296	20,752
African American	1,128	2.6	653	475
Native American	535	1.2	291	244
Japanese	209	0.5	106	103
Chinese	138	0.3	81	57
Filipino	231	0.5	119	112
Other Asian	478	1.1	262	216
Other	0	0.0	0	0
Unknown	26	0.1	16	10
Hispanic <sup>2</sup>	718	1.6	429	289

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

<sup>2</sup>Persons of Hispanic Origin may be of any race. See Appendix A, "Hispanic Origin."

**Mortality Table 2. Deaths to Residents by Age and Ethnicity, 1999**

Age Group	Total	White	African American	Native American	Japa- nese	Chi- nese	Other Filipino	Asian	Other	Un- known	Hispanic <sup>1</sup>
<b>State Total</b>	<b>43,793</b>	<b>41,048</b>	<b>1,128</b>	<b>535</b>	<b>209</b>	<b>138</b>	<b>231</b>	<b>478</b>	<b>0</b>	<b>26</b>	<b>718</b>
Under 1	401	313	50	13	1	0	3	14	0	7	67
1-4	90	77	5	2	0	0	0	4	0	2	15
5-14	144	124	13	0	0	2	1	4	0	0	17
15-19	254	203	13	16	1	1	5	15	0	0	28
20-24	303	247	32	11	2	0	2	9	0	0	38
25-34	706	598	41	36	0	0	6	24	0	1	59
35-44	1,578	1,369	97	70	1	2	9	26	0	4	72
45-54	2,719	2,403	154	67	14	11	17	51	0	2	61
55-64	4,116	3,742	161	70	11	16	37	77	0	2	86
65-74	7,895	7,359	206	116	54	28	30	101	0	1	99
75-84	13,168	12,557	222	91	82	47	57	107	0	5	110
85-94	10,467	10,166	110	39	34	24	54	39	0	1	56
95 and over	1,949	1,888	24	4	9	7	10	7	0	0	10
Unknown	3	2	0	0	0	0	0	0	0	1	0

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

**Mortality Table 3. Deaths to Residents by Age and Sex, 1999**

Age Group	Total		Male	Female
	Number	Percent <sup>1</sup>		
<b>State Total</b>	<b>43,793</b>	<b>100.0</b>	<b>21,824</b>	<b>21,969</b>
Under 1	401	0.9	212	189
1 - 4	90	0.2	52	38
5 - 14	144	0.3	97	47
15 - 19	254	0.6	193	61
20 - 24	303	0.7	226	77
25 - 34	706	1.6	500	206
35 - 44	1,578	3.6	1,015	563
45 - 54	2,719	6.2	1,664	1,055
55 - 64	4,116	9.4	2,416	1,700
65 - 74	7,895	18.0	4,435	3,460
75 - 84	13,168	30.1	6,602	6,566
85 - 94	10,467	23.9	3,983	6,484
95 and Over	1,949	4.5	426	1,523
Unknown	3	0.0	3	0

**Mortality Table 4. Life Expectancy<sup>2</sup> of Residents by Age and Sex, 1999**

Age Group	Total	Male	Female
Under 1	78.1	75.5	80.6
1-5	77.5	75.0	80.0
5-10	73.6	71.1	76.1
10-15	68.6	66.1	71.1
15-20	63.7	61.2	66.2
20-25	58.9	56.5	61.2
25-30	54.2	51.8	56.4
30-35	49.4	47.1	51.5
35-40	44.6	42.4	46.7
40-45	39.9	37.7	41.9
45-50	35.2	33.1	37.1
50-55	30.7	28.7	32.5
55-60	26.3	24.4	28.0
60-65	22.1	20.2	23.7
65-70	18.2	16.5	19.7
70-75	14.7	13.2	16.0
75-80	11.5	10.1	12.6
80-85	8.7	7.6	9.5
85 and Over	6.6	5.7	7.1

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

<sup>2</sup>Life expectancy is the average number of years a person at a given age is expected to live.

**Mortality Table 5. Leading Causes of Death for Residents, 1999**

**A. All Ages**

Rank	Causes of Death and ICD-10 Codes	Number	Percent <sup>1</sup>	Cumulative Percent
	<b>All Causes</b>	<b>43,793</b>	<b>100.0</b>	
1	Diseases of the Heart (I00-I09,I11,I13,I20-I51)	11,477	26.2	26.2
2	Malignant Neoplasms (C00-C97)	10,641	24.3	50.5
3	Cerebrovascular Diseases (I60-I69)	3,705	8.5	59.0
4	Chronic Lower Respiratory Diseases (J40-J47)	2,706	6.2	65.1
5	Accidents (V01-X59, Y85-Y86)	1,913	4.4	69.5
6	Alzheimer's Disease (G30)	1,576	3.6	73.1
7	Diabetes Mellitus (E10-E14)	1,305	3.0	76.1
8	Influenza and Pneumonia (J10-J18)	1,258	2.9	79.0
9	Intentional Self-Harm (Suicide) (X60-X84,Y87.0)	819	1.9	80.8
10	Chronic Liver Disease & Cirrhosis (K70, K73-K74)	530	1.2	82.0
	All Other Causes	7,863	18.0	100.0

**B. Infants (Age < 1 Year)**

Rank	Causes of Death and ICD-10 Codes	Number	Percent <sup>1</sup>	Cumulative Percent
	<b>State Total</b>	<b>401</b>	<b>100.0</b>	
1	Congenital Malformations (Q00-Q99)	106	26.4	26.4
2	Sudden Infant Death Syndrome (R95)	67	16.7	43.1
3	Short Gestation & Low Birth Weight (P07)	48	12.0	55.1
4	Maternal Complications of Pregnancy (P01)	15	3.7	58.9
5	Neonatal Hemorrhage (P50-P52,P54)	13	3.2	62.1
6	Diseases of the Circulatory System (I00-I99)	12	3.0	65.1
7	Complications of Placenta, Cord & Membranes (P02)	11	2.7	67.8
8	Intrauterine Hypoxia & Birth Asphyxia (P20-P21)	11	2.7	70.6
9	Accidents (V01-X59, Y85-Y86)	11	2.7	73.3
10	Bacterial Sepsis of Newborn (P36)	8	2.0	75.3
	All Other Causes	99	24.7	100.0

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

**Mortality Table 6. Deaths to Residents and by Occurrence by Month of Death, 1999**

Month	Residence Total		Occurrence Total	
	Number	Percent <sup>1</sup>	Number	Percent <sup>1</sup>
<b>State Total</b>	<b>43,793</b>	<b>100.0</b>	<b>43,992</b>	<b>100.0</b>
January	3,937	9.0	3,919	8.9
February	3,902	8.9	3,891	8.8
March	3,957	9.0	3,983	9.1
April	3,708	8.5	3,711	8.4
May	3,660	8.4	3,660	8.3
June	3,432	7.8	3,472	7.9
July	3,442	7.9	3,475	7.9
August	3,312	7.6	3,352	7.6
September	3,331	7.6	3,347	7.6
October	3,674	8.4	3,701	8.4
November	3,526	8.1	3,528	8.0
December	3,912	8.9	3,953	9.0

**Mortality Table 7. Deaths to Residents by Marital Status and Sex, 1999**

Marital Status	Total		Male	Female
	Number	Percent <sup>1</sup>		
<b>State Total</b>	<b>43,793</b>	<b>100.0</b>	<b>21,824</b>	<b>21,969</b>
Single	3,960	9.0	2,546	1,414
Married	17,718	40.5	11,910	5,808
Divorced	5,811	13.3	3,176	2,635
Widowed	16,204	37.0	4,113	12,091
Unknown	100	0.2	79	21

**Mortality Table 8. Deaths by Occurrence by Type of Place**

Type of Place	Number	Percent <sup>1</sup>
<b>State Total</b>	<b>43,992</b>	<b>100.0</b>
General Hospital	15,157	34.5
Nursing Home	13,324	30.3
Home	12,190	27.7
Federal Facility	630	1.4
Psychiatric Hospital	64	0.1
Dead on Arrival	32	0.1
State Facility	4	0.0
Other and Unknown	2,591	5.9

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

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 9. Autopsy by Age and Manner of Death, 1999**

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>
State Total	43,793	4,421	10.1	40,735	2,318	5.7	3,058	2,103	68.8
Under 1	401	174	43.4	388	163	42.0	13	11	84.6
1-4	90	55	61.1	54	27	50.0	36	28	77.8
5-14	144	75	52.1	70	19	27.1	74	56	75.7
15-19	254	182	71.7	48	16	33.3	206	166	80.6
20-24	303	204	67.3	71	23	32.4	232	181	78.0
25-34	706	457	64.7	263	97	36.9	443	360	81.3
35-44	1,578	783	49.6	973	301	30.9	605	482	79.7
45-54	2,719	803	29.5	2,243	448	20.0	476	355	74.6
55-64	4,116	535	13.0	3,894	375	9.6	222	160	72.1
65-74	7,895	495	6.3	7,687	376	4.9	208	119	57.2
75-84	13,168	468	3.6	12,885	344	2.7	283	124	43.8
85 and over	12,416	187	1.5	12,157	127	1.0	259	60	23.2
Unknown	3	3	100.0	2	2	100.0	1	1	100.0

<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 10. Deaths to Residents by Leading Causes and Age Group by Sex, 1999**

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	43,793	760.6	100.0	21,824	761.2	100.0	21,969	760.1	100.0
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	11,477	199.3	26.2	5,837	203.6	26.7	5,640	195.1	25.7
Malignant Neoplasms (C00-C97)	10,641	184.8	24.3	5,523	192.6	25.3	5,118	177.1	23.3
Cerebrovascular Diseases (I60-I69)	3,705	64.4	8.5	1,441	50.3	6.6	2,264	78.3	10.3
Chronic Lower Respiratory Disease (J40-J47)	2,706	47.0	6.2	1,313	45.8	6.0	1,393	48.2	6.3
Accidents (V01-X59, Y85-Y86)	1,913	33.2	4.4	1,288	44.9	5.9	625	21.6	2.8
Alzheimer's Disease (G30)	1,576	27.4	3.6	496	17.3	2.3	1,080	37.4	4.9
Diabetes Mellitus (E10-E14)	1,305	22.7	3.0	617	21.5	2.8	688	23.8	3.1
Influenza and Pneumonia (J10-J18)	1,258	21.9	2.9	548	19.1	2.5	710	24.6	3.2
Intentional Self-Harm (Suicide) (X60-X84, Y87.0)	819	14.2	1.9	649	22.6	3.0	170	5.9	0.8
Chronic Liver Disease & Cirrhosis (K70,K73-K74)	530	9.2	1.2	338	11.8	1.5	192	6.6	0.9
All Other Causes	7,863	136.6	18.0	3,774	131.6	17.3	4,089	141.5	18.6
<b>Under 1</b>									
All Causes	401	503.9	100.0	212	519.3	100.0	189	487.7	100.0
Congenital Malformations (Q00-Q99)	106	133.2	26.4	48	117.6	22.6	58	149.7	30.7
Sudden Infant Death Syndrome (R95)	67	84.2	16.7	39	95.5	18.4	28	72.3	14.8
Short Gestation & Low Birth Weight (P07)	48	60.3	12.0	24	58.8	11.3	24	61.9	12.7
Maternal Complications of Pregnancy (P01)	15	18.8	3.7	12	29.4	5.7	3	*	1.6
Neonatal Hemorrhage (P50-P52,P54)	13	16.3	3.2	12	29.4	5.7	1	*	0.5
All Other Causes	152	191.0	37.9	77	188.6	36.3	75	193.5	39.7
<b>1-4</b>									
All Causes	90	27.9	100.0	52	31.6	100.0	38	24.2	100.0
Accidents (V01-X59, Y85-Y86)	29	9.0	32.2	17	10.3	32.7	12	7.6	31.6
Malignant Neoplasms (C00-C97)	11	3.4	12.2	5	3.0	9.6	6	3.8	15.8
Congenital Anomalies (Q00-Q99)	8	2.5	8.9	5	3.0	9.6	3	*	7.9
Assault (Homicide) (X85-Y09, Y87.1)	7	2.2	7.8	4	*	7.7	3	*	7.9
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	6	1.9	6.7	3	*	5.8	3	*	7.9
All Other Causes	29	9.0	32.2	18	10.9	34.6	11	7.0	28.9
<b>5-14</b>									
All Causes	144	16.3	100.0	97	21.4	100.0	47	10.9	100.0
Accidents (V01-X59, Y85-Y86)	59	6.7	41.0	42	9.3	43.3	17	4.0	36.2
Malignant Neoplasms (C00-C97)	24	2.7	16.7	14	3.1	14.4	10	2.3	21.3
Assault (Homicide) (X85-Y09, Y87.1)	10	1.1	6.9	6	1.3	6.2	4	*	8.5
Congenital Anomalies (Q00-Q99)	5	0.6	3.5	4	*	4.1	1	*	2.1
Influenza and Pneumonia (J10-J18)	4	*	2.8	1	*	1.0	3	*	6.4
All Other Causes	42	4.8	29.2	30	6.6	30.9	12	2.8	25.5
<b>15 - 19</b>									
All Causes	254	61.6	100.0	193	90.9	100.0	61	30.5	100.0
Accidents (V01-X59, Y85-Y86)	119	28.8	46.9	98	46.2	50.8	21	10.5	34.4
Intentional Self-Harm (Suicide) (X60-X84, Y87.0)	61	14.8	24.0	47	22.1	24.4	14	7.0	23.0
Assault (Homicide) (X85-Y09, Y87.1)	25	6.1	9.8	19	8.9	9.8	6	3.0	9.8
Malignant Neoplasms (C00-C97)	11	2.7	4.3	7	3.3	3.6	4	*	6.6
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	5	1.2	2.0	4	*	2.1	1	*	1.6
All Other Causes	33	8.0	13.0	18	8.5	9.3	15	7.5	24.6
<b>20 - 24</b>									
All Causes	303	84.8	100.0	226	122.6	100.0	77	44.6	100.0
Accidents (V01-X59, Y85-Y86)	130	36.4	42.9	100	54.2	44.2	30	17.4	39.0
Intentional Self-Harm (Suicide) (X60-X84, Y87.0)	63	17.6	20.8	54	29.3	23.9	9	5.2	11.7
Assault (Homicide) (X85-Y09, Y87.1)	33	9.2	10.9	26	14.1	11.5	7	4.1	9.1
Malignant Neoplasms (C00-C97)	23	6.4	7.6	16	8.7	7.1	7	4.1	9.1
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	6	1.7	2.0	3	*	1.3	3	*	3.9
All Other Causes	48	13.4	15.8	27	14.6	11.9	21	12.2	27.3
<b>25 - 34</b>									
All Causes	706	90.1	100.0	500	125.3	100.0	206	53.6	100.0
Accidents (V01-X59, Y85-Y86)	247	31.5	35.0	194	48.6	38.8	53	13.8	25.7
Intentional Self-Harm (Suicide) (X60-X84, Y87.0)	135	17.2	19.1	113	28.3	22.6	22	5.7	10.7
Malignant Neoplasms (C00-C97)	62	7.9	8.8	33	8.3	6.6	29	7.5	14.1
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	50	6.4	7.1	26	6.5	5.2	24	6.2	11.7
Assault (Homicide) (X85-Y09, Y87.1)	37	4.7	5.2	30	7.5	6.0	7	1.8	3.4
All Other Causes	175	22.3	24.8	104	26.1	20.8	71	18.5	34.5

**Mortality Table 10. Deaths to Residents by Leading Causes and Age Group by Sex, 1999**

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	1,578	160.6	100.0	1,015	205.1	100.0	563	115.4	100.0
Accidents (V01-X59, Y85-Y86)	358	36.4	22.7	263	53.1	25.9	95	19.5	16.9
Malignant Neoplasms (C00-C97)	313	31.9	19.8	146	29.5	14.4	167	34.2	29.7
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	193	19.6	12.2	135	27.3	13.3	58	11.9	10.3
Intentional Self-Harm (Suicide) (X60-X84, Y87.0)	173	17.6	11.0	140	28.3	13.8	33	6.8	5.9
Chronic Liver Disease & Cirrhosis (K70,K73-K74)	56	5.7	3.5	35	7.1	3.4	21	4.3	3.7
All Other Causes	485	49.4	30.7	296	59.8	29.2	189	38.7	33.6
<b>45 - 54</b>									
All Causes	2,719	337.9	100.0	1,664	413.5	100.0	1,055	262.3	100.0
Malignant Neoplasms (C00-C97)	892	110.9	32.8	451	112.1	27.1	441	109.7	41.8
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	536	66.6	19.7	398	98.9	23.9	138	34.3	13.1
Accidents (V01-X59, Y85-Y86)	279	34.7	10.3	195	48.5	11.7	84	20.9	8.0
Intentional Self-Harm (Suicide) (X60-X84, Y87.0)	149	18.5	5.5	112	27.8	6.7	37	9.2	3.5
Chronic Liver Disease & Cirrhosis (K70,K73-K74)	130	16.2	4.8	93	23.1	5.6	37	9.2	3.5
All Other Causes	733	91.1	27.0	415	103.1	24.9	318	79.1	30.1
<b>55 - 64</b>									
All Causes	4,116	862.9	100.0	2,416	1,015.9	100.0	1,700	710.8	100.0
Malignant Neoplasms (C00-C97)	1,672	350.5	40.6	903	379.7	37.4	769	321.5	45.2
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	973	204.0	23.6	685	288.0	28.4	288	120.4	16.9
Chronic Lower Respiratory Disease (J40-J47)	224	47.0	5.4	114	47.9	4.7	110	46.0	6.5
Cerebrovascular Diseases (I60-I69)	166	34.8	4.0	82	34.5	3.4	84	35.1	4.9
Diabetes Mellitus (E10-E14)	161	33.8	3.9	78	32.8	3.2	83	34.7	4.9
All Other Causes	920	192.9	22.4	554	232.9	22.9	366	153.0	21.5
<b>65 - 74</b>									
All Causes	7,895	2,314.1	100.0	4,435	2,812.2	100.0	3,460	1,886.0	100.0
Malignant Neoplasms (C00-C97)	2,833	830.4	35.9	1,532	971.4	34.5	1,301	709.2	37.6
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	1,909	559.6	24.2	1,228	778.7	27.7	681	371.2	19.7
Chronic Lower Respiratory Disease (J40-J47)	706	206.9	8.9	361	228.9	8.1	345	188.1	10.0
Cerebrovascular Diseases (I60-I69)	442	129.6	5.6	218	138.2	4.9	224	122.1	6.5
Diabetes Mellitus (E10-E14)	330	96.7	4.2	173	109.7	3.9	157	85.6	4.5
All Other Causes	1,675	491.0	21.2	923	585.3	20.8	752	409.9	21.7
<b>75-84</b>									
All Causes	13,168	5,654.7	100.0	6,602	6,919.3	100.0	6,566	4,776.8	100.0
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	3,652	1,568.3	27.7	1,898	1,989.2	28.7	1,754	1,276.1	26.7
Malignant Neoplasms (C00-C97)	3,287	1,411.5	25.0	1,716	1,798.5	26.0	1,571	1,142.9	23.9
Cerebrovascular Diseases (I60-I69)	1,263	542.4	9.6	600	628.8	9.1	663	482.3	10.1
Chronic Lower Respiratory Disease (J40-J47)	1,091	468.5	8.3	524	549.2	7.9	567	412.5	8.6
Alzheimer's Disease (G30)	516	221.6	3.9	203	212.8	3.1	313	227.7	4.8
All Other Causes	3,359	1,442.4	25.5	1,661	1,740.8	25.2	1,698	1,235.3	25.9
<b>85 and Over</b>									
All Causes	12,416	15,288.2	100.0	4,409	17,886.4	100.0	8,007	14,155.9	100.0
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	4,134	5,090.3	33.3	1,449	5,878.3	32.9	2,685	4,746.9	33.5
Cerebrovascular Diseases (I60-I69)	1,693	2,084.6	13.6	472	1,914.8	10.7	1,221	2,158.7	15.2
Malignant Neoplasms (C00-C97)	1,511	1,860.5	12.2	699	2,835.7	15.9	812	1,435.6	10.1
Alzheimer's Disease (G30)	949	1,168.5	7.6	238	965.5	5.4	711	1,257.0	8.9
Influenza and Pneumonia (J10-J18)	637	784.4	5.1	223	904.7	5.1	414	731.9	5.2
All Other Causes	3,492	4,299.8	28.1	1,328	5,387.4	30.1	2,164	3,825.8	27.0
<b>Age Unknown</b>									
All Causes	3	*	100.0	3	*	100.0	0	*	0.0
Accidents (V01-X59, Y85-Y86)	1	*	33.3	1	*	33.3	0	*	0.0
Chronic Liver Disease & Cirrhosis (K70,K73-K74)	1	*	33.3	1	*	33.3	0	*	0.0
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	1	*	33.3	1	*	33.3	0	*	0.0
All Other Causes	0	*	0.0	0	*	0.0	0	*	0.0

<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.

**Mortality Table 11a. Deaths to Residents With Crude Rates by Selected Causes by Sex, 1999**

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>	(43,793)	(760.6)	(21,824)	(761.2)	(21,969)	(760.1)
<b>Certain Infectious &amp; Parasitic Disease (A00-B99)</b>	(741)	(12.9)	(413)	(14.4)	(328)	(11.3)
Tuberculosis (A16-A19)	9	0.2	6	0.2	3	*
Septicemia (A40-A41)	307	5.3	136	4.7	171	5.9
Viral Hepatitis (B15-B19)	90	1.6	64	2.2	26	0.9
HIV (B20-B24)	107	1.9	93	3.2	14	0.5
Other (A00-A15,A20-A39,A42-B14,B25-B99)	228	4.0	114	4.0	114	3.9
<b>Neoplasms (C00-D48)</b>	(10,875)	(188.9)	(5,630)	(196.4)	(5,245)	(181.5)
Malignant Neoplasms (C00-C97)	10,641	184.8	5,523	192.6	5,118	177.1
In Situ & Benign Neoplasms (D00-D48)	234	4.1	107	3.7	127	4.4
<b>Diseases of Blood &amp; Blood-Forming Organs (D50-D89)</b>	(123)	(2.1)	(65)	(2.3)	(58)	(2.0)
Anemias (D50-D64)	50	0.9	27	0.9	23	0.8
Other (D65-D89)	73	1.3	38	1.3	35	1.2
<b>Endocrine, Nutritional &amp; Metabolic Diseases (E00-E90)</b>	(1,797)	(31.2)	(814)	(28.4)	(983)	(34.0)
Diabetes Mellitus (E10-E14)	1,305	22.7	617	21.5	688	23.8
Nutritional Diseases (E40-E64)	78	1.4	29	1.0	49	1.7
Other (E00-E09,E15-E39,E65-E90)	414	7.2	168	5.9	246	8.5
<b>Mental &amp; Behavioral Disorders (F01-F99)</b>	(435)	(7.6)	(192)	(6.7)	(243)	(8.4)
<b>Diseases of the Nervous System (G00-G98)</b>	(2,575)	(44.7)	(1,012)	(35.3)	(1,563)	(54.1)
Meningitis (G00-G03)	15	0.3	8	0.3	7	0.2
Amyotrophic Lateral Sclerosis (G12.2)	161	2.8	76	2.7	85	2.9
Parkinson's Disease (G20-G21)	411	7.1	234	8.2	177	6.1
Alzheimer's Disease (G30)	1,576	27.4	496	17.3	1,080	37.4
Multiple Sclerosis (G35)	85	1.5	18	0.6	67	2.3
Other (G04-G12.1,G12.3-G19,G22-G29,G31-G34,G36-G98)	327	5.7	180	6.3	147	5.1
<b>Diseases of the Eye &amp; Ear (H00-H93)</b>	(5)	(0.1)	(3)	(*)	(2)	(*)
<b>Diseases of the Circulatory System (I00-I99)</b>	(16,381)	(284.5)	(7,825)	(272.9)	(8,556)	(296.0)
Major Cardiovascular Diseases (I00-I78)	(16,330)	(283.6)	(7,801)	(272.1)	(8,529)	(295.1)
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	(11,477)	(199.3)	(5,837)	(203.6)	(5,640)	(195.1)
Acute & Chronic Rheumatic Disease (I00-I09)	108	1.9	35	1.2	73	2.5
Hypertensive Heart Disease (I11)	354	6.1	125	4.4	229	7.9
Hypertensive Heart & Renal Disease (I13)	68	1.2	27	0.9	41	1.4
Ischemic Heart Diseases (I20-I25)	(8,650)	(150.2)	(4,641)	(161.9)	(4,009)	(138.7)
Acute Myocardial Infarction (I21-I22)	2,809	48.8	1,549	54.0	1,260	43.6
Other Acute Ischemic Heart Disease (I24)	11	0.2	5	0.2	6	0.2
Other Chronic Ischemic Heart Disease (I20, I25)	(5,830)	(101.3)	(3,087)	(107.7)	(2,743)	(94.9)
Atherosclerotic Cardiovascular Disease (I25.0)	1,856	32.2	986	34.4	870	30.1
All Other Chronic Disease (I20, I25.1-I25.9)	3,974	69.0	2,101	73.3	1,873	64.8
Other Heart Diseases (I26-I51)	(2,297)	(39.9)	(1,009)	(35.2)	(1,288)	(44.6)
Acute & Subacute Endocarditis (I33)	24	0.4	16	0.6	8	0.3
Disease Pericardium & Acute Myocarditis (I30-I31,I40)	13	0.2	8	0.3	5	0.2
Heart Failure (I50)	537	9.3	192	6.7	345	11.9
All Other Heart disease (I26-I28,I34-I38,I42-I49,I51)	1,723	29.9	793	27.7	930	32.2
Hypertension & Hypertensive Renal Disease (I10,I12)	286	5.0	101	3.5	185	6.4
Cerebrovascular Diseases (I60-I69)	3,705	64.4	1,441	50.3	2,264	78.3
Atherosclerosis (I70)	345	6.0	122	4.3	223	7.7
Other Diseases of Circulatory System (I71-I78)	(517)	(9.0)	(300)	(10.5)	(217)	(7.5)
Aortic Aneurysm & Dissection (I71)	317	5.5	203	7.1	114	3.9
Other Disease of Arteries (I72-I78)	200	3.5	97	3.4	103	3.6
Other (I80-I99)	51	0.9	24	0.8	27	0.9



**Mortality Table 11a. Deaths to Residents With Crude Rates by Selected Causes by Sex, 1999**

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>	(4,711)	(81.8)	(2,283)	(79.6)	(2,428)	(84.0)
Influenza and Pneumonia (J10-J18)	(1,258)	(21.9)	(548)	(19.1)	(710)	(24.6)
Influenza (J10-J11)	48	0.8	19	0.7	29	1.0
Pneumonia (J12-J18)	1,210	21.0	529	18.5	681	23.6
Other Acute Lower Respiratory Infections (J20-J22)	8	0.1	2	*	6	0.2
Chronic Lower Respiratory Disease (J40-J47)	(2,706)	(47.0)	(1,313)	(45.8)	(1,393)	(48.2)
Bronchitis, Chronic and Unspecified (J40-J42)	17	0.3	5	0.2	12	0.4
Emphysema (J43)	334	5.8	174	6.1	160	5.5
Asthma (J45-J46)	88	1.5	35	1.2	53	1.8
Other Chronic Lower Respiratory Disease ((J44,J47)	2,267	39.4	1,099	38.3	1,168	40.4
Pneumoconioses & Chemical Effects (J60-J66,J68)	31	0.5	30	1.0	1	*
Pneumonitis Due to Solids & Liquids (J69)	308	5.3	181	6.3	127	4.4
Other (J00-J06,J30-J39,J67,J70-J98)	400	6.9	209	7.3	191	6.6
<b>Diseases of the Digestive System (K00-K92)</b>	(1,582)	(27.5)	(785)	(27.4)	(797)	(27.6)
Peptic Ulcer (K25-K28)	106	1.8	45	1.6	61	2.1
Diseases of Appendix (K35-K38)	8	0.1	7	0.2	1	*
Hernia (K40-K46)	38	0.7	16	0.6	22	0.8
Chronic Liver Disease & Cirrhosis (K70,K73-K74)	(530)	(9.2)	(338)	(11.8)	(192)	(6.6)
Alcoholic Liver Disease (K70)	418	7.3	285	9.9	133	4.6
Other (K73-K74)	112	1.9	53	1.8	59	2.0
Cholelithiasis & Other Gallbladder Disease (K80-K82)	52	0.9	25	0.9	27	0.9
Other (K00-K24,K29-K34,K39,K47-K69,K71-K72,K75-K79,K83-K92)	848	14.7	354	12.3	494	17.1
<b>Diseases of Skin &amp; Subcutaneous Tissue (L00-L98)</b>	(49)	(0.9)	(21)	(0.7)	(28)	(1.0)
<b>Diseases Musculoskeletal &amp; Connective Tissue (M00-M99)</b>	(292)	(5.1)	(80)	(2.8)	(212)	(7.3)
<b>Diseases of the Genitourinary System (N00-N98)</b>	(542)	(9.4)	(241)	(8.4)	(301)	(10.4)
Nephritis (N00-N07, N17-N19, N25-N27)	(276)	(4.8)	(142)	(5.0)	(134)	(4.6)
Acute Nephrotic Syndrome (N00-N01, N04)	5	0.1	4	*	1	*
Chronic Nephritis & Unsp. Nephritis(N02-N03,N05-N07,N26)	15	0.3	10	0.3	5	0.2
Renal Failure (N17-N19)	253	4.4	127	4.4	126	4.4
Other Disorders of Kidney (N25, N27)	3	*	1	*	2	*
Infections of Kidney (N10-N12, N13.6, N15.1)	14	0.2	4	*	10	0.3
Hyperplasia of Prostate (N40)	n/a	n/a	16	0.6	n/a	n/a
Other(N13.0-N13.5,N13.7-N15.0,N15.8-N16,N20-N23,N28-N39,N41-N99)	236	4.1	79	2.8	157	5.4
<b>Pregnancy, Childbirth &amp; Puerperium (O00-O99)</b>	n/a	n/a	n/a	n/a	(6)	(0.2)
<b>Conditions Originating in Perinatal Period (P00-P96)</b>	(171)	(3.0)	(98)	(3.4)	(73)	(2.5)
<b>Congenital Anomalies (Q00-Q99)</b>	(209)	(3.6)	(99)	(3.5)	(110)	(3.8)
<b>Symptoms &amp; Signs Not Elsewhere Classified (R00-R99)</b>	(241)	(4.2)	(107)	(3.7)	(134)	(4.6)
Sudden Infant Death Syndrome (R95)	67	1.2	39	1.4	28	1.0
Other (R00-R94,R96-R99)	174	3.0	68	2.4	106	3.7
<b>External Causes of Mortality (V01-Y89)</b>	(3,058)	(53.1)	(2,156)	(75.2)	(902)	(31.2)
Accidents (V01-X59, Y85-Y86)	(1,913)	(33.2)	(1,288)	(44.9)	(625)	(21.6)
Transport Accidents (V01-V99, Y85)	810	14.1	563	19.6	247	8.5
Nontransport Accidents (W00-X59, Y86)	1,103	19.2	725	25.3	378	13.1
Intentional Self-Harm (Suicide) (X60-X84, Y87.0)	819	14.2	649	22.6	170	5.9
Assault (Homicide) (X85-Y09, Y87.1)	190	3.3	135	4.7	55	1.9
Legal Intervention (Y35, Y89.0)	9	0.2	9	0.3	0	*
Events of Undetermined Intent (Y10-Y34, Y87.2, Y89.9)	100	1.7	62	2.2	38	1.3
Operations of War & Sequelae (Y36, Y89.1)	2	*	2	*	0	*
Complications of Medical & Surgical Care (Y40-Y84, Y88)	25	0.4	11	0.4	14	0.5

<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 11b. Deaths to Residents With Age-Adjusted Rates by Selected Causes by Sex, 1999**

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>	(43,793)	(823.6)	(21,824)	(994.8)	(21,969)	(696.5)
<b>Certain Infectious &amp; Parasitic Disease (A00-B99)</b>	(741)	(13.6)	(413)	(16.7)	(328)	(10.6)
Tuberculosis (A16-A19)	9	0.2	6	0.2	3	*
Septicemia (A40-A41)	307	5.8	136	6.3	171	5.5
Viral Hepatitis (B15-B19)	90	1.6	64	2.4	26	0.9
HIV (B20-B24)	107	1.8	93	3.2	14	0.5
Other (A00-A15,A20-A39,A42-B14,B25-B99)	228	4.2	114	4.7	114	3.7
<b>Neoplasms (C00-D48)</b>	(10,875)	(204.4)	(5,630)	(249.5)	(5,245)	(174.8)
Malignant Neoplasms (C00-C97)	10,641	200.0	5,523	244.4	5,118	170.8
In Situ & Benign Neoplasms (D00-D48)	234	4.4	107	5.2	127	4.0
<b>Diseases of Blood &amp; Blood-Forming Organs (D50-D89)</b>	(123)	(2.3)	(65)	(3.0)	(58)	(1.9)
Anemias (D50-D64)	50	0.9	27	1.3	23	0.7
Other (D65-D89)	73	1.4	38	1.7	35	1.2
<b>Endocrine, Nutritional &amp; Metabolic Diseases (E00-E90)</b>	(1,797)	(34.0)	(814)	(36.8)	(983)	(31.9)
Diabetes Mellitus (E10-E14)	1,305	24.7	617	27.6	688	22.6
Nutritional Diseases (E40-E64)	78	1.5	29	1.5	49	1.5
Other (E00-E09,E15-E39,E65-E90)	414	7.8	168	7.7	246	7.8
<b>Mental &amp; Behavioral Disorders (F01-F99)</b>	(435)	(8.1)	(192)	(8.8)	(243)	(7.5)
<b>Diseases of the Nervous System (G00-G98)</b>	(2,575)	(48.9)	(1,012)	(50.5)	(1,563)	(47.5)
Meningitis (G00-G03)	15	0.3	8	0.3	7	0.2
Amyotrophic Lateral Sclerosis (G12.2)	161	3.0	76	3.2	85	2.9
Parkinson's Disease (G20-G21)	411	7.9	234	12.0	177	5.5
Alzheimer's Disease (G30)	1,576	30.2	496	26.8	1,080	31.7
Multiple Sclerosis (G35)	85	1.5	18	0.7	67	2.3
Other (G04-G12.1,G12.3-G19,G22-G29,G31-G34,G36-G98)	327	6.0	180	7.5	147	4.9
<b>Diseases of the Eye &amp; Ear (H00-H93)</b>	(5)	(0.1)	(3)	(*)	(2)	(*)
<b>Diseases of the Circulatory System (I00-I99)</b>	(16,381)	(311.0)	(7,825)	(375.7)	(8,556)	(262.2)
<b>Major Cardiovascular Diseases (I00-I78)</b>	(16,330)	(310.1)	(7,801)	(374.7)	(8,529)	(261.3)
<b>Diseases of Heart (I00-I09,I11,I13,I20-I51)</b>	(11,477)	(217.6)	(5,837)	(276.1)	(5,640)	(173.7)
Acute & Chronic Rheumatic Disease (I00-I09)	108	2.1	35	1.6	73	2.3
Hypertensive Heart Disease (I11)	354	6.7	125	6.0	229	6.9
Hypertensive Heart & Renal Disease (I13)	68	1.3	27	1.3	41	1.2
<b>Ischemic Heart Diseases (I20-I25)</b>	(8,650)	(164.1)	(4,641)	(218.8)	(4,009)	(123.8)
Acute Myocardial Infarction (I21-I22)	2,809	53.3	1,549	72.2	1,260	39.5
Other Acute Ischemic Heart Disease (I24)	11	0.2	5	0.2	6	0.2
Other Chronic Ischemic Heart Disease (I20, I25)	(5,830)	(110.6)	(3,087)	(146.4)	(2,743)	(84.1)
Atherosclerotic Cardiovascular Disease (I25.0)	1,856	34.9	986	44.3	870	26.9
All Other Chronic Disease (I20, I25.1-I25.9)	3,974	75.7	2,101	102.1	1,873	57.2
<b>Other Heart Diseases (I26-I51)</b>	(2,297)	(43.4)	(1,009)	(48.5)	(1,288)	(39.5)
Acute & Subacute Endocarditis (I33)	24	0.4	16	0.6	8	0.3
Disease Pericardium & Acute Myocarditis (I30-I31,I40)	13	0.2	8	0.3	5	0.2
Heart Failure (I50)	537	10.3	192	10.5	345	10.1
All Other Heart disease (I26-I28,I34-I38,I42-I49,I51)	1,723	32.5	793	37.0	930	28.9
Hypertension & Hypertensive Renal Disease (I10,I12)	286	5.5	101	5.1	185	5.7
<b>Cerebrovascular Diseases (I60-I69)</b>	3,705	70.6	1,441	72.3	2,264	68.7
Atherosclerosis (I70)	345	6.6	122	6.6	223	6.6
<b>Other Diseases of Circulatory System (I71-I78)</b>	(517)	(9.8)	(300)	(14.5)	(217)	(6.8)
Aortic Aneurysm & Dissection (I71)	317	6.0	203	9.7	114	3.6
Other Disease of Arteries (I72-I78)	200	3.8	97	4.8	103	3.2
Other (I80-I99)	51	1.0	24	1.0	27	0.9

**Mortality Table 11b. Deaths to Residents With Age-Adjusted Rates by Selected Causes by Sex, 1999**

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>	(4,711)	(89.8)	(2,283)	(111.6)	(2,428)	(76.8)
Influenza and Pneumonia (J10-J18)	(1,258)	(23.9)	(548)	(28.2)	(710)	(21.3)
Influenza (J10-J11)	48	0.9	19	1.0	29	0.9
Pneumonia (J12-J18)	1,210	23.0	529	27.3	681	20.4
Other Acute Lower Respiratory Infections (J20-J22)	8	0.1	2	*	6	0.2
Chronic Lower Respiratory Disease (J40-J47)	(2,706)	(51.6)	(1,313)	(62.6)	(1,393)	(45.4)
Bronchitis, Chronic and Unspecified (J40-J42)	17	0.3	5	0.2	12	0.4
Emphysema (J43)	334	6.4	174	7.9	160	5.4
Asthma (J45-J46)	88	1.6	35	1.5	53	1.7
Other Chronic Lower Respiratory Disease ((J44,J47)	2,267	43.3	1,099	53.0	1,168	38.0
Pneumoconioses & Chemical Effects (J60-J66,J68)	31	0.6	30	1.5	1	*
Pneumonitis Due to Solids & Liquids (J69)	308	5.9	181	9.3	127	3.8
Other (J00-J06,J30-J39,J67,J70-J98)	400	7.6	209	9.8	191	6.1
<b>Diseases of the Digestive System (K00-K92)</b>	(1,582)	(29.5)	(785)	(34.2)	(797)	(25.4)
Peptic Ulcer (K25-K28)	106	2.0	45	2.2	61	1.9
Diseases of Appendix (K35-K38)	8	0.1	7	0.3	1	*
Hernia (K40-K46)	38	0.7	16	0.8	22	0.6
Chronic Liver Disease & Cirrhosis (K70,K73-K74)	(530)	(9.6)	(338)	(13.1)	(192)	(6.6)
Alcoholic Liver Disease (K70)	418	7.5	285	10.8	133	4.6
Other (K73-K74)	112	2.1	53	2.3	59	2.0
Cholelithiasis & Other Gallbladder Disease (K80-K82)	52	1.0	25	1.3	27	0.8
Other (K00-K24,K29-K34,K39,K47-K69,K71-K72,K75-K79,K83-K92)	848	16.0	354	16.5	494	15.4
<b>Diseases of Skin &amp; Subcutaneous Tissue (L00-L98)</b>	(49)	(0.9)	(21)	(1.0)	(28)	(0.9)
<b>Diseases Musculoskeletal &amp; Connective Tissue (M00-M99)</b>	(292)	(5.5)	(80)	(3.5)	(212)	(6.7)
<b>Diseases of the Genitourinary System (N00-N98)</b>	(542)	(10.3)	(241)	(12.1)	(301)	(9.3)
Nephritis (N00-N07, N17-N19, N25-N27)	(276)	(5.2)	(142)	(7.0)	(134)	(4.2)
Acute Nephrotic Syndrome (N00-N01, N04)	5	0.1	4	*	1	*
Chronic Nephritis & Unsp. Nephritis(N02-N03,N05-N07,N26)	15	0.3	10	0.4	5	0.2
Renal Failure (N17-N19)	253	4.8	127	6.3	126	4.0
Other Disorders of Kidney (N25, N27)	3	*	1	*	2	*
Infections of Kidney (N10-N12, N13.6, N15.1)	14	0.3	4	*	10	0.3
Hyperplasia of Prostate (N40)	n/a	n/a	16	0.8	n/a	n/a
Other(N13.0-N13.5,N13.7-N15.0,N15.8-N16,N20-N23,N28-N39,N41-N99)	236	4.5	79	4.1	157	4.7
<b>Pregnancy, Childbirth &amp; Puerperium (O00-O99)</b>	n/a	n/a	n/a	n/a	(6)	(0.2)
<b>Conditions Originating in Perinatal Period (P00-P96)</b>	(171)	(3.0)	(98)	(3.3)	(73)	(2.6)
<b>Congenital Anomalies (Q00-Q99)</b>	(209)	(3.7)	(99)	(3.6)	(110)	(3.8)
<b>Symptoms &amp; Signs Not Elsewhere Classified (R00-R99)</b>	(241)	(4.4)	(107)	(4.4)	(134)	(4.3)
Sudden Infant Death Syndrome (R95)	67	1.2	39	1.3	28	1.0
Other (R00-R94,R96-R99)	174	3.2	68	3.1	106	3.3
<b>External Causes of Mortality (V01-Y89)</b>	(3,058)	(54.1)	(2,156)	(79.9)	(902)	(30.1)
Accidents (V01-X59, Y85-Y86)	(1,913)	(34.0)	(1,288)	(48.4)	(625)	(20.5)
Transport Accidents (V01-V99, Y85)	810	14.3	563	20.4	247	8.5
Nontransport Accidents (W00-X59, Y86)	1,103	19.7	725	28.0	378	12.1
Intentional Self-Harm (Suicide) (X60-X84, Y87.0)	819	14.4	649	23.8	170	5.9
Assault (Homicide) (X85-Y09, Y87.1)	190	3.3	135	4.7	55	1.9
Legal Intervention (Y35, Y89.0)	9	0.2	9	0.3	0	*
Events of Undetermined Intent (Y10-Y34, Y87.2, Y89.9)	100	1.7	62	2.1	38	1.3
Operations of War & Sequelae (Y36, Y89.1)	2	*	2	*	0	*
Complications of Medical & Surgical Care (Y40-Y84, Y88)	25	0.5	11	0.5	14	0.5

<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 12. Deaths to Residents Due to Malignant Neoplasms by Primary Site by Sex, 1999**

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>
All Sites Combined (C00-C97)	10,641	184.8	200.0	5,523	192.6	244.4	5,118	177.1	170.8
Bladder (C67)	225	3.9	4.3	171	6.0	7.8	54	1.9	1.7
Brain, Meninges, & CNS (C70-C72) <sup>3</sup>	336	5.8	6.1	193	6.7	7.6	143	4.9	4.9
Brain (C71)	327	5.7	5.9	187	6.5	7.4	140	4.8	4.8
Breast (C50)	730	12.7	13.5	8	0.3	0.3	722	25.0	24.1
Cervix (C53)	n/a	n/a	n/a	n/a	n/a	n/a	59	2.0	2.0
Colorectal (C18-C21) <sup>3</sup>	992	17.2	18.7	503	17.5	22.3	489	16.9	15.9
Endometrium & Uterus (C54-C55) <sup>3</sup>	n/a	n/a	n/a	n/a	n/a	n/a	116	4.0	3.9
Endometrium (C54)	n/a	n/a	n/a	n/a	n/a	n/a	54	1.9	1.8
Esophagus (C15)	265	4.6	5.0	208	7.3	9.0	57	2.0	1.9
Hodgkin's Disease (C81)	34	0.6	0.6	19	0.7	0.8	15	0.5	0.5
Kidney & Renal Pelvis (C64-C65)	233	4.0	4.4	141	4.9	6.0	92	3.2	3.1
Larynx (C32)	70	1.2	1.3	52	1.8	2.3	18	0.6	0.6
Leukemia (C91-C95)	454	7.9	8.5	248	8.7	11.1	206	7.1	6.8
Liver (C22)	247	4.3	4.6	151	5.3	6.4	96	3.3	3.2
Lung, Bronchus & Trachea (C33-C34) <sup>3</sup>	3,054	53.0	57.7	1,685	58.8	73.3	1,369	47.4	46.5
Lung & Bronchus (C34)	3,052	53.0	57.6	1,684	58.7	73.3	1,368	47.3	46.5
Melanoma of Skin (C43)	178	3.1	3.3	106	3.7	4.4	72	2.5	2.5
Multiple Myeloma & Immunoproliferative (C88,C90)	235	4.1	4.5	126	4.4	5.7	109	3.8	3.6
Multiple Myeloma (C90)	226	3.9	4.3	120	4.2	5.4	106	3.7	3.5
Non-Hodgkin's Lymphoma (C82-C85)	493	8.6	9.3	268	9.3	11.6	225	7.8	7.4
Oral Cavity & Pharynx (C00-C14)	149	2.6	2.8	93	3.2	3.8	56	1.9	1.9
Ovary (C56)	n/a	n/a	n/a	n/a	n/a	n/a	307	10.6	10.3
Pancreas (C25)	557	9.7	10.5	266	9.3	11.6	291	10.1	9.6
Prostate (C61)	n/a	n/a	n/a	599	20.9	30.0	n/a	n/a	n/a
Stomach (C16)	213	3.7	4.0	132	4.6	5.8	81	2.8	2.6
Testis (C62)	n/a	n/a	n/a	12	0.4	0.4	n/a	n/a	n/a
Thyroid & Endocrine Glands (C73-C75) <sup>3</sup>	35	0.6	0.6	13	0.5	0.5	22	0.8	0.7
Thyroid (C73)	18	0.3	0.3	5	0.2	0.2	13	0.4	0.4
Site Unspecified (C80)	416	7.2	7.8	200	7.0	8.7	216	7.5	7.2
All Other Sites <sup>4</sup>	632	11.0	11.9	329	11.5	14.8	303	10.5	9.9

<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.

<sup>3</sup>The ICD-10 codes selected for these groups differ slightly from Cancer Registry groups. See <http://198.187.0.44/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-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 13. Deaths to Residents by External Causes by National Safety Council Place of Injury Categories, 1999**

Place of Injury	Total	Accident, Non-Transport	Accident, Transport	Intentional Self-Harm or Suicide	Assault or Homicide	Undetermined	Other
<b>State Total</b>	<b>3,058</b>	<b>1,103</b>	<b>810</b>	<b>819</b>	<b>190</b>	<b>100</b>	<b>36</b>
Home	1,361	598	5	590	100	61	7
Nursing Home	97	94	0	3	0	0	0
Agriculture	17	11	2	4	0	0	0
Industry	22	20	0	1	1	0	0
Prison	13	1	0	11	1	0	0
Public	1,309	244	763	200	78	20	4
Unknown	239	135	40	10	10	19	25

**NOTE:**

Source for groups is the International Classification of Diseases (Tenth Revision): Accident, Non-Transport (ICD-10: W00-X59,Y86); Accident, Transport (ICD-10: V01-V99,Y85); Intentional Self-Harm or Suicide (ICD-10: X60-X84,Y87.0); Assault or 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 14. Deaths to Residents by External Causes, 1999**

<b>Cause with ICD-10 Code</b>	<b>Total</b>	<b>Crude Rate<sup>2</sup></b>	<b>Age-adj Rate<sup>3</sup></b>
<b>External Causes (V01-Y89)<sup>1</sup></b>	<b>(3,058)</b>	<b>(53.1)</b>	<b>(54.1)</b>
Accidents (V01-X59,Y85-Y86)	(1,913)	(33.2)	(34.0)
Transport (V01-V99,Y85)	(810)	(14.1)	(14.3)
Pedestrian (V01-V09)	99	1.7	1.7
Bicycle (V10-V19)	12	0.2	0.2
Motorcycle (V20-V29)	44	0.8	0.8
Motor Vehicle (V30-V79)	538	9.3	9.5
Agricultural Vehicle (V84)	3	*	*
Water Transport, Drowning (V90,V92)	29	0.5	0.5
Water Transport, Other (V91,V93)	6	0.1	0.1
Air & Space (V95-V97)	19	0.3	0.3
Other (V80-V83,V85-V89,V94,V98-V99,Y85)	60	1.0	1.1
Falls (W00-W19)	334	5.8	6.3
Struck By or Crushed In or Betw. Objects (W20-W23)	20	0.3	0.3
Firearms (W32-W34)	12	0.2	0.2
Explosive Materials & Fireworks (W35-W40)	3	*	*
Drowning (W65-W74)	86	1.5	1.5
Suffocation, Strangulation & Cave-in (W75-W77)	18	0.3	0.3
Inhalation & Ingestion of Food or Other Object (W78-W80)	50	0.9	0.9
Other Threats to Breathing (W81-W84)	10	0.2	0.2
Fire, Smoke, & Flames (X00-X09)	51	0.9	0.9
Heat & Burns (X10-X19)	3	*	*
Poisoning (X40-X49)	415	7.2	7.1
Other (W24-W31,W41-W64,W85-W99,X20-X39,X50-X59,Y85-Y86)	101	1.8	1.8
Intentional Self-Harm (Suicide) (X60-X84,Y87.0)	(819)	(14.2)	(14.4)
Poisoning (X60-X69)	157	2.7	2.7
Hanging (X70)	133	2.3	2.3
Drowning (X71)	11	0.2	0.2
Firearms (X72-X74)	451	7.8	8.0
Sharp Object (X78)	12	0.2	0.2
Jumping (X80)	33	0.6	0.6
Other (X75-X77,X79,X81-X84,Y87.0)	22	0.4	0.4
Assault (Homicide) (X85-Y09,Y87.1)	(190)	(3.3)	(3.3)
Poisoning (X85-X90)	5	0.1	0.1
Hanging, Strangulation, & Suffocation (X91)	9	0.2	0.2
Firearms (X93-X95)	106	1.8	1.8
Sharp Object (X99)	18	0.3	0.3
Other (X92,X96-X98,Y00-Y09,Y87.1)	52	0.9	0.9
Undetermined (Y10-Y34,Y87.2,Y89.9)	(100)	(1.7)	(1.7)
Poisoning (Y10-Y19)	56	1.0	1.0
Drowning (Y21)	6	0.1	0.1
Firearms (Y22-Y24)	6	0.1	0.1
Other (Y20,Y25-Y34,Y87.2,Y89.9)	32	0.6	0.6
Legal Intervention (Y35,Y89.0)	9	0.2	0.2
Operations of War & Sequelae (Y36,Y89.1)	2	*	*
Complications of Medical & Surgical Care (Y40-Y84,Y88)	(25)	(0.4)	(0.5)
Adverse Effects of Drugs (Y40-Y59,Y88.0)	5	0.1	0.1
Misadventures (Y60-Y69,Y88.1)	1	*	*
Other (Y70-Y84,Y88.2-Y88.3)	19	0.3	0.4

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

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

**Mortality Table 15. Deaths to Residents Due to Firearms by Type of Firearm and Intent, 1999**

Intent	Total			Handgun			Rifle or Shotgun			Other & Unspecified		
	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>	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>
<b>State Total</b>	<b>583</b>	<b>10.1</b>	<b>10.3</b>	<b>348</b>	<b>6.0</b>	<b>6.2</b>	<b>128</b>	<b>2.2</b>	<b>2.3</b>	<b>107</b>	<b>1.9</b>	<b>1.9</b>
Accident	12	0.2	0.2	11	0.2	0.2	1	*	*	0	*	*
Self-Harm (Suicide)	451	7.8	8.0	294	5.1	5.2	114	2.0	2.0	43	0.7	0.8
Assault (Homicide)	106	1.8	1.8	39	0.7	0.7	12	0.2	0.2	55	1.0	1.0
Undetermined	6	0.1	0.1	4	*	*	1	*	*	1	*	*
Legal Intervention	8	0.1	0.1	0	*	*	0	*	*	8	0.1	0.1

<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.

**NOTES:**

Source for groups is the International Classification of Diseases (Tenth Revision): 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 16. Deaths to Residents Due to Poisoning by Intent and Substance, 1999**

Substance and ICD-10 Code	Total			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>State Total</b>	<b>628</b>	<b>10.9</b>	<b>10.8</b>	<b>415</b>	<b>7.2</b>	<b>7.1</b>	<b>157</b>	<b>2.7</b>	<b>2.7</b>	<b>56</b>	<b>1.0</b>	<b>1.0</b>
Drugs (X40-X44, X60-X64, Y10-Y14) <sup>3</sup>	(552)	(9.6)	(9.4)	(403)	(7.0)	(6.9)	(95)	(1.7)	(1.7)	(54)	(0.9)	(0.9)
Non-Opioid Analgesics, Anti-Pyretics & Anti-Rheumatics (e.g., nonsteroidal anti-inflammatory drugs, salicylates, etc.) (X40, X60, Y10)	14	0.2	0.2	5	0.1	0.1	8	0.1	0.1	1	*	*
Anti-Epileptic, Sedative-Hypnotic, Anti-Parkinson & Psychotropic (e.g., antidepressants, barbiturates, psychostimulants, etc.) (X41, X61, Y11)	86	1.5	1.5	35	0.6	0.6	38	0.7	0.7	13	0.2	0.2
Narcotics & Psychodysleptics (e.g., cannabis, cocaine, heroin, etc.) (X42, X62, Y12)	264	4.6	4.5	241	4.2	4.1	7	0.1	0.1	16	0.3	0.3
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)	187	3.2	3.2	121	2.1	2.1	42	0.7	0.7	24	0.4	0.4
Alcohol (X45, X65, Y15)	10	0.2	0.2	7	0.1	0.1	3	*	*	0	*	*
Organic Solvents, Halogenated Hydrocarbons, Vapors (e.g., benzene, petroleum, etc.) (X46, X66, Y16)	6	0.1	0.1	2	*	*	3	*	*	1	*	*
Other Gases & Vapors (e.g., carbon monoxide, nitrogen nitrogen oxides, etc.) (X47, X67, Y17)	59	1.0	1.0	2	*	*	56	1.0	1.0	1	*	*
Pesticides (e.g., fumigants, herbicides, insecticides, wood preservatives, etc.) (X48, X68, Y18)	0	*	*	0	*	*	0	*	*	0	*	*
Other & Unspecified Chemicals & Noxious Substances (e.g., acids, glues, paints, soaps, etc.) (X49, X69, Y19)	1	*	*	1	*	*	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.

**Mortality Table 17a. Deaths by Place of Residence and Occurrence, 1999**

County and City	Total	Residence		Occurrence
		Crude Rate <sup>1</sup>	Age-adj Rate <sup>2</sup>	Total
<b>State Total</b>	<b>43,793</b>	<b>7.6</b>	<b>8.2</b>	<b>43,992</b>
Adams	120	7.5	8.8	98
Asotin	248	12.4	10.0	199
Benton	854	6.1	7.9	816
Kennewick	378	7.4	*	464
Richland	259	7.0	*	253
Chelan	549	8.7	7.6	715
Wenatchee	299	11.7	*	524
Clallam	794	11.9	8.0	749
Port Angeles	259	13.7	*	448
Clark	2,237	6.6	8.1	2,111
Vancouver	1,411	10.4	*	1,877
Columbia	67	16.0	11.6	54
Cowlitz	902	9.6	9.2	963
Longview	396	11.6	*	809
Douglas	237	7.5	7.6	140
Ferry	66	9.0	10.7	48
Franklin	284	6.3	8.4	274
Pasco	199	7.5	*	256
Garfield	28	11.7	8.3	16
Grant	537	7.6	8.1	448
Grays Harbor	735	10.9	9.4	598
Aberdeen	179	10.9	*	313
Island	504	6.9	7.0	384
Oak Harbor	87	4.2	*	121
Jefferson	283	10.6	8.0	221
King	11,940	7.1	7.9	13,285
Auburn	397	10.2	*	564
Bellevue	708	6.7	*	1,103
Burien	175	5.9	*	376
Des Moines	290	10.7	*	318
Federal Way	462	6.0	*	456
Kent	446	6.1	*	222
Kirkland	387	8.6	*	783
Mercer Island	161	7.5	*	112
Redmond	290	6.6	*	300
Renton	464	9.7	*	754
Sea Tac	110	4.7	*	51
Seattle	5,188	9.6	*	6,926
Shoreline	445	8.6	*	355
Kitsap	1,712	7.5	9.0	1,596
Bainbridge Island	128	6.5	*	114
Bremerton	463	12.8	*	889

**Mortality Table 17a. Deaths by Place of Residence and Occurrence, 1999**

County and City	Total	Residence		Occurrence
		Crude Rate <sup>1</sup>	Age-adj Rate <sup>2</sup>	Total
Kittitas	245	7.6	7.9	226
Klickitat	173	9.0	8.5	137
Lewis	714	10.3	9.0	645
Lincoln	111	11.1	7.9	92
Mason	512	10.5	9.5	393
Okanogan	387	10.1	9.7	320
Pacific	273	12.7	8.6	202
Pend Oreille	103	9.3	8.7	85
Pierce	5,146	7.4	8.7	5,157
Lakewood	487	7.6	*	426
Puyallup	311	10.1	*	834
Tacoma	1,999	10.7	*	3,013
University Place	184	6.2	*	146
San Juan	106	8.3	6.7	81
Skagit	905	9.0	8.0	893
Mount Vernon	229	10.1	*	375
Skamania	84	8.5	10.1	47
Snohomish	3,816	6.5	8.3	3,339
Edmonds	379	9.8	*	489
Everett	832	9.6	*	1,243
Lynnwood	344	10.4	*	265
Marysville	309	14.9	*	300
Mountlake Terrace	104	5.1	*	44
Mukilteo	56	3.3	*	23
Spokane	3,554	8.6	8.5	4,039
Spokane (City)	2,200	11.6	*	3,758
Stevens	337	8.9	9.3	271
Thurston	1,536	7.6	8.3	1,627
Lacey	282	9.7	*	286
Olympia	494	12.3	*	1,175
Wahkiakum	42	10.8	7.7	26
Walla Walla	546	10.0	8.5	632
Walla Walla (City)	354	12.1	*	528
Whatcom	1,154	7.2	7.5	1,192
Bellingham	588	9.2	*	892
Whitman	224	5.3	7.3	184
Pullman	60	2.3	*	51
Yakima	1,728	8.1	8.1	1,689
Yakima (City)	791	12.1	*	1,158

<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.



**Mortality Table 17b. Deaths by Place of Residence, 1997-1999 and 1999  
Listed by Age-Adjusted Rate for 1997-1999**

County and City	1997-1999			1999		
	Total	Crude Rate <sup>1</sup>	Age-Adj <sup>2</sup>	Total	Crude Rate <sup>1</sup>	Age-Adj <sup>2</sup>
San Juan	304	8.0	6.5	106	8.3	6.7
Island	1,554	7.1	7.3	504	6.9	7.0
Whitman	656	5.3	7.4	224	5.3	7.3
Klickitat	445	7.8	7.4	173	9.0	8.5
Douglas	685	7.3	7.5	237	7.5	7.6
Whatcom	3,446	7.3	7.7	1,154	7.2	7.5
Jefferson	820	10.3	7.8	283	10.6	8.0
King	34,734	7.0	7.8	11,940	7.1	7.9
Lincoln	332	11.1	7.9	111	11.1	7.9
Chelan	1,662	8.8	7.9	549	8.7	7.6
Clallam	2,305	11.5	8.0	794	11.9	8.0
Grant	1,559	7.5	8.1	537	7.6	8.1
Benton	2,564	6.2	8.1	854	6.1	7.9
Snohomish	10,846	6.4	8.1	3,816	6.5	8.3
Kittitas	739	7.8	8.2	245	7.6	7.9
Walla Walla	1,563	9.6	8.2	546	10.0	8.5
Clark	6,541	6.7	8.2	2,237	6.6	8.1
<b>State Total</b>	<b>(127,807)</b>	<b>(7.5)</b>	<b>(8.2)</b>	<b>(43,793)</b>	<b>(7.6)</b>	<b>(8.2)</b>
Skagit	2,697	9.1	8.2	905	9.0	8.0
Yakima	5,130	8.1	8.2	1,728	8.1	8.1
Thurston	4,512	7.5	8.3	1,536	7.6	8.3
Adams	329	6.9	8.3	120	7.5	8.8
Pacific	800	12.4	8.4	273	12.7	8.6
Spokane	10,554	8.5	8.6	3,554	8.6	8.5
Pierce	14,834	7.2	8.6	5,146	7.4	8.7
Kitsap	4,890	7.1	8.7	1,712	7.5	9.0
Franklin	862	6.5	8.8	284	6.3	8.4
Garfield	90	12.5	8.8	28	11.7	8.3
Skamania	217	7.3	8.8	84	8.5	10.1
Stevens	958	8.5	9.0	337	8.9	9.3
Mason	1,450	10.0	9.1	512	10.5	9.5
Cowlitz	2,642	9.5	9.1	902	9.6	9.2
Wahkiakum	145	12.4	9.2	42	10.8	7.7
Pend Oreille	332	9.9	9.3	103	9.3	8.7
Lewis	2,186	10.6	9.4	714	10.3	9.0
Asotin	684	11.5	9.4	248	12.4	10.0
Columbia	162	12.9	9.5	67	16.0	11.6
Okanogan	1,127	9.8	9.5	387	10.1	9.7
Grays Harbor	2,250	11.0	9.7	735	10.9	9.4
Ferry	201	9.2	11.1	66	9.0	10.7

<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 1997-1999 age-adjusted rate is 8.5; Median 1997-1999 age-adjusted rate is 8.3. State Total is not included in calculation of mean and median.

Mortality Table 18. Deaths by Sex and Race/Ethnicity by Place of Residence, 1999

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>43,793</b>	<b>21,824</b>	<b>21,969</b>	<b>41,048</b>	<b>1,128</b>	<b>535</b>	<b>209</b>	<b>138</b>	<b>231</b>	<b>478</b>	<b>0</b>	<b>26</b>	<b>718</b>
Adams	120	69	51	119	1	0	0	0	0	0	0	0	28
Asotin	248	117	131	247	0	0	0	0	0	1	0	0	2
Benton	854	408	446	840	5	4	0	1	2	2	0	0	20
Kennewick	378	170	208	371	2	2	0	0	2	1	0	0	11
Richland	259	128	131	254	3	0	0	1	0	1	0	0	3
Chelan	549	260	289	546	1	1	0	0	0	0	0	1	16
Wenatchee	299	131	168	297	1	1	0	0	0	0	0	0	10
Clallam	794	406	388	764	2	26	0	1	0	1	0	0	1
Port Angeles	259	119	140	255	2	2	0	0	0	0	0	0	0
Clark	2,237	1,096	1,141	2,178	22	6	3	1	3	22	0	2	20
Vancouver	1,411	680	731	1,366	16	5	2	0	2	20	0	0	11
Columbia	67	37	30	66	0	1	0	0	0	0	0	0	1
Cowlitz	902	461	441	897	2	2	0	1	0	0	0	0	2
Longview	396	190	206	392	2	2	0	0	0	0	0	0	1
Douglas	237	116	121	237	0	0	0	0	0	0	0	0	3
Ferry	66	39	27	48	1	15	0	0	1	1	0	0	0
Franklin	284	157	127	275	6	1	0	0	0	2	0	0	34
Pasco	199	99	100	191	6	1	0	0	0	1	0	0	26
Garfield	28	16	12	28	0	0	0	0	0	0	0	0	0
Grant	537	302	235	520	8	4	2	0	0	3	0	0	42
Grays Harbor	735	381	354	708	1	21	1	0	0	4	0	0	4
Aberdeen	179	86	93	172	0	3	0	0	0	4	0	0	1
Island	504	233	271	494	2	2	3	1	0	2	0	0	3
Oak Harbor	87	38	49	82	2	0	1	1	0	1	0	0	0
Jefferson	283	156	127	280	0	3	0	0	0	0	0	0	1
King	11,940	5,799	6,141	10,523	677	96	124	114	151	240	0	15	160
Auburn	397	172	225	376	7	6	1	0	2	4	0	1	4
Bellevue	708	341	367	662	12	2	7	4	5	16	0	0	8
Burien	175	73	102	164	4	1	0	0	2	4	0	0	4
Des Moines	290	127	163	270	12	1	2	1	2	2	0	0	0
Federal Way	462	235	227	397	26	3	1	2	4	27	0	2	8
Kent	446	225	221	393	30	2	4	4	4	9	0	0	10
Kirkland	387	175	212	374	5	0	1	1	1	5	0	0	2
Mercer Island	161	73	88	152	1	0	2	1	2	3	0	0	1
Redmond	290	129	161	278	3	0	2	0	3	4	0	0	4
Renton	464	229	235	397	32	3	4	6	8	14	0	0	4
Sea Tac	110	66	44	98	5	0	1	0	1	4	0	1	3
Seattle	5,188	2,559	2,629	4,243	504	55	88	82	94	111	0	11	84
Shoreline	445	210	235	419	3	2	6	2	5	8	0	0	1
Kitsap	1,712	838	874	1,618	36	20	2	1	24	11	0	0	15
Bainbridge Island	128	60	68	124	0	1	1	0	1	1	0	0	3
Bremerton	463	219	244	424	24	7	0	0	5	3	0	0	4

**Mortality Table 18. Deaths by Sex and Race/Ethnicity by Place of Residence, 1999**

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	245	113	132	243	1	1	0	0	0	0	0	0	1
Klickitat	173	95	78	167	1	4	0	0	0	1	0	0	2
Lewis	714	384	330	708	0	4	0	0	0	1	0	1	13
Lincoln	111	51	60	109	0	2	0	0	0	0	0	0	0
Mason	512	276	236	501	0	7	0	0	1	2	0	1	3
Okanogan	387	217	170	341	2	41	1	0	1	1	0	0	12
Pacific	273	157	116	269	0	2	0	0	0	2	0	0	0
Pend Oreille	103	60	43	102	0	1	0	0	0	0	0	0	2
Pierce	5,146	2,563	2,583	4,680	235	55	40	9	28	94	0	5	71
Lakewood	487	272	215	427	31	3	8	1	6	11	0	0	4
Puyallup	311	131	180	306	1	3	0	0	0	1	0	0	5
Tacoma	1,999	928	1,071	1,728	145	29	16	6	14	56	0	5	38
University Place	184	87	97	165	9	0	1	1	3	5	0	0	1
San Juan	106	62	44	106	0	0	0	0	0	0	0	0	0
Skagit	905	464	441	878	3	18	2	1	1	2	0	0	13
Mount Vernon	229	108	121	226	1	1	0	0	0	1	0	0	6
Skamania	84	41	43	83	0	1	0	0	0	0	0	0	0
Snohomish	3,816	1,878	1,938	3,668	33	36	8	6	12	52	0	1	28
Edmonds	379	180	199	366	2	2	1	1	0	7	0	0	0
Everett	832	416	416	796	10	4	2	2	3	15	0	0	7
Lynnwood	344	150	194	321	5	2	1	1	3	11	0	0	1
Marysville	309	140	169	303	2	1	0	0	1	2	0	0	1
Mountlake Terrace	104	47	57	101	0	1	0	0	1	1	0	0	1
Mukilteo	56	29	27	54	0	1	0	0	0	1	0	0	0
Spokane	3,554	1,774	1,780	3,458	44	27	12	1	3	9	0	0	20
Spokane (City)	2,200	1,065	1,135	2,122	40	20	9	0	2	7	0	0	9
Stevens	337	193	144	316	0	20	1	0	0	0	0	0	3
Thurston	1,536	756	780	1,482	21	10	4	0	1	18	0	0	15
Lacey	282	129	153	268	6	1	2	0	0	5	0	0	1
Olympia	494	231	263	472	8	3	1	0	1	9	0	0	6
Wahkiakum	42	20	22	42	0	0	0	0	0	0	0	0	0
Walla Walla	546	272	274	539	3	3	1	0	0	0	0	0	17
Walla Walla (City)	354	169	185	349	3	1	1	0	0	0	0	0	10
Whatcom	1,154	566	588	1,119	2	28	1	0	0	4	0	0	9
Bellingham	588	270	318	577	2	7	0	0	0	2	0	0	4
Whitman	224	112	112	220	0	2	0	1	0	1	0	0	1
Pullman	60	33	27	58	0	0	0	1	0	1	0	0	0
Yakima	1,728	879	849	1,629	19	71	4	0	3	2	0	0	156
Yakima (City)	791	385	406	761	17	10	1	0	1	1	0	0	44

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

**Mortality Table 19. Deaths by Age Group by Place of Residence, 1999**

County	Total	Age												Unk
		< 1	1-4	5-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85 and Over	
<b>State Total</b>	<b>43,793</b>	<b>401</b>	<b>90</b>	<b>144</b>	<b>254</b>	<b>303</b>	<b>706</b>	<b>1,578</b>	<b>2,719</b>	<b>4,116</b>	<b>7,895</b>	<b>13,168</b>	<b>12,416</b>	<b>3</b>
Adams	120	4	2	1	0	3	4	2	10	8	19	36	31	0
Asotin	248	3	0	1	0	0	3	8	7	25	38	80	83	0
Benton	854	10	0	5	5	5	14	29	67	88	161	254	216	0
Chelan	549	5	0	3	1	4	4	21	20	46	83	171	191	0
Clallam	794	3	0	3	1	1	4	13	34	66	144	282	243	0
Clark	2,237	21	6	8	8	22	39	71	154	214	427	659	608	0
Columbia	67	0	0	0	0	1	1	2	4	3	11	23	22	0
Cowlitz	902	7	1	5	3	5	19	22	55	92	189	254	250	0
Douglas	237	1	1	1	3	0	1	6	16	17	52	66	73	0
Ferry	66	1	0	1	0	1	2	7	5	9	10	17	13	0
Franklin	284	8	0	3	4	1	9	11	23	27	50	89	59	0
Garfield	28	0	0	0	0	0	1	2	2	3	4	6	10	0
Grant	537	4	4	4	3	7	16	20	31	52	126	154	116	0
Grays Harbor	735	4	0	1	7	1	12	30	52	79	143	228	178	0
Island	504	2	0	0	3	0	5	15	24	45	108	155	147	0
Jefferson	283	0	1	0	0	0	3	8	12	30	67	82	80	0
King	11,940	112	20	23	66	87	219	490	788	1,107	1,925	3,583	3,518	2
Kitsap	1,712	15	4	10	8	13	29	73	112	147	317	497	487	0
Kittitas	245	1	0	0	0	0	3	3	10	21	47	84	76	0
Klickitat	173	0	0	0	3	4	1	8	10	12	32	63	40	0
Lewis	714	7	1	0	9	6	5	19	31	64	129	225	218	0
Lincoln	111	0	1	1	0	1	1	2	4	9	23	35	34	0
Mason	512	6	2	1	3	1	6	21	35	49	113	153	122	0
Okanogan	387	2	0	3	6	7	5	13	24	34	75	103	115	0
Pacific	273	1	0	0	1	1	1	11	17	19	72	76	74	0
Pend Oreille	103	0	1	2	2	0	1	5	4	10	24	34	20	0
Pierce	5,146	54	9	26	33	34	100	210	332	549	985	1,544	1,270	0
San Juan	106	0	1	0	0	0	2	3	11	7	16	39	27	0
Skagit	905	7	3	3	1	5	14	24	47	80	167	287	267	0
Skamania	84	1	2	0	1	0	1	3	8	7	13	24	24	0
Snohomish	3,816	44	4	10	25	27	54	146	274	346	748	1,136	1,001	1
Spokane	3,554	25	10	9	17	23	45	101	187	319	593	1,099	1,126	0
Stevens	337	2	1	2	1	5	7	10	27	42	57	88	95	0
Thurston	1,536	9	2	6	7	8	27	52	110	132	288	470	425	0
Wahkiakum	42	0	0	0	0	0	0	0	2	3	10	14	13	0
Walla Walla	546	2	0	2	5	5	6	10	24	53	90	166	183	0
Whatcom	1,154	8	4	2	11	6	14	46	61	108	199	340	355	0
Whitman	224	2	0	1	3	1	3	4	4	18	37	71	80	0
Yakima	1,728	30	10	7	14	18	25	57	81	176	303	481	526	0



**Mortality Table 20. Deaths by Month of Death by Place of Residence, 1999**

County	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>State Total</b>	<b>43,793</b>	<b>3,937</b>	<b>3,902</b>	<b>3,957</b>	<b>3,708</b>	<b>3,660</b>	<b>3,432</b>	<b>3,442</b>	<b>3,312</b>	<b>3,331</b>	<b>3,674</b>	<b>3,526</b>	<b>3,912</b>
Adams	120	12	9	15	8	10	9	4	11	12	15	10	5
Asotin	248	31	22	31	23	17	14	23	14	19	18	17	19
Benton	854	86	73	84	75	70	74	63	73	54	80	66	56
Chelan	549	66	41	57	46	38	35	42	37	35	52	59	41
Clallam	794	63	66	85	61	85	67	61	59	47	71	57	72
Clark	2,237	211	181	176	184	183	182	185	168	178	169	203	217
Columbia	67	5	8	9	6	6	5	8	6	4	1	2	7
Cowlitz	902	86	72	75	81	82	59	82	72	68	73	74	78
Douglas	237	26	20	20	21	21	12	19	18	17	15	21	27
Ferry	66	4	2	3	5	8	3	8	3	7	8	8	7
Franklin	284	25	25	24	24	29	23	27	13	24	21	18	31
Garfield	28	2	1	2	4	4	2	2	1	1	5	0	4
Grant	537	34	53	40	54	41	47	46	29	57	43	54	39
Grays Harbor	735	55	63	77	83	62	38	66	53	61	65	57	55
Island	504	56	52	44	47	50	42	39	36	35	42	31	30
Jefferson	283	22	26	30	29	28	22	26	18	16	22	21	23
King	11,940	1,035	1,099	1,044	1,050	954	942	946	926	888	1,005	989	1,062
Kitsap	1,712	140	173	176	125	164	129	115	130	147	134	124	155
Kittitas	245	23	27	29	19	19	21	22	17	15	24	11	18
Klickitat	173	11	18	9	11	13	11	17	17	14	19	19	14
Lewis	714	66	52	57	68	61	58	57	49	60	75	51	60
Lincoln	111	10	11	9	11	6	6	8	9	7	10	10	14
Mason	512	53	61	37	37	53	35	40	43	38	39	29	47
Okanogan	387	31	37	30	31	36	27	39	31	28	28	33	36
Pacific	273	30	19	25	22	19	17	20	14	23	32	32	20
Pend Oreille	103	10	6	16	5	7	11	18	6	3	8	4	9
Pierce	5,146	474	460	476	434	384	426	383	364	401	426	435	483
San Juan	106	10	9	9	6	17	7	11	10	5	9	7	6
Skagit	905	73	81	73	74	82	86	76	62	74	83	64	77
Skamania	84	11	5	3	5	7	5	5	8	14	3	11	7
Snohomish	3,816	347	323	376	304	349	307	279	315	287	299	313	317
Spokane	3,554	304	308	312	288	297	307	264	272	264	308	264	366
Stevens	337	28	24	25	21	34	31	26	20	24	30	37	37
Thurston	1,536	163	141	144	123	117	118	125	115	121	130	124	115
Wahkiakum	42	1	6	4	2	2	3	3	2	2	7	6	4
Walla Walla	546	48	49	49	49	51	44	40	47	37	48	38	46
Whatcom	1,154	109	117	106	93	92	87	98	95	87	87	77	106
Whitman	224	25	18	23	22	16	14	13	14	13	23	20	23
Yakima	1,728	151	144	153	157	146	106	136	135	144	147	130	179

**Mortality Table 21a. Deaths by Selected Diseases by Place of Residence, 1999**

County	Diabetes (E10-E14)			Alzheimer's Disease (G30)			Major Cardiovascular Disease (I00-I78)		
	Number	Crude	Age-Adj	Number	Crude	Age-Adj	Number	Crude	Age-Adj
		Rate <sup>1</sup>	Rate <sup>2</sup>		Rate <sup>1</sup>	Rate <sup>2</sup>		Rate <sup>1</sup>	Rate <sup>2</sup>
<b>State Total</b>	<b>1,305</b>	<b>22.7</b>	<b>24.7</b>	<b>1,576</b>	<b>27.4</b>	<b>30.2</b>	<b>16,330</b>	<b>283.6</b>	<b>310.1</b>
Adams	9	56.6	67.0	2	*	*	44	276.7	337.5
Asotin	6	30.0	25.0	6	30.0	21.3	102	510.0	394.0
Benton	35	25.2	32.3	17	12.2	17.4	312	224.6	302.6
Chelan	12	19.0	16.9	14	22.2	17.9	194	307.9	261.0
Clallam	25	37.4	24.5	29	43.3	28.4	325	485.8	318.8
Clark	69	20.5	25.1	99	29.4	38.2	813	241.2	304.2
Columbia	0	*	*	1	*	*	22	523.8	383.8
Cowlitz	26	27.6	26.4	29	30.8	29.2	357	379.4	360.4
Douglas	5	15.8	16.9	12	37.9	40.7	92	290.2	299.9
Ferry	2	*	*	0	*	*	24	328.8	405.3
Franklin	8	17.7	24.2	8	17.7	28.1	112	248.3	353.8
Garfield	1	*	*	3	*	*	14	583.3	360.4
Grant	19	26.9	28.0	13	18.4	21.0	213	301.7	330.5
Grays Harbor	25	36.9	32.0	27	39.9	32.6	254	375.2	317.8
Island	9	12.3	12.8	18	24.6	28.3	195	266.0	277.9
Jefferson	7	26.3	20.0	7	26.3	21.4	107	402.3	298.2
King	330	19.7	22.0	447	26.7	30.1	4,264	254.3	286.3
Kitsap	54	23.5	28.2	88	38.3	48.1	637	277.3	341.0
Kittitas	9	27.8	28.1	9	27.8	27.9	95	293.2	303.9
Klickitat	10	51.8	48.1	3	*	*	63	326.4	303.6
Lewis	29	42.0	36.7	19	27.5	22.5	297	430.4	365.2
Lincoln	2	*	*	4	*	*	44	440.0	290.7
Mason	14	28.8	24.7	17	35.0	32.6	191	393.0	351.8
Okanogan	11	28.6	27.8	16	41.7	38.9	137	356.8	337.9
Pacific	9	41.9	27.2	12	55.8	35.5	103	479.1	309.4
Pend Oreille	3	*	*	4	*	*	31	279.3	260.9
Pierce	157	22.4	26.5	159	22.7	28.2	2,003	286.1	345.7
San Juan	3	*	*	2	*	*	41	322.8	257.9
Skagit	24	23.9	21.2	41	40.8	35.4	326	324.1	285.0
Skamania	3	*	*	1	*	*	34	343.4	400.6
Snohomish	98	16.8	21.5	142	24.3	33.7	1,407	241.2	316.0
Spokane	96	23.2	23.2	114	27.5	26.1	1,383	333.7	325.0
Stevens	8	21.1	22.4	9	23.7	25.3	145	381.6	404.0
Thurston	51	25.2	27.4	58	28.6	32.2	552	272.3	300.1
Wahkiakum	1	*	*	4	*	*	11	282.1	194.9
Walla Walla	16	29.3	27.6	34	62.3	47.3	215	393.8	317.4
Whatcom	48	29.8	32.0	52	32.2	33.2	437	270.9	283.7
Whitman	6	14.3	20.6	7	16.7	22.5	103	245.8	339.0
Yakima	65	30.6	31.4	49	23.1	21.9	631	297.2	294.3

<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.

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

**Mortality Table 21b. Deaths by Selected Diseases by Place of Residence, 1999**

County	Diseases of the Heart (I00-109,I11,I13,I20-I51)			Ischemic Heart Diseases (I20-I25)			Cerebrovascular Diseases (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>11,477</b>	<b>199.3</b>	<b>217.6</b>	<b>8,650</b>	<b>150.2</b>	<b>164.1</b>	<b>3,705</b>	<b>64.4</b>	<b>70.6</b>
Adams	30	188.7	230.6	27	169.8	207.4	10	62.9	76.3
Asotin	74	370.0	290.1	49	245.0	191.0	21	105.0	76.7
Benton	235	169.2	227.2	176	126.7	167.9	69	49.7	68.0
Chelan	132	209.5	177.3	104	165.1	140.0	50	79.4	67.1
Clallam	221	330.3	217.7	157	234.7	155.4	84	125.6	82.1
Clark	548	162.6	204.1	399	118.4	148.4	200	59.3	75.7
Columbia	16	381.0	287.4	14	333.3	247.9	6	142.9	96.4
Cowlitz	263	279.5	265.8	198	210.4	200.2	69	73.3	69.4
Douglas	63	198.7	204.9	53	167.2	170.8	20	63.1	66.3
Ferry	15	205.5	254.0	14	191.8	238.8	7	95.9	108.8
Franklin	58	128.6	181.7	45	99.8	139.2	44	97.6	141.7
Garfield	10	416.7	261.1	7	291.7	186.4	4	*	*
Grant	163	230.9	252.0	133	188.4	203.7	45	63.7	70.2
Grays Harbor	178	262.9	225.1	141	208.3	178.6	58	85.7	70.8
Island	142	193.7	201.9	111	151.4	154.4	40	54.6	58.5
Jefferson	76	285.7	207.3	51	191.7	134.6	28	105.3	80.9
King	2,971	177.2	199.1	2,213	132.0	148.7	1,008	60.1	68.0
Kitsap	446	194.2	237.4	338	147.1	180.1	165	71.8	89.5
Kittitas	62	191.4	199.7	46	142.0	148.0	24	74.1	75.4
Klickitat	46	238.3	222.9	31	160.6	150.3	16	82.9	76.0
Lewis	203	294.2	251.6	172	249.3	212.7	73	105.8	87.6
Lincoln	32	320.0	213.1	29	290.0	194.6	11	110.0	71.7
Mason	138	284.0	252.3	84	172.8	151.2	37	76.1	68.0
Okanogan	95	247.4	234.9	66	171.9	163.9	31	80.7	76.1
Pacific	70	325.6	210.3	57	265.1	166.9	23	107.0	65.9
Pend Oreille	20	180.2	165.1	14	126.1	113.6	11	99.1	95.8
Pierce	1,450	207.1	249.0	1,146	163.7	197.1	401	57.3	70.0
San Juan	26	204.7	158.4	16	126.0	96.2	9	70.9	57.0
Skagit	215	213.7	187.9	167	166.0	145.7	72	71.6	63.0
Skamania	25	252.5	297.9	18	181.8	210.6	7	70.7	81.7
Snohomish	1,003	172.0	223.8	761	130.5	169.8	311	53.3	71.2
Spokane	950	229.2	224.6	710	171.3	168.3	310	74.8	72.1
Stevens	110	289.5	305.7	84	221.1	232.7	26	68.4	73.4
Thurston	401	197.8	217.2	297	146.5	160.9	113	55.7	62.0
Wahkiakum	5	128.2	93.8	4	*	*	3	*	*
Walla Walla	148	271.1	222.1	99	181.3	149.3	47	86.1	67.8
Whatcom	309	191.6	201.1	219	135.8	142.8	94	58.3	60.8
Whitman	73	174.2	241.0	52	124.1	171.6	22	52.5	72.3
Yakima	455	214.3	213.2	348	163.9	163.1	136	64.1	62.8

<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.

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

Mortality Table 21c. Deaths by Selected Diseases by Place of Residence, 1999

County	Pneumonia and Influenza (J10-J18)			Chronic Lower Resp. Dis. (J40-J47)			Chronic Liver Disease & 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>1,258</b>	<b>21.9</b>	<b>23.9</b>	<b>2,706</b>	<b>47.0</b>	<b>51.6</b>	<b>530</b>	<b>9.2</b>	<b>9.6</b>
Adams	4	*	*	7	44.0	53.4	0	*	*
Asotin	8	40.0	28.1	20	100.0	82.2	2	*	*
Benton	18	13.0	17.3	66	47.5	62.2	8	5.8	6.7
Chelan	23	36.5	29.8	47	74.6	66.8	5	7.9	7.5
Clallam	32	47.8	32.7	49	73.2	47.0	6	9.0	7.2
Clark	74	22.0	28.2	138	40.9	51.4	18	5.3	6.0
Columbia	4	*	*	8	190.5	125.5	0	*	*
Cowlitz	31	32.9	31.3	59	62.7	59.7	9	9.6	9.1
Douglas	5	15.8	15.3	22	69.4	69.5	3	*	*
Ferry	2	*	*	2	*	*	1	*	*
Franklin	7	15.5	21.5	20	44.3	60.4	3	*	*
Garfield	0	*	*	0	*	*	1	*	*
Grant	18	25.5	29.1	32	45.3	46.8	4	*	*
Grays Harbor	30	44.3	37.1	55	81.2	69.1	12	17.7	16.2
Island	20	27.3	30.3	27	36.8	32.9	6	8.2	8.0
Jefferson	9	33.8	28.0	19	71.4	55.5	5	18.8	13.5
King	395	23.6	26.4	641	38.2	43.6	165	9.8	10.3
Kitsap	25	10.9	13.5	119	51.8	63.8	30	13.1	14.9
Kittitas	9	27.8	27.3	16	49.4	52.3	2	*	*
Klickitat	6	31.1	28.9	7	36.3	33.9	0	*	*
Lewis	19	27.5	23.0	32	46.4	39.3	10	14.5	13.6
Lincoln	3	*	*	2	*	*	1	*	*
Mason	10	20.6	17.7	31	63.8	54.9	9	18.5	16.3
Okanogan	13	33.9	32.1	24	62.5	59.8	6	15.6	15.0
Pacific	8	37.2	25.0	18	83.7	51.5	7	32.6	25.9
Pend Oreille	4	*	*	5	45.0	42.0	5	45.0	40.4
Pierce	105	15.0	18.2	314	44.9	54.1	65	9.3	10.4
San Juan	5	39.4	34.0	9	70.9	53.1	0	*	*
Skagit	23	22.9	20.1	56	55.7	48.6	7	7.0	6.7
Skamania	1	*	*	8	80.8	96.1	0	*	*
Snohomish	94	16.1	21.6	214	36.7	48.0	47	8.1	8.7
Spokane	106	25.6	24.5	264	63.7	63.3	46	11.1	11.4
Stevens	9	23.7	25.0	20	52.6	56.2	5	13.2	13.1
Thurston	23	11.3	12.7	125	61.7	68.4	8	3.9	4.1
Wahkiakum	1	*	*	2	*	*	0	*	*
Walla Walla	12	22.0	17.5	29	53.1	45.3	4	*	*
Whatcom	32	19.8	20.6	79	49.0	52.0	6	3.7	4.0
Whitman	10	23.9	32.2	16	38.2	55.0	1	*	*
Yakima	60	28.3	27.2	104	49.0	49.9	23	10.8	11.3

<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.

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

**Mortality Table 22. Deaths by Drug or Alcohol Induced Causes by Place of Residence, 1999**

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>594</b>	<b>10.3</b>	<b>10.2</b>	<b>551</b>	<b>9.6</b>	<b>9.8</b>
Adams	1	*	*	0	*	*
Asotin	1	*	*	2	*	*
Benton	14	10.1	10.0	8	5.8	6.7
Chelan	7	11.1	11.2	7	11.1	10.5
Clallam	3	*	*	9	13.5	11.7
Clark	36	10.7	10.8	23	6.8	7.4
Columbia	0	*	*	0	*	*
Cowlitz	17	18.1	18.5	9	9.6	9.1
Douglas	2	*	*	3	*	*
Ferry	2	*	*	1	*	*
Franklin	4	*	*	4	*	*
Garfield	0	*	*	1	*	*
Grant	7	9.9	10.6	4	*	*
Grays Harbor	13	19.2	19.8	14	20.7	19.2
Island	3	*	*	6	8.2	8.0
Jefferson	2	*	*	2	*	*
King	205	12.2	11.5	168	10.0	10.2
Kitsap	26	11.3	11.5	29	12.6	14.2
Kittitas	0	*	*	1	*	*
Klickitat	2	*	*	0	*	*
Lewis	3	*	*	8	11.6	10.8
Lincoln	0	*	*	0	*	*
Mason	11	22.6	23.2	9	18.5	16.5
Okanogan	3	*	*	6	15.6	15.2
Pacific	2	*	*	8	37.2	32.9
Pend Oreille	0	*	*	5	45.0	40.4
Pierce	77	11.0	11.2	60	8.6	9.4
San Juan	0	*	*	0	*	*
Skagit	8	8.0	8.0	11	10.9	10.3
Skamania	2	*	*	0	*	*
Snohomish	55	9.4	9.2	47	8.1	8.4
Spokane	37	8.9	9.0	43	10.4	10.7
Stevens	3	*	*	3	*	*
Thurston	16	7.9	7.9	20	9.9	9.8
Wahkiakum	0	*	*	0	*	*
Walla Walla	2	*	*	3	*	*
Whatcom	13	8.1	8.0	11	6.8	7.1
Whitman	1	*	*	2	*	*
Yakima	16	7.5	8.1	24	11.3	12.1

<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): 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-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 23a. Deaths Due to Malignant Neoplasm by Primary Site by Place of Residence, 1999**

County	Malignant Neoplasms								
	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>10,641</b>	<b>184.8</b>	<b>200.0</b>	<b>3,054</b>	<b>53.0</b>	<b>57.7</b>	<b>992</b>	<b>17.2</b>	<b>18.7</b>
Adams	24	150.9	181.6	6	37.7	45.6	8	50.3	60.9
Asotin	51	255.0	209.8	13	65.0	56.0	5	25.0	19.4
Benton	225	162.0	201.2	55	39.6	49.6	19	13.7	16.5
Chelan	130	206.3	186.1	39	61.9	56.7	13	20.6	18.0
Clallam	211	315.4	214.2	58	86.7	58.3	18	26.9	18.3
Clark	550	163.2	194.9	156	46.3	55.4	51	15.1	18.7
Columbia	19	452.4	325.9	3	*	*	3	*	*
Cowlitz	216	229.5	218.0	73	77.6	73.6	22	23.4	22.2
Douglas	57	179.8	177.1	15	47.3	45.7	5	15.8	16.4
Ferry	12	164.4	188.0	1	*	*	3	*	*
Franklin	69	153.0	201.7	23	51.0	67.7	4	*	*
Garfield	3	*	*	1	*	*	0	*	*
Grant	124	175.6	179.4	40	56.7	57.2	9	12.7	12.9
Grays Harbor	190	280.6	244.0	66	97.5	84.1	13	19.2	16.3
Island	137	186.9	177.1	37	50.5	47.1	19	25.9	24.6
Jefferson	85	319.5	229.4	23	86.5	59.2	7	26.3	19.9
King	2,911	173.6	193.4	761	45.4	51.2	271	16.2	18.0
Kitsap	387	168.5	201.2	112	48.8	58.4	26	11.3	13.9
Kittitas	58	179.0	193.8	15	46.3	51.0	5	15.4	17.0
Klickitat	42	217.6	204.6	9	46.6	43.9	7	36.3	34.1
Lewis	176	255.1	226.0	65	94.2	84.8	7	10.1	9.4
Lincoln	27	270.0	197.6	5	50.0	37.0	3	*	*
Mason	116	238.7	199.8	40	82.3	67.1	7	14.4	11.9
Okanogan	86	224.0	216.2	22	57.3	55.4	4	*	*
Pacific	61	283.7	175.2	20	93.0	54.0	8	37.2	22.4
Pend Oreille	22	198.2	180.1	6	54.1	45.9	3	*	*
Pierce	1,269	181.3	211.9	395	56.4	66.0	127	18.1	21.3
San Juan	26	204.7	150.0	8	63.0	46.6	0	*	*
Skagit	240	238.6	211.6	64	63.6	56.0	22	21.9	19.6
Skamania	17	171.7	208.2	5	50.5	61.4	2	*	*
Snohomish	1,003	172.0	214.2	320	54.9	68.2	83	14.2	18.1
Spokane	793	191.3	193.0	221	53.3	54.3	93	22.4	22.4
Stevens	61	160.5	166.0	13	34.2	35.9	6	15.8	16.5
Thurston	393	193.9	208.8	122	60.2	64.9	37	18.3	19.8
Wahkiakum	13	333.3	243.9	3	*	*	2	*	*
Walla Walla	125	228.9	206.5	41	75.1	70.7	10	18.3	15.6
Whatcom	267	165.5	177.3	62	38.4	41.5	35	21.7	23.2
Whitman	44	105.0	151.1	11	26.3	38.0	2	*	*
Yakima	401	188.9	194.5	125	58.9	61.2	33	15.5	16.1

<sup>1</sup>The ICD-10 codes selected for these groups differ slightly from Cancer Registry groups. See <http://198.187.0.44/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.

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

**Mortality Table 23b. Deaths Due to Malignant Neoplasm by Primary Site by Place of Residence, 1999**

County	Female Breast (C50)			Prostate (C61)			Pancreas (C25)		
	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>722</b>	<b>25.0</b>	<b>24.1</b>	<b>599</b>	<b>20.9</b>	<b>30.0</b>	<b>557</b>	<b>9.7</b>	<b>10.5</b>
Adams	0	*	*	3	*	*	2	*	*
Asotin	1	*	*	0	*	*	2	*	*
Benton	27	38.6	42.8	7	10.2	17.9	10	7.2	8.9
Chelan	4	*	*	10	32.1	34.4	8	12.7	11.7
Clallam	12	35.6	24.7	18	54.3	37.5	6	9.0	6.5
Clark	26	15.2	16.0	36	21.7	34.1	34	10.1	12.2
Columbia	1	*	*	2	*	*	3	*	*
Cowlitz	12	25.2	21.0	9	19.3	22.4	10	10.6	10.1
Douglas	6	37.9	34.0	5	31.5	43.6	4	*	*
Ferry	3	*	*	2	*	*	1	*	*
Franklin	2	*	*	8	34.5	56.4	3	*	*
Garfield	1	*	*	0	*	*	0	*	*
Grant	6	17.1	16.8	4	*	*	8	11.3	11.4
Grays Harbor	12	35.3	29.1	9	26.7	27.0	11	16.2	13.7
Island	12	33.9	26.9	5	13.2	12.7	5	6.8	7.0
Jefferson	8	60.2	43.4	10	75.1	60.7	1	*	*
King	198	23.4	22.7	173	20.8	32.5	178	10.6	11.9
Kitsap	42	37.3	39.2	22	18.8	32.1	19	8.3	10.1
Kittitas	1	*	*	5	31.1	40.1	2	*	*
Klickitat	2	*	*	6	61.8	70.1	2	*	*
Lewis	10	28.7	24.8	9	26.3	27.4	8	11.6	9.7
Lincoln	3	*	*	0	*	*	3	*	*
Mason	4	*	*	6	24.2	24.1	6	12.3	10.6
Okanogan	1	*	*	6	31.0	35.9	1	*	*
Pacific	6	55.1	31.1	4	*	*	0	*	*
Pend Oreille	0	*	*	0	*	*	1	*	*
Pierce	73	21.0	21.5	62	17.6	29.2	61	8.7	10.3
San Juan	4	*	*	0	*	*	3	*	*
Skagit	15	29.4	24.0	18	36.3	38.6	15	14.9	13.2
Skamania	1	*	*	3	*	*	1	*	*
Snohomish	73	25.0	26.9	46	15.8	27.3	48	8.2	10.1
Spokane	66	31.3	28.6	46	22.6	29.6	41	9.9	10.0
Stevens	3	*	*	2	*	*	3	*	*
Thurston	26	25.1	23.7	24	24.2	38.3	22	10.9	11.6
Wahkiakum	1	*	*	0	*	*	1	*	*
Walla Walla	11	41.2	32.5	5	17.9	19.9	7	12.8	11.7
Whatcom	25	30.6	30.9	11	13.8	19.1	13	8.1	8.7
Whitman	4	*	*	4	*	*	2	*	*
Yakima	20	18.7	17.2	19	18.0	22.4	12	5.7	5.8

<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.

NOTES: Codes for International Classification of Diseases (Tenth Revision) are in parentheses after each group heading.

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

**Mortality Table 24a. Deaths by Selected Accidents by Place of Residence, 1999**

County	All Accidents (V01-X59,Y85-Y86)			Motor Vehicle <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>1,913</b>	<b>33.2</b>	<b>34.0</b>	<b>711</b>	<b>12.3</b>	<b>12.5</b>	<b>334</b>	<b>5.8</b>	<b>6.3</b>
Adams	9	56.6	52.7	5	31.4	27.8	0	*	*
Asotin	13	65.0	61.1	6	30.0	31.1	4	*	*
Benton	33	23.8	26.3	18	13.0	13.8	6	4.3	6.2
Chelan	29	46.0	43.5	7	11.1	11.4	9	14.3	11.1
Clallam	15	22.4	20.0	7	10.5	10.6	3	*	*
Clark	100	29.7	31.7	32	9.5	9.9	14	4.2	5.2
Columbia	3	*	*	1	*	*	0	*	*
Cowlitz	39	41.4	41.5	13	13.8	14.4	8	8.5	8.0
Douglas	8	25.2	25.8	3	*	*	1	*	*
Ferry	9	123.3	126.1	5	68.5	71.3	1	*	*
Franklin	19	42.1	46.3	11	24.4	28.1	0	*	*
Garfield	0	*	*	0	*	*	0	*	*
Grant	51	72.2	75.1	32	45.3	47.2	3	*	*
Grays Harbor	34	50.2	50.0	10	14.8	15.4	6	8.9	8.0
Island	17	23.2	25.4	8	10.9	11.5	2	*	*
Jefferson	10	37.6	36.9	3	*	*	1	*	*
King	486	29.0	29.4	137	8.2	8.5	97	5.8	6.4
Kitsap	65	28.3	30.3	31	13.5	14.2	12	5.2	6.5
Kittitas	5	15.4	17.2	4	*	*	1	*	*
Klickitat	13	67.4	68.2	5	25.9	26.9	1	*	*
Lewis	26	37.7	37.2	15	21.7	22.0	2	*	*
Lincoln	3	*	*	1	*	*	1	*	*
Mason	28	57.6	57.5	10	20.6	20.4	5	10.3	9.8
Okanogan	32	83.3	82.9	18	46.9	47.4	5	13.0	13.2
Pacific	7	32.6	32.3	4	*	*	0	*	*
Pend Oreille	9	81.1	78.8	5	45.0	43.4	1	*	*
Pierce	227	32.4	34.2	75	10.7	11.0	29	4.1	4.9
San Juan	5	39.4	46.6	1	*	*	1	*	*
Skagit	45	44.7	44.2	20	19.9	19.2	5	5.0	4.3
Skamania	7	70.7	79.6	1	*	*	1	*	*
Snohomish	173	29.7	32.3	64	11.0	11.8	35	6.0	7.7
Spokane	136	32.8	32.5	50	12.1	12.1	34	8.2	7.8
Stevens	27	71.1	72.8	13	34.2	35.5	6	15.8	16.8
Thurston	70	34.5	35.6	32	15.8	15.8	17	8.4	9.3
Wahkiakum	1	*	*	0	*	*	1	*	*
Walla Walla	21	38.5	36.6	10	18.3	16.6	3	*	*
Whatcom	48	29.8	29.4	17	10.5	10.1	8	5.0	5.0
Whitman	12	28.6	29.0	5	11.9	11.6	2	*	*
Yakima	78	36.7	37.8	32	15.1	15.6	9	4.2	4.2

<sup>1</sup>ICD-10 codes are V02-V04,V09.0,V09.2,V12-V14,V19.0-V19.2,V19.4-V19.6,V20-V79,V80.3-V80.5, V81.0-V81.1,V82.0-V82.1,V83-V86,V87.0-V87.8,V88.0-V88.8,V89.0,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.

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



**Mortality Table 24b. Deaths by Selected Accidents by Place of Residence, 1999**

County	Drownings (V90,V92,W65-W74)			Fires (X00-X09)			Other Accidents (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>115</b>	<b>2.0</b>	<b>2.0</b>	<b>51</b>	<b>0.9</b>	<b>0.9</b>	<b>702</b>	<b>12.2</b>	<b>12.2</b>
Adams	0	*	*	3	*	*	1	*	*
Asotin	1	*	*	1	*	*	1	*	*
Benton	0	*	*	0	*	*	9	6.5	6.4
Chelan	3	*	*	0	*	*	10	15.9	15.5
Clallam	1	*	*	0	*	*	4	*	*
Clark	6	1.8	1.8	3	*	*	45	13.4	13.9
Columbia	0	*	*	0	*	*	2	*	*
Cowlitz	3	*	*	0	*	*	15	15.9	16.1
Douglas	1	*	*	0	*	*	3	*	*
Ferry	1	*	*	0	*	*	2	*	*
Franklin	1	*	*	0	*	*	7	15.5	15.6
Garfield	0	*	*	0	*	*	0	*	*
Grant	8	11.3	10.7	0	*	*	8	11.3	12.5
Grays Harbor	1	*	*	1	*	*	16	23.6	23.7
Island	2	*	*	0	*	*	5	6.8	7.8
Jefferson	0	*	*	1	*	*	5	18.8	18.7
King	28	1.7	1.6	10	0.6	0.6	214	12.8	12.3
Kitsap	3	*	*	5	2.2	2.2	14	6.1	6.1
Kittitas	0	*	*	0	*	*	0	*	*
Klickitat	2	*	*	0	*	*	5	25.9	26.0
Lewis	2	*	*	0	*	*	7	10.1	9.8
Lincoln	0	*	*	0	*	*	1	*	*
Mason	2	*	*	5	10.3	10.7	6	12.3	13.0
Okanogan	1	*	*	1	*	*	7	18.2	17.0
Pacific	2	*	*	0	*	*	1	*	*
Pend Oreille	0	*	*	0	*	*	3	*	*
Pierce	17	2.4	2.5	4	*	*	102	14.6	15.2
San Juan	0	*	*	1	*	*	2	*	*
Skagit	2	*	*	0	*	*	18	17.9	18.6
Skamania	0	*	*	1	*	*	4	*	*
Snohomish	7	1.2	1.4	3	*	*	64	11.0	10.7
Spokane	5	1.2	1.2	2	*	*	45	10.9	10.9
Stevens	2	*	*	0	*	*	6	15.8	15.3
Thurston	3	*	*	3	*	*	15	7.4	7.5
Wahkiakum	0	*	*	0	*	*	0	*	*
Walla Walla	2	*	*	1	*	*	5	9.2	10.0
Whatcom	1	*	*	1	*	*	21	13.0	13.1
Whitman	2	*	*	1	*	*	2	*	*
Yakima	6	2.8	2.9	4	*	*	27	12.7	13.3

<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.

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

**Mortality Table 25. Deaths by External Causes by Place of Residence, 1999**

County	Intentional Self-Harm or Suicide (X60-X84,Y87.0)			Assault or Homicide (X85-Y09,Y87.1)			Undetermined (Y10-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>819</b>	<b>14.2</b>	<b>14.4</b>	<b>190</b>	<b>3.3</b>	<b>3.3</b>	<b>100</b>	<b>1.7</b>	<b>1.7</b>
Adams	2	*	*	1	*	*	0	*	*
Asotin	7	35.0	35.1	1	*	*	0	*	*
Benton	19	13.7	14.3	2	*	*	2	*	*
Chelan	8	12.7	12.7	1	*	*	1	*	*
Clallam	12	17.9	16.4	0	*	*	0	*	*
Clark	46	13.6	14.2	8	2.4	2.6	6	1.8	1.7
Columbia	1	*	*	0	*	*	0	*	*
Cowlitz	17	18.1	18.9	4	*	*	7	7.4	7.5
Douglas	4	*	*	0	*	*	0	*	*
Ferry	3	*	*	0	*	*	0	*	*
Franklin	3	*	*	1	*	*	0	*	*
Garfield	3	*	*	0	*	*	0	*	*
Grant	7	9.9	10.6	2	*	*	0	*	*
Grays Harbor	18	26.6	27.1	0	*	*	1	*	*
Island	4	*	*	2	*	*	1	*	*
Jefferson	2	*	*	0	*	*	0	*	*
King	215	12.8	12.7	80	4.8	4.7	27	1.6	1.6
Kitsap	45	19.6	20.4	5	2.2	2.2	9	3.9	3.8
Kittitas	2	*	*	1	*	*	1	*	*
Klickitat	6	31.1	31.1	0	*	*	2	*	*
Lewis	10	14.5	14.8	1	*	*	0	*	*
Lincoln	2	*	*	0	*	*	0	*	*
Mason	9	18.5	18.4	1	*	*	2	*	*
Okanogan	9	23.4	25.3	2	*	*	2	*	*
Pacific	7	32.6	31.1	0	*	*	1	*	*
Pend Oreille	2	*	*	1	*	*	0	*	*
Pierce	109	15.6	16.1	24	3.4	3.3	11	1.6	1.6
San Juan	1	*	*	0	*	*	1	*	*
Skagit	13	12.9	12.6	2	*	*	1	*	*
Skamania	0	*	*	0	*	*	1	*	*
Snohomish	75	12.9	13.1	13	2.2	2.3	7	1.2	1.2
Spokane	59	14.2	14.3	15	3.6	3.6	13	3.1	3.2
Stevens	5	13.2	12.9	0	*	*	0	*	*
Thurston	34	16.8	16.7	7	3.5	3.4	1	*	*
Wahkiakum	1	*	*	0	*	*	0	*	*
Walla Walla	10	18.3	17.5	0	*	*	0	*	*
Whatcom	17	10.5	10.7	1	*	*	2	*	*
Whitman	5	11.9	15.6	0	*	*	0	*	*
Yakima	27	12.7	13.5	15	7.1	7.3	1	*	*

<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.

NOTES: Codes for International Classification of Diseases (Tenth Revision) are in parentheses after each group heading.

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

**Mortality Table 26. Deaths by Selected Accidents for Washington State Residents by Place Where Injury Occurred, 1999**

County of Injury	All Accidents	Motor Vehicle	Falls	Drownings	Fires	Other Accidents
<b>State Total</b>	<b>1,913</b>	<b>711</b>	<b>334</b>	<b>115</b>	<b>51</b>	<b>702</b>
Adams	7	3	0	0	3	1
Asotin	4	0	2	1	1	0
Benton	27	13	5	0	0	9
Chelan	41	16	8	9	0	8
Clallam	12	8	3	1	0	0
Clark	76	28	10	5	3	30
Columbia	1	0	0	0	0	1
Cowlitz	28	11	6	3	0	8
Douglas	5	3	1	0	0	1
Ferry	7	5	0	1	0	1
Franklin	12	7	0	1	0	4
Garfield	0	0	0	0	0	0
Grant	58	38	2	9	0	9
Grays Harbor	32	10	4	5	1	12
Island	11	7	1	1	0	2
Jefferson	14	8	2	0	1	3
King	395	105	85	21	11	173
Kitsap	54	22	12	3	5	12
Kittitas	8	5	1	2	0	0
Klickitat	9	4	0	1	0	4
Lewis	25	16	1	2	0	6
Lincoln	10	7	1	2	0	0
Mason	26	13	4	1	5	3
Okanogan	23	12	5	0	1	5
Pacific	8	3	0	3	0	2
Pend Oreille	3	1	0	0	0	2
Pierce	191	71	31	6	4	79
San Juan	4	1	0	1	0	2
Skagit	40	20	4	2	0	14
Skamania	8	0	0	1	1	6
Snohomish	142	49	33	7	2	51
Spokane	116	44	35	1	2	34
Stevens	23	12	4	2	0	5
Thurston	61	28	17	0	3	13
Wahkiakum	1	0	1	0	0	0
Walla Walla	21	12	3	1	1	4
Whatcom	48	18	6	1	2	21
Whitman	11	5	1	2	1	2
Yakima	66	34	6	4	4	18
Unknown	100	51	8	7	0	34
Out of State	185	21	32	9	0	123

NOTE: Source for Selected Accidents is International Classification of Diseases (Tenth): All Accidental (ICD-10: V01-X59, Y85-Y86); Motor Vehicle (ICD-10: V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2); Falls (ICD-10: W00-W19); Drownings (ICD-10: V90, V92, W65-W74); Fires (ICD-10: X00-X09); Other Accidents (remainder).

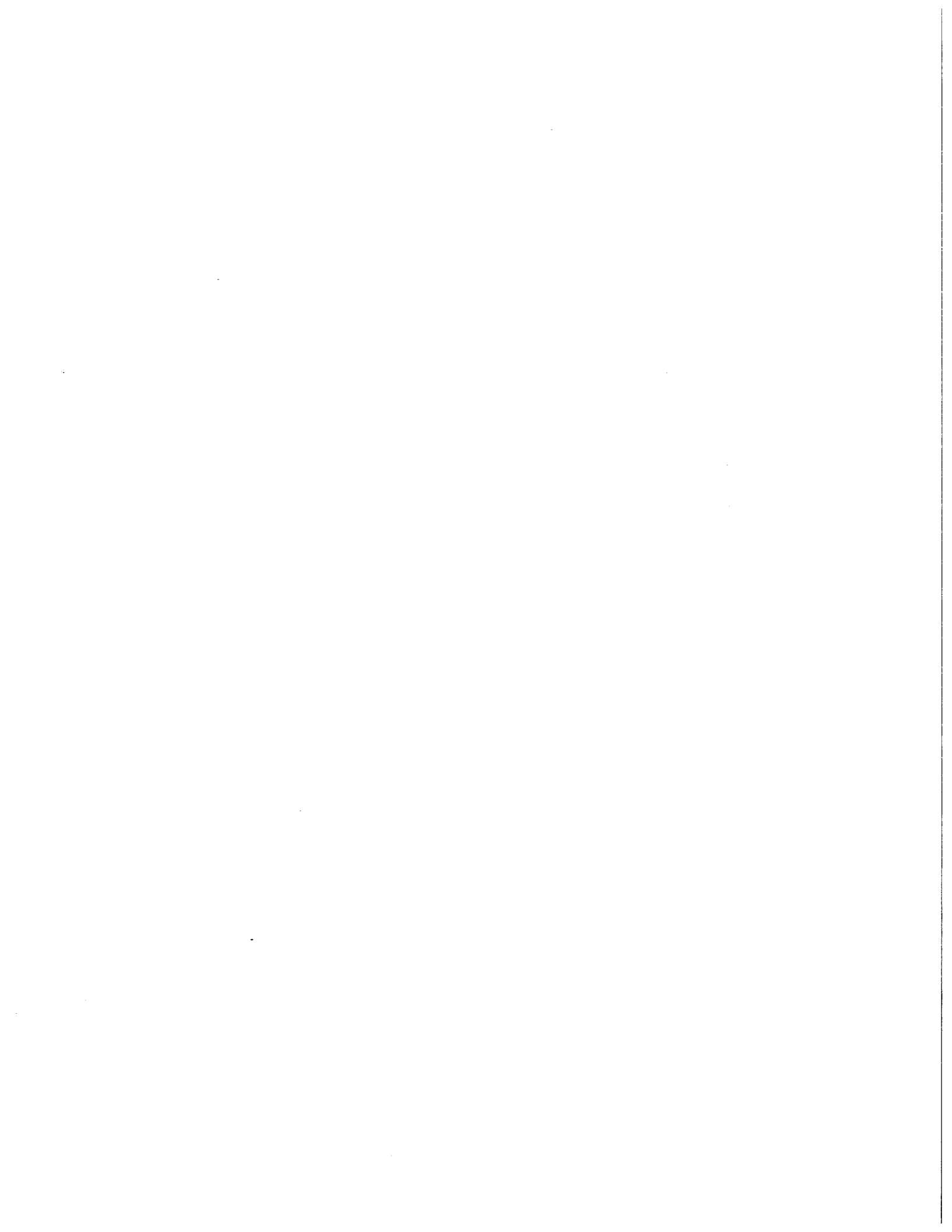
**Mortality Table 27. Deaths by External Cause for Washington State Residents by Place Where Injury Occurred, 1999**

<b>County of Injury</b>	<b>Intentional Self-Harm or Suicide (X60-X84, Y87.0)</b>	<b>Assault or Homicide (X85-Y09, Y87.1)</b>	<b>Undetermined (Y10-Y34, Y87.2, Y89.9)</b>
<b>State Total</b>	<b>819</b>	<b>190</b>	<b>100</b>
Adams	2	1	0
Asotin	5	0	0
Benton	16	1	2
Chelan	8	0	0
Clallam	13	0	0
Clark	41	5	3
Columbia	1	0	0
Cowlitz	16	4	5
Douglas	3	1	0
Ferry	3	0	0
Franklin	3	1	0
Garfield	1	0	0
Grant	9	4	1
Grays Harbor	20	1	2
Island	4	2	1
Jefferson	3	0	0
King	202	75	25
Kitsap	44	4	8
Kittitas	4	2	2
Klickitat	4	0	1
Lewis	10	1	0
Lincoln	2	0	0
Mason	10	2	3
Okanogan	7	2	0
Pacific	6	0	2
Pend Oreille	2	0	0
Pierce	109	25	9
San Juan	0	0	0
Skagit	11	2	2
Skamania	2	1	0
Snohomish	75	13	6
Spokane	55	11	6
Stevens	7	1	0
Thurston	31	2	0
Wahkiakum	1	0	0
Walla Walla	11	0	0
Whatcom	16	1	1
Whitman	6	0	0
Yakima	25	13	1
Unknown	15	6	2
Out of State	16	9	18

NOTE: Codes for International Classification of Diseases (Tenth Revision) are in parentheses after each group heading.

**Mortality Table 28. Deaths by Type of Place by Place of Occurrence, 1999**

County	Total	General Hospital	Nursing Home	Home	Federal Facility	Psychiatric Hospital	State Facility	Dead on Arrival	Other and Unk
<b>State Total</b>	<b>43,992</b>	<b>15,157</b>	<b>13,324</b>	<b>12,190</b>	<b>630</b>	<b>64</b>	<b>4</b>	<b>32</b>	<b>2,591</b>
Adams	98	32	35	26	0	0	0	0	5
Asotin	199	66	70	50	0	0	0	0	13
Benton	816	397	141	243	0	0	0	0	35
Chelan	715	392	164	120	0	0	0	0	39
Clallam	749	220	222	265	0	0	0	0	42
Clark	2,111	456	687	769	1	0	0	0	198
Columbia	54	19	21	11	0	0	0	0	3
Cowlitz	963	452	212	174	0	0	0	0	125
Douglas	140	0	63	61	0	0	0	1	15
Ferry	48	24	1	15	0	0	0	0	8
Franklin	274	118	77	63	0	0	0	0	16
Garfield	16	3	7	4	0	0	0	0	2
Grant	448	199	87	115	0	0	0	1	46
Grays Harbor	598	211	157	197	0	0	0	0	33
Island	384	75	99	188	0	0	0	0	22
Jefferson	221	50	57	89	0	0	0	2	23
King	13,285	5,264	3,947	3,040	256	0	0	9	769
Kitsap	1,596	447	639	422	23	0	0	0	65
Kittitas	226	64	70	71	0	0	0	0	21
Klickitat	137	45	13	64	0	0	0	0	15
Lewis	645	198	230	187	0	0	0	0	30
Lincoln	92	41	29	10	0	0	0	0	12
Mason	393	92	117	155	0	0	1	0	28
Okanogan	320	88	109	88	0	0	0	1	34
Pacific	202	65	50	77	0	0	0	1	9
Pend Oreille	85	26	25	28	0	0	0	0	6
Pierce	5,157	1,632	1,610	1,439	248	37	0	4	187
San Juan	81	0	30	37	0	0	0	0	14
Skagit	893	260	318	253	0	0	0	1	61
Skamania	47	0	3	32	0	0	0	0	12
Snohomish	3,339	865	1,041	1,247	0	0	0	5	181
Spokane	4,039	1,582	1,144	983	62	27	0	2	239
Stevens	271	87	69	88	0	0	0	2	25
Thurston	1,627	497	517	532	0	0	0	1	80
Wahkiakum	26	0	16	9	0	0	0	0	1
Walla Walla	632	217	201	145	40	0	3	1	25
Whatcom	1,192	283	446	395	0	0	0	1	67
Whitman	184	56	79	38	0	0	0	0	11
Yakima	1,689	634	521	460	0	0	0	0	74



**Mortality Table 29. Infant (Age < 1 Year) Mortality to Residents by Birth Weight and Age, 1999**

Birth Weight in Grams	Total Number	Total Rate <sup>1</sup>	< 1 Day	1 Day to < 7 Days	7 Days to <28 Days	28 Days to < 6 Months	6 Months to < 12 Months
<b>State Totals</b>	<b>401</b>	<b>5.0</b>	<b>154</b>	<b>52</b>	<b>51</b>	<b>113</b>	<b>31</b>
Under 500	55	423.1	51	2	0	1	1
500 - 749	63	572.7	44	7	6	5	1
750 - 999	19	134.8	4	4	3	5	3
1,000 - 1,499	24	57.1	9	4	4	4	3
1,500 - 1,999	32	33.2	12	5	3	10	2
2,000 - 2,499	26	9.1	10	4	3	8	1
2,500 - 2,999	47	4.4	4	6	10	24	3
3,000 - 3,499	70	2.5	6	9	12	35	8
3,500 - 3,999	28	1.1	1	5	6	12	4
4,000 - 4,499	13	1.6	1	1	2	5	4
4,500 and over	4	*	2	1	0	1	0
Unknown	20	22.0	10	4	2	3	1

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

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

**Mortality Table 30a. Infant (Age < 1 Year) Mortality to Residents by Cause by Age and Sex, 1999**

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>(401)</b>	<b>(212)</b>	<b>(189)</b>	<b>(154)</b>	<b>(80)</b>	<b>(74)</b>	<b>(52)</b>	<b>(31)</b>	<b>(21)</b>
<b>Infectious &amp; Parasitic Diseases (A00-B99)</b>	7	4	3	0	0	0	0	0	0
<b>Diseases of the Nervous System (G00-G98)</b>	5	3	2	0	0	0	0	0	0
<b>Diseases of the Circulatory System (I00-I99)</b>	12	8	4	0	0	0	1	1	0
<b>Diseases of the Respiratory System (J00-J98)</b>	8	7	1	1	1	0	0	0	0
<b>Conditions Originating in Perinatal Period(P00-P96)</b>	<b>(167)</b>	<b>(95)</b>	<b>(72)</b>	<b>(103)</b>	<b>(54)</b>	<b>(49)</b>	<b>(28)</b>	<b>(18)</b>	<b>(10)</b>
Newborn Affected by Maternal Factors (P00-P04)	(35)	(22)	(13)	(30)	(18)	(12)	(3)	(2)	(1)
Incompetent Cervix (P01.0)	7	6	1	7	6	1	0	0	0
Premature Rupture of Membranes (P01.1)	4	3	1	4	3	1	0	0	0
Other Maternal Complications of Pregnancy (P01.2-P01.9)	4	3	1	3	2	1	0	0	0
Complications Involving Placenta (P02.0-P02.3)	9	5	4	7	4	3	2	1	1
Complications of Cord & Membranes (P02.4-P02.9)	2	1	1	1	0	1	1	1	0
Other (P00,P03,P04)	9	4	5	8	3	5	0	0	0
Short Gestation & Low Birth Weight (P07)	48	24	24	46	22	24	1	1	0
Intrauterine Hypoxia & Birth Asphyxia (P20-P21)	11	7	4	1	0	1	6	5	1
Respiratory Distress of Newborn (P22)	7	6	1	2	1	1	3	3	0
Other Respiratory Conditions (P23-P28)	20	5	15	5	0	5	5	1	4
Infections Specific to Perinatal Period (P35-P39)	11	8	3	4	2	2	0	0	0
Neonatal Hemorrhage (P50-P52,P54)	13	12	1	2	2	0	6	6	0
Necrotizing Enterocolitis of Newborn (P77)	2	1	1	0	0	0	0	0	0
Hydrops Fetalis Not Due to Hemolytic Disease (P83.2)	4	4	0	4	4	0	0	0	0
Other(P05-P06,P08-P15,P29-P34,P53,P55-P76,P78-P83.1,P83.3-P96)	16	6	10	9	5	4	4	0	4
<b>Congenital Malformations (Q00-Q99)</b>	<b>(106)</b>	<b>(48)</b>	<b>(58)</b>	<b>(46)</b>	<b>(24)</b>	<b>(22)</b>	<b>(18)</b>	<b>(10)</b>	<b>(8)</b>
Anencephaly and Similar Malformations (Q00)	6	0	6	6	0	6	0	0	0
Malformations of Heart (Q20-Q24)	28	13	15	3	1	2	7	4	3
Other Malformations of Circulatory System (Q25-Q28)	5	1	4	1	1	0	2	0	2
Malformations of Respiratory System (Q30-Q34)	17	8	9	13	7	6	1	0	1
Malformations of Genitourinary System (Q50-Q64)	6	5	1	5	4	1	0	0	0
Malform. of Musculoskeletal Sys. & Skin (Q65-Q85)	3	3	0	2	2	0	1	1	0
Down's Syndrome (Q90)	4	1	3	0	0	0	0	0	0
Edward's Syndrome (Q91.0-Q91.3)	10	5	5	3	3	0	2	2	0
Patau's Syndrome (Q91.4-Q91.7)	8	4	4	4	1	3	3	3	0
Other (Q01-Q18,Q35-Q45,Q86-Q89)	15	7	8	7	4	3	0	0	0
Other Chromosomal Abnormalities (Q92-Q99)	4	1	3	2	1	1	2	0	2
<b>Sudden Infant Death Syndrome (R95)</b>	<b>67</b>	<b>39</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>2</b>
Other(C00-F99,H00-H99,K00-N99,R00-R94,R96-R99)	16	6	10	4	1	3	1	1	0
<b>External Causes of Mortality (V01-Y89)</b>	<b>(13)</b>	<b>(2)</b>	<b>(11)</b>	<b>(0)</b>	<b>(0)</b>	<b>(0)</b>	<b>(1)</b>	<b>(0)</b>	<b>(1)</b>
Accidents (V01-X59, Y85-Y86)	11	2	9	0	0	0	0	0	0
Suffocation & Strangulation (W75-W77,W81-W84)	6	2	4	0	0	0	0	0	0
Other (V00-W74,W78-W80,W85-X59,Y85-Y86)	5	0	5	0	0	0	0	0	0
Assault (homicide) (X85-Y09, Y87.1)	2	0	2	0	0	0	1	0	1
Other (X60-X84,Y10-Y84,Y87.0,Y87.2-Y89)	0	0	0	0	0	0	0	0	0

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



**Mortality Table 30b. Infant (< 1 Year) Mortality to Residents by Cause by Age and Sex, 1999**

Cause and ICD-10 Code	7 Days to Under 28 Days			28 Days to Under 6 Months			6 Months to Under 12 Months		
	Total	Male	Fem.	Total	Male	Fem.	Total	Male	Fem.
<b>Total All Causes<sup>1</sup></b>	<b>(51)</b>	<b>(24)</b>	<b>(27)</b>	<b>(113)</b>	<b>(59)</b>	<b>(54)</b>	<b>(31)</b>	<b>(18)</b>	<b>(13)</b>
<b>Infectious &amp; Parasitic Diseases (A00-B99)</b>	1	1	0	6	3	3	0	0	0
<b>Diseases of the Nervous System (G00-G98)</b>	0	0	0	3	1	2	2	2	0
<b>Diseases of the Circulatory System (I00-I99)</b>	2	0	2	6	5	1	3	2	1
<b>Diseases of the Respiratory System (J00-J98)</b>	1	0	1	4	4	0	2	2	0
<b>Conditions Originating in Perinatal Period(P00-P96)</b>	(21)	(15)	(6)	(11)	(5)	(6)	(4)	(3)	(1)
Newborn Affected by Maternal Factors (P00-P04)	(1)	(1)	(0)	(1)	(1)	(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	1	1	0	0	0	0
Complications Involving Placenta (P02.0-P02.3)	0	0	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	1	0	0	0	0	0	0	0
Short Gestation & Low Birth Weight (P07)	0	0	0	1	1	0	0	0	0
Intrauterine Hypoxia & Birth Asphyxia (P20-P21)	3	2	1	1	0	1	0	0	0
Respiratory Distress of Newborn (P22)	1	1	0	1	1	0	0	0	0
Other Respiratory Conditions (P23-P28)	2	1	1	4	0	4	4	3	1
Infections Specific to Perinatal Period (P35-P39)	7	6	1	0	0	0	0	0	0
Neonatal Hemorrhage (P50-P52,P54)	4	3	1	1	1	0	0	0	0
Necrotizing Enterocolitis of Newborn (P77)	1	1	0	1	0	1	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)	2	0	2	1	1	0	0	0	0
<b>Congenital Malformations (Q00-Q99)</b>	(15)	(4)	(11)	(21)	(8)	(13)	(6)	(2)	(4)
Anencephaly and Similar Malformations (Q00)	0	0	0	0	0	0	0	0	0
Malformations of Heart (Q20-Q24)	7	3	4	9	5	4	2	0	2
Other Malformations of Circulatory System (Q25-Q28)	0	0	0	1	0	1	1	0	1
Malformations of Respiratory System (Q30-Q34)	2	1	1	1	0	1	0	0	0
Malformations of Genitourinary System (Q50-Q64)	0	0	0	0	0	0	1	1	0
Malform. of Musculoskeletal Sys. & Skin (Q65-Q85)	0	0	0	0	0	0	0	0	0
Down's Syndrome (Q90)	2	0	2	0	0	0	2	1	1
Edward's Syndrome (Q91.0-Q91.3)	2	0	2	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)	2	0	2	6	3	3	0	0	0
Other Chromosomal Abnormalities (Q92-Q99)	0	0	0	0	0	0	0	0	0
<b>Sudden Infant Death Syndrome (R95)</b>	7	3	4	54	32	22	3	3	0
<b>Other(C00-F99,H00-H99,K00-N99,R00-R94,R96-R99)</b>	3	0	3	4	1	3	4	3	1
<b>External Causes of Mortality (V01-Y89)</b>	(1)	(1)	(0)	(4)	(0)	(4)	(7)	(1)	(6)
Accidents (V01-X59, Y85-Y86)	(1)	(1)	(0)	(4)	(0)	(4)	(6)	(1)	(5)
Suffocation & Strangulation (W75-W77,W81-W84)	1	1	0	2	0	2	3	1	2
Other (V00-W74,W78-W80,W85-X59,Y85-Y86)	0	0	0	2	0	2	3	0	3
Assault (homicide) (X85-Y09, Y87.1)	0	0	0	0	0	0	1	0	1
Other (X60-X84,Y10-Y84,Y87.0,Y87.2-Y89)	0	0	0	0	0	0	0	0	0

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

**Mortality Table 31. Infant (Age < 1 Year) Mortality by Selected Causes by Place of Residence, 1999**

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>401</b>	<b>35</b>	<b>38</b>	<b>94</b>	<b>106</b>	<b>67</b>	<b>13</b>	<b>48</b>
Adams	4	0	0	0	3	0	1	0
Asotin	3	0	0	0	0	2	0	1
Benton	10	0	2	3	3	1	0	1
Chelan	5	3	0	2	0	0	0	0
Clallam	3	1	0	1	0	1	0	0
Clark	21	2	2	4	7	2	0	4
Columbia	0	0	0	0	0	0	0	0
Cowlitz	7	1	0	1	2	1	0	2
Douglas	1	0	1	0	0	0	0	0
Ferry	1	0	0	0	1	0	0	0
Franklin	8	0	0	1	5	1	0	1
Garfield	0	0	0	0	0	0	0	0
Grant	4	0	0	2	1	0	1	0
Grays Harbor	4	0	1	1	1	1	0	0
Island	2	0	0	0	2	0	0	0
Jefferson	0	0	0	0	0	0	0	0
King	112	15	18	34	21	11	3	10
Kitsap	15	1	1	3	3	5	0	2
Kittitas	1	0	0	0	1	0	0	0
Klickitat	0	0	0	0	0	0	0	0
Lewis	7	0	0	0	2	4	0	1
Lincoln	0	0	0	0	0	0	0	0
Mason	6	0	1	1	2	2	0	0
Okanogan	2	0	0	1	0	0	1	0
Pacific	1	0	1	0	0	0	0	0
Pend Oreille	0	0	0	0	0	0	0	0
Pierce	54	5	1	11	14	15	2	6
San Juan	0	0	0	0	0	0	0	0
Skagit	7	0	3	0	1	2	1	0
Skamania	1	0	0	1	0	0	0	0
Snohomish	44	7	4	7	12	6	1	7
Spokane	25	0	0	7	4	6	2	6
Stevens	2	0	0	1	0	1	0	0
Thurston	9	0	1	2	2	2	0	2
Wahkiakum	0	0	0	0	0	0	0	0
Walla Walla	2	0	0	2	0	0	0	0
Whatcom	8	0	1	3	2	1	0	1
Whitman	2	0	0	0	1	0	1	0
Yakima	30	0	1	6	16	3	0	4

NOTE: Source for Selected Causes is International Classification of Diseases (Tenth Revision); Maternal Factors (ICD-10: P00-P04); Hypoxia, Asphyxia, 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 32. Infant Deaths (<1 year) by Mother's Race/Ethnicity<sup>1</sup> by Place of Residence<sup>2</sup>, 1999**

County	African		Native		Asian	Other	Unk	Hispanic <sup>3</sup>
	Total	White	American	American				
<b>State Total</b>	<b>401</b>	<b>289</b>	<b>43</b>	<b>13</b>	<b>21</b>	<b>0</b>	<b>35</b>	<b>53</b>
<b>State Rate<sup>4</sup></b>	<b>5.0</b>	<b>4.4</b>	<b>13.7</b>	<b>7.3</b>	<b>3.6</b>	<b>*</b>	<b>n/a</b>	<b>5.1</b>
Adams	4	4	0	0	0	0	0	3
Asotin	3	3	0	0	0	0	0	0
Benton	10	10	0	0	0	0	0	1
Chelan	5	3	0	0	0	0	2	3
Clallam	3	3	0	0	0	0	0	0
Clark	21	20	0	1	0	0	0	1
Columbia	0	0	0	0	0	0	0	0
Cowlitz	7	6	1	0	0	0	0	0
Douglas	1	1	0	0	0	0	0	0
Ferry	1	0	0	1	0	0	0	0
Franklin	8	7	0	0	0	0	1	6
Garfield	0	0	0	0	0	0	0	0
Grant	4	4	0	0	0	0	0	1
Grays Harbor	4	2	0	2	0	0	0	0
Island	2	1	0	0	1	0	0	0
Jefferson	0	0	0	0	0	0	0	0
King	112	71	20	0	10	0	11	10
Kitsap	15	10	4	0	1	0	0	0
Kittitas	1	1	0	0	0	0	0	0
Klickitat	0	0	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	6	5	0	1	0	0	0	0
Okanogan	2	1	1	0	0	0	0	1
Pacific	1	0	0	1	0	0	0	0
Pend Oreille	0	0	0	0	0	0	0	0
Pierce	54	33	11	1	5	0	4	4
San Juan	0	0	0	0	0	0	0	0
Skagit	7	5	0	2	0	0	0	2
Skamania	1	1	0	0	0	0	0	0
Snohomish	44	28	2	1	2	0	11	3
Spokane	25	20	1	1	0	0	3	1
Stevens	2	1	0	0	1	0	0	0
Thurston	9	5	1	0	0	0	3	2
Wahkiakum	0	0	0	0	0	0	0	0
Walla Walla	2	2	0	0	0	0	0	1
Whatcom	8	5	0	2	1	0	0	0
Whitman	2	2	0	0	0	0	0	0
Yakima	30	28	2	0	0	0	0	14

<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 33. Infant Deaths (<1 year) by Child's Race/Ethnicity<sup>1</sup> by Residence<sup>2</sup>, 1999**

County	Total	African		Native		Asian	Other	Unk	Hispanic <sup>3</sup>
		White	American	American	Native				
<b>State Total</b>	<b>401</b>	<b>277</b>	<b>54</b>	<b>14</b>	<b>25</b>	<b>0</b>	<b>31</b>	<b>66</b>	
<b>State Rate<sup>4</sup></b>	<b>5.0</b>	<b>4.4</b>	<b>11.3</b>	<b>6.2</b>	<b>3.8</b>	<b>*</b>	<b>n/a</b>	<b>5.1</b>	
Adams	4	4	0	0	0	0	0	3	
Asotin	3	3	0	0	0	0	0	0	
Benton	10	10	0	0	0	0	0	1	
Chelan	5	4	0	0	0	0	1	3	
Clallam	3	2	0	1	0	0	0	0	
Clark	21	20	0	1	0	0	0	1	
Columbia	0	0	0	0	0	0	0	0	
Cowlitz	7	6	1	0	0	0	0	0	
Douglas	1	1	0	0	0	0	0	0	
Ferry	1	0	0	1	0	0	0	0	
Franklin	8	7	0	0	0	0	1	6	
Garfield	0	0	0	0	0	0	0	0	
Grant	4	4	0	0	0	0	0	1	
Grays Harbor	4	4	0	0	0	0	0	2	
Island	2	1	0	0	1	0	0	0	
Jefferson	0	0	0	0	0	0	0	0	
King	112	64	24	0	14	0	10	11	
Kitsap	15	9	4	1	1	0	0	1	
Kittitas	1	1	0	0	0	0	0	0	
Klickitat	0	0	0	0	0	0	0	0	
Lewis	7	7	0	0	0	0	0	1	
Lincoln	0	0	0	0	0	0	0	0	
Mason	6	4	0	1	1	0	0	0	
Okanogan	2	1	1	0	0	0	0	1	
Pacific	1	0	0	1	0	0	0	0	
Pend Oreille	0	0	0	0	0	0	0	0	
Pierce	54	33	12	1	4	0	4	6	
San Juan	0	0	0	0	0	0	0	0	
Skagit	7	4	1	2	0	0	0	2	
Skamania	1	1	0	0	0	0	0	0	
Snohomish	44	26	5	1	2	0	10	4	
Spokane	25	20	2	1	0	0	2	1	
Stevens	2	1	0	0	1	0	0	0	
Thurston	9	5	1	0	0	0	3	2	
Wahkiakum	0	0	0	0	0	0	0	0	
Walla Walla	2	2	0	0	0	0	0	1	
Whatcom	8	4	1	2	1	0	0	0	
Whitman	2	2	0	0	0	0	0	0	
Yakima	30	27	2	1	0	0	0	19	

<sup>1</sup>Infant deaths are matched with births to find infant'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 34. Infant (< 1 year) Deaths by Mother's Age Group<sup>1</sup> by Place of Residence<sup>2</sup>, 1999**

County	Under									45 and Over	Age Unk
	All Ages	15	15-17	18-19	20-24	25-29	30-34	35-39	40-44		
<b>State Total</b>	<b>401</b>	<b>0</b>	<b>24</b>	<b>37</b>	<b>116</b>	<b>92</b>	<b>69</b>	<b>44</b>	<b>16</b>	<b>0</b>	<b>3</b>
<b>State Rate<sup>3</sup></b>	<b>5.0</b>	<b>*</b>	<b>8.9</b>	<b>6.5</b>	<b>6.0</b>	<b>4.1</b>	<b>3.8</b>	<b>4.8</b>	<b>8.4</b>	<b>*</b>	<b>n/a</b>
Adams	4	0	0	0	1	0	1	0	2	0	0
Asotin	3	0	0	2	1	0	0	0	0	0	0
Benton	10	0	0	0	1	3	2	3	1	0	0
Chelan	5	0	0	0	1	1	0	3	0	0	0
Clallam	3	0	1	0	1	0	1	0	0	0	0
Clark	21	0	1	1	5	7	3	3	1	0	0
Columbia	0	0	0	0	0	0	0	0	0	0	0
Cowlitz	7	0	1	0	5	0	0	1	0	0	0
Douglas	1	0	0	0	1	0	0	0	0	0	0
Ferry	1	0	0	0	0	1	0	0	0	0	0
Franklin	8	0	1	0	2	2	0	2	0	0	1
Garfield	0	0	0	0	0	0	0	0	0	0	0
Grant	4	0	0	0	2	1	0	0	1	0	0
Grays Harbor	4	0	1	0	2	1	0	0	0	0	0
Island	2	0	0	0	0	0	2	0	0	0	0
Jefferson	0	0	0	0	0	0	0	0	0	0	0
King	112	0	9	3	23	29	25	18	3	0	2
Kitsap	15	0	1	0	8	4	1	0	1	0	0
Kittitas	1	0	0	0	0	1	0	0	0	0	0
Klickitat	0	0	0	0	0	0	0	0	0	0	0
Lewis	7	0	1	1	4	1	0	0	0	0	0
Lincoln	0	0	0	0	0	0	0	0	0	0	0
Mason	6	0	0	1	3	1	1	0	0	0	0
Okanogan	2	0	0	0	2	0	0	0	0	0	0
Pacific	1	0	1	0	0	0	0	0	0	0	0
Pend Oreille	0	0	0	0	0	0	0	0	0	0	0
Pierce	54	0	3	9	15	17	6	3	1	0	0
San Juan	0	0	0	0	0	0	0	0	0	0	0
Skagit	7	0	1	2	2	2	0	0	0	0	0
Skamania	1	0	0	0	0	0	1	0	0	0	0
Snohomish	44	0	1	6	9	8	14	5	1	0	0
Spokane	25	0	0	3	11	3	4	2	2	0	0
Stevens	2	0	0	0	1	0	0	0	1	0	0
Thurston	9	0	0	2	4	2	1	0	0	0	0
Wahkiakum	0	0	0	0	0	0	0	0	0	0	0
Walla Walla	2	0	1	0	1	0	0	0	0	0	0
Whatcom	8	0	1	1	3	1	0	1	1	0	0
Whitman	2	0	0	0	1	0	1	0	0	0	0
Yakima	30	0	0	6	7	7	6	3	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 35. Fetal Deaths, Perinatal, Neonatal and Infant Mortality by Place of Residence, 1999**

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>468</b>	<b>5.9</b>	<b>674</b>	<b>8.4</b>	<b>257</b>	<b>3.2</b>	<b>401</b>	<b>5.0</b>
Adams	2	*	3	*	2	*	4	*
Asotin	1	*	2	*	2	*	3	*
Benton	9	4.2	15	7.0	6	2.8	10	4.7
Kennewick	5	5.1	7	7.2	2	*	5	5.1
Richland	2	*	4	*	2	*	2	*
Chelan	6	6.2	11	11.3	5	5.2	5	5.2
Wenatchee	5	10.2	7	14.1	2	*	2	*
Clallam	2	*	4	*	2	*	3	*
Port Angeles	1	*	1	*	0	*	0	*
Clark	21	4.1	27	5.2	10	1.9	21	4.1
Vancouver	18	5.5	23	7.0	8	2.4	15	4.6
Columbia	0	*	0	*	0	*	0	*
Cowlitz	15	11.7	17	13.1	2	*	7	5.4
Longview	8	14.0	9	15.5	1	*	2	*
Douglas	3	*	3	*	0	*	1	*
Ferry	2	*	3	*	1	*	1	*
Franklin	9	8.2	13	11.7	4	*	8	7.2
Pasco	7	8.5	10	12.1	3	*	5	6.1
Garfield	0	*	0	*	0	*	0	*
Grant	8	5.8	11	7.9	3	*	4	*
Grays Harbor	9	10.9	9	10.8	3	*	4	*
Aberdeen	4	*	4	*	1	*	1	*
Island	10	11.0	12	13.0	2	*	2	*
Oak Harbor	4	*	5	10.6	1	*	1	*
Jefferson	1	*	1	*	0	*	0	*
King	120	5.5	188	8.5	81	3.7	112	5.1
Auburn	2	*	4	*	3	*	4	*
Bellevue	7	5.5	10	7.8	3	*	4	*
Burien	1	*	1	*	0	*	0	*
Des Moines	3	*	4	*	1	*	1	*
Federal Way	10	7.8	12	9.3	3	*	6	4.7
Kent	6	3.8	13	8.3	7	4.5	8	5.1
Kirkland	3	*	3	*	2	*	2	*
Mercer Island	0	*	0	*	0	*	0	*
Redmond	3	*	5	5.8	3	*	4	*
Renton	9	8.3	11	10.1	2	*	4	*
Sea Tac	4	*	4	*	0	*	0	*
Seattle	45	6.1	78	10.5	37	5.0	49	6.7
Shoreline	2	*	5	13.6	3	*	5	13.7
Kitsap	16	5.5	24	8.3	10	3.5	15	5.2
Bainbridge Island	2	*	2	*	0	*	0	*
Bremerton	8	9.7	10	12.1	3	*	6	7.3

**Mortality Table 35. Fetal Deaths, Perinatal, Neonatal and Infant Mortality by Place of Residence, 1999**

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	3	*	3	*	1	*	1	*
Klickitat	0	*	0	*	0	*	0	*
Lewis	5	5.3	6	6.3	3	*	7	7.4
Lincoln	1	*	1	*	0	*	0	*
Mason	1	*	3	*	2	*	6	11.5
Okanogan	1	*	2	*	1	*	2	*
Pacific	1	*	1	*	1	*	1	*
Pend Oreille	0	*	0	*	0	*	0	*
Pierce	65	6.5	89	8.9	28	2.8	54	5.4
Lakewood	4	*	7	10.5	3	*	7	10.6
Puyallup	3	*	5	6.0	2	*	5	6.0
Tacoma	31	7.5	41	9.8	12	2.9	20	4.8
University Place	0	*	1	*	1	*	1	*
San Juan	3	*	3	*	0	*	0	*
Skagit	8	5.9	11	8.0	4	*	7	5.2
Mount Vernon	0	*	1	*	1	*	3	*
Skamania	1	*	2	*	1	*	1	*
Snohomish	58	6.8	85	9.9	30	3.5	44	5.2
Edmonds	2	*	4	*	2	*	3	*
Everett	14	6.6	24	11.3	12	5.7	16	7.6
Lynnwood	8	9.4	9	10.5	2	*	2	*
Marysville	4	*	6	9.2	2	*	3	*
Mountlake Terrace	6	25.3	7	28.8	1	*	2	*
Mukilteo	1	*	1	*	0	*	0	*
Spokane	27	4.9	32	5.8	12	2.2	25	4.5
Spokane (City)	19	5.7	21	6.3	7	2.1	15	4.5
Stevens	2	*	3	*	1	*	2	*
Thurston	13	5.2	18	7.2	6	2.4	9	3.6
Lacey	2	*	4	*	2	*	2	*
Olympia	4	*	5	5.6	1	*	2	*
Wahkiakum	1	*	1	*	0	*	0	*
Walla Walla	10	14.0	11	15.2	2	*	2	*
Walla Walla (City)	6	14.3	7	16.4	1	*	1	*
Whatcom	9	4.5	13	6.5	6	3.0	8	4.0
Bellingham	4	*	5	5.9	3	*	5	5.9
Whitman	1	*	2	*	1	*	2	*
Pullman	1	*	2	*	1	*	2	*
Yakima	24	5.7	45	10.6	25	5.9	30	7.1
Yakima (City)	9	5.7	21	13.3	13	8.3	14	8.9

<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.

**Mortality Table 36. Fetal Deaths by Mother's Age Group by Place of Residence, 1999**

County	All Ages	Under								45 and Over	Unk
		15	15-17	18-19	20-24	25-29	30-34	35-39	40-44		
<b>State Total</b>	<b>468</b>	<b>4</b>	<b>28</b>	<b>40</b>	<b>109</b>	<b>106</b>	<b>95</b>	<b>63</b>	<b>21</b>	<b>2</b>	<b>3</b>
<b>State Ratio<sup>1</sup></b>	<b>5.9</b>	<b>*</b>	<b>10.4</b>	<b>7.0</b>	<b>5.6</b>	<b>4.8</b>	<b>5.2</b>	<b>6.9</b>	<b>11.0</b>	<b>*</b>	<b>n/a</b>
Adams	2	0	0	0	1	0	1	0	0	0	0
Asotin	1	0	0	0	0	1	0	0	0	0	0
Benton	9	0	2	0	4	2	1	0	0	0	0
Chelan	6	1	0	1	2	1	1	0	0	0	1
Clallam	2	0	0	0	1	0	1	0	0	0	0
Clark	21	0	3	3	5	5	2	1	1	1	0
Columbia	0	0	0	0	0	0	0	0	0	0	0
Cowlitz	15	0	0	2	9	3	1	0	0	0	0
Douglas	3	0	0	0	0	0	1	1	1	0	0
Ferry	2	0	1	0	0	0	0	0	1	0	0
Franklin	9	0	1	2	1	1	3	1	0	0	0
Garfield	0	0	0	0	0	0	0	0	0	0	0
Grant	8	0	1	1	1	1	2	2	0	0	0
Grays Harbor	9	0	0	3	1	3	1	1	0	0	0
Island	10	0	0	0	4	1	2	2	1	0	0
Jefferson	1	0	0	0	0	0	1	0	0	0	0
King	120	0	4	10	14	27	28	28	8	1	0
Kitsap	16	0	1	1	9	1	1	1	2	0	0
Kittitas	3	0	0	0	1	0	0	1	1	0	0
Klickitat	0	0	0	0	0	0	0	0	0	0	0
Lewis	5	0	0	0	2	2	0	1	0	0	0
Lincoln	1	0	0	0	0	1	0	0	0	0	0
Mason	1	0	0	0	0	0	1	0	0	0	0
Okanogan	1	0	1	0	0	0	0	0	0	0	0
Pacific	1	0	0	0	0	0	1	0	0	0	0
Pend Oreille	0	0	0	0	0	0	0	0	0	0	0
Pierce	65	0	3	10	13	18	14	7	0	0	0
San Juan	3	0	0	0	1	2	0	0	0	0	0
Skagit	8	0	0	1	2	2	3	0	0	0	0
Skamania	1	0	0	0	0	0	1	0	0	0	0
Snohomish	58	2	5	3	11	19	9	7	2	0	2
Spokane	27	1	2	1	6	3	12	2	0	0	0
Stevens	2	0	0	0	1	0	0	0	1	0	0
Thurston	13	0	0	1	4	3	4	0	1	0	0
Wahkiakum	1	0	0	0	0	0	1	0	0	0	0
Walla Walla	10	0	1	0	5	1	1	2	0	0	0
Whatcom	9	0	1	0	4	0	1	2	1	0	0
Whitman	1	0	0	0	0	1	0	0	0	0	0
Yakima	24	0	2	1	7	8	1	4	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 37. Fetal Mortality to Residents by Cause, 1999**

<b>Cause with ICD-10 Code</b>	<b>Number</b>
<b>All causes<sup>1</sup></b>	<b>468</b>
<b>Perinatal conditions (P00-P96)</b>	<b>390</b>
Fetus Affected by Maternal Conditions (P00) <sup>2</sup>	(22)
Maternal Hypertensive Disorders (P00.0)	15
Maternal Injury (P00.5)	3
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)	15
Premature Rupture of Membranes (P01.1)	28
Multiple Pregnancy (P01.5)	6
Other (P01.2-P01.4,P01.6-P01.9)	3
Fetus Affected by Complications of Placenta, Cord & Membrane (P02)	(125)
Other Forms of Placental Separation & Hemorrhage (P02.1)	27
Other Morphological & Functional Abnormalities of Placenta (P02.2)	21
Placental Transfusion Syndrome (P02.3)	7
Other Compression of Umbilical Cord (P02.5)	39
Other & Unspecified Conditions of Umbilical Cord (P026.6)	23
Chorioamnionitis (P02.7)	5
Other (P020.0,P02.4,P02.8-P02.9)	3
Fetus Affected by Complications of Labor & Delivery (P03)	4
Fetus Affected by Noxious Influences Via Placenta (P04)	4
Slow Fetal Growth & Fetal Malnutrition (P05)	2
Disorders Related to Short Gestation, Low Birth Wt (P07)	33
Disorders Related to Long Gestation & High Birth Weight (P08)	0
Birth Trauma (P10-P15)	0
Intrauterine Hypoxia and Birth Asphyxia (P20-P21)	4
Cardiovascular Disorders (P29)	8
Fetal Hemorrhage (P50-P54)	4
Hydrops Fetalis Due to Hemolytic Disease (P56)	0
Transitory Endocrine & Metabolic Disorders (P70-P74)	4
Fetal Death of Unspecified Cause (P95)	113
All other (P22-P26,P28,P30-P49,P55,P57-P69,P75-P94,P96)	15
<b>Congenital Malformations &amp; Chromosomal Abnormalities (Q00-Q99)</b>	<b>77</b>
Congenital Malformations of Nervous System (Q00-Q07)	(7)
Anencephaly & Similar Malformations (Q00)	7
Other (Q01-Q07)	0
Congenital Malformations of Heart (Q20-Q24)	7
Congenital Malformations of Urinary System (Q60-Q64)	5
Congenital Malformations Musculoskeletal & Integument (Q85-Q85)	4
Chromosomal Abnormalities Not Elsewhere Classified, (Q90-Q99)	(31)
Down's Syndrome (Q90)	9
Edward's Syndrome (Q91.0-Q91.3)	13
Other (Q91.4-Q99)	9
Other (Q08-Q18,Q25-Q56,Q86-Q89)	23
<b>All Other Causes (A00-O00,R00-R99,V01-V84)</b>	<b>1</b>

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

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

**Mortality Table 38. Fetal Mortality to Residents by Weight in Grams by Sex, 1999**

<b>Weight in Grams</b>	<b>Total</b>	<b>Male</b>	<b>Female</b>	<b>Unknown</b>
<b>State Totals</b>	<b>468</b>	<b>235</b>	<b>231</b>	<b>2</b>
Under 250	23	13	10	0
250 - 499	98	48	50	0
500 - 749	62	33	28	1
750 - 999	23	14	9	0
1,000 - 1,499	43	22	21	0
1,500 - 1,999	30	15	15	0
2,000 - 2,499	26	10	16	0
2,500 - 2,999	23	11	12	0
3,000 - 3,499	42	16	26	0
3,500 - 3,999	21	12	9	0
4,000 - 4,499	8	5	3	0
4,500 and over	1	0	1	0
Unknown	68	36	31	1

# Marriage





**Marriage Table 1. Marriages by County of Occurrence and County of Residence,<sup>1</sup> 1999**

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>41,868</b>	<b>7.3</b>	<b>41,868</b>	<b>7.3</b>	<b>41,868</b>	<b>7.3</b>
Adams	118	7.4	105	6.6	100	6.3
Asotin	103	5.2	64	3.2	57	2.9
Benton	856	6.2	812	5.8	787	5.7
Chelan	744	11.8	431	6.8	425	6.7
Clallam	479	7.2	422	6.3	403	6.0
Clark	2,693	8.0	2,118	6.3	2,046	6.1
Columbia	36	8.6	30	7.1	31	7.4
Cowlitz	744	7.9	662	7.0	639	6.8
Douglas	129	4.1	194	6.1	204	6.4
Ferry	41	5.6	38	5.2	42	5.8
Franklin	358	7.9	286	6.3	284	6.3
Garfield	3	1.3	2	0.8	3	1.3
Grant	431	6.1	462	6.5	464	6.6
Grays Harbor	504	7.4	449	6.6	421	6.2
Island	638	8.7	492	6.7	534	7.3
Jefferson	325	12.2	165	6.2	170	6.4
King	12,412	7.4	11,928	7.1	11,768	7.0
Kitsap	1,782	7.8	1,670	7.3	1,597	7.0
Kittitas	234	7.2	254	7.8	244	7.5
Klickitat	126	6.5	100	5.2	97	5.0
Lewis	543	7.9	484	7.0	491	7.1
Lincoln	41	4.1	27	2.7	32	3.2
Mason	341	7.0	327	6.7	333	6.9
Okanogan	309	8.0	227	5.9	227	5.9
Pacific	200	9.3	101	4.7	95	4.4
Pend Oreille	77	6.9	50	4.5	48	4.3
Pierce	5,504	7.9	5,052	7.2	5,127	7.3
San Juan	343	27.0	84	6.6	80	6.3
Skagit	849	8.4	715	7.1	681	6.8
Skamania	133	13.4	67	6.8	63	6.4
Snohomish	3,598	6.2	4,168	7.1	4,093	7.0
Spokane	2,252	5.4	2,085	5.0	1,997	4.8
Stevens	231	6.1	188	4.9	200	5.3
Thurston	1,458	7.2	1,432	7.1	1,388	6.8
Wahkiakum	25	6.4	9	2.3	14	3.6
Walla Walla	346	6.3	307	5.6	296	5.4
Whatcom	1,190	7.4	1,163	7.2	1,154	7.2
Whitman	140	3.3	176	4.2	188	4.5
Yakima	1,531	7.2	1,497	7.1	1,466	6.9
Tribal Authority	1	--	--	--	--	--
Out of State	--	--	3,023	--	3,579	--
Unknown	--	--	2	--	--	--

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

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

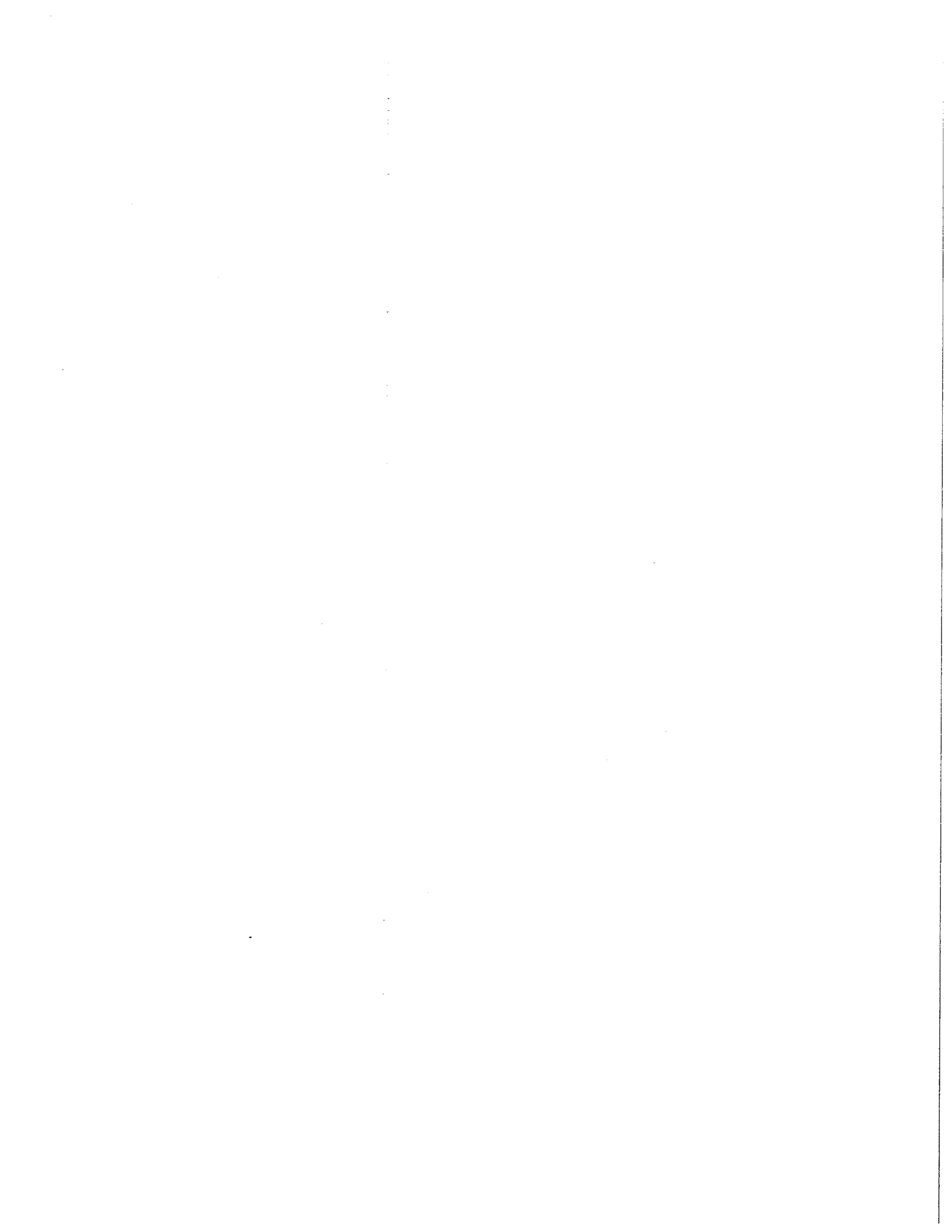
<sup>3</sup>Exceptionally high rates by county of occurrence may reflect unique local circumstances, such as highly desirable locations for weddings. See pages 5-6 for a discussion of occurrence rates.

**Marriage Table 2. Marriages by Woman's Age and County where Ceremony was Performed, 1999**

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>41,868</b>	<b>3,621</b>	<b>11,256</b>	<b>8,948</b>	<b>5,628</b>	<b>4,314</b>	<b>3,138</b>	<b>2,204</b>	<b>1,279</b>	<b>591</b>	<b>345</b>	<b>504</b>	<b>40</b>
Adams	118	30	45	15	9	9	4	3	1	2	0	0	0
Asotin	103	12	34	19	9	10	7	5	3	1	1	2	0
Benton	856	114	305	153	66	75	59	47	13	13	6	4	1
Chelan	744	73	178	162	102	83	52	42	32	7	9	3	1
Clallam	479	50	124	74	44	51	51	37	22	10	4	12	0
Clark	2,693	268	741	522	347	268	199	142	93	39	30	43	1
Columbia	36	4	8	3	3	3	5	6	2	1	1	0	0
Cowlitz	744	96	215	127	98	59	51	35	31	11	5	15	1
Douglas	129	18	40	24	17	9	5	9	2	1	3	1	0
Ferry	41	6	12	4	2	5	2	5	1	3	1	0	0
Franklin	358	73	116	48	39	32	26	13	2	4	2	2	1
Garfield	3	0	2	1	0	0	0	0	0	0	0	0	0
Grant	431	80	139	56	36	49	28	19	9	6	2	7	0
Grays Harbor	504	46	136	84	62	53	47	36	22	6	3	9	0
Island	638	68	166	135	79	60	42	33	16	18	7	11	3
Jefferson	325	22	58	70	54	39	29	25	14	5	3	6	0
King	12,412	625	2,827	3,228	2,093	1,381	929	606	321	172	90	127	13
Kitsap	1,782	216	491	356	234	158	137	93	53	21	7	15	1
Kittitas	234	20	71	42	27	18	26	13	4	3	4	6	0
Klickitat	126	12	37	19	12	17	13	6	4	1	3	2	0
Lewis	543	80	162	85	62	57	40	28	11	7	7	4	0
Lincoln	41	4	15	7	4	3	5	1	1	0	1	0	0
Mason	341	45	74	57	35	41	39	20	17	6	4	3	0
Okanogan	309	35	86	51	41	24	35	13	11	4	4	5	0
Pacific	200	14	39	35	28	26	20	15	13	1	4	4	1
Pend Oreille	77	9	16	17	6	6	6	9	3	1	0	3	1
Pierce	5,504	525	1,562	1,106	698	588	403	285	173	69	40	51	4
San Juan	343	6	24	92	66	59	30	30	17	12	3	4	0
Skagit	849	80	232	161	96	88	68	49	32	18	9	16	0
Skamania	133	11	21	27	10	15	19	17	6	1	4	2	0
Snohomish	3,598	290	994	720	476	379	277	195	130	56	35	39	7
Spokane	2,252	195	803	484	234	183	125	104	50	21	16	33	4
Stevens	231	28	76	40	14	22	17	11	11	4	2	5	1
Thurston	1,458	131	367	308	185	151	120	94	54	11	18	19	0
Wahkiakum	25	2	7	2	2	3	3	2	0	2	1	1	0
Walla Walla	346	29	115	61	38	32	27	17	14	3	3	7	0
Whatcom	1,190	100	351	261	116	105	79	81	48	27	6	16	0
Whitman	140	4	54	26	14	17	11	3	4	3	1	3	0
Yakima	1,531	200	513	266	170	136	102	55	39	20	6	24	0
Tribal Authority	1	0	0	0	0	0	0	0	0	1	0	0	0

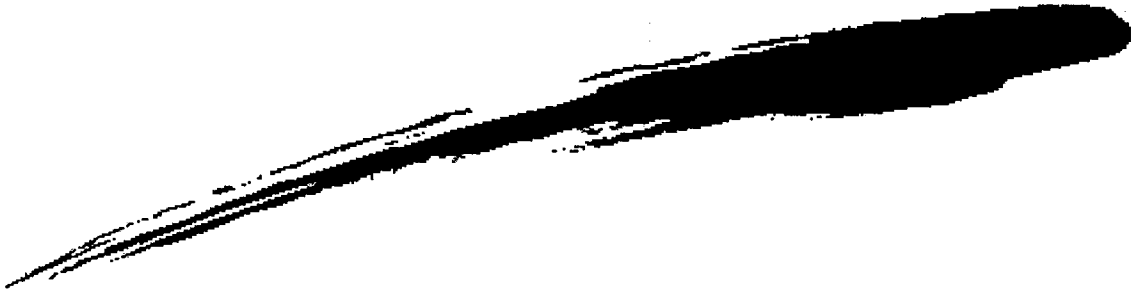
**Marriage Table 3. Marriages by Man's Age and County where Ceremony was Performed, 1999**

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>41,868</b>	<b>1,258</b>	<b>9,556</b>	<b>9,549</b>	<b>6,588</b>	<b>4,744</b>	<b>3,556</b>	<b>2,448</b>	<b>1,718</b>	<b>994</b>	<b>511</b>	<b>904</b>	<b>42</b>
Adams	118	12	49	25	10	8	6	5	1	1	1	0	0
Asotin	103	4	30	23	10	9	7	8	3	4	1	3	1
Benton	856	39	267	194	100	89	49	45	33	18	12	9	1
Chelan	744	24	179	158	111	73	74	50	36	17	9	13	0
Clallam	479	17	115	88	59	46	48	39	20	20	4	23	0
Clark	2,693	102	631	590	386	296	242	153	116	72	38	66	1
Columbia	36	1	7	5	4	3	3	4	4	0	1	4	0
Cowlitz	744	36	186	168	101	71	73	37	18	22	10	21	1
Douglas	129	9	37	18	18	15	15	8	2	3	1	3	0
Ferry	41	0	11	7	3	4	4	5	4	0	1	2	0
Franklin	358	23	132	64	41	36	28	13	14	3	0	3	1
Garfield	3	0	1	2	0	0	0	0	0	0	0	0	0
Grant	431	30	135	85	48	42	34	19	12	8	2	16	0
Grays Harbor	504	16	126	81	84	35	43	48	35	10	8	16	2
Island	638	28	157	143	92	62	49	39	26	16	6	19	1
Jefferson	325	7	52	67	45	51	31	30	21	6	5	10	0
King	12,412	188	2,139	3,064	2,435	1,615	1,104	697	493	299	138	226	14
Kitsap	1,782	75	512	377	239	192	145	101	60	43	8	28	2
Kittitas	234	7	67	46	26	22	21	14	11	7	3	10	0
Klickitat	126	5	28	23	19	14	8	7	8	1	6	7	0
Lewis	543	27	157	104	73	55	38	35	22	12	4	16	0
Lincoln	41	1	13	12	1	4	5	2	1	1	0	1	0
Mason	341	15	74	51	52	51	37	20	15	6	8	12	0
Okanogan	309	8	74	68	48	39	22	15	13	11	5	6	0
Pacific	200	7	32	33	26	21	24	18	16	9	7	7	0
Pend Oreille	77	2	17	14	14	10	3	6	3	3	1	4	0
Pierce	5,504	168	1,402	1,258	778	638	448	296	236	105	70	97	8
San Juan	343	1	20	70	62	54	48	33	29	12	5	8	1
Skagit	849	38	197	176	113	96	63	64	40	20	15	27	0
Skamania	133	5	14	22	16	23	16	12	12	6	2	5	0
Snohomish	3,598	96	799	820	576	377	353	216	137	94	47	79	4
Spokane	2,252	73	662	576	315	190	145	114	72	31	28	45	1
Stevens	231	12	60	46	28	21	19	20	8	9	2	6	0
Thurston	1,458	37	304	340	225	156	112	103	72	51	23	35	0
Wahkiakum	25	1	5	5	2	1	3	1	2	0	1	3	1
Walla Walla	346	12	104	71	33	39	30	28	11	3	5	10	0
Whatcom	1,190	46	280	274	178	116	87	67	61	31	20	29	1
Whitman	140	1	34	41	18	16	8	7	6	5	1	3	0
Yakima	1,531	85	447	340	199	154	110	69	45	35	13	32	2
Tribal Authority	1	0	0	0	0	0	1	0	0	0	0	0	0





# Divorce





**Divorce Table 1. Divorces and Annulments by County of Decree and County of Residence<sup>1</sup>, 1999**

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>28,378</b>	<b>4.9</b>	<b>28,627</b>	<b>5.0</b>	<b>28,627</b>	<b>5.0</b>
Adams	46	2.9	52	3.3	41	2.6
Asotin	96	4.8	100	5.0	81	4.1
Benton	764	5.5	695	5.1	646	4.7
Chelan	407	6.5	284	4.5	301	4.8
Clallam	312	4.7	314	4.7	294	4.4
Clark	1,555	4.6	1,661	5.1	1,535	4.7
Columbia	16	3.8	33	7.9	26	6.2
Cowlitz	500	5.3	496	5.3	477	5.1
Douglas	16	0.5	119	3.8	113	3.6
Ferry	19	2.6	27	3.7	33	4.5
Franklin	161	3.6	154	3.5	159	3.6
Garfield	14	5.8	5	2.1	6	2.5
Grant	312	4.4	330	4.8	309	4.5
Grays Harbor	304	4.5	311	4.6	292	4.3
Island	305	4.2	322	4.4	340	4.7
Jefferson	133	5.0	103	3.9	106	4.0
King	6,840	4.1	7,098	4.3	6,861	4.1
Kitsap	1,116	4.9	1,200	5.2	1,128	4.9
Kittitas	115	3.5	70	2.2	61	1.9
Klickitat	48	2.5	54	2.8	48	2.5
Lewis	356	5.2	326	4.8	329	4.8
Lincoln	3,359	335.9	48	4.8	40	4.0
Mason	198	4.1	243	5.0	261	5.4
Okanogan	133	3.5	154	4.0	144	3.8
Pacific	84	3.9	97	4.5	93	4.3
Pend Oreille	45	4.1	48	4.3	42	3.8
Pierce	2,941	4.2	3,662	5.3	3,523	5.1
San Juan	41	3.2	40	3.2	42	3.3
Skagit	583	5.8	529	5.4	473	4.8
Skamania	46	4.6	36	3.6	30	3.0
Snohomish	2,631	4.5	2,803	4.9	2,675	4.7
Spokane	1,718	4.1	2,066	5.0	1,954	4.8
Stevens	163	4.3	152	4.0	168	4.5
Thurston	1,101	5.4	1,038	5.2	963	4.8
Wahkiakum	15	3.8	12	3.1	13	3.3
Walla Walla	188	3.4	236	4.3	234	4.3
Whatcom	627	3.9	626	4.0	581	3.7
Whitman	120	2.9	102	2.5	108	2.6
Yakima	922	4.3	812	3.9	780	3.7
Tribal Authority	28	--	--	--	--	--
Out-of-State	--	--	1,593	--	2,422	--
Unknown	--	--	576	--	895	--

<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.

**Divorce Table 2. Divorces, Annulments, and Legal Separations by County of Decree, 1999**

County	Total	Divorce	Annulment	Legal Separation <sup>1</sup>
<b>State Total</b>	<b>28,378</b>	<b>28,268</b>	<b>110</b>	<b>536</b>
Adams	46	45	1	1
Asotin	96	96	0	1
Benton	764	761	3	6
Chelan	407	406	1	4
Clallam	312	312	0	4
Clark	1,555	1,551	4	13
Columbia	16	15	1	0
Cowlitz	500	500	0	4
Douglas	16	16	0	0
Ferry	19	19	0	0
Franklin	161	160	1	1
Garfield	14	14	0	0
Grant	312	311	1	2
Grays Harbor	304	304	0	0
Island	305	305	0	6
Jefferson	133	132	1	2
King	6,840	6,813	27	161
Kitsap	1,116	1,114	2	39
Kittitas	115	115	0	0
Klickitat	48	48	0	1
Lewis	356	355	1	2
Lincoln	3,359	3,340	19	66
Mason	198	197	1	4
Okanogan	133	131	2	1
Pacific	84	83	1	2
Pend Oreille	45	45	0	1
Pierce	2,941	2,928	13	74
San Juan	41	41	0	0
Skagit	583	582	1	5
Skamania	46	44	2	1
Snohomish	2,631	2,619	12	54
Spokane	1,718	1,714	4	26
Stevens	163	163	0	1
Thurston	1,101	1,099	2	32
Wahkiakum	15	15	0	0
Walla Walla	188	186	2	2
Whatcom	627	626	1	13
Whitman	120	120	0	1
Yakima	922	915	7	5
Tribal Authority	28	28	0	1

<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, 1999**

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>28,378</b>	<b>161</b>	<b>2,379</b>	<b>4,456</b>	<b>4,759</b>	<b>4,908</b>	<b>4,286</b>	<b>2,872</b>	<b>1,648</b>	<b>783</b>	<b>303</b>	<b>311</b>	<b>1,512</b>
Adams	46	3	6	7	1	6	8	6	4	0	1	3	1
Asotin	96	1	10	11	20	19	13	13	1	3	2	1	2
Benton	764	5	85	104	143	130	125	73	37	23	8	15	16
Chelan	407	4	33	61	71	78	62	48	19	14	5	3	9
Clallam	312	0	27	41	43	49	52	35	21	18	9	4	13
Clark	1,555	13	132	288	273	282	184	148	72	46	14	15	88
Columbia	16	0	1	4	3	3	2	1	0	0	1	1	0
Cowlitz	500	4	53	93	82	97	68	36	43	7	9	3	5
Douglas	16	0	0	5	2	3	3	0	0	0	0	0	3
Ferry	19	0	2	1	3	4	3	4	1	0	0	0	1
Franklin	161	1	18	23	20	26	23	9	6	6	2	4	23
Garfield	14	0	1	0	0	5	4	1	2	1	0	0	0
Grant	312	5	41	43	59	52	46	23	11	9	5	5	13
Grays Harbor	304	4	24	52	57	52	35	30	18	12	8	2	10
Island	305	1	48	49	49	52	46	16	12	9	4	7	12
Jefferson	133	0	4	14	20	17	22	25	18	7	3	0	3
King	6,840	15	355	1,032	1,239	1,145	1,088	721	417	186	68	74	500
Kitsap	1,116	9	127	187	181	193	179	104	61	23	10	7	35
Kittitas	115	1	11	18	9	20	18	20	2	7	3	3	3
Klickitat	48	1	1	9	8	4	6	7	5	3	2	1	1
Lewis	356	4	47	48	62	42	68	29	19	9	10	6	12
Lincoln	3,359	16	342	599	602	591	499	325	184	70	33	25	73
Mason	198	4	23	30	23	35	30	20	9	16	1	2	5
Okanogan	133	0	12	18	23	17	17	17	7	6	3	3	10
Pacific	84	1	11	9	17	11	10	9	8	1	3	1	3
Pend Oreille	45	0	5	6	4	12	3	4	4	3	1	1	2
Pierce	2,941	26	275	459	494	542	436	284	151	64	25	26	159
San Juan	41	0	3	3	6	9	5	10	2	1	0	0	2
Skagit	583	4	47	91	93	93	79	60	31	18	9	8	50
Skamania	46	2	2	5	4	6	9	10	3	3	2	0	0
Snohomish	2,631	9	181	403	430	475	410	275	167	63	15	23	180
Spokane	1,718	10	171	257	239	279	241	188	111	59	16	19	128
Stevens	163	0	14	26	26	21	33	10	11	4	5	6	7
Thurston	1,101	5	92	185	162	193	184	126	63	39	5	15	32
Wahkiakum	15	1	3	2	2	3	1	1	0	2	0	0	0
Walla Walla	188	3	21	23	20	39	32	17	13	9	2	5	4
Whatcom	627	2	38	83	93	100	88	71	49	22	9	6	66
Whitman	120	0	13	24	21	17	13	14	11	4	0	2	1
Yakima	922	6	97	139	153	177	136	79	54	16	10	15	40
Tribal Authority	28	1	3	4	2	9	5	3	1	0	0	0	0

**Divorce Table 4. Divorces and Annulments by Husband's Age and County of Decree, 1999**

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>28,378</b>	<b>25</b>	<b>1,357</b>	<b>3,740</b>	<b>4,549</b>	<b>4,973</b>	<b>4,437</b>	<b>3,378</b>	<b>2,164</b>	<b>1,215</b>	<b>509</b>	<b>583</b>	<b>1448</b>
Adams	46	0	6	8	3	4	8	6	3	3	0	3	2
Asotin	96	0	3	15	19	14	14	14	7	1	4	2	3
Benton	764	1	47	104	117	133	126	99	55	36	17	15	14
Chelan	407	0	22	52	62	78	72	51	25	18	7	9	11
Clallam	312	0	9	30	49	54	48	38	29	20	14	9	12
Clark	1,555	2	83	232	264	281	229	152	121	65	28	24	74
Columbia	16	0	1	3	2	2	3	4	0	0	0	1	0
Cowlitz	500	0	31	69	84	91	81	50	49	26	10	7	2
Douglas	16	0	0	1	4	2	1	3	0	0	1	1	3
Ferry	19	0	1	2	3	4	3	1	1	1	2	0	1
Franklin	161	0	13	19	27	20	28	16	8	2	5	6	17
Garfield	14	0	1	0	1	0	6	3	2	0	0	0	1
Grant	312	2	23	47	50	55	53	30	20	11	4	6	11
Grays Harbor	304	1	18	38	48	58	46	33	25	15	8	9	5
Island	305	0	30	61	38	50	42	29	16	14	5	11	9
Jefferson	133	0	1	8	19	14	25	23	26	7	4	4	2
King	6,840	3	163	781	1,133	1,224	1,102	844	556	318	98	144	474
Kitsap	1,116	0	92	173	178	196	172	134	76	37	14	19	25
Kittitas	115	0	6	12	17	18	15	16	10	9	3	5	4
Klickitat	48	0	2	4	6	9	5	5	5	5	2	3	2
Lewis	356	3	22	38	59	60	63	41	21	12	9	11	17
Lincoln	3,359	2	169	545	602	581	492	384	264	128	44	63	85
Mason	198	0	12	23	30	36	34	22	17	9	6	6	3
Okanogan	133	0	7	18	18	23	21	15	13	7	3	5	3
Pacific	84	0	7	9	8	18	13	9	8	3	2	3	4
Pend Oreille	45	0	3	7	3	8	8	3	5	1	4	2	1
Pierce	2,941	4	181	416	495	527	473	328	172	116	46	41	142
San Juan	41	0	1	4	3	9	8	4	3	3	3	3	0
Skagit	583	0	36	69	88	103	71	67	46	22	15	15	51
Skamania	46	0	4	2	6	5	8	10	2	3	1	3	2
Snohomish	2,631	2	100	303	399	483	445	338	193	111	40	39	178
Spokane	1,718	2	95	236	227	265	248	223	144	70	42	38	128
Stevens	163	0	5	16	27	27	27	21	10	8	4	11	7
Thurston	1,101	1	68	130	179	197	178	131	85	59	27	21	25
Wahkiakum	15	0	2	2	1	3	1	2	1	0	2	1	0
Walla Walla	188	0	11	25	31	33	21	22	17	6	1	12	9
Whatcom	627	0	18	70	85	96	89	83	63	19	14	13	77
Whitman	120	0	7	23	19	29	14	10	9	5	2	1	1
Yakima	922	2	55	141	140	157	138	110	57	44	18	17	43
Tribal Authority	28	0	2	4	5	6	6	4	0	1	0	0	0

**Divorce Table 5. Divorces and Annulments by Number of Children<sup>1</sup>  
and County of Wife's Residence,<sup>2</sup> 1999**

<b>County</b>	<b>Total</b>	<b>0<sup>3</sup></b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4 +</b>	<b>Unknown<sup>3</sup></b>
<b>State Total</b>	<b>28,378</b>	<b>13,056</b>	<b>5,955</b>	<b>5,990</b>	<b>2,054</b>	<b>715</b>	<b>608</b>
Adams	49	20	7	11	4	6	1
Asotin	94	42	22	19	8	3	0
Benton	730	293	160	188	57	25	7
Chelan	294	136	59	59	26	9	5
Clallam	299	122	73	55	25	13	11
Clark	1,613	719	342	373	120	32	27
Columbia	10	6	3	0	1	0	0
Cowlitz	496	229	91	121	42	12	1
Douglas	124	46	35	27	11	3	2
Ferry	32	18	7	2	3	1	1
Franklin	146	52	35	36	12	11	0
Garfield	8	5	1	1	0	1	0
Grant	302	147	50	55	39	6	5
Grays Harbor	288	135	63	57	21	9	3
Island	339	134	88	67	28	10	12
Jefferson	139	62	31	35	9	2	0
King	6,914	3,404	1,397	1,421	439	147	106
Kitsap	1,150	496	267	260	92	29	6
Kittitas	104	45	20	27	8	2	2
Klickitat	52	25	5	13	4	2	3
Lewis	337	149	68	77	24	13	6
Lincoln	46	19	10	9	3	4	1
Mason	257	109	53	53	29	8	5
Okanogan	139	72	22	23	16	3	3
Pacific	88	40	19	17	11	0	1
Pend Oreille	54	30	7	9	7	1	0
Pierce	3,651	1,614	803	841	250	90	53
San Juan	41	28	3	4	3	3	0
Skagit	517	216	129	105	40	15	12
Skamania	35	15	9	6	1	3	1
Snohomish	2,784	1,205	610	643	235	57	34
Spokane	1,995	874	452	415	137	48	69
Stevens	171	74	29	45	10	9	4
Thurston	1,104	483	250	228	83	28	32
Wahkiakum	14	7	4	2	0	0	1
Walla Walla	180	81	44	33	14	5	3
Whatcom	605	260	106	138	43	17	41
Whitman	108	60	20	20	4	2	2
Yakima	900	339	195	212	84	40	30
Out-of-State	1,543	915	270	208	83	30	37
Unknown	626	330	96	75	28	16	81

<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.

<sup>3</sup>Unknowns are higher and divorces with no children appear lower in 1999 than in prior years since cases in which the number of children was not reported were previously entered as "none" rather than "unknown."





# Appendices





## ***Appendix A: Technical Appendix***

### **Sources of Data**

#### Collection Year

Data for *Washington State Vital Statistics, 1999* are compiled from items on birth, death, fetal death, marriage, and dissolution certificates received before extraction of annual datafiles in 2000. (See Appendix G for samples of certificate forms used.)

#### Population

Population estimates in this report are from the Washington State Office of Financial Management, Forecasting Division, *Population Estimates by Age and Sex: 1980-1999, Washington State*, August 30, 1999.

### **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.

The current standard for tabulating race data for births is to use the race of the mother (see Natality Tables 1A and 10). These tables should be used for comparisons with other state and national data. To provide some comparisons with past data, this report also provides data by a "calculated" child's race, determined by the following formula:

- If either parent is Hawaiian, then the child's race is considered Hawaiian.
- In cases where one parent is white and the other non-white, the non-white race is selected as the race of the child.
- If both parents are non-white, the father's race is selected except where the mother's race is Hawaiian.

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 or the child's race at birth can be used for both the numerator and the denominator. In this report, Mortality Table 2 tabulates data by the child's race at death, whereas Mortality Table 33 tabulates data by the child's race at birth, calculated from the mother's and father's races. Mortality Table 32 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

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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.

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)." 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 for 1987-1999 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*

#### *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.

#### *Malformations*

Malformation reporting on the birth certificate is incomplete because the person completing the certificate may not have access to the medical record or the malformation may not be evident at birth. For 1992-1995 infant deaths due to malformations, the corresponding birth data were examined to see if the malformation had been reported on the birth certificate. Reporting rates ranged from 11% for circulatory/respiratory system malformations to 64% for anencephalus. These percentages give an estimate of how well malformations are reported on birth certificates.

#### *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.

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.

### *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 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. Thus, 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 judgements 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 or 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

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

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

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

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

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

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

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

Weight in Grams	Pounds and Ounces
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

appendix.xls

One pound = 453.59 grams

**Appendix C. Estimated Population, State of Washington, by Age Group by Sex, April 1, 1999**

<b>Age Group</b>	<b>Total</b>	<b>Male</b>	<b>Female</b>
<b>Total</b>	5,757,400	2,867,029	2,890,371
Under 1 Year <sup>1</sup>	79,576	40,823	38,753
1 - 4	322,040	164,719	157,321
5 - 14	882,926	452,748	430,178
15 - 19	412,545	212,300	200,245
20 - 24	357,199	184,409	172,790
25 - 34	783,559	399,156	384,403
35 - 44	982,697	494,826	487,871
45 - 54	804,617	402,452	402,165
55 - 64	476,995	237,825	239,170
65 - 74	341,164	157,707	183,457
75 - 84	232,869	95,414	137,455
85 and Over	81,213	24,650	56,563

<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: Office of Financial Management, Forecasting Division, "Population Estimates by Age and Sex 1980-1999", August 30, 1999



**Appendix D. Estimated Population of Counties and Cities of 15,000 Population and Over, April 1, 1999**

<b>Name</b>	<b>City</b>	<b>County</b>	<b>Name</b>	<b>City</b>	<b>County</b>
Adams		15,900	Kittitas		32,400
Asotin		20,000	Klickitat		19,300
Benton		138,900	Lewis		69,000
Kennewick	50,950		Lincoln		10,000
Richland	36,880		Mason		48,600
Chelan		63,000	Okanogan		38,400
Wenatchee	25,620		Pacific		21,500
Clallam		66,900	Pend Oreille		11,100
Port Angeles	18,950		Pierce		700,000
Clark		337,000	Lakewood	63,820	
Vancouver	135,100		Puyallup	30,740	
Columbia		4,200	Tacoma	187,200	
Cowlitz		94,100	University Place	29,550	
Longview	34,190		San Juan		12,700
Douglas		31,700	Skagit		100,600
Ferry		7,300	Mount Vernon	22,700	
Franklin		45,100	Skamania		9,900
Pasco	26,600		Snohomish		583,300
Garfield		2,400	Edmonds	38,610	
Grant		70,600	Everett	86,730	
Grays Harbor		67,700	Lynnwood	33,140	
Aberdeen	16,420		Marysville	20,680	
Island		73,300	Mountlake Terrace	20,270	
Oak Harbor	20,830		Mukilteo	17,180	
Jefferson		26,600	Spokane		414,500
King		1,677,000	Spokane	189,200	
Auburn	38,980		Stevens		38,000
Bellevue	106,200		Thurston		202,700
Burien	29,770		Lacey	29,020	
Des Moines	27,160		Olympia	40,210	
Federal Way	76,910		Wahkiakum		3,900
Kent	73,060		Walla Walla		54,600
Kirkland	44,860		Walla Walla	29,200	
Mercer Island	21,570		Whatcom		161,300
Redmond	43,610		Bellingham	64,070	
Renton	47,620		Whitman		41,900
Sea Tac	23,570		Pullman	25,630	
Seattle	540,500		Yakima		212,300
Shoreline	52,030		Yakima	65,500	
Kitsap		229,700			
Bainbridge Island	19,840				
Bremerton	36,270		<b>State Total</b>		<b>5,757,400</b>

Source: Office of Financial Management, Forecasting Division, "April 1 Population of Cities, Towns, and Counties; Includes annexations and incorporations from April 1, 1998 to March 31, 1999"

Appendix E. Top 100 Baby Names of Girls, 1999

Rank	First Name	N	%	Cumulative		Rank	First Name	N	%	Cumulative	
				N	%					N	%
1	EMILY	566	1.5	566	1.5	51	BROOKE	109	0.3	11,063	28.5
2	HANNAH	490	1.3	1,056	2.7	52	MARIAH	108	0.3	11,171	28.8
3	SAMANTHA	408	1.1	1,464	3.8	53	CLAIRE	107	0.3	11,278	29.1
4	MADISON	392	1.0	1,856	4.8	54	VANESSA	106	0.3	11,384	29.4
5	JESSICA	347	0.9	2,203	5.7	55	BRITTANY	105	0.3	11,489	29.6
6	TAYLOR	337	0.9	2,540	6.6	56	DESTINY	105	0.3	11,594	29.9
7	EMMA	334	0.9	2,874	7.4	57	STEPHANIE	104	0.3	11,698	30.2
8	ALEXIS	320	0.8	3,194	8.2	58	SARA	102	0.3	11,800	30.5
9	ELIZABETH	307	0.8	3,501	9.0	59	SHELBY	101	0.3	11,901	30.7
10	SARAH	306	0.8	3,807	9.8	60	GABRIELLE	99	0.3	12,000	31.0
11	ASHLEY	298	0.8	4,105	10.6	61	MIKAYLA	98	0.3	12,098	31.2
12	OLIVIA	290	0.7	4,395	11.3	62	PAIGE	98	0.3	12,196	31.5
13	ABIGAIL	283	0.7	4,678	12.1	63	DANIELLE	95	0.2	12,291	31.7
14	MEGAN	273	0.7	4,951	12.8	64	ANGELA	94	0.2	12,385	32.0
15	ALYSSA	256	0.7	5,207	13.4	65	ZOE	94	0.2	12,479	32.2
16	GRACE	254	0.7	5,461	14.1	66	KATELYN	93	0.2	12,572	32.4
17	ANNA	239	0.6	5,700	14.7	67	AMBER	90	0.2	12,662	32.7
18	KAYLA	231	0.6	5,931	15.3	68	MICHELLE	87	0.2	12,749	32.9
19	LAUREN	227	0.6	6,158	15.9	69	ERIN	86	0.2	12,835	33.1
20	SYDNEY	218	0.6	6,376	16.5	70	FAITH	86	0.2	12,921	33.3
21	RACHEL	216	0.6	6,592	17.0	71	KIMBERLY	86	0.2	13,007	33.6
22	NATALIE	205	0.5	6,797	17.5	72	MAYA	85	0.2	13,092	33.8
23	HAILEY	204	0.5	7,001	18.1	73	AUTUMN	84	0.2	13,176	34.0
24	NICOLE	194	0.5	7,195	18.6	74	KELSEY	84	0.2	13,260	34.2
25	VICTORIA	189	0.5	7,384	19.1	75	ISABEL	83	0.2	13,343	34.4
26	JENNIFER	184	0.5	7,568	19.5	76	MOLLY	83	0.2	13,426	34.6
27	JASMINE	176	0.5	7,744	20.0	77	KATIE	82	0.2	13,508	34.9
28	AMANDA	175	0.5	7,919	20.4	78	KATHRYN	81	0.2	13,589	35.1
29	SOPHIA	170	0.4	8,089	20.9	79	AMY	80	0.2	13,669	35.3
30	ALEXANDRA	167	0.4	8,256	21.3	80	KYLIE	80	0.2	13,749	35.5
31	KATHERINE	166	0.4	8,422	21.7	81	CASSANDRA	79	0.2	13,828	35.7
32	JULIA	162	0.4	8,584	22.2	82	MARY	78	0.2	13,906	35.9
33	BRIANNA	155	0.4	8,739	22.6	83	MARISSA	77	0.2	13,983	36.1
34	ISABELLA	153	0.4	8,892	22.9	84	ISABELLE	76	0.2	14,059	36.3
35	KAITLYN	150	0.4	9,042	23.3	85	MELISSA	75	0.2	14,134	36.5
36	MORGAN	144	0.4	9,186	23.7	86	CHEYENNE	74	0.2	14,208	36.7
37	SAVANNAH	142	0.4	9,328	24.1	87	DIANA	74	0.2	14,282	36.9
38	CHLOE	140	0.4	9,468	24.4	88	LEAH	74	0.2	14,356	37.0
39	MACKENZIE	140	0.4	9,608	24.8	89	RILEY	74	0.2	14,430	37.2
40	HALEY	137	0.4	9,745	25.1	90	ANDREA	73	0.2	14,503	37.4
41	MARIA	135	0.3	9,880	25.5	91	LILLIAN	73	0.2	14,576	37.6
42	SIERRA	130	0.3	10,010	25.8	92	ALICIA	72	0.2	14,648	37.8
43	JORDAN	129	0.3	10,139	26.2	93	CASSIDY	72	0.2	14,720	38.0
44	MADLINE	126	0.3	10,265	26.5	94	CHRISTINA	72	0.2	14,792	38.2
45	ALLISON	119	0.3	10,384	26.8	95	ALEXANDRIA	71	0.2	14,863	38.4
46	REBECCA	117	0.3	10,501	27.1	96	ALEXA	70	0.2	14,933	38.5
47	BAILEY	116	0.3	10,617	27.4	97	LAURA	70	0.2	15,003	38.7
48	MAKAYLA	114	0.3	10,731	27.7	98	SOPHIE	70	0.2	15,073	38.9
49	KAYLEE	113	0.3	10,844	28.0	99	JADE	69	0.2	15,142	39.1
50	COURTNEY	110	0.3	10,954	28.3	100	JAMIE	69	0.2	15,211	39.3

### Appendix E. Top 100 Baby Names of Boys, 1999

Rank	First Name	N	%	Cumulative		Rank	First Name	N	%	Cumulative	
				N	%					N	%
1	JACOB	729	1.8	729	1.8	51	JACK	173	0.4	15,902	39.0
2	MICHAEL	520	1.3	1,249	3.1	52	CHASE	172	0.4	16,074	39.4
3	JOSHUA	509	1.2	1,758	4.3	53	KEVIN	167	0.4	16,241	39.8
4	ANDREW	486	1.2	2,244	5.5	54	RILEY	166	0.4	16,407	40.2
5	MATTHEW	467	1.1	2,711	6.6	55	JASON	162	0.4	16,569	40.6
6	ALEXANDER	462	1.1	3,173	7.8	56	EVAN	159	0.4	16,728	41.0
7	AUSTIN	461	1.1	3,634	8.9	57	SPENCER	158	0.4	16,886	41.4
8	TYLER	455	1.1	4,089	10.0	58	ADAM	154	0.4	17,040	41.7
9	RYAN	440	1.1	4,529	11.1	59	SEAN	152	0.4	17,192	42.1
10	DANIEL	419	1.0	4,948	12.1	60	COLE	151	0.4	17,343	42.5
11	DAVID	417	1.0	5,365	13.1	61	LUKE	144	0.4	17,487	42.8
12	NICHOLAS	400	1.0	5,765	14.1	62	BLAKE	143	0.4	17,630	43.2
13	JOSEPH	388	1.0	6,153	15.1	63	ERIC	143	0.4	17,773	43.5
14	BRANDON	384	0.9	6,537	16.0	64	IAN	143	0.4	17,916	43.9
15	ZACHARY	369	0.9	6,906	16.9	65	SETH	141	0.3	18,057	44.2
16	BENJAMIN	367	0.9	7,273	17.8	66	BRIAN	138	0.3	18,195	44.6
17	DYLAN	361	0.9	7,634	18.7	67	JESSE	134	0.3	18,329	44.9
18	NATHAN	360	0.9	7,994	19.6	68	GARRETT	132	0.3	18,461	45.2
19	SAMUEL	337	0.8	8,331	20.4	69	DEVIN	128	0.3	18,589	45.5
20	ANTHONY	324	0.8	8,655	21.2	70	MASON	127	0.3	18,716	45.8
21	WILLIAM	324	0.8	8,979	22.0	71	STEVEN	126	0.3	18,842	46.2
22	CHRISTOPHER	323	0.8	9,302	22.8	72	TIMOTHY	125	0.3	18,967	46.5
23	JUSTIN	315	0.8	9,617	23.6	73	JUAN	121	0.3	19,088	46.8
24	KYLE	314	0.8	9,931	24.3	74	TAYLOR	117	0.3	19,205	47.0
25	NOAH	306	0.7	10,237	25.1	75	JACKSON	116	0.3	19,321	47.3
26	CAMERON	301	0.7	10,538	25.8	76	JEREMY	116	0.3	19,437	47.6
27	JORDAN	285	0.7	10,823	26.5	77	CHARLES	115	0.3	19,552	47.9
28	JAMES	284	0.7	11,107	27.2	78	TRISTAN	112	0.3	19,664	48.2
29	ETHAN	281	0.7	11,388	27.9	79	PATRICK	110	0.3	19,774	48.4
30	JONATHAN	278	0.7	11,666	28.6	80	BRYCE	107	0.3	19,881	48.7
31	CHRISTIAN	268	0.7	11,934	29.2	81	CARLOS	107	0.3	19,988	49.0
32	JOHN	263	0.6	12,197	29.9	82	GAVIN	105	0.3	20,093	49.2
33	HUNTER	238	0.6	12,435	30.5	83	LUIS	103	0.3	20,196	49.5
34	ROBERT	234	0.6	12,669	31.0	84	LUCAS	102	0.2	20,298	49.7
35	CONNOR	232	0.6	12,901	31.6	85	RICHARD	102	0.2	20,400	50.0
36	THOMAS	219	0.5	13,120	32.1	86	DAKOTA	101	0.2	20,501	50.2
37	CODY	204	0.5	13,324	32.6	87	JESUS	101	0.2	20,602	50.5
38	GABRIEL	202	0.5	13,526	33.1	88	WYATT	101	0.2	20,703	50.7
39	CALEB	197	0.5	13,723	33.6	89	MARK	100	0.2	20,803	51.0
40	JOSE	196	0.5	13,919	34.1	90	ADRIAN	95	0.2	20,898	51.2
41	LOGAN	193	0.5	14,112	34.6	91	AIDAN	95	0.2	20,993	51.4
42	AARON	188	0.5	14,300	35.0	92	COLTON	95	0.2	21,088	51.7
43	ISAAC	185	0.5	14,485	35.5	93	MAXWELL	95	0.2	21,183	51.9
44	NATHANIEL	185	0.5	14,670	35.9	94	LEVI	89	0.2	21,272	52.1
45	ELIJAH	181	0.4	14,851	36.4	95	BRENDAN	87	0.2	21,359	52.3
46	TREVOR	179	0.4	15,030	36.8	96	JEFFREY	87	0.2	21,446	52.5
47	ALEX	177	0.4	15,207	37.3	97	ALEJANDRO	86	0.2	21,532	52.7
48	ISAIAH	174	0.4	15,381	37.7	98	PARKER	86	0.2	21,618	53.0
49	JARED	174	0.4	15,555	38.1	99	CARSON	85	0.2	21,703	53.2
50	TANNER	174	0.4	15,729	38.5	100	TRAVIS	81	0.2	21,784	53.4

## Appendix F: Comparison Between Current and Previous Table Numbers

Table Numbers		
1980-1998 <sup>1</sup>	Current Table	Title
1	Overview Table 1	Live Births, Deaths, Infant Deaths, Maternal Deaths, and Fetal Deaths, 1910-1999
2	Natality Table 1	Births by Selected Topics, 1999
2A	Natality Table 1A	Residence, Mother's Race/Ethnicity by Sex
2B	Natality Table 1B	Residence, Child's Race/Ethnicity by Sex
2C	Natality Table 1C	Residence, Mother's Age Group by Sex
2D	Natality Table 1D	Residence, Order of Birth to Mother
2E	Natality Table 1E	Residence, Attendant at Birth
2F	Natality Table 1F	Residence, Maternal Smoking
2G	Natality Table 1G	Residence and Occurrence, Birth Weight in Grams by Sex
2H	Natality Table 1H	Residence and Occurrence, Live Births and Fetal Deaths by Month
2I	Natality Table 1I	Occurrence, Primary Method of Birth Delivery by Obstetric Procedures
2J	Natality Table 1J	Occurrence, Type of Place
3	Natality Table 2	Live Births to Residents by Birth Weight in Grams by Mother's Race/Ethnicity, 1999
4	Natality Table 3	Live Births to Residents by Birth Weight in Grams by Child's Race/Ethnicity, 2 1999
5	Natality Table 4	Live Births to Residents by Birth Weight in Grams by Mother's Age, 1999
6	Natality Table 5	Live Births to Residents by Month Prenatal Care Began by Mother's Age, 1999
7	Natality Table 6	Live Births to Residents by Number of Prenatal Visits by Month Care Began, 1999
8	Natality Table 7	Live Births by Sex and Place of Residence and by Place of Occurrence, 1999
9	Natality Table 8	Live Births by Mother's Age Group by Place of Residence, 1999
10	Natality Table 9	Live Births to Single Mothers by Mother's Age Group by Place of Residence, 1999
11	Natality Table 10	Live Births by Mother's Race/Ethnicity by Place of Residence, 1999
12	Natality Table 11	Live Births by Child's Race/Ethnicity <sup>1</sup> by Place of Residence, 1999
13	Natality Table 12	Live Births by Month by Place of Residence, 1999
14	Natality Table 13	Live Births by Birth Weight in Grams by Place of Residence, 1999
15	Natality Table 14	Live Births by Month Prenatal Care Began by Place of Residence, 1999
16	Natality Table 15	Live Births with Malformations by Place of Residence, 1999
17	Natality Table 16	Live Births by Maternal Smoking During Pregnancy
18	Natality Table 17	Live Births by Institutions by Place of Occurrence, 1999
19	Natality Table 18	Live Births, County of Residence by County of Occurrence, 1999
20A	Mortality Table 1	Deaths to Residents by Race/Ethnicity and Sex, 1999
20B	Mortality Table 2	Deaths to Residents by Age and Ethnicity, 1999 (Note: 1980-1998 tables have infants only)
20C	Mortality Table 3	Deaths to Residents by Age and Sex, 1999
20D	Mortality Table 4	Life Expectancy of Residents by Age and Sex, 1999
20E	Mortality Table 5A	Leading Causes of Death for Residents, 1999 - All Ages
20F	Mortality Table 5B	Leading Causes of Death for Residents, 1999 - Infants (Age < 1 Year)
20G	Mortality Table 6	Deaths to Residents and by Occurrence by Month of Death, 1999
20H	Mortality Table 7	Deaths to Residents by Marital Status and Sex, 1999
20I	Mortality Table 8	Deaths by Occurrence by Type of Place
n/a	Mortality Table 9	Autopsy by Age and Manner of Death, 1999
21	Mortality Table 10	Deaths to Residents by Leading Causes and Age Group by Sex, 1999
22	Mortality Table 11A	Deaths to Residents With Crude Rates by Selected Causes by Sex, 1999
22	Mortality Table 11B	Deaths to Residents With Age-Adjusted Rates by Selected Causes by Sex, 1999
23	Mortality Table 12	Deaths to Residents Due to Malignant Neoplasms by Primary Site by Sex, 1999
24	Mortality Table 13	Deaths to Residents by External Causes by National Safety Council Place of Injury Category
n/a	Mortality Table 14	Deaths to Residents by External Causes, 1999
n/a	Mortality Table 15	Deaths to Residents Due to Firearms by Type of Firearm and Intent, 1999
n/a	Mortality Table 16	Deaths to Residents Due to Poisoning by Intent and Substance, 1999
25	Mortality Table 17A	Deaths by Place of Residence and Occurrence, 1999
n/a	Mortality Table 17B	Deaths by Place of Residence, 1997-1999 and 1999 Listed by Age-Adjusted Rate for 1997-1999
26	Mortality Table 18	Deaths by Sex and Race/Ethnicity by Place of Residence, 1999

<sup>1</sup>From *Washington State Vital Statistics Reports, 1980-1998*

## Appendix F: Comparison Between Current and Previous Table Numbers

Table Numbers		
1980-1998 <sup>1</sup>	Current Table	Title
27	Mortality Table 19	Deaths by Age Group by Place of Residence, 1999
28	Mortality Table 20	Deaths by Month of Death by Place of Residence, 1999
29	Mortality Table 21A	Deaths by Selected Diseases by Place of Residence, 1999
29	Mortality Table 21B	Deaths by Selected Diseases by Place of Residence, 1999
29	Mortality Table 21C	Deaths by Selected Diseases by Place of Residence, 1999
n/a	Mortality Table 22	Deaths by Drug or Alcohol Induced Causes by Place of Residence, 1999
30A	Mortality Table 23A	Deaths Due to Malignant Neoplasm by Primary Site by Place of Residence, 1999
30B	Mortality Table 23B	Deaths Due to Malignant Neoplasm by Primary Site by Place of Residence, 1999
31	n/a	
32A	Mortality Table 24A	Deaths by Selected Accidents by Place of Residence, 1999
32B	Mortality Table 24B	Deaths by Selected Accidents by Place of Residence, 1999
33	Mortality Table 25	Deaths by External Causes by Place of Residence, 1999
34	n/a	
35	Mortality Table 26	Deaths by Selected Accidents for Residents by Place Where Injury Occurred, 1999
36	Mortality Table 27	Deaths by External Cause for Residents by Place Where Injury Occurred, 1999
37	Mortality Table 28	Deaths by Type of Place by Place of Occurrence, 1999
n/a	Mortality Table 29	Infant (Age < 1 Year) Mortality to Residents by Birth Weight and Age, 1999
38A	Mortality Table 30A	Infant (Age < 1 Year) Mortality to Residents by Cause by Age and Sex, 1999
38B	Mortality Table 30B	Infant (Age < 1 Year) Mortality to Residents by Cause by Age and Sex, 1999
39	Mortality Table 31	Infant (Age < 1 Year) Mortality by Selected Causes by Place of Residence, 1999
40	Mortality Table 32	Infant (Age < 1 Year) Deaths by Mother's Race/Ethnicity by Place of Residence, 1999
41	Mortality Table 33	Infant (Age < 1 Year) Deaths by Child's Race/Ethnicity by Residence, 1999
42	Mortality Table 34	Infant (Age < 1 Year) Deaths by Mother's Age Group by Place of Residence, 1999
43	Mortality Table 35	Fetal Deaths, Perinatal, Neonatal and Infant Mortality by Place of Residence, 1999
44	n/a	
45	Mortality Table 36	Fetal Deaths by Mother's Age Group by Place of Residence, 1999
46	Mortality Table 37	Fetal Mortality to Residents by Cause, 1999
47	Mortality Table 38	Fetal Mortality to Residents by Weight in Grams by Sex, 1999
48	Marriage Table 1	Marriages by County of Occurrence and County of Residence, 1999
49	Marriage Table 2	Marriages by Woman's Age and County where Ceremony was Performed, 1999
50	Marriage Table 3	Marriages by Man's Age and County where Ceremony was Performed, 1999
51	Divorce Table 1	Divorces and Annulments by County of Decree and County of Residence, 1999
52	Divorce Table 2	Divorces, Annulments, and Legal Separations by County of Decree, 1999
53	Divorce Table 3	Divorces and Annulments by Wife's Age and County of Decree, 1999
54	Divorce Table 4	Divorces and Annulments by Husband's Age and County of Decree, 1999
55	Divorce Table 5	Divorces and Annulments by Number of Children

<sup>1</sup>From *Washington State Vital Statistics Reports, 1980-1998*



## **Appendix G**

### **Sample Certificates**

**Live Birth, Death, Fetal Death,  
Marriage and Divorce**





222473



146

LOCAL FILE NUMBER

CERTIFICATE OF LIVE BIRTH

STATE FILE NUMBER

1. CHILD'S NAME First Middle LAST 2. SEX (M/F) 3. DATE OF BIRTH (MO, DAY, YR) 4. TIME OF BIRTH 5. TYPE OF BIRTHPLACE (SPECIFY TYPE) 6. NAME OF FACILITY / IF NOT A FACILITY ENTER NAME OF PLACE AND ADDRESS 7. CITY / TOWN / LOCATION 8. COUNTY OF BIRTH 9. I CERTIFY THAT THIS CHILD WAS BORN ALIVE AT THE PLACE AND TIME AND ON THE DATE STATED. 10. DATE SIGNED (MO, DAY, YR) 11. ATTENDANT'S NAME AND TITLE (If other than certifier) (Type or Print) Signature X 12. CERTIFIER - NAME AND TITLE (Type or print) 13. ATTENDANT'S MAILING ADDRESS (street / box no., city, state, ZIP code) 14. FATHER'S NAME First Middle Last 15. DATE OF BIRTH (MO, DAY, YR) 16. STATE OF BIRTH (If not USA give country) 17. MOTHER'S NAME First Middle MAIDEN 18. DATE OF BIRTH (MO, DAY, YR) 19. STATE OF BIRTH (If not USA give country) 20. MOTHER'S RESIDENCE (number and street) 21. CITY / TOWN / LOCATION 22. INSIDE CITY LIMITS Yes No 23. COUNTY 24. STATE / ZIP CODE 25. HOW LONG AT CURRENT RESIDENCE? Yrs. Mos. 26. MOTHER'S MAILING ADDRESS (if different than residence) 27. NAME OF INFORMANT (Type or print) 28. RELATION TO CHILD 29. PARENT(S) REQUEST FOR SOCIAL SECURITY NUMBER ISSUANCE (allow up to 6 months) 1 Yes 2 No 30. REGISTRAR (signature) X 31. DATE FILED BY LOCAL REGISTRAR 32. RECORD AMENDMENT (state registrar use only) DOCUMENTARY EVIDENCE APPROVED BY DATE ITEM 33. FATHER'S SOCIAL SECURITY NUMBER 34. MOTHER'S SOCIAL SECURITY NUMBER

CONFIDENTIAL INFORMATION FOR MEDICAL AND HEALTH USE ONLY - DETACHED FROM CERTIFICATE BEFORE PERMANENT FILING

35. OF HISPANIC ORIGIN OR DESCENT? If yes, specify: Mexican, Puerto Rican, Spanish, etc. 36. RACE (American Indian, White, Black, Asian/Pacific Islander (Specify subgroup), etc.) 37. OCCUPATION (Worked during last year) (registered nurse, paraprofessional, manager) 38. TYPE OF BUSINESS OR INDUSTRY (journal, newspaper publishing) 39. EDUCATION (specify only highest grade completed) Elementary / HS (9-12); College (1-4 or 5+) 35a. FATHER 1 Yes 2 No Specify: 36a. 37a. 38a. 39a. 35b. MOTHER 1 Yes 2 No Specify: 36b. 37b. 38b. 39b. 40. OF HISPANIC ORIGIN OR DESCENT? If yes, specify: Mexican, Puerto Rican, Spanish, etc. 41. RACE (American Indian, White, Black, Asian/Pacific Islander (Specify subgroup), etc.) 1 Yes 2 No Specify: 42. PRIOR LIVE BIRTHS (Do not include this birth) NONE NOW LIVING NOW DEAD NUMBER DATE LAST LIVE BIRTH (MO, YR) 43. OTHER TERMINATIONS (Not live births) NONE SPONTANEOUS INDUCED (Specify gest. age) 44. TOTAL PRIOR PREGNANCIES 45. CLINICAL ESTIMATE OF GESTATION (WEEKS) 46. DATE LAST NORMAL MENSES BEGAN (MO, DAY, YR) 47. IS MOTHER MARRIED? 1 YES 2 NO 48. MONTH OF PREGNANCY PRENATAL CARE BEGAN (1st, 2nd, 3rd, etc) 49. TOTAL NUMBER OF PRENATAL VISITS (If none, enter 0) 50. PRINCIPAL SOURCE OF PAYMENT FOR PRENATAL CARE 1 Medicaid 2 Self pay 3 Commercial 4 Charity care 5 UNK 51. DURING PREGNANCY MOTHER PARTICIPATED IN 1 WVC 2 First Steps 3 AFDC 4 Services from Local Health Dept. 52. DID MOTHER SMOKE AT ANY TIME DURING PREGNANCY? 1 YES 2 NO Average no. cigarettes per day? 53. PLURALITY - Single, Twin, Triplet, etc. (Specify) 54. IF NOT SINGLE BIRTH - born 1st, 2nd, 3rd, etc. (Specify) 55. BIRTH WEIGHT (lbs, oz) 56. APGAR SCORE (1 min, 5 min) 57. INFANT TRANSFERRED TO ANOTHER FACILITY? 1 YES 2 NO 3 UNK. 58. MOTHER TRANSFERRED AFTER ATTEMPTED DELIVERY (Type, room, birth Cr) 1 YES 2 NO 3 Other

CHECK ALL BOXES IN EACH COLUMN THAT APPLY

59. MEDICAL RISK FACTORS FOR THIS PREGNANCY

- 1. Anemia (Hct. <30 / Hgb. <10)
2. Cardiac disease
3. Acute or chronic lung disease
4. Diabetes, Gest. Estab.
5. Genital herpes - active
6. Polyhydramnios
7. Oligohydramnios
8. Hemoglobinopathy
9. Hypertension, chronic
10. Hypertension, pregnancy-associated
11. Eclampsia
12. Incompetent cervix
13. Previous infant 4000 + grams
14. Previous preterm or small-for-gestational-age infant
15. Renal disease
16. Rh sensitization
17. Uterine bleeding - trimester
18. Hepatitis B - HBsAg Positive
19. Syphilis
20. None
21. Other (specify)

60. OTHER RISK FACTORS FOR THIS PREGNANCY

- 1. Alcohol use during pregnancy? Yes No Av. No. drinks per wk?
2. Weight gained during pregnancy lbs.
3. Weight before pregnancy lbs.
61. OBSTETRIC PROCEDURES
1. Amniocentesis - If yes, specify trimesters
2. Electronic fetal monitoring
3. Induction of labor
4. Stimulation of labor
5. Tocolysis

- 62. METHOD OF DELIVERY
1. Vaginal
2. Vaginal birth after previous C-section
3. Primary C-section
4. Repeat C-section with labor no labor
6. Forceps
7. Vacuum extraction
9. Other (specify)
63. COMPLICATIONS OF LABOR AND/OR DELIVERY
1. Febrile (>100°F or 38°C)
2. Meconium, moderate / heavy
3. Premature rupture of membrane (>12 hrs)
4. Abruptio placenta
5. Placenta previa
6. Other excessive bleeding
7. Seizures during labor
8. Precipitous labor (<3 hrs)
9. Prolonged labor (>20 hrs)
10. Dysfunctional labor
11. Breech / Malpresentation
12. Cephalopelvic disproportion
13. Cord prolapse
14. Anesthetic complications
15. Fetal distress
16. Nuchal cord
17. None
18. Other (specify)

(CONTINUED NEXT COLUMN)

- 64. ABNORMAL CONDITIONS OF THE NEWBORN
1. Anemia (Hct <39 / Hgb. <13)
2. Birth injury
3. Fetal alcohol syndrome
4. Hyaline membrane disease/RDS
5. Meconium aspiration syndrome
6. Drug withdrawal syndrome in newborn
7. Assisted ventilation < 30 min.
8. Assisted ventilation > 30 min.
9. Seizures
10. None
11. Other (specify)
65. CONGENITAL ANOMALIES OF CHILD
1. Anencephalus
2. Spina bifida / Meningocele
3. Hydrocephalus
4. Microcephalus
5. Other central nervous system anomalies (specify)
6. Heart malformations
7. Other circulatory / respiratory anomalies (specify)
8. Rectal atresia / stenosis
9. Tracheo-esophageal fistula / Esophageal atresia
10. Omphalocele / Gastroschisis
11. Other gastrointestinal anomalies (specify)
12. Malformed genitalia
13. Renal agenesis
14. Other urogenital anomalies (specify)
15. Cleft lip / palate
16. Polydactyly / Syndactyly / Adactyly
17. Club foot
18. Diaphragmatic hernia
19. Other musculoskeletal / integumental anomalies (specify)
20. Down's syndrome
21. Other chromosomal anomalies (specify)
22. None
23. Other anomalies (specify)

- 66. OTHER RISK FACTORS FOR THIS PREGNANCY
1. Alcohol use during pregnancy? Yes No Av. No. drinks per wk?
2. Weight gained during pregnancy lbs.
3. Weight before pregnancy lbs.
67. OBSTETRIC PROCEDURES
1. Amniocentesis - If yes, specify trimesters
2. Electronic fetal monitoring
3. Induction of labor
4. Stimulation of labor
5. Tocolysis

(CONTINUED NEXT COLUMN)

FOR SPECIFIC ITEM INSTRUCTIONS SEE HANDBOOK

TYPE OR PRINT IN PERMANENT BLACK INK



146

LOCAL FILE NUMBER

CERTIFICATE OF DEATH

STATE FILE NUMBER

1. NAME First Middle Last *				2. SEX (M / F)		3. DEATH DATE (Mo, Day, Yr)							
4. AGE LAST BIRTH-DAY (Yrs)		5. UNDER 1 YEAR MOS DAYS		6. UNDER 1 DAY HOURS MINS		7. BIRTHDATE (Mo, Day, Yr)		8. BIRTHPLACE (City, State or Foreign Country)		9. WAS DECEDENT EVER IN U.S. ARMED FORCES? (Yes / No)		10. COUNTY OF DEATH	
11. CITY, TOWN OR LOCATION OF DEATH						12. PLACE OF DEATH— <input checked="" type="checkbox"/> BOX FOR PLACE THEN GIVE ADDRESS OR INSTITUTION NAME 1. <input type="checkbox"/> HOME 2. <input type="checkbox"/> IN TRANSPORT 3. <input type="checkbox"/> EMERG. RM/OUT PTN 4. <input type="checkbox"/> HOSP. 5. <input type="checkbox"/> NUR HOME 6. <input type="checkbox"/> OTHER PLACE						13. SMOKING IN LAST 15 YEARS? (Yes / No)	
14. MARITAL STATUS—Married, Never Married, Widowed, Divorced (Specify)				15. SURVIVING SPOUSE (if wife, give maiden name)				16. SOCIAL SECURITY NO.		17. DECEDENT'S EDUCATION (Specify only highest grade completed) Elementary/Secondary (0-12) College (1-4 or 5+)			
18. USUAL OCCUPATION (Give kind of work done during most of working life. DO NOT USE RETIRED)				19. KIND OF BUSINESS OR INDUSTRY				20. Was Decedent of Hispanic origin or descent? (Ancestry) (Specify Yes or No. If Yes, specify Cuban, Mexican, Puerto Rican, etc.) (Yes / No) Specify:				21. RACE (Specify)	
22. RESIDENCE—NUMBER AND STREET				23. CITY/TOWN, OR LOCATION		24. INSIDE CITY LIMITS? (Yes / No)		25A. COUNTY		25B. LENGTH OF TIME IN STATE RESID. CO.		27. ZIP CODE	
28. FATHER'S NAME—FIRST, MIDDLE, LAST						29. MOTHER'S NAME—FIRST, MIDDLE, MAIDEN SURNAME							
30. INFORMANT—NAME				31. MAILING ADDRESS STREET OR RFD NO. CITY OR TOWN STATE ZIP									
32. BURIAL/CREMATION REMOVAL, OTHER (Specify)		33. DATE (Mo, Day, Yr)		34. CEMETERY/CREMATORY—NAME				35. LOCATION—CITY/TOWN, STATE					
36. FUNERAL DIRECTOR SIGNATURE <b>X</b>				37. NAME OF FACILITY				38. ADDRESS OF FACILITY					
TO BE COMPLETED ONLY BY <b>CERTIFYING PHYSICIAN</b>						TO BE COMPLETED ONLY BY <b>MEDICAL EXAMINER OR CORONER</b>							
39. <b>TO THE BEST OF MY KNOWLEDGE</b> , DEATH OCCURRED AT THE TIME, DATE AND PLACE AND WAS DUE TO THE CAUSE(S) STATED. SIGNATURE AND TITLE <b>X</b>						43. ON THE BASIS OF EXAMINATION AND/OR INVESTIGATION, IN MY OPINION DEATH OCCURRED AT THE TIME, DATE AND PLACE AND WAS DUE TO THE CAUSE(S) STATED. SIGNATURE AND TITLE <b>X</b>							
40. DATE SIGNED (Mo., Day, Yr)				43. HOUR OF DEATH (24 Hrs.)		44. DATE SIGNED (Mo., Day, Yr)				45. HOUR OF DEATH (24 Hrs)			
42. NAME AND TITLE OF ATTENDING PHYSICIAN IF OTHER THAN CERTIFIER (Type or Print)						46. PRONOUNCED DEAD (Mo., Day, Yr)				47. HOUR PRONOUNCED DEAD (24 Hrs.)			
48. NAME AND ADDRESS OF CERTIFIER—PHYSICIAN, MEDICAL EXAMINER OR CORONER (Type or Print)						49. ME/CORONER FILE NUMBER							
50. ENTER THE DISEASES, INJURIES, OR COMPLICATIONS WHICH CAUSED THE DEATH:													
IMMEDIATE CAUSE (Final disease or condition resulting in death)								INTERVAL BETWEEN ONSET AND DEATH					
DO NOT ENTER THE MANNER OF DYING, SUCH AS CAULDRON OR RESPIRATORY ARREST, SHOCK OR HEART FAILURE. LIST ONLY ONE CAUSE ON EACH LINE. Sequentially list conditions, in order leading to immediate cause. Enter UNDERLYING CAUSE (Disease or injury which initiated events resulting in death) LAST.								INTERVAL BETWEEN ONSET AND DEATH					
A. DUE TO, OR AS A CONSEQUENCE OF:								INTERVAL BETWEEN ONSET AND DEATH					
B. DUE TO, OR AS A CONSEQUENCE OF:								INTERVAL BETWEEN ONSET AND DEATH					
C. DUE TO, OR AS A CONSEQUENCE OF:								INTERVAL BETWEEN ONSET AND DEATH					
D. DUE TO, OR AS A CONSEQUENCE OF:								INTERVAL BETWEEN ONSET AND DEATH					
51. OTHER SIGNIFICANT CONDITIONS—CONDITIONS CONTRIBUTING TO DEATH BUT NOT RESULTING IN THE UNDERLYING CAUSE GIVEN ABOVE:						52. AUTOPSY? (Yes / No)		53. WAS CASE REFERRED TO MEDICAL EXAMINER OR CORONER? (Yes / No)					
54. ACC. SUICIDE, HOM., UNDET., OR PENDING INVEST. (Specify)		55. INJURY DATE (Mo, Day, Yr)		56. HOUR OF INJURY (24 Hrs)		57. DESCRIBE HOW INJURY OCCURRED:							
58. INJURY AT WORK? (Yes / No)		59. PLACE OF INJURY—AT HOME, FARM, STREET, FACTORY, OFFICE BLDG, ETC. (Specify)				60. LOCATION—STREET OR RFD NO., CITY/TOWN, STATE							
61. RECORD AMENDMENT (Registrar use only) ITEM DOCUMENTARY EVIDENCE REVIEWED BY DATE				62. REGISTRAR SIGNATURE <b>X</b>				63. DATE RECEIVED (Mo., Day, Yr.)					

SAMPLE

FOR INSTRUCTIONS SEE BACK AND HANDBOOK

DOH 110-008 (Rev. 7/91) (formerly DSHS 9-150)

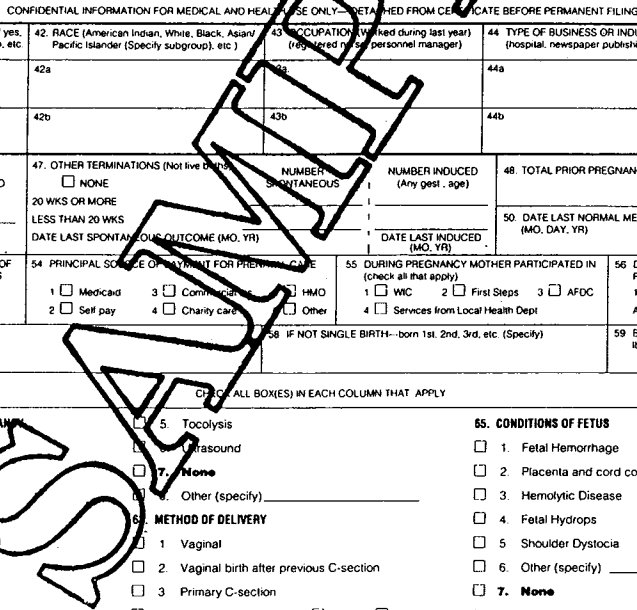
**A**

LOCAL FILE NUMBER

CERTIFICATE OF FETAL DEATH

STATE FILE NUMBER

1 FETUS NAME First Middle LAST 2 SEX (M / F) 3 DATE OF DELIVERY (MO, DAY, YR) 4 TIME OF DELIVERY
5 PLACE OF DELIVERY (Specify type) 6 NAME OF FACILITY / IF NOT A FACILITY ENTER NAME OF PLACE AND ADDRESS 7 CITY / TOWN / LOCATION 8 COUNTY OF DELIVERY
9 FATHER'S NAME First Middle Last 10 DATE OF BIRTH (MO, DAY, YR) 11 STATE OF BIRTH (if not USA give country)
12 MOTHER'S NAME First Middle MAIDEN 13 DATE OF BIRTH (MO, DAY, YR) 14 STATE OF BIRTH (if not USA give country)
15 MOTHER'S RESIDENCE (number and street) 16 CITY / TOWN / LOCATION 17 INSIDE CITY LIMITS Yes No 18 COUNTY 19 STATE / ZIP CODE
20 HOW LONG AT CURRENT RESIDENCE? Yrs Mos 21 REGISTRAR SIGNATURE X 22 DATE FILED BY REGISTRAR
23 BURIAL, CREMATION REMOVAL, OTHER (Specify) 24 DATE (MO, DAY, YR) 25 CEMETERY / CREMATORY - NAME 26 LOCATION - CITY / TOWN, STATE
27 FUNERAL DIRECTOR SIGNATURE X 28 NAME OF FACILITY 29 ADDRESS OF FACILITY
30 PART I (enter only one cause per line for (A), (B), and (C)) Fetal and/or Maternal condition directly causing fetal death A IMMEDIATE CAUSE 31 SPECIFY FETAL OR MATERNAL
Fetal and/or Maternal conditions, if any, giving rise to the immediate cause (A) stating the underlying cause last. B DUE TO, OR AS A CONSEQUENCE OF SPECIFY FETAL OR MATERNAL
C DUE TO, OR AS A CONSEQUENCE OF SPECIFY FETAL OR MATERNAL
32 PART II OTHER SIGNIFICANT CONDITIONS OF FETUS OR MOTHER - Conditions contributing to fetal death but not resulting in the underlying cause given above 33 FETUS DIED Before Labor 3 During Delivery 4 Unknown 34 AUTOPSY Yes No 35 Were autopsy findings used to complete cause of death? 1 Yes 2 No
36 I CERTIFY THAT THE STATED INFORMATION CONCERNING THIS FETUS IS TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF X 37 DATE SIGNED (MO, DAY, YR) 38 NAME, TITLE OF ATTENDANT AT DELIVERY IF OTHER THAN CERTIFIER (Type or Print)
39 CERTIFIER NAME AND TITLE (Type or Print) 40 ATTENDANT'S MAILING ADDRESS (Street, Box Number, City, State, ZIP Code)



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41 OF HISPANIC ORIGIN OR DESCENT? If yes, specify: Mexican, Puerto Rican, Spanish, etc. 42 RACE (American Indian, White, Black, Asian/Pacific Islander (Specify subgroup), etc.) 43 OCCUPATION (worked during last year) (registered nurse, personnel manager) 44 TYPE OF BUSINESS OR INDUSTRY (hospital, newspaper publishing) 45 EDUCATION (specify only highest grade completed) Elementary / HS (0-12), College (1-4 or 5+)
41a FATHER Specify: 1 Yes 2 No 42a 43a 44a 45a
41b MOTHER Specify: 1 Yes 2 No 42b 43b 44b 45b
46 PRIOR LIVE BIRTHS (Do not include this birth) NONE NOW LIVING NOW DEAD 47 OTHER TERMINATIONS (Not live births) NONE 20 WKS OR MORE LESS THAN 20 WKS DATE LAST SPONTANEOUS OUTCOME (MO, YR) NUMBER INDUCED (Any gest. age) DATE LAST INDUCED (MO, YR) 48 TOTAL PRIOR PREGNANCIES 49 CLINICAL ESTIMATE OF GESTATION (WEEKS)
50 DATE LAST NORMAL MENSES BEGAN (MO, DAY, YR) 51 IS MOTHER MARRIED? 1 YES 2 NO
52 MONTH OF PREGNANCY PRENATAL CARE BEGAN (1st, 2nd, 3rd, etc.) 53 TOTAL NUMBER OF PRENATAL VISITS (if none, enter 0) 54 PRINCIPAL SOURCE OF PAYMENT FOR PRENATAL CARE 1 Medicaid 3 Convalescent 5 HMO 2 Self pay 4 Charity care 6 Other 55 DURING PREGNANCY MOTHER PARTICIPATED IN (check all that apply) 1 WIC 2 First Steps 3 AFDC 4 Services from Local Health Dept 56 DID MOTHER SMOKE AT ANY TIME DURING PREGNANCY? 1 YES 2 NO Average no. cigarettes per day?
57 PLURALITY—Single, Twin, Triplet, etc. (Specify) 58 IF NOT SINGLE BIRTH—born 1st, 2nd, 3rd, etc. (Specify) 59 BIRTH WEIGHT lbs ozs grams

60. MEDICAL RISK FACTORS FOR THIS PREGNANCY 1 Anemia (Hct <30 / High <10) 2 Cardiac disease 3 Acute or chronic lung disease 4 Diabetes, Gest Estab. 5 Genital herpes—active HX 6 Polyhydramnios 7 Oligohydramnios 8 Hemoglobinopathy 9 Hypertension, chronic 10 Hypertension, pregnancy-associated 11 Eclampsia 12 Incompetent cervix 13 Previous infant 4000 + grams 14 Previous preterm or small-for-gestational-age infant 15 Renal disease 16 Rh sensitization 17 Uterine bleeding - trimester 18 Syphilis 19 20. None 21 Other (specify)
61. OTHER RISK FACTORS FOR THIS PREGNANCY 1. Alcohol use during pregnancy? Yes No Av. No. drinks per wk? 2. Weight gained during pregnancy lbs. 3 Weight before pregnancy lbs.
62. OBSTETRIC PROCEDURES 1. Amniocentesis—if yes, specify trimesters 2 Electronic fetal monitoring 3 Induction of labor 4 Stimulation of labor
63. CHECK ALL BOXES IN EACH COLUMN THAT APPLY 5. Tocolysis 6. Ultrasound 7. None 8. Other (specify)
64. METHOD OF DELIVERY 1 Vaginal 2 Vaginal birth after previous C-section 3 Primary C-section 4 Repeat C-section with labor no labor 5 Forceps 6 Vacuum extraction 7 Hysterotomy / Hysterectomy 8 Other (specify)
65. COMPLICATIONS OF LABOR AND/OR DELIVERY 1 Febrile (>100°F or 38°C) 2 Meconium, moderate / heavy 3 Premature rupture of membrane (>12 hrs) 4 Abruptio placenta 5 Placenta previa 6 Other excessive bleeding 7 Seizures during labor 8 Precipitous labor (<3 hrs) 9 Prolonged labor (>20 hrs) 10 Dysfunctional labor 11 Breech / Malpresentation 12 Cephalopelvic disproportion 13 Cord prolapse 14 Anesthetic complications 15 Fetal distress 17. None 18. Other (specify)
66. CONDITIONS OF FETUS 1. Fetal Hemorrhage 2. Placenta and cord conditions (specify) 3. Hemolytic Disease 4. Fetal Hydrops 5. Shoulder Dystocia 6. Other (specify)
67. CONGENITAL MALFORMATIONS OR ANOMALIES OF FETUS 1. Anencephalus 2. Spina bifida / Meningocele 3. Hydrocephalus 4. Microcephalus 5. Other central nervous system anomalies (specify) 6. Heart malformations 7. Other circulatory / respiratory anomalies (specify) 8. Rectal atresia / stenosis 9. Tracheo-esophageal fistula / Esophageal atresia 10. Omphalocele / Gastroschisis 11. Other gastrointestinal anomalies (specify) 12. Malformed genitalia 13. Renal agenesis 14. Other urogenital anomalies (specify) 15. Cleft lip / palate 16. Polydactyly / Syndactyly / Adactyly 17. Club foot 18. Diaphragmatic hernia 19. Other musculoskeletal / integumental anomalies (specify) 20. Down's syndrome 21. Other chromosomal anomalies (specify) 22. None 23. Other anomalies (specify)



# CERTIFICATE OF MARRIAGE

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COUNTY OF LICENSE		DATE OF APPLICATION		STATE FILE NUMBER	
I CERTIFY THE PERSONS NAMED BELOW WERE MARRIED ON ●●●		1. DATE (MO DAY YR)	2. COUNTY OF CEREMONY	3. TYPE OF CEREMONY <input type="checkbox"/> RELIGIOUS <input checked="" type="checkbox"/> CIVIL	4. DATE SIGNED (MO DAY YR)
5. OFFICIANT Signature <b>X</b>		6. OFFICIANT ADDRESS			
7. NAME FIRST MIDDLE LAST		12. INSIDE CITY LIMITS <input type="checkbox"/> Yes <input type="checkbox"/> No		13. BIRTHDATE (MO DAY YR)	14. BIRTH STATE (if not USA give country)
10. USUAL RESIDENCE (NUMBER AND STREET)		11. CITY/TOWN/LOCATION		13. COUNTY	14. STATE
15. FATHER'S FULL NAME		16. BIRTH STATE (if not USA give country)		17. MOTHER'S FULL MAIDEN NAME (First / Last)	
19. GROOM Signature <b>X</b>		20. DATE SIGNED (MO DAY YR)			
21. NAME FIRST MIDDLE LAST		22. MAIDEN NAME		23. BIRTHDATE (MO DAY YR)	24. BIRTH STATE (if not USA give country)
25. USUAL RESIDENCE (NUMBER AND STREET)		26. CITY/TOWN/LOCATION		27. INSIDE CITY LIMITS <input type="checkbox"/> Yes <input type="checkbox"/> No	28. COUNTY
30. FATHER'S FULL NAME		31. BIRTH STATE (if not USA give country)		32. MOTHER'S FULL MAIDEN NAME (First / Last)	
34. BRIDE Signature <b>X</b>		35. DATE SIGNED (MO DAY YR)			
36. WITNESS Signature <b>X</b>			37. WITNESS Signature <b>X</b>		
38. COUNTY AUDITOR Signature <b>X</b>				39. DATE RECEIVED (MO DAY YR)	

DOH 110-009 (Rev. 8/92)



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**CERTIFICATE OF DISSOLUTION  
DECLARATION OF INVALIDITY OF MARRIAGE  
OR LEGAL SEPARATION**

COURT FILE NUMBER

STATE FILE NUMBER

<b>DECREE</b>	1. CERTIFY THE MARRIAGE OF THE PERSONS NAMED BELOW WAS ORDERED AS A . . . .		1. <input type="checkbox"/> DISSOLUTION OF MARRIAGE <input type="checkbox"/> DECLARATION OF INVALIDITY <input type="checkbox"/> LEGAL SEPARATION	2. DATE OF ENTRY (MO DAY YR)	3. COUNTY OF DECREE
	4. CLERK OF SUPERIOR COURT Signature <b>X</b>				

**TO BE COMPLETED BY PETITIONER'S ATTORNEY OR PRO SE**

<b>HUSBAND</b>	5. NAME FIRST MIDDLE LAST			6. BIRTHDATE (MO DAY YR)	7. BIRTHPLACE (State or Foreign Country)
	8. USUAL RESIDENCE - STREET ADDRESS		9. CITY, TOWN, LOCATION	10. INSIDE CITY LIMITS <input type="checkbox"/> YES <input type="checkbox"/> NO	11. COUNTY

<b>WIFE</b>	13. NAME FIRST MIDDLE LAST			14. MAIDEN NAME	15. BIRTHDATE (MO DAY YR)	16. BIRTHPLACE (State or Foreign Country)
	17. USUAL RESIDENCE (NUMBER AND STREET)		18. CITY, TOWN, LOCATION	19. INSIDE CITY LIMITS <input type="checkbox"/> YES <input type="checkbox"/> NO	20. COUNTY	21. STATE

22. PLACE OF THIS MARRIAGE - COUNTY		23. STATE (IF NOT USA GIVE COUNTRY)		24. DATE OF THIS MARRIAGE (MO DAY YR)		25. NUMBER CHILDREN BORN ALIVE OF THIS MARRIAGE	
26. PETITIONER <input type="checkbox"/> HUSBAND <input type="checkbox"/> WIFE <input type="checkbox"/> BOTH <input type="checkbox"/> OTHER (Specify)							
27. NAME OF PETITIONER'S ATTORNEY / Pro Se			28. ADDRESS STREET		CITY OR TOWN		STATE ZIP

**Please Type or Print Clearly in Permanent Black Ink.**

DOH 110-005 (Rev. 5/95)





