

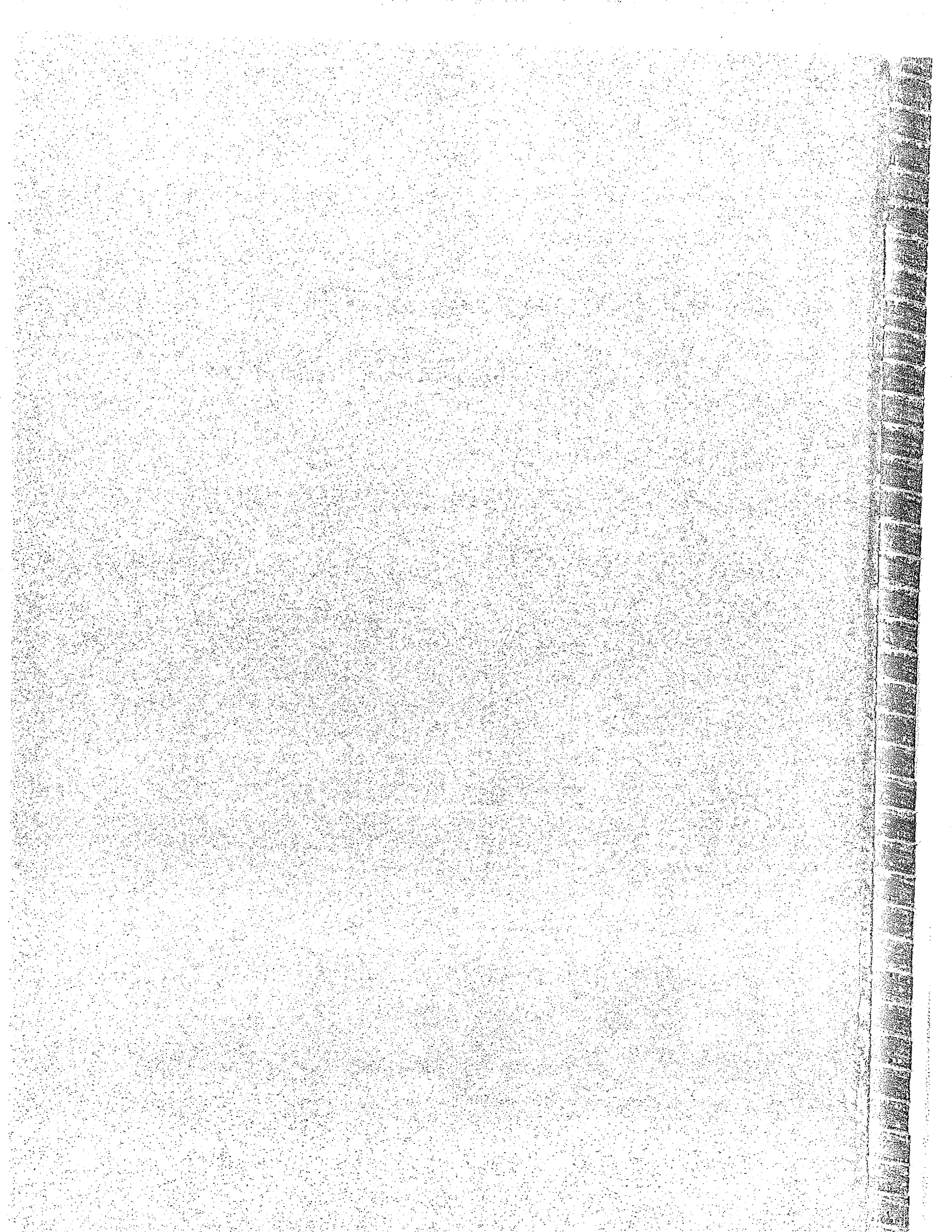
Washington State Vital Statistics 1998



Washington State Department of

Health

Center for Health Statistics
November 1999



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

218 births including:

- 8 to teens <18
- 5 to women aged 40+
- 61 to unmarried women
- 12 with low birth weight
- 39 by Cesarean section
- 30 to maternal smokers

114 marriages

78 divorces

117 deaths including:

- 31 due to heart disease
- 28 due to cancer
- 5 due to accidents
- 2 due to suicide

Washington State outperformed the nation¹ by experiencing a...

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

Washington State fell below the nation¹ by experiencing a...

- Higher crude and age-adjusted death rate from cerebrovascular disease
- Higher crude and age-adjusted death rate from suicide
- Higher crude and age-adjusted death rate from Alzheimer's disease

¹ National data reported in "Births and Deaths: Preliminary Data for 1998," *National Vital Statistics Reports*, Volume 47, Number 25 (October 5, 1999), available on the internet at http://www.cdc.gov/nchs/data/nvs47_25.pdf

- **Nearly 80,000 babies were born in 1998**
Washington women had 79,640 babies in 1998. Although the number of births has increased every year since 1995, the birth rate has changed very little since the state's population has also grown during this period.
- **Women in their 20's and early 30's had most births**
Three-quarters (75.1%) of 1998 births were to women aged 20-34. The 3 highest birth rates were 120.3 per 1,000 women aged 25-29 years, 113.5 for women 20-24, and 88.0 for women 30-34.
- **The percent low birth weight showed no change in the past year**
Low birth weight (<2500 grams) occurred in 5.6% of births in 1997 and 5.7% of births in 1998.
- **Births to unmarried mothers continued to increase over the decade**
The percentage of births to unmarried mothers increased from 22.3% in 1988 to 27.9% in 1998.
- **Nearly 43,000 residents died in 1998**
There were 42,585 deaths of Washington State residents in 1998. Although the number of deaths has increased fairly steadily over the past decade, there has been little change in the crude death rate since the state's population has also grown during this period.
- **Heart disease and cancer continued as the leading causes of death**
Ranking of the top 10 causes of death remains the same as it was in 1997. In addition, the percent distribution of deaths among the leading causes has changed very little.
- **The infant death rate has been at an all-time low for the past two years**
The infant death rate was 5.6 per 1,000 live births in 1997 and 5.7 in 1998. For comparison, the infant death rate a decade ago (1988) was 9.0 per 1,000 live births.
- **The marriage rate decreased while the divorce rate did not change in the past year**
The 1997 marriage rate was 7.6 per 1,000 population; the 1998 rate decreased to 7.3. The divorce rate was 5.1 per 1,000 population in 1997 and 5.0 in 1998.
- **Emily and Jacob continued as the most popular baby names**
The number of babies named Emily decreased to 572 from a high of 649 in 1997 while the number of babies named Jacob remained fairly steady at about 770.

Washington State
Vital Statistics 1998

November 1999



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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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<i>Page</i>	<i>Contents</i>
<i>iii</i>	<i>List of Tables</i>
<i>1</i>	<i>Introduction</i>
<i>2</i>	Washington Counties and County Seats
<i>3</i>	Source of Vital Statistics
<i>4</i>	How to Use Vital Statistics
<i>4</i>	Why Read this Section?
<i>4</i>	Issues in Using the Data
<i>5</i>	<i>Residence vs. occurrence</i>
<i>6</i>	<i>Numbers vs. rates</i>
<i>7</i>	<i>Standards for comparison of rates</i>
<i>7</i>	<i>Unknowns</i>
<i>8</i>	<i>Small numbers</i>
<i>9</i>	<i>Data quality</i>
<i>10</i>	<i>Confidentiality</i>
<i>10</i>	Additional Services
<i>11</i>	Annual Trends
<i>12</i>	Vital Statistics for Washington State Residents, 1910-1998
<i>15-45</i>	<i>Natality</i>
<i>47-104</i>	<i>Mortality</i>
<i>105-114</i>	<i>Marriage and Divorce</i>
<i>115</i>	<i>Appendices</i>
<i>117</i>	<i>Appendix A: Technical Appendix</i>
<i>117</i>	Sources of Data
<i>117</i>	Collection Year
<i>117</i>	Population
<i>117</i>	Classification of Data
<i>117</i>	Demographics

<i>Page</i>	<i>Contents (cont.)</i>
117	<i>Age</i>
118	<i>Race</i>
119	<i>Hispanic Origin</i>
120	<i>County of Residence</i>
121	<i>City of Residence</i>
122	Birth Risk Factors
122	<i>Low Birth Weight</i>
122	<i>Maternal Smoking</i>
123	<i>Malformations</i>
123	<i>Increase in Unknowns</i>
123	Cause of Death
123	<i>Underlying Cause of Death</i>
125	<i>Cause of Death Groupings</i>
126	<i>Alcohol-Related Cause of Death Categories</i>
126	<i>Maternal Death</i>
127	<i>Perinatal Death</i>
127	Marriage and Divorce Data
127	<i>Residence vs. Occurrence Data</i>
128	<i>Legal Separations</i>
128	<i>Court Orders</i>
128	<i>Number of Children</i>
128	Definitions
130	Rates and Ratios
131	<i>Appendix B: Birth Weight Conversion Table</i>
133	<i>Appendix C: Estimated Population, State of Washington</i>
134	<i>Appendix D: Estimated Population, Counties and Cities</i>
135	<i>Appendix E: Top 100 Baby Names</i>
137	<i>Appendix F: Sample Certificates</i>
139	<i>Certificate of Live Birth</i>
140	<i>Certificate of Death</i>
141	<i>Certificate of Fetal Death</i>
142	<i>Certificate of Marriage</i>
143	<i>Certificate of Dissolution</i>

<i>Page</i>	<i>List of Tables</i>
12	1. Live Births, Deaths, Infant Deaths, Maternal Deaths, and Fetal Deaths, 1910-1998
	<i>Nativity</i>
17	2. Births by Selected Topics, 1998
	Mother's Race/Ethnicity by Sex Child's Race/Ethnicity by Sex Mother's Age Group by Sex Order of Birth to Mother Attendant at Birth Maternal Smoking Birth Weight in Grams by Sex Live Births and Fetal Deaths by Month Primary Method of Birth Delivery by Obstetric Procedures Type of Place
20	3. Live Births to Residents by Birth Weight in Grams by Mother's Race/Ethnicity, 1998
20	4. Live Births to Residents by Birth Weight in Grams by Child's Race/Ethnicity, 1998
20	5. Live Births to Residents by Birth Weight in Grams by Mother's Age, 1998
21	6. Live Births to Residents by Month Prenatal Care Began by Mother's Age, 1998
21	7. Live Births to Residents by Number of Prenatal Visits by Month Care Began, 1998
22	8. Live Births by Sex and Place of Residence and by Place of Occurrence, 1998
24	9. Live Births by Mother's Age Group by Place of Residence, 1998
26	10. Live Births to Single Mothers by Mother's Age Group by Place of Residence, 1998
28	11. Live Births by Mother's Race/Ethnicity by Place of Residence, 1998
30	12. Live Births by Child's Race/Ethnicity by Place of Residence, 1998

<i>Page</i>	<i>List of Tables (cont.)</i>
32	13. Live Births by Month by Place of Residence, 1998
34	14. Live Births by Birth Weight in Grams by Place of Residence, 1998
36	15. Live Births by Month Prenatal Care Began by Place of Residence, 1998
38	16. Live Births with Malformations by Place of Residence, 1998
40	17. Live Births by Maternal Smoking During Pregnancy by Place of Residence, 1998
42	18. Live Births by Institutions by Place of Occurrence, 1998
44	19. Live Births, County of Residence by County of Occurrence, 1998
	<i>Mortality</i>
49	20. Deaths by Selected Topics, 1998 Race/Ethnicity by Sex Infant Deaths by Race/Ethnicity Age Group by Sex Life Expectancy by Age and Sex Leading Causes of Death Leading Causes of Death, Infant Mortality Month of Death Marital Status by Sex Type of Place
52	21. Deaths to Residents by Leading Causes and Age Group by Sex, 1998
54	22. Deaths to Residents by Selected Causes by Sex, 1998
56	23. Deaths to Residents Due to Malignant Neoplasm by Primary Site by Sex, 1998
57	24. Deaths to Residents by Non-Transport Causes by Place of Accident, 1998
58	25. Deaths by Place of Residence and Occurrence, 1998
60	26. Deaths by Sex and Race/Ethnicity by Place of Residence, 1998
62	27. Deaths by Age Group by Place of Residence, 1998

<i>Page</i>	<i>List of Tables (cont.)</i>
64	28. Deaths by Month of Death by Place of Residence, 1998
66	29a-b. Deaths by Selected Disease Conditions by Place of Residence, 1998
70	30a-b. Deaths Due to Malignant Neoplasm by Primary Site by Place of Residence, 1998
74	31. Deaths Due to Human Immunodeficiency Virus by Sex by Place of Residence, 1998
76	32. Deaths by Selected Accidents by Place of Residence, 1998
78	33. Deaths by External Causes by Place of Residence, 1998
80	34. Deaths Due to Human Immunodeficiency Virus by Sex by Place of Occurrence, 1998
82	35. Deaths by Selected Accidents by Place of Occurrence, 1998
84	36. Deaths by External Causes by Place of Occurrence, 1998
86	37. Deaths by Type of Place by Place of Occurrence, 1998
88	38a-b. Infant Mortality to Residents by Cause by Age and Sex, 1998
90	39. Infant Mortality by Selected Causes by Place of Residence, 1998
92	40. Infant Deaths by Mother's Race/Ethnicity by Place of Residence, 1998
94	41. Infant Deaths by Child's Race/Ethnicity by Place of Residence, 1998
96	42. Infant Deaths by Mother's Age Group by Place of Residence, 1998
98	43. Fetal Deaths, Perinatal, Neonatal and Infant Mortality by Place of Residence, 1998
100	44. Fetal Deaths, Perinatal, Neonatal and Infant Mortality by Place of Occurrence, 1998
102	45. Fetal Deaths by Mother's Age Group by Place of Residence, 1998
103	46. Fetal Mortality to Residents by Cause, 1998

Page ***List of Tables (cont.)***

104 47. Fetal Mortality to Residents by Weight in Grams by Sex, 1998

Marriage and Divorce

107 48. Marriages by County of Occurrence and County of Residence, 1998

108 49. Marriages by Woman's Age and County where Ceremony was Performed, 1998

109 50. Marriages by Man's Age and County where Ceremony was Performed, 1998

110 51. Divorces and Annulments by County of Decree and County of Residence, 1998

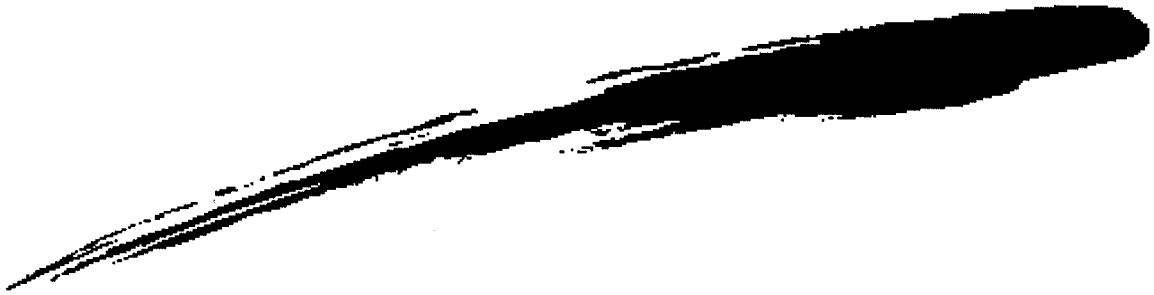
111 52. Divorces, Annulments, and Legal Separations by County of Decree, 1998

112 53. Divorces and Annulments by Wife's Age and County of Decree, 1998

113 54. Divorces and Annulments by Husband's Age and County of Decree, 1998

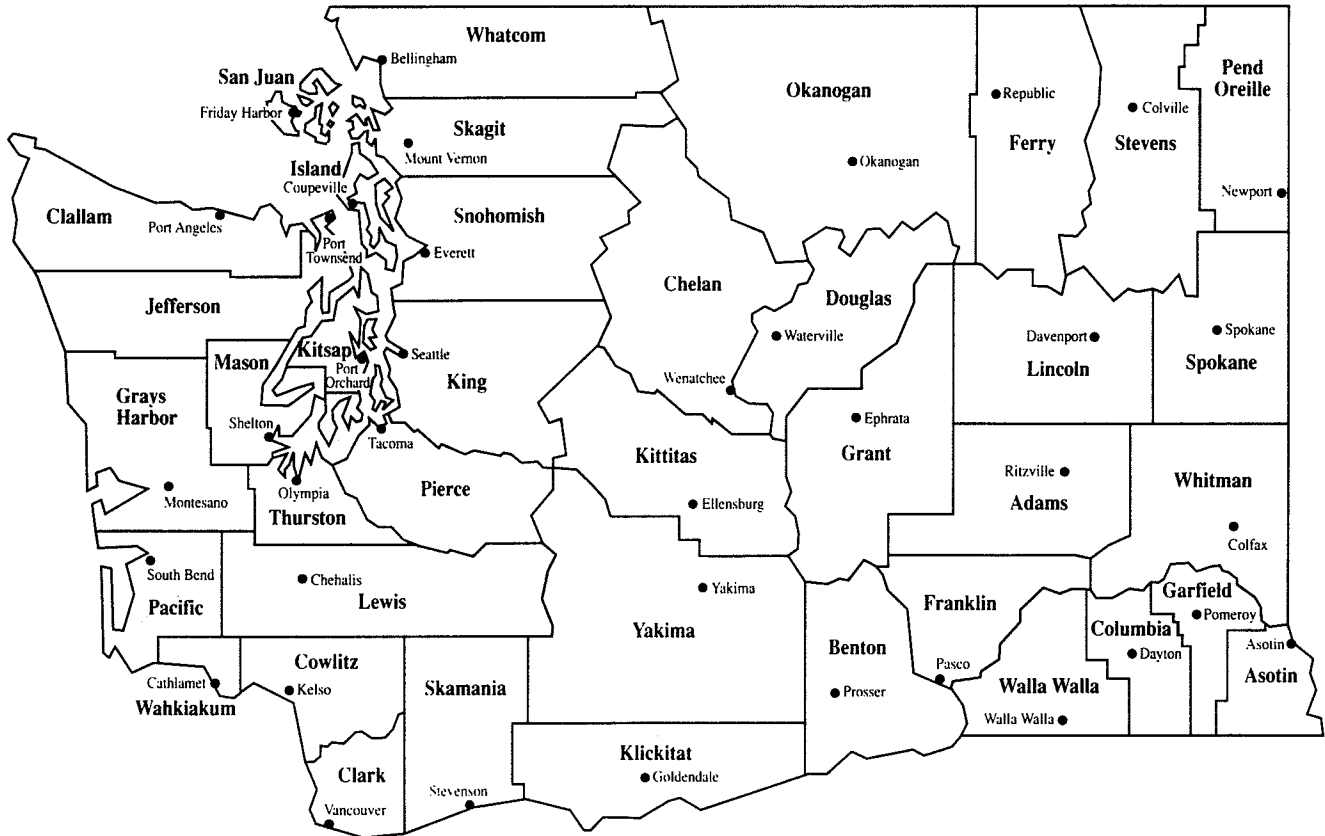
114 55. Divorces and Annulments by Number of Children and County of Wife's Residence, 1998

Introduction



Washington Counties

and County Seats



Introduction

Washington State Vital Statistics, 1998, 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 1998.

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.

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 Table 19 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.

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 Public Health Improvement Plan (PHIP) guidelines call for suppressing calculation of rates when the number of events is less than 5. 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.

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. Also, the new Electronic Birth Certificate (EBC) system makes it more difficult to enter "unknown" into the record.

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 F 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 1980-1998 in WORD, Excel, Wordperfect, and print text format. To order a copy of the CD-ROM, call (360) 236-4321.

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, 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 1980-1998.
- “Marriage Tables” or “Divorce Tables” for tables for 1991-1998.
- “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 1994-1998

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

Table 1 provides a historical context for interpreting 1998 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 1910-1998, 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.

**Table 1. Live Births, Deaths, Infant Deaths, Maternal Deaths, and Fetal Deaths
Washington Residents, 1910-1998**

Year	Population ¹	Live Births		Deaths		Infant Deaths		Maternal Deaths		Fetal Deaths	
		Number	Rate ²	Number	Rate ²	Number	Rate ³	Number ⁴	Rate ⁵	Number	Rate ³
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

**Table 1. Live Births, Deaths, Infant Deaths, Maternal Deaths, and Fetal Deaths
Washington Residents, 1910-1998**

Year	Population ¹	Live Births		Deaths		Infant Deaths		Maternal Deaths		Fetal Deaths	
		Number	Rate ²	Number	Rate ²	Number	Rate ³	Number ⁴	Rate ⁵	Number	Rate ³
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

¹Population figures for 1910-1950 ten year intervals and for 1950-1998 single years are from the Office of Financial Management, Forecasting Division, *State of Washington 1998 Population Trends*, October 1998.

²Rate per 1,000 population.

³Rate per 1,000 live births.

⁴1979-1988 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.

⁵Rate per 100,000 live births (change from previous reports).

Natality





Table 2. Births by Selected Topics, 1998

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

Race/Ethnicity	Total	Male	Female
State Total	79,640	40,853	38,787
White	66,579	34,108	32,471
African American	2,968	1,477	1,491
Native American	1,778	938	840
Japanese	316	177	139
Chinese	450	232	218
Filipino	977	524	453
Other Asian	3,666	1,924	1,742
Other	27	13	14
Unknown	2,879	1,460	1,419
Hispanic ¹	10,064	5,117	4,947

BIRA49M1

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

Race/Ethnicity	Total	Male	Female
State Total	79,640	40,853	38,787
White	63,966	32,784	31,182
African American	4,735	2,392	2,343
Native American	2,255	1,186	1,069
Japanese	355	202	153
Chinese	485	257	228
Filipino	1,030	512	518
Other Asian	4,301	2,247	2,054
Other	52	32	20
Unknown	2,461	1,241	1,220
Hispanic ¹	12,861	6,579	6,282

BIRA49M1

C. Residence, Mother's Age Group by Sex

Age	Total	Male	Female
State Total	79,640	40,853	38,787
Under 15	111	53	58
15 - 17	2,880	1,491	1,389
18 - 19	5,704	2,959	2,745
20 - 24	18,989	9,741	9,248
25 - 29	22,492	11,533	10,959
30 - 34	18,300	9,362	8,938
35 - 39	9,169	4,676	4,493
40 - 44	1,859	967	892
45 and Over	86	45	41
Unknown	50	26	24

BIRA49M2

D. Residence, Order of Birth to Mother

Order at Birth	Number	Percent ²
State Total	79,640	100.0
1st Child	31,545	39.6
2nd Child	24,781	31.1
3rd Child	11,893	14.9
4th Child	4,593	5.7
5th Child	1,740	2.1
6th Child	756	0.9
7th Child	360	0.4
8th Child	185	0.2
9th Child	102	0.1
10th or more	108	0.1
Unknown	3,577	4.4

BIRA49M3

E. Residence, Attendant at Birth

Attendant at Birth	Number	Percent ²
State Total	79,640	100.0
Hospital Administrator	38	0.0
MD	69,563	87.3
Licensed Midwife	917	1.1
Osteopath	1,391	1.7
Father	73	0.0
Certified Midwife	6,387	8.0
Nurse	478	0.6
Other Midwife	285	0.3
Other	501	0.6
Unknown	7	0.0

BIRA49M4

F. Residence, Maternal Smoking

Maternal Smoking	Number	Percent ²
State Total	79,640	100.0
Yes	11,015	13.8
No	64,469	81.0
Unknown	4,156	5.2

BIRA49M3

¹Persons of Hispanic Origin may be of any race. See Appendix A, "Hispanic Origin."

²Percents may not add to 100% due to rounding.

Table 2. Births by Selected Topics, 1998

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

Gram Weight	Residence				Occurrence			
	Total	Male	Female	Unknown	Total	Male	Female	Unknown
State Total	79,640	40,853	38,787	0	79,009	40,517	38,492	0
Under 1,000	402	210	192	0	380	196	184	0
1,000 - 1,499	458	236	222	0	449	227	222	0
1,500 - 1,999	856	427	429	0	835	418	417	0
2,000 - 2,499	2,829	1,295	1,534	0	2,783	1,280	1,503	0
2,500 - 2,999	10,802	4,746	6,056	0	10,718	4,717	6,001	0
3,000 - 3,499	28,261	13,577	14,684	0	28,070	13,491	14,579	0
3,500 - 3,999	25,469	13,789	11,680	0	25,300	13,692	11,608	0
4,000 - 4,499	8,609	5,302	3,307	0	8,533	5,239	3,294	0
4,500 and over	1,681	1,116	565	0	1,672	1,104	568	0
Unknown	273	155	118	0	269	153	116	0

BIRA31M5

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

Month	Live Births		Fetal Deaths	
	Residence	Occurrence	Residence	Occurrence
State Total	79,640	79,009	471	463
January	6,391	6,347	36	35
February	6,032	5,991	38	37
March	6,875	6,809	46	45
April	6,779	6,719	43	41
May	6,956	6,912	40	40
June	6,826	6,760	40	40
July	7,005	6,962	44	42
August	6,921	6,832	34	33
September	6,688	6,637	46	43
October	6,560	6,522	38	38
November	6,083	6,058	33	36
December	6,524	6,460	33	33

BIRA49P7

Table 2. Births by Selected Topics, 1998

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

Method of Delivery	Total ¹ Births	Electronic		Stimulation						
		Amnio- None	Fetal centesis Monitoring	Induction of Labor	of Labor	Toco- lysis	Ultra- sound	Other	Unk	
State Total	79,009	10,929	3,150	56,568	14,649	12,209	2,396	46,566	2,623	5,647
Vaginal Delivery	62,245	8,579	2,016	44,776	11,938	10,160	1,691	36,171	1,866	4,562
Vaginal Del. After Prev. C-Section	2,339	203	149	1,886	588	521	72	1,541	95	71
Primary C-Section	9,580	1,389	579	6,830	1,813	1,301	484	5,808	396	699
Repeat C-Section w/o Trial Labor	3,437	639	321	1,999	59	33	79	2,140	196	220
Repeat C-Section with Trial Labor	1,350	114	85	1,058	243	187	70	886	70	64
Outlet Forceps	1	0	0	1	0	1	0	1	0	0
Vacuum Extraction	24	3	0	17	7	6	0	18	0	1
Other	0	0	0	0	0	0	0	0	0	0
Unknown	33	2	0	1	1	0	0	1	0	30

BIRA49P8

¹Total 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 ¹
State Total	79,009	100.0
General Hospital	74,501	94.3
Federal Facility	2,984	3.8
Home	1,062	1.3
Birth Center	367	0.5
Born on Arrival	48	0.1
Other	46	0.1
Unknown	1	0.0

BIRA49P7

¹Percents may not add to 100% due to rounding

Table 8. Live Births by Sex and Place of Residence and by Place of Occurrence, 1998

County and City	Residence				Occurrence	
	Number	Rate ¹	Male	Female	Number	Rate ¹
State Total	79,640	14.0	40,853	38,787	79,009	13.9
Adams	332	20.9	161	171	383	24.1
Asotin	280	14.0	153	127	1	--*
Benton	2,053	14.9	1,079	974	2,745	20.0
Kennewick	845	16.8	442	403	1,161	23.0
Richland	486	13.2	262	224	1,177	31.9
Chelan	1,032	16.5	532	500	1,486	23.7
Wenatchee	503	19.9	266	237	1,375	54.4
Ciallam	687	10.3	372	315	673	10.1
Port Angeles	227	12.0	130	97	583	30.9
Clark	5,142	15.7	2,588	2,554	4,411	13.4
Vancouver	2,602	19.7	1,289	1,313	4,388	33.2
Columbia	48	11.4	15	33	1	--*
Cowlitz	1,195	12.8	614	581	1,269	13.6
Longview	509	14.9	257	252	1,269	37.3
Douglas	445	14.2	209	236	3	--*
Ferry	78	10.7	41	37	11	1.5
Franklin	1,035	23.3	539	496	670	15.1
Pasco	743	28.5	375	368	670	25.7
Garfield	16	6.7	8	8	0	--*
Grant	1,334	19.2	653	681	1,026	14.8
Grays Harbor	882	13.0	472	410	585	8.6
Aberdeen	302	18.2	163	139	578	34.8
Island	948	13.1	449	499	694	9.6
Oak Harbor	461	22.5	227	234	416	20.3
Jefferson	207	7.8	105	102	141	5.3
King	22,212	13.3	11,355	10,857	25,894	15.5
Auburn	862	23.0	430	432	698	18.6
Bellevue	1,246	11.8	602	644	3,199	30.3
Burien	171	6.1	80	91	878	31.2
Des Moines	289	10.6	153	136	4	--*
Federal Way	1,245	16.2	644	601	1,683	21.9
Kent	1,593	22.2	848	745	12	0.2
Kirkland	811	18.3	422	389	3,459	78.2
Mercer Island	136	6.3	64	72	0	--*
Redmond	845	19.5	429	416	930	21.5
Renton	1,077	23.3	527	550	2,990	64.6
Sea Tac	113	4.8	62	51	3	--*
Seattle	7,285	13.5	3,721	3,564	11,691	21.7
Shoreline	156	3.1	78	78	5	0.1
Kitsap	3,004	13.1	1,586	1,418	2,511	11.0
Bainbridge Island	112	5.9	63	49	9	0.5
Bremerton	963	25.8	516	447	2,471	66.3

Table 8. Live Births by Sex and Place of Residence and by Place of Occurrence, 1998

County and City	Residence				Occurrence	
	Number	Rate ¹	Male	Female	Number	Rate ¹
Kittitas	374	11.9	200	174	340	10.8
Klickitat	234	12.3	116	118	202	10.6
Lewis	901	13.1	453	448	704	10.3
Lincoln	110	11.0	56	54	27	2.7
Mason	598	12.4	290	308	300	6.2
Okanogan	545	14.2	290	255	565	14.7
Pacific	211	9.8	101	110	77	3.6
Pend Oreille	129	11.5	60	69	80	7.1
Pierce	9,780	14.2	5,014	4,766	10,106	14.7
Lakewood	40	0.6	22	18	4	--*
Puyallup	864	28.9	444	420	1,448	48.4
Tacoma	4,031	21.7	2,044	1,987	8,497	45.7
University Place	43	1.5	29	14	0	--*
San Juan	101	8.0	44	57	8	0.6
Skagit	1,367	13.9	699	668	1,534	15.5
Mount Vernon	529	23.5	273	256	1,289	57.2
Skamania	104	10.5	51	53	1	--*
Snohomish	8,352	14.7	4,272	4,080	5,845	10.3
Edmonds	436	11.3	225	211	1,647	42.7
Everett	2,055	24.4	1,068	987	3,209	38.1
Lynnwood	838	25.3	412	426	23	0.7
Marysville	535	27.1	257	278	4	--*
Mountlake Terrace	260	12.8	135	125	1	--*
Mukilteo	196	11.7	106	90	0	--*
Spokane	5,496	13.4	2,913	2,583	6,365	15.5
Spokane (City)	3,164	16.8	1,666	1,498	6,333	33.6
Stevens	412	11.0	207	205	259	6.9
Thurston	2,511	12.6	1,261	1,250	2,741	13.7
Lacey	347	12.3	166	181	5	0.2
Olympia	779	19.9	378	401	2,722	69.7
Wahkiakum	37	9.5	16	21	1	--*
Walla Walla	700	12.8	367	333	891	16.3
Walla Walla (City)	409	13.9	204	205	887	30.1
Whatcom	2,055	13.0	1,120	935	2,008	12.7
Bellingham	906	14.6	488	418	1,980	31.9
Whitman	398	9.6	222	176	343	8.3
Pullman	211	8.4	123	88	267	10.7
Yakima	4,295	20.4	2,170	2,125	4,108	19.5
Yakima (City)	1,422	22.1	699	723	2,965	46.1

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

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

Table 9. Live Births by Mother's Age Group by Place of Residence, 1998

County and City	All Ages	Under 15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 and Over	Age Unk
State Total	79,640	111	2,880	5,704	18,989	22,492	18,300	9,169	1,859	86	50
Adams	332	1	24	34	108	87	54	17	7	0	0
Asotin	280	2	14	21	79	96	43	21	4	0	0
Benton	2,053	4	73	168	595	607	381	191	31	2	1
Kennewick	845	1	24	80	274	247	142	62	14	1	0
Richland	486	1	16	32	121	148	106	55	6	1	0
Chelan	1,032	0	57	90	306	268	201	88	22	0	0
Wenatchee	503	0	35	42	148	135	96	37	10	0	0
Clallam	687	5	44	79	183	193	111	53	19	0	0
Port Angeles	227	1	13	23	73	61	41	11	4	0	0
Clark	5,142	3	177	385	1,267	1,495	1,147	564	99	3	2
Vancouver	2,602	2	112	248	736	749	503	215	37	0	0
Columbia	48	0	1	5	15	15	10	2	0	0	0
Cowlitz	1,195	0	54	138	400	310	192	88	13	0	0
Longview	509	0	31	54	191	122	77	30	4	0	0
Douglas	445	1	27	35	118	120	93	40	10	0	1
Ferry	78	0	5	10	26	20	10	3	2	1	1
Franklin	1,035	6	75	111	307	282	171	68	15	0	0
Pasco	743	3	60	93	220	199	114	44	10	0	0
Garfield	16	0	2	0	6	2	4	2	0	0	0
Grant	1,334	0	66	143	439	381	201	86	18	0	0
Grays Harbor	882	1	55	85	272	233	154	66	16	0	0
Aberdeen	302	1	23	31	107	76	39	19	6	0	0
Island	948	1	34	64	276	256	204	93	19	0	1
Oak Harbor	461	0	13	31	176	128	77	33	3	0	0
Jefferson	207	0	10	16	43	52	52	33	1	0	0
King	22,212	21	462	989	3,689	6,011	6,563	3,657	753	38	29
Auburn	862	0	35	70	235	242	183	87	10	0	0
Bellevue	1,246	0	13	35	135	326	434	258	40	5	0
Burien	171	0	7	15	48	45	30	22	3	1	0
Des Moines	289	0	6	20	61	87	74	34	7	0	0
Federal Way	1,245	0	40	78	301	356	284	162	23	0	1
Kent	1,593	1	41	102	372	479	397	165	32	1	3
Kirkland	811	0	11	21	106	250	269	123	28	3	0
Mercer Island	136	0	1	0	3	17	48	57	10	0	0
Redmond	845	0	2	17	90	257	314	143	18	2	2
Renton	1,077	0	17	49	236	354	291	111	19	0	0
Sea Tac	113	0	3	7	30	28	30	12	3	0	0
Seattle	7,285	10	138	298	1,125	1,854	2,198	1,324	314	14	10
Shoreline	156	0	2	3	13	41	44	46	7	0	0
Kitsap	3,004	3	104	220	828	847	622	317	55	5	3
Bainbridge Island	112	0	0	1	7	21	35	41	6	1	0
Bremerton	963	3	46	92	342	259	143	60	14	1	3

Table 9. Live Births by Mother's Age Group by Place of Residence, 1998

County and City	All Ages	Under								45 and Over	Age Unk
		15	15-17	18-19	20-24	25-29	30-34	35-39	40-44		
Kittitas	374	1	13	23	107	117	71	34	8	0	0
Klickitat	234	0	8	21	82	51	45	22	5	0	0
Lewis	901	3	44	114	285	240	147	59	8	0	1
Lincoln	110	0	6	6	24	35	20	16	2	1	0
Mason	598	1	44	57	174	175	80	53	12	2	0
Okanogan	545	0	31	65	163	151	89	41	5	0	0
Pacific	211	2	10	18	59	55	39	19	9	0	0
Pend Oreille	129	0	11	18	32	25	20	17	6	0	0
Pierce	9,780	19	408	841	2,632	2,766	2,042	876	185	8	3
Lakewood	40	0	0	2	12	11	9	6	0	0	0
Puyallup	864	2	27	75	223	261	188	74	14	0	0
Tacoma	4,031	15	224	392	1,098	1,077	774	366	82	2	1
University Place	43	0	2	2	14	10	9	5	1	0	0
San Juan	101	0	2	3	21	27	27	14	7	0	0
Skagit	1,367	5	78	132	344	416	230	124	35	3	0
Mount Vernon	529	2	36	66	134	153	85	45	8	0	0
Skamania	104	0	5	11	33	21	18	12	4	0	0
Snohomish	8,352	6	231	455	1,792	2,502	2,087	1,071	195	11	2
Edmonds	436	0	6	18	70	99	127	93	23	0	0
Everett	2,055	4	67	151	588	614	418	178	31	3	1
Lynnwood	838	0	21	47	222	242	184	104	17	1	0
Marysville	535	0	17	43	129	158	125	55	8	0	0
Mountlake Terrace	260	0	9	14	39	84	78	32	3	0	1
Mukilteo	196	0	6	2	22	56	60	41	9	0	0
Spokane	5,496	5	187	432	1,525	1,660	1,111	475	97	3	1
Spokane (City)	3,164	4	114	276	918	967	584	250	48	2	1
Stevens	412	0	22	39	109	111	77	44	10	0	0
Thurston	2,511	3	94	185	619	736	546	259	61	4	4
Lacey	347	0	15	24	107	93	72	32	3	0	1
Olympia	779	1	25	70	189	222	163	83	23	2	1
Wahkiakum	37	0	3	5	7	10	8	4	0	0	0
Walla Walla	700	1	38	69	198	196	142	47	8	1	0
Walla Walla (City)	409	1	27	44	118	112	67	36	4	0	0
Whatcom	2,055	2	74	145	445	608	483	248	47	3	0
Bellingham	906	1	31	67	213	281	196	97	19	1	0
Whitman	398	0	4	21	95	114	107	47	10	0	0
Pullman	211	0	1	9	55	61	55	26	4	0	0
Yakima	4,295	15	283	451	1,286	1,201	698	298	61	1	1
Yakima (City)	1,422	3	109	144	424	404	223	101	14	0	0

BIRA41P1

Table 10. Live Births to Single Mothers by Mother's Age Group by Place of Residence, 1998

County and City	All Ages	Under 15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 and Over	Age Unk
State Total	22,206	109	2,561	3,979	7,725	4,243	2,202	1,106	254	6	21
Adams	102	1	19	21	34	15	9	2	1	0	0
Asotin	93	2	13	17	32	17	7	4	1	0	0
Benton	616	4	67	120	239	111	48	19	7	0	1
Kennewick	296	1	21	57	130	54	21	10	2	0	0
Richland	110	1	14	25	39	17	10	3	1	0	0
Chelan	339	0	45	69	118	49	34	20	4	0	0
Wenatchee	176	0	27	36	57	28	19	6	3	0	0
Clallam	249	5	38	59	71	44	21	10	1	0	0
Port Angeles	95	1	12	17	34	21	8	2	0	0	0
Clark	1,276	3	153	249	455	239	114	49	13	0	1
Vancouver	836	2	102	175	305	152	68	25	7	0	0
Columbia	16	0	1	4	6	3	2	0	0	0	0
Cowlitz	463	0	51	110	168	69	44	18	3	0	0
Longview	223	0	29	40	90	32	25	5	2	0	0
Douglas	122	1	24	22	46	18	5	4	2	0	0
Ferry	40	0	4	7	14	9	5	0	0	0	1
Franklin	399	5	56	73	138	76	36	13	2	0	0
Pasco	309	2	43	61	102	63	28	9	1	0	0
Garfield	7	0	2	0	3	0	2	0	0	0	0
Grant	444	0	57	79	185	73	36	10	4	0	0
Grays Harbor	367	1	52	61	132	69	34	14	4	0	0
Aberdeen	136	1	21	22	52	26	9	4	1	0	0
Island	189	1	29	34	63	44	8	5	4	0	1
Oak Harbor	95	0	10	14	39	22	7	3	0	0	0
Jefferson	79	0	9	13	22	15	11	9	0	0	0
King	5,075	21	428	755	1,693	1,137	595	343	89	2	12
Auburn	294	0	34	50	112	58	29	8	3	0	0
Bellevue	152	0	10	23	46	35	19	18	1	0	0
Burien	63	0	6	11	26	15	3	1	1	0	0
Des Moines	83	0	6	13	26	23	10	4	1	0	0
Federal Way	347	0	34	61	124	68	34	21	4	0	1
Kent	402	1	37	69	154	88	33	16	2	1	1
Kirkland	116	0	10	17	32	31	18	6	2	0	0
Mercer Island	5	0	1	0	1	1	0	2	0	0	0
Redmond	90	0	2	14	34	21	11	5	1	0	2
Renton	261	0	15	33	103	66	29	13	2	0	0
Sea Tac	31	0	3	3	11	9	4	1	0	0	0
Seattle	1,859	10	131	242	579	446	245	158	46	0	2
Shoreline	16	0	2	2	4	5	1	1	1	0	0
Kitsap	753	3	96	141	259	137	79	34	3	0	1
Bainbridge Island	6	0	0	1	3	0	0	2	0	0	0
Bremerton	317	3	42	53	113	60	32	11	2	0	1

Table 10. Live Births to Single Mothers by Mother's Age Group by Place of Residence, 1998

County and City	All Ages	Under 15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 and Over	Age Unk
Kittitas	89	1	12	11	42	14	8	1	0	0	0
Klickitat	76	0	7	13	31	13	9	3	0	0	0
Lewis	331	3	36	71	116	49	35	19	1	0	1
Lincoln	21	0	5	3	5	3	2	3	0	0	0
Mason	247	1	38	46	77	53	15	14	3	0	0
Okanogan	218	0	28	47	82	35	16	10	0	0	0
Pacific	78	2	10	14	20	16	8	5	3	0	0
Pend Oreille	48	0	9	12	14	4	5	4	0	0	0
Pierce	3,116	19	370	569	1,084	563	314	154	41	1	1
Lakewood	7	0	0	1	1	3	2	0	0	0	0
Puyallup	267	2	24	62	97	48	19	12	3	0	0
Tacoma	1,746	15	210	285	609	330	180	94	22	0	1
University Place	14	0	1	2	2	3	4	1	1	0	0
San Juan	24	0	2	2	8	9	3	0	0	0	0
Skagit	434	5	66	85	142	84	36	12	4	0	0
Mount Vernon	181	2	30	38	55	32	17	6	1	0	0
Skamania	29	0	5	8	15	0	1	0	0	0	0
Snohomish	1,916	6	211	325	658	395	192	104	23	1	1
Edmonds	83	0	6	15	28	16	8	7	3	0	0
Everett	597	4	60	104	212	120	58	32	6	0	1
Lynnwood	212	0	16	35	96	33	19	10	3	0	0
Marysville	130	0	17	31	40	24	14	4	0	0	0
Mountlake Terrace	61	0	8	11	12	17	9	3	1	0	0
Mukilteo	36	0	6	2	10	11	5	0	2	0	0
Spokane	1,609	5	167	303	620	289	144	66	14	0	1
Spokane (City)	1,046	4	102	195	404	197	97	37	9	0	1
Stevens	128	0	18	28	44	19	9	8	2	0	0
Thurston	707	3	85	137	232	147	64	31	7	1	0
Lacey	114	0	14	19	49	19	8	4	1	0	0
Olympia	242	1	21	57	83	49	19	6	5	1	0
Wahkiakum	11	0	1	4	5	1	0	0	0	0	0
Walla Walla	217	1	32	49	75	30	20	9	0	1	0
Walla Walla (City)	145	1	23	29	48	25	10	9	0	0	0
Whatcom	561	2	69	108	185	95	59	34	9	0	0
Bellingham	276	1	28	49	97	54	27	16	4	0	0
Whitman	53	0	4	9	19	4	12	5	0	0	0
Pullman	20	0	1	6	7	0	4	2	0	0	0
Yakima	1,664	14	242	301	573	295	160	70	9	0	0
Yakima (City)	607	3	94	103	200	115	61	26	5	0	0

BIRA67P1

Table 13. Live Births by Month by Place of Residence, 1998

County and City	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
State Total	79,640	6,391	6,032	6,875	6,779	6,956	6,826	7,005	6,921	6,688	6,560	6,083	6,524
Adams	332	17	26	28	21	36	35	27	27	32	29	26	28
Asotin	280	13	19	25	20	21	34	33	24	25	20	21	25
Benton	2,053	168	152	171	159	169	168	184	174	169	171	170	198
Kennewick	845	69	68	72	67	74	76	82	67	69	75	59	67
Richland	486	35	29	40	39	41	29	39	47	48	38	50	51
Chelan	1,032	76	60	90	82	75	96	113	98	91	85	79	87
Wenatchee	503	34	33	41	41	38	45	59	44	57	41	33	37
Clallam	687	60	46	52	70	71	47	50	75	66	46	61	43
Port Angeles	227	19	15	21	25	25	20	14	18	27	15	15	13
Clark	5,142	410	397	463	415	467	443	458	466	415	425	368	415
Vancouver	2,602	208	199	226	200	239	230	258	253	192	210	177	210
Columbia	48	2	2	6	7	4	1	6	8	3	2	3	4
Cowlitz	1,195	113	65	97	115	106	110	97	105	109	87	96	95
Longview	509	52	27	46	60	49	47	39	43	37	36	41	32
Douglas	445	38	37	40	37	42	41	35	44	34	35	25	37
Ferry	78	5	8	6	8	8	5	8	5	9	6	4	6
Franklin	1,035	75	77	94	85	93	99	81	93	104	85	74	75
Pasco	743	54	56	65	63	71	73	55	67	75	56	56	52
Garfield	16	3	0	0	2	4	2	0	4	0	1	0	0
Grant	1,334	125	95	113	114	111	128	110	128	106	104	117	83
Grays Harbor	882	77	64	79	66	70	61	93	82	85	72	57	76
Aberdeen	302	24	26	22	25	23	21	39	22	35	18	20	27
Island	948	97	88	98	83	63	74	90	80	83	60	66	66
Oak Harbor	461	49	36	41	39	33	40	43	41	36	27	38	38
Jefferson	207	25	21	15	22	25	16	12	14	18	11	13	15
King	22,212	1,726	1,709	1,961	1,899	1,967	1,893	1,928	1,887	1,881	1,922	1,623	1,816
Auburn	862	64	65	79	78	86	80	80	76	71	58	56	69
Bellevue	1,246	97	100	95	122	115	92	100	118	100	118	97	92
Burien	171	24	13	17	13	12	17	12	12	14	11	16	10
Des Moines	289	15	23	21	26	23	19	34	29	20	20	25	34
Federal Way	1,245	80	102	92	109	110	114	114	115	102	105	99	103
Kent	1,593	124	123	148	133	148	135	141	137	117	157	105	125
Kirkland	811	70	62	72	57	84	75	55	70	71	70	67	58
Mercer Island	136	7	13	15	7	12	11	15	6	8	14	11	17
Redmond	845	70	69	72	81	81	78	64	60	77	66	64	63
Renton	1,077	79	86	106	80	95	72	85	103	105	84	78	104
Sea Tac	113	9	6	7	18	8	21	10	6	10	7	5	6
Seattle	7,285	545	544	655	612	603	629	665	643	601	657	525	606
Shoreline	156	24	16	12	20	16	14	5	8	14	14	6	7
Kitsap	3,004	235	253	259	267	247	241	264	263	232	247	235	261
Bainbridge Island	112	4	7	15	11	10	13	4	8	9	13	7	11
Bremerton	963	74	77	83	78	74	77	100	83	67	84	80	86

Table 13. Live Births by Month by Place of Residence, 1998

County and City	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Kittitas	374	44	28	35	29	32	28	32	28	29	30	29	30
Klickitat	234	14	14	19	22	19	18	23	27	22	27	20	9
Lewis	901	63	75	76	82	76	79	79	78	77	82	61	73
Lincoln	110	3	5	14	10	13	8	8	15	10	9	4	11
Mason	598	58	51	41	49	53	61	50	62	50	30	44	49
Okanogan	545	39	32	66	42	42	53	49	49	42	51	35	45
Pacific	211	16	24	14	24	24	26	13	16	12	10	14	18
Pend Oreille	129	13	9	4	14	14	14	11	9	14	6	13	8
Pierce	9,780	776	709	826	853	814	840	885	841	836	767	799	834
Lakewood	40	3	2	1	5	2	1	5	3	5	4	5	4
Puyallup	864	58	46	72	89	64	78	89	76	85	69	71	67
Tacoma	4,031	332	278	328	344	357	364	349	357	334	290	347	351
University Place	43	4	9	0	6	1	1	3	1	5	1	4	8
San Juan	101	7	8	5	13	6	6	11	7	11	9	12	6
Skagit	1,367	101	95	118	117	130	122	97	134	118	100	126	109
Mount Vernon	529	45	31	45	44	52	48	34	58	32	42	55	43
Skamania	104	6	7	10	7	11	10	9	12	5	7	10	10
Snohomish	8,352	699	638	695	708	743	685	733	698	708	697	682	666
Edmonds	436	38	38	38	41	37	23	30	46	37	37	42	29
Everett	2,055	176	162	171	168	186	158	177	167	173	172	194	151
Lynnwood	838	71	71	78	77	77	56	69	67	76	74	62	60
Marysville	535	57	45	41	50	43	52	45	33	45	43	31	50
Mountlake Terrace	260	23	14	21	25	18	24	26	27	15	22	21	24
Mukilteo	196	15	13	17	19	20	18	15	19	14	16	13	17
Spokane	5,496	449	442	452	470	525	456	482	433	437	479	411	460
Spokane (City)	3,164	243	263	270	266	314	277	265	247	250	285	221	263
Stevens	412	28	33	39	33	44	29	44	27	35	33	36	31
Thurston	2,511	201	162	222	219	204	214	229	213	231	207	181	228
Lacey	347	32	20	34	31	27	38	32	22	27	25	21	38
Olympia	779	62	56	61	68	58	62	77	69	67	67	63	69
Wahkiakum	37	3	5	6	3	2	0	3	3	3	2	2	5
Walla Walla	700	52	56	87	47	66	69	59	78	45	45	46	50
Walla Walla (City)	409	40	25	49	31	36	38	30	40	31	29	29	31
Whatcom	2,055	162	166	188	168	163	176	199	200	173	150	151	159
Bellingham	906	67	75	75	79	74	73	89	101	73	62	63	75
Whitman	398	32	35	30	46	44	32	23	35	37	37	24	23
Pullman	211	16	19	17	21	28	18	11	19	19	16	12	15
Yakima	4,295	360	319	331	351	352	406	377	379	331	374	345	370
Yakima (City)	1,422	143	104	107	108	119	123	126	137	103	125	97	130

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Table 14. Live Births by Birth Weight in Grams by Place of Residence, 1998

County and City	Total	Under 1000	1000- 1499	1500- 1999	2000- 2499	2500- 2999	3000- 3499	3500- 3999	4000- 4499	4500- Over	Unk
State Total	79,640	402	458	856	2,829	10,802	28,261	25,469	8,609	1,681	273
Adams	332	4	1	2	10	46	140	97	23	9	0
Asotin	280	6	2	3	8	25	110	75	46	5	0
Benton	2,053	6	8	26	84	281	725	668	206	48	1
Kennewick	845	2	1	9	35	116	307	292	72	11	0
Richland	486	2	2	6	20	62	168	153	55	18	0
Chelan	1,032	2	7	13	36	152	364	349	93	15	1
Wenatchee	503	2	3	4	27	73	169	174	45	6	0
Clallam	687	5	4	11	23	83	222	240	80	18	1
Port Angeles	227	1	0	4	7	25	74	83	27	6	0
Clark	5,142	28	27	53	159	595	1,794	1,748	613	121	4
Vancouver	2,602	4	3	8	58	286	969	890	317	63	4
Columbia	48	0	0	0	0	5	18	18	6	1	0
Cowlitz	1,195	10	8	21	33	158	382	406	146	31	0
Longview	509	0	5	4	10	73	175	171	60	11	0
Douglas	445	2	1	5	19	49	160	139	63	7	0
Ferry	78	4	0	1	3	12	24	26	6	2	0
Franklin	1,035	7	5	11	39	135	385	319	106	28	0
Pasco	743	4	3	9	27	102	284	234	62	18	0
Garfield	16	0	0	3	1	0	5	4	3	0	0
Grant	1,334	7	5	14	46	199	521	411	105	25	1
Grays Harbor	882	1	4	10	31	118	317	299	89	13	0
Aberdeen	302	0	2	4	10	41	105	100	35	5	0
Island	948	3	2	5	31	115	325	333	108	24	2
Oak Harbor	461	1	1	0	14	63	156	159	55	12	0
Jefferson	207	0	0	1	6	34	60	71	21	10	4
King	22,212	119	134	247	780	2,996	7,914	6,964	2,420	449	189
Auburn	862	3	5	8	28	126	292	287	90	22	1
Bellevue	1,246	11	13	15	34	173	447	398	126	26	3
Burien	171	2	0	2	5	28	68	44	20	2	0
Des Moines	289	3	0	6	7	35	113	88	29	7	1
Federal Way	1,245	10	9	11	35	163	471	404	121	17	4
Kent	1,593	8	8	16	61	210	559	493	190	44	4
Kirkland	811	3	5	9	27	115	285	256	96	13	2
Mercer Island	136	0	0	1	5	14	46	52	15	3	0
Redmond	845	3	1	7	29	109	305	284	91	12	4
Renton	1,077	4	6	12	36	140	406	330	109	30	4
Sea Tac	113	0	1	2	5	13	42	31	14	3	2
Seattle	7,285	36	52	92	291	1,041	2,589	2,158	767	138	121
Shoreline	156	1	0	1	5	21	57	50	16	5	0
Kitsap	3,004	16	20	29	110	367	996	1,045	349	62	10
Bainbridge Island	112	1	3	1	2	5	37	46	15	0	2
Bremerton	963	3	1	10	42	120	361	312	97	16	1

Table 14. Live Births by Birth Weight in Grams by Place of Residence, 1998

County and City	Total	Under 1000	1000- 1499	1500- 1999	2000- 2499	2500- 2999	3000- 3499	3500- 3999	4000- 4499	4500- Over	Unk
Kittitas	374	1	0	1	12	51	132	128	39	7	3
Klickitat	234	0	0	1	8	32	85	77	23	8	0
Lewis	901	4	4	9	38	126	330	272	97	20	1
Lincoln	110	0	0	0	6	17	36	37	11	3	0
Mason	598	3	7	12	21	81	224	174	58	17	1
Okanogan	545	5	1	3	21	78	199	162	65	8	3
Pacific	211	3	2	2	3	32	82	61	23	1	2
Pend Oreille	129	0	2	0	8	20	40	46	10	2	1
Pierce	9,780	48	84	114	371	1,469	3,399	3,027	1,063	191	14
Lakewood	40	0	0	0	1	8	20	9	1	1	0
Puyallup	864	4	8	6	42	133	283	281	96	11	0
Tacoma	4,031	24	34	54	149	636	1,442	1,218	397	75	2
University Place	43	0	1	0	0	6	15	15	5	1	0
San Juan	101	0	2	1	0	10	35	37	14	2	0
Skagit	1,367	9	7	14	52	184	485	435	151	24	6
Mount Vernon	529	2	1	6	20	77	186	173	54	7	3
Skamania	104	0	0	1	1	12	42	37	7	4	0
Snohomish	8,352	33	37	89	315	1,129	2,893	2,705	945	186	20
Edmonds	436	1	1	7	19	61	145	149	39	14	0
Everett	2,055	6	8	18	82	311	716	644	225	44	1
Lynnwood	838	5	4	6	33	104	316	271	79	16	4
Marysville	535	2	1	6	15	69	187	181	67	7	0
Mountlake Terrace	260	0	1	2	7	37	86	82	35	8	2
Mukilteo	196	0	0	2	8	21	71	63	26	3	2
Spokane	5,496	28	34	51	188	774	2,008	1,744	565	103	1
Spokane (City)	3,164	15	24	28	111	471	1,137	1,010	319	49	0
Stevens	412	2	2	3	16	61	139	133	46	10	0
Thurston	2,511	17	18	28	87	343	863	830	247	76	2
Lacey	347	1	1	4	9	40	141	109	30	12	0
Olympia	779	7	8	7	24	105	269	261	77	20	1
Wahkiakum	37	0	0	0	2	1	17	13	1	3	0
Walla Walla	700	4	4	7	21	95	244	242	63	19	1
Walla Walla (City)	409	3	2	2	10	61	145	137	39	9	1
Whatcom	2,055	9	4	17	54	240	673	701	299	56	2
Bellingham	906	1	1	6	25	96	316	300	141	19	1
Whitman	398	2	1	4	8	57	131	138	47	10	0
Pullman	211	0	1	1	5	30	79	67	24	4	0
Yakima	4,295	14	21	44	178	620	1,742	1,258	352	63	3
Yakima (City)	1,422	5	11	19	70	215	559	420	105	18	0

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Table 15. Live Births by Month Prenatal Care Began by Place of Residence, 1998

County and City	Total	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth+	No Care	Unk
State Total	79,640	16,089	28,668	14,898	5,667	2,733	1,559	1,005	603	240	436	7,742
Adams	332	28	136	84	35	17	8	9	7	0	0	8
Asotin	280	26	115	82	26	18	4	2	0	0	4	3
Benton	2,053	277	664	480	235	133	78	63	28	12	10	73
Kennewick	845	92	256	201	101	62	39	35	21	6	3	29
Richland	486	92	191	101	37	25	15	8	3	2	0	12
Chelan	1,032	37	325	341	107	54	26	18	7	5	14	98
Wenatchee	503	16	191	144	52	25	11	6	2	3	5	48
Clallam	687	63	295	183	54	25	14	9	4	2	2	36
Port Angeles	227	20	102	62	14	7	6	4	1	0	0	11
Clark	5,142	1,006	2,166	1,105	386	201	105	80	28	5	18	42
Vancouver	2,602	528	986	589	201	124	60	52	18	4	12	28
Columbia	48	9	21	8	6	1	2	1	0	0	0	0
Cowlitz	1,195	50	380	375	175	77	65	33	22	2	10	6
Longview	509	11	149	165	82	35	27	17	15	1	5	2
Douglas	445	16	184	120	31	21	21	7	2	0	5	38
Ferry	78	12	24	18	11	3	1	1	1	2	0	5
Franklin	1,035	74	235	254	137	85	68	40	26	34	6	76
Pasco	743	56	149	177	100	66	51	30	22	26	5	61
Garfield	16	4	5	2	2	0	1	0	0	0	2	0
Grant	1,334	117	477	346	183	68	49	25	18	6	5	40
Grays Harbor	882	205	280	150	57	26	13	11	10	6	14	110
Aberdeen	302	59	98	57	21	9	7	6	6	2	6	31
Island	948	111	455	214	68	17	19	11	5	2	2	44
Oak Harbor	461	23	226	124	31	10	9	7	4	0	2	25
Jefferson	207	20	112	43	12	4	4	1	2	2	1	6
King	22,212	5,100	7,942	3,294	1,060	522	273	176	119	48	120	3,558
Auburn	862	165	340	123	48	24	15	6	3	3	11	124
Bellevue	1,246	323	491	199	61	21	7	4	7	3	6	124
Burien	171	45	50	25	13	6	1	1	2	0	1	27
Des Moines	289	61	94	41	23	11	7	1	0	0	1	50
Federal Way	1,245	162	410	272	91	47	21	14	16	4	7	201
Kent	1,593	418	481	231	71	36	19	8	10	3	9	307
Kirkland	811	260	287	95	21	10	3	1	5	2	3	124
Mercer Island	136	43	57	18	3	0	0	0	1	0	0	14
Redmond	845	257	344	92	31	9	2	2	3	1	3	101
Renton	1,077	279	356	151	47	26	4	8	6	2	3	195
Sea Tac	113	27	31	12	6	0	2	1	1	2	0	31
Seattle	7,285	1,427	2,635	1,139	392	199	120	72	43	20	27	1,211
Shoreline	156	49	52	19	3	5	1	0	0	0	1	26
Kitsap	3,004	388	1,154	765	311	106	65	37	29	6	14	129
Bainbridge Island	112	21	52	18	5	2	0	0	0	0	0	14
Bremerton	963	110	348	260	115	43	25	14	14	0	4	30

Table 15. Live Births by Month Prenatal Care Began by Place of Residence, 1998

County and City	Total	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth+	No Care	Unk
Kittitas	374	133	157	39	22	3	5	1	0	0	2	12
Klickitat	234	40	101	46	19	8	4	6	4	0	3	3
Lewis	901	257	287	156	53	32	17	10	9	2	6	72
Lincoln	110	31	46	12	11	4	2	0	0	0	0	4
Mason	598	75	250	103	59	23	12	11	7	1	4	53
Okanogan	545	37	219	129	60	27	14	16	5	1	6	31
Pacific	211	28	75	58	25	14	5	2	1	0	1	2
Pend Oreille	129	29	41	26	12	9	3	1	1	1	1	5
Pierce	9,780	888	3,713	2,128	790	414	235	149	95	40	34	1,294
Lakewood	40	6	20	4	4	0	1	2	0	0	1	2
Puyallup	864	103	321	196	82	40	12	20	7	6	2	75
Tacoma	4,031	335	1,358	814	345	201	109	72	48	15	22	712
University Place	43	6	11	8	4	0	4	1	1	0	0	8
San Juan	101	4	31	31	18	7	2	1	1	0	0	6
Skagit	1,367	56	494	412	163	68	41	36	16	6	7	68
Mount Vernon	529	20	185	151	65	26	21	19	7	5	3	27
Skamania	104	14	48	27	7	2	4	1	1	0	0	0
Snohomish	8,352	2,802	2,987	1,136	380	209	108	52	58	14	39	567
Edmonds	436	164	150	42	10	7	7	3	2	0	4	47
Everett	2,055	729	723	288	87	57	26	20	19	3	11	92
Lynnwood	838	255	268	122	47	28	18	5	8	2	3	82
Marysville	535	212	203	64	22	11	6	0	2	1	0	14
Mountlake Terrace	260	82	88	38	14	5	1	1	0	1	1	29
Mukilteo	196	77	72	24	5	5	0	0	2	0	0	11
Spokane	5,496	2,126	1,902	634	248	124	64	45	19	17	28	289
Spokane (City)	3,164	1,240	1,070	368	142	77	34	26	11	12	13	171
Stevens	412	115	152	70	31	16	9	3	1	0	4	11
Thurston	2,511	587	666	309	111	44	30	18	6	7	15	718
Lacey	347	92	87	42	16	1	3	2	0	0	4	100
Olympia	779	194	212	68	30	13	5	4	2	1	4	246
Wahkiakum	37	3	13	12	4	0	1	1	2	0	0	1
Walla Walla	700	106	259	157	76	35	28	11	8	4	7	9
Walla Walla (City)	409	70	153	80	42	19	16	9	8	3	5	4
Whatcom	2,055	8	658	667	342	104	54	40	16	2	9	155
Bellingham	906	4	280	303	165	38	16	17	4	2	6	71
Whitman	398	62	184	102	27	6	5	3	4	2	0	3
Pullman	211	23	88	67	17	4	4	2	2	2	0	2
Yakima	4,295	1,145	1,415	780	313	206	100	74	41	11	43	167
Yakima (City)	1,422	490	487	210	72	48	30	20	6	6	11	42

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Table 16. Live Births with Malformations by Place of Residence, 1998

County and City	Total Births	Births with Malformations	Percent of Total Births ¹	Total Malformations ²
State Total	79,640	1,814	2.3	2,052
Adams	332	3	0.9	3
Asotin	280	8	2.9	10
Benton	2,053	69	3.4	85
Kennewick	845	25	3.0	31
Richland	486	21	4.3	26
Chelan	1,032	4	0.4	4
Wenatchee	503	1	0.2	1
Clallam	687	20	2.9	22
Port Angeles	227	5	2.2	5
Clark	5,142	103	2.0	109
Vancouver	2,602	42	1.6	43
Columbia	48	2	4.2	2
Cowlitz	1,195	11	0.9	11
Longview	509	3	0.6	3
Douglas	445	4	0.9	5
Ferry	78	0	0.0	0
Franklin	1,035	26	2.5	30
Pasco	743	17	2.3	20
Garfield	16	0	0.0	0
Grant	1,334	18	1.3	20
Grays Harbor	882	15	1.7	15
Aberdeen	302	5	1.7	5
Island	948	17	1.8	21
Oak Harbor	461	4	0.9	4
Jefferson	207	4	1.9	5
King	22,212	458	2.1	522
Auburn	862	18	2.1	26
Bellevue	1,246	55	4.4	65
Burien	171	4	2.3	4
Des Moines	289	4	1.4	4
Federal Way	1,245	49	3.9	61
Kent	1,593	27	1.7	32
Kirkland	811	14	1.7	14
Mercer Island	136	6	4.4	6
Redmond	845	29	3.4	33
Renton	1,077	24	2.2	27
Sea Tac	113	1	0.9	1
Seattle	7,285	97	1.3	105
Shoreline	156	4	2.6	5
Kitsap	3,004	188	6.3	199
Bainbridge Island	112	2	1.8	2
Bremerton	963	73	7.6	78

Table 16. Live Births with Malformations by Place of Residence, 1998

County and City	Total Births	Births with Malformations	Percent of Total Births ¹	Total Malformations ²
Kittitas	374	10	2.7	11
Klickitat	234	3	1.3	3
Lewis	901	7	0.8	8
Lincoln	110	3	2.7	3
Mason	598	27	4.5	30
Okanogan	545	9	1.7	11
Pacific	211	7	3.3	8
Pend Oreille	129	4	3.1	5
Pierce	9,780	296	3.0	337
Lakewood	40	2	5.0	3
Puyallup	864	36	4.2	42
Tacoma	4,031	117	2.9	135
University Place	43	2	4.7	2
San Juan	101	1	1.0	2
Skagit	1,367	18	1.3	21
Mount Vernon	529	5	0.9	8
Skamania	104	1	1.0	1
Snohomish	8,352	222	2.7	241
Edmonds	436	6	1.4	7
Everett	2,055	59	2.9	63
Lynnwood	838	19	2.3	22
Marysville	535	15	2.8	16
Mountlake Terrace	260	9	3.5	9
Mukilteo	196	5	2.6	5
Spokane	5,496	125	2.3	150
Spokane (City)	3,164	74	2.3	87
Stevens	412	6	1.5	7
Thurston	2,511	33	1.3	43
Lacey	347	6	1.7	10
Olympia	779	8	1.0	11
Wahkiakum	37	0	0.0	0
Walla Walla	700	28	4.0	33
Walla Walla (City)	409	12	2.9	16
Whatcom	2,055	33	1.6	38
Bellingham	906	12	1.3	13
Whitman	398	6	1.5	6
Pullman	211	3	1.4	3
Yakima	4,295	25	0.6	31
Yakima (City)	1,422	10	0.7	12

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¹Percents may not add to 100% due to rounding.

²Individual births may have more than one malformation.

Table 17. Live Births by Maternal Smoking During Pregnancy by Place of Residence, 1998

County and City	Total Births	Maternal Smoking		No Maternal Smoking		Unknown	
		Number	Percent ¹	Number	Percent ¹	Number	Percent ¹
State Total	79,640	11,015	13.8	64,469	81.0	4,156	5.2
Adams	332	21	6.3	311	93.7	0	0.0
Asotin	280	72	25.7	208	74.3	0	0.0
Benton	2,053	292	14.2	1,745	85.0	16	0.8
Kennewick	845	132	15.6	705	83.4	8	0.9
Richland	486	68	14.0	417	85.8	1	0.2
Chelan	1,032	65	6.3	953	92.3	14	1.4
Wenatchee	503	33	6.6	460	91.5	10	2.0
Clallam	687	185	26.9	480	69.9	22	3.2
Port Angeles	227	62	27.3	160	70.5	5	2.2
Clark	5,142	958	18.6	4,178	81.3	6	0.1
Vancouver	2,602	564	21.7	2,033	78.1	5	0.2
Columbia	48	15	31.3	33	68.8	0	0.0
Cowlitz	1,195	257	21.5	933	78.1	5	0.4
Longview	509	118	23.2	387	76.0	4	0.8
Douglas	445	32	7.2	401	90.1	12	2.7
Ferry	78	21	26.9	56	71.8	1	1.3
Franklin	1,035	57	5.5	973	94.0	5	0.5
Pasco	743	40	5.4	698	93.9	5	0.7
Garfield	16	6	37.5	10	62.5	0	0.0
Grant	1,334	163	12.2	1,149	86.1	22	1.6
Grays Harbor	882	246	27.9	565	64.1	71	8.0
Aberdeen	302	85	28.1	198	65.6	19	6.3
Island	948	129	13.6	806	85.0	13	1.4
Oak Harbor	461	66	14.3	389	84.4	6	1.3
Jefferson	207	44	21.3	158	76.3	5	2.4
King	22,212	2,123	9.6	18,930	85.2	1,159	5.2
Auburn	862	169	19.6	668	77.5	25	2.9
Bellevue	1,246	76	6.1	1,124	90.2	46	3.7
Burien	171	30	17.5	135	78.9	6	3.5
Des Moines	289	44	15.2	230	79.6	15	5.2
Federal Way	1,245	155	12.4	1,064	85.5	26	2.1
Kent	1,593	181	11.4	1,379	86.6	33	2.1
Kirkland	811	71	8.8	654	80.6	86	10.6
Mercer Island	136	6	4.4	123	90.4	7	5.1
Redmond	845	38	4.5	771	91.2	36	4.3
Renton	1,077	103	9.6	944	87.7	30	2.8
Sea Tac	113	23	20.4	85	75.2	5	4.4
Seattle	7,285	630	8.6	6,144	84.3	511	7.0
Shoreline	156	18	11.5	121	77.6	17	10.9
Kitsap	3,004	521	17.3	2,445	81.4	38	1.3
Bainbridge Island	112	3	2.7	102	91.1	7	6.3
Bremerton	963	198	20.6	757	78.6	8	0.8

Table 17. Live Births by Maternal Smoking During Pregnancy by Place of Residence, 1998

County and City	Total Births	Maternal Smoking		No Maternal Smoking		Unknown	
		Number	Percent ¹	Number	Percent ¹	Number	Percent ¹
Kittitas	374	83	22.2	287	76.7	4	1.1
Klickitat	234	44	18.8	190	81.2	0	0.0
Lewis	901	212	23.5	624	69.3	65	7.2
Lincoln	110	19	17.3	88	80.0	3	2.7
Mason	598	161	26.9	411	68.7	26	4.3
Okanogan	545	70	12.8	457	83.9	18	3.3
Pacific	211	48	22.7	161	76.3	2	0.9
Pend Oreille	129	47	36.4	82	63.6	0	0.0
Pierce	9,780	1,556	15.9	7,864	80.4	360	3.7
Lakewood	40	13	32.5	26	65.0	1	2.5
Puyallup	864	122	14.1	707	81.8	35	4.1
Tacoma	4,031	794	19.7	3,037	75.3	200	5.0
University Place	43	6	14.0	36	83.7	1	2.3
San Juan	101	10	9.9	88	87.1	3	3.0
Skagit	1,367	212	15.5	1,099	80.4	56	4.1
Mount Vernon	529	67	12.7	438	82.8	24	4.5
Skamania	104	31	29.8	73	70.2	0	0.0
Snohomish	8,352	1,167	14.0	6,893	82.5	292	3.5
Edmonds	436	44	10.1	371	85.1	21	4.8
Everett	2,055	361	17.6	1,649	80.2	45	2.2
Lynnwood	838	118	14.1	677	80.8	43	5.1
Marysville	535	72	13.5	458	85.6	5	0.9
Mountlake Terrace	260	44	16.9	203	78.1	13	5.0
Mukilteo	196	16	8.2	174	88.8	6	3.1
Spokane	5,496	1,069	19.5	4,369	79.5	58	1.1
Spokane (City)	3,164	686	21.7	2,444	77.2	34	1.1
Stevens	412	87	21.1	322	78.2	3	0.7
Thurston	2,511	328	13.1	1,612	64.2	571	22.7
Lacey	347	45	13.0	225	64.8	77	22.2
Olympia	779	93	11.9	489	62.8	197	25.3
Wahkiakum	37	4	10.8	31	83.8	2	5.4
Walla Walla	700	117	16.7	580	82.9	3	0.4
Walla Walla (City)	409	88	21.5	318	77.8	3	0.7
Whatcom	2,055	120	5.8	786	38.2	1,149	55.9
Bellingham	906	48	5.3	319	35.2	539	59.5
Whitman	398	25	6.3	371	93.2	2	0.5
Pullman	211	3	1.4	207	98.1	1	0.5
Yakima	4,295	398	9.3	3,747	87.2	150	3.5
Yakima (City)	1,422	181	12.7	1,204	84.7	37	2.6

¹Percents may not add to 100% due to rounding.

BIRA76M1

Table 18. Live Births by Institutions by Place of Occurrence, 1998

County and City	Total	Hospital	Birth Center	Federal Facility	Home	Born On Arrival	Other	Unknown
State Total	79,009	74,501	367	2,984	1,062	48	46	1
Adams	383	380	0	0	2	1	0	0
Asotin	1	0	0	0	1	0	0	0
Benton	2,745	2,730	0	0	13	1	1	0
Kennewick	1,161	1,155	0	0	6	0	0	0
Richland	1,177	1,173	0	0	4	0	0	0
Chelan	1,486	1,466	10	0	9	0	1	0
Wenatchee	1,375	1,360	10	0	4	0	1	0
Clallam	673	661	0	0	10	1	1	0
Port Angeles	583	578	0	0	5	0	0	0
Clark	4,411	4,354	0	0	53	4	0	0
Vancouver	4,388	4,354	0	0	30	4	0	0
Columbia	1	1	0	0	0	0	0	0
Cowlitz	1,269	1,266	0	0	3	0	0	0
Longview	1,269	1,266	0	0	3	0	0	0
Douglas	3	0	0	0	2	1	0	0
Ferry	11	11	0	0	0	0	0	0
Franklin	670	662	0	0	8	0	0	0
Pasco	670	662	0	0	8	0	0	0
Garfield	0	0	0	0	0	0	0	0
Grant	1,026	1,023	0	0	3	0	0	0
Grays Harbor	585	575	0	0	8	2	0	0
Aberdeen	578	575	0	0	1	2	0	0
Island	694	235	21	411	27	0	0	0
Oak Harbor	416	0	0	411	5	0	0	0
Jefferson	141	134	0	0	7	0	0	0
King	25,894	25,394	150	0	330	18	1	1
Auburn	698	687	0	0	10	1	0	0
Bellevue	3,199	3,189	0	0	10	0	0	0
Burien	878	876	0	0	2	0	0	0
Des Moines	4	0	0	0	4	0	0	0
Federal Way	1,683	1,669	0	0	14	0	0	0
Kent	12	0	0	0	12	0	0	0
Kirkland	3,459	3,341	98	0	20	0	0	0
Mercer Island	0	0	0	0	0	0	0	0
Redmond	930	919	0	0	11	0	0	0
Renton	2,990	2,976	0	0	11	3	0	0
Sea Tac	3	0	0	0	2	0	0	1
Seattle	11,691	11,458	52	0	167	13	1	0
Shoreline	5	0	0	0	5	0	0	0
Kitsap	2,511	1,667	0	786	55	3	0	0
Bainbridge Island	9	0	0	0	9	0	0	0
Bremerton	2,471	1,667	0	786	16	2	0	0

Table 18. Live Births by Institutions by Place of Occurrence, 1998

County and City	Total	Hospital	Birth Center	Federal Facility	Home	Born On Arrival	Other	Unknown
Kittitas	340	331	0	0	8	0	1	0
Klickitat	202	201	0	0	1	0	0	0
Lewis	704	656	0	0	48	0	0	0
Lincoln	27	24	0	0	3	0	0	0
Mason	300	288	0	0	8	2	2	0
Okanogan	565	560	0	0	4	1	0	0
Pacific	77	42	4	0	6	0	25	0
Pend Oreille	80	78	0	0	2	0	0	0
Pierce	10,106	8,100	95	1,787	113	4	7	0
Lakewood	4	1	0	0	3	0	0	0
Puyallup	1,448	1,439	0	0	9	0	0	0
Tacoma	8,497	6,660	0	1,787	46	4	0	0
University Place	0	0	0	0	0	0	0	0
San Juan	8	0	0	0	6	0	2	0
Skagit	1,534	1,516	0	0	18	0	0	0
Mount Vernon	1,289	1,285	0	0	4	0	0	0
Skamania	1	0	0	0	1	0	0	0
Snohomish	5,845	5,669	86	0	86	4	0	0
Edmonds	1,647	1,638	0	0	9	0	0	0
Everett	3,209	3,186	0	0	21	2	0	0
Lynnwood	23	0	12	0	10	1	0	0
Marysville	4	0	0	0	4	0	0	0
Mountlake Terrace	1	0	0	0	1	0	0	0
Mukilteo	0	0	0	0	0	0	0	0
Spokane	6,365	6,299	0	0	65	1	0	0
Spokane (City)	6,333	6,284	0	0	48	1	0	0
Stevens	259	244	0	0	15	0	0	0
Thurston	2,741	2,690	0	0	51	0	0	0
Lacey	5	0	0	0	5	0	0	0
Olympia	2,722	2,690	0	0	32	0	0	0
Wahkiakum	1	0	0	0	1	0	0	0
Walla Walla	891	874	0	0	16	0	1	0
Walla Walla (City)	887	874	0	0	12	0	1	0
Whatcom	2,008	1,947	0	0	59	1	1	0
Bellingham	1,980	1,947	0	0	31	1	1	0
Whitman	343	336	1	0	4	0	2	0
Pullman	267	265	0	0	2	0	0	0
Yakima	4,108	4,087	0	0	16	4	1	0
Yakima (City)	2,965	2,955	0	0	7	3	0	0

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Table 19. Live Births, County of Residence by County of Occurrence, 1998

County of Residence ²	County of Occurrence ¹														
	King	Pierce	Spokane	Snohomish	Clark	Yakima	Benton	Thurston	Kitsap	Whatcom	Skagit	Chelan	Cowlitz	Grant	Walla Walla
King	21,384	575	2	174	0	5	1	9	6	2	2	2	0	0	0
Pierce	1,035	8,637	2	4	2	0	0	55	26	0	0	0	1	0	0
Snohomish	2,730	12	1	5,504	1	1	0	2	5	5	84	0	0	0	0
Spokane	1	3	5,455	0	1	1	1	0	0	0	0	0	0	1	1
Clark	7	2	0	0	4,195	0	1	2	0	0	0	0	15	0	0
Yakima	22	3	3	0	0	3,949	296	0	0	1	0	0	1	1	0
Kitsap	278	355	2	14	0	0	0	2,337	2	0	0	0	0	0	0
Thurston	42	343	1	0	1	0	0	2,048	1	0	0	0	0	0	1
Whatcom	58	0	3	2	0	2	0	0	1,956	33	0	0	0	0	0
Benton	4	1	11	0	0	55	1,826	0	0	2	0	0	0	1	8
Skagit	57	3	0	34	0	1	0	0	0	23	1,217	0	0	0	0
Grant	10	1	29	1	0	58	17	0	0	0	0	124	0	930	0
Cowlitz	2	2	0	2	98	0	0	2	0	0	1	0	1,019	0	0
Franklin	0	0	9	0	0	0	488	0	0	0	0	0	0	7	0
Chelan	28	1	5	2	0	0	0	0	0	0	0	982	0	0	0
Island	46	19	0	94	0	0	0	1	1	5	115	0	0	0	0
Lewis	2	31	0	0	0	1	0	195	1	0	0	0	47	0	0
Grays Harbor	16	28	1	1	0	1	0	258	0	1	0	0	0	0	0
Walla Walla	3	0	7	0	0	0	53	0	0	0	0	0	0	0	617
Clallam	24	4	0	2	0	0	0	1	2	0	1	0	0	0	0
Mason	5	53	0	0	0	0	0	151	103	0	0	0	1	0	0
Okanogan	3	0	37	0	0	0	0	0	0	0	0	8	0	17	0
Douglas	8	0	5	0	0	1	0	0	0	1	0	366	0	0	0
Stevens	1	0	191	0	0	0	0	0	0	0	0	0	0	0	0
Whitman	4	1	50	0	0	0	1	0	1	0	0	0	0	0	0
Kittitas	25	1	0	1	0	18	1	0	0	0	0	2	0	0	1
Adams	0	1	42	0	0	0	14	0	0	0	0	0	0	62	1
Asotin	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0
Klickitat	0	0	0	0	1	7	0	0	0	0	0	0	0	0	0
Pacific	2	2	0	0	0	0	0	8	0	0	0	0	4	0	0
Jefferson	20	0	0	0	0	0	0	2	25	0	0	0	0	0	0
Pend Oreille	1	0	56	0	0	0	0	0	0	0	0	0	0	0	0
Lincoln	0	0	79	0	0	0	0	0	0	0	0	0	0	4	0
Skamania	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0
San Juan	7	0	0	2	0	0	0	0	0	4	78	0	0	0	0
Ferry	0	0	23	0	0	1	0	0	0	0	0	0	0	3	0
Columbia	0	0	0	0	0	0	1	0	0	0	0	0	0	0	46
Wahkiakum	0	0	0	0	3	0	0	1	0	0	0	0	28	0	0
Garfield	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Out of State	69	28	337	8	78	7	45	4	3	6	3	2	153	0	216
Total															
Occurrence	25,894	10,106	6,365	5,845	4,411	4,108	2,745	2,741	2,511	2,008	1,534	1,486	1,269	1,026	891
Cumulative															
Percent ³	32.8	45.6	53.6	61.0	66.6	71.8	75.3	78.7	81.9	84.5	86.4	88.3	89.9	91.2	92.3

¹Counties in columns are ranked based on total births by place of occurrence. The following counties are not shown since the number of births occurring there was less than eight: Asotin (1), Columbia (1), Douglas (3), Garfield (0), Skamania (1), Wahkiakum (1).

²Counties in rows are ranked based on total births by mother's residence.

³The cumulative percents show that of all births occurring in Washington State, 32.8 percent occurred in King County alone 45.6 percent occurred in King and Pierce Counties, and so on.

Table 19. Live Births, County of Residence by County of Occurrence, 1998

	County of Occurrence ¹																			Residence Total
	Lewis	Island	Clallam	Franklin	Grays Harbor	Okanogan	Adams	Whitman	Kittitas	Mason	Stevens	Klickitat	Jefferson	Pend Oreille	Pacific	Lincoln	Ferry	San Juan	Out-of-State	
1	1	2	0	1	0	0	0	3	1	0	1	0	0	0	0	0	0	0	40	22,212
3	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	12	9,780
0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4	8,352
0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	1	0	0	0	28	5,496
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	918	5,142
0	0	0	5	0	0	0	0	3	0	0	2	0	0	0	0	0	0	0	9	4,295
0	2	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	7	3,004
56	0	0	0	1	0	0	1	0	9	0	1	0	0	1	0	0	0	0	5	2,511
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2,055
0	0	0	139	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5	2,053
0	27	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1,367
0	0	0	2	0	2	147	0	9	0	0	0	0	0	0	0	0	0	0	4	1,334
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	1,195
0	0	0	504	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	1	1,035
0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,032
0	662	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	948
614	0	0	0	1	0	0	0	0	0	0	0	0	0	4	0	0	0	0	5	901
12	0	0	0	539	0	0	0	0	2	0	0	0	0	22	0	0	0	0	1	882
0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	700
0	0	648	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	1	687
1	0	0	0	1	0	0	0	0	283	0	0	0	0	0	0	0	0	0	0	598
0	0	0	0	0	478	0	0	0	0	0	0	0	1	0	0	1	0	0	0	545
0	0	0	0	0	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	445
0	0	0	0	0	0	0	0	0	0	215	0	0	0	0	0	0	0	0	5	412
0	0	0	0	0	0	0	299	0	1	0	0	0	0	0	0	0	0	0	41	398
0	0	0	0	0	0	0	0	324	0	0	0	0	0	0	0	0	0	0	1	374
0	0	0	2	0	0	209	0	0	0	0	0	0	0	0	0	0	0	0	1	332
0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	263	280
0	0	0	0	0	0	0	0	0	0	0	148	0	0	0	0	0	0	0	78	234
6	0	0	0	37	0	0	0	0	0	0	0	0	0	50	0	0	0	0	102	211
0	0	19	0	5	0	0	0	0	2	0	0	134	0	0	0	0	0	0	0	207
0	0	0	0	0	0	0	0	0	0	9	0	0	61	0	0	0	0	0	2	129
0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	26	0	0	0	0	110
0	0	0	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	0	37	104
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	2	101
0	0	0	0	0	9	0	0	0	0	32	0	0	0	0	10	0	0	0	0	78
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	48
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	37
0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	12	16
3	0	1	0	0	0	0	34	1	1	1	15	0	18	0	0	0	0	0	0	1,033
704	694	673	670	585	565	383	343	340	300	259	202	141	80	77	27	11	8	1,664		
93.2	94.1	94.9	95.8	96.5	97.2	97.7	98.2	98.6	99.0	99.3	99.6	99.7	99.8	99.9	100	100	100			

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



Mortality





Table 20. Deaths by Selected Topics, 1998

A. Residence, Race/Ethnicity by Sex

Race/Ethnicity	Total	Male	Female
State Total	42,585	21,370	21,215
White	40,000	19,909	20,091
African American	1,034	608	426
Native American	529	281	248
Japanese	205	89	116
Chinese	124	70	54
Filipino	219	130	89
Other Asian	446	263	183
Other	2	2	0
Unknown	26	18	8
Hispanic ¹	718	483	235

DEAB01M1

C. Residence, Age Group by Sex

Age Group	Total	Male	Female
State Total	42,585	21,370	21,215
Under 1	452	248	204
1 - 4	96	52	44
5 - 14	133	75	58
15 - 19	250	196	54
20 - 24	319	247	72
25 - 34	744	507	237
35 - 44	1,514	983	531
45 - 54	2,661	1,650	1,011
55 - 64	4,004	2,331	1,673
65 - 74	7,821	4,435	3,386
75 - 84	12,796	6,512	6,284
85 - 94	9,957	3,730	6,227
95 and Over	1,830	397	1,433
Unknown	8	7	1

DEAB01M2

B. Residence, Infant Deaths by Race/Ethnicity²

Race/Ethnicity	Number
State Total	452
White	354
African American	42
Native American	23
Japanese	3
Chinese	2
Filipino	5
Other Asian	21
Other	1
Unknown	1
Hispanic ¹	58

DEAC01M1

D. Residence, Life Expectancy by Age and Sex

Age Group	Total	Male	Female
0-1	78.1	75.5	80.6
1-5	77.5	75.0	80.0
5-10	73.6	71.1	76.1
10-15	68.7	66.1	71.1
15-20	63.7	61.2	66.2
20-25	58.9	56.5	61.3
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	33.2	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	18.3	16.5	19.7
70-75	14.7	13.2	16.0
75-80	11.5	10.1	12.6
80-85	8.8	7.6	9.5
85 and Over	6.6	5.7	7.1

DEAA01P2

¹Persons of Hispanic Origin may be of any race. See Appendix A, "Hispanic Origin."

²Race/Ethnicity as reported on the death certificate. See Appendix A, "Race."

Table 20. Deaths by Selected Topics, 1998

E. Residence, Leading Causes of Death

Rank	Causes of Death	International List Numbers	Number	Percent ¹
	All Causes		42,585	100.0
1	Diseases of the Heart	390-398,402,404-429	11,473	26.9
2	Malignant Neoplasms	140-208	10,270	24.1
3	Cerebrovascular Diseases	430-438	3,414	8.0
4	Chronic Obstructive Pulm. Dis.	490-496	2,401	5.6
5	Accidents & Adverse Effects	E800-E949	1,930	4.5
6	Pneumonia and Influenza	480-487	1,717	4.0
7	Diabetes Mellitus	250	1,212	2.8
8	Suicide	E950-E959	700	1.6
9	Alzheimer's Disease	331.0	608	1.4
10	Chronic Liver Dis. & Cirrhosis	571	462	1.1
	All Other Causes		8,398	19.7

DEAA01P2

F. Residence, Leading Causes of Death, Infant Mortality

Rank	Causes of Death	International List Numbers	Number	Percent ¹
	Infant Causes		452	100.0
1	Congenital Anomalies	740-759	120	26.5
2	Sudden Infant Death Syndrome	7980	91	20.1
3	Short Gestation	765	39	8.6
4	Maternal Complications	761	18	4.0
5	Complications of Placenta	762	15	3.3
6	Hypoxia & Birth Asphyxia	768	15	3.3
7	Respiratory Distress Syndrome	769	14	3.1
8	Accidents & Adverse Effects	E800-E949	10	2.2
9	Perinatal Infections	771	7	1.5
10	Neonatal Hemorrhage	772	6	1.3
	All Other Causes		117	25.9

¹Percents may not add to 100% due to rounding.

DEAA01P1

Table 20. Deaths by Selected Topics, 1998

G. Residence and Occurrence, Month of Death

Month	Residence	Occurrence
State Total	42,585	42,853
January	3,986	3,988
February	3,541	3,550
March	3,709	3,698
April	3,612	3,616
May	3,458	3,472
June	3,321	3,346
July	3,426	3,452
August	3,410	3,439
September	3,267	3,302
October	3,598	3,656
November	3,502	3,561
December	3,755	3,773

DEAA01P1

H. Residence, Marital Status by Sex

Marital Status	Total	Male	Female
State Total	42,585	21,370	21,215
Single	3,878	2,523	1,355
Married	17,495	11,848	5,647
Divorced	5,470	2,921	2,549
Widowed	15,616	3,976	11,640
Unknown	126	102	24

DEAA01P1

I. Occurrence, Type of Place

Type of Place	Number
State Total	42,853
General Hospital	14,287
Nursing Home	13,394
Home	11,780
Federal Facility	583
Psychiatric Hospital	50
Dead on Arrival	24
State Facility	2
Other and Unknown	2,733

DEAA01P1

Table 21. Deaths to Residents by Leading Causes and Age Group by Sex, 1998

Age Group with Causes	Total			Male			Female		
	No.	Rate ¹	Pct ²	No.	Rate ¹	Pct ²	No.	Rate ¹	Pct ²
All Ages									
All Causes	42,585	749.0	100.0	21,370	755.0	100.0	21,215	743.1	100.0
Diseases of Heart (390-398,402,404-429)	11,473	201.8	26.9	5,991	211.7	28.0	5,482	192.0	25.8
Malignant Neoplasms (140-208)	10,270	180.6	24.1	5,352	189.1	25.0	4,918	172.3	23.2
Cerebrovascular Diseases (430-438)	3,414	60.0	8.0	1,311	46.3	6.1	2,103	73.7	9.9
Chronic Obstructive Pulmonary Diseases (490-49)	2,401	42.2	5.6	1,159	40.9	5.4	1,242	43.5	5.9
Accidents & Adverse Effects (E800-E949)	1,930	33.9	4.5	1,278	45.2	6.0	652	22.8	3.1
Pneumonia/Influenza (480-487)	1,717	30.2	4.0	771	27.2	3.6	946	33.1	4.5
Diabetes Mellitus (250)	1,212	21.3	2.8	581	20.5	2.7	631	22.1	3.0
Suicide (E950-E959)	700	12.3	1.6	564	19.9	2.6	136	4.8	0.6
Alzheimer's Disease (3310)	608	10.7	1.4	203	7.2	0.9	405	14.2	1.9
Chronic Liver Dis. & Cirrhosis (571)	462	8.1	1.1	292	10.3	1.4	170	6.0	0.8
All Other Causes	8,398	147.7	19.7	3,868	136.7	18.1	4,530	158.7	21.4
Under 1									
All Causes	452	567.6	100.0	248	607.1	100.0	204	526.0	100.0
Congenital Anomalies (740-759)	120	150.7	26.5	69	168.9	27.8	51	131.5	25.0
Sudden Infant Death Syndrome (7980)	91	114.3	20.1	55	134.6	22.2	36	92.8	17.6
Short Gestation (765)	39	49.0	8.6	24	58.8	9.7	15	38.7	7.4
Maternal Complications (761)	18	22.6	4.0	4	--*	1.6	14	36.1	6.9
Complications of Placenta (762)	15	18.8	3.3	8	19.6	3.2	7	18.0	3.4
All Other Causes	169	212.2	37.4	88	215.4	35.5	81	208.8	39.7
1-4									
All Causes	96	29.8	100.0	52	31.6	100.0	44	28.0	100.0
Accidents & Adverse Effects (E800-E949)	36	11.2	37.5	20	12.1	38.5	16	10.2	36.4
Congenital Anomalies (740-759)	12	3.7	12.5	5	3.0	9.6	7	4.5	15.9
Malignant Neoplasms (140-208)	8	2.5	8.3	4	--*	7.7	4	--*	9.1
Homicide & Legal Intervention (E960-E978)	6	1.9	6.3	3	--*	5.8	3	--*	6.8
Diseases of Heart (390-398,402,404-429)	4	--*	4.2	2	--*	3.8	2	--*	4.5
All Other Causes	30	9.3	31.3	18	10.9	34.6	12	7.6	27.3
5-14									
All Causes	133	15.2	100.0	75	16.7	100.0	58	13.6	100.0
Accidents & Adverse Effects (E800-E949)	45	5.1	33.8	23	5.1	30.7	22	5.2	37.9
Malignant Neoplasms (140-208)	28	3.2	21.1	19	4.2	25.3	9	2.1	15.5
Homicide & Legal Intervention (E960-E978)	7	0.8	5.3	3	--*	4.0	4	--*	6.9
Suicide (E950-E959)	7	0.8	5.3	5	1.1	6.7	2	--*	3.4
Congenital Anomalies (740-759)	6	0.7	4.5	2	--*	2.7	4	--*	6.9
All Other Causes	40	4.6	30.1	23	5.1	30.7	17	4.0	29.3
15 - 19									
All Causes	250	62.2	100.0	196	94.8	100.0	54	27.7	100.0
Accidents & Adverse Effects (E800-E949)	123	30.6	49.2	100	48.3	51.0	23	11.8	42.6
Suicide (E950-E959)	40	9.9	16.0	37	17.9	18.9	3	--*	5.6
Homicide & Legal Intervention (E960-E978)	33	8.2	13.2	25	12.1	12.8	8	4.1	14.8
Malignant Neoplasms (140-208)	18	4.5	7.2	10	4.8	5.1	8	4.1	14.8
Diseases of Heart (390-398,402,404-429)	7	1.7	2.8	4	--*	2.0	3	--*	5.6
All Other Causes	29	7.2	11.6	20	9.7	10.2	9	4.6	16.7
20 - 24									
All Causes	319	92.0	100.0	247	137.6	100.0	72	43.0	100.0
Accidents & Adverse Effects (E800-E949)	144	41.5	45.1	111	61.8	44.9	33	19.7	45.8
Suicide (E950-E959)	55	15.9	17.2	47	26.2	19.0	8	4.8	11.1
Homicide & Legal Intervention (E960-E978)	35	10.1	11.0	30	16.7	12.1	5	3.0	6.9
Malignant Neoplasms (140-208)	28	8.1	8.8	22	12.3	8.9	6	3.6	8.3
Diseases of Heart (390-398,402,404-429)	10	2.9	3.1	7	3.9	2.8	3	--*	4.2
All Other Causes	47	13.5	14.7	30	16.7	12.1	17	10.2	23.6
25 - 34									
All Causes	744	92.7	100.0	507	124.3	100.0	237	60.0	100.0
Accidents & Adverse Effects (E800-E949)	235	29.3	31.6	167	40.9	32.9	68	17.2	28.7
Suicide (E950-E959)	123	15.3	16.5	101	24.8	19.9	22	5.6	9.3
Malignant Neoplasms (140-208)	75	9.3	10.1	43	10.5	8.5	32	8.1	13.5
Homicide & Legal Intervention (E960-E978)	60	7.5	8.1	45	11.0	8.9	15	3.8	6.3
Diseases of Heart (390-398,402,404-429)	50	6.2	6.7	36	8.8	7.1	14	3.5	5.9
All Other Causes	201	25.0	27.0	115	28.2	22.7	86	21.8	36.3

Table 21. Deaths to Residents by Leading Causes and Age Group by Sex, 1998

Age Group with Causes	Total			Male			Female		
	No.	Rate ¹	Pct ²	No.	Rate ¹	Pct ²	No.	Rate ¹	Pct ²
35 - 44									
All Causes	1,514	154.7	100.0	983	199.4	100.0	531	109.4	100.0
Accidents & Adverse Effects (E800-E949)	320	32.7	21.1	242	49.1	24.6	78	16.1	14.7
Malignant Neoplasms (140-208)	308	31.5	20.3	141	28.6	14.3	167	34.4	31.5
Diseases of Heart (390-398,402,404-429)	186	19.0	12.3	139	28.2	14.1	47	9.7	8.9
Suicide (E950-E959)	146	14.9	9.6	114	23.1	11.6	32	6.6	6.0
Chronic Liver Dis. & Cirrhosis (571)	69	7.1	4.6	41	8.3	4.2	28	5.8	5.3
All Other Causes	485	49.6	32.0	306	62.1	31.1	179	36.9	33.7
45 - 54									
All Causes	2,661	343.6	100.0	1,650	425.9	100.0	1,011	261.2	100.0
Malignant Neoplasms (140-208)	867	111.9	32.6	447	115.4	27.1	420	108.5	41.5
Diseases of Heart (390-398,402,404-429)	545	70.4	20.5	407	105.0	24.7	138	35.7	13.6
Accidents & Adverse Effects (E800-E949)	266	34.3	10.0	200	51.6	12.1	66	17.1	6.5
Suicide (E950-E959)	124	16.0	4.7	96	24.8	5.8	28	7.2	2.8
Chronic Liver Dis. & Cirrhosis (571)	103	13.3	3.9	71	18.3	4.3	32	8.3	3.2
All Other Causes	756	97.6	28.4	429	110.7	26.0	327	84.5	32.3
55 - 64									
All Causes	4,004	882.3	100.0	2,331	1,031.5	100.0	1,673	734.2	100.0
Malignant Neoplasms (140-208)	1,644	362.2	41.1	851	376.6	36.5	793	348.0	47.4
Diseases of Heart (390-398,402,404-429)	992	218.6	24.8	713	315.5	30.6	279	122.4	16.7
Chronic Obstructive Pulmonary Diseases (490-49)	195	43.0	4.9	94	41.6	4.0	101	44.3	6.0
Diabetes Mellitus (250)	163	35.9	4.1	82	36.3	3.5	81	35.5	4.8
Cerebrovascular Diseases (430-438)	144	31.7	3.6	70	31.0	3.0	74	32.5	4.4
All Other Causes	866	190.8	21.6	521	230.6	22.4	345	151.4	20.6
65 - 74									
All Causes	7,821	2,276.7	100.0	4,435	2,801.8	100.0	3,386	1,828.0	100.0
Malignant Neoplasms (140-208)	2,823	821.8	36.1	1,542	974.1	34.8	1,281	691.6	37.8
Diseases of Heart (390-398,402,404-429)	2,027	590.1	25.9	1,312	828.8	29.6	715	386.0	21.1
Chronic Obstructive Pulmonary Diseases (490-49)	623	181.4	8.0	316	199.6	7.1	307	165.7	9.1
Cerebrovascular Diseases (430-438)	444	129.3	5.7	225	142.1	5.1	219	118.2	6.5
Diabetes Mellitus (250)	274	79.8	3.5	143	90.3	3.2	131	70.7	3.9
All Other Causes	1,630	474.5	20.8	897	566.7	20.2	733	395.7	21.6
75 - 84									
All Causes	12,796	5,604.1	100.0	6,512	6,962.9	100.0	6,284	4,661.4	100.0
Diseases of Heart (390-398,402,404-429)	3,655	1,600.7	28.6	1,956	2,091.4	30.0	1,699	1,260.3	27.0
Malignant Neoplasms (140-208)	3,090	1,353.3	24.1	1,656	1,770.7	25.4	1,434	1,063.7	22.8
Cerebrovascular Diseases (430-438)	1,235	540.9	9.7	518	553.9	8.0	717	531.9	11.4
Chronic Obstructive Pulmonary Diseases (490-49)	1,008	441.5	7.9	503	537.8	7.7	505	374.6	8.0
Pneumonia/Influenza (480-487)	514	225.1	4.0	269	287.6	4.1	245	181.7	3.9
All Other Causes	3,294	1,442.6	25.7	1,610	1,721.5	24.7	1,684	1,249.2	26.8
85 and Over									
All Causes	11,787	15,095.7	100.0	4,127	17,575.2	100.0	7,660	14,029.3	100.0
Diseases of Heart (390-398,402,404-429)	3,979	5,095.9	33.8	1,409	6,000.3	34.1	2,570	4,707.0	33.6
Cerebrovascular Diseases (430-438)	1,437	1,840.4	12.2	417	1,775.8	10.1	1,020	1,868.1	13.3
Malignant Neoplasms (140-208)	1,380	1,767.4	11.7	616	2,623.3	14.9	764	1,399.3	10.0
Pneumonia/Influenza (480-487)	892	1,142.4	7.6	327	1,392.6	7.9	565	1,034.8	7.4
Chronic Obstructive Pulmonary Diseases (490-49)	488	625.0	4.1	200	851.7	4.8	288	527.5	3.8
All Other Causes	3,611	4,624.6	30.6	1,158	4,931.4	28.1	2,453	4,492.7	32.0
Age Unknown									
All Causes	8	0.0	100.0	7	0.0	100.0	1	--*	100.0
Accidents & Adverse Effects (E800-E949)	1	--*	12.5	0	--*	0.0	1	--*	100.0
Chronic Obstructive Pulmonary Diseases (490-49)	1	--*	12.5	1	--*	14.3	0	--*	0.0
Diseases of Heart (390-398,402,404-429)	1	--*	12.5	1	--*	14.3	0	--*	0.0
Homicide & Legal Intervention (E960-E978)	1	--*	12.5	1	--*	14.3	0	--*	0.0
Malignant Neoplasms (140-208)	1	--*	12.5	1	--*	14.3	0	--*	0.0
All Other Causes	3	--*	37.5	3	--*	42.9	0	--*	0.0

¹Rate per 100,000 population in each age-sex group.

²Percent 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.

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Table 22. Deaths to Residents by Selected Causes by Sex, 1998

Cause with International List Number	Total		Male		Female	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
Total All Causes²	(42,585)	(749.0)	(21,370)	(755.0)	(21,215)	(743.1)
Infectious and Parasitic Diseases (001-139)	(633)	(11.1)	(388)	(13.7)	(245)	(8.6)
Tuberculosis (010-018)	15	0.3	9	0.3	6	0.2
Septicemia (038)	223	3.9	90	3.2	133	4.7
Human Immunodeficiency Virus (042-044)	114	2.0	107	3.8	7	0.2
Other (000-009,020-037,039-041,045-139)	281	4.9	182	6.4	99	3.5
Neoplasms (140-239)	(10,397)	(182.9)	(5,407)	(191.0)	(4,990)	(174.8)
Malignant Neoplasms (140-208)	10,270	180.6	5,352	189.1	4,918	172.3
Benign Neoplasms, Carcinoma in Situ (210-239)	127	2.2	55	1.9	72	2.5
Endocrine, Nutrition, Metabolic Immunity (240-279)	(1,638)	(28.8)	(749)	(26.5)	(889)	(31.1)
Diabetes Mellitus (250)	1,212	21.3	581	20.5	631	22.1
Nutritional Deficiencies (260-269)	68	1.2	21	0.7	47	1.6
Other (240-249,251-259,270-279)	358	6.3	147	5.2	211	7.4
Diseases of Blood and Blood-Forming Organs (280-289)	(187)	(3.3)	(99)	(3.5)	(88)	(3.1)
Anemia (280-285)	75	1.3	34	1.2	41	1.4
Other (286-289)	112	2.0	65	2.3	47	1.6
Mental Disorders (290-319)	(1,557)	(27.4)	(565)	(20.0)	(992)	(34.7)
Alcohol-Related (291,303,305.0)	151	2.7	106	3.7	45	1.6
Other (290,292-302,304,305.1-319)	1,406	24.7	459	16.2	947	33.2
Diseases of the Nervous System and Sense Organ (320-389)	(1,463)	(25.7)	(678)	(24.0)	(785)	(27.5)
Meningitis (320-322)	11	0.2	7	0.2	4	—*
Alzheimers' Disease (331.0)	608	10.7	203	7.2	405	14.2
Parkinson's Disease (332)	351	6.2	219	7.7	132	4.6
Amyotrophic Lateral Sclerosis (335.2)	107	1.9	49	1.7	58	2.0
Multiple Sclerosis (340)	91	1.6	28	1.0	63	2.2
Other (323-330,331.1-331.9,333-335.1,335.8-337,341-389)	295	5.2	172	6.1	123	4.3
Diseases of the Circulatory System (390-459)	(16,075)	(282.7)	(7,822)	(276.4)	(8,253)	(289.1)
Major Cardiovascular Diseases (390-448)	(16,011)	(281.6)	(7,798)	(275.5)	(8,213)	(287.7)
Diseases of the Heart (390-398,402,404-429)	(11,473)	(201.8)	(5,991)	(211.7)	(5,482)	(192.0)
Rheumatic Fever & Rheumatic Heart Disease (390-398)	117	2.1	37	1.3	80	2.8
Hypertensive Heart Disease (402)	441	7.8	204	7.2	237	8.3
Hypertensive Heart and Renal Disease (404)	36	0.6	14	0.5	22	0.8
Ischemic Heart Disease (410-414)	(6,879)	(121.0)	(3,767)	(133.1)	(3,112)	(109.0)
Acute Myocardial Infarction (410)	2,906	51.1	1,608	56.8	1,298	45.5
Other Forms of Ischemic Heart Disease (411)	7	0.1	5	0.2	2	—*
Angina Pectoris (413)	13	0.2	6	0.2	7	0.2
Old Myocardial Infarction, Chronic Ischemic (412,414)	3,953	69.5	2,148	75.9	1,805	63.2
Other Diseases of Endocardium (424)	532	9.4	221	7.8	311	10.9
Cardiovascular Disease, Unspecified (429.2)	1,653	29.1	910	32.2	743	26.0
Other Heart Disease (415-428,429.0-429.1,429.3-429.9)	1,815	31.9	838	29.6	977	34.2
Hypertensive Disease (401,403)	227	4.0	73	2.6	154	5.4
Cerebrovascular Disease (430-438)	3,414	60.0	1,311	46.3	2,103	73.7
Arteriosclerosis (440)	334	5.9	126	4.5	208	7.3
Other Major Cardiovascular Diseases (441-448)	563	9.9	297	10.5	266	9.3
Other Diseases of Circulatory System (451-459)	64	1.1	24	0.8	40	1.4
Diseases of the Respiratory System (460-519)	(4,720)	(83.0)	(2,244)	(79.3)	(2,476)	(86.7)
Acute Bronchitis and Bronchiolitis (466)	4	—*	1	—*	3	—*
Pneumonia and Influenza (480-487)	(1,717)	(30.2)	(771)	(27.2)	(946)	(33.1)
Pneumonia (480-486)	1,694	29.8	763	27.0	931	32.6
Influenza (487)	23	0.4	8	0.3	15	0.5

Table 22. Deaths to Residents by Selected Causes by Sex, 1998

Cause with International List Number	Total		Male		Female	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
Diseases of the Respiratory System (460-519) Cont.	(4,720)	(83.0)	(2,244)	(79.3)	(2,476)	(86.7)
Chronic Obstructive Pulmonary Diseases (490-496)	(2,401)	(42.2)	(1,159)	(40.9)	(1,242)	(43.5)
Bronchitis, Chronic and Unspecified (490-491)	68	1.2	32	1.1	36	1.3
Emphysema (492)	323	5.7	161	5.7	162	5.7
Asthma (493)	86	1.5	32	1.1	54	1.9
Other Chronic Obstructive Pulmonary Diseases (494-496)	1,924	33.8	934	33.0	990	34.7
Other (460-465,470-478,500-519)	598	10.5	313	11.1	285	10.0
Diseases of the Digestive System (520-579)	(1,431)	(25.2)	(706)	(24.9)	(725)	(25.4)
Ulcer of Stomach and Duodenum (531-533)	93	1.6	46	1.6	47	1.6
Appendicitis (540-543)	5	0.1	4	--*	1	--*
Hernia & Intestinal Obstruction (550-553,560)	127	2.2	51	1.8	76	2.7
Chronic Liver Disease & Cirrhosis (571)	462	8.1	292	10.3	170	6.0
Cholelithiasis and Disorders of Gallbladder (574-575)	48	0.8	25	0.9	23	0.8
Other (520-530,534-537,555-558,562-570,572-573,576-579)	696	12.2	288	10.2	408	14.3
Diseases of the Genitourinary System (580-629)	(541)	(9.5)	(211)	(7.5)	(330)	(11.6)
Nephritis, Nephrotic Syndrome, and Nephrosis (580-589)	221	3.9	103	3.6	118	4.1
Infections of Kidney (590)	32	0.6	9	0.3	23	0.8
Hyperplasia of Prostate (600)	13	0.2	13	0.5	0	--*
Other (591-599,601-629)	275	4.8	86	3.0	189	6.6
Complications of Pregnancy & Childbirth (630-676)	(3)	--*	0	--*	(3)	--*
Diseases of the Skin (680-709)	(40)	(0.7)	(13)	(0.5)	(27)	(0.9)
Diseases of the Musculoskeletal (710-739)	(227)	(4.0)	(62)	(2.2)	(165)	(5.8)
Congenital Anomalies (740-759)	(252)	(4.4)	(131)	(4.6)	(121)	(4.2)
Certain Conditions in the Perinatal Period (760-779)	(182)	(3.2)	(93)	(3.3)	(89)	(3.1)
Birth Trauma & Asphyxia Conditions (767-769)	34	0.6	24	0.8	10	0.4
Other Conditions in Perinatal Period (760-766,770-779)	148	2.6	69	2.4	79	2.8
Ill-Defined Conditions (780-799)	(274)	(4.8)	(132)	(4.7)	(142)	(5.0)
Sudden Infant Death Syndrome (798.0)	91	1.6	55	1.9	36	1.3
Other (780-797,798.1-799)	183	3.2	77	2.7	106	3.7
Accidents and Adverse Effects (E800-E949)	(1,930)	(33.9)	(1,278)	(45.2)	(652)	(22.8)
Motor Vehicle (E810-E825)	743	13.1	495	17.5	248	8.7
Water Transport (E830-E838)	(25)	(0.4)	(23)	(0.8)	(2)	--*
Drownings Due To (E830,E832)	20	0.4	19	0.7	1	--*
Other Water Transport (E831,E833-E838)	5	0.1	4	--*	1	--*
Air and Space Transport (E840-E845)	18	0.3	16	0.6	2	--*
Accidental Poisoning (E850-E869)	327	5.8	249	8.8	78	2.7
Falls (E880-E888)	377	6.6	209	7.4	168	5.9
Fire (E890-E899)	54	0.9	34	1.2	20	0.7
Accidental Drowning (E910)	87	1.5	64	2.3	23	0.8
Late Effects of Accidental Injury (E929)	15	0.3	8	0.3	7	0.2
Other (E800-E949)	284	5.0	180	6.4	104	3.6
Suicide (E950-E959)	(700)	(12.3)	(564)	(19.9)	(136)	(4.8)
Suicide: Firearms or Explosives (E955)	377	6.6	325	11.5	52	1.8
Suicide: Other Methods (E950-E954,E956-E959)	323	5.7	239	8.4	84	2.9
Homicide and Legal Intervention (E960-E978)	(237)	(4.2)	(170)	(6.0)	(67)	(2.3)
Homicide: Firearms and Explosives (E965)	142	2.5	109	3.9	33	1.2
Homicide: Other Methods (E960-E964,E966-E969)	93	1.6	59	2.1	34	1.2
Legal Intervention (E970-E978)	2	--*	2	--*	0	--*
All other External Causes (E980-E999)	(98)	(1.7)	(58)	(2.0)	(40)	(1.4)

¹Rates per 100,000 population.

²Group totals are shown in parentheses.

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

DEAA03M2

Table 23. Deaths to Residents Due to Malignant Neoplasm by Primary Site by Sex, 1998

Cause with International List Number	Total		Male		Female	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
Total All Causes²	(10,270)	(180.6)	(5,352)	(189.1)	(4,918)	(172.3)
Lip, Oral Cavity, and Pharynx (140-149)	(149)	(2.6)	(101)	(3.6)	(48)	(1.7)
Digestive Organs and Peritoneum (150-159)	(2,402)	(42.2)	(1,323)	(46.7)	(1,079)	(37.8)
Esophagus (150)	252	4.4	194	6.9	58	2.0
Stomach (151)	204	3.6	112	4.0	92	3.2
Small Intestine, Including Duodenum (152)	29	0.5	14	0.5	15	0.5
Colon (153)	812	14.3	415	14.7	397	13.9
Rectum (154)	156	2.7	83	2.9	73	2.6
Liver and Intrahepatic Ducts (155)	243	4.3	156	5.5	87	3.0
Gallbladder and Extrahepatic Bile Ducts (156)	72	1.3	36	1.3	36	1.3
Pancreas (157)	583	10.3	292	10.3	291	10.2
Retroperitoneum and Peritoneum (158)	20	0.4	7	0.2	13	0.5
Intestinal tract, part unspecified (159.0)	12	0.2	3	--*	9	0.3
Other and Ill-defined sites within the digestive organs and peritoneum (159.1-159.9)	19	0.3	11	0.4	8	0.3
Respiratory and Intrathoracic Organs (160-165)	(3,159)	(55.6)	(1,773)	(62.6)	(1,386)	(48.5)
Trachea (162.0)	3	--*	2	--*	1	--*
Bronchus and Lung (162.2-162.9)	3,031	53.3	1,676	59.2	1,355	47.5
Other (160-161,163-165)	125	2.2	95	3.4	30	1.1
Bone, Connective Tissue, Skin and Breast (170-175)	(1,055)	(18.6)	(179)	(6.3)	(876)	(30.7)
Bone and Articular Cartilage (170)	25	0.4	17	0.6	8	0.3
Connective Tissue and Other Soft Tissue (171)	83	1.5	42	1.5	41	1.4
Skin (172-173)	191	3.4	117	4.1	74	2.6
Breast (174,175)	756	13.3	3	--*	753	26.4
Genital Organs (179-187)	(1,073)	(18.9)	(590)	(20.8)	(483)	(16.9)
Cervix uteri (180)	77	1.4	0	--*	77	2.7
Prostate (185)	576	10.1	576	20.4	0	--*
Other (179,181-184,186-187)	420	7.4	14	0.5	406	14.2
Urinary Organs (188-189)	(496)	(8.7)	(338)	(11.9)	(158)	(5.5)
Bladder (188)	227	4.0	162	5.7	65	2.3
Other (189)	269	4.7	176	6.2	93	3.3
Brain (191)	(304)	(5.3)	(180)	(6.4)	(124)	(4.3)
Other and Ill-Defined Sites (190,192-199)	(517)	(9.1)	(257)	(9.1)	(260)	(9.1)
Lymphatic and Hematopoietic Tissue (200-208)	(1,115)	(19.6)	(611)	(21.6)	(504)	(17.7)
Lymphosarcoma (200)	34	0.6	17	0.6	17	0.6
Hodgkins Disease (201)	27	0.5	20	0.7	7	0.2
Lymphoid and Histiocytic Tissue (202)	439	7.7	227	8.0	212	7.4
Multiple Myeloma and Immunoproliferative Tissue (203)	223	3.9	107	3.8	116	4.1
Lymphoid Leukemia (204)	133	2.3	95	3.4	38	1.3
Myeloid Leukemia (205)	223	3.9	119	4.2	104	3.6
Monocytic Leukemia (206)	7	0.1	4	--*	3	--*
Other and Unspecified Leukemia (207-208)	29	0.5	22	0.8	7	0.2

¹Rates per 100,000 population.

²Group totals are shown in parentheses.

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

DEAA04M1

Table 24. Deaths to Residents by Non-Transport Causes by Place of Accident, 1998

Cause of Death	Nursing							
	Total	Home	Home	Agriculture	Industry	Prison	Public	Unk
State Total	1,115	542	81	23	46	7	234	182
Poisoning by Drugs, Medicaments and Biologicals (E850-E858)	310	209	0	1	7	4	64	25
Poisoning by Other Solid and Liquid Substances, Gases and Vapors (E860-E869)	17	6	0	0	7	0	3	1
Misadventures and Abnormal Reactions Due to Surgical and Medical Care (E870-E879)	37	0	1	0	0	0	26	10
Falls (E880-E888) ¹	(377)	(188)	(76)	(3)	(10)	(1)	(46)	(53)
Falls on/from Stairs or Ladders (E880-E881)	43	36	2	1	3	0	1	0
Falls from One Level to Another (E882-E884)	57	20	9	2	7	0	19	0
Falls on Same Level (E885-E886)	30	18	5	0	0	0	5	2
Other and Unspecified Fall (E887-E888)	247	114	60	0	0	1	21	51
Fire (E890-E899)	54	48	0	0	1	0	5	0
Natural and Environmental Factors (E900-E909)	31	6	0	1	0	0	17	7
Drowning, Excluding Submersion Following Boating Accidents (E910)	87	22	2	4	3	1	54	1
Inhalation and Ingestion of Food or Other Object Causing Suffocation and Obstruction (E911-E912)	74	7	1	0	0	1	4	61
Mechanical Suffocation (E913)	21	20	0	0	0	0	1	0
Foreign Body Entering Other Orifice (E914-E915)	0	0	0	0	0	0	0	0
Struck by, Against or Between Objects (E916-E918)	27	7	0	3	7	0	9	1
Machinery (E919-E920)	17	3	0	8	5	0	1	0
Explosion and Explosive Material (E921,E923)	4	3	1	0	0	0	0	0
Firearms (E922)	12	9	0	0	1	0	2	0
Hot Substance, Corrosive Liquid and Steam (E924)	1	1	0	0	0	0	0	0
Electricity (E925)	8	6	0	0	1	0	1	0
Late Effects of Non-Transport Accidents (E929.2-E929.9)	13	2	0	1	2	0	0	8
Other and Unspecified Non-Transport Accidents (E926-E928,E930-E949)	25	5	0	2	2	0	1	15

¹Group totals for falls are shown in parentheses.

DEAA05MI

Table 25. Deaths by Place of Residence and Occurrence, 1998

County and City	Residence		Occurrence	
	Total	Rate ¹	Total	Rate ¹
State Total	42,585	7.5	42,853	7.5
Adams	108	6.8	90	5.7
Asotin	217	10.9	183	9.2
Benton	877	6.4	845	6.1
Kennewick	401	8.0	450	8.9
Richland	251	6.8	300	8.1
Chelan	553	8.8	671	10.7
Wenatchee	283	11.2	496	19.6
Clallam	741	11.1	676	10.1
Port Angeles	258	13.7	412	21.8
Clark	2,191	6.7	2,074	6.3
Vancouver	1,335	10.1	1,745	13.2
Columbia	45	10.7	41	9.8
Cowlitz	869	9.3	957	10.3
Longview	433	12.7	835	24.5
Douglas	217	6.9	110	3.5
Ferry	63	8.6	38	5.2
Franklin	301	6.8	276	6.2
Pasco	223	8.5	261	10.0
Garfield	34	14.2	23	9.6
Grant	534	7.7	457	6.6
Grays Harbor	722	10.6	621	9.1
Aberdeen	194	11.7	342	20.6
Island	549	7.6	386	5.3
Oak Harbor	109	5.3	130	6.3
Jefferson	282	10.6	207	7.8
King	11,484	6.9	12,802	7.7
Auburn	366	9.8	512	13.7
Bellevue	681	6.4	1,045	9.9
Burien	150	5.3	331	11.8
Des Moines	274	10.1	325	11.9
Federal Way	420	5.5	452	5.9
Kent	397	5.5	191	2.7
Kirkland	327	7.4	723	16.4
Mercer Island	152	7.0	125	5.8
Redmond	259	6.0	273	6.3
Renton	420	9.1	720	15.6
Sea Tac	114	4.8	65	2.8
Seattle	5,148	9.5	6,834	12.7
Shoreline	349	6.9	307	6.1
Kitsap	1,580	6.9	1,514	6.6
Bainbridge Island	133	7.0	99	5.2
Bremerton	448	12.0	864	23.2

Table 25. Deaths by Place of Residence and Occurrence, 1998

County and City	Residence		Occurrence	
	Total	Rate ¹	Total	Rate ¹
Kittitas	254	8.1	237	7.5
Klickitat	133	7.0	109	5.7
Lewis	763	11.1	683	10.0
Lincoln	125	12.5	94	9.4
Mason	491	10.2	364	7.5
Okanogan	376	9.8	316	8.2
Pacific	267	12.4	192	8.9
Pend Oreille	114	10.2	100	8.9
Pierce	4,971	7.2	5,031	7.3
Lakewood	400	6.4	388	6.2
Puyallup	323	10.8	800	26.7
Tacoma	1,964	10.6	3,011	16.2
University Place	182	6.2	146	4.9
San Juan	99	7.9	82	6.5
Skagit	929	9.4	910	9.2
Mount Vernon	201	8.9	402	17.8
Skamania	64	6.5	44	4.4
Snohomish	3,590	6.3	3,201	5.6
Edmonds	350	9.1	488	12.6
Everett	770	9.1	1,136	13.5
Lynnwood	328	9.9	257	7.8
Marysville	235	11.9	247	12.5
Mountlake Terrace	97	4.8	39	1.9
Mukilteo	67	4.0	26	1.5
Spokane	3,488	8.5	3,931	9.6
Spokane (City)	2,107	11.2	3,567	18.9
Stevens	323	8.6	264	7.0
Thurston	1,551	7.8	1,633	8.2
Lacey	260	9.2	253	9.0
Olympia	504	12.9	1,203	30.8
Wahkiakum	61	15.6	42	10.8
Walla Walla	517	9.5	608	11.1
Walla Walla (City)	344	11.7	546	18.5
Whatcom	1,191	7.6	1,214	7.7
Bellingham	610	9.8	905	14.6
Whitman	212	5.1	174	4.2
Pullman	48	1.9	51	2.0
Yakima	1,699	8.1	1,653	7.9
Yakima (City)	766	11.9	1,143	17.8

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

DEAA06P1

Table 26. Deaths by Sex and Race/Ethnicity by Place of Residence, 1998

County and City	Total	Male	Female	White	African Amer.	Native Amer.	Japane	Chi-nese	Fili-pino	Other Asian	Other	Unk	Hispanic ¹
State Total	42,585	21,370	21,215	40,000	1,034	529	205	124	219	446	2	26	718
Adams	108	57	51	107	0	0	0	0	0	1	0	0	12
Asotin	217	105	112	216	0	1	0	0	0	0	0	0	1
Benton	877	457	420	866	5	1	2	0	1	1	0	1	19
Kennewick	401	206	195	394	3	1	1	0	1	0	0	1	8
Richland	251	125	126	249	1	0	0	0	0	1	0	0	3
Chelan	553	253	300	551	0	1	0	0	0	1	0	0	17
Wenatchee	283	118	165	281	0	1	0	0	0	1	0	0	3
Clallam	741	399	342	712	1	23	3	0	0	2	0	0	6
Port Angeles	258	120	138	252	0	4	1	0	0	1	0	0	2
Clark	2,191	1,094	1,097	2,126	20	11	6	2	4	21	0	1	19
Vancouver	1,335	651	684	1,285	19	6	5	2	1	17	0	0	14
Columbia	45	22	23	45	0	0	0	0	0	0	0	0	2
Cowlitz	869	432	437	863	0	4	0	0	0	1	0	1	6
Longview	433	200	233	430	0	2	0	0	0	1	0	0	4
Douglas	217	117	100	216	0	0	0	0	0	1	0	0	5
Ferry	63	39	24	44	0	19	0	0	0	0	0	0	0
Franklin	301	159	142	282	13	1	3	0	0	2	0	0	39
Pasco	223	110	113	205	12	1	3	0	0	2	0	0	32
Garfield	34	17	17	34	0	0	0	0	0	0	0	0	0
Grant	534	288	246	519	8	5	1	0	0	0	0	1	41
Grays Harbor	722	359	363	699	0	19	0	1	2	1	0	0	8
Aberdeen	194	88	106	187	0	4	0	1	2	0	0	0	3
Island	549	292	257	533	2	2	5	0	6	1	0	0	6
Oak Harbor	109	49	60	100	1	1	1	0	5	1	0	0	3
Jefferson	282	147	135	278	1	3	0	0	0	0	0	0	0
King	11,484	5,662	5,822	10,165	605	101	129	114	121	238	2	9	158
Auburn	366	181	185	351	3	4	0	0	2	4	0	2	5
Bellevue	681	302	379	628	11	3	7	9	2	21	0	0	7
Burien	150	77	73	139	6	2	0	0	0	3	0	0	3
Des Moines	274	111	163	261	3	2	0	1	1	6	0	0	3
Federal Way	420	221	199	364	19	4	3	2	4	24	0	0	6
Kent	397	216	181	353	16	5	4	1	9	8	1	0	13
Kirkland	327	135	192	313	5	0	6	1	0	2	0	0	1
Mercer Island	152	77	75	145	0	0	3	1	1	2	0	0	0
Redmond	259	107	152	249	0	0	2	1	2	5	0	0	4
Renton	420	193	227	375	24	5	2	0	8	6	0	0	4
Sea Tac	114	60	54	102	9	1	0	0	0	2	0	0	3
Seattle	5,148	2,574	2,574	4,225	482	56	90	92	79	119	0	5	81
Shoreline	349	140	209	336	1	3	1	1	3	4	0	0	1
Kitsap	1,580	816	764	1,513	18	14	6	1	16	12	0	0	19
Bainbridge Island	133	66	67	128	1	0	0	0	3	1	0	0	0
Bremerton	448	227	221	426	11	4	0	1	3	3	0	0	8

Table 26. Deaths by Sex and Race/Ethnicity by Place of Residence, 1998

County and City	Total	Male	Female	White	African Amer.	Native Amer.	Japanese	Chinese	Filipino	Other Asian	Other	Unk	Hispanic ¹
Kittitas	254	136	118	252	0	1	1	0	0	0	0	0	2
Klickitat	133	81	52	125	1	6	1	0	0	0	0	0	2
Lewis	763	400	363	760	2	0	0	0	1	0	0	0	10
Lincoln	125	68	57	125	0	0	0	0	0	0	0	0	1
Mason	491	280	211	473	2	14	1	0	0	1	0	0	3
Okanogan	376	186	190	340	0	36	0	0	0	0	0	0	17
Pacific	267	128	139	264	0	1	0	0	1	0	0	1	2
Pend Oreille	114	53	61	114	0	0	0	0	0	0	0	0	1
Pierce	4,971	2,526	2,445	4,532	246	45	31	3	28	83	0	3	53
Lakewood	400	222	178	360	23	2	5	0	2	8	0	0	8
Puyallup	323	140	183	315	3	0	0	0	2	2	0	1	3
Tacoma	1,964	920	1,044	1,689	172	26	10	3	14	49	0	1	25
University Place	182	98	84	170	4	0	3	0	2	3	0	0	2
San Juan	99	49	50	98	0	1	0	0	0	0	0	0	0
Skagit	929	470	459	915	2	9	2	0	0	0	0	1	17
Mount Vernon	201	100	101	198	1	1	1	0	0	0	0	0	11
Skamania	64	41	23	63	0	1	0	0	0	0	0	0	0
Snohomish	3,590	1,759	1,831	3,470	21	32	3	1	23	40	0	0	23
Edmonds	350	165	185	339	5	0	0	0	3	3	0	0	2
Everett	770	359	411	739	7	5	1	0	7	11	0	0	6
Lynnwood	328	145	183	310	3	2	0	0	3	10	0	0	5
Marysville	235	111	124	227	0	2	1	1	2	2	0	0	2
Mountlake Terrace	97	53	44	94	0	0	0	0	1	2	0	0	1
Mukilteo	67	40	27	67	0	0	0	0	0	0	0	0	0
Spokane	3,488	1,703	1,785	3,396	42	30	5	1	2	9	0	3	19
Spokane (City)	2,107	1,017	1,090	2,045	29	20	3	1	2	6	0	1	11
Stevens	323	162	161	303	0	17	0	0	1	1	0	1	0
Thurston	1,551	763	788	1,485	19	18	4	1	2	20	0	2	17
Lacey	260	118	142	251	4	2	1	0	0	2	0	0	3
Olympia	504	246	258	483	7	2	2	1	0	8	0	1	8
Wahkiakum	61	36	25	59	0	1	0	0	0	1	0	0	0
Walla Walla	517	250	267	511	3	1	0	0	1	1	0	0	17
Walla Walla (City)	344	160	184	339	3	1	0	0	0	1	0	0	11
Whatcom	1,191	592	599	1,153	2	28	1	0	3	4	0	0	15
Bellingham	610	266	344	604	1	2	0	0	2	1	0	0	3
Whitman	212	111	101	206	2	1	0	0	0	2	0	1	1
Pullman	48	24	24	43	2	0	0	0	0	2	0	1	0
Yakima	1,699	861	838	1,587	19	82	1	0	7	2	0	1	160
Yakima (City)	766	362	404	744	17	5	0	0	0	0	0	0	50

DEAA11P1

¹Persons of Hispanic Origin may be of any race. See Appendix A, "Hispanic Origin."

Table 27. Deaths by Age Group by Place of Residence, 1998

County and City	Total	85 and Age												
		< 1	1-4	5-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	Over Unk	
State Total	42,585	452	96	133	250	319	744	1,514	2,661	4,004	7,821	12,796	11,787	8
Adams	108	2	1	0	1	1	3	4	10	13	14	28	31	0
Asotin	217	2	0	2	1	0	2	10	12	9	34	71	74	0
Benton	877	11	2	4	11	5	8	36	46	98	183	253	220	0
Kennewick	401	3	0	0	5	4	0	19	21	37	92	118	102	0
Richland	251	5	1	2	1	1	7	4	9	23	49	82	67	0
Chelan	553	5	1	4	6	6	9	15	38	50	89	164	166	0
Wenatchee	283	3	1	0	3	1	2	7	15	28	43	84	96	0
Clallam	741	8	1	1	5	5	9	18	33	60	143	243	215	0
Port Angeles	258	5	0	1	0	0	2	8	13	19	48	87	75	0
Clark	2,191	30	8	7	11	17	42	71	146	204	453	632	568	2
Vancouver	1,335	22	4	4	7	8	29	47	77	116	264	401	355	1
Columbia	45	0	0	0	0	0	2	2	1	1	9	14	16	0
Cowlitz	869	8	1	2	7	4	12	23	52	80	174	265	241	0
Longview	433	6	0	0	2	2	8	11	24	31	86	119	144	0
Douglas	217	4	0	0	1	1	8	15	9	15	45	55	64	0
Ferry	63	1	0	1	0	2	2	3	7	4	14	17	12	0
Franklin	301	6	1	1	4	3	10	8	11	32	62	85	78	0
Pasco	223	4	1	0	3	3	7	5	8	23	44	58	67	0
Garfield	34	0	0	0	0	0	0	2	1	4	7	11	9	0
Grant	534	3	3	4	8	12	13	25	31	50	108	154	123	0
Grays Harbor	722	7	1	1	2	3	6	31	30	76	160	222	183	0
Aberdeen	194	3	0	0	2	1	4	10	6	21	31	49	67	0
Island	549	4	2	0	1	5	6	9	42	54	91	194	141	0
Oak Harbor	109	3	0	0	1	1	2	2	8	10	15	32	35	0
Jefferson	282	0	1	0	1	0	7	5	12	23	68	96	69	0
King	11,484	111	23	25	49	68	230	464	765	985	1,934	3,511	3,316	3
Auburn	366	1	0	0	4	6	6	11	24	33	80	110	91	0
Bellevue	681	6	0	0	3	1	12	20	28	62	129	222	198	0
Burien	150	1	1	1	2	1	3	6	7	15	23	49	41	0
Des Moines	274	4	0	0	1	1	3	7	6	17	41	79	115	0
Federal Way	420	4	0	1	2	5	6	10	40	37	99	120	94	2
Kent	397	14	2	4	5	3	12	26	38	42	77	104	70	0
Kirkland	327	2	0	2	1	4	7	8	21	29	48	90	115	0
Mercer Island	152	1	0	1	0	0	1	1	4	11	29	47	57	0
Redmond	259	3	0	0	1	1	5	11	10	16	23	76	113	0
Renton	420	7	3	1	1	2	5	23	36	34	69	120	119	0
Sea Tac	114	3	0	0	0	0	2	11	9	12	29	32	16	0
Seattle	5,148	44	11	8	12	25	118	229	359	415	774	1,575	1,577	1
Shoreline	349	3	2	0	1	3	3	16	22	22	62	114	101	0
Kitsap	1,580	12	5	9	5	12	26	40	112	165	287	487	420	0
Bainbridge Island	133	0	1	0	0	0	1	2	7	8	26	37	51	0
Bremerton	448	5	1	2	1	5	4	7	33	48	73	126	143	0

Table 27. Deaths by Age Group by Place of Residence, 1998

County and City	Total	85 and Age											Over	Unk
		< 1	1-4	5-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84		
Kittitas	254	5	2	3	3	2	2	4	9	20	49	77	78	0
Klickitat	133	0	0	1	2	3	3	5	12	20	19	44	24	0
Lewis	763	9	1	3	10	1	10	23	45	69	136	221	235	0
Lincoln	125	1	0	0	0	0	0	1	8	6	22	32	55	0
Mason	491	4	2	0	4	6	6	14	41	45	109	147	113	0
Okanogan	376	6	0	1	4	5	4	10	26	47	78	96	99	0
Pacific	267	0	1	0	1	3	0	6	15	39	52	83	67	0
Pend Oreille	114	2	0	0	1	1	2	4	3	16	30	33	22	0
Pierce	4,971	64	10	15	37	34	103	196	316	525	992	1,416	1,263	0
Lakewood	400	6	0	1	1	1	10	13	37	50	103	122	56	0
Puyallup	323	6	2	0	2	0	3	8	11	23	59	94	115	0
Tacoma	1,964	23	3	5	18	18	39	76	119	174	341	568	580	0
University Place	182	3	1	0	0	1	4	5	10	23	39	56	40	0
San Juan	99	0	0	0	0	0	0	2	5	10	18	35	29	0
Skagit	929	12	0	2	8	5	15	30	54	75	141	293	294	0
Mount Vernon	201	6	0	0	1	1	4	10	13	13	28	62	63	0
Skamania	64	0	0	1	1	1	1	3	1	7	10	24	15	0
Snohomish	3,590	46	11	8	20	37	55	138	253	405	693	1,033	890	1
Edmonds	350	1	0	0	1	2	3	9	14	39	67	115	98	1
Everett	770	17	2	0	4	7	14	30	49	82	137	222	206	0
Lynnwood	328	9	2	0	1	5	6	12	26	32	69	78	88	0
Marysville	235	2	1	2	1	3	3	3	20	22	47	71	60	0
Mountlake Terrace	97	2	0	0	0	2	4	4	6	10	24	31	14	0
Mukilteo	67	0	1	1	0	1	1	3	5	7	17	20	11	0
Spokane	3,488	30	6	16	11	19	57	105	210	299	634	1,112	988	1
Spokane (City)	2,107	20	2	8	7	15	33	65	113	152	354	707	631	0
Stevens	323	3	0	3	4	2	5	13	22	33	54	89	95	0
Thurston	1,551	16	5	6	9	18	30	47	87	155	277	491	409	1
Lacey	260	2	0	1	1	4	7	4	10	17	42	74	98	0
Olympia	504	6	1	1	4	6	10	16	24	49	80	170	137	0
Wahkiakum	61	0	0	1	0	0	0	1	3	5	13	14	24	0
Walla Walla	517	6	1	0	1	2	3	14	24	33	86	159	188	0
Walla Walla (City)	344	4	1	0	1	0	3	11	18	19	48	105	134	0
Whatcom	1,191	5	1	3	11	5	19	54	66	98	207	337	385	0
Bellingham	610	1	1	1	3	4	11	21	34	34	96	170	234	0
Whitman	212	2	0	0	0	2	3	2	8	18	39	65	73	0
Pullman	48	0	0	0	0	1	1	0	4	5	6	17	14	0
Yakima	1,699	27	6	9	10	29	31	61	95	156	287	493	495	0
Yakima (City)	766	11	2	2	4	9	18	15	34	63	114	236	258	0

DEAA15P1

Table 28. Deaths by Month of Death by Place of Residence, 1998

County and City	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
State Total	42,585	3,986	3,541	3,709	3,612	3,458	3,321	3,426	3,410	3,267	3,598	3,502	3,755
Adams	108	9	7	6	6	13	8	14	9	6	10	9	11
Asotin	217	22	19	23	17	20	15	16	18	14	21	15	17
Benton	877	92	69	55	73	69	79	72	60	71	78	75	84
Kennewick	401	44	35	25	33	30	39	25	25	25	40	34	46
Richland	251	26	18	17	24	22	18	25	16	22	20	24	19
Chelan	553	68	49	36	38	44	36	50	45	46	48	42	51
Wenatchee	283	34	29	15	23	14	17	24	24	28	24	22	29
Clallam	741	76	56	54	56	53	54	71	56	69	59	67	70
Port Angeles	258	23	25	14	20	14	18	24	25	31	20	21	23
Clark	2,191	208	176	177	188	208	164	181	180	171	167	177	194
Vancouver	1,335	122	97	121	112	114	98	109	116	93	115	109	129
Columbia	45	4	6	0	5	5	3	2	4	7	3	3	3
Cowlitz	869	82	78	77	77	64	64	68	77	65	72	61	84
Longview	433	41	37	43	34	25	28	35	39	38	35	34	44
Douglas	217	21	16	19	16	13	23	17	24	13	21	16	18
Ferry	63	2	7	5	3	6	5	6	5	4	11	5	4
Franklin	301	28	22	28	22	21	23	28	25	21	20	30	33
Pasco	223	19	17	20	14	19	18	22	16	13	18	21	26
Garfield	34	4	5	2	2	4	4	2	3	1	0	2	5
Grant	534	64	38	41	48	39	44	44	44	40	42	43	47
Grays Harbor	722	80	68	56	67	55	48	62	65	53	60	55	53
Aberdeen	194	19	18	13	21	16	11	19	15	23	10	15	14
Island	549	36	47	51	55	56	42	49	45	39	37	42	50
Oak Harbor	109	6	11	10	14	14	11	13	6	6	9	2	7
Jefferson	282	25	18	22	37	19	27	32	18	18	22	18	26
King	11,484	1,117	949	1,010	1,003	938	885	920	926	833	981	974	948
Auburn	366	42	35	30	37	28	29	27	28	17	38	28	27
Bellevue	681	64	55	65	52	47	60	59	49	54	57	55	64
Burien	150	10	11	17	15	16	8	17	12	12	12	10	10
Des Moines	274	22	19	21	22	28	16	26	25	17	24	23	31
Federal Way	420	41	34	32	31	34	34	32	38	32	38	28	46
Kent	397	46	30	27	28	33	35	42	27	28	26	40	35
Kirkland	327	36	38	23	32	32	22	22	22	21	30	28	21
Mercer Island	152	18	17	12	14	11	10	11	13	17	10	9	10
Redmond	259	30	24	18	25	27	21	17	19	16	21	24	17
Renton	420	38	33	41	38	32	27	40	22	36	36	37	40
Sea Tac	114	22	6	6	9	9	8	11	5	4	14	7	13
Seattle	5,148	488	404	475	464	450	396	411	422	362	439	431	406
Shoreline	349	25	22	41	27	25	28	21	24	26	22	48	40
Kitsap	1,580	132	135	141	118	134	110	128	130	126	138	140	148
Bainbridge Island	133	10	15	14	8	17	8	8	10	13	10	10	10
Bremerton	448	40	41	44	29	36	32	40	42	29	42	38	35

Table 28. Deaths by Month of Death by Place of Residence, 1998

County and City	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Kittitas	254	21	18	19	34	22	30	17	17	19	18	17	22
Klickitat	133	11	8	12	7	11	6	9	17	13	9	12	18
Lewis	763	64	79	68	59	60	66	55	52	62	66	59	73
Lincoln	125	13	11	10	10	9	12	16	9	4	10	11	10
Mason	491	43	33	34	43	40	36	43	38	39	50	43	49
Okanogan	376	26	33	30	38	27	37	29	31	32	35	30	28
Pacific	267	27	28	22	18	23	19	24	24	24	19	18	21
Pend Oreille	114	9	8	10	10	10	7	7	10	7	11	12	13
Pierce	4,971	462	405	450	384	415	405	398	418	403	429	365	437
Lakewood	400	32	26	38	33	38	33	26	30	40	36	34	34
Puyallup	323	29	23	32	22	24	26	19	39	26	32	22	29
Tacoma	1,964	194	168	180	143	184	168	142	159	143	174	150	159
University Place	182	18	14	17	13	19	12	14	15	14	17	9	20
San Juan	99	9	10	10	8	4	9	3	6	10	11	2	17
Skagit	929	77	73	86	84	80	61	77	64	64	83	88	92
Mount Vernon	201	19	20	18	14	20	11	20	11	16	10	15	27
Skamania	64	10	7	6	2	6	4	3	3	6	3	8	6
Snohomish	3,590	324	313	333	327	295	287	269	264	271	297	302	308
Edmonds	350	31	25	28	37	31	29	17	29	25	27	38	33
Everett	770	70	62	75	56	77	58	68	55	53	70	69	57
Lynnwood	328	39	25	29	35	26	27	28	28	24	21	22	24
Marysville	235	22	28	28	25	16	17	17	9	15	26	18	14
Mountlake Terrace	97	4	8	11	13	6	8	10	8	7	7	7	8
Mukilteo	67	5	8	5	10	3	3	6	5	5	8	3	6
Spokane	3,488	288	312	306	307	263	293	266	284	275	294	275	325
Spokane (City)	2,107	169	179	205	185	153	185	165	155	166	182	176	187
Stevens	323	34	35	32	18	20	35	18	25	31	24	23	28
Thurston	1,551	109	121	161	134	131	106	138	113	115	123	157	143
Lacey	260	16	26	27	18	22	20	26	11	22	23	22	27
Olympia	504	39	38	52	45	38	28	48	40	36	41	47	52
Wahkiakum	61	7	7	6	4	5	3	7	5	4	3	5	5
Walla Walla	517	63	53	39	37	23	39	36	30	44	48	50	55
Walla Walla (City)	344	46	41	29	25	14	20	16	19	29	35	32	38
Whatcom	1,191	112	91	111	110	100	91	104	92	93	94	86	107
Bellingham	610	56	52	56	54	52	52	48	49	47	50	35	59
Whitman	212	20	19	23	11	20	10	12	21	14	20	17	25
Pullman	48	7	3	7	3	7	2	4	4	4	5	1	1
Yakima	1,699	187	112	138	136	133	131	133	153	140	161	148	127
Yakima (City)	766	87	53	63	65	64	58	56	66	59	68	71	56

DEAA16P1

Table 29a. Deaths by Selected Disease Conditions by Place of Residence, 1998

County and City	<u>Infectious and Parasitic Diseases</u>		<u>Diabetes Mellitus</u>		<u>Alcoholism</u>		<u>Diseases of the Heart</u>		<u>Cerebrovascular Disease</u>	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
State Total	633	11.1	1,212	21.3	104	1.8	11,473	201.8	3,414	60.0
Adams	0	--*	6	37.7	0	--*	29	182.4	12	75.5
Asotin	3	--*	7	35.0	0	--*	59	295.0	17	85.0
Benton	8	5.8	33	24.0	3	--*	270	196.4	57	41.5
Kennewick	2	--*	17	33.7	0	--*	128	254.0	27	53.6
Richland	3	--*	11	29.8	1	--*	74	200.8	20	54.3
Chelan	7	11.2	14	22.4	0	--*	150	239.6	38	60.7
Wenatchee	5	19.8	6	23.7	0	--*	84	332.1	19	75.1
Clallam	6	9.0	21	31.5	0	--*	204	305.8	78	116.9
Port Angeles	2	--*	9	47.7	0	--*	77	408.3	33	175.0
Clark	29	8.8	58	17.7	15	4.6	573	174.7	157	47.9
Vancouver	18	13.6	34	25.8	9	6.8	325	246.2	91	68.9
Columbia	0	--*	3	--*	0	--*	12	285.7	2	--*
Cowlitz	7	7.5	20	21.5	3	--*	261	280.3	62	66.6
Longview	5	14.7	8	23.5	2	--*	137	402.2	34	99.8
Douglas	4	--*	6	19.1	1	--*	55	175.2	15	47.8
Ferry	0	--*	1	--*	0	--*	17	232.9	4	--*
Franklin	5	11.3	8	18.0	0	--*	90	202.7	33	74.3
Pasco	5	19.2	7	26.8	0	--*	64	245.3	26	99.7
Garfield	1	--*	1	--*	0	--*	9	375.0	5	208.3
Grant	4	--*	12	17.3	2	--*	153	220.5	50	72.0
Grays Harbor	11	16.2	15	22.1	2	--*	202	297.5	60	88.4
Aberdeen	1	--*	7	42.1	0	--*	62	373.3	17	102.3
Island	8	11.0	17	23.4	1	--*	158	217.9	35	48.3
Oak Harbor	1	--*	3	--*	0	--*	33	160.9	8	39.0
Jefferson	2	--*	6	22.6	1	--*	91	343.4	21	79.2
King	226	13.6	315	18.9	22	1.3	3,031	182.0	951	57.1
Auburn	10	26.7	9	24.0	2	--*	118	315.2	22	58.8
Bellevue	13	12.3	24	22.7	0	--*	165	156.1	55	52.0
Burien	1	--*	5	17.8	0	--*	56	199.2	11	39.1
Des Moines	1	--*	3	--*	2	--*	80	294.1	25	91.9
Federal Way	11	14.3	15	19.5	0	--*	131	170.5	30	39.1
Kent	9	12.6	9	12.6	2	--*	103	143.8	26	36.3
Kirkland	2	--*	4	--*	1	--*	73	165.1	29	65.6
Mercer Island	6	27.7	3	--*	0	--*	35	161.4	21	96.8
Redmond	4	--*	4	--*	0	--*	55	127.0	22	50.8
Renton	10	21.6	14	30.3	1	--*	95	205.3	31	67.0
Sea Tac	1	--*	3	--*	1	--*	32	135.9	4	--*
Seattle	132	24.5	141	26.1	6	1.1	1,351	250.3	452	83.8
Shoreline	2	--*	9	17.9	2	--*	99	196.5	32	63.5
Kitsap	20	8.7	50	21.8	4	--*	414	180.8	105	45.9
Bainbridge Island	3	--*	5	26.2	0	--*	34	178.2	14	73.4
Bremerton	5	13.4	10	26.8	2	--*	121	324.7	27	72.5

Table 29a. Deaths by Selected Disease Conditions by Place of Residence, 1998

County and City	Infectious and Parasitic Diseases		Diabetes Mellitus		Alcoholism		Diseases of the Heart		Cerebrovascular Disease	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
Kittitas	2	--*	8	25.5	0	--*	73	232.5	20	63.7
Klickitat	1	--*	6	31.4	1	--*	35	183.2	8	41.9
Lewis	3	--*	17	24.8	1	--*	257	374.6	71	103.5
Lincoln	1	--*	1	--*	0	--*	41	410.0	12	120.0
Mason	6	12.4	11	22.8	0	--*	121	250.5	45	93.2
Okanogan	4	--*	13	33.9	0	--*	94	244.8	24	62.5
Pacific	4	--*	8	37.2	2	--*	87	404.7	22	102.3
Pend Oreille	5	44.6	2	--*	0	--*	26	232.1	12	107.1
Pierce	83	12.1	144	21.0	7	1.0	1,382	201.2	350	51.0
Lakewood	8	12.8	19	30.4	3	--*	111	177.5	14	22.4
Puyallup	3	--*	7	23.4	1	--*	105	351.1	24	80.2
Tacoma	36	19.4	55	29.6	2	--*	509	273.7	178	95.7
University Place	4	--*	4	--*	0	--*	57	192.9	7	23.7
San Juan	0	--*	1	--*	0	--*	26	206.3	7	55.6
Skagit	11	11.1	24	24.3	0	--*	221	223.9	87	88.1
Mount Vernon	0	--*	6	26.6	0	--*	42	186.3	15	66.5
Skamania	3	--*	1	--*	0	--*	16	161.6	1	--*
Snohomish	48	8.4	112	19.7	10	1.8	934	164.4	292	51.4
Edmonds	1	--*	15	38.9	0	--*	102	264.2	25	64.8
Everett	12	14.2	39	46.2	2	--*	178	211.1	77	91.3
Lynnwood	5	15.1	7	21.1	1	--*	85	256.7	18	54.4
Marysville	5	25.3	5	25.3	1	--*	74	374.9	19	96.3
Mountlake Terrace	1	--*	4	--*	1	--*	25	122.8	7	34.4
Mukilteo	3	--*	3	--*	0	--*	12	71.4	6	35.7
Spokane	46	11.2	105	25.6	6	1.5	911	221.7	259	63.0
Spokane (City)	29	15.4	67	35.6	3	--*	540	286.8	167	88.7
Stevens	4	--*	8	21.3	0	--*	88	234.0	29	77.1
Thurston	21	10.5	51	25.5	8	4.0	419	209.8	121	60.6
Lacey	6	21.2	10	35.4	5	17.7	78	276.2	18	63.7
Olympia	7	17.9	17	43.5	1	--*	124	317.4	46	117.7
Wahkiakum	1	--*	5	128.2	0	--*	21	538.5	5	128.2
Walla Walla	4	--*	14	25.6	1	--*	145	265.6	45	82.4
Walla Walla (City)	3	--*	10	34.0	1	--*	98	332.9	28	95.1
Whatcom	12	7.6	28	17.8	2	--*	290	184.1	114	72.4
Bellingham	6	9.7	19	30.7	1	--*	136	219.4	60	96.8
Whitman	4	--*	3	--*	0	--*	53	128.0	20	48.3
Pullman	1	--*	0	--*	0	--*	10	39.9	6	23.9
Yakima	29	13.8	57	27.1	12	5.7	455	216.2	168	79.8
Yakima (City)	14	21.8	25	38.9	2	--*	194	301.8	89	138.4

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¹Rates per 100,000 population.

NOTE: Source for Selected Disease Conditions is The International Classification of Diseases (Ninth Revision): Infectious and Parasitic Diseases (ICD 001-139); Diabetes Mellitus (ICD 250); Alcoholism (ICD 303); Diseases of the Heart (ICD 390-398, 402, 404-429); Cerebrovascular Disease (ICD 430-438).

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

Table 29b. Deaths by Selected Disease Conditions by Place of Residence, 1998

County and City	General Arteriosclerosis		Pneumonia and Influenza		Chronic Obstructive Pulmonary Diseases		Chronic Liver Disease and Cirrhosis		Nephritis, Nephrotic Syndrome, Nephrosis	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
State Total	334	5.9	1,717	30.2	2,401	42.2	462	8.1	221	3.9
Adams	1	--*	5	31.4	3	--*	1	--*	0	--*
Asotin	1	--*	6	30.0	13	65.0	2	--*	1	--*
Benton	3	--*	19	13.8	56	40.7	7	5.1	2	--*
Kennewick	1	--*	10	19.8	31	61.5	1	--*	1	--*
Richland	2	--*	7	19.0	10	27.1	3	--*	1	--*
Chelan	2	--*	30	47.9	24	38.3	4	--*	2	--*
Wenatchee	1	--*	19	75.1	13	51.4	0	--*	1	--*
Clallam	5	7.5	28	42.0	39	58.5	2	--*	1	--*
Port Angeles	2	--*	9	47.7	11	58.3	2	--*	1	--*
Clark	14	4.3	104	31.7	131	39.9	23	7.0	6	1.8
Vancouver	8	6.1	72	54.5	90	68.2	14	10.6	2	--*
Columbia	0	--*	3	--*	2	--*	0	--*	0	--*
Cowlitz	1	--*	47	50.5	56	60.2	13	14.0	4	--*
Longview	1	--*	24	70.5	20	58.7	7	20.6	1	--*
Douglas	0	--*	6	19.1	14	44.6	1	--*	0	--*
Ferry	0	--*	4	--*	3	--*	4	--*	0	--*
Franklin	0	--*	4	--*	16	36.0	3	--*	0	--*
Pasco	0	--*	2	--*	9	34.5	3	--*	0	--*
Garfield	0	--*	0	--*	1	--*	1	--*	2	--*
Grant	1	--*	17	24.5	39	56.2	8	11.5	1	--*
Grays Harbor	2	--*	26	38.3	42	61.9	7	10.3	7	10.3
Aberdeen	1	--*	7	42.1	9	54.2	2	--*	0	--*
Island	3	--*	23	31.7	21	29.0	6	8.3	2	--*
Oak Harbor	0	--*	3	--*	3	--*	2	--*	0	--*
Jefferson	0	--*	7	26.4	15	56.6	1	--*	1	--*
King	59	3.5	533	32.0	562	33.7	133	8.0	82	4.9
Auburn	1	--*	17	45.4	14	37.4	5	13.4	2	--*
Bellevue	3	--*	40	37.8	29	27.4	5	4.7	9	8.5
Burien	0	--*	5	17.8	7	24.9	0	--*	2	--*
Des Moines	4	--*	15	55.1	13	47.8	3	--*	2	--*
Federal Way	2	--*	16	20.8	16	20.8	4	--*	1	--*
Kent	5	7.0	8	11.2	19	26.5	4	--*	3	--*
Kirkland	1	--*	20	45.2	15	33.9	2	--*	4	--*
Mercer Island	0	--*	9	41.5	5	23.1	0	--*	1	--*
Redmond	0	--*	18	41.6	16	36.9	1	--*	2	--*
Renton	6	13.0	21	45.4	29	62.7	6	13.0	4	--*
Sea Tac	0	--*	5	21.2	5	21.2	2	--*	0	--*
Seattle	22	4.1	229	42.4	241	44.7	80	14.8	34	6.3
Shoreline	1	--*	18	35.7	25	49.6	2	--*	4	--*
Kitsap	6	2.6	49	21.4	117	51.1	19	8.3	5	2.2
Bainbridge Island	0	--*	5	26.2	3	--*	0	--*	0	--*
Bremerton	3	--*	19	51.0	30	80.5	5	13.4	1	--*

Table 29b. Deaths by Selected Disease Conditions by Place of Residence, 1998

County and City	General Arteriosclerosis		Pneumonia and Influenza		Chronic Obstructive Pulmonary Diseases		Chronic Liver Disease and Cirrhosis		Nephritis, Nephrotic Syndrome, Nephrosis	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
Kittitas	1	--*	7	22.3	19	60.5	2	--*	2	--*
Klickitat	1	--*	4	--*	3	--*	0	--*	0	--*
Lewis	6	8.7	24	35.0	46	67.1	7	10.2	1	--*
Lincoln	1	--*	5	50.0	7	70.0	0	--*	0	--*
Mason	1	--*	21	43.5	33	68.3	6	12.4	2	--*
Okanogan	2	--*	14	36.5	28	72.9	4	--*	3	--*
Pacific	2	--*	6	27.9	10	46.5	7	32.6	1	--*
Pend Oreille	4	--*	2	--*	7	62.5	1	--*	3	--*
Pierce	84	12.2	135	19.7	280	40.8	40	5.8	25	3.6
Lakewood	2	--*	9	14.4	25	40.0	2	--*	1	--*
Puyallup	13	43.5	10	33.4	20	66.9	2	--*	0	--*
Tacoma	34	18.3	59	31.7	104	55.9	15	8.1	11	5.9
University Place	1	--*	3	--*	10	33.8	0	--*	0	--*
San Juan	5	39.7	2	--*	4	--*	1	--*	0	--*
Skagit	3	--*	44	44.6	59	59.8	7	7.1	6	6.1
Mount Vernon	2	--*	13	57.7	12	53.2	1	--*	1	--*
Skamania	1	--*	2	--*	3	--*	0	--*	0	--*
Snohomish	25	4.4	126	22.2	188	33.1	41	7.2	21	3.7
Edmonds	1	--*	16	41.4	18	46.6	4	--*	1	--*
Everett	6	7.1	19	22.5	51	60.5	13	15.4	4	--*
Lynnwood	6	18.1	14	42.3	18	54.4	2	--*	1	--*
Marysville	2	--*	4	--*	18	91.2	1	--*	2	--*
Mountlake Terrace	2	--*	5	24.6	3	--*	2	--*	3	--*
Mukilteo	0	--*	1	--*	5	29.7	2	--*	0	--*
Spokane	64	15.6	172	41.9	233	56.7	45	11.0	15	3.7
Spokane (City)	48	25.5	109	57.9	144	76.5	25	13.3	11	5.8
Stevens	4	--*	13	34.6	29	77.1	7	18.6	0	--*
Thurston	4	--*	50	25.0	102	51.1	18	9.0	5	2.5
Lacey	1	--*	9	31.9	16	56.7	3	--*	0	--*
Olympia	1	--*	21	53.7	25	64.0	8	20.5	4	--*
Wahkiakum	0	--*	2	--*	9	230.8	0	--*	0	--*
Walla Walla	7	12.8	30	54.9	28	51.3	6	11.0	2	--*
Walla Walla (City)	6	20.4	24	81.5	21	71.3	6	20.4	1	--*
Whatcom	9	5.7	67	42.5	72	45.7	14	8.9	2	--*
Bellingham	4	--*	40	64.5	33	53.2	4	--*	0	--*
Whitman	3	--*	1	--*	10	24.2	1	--*	2	--*
Pullman	1	--*	0	--*	1	--*	0	--*	1	--*
Yakima	9	4.3	79	37.5	77	36.6	20	9.5	15	7.1
Yakima (City)	5	7.8	39	60.7	32	49.8	6	9.3	5	7.8

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¹Rates per 100,000 population.

NOTE: Source for Selected Disease Conditions is The International Classification of Diseases (Ninth Revision): General Arteriosclerosis (ICD 440); Pneumonia and Influenza (ICD 480-487); Chronic Obstructive Pulmonary Diseases (ICD 490-496); Chronic Liver Disease and Cirrhosis (ICD 571); Nephritis, Nephrotic Syndrome, Nephrosis (ICD 580-589).

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

Table 30a. Deaths Due to Malignant Neoplasm by Primary Site by Place of Residence, 1998

County and City	Malignant Neoplasms Total All Sites		Lip, Oral Cavity and Pharynx		Digestive Organs and Peritoneum		Respiratory and Intrathoracic Organs		Genital Organs	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
State Total	10,270	180.6	149	2.6	2,402	42.2	3,159	55.6	1,073	18.9
Adams	22	138.4	0	--*	6	37.7	6	37.7	3	--*
Asotin	58	290.0	1	--*	12	60.0	17	85.0	10	50.0
Benton	192	139.6	6	4.4	54	39.3	50	36.4	16	11.6
Kennewick	91	180.6	2	--*	26	51.6	27	53.6	6	11.9
Richland	49	132.9	2	--*	19	51.5	9	24.4	5	13.6
Chelan	131	209.3	2	--*	16	25.6	46	73.5	13	20.8
Wenatchee	64	253.1	2	--*	6	23.7	23	90.9	4	--*
Clallam	199	298.4	1	--*	45	67.5	64	96.0	23	34.5
Port Angeles	63	334.0	1	--*	6	31.8	28	148.5	7	37.1
Clark	529	161.3	5	1.5	110	33.5	168	51.2	47	14.3
Vancouver	328	248.5	4	--*	69	52.3	107	81.1	31	23.5
Columbia	15	357.1	0	--*	6	142.9	6	142.9	0	--*
Cowlitz	192	206.2	4	--*	50	53.7	62	66.6	11	11.8
Longview	81	237.8	2	--*	19	55.8	26	76.3	5	14.7
Douglas	60	191.1	0	--*	17	54.1	19	60.5	8	25.5
Ferry	9	123.3	0	--*	3	--*	3	--*	0	--*
Franklin	72	162.2	1	--*	18	40.5	25	56.3	8	18.0
Pasco	55	210.8	1	--*	12	46.0	20	76.7	6	23.0
Garfield	7	291.7	0	--*	1	--*	2	--*	1	--*
Grant	120	172.9	2	--*	29	41.8	35	50.4	15	21.6
Grays Harbor	200	294.6	6	8.8	39	57.4	66	97.2	23	33.9
Aberdeen	44	264.9	3	--*	6	36.1	8	48.2	6	36.1
Island	152	209.7	1	--*	41	56.6	42	57.9	15	20.7
Oak Harbor	25	121.9	0	--*	10	48.8	2	--*	3	--*
Jefferson	64	241.5	1	--*	13	49.1	25	94.3	7	26.4
King	2,696	161.8	49	2.9	655	39.3	795	47.7	282	16.9
Auburn	73	195.0	2	--*	13	34.7	24	64.1	8	21.4
Bellevue	162	153.3	4	--*	47	44.5	49	46.4	20	18.9
Burien	31	110.3	1	--*	7	24.9	6	21.3	4	--*
Des Moines	61	224.3	0	--*	14	51.5	13	47.8	5	18.4
Federal Way	102	132.8	1	--*	25	32.5	37	48.2	8	10.4
Kent	105	146.6	3	--*	26	36.3	42	58.7	6	8.4
Kirkland	79	178.7	1	--*	24	54.3	19	43.0	8	18.1
Mercer Island	43	198.2	2	--*	7	32.3	10	46.1	7	32.3
Redmond	65	150.1	1	--*	13	30.0	19	43.9	6	13.9
Renton	91	196.7	0	--*	23	49.7	29	62.7	7	15.1
Sea Tac	36	152.9	1	--*	10	42.5	8	34.0	3	--*
Seattle	1,157	214.4	22	4.1	282	52.3	341	63.2	143	26.5
Shoreline	65	129.0	3	--*	18	35.7	14	27.8	3	--*
Kitsap	412	179.9	1	--*	88	38.4	149	65.1	45	19.7
Bainbridge Island	38	199.2	0	--*	11	57.7	12	62.9	4	--*
Bremerton	106	284.5	0	--*	29	77.8	37	99.3	9	24.2

Table 30a. Deaths Due to Malignant Neoplasm by Primary Site by Place of Residence, 1998

County and City	Malignant Neoplasms Total All Sites		Lip, Oral Cavity and Pharynx		Digestive Organs and Peritoneum		Respiratory and Intrathoracic Organs		Genital Organs	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
Kittitas	55	175.2	3	--*	12	38.2	21	66.9	2	--*
Klickitat	39	204.2	0	--*	7	36.6	11	57.6	6	31.4
Lewis	167	243.4	4	--*	27	39.4	64	93.3	24	35.0
Lincoln	28	280.0	0	--*	6	60.0	9	90.0	3	--*
Mason	126	260.9	2	--*	31	64.2	50	103.5	10	20.7
Okanogan	78	203.1	1	--*	15	39.1	28	72.9	12	31.3
Pacific	68	316.3	2	--*	18	83.7	20	93.0	6	27.9
Pend Oreille	26	232.1	0	--*	6	53.6	10	89.3	5	44.6
Pierce	1,231	179.2	13	1.9	292	42.5	387	56.3	131	19.1
Lakewood	114	182.3	1	--*	30	48.0	32	51.2	15	24.0
Puyallup	61	203.9	0	--*	8	26.7	21	70.2	7	23.4
Tacoma	451	242.5	5	2.7	117	62.9	136	73.1	41	22.0
University Place	58	196.3	0	--*	11	37.2	16	54.1	4	--*
San Juan	28	222.2	0	--*	4	--*	5	39.7	5	39.7
Skagit	205	207.7	5	5.1	44	44.6	67	67.9	20	20.3
Mount Vernon	37	164.2	0	--*	11	48.8	8	35.5	3	--*
Skamania	19	191.9	0	--*	4	--*	6	60.6	1	--*
Snohomish	943	166.0	15	2.6	231	40.7	258	45.4	97	17.1
Edmonds	105	272.0	2	--*	32	82.9	33	85.5	8	20.7
Everett	181	214.6	2	--*	46	54.5	51	60.5	17	20.2
Lynnwood	80	241.6	2	--*	30	90.6	18	54.4	7	21.1
Marysville	58	293.8	0	--*	11	55.7	14	70.9	12	60.8
Mountlake Terrace	21	103.1	0	--*	6	29.5	9	44.2	2	--*
Mukilteo	18	107.1	1	--*	7	41.6	2	--*	0	--*
Spokane	833	202.7	11	2.7	198	48.2	235	57.2	85	20.7
Spokane (City)	480	254.9	6	3.2	106	56.3	146	77.5	45	23.9
Stevens	76	202.1	0	--*	14	37.2	25	66.5	9	23.9
Thurston	371	185.8	8	4.0	77	38.6	131	65.6	39	19.5
Lacey	51	180.6	1	--*	9	31.9	20	70.8	11	39.0
Olympia	118	302.0	3	--*	21	53.7	40	102.4	11	28.2
Wahkiakum	10	256.4	1	--*	6	153.8	2	--*	0	--*
Walla Walla	105	192.3	1	--*	25	45.8	29	53.1	15	27.5
Walla Walla (City)	65	220.8	1	--*	14	47.6	16	54.3	12	40.8
Whatcom	312	198.1	2	--*	83	52.7	73	46.3	42	26.7
Bellingham	152	245.2	1	--*	35	56.5	36	58.1	25	40.3
Whitman	51	123.2	0	--*	13	31.4	17	41.1	3	--*
Pullman	15	59.8	0	--*	1	--*	5	19.9	2	--*
Yakima	369	175.3	1	--*	86	40.9	131	62.2	31	14.7
Yakima (City)	165	256.6	1	--*	35	54.4	59	91.8	12	18.7

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¹Rates per 100,000 population.

NOTE: Source for Malignant Neoplasm by Primary Site is The International Classification of Diseases (Ninth Revision): Malignant Neoplasms, Total All Sites (ICD 140-208); Lip, Oral Cavity and Pharynx (ICD 140-149); Digestive Organs and Peritoneum (ICD 150-159); Respiratory and Intrathoracic Organs (ICD 160-165); Genital Organs (ICD 179-187).

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

Table 30b. Deaths Due to Malignant Neoplasm by Primary Site by Place of Residence, 1998

County and City	Urinary Organs		Skin		Breast		Lymphatic and Hematopoietic Tissue		Other and Unspecified Primary Sites	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
State Total	496	8.7	191	3.4	756	13.3	1,115	19.6	929	16.3
Adams	3	--*	2	--*	0	--*	1	--*	1	--*
Asotin	0	--*	4	--*	0	--*	8	40.0	6	30.0
Benton	12	8.7	1	--*	12	8.7	25	18.2	16	11.6
Kennewick	5	9.9	0	--*	6	11.9	11	21.8	8	15.9
Richland	2	--*	0	--*	4	--*	5	13.6	3	--*
Chelan	7	11.2	1	--*	14	22.4	17	27.2	15	24.0
Wenatchee	2	--*	0	--*	7	27.7	8	31.6	12	47.4
Clallam	9	13.5	2	--*	11	16.5	20	30.0	24	36.0
Port Angeles	4	--*	1	--*	5	26.5	6	31.8	5	26.5
Clark	27	8.2	12	3.7	47	14.3	55	16.8	58	17.7
Vancouver	13	9.8	5	3.8	28	21.2	34	25.8	37	28.0
Columbia	0	--*	1	--*	0	--*	2	--*	0	--*
Cowlitz	13	14.0	3	--*	15	16.1	21	22.6	13	14.0
Longview	4	--*	2	--*	9	26.4	8	23.5	6	17.6
Douglas	2	--*	2	--*	2	--*	2	--*	8	25.5
Ferry	1	--*	0	--*	1	--*	0	--*	1	--*
Franklin	3	--*	1	--*	5	11.3	8	18.0	3	--*
Pasco	2	--*	1	--*	4	--*	7	26.8	2	--*
Garfield	0	--*	0	--*	3	--*	0	--*	0	--*
Grant	5	7.2	2	--*	7	10.1	11	15.9	14	20.2
Grays Harbor	8	11.8	5	7.4	14	20.6	20	29.5	19	28.0
Aberdeen	2	--*	1	--*	4	--*	10	60.2	4	--*
Island	12	16.6	2	--*	12	16.6	20	27.6	7	9.7
Oak Harbor	2	--*	0	--*	1	--*	6	29.3	1	--*
Jefferson	1	--*	0	--*	5	18.9	6	22.6	6	22.6
King	131	7.9	40	2.4	221	13.3	276	16.6	247	14.8
Auburn	3	--*	1	--*	9	24.0	10	26.7	3	--*
Bellevue	4	--*	3	--*	11	10.4	11	10.4	13	12.3
Burien	2	--*	2	--*	2	--*	2	--*	5	17.8
Des Moines	4	--*	2	--*	9	33.1	8	29.4	6	22.1
Federal Way	6	7.8	0	--*	4	--*	11	14.3	10	13.0
Kent	6	8.4	2	--*	4	--*	12	16.8	4	--*
Kirkland	6	13.6	2	--*	5	11.3	7	15.8	7	15.8
Mercer Island	2	--*	2	--*	4	--*	4	--*	5	23.1
Redmond	3	--*	2	--*	6	13.9	11	25.4	4	--*
Renton	1	--*	1	--*	9	19.5	7	15.1	14	30.3
Sea Tac	4	--*	0	--*	2	--*	3	--*	5	21.2
Seattle	48	8.9	12	2.2	98	18.2	113	20.9	98	18.2
Shoreline	7	13.9	1	--*	6	11.9	7	13.9	6	11.9
Kitsap	21	9.2	11	4.8	23	10.0	37	16.2	37	16.2
Bainbridge Island	1	--*	1	--*	2	--*	5	26.2	2	--*
Bremerton	3	--*	1	--*	5	13.4	10	26.8	12	32.2

Table 30b. Deaths Due to Malignant Neoplasm by Primary Site by Place of Residence, 1998

County and City	Urinary Organs		Skin		Breast		Lymphatic and Hematopoietic Tissue		Other and Unspecified Primary Sites	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
Kittitas	1	--*	1	--*	3	--*	7	22.3	5	15.9
Klickitat	6	31.4	1	--*	1	--*	5	26.2	2	--*
Lewis	6	8.7	4	--*	9	13.1	16	23.3	13	19.0
Lincoln	3	--*	1	--*	1	--*	0	--*	5	50.0
Mason	2	--*	3	--*	4	--*	14	29.0	10	20.7
Okanogan	2	--*	2	--*	4	--*	7	18.2	7	18.2
Pacific	3	--*	1	--*	5	23.3	8	37.2	5	23.3
Pend Oreille	1	--*	0	--*	2	--*	2	--*	0	--*
Pierce	55	8.0	17	2.5	83	12.1	146	21.3	107	15.6
Lakewood	4	--*	2	--*	9	14.4	14	22.4	7	11.2
Puyallup	2	--*	2	--*	7	23.4	9	30.1	5	16.7
Tacoma	21	11.3	6	3.2	29	15.6	56	30.1	40	21.5
University Place	5	16.9	1	--*	6	20.3	7	23.7	8	27.1
San Juan	2	--*	1	--*	1	--*	6	47.6	4	--*
Skagit	11	11.1	5	5.1	18	18.2	15	15.2	20	20.3
Mount Vernon	2	--*	0	--*	3	--*	4	--*	6	26.6
Skamania	0	--*	1	--*	2	--*	1	--*	4	--*
Snohomish	43	7.6	24	4.2	80	14.1	99	17.4	96	16.9
Edmonds	3	--*	3	--*	6	15.5	8	20.7	10	25.9
Everett	6	7.1	2	--*	18	21.3	21	24.9	18	21.3
Lynnwood	3	--*	0	--*	7	21.1	6	18.1	7	21.1
Marysville	3	--*	3	--*	4	--*	8	40.5	3	--*
Mountlake Terrace	0	--*	0	--*	0	--*	2	--*	2	--*
Mukilteo	1	--*	0	--*	2	--*	3	--*	2	--*
Spokane	44	10.7	19	4.6	65	15.8	105	25.6	71	17.3
Spokane (City)	26	13.8	8	4.2	39	20.7	62	32.9	42	22.3
Stevens	3	--*	3	--*	4	--*	6	16.0	12	31.9
Thurston	18	9.0	8	4.0	22	11.0	42	21.0	26	13.0
Lacey	2	--*	1	--*	2	--*	4	--*	1	--*
Olympia	6	15.4	5	12.8	10	25.6	15	38.4	7	17.9
Wahkiakum	0	--*	0	--*	1	--*	0	--*	0	--*
Walla Walla	9	16.5	0	--*	6	11.0	8	14.7	12	22.0
Walla Walla (City)	4	--*	0	--*	3	--*	5	17.0	10	34.0
Whatcom	16	10.2	8	5.1	25	15.9	33	21.0	30	19.0
Bellingham	6	9.7	3	--*	15	24.2	18	29.0	13	21.0
Whitman	1	--*	0	--*	4	--*	9	21.7	4	--*
Pullman	0	--*	0	--*	2	--*	4	--*	1	--*
Yakima	15	7.1	3	--*	24	11.4	57	27.1	21	10.0
Yakima (City)	8	12.4	2	--*	14	21.8	23	35.8	11	17.1

DEAA21P2

¹Rates per 100,000 population.

NOTE: Source for Malignant Neoplasm by Primary Site is The International Classification of Diseases (Ninth Revision): Urinary Organs (ICD 188-189); Skin (ICD 172-173); Breast (ICD 174-175); Lymphatic and Hematopoietic Tissue (ICD 200-208); Other and Unspecified (ICD 170-171, 190-199).

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

**Table 31. Deaths Due to Human Immunodeficiency Virus by Sex
by Place of Residence, 1998**

County and City	Total		Male	Female
	Number	Rate ¹		
State Total	114	2.0	107	7
Adams	0	--*	0	0
Asotin	0	--*	0	0
Benton	2	--*	2	0
Kennewick	0	--*	0	0
Richland	0	--*	0	0
Chelan	0	--*	0	0
Wenatchee	0	--*	0	0
Ciallam	0	--*	0	0
Port Angeles	0	--*	0	0
Clark	6	1.8	6	0
Vancouver	5	3.8	5	0
Columbia	0	--*	0	0
Cowlitz	0	--*	0	0
Longview	0	--*	0	0
Douglas	1	--*	1	0
Ferry	0	--*	0	0
Franklin	0	--*	0	0
Pasco	0	--*	0	0
Garfield	0	--*	0	0
Grant	0	--*	0	0
Grays Harbor	0	--*	0	0
Aberdeen	0	--*	0	0
Island	0	--*	0	0
Oak Harbor	0	--*	0	0
Jefferson	0	--*	0	0
King	66	4.0	61	5
Auburn	1	--*	1	0
Bellevue	2	--*	1	1
Burien	0	--*	0	0
Des Moines	1	--*	1	0
Federal Way	1	--*	1	0
Kent	1	--*	1	0
Kirkland	0	--*	0	0
Mercer Island	1	--*	1	0
Redmond	0	--*	0	0
Renton	1	--*	1	0
Sea Tac	0	--*	0	0
Seattle	54	10.0	51	3
Shoreline	0	--*	0	0
Kitsap	2	--*	2	0
Bainbridge Island	1	--*	1	0
Bremerton	0	--*	0	0

**Table 31. Deaths Due to Human Immunodeficiency Virus by Sex
by Place of Residence, 1998**

County and City	Total		Male	Female
	Number	Rate ¹		
Kittitas	0	--*	0	0
Klickitat	0	--*	0	0
Lewis	0	--*	0	0
Lincoln	0	--*	0	0
Mason	0	--*	0	0
Okanogan	0	--*	0	0
Pacific	0	--*	0	0
Pend Oreille	2	--*	2	0
Pierce	13	1.9	12	1
Lakewood	1	--*	1	0
Puyallup	0	--*	0	0
Tacoma	8	--*	7	1
University Place	0	--*	0	0
San Juan	0	--*	0	0
Skagit	0	--*	0	0
Mount Vernon	0	--*	0	0
Skamania	0	--*	0	0
Snohomish	4	--*	4	0
Edmonds	0	--*	0	0
Everett	0	--*	0	0
Lynnwood	2	--*	2	0
Marysville	0	--*	0	0
Mountlake Terrace	1	--*	1	0
Mukilteo	0	--*	0	0
Spokane	8	1.9	7	1
Spokane (City)	6	3.2	5	1
Stevens	0	--*	0	0
Thurston	2	--*	2	0
Lacey	0	--*	0	0
Olympia	1	--*	1	0
Wahkiakum	0	--*	0	0
Walla Walla	1	--*	1	0
Walla Walla (City)	1	--*	1	0
Whatcom	4	--*	4	0
Bellingham	2	--*	2	0
Whitman	0	--*	0	0
Pullman	0	--*	0	0
Yakima	3	--*	3	0
Yakima (City)	2	--*	2	0

DEAA23P1

¹Rates per 100,000 population.

NOTE: Source for Human Immunodeficiency Virus is The International Classification of Diseases (Ninth Revision): Human Immunodeficiency Virus (ICD 042-044).

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

Table 32. Deaths by Selected Accidents by Place of Residence, 1998

County and City	All Accidents		Motor Vehicle		Falls		Drownings		Fires		Other Accidents	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
State Total	1,930	33.9	743	13.1	377	6.6	107	1.9	54	0.9	649	11.4
Adams	7	44.0	3	--*	0	--*	0	--*	1	--*	3	--*
Asotin	7	35.0	3	--*	1	--*	0	--*	0	--*	3	--*
Benton	46	33.5	24	17.5	6	4.4	1	--*	0	--*	15	10.9
Kennewick	21	41.7	13	25.8	1	--*	0	--*	0	--*	7	13.9
Richland	12	32.6	4	--*	4	--*	0	--*	0	--*	4	--*
Chelan	39	62.3	15	24.0	5	8.0	1	--*	4	--*	14	22.4
Wenatchee	12	47.4	5	19.8	3	--*	0	--*	0	--*	4	--*
Clallam	34	51.0	14	21.0	6	9.0	4	--*	0	--*	10	15.0
Port Angeles	5	26.5	0	--*	2	--*	0	--*	0	--*	3	--*
Clark	96	29.3	33	10.1	22	6.7	8	2.4	0	--*	33	10.1
Vancouver	56	42.4	20	15.2	12	9.1	4	--*	0	--*	20	15.2
Columbia	3	--*	1	--*	1	--*	0	--*	0	--*	1	--*
Cowlitz	38	40.8	10	10.7	8	8.6	1	--*	3	--*	16	17.2
Longview	18	52.8	7	20.6	4	--*	0	--*	2	--*	5	14.7
Douglas	14	44.6	6	19.1	4	--*	0	--*	0	--*	4	--*
Ferry	8	109.6	1	--*	1	--*	1	--*	0	--*	5	68.5
Franklin	15	33.8	9	20.3	2	--*	1	--*	0	--*	3	--*
Pasco	12	46.0	8	30.7	1	--*	1	--*	0	--*	2	--*
Garfield	3	--*	2	--*	0	--*	0	--*	0	--*	1	--*
Grant	45	64.8	33	47.6	3	--*	2	--*	1	--*	6	8.6
Grays Harbor	18	26.5	2	--*	6	8.8	3	--*	3	--*	4	--*
Aberdeen	5	30.1	1	--*	2	--*	0	--*	2	--*	0	--*
Island	24	33.1	9	12.4	6	8.3	2	--*	1	--*	6	8.3
Oak Harbor	5	24.4	2	--*	2	--*	0	--*	0	--*	1	--*
Jefferson	18	67.9	8	30.2	4	--*	0	--*	1	--*	5	18.9
King	463	27.8	137	8.2	80	4.8	20	1.2	17	1.0	209	12.5
Auburn	10	26.7	4	--*	2	--*	0	--*	0	--*	4	--*
Bellevue	16	15.1	2	--*	4	--*	2	--*	1	--*	7	6.6
Burien	6	21.3	3	--*	1	--*	0	--*	0	--*	2	--*
Des Moines	9	33.1	0	--*	2	--*	0	--*	0	--*	7	25.7
Federal Way	12	15.6	5	6.5	1	--*	1	--*	1	--*	4	--*
Kent	23	32.1	13	18.2	3	--*	0	--*	0	--*	7	9.8
Kirkland	12	27.1	7	15.8	2	--*	0	--*	0	--*	3	--*
Mercer Island	2	--*	0	--*	1	--*	0	--*	0	--*	1	--*
Redmond	12	27.7	4	--*	3	--*	0	--*	0	--*	5	11.5
Renton	23	49.7	7	15.1	5	10.8	1	--*	1	--*	9	19.5
Sea Tac	2	--*	0	--*	0	--*	0	--*	0	--*	2	--*
Seattle	226	41.9	46	8.5	40	7.4	11	2.0	8	1.5	121	22.4
Shoreline	17	33.7	5	9.9	0	--*	0	--*	4	--*	8	15.9
Kitsap	57	24.9	20	8.7	9	3.9	4	--*	4	--*	20	8.7
Bainbridge Island	2	--*	1	--*	0	--*	0	--*	0	--*	1	--*
Bremerton	22	59.0	6	16.1	6	16.1	1	--*	0	--*	9	24.2

Table 32. Deaths by Selected Accidents by Place of Residence, 1998

County and City	All Accidents		Motor Vehicle		Falls		Drownings		Fires		Other Accidents	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Kittitas	19	60.5	9	28.7	5	15.9	0	--*	0	--*	5	15.9
Klickitat	12	62.8	5	26.2	1	--*	1	--*	0	--*	5	26.2
Lewis	42	61.2	23	33.5	8	11.7	1	--*	0	--*	10	14.6
Lincoln	5	50.0	0	--*	4	--*	0	--*	0	--*	1	--*
Mason	30	62.1	13	26.9	9	18.6	2	--*	0	--*	6	12.4
Okanogan	30	78.1	21	54.7	7	18.2	0	--*	1	--*	1	--*
Pacific	14	65.1	4	--*	3	--*	4	--*	1	--*	2	--*
Pend Oreille	6	53.6	5	44.6	1	--*	0	--*	0	--*	0	--*
Pierce	225	32.8	81	11.8	47	6.8	15	2.2	8	1.2	74	10.8
Lakewood	13	20.8	4	--*	3	--*	2	--*	0	--*	4	--*
Puyallup	11	36.8	5	16.7	3	--*	0	--*	1	--*	2	--*
Tacoma	89	47.8	29	15.6	21	11.3	6	3.2	2	--*	31	16.7
University Place	8	27.1	4	--*	0	--*	1	--*	0	--*	3	--*
San Juan	5	39.7	2	--*	0	--*	1	--*	0	--*	2	--*
Skagit	60	60.8	24	24.3	7	7.1	2	--*	0	--*	27	27.4
Mount Vernon	18	79.9	8	35.5	1	--*	0	--*	0	--*	9	39.9
Skamania	4	--*	1	--*	1	--*	1	--*	0	--*	1	--*
Snohomish	148	26.1	56	9.9	29	5.1	12	2.1	2	--*	49	8.6
Edmonds	7	18.1	1	--*	1	--*	1	--*	0	--*	4	--*
Everett	34	40.3	9	10.7	12	14.2	4	--*	0	--*	9	10.7
Lynnwood	10	30.2	4	--*	1	--*	0	--*	0	--*	5	15.1
Marysville	6	30.4	3	--*	0	--*	0	--*	0	--*	3	--*
Mountlake Terrace	3	--*	1	--*	1	--*	0	--*	0	--*	1	--*
Mukilteo	2	--*	2	--*	0	--*	0	--*	0	--*	0	--*
Spokane	142	34.6	52	12.7	34	8.3	9	2.2	4	--*	43	10.5
Spokane (City)	91	48.3	28	14.9	26	13.8	5	2.7	3	--*	29	15.4
Stevens	14	37.2	8	21.3	4	--*	0	--*	0	--*	2	--*
Thurston	65	32.5	25	12.5	20	10.0	3	--*	2	--*	15	7.5
Lacey	6	21.2	3	--*	1	--*	0	--*	0	--*	2	--*
Olympia	24	61.4	9	23.0	9	23.0	1	--*	0	--*	5	12.8
Wahkiakum	2	--*	0	--*	1	--*	0	--*	0	--*	1	--*
Walla Walla	18	33.0	7	12.8	9	16.5	0	--*	0	--*	2	--*
Walla Walla (City)	8	27.2	1	--*	6	20.4	0	--*	0	--*	1	--*
Whatcom	54	34.3	25	15.9	11	7.0	2	--*	1	--*	15	9.5
Bellingham	24	38.7	11	17.7	5	8.1	0	--*	1	--*	7	11.3
Whitman	12	29.0	1	--*	3	--*	2	--*	0	--*	6	14.5
Pullman	4	--*	1	--*	1	--*	0	--*	0	--*	2	--*
Yakima	88	41.8	51	24.2	9	4.3	4	--*	0	--*	24	11.4
Yakima (City)	33	51.3	16	24.9	4	--*	1	--*	0	--*	12	18.7

DEAA17P4

¹Rates per 100,000 population.

NOTE: Source for Selected Accidents is The International Classification of Diseases (Ninth Revision):

All Accidents (ICD E800-E949); Motor Vehicle (ICD E810-E825); Falls (ICD E880-E888);

Drownings (ICD E830, E832, E910); Fires (ICD E890-E899);

Other Accidents (ICD E800-E809, E826-E829, E831, E833-E879, E900-E909, E911-E949).

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

Table 33. Deaths by External Causes by Place of Residence, 1998

County and City	Suicide		Homicide		Undetermined	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
State Total	700	12.3	235	4.1	97	1.7
Adams	2	--*	0	--*	0	--*
Asotin	1	--*	1	--*	0	--*
Benton	17	12.4	4	--*	1	--*
Kennewick	5	9.9	3	--*	0	--*
Richland	7	19.0	1	--*	0	--*
Chelan	9	14.4	3	--*	1	--*
Wenatchee	4	--*	1	--*	1	--*
Clallam	12	18.0	3	--*	0	--*
Port Angeles	4	--*	2	--*	0	--*
Clark	42	12.8	7	2.1	3	--*
Vancouver	27	20.5	4	--*	2	--*
Columbia	0	--*	0	--*	0	--*
Cowlitz	15	16.1	1	--*	1	--*
Longview	6	17.6	0	--*	1	--*
Douglas	7	22.3	0	--*	0	--*
Ferry	1	--*	0	--*	0	--*
Franklin	2	--*	7	15.8	0	--*
Pasco	0	--*	6	23.0	0	--*
Garfield	0	--*	0	--*	0	--*
Grant	12	17.3	2	--*	1	--*
Grays Harbor	13	19.1	3	--*	2	--*
Aberdeen	5	30.1	2	--*	1	--*
Island	12	16.6	0	--*	0	--*
Oak Harbor	2	--*	0	--*	0	--*
Jefferson	6	22.6	1	--*	1	--*
King	189	11.3	71	4.3	42	2.5
Auburn	11	29.4	5	13.4	1	--*
Bellevue	8	7.6	2	--*	1	--*
Burien	2	--*	3	--*	0	--*
Des Moines	1	--*	1	--*	0	--*
Federal Way	2	--*	5	6.5	2	--*
Kent	13	18.2	1	--*	2	--*
Kirkland	5	11.3	0	--*	2	--*
Mercer Island	2	--*	0	--*	0	--*
Redmond	4	--*	0	--*	1	--*
Renton	8	17.3	3	--*	0	--*
Sea Tac	4	--*	1	--*	1	--*
Seattle	85	15.7	37	6.9	26	4.8
Shoreline	2	--*	1	--*	0	--*
Kitsap	28	12.2	7	3.1	4	--*
Bainbridge Island	1	--*	2	--*	0	--*
Bremerton	8	21.5	1	--*	1	--*

Table 33. Deaths by External Causes by Place of Residence, 1998

County and City	Suicide		Homicide		Undetermined	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
Kittitas	4	--*	0	--*	0	--*
Klickitat	1	--*	0	--*	0	--*
Lewis	13	19.0	1	--*	1	--*
Lincoln	2	--*	0	--*	0	--*
Mason	9	18.6	4	--*	1	--*
Okanogan	3	--*	4	--*	0	--*
Pacific	6	27.9	0	--*	2	--*
Pend Oreille	2	--*	0	--*	0	--*
Pierce	79	11.5	52	7.6	13	1.9
Lakewood	9	14.4	5	8.0	2	--*
Puyallup	5	16.7	2	--*	1	--*
Tacoma	21	11.3	30	16.1	7	3.8
University Place	3	--*	0	--*	0	--*
San Juan	3	--*	1	--*	0	--*
Skagit	14	14.2	2	--*	1	--*
Mount Vernon	5	22.2	0	--*	0	--*
Skamania	1	--*	0	--*	0	--*
Snohomish	61	10.7	14	2.5	13	2.3
Edmonds	1	--*	1	--*	0	--*
Everett	11	13.0	3	--*	2	--*
Lynnwood	5	15.1	1	--*	0	--*
Marysville	2	--*	1	--*	0	--*
Mountlake Terrace	3	--*	1	--*	0	--*
Mukilteo	2	--*	0	--*	0	--*
Spokane	51	12.4	16	3.9	1	--*
Spokane (City)	30	15.9	14	7.4	1	--*
Stevens	7	18.6	0	--*	2	--*
Thurston	35	17.5	9	4.5	2	--*
Lacey	3	--*	1	--*	0	--*
Olympia	13	33.3	3	--*	0	--*
Wahkiakum	0	--*	0	--*	0	--*
Walla Walla	4	--*	0	--*	0	--*
Walla Walla (City)	4	--*	0	--*	0	--*
Whatcom	16	10.2	4	--*	2	--*
Bellingham	10	16.1	3	--*	2	--*
Whitman	2	--*	0	--*	0	--*
Pullman	0	--*	0	--*	0	--*
Yakima	19	9.0	18	8.6	3	--*
Yakima (City)	8	12.4	5	7.8	0	--*

DEAA17P5

¹Rates per 100,000 population.

NOTE: Source for External Causes is International Classification of Diseases (Ninth Revision): Suicide (ICD E950-E959); Homicide (ICD E960-E969); Undetermined (ICD E980-E989).

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

**Table 34. Deaths Due to Human Immunodeficiency Virus by Sex
by Place of Occurrence, 1998**

County and City	Total		Male	Female
	Number	Rate ¹		
State Total	115	2.0	108	7
Adams	0	--*	0	0
Asotin	0	--*	0	0
Benton	1	--*	1	0
Kennewick	1	--*	1	0
Richland	0	--*	0	0
Chelan	1	--*	1	0
Wenatchee	1	--*	1	0
Clallam	0	--*	0	0
Port Angeles	0	--*	0	0
Clark	5	1.5	5	0
Vancouver	4	--*	4	0
Columbia	0	--*	0	0
Cowlitz	1	--*	1	0
Longview	1	--*	1	0
Douglas	0	--*	0	0
Ferry	0	--*	0	0
Franklin	0	--*	0	0
Pasco	0	--*	0	0
Garfield	0	--*	0	0
Grant	0	--*	0	0
Grays Harbor	0	--*	0	0
Aberdeen	0	--*	0	0
Island	0	--*	0	0
Oak Harbor	0	--*	0	0
Jefferson	0	--*	0	0
King	72	4.3	67	5
Auburn	0	--*	0	0
Bellevue	1	--*	1	0
Burien	0	--*	0	0
Des Moines	0	--*	0	0
Federal Way	0	--*	0	0
Kent	1	--*	1	0
Kirkland	0	--*	0	0
Mercer Island	0	--*	0	0
Redmond	0	--*	0	0
Renton	1	--*	1	0
Sea Tac	0	--*	0	0
Seattle	68	12.6	63	5
Shoreline	0	--*	0	0
Kitsap	1	--*	1	0
Bainbridge Island	0	--*	0	0
Bremerton	1	--*	1	0

**Table 34. Deaths Due to Human Immunodeficiency Virus by Sex
by Place of Occurrence, 1998**

County and City	Total		Male	Female
	Number	Rate ¹		
Kittitas	0	—*	0	0
Klickitat	0	—*	0	0
Lewis	1	—*	1	0
Lincoln	0	—*	0	0
Mason	0	—*	0	0
Okanogan	0	—*	0	0
Pacific	0	—*	0	0
Pend Oreille	2	—*	2	0
Pierce	12	1.7	11	1
Lakewood	2	—*	2	0
Puyallup	0	—*	0	0
Tacoma	10	5.4	9	1
University Place	0	—*	0	0
San Juan	0	—*	0	0
Skagit	0	—*	0	0
Mount Vernon	0	—*	0	0
Skamania	0	—*	0	0
Snohomish	2	—*	2	0
Edmonds	0	—*	0	0
Everett	0	—*	0	0
Lynnwood	1	—*	1	0
Marysville	0	—*	0	0
Mountlake Terrace	0	—*	0	0
Mukilteo	0	—*	0	0
Spokane	8	1.9	7	1
Spokane (City)	8	4.2	7	1
Stevens	0	—*	0	0
Thurston	0	—*	0	0
Lacey	0	—*	0	0
Olympia	0	—*	0	0
Wahkiakum	0	—*	0	0
Walla Walla	1	—*	1	0
Walla Walla (City)	1	—*	1	0
Whatcom	4	—*	4	0
Bellingham	4	—*	4	0
Whitman	0	—*	0	0
Pullman	0	—*	0	0
Yakima	4	—*	4	0
Yakima (City)	3	—*	3	0

DEAA23P2

¹Rates per 100,000 population. See pages 5-6 for discussion of occurrence rates.

NOTE: Source for Human Immunodeficiency Virus is The International Classification of Diseases (Ninth Revision): Human Immunodeficiency Virus (ICD 042-044).

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

Table 35. Deaths by Selected Accidents by Place of Occurrence, 1998

County and City	All Accidents		Motor Vehicle		Falls		Drownings		Fires		Other Accidents	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
State Total	1,899	33.4	700	12.3	378	6.6	98	1.7	56	1.0	667	11.7
Adams	8	50.3	7	44.0	0	--*	0	--*	0	--*	1	--*
Asotin	3	--*	1	--*	1	--*	0	--*	0	--*	1	--*
Benton	41	29.8	20	14.5	5	3.6	1	--*	0	--*	15	10.9
Kennewick	12	23.8	4	--*	0	--*	0	--*	0	--*	8	15.9
Richland	16	43.4	4	--*	5	13.6	0	--*	0	--*	7	19.0
Chelan	43	68.7	17	27.2	7	11.2	0	--*	3	--*	16	25.6
Wenatchee	20	79.1	4	--*	5	19.8	0	--*	2	--*	9	35.6
Clallam	24	36.0	9	13.5	3	--*	3	--*	0	--*	9	13.5
Port Angeles	11	58.3	4	--*	1	--*	1	--*	0	--*	5	26.5
Clark	75	22.9	22	6.7	16	4.9	4	--*	0	--*	33	10.1
Vancouver	56	42.4	14	10.6	16	12.1	2	--*	0	--*	24	18.2
Columbia	2	--*	1	--*	0	--*	0	--*	0	--*	1	--*
Cowlitz	26	27.9	5	5.4	7	7.5	2	--*	3	--*	9	9.7
Longview	20	58.7	3	--*	7	20.6	1	--*	2	--*	7	20.6
Douglas	7	22.3	2	--*	3	--*	0	--*	0	--*	2	--*
Ferry	5	68.5	3	--*	0	--*	1	--*	0	--*	1	--*
Franklin	17	38.3	10	22.5	2	--*	2	--*	0	--*	3	--*
Pasco	14	53.7	9	34.5	2	--*	0	--*	0	--*	3	--*
Garfield	5	208.3	4	--*	0	--*	0	--*	0	--*	1	--*
Grant	41	59.1	22	31.7	3	--*	4	--*	1	--*	11	15.9
Grays Harbor	17	25.0	7	10.3	2	--*	3	--*	2	--*	3	--*
Aberdeen	10	60.2	5	30.1	1	--*	2	--*	1	--*	1	--*
Island	15	20.7	2	--*	4	--*	3	--*	1	--*	5	6.9
Oak Harbor	5	24.4	0	--*	0	--*	1	--*	0	--*	4	--*
Jefferson	12	45.3	5	18.9	4	--*	0	--*	0	--*	3	--*
King	596	35.8	194	11.6	107	6.4	24	1.4	24	1.4	247	14.8
Auburn	15	40.1	2	--*	2	--*	1	--*	0	--*	10	26.7
Bellevue	16	15.1	2	--*	3	--*	3	--*	1	--*	7	6.6
Burien	5	17.8	0	--*	2	--*	0	--*	0	--*	3	--*
Des Moines	7	25.7	0	--*	1	--*	0	--*	0	--*	6	22.1
Federal Way	9	11.7	2	--*	1	--*	2	--*	0	--*	4	--*
Kent	14	19.6	6	8.4	0	--*	1	--*	2	--*	5	7.0
Kirkland	5	11.3	1	--*	1	--*	0	--*	0	--*	3	--*
Mercer Island	2	--*	0	--*	0	--*	0	--*	0	--*	2	--*
Redmond	10	23.1	2	--*	5	11.5	0	--*	0	--*	3	--*
Renton	29	62.7	6	13.0	7	15.1	1	--*	0	--*	15	32.4
Sea Tac	3	--*	2	--*	0	--*	0	--*	0	--*	1	--*
Seattle	431	79.9	147	27.2	79	14.6	15	2.8	16	3.0	174	32.2
Shoreline	9	17.9	1	--*	1	--*	0	--*	4	--*	3	--*
Kitsap	37	16.2	8	3.5	9	3.9	4	--*	4	--*	12	5.2
Bainbridge Island	1	--*	0	--*	0	--*	0	--*	0	--*	1	--*
Bremerton	15	40.3	2	--*	7	18.8	1	--*	0	--*	5	13.4

Table 35. Deaths by Selected Accidents by Place of Occurrence, 1998

County and City	All Accidents		Motor Vehicle		Falls		Drownings		Fires		Other Accidents	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Kittitas	24	76.4	12	38.2	4	--*	1	--*	0	--*	7	22.3
Klickitat	12	62.8	6	31.4	1	--*	1	--*	0	--*	4	--*
Lewis	39	56.9	13	19.0	10	14.6	1	--*	0	--*	15	21.9
Lincoln	6	60.0	2	--*	4	--*	0	--*	0	--*	0	--*
Mason	17	35.2	9	18.6	4	--*	1	--*	0	--*	3	--*
Okanogan	28	72.9	16	41.7	8	20.8	0	--*	1	--*	3	--*
Pacific	8	37.2	2	--*	0	--*	3	--*	1	--*	2	--*
Pend Oreille	6	53.6	5	44.6	1	--*	0	--*	0	--*	0	--*
Pierce	195	28.4	64	9.3	43	6.3	13	1.9	8	1.2	67	9.8
Lakewood	13	20.8	2	--*	4	--*	1	--*	0	--*	6	9.6
Puyallup	17	56.8	5	16.7	6	20.1	1	--*	1	--*	4	--*
Tacoma	124	66.7	41	22.0	31	16.7	9	4.8	2	--*	41	22.0
University Place	5	16.9	3	--*	2	--*	0	--*	0	--*	0	--*
San Juan	5	39.7	2	--*	0	--*	2	--*	0	--*	1	--*
Skagit	46	46.6	14	14.2	6	6.1	1	--*	0	--*	25	25.3
Mount Vernon	17	75.4	8	35.5	1	--*	0	--*	0	--*	8	35.5
Skamania	11	111.1	2	--*	3	--*	1	--*	0	--*	5	50.5
Snohomish	123	21.7	40	7.0	26	4.6	9	1.6	1	--*	47	8.3
Edmonds	8	20.7	1	--*	2	--*	0	--*	0	--*	5	13.0
Everett	42	49.8	5	5.9	16	19.0	3	--*	0	--*	18	21.3
Lynnwood	7	21.1	1	--*	1	--*	0	--*	0	--*	5	15.1
Marysville	12	60.8	8	40.5	2	--*	1	--*	0	--*	1	--*
Mountlake Terrace	1	--*	0	--*	0	--*	0	--*	0	--*	1	--*
Mukilteo	1	--*	1	--*	0	--*	0	--*	0	--*	0	--*
Spokane	158	38.5	59	14.4	43	10.5	5	1.2	3	--*	48	11.7
Spokane (City)	134	71.2	45	23.9	39	20.7	4	--*	3	--*	43	22.8
Stevens	16	42.6	8	21.3	2	--*	1	--*	0	--*	5	13.3
Thurston	51	25.5	20	10.0	17	8.5	2	--*	2	--*	10	5.0
Lacey	0	--*	0	--*	0	--*	0	--*	0	--*	0	--*
Olympia	38	97.3	11	28.2	17	43.5	2	--*	1	--*	7	17.9
Wahkiakum	2	--*	2	--*	0	--*	0	--*	0	--*	0	--*
Walla Walla	27	49.5	10	18.3	12	22.0	0	--*	1	--*	4	--*
Walla Walla (City)	24	81.5	8	27.2	12	40.8	0	--*	1	--*	3	--*
Whatcom	56	35.6	27	17.1	10	6.3	4	--*	1	--*	14	8.9
Bellingham	32	51.6	15	24.2	8	12.9	1	--*	1	--*	7	11.3
Whitman	12	29.0	3	--*	2	--*	1	--*	0	--*	6	14.5
Pullman	3	--*	0	--*	0	--*	0	--*	0	--*	3	--*
Yakima	83	39.4	45	21.4	9	4.3	1	--*	0	--*	28	13.3
Yakima (City)	47	73.1	17	26.4	7	10.9	0	--*	0	--*	23	35.8

DEAA17P1

¹Rates per 100,000 population. See pages 5-6 for discussion of occurrence rates.

NOTE: Source for Selected Accidents is The International Classification of Diseases (Ninth Revision):

All Accidents (ICD E800-E949); Motor Vehicle (ICD E810-E825); Falls (ICD E880-E888);

Drownings (ICD E830, E832, E910); Fires (ICD E890-E899);

Other Accidents (ICD E800-E809, E826-E829, E831, E833-E879, E900-E909, E911-E949).

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

Table 36. Deaths by External Causes by Place of Occurrence, 1998

County and City	Suicide		Homicide		Undetermined	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
State Total	718	12.6	230	4.0	97	1.7
Adams	2	--*	0	--*	0	--*
Asotin	0	--*	0	--*	0	--*
Benton	16	11.6	5	3.6	1	--*
Kennewick	8	15.9	2	--*	0	--*
Richland	6	16.3	2	--*	0	--*
Chelan	11	17.6	3	--*	0	--*
Wenatchee	6	23.7	2	--*	0	--*
Clallam	13	19.5	2	--*	0	--*
Port Angeles	8	42.4	2	--*	0	--*
Clark	42	12.8	6	1.8	2	--*
Vancouver	30	22.7	4	--*	2	--*
Columbia	1	--*	0	--*	0	--*
Cowlitz	16	17.2	1	--*	2	--*
Longview	10	29.4	1	--*	2	--*
Douglas	4	--*	0	--*	0	--*
Ferry	1	--*	1	--*	0	--*
Franklin	2	--*	4	--*	0	--*
Pasco	2	--*	2	--*	0	--*
Garfield	0	--*	0	--*	0	--*
Grant	11	15.9	2	--*	1	--*
Grays Harbor	14	20.6	3	--*	1	--*
Aberdeen	4	--*	2	--*	1	--*
Island	9	12.4	0	--*	0	--*
Oak Harbor	5	24.4	0	--*	0	--*
Jefferson	6	22.6	1	--*	2	--*
King	202	12.1	83	5.0	52	3.1
Auburn	13	34.7	2	--*	1	--*
Bellevue	10	9.5	1	--*	2	--*
Burien	1	--*	0	--*	0	--*
Des Moines	2	--*	1	--*	0	--*
Federal Way	4	--*	1	--*	2	--*
Kent	8	11.2	3	--*	0	--*
Kirkland	5	11.3	0	--*	1	--*
Mercer Island	2	--*	0	--*	0	--*
Redmond	4	--*	0	--*	0	--*
Renton	7	15.1	2	--*	1	--*
Sea Tac	4	--*	0	--*	1	--*
Seattle	116	21.5	65	12.0	39	7.2
Shoreline	3	--*	1	--*	1	--*
Kitsap	22	9.6	5	2.2	2	--*
Bainbridge Island	1	--*	2	--*	0	--*
Bremerton	9	24.2	1	--*	1	--*

Table 36. Deaths by External Causes by Place of Occurrence, 1998

County and City	Suicide		Homicide		Undetermined	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
Kittitas	8	25.5	0	--*	0	--*
Klickitat	2	--*	2	--*	0	--*
Lewis	12	17.5	2	--*	1	--*
Lincoln	2	--*	0	--*	0	--*
Mason	13	26.9	5	10.4	1	--*
Okanogan	3	--*	3	--*	0	--*
Pacific	6	27.9	0	--*	2	--*
Pend Oreille	2	--*	0	--*	0	--*
Pierce	79	11.5	50	7.3	13	1.9
Lakewood	9	14.4	3	--*	3	--*
Puyallup	8	26.7	4	--*	1	--*
Tacoma	32	17.2	34	18.3	6	3.2
University Place	3	--*	0	--*	0	--*
San Juan	1	--*	1	--*	0	--*
Skagit	16	16.2	2	--*	1	--*
Mount Vernon	7	31.1	2	--*	0	--*
Skamania	1	--*	0	--*	0	--*
Snohomish	59	10.4	9	1.6	10	1.8
Edmonds	1	--*	1	--*	1	--*
Everett	22	26.1	4	--*	2	--*
Lynnwood	6	18.1	1	--*	1	--*
Marysville	2	--*	1	--*	0	--*
Mountlake Terrace	3	--*	1	--*	0	--*
Mukilteo	2	--*	0	--*	0	--*
Spokane	54	13.1	19	4.6	3	--*
Spokane (City)	43	22.8	18	9.6	2	--*
Stevens	7	18.6	0	--*	1	--*
Thurston	33	16.5	5	2.5	0	--*
Lacey	3	--*	0	--*	0	--*
Olympia	18	46.1	4	--*	0	--*
Wahkiakum	1	--*	0	--*	0	--*
Walla Walla	7	12.8	0	--*	0	--*
Walla Walla (City)	7	23.8	0	--*	0	--*
Whatcom	20	12.7	3	--*	0	--*
Bellingham	14	22.6	2	--*	0	--*
Whitman	3	--*	0	--*	0	--*
Pullman	1	--*	0	--*	0	--*
Yakima	17	8.1	13	6.2	2	--*
Yakima (City)	10	15.6	5	7.8	0	--*

DEAA17P2

¹Rates per 100,000 population. See pages 5-6 for discussion of occurrence rates.

NOTE: Source for External Causes is The International Classification of Diseases (Ninth Revision): Suicide (ICD E950-E959); Homicide (ICD E960-E969); Undetermined (ICD E980-E989).

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

Table 37. Deaths by Type of Place by Place of Occurrence, 1998

County and City	Total	General Hospital	Nursing Home	Home	Federal Facility	Psychiatric Hospital	State Facility	Dead on Arrival	Other and Unk
State Total	42,853	14,287	13,394	11,780	583	50	2	24	2,733
Adams	90	28	25	25	0	0	0	0	12
Asotin	183	61	76	39	0	0	0	0	7
Benton	845	398	175	222	0	0	0	0	50
Kennewick	450	209	95	120	0	0	0	0	26
Richland	300	180	52	63	0	0	0	0	5
Chelan	671	346	164	132	0	0	0	0	29
Wenatchee	496	324	95	73	0	0	0	0	4
Clallam	676	168	187	294	0	0	0	0	27
Port Angeles	412	143	109	149	0	0	0	0	11
Clark	2,074	464	643	770	3	0	0	0	194
Vancouver	1,745	464	544	583	3	0	0	0	151
Columbia	41	14	17	7	0	0	0	0	3
Cowlitz	957	341	248	165	0	0	0	1	202
Longview	835	341	211	92	0	0	0	1	190
Douglas	110	0	53	47	0	0	0	0	10
Ferry	38	18	1	13	0	0	0	0	6
Franklin	276	129	53	68	0	0	0	0	26
Pasco	261	129	53	60	0	0	0	0	19
Garfield	23	5	10	4	0	0	0	0	4
Grant	457	165	124	128	0	0	0	1	39
Grays Harbor	621	217	171	201	0	0	0	1	31
Aberdeen	342	196	81	55	0	0	0	0	10
Island	386	71	108	196	0	0	0	1	10
Oak Harbor	130	1	46	82	0	0	0	0	1
Jefferson	207	57	51	80	0	0	0	0	19
King	12,802	4,794	4,021	2,959	216	0	0	6	806
Auburn	512	182	165	136	0	0	0	0	29
Bellevue	1,045	344	464	183	0	0	0	0	54
Burien	331	179	87	56	0	0	0	0	9
Des Moines	325	0	259	49	0	0	0	0	17
Federal Way	452	140	132	150	0	0	0	0	30
Kent	191	0	4	143	0	0	0	0	44
Kirkland	723	261	301	86	0	0	0	1	74
Mercer Island	125	0	76	40	0	0	0	0	9
Redmond	273	96	100	68	0	0	0	0	9
Renton	720	336	198	146	0	0	0	0	40
Sea Tac	65	3	4	38	0	0	0	0	20
Seattle	6,834	3,178	1,716	1,386	216	0	0	5	333
Shoreline	307	0	200	81	0	0	0	0	26
Kitsap	1,514	438	561	447	23	0	0	0	45
Bainbridge Island	99	0	66	32	0	0	0	0	1
Bremerton	864	437	233	160	22	0	0	0	12

Table 37. Deaths by Type of Place by Place of Occurrence, 1998

County and City	Total	General Hospital	Nursing Home	Home	Federal Facility	Psychiatric Hospital	State Facility	Dead on Arrival	Other and Unk
Kittitas	237	59	81	65	0	0	0	0	32
Klickitat	109	29	19	47	0	0	0	0	14
Lewis	683	238	232	175	0	0	0	0	38
Lincoln	94	30	45	15	0	0	0	0	4
Mason	364	81	113	138	0	0	0	0	32
Okanogan	316	97	100	88	0	0	0	0	31
Pacific	192	59	46	75	0	0	0	0	12
Pend Oreille	100	39	23	31	0	0	0	1	6
Pierce	5,031	1,616	1,621	1,387	234	24	0	3	146
Lakewood	388	164	88	120	3	1	0	0	12
Puyallup	800	354	271	169	0	0	0	0	6
Tacoma	3,011	1,098	1,003	602	230	16	0	3	59
University Place	146	0	89	53	0	0	0	0	4
San Juan	82	0	32	37	0	0	0	0	13
Skagit	910	277	272	270	0	0	0	1	90
Mount Vernon	402	194	103	73	0	0	0	0	32
Skamania	44	0	0	31	0	0	0	0	13
Snohomish	3,201	738	1,058	1,198	0	0	0	4	203
Edmonds	488	201	140	126	0	0	0	0	21
Everett	1,136	455	333	287	0	0	0	2	59
Lynnwood	257	0	99	136	0	0	0	0	22
Marysville	247	0	98	130	0	0	0	0	19
Mountlake Terrace	39	0	0	36	0	0	0	0	3
Mukilteo	26	0	0	23	0	0	0	0	3
Spokane	3,931	1,566	1,154	887	61	26	0	0	237
Spokane (City)	3,567	1,548	1,056	718	61	1	0	0	183
Stevens	264	91	77	78	0	0	0	1	17
Thurston	1,633	515	536	494	0	0	0	2	86
Lacey	253	0	161	74	0	0	0	0	18
Olympia	1,203	515	362	288	0	0	0	2	36
Wahkiakum	42	0	21	16	0	0	0	0	5
Walla Walla	608	233	186	112	46	0	2	0	29
Walla Walla (City)	546	233	153	89	46	0	2	0	23
Whatcom	1,214	255	472	377	0	0	0	1	109
Bellingham	905	254	384	216	0	0	0	1	50
Whitman	174	50	71	45	0	0	0	1	7
Pullman	51	18	21	12	0	0	0	0	0
Yakima	1,653	600	547	417	0	0	0	0	89
Yakima (City)	1,143	492	384	236	0	0	0	0	31

DEAA17P3

Table 38a. Infant Mortality to Residents by Cause¹ by Age and Sex, 1998

Cause and International List Number	Total		Under 1 Day		Under 7 Days		7 Days to Under 28 Days	
	Male	Female	Male	Female	Male	Female	Male	Female
Total All Causes	248	204	79	69	36	37	41	23
All Infective and Parasitic Diseases (000-139)	4	1	0	0	0	0	3	0
Malignant Neoplasms (140-208)	0	0	0	0	0	0	0	0
Meningitis (320,322)	1	1	0	0	0	0	1	0
Diseases of the Circulatory System (390-459)	3	12	0	0	0	4	2	1
Pneumonia and Influenza (480-487)	2	1	0	0	0	0	0	0
Other Diseases of Respiratory System (510-519)	3	0	0	0	0	0	0	0
Hernia and Intestinal Obstruction (550-553,560)	1	0	0	0	1	0	0	0
Congenital Anomalies (740-759)	(69)	(51)	(23)	(16)	(12)	(10)	(17)	(10)
Anencephalus (740)	3	0	2	0	0	0	1	0
Spina Bifida and Meningocele (741)	1	1	0	0	0	0	0	0
Other Anomalies of the Central Nervous System (742)	2	2	0	0	0	0	0	1
Anomalies of the Heart (745-746)	25	12	1	0	7	6	10	5
Other Anomalies of Circulatory System (747)	3	2	0	0	1	0	0	1
Anomalies of the Respiratory System (748)	11	5	10	5	0	0	1	0
Anomalies of the Digestive System (749-751)	0	0	0	0	0	0	0	0
Anomalies of the Genitourinary System (752-753)	5	3	3	3	1	0	1	0
Anomalies of the Musculoskeletal System (754-756)	5	8	2	3	1	0	1	1
Chromosomal Anomalies (758)	12	14	4	3	2	4	3	1
Other Congenital Anomalies (743-744, 757, 759)	2	4	1	2	0	0	0	1
Certain Conditions in Perinatal Period (760-779)	(90)	(85)	(55)	(52)	(21)	(18)	(12)	(7)
Maternal Diseases Affecting Child (760)	0	1	0	0	0	0	0	1
Complications of Pregnancy Affecting Child (761-762)	12	21	12	20	0	0	0	1
Birth injuries (763,767-769)	23	13	7	2	12	8	3	1
Other Diseases Peculiar to Early Infancy	55	50	36	30	9	10	9	4
Sudden Infant Death Syndrome (798.0)	55	36	0	0	1	1	6	3
All Other Diseases (000-799)	11	13	1	1	1	3	0	2
All Accidents (E800-E949)	(7)	(3)	(0)	(0)	(0)	(1)	(0)	(0)
Motor Vehicle Accidents (E810-E825)	0	1	0	0	0	0	0	0
Accidental Drowning and Submersion (E910)	1	0	0	0	0	0	0	0
Inhalation of Food or Other Object Causing Obstruction or Suffocation (E911-E912)	2	0	0	0	0	0	0	0
Mechanical Suffocation in Bed or Cradle and in Other and Unspecified Circumstances (E913)	2	2	0	0	0	1	0	0
All Other Accidents	2	0	0	0	0	0	0	0
Homicide (E960-E969)	1	1	0	0	0	0	0	0
Injury Undetermined Whether Accidentally or Purposely Inflicted (E980-E988)	1	0	0	0	0	0	0	0

¹Totals for sub-groups by selected causes are shown in parentheses.

Table 38b. Infant Mortality to Residents by Cause¹ by Age and Sex, 1998

Cause and International List Number	28 Days to Under 3 Months		3 Months to Under 6 Months		6 Months to Under 9 Months		9 Months to Under 12 Months	
	Male	Female	Male	Female	Male	Female	Male	Female
Total All Causes	40	32	34	31	9	7	9	5
All Infective and Parasitic Diseases (000-139)	1	1	0	0	0	0	0	0
Malignant Neoplasms (140-208)	0	0	0	0	0	0	0	0
Meningitis (320,322)	0	0	0	0	0	0	0	1
Diseases of the Circulatory System (390-459)	0	0	1	6	0	1	0	0
Pneumonia and Influenza (480-487)	1	0	0	1	0	0	1	0
Other Diseases of Respiratory System (510-519)	0	0	2	0	0	0	1	0
Hernia and Intestinal Obstruction (550-553,560)	0	0	0	0	0	0	0	0
Congenital Anomalies (740-759)	(12)	(9)	(1)	(3)	(1)	(2)	(3)	(1)
Anencephalus (740)	0	0	0	0	0	0	0	0
Spina Bifida and Meningocele (741)	1	0	0	0	0	0	0	1
Other Anomalies of the Central Nervous System (742) ¹	2	1	0	0	0	0	0	0
Anomalies of the Heart (745-746)	6	1	0	0	0	0	1	0
Other Anomalies of Circulatory System (747)	1	0	0	1	1	0	0	0
Anomalies of the Respiratory System (748)	0	0	0	0	0	0	0	0
Anomalies of the Digestive System (749-751)	0	0	0	0	0	0	0	0
Anomalies of the Genitourinary System (752-753)	0	0	0	0	0	0	0	0
Anomalies of the Musculoskeletal System (754-756)	0	3	0	1	0	0	1	0
Chromosomal Anomalies (758)	2	3	0	1	0	2	1	0
Other Congenital Anomalies	0	1	1	0	0	0	0	0
Certain Conditions in Perinatal Period (760-779)	(1)	(5)	(1)	(3)	(0)	(0)	(0)	(0)
Maternal Diseases Affecting Child (760)	0	0	0	0	0	0	0	0
Complications of Pregnancy Affecting Child (761-762)	0	0	0	0	0	0	0	0
Birth injuries (763,767-769)	1	2	0	0	0	0	0	0
Other Diseases Peculiar to Early Infancy	0	3	1	3	0	0	0	0
Sudden Infant Death Syndrome (798.0)	19	14	26	15	2	2	1	1
All Other Diseases (000-799)	4	1	2	2	2	2	1	2
All Accidents (E800-E949)	(2)	(1)	(1)	(1)	(3)	(0)	(1)	(0)
Motor Vehicle Accidents (E810-E825)	0	0	0	1	0	0	0	0
Accidental Drowning and Submersion (E910)	0	0	0	0	0	0	1	0
Inhalation of Food or Other Object Causing Obstruction or Suffocation (E911-E912)	1	0	1	0	0	0	0	0
Mechanical Suffocation in Bed or Cradle and in Other and Unspecified Circumstances (E913)	1	1	0	0	1	0	0	0
All Other Accidents	0	0	0	0	2	0	0	0
Homicide (E960-E969)	0	1	0	0	0	0	1	0
Injury Undetermined Whether Accidentally or Purposely Inflicted (E980-E988)	0	0	0	0	1	0	0	0

¹Totals for sub-groups by selected causes are shown in parentheses.

DEAA0822

Table 39. Infant Mortality by Selected Causes by Place of Residence, 1998

County and City	Total All Causes	Birth Trauma Conditions ¹	Other Conditions in Perinatal Period	Congenital Malformations	Pneumonia and Influenza	All Accidents	Sudden Infant Death	All Other Causes
State Total	452	33	142	120	3	10	91	53
Adams	2	0	0	1	0	0	1	0
Asotin	2	0	2	0	0	0	0	0
Benton	11	1	1	4	0	1	3	1
Kennewick	3	0	0	1	0	1	1	0
Richland	5	1	0	3	0	0	0	1
Chelan	5	0	0	1	0	0	3	1
Wenatchee	3	0	0	1	0	0	1	1
Clallam	8	0	2	1	0	0	2	3
Port Angeles	5	0	1	0	0	0	1	3
Clark	30	2	11	5	0	1	7	4
Vancouver	22	2	8	5	0	1	4	2
Columbia	0	0	0	0	0	0	0	0
Cowlitz	8	0	3	2	0	0	3	0
Longview	6	0	3	2	0	0	1	0
Douglas	4	0	1	1	0	0	2	0
Ferry	1	1	0	0	0	0	0	0
Franklin	6	0	3	2	0	0	1	0
Pasco	4	0	2	2	0	0	0	0
Garfield	0	0	0	0	0	0	0	0
Grant	3	0	1	1	0	0	0	1
Grays Harbor	7	0	0	3	0	0	2	2
Aberdeen	3	0	0	1	0	0	1	1
Island	4	0	0	1	0	0	2	1
Oak Harbor	3	0	0	0	0	0	2	1
Jefferson	0	0	0	0	0	0	0	0
King	111	12	45	26	1	2	15	10
Auburn	1	0	0	1	0	0	0	0
Bellevue	6	1	2	3	0	0	0	0
Burien	1	0	1	0	0	0	0	0
Des Moines	4	0	1	2	0	1	0	0
Federal Way	4	0	3	0	0	0	0	1
Kent	14	2	6	3	0	0	2	1
Kirkland	2	0	1	0	0	0	0	1
Mercer Island	1	0	0	1	0	0	0	0
Redmond	3	2	0	1	0	0	0	0
Renton	7	0	4	2	0	0	0	1
Sea Tac	3	0	1	0	0	0	2	0
Seattle	44	7	18	6	1	0	9	3
Shoreline	3	0	2	1	0	0	0	0
Kitsap	12	1	3	5	0	1	1	1
Bainbridge Island	0	0	0	0	0	0	0	0
Bremerton	5	1	0	4	0	0	0	0

Table 39. Infant Mortality by Selected Causes by Place of Residence, 1998

County and City	Total All Causes	Birth Trauma Conditions ¹	Other Conditions in Perinatal Period	Congenital Malformations	Pneumonia and Influenza	All Accidents	Sudden Infant Death	All Other Causes
Kittitas	5	0	1	3	0	0	1	0
Klickitat	0	0	0	0	0	0	0	0
Lewis	9	1	3	1	0	0	2	2
Lincoln	1	0	0	0	0	0	1	0
Mason	4	0	2	1	0	0	0	1
Okanogan	6	0	0	3	0	0	1	2
Pacific	0	0	0	0	0	0	0	0
Pend Oreille	2	0	0	2	0	0	0	0
Pierce	64	4	17	20	0	1	17	5
Lakewood	6	0	0	2	0	0	3	1
Puyallup	6	0	2	2	0	0	2	0
Tacoma	23	3	6	7	0	0	5	2
University Place	3	1	0	1	0	0	1	0
San Juan	0	0	0	0	0	0	0	0
Skagit	12	2	3	4	0	1	1	1
Mount Vernon	6	1	2	2	0	1	0	0
Skamania	0	0	0	0	0	0	0	0
Snohomish	46	3	15	12	0	1	6	9
Edmonds	1	0	0	0	0	0	0	1
Everett	17	1	3	6	0	0	4	3
Lynnwood	9	0	7	1	0	0	0	1
Marysville	2	0	0	1	0	0	0	1
Mountlake Terrace	2	1	0	1	0	0	0	0
Mukilteo	0	0	0	0	0	0	0	0
Spokane	30	3	7	10	0	0	8	2
Spokane (City)	20	2	4	6	0	0	7	1
Stevens	3	0	1	0	0	0	1	1
Thurston	16	0	5	7	0	0	3	1
Lacey	2	0	0	2	0	0	0	0
Olympia	6	0	1	2	0	0	2	1
Wahkiakum	0	0	0	0	0	0	0	0
Walla Walla	6	1	2	1	0	0	0	2
Walla Walla (City)	4	0	2	1	0	0	0	1
Whatcom	5	0	4	0	0	0	0	1
Bellingham	1	0	1	0	0	0	0	0
Whitman	2	0	1	1	0	0	0	0
Pullman	0	0	0	0	0	0	0	0
Yakima	27	2	9	2	2	2	8	2
Yakima (City)	11	1	3	1	0	2	3	1

DEAA19P1

¹In 1996, deaths due to other complications of labor and delivery (ICD 763) were moved from 'Birth Injuries' (see 1980-1995 tables) to 'Other Conditions in Perinatal Period'.

NOTE: Source for Selected Causes is The International Classification of Diseases (Ninth Revision): Birth Trauma & Asphyxia Conditions (ICD 767-769); Other Conditions in Perinatal Period (ICD 760-766, 770-779); Congenital Malformations (ICD 740-759); Pneumonia and Influenza (ICD 480-487); All Accidents (ICD E800-E949); Sudden Infant Death (ICD 798.0).

Table 40. Infant Deaths by Mother's Race/Ethnicity¹ by Place of Residence², 1998

County and City	Total	African American		Native American		Japanese	Chinese	Other			Hispanic ³
		White	American	American	Other			Unk			
State Total	452	341	31	20	3	1	5	24	1	26	48
Adams	2	2	0	0	0	0	0	0	0	0	1
Asotin	2	2	0	0	0	0	0	0	0	0	0
Benton	11	10	0	1	0	0	0	0	0	0	1
Kennewick	3	3	0	0	0	0	0	0	0	0	0
Richland	5	4	0	1	0	0	0	0	0	0	1
Chehalis	5	5	0	0	0	0	0	0	0	0	0
Wenatchee	3	3	0	0	0	0	0	0	0	0	0
Clallam	8	5	0	2	0	0	0	0	0	1	0
Port Angeles	5	4	0	0	0	0	0	0	0	1	0
Clark	30	27	2	0	0	0	0	1	0	0	3
Vancouver	22	19	2	0	0	0	0	1	0	0	3
Columbia	0	0	0	0	0	0	0	0	0	0	0
Cowlitz	8	8	0	0	0	0	0	0	0	0	0
Longview	6	6	0	0	0	0	0	0	0	0	0
Douglas	4	3	0	0	0	0	0	1	0	0	1
Ferry	1	1	0	0	0	0	0	0	0	0	0
Franklin	6	6	0	0	0	0	0	0	0	0	3
Pasco	4	4	0	0	0	0	0	0	0	0	3
Garfield	0	0	0	0	0	0	0	0	0	0	0
Grant	3	3	0	0	0	0	0	0	0	0	1
Grays Harbor	7	7	0	0	0	0	0	0	0	0	1
Aberdeen	3	3	0	0	0	0	0	0	0	0	1
Island	4	3	0	0	0	0	1	0	0	0	0
Oak Harbor	3	2	0	0	0	0	1	0	0	0	0
Jefferson	0	0	0	0	0	0	0	0	0	0	0
King	111	59	19	4	0	1	2	16	1	9	6
Auburn	1	1	0	0	0	0	0	0	0	0	0
Bellevue	6	3	0	0	0	0	0	3	0	0	0
Burien	1	1	0	0	0	0	0	0	0	0	0
Des Moines	4	2	0	0	0	0	0	2	0	0	0
Federal Way	4	2	1	0	0	0	0	1	0	0	0
Kent	14	9	2	2	0	0	0	0	0	1	0
Kirkland	2	2	0	0	0	0	0	0	0	0	0
Mercer Island	1	0	0	0	0	0	0	1	0	0	0
Redmond	3	3	0	0	0	0	0	0	0	0	0
Renton	7	5	2	0	0	0	0	0	0	0	2
Sea Tac	3	1	1	0	0	0	0	0	0	1	1
Seattle	44	16	13	1	0	1	2	6	1	4	2
Shoreline	3	1	0	0	0	0	0	1	0	1	0
Kitsap	12	9	0	0	1	0	1	0	0	1	2
Bainbridge Island	0	0	0	0	0	0	0	0	0	0	0
Bremerton	5	3	0	0	0	0	1	0	0	1	0

Table 40. Infant Deaths by Mother's Race/Ethnicity¹ by Place of Residence², 1998

County and City	Total	African		Native		Other					Hispanic ³	
		White	American	American	Japanese	Chinese	Filipino	Asian	Other	Unk		
Kittitas	5	5	0	0	0	0	0	0	0	0	0	0
Klickitat	0	0	0	0	0	0	0	0	0	0	0	0
Lewis	9	7	0	0	0	0	0	0	0	0	2	0
Lincoln	1	1	0	0	0	0	0	0	0	0	0	0
Mason	4	4	0	0	0	0	0	0	0	0	0	0
Okanogan	6	5	0	1	0	0	0	0	0	0	0	2
Pacific	0	0	0	0	0	0	0	0	0	0	0	0
Pend Oreille	2	2	0	0	0	0	0	0	0	0	0	0
Pierce	64	49	7	1	1	0	0	4	0	2	7	7
Lakewood	6	5	1	0	0	0	0	0	0	0	1	1
Puyallup	6	6	0	0	0	0	0	0	0	0	0	0
Tacoma	23	16	4	0	0	0	0	2	0	1	4	4
University Place	3	1	0	0	0	0	0	2	0	0	0	0
San Juan	0	0	0	0	0	0	0	0	0	0	0	0
Skagit	12	9	0	0	0	0	0	0	0	3	2	2
Mount Vernon	6	5	0	0	0	0	0	0	0	1	1	1
Skamania	0	0	0	0	0	0	0	0	0	0	0	0
Snohomish	46	36	1	3	1	0	0	2	0	3	5	5
Edmonds	1	1	0	0	0	0	0	0	0	0	0	0
Everett	17	11	1	0	0	0	0	2	0	3	2	2
Lynnwood	9	8	0	0	1	0	0	0	0	0	1	1
Marysville	2	2	0	0	0	0	0	0	0	0	2	2
Mountlake Terrace	2	2	0	0	0	0	0	0	0	0	0	0
Mukilteo	0	0	0	0	0	0	0	0	0	0	0	0
Spokane	30	26	0	1	0	0	1	0	0	2	1	1
Spokane (City)	20	17	0	1	0	0	1	0	0	1	1	1
Stevens	3	3	0	0	0	0	0	0	0	0	0	0
Thurston	16	14	1	0	0	0	0	0	0	1	0	0
Lacey	2	2	0	0	0	0	0	0	0	0	0	0
Olympia	6	5	0	0	0	0	0	0	0	1	0	0
Wahkiakum	0	0	0	0	0	0	0	0	0	0	0	0
Walla Walla	6	6	0	0	0	0	0	0	0	0	0	3
Walla Walla (City)	4	4	0	0	0	0	0	0	0	0	1	1
Whatcom	5	3	0	2	0	0	0	0	0	0	0	0
Bellingham	1	1	0	0	0	0	0	0	0	0	0	0
Whitman	2	2	0	0	0	0	0	0	0	0	0	0
Pullman	0	0	0	0	0	0	0	0	0	0	0	0
Yakima	27	19	1	5	0	0	0	0	0	2	9	9
Yakima (City)	11	10	1	0	0	0	0	0	0	0	3	3

DEAA07P1

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

²Residence is the infant's at the time of death.

³Persons of Hispanic Origin may be of any race. See Appendix A, "Hispanic Origin."

Table 41. Infant Deaths by Child's Race/Ethnicity¹ by Place of Residence², 1998

County and City	Total	African		Native		Other					Hispanic ³
		White	American	American	Japanese	Chinese	Filipino	Asian	Other	Unk	
State Total	452	323	43	25	3	2	6	24	1	25	63
Adams	2	2	0	0	0	0	0	0	0	0	1
Asotin	2	2	0	0	0	0	0	0	0	0	0
Benton	11	11	0	0	0	0	0	0	0	0	3
Kennewick	3	3	0	0	0	0	0	0	0	0	0
Richland	5	5	0	0	0	0	0	0	0	0	3
Chelan	5	5	0	0	0	0	0	0	0	0	0
Wenatchee	3	3	0	0	0	0	0	0	0	0	0
Clallam	8	4	0	3	0	0	0	0	0	1	0
Port Angeles	5	3	0	1	0	0	0	0	0	1	0
Clark	30	25	3	1	0	0	0	1	0	0	3
Vancouver	22	18	3	0	0	0	0	1	0	0	3
Columbia	0	0	0	0	0	0	0	0	0	0	0
Cowlitz	8	8	0	0	0	0	0	0	0	0	0
Longview	6	6	0	0	0	0	0	0	0	0	0
Douglas	4	3	0	0	0	0	0	1	0	0	1
Ferry	1	1	0	0	0	0	0	0	0	0	0
Franklin	6	5	0	1	0	0	0	0	0	0	4
Pasco	4	4	0	0	0	0	0	0	0	0	4
Garfield	0	0	0	0	0	0	0	0	0	0	0
Grant	3	3	0	0	0	0	0	0	0	0	1
Grays Harbor	7	7	0	0	0	0	0	0	0	0	1
Aberdeen	3	3	0	0	0	0	0	0	0	0	1
Island	4	3	0	0	0	0	1	0	0	0	0
Oak Harbor	3	2	0	0	0	0	1	0	0	0	0
Jefferson	0	0	0	0	0	0	0	0	0	0	0
King	111	56	22	3	0	2	2	16	1	9	8
Auburn	1	1	0	0	0	0	0	0	0	0	0
Bellevue	6	2	1	0	0	0	0	3	0	0	0
Burien	1	1	0	0	0	0	0	0	0	0	0
Des Moines	4	2	0	0	0	0	0	2	0	0	0
Federal Way	4	1	2	0	0	0	0	1	0	0	0
Kent	14	9	3	1	0	0	0	0	0	1	1
Kirkland	2	2	0	0	0	0	0	0	0	0	0
Mercer Island	1	0	0	0	0	0	0	1	0	0	0
Redmond	3	3	0	0	0	0	0	0	0	0	0
Renton	7	5	2	0	0	0	0	0	0	0	2
Sea Tac	3	0	1	0	0	0	0	1	0	1	1
Seattle	44	16	13	1	0	1	2	6	1	4	2
Shoreline	3	1	0	0	0	0	0	1	0	1	0
Kitsap	12	9	0	0	1	0	1	0	0	1	3
Bainbridge Island	0	0	0	0	0	0	0	0	0	0	0
Bremerton	5	3	0	0	0	0	1	0	0	1	1

Table 41. Infant Deaths by Child's Race/Ethnicity¹ by Place of Residence², 1998

County and City	Total	African		Native		Other					Hispanic ³	
		White	American	American	Japanese	Chinese	Filipino	Asian	Other	Unk		
Kittitas	5	5	0	0	0	0	0	0	0	0	0	0
Klickitat	0	0	0	0	0	0	0	0	0	0	0	0
Lewis	9	7	0	0	0	0	0	0	0	0	2	1
Lincoln	1	1	0	0	0	0	0	0	0	0	0	0
Mason	4	4	0	0	0	0	0	0	0	0	0	2
Okanogan	6	4	0	1	0	0	1	0	0	0	0	2
Pacific	0	0	0	0	0	0	0	0	0	0	0	0
Pend Oreille	2	0	0	2	0	0	0	0	0	0	0	0
Pierce	64	43	13	1	1	0	0	4	0	2	9	9
Lakewood	6	5	1	0	0	0	0	0	0	0	0	2
Puyallup	6	6	0	0	0	0	0	0	0	0	0	0
Tacoma	23	11	9	0	0	0	0	2	0	1	4	4
University Place	3	1	0	0	0	0	0	2	0	0	0	0
San Juan	0	0	0	0	0	0	0	0	0	0	0	0
Skagit	12	10	0	0	0	0	0	0	0	0	2	4
Mount Vernon	6	5	0	0	0	0	0	0	0	0	1	3
Skamania	0	0	0	0	0	0	0	0	0	0	0	0
Snohomish	46	36	1	3	1	0	0	2	0	3	6	6
Edmonds	1	1	0	0	0	0	0	0	0	0	0	0
Everett	17	11	1	0	0	0	0	2	0	3	2	2
Lynnwood	9	8	0	0	1	0	0	0	0	0	0	2
Marysville	2	2	0	0	0	0	0	0	0	0	0	2
Mountlake Terrace	2	2	0	0	0	0	0	0	0	0	0	0
Mukilteo	0	0	0	0	0	0	0	0	0	0	0	0
Spokane	30	24	1	2	0	0	1	0	0	2	1	1
Spokane (City)	20	17	0	1	0	0	1	0	0	1	1	1
Stevens	3	3	0	0	0	0	0	0	0	0	0	0
Thurston	16	13	2	0	0	0	0	0	0	1	0	0
Lacey	2	2	0	0	0	0	0	0	0	0	0	0
Olympia	6	5	0	0	0	0	0	0	0	1	0	0
Wahkiakum	0	0	0	0	0	0	0	0	0	0	0	0
Walla Walla	6	5	0	1	0	0	0	0	0	0	0	3
Walla Walla (City)	4	3	0	1	0	0	0	0	0	0	0	1
Whatcom	5	3	0	2	0	0	0	0	0	0	0	0
Bellingham	1	1	0	0	0	0	0	0	0	0	0	0
Whitman	2	2	0	0	0	0	0	0	0	0	0	0
Pullman	0	0	0	0	0	0	0	0	0	0	0	0
Yakima	27	19	1	5	0	0	0	0	0	0	2	10
Yakima (City)	11	10	1	0	0	0	0	0	0	0	0	4

DEAA22P1

¹Infant deaths are matched with births to find infant's race/ethnicity at birth.

²Residence is the infant's at the time of death.

³Persons of Hispanic Origin may be of any race. See Appendix A, "Hispanic Origin."

Table 42. Infant Deaths by Mother's Age Group¹ by Place of Residence², 1998

County and City	All Ages	Under							45 and Over	Age Unk
		15	15-19	20-24	25-29	30-34	35-39	40-44		
State Total	452	6	72	138	97	79	40	15	0	5
Adams	2	0	0	0	1	1	0	0	0	0
Asotin	2	1	0	1	0	0	0	0	0	0
Benton	11	0	2	4	4	0	1	0	0	0
Kennewick	3	0	1	1	1	0	0	0	0	0
Richland	5	0	0	3	1	0	1	0	0	0
Chelan	5	1	0	2	1	1	0	0	0	0
Wenatchee	3	0	0	1	1	1	0	0	0	0
Clallam	8	0	0	4	2	2	0	0	0	0
Port Angeles	5	0	0	3	1	1	0	0	0	0
Clark	30	0	6	13	7	2	0	2	0	0
Vancouver	22	0	4	10	5	1	0	2	0	0
Columbia	0	0	0	0	0	0	0	0	0	0
Cowlitz	8	0	0	4	1	3	0	0	0	0
Longview	6	0	0	3	0	3	0	0	0	0
Douglas	4	0	0	1	1	1	1	0	0	0
Ferry	1	0	0	1	0	0	0	0	0	0
Franklin	6	0	3	2	1	0	0	0	0	0
Pasco	4	0	2	2	0	0	0	0	0	0
Garfield	0	0	0	0	0	0	0	0	0	0
Grant	3	0	0	2	0	1	0	0	0	0
Grays Harbor	7	0	0	3	0	0	3	1	0	0
Aberdeen	3	0	0	3	0	0	0	0	0	0
Island	4	0	1	2	0	0	0	0	0	1
Oak Harbor	3	0	1	1	0	0	0	0	0	1
Jefferson	0	0	0	0	0	0	0	0	0	0
King	111	2	18	24	23	25	11	6	0	2
Auburn	1	0	0	1	0	0	0	0	0	0
Bellevue	6	0	0	0	2	3	0	1	0	0
Burien	1	0	0	0	1	0	0	0	0	0
Des Moines	4	0	1	1	1	0	1	0	0	0
Federal Way	4	0	0	1	1	2	0	0	0	0
Kent	14	0	4	6	1	1	2	0	0	0
Kirkland	2	0	0	0	1	1	0	0	0	0
Mercer Island	1	0	0	0	0	1	0	0	0	0
Redmond	3	0	0	0	3	0	0	0	0	0
Renton	7	0	0	4	1	1	1	0	0	0
Sea Tac	3	2	0	0	0	0	0	0	0	1
Seattle	44	0	12	6	8	8	4	5	0	1
Shoreline	3	0	0	1	1	1	0	0	0	0
Kitsap	12	0	2	2	2	6	0	0	0	0
Bainbridge Island	0	0	0	0	0	0	0	0	0	0
Bremerton	5	0	2	0	1	2	0	0	0	0

Table 42. Infant Deaths by Mother's Age Group¹ by Place of Residence², 1998

County and City	All Ages	Under							45 and Over	Age Unk
		15	15-19	20-24	25-29	30-34	35-39	40-44		
Kittitas	5	0	0	2	2	0	1	0	0	0
Klickitat	0	0	0	0	0	0	0	0	0	0
Lewis	9	0	2	3	3	1	0	0	0	0
Lincoln	1	0	0	1	0	0	0	0	0	0
Mason	4	0	0	0	2	1	1	0	0	0
Okanogan	6	0	2	3	0	1	0	0	0	0
Pacific	0	0	0	0	0	0	0	0	0	0
Pend Oreille	2	0	1	1	0	0	0	0	0	0
Pierce	64	1	11	23	10	13	5	1	0	0
Lakewood	6	0	1	3	1	1	0	0	0	0
Puyallup	6	0	2	2	1	1	0	0	0	0
Tacoma	23	1	3	10	2	4	3	0	0	0
University Place	3	0	1	1	0	0	1	0	0	0
San Juan	0	0	0	0	0	0	0	0	0	0
Skagit	12	0	2	2	5	2	0	1	0	0
Mount Vernon	6	0	1	2	2	1	0	0	0	0
Skamania	0	0	0	0	0	0	0	0	0	0
Snohomish	46	0	7	9	14	6	9	1	0	0
Edmonds	1	0	0	0	0	0	0	1	0	0
Everett	17	0	1	1	7	2	6	0	0	0
Lynnwood	9	0	2	4	0	0	3	0	0	0
Marysville	2	0	0	1	1	0	0	0	0	0
Mountlake Terrace	2	0	2	0	0	0	0	0	0	0
Mukilteo	0	0	0	0	0	0	0	0	0	0
Spokane	30	0	5	11	5	3	5	1	0	0
Spokane (City)	20	0	2	8	3	2	4	1	0	0
Stevens	3	0	0	1	1	1	0	0	0	0
Thurston	16	0	3	5	2	2	3	1	0	0
Lacey	2	0	0	1	0	1	0	0	0	0
Olympia	6	0	2	2	1	0	1	0	0	0
Wahkiakum	0	0	0	0	0	0	0	0	0	0
Walla Walla	6	0	2	3	0	1	0	0	0	0
Walla Walla (City)	4	0	1	2	0	1	0	0	0	0
Whatcom	5	0	0	2	2	1	0	0	0	0
Bellingham	1	0	0	0	1	0	0	0	0	0
Whitman	2	0	0	1	0	1	0	0	0	0
Pullman	0	0	0	0	0	0	0	0	0	0
Yakima	27	1	5	6	8	4	0	1	0	2
Yakima (City)	11	0	3	3	4	1	0	0	0	0

DEAA18P1

¹Infant deaths are matched with births to find mother's age.

²Residence is the infant's at the time of death.

Table 43. Fetal Deaths, Perinatal, Neonatal and Infant Mortality by Place of Residence, 1998

County and City	Fetal Deaths ¹		Perinatal Mortality ²		Neonatal Mortality ³		Infant Mortality ⁴	
	Number	Ratio	Number	Rate	Number	Rate	Number	Rate
State Total	471	5.9	692	8.6	285	3.6	452	5.7
Adams	0	--*	0	--*	1	--*	2	--*
Asotin	2	--*	4	--*	2	--*	2	--*
Benton	11	5.4	16	7.8	6	2.9	11	5.4
Kennewick	2	--*	3	--*	1	--*	3	--*
Richland	3	--*	6	12.3	4	--*	5	10.3
Chelan	8	7.8	9	8.7	1	--*	5	4.8
Wenatchee	5	9.9	6	11.8	1	--*	3	--*
Clallam	3	--*	7	10.1	4	--*	8	11.6
Port Angeles	1	--*	3	--*	2	--*	5	22.0
Clark	27	5.3	42	8.1	20	3.9	30	5.8
Vancouver	18	6.9	29	11.1	16	6.1	22	8.5
Columbia	0	--*	0	--*	0	--*	0	--*
Cowlitz	7	5.9	11	9.2	4	--*	8	6.7
Longview	5	9.8	9	17.5	4	--*	6	11.8
Douglas	2	--*	3	--*	1	--*	4	--*
Ferry	2	--*	3	--*	1	--*	1	--*
Franklin	7	6.8	11	10.6	5	4.8	6	5.8
Pasco	5	6.7	8	10.7	4	--*	4	--*
Garfield	0	--*	0	--*	0	--*	0	--*
Grant	14	10.5	16	11.9	2	--*	3	--*
Grays Harbor	5	5.7	8	9.0	3	--*	7	7.9
Aberdeen	0	--*	2	--*	2	--*	3	--*
Island	2	--*	3	--*	1	--*	4	--*
Oak Harbor	2	--*	2	--*	0	--*	3	--*
Jefferson	0	--*	0	--*	0	--*	0	--*
King	129	5.8	192	8.6	80	3.6	111	5.0
Auburn	6	7.0	6	6.9	0	--*	1	--*
Bellevue	6	4.8	10	8.0	5	4.0	6	4.8
Burien	0	--*	1	--*	1	--*	1	--*
Des Moines	4	--*	6	20.5	2	--*	4	--*
Federal Way	9	7.2	12	9.6	4	--*	4	--*
Kent	9	5.6	17	10.6	11	6.9	14	8.8
Kirkland	6	7.4	7	8.6	1	--*	2	--*
Mercer Island	0	--*	1	--*	1	--*	1	--*
Redmond	4	--*	7	8.2	3	--*	3	--*
Renton	9	8.4	13	12.0	5	4.6	7	6.5
Sea Tac	1	--*	2	--*	1	--*	3	--*
Seattle	56	7.7	81	11.0	31	4.3	44	6.0
Shoreline	1	--*	3	--*	3	--*	3	--*
Kitsap	25	8.3	30	9.9	6	2.0	12	4.0
Bainbridge Island	3	--*	3	--*	0	--*	0	--*
Bremerton	8	8.3	11	11.3	4	--*	5	5.2

Table 43. Fetal Deaths, Perinatal, Neonatal and Infant Mortality by Place of Residence, 1998

County and City	Fetal Deaths ¹		Perinatal Mortality ²		Neonatal Mortality ³		Infant Mortality ⁴	
	Number	Ratio	Number	Rate	Number	Rate	Number	Rate
Kittitas	3	--*	5	13.3	4	--*	5	13.4
Klickitat	2	--*	2	--*	0	--*	0	--*
Lewis	4	--*	8	8.8	5	5.5	9	10.0
Lincoln	1	--*	1	--*	0	--*	1	--*
Mason	8	13.4	12	19.8	4	--*	4	--*
Okanogan	6	11.0	7	12.7	1	--*	6	11.0
Pacific	4	--*	4	--*	0	--*	0	--*
Pend Oreille	0	--*	1	--*	1	--*	2	--*
Pierce	60	6.1	83	8.4	34	3.5	64	6.5
Lakewood	3	--*	5	116.3	2	--*	6	150.0
Puyallup	5	5.8	8	9.2	4	--*	6	6.9
Tacoma	28	6.9	37	9.1	13	3.2	23	5.7
University Place	2	--*	2	--*	1	--*	3	--*
San Juan	1	--*	1	--*	0	--*	0	--*
Skagit	6	4.4	13	9.5	9	6.6	12	8.8
Mount Vernon	2	--*	7	13.2	5	9.5	6	11.3
Skamania	0	--*	0	--*	0	--*	0	--*
Snohomish	42	5.0	66	7.9	35	4.2	46	5.5
Edmonds	3	--*	3	--*	0	--*	1	--*
Everett	9	4.4	18	8.7	11	5.4	17	8.3
Lynnwood	4	--*	10	11.9	8	9.5	9	10.7
Marysville	1	--*	1	--*	2	--*	2	--*
Mountlake Terrace	5	19.2	6	22.6	2	--*	2	--*
Mukilteo	1	--*	1	--*	0	--*	0	--*
Spokane	40	7.3	58	10.5	21	3.8	30	5.5
Spokane (City)	30	9.5	42	13.1	14	4.4	20	6.3
Stevens	0	--*	1	--*	1	--*	3	--*
Thurston	9	3.6	16	6.3	11	4.4	16	6.4
Lacey	2	--*	3	--*	1	--*	2	--*
Olympia	5	6.4	5	6.4	3	--*	6	7.7
Wahkiakum	0	--*	0	--*	0	--*	0	--*
Walla Walla	6	8.6	10	14.2	4	--*	6	8.6
Walla Walla (City)	3	--*	6	14.6	3	--*	4	--*
Whatcom	12	5.8	15	7.3	3	--*	5	2.4
Bellingham	6	6.6	7	7.7	1	--*	1	--*
Whitman	2	--*	3	--*	1	--*	2	--*
Pullman	2	--*	2	--*	0	--*	0	--*
Yakima	21	4.9	31	7.2	14	3.3	27	6.3
Yakima (City)	9	6.3	13	9.1	7	4.9	11	7.7

DEAA08P1

¹Fetal death ratio = fetal deaths per 1,000 live births.

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

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

⁴Infant 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.

Table 44. Fetal Deaths, Perinatal, Neonatal and Infant Mortality by Place of Occurrence, 1998

County and City	Fetal Deaths ¹		Perinatal Mortality ²		Neonatal Mortality ³		Infant Mortality ⁴	
	Number	Ratio	Number	Rate	Number	Rate	Number	Rate
State Total	463	5.9	673	8.5	276	3.5	444	5.6
Adams	1	--*	1	--*	0	--*	1	--*
Asotin	0	--*	0	--*	0	--*	0	--*
Benton	12	4.4	15	5.4	3	--*	8	2.9
Kennewick	6	5.2	7	6.0	1	--*	3	--*
Richland	4	--*	6	5.1	2	--*	4	--*
Chelan	11	7.4	12	8.0	1	--*	5	3.4
Wenatchee	11	8.0	12	8.7	1	--*	4	--*
Clallam	3	--*	4	--*	1	--*	4	--*
Port Angeles	3	--*	4	--*	1	--*	4	--*
Clark	20	4.5	25	5.6	7	1.6	18	4.1
Vancouver	20	4.6	25	5.7	7	1.6	16	3.6
Columbia	0	--*	0	--*	0	--*	0	--*
Cowlitz	6	4.7	6	4.7	0	--*	3	--*
Longview	6	4.7	6	4.7	0	--*	2	--*
Douglas	0	--*	0	--*	0	--*	1	--*
Ferry	0	--*	0	--*	0	--*	0	--*
Franklin	6	9.0	7	10.4	1	--*	2	--*
Pasco	6	9.0	7	10.4	1	--*	2	--*
Garfield	0	--*	0	--*	0	--*	0	--*
Grant	8	7.8	8	7.7	0	--*	0	--*
Grays Harbor	2	--*	2	--*	0	--*	2	--*
Aberdeen	2	--*	2	--*	0	--*	1	--*
Island	2	--*	2	--*	0	--*	2	--*
Oak Harbor	2	--*	2	--*	0	--*	1	--*
Jefferson	1	--*	1	--*	0	--*	0	--*
King	155	6.0	261	10.0	140	5.4	185	7.1
Auburn	2	--*	2	--*	0	--*	1	--*
Bellevue	12	3.8	15	4.7	3	--*	3	--*
Burien	3	--*	5	5.7	2	--*	2	--*
Des Moines	0	--*	0	--*	0	--*	1	--*
Federal Way	4	--*	9	5.3	5	3.0	6	3.6
Kent	0	--*	0	--*	1	--*	4	--*
Kirkland	17	4.9	18	5.2	1	--*	2	--*
Mercer Island	0	--*	0	--*	0	--*	0	--*
Redmond	3	--*	3	--*	0	--*	1	--*
Renton	7	2.3	7	2.3	0	--*	1	--*
Sea Tac	0	--*	0	--*	0	--*	1	--*
Seattle	105	9.0	199	16.9	126	10.8	160	13.7
Shoreline	0	--*	0	--*	0	--*	0	--*
Kitsap	16	6.4	17	6.7	2	--*	5	2.0
Bainbridge Island	0	--*	0	--*	0	--*	0	--*
Bremerton	16	6.5	17	6.8	2	--*	4	--*

Table 44. Fetal Deaths, Perinatal, Neonatal and Infant Mortality by Place of Occurrence, 1998

County and City	Fetal Deaths ¹		Perinatal Mortality ²		Neonatal Mortality ³		Infant Mortality ⁴	
	Number	Ratio	Number	Rate	Number	Rate	Number	Rate
Kittitas	3	--*	4	--*	1	--*	2	--*
Klickitat	0	--*	0	--*	0	--*	0	--*
Lewis	2	--*	3	--*	1	--*	3	--*
Lincoln	0	--*	0	--*	0	--*	0	--*
Mason	5	16.7	5	16.4	0	--*	0	--*
Okanogan	4	--*	4	--*	0	--*	2	--*
Pacific	2	--*	2	--*	0	--*	0	--*
Pend Oreille	0	--*	1	--*	1	--*	1	--*
Pierce	77	7.6	114	11.2	51	5.0	84	8.3
Lakewood	4	--*	4	--*	0	--*	1	--*
Puyallup	6	4.1	7	4.8	1	--*	6	4.1
Tacoma	67	7.9	103	12.0	47	5.5	71	8.4
University Place	0	--*	0	--*	1	--*	2	--*
San Juan	0	--*	0	--*	0	--*	0	--*
Skagit	5	3.3	6	3.9	2	--*	5	3.3
Mount Vernon	4	--*	5	3.9	1	--*	2	--*
Skamania	0	--*	0	--*	0	--*	0	--*
Snohomish	26	4.4	29	4.9	4	--*	12	2.1
Edmonds	6	3.6	6	3.6	0	--*	1	--*
Everett	17	5.3	18	5.6	2	--*	7	2.2
Lynnwood	0	--*	0	--*	0	--*	0	--*
Marysville	0	--*	0	--*	0	--*	0	--*
Mountlake Terrace	0	--*	0	--*	0	--*	0	--*
Mukilteo	0	--*	0	--*	0	--*	0	--*
Spokane	51	8.0	82	12.8	40	6.3	56	8.8
Spokane (City)	51	8.1	82	12.8	40	6.3	56	8.8
Stevens	2	--*	2	--*	0	--*	2	--*
Thurston	6	2.2	7	2.5	2	--*	6	2.2
Lacey	0	--*	0	--*	0	--*	0	--*
Olympia	6	2.2	7	2.6	2	--*	5	1.8
Wahkiakum	0	--*	0	--*	0	--*	0	--*
Walla Walla	6	6.7	10	11.1	4	--*	7	7.9
Walla Walla (City)	6	6.8	10	11.2	4	--*	7	7.9
Whatcom	12	6.0	15	7.4	3	--*	4	--*
Bellingham	11	5.6	14	7.0	3	--*	3	--*
Whitman	2	--*	2	--*	0	--*	1	--*
Pullman	2	--*	2	--*	0	--*	0	--*
Yakima	17	4.1	26	6.3	12	2.9	23	5.6
Yakima (City)	13	4.4	21	7.1	11	3.7	17	5.7

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NOTE: See pages 5-6 for discussion of occurrence rates.

¹Fetal death ratio = fetal deaths per 1,000 live births.

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

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

⁴Infant 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.

Table 45. Fetal Deaths by Mother's Age Group by Place of Residence, 1998

County	All Ages	Under								45 and Over	Unk
		15	15-17	18-19	20-24	25-29	30-34	35-39	40-44		
State Total	471	1	18	43	103	119	80	72	23	0	12
Adams	0	0	0	0	0	0	0	0	0	0	0
Asotin	2	0	0	0	0	1	1	0	0	0	0
Benton	11	0	0	3	0	4	2	2	0	0	0
Chelan	8	0	0	2	2	1	0	3	0	0	0
Clallam	3	0	0	0	0	0	0	1	2	0	0
Clark	27	0	0	6	8	5	1	5	2	0	0
Columbia	0	0	0	0	0	0	0	0	0	0	0
Cowlitz	7	0	1	0	3	2	0	1	0	0	0
Douglas	2	0	1	0	0	1	0	0	0	0	0
Ferry	2	0	0	0	0	2	0	0	0	0	0
Franklin	7	0	4	0	1	0	0	2	0	0	0
Garfield	0	0	0	0	0	0	0	0	0	0	0
Grant	14	1	1	2	3	5	1	1	0	0	0
Grays Harbor	5	0	1	0	0	2	0	2	0	0	0
Island	2	0	0	0	1	1	0	0	0	0	0
Jefferson	0	0	0	0	0	0	0	0	0	0	0
King	129	0	3	6	28	34	30	17	6	0	5
Kitsap	25	0	1	0	7	5	4	5	1	0	2
Kittitas	3	0	0	0	0	1	0	0	2	0	0
Klickitat	2	0	0	1	0	1	0	0	0	0	0
Lewis	4	0	0	1	1	2	0	0	0	0	0
Lincoln	1	0	0	0	0	1	0	0	0	0	0
Mason	8	0	0	1	3	2	1	1	0	0	0
Okanogan	6	0	0	0	4	1	1	0	0	0	0
Pacific	4	0	0	2	1	0	1	0	0	0	0
Pend Oreille	0	0	0	0	0	0	0	0	0	0	0
Pierce	60	0	2	7	9	15	13	9	3	0	2
San Juan	1	0	0	0	0	1	0	0	0	0	0
Skagit	6	0	1	0	2	2	0	1	0	0	0
Skamania	0	0	0	0	0	0	0	0	0	0	0
Snohomish	42	0	0	3	6	15	8	6	3	0	1
Spokane	40	0	1	3	12	7	10	6	1	0	0
Stevens	0	0	0	0	0	0	0	0	0	0	0
Thurston	9	0	0	0	3	1	1	3	0	0	1
Wahkiakum	0	0	0	0	0	0	0	0	0	0	0
Walla Walla	6	0	0	1	2	1	0	2	0	0	0
Whatcom	12	0	0	1	0	2	4	4	1	0	0
Whitman	2	0	0	0	1	0	0	0	1	0	0
Yakima	21	0	2	4	6	4	2	1	1	0	1

BIRA02P1

Table 46. Fetal Mortality to Residents by Cause, 1998

Cause with International List Number	Number
Total All Causes	471
Congenital Anomalies (740-759)¹	55
Anencephalus (740)	3
Spina Bifida (741)	0
Other Anomalies of the Central Nervous System (742)	7
Anomalies of the Heart (745-746)	4
Other Anomalies of Circulatory System (747)	1
Anomalies of Respiratory System (748)	2
Anomalies of Digestive System (749-751)	0
Anomalies of the Genitourinary System (752-753)	3
Anomalies of Musculoskeletal System (754-756)	1
Chromosomal Anomalies (758)	20
Other and Unspecified Congenital Anomalies (743-744,757,759)	14
Certain Causes of Perinatal Morbidity and Mortality (760-779)	414
Maternal Conditions which may be Unrelated to Pregnancy (760) ²	(16)
Chronic Hypertension (760.0)	10
Maternal Infections (760.2)	3
Maternal Injury (760.5)	0
Other Maternal Conditions (760.1,760.3-760.4,760.6-760.9)	3
Maternal Conditions Related to Pregnancy (761)	(57)
Incompetent Cervix (761.0)	17
Premature Rupture of Membranes (761.1)	29
Other Maternal Conditions (761.2-761.9)	11
Complications of Placenta, Cord, and Membranes (762)	(148)
Complications of Placenta (762.0-762.3)	59
Complications of Cord (762.4-762.6)	74
Complications of Membranes (762.7-762.9)	15
Complications of Labor (763)	5
Other Complications of Pregnancy and Childbirth (764-767)	44
Intrauterine Hypoxia (768)	4
Diseases of the Fetus and Ill-defined Causes (769-779)	(140)
Respiratory Conditions (769-770)	1
Infections Specific to the Perinatal Period (771)	2
Fetal Hemorrhage (772)	2
Haemolytic Disease and Other Perinatal Jaundice (773-774)	0
Endocrine and Metabolic Disturbances (775)	6
Haematological Disorders (776)	0
Disorders of Digestive System (777)	0
Conditions Involving the Integument and Temperature (778)	10
Other Conditions of Fetus (779)	119
All Other Causes (001-739,780-799)	2

¹Group totals are shown in bold.

²Sub-group totals are shown in parentheses.

Table 47. Fetal Mortality to Residents by Weight in Grams by Sex, 1998

Weight in Grams	Total	Male	Female	Unknown
State Totals	471	255	213	3
Under 1,000	222	118	103	1
1,000 - 1,499	31	21	10	0
1,500 - 1,999	25	14	11	0
2,000 - 2,499	30	17	13	0
2,500 - 2,999	31	16	15	0
3,000 - 3,499	29	18	11	0
3,500 - 3,999	24	12	12	0
4,000 - 4,499	5	4	1	0
4,500 and over	2	0	2	0
Unknown	72	35	35	2

BIRA01M1

Marriage and Divorce





Table 48. Marriages by County of Occurrence and County of Residence,¹ 1998

County	Occurrence		Wife's Residence		Husband's Residence	
	Number	Rate ^{2,3}	Number	Rate ²	Number	Rate ²
State Total	41,443	7.3	41,443	7.3	41,443	7.3
Adams	112	7.0	85	5.3	76	4.8
Asotin	126	6.3	75	3.8	69	3.5
Benton	900	6.5	870	6.3	850	6.2
Chelan	736	11.8	423	6.8	419	6.7
Clallam	466	7.0	407	6.1	396	5.9
Clark	2,726	8.3	2,121	6.5	2,041	6.2
Columbia	28	6.7	26	6.2	23	5.5
Cowlitz	733	7.9	663	7.1	673	7.2
Douglas	111	3.5	189	6.0	179	5.7
Ferry	46	6.3	36	4.9	38	5.2
Franklin	362	8.2	328	7.4	308	6.9
Garfield	10	4.2	7	2.9	6	2.5
Grant	436	6.3	451	6.5	466	6.7
Grays Harbor	524	7.7	438	6.5	429	6.3
Island	566	7.8	461	6.4	489	6.7
Jefferson	283	10.7	151	5.7	144	5.4
King	12,381	7.4	11,931	7.2	11,700	7.0
Kitsap	1,725	7.5	1,510	6.6	1,498	6.5
Kittitas	238	7.6	240	7.6	233	7.4
Klickitat	130	6.8	94	4.9	95	5.0
Lewis	551	8.0	493	7.2	474	6.9
Lincoln	34	3.4	27	2.7	26	2.6
Mason	301	6.2	301	6.2	288	6.0
Okanogan	322	8.4	246	6.4	243	6.3
Pacific	269	12.5	126	5.9	130	6.0
Pend Oreille	74	6.6	45	4.0	47	4.2
Pierce	5,431	7.9	5,063	7.4	5,098	7.4
San Juan	284	22.5	76	6.0	79	6.3
Skagit	904	9.2	728	7.4	738	7.5
Skamania	105	10.6	54	5.5	62	6.3
Snohomish	3,524	6.2	4,071	7.2	3,985	7.0
Spokane	2,216	5.4	2,069	5.0	2,023	4.9
Stevens	185	4.9	171	4.5	171	4.5
Thurston	1,476	7.4	1,445	7.2	1,378	6.9
Wahkiakum	30	7.7	21	5.4	23	5.9
Walla Walla	370	6.8	310	5.7	307	5.6
Whatcom	1,128	7.2	1,059	6.7	1,032	6.6
Whitman	154	3.7	179	4.3	186	4.5
Yakima	1,446	6.9	1,409	6.7	1,416	6.7
Tribal Authority	2	*	*	*	*	*
Out of State	*	*	3,037	*	3,603	*
Unknown	*	*	7	*	2	*

¹Does not include marriages to Washington residents performed in other states or countries.

²Rates per 1,000 population.

³Exceptionally 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.

Table 49. Marriages by Woman's Age and County where Ceremony was Performed, 1998

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		
State Total	41,443	3,306	11,087	9,186	5,749	4,330	3,008	2,015	1,222	542	339	515	144
Adams	112	17	42	13	10	8	7	7	3	0	2	0	3
Asotin	126	11	40	33	11	8	10	3	3	4	0	1	2
Benton	900	111	291	177	91	80	64	39	18	13	5	7	4
Chelan	736	63	188	156	106	84	58	29	20	10	3	14	5
Clallam	466	37	115	81	48	63	43	30	19	12	7	9	2
Clark	2,726	253	771	529	333	264	213	144	109	40	26	37	7
Columbia	28	4	11	3	1	1	3	1	1	2	0	1	0
Cowlitz	733	82	234	133	73	72	56	31	20	7	10	15	0
Douglas	111	16	32	16	9	9	14	5	3	1	2	4	0
Ferry	46	4	7	11	8	2	2	5	3	2	1	1	0
Franklin	362	59	131	53	42	27	18	10	7	5	1	4	5
Garfield	10	0	3	3	0	2	0	0	1	0	1	0	0
Grant	436	75	140	73	30	47	24	21	7	8	2	5	4
Grays Harbor	524	53	146	84	65	58	41	28	19	9	5	13	3
Island	566	51	147	136	67	64	35	28	17	5	6	9	1
Jefferson	283	15	45	58	49	37	31	21	18	6	1	2	0
King	12,381	560	2,814	3,296	2,102	1,399	861	600	364	120	93	130	42
Kitsap	1,725	177	482	340	213	194	119	78	51	29	14	22	6
Kittitas	238	17	67	49	38	29	14	13	8	1	0	2	0
Klickitat	130	17	31	22	18	13	12	9	3	2	1	1	1
Lewis	551	73	175	87	58	57	29	28	16	6	8	14	0
Lincoln	34	1	15	7	4	2	2	0	1	0	2	0	0
Mason	301	29	81	40	30	39	28	27	7	8	5	7	0
Okanogan	322	32	77	57	42	41	32	19	7	5	6	4	0
Pacific	269	12	58	51	49	26	24	19	12	7	6	5	0
Pend Oreille	74	8	16	14	9	9	7	6	2	0	0	3	0
Pierce	5,431	492	1,555	1,168	701	542	410	240	149	70	33	58	13
San Juan	284	4	32	67	65	46	28	23	14	3	0	2	0
Skagit	904	97	220	171	119	96	72	38	39	19	14	15	4
Skamania	105	9	13	22	22	11	9	9	5	3	1	1	0
Snohomish	3,524	251	938	787	524	350	272	176	104	46	24	44	8
Spokane	2,216	189	717	510	248	185	137	96	52	25	24	17	16
Stevens	185	24	57	27	20	19	17	4	5	5	3	4	0
Thurston	1,476	124	415	300	186	152	117	82	43	23	13	16	5
Wahkiakum	30	5	8	5	2	2	5	0	1	0	1	0	1
Walla Walla	370	48	107	71	51	28	21	16	6	7	4	9	2
Whatcom	1,128	77	350	217	125	122	84	67	39	18	6	17	6
Whitman	154	13	54	35	17	14	5	7	4	3	1	1	0
Yakima	1,446	196	462	284	163	128	84	56	22	18	8	21	4
Tribal Authority	2	0	1	0	0	1	0	0	0	0	0	0	0

Table 50. Marriages by Man's Age and County where Ceremony was Performed, 1998

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		
State Total	41,443	1,267	9,252	9,943	6,489	4,732	3,351	2,344	1,594	914	532	913	112
Adams	112	7	41	27	9	8	2	8	4	2	0	3	1
Asotin	126	5	31	33	18	14	6	8	2	3	2	3	1
Benton	900	43	251	219	122	72	71	51	23	20	9	13	6
Chelan	736	26	165	167	115	87	60	51	18	13	8	23	3
Clallam	466	16	92	92	56	46	54	30	30	16	13	21	0
Clark	2,726	114	629	604	389	299	229	174	109	74	41	63	1
Columbia	28	2	8	5	2	1	2	3	2	1	2	0	0
Cowlitz	733	31	189	160	103	82	58	38	27	9	10	25	1
Douglas	111	7	32	19	13	12	9	5	4	3	3	4	0
Ferry	46	1	9	7	8	4	2	3	3	2	2	5	0
Franklin	362	31	121	65	52	28	18	16	14	3	5	8	1
Garfield	10	0	4	2	0	1	1	0	0	0	0	2	0
Grant	436	32	130	96	58	39	31	11	17	9	4	8	1
Grays Harbor	524	21	121	113	62	51	46	34	26	15	13	18	4
Island	566	25	139	131	80	70	38	24	23	10	12	11	3
Jefferson	283	5	36	54	49	40	26	20	22	15	11	3	2
King	12,381	185	2,062	3,323	2,392	1,551	1,056	685	478	253	136	230	30
Kitsap	1,725	57	507	364	215	196	127	82	76	39	19	40	3
Kittitas	238	12	55	49	38	32	23	16	4	2	3	3	1
Klickitat	130	6	30	23	19	14	14	12	4	2	3	3	0
Lewis	551	32	150	123	66	56	28	28	22	17	4	25	0
Lincoln	34	1	11	12	3	1	0	3	1	0	0	2	0
Mason	301	8	68	58	34	33	27	29	18	7	7	11	1
Okanogan	322	9	69	60	51	41	31	20	12	14	7	8	0
Pacific	269	2	37	56	52	30	23	25	15	10	8	11	0
Pend Oreille	74	4	11	15	11	9	9	7	3	1	0	4	0
Pierce	5,431	199	1,375	1,295	782	590	430	297	171	124	48	109	11
San Juan	284	4	21	61	59	42	26	34	19	9	3	6	0
Skagit	904	36	210	181	113	93	91	63	31	28	23	33	2
Skamania	105	1	16	19	17	17	10	7	5	7	4	2	0
Snohomish	3,524	84	761	842	572	444	295	200	145	66	33	69	13
Spokane	2,216	72	608	579	286	215	143	106	86	44	30	32	15
Stevens	185	7	47	36	28	14	13	17	10	5	3	5	0
Thurston	1,476	51	338	343	200	169	126	80	73	39	21	32	4
Wahkiakum	30	1	6	4	4	4	0	7	0	2	0	2	0
Walla Walla	370	20	103	77	58	39	26	13	10	8	3	12	1
Whatcom	1,128	25	283	259	140	118	108	73	41	25	24	30	2
Whitman	154	3	40	47	24	14	8	3	6	3	3	3	0
Yakima	1,446	82	446	323	189	156	84	61	40	14	15	31	5
Tribal Authority	2	0	1	0	0	1	0	0	0	0	0	0	0

Table 51. Divorces and Annulments by County of Decree and County of Residence,¹ 1998

County	Occurrence		Wife's Residence		Husband's Residence	
	Number	Rate ^{2,3}	Number	Rate ²	Number	Rate ²
State Total	28,627	5.0	28,627	5.0	28,627	5.0
Adams	58	3.6	52	3.3	41	2.6
Asotin	106	5.3	100	5.0	81	4.1
Benton	739	5.4	695	5.1	646	4.7
Chelan	395	6.3	284	4.5	301	4.8
Ciallam	315	4.7	314	4.7	294	4.4
Clark	1,614	4.9	1,661	5.1	1,535	4.7
Columbia	22	5.2	33	7.9	26	6.2
Cowlitz	497	5.3	496	5.3	477	5.1
Douglas	19	0.6	119	3.8	113	3.6
Ferry	24	3.3	27	3.7	33	4.5
Franklin	158	3.6	154	3.5	159	3.6
Garfield	10	4.2	5	2.1	6	2.5
Grant	321	4.6	330	4.8	309	4.5
Grays Harbor	312	4.6	311	4.6	292	4.3
Island	327	4.5	322	4.4	340	4.7
Jefferson	109	4.1	103	3.9	106	4.0
King	6,950	4.2	7,098	4.3	6,861	4.1
Kitsap	1,156	5.0	1,200	5.2	1,128	4.9
Kittitas	79	2.5	70	2.2	61	1.9
Klickitat	62	3.2	54	2.8	48	2.5
Lewis	335	4.9	326	4.8	329	4.8
Lincoln	3,402	340.2	48	4.8	40	4.0
Mason	227	4.7	243	5.0	261	5.4
Okanogan	144	3.8	154	4.0	144	3.8
Pacific	87	4.0	97	4.5	93	4.3
Pend Oreille	46	4.1	48	4.3	42	3.8
Pierce	3,003	4.4	3,662	5.3	3,523	5.1
San Juan	48	3.8	40	3.2	42	3.3
Skagit	578	5.9	529	5.4	473	4.8
Skamania	61	6.2	36	3.6	30	3.0
Snohomish	2,604	4.6	2,803	4.9	2,675	4.7
Spokane	1,760	4.3	2,066	5.0	1,954	4.8
Stevens	143	3.8	152	4.0	168	4.5
Thurston	1,026	5.1	1,038	5.2	963	4.8
Wahkiakum	12	3.1	12	3.1	13	3.3
Walla Walla	248	4.5	236	4.3	234	4.3
Whatcom	666	4.2	626	4.0	581	3.7
Whitman	112	2.7	102	2.5	108	2.6
Yakima	815	3.9	812	3.9	780	3.7
Tribal Authority	37	--	--	--	--	--
Out-of-State	--	--	1,593	--	2,422	--
Unknown	--	--	576	--	895	--

¹ Does not include divorces to Washington residents obtained in other states or countries.

² Rates per 1,000 population.

³ 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.

Table 52. Divorces, Annulments, and Legal Separations by County of Decree, 1998

County	Total	Divorce	Annulment	Legal Separation ¹
State Total	28,627	28,470	157	585
Adams	58	57	1	0
Asotin	106	106	0	1
Benton	739	738	1	3
Chelan	395	391	4	3
Clallam	315	315	0	1
Clark	1,614	1,607	7	15
Columbia	22	22	0	0
Cowlitz	497	494	3	4
Douglas	19	19	0	0
Ferry	24	24	0	0
Franklin	158	158	0	2
Garfield	10	10	0	0
Grant	321	321	0	5
Grays Harbor	312	311	1	6
Island	327	325	2	5
Jefferson	109	109	0	1
King	6,950	6,909	41	190
Kitsap	1,156	1,153	3	29
Kittitas	79	79	0	1
Klickitat	62	61	1	1
Lewis	335	335	0	4
Lincoln	3,402	3,370	32	82
Mason	227	227	0	4
Okanogan	144	144	0	1
Pacific	87	87	0	0
Pend Oreille	46	46	0	1
Pierce	3,003	2,984	19	69
San Juan	48	48	0	0
Skagit	578	574	4	7
Skamania	61	61	0	1
Snohomish	2,604	2,587	17	66
Spokane	1,760	1,754	6	23
Stevens	143	143	0	1
Thurston	1,026	1,018	8	37
Wahkiakum	12	11	1	1
Walla Walla	248	247	1	1
Whatcom	666	665	1	10
Whitman	112	112	0	1
Yakima	815	811	4	8
Tribal Authority	37	37	0	1

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

Table 53. Divorces and Annulments by Wife's Age and County of Decree, 1998

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		
State Total	28,627	142	2,417	4,469	4,760	4,939	4,371	2,815	1,563	649	323	319	1,860
Adams	58	3	4	11	10	9	9	5	3	0	0	1	3
Asotin	106	2	8	16	20	21	10	10	7	5	2	2	3
Benton	739	4	85	124	112	131	120	80	42	9	5	8	19
Chelan	395	2	39	64	46	78	63	47	22	10	4	6	14
Clallam	315	1	33	40	40	55	55	33	22	7	2	4	23
Clark	1,614	7	142	245	275	268	271	163	85	34	20	22	82
Columbia	22	0	1	3	3	4	5	2	1	3	0	0	0
Cowlitz	497	3	54	89	74	82	79	46	36	10	7	4	13
Douglas	19	0	1	3	2	3	5	0	0	1	0	1	3
Ferry	24	0	0	5	3	3	4	4	1	2	0	2	0
Franklin	158	3	12	30	27	25	18	18	5	2	5	1	12
Garfield	10	0	1	0	2	2	1	1	2	0	0	1	0
Grant	321	4	39	54	48	48	40	37	17	9	2	5	18
Grays Harbor	312	3	25	52	53	59	47	33	15	9	3	3	10
Island	327	1	50	55	61	60	41	23	13	6	4	6	7
Jefferson	109	0	8	12	13	15	19	18	10	6	4	4	0
King	6,950	17	389	986	1,184	1,230	1,084	748	409	174	71	57	601
Kitsap	1,156	8	137	197	183	181	177	102	62	21	10	13	65
Kittitas	79	0	10	10	10	12	13	11	10	2	1	0	0
Klickitat	62	0	5	8	7	8	12	5	5	3	4	3	2
Lewis	335	0	24	54	53	54	53	29	16	10	7	4	31
Lincoln	3,402	18	356	635	597	557	487	316	167	62	25	36	146
Mason	227	1	22	27	34	41	36	23	16	7	5	4	11
Okanogan	144	7	9	15	18	20	30	11	7	2	2	3	20
Pacific	87	1	10	7	14	10	11	13	6	5	3	4	3
Pend Oreille	46	0	3	9	8	8	8	4	3	0	0	1	2
Pierce	3,003	15	258	489	530	544	466	258	131	57	33	25	197
San Juan	48	0	5	2	7	6	11	6	6	1	3	1	0
Skagit	578	5	43	74	79	95	92	51	24	13	13	5	84
Skamania	61	0	3	9	11	11	9	6	6	1	5	0	0
Snohomish	2,604	7	205	358	456	508	405	242	150	62	21	37	153
Spokane	1,760	15	183	281	298	286	246	152	75	38	31	21	134
Stevens	143	0	14	14	18	22	28	20	7	4	5	4	7
Thurston	1,026	3	79	171	161	183	147	112	66	29	6	13	56
Wahkiakum	12	0	2	2	2	0	2	0	4	0	0	0	0
Walla Walla	248	1	25	44	46	36	38	27	14	1	3	2	11
Whatcom	666	0	44	88	102	100	84	78	41	21	7	5	96
Whitman	112	0	16	28	12	19	18	7	7	3	0	0	2
Yakima	815	9	71	150	131	136	124	73	49	20	9	11	32
Tribal Authority	37	2	2	8	10	9	3	1	1	0	1	0	0

Table 54. Divorces and Annulments by Husband's Age and County of Decree, 1998

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			
State Total	28,627	33	1,416	3,877	4,519	4,886	4,440	3,260	2,230	1,076	550	635	1,705	
Adams	58	0	4	14	9	9	3	6	4	3	2	1	3	
Asotin	106	1	4	14	13	13	18	13	13	3	7	3	4	
Benton	739	1	46	116	112	125	118	79	67	27	15	16	17	
Chelan	395	1	18	50	62	59	62	57	30	20	8	12	16	
Clallam	315	0	18	23	49	47	57	39	34	11	6	6	25	
Clark	1,614	4	74	217	253	273	261	190	127	63	35	33	84	
Columbia	22	0	0	2	1	7	5	2	2	2	0	1	0	
Cowlitz	497	0	27	77	78	81	83	58	41	21	7	14	10	
Douglas	19	0	0	2	2	3	2	2	2	1	1	0	4	
Ferry	24	0	0	5	2	3	4	2	3	1	3	1	0	
Franklin	158	1	10	24	28	24	22	18	8	8	2	4	9	
Garfield	10	0	1	0	1	3	0	2	1	0	1	1	0	
Grant	321	1	22	53	52	49	45	29	35	9	7	9	10	
Grays Harbor	312	0	18	43	55	44	56	37	22	13	10	7	7	
Island	327	1	21	65	53	60	38	34	17	12	4	11	11	
Jefferson	109	0	4	9	15	13	19	14	18	5	6	6	0	
King	6,950	3	199	790	1,101	1,228	1,114	851	563	272	119	137	573	
Kitsap	1,156	0	91	186	183	191	167	123	84	38	12	23	58	
Kittitas	79	0	6	10	15	8	13	4	14	3	3	1	2	
Klickitat	62	0	1	9	8	5	8	9	9	3	4	5	1	
Lewis	335	0	10	55	45	48	45	42	29	14	10	11	26	
Lincoln	3,402	7	231	543	596	545	509	362	227	120	65	71	126	
Mason	227	0	13	28	34	43	32	29	21	10	6	4	7	
Okanogan	144	0	11	20	10	28	22	18	6	10	1	5	13	
Pacific	87	0	5	9	10	14	11	6	15	5	7	5	0	
Pend Oreille	46	0	2	3	10	6	8	3	7	3	1	2	1	
Pierce	3,003	5	183	438	472	536	462	316	227	93	39	56	176	
San Juan	48	0	3	5	3	8	7	8	8	1	2	3	0	
Skagit	578	2	27	58	82	86	87	75	36	19	15	17	74	
Skamania	61	1	2	4	13	9	6	10	10	3	3	0	0	
Snohomish	2,604	2	116	299	390	512	449	288	192	107	49	62	138	
Spokane	1,760	1	112	272	280	285	258	192	99	50	33	51	127	
Stevens	143	1	6	16	18	26	24	22	6	10	5	5	4	
Thurston	1,026	1	34	152	164	179	151	118	97	47	16	20	47	
Wahkiakum	12	0	2	2	2	1	0	1	0	2	1	1	0	
Walla Walla	248	0	15	38	33	52	41	29	15	9	6	4	6	
Whatcom	666	0	27	66	100	96	82	74	68	24	20	13	96	
Whitman	112	0	9	22	20	15	18	10	8	5	4	0	1	
Yakima	815	0	41	131	139	146	125	85	64	28	15	14	27	
Tribal Authority	37	0	3	7	6	6	8	3	1	1	0	0	2	

**Table 55. Divorces and Annulments by Number of Children¹
and County of Wife's Residence,² 1998**

County	Total	0	1	2	3	4 +	Unknown ³
State Total	28,627	13,109	6,013	6,100	1,973	732	700
Adams	52	21	13	9	5	4	0
Asotin	100	47	24	22	5	2	0
Benton	695	298	148	159	53	24	13
Chelan	284	123	62	69	18	7	5
Clallam	314	147	50	79	28	3	7
Clark	1,661	718	375	369	131	35	33
Columbia	33	16	8	6	3	0	0
Cowlitz	496	209	101	123	45	14	4
Douglas	119	44	35	27	9	3	1
Ferry	27	10	4	6	4	3	0
Franklin	154	66	32	34	11	10	1
Garfield	5	1	1	2	1	0	0
Grant	330	129	68	87	30	13	3
Grays Harbor	311	122	67	74	34	5	9
Island	322	137	69	79	23	9	5
Jefferson	103	52	24	16	7	3	1
King	7,098	3,495	1,416	1,422	419	159	187
Kitsap	1,200	527	251	271	96	37	18
Kittitas	70	36	17	10	5	1	1
Klickitat	54	30	10	6	5	1	2
Lewis	326	129	76	73	23	12	13
Lincoln	48	24	6	4	10	2	2
Mason	243	94	50	68	13	12	6
Okanogan	154	77	31	26	12	6	2
Pacific	97	48	21	19	6	2	1
Pend Oreille	48	24	9	8	3	4	0
Pierce	3,662	1,580	850	795	255	93	89
San Juan	40	19	9	6	3	1	2
Skagit	529	239	105	112	56	11	6
Skamania	36	20	7	5	1	1	2
Snohomish	2,803	1,208	620	663	213	62	37
Spokane	2,066	948	439	458	130	47	44
Stevens	152	58	35	39	12	6	2
Thurston	1,038	443	243	220	60	28	44
Wahkiakum	12	3	3	4	2	0	0
Walla Walla	236	103	44	65	14	5	5
Whatcom	626	278	127	124	56	21	20
Whitman	102	42	23	23	10	3	1
Yakima	812	306	191	195	71	31	18
Out-of-State	1,593	941	267	226	72	41	46
Unknown	576	297	82	97	19	11	70

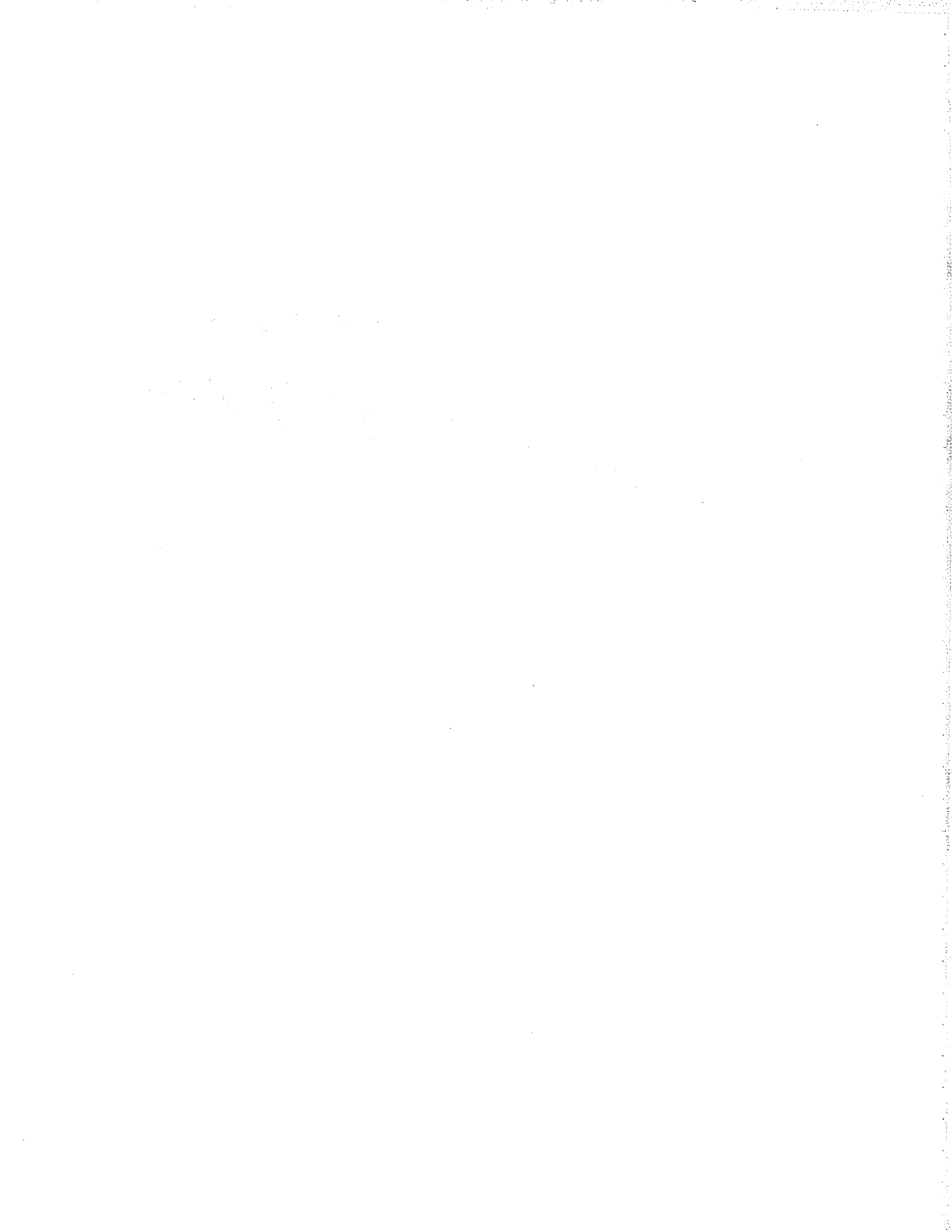
¹Certificate of dissolution records, "Children born alive of this marriage." All children are counted regardless of age.

²Does not include residents who obtain divorces or annulments outside of Washington State.

³Unknowns are higher and divorces with no children appear lower in 1998 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, 1998* are compiled from items on birth, death, fetal death, marriage and dissolution certificates received before extraction of annual datafiles in August 1999. (See Appendix F for samples of certificate forms used.)

Population

Population estimates in this report are from the Washington State Office of Financial Management, Forecasting Division, *Intercensal and Postcensal Estimates of County Population by Age and Sex: 1980-1998, Washington State*, December 30, 1998.

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 US Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Health Statistics, Hyattsville MD).

Demographics

Age

In 1989, the birth certificate item on mother's and father's ages was replaced by mother's and father's date of birth. The actual birth date provides more detail than the ages alone and can be used in linking birth data with other files. As of 1989, therefore, ages are computed from parents' birth dates and the date of delivery. A comparison of parents' age distributions before and after the change showed that ages calculated from birth dates are consistent with ages determined by asking the mother and that there is no substantial increase in missing data as a result of asking for the more detailed birth dates.

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.¹

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 following changes have been made to the collection and coding of race since 1980.

- In mid-1988, the race code 'C' which previously had been used only for Mexican/Chicano was expanded to include all Hispanics. Because of this change, race data based on code 'C' should not be used for any trend analysis which spans 1988.
- In 1990, the coding of race was changed in accordance with NCHS guidelines such that if more than one race was given on the certificate, the first race listed was assigned as the person's race. Before 1990, the first non-white race was used. This change increased the number of events coded as "White" and decreased the number coded to other races. Thus, race-specific rates may not be comparable before and after the change.
- In 1992, codes for race were expanded to provide more detail on Asian Pacific American subgroups. However, a large number of records still report just 'Asian' as the race.

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

Thus, rates for Asian subgroups may substantially underestimate the actual rates.

The current standard for tabulating race data for births is to use the race of the mother (see Tables 2A and 11). 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, table 20B tabulates data by the child’s race at death, whereas Table 41 tabulates data by the child’s race at birth, calculated from the mother’s and father’s races.

Hispanic Origin

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

The following changes have been made to the collection and coding of Hispanic Origin since 1980.

- In 1988, a separate item for Hispanic Origin was added to the certificate to provide more complete data on Hispanic ethnicity previously collected using only the item on race. In 1988, the first year of data collection, some facilities continued to use the 1987 certificate, which did not have the Hispanic ethnicity item. As a result, Hispanic ethnicity data are less complete for 1988 than they are for later years.
- In 1996 the coding of Hispanic Origin entries was modified in Washington State to comply with guidelines established by the National Center for Health Statistics (NCHS) in *Instruction Manual, Part 4, Demographic Classification and Coding Instructions for Death Records*. Specifically, the following edits were added to improve the specificity and completeness of the data for Hispanic Origin:

- (1) If the person's Hispanic ethnicity is reported as "Yes, Hispanic," but the country of origin is not given, then the race field is checked for more specific information on country of origin.
 - (2) If the race field does not provide sufficient detail, then the place of birth field is checked.
 - (3) If neither race nor place of birth provides additional information on country of origin, then Hispanic Origin is classified as "Other and Unknown Hispanic." The separate category labeled "Unknown Hispanic" was dropped in 1996.
- Data on Hispanic Origin for 1988-1995 may be inconsistent with the data for 1996 or later due to the preceding changes. In particular, before 1996, Hispanic Origin for some records may be coded as "Unknown Hispanic" or "Unknown," whereas, in 1996 and later, a similar record would be given a more specific Hispanic code under NCHS guidelines.

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 1987-1998 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 0.2 to 0.3% of the births by year and 0.1% of the deaths. 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. 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. For 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. Tables affected are: 2G, 3, 4, 5, 14, and 47.

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, 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.

Maternal Smoking

This item has undergone some wording and placement changes over time. For 1984-88, it asked about "Smoking at any time during the pregnancy" and was placed in the middle section of the certificate, which the mother generally completes from a worksheet. With the 1989 revision, the wording was changed to "Tobacco use during pregnancy" (which could include smokeless tobacco), and the item was relocated to the bottom of the certificate, which is generally completed by the physician (often without access to prenatal records). The percentage of missing data increased from 4% in 1984 to 13% in 1989, possibly because the change in placement on the certificate changed the way the data were collected. To eliminate the problem and provide more comparable data, the item was changed in 1992 to its original wording and placement on the certificate. The proportion of births with unknown maternal smoking decreased to 3.7% in 1992. Thus, data for 1989-91 may not be comparable to data from other time periods. Unfortunately, after decreasing to 1.9% in 1993, the percent unknown maternal smoking

has increased over time to 5.2% in 1998. This increase is part of a general pattern of increasing unknowns for birth risk factors (see below).

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 and as of 1998 is at an all-time high of 9.7%. 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 have 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, Ninth Revision published by the World Health Organization. The State of Washington began using this revision on January 1, 1979.

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 'the disease or injury which initiated events resulting in death.' 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. The underlying cause of death receives a four-digit code. For an external event (accident, suicide, homicide, or undetermined), the same four-digit code can have two different meanings depending on the context. For example, an injury code of 950.0 means "optic nerve injury" whereas an external event code of E950.0 means "suicide by analgesics, antipyretics, and antirheumatics." In nosological rules for coding underlying cause of death, one can only die of the external events that produced an injury. One does not die of the head injury (854); rather one dies of the fall from a ladder (E884.2) which resulted in the head injury. Therefore, all injury death data published in this report use the external event ("E") code rather than the nature of injury code.

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. Data users should be careful not to look at specific ICD-9 gun death codes in isolation. For instance, homicide hand gun deaths (E965.0) doubled between 1994 and 1995. This increase is due to the supplemental gun surveillance information; overall homicide gun deaths (E965.0 - E965.4) decreased 14% during the same period.
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-9 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 72 separate groups and deaths for infants into 61 groups. In preparing the goals for Healthy People 2000 (HP 2000), the Centers for Disease Control and Prevention (CDC) focused on a different classification of adult deaths in several areas. With the 1994-1995 annual summary, published cause of death groupings were revised as follows, to accommodate both of these classification systems as much as possible:

1. NCHS classifies diseases of the heart as ICD-9 codes 390-398, 402, 404-429; HP 2000 focuses only on ischemic heart disease which is based on ICD-9 codes 402, 410-414, 429.2. In this report, the group for heart disease now includes ICD-9 codes 390-398, 402, and 404-429. Previous heart disease groups excluded ICD-9 codes 390, 392.9, and 405 (which account for few, if any, deaths). Deaths from ICD-9 code 429.2 (Unspecified cardiovascular disease) are no longer grouped with 'Other heart disease,' but are published separately in Table 22. This format allows users to calculate a total for coronary or ischemic heart disease for comparison with HP 2000 goals;
2. NCHS classifies malignant neoplasms of trachea, bronchus and lung as ICD-9 162 in its entirety; HP 2000 focuses only on lung cancer which is a subset (ICD-9 codes 162.2-162.9). In this report (Table 23), malignant neoplasm of trachea (ICD-9 162.0) is no longer grouped with 'Lung Cancer'. These two categories are published separately to facilitate comparison with HP 2000 goals;
3. NCHS includes deaths due to legal intervention with homicide (ICD-9 E960-E978); HP 2000 examines only homicides (ICD-9 E960-E969). In this report, homicide and legal intervention deaths are published separately; and
4. NCHS uses accidental drowning and submersion (ICD-9 E910); HP 2000 includes additional codes to define drowning (ICD-9 E830, E832, E910) In Table 22 of this report, drowning due to water transport (ICD-9 E830, E832) is published separately from accidental drowning (ICD-9 E910) to facilitate comparison with HP 2000 goals.

In addition, a few other changes were made to ensure consistency with the NCHS classification scheme beginning with the report, *Vital Statistics, 1994-95*. These changes may result in differences with printed reports prior to that time. All of these changes, however, have been incorporated into the revised series of annual summary tables available on CD-ROM or the Department of Health's website (for further

information, see the "Introduction" in this report, page 10). The following items were modified:

1. Cancer: Carcinoma in situ (ICD-9 230-234) is no longer grouped with malignant neoplasms but is now included with "Benign and Unspecified Neoplasms (ICD-9 210-239)." (Deaths from carcinoma in situ rarely occur.) Malignant neoplasm of intestinal tract, part unspecified (ICD-9 159.0) is no longer grouped with "Digestive Organs and Peritoneum - Other and Ill-Defined Sites."
2. Diseases of the Nervous System and Sense Organs: Meningitis (ICD-9 320-322) and Alzheimer's Disease (ICD-9 331.0) are now tabulated separately. "Other Hereditary and Degenerative Diseases of the Central Nervous System" (ICD-9 330-337) are no longer tabulated separately but are grouped with "Other Diseases of the Nervous System and Sense Organs."
3. Injuries: Late effects of specific injuries (ICD-9 E929) are no longer included with the specific injury (such as a fall) but are grouped as a single category "Late Effects of Accidental Injury."

Tables affected by these changes are: 20E, 20F, 21-24, 29A, 30A, 30B, 32, 35, 38A, and 38B.

Alcohol-Related Cause of Death Categories

Prior to the 1994-95 annual summary of vital statistics, alcohol-related deaths were incorrectly classified as any deaths from ICD-9 codes 291, 303, or 305. The code 305 actually includes other drugs such as tobacco and cocaine; only 305.0 pertains specifically to alcohol abuse. Including all of ICD-9 305 causes about a 25% overestimate of alcohol-related deaths. Beginning with the 1994-1995 report, the category was corrected to include only ICD-9 codes 291, 303, and 305.0. This correction is also included in the revised series of annual summary tables contained on CD-ROM or the Department of Health's website (see page 10 of this report for more details). The table affected is: 22.

Maternal Death

Maternal deaths are those for which a maternal condition (ICD-9 codes 630-676) 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.

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 one National Center for Health Statistics definition: 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

Marriages are tabulated in this report according to the county in which the marriage was performed. Divorces, annulments, and legal separations are tallied by the county in which the legal certificate was issued. Thus, the statistics calculated with this data reflect the place of occurrence of the event (e.g., marriage ceremony performed, divorce decree issued) rather than the place of residence of the individuals involved. 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 and divorces for residents of Washington State that occur in other states.

Divorces and annulments issued in Washington State are tabulated by the wife's county of residence in one table in this report: Table 55 - Divorces and Annulments by Number of Children and County of Wife's Residence. Thus, this table, unlike the others included in this report,

presents information by place of residence rather than by the place at which the legal document was issued. As shown on this table, some of the women who had divorces or annulments issued in Washington State were from out of state.

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 trend data is small, since legal separations equal only about one to two percent 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." Table 55 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 630-676) 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).

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

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

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

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

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

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

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

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

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

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

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

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

appendxv.xls

One pound = 453.59 grams

Appendix C. Estimated Population, State of Washington, by Age Group by Sex, April 1, 1998

Age Group	Total	Male	Female
Total	5,685,300	2,830,386	2,854,914
Under 1 Year ¹	79,640	40,853	38,787
1 - 4	321,865	164,645	157,220
5 - 14	875,155	448,901	426,254
15 - 19	402,019	206,858	195,161
20 - 24	346,904	179,545	167,359
25 - 34	802,930	407,851	395,079
35 - 44	978,536	493,015	485,521
45 - 54	774,485	387,440	387,045
55 - 64	453,832	225,980	227,852
65 - 74	343,518	158,292	185,226
75 - 84	228,334	93,524	134,810
85 and Over	78,082	23,482	54,600

¹Population 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 1980-1998", December 30, 1998

Appendix D. Estimated Population of Counties and Cities of 15,000 Population and Over, April 1, 1998

Name	City	County	Name	City	County
Adams		15,900	Kittitas		31,400
Asotin		20,000	Klickitat		19,100
Benton		137,500	Lewis		68,600
Kennewick	50,390		Lincoln		10,000
Richland	36,860		Mason		48,300
Chelan		62,600	Okanogan		38,400
Wenatchee	25,290		Pacific		21,500
Ciallam		66,700	Pend Oreille		11,200
Port Angeles	18,860		Pierce		686,800
Clark		328,000	Lakewood	62,540	
Vancouver	132,000		Puyallup	29,910	
Columbia		4,200	Tacoma	186,000	
Cowlitz		93,100	University Place	29,550	
Longview	34,060		San Juan		12,600
Douglas		31,400	Skagit		98,700
Ferry		7,300	Mount Vernon	22,540	
Franklin		44,400	Skamania		9,900
Pasco	26,090		Snohomish		568,100
Garfield		2,400	Edmonds	38,610	
Grant		69,400	Everett	84,330	
Grays Harbor		67,900	Lynnwood	33,110	
Aberdeen	16,610		Marysville	19,740	
Island		72,500	Mountlake Terrace	20,360	
Oak Harbor	20,510		Mukilteo	16,810	
Jefferson		26,500	Spokane		410,900
King		1,665,800	Spokane	188,300	
Auburn	37,440		Stevens		37,600
Bellevue	105,700		Thurston		199,700
Burien	28,110		Lacey	28,240	
Des Moines	27,200		Olympia	39,070	
Federal Way	76,820		Wahkiakum		3,900
Kent	71,610		Walla Walla		54,600
Kirkland	44,220		Walla Walla	29,440	
Mercer Island	21,690		Whatcom		157,500
Redmond	43,310		Bellingham	61,980	
Renton	46,270		Whitman		41,400
Sea Tac	23,540		Pullman	25,070	
Seattle	539,700		Yakima		210,500
Shoreline	50,390		Yakima	64,290	
Kitsap		229,000			
Bainbridge Island	19,080				
Bremerton	37,260		State Total		5,685,300

Source: Office of Financial Management, Forecasting Division, "State of Washington 1998 Population Trends", October 1998

Appendix E. Top 100 Baby Names of Girls, 1998

Rank	First Name	N	%	Cumulative		Rank	First Name	N	%	Cumulative	
				N	%					N	%
1	EMILY	572	1.5	572	1.5	51	SHELBY	125	0.3	11,267	29.0
2	HANNAH	504	1.3	1,076	2.8	52	BRITTANY	121	0.3	11,388	29.4
3	MADISON	451	1.2	1,527	3.9	53	CLAIRE	114	0.3	11,502	29.7
4	SAMANTHA	414	1.1	1,941	5.0	54	DANIELLE	113	0.3	11,615	29.9
5	SARAH	368	0.9	2,309	6.0	55	MAKAYLA	111	0.3	11,726	30.2
6	TAYLOR	368	0.9	2,677	6.9	56	AMBER	110	0.3	11,836	30.5
7	EMMA	363	0.9	3,040	7.8	57	VANESSA	108	0.3	11,944	30.8
8	JESSICA	353	0.9	3,393	8.7	58	MELISSA	106	0.3	12,050	31.1
9	ALEXIS	340	0.9	3,733	9.6	59	GABRIELLE	105	0.3	12,155	31.3
10	ASHLEY	315	0.8	4,048	10.4	60	ISABELLA	103	0.3	12,258	31.6
11	ELIZABETH	298	0.8	4,346	11.2	61	KAYLEE	103	0.3	12,361	31.9
12	MEGAN	298	0.8	4,644	12.0	62	KYLIE	103	0.3	12,464	32.1
13	OLIVIA	269	0.7	4,913	12.7	63	SARA	101	0.3	12,565	32.4
14	RACHEL	254	0.7	5,167	13.3	64	KELSEY	98	0.3	12,663	32.6
15	ALYSSA	238	0.6	5,405	13.9	65	MIKAYLA	96	0.2	12,759	32.9
16	ABIGAIL	229	0.6	5,634	14.5	66	AMY	93	0.2	12,852	33.1
17	LAUREN	211	0.5	5,845	15.1	67	ERIN	93	0.2	12,945	33.4
18	AMANDA	201	0.5	6,046	15.6	68	PAIGE	93	0.2	13,038	33.6
19	REBECCA	198	0.5	6,244	16.1	69	ANDREA	90	0.2	13,128	33.8
20	ANNA	197	0.5	6,441	16.6	70	MICHELLE	90	0.2	13,218	34.1
21	NICOLE	197	0.5	6,638	17.1	71	CHEYENNE	89	0.2	13,307	34.3
22	SYDNEY	193	0.5	6,831	17.6	72	KATELYN	89	0.2	13,396	34.5
23	NATALIE	192	0.5	7,023	18.1	73	CASSANDRA	88	0.2	13,484	34.8
24	KAYLA	188	0.5	7,211	18.6	74	KATIE	88	0.2	13,572	35.0
25	SIERRA	178	0.5	7,389	19.1	75	MARY	88	0.2	13,660	35.2
26	JENNIFER	176	0.5	7,565	19.5	76	CHRISTINA	87	0.2	13,747	35.4
27	VICTORIA	176	0.5	7,741	20.0	77	ALICIA	86	0.2	13,833	35.7
28	MADELINE	175	0.5	7,916	20.4	78	MARISSA	86	0.2	13,919	35.9
29	ALEXANDRA	173	0.4	8,089	20.9	79	MIRANDA	84	0.2	14,003	36.1
30	MORGAN	170	0.4	8,259	21.3	80	MAYA	83	0.2	14,086	36.3
31	HALEY	165	0.4	8,424	21.7	81	ZOE	83	0.2	14,169	36.5
32	JULIA	164	0.4	8,588	22.1	82	DIANA	82	0.2	14,251	36.7
33	BAILEY	158	0.4	8,746	22.5	83	ANGELA	80	0.2	14,331	36.9
34	HAILEY	158	0.4	8,904	23.0	84	CAITLIN	80	0.2	14,411	37.2
35	KATHERINE	156	0.4	9,060	23.4	85	DESTINY	80	0.2	14,491	37.4
36	BRIANNA	150	0.4	9,210	23.7	86	KIMBERLY	80	0.2	14,571	37.6
37	KAITLYN	150	0.4	9,360	24.1	87	ISABEL	79	0.2	14,650	37.8
38	JASMINE	149	0.4	9,509	24.5	88	MCKENZIE	79	0.2	14,729	38.0
39	SOPHIA	148	0.4	9,657	24.9	89	ALEXANDRIA	78	0.2	14,807	38.2
40	COURTNEY	144	0.4	9,801	25.3	90	MOLLY	78	0.2	14,885	38.4
41	GRACE	144	0.4	9,945	25.6	91	SABRINA	78	0.2	14,963	38.6
42	MACKENZIE	142	0.4	10,087	26.0	92	TIFFANY	75	0.2	15,038	38.8
43	MARIAH	140	0.4	10,227	26.4	93	RILEY	74	0.2	15,112	39.0
44	MARIA	137	0.4	10,364	26.7	94	JENNA	73	0.2	15,185	39.1
45	STEPHANIE	136	0.4	10,500	27.1	95	AUTUMN	72	0.2	15,257	39.3
46	JORDAN	134	0.3	10,634	27.4	96	ALEXA	71	0.2	15,328	39.5
47	SAVANNAH	131	0.3	10,765	27.8	97	AUDREY	71	0.2	15,399	39.7
48	BROOKE	126	0.3	10,891	28.1	98	HEATHER	71	0.2	15,470	39.9
49	CHLOE	126	0.3	11,017	28.4	99	KATHRYN	71	0.2	15,541	40.1
50	ALLISON	125	0.3	11,142	28.7	100	BREANNA	69	0.2	15,610	40.2

Appendix E. Top 100 Baby Names of Boys, 1998

Rank	First Name	N	%	Cumulative		Rank	First Name	N	%	Cumulative	
				N	%					N	%
1	JACOB	767	1.9	767	1.9	51	NATHANIEL	167	0.4	16,163	39.6
2	MICHAEL	596	1.5	1,363	3.3	52	ERIC	162	0.4	16,325	40.0
3	AUSTIN	576	1.4	1,939	4.7	53	BRIAN	161	0.4	16,486	40.4
4	JOSHUA	514	1.3	2,453	6.0	54	EVAN	161	0.4	16,647	40.7
5	ANDREW	509	1.2	2,962	7.3	55	SPENCER	159	0.4	16,806	41.1
6	ALEXANDER	499	1.2	3,461	8.5	56	JACK	156	0.4	16,962	41.5
7	TYLER	468	1.1	3,929	9.6	57	TREVOR	156	0.4	17,118	41.9
8	DANIEL	459	1.1	4,388	10.7	58	IAN	155	0.4	17,273	42.3
9	RYAN	457	1.1	4,845	11.9	59	RILEY	154	0.4	17,427	42.7
10	MATTHEW	435	1.1	5,280	12.9	60	JESSE	153	0.4	17,580	43.0
11	NICHOLAS	419	1.0	5,699	14.0	61	ADAM	152	0.4	17,732	43.4
12	BRANDON	395	1.0	6,094	14.9	62	COLTON	152	0.4	17,884	43.8
13	ZACHARY	394	1.0	6,488	15.9	63	SEAN	150	0.4	18,034	44.1
14	KYLE	385	0.9	6,873	16.8	64	TRISTAN	147	0.4	18,181	44.5
15	JOSEPH	380	0.9	7,253	17.8	65	ELIJAH	142	0.3	18,323	44.9
16	DAVID	377	0.9	7,630	18.7	66	JASON	142	0.3	18,465	45.2
17	CHRISTOPHER	339	0.8	7,969	19.5	67	BLAKE	138	0.3	18,603	45.5
18	WILLIAM	339	0.8	8,308	20.3	68	MASON	129	0.3	18,732	45.9
19	SAMUEL	334	0.8	8,642	21.2	69	TAYLOR	129	0.3	18,861	46.2
20	NATHAN	327	0.8	8,969	22.0	70	TIMOTHY	129	0.3	18,990	46.5
21	JORDAN	321	0.8	9,290	22.7	71	STEVEN	128	0.3	19,118	46.8
22	ANTHONY	317	0.8	9,607	23.5	72	DEVIN	125	0.3	19,243	47.1
23	BENJAMIN	302	0.7	9,909	24.3	73	GARRETT	120	0.3	19,363	47.4
24	DYLAN	298	0.7	10,207	25.0	74	BRYCE	118	0.3	19,481	47.7
25	JAMES	296	0.7	10,503	25.7	75	JACKSON	117	0.3	19,598	48.0
26	ETHAN	278	0.7	10,781	26.4	76	LEVI	115	0.3	19,713	48.3
27	JOHN	274	0.7	11,055	27.1	77	PATRICK	115	0.3	19,828	48.5
28	JUSTIN	273	0.7	11,328	27.7	78	LUKE	114	0.3	19,942	48.8
29	CAMERON	271	0.7	11,599	28.4	79	DEREK	111	0.3	20,053	49.1
30	NOAH	271	0.7	11,870	29.1	80	ADRIAN	109	0.3	20,162	49.4
31	JONATHAN	268	0.7	12,138	29.7	81	JUAN	108	0.3	20,270	49.6
32	CHRISTIAN	267	0.7	12,405	30.4	82	LUCAS	106	0.3	20,376	49.9
33	CONNOR	257	0.6	12,662	31.0	83	JEREMY	102	0.2	20,478	50.1
34	ROBERT	251	0.6	12,913	31.6	84	DAKOTA	101	0.2	20,579	50.4
35	HUNTER	238	0.6	13,151	32.2	85	CHARLES	100	0.2	20,679	50.6
36	THOMAS	211	0.5	13,362	32.7	86	GAVIN	100	0.2	20,779	50.9
37	CALEB	209	0.5	13,571	33.2	87	WYATT	100	0.2	20,879	51.1
38	CODY	201	0.5	13,772	33.7	88	LUIS	99	0.2	20,978	51.4
39	LOGAN	200	0.5	13,972	34.2	89	JESUS	98	0.2	21,076	51.6
40	ISAAC	197	0.5	14,169	34.7	90	PETER	98	0.2	21,174	51.8
41	JARED	195	0.5	14,364	35.2	91	BRADLEY	95	0.2	21,269	52.1
42	ALEX	194	0.5	14,558	35.6	92	SETH	95	0.2	21,364	52.3
43	JOSE	194	0.5	14,752	36.1	93	PARKER	94	0.2	21,458	52.5
44	AARON	192	0.5	14,944	36.6	94	RICHARD	94	0.2	21,552	52.8
45	TANNER	181	0.4	15,125	37.0	95	KENNETH	93	0.2	21,645	53.0
46	COLE	180	0.4	15,305	37.5	96	MARK	92	0.2	21,737	53.2
47	GABRIEL	178	0.4	15,483	37.9	97	ALEC	86	0.2	21,823	53.4
48	KEVIN	174	0.4	15,657	38.3	98	MITCHELL	86	0.2	21,909	53.6
49	ISAIAH	171	0.4	15,828	38.7	99	MAXWELL	84	0.2	21,993	53.8
50	CHASE	168	0.4	15,996	39.2	100	TRAVIS	83	0.2	22,076	54.0

Appendix F

Sample Certificates

Live Birth, Death, Fetal Death, Marriage and Divorce



CERTIFICATE OF LIVE BIRTH

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 BIRTH-PLACE (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 DATE 33. FATHER'S SOCIAL SECURITY NUMBER 34. MOTHER'S SOCIAL SECURITY NUMBER

35. OF HISPANIC ORIGIN OR DESCENT? If yes, specify: Mexican, Puerto Rican, Spanish, etc. 35a. FATHER 1 Yes 2 No 35b. MOTHER 1 Yes 2 No 36. RACE (American Indian, White, Black, Asian/Pacific Islander (Specify subgroup), etc.) 36a. FATHER 36b. MOTHER 37. OCCUPATION (Worked during last year) (registered nurse, personal manager) 37a. FATHER 37b. MOTHER 38. TYPE OF BUSINESS OR INDUSTRY (restaurant, newspaper publishing) 38a. FATHER 38b. MOTHER 39. EDUCATION (specify only highest grade completed) Elementary / HS (9-12) / College (1-4 or 5+) 39a. FATHER 39b. MOTHER 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.) 42. PRIOR LIVE BIRTHS (Do not include this birth) NONE NOW LIVING NOW DEAD 43. OTHER TERMINATIONS (Not live births) NONE SPONTANEOUS INDUCED 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 insurance 4 Charity care 5 Other 51. DURING PREGNANCY MOTHER PARTICIPATED IN (check all that apply) 1 WIC 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 (If yes, from Birth Ctr. Home Other)

CHECK ALL BOX(ES) IN EACH COLUMN THAT APPLY 59. MEDICAL RISK FACTORS FOR THIS PREGNANCY 1. Anemia (Hct. <30 / Hgh. <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 1 2 3 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 1 2 3 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 5. Forceps 6. Vacuum extraction 7. 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) 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)

TYPE OR PRINT IN PERMANENT BLACK INK



CERTIFICATE OF DEATH

146

LOCAL FILE NUMBER

STATE FILE NUMBER

P A R E N T S	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 RES. IN CO.		27. STATE		
								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							
D I S P O S I T I O N	32. BURIAL, CREMATION REMOVAL, OTHER (Specify)		33. DATE (Mo, Day, Yr)		34. CEMETERY/CREMATORY—NAME		35. LOCATION—CITY/TOWN, STATE			
	36. FUNERAL DIRECTOR SIGNATURE X			37. NAME OF FACILITY			38. ADDRESS OF FACILITY			
	TO BE COMPLETED ONLY BY CERTIFYING PHYSICIAN				TO BE COMPLETED ONLY BY MEDICAL EXAMINER OR CORONER					
C E R T I F I E R	39. TO THE BEST OF MY KNOWLEDGE , DEATH OCCURRED AT THE TIME, DATE AND PLACE AND WAS DUE TO THE CAUSE(S) STATED. SIGNATURE AND TITLE X				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 X					
	40. DATE SIGNED (Mo., Day, Yr)		41. 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:									
C A U S E S O F D E A T H	IMMEDIATE CAUSE (Final disease or condition resulting in death)						INTERVAL BETWEEN ONSET AND DEATH			
	DO NOT ENTER THE MANNER OF DYING, SUCH AS CARDIAC 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			
	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 REVIEWED BY DATE				62. REGISTRAR SIGNATURE X		63. DATE RECEIVED (Mo., Day, Yr.)				

FOR INSTRUCTIONS SEE BACK AND HANDBOOK

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

A

CERTIFICATE OF FETAL DEATH

LOCAL FILE NUMBER

STATE FILE NUMBER

Form with fields 1-31 including Fetus Name, Sex, Date of Delivery, Facility Name, Parents' Information, Registrar Signature, and Cause of Death.

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

Form with fields 41-59 including Hispanic Origin, Race, Occupation, Education, Pregnancy History, and Prenatal Care.

CHECK ALL BOXES IN EACH COLUMN THAT APPLY

Form with fields 60-66 including Medical Risk Factors, Complications of Labor, Conditions of Fetus, and Obstetric Procedures.



CERTIFICATE OF MARRIAGE

146

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)
OFFICIANT	5. OFFICIANT Signature X	6. OFFICIANT ADDRESS			
GROOM	7. NAME FIRST MIDDLE LAST	8. BIRTHDATE (MO DAY YR)	9. BIRTH STATE (if not USA give country)		
	10. USUAL RESIDENCE (NUMBER AND STREET)	11. CITY/TOWN/LOCATION	12. INSIDE CITY LIMITS <input type="checkbox"/> Yes <input type="checkbox"/> No	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)		18. BIRTH STATE (if not USA give country)
	19. GROOM Signature X	20. DATE SIGNED (MO DAY YR)			
BRIDE	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	29. STATE
	30. FATHER'S FULL NAME	31. BIRTH STATE (if not USA give country)	32. MOTHER'S FULL MAIDEN NAME (First / Last)		33. BIRTH STATE (if not USA give country)
	34. BRIDE Signature X	35. DATE SIGNED (MO DAY YR)			
	36. WITNESS Signature X	37. WITNESS Signature X			
38. COUNTY AUDITOR Signature X	39. DATE RECEIVED (MO DAY YR)				

DOH 110-009 (Rev. 8/92)



146

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

COURT FILE NUMBER

STATE FILE NUMBER

DECREE	I 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 X			

TO BE COMPLETED BY PETITIONER'S ATTORNEY OR PRO SE

HUSBAND	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

WIFE	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

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)

