

Washington State  
**Vital Statistics 2000**

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For more information contact:

Center for Health Statistics  
1112 SE Quince Street  
PO Box 47814  
Olympia, WA 98504-7814

360 236-4300  
Fax 360 753-4135

Mary Selecky  
*Secretary*

*Center for Health Statistics, Vital Statistics report staff:*

John Whitbeck, *Manager, Research Services (360) 236-4321*

Ann Lima, *State Nosologist - Deaths (360) 236-4324*

Patricia Starzyk, *Research Investigator – Births (360) 236-4323*

Gregory Newkirk *IT Application Specialist – Marriage & Divorce (360) 236-4332*

Margaret Love, *Research Analyst (360) 236-4327*

*Design Consultation:*

Office of Health Promotion

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Jac Davies

*Assistant Secretary*

*Epidemiology, Health Statistics & Public Health Laboratories*

Teresa J. Jennings

*State Registrar and Director*

Center for Health Statistics

## Washington State Vital Statistics Highlights for 2000

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- **More than 81,000 babies were born in 2000**  
Washington women had 81,004 babies in 2000, an increase of 1,427 births compared to 1999. However, the birth rate continues to be about 14.0 births per 1,000 population, as it has since 1995.
- **Most of the births were to women in their 20's and early 30's**  
Three-quarters (75.5%) of 2000 births were to women aged 20-34.
- **The percent low birth weight decreased in 2000**  
Low birth weight (<2500 grams) occurred in 5.1-5.3% of births in 1990-1994 and has increased slightly but steadily since then, reaching 5.9% of births in 1999. In 2000, it decreased to 5.6% of births.
- **Births to unmarried mothers increased over the decade but has not changed much recently**  
The percentage of births to unmarried mothers increased from 23.4% in 1989 to 27.9% in 1998 and 1999 and 28.2% in 2000.
- **Nearly 44,000 residents died in 2000**  
There were 43,904 deaths of Washington State residents in 2000. Although the number of deaths has increased fairly steadily over the past decade, there has been a decline in the age-adjusted death rate since the state's population has also grown during this period.
- **Heart disease and cancer continued as the leading causes of death**  
Ranking of the top five causes of death remains the same as it was in 1999. In addition, the percent distribution of deaths among the leading causes has changed very little.
- **The infant death rate remains low**  
The infant death rate was 5.2 per 1,000 live births in 2000. For comparison, the infant death rate a decade ago (1990) was 7.8 per 1,000 live births.
- **The marriage and divorce rates showed little or no change**  
The marriage rate was 7.0 per 1,000 population in 2000. The divorce rate was 4.6 per 1,000 population in 2000.
- **Emily and Jacob continued as the most popular baby names**  
The number of babies named Emily remained fairly steady at about 560 while the number of babies named Jacob decreased from 767 in 1998 to 729 in 1999 to 659 in 2000.

## Washington State Vital Statistics Highlights for 2000

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

- 222 births including:
  - 7 to teens <18
  - 6 to women aged 40+
  - 63 to unmarried women
  - 12 with low birth weight
  - 46 by Cesarean section
  - 29 to maternal smokers
- 113 marriages
- 75 deaths including:
  - 31 due to heart disease
  - 29 due to cancer
  - 6 due to unintentional injuries (accidents)
  - 2 due to suicide
- 75 divorces

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

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

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

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

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<sup>1</sup> National data reported in "Births: Final Data for 2000" *National Vital Statistics Reports*, Vol 50 No 5 (Feb 12, 2002), available on the internet at [http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvs50\\_05.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvs50_05.pdf) and "Deaths: Preliminary Data for 2000" *National Vital Statistics Reports*, Vol 49 No 12 (October 9, 2001), available on the internet at <http://www.cdc.gov/nchs/products/pubs/pubd/nvsr/49/49-12.htm>

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# Introduction



# Washington Counties and County Seats



## **Introduction**

*Washington State Vital Statistics, 2000*, 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 2000.

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

## **Differences from Previous Reports**

Since the 1999 Vital Statistics Report, the natality and mortality sections have been extensively revised. The tables are now grouped by major use of the data (such as demographics or service utilization) rather than by geographic location (state or county). This grouping is similar to what the National Center for Health Statistics (NCHS) uses in its reports and it serves to emphasize why each data item is collected. Each section has a trend table of summary indicators (such as percent of births to single mothers over the past 10 years) and brief analysis of the data at the state level, as well as state and county tables. In addition to these changes, some of the tables from previous reports have been deleted and new tables added (see the table comparison in Appendix E for details).

## **Source of Vital Statistics**

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

## Filing of Washington State Vital Statistics

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

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

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

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

### How To Use Vital Statistics

Why Read this Section?

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

## Issues in Using the Data

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

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

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

### *Residence vs. Occurrence*

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

Some users may be tempted to add residence and occurrence figures together to get a total for an area, but this would not be correct. There is a great deal of overlap between these two, as most residents of a county also have their babies or die in the same county. Other users try to subtract residence and occurrence data to figure out how many residents are born or die outside of their county, but this is also incorrect. The only way to determine where county residents are having babies or dying is to tabulate births or deaths by place of residence relative to place of occurrence. For example, in *Nativity Table C8* of this report the mother's county of residence is cross-tabulated by the county in which the birth occurred.

When should residence or occurrence data be used? Users generally need data about the residents of an area. Residents would be the target audience for any local health assessment or health promotion programs. Population figures, commonly used to

calculate rates, are also based on a person's residence. Hospital planners might want to know both (where births occurred to residents of their area) so they can assess possible markets.

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

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

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

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

To eliminate the effect of different sized populations, we compare rates. A rate is the number of vital events (such as deaths) in a specified time period divided by the number of people at risk of these events in that period (typically, a state or county population, or the number of births in the case of infant death). This figure is generally multiplied by a constant such as 1,000 or 100,000 to get a number that is easy to read and compare and is reported as “per 1,000” or “per 100,000.”

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

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

population of age 65 years and over almost doubled during this period. Since age-adjusted rates using 2000 population give more weight to older age groups, the magnitude of age-adjusted rates using this standard will change considerably.

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

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

#### *Standards for Comparison of Rates*

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

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

#### *Unknowns*

Most vital statistics data are not 100% complete. Sometimes the information is not (or cannot be) collected, and then the item is reported as unknown. How should unknowns be handled? When the number of unknowns for a particular characteristic is large, it can affect rates or percentage distributions based on that characteristic. For example, in 2000, father's education was missing for about 22% of the births.

How should unknowns be handled in calculating percentages? If we include unknowns in the total, the percent in any category is smaller than it would be if we subtract unknowns from the total. For example, in the case of 2000 births, the percent of fathers with less than a high school education is 9.9% if unknowns are included in the total, but is 12.7% if unknowns are excluded from the total.

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

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

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

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

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

- ICD-10 is far more detailed and has about 8,000 categories compared to ICD-9 with 5,000 categories.
- ICD-10 uses 4-digit alphanumeric codes that begin with a letter compared to ICD-9 which has 4-digit numeric codes.
- Additional chapters have been added and some have been rearranged. For example, myelodysplastic syndromes have been moved into the neoplasm chapter which has caused an increase in the number of benign neoplasms and neoplasms of uncertain or unknown behavior.
- Tabulation lists with groups of ICD codes have changed. More conditions are included in the lists used to determine leading causes of death and some of the groups of conditions have changed. For example,



accidents and adverse effects were combined in ICD-9 tabulation lists. With ICD-10, accidents and adverse effects are now in separate categories.

- Coding rules for causes of death have changed. For example, pneumonia is now considered a direct sequel of more conditions which has led to a 30% decrease in pneumonia as an underlying cause-of-death.

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

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

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

### *Small Numbers*

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

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

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

### *Data Quality*

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

In addition to determining the completeness of a reporting system, researchers are often concerned with the degree to which people report what is actually happening. This characteristic of the data is called its **validity**. Studies of validity of reporting systems like the birth certificate system usually look for an independent source of the information and determine the consistency with data contained in the reporting system. A previous study of birth certificate data quality conducted by the Center for Health Statistics showed that validity of the item varied with the type of item. Legal information (e.g., names, addresses, ages) is very accurately reported. Unfortunately, medical information (e.g., menses date, prior pregnancy outcomes, complications, and malformations) is less accurate. Comparison to what was actually found in patients' medical history records revealed error rates of 5-20%.

To improve data quality, both birth and death certificates are edited for accuracy of the data. Where possible, data are checked to see if they are within a reasonable range of values (e.g., mother's age must be 8-59, with warning notices for ages less than 14 or greater than 49). Data are also checked to see if there is internal consistency between items (e.g., a person is not expected to have more than one year

of college education if he/she is less than 16 years old). Those who complete death certificates are queried if there is not enough information to establish an accurate and specific cause of death.

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

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

### *Confidentiality*

How do we ensure confidentiality of the data? All of the data in this report are presented in aggregate form so that individuals are not likely to be identified from the tables. However, it is important for potential data users to be aware of confidentiality issues related to the data. The medical and health information on birth and fetal death certificates is confidential and is to be used only in aggregate statistics which do not enable the identification of specific individuals. Hence, such confidential data may not be linked to any identifying information except for research projects approved by the Human Research Review Board of the Department of Social and Health Services and the Department of Health. The sample birth and fetal death certificates in Appendix G delineate the portion that is confidential. Some death data (particularly causes of death such as suicide and AIDS), while not confidential by law, are extremely sensitive. It is the responsibility of all data users to treat these data in such a way as to respect and protect the privacy of individuals who have allowed information about their personal lives to be used for the good of the public. To ensure continued reporting of important demographic, medical, and health information, data must be handled in a way that ensures the privacy of individuals as required by law.

## **Additional Services**

This annual report provides an overview of the types of data available through the Washington State Center for Health Statistics. Birth, death, and fetal death data are also available as raw data files on the Center's CD-ROM "*Vital Registration System Annual Statistical Files, Washington State.*" The CD-ROM contains data in ASCII format, detailed technical documentation, and annual summary tables for 1980-2000 in WORD and Excel format. To order a copy of the CD-ROM, call (360) 236-4327.

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

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

## **Annual Trends**

Overview Table 1 provides a historical context for interpreting 2000 vital statistics in Washington State. The crude birth rate has just begun to level off in the last five 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 increased more than five-fold from 1910-2000, 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.

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Overview Table 1. Live Births, Deaths, Infant Deaths, Maternal Deaths, and Fetal Deaths for Washington Residents, 1910-2000

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

continued Overview Table 1. Live Births, Deaths, Infant Deaths, Maternal Deaths, and Fetal Deaths for Washington Residents, 1910-2000

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

continued Overview Table 1. Live Births, Deaths, Infant Deaths, Maternal Deaths, and Fetal Deaths for Washington Residents, 1910-2000

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

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

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

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

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

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

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



# Natality



## Natality

### A. Demographics

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

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

Natality Table A1. Demographic Summary Indicators for Residents, 1990-2000

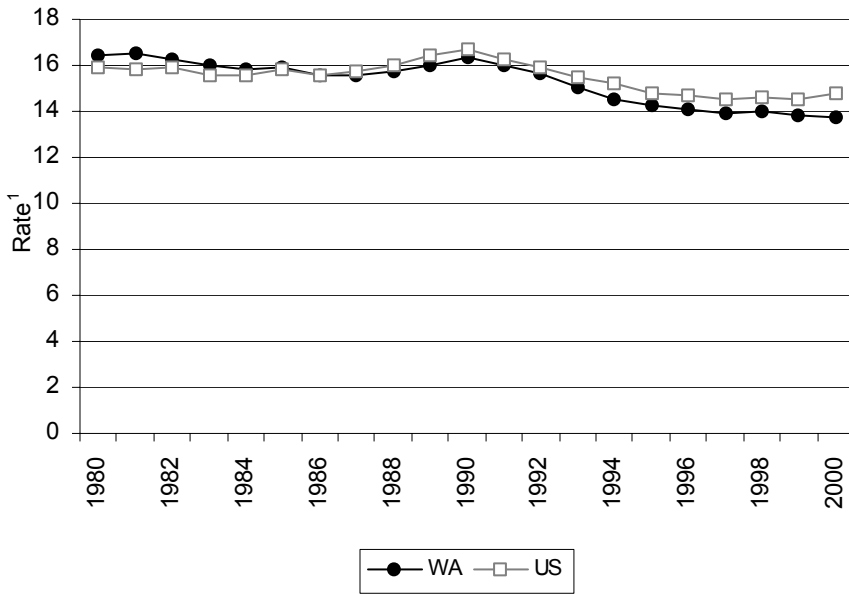
	Percent of Births <sup>1</sup> where Mother is...			
	A Teenager (<20)	Unmarried	Not a High School Graduate	A Woman of Color <sup>2</sup>
1990	10.6	25.0	Not Collected	17.8
1991	10.6	25.0	Not Collected	19.3
1992	10.8	25.3	17.5	20.6
1993	11.1	26.3	18.3	22.2
1994	11.1	26.0	18.5	23.0
1995	11.4	26.7	18.7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

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

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

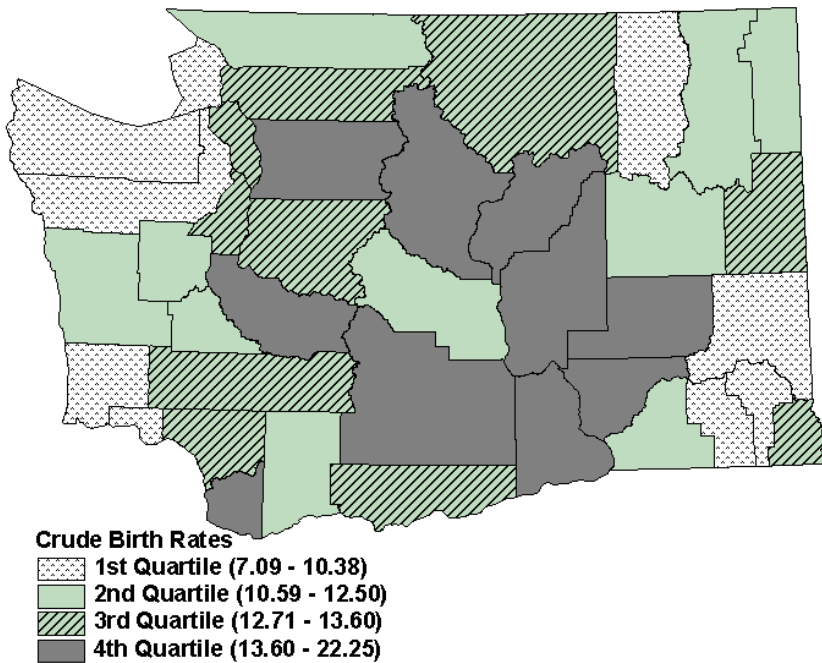
All of the groups shown in Table A1 have experienced disparities in health outcomes and/or service availability. The trend data show a steady increase in the percent of births to unmarried women, continuing a longstanding trend. The percent of births to teenagers and women with less than a high school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

Nativity Figure 1. Crude Birth Rates<sup>1</sup>, Washington State Residents Compared to National, 1980-2000



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

Nativity Figure 2. Washington State Crude Birth Rates<sup>1</sup> by County of Residence, 1998-2000 (Washington State Rate=13.75)



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

Nativity Table A2. Mother's Race/Ethnicity by Child's Sex<sup>1</sup> for Residents, 2000

Race/Ethnicity	Total		Male	Female
	Number	Percent <sup>2</sup>		
<b>State Total</b>	<b>81,004</b>	<b>100.0</b>	<b>41,572</b>	<b>39,430</b>
White	65,988	81.5	33,930	32,056
African American	3,335	4.1	1,710	1,625
Native American	1,914	2.4	977	937
Japanese	285	0.4	158	127
Chinese	526	0.6	259	267
Filipino	1,054	1.3	551	503
Other Asian	4,733	5.8	2,397	2,336
Other	32	0.0	20	12
Unknown	3,137	3.9	1,570	1,567
Hispanic <sup>3</sup>	11,359	14.0	5,799	5,559

<sup>1</sup>Total includes 2 births for which sex is unknown.

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

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

Nativity Table A3. Mother's Age Group by Child's Sex<sup>1</sup> for Residents, 2000

Age	Total		Male	Female
	Number	Percent <sup>2</sup>		
<b>State Total</b>	<b>81,004</b>	<b>100.0</b>	<b>41,572</b>	<b>39,430</b>
Under 15	118	0.1	63	55
15 - 17	2,559	3.2	1,282	1,276
18 - 19	5,561	6.9	2,824	2,737
20 - 24	19,795	24.4	10,283	9,512
25 - 29	21,858	27.0	11,230	10,627
30 - 34	19,490	24.1	9,938	9,552
35 - 39	9,509	11.7	4,904	4,605
40 - 44	1,952	2.4	955	997
45 and Over	125	0.2	73	52
Unknown	37	0.0	20	17

<sup>1</sup>Total includes 2 births for which sex is unknown.

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

Nativity Table A4. Child's Birth Order by Mother's Age Group for Residents, 2000

Order at Birth	All Ages	Under 15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 and Over	Age Unk
<b>State Total</b>	<b>81,004</b>	<b>118</b>	<b>2,559</b>	<b>5,561</b>	<b>19,795</b>	<b>21,858</b>	<b>19,490</b>	<b>9,509</b>	<b>1,952</b>	<b>125</b>	<b>37</b>
1st Child	32,317	114	2,266	4,217	9,410	7,742	5,865	2,213	445	19	26
2nd Child	25,675	1	219	1,051	6,670	7,427	6,699	3,040	535	30	3
3rd Child	12,487	0	14	133	2,480	3,956	3,566	1,956	361	18	3
4th Child	4,977	0	2	6	641	1,500	1,662	949	204	13	0
5th Child	1,845	0	0	2	132	448	667	467	121	8	0
6th Child	810	0	0	0	20	149	308	258	69	6	0
7th Child	353	0	0	0	4	50	106	137	50	5	1
8th Child	198	0	0	0	2	13	68	81	32	2	0
9th Child	125	0	0	0	0	6	27	61	28	3	0
10th or more	138	0	0	0	2	4	21	57	42	11	1
Unknown	2,079	3	58	152	434	563	501	290	65	10	3

Nativity Table A5. Mother's Education by Mother's Age Group for Residents, 2000

Education	All Ages	Under 15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 and Over	Age Unk
<b>State Total</b>	<b>81,004</b>	<b>118</b>	<b>2,559</b>	<b>5,561</b>	<b>19,795</b>	<b>21,858</b>	<b>19,490</b>	<b>9,509</b>	<b>1,952</b>	<b>125</b>	<b>37</b>
No Education	144	0	6	7	33	33	34	18	7	6	0
8th Grade or Less	3,561	63	305	338	1,050	905	549	281	62	7	1
Some High School	9,330	36	1,672	1,983	3,206	1,429	670	274	52	3	5
High School Graduate	22,934	0	263	2,354	8,377	6,082	3,778	1,728	322	20	10
Some College	19,299	0	18	399	4,723	6,432	4,964	2,270	467	23	3
College Graduate	11,540	0	0	6	722	3,477	4,621	2,261	424	24	5
Postgraduate Educ	8,098	0	0	2	241	1,904	3,497	1,969	452	32	1
Unknown	6,098	19	295	472	1,443	1,596	1,377	708	166	10	12

Nativity Table A6a. Top 100 Baby Names of Girls for Residents, 2000

Rank	First Name	N	%	Cumulative		Rank	First Name	N	%	Cumulative	
				N	%					N	%
1	EMILY	556	1.4	556	1.4	51	MAKAYLA	104	0.3	11,157	28.3
2	HANNAH	512	1.3	1,068	2.7	52	JORDAN	102	0.3	11,259	28.6
3	MADISON	441	1.1	1,509	3.8	53	MICHELLE	101	0.3	11,360	28.8
4	EMMA	367	0.9	1,876	4.8	54	GABRIELLE	100	0.3	11,460	29.1
5	SARAH	352	0.9	2,228	5.7	55	BAILEY	98	0.2	11,558	29.3
6	SAMANTHA	321	0.8	2,549	6.5	56	ERIN	97	0.2	11,655	29.6
7	JESSICA	318	0.8	2,867	7.3	57	ISABEL	97	0.2	11,752	29.8
8	ASHLEY	317	0.8	3,184	8.1	58	KATELYN	95	0.2	11,847	30.0
9	TAYLOR	315	0.8	3,499	8.9	59	STEPHANIE	93	0.2	11,940	30.3
10	GRACE	306	0.8	3,805	9.7	60	AMBER	92	0.2	12,032	30.5
11	ELIZABETH	301	0.8	4,106	10.4	61	KATIE	91	0.2	12,123	30.7
12	ALEXIS	298	0.8	4,404	11.2	62	KAYLEE	91	0.2	12,214	31.0
13	ABIGAIL	293	0.7	4,697	11.9	63	TRINITY	88	0.2	12,302	31.2
14	OLIVIA	282	0.7	4,979	12.6	64	DANIELLE	87	0.2	12,389	31.4
15	ANNA	260	0.7	5,239	13.3	65	ANDREA	85	0.2	12,474	31.6
16	MEGAN	257	0.7	5,496	13.9	66	AUDREY	85	0.2	12,559	31.9
17	LAUREN	244	0.6	5,740	14.6	67	MARIAH	85	0.2	12,644	32.1
18	HAILEY	229	0.6	5,969	15.1	68	PAIGE	85	0.2	12,729	32.3
19	SYDNEY	223	0.6	6,192	15.7	69	CHRISTINA	84	0.2	12,813	32.5
20	ALYSSA	221	0.6	6,413	16.3	70	ISABELLE	84	0.2	12,897	32.7
21	CHLOE	215	0.5	6,628	16.8	71	CASSANDRA	82	0.2	12,979	32.9
22	SOPHIA	208	0.5	6,836	17.3	72	COURTNEY	82	0.2	13,061	33.1
23	NATALIE	199	0.5	7,035	17.8	73	BROOKE	81	0.2	13,142	33.3
24	RACHEL	190	0.5	7,225	18.3	74	KYLIE	81	0.2	13,223	33.5
25	JENNIFER	186	0.5	7,411	18.8	75	ANGELA	78	0.2	13,301	33.7
26	JULIA	186	0.5	7,597	19.3	76	MARY	78	0.2	13,379	33.9
27	KAYLA	177	0.4	7,774	19.7	77	KATHRYN	77	0.2	13,456	34.1
28	VICTORIA	175	0.4	7,949	20.2	78	MAYA	76	0.2	13,532	34.3
29	MADELINE	174	0.4	8,123	20.6	79	JENNA	75	0.2	13,607	34.5
30	NICOLE	174	0.4	8,297	21.0	80	LILLIAN	74	0.2	13,681	34.7
31	KATHERINE	167	0.4	8,464	21.5	81	ALEXANDRIA	73	0.2	13,754	34.9
32	SAVANNAH	166	0.4	8,630	21.9	82	SOPHIE	73	0.2	13,827	35.1
33	ISABELLA	164	0.4	8,794	22.3	83	LILY	72	0.2	13,899	35.3
34	AMANDA	157	0.4	8,951	22.7	84	RILEY	72	0.2	13,971	35.4
35	JASMINE	157	0.4	9,108	23.1	85	MIA	71	0.2	14,042	35.6
36	KAITLYN	156	0.4	9,264	23.5	86	SARA	71	0.2	14,113	35.8
37	MORGAN	150	0.4	9,414	23.9	87	JACQUELINE	70	0.2	14,183	36.0
38	HALEY	147	0.4	9,561	24.2	88	MOLLY	70	0.2	14,253	36.1
39	BRIANNA	143	0.4	9,704	24.6	89	AMY	69	0.2	14,322	36.3
40	ALEXANDRA	141	0.4	9,845	25.0	90	KIMBERLY	69	0.2	14,391	36.5
41	MACKENZIE	138	0.3	9,983	25.3	91	MELISSA	69	0.2	14,460	36.7
42	SIERRA	138	0.3	10,121	25.7	92	AUTUMN	68	0.2	14,528	36.8
43	MARIA	131	0.3	10,252	26.0	93	MARISSA	68	0.2	14,596	37.0
44	REBECCA	129	0.3	10,381	26.3	94	PAYTON	68	0.2	14,664	37.2
45	CLAIRE	120	0.3	10,501	26.6	95	ARIANA	67	0.2	14,731	37.4
46	ALLISON	116	0.3	10,617	26.9	96	MCKENZIE	67	0.2	14,798	37.5
47	DESTINY	115	0.3	10,732	27.2	97	CAITLIN	66	0.2	14,864	37.7
48	FAITH	108	0.3	10,840	27.5	98	ALICIA	65	0.2	14,929	37.9
49	ZOE	108	0.3	10,948	27.8	99	MCKENNA	64	0.2	14,993	38.0
50	VANESSA	105	0.3	11,053	28.0	100	HOPE	63	0.2	15,056	38.2

Nativity Table A6b. Top 100 Baby Names of Boys for Residents, 2000

Rank	First Name	N	%	Cumulative		Rank	First Name	N	%	Cumulative	
				N	%					N	%
1	JACOB	659	1.6	659	1.6	51	CHASE	162	0.4	15,751	37.9
2	JOSHUA	513	1.2	1,172	2.8	52	RILEY	161	0.4	15,912	38.3
3	MICHAEL	504	1.2	1,676	4.0	53	KEVIN	160	0.4	16,072	38.7
4	ALEXANDER	493	1.2	2,169	5.2	54	IAN	158	0.4	16,230	39.0
5	ANDREW	482	1.2	2,651	6.4	55	NATHANIEL	158	0.4	16,388	39.4
6	TYLER	478	1.1	3,129	7.5	56	ALEX	157	0.4	16,545	39.8
7	MATTHEW	445	1.1	3,574	8.6	57	JARED	156	0.4	16,701	40.2
8	DANIEL	436	1.0	4,010	9.6	58	SPENCER	151	0.4	16,852	40.5
9	RYAN	429	1.0	4,439	10.7	59	BLAKE	150	0.4	17,002	40.9
10	JOSEPH	398	1.0	4,837	11.6	60	ERIC	150	0.4	17,152	41.3
11	ZACHARY	397	1.0	5,234	12.6	61	TREVOR	147	0.4	17,299	41.6
12	BENJAMIN	381	0.9	5,615	13.5	62	JACKSON	146	0.4	17,445	42.0
13	ETHAN	381	0.9	5,996	14.4	63	TANNER	146	0.4	17,591	42.3
14	AUSTIN	377	0.9	6,373	15.3	64	LUKE	144	0.3	17,735	42.7
15	NICHOLAS	377	0.9	6,750	16.2	65	GARRETT	134	0.3	17,869	43.0
16	DAVID	370	0.9	7,120	17.1	66	TIMOTHY	134	0.3	18,003	43.3
17	WILLIAM	343	0.8	7,463	18.0	67	ADAM	133	0.3	18,136	43.6
18	SAMUEL	339	0.8	7,802	18.8	68	WYATT	133	0.3	18,269	43.9
19	BRANDON	336	0.8	8,138	19.6	69	GAVIN	132	0.3	18,401	44.3
20	NATHAN	334	0.8	8,472	20.4	70	DEVIN	128	0.3	18,529	44.6
21	ANTHONY	331	0.8	8,803	21.2	71	SETH	126	0.3	18,655	44.9
22	CHRISTOPHER	328	0.8	9,131	22.0	72	BRIAN	125	0.3	18,780	45.2
23	DYLAN	313	0.8	9,444	22.7	73	LUCAS	118	0.3	18,898	45.5
24	JUSTIN	307	0.7	9,751	23.5	74	SEAN	117	0.3	19,015	45.7
25	CAMERON	304	0.7	10,055	24.2	75	TAYLOR	117	0.3	19,132	46.0
26	HUNTER	299	0.7	10,354	24.9	76	AIDAN	113	0.3	19,245	46.3
27	JONATHAN	285	0.7	10,639	25.6	77	TRISTAN	113	0.3	19,358	46.6
28	JOHN	279	0.7	10,918	26.3	78	LIAM	112	0.3	19,470	46.8
29	JAMES	278	0.7	11,196	26.9	79	JUAN	111	0.3	19,581	47.1
30	NOAH	278	0.7	11,474	27.6	80	PATRICK	110	0.3	19,691	47.4
31	KYLE	271	0.7	11,745	28.3	81	JESUS	109	0.3	19,800	47.6
32	JORDAN	251	0.6	11,996	28.9	82	ADRIAN	108	0.3	19,908	47.9
33	CHRISTIAN	248	0.6	12,244	29.5	83	MAXWELL	108	0.3	20,016	48.1
34	THOMAS	226	0.5	12,470	30.0	84	LUIS	104	0.3	20,120	48.4
35	JOSE	217	0.5	12,687	30.5	85	ALEJANDRO	103	0.2	20,223	48.6
36	ISAAC	212	0.5	12,899	31.0	86	BRYCE	103	0.2	20,326	48.9
37	CONNOR	211	0.5	13,110	31.5	87	CHARLES	103	0.2	20,429	49.1
38	CALEB	210	0.5	13,320	32.0	88	JESSE	101	0.2	20,530	49.4
39	ISAIAH	207	0.5	13,527	32.5	89	RICHARD	101	0.2	20,631	49.6
40	COLE	205	0.5	13,732	33.0	90	DAKOTA	98	0.2	20,729	49.9
41	GABRIEL	205	0.5	13,937	33.5	91	CARSON	97	0.2	20,826	50.1
42	CODY	203	0.5	14,140	34.0	92	STEVEN	97	0.2	20,923	50.3
43	LOGAN	203	0.5	14,343	34.5	93	COLTON	94	0.2	21,017	50.6
44	JACK	200	0.5	14,543	35.0	94	PARKER	92	0.2	21,109	50.8
45	ROBERT	183	0.4	14,726	35.4	95	JADEN	90	0.2	21,199	51.0
46	EVAN	182	0.4	14,908	35.9	96	JEREMY	90	0.2	21,289	51.2
47	AARON	174	0.4	15,082	36.3	97	MIGUEL	89	0.2	21,378	51.4
48	ELIJAH	174	0.4	15,256	36.7	98	DEREK	88	0.2	21,466	51.6
49	MASON	170	0.4	15,426	37.1	99	HAYDEN	87	0.2	21,553	51.8
50	JASON	163	0.4	15,589	37.5	100	JOEL	87	0.2	21,640	52.1

Nativity Table A7. County/City of Residence, Sex<sup>1</sup>, and County/City of Occurrence, 2000

County and City	Total	Residence		Occurrence	
		Rate <sup>2</sup>	Male	Female	Total
<b>State Total</b>	<b>81,004</b>	<b>13.7</b>	<b>41,572</b>	<b>39,430</b>	<b>80,463</b>
Adams	334	20.3	191	143	470
Asotin	252	12.3	125	127	2
Benton	2,079	14.6	1,078	1,001	2,812
Kennewick	1,005	18.4	518	487	1,220
Richland	479	12.4	261	218	1,217
Chelan	981	14.7	508	473	1,448
Wenatchee	506	18.2	251	255	1,362
Clallam	622	9.6	311	311	616
Port Angeles	210	11.4	103	107	513
Clark	5,411	15.7	2,790	2,621	4,765
Vancouver	3,496	24.4	1,776	1,720	4,744
Columbia	34	8.4	12	22	0
Cowlitz	1,289	13.9	666	623	1,320
Longview	579	16.7	302	277	1,313
Douglas	455	14.0	221	234	1
Ferry	69	9.5	40	29	9
Franklin	1,096	22.2	594	502	690
Pasco	821	25.6	446	375	687
Garfield	23	9.6	13	10	0
Grant	1,432	19.2	747	685	1,076
Grays Harbor	793	11.8	408	385	490
Aberdeen	259	15.7	127	132	483
Island	959	13.4	526	433	669
Oak Harbor	493	24.9	278	215	434
Jefferson	211	8.1	103	108	160
King	22,487	12.9	11,496	10,990	26,683
Auburn	847	21.1	439	408	807
Bellevue	1,388	12.7	694	694	3,579
Bothell (part)	295	18.2	144	151	1
Burien	227	7.1	123	104	1,266
Des Moines	318	10.9	164	154	0
Federal Way	1,344	16.1	689	655	1,685
Kenmore	179	9.6	84	95	5
Kent	1,676	21.1	853	823	6
Kirkland	789	17.5	418	371	3,915
Mercer Island	155	7.0	83	72	1
Redmond	844	18.6	460	384	689
Renton	1,219	24.4	632	587	2,529
Sammamish	302	8.9	161	141	0
SeaTac	262	10.3	137	125	0
Seattle	7,415	13.2	3,732	3,682	11,912
Shoreline	426	8.0	200	226	9
Tukwila	225	13.1	124	101	1
Kitsap	3,108	13.4	1,613	1,495	2,500
Bainbridge Island	121	6.0	65	56	3
Bremerton	904	24.3	475	429	1,627



continued Natality Table A7. County/City of Residence, Sex<sup>1</sup>, and County/City of Occurrence, 2000

County and City	Total	Residence		Occurrence	
		Rate <sup>2</sup>	Male	Female	Total
Kittitas	368	11.0	181	187	312
Ellensburg	180	11.7	87	93	310
Klickitat	254	13.3	143	111	178
Lewis	869	12.7	450	419	646
Lincoln	99	9.7	50	49	20
Mason	560	11.3	323	237	291
Okanogan	506	12.8	256	250	530
Pacific	195	9.3	92	103	61
Pend Oreille	110	9.4	64	46	93
Pierce	10,174	14.5	5,213	4,961	10,410
Lakewood	845	14.5	414	431	735
Puyallup	929	28.1	481	448	1,571
Tacoma	3,943	20.4	2,035	1,908	7,913
University Place	209	7.0	105	104	3
San Juan	92	6.5	53	39	11
Skagit	1,396	13.6	735	661	1,538
Mount Vernon	534	20.4	279	255	1,292
Skamania	116	11.8	63	53	2
Snohomish	8,545	14.1	4,334	4,211	5,719
Edmonds	418	10.6	204	214	1,583
Everett	2,154	23.5	1,103	1,051	3,049
Lynnwood	878	25.9	442	436	29
Marysville	607	24.0	313	294	3
Mountlake Terrace	234	11.5	115	119	3
Mukilteo	169	9.4	86	83	0
Spokane	5,666	13.6	2,880	2,786	6,485
Spokane (city)	3,403	17.4	1,714	1,689	6,481
Stevens	445	11.1	214	231	274
Thurston	2,547	12.3	1,275	1,272	2,813
Lacey	510	16.3	265	245	4
Olympia	935	22.0	481	454	2,794
Wahkiakum	28	7.3	13	15	0
Walla Walla	660	12.0	337	323	837
Walla Walla (city)	397	13.4	205	192	835
Whatcom	2,077	12.5	1,057	1,020	2,050
Bellingham	936	13.9	479	457	2,029
Whitman	411	10.1	203	208	370
Pullman	239	9.7	126	113	302
Yakima	4,251	19.1	2,194	2,056	4,112
Yakima (city)	1,541	21.4	782	759	2,960

<sup>1</sup>Total includes 2 births for which sex is unknown.

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

NOTE: Occurrence represents all births which occur in Washington State regardless of the mother's residence. Residence represents all births to residents of Washington State regardless of where the birth occurred.

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Nativity Table A8. Month of Birth by County of Residence, 2000

County	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>State Total</b>	<b>81,004</b>	<b>6,443</b>	<b>6,363</b>	<b>6,886</b>	<b>6,707</b>	<b>7,164</b>	<b>6,951</b>	<b>6,812</b>	<b>7,146</b>	<b>6,750</b>	<b>6,714</b>	<b>6,481</b>	<b>6,587</b>
Adams	334	25	30	39	33	28	23	27	28	25	25	26	25
Asotin	252	24	21	20	23	20	20	17	24	18	18	28	19
Benton	2,079	176	184	173	158	193	195	181	179	159	149	169	163
Chelan	981	78	83	88	76	85	77	72	93	83	80	90	76
Clallam	622	50	35	57	47	48	45	64	54	59	49	51	63
Clark	5,411	422	424	435	454	504	443	452	481	424	450	476	446
Columbia	34	3	1	2	4	3	4	4	2	5	6	0	0
Cowlitz	1,289	89	120	109	104	110	124	103	118	99	116	96	101
Douglas	455	40	35	43	43	49	30	36	36	44	37	35	27
Ferry	69	2	5	6	5	10	2	7	5	4	13	4	6
Franklin	1,096	77	86	86	67	88	94	93	112	93	106	93	101
Garfield	23	3	1	1	2	3	1	2	3	1	1	2	3
Grant	1,432	122	107	122	116	132	121	115	140	114	99	119	125
Grays Harbor	793	62	64	66	78	71	67	71	63	60	62	61	68
Island	959	62	82	83	85	73	84	86	93	71	78	73	89
Jefferson	211	18	15	14	10	26	18	18	19	22	21	13	17
King	22,487	1,830	1,701	1,924	1,870	2,021	1,947	1,933	1,975	1,832	1,898	1,733	1,823
Kitsap	3,108	227	280	301	253	264	243	256	264	263	255	236	266
Kittitas	368	25	31	24	27	29	31	42	34	31	26	30	38
Klickitat	254	20	17	21	17	27	21	23	19	20	28	14	27
Lewis	869	70	69	79	60	75	73	64	68	88	68	91	64
Lincoln	99	11	6	6	9	12	5	11	11	8	7	7	6
Mason	560	40	46	58	43	44	48	49	45	47	55	27	58
Okanogan	506	41	43	56	34	37	46	35	39	56	35	49	35
Pacific	195	19	8	17	20	20	17	14	22	11	16	20	11
Pend Oreille	110	8	5	16	9	17	8	11	7	11	5	7	6
Pierce	10,174	819	776	856	833	903	875	844	913	877	869	792	817
San Juan	92	3	7	2	9	9	10	12	11	5	4	8	12
Skagit	1,396	107	111	96	123	118	125	120	151	143	94	107	101
Skamania	116	13	10	8	8	6	11	6	14	10	8	14	8
Snohomish	8,545	667	672	730	703	745	768	682	757	737	686	713	685
Spokane	5,666	443	480	480	491	514	475	502	450	455	493	450	433
Stevens	445	36	43	50	34	40	35	34	39	32	30	34	38
Thurston	2,547	216	185	206	208	228	230	202	218	219	202	225	208
Wahkiakum	28	4	1	1	1	3	5	1	5	2	1	0	4
Walla Walla	660	45	52	50	55	61	57	51	70	45	55	62	57
Whatcom	2,077	172	142	169	197	174	185	168	189	167	160	171	183
Whitman	411	32	43	40	27	31	28	30	38	31	38	35	38
Yakima	4,251	342	342	352	371	343	360	374	357	379	371	320	340

Nativity Table A9. Mother's Age Group by County of Residence, 2000

County	All Under											Age Unk
	Agas	15	15-19	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 and Over	
<b>State Total</b>	<b>81,004</b>	<b>118</b>	<b>8,120</b>	<b>2,559</b>	<b>5,561</b>	<b>19,795</b>	<b>21,858</b>	<b>19,490</b>	<b>9,509</b>	<b>1,952</b>	<b>125</b>	<b>37</b>
Adams	334	1	54	25	29	114	93	58	9	4	1	0
Asotin	252	0	43	15	28	76	66	44	23	0	0	0
Benton	2,079	4	259	83	176	638	541	429	167	37	4	0
Chelan	981	2	140	56	84	246	293	177	96	25	2	0
Clallam	622	1	94	21	73	186	145	112	66	17	1	0
Clark	5,411	6	533	142	391	1,425	1,573	1,220	516	129	9	0
Columbia	34	0	4	2	2	17	6	4	3	0	0	0
Cowlitz	1,289	1	194	62	132	451	318	215	89	20	1	0
Douglas	455	2	55	20	35	132	129	93	40	4	0	0
Ferry	69	0	9	1	8	23	22	9	4	2	0	0
Franklin	1,096	1	172	73	99	360	278	187	84	13	0	1
Garfield	23	0	5	1	4	4	4	6	4	0	0	0
Grant	1,432	5	224	90	134	477	383	233	84	25	1	0
Grays Harbor	793	3	131	53	78	246	197	136	66	11	2	1
Island	959	1	96	24	72	279	251	211	105	14	1	1
Jefferson	211	0	29	12	17	54	49	44	27	8	0	0
King	22,487	17	1,327	386	941	3,723	5,643	7,034	3,889	779	57	18
Kitsap	3,108	4	298	77	221	851	840	704	341	61	4	5
Kittitas	368	2	29	9	20	111	102	83	32	9	0	0
Klickitat	254	0	36	13	23	70	74	35	30	9	0	0
Lewis	869	1	125	49	76	300	226	149	59	9	0	0
Lincoln	99	1	9	2	7	32	26	19	10	1	1	0
Mason	560	4	98	37	61	177	144	81	46	10	0	0
Okanogan	506	1	82	26	56	149	128	98	38	7	3	0
Pacific	195	0	26	7	19	67	52	33	13	4	0	0
Pend Oreille	110	1	24	6	18	30	25	18	9	3	0	0
Pierce	10,174	14	1,174	366	808	2,798	2,843	2,192	974	164	12	3
San Juan	92	0	4	3	1	13	26	23	17	9	0	0
Skagit	1,396	3	191	61	130	361	396	286	125	33	1	0
Skamania	116	1	8	2	6	33	32	26	12	4	0	0
Snohomish	8,545	9	665	187	478	1,866	2,507	2,224	1,051	207	12	4
Spokane	5,666	8	623	172	451	1,551	1,601	1,229	532	119	2	1
Stevens	445	0	50	18	32	126	129	80	49	10	1	0
Thurston	2,547	3	238	60	178	664	752	574	245	68	2	1
Wahkiakum	28	0	0	0	0	6	10	7	3	2	0	0
Walla Walla	660	1	95	44	51	179	166	138	61	20	0	0
Whatcom	2,077	5	193	61	132	493	595	501	232	55	3	0
Whitman	411	0	21	5	16	99	119	112	49	11	0	0
Yakima	4,251	16	762	288	474	1,368	1,074	666	309	49	5	2

Nativity Table A10. Age-Specific Live Birth Rates<sup>1</sup> by County of Residence, 2000

County	All								
	Ages	15-19	15-17	18-19	20-24	25-29	30-34	35-39	40-44
<b>State Total</b>	<b>62.7</b>	<b>39.1</b>	<b>20.4</b>	<b>67.6</b>	<b>104.5</b>	<b>111.0</b>	<b>91.0</b>	<b>39.6</b>	<b>8.0</b>
Adams	101.6	78.3	56.2	118.4	224.0	178.8	112.6	17.4	--*
Asotin	60.7	54.6	29.6	99.3	133.6	113.2	69.4	29.8	--*
Benton	68.8	45.8	22.7	88.3	156.8	127.4	90.9	29.7	6.3
Chelan	74.3	57.9	36.3	95.7	140.1	152.8	87.7	39.1	9.5
Clallam	58.9	46.1	15.9	101.5	148.3	110.2	77.6	31.8	7.0
Clark	71.7	44.4	18.7	88.7	139.7	136.6	94.5	35.6	9.0
Columbia	48.8	--*	--*	--*	182.8	71.4	--*	--*	--*
Cowlitz	69.3	59.4	30.0	110.2	176.0	115.6	71.9	26.0	5.5
Douglas	68.5	43.3	24.1	79.2	153.7	140.8	94.0	31.4	--*
Ferry	52.5	31.0	--*	88.9	149.4	133.3	48.6	--*	--*
Franklin	106.9	83.3	55.9	130.6	216.3	160.7	118.7	49.9	8.5
Garfield	57.4	51.0	--*	--*	--*	--*	96.8	--*	--*
Grant	95.2	74.0	46.4	123.5	212.1	162.9	99.7	33.3	9.8
Grays Harbor	61.4	52.8	33.4	87.2	147.6	111.7	69.9	27.7	4.1
Island	68.6	43.3	16.9	90.6	143.0	123.6	91.8	38.2	5.1
Jefferson	52.4	39.9	24.0	74.6	142.9	113.2	74.6	33.8	7.2
King	55.5	25.1	12.4	43.4	64.4	81.8	95.7	51.0	10.3
Kitsap	64.7	37.0	14.7	78.3	130.7	128.1	91.0	36.7	6.2
Kittitas	44.3	17.7	14.8	19.4	42.5	105.5	94.7	30.3	7.8
Klickitat	71.7	54.1	27.8	116.2	179.5	155.8	68.1	43.4	11.2
Lewis	66.6	48.9	29.6	84.4	167.0	129.9	78.8	24.3	3.4
Lincoln	57.1	25.0	--*	70.7	196.3	137.6	72.8	28.9	--*
Mason	64.2	59.2	33.4	111.5	172.5	129.0	63.9	26.5	5.2
Okanogan	67.6	54.1	25.8	109.8	172.1	126.0	88.4	28.2	4.3
Pacific	60.1	41.6	16.7	92.7	187.2	135.8	68.9	21.2	--*
Pend Oreille	52.6	54.1	18.8	144.0	173.4	110.1	60.4	19.9	--*
Pierce	64.7	45.7	23.5	79.8	122.4	121.0	83.1	33.0	5.6
San Juan	42.9	--*	--*	--*	67.4	112.1	79.0	37.2	14.2
Skagit	67.9	50.6	25.7	92.7	127.8	134.8	88.7	33.5	8.1
Skamania	58.5	21.4	--*	48.4	169.2	129.6	88.4	29.0	--*
Snohomish	62.7	31.6	14.0	61.9	109.9	124.1	94.3	38.4	7.6
Spokane	62.1	38.4	18.6	64.5	103.1	122.2	89.9	32.8	7.0
Stevens	59.2	31.2	15.7	70.5	165.1	151.9	71.9	35.3	5.6
Thurston	56.2	31.1	12.7	61.1	99.7	116.5	81.9	29.2	7.5
Wahkiakum	45.6	--*	--*	--*	103.4	137.0	74.5	--*	--*
Walla Walla	58.6	39.3	36.3	42.2	83.4	120.6	86.4	34.5	10.2
Whatcom	54.1	26.8	17.7	35.2	58.7	116.0	95.1	38.0	8.7
Whitman	34.6	7.8	7.5	7.9	22.3	87.0	97.9	44.3	9.6
Yakima	92.2	86.2	51.4	146.3	191.3	145.5	93.1	39.7	6.3

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

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

Population Data: Office of Financial Management, Forecasting Division, "Population Estimates by Age and Sex, 1980-2000, Washington State," December 2000.

Nativity Table A11. Single Mothers, Mother's Age Group by County of Residence, 2000

County	All Ages	Under 15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 and Over	Age Unk
<b>State Total</b>	<b>22,816</b>	<b>116</b>	<b>2,265</b>	<b>3,902</b>	<b>8,527</b>	<b>4,285</b>	<b>2,291</b>	<b>1,159</b>	<b>239</b>	<b>17</b>	<b>15</b>
Adams	119	1	22	19	49	16	10	2	0	0	0
Asotin	103	0	13	22	36	16	9	7	0	0	0
Benton	634	4	74	124	263	96	54	16	3	0	0
Chelan	321	2	51	59	101	63	24	16	5	0	0
Clallam	231	1	16	57	91	31	20	12	3	0	0
Clark	1,368	6	121	266	516	245	150	48	16	0	0
Columbia	11	0	1	2	6	2	0	0	0	0	0
Cowlitz	514	1	55	107	209	82	42	18	0	0	0
Douglas	144	2	13	23	52	27	17	10	0	0	0
Ferry	27	0	1	6	10	8	0	2	0	0	0
Franklin	441	1	62	61	172	70	54	19	1	0	1
Garfield	9	0	1	3	2	1	1	1	0	0	0
Grant	493	5	80	75	192	85	34	15	7	0	0
Grays Harbor	351	3	49	61	128	52	39	19	0	0	0
Island	166	1	20	32	59	26	14	11	2	1	0
Jefferson	87	0	12	10	32	18	9	6	0	0	0
King	5,046	17	356	674	1,771	1,146	629	362	74	11	6
Kitsap	763	4	68	151	299	123	71	40	6	0	1
Kittitas	80	2	7	13	31	14	8	2	3	0	0
Klickitat	75	0	11	15	30	9	4	5	1	0	0
Lewis	337	1	42	60	150	51	21	11	1	0	0
Lincoln	27	1	2	5	12	3	2	2	0	0	0
Mason	233	4	30	47	88	30	15	17	2	0	0
Okanogan	200	1	23	38	68	36	24	6	3	1	0
Pacific	70	0	3	15	30	13	5	3	1	0	0
Pend Oreille	39	1	5	9	13	5	4	2	0	0	0
Pierce	3,225	13	335	568	1,211	589	326	149	31	1	2
San Juan	23	0	2	1	6	7	3	4	0	0	0
Skagit	450	3	53	91	149	92	39	16	7	0	0
Skamania	19	0	2	1	13	3	0	0	0	0	0
Snohomish	2,000	9	160	335	746	379	221	121	25	1	3
Spokane	1,711	8	159	345	683	306	133	61	15	0	1
Stevens	137	0	15	21	51	31	10	7	2	0	0
Thurston	749	3	54	124	285	142	84	43	13	1	0
Wahkiakum	7	0	0	0	1	3	2	0	1	0	0
Walla Walla	202	1	35	41	73	30	11	11	0	0	0
Whatcom	546	5	57	90	214	103	43	27	6	1	0
Whitman	57	0	5	13	20	9	5	4	1	0	0
Yakima	1,801	16	250	318	665	323	154	64	10	0	1

Nativity Table A12. Father's Age Group by County of Residence, 2000

County	All Ages	Under 15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 and Over	Age Unk
<b>State Total</b>	<b>81,004</b>	<b>7</b>	<b>504</b>	<b>1,879</b>	<b>12,698</b>	<b>18,698</b>	<b>19,549</b>	<b>12,282</b>	<b>4,881</b>	<b>1,973</b>	<b>8,533</b>
Adams	334	0	2	15	70	87	76	28	9	7	40
Asotin	252	0	2	13	48	63	40	31	8	5	42
Benton	2,079	1	20	75	397	512	477	260	90	35	212
Chelan	981	0	17	40	156	266	205	130	63	30	74
Clallam	622	0	4	25	134	136	133	72	33	20	65
Clark	5,411	0	17	98	804	1,298	1,315	702	281	106	790
Columbia	34	0	0	1	12	7	3	1	2	1	7
Cowlitz	1,289	0	11	49	307	315	231	140	57	19	160
Douglas	455	0	5	8	99	115	117	62	15	10	24
Ferry	69	0	0	6	12	18	14	6	2	3	8
Franklin	1,096	0	12	40	271	294	193	107	45	20	114
Garfield	23	0	0	0	5	7	2	2	2	2	3
Grant	1,432	0	20	46	320	387	275	149	43	27	165
Grays Harbor	793	0	14	29	184	216	137	90	38	11	74
Island	959	0	6	30	220	236	213	114	50	21	69
Jefferson	211	0	0	7	38	44	41	32	21	6	22
King	22,487	1	80	284	2,113	4,265	6,430	4,659	1,896	759	2,000
Kitsap	3,108	0	13	66	622	781	675	447	170	65	269
Kittitas	368	0	0	9	69	105	90	47	15	14	19
Klickitat	254	0	3	7	50	68	53	26	17	7	23
Lewis	869	0	11	19	172	210	176	67	26	19	169
Lincoln	99	0	2	4	17	33	20	12	3	3	5
Mason	560	0	5	26	109	136	96	64	25	10	89
Okanogan	506	0	3	20	111	133	98	66	26	10	39
Pacific	195	0	0	4	40	47	41	19	10	5	29
Pend Oreille	110	0	2	6	28	20	17	14	5	5	13
Pierce	10,174	1	61	256	1,913	2,458	2,145	1,323	474	175	1,368
San Juan	92	0	1	0	7	18	26	14	14	7	5
Skagit	1,396	1	12	37	261	325	306	186	84	33	151
Skamania	116	0	0	1	18	37	24	23	5	2	6
Snohomish	8,545	1	37	133	1,157	2,053	2,289	1,399	553	194	729
Spokane	5,666	0	36	168	1,041	1,448	1,347	710	288	115	513
Stevens	445	0	3	18	77	111	83	60	29	17	47
Thurston	2,547	0	16	67	425	656	601	331	123	50	278
Wahkiakum	28	0	0	0	4	8	9	3	1	1	2
Walla Walla	660	0	10	17	119	148	147	92	29	19	79
Whatcom	2,077	1	22	51	348	532	527	310	134	56	96
Whitman	411	0	0	6	60	110	111	72	27	12	13
Yakima	4,251	1	57	198	860	995	766	412	168	72	722

Nativity Table A13. Mother's Race/Ethnicity by County of Residence, 2000

County	Total	White	African American	Native American	Japa- nese	Chinese	Filipino	Other Asian	Other	Unk	Hispanic Origin <sup>1</sup>
<b>State Total</b>	<b>81,004</b>	<b>65,988</b>	<b>3,335</b>	<b>1,914</b>	<b>285</b>	<b>526</b>	<b>1,054</b>	<b>4,733</b>	<b>32</b>	<b>3,137</b>	<b>11,359</b>
Adams	334	323	0	3	0	0	1	4	0	3	224
Asotin	252	246	3	2	1	0	0	0	0	0	5
Benton	2,079	1,940	25	16	2	5	10	47	0	34	444
Chelan	981	950	4	8	0	0	1	11	0	7	396
Clallam	622	542	3	58	2	2	4	7	0	4	47
Clark	5,411	4,917	114	54	14	18	44	232	0	18	449
Columbia	34	31	0	2	0	0	1	0	0	0	4
Cowlitz	1,289	1,233	10	18	1	1	5	17	1	3	89
Douglas	455	441	0	7	0	1	1	5	0	0	161
Ferry	69	48	0	20	0	0	0	0	0	1	2
Franklin	1,096	1,012	24	9	0	1	4	12	1	33	703
Garfield	23	23	0	0	0	0	0	0	0	0	2
Grant	1,432	1,358	10	16	4	1	2	20	0	21	689
Grays Harbor	793	672	1	62	0	1	1	12	0	44	71
Island	959	826	38	15	9	0	39	20	0	12	70
Jefferson	211	191	0	7	1	0	0	2	0	10	7
King	22,487	15,505	1,695	311	158	387	517	2,561	18	1,335	2,205
Kitsap	3,108	2,587	124	77	12	11	96	111	2	88	205
Kittitas	368	343	1	3	1	1	1	10	0	8	45
Klickitat	254	232	0	16	1	0	0	1	0	4	38
Lewis	869	815	3	15	0	0	1	8	0	27	97
Lincoln	99	91	1	5	0	0	0	0	0	2	0
Mason	560	475	2	36	1	1	6	8	0	31	56
Okanogan	506	412	0	74	1	0	0	2	0	17	126
Pacific	195	179	1	6	0	0	1	5	0	3	21
Pend Oreille	110	103	1	3	0	1	0	0	0	2	2
Pierce	10,174	7,869	873	225	36	17	148	679	3	324	944
San Juan	92	90	0	1	1	0	0	0	0	0	6
Skagit	1,396	1,316	6	44	1	2	4	16	0	7	357
Skamania	116	109	1	4	0	0	0	0	0	2	13
Snohomish	8,545	6,997	186	187	24	38	95	525	2	491	697
Spokane	5,666	5,073	104	167	6	13	16	136	2	149	216
Stevens	445	395	1	40	0	0	1	5	0	3	8
Thurston	2,547	1,922	62	53	1	5	23	134	2	345	157
Wahkiakum	28	28	0	0	0	0	0	0	0	0	1
Walla Walla	660	633	5	5	2	0	1	12	0	2	222
Whatcom	2,077	1,845	6	93	3	3	12	70	1	44	201
Whitman	411	340	9	4	1	12	6	34	0	5	13
Yakima	4,251	3,876	22	248	2	5	13	27	0	58	2,366

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



Nativity Table A14. Mother's Education by County of Residence, 2000

County	Total	No Education	8th Grade or less	Some High School	High School Grad	Some College	College Grad	Postgrad Educ	Unknown
<b>State Total</b>	<b>81,004</b>	<b>144</b>	<b>3,561</b>	<b>9,330</b>	<b>22,934</b>	<b>19,299</b>	<b>11,540</b>	<b>8,098</b>	<b>6,098</b>
Adams	334	4	86	86	79	49	16	13	1
Asotin	252	0	5	41	94	74	16	20	2
Benton	2,079	2	118	254	636	491	239	143	196
Chelan	981	6	226	187	235	179	74	63	11
Clallam	622	0	20	118	212	159	56	44	13
Clark	5,411	6	155	682	1,961	1,351	751	357	148
Columbia	34	0	1	6	10	11	3	2	1
Cowlitz	1,289	1	45	199	494	366	80	50	54
Douglas	455	3	83	73	138	93	37	19	9
Ferry	69	0	1	10	36	14	1	5	2
Franklin	1,096	8	220	276	258	147	60	32	95
Garfield	23	0	2	3	7	5	4	2	0
Grant	1,432	10	279	329	385	276	69	60	24
Grays Harbor	793	2	49	145	263	179	51	32	72
Island	959	0	3	82	347	314	98	82	33
Jefferson	211	0	4	23	86	50	24	16	8
King	22,487	43	499	1,356	4,510	4,743	4,926	3,746	2,664
Kitsap	3,108	0	32	291	1,114	894	416	261	100
Kittitas	368	0	20	32	95	99	62	54	6
Klickitat	254	0	9	50	91	49	31	21	3
Lewis	869	0	36	179	339	185	50	16	64
Lincoln	99	0	4	7	35	32	9	10	2
Mason	560	5	40	100	169	139	33	12	62
Okanogan	506	1	61	119	141	119	25	26	14
Pacific	195	0	7	34	63	48	21	14	8
Pend Oreille	110	0	1	13	39	32	5	8	12
Pierce	10,174	10	223	1,367	3,472	2,875	1,079	620	528
San Juan	92	0	0	3	14	18	19	8	30
Skagit	1,396	5	91	203	409	274	137	67	210
Skamania	116	0	5	12	43	25	17	13	1
Snohomish	8,545	1	199	755	2,585	2,232	1,319	881	573
Spokane	5,666	4	71	647	1,691	1,661	800	588	204
Stevens	445	0	10	61	186	109	37	31	11
Thurston	2,547	2	19	182	676	604	286	182	596
Wahkiakum	28	0	1	2	9	8	7	1	0
Walla Walla	660	0	52	112	175	147	64	61	49
Whatcom	2,077	1	82	287	563	582	260	242	60
Whitman	411	0	2	11	88	105	105	99	1
Yakima	4,251	30	800	993	1,186	561	253	197	231

## B. Behavioral and Health Characteristics

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

Nativity Table B1. Behavioral and Health Summary Indicators for Residents, 1990-2000

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

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

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

Nativity Table B2. Mother's Age Group by Maternal Smoking for Residents, 2000

Age	Total	Maternal Smoking	No Maternal Smoking	Unknown
<b>State Total</b>	<b>81,004</b>	<b>10,450</b>	<b>66,934</b>	<b>3,620</b>
Under 15	118	19	93	6
15 - 17	2,559	594	1,842	123
18 - 19	5,561	1,318	4,010	233
20 - 24	19,795	3,726	15,277	792
25 - 29	21,858	2,346	18,518	994
30 - 34	19,490	1,481	17,137	872
35 - 39	9,509	807	8,225	477
40 - 44	1,952	151	1,692	109
45 and Over	125	6	110	9
Unknown	37	2	30	5

Nativity Table B3. Mother's Education by Maternal Smoking for Residents, 2000

Education	Total	Maternal Smoking	No Maternal Smoking	Unknown
<b>State Total</b>	<b>81,004</b>	<b>10,450</b>	<b>66,934</b>	<b>3,620</b>
No Education	144	6	135	3
8th Grade or Less	3,561	323	3,134	104
Some High School	9,330	2,906	6,119	305
High School Graduate	22,934	4,262	17,957	715
Some College	19,299	1,910	16,796	593
College Graduate	11,540	252	10,969	319
Postgraduate Educ	8,098	135	7,720	243
Unknown	6,098	656	4,104	1,338

Nativity Table B4. Maternal Smoking During Pregnancy by County of Residence, 2000

County	Total Births	Maternal Smoking		No Maternal Smoking		Unknown	
		Number	Percent <sup>1</sup>	Number	Percent <sup>1</sup>	Number	Percent <sup>1</sup>
<b>State Total</b>	<b>81,004</b>	<b>10,450</b>	<b>12.9</b>	<b>66,934</b>	<b>82.6</b>	<b>3,620</b>	<b>4.5</b>
Adams	334	14	4.2	318	95.2	2	0.6
Asotin	252	57	22.6	195	77.4	0	0.0
Benton	2,079	243	11.7	1,817	87.4	19	0.9
Chelan	981	76	7.7	901	91.8	4	0.4
Clallam	622	155	24.9	463	74.4	4	0.6
Clark	5,411	967	17.9	4,436	82.0	8	0.1
Columbia	34	11	32.4	23	67.6	0	0.0
Cowlitz	1,289	332	25.8	952	73.9	5	0.4
Douglas	455	33	7.3	419	92.1	3	0.7
Ferry	69	18	26.1	49	71.0	2	2.9
Franklin	1,096	57	5.2	1,003	91.5	36	3.3
Garfield	23	10	43.5	13	56.5	0	0.0
Grant	1,432	150	10.5	1,274	89.0	8	0.6
Grays Harbor	793	230	29.0	521	65.7	42	5.3
Island	959	108	11.3	840	87.6	11	1.1
Jefferson	211	56	26.5	153	72.5	2	0.9
King	22,487	1,738	7.7	19,394	86.2	1,355	6.0
Kitsap	3,108	480	15.4	2,577	82.9	51	1.6
Kittitas	368	52	14.1	309	84.0	7	1.9
Klickitat	254	32	12.6	219	86.2	3	1.2
Lewis	869	219	25.2	621	71.5	29	3.3
Lincoln	99	15	15.2	83	83.8	1	1.0
Mason	560	136	24.3	389	69.5	35	6.3
Okanogan	506	89	17.6	411	81.2	6	1.2
Pacific	195	43	22.1	146	74.9	6	3.1
Pend Oreille	110	23	20.9	83	75.5	4	3.6
Pierce	10,174	1,582	15.5	8,296	81.5	296	2.9
San Juan	92	1	1.1	86	93.5	5	5.4
Skagit	1,396	195	14.0	1,115	79.9	86	6.2
Skamania	116	19	16.4	97	83.6	0	0.0
Snohomish	8,545	997	11.7	7,254	84.9	294	3.4
Spokane	5,666	1,114	19.7	4,455	78.6	97	1.7
Stevens	445	99	22.2	343	77.1	3	0.7
Thurston	2,547	407	16.0	1,725	67.7	415	16.3
Wahkiakum	28	6	21.4	22	78.6	0	0.0
Walla Walla	660	91	13.8	559	84.7	10	1.5
Whatcom	2,077	164	7.9	1,277	61.5	636	30.6
Whitman	411	37	9.0	373	90.8	1	0.2
Yakima	4,251	394	9.3	3,723	87.6	134	3.2

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

Nativity Table B5. Selected Medical Risk Factors<sup>1</sup> by County of Residence, 2000

County	Total Births	Diabetes		Hypertension		
		Gestational	Established	Chronic	Pregnancy - Associated	Eclampsia
<b>State Total</b>	<b>81,004</b>	<b>2,537</b>	<b>358</b>	<b>836</b>	<b>4,168</b>	<b>422</b>
Adams	334	16	1	4	14	5
Asotin	252	5	11	5	27	4
Benton	2,079	55	18	12	96	27
Chelan	981	22	9	5	56	1
Clallam	622	31	3	7	38	5
Clark	5,411	170	23	51	443	3
Columbia	34	0	0	0	1	0
Cowlitz	1,289	30	9	19	60	2
Douglas	455	5	1	2	27	1
Ferry	69	2	0	2	4	1
Franklin	1,096	28	5	5	43	10
Garfield	23	0	0	0	1	0
Grant	1,432	39	9	24	82	4
Grays Harbor	793	34	4	12	39	4
Island	959	22	7	9	61	7
Jefferson	211	5	1	2	20	2
King	22,487	741	108	232	967	56
Kitsap	3,108	83	13	36	159	39
Kittitas	368	10	1	6	44	5
Klickitat	254	6	1	7	17	2
Lewis	869	16	4	1	20	4
Lincoln	99	4	0	1	10	0
Mason	560	18	3	7	26	12
Okanogan	506	15	1	7	21	1
Pacific	195	7	1	2	14	0
Pend Oreille	110	4	0	0	11	0
Pierce	10,174	286	10	141	329	99
San Juan	92	1	0	0	2	0
Skagit	1,396	62	7	31	70	2
Skamania	116	5	0	2	10	2
Snohomish	8,545	309	39	103	672	19
Spokane	5,666	165	24	28	345	24
Stevens	445	15	3	1	45	2
Thurston	2,547	50	11	22	59	20
Wahkiakum	28	2	1	0	0	0
Walla Walla	660	22	3	4	26	6
Whatcom	2,077	41	8	6	99	1
Whitman	411	16	2	2	22	0
Yakima	4,251	195	17	38	188	52

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

### C. Health Service Utilization

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

Nativity Table C1. Health Service Utilization Summary Indicators for Residents, 1990-2000

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

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

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

The percent of women receiving first trimester prenatal care reached a peak in the late 1990s but has dropped off slightly since then. Some, if not much, of the improvement in timeliness of care over the decade is likely due to programs such as the First Steps program begun in 1989, which expanded maternity care coverage for low-income women. The percent of women having late or no care continues to fluctuate with a general downward trend but it increased in 2000 for the first time in four years, suggesting that this item should be monitored carefully in future years. Primary C-section deliveries were fairly constant through much of the 1990s but they have begun to be more frequent in recent years. The significance of this change cannot be assessed without more detailed analysis of possible indications for C-sections.

Nativity Table C2. Month Prenatal Care Began by Mother's Age Group for Residents, 2000

Month Care Began	All Ages	Under 15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 and Over	Unk
<b>State Total</b>	<b>81,004</b>	<b>118</b>	<b>2,559</b>	<b>5,561</b>	<b>19,795</b>	<b>21,858</b>	<b>19,490</b>	<b>9,509</b>	<b>1,952</b>	<b>125</b>	<b>37</b>
First	15,419	9	238	625	2,965	4,493	4,582	2,084	395	23	5
Second	30,583	25	671	1,813	7,154	8,613	7,776	3,742	733	45	11
Third	15,698	17	589	1,226	4,102	4,045	3,522	1,770	393	25	9
Fourth	5,917	15	317	613	1,813	1,447	1,002	566	132	11	1
Fifth	2,916	14	226	387	965	636	397	219	64	5	3
Sixth	1,714	11	149	191	535	388	273	140	23	3	1
Seventh	1,108	7	82	136	348	260	179	77	18	0	1
Eighth	688	3	51	86	224	144	103	63	14	0	0
Ninth +	284	0	20	23	84	78	47	24	6	1	1
No Care	349	3	30	37	109	66	63	31	8	1	1
Unknown	6,328	14	186	424	1,496	1,688	1,546	793	166	11	4

Nativity Table C3. Number of Prenatal Visits by Month Prenatal Care Began for Residents, 2000

Number of Prenatal Visits	Total	1 - 3	4 - 6	7 - 9+	No Care	Unk
<b>State Total</b>	<b>81,004</b>	<b>61,700</b>	<b>10,547</b>	<b>2,080</b>	<b>349</b>	<b>6,328</b>
9 or More	57,091	50,757	5,098	297	0	939
5 - 8	12,351	7,035	4,188	769	0	359
1 - 4	2,393	550	817	887	0	139
No Visits	351	1	0	0	349	1
Unknown	8,818	3,357	444	127	0	4,890

Nativity Table C4. Month Prenatal Care Began by County of Residence, 2000

County	Total	1st	2nd	3rd	4th	5th	6th	7th	8th	9th+	No Care	Unk
<b>State Total</b>	<b>81,004</b>	<b>15,419</b>	<b>30,583</b>	<b>15,698</b>	<b>5,917</b>	<b>2,916</b>	<b>1,714</b>	<b>1,108</b>	<b>688</b>	<b>284</b>	<b>349</b>	<b>6,328</b>
Adams	334	24	125	91	47	23	9	5	2	1	2	5
Asotin	252	39	121	49	16	18	2	4	1	0	0	2
Benton	2,079	303	696	483	268	105	74	47	44	6	11	42
Chelan	981	41	424	293	112	37	36	18	8	1	4	7
Clallam	622	52	251	201	48	32	15	7	3	1	1	11
Clark	5,411	1,197	2,209	1,045	426	236	153	69	38	2	20	16
Columbia	34	1	19	5	5	2	2	0	0	0	0	0
Cowlitz	1,289	107	505	357	145	71	43	18	10	5	14	14
Douglas	455	20	221	119	43	22	16	5	6	0	1	2
Ferry	69	9	32	12	3	5	3	2	0	1	0	2
Franklin	1,096	122	248	298	166	88	54	37	39	9	9	26
Garfield	23	5	7	8	1	1	0	0	1	0	0	0
Grant	1,432	88	509	427	165	103	43	31	22	5	8	31
Grays Harbor	793	133	308	153	52	33	24	15	8	2	10	55
Island	959	185	450	168	47	16	9	8	4	1	2	69
Jefferson	211	10	69	81	22	12	6	3	2	2	0	4
King	22,487	4,762	8,239	3,742	1,190	602	342	222	151	68	79	3,090
Kitsap	3,108	454	1,289	747	253	112	72	46	20	14	8	93
Kittitas	368	77	188	58	17	10	6	2	2	1	1	6
Klickitat	254	33	102	43	19	12	8	2	1	2	0	32
Lewis	869	243	295	142	62	23	23	10	5	3	2	61
Lincoln	99	27	36	19	9	3	0	2	0	0	1	2
Mason	560	66	250	110	39	21	6	18	3	2	4	41
Okanogan	506	30	252	115	48	18	13	12	6	0	6	6
Pacific	195	21	75	43	22	10	6	6	4	1	2	5
Pend Oreille	110	25	31	22	14	9	2	4	1	0	2	0
Pierce	10,174	841	3,916	2,384	863	437	296	213	114	53	33	1,024
San Juan	92	11	38	19	6	5	5	1	0	0	0	7
Skagit	1,396	77	603	335	126	67	48	40	35	6	7	52
Skamania	116	22	52	24	8	5	0	2	0	0	1	2
Snohomish	8,545	2,671	3,251	1,202	390	213	103	65	36	46	28	540
Spokane	5,666	1,899	2,336	718	268	146	70	31	31	18	34	115
Stevens	445	123	175	81	27	16	4	4	5	0	1	9
Thurston	2,547	682	768	323	107	68	26	29	16	8	8	512
Wahkiakum	28	7	9	6	2	1	2	1	0	0	0	0
Walla Walla	660	58	284	173	86	21	8	12	3	1	5	9
Whatcom	2,077	17	601	659	347	81	55	21	13	1	7	275
Whitman	411	70	170	107	33	11	7	3	1	1	2	6
Yakima	4,251	867	1,429	836	415	221	123	93	53	23	36	155



Nativity Table C5. Birth Facility by County of Occurrence, 2000

County	Total	Hospital	Birth Center	Federal Facility	Home	Born On Arrival	Other	Unknown
<b>State Total</b>	<b>80,463</b>	<b>75,738</b>	<b>580</b>	<b>2,928</b>	<b>1,122</b>	<b>47</b>	<b>47</b>	<b>1</b>
Adams	470	469	0	0	1	0	0	0
Asotin	2	0	0	0	2	0	0	0
Benton	2,812	2,776	20	0	14	2	0	0
Chelan	1,448	1,432	11	0	3	2	0	0
Clallam	616	594	0	0	22	0	0	0
Clark	4,765	4,718	0	0	44	3	0	0
Columbia	0	0	0	0	0	0	0	0
Cowlitz	1,320	1,305	0	0	15	0	0	0
Douglas	1	0	0	0	1	0	0	0
Ferry	9	9	0	0	0	0	0	0
Franklin	690	680	0	0	9	0	1	0
Garfield	0	0	0	0	0	0	0	0
Grant	1,076	1,067	0	0	9	0	0	0
Grays Harbor	490	475	0	0	11	0	4	0
Island	669	191	21	431	25	1	0	0
Jefferson	160	135	0	0	25	0	0	0
King	26,683	26,115	203	0	347	15	2	1
Kitsap	2,500	1,652	10	769	68	1	0	0
Kittitas	312	301	0	0	11	0	0	0
Klickitat	178	171	0	0	6	1	0	0
Lewis	646	598	0	0	20	0	28	0
Lincoln	20	18	0	0	1	1	0	0
Mason	291	283	0	0	8	0	0	0
Okanogan	530	522	0	0	8	0	0	0
Pacific	61	52	0	0	9	0	0	0
Pend Oreille	93	91	0	0	2	0	0	0
Pierce	10,410	8,393	148	1,728	135	5	1	0
San Juan	11	0	0	0	8	0	3	0
Skagit	1,538	1,517	0	0	20	1	0	0
Skamania	2	0	0	0	2	0	0	0
Snohomish	5,719	5,478	159	0	74	6	2	0
Spokane	6,485	6,409	6	0	64	5	1	0
Stevens	274	262	0	0	12	0	0	0
Thurston	2,813	2,744	0	0	67	2	0	0
Wahkiakum	0	0	0	0	0	0	0	0
Walla Walla	837	822	2	0	8	0	5	0
Whatcom	2,050	1,994	0	0	55	1	0	0
Whitman	370	367	0	0	3	0	0	0
Yakima	4,112	4,098	0	0	13	1	0	0

Nativity Table C6. Method of Delivery<sup>1</sup> by County of Occurrence, 2000

County	Total	Vaginal Deliveries				Primary	Repeat C-Section		Unk
		Sponta- neous	Forceps	Vacuum	VBAC	C-Section	With Labor	No Labor	
<b>State Total</b>	<b>80,463</b>	<b>55,952</b>	<b>1,233</b>	<b>4,794</b>	<b>1,604</b>	<b>10,521</b>	<b>1,211</b>	<b>5,138</b>	<b>10</b>
Adams	470	293	3	67	16	52	18	21	0
Asotin	2	2	0	0	0	0	0	0	0
Benton	2,812	1,833	36	238	62	379	69	195	0
Chelan	1,448	1,074	0	30	21	207	12	104	0
Clallam	616	466	0	20	11	66	11	42	0
Clark	4,765	3,539	26	195	116	555	106	228	0
Columbia	0	0	0	0	0	0	0	0	0
Cowlitz	1,320	912	20	58	27	177	33	93	0
Douglas	1	1	0	0	0	0	0	0	0
Ferry	9	6	0	0	1	1	0	1	0
Franklin	690	481	5	62	29	65	14	34	0
Garfield	0	0	0	0	0	0	0	0	0
Grant	1,076	710	8	61	6	137	24	130	0
Grays Harbor	490	348	5	5	14	55	15	48	0
Island	669	414	22	45	11	120	19	38	0
Jefferson	160	113	0	3	3	19	4	18	0
King	26,683	17,507	483	2,140	502	3,916	376	1,756	3
Kitsap	2,500	1,716	51	153	32	335	39	174	0
Kittitas	312	226	2	13	11	39	6	15	0
Klickitat	178	126	2	11	1	22	2	14	0
Lewis	646	510	3	27	10	52	7	37	0
Lincoln	20	12	0	0	1	3	0	4	0
Mason	291	219	1	7	6	38	7	13	0
Okanogan	530	374	4	30	15	71	13	23	0
Pacific	61	49	3	2	3	4	0	0	0
Pend Oreille	93	68	0	0	2	15	2	6	0
Pierce	10,410	7,431	275	382	197	1,275	96	752	2
San Juan	11	11	0	0	0	0	0	0	0
Skagit	1,538	1,119	10	85	39	139	28	116	2
Skamania	2	2	0	0	0	0	0	0	0
Snohomish	5,719	4,118	50	270	111	739	54	377	0
Spokane	6,485	4,514	118	305	106	911	116	415	0
Stevens	274	208	0	3	6	38	7	12	0
Thurston	2,813	2,120	18	108	33	412	25	96	1
Wahkiakum	0	0	0	0	0	0	0	0	0
Walla Walla	837	632	8	42	25	69	17	44	0
Whatcom	2,050	1,464	28	101	54	243	26	133	1
Whitman	370	244	11	40	4	48	4	19	0
Yakima	4,112	3,090	41	291	129	319	61	180	1

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

Nativity Table C7. Birth Attendant by County of Occurrence, 2000

County	Total	MD	DO	Cert Midwife	Lic Midwife	Other Midwife	Nurse	Hosp Admin	Father	Other	Unk
<b>State Total</b>	<b>80,463</b>	<b>68,539</b>	<b>2,022</b>	<b>6,874</b>	<b>1,684</b>	<b>61</b>	<b>411</b>	<b>319</b>	<b>90</b>	<b>396</b>	<b>67</b>
Adams	470	443	0	1	0	0	0	0	0	26	0
Asotin	2	0	0	0	0	0	0	0	2	0	0
Benton	2,812	2,246	26	455	1	6	3	71	1	3	0
Chelan	1,448	565	830	0	13	0	38	1	1	0	0
Clallam	616	429	0	84	1	0	0	0	12	90	0
Clark	4,765	3,243	1	1,478	4	3	1	0	13	22	0
Columbia	0	0	0	0	0	0	0	0	0	0	0
Cowlitz	1,320	1,309	0	0	6	0	0	0	4	1	0
Douglas	1	0	0	0	0	0	0	0	1	0	0
Ferry	9	8	0	0	0	0	0	0	0	1	0
Franklin	690	650	0	32	2	6	0	0	0	0	0
Garfield	0	0	0	0	0	0	0	0	0	0	0
Grant	1,076	932	2	132	0	0	0	3	2	5	0
Grays Harbor	490	345	0	6	130	1	1	0	1	6	0
Island	669	589	32	0	43	1	1	0	2	1	0
Jefferson	160	106	29	0	20	0	0	0	1	4	0
King	26,683	23,795	211	1,739	713	6	79	77	15	29	19
Kitsap	2,500	2,224	32	65	55	1	56	64	1	2	0
Kittitas	312	300	0	0	0	1	1	0	9	1	0
Klickitat	178	145	0	0	3	0	0	1	1	3	25
Lewis	646	370	210	4	58	0	0	0	0	4	0
Lincoln	20	17	0	0	0	1	0	0	1	1	0
Mason	291	227	0	50	6	0	6	0	0	2	0
Okanogan	530	440	0	75	3	1	0	0	0	11	0
Pacific	61	6	40	6	1	5	0	0	1	2	0
Pend Oreille	93	90	0	0	0	1	0	0	1	1	0
Pierce	10,410	8,776	330	886	225	2	36	3	2	139	11
San Juan	11	2	0	3	6	0	0	0	0	0	0
Skagit	1,538	1,375	3	36	35	1	84	0	1	2	1
Skamania	2	0	0	1	0	0	0	0	1	0	0
Snohomish	5,719	4,915	142	359	194	4	68	19	0	18	0
Spokane	6,485	5,846	1	545	58	2	12	3	5	13	0
Stevens	274	233	10	0	1	8	1	17	2	1	1
Thurston	2,813	2,522	0	215	55	1	5	7	2	2	4
Wahkiakum	0	0	0	0	0	0	0	0	0	0	0
Walla Walla	837	723	0	102	5	0	3	0	3	1	0
Whatcom	2,050	1,854	0	102	44	8	0	37	1	3	1
Whitman	370	359	0	0	1	0	8	1	1	0	0
Yakima	4,112	3,455	123	498	1	2	8	15	3	2	5

Nativity Table C8. County of Residence by County of Occurrence, 2000

County of Residence	Adams	Asotin	Benton	Chelan	Clallam	Clark	Columbia	Cowlitz	Douglas	Ferry	Franklin	Garfield	Grant	Grays Harbor	Island	Jefferson	King	Kitsap	Kittitas
Adams	222		16								7		50						
Asotin		2																	
Benton			1,864	1							142						3		1
Chelan				945													22		
Clallam					592											1	24		
Clark				1	4,538			20									1		
Columbia			1																
Cowlitz						110		1,106											
Douglas				382					1				3				1		
Ferry										9			2						
Franklin	37		534	1							513		2						
Garfield																			
Grant	209		17	106									980				8		4
Grays Harbor					1			1						451			6		
Island															646		51		
Jefferson					15									3		157	13	17	
King			1	3									1		1		21,682	4	2
Kitsap				1	1											1	334	2,365	
Kittitas			2	1									1				28		300
Klickitat			6			1													
Lewis						2		40									3	1	
Lincoln													4						
Mason					3									1			3	82	
Okanogan				7									29				1		
Pacific						1		4						33			5		
Pend Oreille																			
Pierce					1	2		1						1		1	1,175	26	
San Juan																	6		
Skagit						1									14		58		
Skamania						34													
Snohomish			2			2								1	1		3,085	1	
Spokane	1		1										1				2		
Stevens																			
Thurston						2		1									29		
Wahkiakum								21											
Walla Walla			50								21								
Whatcom					1	1									2		50		
Whitman													1				1		
Yakima			266								4						17	1	5
Out of State Occurrence	1		52	1	1	71		126			3		2		5		75	3	
<b>Total</b>	<b>470</b>	<b>2</b>	<b>2,812</b>	<b>1,448</b>	<b>616</b>	<b>4,765</b>	<b>0</b>	<b>1,320</b>	<b>1</b>	<b>9</b>	<b>690</b>	<b>0</b>	<b>1,076</b>	<b>490</b>	<b>669</b>	<b>160</b>	<b>26,683</b>	<b>2,500</b>	<b>312</b>

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

continued Natality Table C8. County of Residence by County of Occurrence, 2000

		County of Occurrence																	Residence Total				
Klickitat	Lewis	Lincoln	Mason	Okanogan	Pacific	Pend Oreille	Pierce	San Juan	Skagit	Skamania	Snohomish	Spokane	Stevens	Thurston	Wahkiakum	Walla Walla	Whatcom	Whitman		Yakima	Out of State		
							1					38										334	
												5				1		4			240	252	
2				1							1	10				1		2	47		4	2,079	
				8							1	4									1	981	
									1		1				1		1				1	622	
1							4								1							845	5,411
																33							34
	5						5															63	1,289
				61								4				1						2	455
				13						1		13	31										69
												4				3	1					1	1,096
												1						3				19	23
	1	1		3			1				1	39									60	2	1,432
	9		2		17		22		1						280							3	793
							29		115		107							6		1		4	959
			3												1		1				1	1	211
	1						555		1		182	2		6			4			5	37	22,487	
			4				381				7			2							12	3,108	
							2				1			1		1				30	1	368	
129																					12	106	254
	564		2		1		44								210							2	869
		16										78										1	99
	1		270				39							160								1	560
				440	1		1					25	1					1					506
		2			42		3								17							88	195
						58						41	8									3	110
	4			1			8,873		1		6			62			1			3	16	10,174	
	1							11	66		1			1			5				1	92	
							1		1,249		41							29			3	1,396	
30										2		1										49	116
				1			12		70		5,348	3		4				9			6	8,545	
		1				6	1				2	5,616	5							3	27	5,666	
		2				1						212	229									1	445
	53		10				380				3			2,064							1	4	2,547
	2																					5	28
												4				583						2	660
							2		32		8	1						1,974		1	5	2,077	
												49										28	411
1							1		1		1					1		2	3,946		5	4,251	
15	3			2	28	53					8	335		3	213	18	24	6					1,048
178	646	20	291	530	61	93	10,410	11	1,538	2	5,719	6,485	274	2,813	0	837	2,050	370	4,112	1,589		82,052	

## D. Infant Health

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

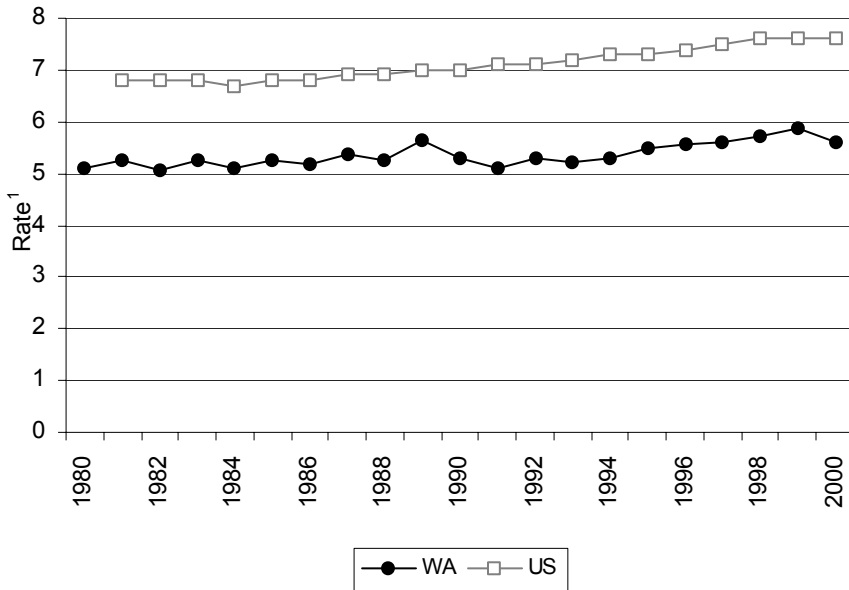
Nativity Table D1. Infant Health Summary Indicators for Residents, 1990-2000

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

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

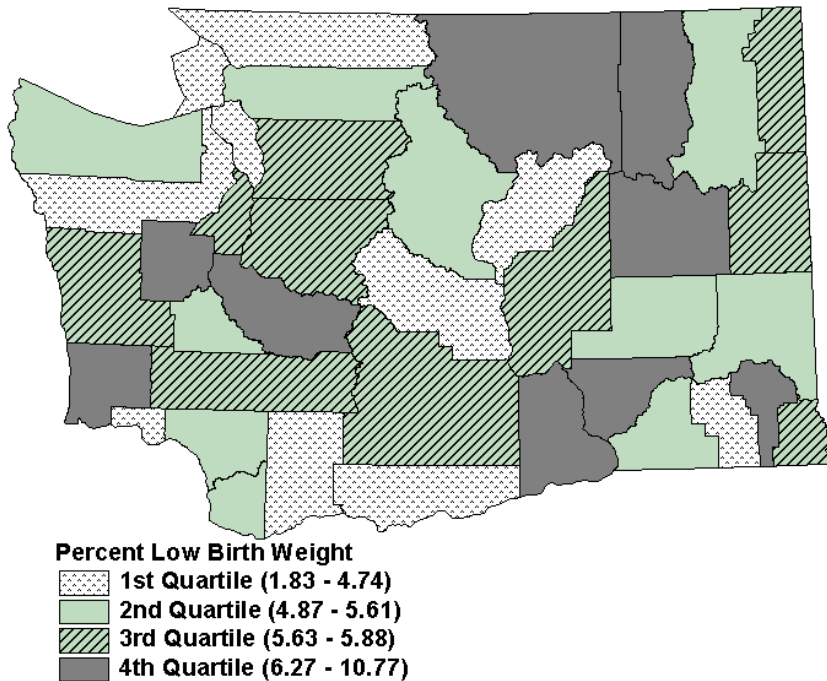
These indicators are all interrelated; low birth weight is associated with plural births and short gestational age. Thus all of the indicators have similar variation over time, with a general increase since the middle of the decade. One possible reason for the change is the increasing use of assisted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

Nativity Figure 3. Percent Low Birth Weight<sup>1</sup>, Washington State Residents Compared to National, 1980-2000



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

Nativity Figure 4. Washington State Percent Low Birth Weight<sup>1</sup> by County of Residence, 1998-2000 (Washington State Rate=5.74)



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

Nativity Table D2. Birth Weight in Grams by Mother's Race/Ethnicity for Residents, 2000

Birth Weight in Grams	Race/Ethnicity										
	Total	White	African Amer.	Native Amer.	Japanese	Chinese	Filipino	Other Asian	Other	Unk	Hispanic <sup>1</sup>
<b>State Total</b>	<b>81,004</b>	<b>65,988</b>	<b>3,335</b>	<b>1,914</b>	<b>285</b>	<b>526</b>	<b>1,054</b>	<b>4,733</b>	<b>32</b>	<b>3,137</b>	<b>11,359</b>
Under 1,000	349	260	41	9	1	1	4	21	0	12	53
1,000 - 1,499	424	324	45	12	1	1	9	21	0	11	62
1,500 - 1,999	904	724	58	19	2	5	10	58	0	28	139
2,000 - 2,499	2,840	2,138	214	88	14	25	44	192	1	124	357
2,500 - 2,999	10,946	8,398	645	231	40	102	199	894	5	432	1,708
3,000 - 3,499	28,407	22,665	1,235	650	142	213	424	1,968	7	1,103	4,370
3,500 - 3,999	26,299	22,132	809	619	71	140	269	1,222	17	1,020	3,452
4,000 - 4,499	8,696	7,542	231	232	13	27	65	282	2	302	992
4,500 and Over	1,789	1,565	27	50	0	5	18	48	0	76	190
Unknown	350	240	30	4	1	7	12	27	0	29	36

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

Nativity Table D3. Birth Weight in Grams by Mother's Age Group for Residents, 2000

Birth Weight in Grams	Mother's Age Group										
	Total	Under 15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45 and Over	Age Unk
<b>State Total</b>	<b>81,004</b>	<b>118</b>	<b>2,559</b>	<b>5,561</b>	<b>19,795</b>	<b>21,858</b>	<b>19,490</b>	<b>9,509</b>	<b>1,952</b>	<b>125</b>	<b>37</b>
Under 1,000	349	0	24	27	83	73	78	48	15	0	1
1,000 - 1,499	424	4	22	35	93	103	92	57	16	2	0
1,500 - 1,999	904	1	40	72	204	199	201	145	35	7	0
2,000 - 2,499	2,840	8	127	257	700	676	637	329	89	14	3
2,500 - 2,999	10,946	24	441	925	2,882	2,831	2,342	1,216	255	22	8
3,000 - 3,499	28,407	50	1,027	2,155	7,297	7,677	6,463	3,070	621	34	13
3,500 - 3,999	26,299	20	682	1,586	6,274	7,289	6,654	3,176	581	29	8
4,000 - 4,499	8,696	11	168	420	1,873	2,426	2,396	1,130	257	11	4
4,500 and Over	1,789	0	23	66	329	499	521	283	65	3	0
Unknown	350	0	5	18	60	85	106	55	18	3	0



Nativity Table D4. Birth Weight in Grams by Calculated Gestational Age<sup>1</sup> for Residents, 2000

<b>Birth Weight in Grams</b>	<b>Total</b>	<b>Preterm (&lt;37 wks)</b>	<b>Term (37-41 wks)</b>	<b>Postterm (42+ wks)</b>	<b>Unknown</b>
<b>State Total</b>	<b>81,004</b>	<b>10,151</b>	<b>64,518</b>	<b>6,159</b>	<b>176</b>
Under 1,000	349	299	15	1	34
1,000 - 1,499	424	396	23	5	0
1,500 - 1,999	904	768	121	15	0
2,000 - 2,499	2,840	1,859	925	56	0
2,500 - 2,999	10,946	3,840	6,577	529	0
3,000 - 3,499	28,407	1,943	24,442	2,022	0
3,500 - 3,999	26,299	765	23,114	2,420	0
4,000 - 4,499	8,696	186	7,634	876	0
4,500 and over	1,789	34	1,536	219	0
Unknown	350	61	131	16	142

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

Nativity Table D5. Birth Weight in Grams by Plurality for Residents, 2000

<b>Birth Weight (Grams)</b>	<b>Total</b>	<b>Single</b>	<b>Twin</b>	<b>Triplet</b>	<b>Quadruplet+</b>	<b>Unknown</b>
<b>State Total</b>	<b>81,004</b>	<b>78,765</b>	<b>2,129</b>	<b>99</b>	<b>0</b>	<b>11</b>
Under 1,000	349	285	62	2	0	0
1,000 - 1,499	424	316	86	22	0	0
1,500 - 1,999	904	616	253	35	0	0
2,000 - 2,499	2,840	2,194	623	23	0	0
2,500 - 2,999	10,946	10,192	744	10	0	0
3,000 - 3,499	28,407	28,110	297	0	0	0
3,500 - 3,999	26,299	26,260	38	1	0	0
4,000 - 4,499	8,696	8,692	3	1	0	0
4,500 and over	1,789	1,787	2	0	0	0
Unknown	350	313	21	5	0	11

Nativity Table D6. Mother's Age Group by Plurality for Residents, 2000

<b>Age</b>	<b>Total</b>	<b>Single</b>	<b>Twin</b>	<b>Triplet</b>	<b>Quadruplet+</b>	<b>Unknown</b>
<b>State Total</b>	<b>81,004</b>	<b>78,765</b>	<b>2,129</b>	<b>99</b>	<b>0</b>	<b>11</b>
Under 15	118	118	0	0	0	0
15 - 17	2,559	2,516	43	0	0	0
18 - 19	5,561	5,465	90	6	0	0
20 - 24	19,795	19,400	395	0	0	0
25 - 29	21,858	21,300	536	17	0	5
30 - 34	19,490	18,866	582	38	0	4
35 - 39	9,509	9,098	384	25	0	2
40 - 44	1,952	1,865	77	10	0	0
45 and Over	125	100	22	3	0	0
Unknown	37	37	0	0	0	0

Nativity Table D7. Birth Weight in Grams by County of Residence, 2000

County	Total	Under 1000	1000-1499	1500-1999	2000-2499	2500-2999	3000-3499	3500-3999	4000-4499	4500+	Unk
<b>State Total</b>	<b>81,004</b>	<b>349</b>	<b>424</b>	<b>904</b>	<b>2,840</b>	<b>10,946</b>	<b>28,407</b>	<b>26,299</b>	<b>8,696</b>	<b>1,789</b>	<b>350</b>
Adams	334	3	2	4	8	47	137	101	27	4	1
Asotin	252	2	1	1	5	33	89	81	35	5	0
Benton	2,079	15	7	32	76	307	724	659	202	54	3
Chelan	981	5	6	7	21	157	330	335	102	18	0
Clallam	622	0	2	5	13	83	217	220	65	14	3
Clark	5,411	23	29	49	185	612	1,906	1,845	603	157	2
Columbia	34	0	0	0	0	3	15	12	4	0	0
Cowlitz	1,289	6	6	23	42	159	456	397	156	43	1
Douglas	455	1	1	2	14	64	153	171	40	9	0
Ferry	69	0	0	0	3	14	20	21	10	1	0
Franklin	1,096	3	11	20	28	147	413	344	108	21	1
Garfield	23	0	0	0	1	4	10	7	1	0	0
Grant	1,432	8	5	17	45	215	553	440	123	20	6
Grays Harbor	793	2	2	14	27	115	259	270	93	10	1
Island	959	1	4	11	27	87	330	339	121	38	1
Jefferson	211	1	0	1	5	27	71	66	33	7	0
King	22,487	99	107	244	855	3,066	7,818	7,235	2,359	490	214
Kitsap	3,108	11	9	32	104	399	1,053	1,002	397	81	20
Kittitas	368	4	3	6	8	59	130	115	36	6	1
Klickitat	254	1	2	0	4	25	91	83	42	4	2
Lewis	869	4	6	10	33	122	300	290	87	16	1
Lincoln	99	0	0	4	8	14	33	31	9	0	0
Mason	560	7	3	8	18	76	197	178	60	13	0
Okanogan	506	3	3	3	28	80	192	155	38	3	1
Pacific	195	0	0	3	12	22	62	67	25	4	0
Pend Oreille	110	0	0	1	3	15	34	39	15	3	0
Pierce	10,174	58	74	130	369	1,400	3,544	3,235	1,130	208	26
San Juan	92	0	0	0	3	11	31	31	12	3	1
Skagit	1,396	10	5	20	39	175	480	483	154	26	4
Skamania	116	0	0	0	5	16	46	34	13	2	0
Snohomish	8,545	21	46	87	286	1,129	2,879	2,878	985	200	34
Spokane	5,666	26	27	66	220	857	2,036	1,781	549	99	5
Stevens	445	1	4	7	15	49	155	154	40	19	1
Thurston	2,547	10	10	28	66	326	905	855	288	55	4
Wahkiakum	28	0	0	0	0	2	7	13	5	1	0
Walla Walla	660	3	5	6	25	81	255	194	73	13	5
Whatcom	2,077	6	15	18	57	232	688	735	257	60	9
Whitman	411	0	4	4	17	48	158	129	41	9	1
Yakima	4,251	15	25	41	165	668	1,630	1,274	358	73	2

Nativity Table D8. Calculated Gestational Age<sup>1</sup> by County of Residence, 2000

County	Total	Preterm (<37 wks)	Term (37-41 wks)	Postterm (42+ wks)	Unknown
<b>State Total</b>	<b>81,004</b>	<b>10,151</b>	<b>64,518</b>	<b>6,159</b>	<b>176</b>
Adams	334	40	256	37	1
Asotin	252	19	211	22	0
Benton	2,079	309	1,640	126	4
Chelan	981	114	793	74	0
Clallam	622	68	491	62	1
Clark	5,411	507	4,426	477	1
Columbia	34	1	29	4	0
Cowlitz	1,289	129	1,044	115	1
Douglas	455	48	366	41	0
Ferry	69	8	57	4	0
Franklin	1,096	163	847	86	0
Garfield	23	4	17	2	0
Grant	1,432	165	1,159	103	5
Grays Harbor	793	109	609	74	1
Island	959	97	768	93	1
Jefferson	211	24	177	10	0
King	22,487	2,916	17,789	1,692	90
Kitsap	3,108	330	2,575	199	4
Kittitas	368	40	305	22	1
Klickitat	254	25	205	22	2
Lewis	869	105	682	82	0
Lincoln	99	14	78	7	0
Mason	560	68	461	31	0
Okanogan	506	80	381	44	1
Pacific	195	24	146	25	0
Pend Oreille	110	7	94	9	0
Pierce	10,174	1,510	7,960	681	23
San Juan	92	6	76	10	0
Skagit	1,396	138	1,133	121	4
Skamania	116	10	93	13	0
Snohomish	8,545	997	6,852	679	17
Spokane	5,666	787	4,492	384	3
Stevens	445	51	355	39	0
Thurston	2,547	366	2,007	172	2
Wahkiakum	28	2	22	4	0
Walla Walla	660	67	542	46	5
Whatcom	2,077	213	1,702	156	6
Whitman	411	43	336	31	1
Yakima	4,251	547	3,342	360	2

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

Nativity Table D9. Plurality by County of Residence, 2000

County	Total	Single	Twin	Triplet	Quadruplet+	Unknown
<b>State Total</b>	<b>81,004</b>	<b>78,765</b>	<b>2,129</b>	<b>99</b>	<b>0</b>	<b>11</b>
Adams	334	324	10	0	0	0
Asotin	252	250	2	0	0	0
Benton	2,079	2,039	40	0	0	0
Chelan	981	949	29	3	0	0
Clallam	622	608	14	0	0	0
Clark	5,411	5,325	86	0	0	0
Columbia	34	34	0	0	0	0
Cowlitz	1,289	1,252	37	0	0	0
Douglas	455	446	9	0	0	0
Ferry	69	67	2	0	0	0
Franklin	1,096	1,068	22	6	0	0
Garfield	23	23	0	0	0	0
Grant	1,432	1,402	30	0	0	0
Grays Harbor	793	766	27	0	0	0
Island	959	934	24	0	0	1
Jefferson	211	211	0	0	0	0
King	22,487	21,731	720	35	0	1
Kitsap	3,108	3,027	81	0	0	0
Kittitas	368	355	13	0	0	0
Klickitat	254	250	4	0	0	0
Lewis	869	850	16	3	0	0
Lincoln	99	97	2	0	0	0
Mason	560	547	13	0	0	0
Okanogan	506	492	14	0	0	0
Pacific	195	190	5	0	0	0
Pend Oreille	110	108	2	0	0	0
Pierce	10,174	9,927	233	12	0	2
San Juan	92	90	2	0	0	0
Skagit	1,396	1,354	42	0	0	0
Skamania	116	116	0	0	0	0
Snohomish	8,545	8,315	220	10	0	0
Spokane	5,666	5,460	188	18	0	0
Stevens	445	435	10	0	0	0
Thurston	2,547	2,487	59	0	0	1
Wahkiakum	28	28	0	0	0	0
Walla Walla	660	638	17	0	0	5
Whatcom	2,077	2,021	52	3	0	1
Whitman	411	391	17	3	0	0
Yakima	4,251	4,158	87	6	0	0

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# Mortality



## Mortality

### A. Demographics

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

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

Mortality Table A1. Age-Adjusted Mortality Rates and Life Expectancy by Sex for Residents, 1990-2000

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

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

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

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

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

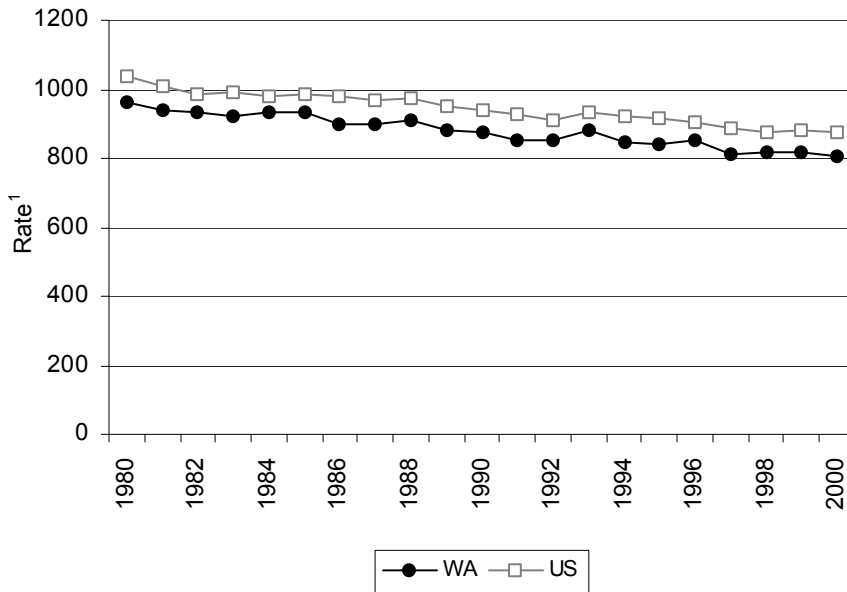
Hoyert DL, Anderson RN. Age-Adjusted Death Rates: Trend Data Based on the Year 2000 Standard Population: National Vital Statistics Reports; Vol 49 No 9. Hyattsville, Maryland: National Center for Health Statistics. 2001.

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

The mortality rate of 803.6 in 2000 is the lowest mortality rate ever reported and continues an almost steady decline in mortality over time. Mortality rates for males are much higher than females. This results in life expectancies of 76 years for males and 80.7 years for females. The differences between male and female life expectancies are decreasing over time, however. Mortality rates in Washington State are considerably lower than the U.S. as a whole.

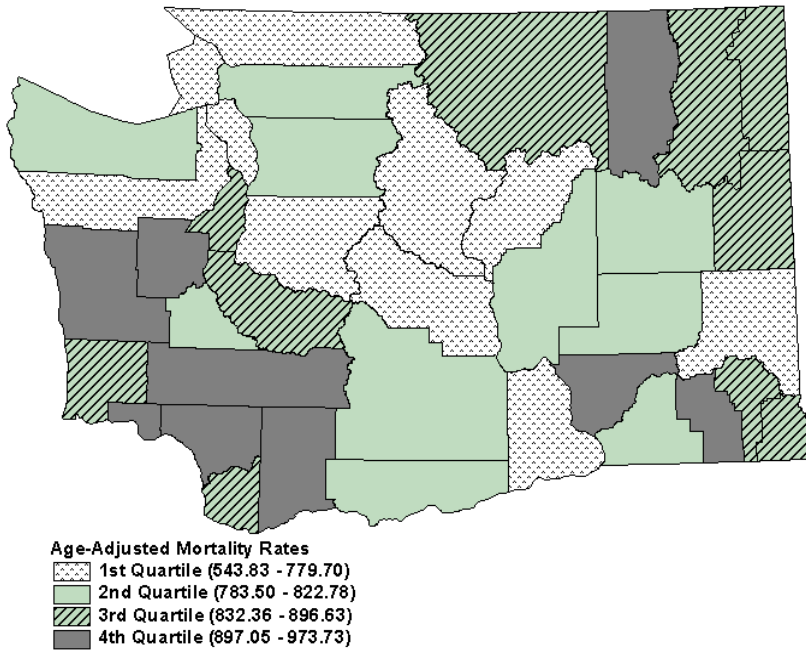


Mortality Figure 1. Mortality Rates<sup>1</sup>, Washington State Residents Compared to United States, 1980-2000



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

Mortality Figure 2. Washington State Age-Adjusted Mortality Rates<sup>1</sup> by County of Residence, 1998-2000 (Washington State Rate=812.42)



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

Mortality Table A2. Age by Race/Ethnicity for Residents, 2000

Age Group	Total	African		Native	Japa-	Chi-	Other		Un-		Hispanic <sup>1</sup>
		White	American	American	nese	nese	Filipino	Asian	Other	known	
<b>State Total</b>	<b>43,904</b>	<b>41,208</b>	<b>1,086</b>	<b>516</b>	<b>179</b>	<b>144</b>	<b>228</b>	<b>513</b>	<b>1</b>	<b>29</b>	<b>761</b>
Under 1	423	341	32	21	2	2	1	23	0	1	70
1-4	84	64	7	8	0	0	1	4	0	0	12
5-14	135	108	14	4	0	1	1	7	0	0	11
15-19	251	215	10	7	2	0	3	14	0	0	27
20-24	308	265	13	15	1	0	6	6	0	2	46
25-34	685	581	48	26	2	1	10	14	1	2	69
35-44	1,542	1,337	87	58	4	4	5	47	0	0	63
45-54	2,929	2,612	145	56	8	6	24	69	0	9	70
55-64	4,186	3,839	136	85	10	16	31	65	0	4	79
65-74	7,567	7,061	208	87	40	32	45	92	0	2	105
75-84	13,141	12,539	240	92	67	48	36	113	0	6	118
85-94	10,708	10,369	118	50	30	28	60	52	0	1	72
95 and over	1,943	1,877	28	7	13	6	5	7	0	0	19
Unknown	2	0	0	0	0	0	0	0	0	2	0

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

Mortality Table A3. Age by Sex for Residents, 2000

Age Group	Total		Male	Female
	Number	Percent <sup>1</sup>		
<b>State Total</b>	<b>43,904</b>	<b>100.0</b>	<b>21,829</b>	<b>22,075</b>
Under 1	423	1.0	225	198
1 - 4	84	0.2	49	35
5 - 14	135	0.3	76	59
15 - 19	251	0.6	185	66
20 - 24	308	0.7	237	71
25 - 34	685	1.6	470	215
35 - 44	1,542	3.5	958	584
45 - 54	2,929	6.7	1,870	1,059
55 - 64	4,186	9.5	2,482	1,704
65 - 74	7,567	17.2	4,290	3,277
75 - 84	13,141	29.9	6,517	6,624
85 - 94	10,708	24.4	4,029	6,679
95 and Over	1,943	4.4	440	1,503
Unknown	2	0.0	1	1

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

Mortality Table A4. Life Expectancy<sup>1</sup> by Age and Sex for Residents, 2000

Age Group	Total	Male	Female
Under 1	78.4	76.0	80.7
1-5	77.8	75.4	80.1
5-10	73.9	71.5	76.2
10-15	68.9	66.6	71.2
15-20	64.0	61.6	66.3
20-25	59.2	56.9	61.4
25-30	54.4	52.2	56.5
30-35	49.6	47.4	51.6
35-40	44.8	42.7	46.8
40-45	40.1	38.0	42.0
45-50	35.4	33.4	37.3
50-55	30.9	29.0	32.6
55-60	26.5	24.7	28.1
60-65	22.3	20.6	23.7
65-70	18.4	16.8	19.7
70-75	14.9	13.4	16.0
75-80	11.7	10.5	12.5
80-85	8.9	7.9	9.6
85 and Over	6.7	5.9	7.1

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

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Mortality Table A5. Marital Status by Sex for Residents, 2000

Marital Status	Total		Male	Female
	Number	Percent <sup>1</sup>		
<b>State Total</b>	<b>43,904</b>	<b>100.0</b>	<b>21,829</b>	<b>22,075</b>
Single	4,013	9.1	2,592	1,421
Married	17,606	40.1	11,918	5,688
Divorced	5,867	13.4	3,143	2,724
Widowed	16,271	37.1	4,065	12,206
Unknown	147	0.3	111	36

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

Mortality Table A6. Education by Age for Residents, 2000

Age	Total	No Education	8th Grade or Less	Some High School	High School Grad	Some College	College Grad	Postgrad Education	Unknown
<b>State Total</b>	<b>43,904</b>	<b>763</b>	<b>5,641</b>	<b>4,761</b>	<b>17,518</b>	<b>8,145</b>	<b>3,903</b>	<b>2,443</b>	<b>730</b>
Under 1	423	422	0	0	0	0	0	0	1
1-4	84	84	0	0	0	0	0	0	0
5-14	135	28	98	6	0	0	0	0	3
15-19	251	1	10	147	74	17	1	0	1
20-24	308	1	20	61	127	78	13	3	5
25-34	685	6	39	101	306	143	60	21	9
35-44	1,542	16	42	209	690	367	116	81	21
45-54	2,929	18	93	244	1,164	783	344	216	67
55-64	4,186	30	253	442	1,692	940	420	310	99
65-74	7,567	43	767	937	3,080	1,422	711	469	138
75-84	13,141	62	1,702	1,315	5,720	2,337	1,102	733	170
85-94	10,708	43	2,071	1,104	4,084	1,750	958	534	164
95 and over	1,943	9	546	195	581	308	178	76	50
Unknown	2	0	0	0	0	0	0	0	2

Mortality Table A7-a. Residence and Occurrence by County and City, 2000

County and City	Total	Residence		Occurrence
		Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>	Total
<b>State Total</b>	<b>43,904</b>	<b>7.4</b>	<b>8.0</b>	<b>43,934</b>
Adams	97	5.9	7.1	86
Asotin	204	9.9	7.7	171
Benton	943	6.6	8.0	917
Kennewick	448	8.2	*	507
Richland	267	6.9	*	304
Chelan	560	8.4	7.5	684
Wenatchee	296	10.6	*	532
Clallam	755	11.7	7.7	686
Port Angeles	222	12.1	*	395
Clark	2,341	6.8	8.5	2,157
Vancouver	1,431	10.0	*	1,824
Columbia	48	11.8	8.9	41
Cowlitz	951	10.2	9.6	1,001
Longview	445	12.8	*	854
Douglas	253	7.8	7.9	139
Ferry	45	6.2	6.5	34
Franklin	310	6.3	9.4	278
Pasco	237	7.4	*	263
Garfield	30	12.5	7.4	21
Grant	495	6.6	7.5	400
Grays Harbor	813	12.1	10.4	640
Aberdeen	209	12.7	*	352
Island	531	7.4	7.1	378
Oak Harbor	102	5.2	*	104
Jefferson	261	10.1	6.9	199
King	11,553	6.7	7.4	12,801
Auburn	382	9.5	*	491
Bellevue	741	6.8	*	1,092
Bothell (part)	119	7.4	*	98
Burien	147	4.6	*	404
Des Moines	302	10.3	*	323
Federal Way	447	5.4	*	477
Kenmore	95	5.1	*	38
Kent	479	6.0	*	215
Kirkland	327	7.3	*	727
Mercer Island	165	7.5	*	100
Redmond	286	6.3	*	266
Renton	458	9.2	*	762
Sammamish	44	1.3	*	16
SeaTac	123	4.8	*	65
Seattle	4,969	8.8	*	6,596
Shoreline	380	7.2	*	333
Tukwila	68	4.0	*	122
Kitsap	1,726	7.4	8.4	1,644
Bainbridge Island	128	6.3	*	106
Bremerton	438	11.8	*	948

continued Mortality Table A7-a. Residence and Occurrence by County and City, 2000

County and City	Residence		Occurrence
	Total	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>
Kittitas	236	7.1	7.4
Ellensburg	94	6.1	*
Klickitat	180	9.4	8.7
Lewis	766	11.2	9.3
Lincoln	133	13.1	8.7
Mason	516	10.4	9.0
Okanogan	319	8.1	7.6
Pacific	316	15.1	9.8
Pend Oreille	107	9.1	8.5
Pierce	5,174	7.4	8.9
Lakewood	452	7.8	*
Puyallup	329	10.0	*
Tacoma	1,961	10.1	*
University Place	176	5.9	*
San Juan	114	8.1	5.6
Skagit	938	9.1	7.9
Mount Vernon	241	9.2	*
Skamania	72	7.3	8.2
Snohomish	3,824	6.3	8.1
Edmonds	348	8.8	*
Everett	883	9.7	*
Lynnwood	338	10.0	*
Marysville	279	11.0	*
Mountlake Terrace	114	5.6	*
Mukilteo	58	3.2	*
Spokane	3,666	8.8	8.5
Spokane (city)	2,118	10.8	*
Stevens	354	8.8	8.6
Thurston	1,547	7.5	7.9
Lacey	267	8.6	*
Olympia	490	11.5	*
Wahkiakum	45	11.8	8.6
Walla Walla	519	9.4	7.7
Walla Walla (city)	325	10.9	*
Whatcom	1,225	7.3	7.7
Bellingham	645	9.6	*
Whitman	245	6.0	7.7
Pullman	67	2.7	*
Yakima	1,692	7.6	8.2
Yakima (city)	767	10.7	*

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

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

\*Age by city population not available.

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

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Mortality Table A7-b. Residence and Occurrence by County Listed by Age-Adjusted Rates for 1998-2000

County and City	1998-2000			2000		
	Total	Crude Rate <sup>1</sup>	Age-Adj <sup>2</sup>	Total	Crude Rate <sup>1</sup>	Age-Adj <sup>2</sup>
San Juan	319	7.7	5.4	114	8.1	5.6
Whitman	681	5.5	7.1	245	6.0	7.7
Island	1,584	7.5	7.4	531	7.4	7.1
Jefferson	826	10.7	7.4	261	10.1	6.9
Chelan	1,662	8.3	7.5	560	8.4	7.5
Douglas	707	7.3	7.6	253	7.8	7.9
King	34,977	6.8	7.6	11,553	6.7	7.4
Whatcom	3,570	7.3	7.6	1,225	7.3	7.7
Kittitas	735	7.3	7.7	236	7.1	7.4
Benton	2,674	6.4	7.8	943	6.6	8.0
Walla Walla	1,582	9.5	7.8	519	9.4	7.7
Clallam	2,290	11.9	8.0	755	11.7	7.7
Skagit	2,772	9.1	8.0	938	9.1	7.9
Adams	325	6.7	8.0	97	5.9	7.1
Grant	1,566	7.1	8.1	495	6.6	7.5
Thurston	4,634	7.5	8.1	1,547	7.5	7.9
Lincoln	369	12.1	8.1	133	13.1	8.7
<b>State Total</b>	<b>(130,282)</b>	<b>(7.5)</b>	<b>(8.1)</b>	<b>(43,904)</b>	<b>(7.4)</b>	<b>(8.0)</b>
Klickitat	486	8.6	8.2	180	9.4	8.7
Yakima	5,119	7.7	8.2	1,692	7.6	8.2
Snohomish	11,230	6.3	8.2	3,824	6.3	8.1
Kitsap	5,018	7.3	8.3	1,726	7.4	8.4
Asotin	669	10.8	8.4	204	9.9	7.7
Spokane	10,708	8.6	8.4	3,666	8.8	8.5
Clark	6,769	6.7	8.5	2,341	6.8	8.5
Garfield	92	13.0	8.5	30	12.5	7.4
Stevens	1,014	8.7	8.6	354	8.8	8.6
Okanogan	1,082	9.1	8.6	319	8.1	7.6
Pend Oreille	324	9.2	8.8	107	9.1	8.5
Pierce	15,291	7.4	8.9	5,174	7.4	8.9
Skamania	220	7.6	9.0	72	7.3	8.2
Pacific	856	13.6	9.0	316	15.1	9.8
Ferry	174	8.1	9.0	45	6.2	6.5
Mason	1,519	10.4	9.1	516	10.4	9.0
Franklin	895	6.2	9.1	310	6.3	9.4
Lewis	2,243	10.9	9.2	766	11.2	9.3
Cowlitz	2,722	9.8	9.3	951	10.2	9.6
Columbia	160	12.5	9.4	48	11.8	8.9
Wahkiakum	148	12.8	9.4	45	11.8	8.6
Grays Harbor	2,270	11.2	9.7	813	12.1	10.4

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

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

Note: Mean 1998-2000 age-adjusted rate is 8.3; Median 1998-2000 age-adjusted rate is 8.2. State Total is not included in calculation of mean and median.

Mortality Table A8. Sex and Race/Ethnicity by County/City of Residence,2000

County & City	Total	Male	Female	White	African Amer.	Native Amer.	Japa- nese	Chi- nese	Fili- pino	Other Asian	Other	Unk	His- panic <sup>1</sup>
<b>State Total</b>	<b>43,904</b>	<b>21,829</b>	<b>22,075</b>	<b>41,208</b>	<b>1,086</b>	<b>516</b>	<b>179</b>	<b>144</b>	<b>228</b>	<b>513</b>	<b>1</b>	<b>29</b>	<b>761</b>
Adams	97	45	52	97	0	0	0	0	0	0	0	0	14
Asotin	204	103	101	202	0	1	0	0	0	0	0	1	1
Benton	943	461	482	932	3	2	2	2	1	1	0	0	32
Kennewick	448	217	231	444	1	1	1	1	0	0	0	0	19
Richland	267	131	136	261	2	1	1	1	1	0	0	0	3
Chelan	560	290	270	558	0	1	0	0	0	1	0	0	7
Wenatchee	296	143	153	295	0	0	0	0	0	1	0	0	6
Clallam	755	401	354	736	0	14	2	0	0	2	0	1	3
Port Angeles	222	108	114	219	0	2	0	0	0	0	0	1	1
Clark	2,341	1,123	1,218	2,275	26	12	3	3	6	16	0	0	19
Vancouver	1,431	681	750	1,381	24	7	2	1	3	13	0	0	14
Columbia	48	23	25	46	0	1	0	0	0	1	0	0	1
Cowlitz	951	470	481	936	6	4	0	0	1	4	0	0	7
Longview	445	196	249	436	4	1	0	0	0	4	0	0	4
Douglas	253	135	118	252	0	1	0	0	0	0	0	0	6
Ferry	45	30	15	36	1	8	0	0	0	0	0	0	2
Franklin	310	156	154	290	16	1	2	0	0	1	0	0	38
Pasco	237	112	125	219	15	1	1	0	0	1	0	0	29
Garfield	30	16	14	30	0	0	0	0	0	0	0	0	0
Grant	495	267	228	485	6	3	1	0	0	0	0	0	37
Grays Harbor	813	418	395	783	2	25	2	0	0	0	0	1	5
Aberdeen	209	100	109	202	2	5	0	0	0	0	0	0	4
Island	531	267	264	518	3	1	2	0	4	3	0	0	4
Oak Harbor	102	53	49	95	1	1	0	0	4	1	0	0	2
Jefferson	261	135	126	259	0	1	1	0	0	0	0	0	2
King	11,553	5,686	5,867	10,182	613	104	99	121	145	275	1	13	176
Auburn	382	184	198	358	6	6	4	0	1	7	0	0	4
Bellevue	741	355	386	691	10	2	3	8	4	22	0	1	5
Bothell (part)	119	56	63	115	0	2	0	1	1	0	0	0	1
Burien	147	66	81	137	4	2	0	0	1	2	0	1	4
Des Moines	302	131	171	286	5	3	0	0	3	5	0	0	4
Federal Way	447	206	241	390	24	6	1	2	4	20	0	0	13
Kenmore	95	53	42	84	3	1	1	0	2	3	0	1	2
Kent	479	262	217	425	20	5	3	1	5	20	0	0	15
Kirkland	327	162	165	308	5	1	1	2	5	5	0	0	7
Mercer Island	165	70	95	150	5	0	3	3	0	3	0	1	0
Redmond	286	138	148	277	0	0	2	2	2	3	0	0	2
Renton	458	209	249	398	24	5	3	2	14	11	0	1	4
Sammamish	44	23	21	44	0	0	0	0	0	0	0	0	0
SeaTac	123	61	62	113	4	2	1	0	1	2	0	0	3
Seattle	4,969	2,461	2,508	4,075	465	49	70	93	85	124	0	8	86
Shoreline	380	170	210	360	3	4	1	1	3	8	0	0	3
Tukwila	68	37	31	56	8	0	0	0	0	4	0	0	2
Kitsap	1,726	823	903	1,645	31	10	6	0	16	17	0	1	19
Bainbridge Island	128	59	69	124	1	0	0	0	2	1	0	0	1
Bremerton	438	194	244	405	20	2	0	0	5	6	0	0	5

continued Mortality Table A8. Sex and Race/Ethnicity by County/City of Residence, 2000

County & City	Total	Male	Female	White	African Amer.	Native Amer.	Japa- nese	Chi- nese	Fili- pino	Other Asian	Other	Unk	His-panic <sup>1</sup>
Kittitas	236	136	100	236	0	0	0	0	0	0	0	0	3
Ellensburg	94	52	42	94	0	0	0	0	0	0	0	0	2
Klickitat	180	89	91	173	0	7	0	0	0	0	0	0	0
Lewis	766	384	382	762	2	1	0	0	0	1	0	0	7
Lincoln	133	70	63	132	0	0	0	0	0	1	0	0	1
Mason	516	263	253	504	0	10	1	0	0	1	0	0	8
Okanogan	319	168	151	288	1	29	0	0	0	1	0	0	9
Pacific	316	172	144	312	1	3	0	0	0	0	0	0	0
Pend Oreille	107	60	47	106	0	1	0	0	0	0	0	0	0
Pierce	5,174	2,570	2,604	4,702	272	44	31	2	24	98	0	1	55
Lakewood	452	240	212	379	42	2	9	0	8	12	0	0	6
Puyallup	329	154	175	317	3	2	2	0	3	2	0	0	3
Tacoma	1,961	918	1,043	1,697	170	22	10	0	9	53	0	0	30
University Place	176	89	87	158	10	0	0	0	0	8	0	0	1
San Juan	114	59	55	113	1	0	0	0	0	0	0	0	0
Skagit	938	483	455	913	2	17	0	0	3	2	0	1	26
Mount Vernon	241	125	116	236	1	0	0	0	2	2	0	0	14
Skamania	72	41	31	69	0	3	0	0	0	0	0	0	0
Snohomish	3,824	1,955	1,869	3,666	35	40	9	8	16	47	0	3	37
Edmonds	348	155	193	338	3	1	1	0	2	3	0	0	4
Everett	883	435	448	838	12	12	2	0	5	12	0	2	9
Lynnwood	338	168	170	311	9	2	0	3	3	10	0	0	5
Marysville	279	138	141	269	0	4	1	1	2	2	0	0	3
Mountlake Terrace	114	62	52	106	1	1	1	0	2	3	0	0	1
Mukilteo	58	29	29	51	0	0	0	1	0	5	0	1	1
Spokane	3,666	1,731	1,935	3,562	34	33	12	3	3	17	0	2	23
Spokane (city)	2,118	986	1,132	2,033	31	27	9	2	3	12	0	1	11
Stevens	354	181	173	336	0	18	0	0	0	0	0	0	1
Thurston	1,547	762	785	1,500	11	15	5	0	4	12	0	0	16
Lacey	267	127	140	254	3	3	1	0	1	5	0	0	4
Olympia	490	207	283	478	0	5	2	0	1	4	0	0	9
Wahkiakum	45	21	24	44	0	1	0	0	0	0	0	0	0
Walla Walla	519	266	253	509	4	3	0	0	1	2	0	0	15
Walla Walla (city)	325	158	167	317	3	3	0	0	1	1	0	0	10
Whatcom	1,225	637	588	1,181	7	25	1	2	0	7	0	2	14
Bellingham	645	297	348	628	3	5	0	2	0	6	0	1	4
Whitman	245	114	131	242	0	0	0	1	0	2	0	0	1
Pullman	67	33	34	65	0	0	0	0	0	2	0	0	1
Yakima	1,692	818	874	1,596	9	77	0	2	4	1	0	3	172
Yakima (city)	767	340	427	742	7	16	0	1	1	0	0	0	42

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

Mortality Table A9. Age Group by County of Residence, 2000

County	Total	< 1	1-4	5-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85 and Over	Age Unk
<b>State Total</b>	<b>43,904</b>	<b>423</b>	<b>84</b>	<b>135</b>	<b>251</b>	<b>308</b>	<b>685</b>	<b>1,542</b>	<b>2,929</b>	<b>4,186</b>	<b>7,567</b>	<b>13,141</b>	<b>12,651</b>	<b>2</b>
Adams	97	4	0	0	0	1	1	3	6	11	19	27	25	0
Asotin	204	3	0	0	2	1	5	3	14	19	27	55	75	0
Benton	943	19	3	4	2	6	9	29	63	90	180	291	247	0
Chelan	560	3	1	5	4	1	7	16	26	41	91	176	189	0
Clallam	755	5	2	2	2	5	8	16	31	68	126	256	234	0
Clark	2,341	19	2	9	15	15	37	81	179	240	438	672	634	0
Columbia	48	0	0	0	1	1	1	2	1	7	12	14	9	0
Cowlitz	951	11	1	2	7	6	16	28	63	86	181	272	278	0
Douglas	253	1	0	1	4	4	2	8	12	25	45	86	65	0
Ferry	45	0	0	0	0	0	0	4	4	7	9	15	6	0
Franklin	310	4	0	3	1	5	8	17	20	28	59	86	79	0
Garfield	30	0	0	0	0	0	0	0	0	2	4	14	10	0
Grant	495	8	0	1	8	5	12	13	39	49	103	154	103	0
Grays Harbor	813	2	5	0	3	4	9	21	58	87	158	245	221	0
Island	531	3	2	0	3	3	2	15	27	52	116	175	133	0
Jefferson	261	1	0	0	1	2	3	4	15	29	42	86	78	0
King	11,553	102	28	38	52	87	212	418	799	1,067	1,797	3,486	3,466	1
Kitsap	1,726	19	1	1	10	8	21	53	118	169	296	524	506	0
Kittitas	236	5	0	0	3	1	0	7	9	29	49	69	64	0
Klickitat	180	1	3	2	4	0	3	6	10	24	26	55	46	0
Lewis	766	8	0	0	3	4	14	19	46	69	151	230	222	0
Lincoln	133	1	0	1	1	0	0	1	4	8	25	44	48	0
Mason	516	3	2	0	3	2	4	15	22	58	105	177	125	0
Okanogan	319	5	1	0	2	6	5	17	16	32	59	97	79	0
Pacific	316	2	1	1	1	2	2	6	21	29	57	108	86	0
Pend Oreille	107	1	0	0	0	1	0	6	12	12	29	27	19	0
Pierce	5,174	62	7	23	39	38	80	195	392	491	986	1,552	1,309	0
San Juan	114	0	0	0	0	0	0	2	7	12	27	28	38	0
Skagit	938	11	0	2	6	5	18	30	52	75	165	281	293	0
Skamania	72	2	0	0	1	2	1	4	2	14	15	15	16	0
Snohomish	3,824	36	8	10	22	21	73	167	292	397	668	1,076	1,054	0
Spokane	3,666	28	4	8	21	20	49	139	222	332	571	1,109	1,163	0
Stevens	354	1	2	5	4	4	4	12	21	42	63	97	99	0
Thurston	1,547	11	0	5	10	14	22	48	117	163	260	450	447	0
Wahkiakum	45	0	0	0	0	0	0	1	3	6	10	13	12	0
Walla Walla	519	2	4	0	3	3	4	13	22	36	81	173	178	0
Whatcom	1,225	7	0	6	3	8	21	47	80	101	194	357	400	1
Whitman	245	2	0	0	4	3	1	7	8	19	42	71	88	0
Yakima	1,692	31	7	6	6	20	31	69	96	160	281	478	507	0

Mortality Table A10. Month of Death by County of Residence, 2000

County	Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>State Total</b>	<b>43,904</b>	<b>4,370</b>	<b>3,630</b>	<b>3,746</b>	<b>3,527</b>	<b>3,590</b>	<b>3,437</b>	<b>3,407</b>	<b>3,462</b>	<b>3,405</b>	<b>3,676</b>	<b>3,677</b>	<b>3,977</b>
Adams	97	9	7	9	11	10	7	6	6	6	4	9	13
Asotin	204	20	20	26	23	11	16	13	15	14	16	13	17
Benton	943	72	82	71	69	81	78	82	79	70	83	94	82
Chelan	560	57	48	43	50	43	28	50	44	48	52	44	53
Clallam	755	88	69	66	65	63	43	63	48	51	57	66	76
Clark	2,341	217	185	203	201	195	178	179	192	176	198	231	186
Columbia	48	6	2	3	2	2	2	2	4	4	9	6	6
Cowlitz	951	90	92	65	83	74	84	77	85	64	85	74	78
Douglas	253	27	15	25	17	28	25	17	15	18	21	18	27
Ferry	45	5	3	4	3	4	3	5	3	4	2	7	2
Franklin	310	37	16	26	24	24	26	20	24	33	24	19	37
Garfield	30	3	3	0	4	5	2	2	2	1	2	4	2
Grant	495	45	35	60	43	41	34	40	33	23	40	47	54
Grays Harbor	813	81	84	71	73	56	42	79	67	54	57	80	69
Island	531	50	59	41	46	32	34	50	35	44	44	42	54
Jefferson	261	25	24	25	20	20	26	17	31	18	20	21	14
King	11,553	1,156	931	1,034	883	941	946	929	889	904	970	911	1,059
Kitsap	1,726	173	138	137	151	144	121	141	137	128	136	155	165
Kittitas	236	18	30	13	18	16	23	22	19	16	16	17	28
Klickitat	180	16	13	25	11	13	15	11	16	13	14	11	22
Lewis	766	82	63	69	60	74	54	48	54	68	68	60	66
Lincoln	133	15	14	10	15	6	7	10	6	12	10	12	16
Mason	516	52	46	38	37	52	39	35	36	43	48	45	45
Okanogan	319	24	21	25	19	24	28	20	32	32	33	25	36
Pacific	316	37	25	18	23	23	23	21	21	26	28	38	33
Pend Oreille	107	14	7	3	10	14	7	8	9	14	10	6	5
Pierce	5,174	510	436	411	437	434	398	397	439	405	411	439	457
San Juan	114	13	9	9	5	16	11	8	5	10	10	9	9
Skagit	938	92	72	89	82	84	71	67	66	68	104	69	74
Skamania	72	3	5	5	5	5	6	9	7	8	5	8	6
Snohomish	3,824	394	333	327	301	287	310	290	310	318	293	323	338
Spokane	3,666	406	266	329	280	306	291	289	263	255	318	320	343
Stevens	354	34	24	29	30	28	32	30	25	25	31	21	45
Thurston	1,547	162	135	111	124	128	126	112	122	121	134	130	142
Wahkiakum	45	7	3	2	3	3	7	6	2	3	3	3	3
Walla Walla	519	42	46	45	38	40	34	41	39	56	57	44	37
Whatcom	1,225	110	101	112	91	103	106	69	112	109	108	100	104
Whitman	245	21	20	27	24	17	26	22	14	19	16	16	23
Yakima	1,692	157	148	140	146	143	128	120	156	124	139	140	151

Mortality Table A11. Place Where Death Occurred by County of Occurrence, 2000

County	Total	General Hospital	Nursing Home	Home	Federal Facility	Psychiatric Hospital	State Facility	Dead on Arrival	Other and Unk
<b>State Total</b>	<b>43,934</b>	<b>15,616</b>	<b>12,869</b>	<b>12,307</b>	<b>573</b>	<b>44</b>	<b>1</b>	<b>23</b>	<b>2,501</b>
Adams	86	24	31	22	0	0	0	0	9
Asotin	171	51	61	49	0	0	0	0	10
Benton	917	463	150	252	0	0	0	2	50
Chelan	684	356	162	134	0	0	0	0	32
Clallam	686	202	171	266	0	0	0	0	47
Clark	2,157	562	559	818	0	0	0	0	218
Columbia	41	11	16	13	0	0	0	0	1
Cowlitz	1,001	550	217	190	0	0	0	0	44
Douglas	139	0	58	65	0	0	0	0	16
Ferry	34	14	0	13	0	0	0	1	6
Franklin	278	105	71	82	0	0	0	0	20
Garfield	21	5	10	3	0	0	0	0	3
Grant	400	139	97	121	0	0	0	0	43
Grays Harbor	640	230	192	201	0	0	0	0	17
Island	378	75	103	176	1	0	0	0	23
Jefferson	199	59	62	67	0	0	0	2	9
King	12,801	5,227	3,649	2,885	214	1	0	5	820
Kitsap	1,644	484	629	467	19	0	0	0	45
Kittitas	211	45	65	69	0	0	0	0	32
Klickitat	131	42	17	63	0	0	0	0	9
Lewis	689	217	229	211	0	0	0	0	32
Lincoln	98	40	29	25	0	0	0	0	4
Mason	400	86	121	161	0	0	0	1	31
Okanogan	277	80	82	94	0	0	0	0	21
Pacific	250	87	58	91	0	0	0	0	14
Pend Oreille	79	33	12	28	0	0	0	0	6
Pierce	5,223	1,766	1,632	1,424	226	24	0	3	148
San Juan	79	0	32	39	0	0	0	0	8
Skagit	941	305	308	275	0	0	0	1	52
Skamania	49	0	0	34	0	0	0	0	15
Snohomish	3,412	891	1,004	1,295	0	0	0	1	221
Spokane	4,147	1,666	1,177	1,026	69	19	0	0	190
Stevens	273	69	70	105	0	0	0	3	26
Thurston	1,653	536	511	515	0	0	0	4	87
Wahkiakum	28	0	11	14	0	0	0	0	3
Walla Walla	600	208	194	132	44	0	0	0	22
Whatcom	1,243	321	449	388	0	0	0	0	85
Whitman	193	56	80	51	0	0	0	0	6
Yakima	1,681	611	550	443	0	0	1	0	76

## B. Autopsy and Disposition

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

Mortality Table B1. Percent Autopsy and Cremation for Residents, 1990-2000

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

The percent of deaths with an autopsy has steadily decreased since 1990. Rates of autopsy vary by age and by manner of death. Table B2 provides more detailed information on autopsies for 2000. The percent of total deaths with cremation as a disposition type have increased substantially since 1990.

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

Age Group	Total Deaths			Natural or Disease			External Causes (e.g., Accident, Suicide, Homicide, etc.)		
	Total	Autopsy	Percent <sup>1</sup>	Total	Autopsy	Percent <sup>1</sup>	Total	Autopsy	Percent <sup>1</sup>
<b>State Total</b>	<b>43,904</b>	<b>4,355</b>	<b>9.9</b>	<b>40,769</b>	<b>2,222</b>	<b>5.5</b>	<b>3,135</b>	<b>2,133</b>	<b>68.0</b>
Under 1	423	198	46.8	396	176	44.4	27	22	81.5
1-4	84	51	60.7	45	22	48.9	39	29	74.4
5-14	135	79	58.5	65	22	33.8	70	57	81.4
15-19	251	180	71.7	37	8	21.6	214	172	80.4
20-24	308	208	67.5	67	28	41.8	241	180	74.7
25-34	685	434	63.4	275	93	33.8	410	341	83.2
35-44	1,542	749	48.6	980	300	30.6	562	449	79.9
45-54	2,929	843	28.8	2,454	460	18.7	475	383	80.6
55-64	4,186	578	13.8	3,933	384	9.8	253	194	76.7
65-74	7,567	401	5.3	7,364	293	4.0	203	108	53.2
75-84	13,141	437	3.3	12,820	301	2.3	321	136	42.4
85 and over	12,651	196	1.5	12,332	135	1.1	319	61	19.1
Unknown	2	1	50.0	1	0	0.0	1	1	100.0

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

Note:

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



Mortality Table B3. Type of Disposition by County of Residence

County	Total	Burial	Cremation	Removal	Medical Research	Body Not Recovered	Unknown
<b>State Total</b>	<b>43,904</b>	<b>17,041</b>	<b>25,302</b>	<b>1,372</b>	<b>160</b>	<b>9</b>	<b>20</b>
Adams	97	57	36	3	1	0	0
Asotin	204	74	79	49	1	0	1
Benton	943	437	467	37	2	0	0
Chelan	560	255	303	2	0	0	0
Clallam	755	191	550	12	2	0	0
Clark	2,341	957	1,259	119	5	0	1
Columbia	48	16	30	2	0	0	0
Cowlitz	951	385	544	21	1	0	0
Douglas	253	129	123	1	0	0	0
Ferry	45	20	21	4	0	0	0
Franklin	310	146	148	16	0	0	0
Garfield	30	19	6	5	0	0	0
Grant	495	205	273	15	2	0	0
Grays Harbor	813	323	478	8	3	0	1
Island	531	131	389	8	2	1	0
Jefferson	261	55	201	3	2	0	0
King	11,553	3,992	7,062	418	72	3	6
Kitsap	1,726	547	1,108	61	9	0	1
Kittitas	236	91	143	1	1	0	0
Klickitat	180	83	78	19	0	0	0
Lewis	766	365	383	17	1	0	0
Lincoln	133	82	50	1	0	0	0
Mason	516	144	362	9	1	0	0
Okanogan	319	155	158	6	0	0	0
Pacific	316	128	184	4	0	0	0
Pend Oreille	107	36	68	3	0	0	0
Pierce	5,174	2,171	2,808	172	19	2	2
San Juan	114	15	96	2	1	0	0
Skagit	938	353	561	23	1	0	0
Skamania	72	26	38	7	1	0	0
Snohomish	3,824	1,367	2,325	109	17	3	3
Spokane	3,666	1,489	2,062	110	5	0	0
Stevens	354	160	184	9	0	0	1
Thurston	1,547	506	1,011	24	5	0	1
Wahkiakum	45	21	22	1	0	0	1
Walla Walla	519	232	277	8	1	0	1
Whatcom	1,225	526	672	23	4	0	0
Whitman	245	129	110	6	0	0	0
Yakima	1,692	1,023	633	34	1	0	1

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

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

Mortality Table C1. Age-Adjusted Rates<sup>1</sup> for 10 Leading Causes of Death for Residents, 1990-2000

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

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

Note:

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

ICD codes and comparability ratios are:

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

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

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

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

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

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

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

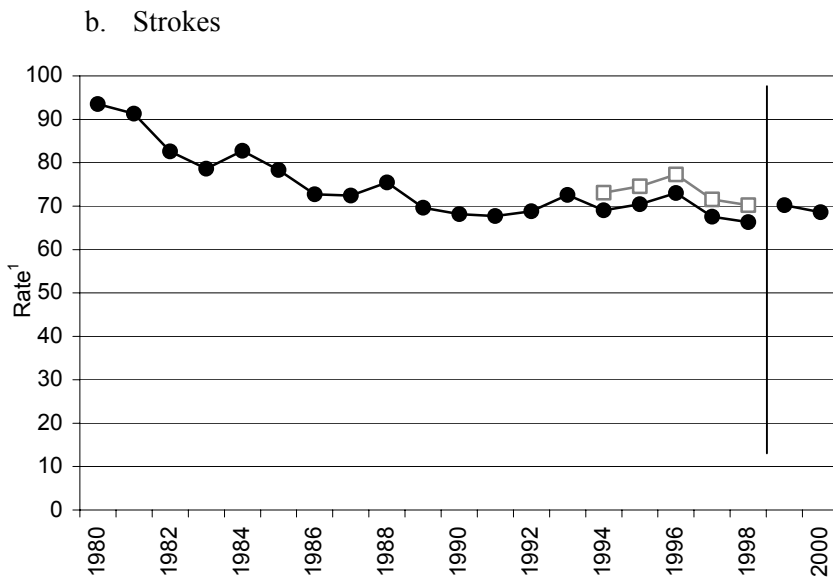
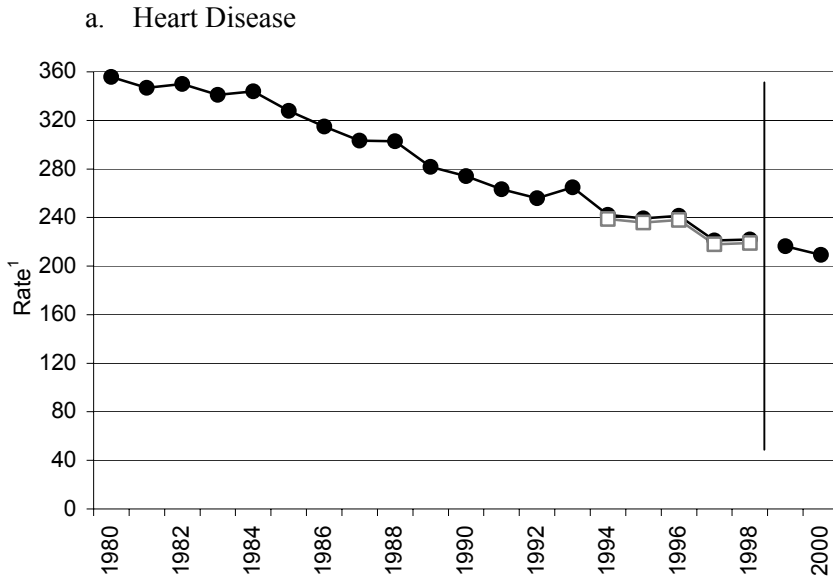
Influenza and Pneumonia: ICD-9: 480-487; ICD-10: J10-J18; CR=0.6982

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

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

The ten leading causes of death accounted for 81.5% of all deaths to residents of Washington State in 2000. Heart disease and cancer alone account for 50% of all deaths. Alzheimer's Disease and Heart Disease have the largest changes over time with heart disease decreasing and Alzheimer's Disease increasing. There have been smaller increases in mortality due to diabetes during the last decade.

Mortality Figure 3. Mortality Rates for Residents, 1980-2000



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

- Unmodified Rates
- Comparability-Modified Rates

Note:

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

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

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

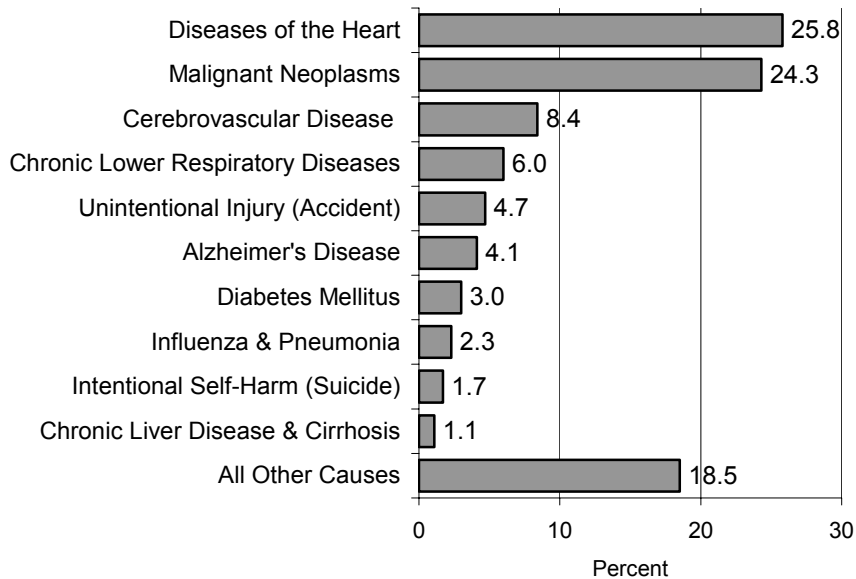
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Mortality Table C2. Leading Causes of Death for Residents, 2000

Rank	Causes of Death and ICD-10 Codes	Number	Percent <sup>1</sup>	Cumulative Percent
	<b>All Causes</b>	<b>43,904</b>	<b>100.0</b>	
1	Diseases of the Heart (I00-I09,I11,I13,I20-I51)	11,349	25.8	25.8
2	Malignant Neoplasms (C00-C97)	10,656	24.3	50.1
3	Cerebrovascular Diseases (I60-I69)	3,709	8.4	58.6
4	Chronic Lower Respiratory Diseases (J40-J47)	2,642	6.0	64.6
5	Unintentional Injury (Accident) (V01-X59, Y85-Y86)	2,048	4.7	69.3
6	Alzheimer's Disease (G30)	1,801	4.1	73.4
7	Diabetes Mellitus (E10-E14)	1,331	3.0	76.4
8	Influenza and Pneumonia (J10-J18)	1,005	2.3	78.7
9	Intentional Self-Harm (Suicide) (X60-X84,Y87.0)	727	1.7	80.3
10	Chronic Liver Disease & Cirrhosis (K70, K73-K74)	493	1.1	81.5
	All Other Causes	8,143	18.5	100.0

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

Mortality Figure 4. Leading Causes of Death for Residents, 2000



Mortality Table C3. Leading Causes by Age Group and Sex for Residents, 2000

Age Group with Causes and ICD-10 Codes	Total			Male			Female		
	No.	Rate <sup>1</sup>	Pct <sup>2</sup>	No.	Rate <sup>1</sup>	Pct <sup>2</sup>	No.	Rate <sup>1</sup>	Pct <sup>2</sup>
<b>All Ages</b>									
All Causes	43,904	744.9	100.0	21,829	743.9	100.0	22,075	745.8	100.0
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	11,349	192.5	25.8	5,857	199.6	26.8	5,492	185.6	24.9
Malignant Neoplasms (C00-C97)	10,656	180.8	24.3	5,449	185.7	25.0	5,207	175.9	23.6
Cerebrovascular Diseases (I60-I69)	3,709	62.9	8.4	1,490	50.8	6.8	2,219	75.0	10.1
Chronic Lower Respiratory Diseases (J40-J47)	2,642	44.8	6.0	1,262	43.0	5.8	1,380	46.6	6.3
Unintentional Injury (Accident) (V01-X59,Y85-Y86)	2,048	34.7	4.7	1,326	45.2	6.1	722	24.4	3.3
Alzheimer's Disease (G30)	1,801	30.6	4.1	538	18.3	2.5	1,263	42.7	5.7
Diabetes Mellitus (E10-E14)	1,331	22.6	3.0	659	22.5	3.0	672	22.7	3.0
Influenza and Pneumonia (J10-J18)	1,005	17.1	2.3	438	14.9	2.0	567	19.2	2.6
Intentional Self-Harm (Suicide)(X60-X84,Y87.0)	727	12.3	1.7	587	20.0	2.7	140	4.7	0.6
Chronic Liver Disease & Cirrhosis (K70,K73-K74)	493	8.4	1.1	321	10.9	1.5	172	5.8	0.8
All Other Causes	8,143	138.2	18.5	3,902	133.0	17.9	4,241	143.3	19.2
<b>Under 1</b>									
All Causes	423	522.2	100.0	225	541.2	100.0	198	502.2	100.0
Congenital Malformations (Q00-Q99)	92	113.6	21.7	49	117.9	21.8	43	109.1	21.7
Sudden Infant Death Syndrome (R95)	76	93.8	18.0	41	98.6	18.2	35	88.8	17.7
Short Gestation & Low Birth Weight (P07)	39	48.1	9.2	23	55.3	10.2	16	40.6	8.1
Complic. of Placenta, Cord & Membranes (P02)	23	28.4	5.4	15	36.1	6.7	8	20.3	4.0
Unintentional Injury (Accident) (V01-X59,Y85-Y86)	19	23.5	4.5	8	19.2	3.6	11	27.9	5.6
All Other Causes	174	214.8	41.1	89	214.1	39.6	85	215.6	42.9
<b>1-4</b>									
All Causes	84	26.8	100.0	49	30.5	100.0	35	22.9	100.0
Unintentional Injury (Accident) (V01-X59,Y85-Y86)	33	10.5	39.3	20	12.5	40.8	13	8.5	37.1
Congenital Anomalies (Q00-Q99)	7	2.2	8.3	4	*	8.2	3	*	8.6
Malignant Neoplasms (C00-C97)	7	2.2	8.3	4	*	8.2	3	*	8.6
Assault (Homicide) (X85-Y09,Y87.1)	5	1.6	6.0	3	*	6.1	2	*	5.7
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	4	*	4.8	3	*	6.1	1	*	2.9
All Other Causes	28	8.9	33.3	15	9.3	30.6	13	8.5	37.1
<b>5-14</b>									
All Causes	135	15.7	100.0	76	17.2	100.0	59	14.1	100.0
Unintentional Injury (Accident) (V01-X59,Y85-Y86)	57	6.6	42.2	36	8.2	47.4	21	5.0	35.6
Malignant Neoplasms (C00-C97)	22	2.6	16.3	8	1.8	10.5	14	3.3	23.7
Congenital Anomalies (Q00-Q99)	8	0.9	5.9	3	*	3.9	5	1.2	8.5
Intentional Self-Harm (Suicide)(X60-X84,Y87.0)	6	0.7	4.4	4	*	5.3	2	*	3.4
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	5	0.6	3.7	4	*	5.3	1	*	1.7
All Other Causes	37	4.3	27.4	21	4.8	27.6	16	3.8	27.1
<b>15 - 19</b>									
All Causes	251	58.6	100.0	185	83.9	100.0	66	31.8	100.0
Unintentional Injury (Accident) (V01-X59,Y85-Y86)	140	32.7	55.8	97	44.0	52.4	43	20.7	65.2
Intentional Self-Harm (Suicide)(X60-X84,Y87.0)	42	9.8	16.7	33	15.0	17.8	9	4.3	13.6
Assault (Homicide) (X85-Y09,Y87.1)	27	6.3	10.8	26	11.8	14.1	1	*	1.5
Malignant Neoplasms (C00-C97)	17	4.0	6.8	13	5.9	7.0	4	*	6.1
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	4	*	1.6	3	*	1.6	1	*	1.5
All Other Causes	21	4.9	8.4	13	5.9	7.0	8	3.9	12.1
<b>20 - 24</b>									
All Causes	308	78.9	100.0	237	118.0	100.0	71	37.5	100.0
Unintentional Injury (Accident) (V01-X59,Y85-Y86)	151	38.7	49.0	122	60.8	51.5	29	15.3	40.8
Intentional Self-Harm (Suicide)(X60-X84,Y87.0)	48	12.3	15.6	40	19.9	16.9	8	4.2	11.3
Assault (Homicide) (X85-Y09,Y87.1)	29	7.4	9.4	23	11.5	9.7	6	3.2	8.5
Malignant Neoplasms (C00-C97)	17	4.4	5.5	11	5.5	4.6	6	3.2	8.5
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	8	2.1	2.6	5	2.5	2.1	3	*	4.2
All Other Causes	55	14.1	17.9	36	17.9	15.2	19	10.0	26.8
<b>25 - 34</b>									
All Causes	685	81.4	100.0	470	109.3	100.0	215	52.3	100.0
Unintentional Injury (Accident) (V01-X59,Y85-Y86)	228	27.1	33.3	166	38.6	35.3	62	15.1	28.8
Intentional Self-Harm (Suicide)(X60-X84,Y87.0)	118	14.0	17.2	95	22.1	20.2	23	5.6	10.7
Malignant Neoplasms (C00-C97)	60	7.1	8.8	29	6.7	6.2	31	7.5	14.4
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	43	5.1	6.3	30	7.0	6.4	13	3.2	6.0
Assault (Homicide) (X85-Y09,Y87.1)	42	5.0	6.1	29	6.7	6.2	13	3.2	6.0
All Other Causes	194	23.1	28.3	121	28.1	25.7	73	17.8	34.0

continued Mortality Table C3. Leading Causes by Age Group and Sex for Residents, 2000

Age Group with Causes and ICD-10 Codes	Total			Male			Female		
	No.	Rate <sup>1</sup>	Pct <sup>2</sup>	No.	Rate <sup>1</sup>	Pct <sup>2</sup>	No.	Rate <sup>1</sup>	Pct <sup>2</sup>
<b>35 - 44</b>									
All Causes	1,542	158.1	100.0	958	195.4	100.0	584	120.5	100.0
Malignant Neoplasms (C00-C97)	330	33.8	21.4	135	27.5	14.1	195	40.2	33.4
Unintentional Injury (Accident) (V01-X59,Y85-Y86)	324	33.2	21.0	232	47.3	24.2	92	19.0	15.8
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	207	21.2	13.4	149	30.4	15.6	58	12.0	9.9
Intentional Self-Harm (Suicide)(X60-X84,Y87.0)	170	17.4	11.0	138	28.1	14.4	32	6.6	5.5
Chronic Liver Disease & Cirrhosis (K70,K73-K74)	66	6.8	4.3	40	8.2	4.2	26	5.4	4.5
All Other Causes	445	45.6	28.9	264	53.8	27.6	181	37.3	31.0
<b>45 - 54</b>									
All Causes	2,929	346.2	100.0	1,870	444.6	100.0	1,059	248.9	100.0
Malignant Neoplasms (C00-C97)	937	110.8	32.0	499	118.6	26.7	438	103.0	41.4
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	568	67.1	19.4	431	102.5	23.0	137	32.2	12.9
Unintentional Injury (Accident) (V01-X59,Y85-Y86)	278	32.9	9.5	207	49.2	11.1	71	16.7	6.7
Intentional Self-Harm (Suicide)(X60-X84,Y87.0)	132	15.6	4.5	99	23.5	5.3	33	7.8	3.1
Chronic Liver Disease & Cirrhosis (K70,K73-K74)	118	13.9	4.0	86	20.4	4.6	32	7.5	3.0
All Other Causes	896	105.9	30.6	548	130.3	29.3	348	81.8	32.9
<b>55 - 64</b>									
All Causes	4,186	843.0	100.0	2,482	1,006.8	100.0	1,704	681.4	100.0
Malignant Neoplasms (C00-C97)	1,693	340.9	40.4	883	358.2	35.6	810	323.9	47.5
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	950	191.3	22.7	673	273.0	27.1	277	110.8	16.3
Chronic Lower Respiratory Diseases (J40-J47)	193	38.9	4.6	110	44.6	4.4	83	33.2	4.9
Diabetes Mellitus (E10-E14)	185	37.3	4.4	101	41.0	4.1	84	33.6	4.9
Cerebrovascular Diseases (I60-I69)	159	32.0	3.8	90	36.5	3.6	69	27.6	4.0
All Other Causes	1,006	202.6	24.0	625	253.5	25.2	381	152.4	22.4
<b>65 - 74</b>									
All Causes	7,567	2,244.3	100.0	4,290	2,733.8	100.0	3,277	1,818.1	100.0
Malignant Neoplasms (C00-C97)	2,732	810.3	36.1	1,501	956.5	35.0	1,231	683.0	37.6
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	1,865	553.1	24.6	1,204	767.3	28.1	661	366.7	20.2
Chronic Lower Respiratory Diseases (J40-J47)	644	191.0	8.5	318	202.6	7.4	326	180.9	9.9
Cerebrovascular Diseases (I60-I69)	419	124.3	5.5	225	143.4	5.2	194	107.6	5.9
Diabetes Mellitus (E10-E14)	322	95.5	4.3	176	112.2	4.1	146	81.0	4.5
All Other Causes	1,585	470.1	20.9	866	551.9	20.2	719	398.9	21.9
<b>75-84</b>									
All Causes	13,141	5,455.0	100.0	6,517	6,593.1	100.0	6,624	4,663.1	100.0
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	3,577	1,484.9	27.2	1,894	1,916.1	29.1	1,683	1,184.8	25.4
Malignant Neoplasms (C00-C97)	3,243	1,346.2	24.7	1,663	1,682.4	25.5	1,580	1,112.3	23.9
Cerebrovascular Diseases (I60-I69)	1,323	549.2	10.1	567	573.6	8.7	756	532.2	11.4
Chronic Lower Respiratory Diseases (J40-J47)	1,103	457.9	8.4	521	527.1	8.0	582	409.7	8.8
Alzheimer's Disease (G30)	576	239.1	4.4	225	227.6	3.5	351	247.1	5.3
All Other Causes	3,319	1,377.8	25.3	1,647	1,666.2	25.3	1,672	1,177.0	25.2
<b>85 and Over</b>									
All Causes	12,651	15,045.0	100.0	4,469	17,046.0	100.0	8,182	14,139.0	100.0
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	4,109	4,886.7	32.5	1,457	5,557.5	32.6	2,652	4,582.8	32.4
Cerebrovascular Diseases (I60-I69)	1,642	1,952.8	13.0	531	2,025.4	11.9	1,111	1,919.9	13.6
Malignant Neoplasms (C00-C97)	1,598	1,900.5	12.6	703	2,681.5	15.7	895	1,546.6	10.9
Alzheimer's Disease (G30)	1,105	1,314.1	8.7	262	999.4	5.9	843	1,456.8	10.3
Chronic Lower Respiratory Diseases (J40-J47)	611	726.6	4.8	270	1,029.9	6.0	341	589.3	4.2
All Other Causes	3,586	4,264.7	28.3	1,246	4,752.6	27.9	2,340	4,043.7	28.6

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

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

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

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

Mortality Table C4. Crude Rates for Selected Causes by Sex for Residents, 2000

Cause with ICD-10 Code	Total		Male		Female	
	Number	Crude Rate <sup>2</sup>	Number	Crude Rate <sup>2</sup>	Number	Crude Rate <sup>2</sup>
<b>All Causes<sup>1</sup></b>	(43,904)	(744.9)	(21,829)	(743.9)	(22,075)	(745.8)
<b>Certain Infectious &amp; Parasitic Disease (A00-B99)</b>	(797)	(13.5)	(450)	(15.3)	(347)	(11.7)
Tuberculosis (A16-A19)	7	0.1	5	0.2	2	*
Septicemia (A40-A41)	340	5.8	152	5.2	188	6.4
Viral Hepatitis (B15-B19)	159	2.7	111	3.8	48	1.6
HIV (B20-B24)	127	2.2	113	3.9	14	0.5
Other (A00-A15,A20-A39,A42-B14,B25-B99)	164	2.8	69	2.4	95	3.2
<b>Neoplasms (C00-D48)</b>	(10,892)	(184.8)	(5,566)	(189.7)	(5,326)	(179.9)
Malignant Neoplasms (C00-C97)	10,656	180.8	5,449	185.7	5,207	175.9
In Situ & Benign Neoplasms (D00-D48)	236	4.0	117	4.0	119	4.0
<b>Diseases of Blood &amp; Blood-Forming Organs (D50-D89)</b>	(115)	(2.0)	(56)	(1.9)	(59)	(2.0)
Anemias (D50-D64)	44	0.7	19	0.6	25	0.8
Other (D65-D89)	71	1.2	37	1.3	34	1.1
<b>Endocrine, Nutritional &amp; Metabolic Diseases (E00-E90)</b>	(1,782)	(30.2)	(836)	(28.5)	(946)	(32.0)
Diabetes Mellitus (E10-E14)	1,331	22.6	659	22.5	672	22.7
Nutritional Diseases (E40-E64)	58	1.0	17	0.6	41	1.4
Other (E00-E09,E15-E39,E65-E90)	393	6.7	160	5.5	233	7.9
<b>Mental &amp; Behavioral Disorders (F01-F99)</b>	(443)	(7.5)	(189)	(6.4)	(254)	(8.6)
<b>Diseases of the Nervous System (G00-G98)</b>	(2,779)	(47.1)	(1,053)	(35.9)	(1,726)	(58.3)
Meningitis (G00-G03)	9	0.2	5	0.2	4	*
Amyotrophic Lateral Sclerosis (G12.2)	151	2.6	71	2.4	80	2.7
Parkinson's Disease (G20-G21)	422	7.2	242	8.2	180	6.1
Alzheimer's Disease (G30)	1,801	30.6	538	18.3	1,263	42.7
Multiple Sclerosis (G35)	83	1.4	32	1.1	51	1.7
Other (G04-G12.1,G12.3-G19,G22-G29,G31-G34,G36-G98)	313	5.3	165	5.6	148	5.0
<b>Diseases of the Eye &amp; Ear (H00-H93)</b>	(6)	(0.1)	(1)	(*)	(5)	(0.2)
<b>Diseases of the Circulatory System (I00-I99)</b>	(16,283)	(276.3)	(7,904)	(269.4)	(8,379)	(283.1)
Major Cardiovascular Diseases (I00-I78)	(16,202)	(274.9)	(7,866)	(268.1)	(8,336)	(281.6)
Diseases of the Heart (I00-I09,I11,I13,I20-I51)	(11,349)	(192.5)	(5,857)	(199.6)	(5,492)	(185.6)
Acute & Chronic Rheumatic Disease (I00-I09)	96	1.6	23	0.8	73	2.5
Hypertensive Heart Disease (I11)	337	5.7	125	4.3	212	7.2
Hypertensive Heart & Renal Disease (I13)	48	0.8	16	0.5	32	1.1
Ischemic Heart Diseases (I20-I25)	(8,613)	(146.1)	(4,688)	(159.8)	(3,925)	(132.6)
Acute Myocardial Infarction (I21-I22)	2,701	45.8	1,494	50.9	1,207	40.8
Other Acute Ischemic Heart Disease (I24)	11	0.2	4	*	7	0.2
Other Chronic Ischemic Heart Disease (I20,I25)	(5,901)	(100.1)	(3,190)	(108.7)	(2,711)	(91.6)
Atherosclerotic Cardiovascular Disease (I25.0)	1,805	30.6	970	33.1	835	28.2
All Other Chronic Disease (I20,I25.1-I25.9)	4,096	69.5	2,220	75.7	1,876	63.4
Other Heart Diseases (I26-I51)	(2,255)	(38.3)	(1,005)	(34.3)	(1,250)	(42.2)
Acute & Subacute Endocarditis (I33)	23	0.4	16	0.5	7	0.2
Disease Pericardium & Acute Myocarditis (I30-I31,I40)	13	0.2	6	0.2	7	0.2
Heart Failure (I50)	505	8.6	193	6.6	312	10.5
All Other Heart disease (I26-I28,I34-I38,I42-I49,I51)	1,714	29.1	790	26.9	924	31.2
Hypertension & Hypertensive Renal Disease (I10,I12)	280	4.8	102	3.5	178	6.0
Cerebrovascular Diseases (I60-I69)	3,709	62.9	1,490	50.8	2,219	75.0
Atherosclerosis (I70)	339	5.8	134	4.6	205	6.9
Other Diseases of Circulatory System (I71-I78)	(525)	(8.9)	(283)	(9.6)	(242)	(8.2)
Aortic Aneurysm & Dissection (I71)	348	5.9	201	6.9	147	5.0
Other Disease of Arteries (I72-I78)	177	3.0	82	2.8	95	3.2
Other (I80-I99)	81	1.4	38	1.3	43	1.5



continued Mortality Table C4. Crude Rates for Selected Causes by Sex for Residents, 2000

Cause with ICD-10 Code	Total		Male		Female	
	Number	Crude Rate <sup>2</sup>	Number	Crude Rate <sup>2</sup>	Number	Crude Rate <sup>2</sup>
<b>Diseases of the Respiratory System (J00-J98)</b>	(4,531)	(76.9)	(2,164)	(73.7)	(2,367)	(80.0)
Influenza and Pneumonia (J10-J18)	(1,005)	(17.1)	(438)	(14.9)	(567)	(19.2)
Influenza (J10-J11)	29	0.5	10	0.3	19	0.6
Pneumonia (J12-J18)	976	16.6	428	14.6	548	18.5
Other Acute Lower Respiratory Infections (J20-J22)	8	0.1	4	*	4	*
Chronic Lower Respiratory Disease (J40-J47)	(2,642)	(44.8)	(1,262)	(43.0)	(1,380)	(46.6)
Bronchitis, Chronic and Unspecified (J40-J42)	24	0.4	11	0.4	13	0.4
Emphysema (J43)	275	4.7	133	4.5	142	4.8
Asthma (J45-J46)	84	1.4	27	0.9	57	1.9
Other Chronic Lower Respiratory Disease (J44,J47)	2,259	38.3	1,091	37.2	1,168	39.5
Pneumoconioses & Chemical Effects (J60-J66,J68)	27	0.5	27	0.9	0	*
Pneumonitis Due to Solids & Liquids (J69)	394	6.7	207	7.1	187	6.3
Other (J00-J06,J30-J39,J67,J70-J98)	455	7.7	226	7.7	229	7.7
<b>Diseases of the Digestive System (K00-K92)</b>	(1,564)	(26.5)	(774)	(26.4)	(790)	(26.7)
Peptic Ulcer (K25-K28)	116	2.0	57	1.9	59	2.0
Diseases of Appendix (K35-K38)	6	0.1	4	*	2	*
Hernia (K40-K46)	33	0.6	13	0.4	20	0.7
Chronic Liver Disease & Cirrhosis (K70,K73-K74)	(493)	(8.4)	(321)	(10.9)	(172)	(5.8)
Alcoholic Liver Disease (K70)	370	6.3	264	9.0	106	3.6
Other (K73-K74)	123	2.1	57	1.9	66	2.2
Cholelithiasis & Other Gallbladder Disease (K80-K82)	56	1.0	27	0.9	29	1.0
Other (K00-K24,K29-K34,K39,K47-K69,K71-K72,K75-K79,K83-K92)	860	14.6	352	12.0	508	17.2
<b>Diseases of Skin &amp; Subcutaneous Tissue (L00-L98)</b>	(34)	(0.6)	(10)	(0.3)	(24)	(0.8)
<b>Diseases Musculoskeletal &amp; Connective Tissue (M00-M99)</b>	(293)	(5.0)	(93)	(3.2)	(200)	(6.8)
<b>Diseases of the Genitourinary System (N00-N98)</b>	(606)	(10.3)	(247)	(8.4)	(359)	(12.1)
Nephritis (N00-N07,N17-N19,N25-N27)	(292)	(5.0)	(137)	(4.7)	(155)	(5.2)
Acute Nephrotic Syndrome (N00-N01,N04)	7	0.1	2	*	5	0.2
Chronic Nephritis & Unsp. Nephritis(N02-N03,N05-N07,N26)	23	0.4	13	0.4	10	0.3
Renal Failure (N17-N19)	260	4.4	121	4.1	139	4.7
Other Disorders of Kidney (N25,N27)	2	*	1	*	1	*
Infections of Kidney (N10-N12,N13.6,N15.1)	16	0.3	5	0.2	11	0.4
Hyperplasia of Prostate (N40)	n/a	n/a	6	0.2	n/a	n/a
Other(N13.0-N13.5,N13.7-N15.0,N15.8-N16,N20-N23,N28-N39,N41-N99)	292	5.0	99	3.4	193	6.5
<b>Pregnancy, Childbirth &amp; Puerperium (O00-O99)</b>	n/a	n/a	n/a	n/a	(3)	(*)
<b>Conditions Originating in Perinatal Period (P00-P96)</b>	(176)	(3.0)	(96)	(3.3)	(80)	(2.7)
<b>Congenital Anomalies (Q00-Q99)</b>	(206)	(3.5)	(101)	(3.4)	(105)	(3.5)
<b>Symptoms &amp; Signs Not Elsewhere Classified (R00-R99)</b>	(259)	(4.4)	(130)	(4.4)	(129)	(4.4)
Sudden Infant Death Syndrome (R95)	76	1.3	41	1.4	35	1.2
Other (R00-R94,R96-R99)	183	3.1	89	3.0	94	3.2
<b>External Causes of Mortality (V01-Y89)</b>	(3,135)	(53.2)	(2,159)	(73.6)	(976)	(33.0)
Unintentional Injury or Accident (V01-X59,Y85-Y86)	(2,048)	(34.7)	(1,326)	(45.2)	(722)	(24.4)
Transport Accidents (V01-V99,Y85)	815	13.8	562	19.2	253	8.5
Nontransport Accidents (W00-X59,Y86)	1,233	20.9	764	26.0	469	15.8
Intentional Self-Harm (Suicide) (X60-X84,Y87.0)	727	12.3	587	20.0	140	4.7
Assault (Homicide) (X85-Y09,Y87.1)	200	3.4	142	4.8	58	2.0
Legal Intervention (Y35,Y89.0)	3	*	3	*	0	*
Events of Undetermined Intent (Y10-Y34,Y87.2,Y89.9)	133	2.3	86	2.9	47	1.6
Operations of War & Sequelae (Y36,Y89.1)	3	*	3	*	0	*
Complications of Medical & Surgical Care (Y40-Y84,Y88)	21	0.4	12	0.4	9	0.3

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

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

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

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

Mortality Table C5. Age-Adjusted Rates for Selected Causes by Sex for Residents, 2000

Cause with ICD-10 Code	Total		Male		Female	
	Number	Age-Ad Rate <sup>2</sup>	Number	Age-Ad Rate <sup>2</sup>	Number	Age-Ad Rate <sup>2</sup>
<b>All Causes<sup>1</sup></b>	(43,904)	(803.6)	(21,829)	(960.5)	(22,075)	(683.2)
<b>Certain Infectious &amp; Parasitic Disease (A00-B99)</b>	(797)	(14.2)	(450)	(17.4)	(347)	(11.0)
Tuberculosis (A16-A19)	7	0.1	5	0.2	2	*
Septicemia (A40-A41)	340	6.2	152	6.7	188	5.9
Viral Hepatitis (B15-B19)	159	2.7	111	4.0	48	1.6
HIV (B20-B24)	127	2.1	113	3.7	14	0.5
Other (A00-A15,A20-A39,A42-B14,B25-B99)	164	3.0	69	2.7	95	3.0
<b>Neoplasms (C00-D48)</b>	(10,892)	(199.9)	(5,566)	(239.4)	(5,326)	(173.3)
Malignant Neoplasms (C00-C97)	10,656	195.6	5,449	234.0	5,207	169.6
In Situ & Benign Neoplasms (D00-D48)	236	4.3	117	5.4	119	3.6
<b>Diseases of Blood &amp; Blood-Forming Organs (D50-D89)</b>	(115)	(2.1)	(56)	(2.4)	(59)	(1.8)
Anemias (D50-D64)	44	0.8	19	0.9	25	0.7
Other (D65-D89)	71	1.3	37	1.5	34	1.1
<b>Endocrine, Nutritional &amp; Metabolic Diseases (E00-E90)</b>	(1,782)	(32.7)	(836)	(36.2)	(946)	(29.9)
Diabetes Mellitus (E10-E14)	1,331	24.5	659	28.4	672	21.5
Nutritional Diseases (E40-E64)	58	1.1	17	0.8	41	1.2
Other (E00-E09,E15-E39,E65-E90)	393	7.2	160	6.9	233	7.2
<b>Mental &amp; Behavioral Disorders (F01-F99)</b>	(443)	(8.0)	(189)	(7.9)	(254)	(7.4)
<b>Diseases of the Nervous System (G00-G98)</b>	(2,779)	(51.3)	(1,053)	(50.8)	(1,726)	(50.9)
Meningitis (G00-G03)	9	0.2	5	0.2	4	*
Amyotrophic Lateral Sclerosis (G12.2)	151	2.8	71	2.9	80	2.7
Parkinson's Disease (G20-G21)	422	7.9	242	11.9	180	5.4
Alzheimer's Disease (G30)	1,801	33.4	538	27.8	1,263	36.2
Multiple Sclerosis (G35)	83	1.5	32	1.2	51	1.7
Other (G04-G12.1,G12.3-G19,G22-G29,G31-G34,G36-G98)	313	5.6	165	6.7	148	4.8
<b>Diseases of the Eye &amp; Ear (H00-H93)</b>	(6)	(0.1)	(1)	(*)	(5)	(0.1)
<b>Diseases of the Circulatory System (I00-I99)</b>	(16,283)	(300.6)	(7,904)	(365.3)	(8,379)	(251.4)
Major Cardiovascular Diseases (I00-I78)	(16,202)	(299.1)	(7,866)	(363.7)	(8,336)	(250.1)
Diseases of Heart (I00-I09,I11,I13,I20-I51)	(11,349)	(209.3)	(5,857)	(266.9)	(5,492)	(165.2)
Acute & Chronic Rheumatic Disease (I00-I09)	96	1.8	23	0.9	73	2.3
Hypertensive Heart Disease (I11)	337	6.2	125	5.5	212	6.2
Hypertensive Heart & Renal Disease (I13)	48	0.9	16	0.8	32	0.9
Ischemic Heart Diseases (I20-I25)	(8,613)	(159.1)	(4,688)	(213.1)	(3,925)	(118.4)
Acute Myocardial Infarction (I21-I22)	2,701	49.9	1,494	67.1	1,207	37.0
Other Acute Ischemic Heart Disease (I24)	11	0.2	4	*	7	0.2
Other Chronic Ischemic Heart Disease (I20,I25)	(5,901)	(109.0)	(3,190)	(145.9)	(2,711)	(81.2)
Atherosclerotic Cardiovascular Disease (I25.0)	1,805	33.0	970	41.9	835	25.1
All Other Chronic Disease (I20,I25.1-I25.9)	4,096	76.0	2,220	104.0	1,876	56.1
Other Heart Diseases (I26-I51)	(2,255)	(41.4)	(1,005)	(46.5)	(1,250)	(37.3)
Acute & Subacute Endocarditis (I33)	23	0.4	16	0.6	7	0.2
Disease Pericardium & Acute Myocarditis (I30-I31,I40)	13	0.2	6	0.3	7	0.2
Heart Failure (I50)	505	9.3	193	9.8	312	9.0
All Other Heart disease (I26-I28,I34-I38,I42-I49,I51)	1,714	31.4	790	35.9	924	27.9
Hypertension & Hypertensive Renal Disease (I10,I12)	280	5.2	102	4.7	178	5.3
Cerebrovascular Diseases (I60-I69)	3,709	68.6	1,490	72.3	2,219	66.1
Atherosclerosis (I70)	339	6.3	134	6.9	205	6.0
Other Diseases of Circulatory System (I71-I78)	(525)	(9.8)	(283)	(12.8)	(242)	(7.5)
Aortic Aneurysm & Dissection (I71)	348	6.5	201	9.1	147	4.6
Other Disease of Arteries (I72-I78)	177	3.3	82	3.7	95	2.9
Other (I80-I99)	81	1.5	38	1.7	43	1.3

continued Mortality Table C5. Age-Adjusted Rates for Selected Causes by Sex for Residents, 2000

Cause with ICD-10 Code	Total		Male		Female	
	Number	Age-Ad Rate <sup>2</sup>	Number	Age-Ad Rate <sup>2</sup>	Number	Age-Ad Rate <sup>2</sup>
<b>Diseases of the Respiratory System (J00-J98)</b>	(4,531)	(84.2)	(2,164)	(102.2)	(2,367)	(73.1)
Influenza and Pneumonia (J10-J18)	(1,005)	(18.6)	(438)	(22.0)	(567)	(16.4)
Influenza (J10-J11)	29	0.5	10	0.5	19	0.5
Pneumonia (J12-J18)	976	18.0	428	21.5	548	15.9
Other Acute Lower Respiratory Infections (J20-J22)	8	0.1	4	*	4	*
Chronic Lower Respiratory Disease (J40-J47)	(2,642)	(49.3)	(1,262)	(58.3)	(1,380)	(43.9)
Bronchitis, Chronic and Unspecified (J40-J42)	24	0.4	11	0.5	13	0.4
Emphysema (J43)	275	5.1	133	5.8	142	4.7
Asthma (J45-J46)	84	1.5	27	1.1	57	1.8
Other Chronic Lower Respiratory Disease (J44,J47)	2,259	42.2	1,091	50.8	1,168	36.9
Pneumoconioses & Chemical Effects (J60-J66,J68)	27	0.5	27	1.3	0	*
Pneumonitis Due to Solids & Liquids (J69)	394	7.3	207	10.4	187	5.5
Other (J00-J06,J30-J39,J67,J70-J98)	455	8.4	226	10.1	229	7.2
<b>Diseases of the Digestive System (K00-K92)</b>	(1,564)	(28.3)	(774)	(32.4)	(790)	(24.5)
Peptic Ulcer (K25-K28)	116	2.1	57	2.6	59	1.8
Diseases of Appendix (K35-K38)	6	0.1	4	*	2	*
Hernia (K40-K46)	33	0.6	13	0.6	20	0.6
Chronic Liver Disease & Cirrhosis (K70,K73-K74)	(493)	(8.7)	(321)	(11.9)	(172)	(5.8)
Alcoholic Liver Disease (K70)	370	6.4	264	9.6	106	3.6
Other (K73-K74)	123	2.2	57	2.3	66	2.2
Cholelithiasis & Other Gallbladder Disease (K80-K82)	56	1.0	27	1.2	29	0.8
Other (K00-K24,K29-K34,K39,K47-K69,K71-K72,K75-K79,K83-K92)	860	15.8	352	16.0	508	15.4
<b>Diseases of Skin &amp; Subcutaneous Tissue (L00-L98)</b>	(34)	(0.6)	(10)	(0.5)	(24)	(0.7)
<b>Diseases Musculoskeletal &amp; Connective Tissue (M00-M99)</b>	(293)	(5.4)	(93)	(4.2)	(200)	(6.3)
<b>Diseases of the Genitourinary System (N00-N98)</b>	(606)	(11.2)	(247)	(12.2)	(359)	(10.8)
Nephritis (N00-N07, N17-N19, N25-N27)	(292)	(5.4)	(137)	(6.6)	(155)	(4.7)
Acute Nephrotic Syndrome (N00-N01, N04)	7	0.1	2	*	5	0.1
Chronic Nephritis & Unsp. Nephritis(N02-N03,N05-N07,N26)	23	0.4	13	0.6	10	0.3
Renal Failure (N17-N19)	260	4.8	121	5.9	139	4.3
Other Disorders of Kidney (N25, N27)	2	*	1	*	1	*
Infections of Kidney (N10-N12, N13.6, N15.1)	16	0.3	5	0.2	11	0.3
Hyperplasia of Prostate (N40)	n/a	n/a	6	0.3	n/a	n/a
Other(N13.0-N13.5,N13.7-N15.0,N15.8-N16,N20-N23,N28-N39,N41-N99)	292	5.4	99	5.0	193	5.7
<b>Pregnancy, Childbirth &amp; Puerperium (O00-O99)</b>	n/a	n/a	n/a	n/a	(3)	(*)
<b>Conditions Originating in Perinatal Period (P00-P96)</b>	(176)	(3.0)	(96)	(3.2)	(80)	(2.8)
<b>Congenital Anomalies (Q00-Q99)</b>	(206)	(3.6)	(101)	(3.5)	(105)	(3.6)
<b>Symptoms &amp; Signs Not Elsewhere Classified (R00-R99)</b>	(259)	(4.6)	(130)	(5.0)	(129)	(4.0)
Sudden Infant Death Syndrome (R95)	76	1.3	41	1.4	35	1.2
Other (R00-R94,R96-R99)	183	3.3	89	3.6	94	2.8
<b>External Causes of Mortality (V01-Y89)</b>	(3,135)	(53.9)	(2,159)	(78.1)	(976)	(31.5)
Unintentional Injury or Accident (V01-X59,Y85-Y86)	(2,048)	(35.5)	(1,326)	(48.9)	(722)	(23.0)
Transport Accidents (V01-V99,Y85)	815	13.9	562	19.6	253	8.5
Nontransport Accidents (W00-X59, Y86)	1,233	21.6	764	29.3	469	14.5
Intentional Self-Harm (Suicide) (X60-X84,Y87.0)	727	12.4	587	20.9	140	4.7
Assault (Homicide) (X85-Y09,Y87.1)	200	3.4	142	4.7	58	1.9
Legal Intervention (Y35,Y89.0)	3	*	3	*	0	*
Events of Undetermined Intent (Y10-Y34,Y87.2,Y89.9)	133	2.2	86	2.8	47	1.5
Operations of War & Sequelae (Y36,Y89.1)	3	*	3	*	0	*
Complications of Medical & Surgical Care (Y40-Y84,Y88)	21	0.4	12	0.5	9	0.3

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

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

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

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

Mortality Table C6. Diabetes, Alzheimer's Disease, and Major Cardiovascular Disease by County of Residence, 2000

County	Diabetes (E10-E14)			Alzheimer's Disease (G30)			Major Cardiovascular Disease (I00-I78)		
	Number	Age-		Number	Age-		Number	Age-	
		Crude Rate <sup>1</sup>	Adj Rate <sup>2</sup>		Crude Rate <sup>1</sup>	Adj Rate <sup>2</sup>		Crude Rate <sup>1</sup>	Adj Rate <sup>2</sup>
<b>State Total</b>	<b>1,331</b>	<b>22.6</b>	<b>24.5</b>	<b>1,801</b>	<b>30.6</b>	<b>33.4</b>	<b>16,202</b>	<b>274.9</b>	<b>299.1</b>
Adams	3	*	*	1	*	*	50	304.4	377.8
Asotin	11	53.5	42.5	4	*	*	77	374.7	272.9
Benton	36	25.3	29.5	21	14.7	19.3	342	240.0	301.7
Chelan	15	22.5	19.9	21	31.5	26.1	233	349.8	307.9
Clallam	13	20.1	12.4	30	46.5	28.4	304	471.1	297.7
Clark	97	28.1	35.2	110	31.9	43.2	819	237.2	307.3
Columbia	1	*	*	0	*	*	18	442.9	318.8
Cowlitz	43	46.3	43.6	43	46.3	42.3	350	376.6	349.4
Douglas	12	36.8	37.1	7	21.5	22.8	99	303.7	312.5
Ferry	1	*	*	1	*	*	18	247.9	274.1
Franklin	16	32.4	51.9	10	20.3	36.4	98	198.6	307.2
Garfield	2	*	*	0	*	*	11	458.9	263.7
Grant	16	21.4	24.3	8	10.7	12.9	212	283.8	326.3
Grays Harbor	30	44.6	37.4	27	40.2	34.1	316	470.3	399.0
Island	18	25.2	24.4	22	30.7	30.8	195	272.5	264.0
Jefferson	5	19.3	12.1	8	30.8	20.1	97	373.8	245.2
King	295	17.0	19.2	490	28.2	31.5	4,227	243.3	273.5
Kitsap	50	21.6	24.4	102	44.0	51.3	609	262.5	301.2
Kittitas	5	15.0	16.2	9	27.0	26.3	78	233.8	242.8
Klickitat	4	*	*	6	31.3	28.5	61	318.4	293.9
Lewis	30	43.7	36.3	35	51.0	39.5	300	437.3	355.4
Lincoln	3	*	*	5	49.1	33.8	59	579.3	371.8
Mason	15	30.4	23.5	19	38.5	33.6	171	346.1	302.4
Okanogan	13	32.9	30.6	7	17.7	16.3	109	275.5	253.4
Pacific	7	33.4	20.4	15	71.5	44.7	125	595.7	375.7
Pend Oreille	4	*	*	4	*	*	35	298.3	272.8
Pierce	145	20.7	24.5	207	29.5	38.0	1,966	280.5	345.9
San Juan	2	*	*	10	71.0	50.9	32	227.3	158.2
Skagit	36	35.0	30.4	55	53.4	43.9	306	297.1	253.5
Skamania	3	*	*	2	*	*	20	202.6	233.6
Snohomish	108	17.8	22.5	149	24.6	33.9	1,381	227.9	303.2
Spokane	100	23.9	23.4	139	33.3	30.6	1,395	333.8	317.7
Stevens	15	37.4	36.5	13	32.4	33.0	139	346.9	338.2
Thurston	46	22.2	23.0	85	41.0	44.4	531	256.1	275.0
Wahkiakum	0	*	*	2	*	*	21	549.2	413.4
Walla Walla	12	21.7	17.9	30	54.4	39.7	202	366.1	279.8
Whatcom	42	25.2	26.9	55	33.0	34.0	459	275.2	286.1
Whitman	8	19.6	25.8	3	*	*	117	287.2	365.0
Yakima	69	31.0	33.9	46	20.7	21.3	620	278.6	298.2

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

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

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

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

Mortality Table C7. Diseases of the Heart, Ischemic Heart Diseases, and Cerebrovascular Diseases by County of Residence, 2000

County	Diseases of the Heart (I00-I09,I11,I13,I20-I51)			Ischemic Heart Disease (I20-I25)			Cerebrovascular Disease (I60-I69)		
	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>
<b>State Total</b>	<b>11,349</b>	<b>192.5</b>	<b>209.3</b>	<b>8,613</b>	<b>146.1</b>	<b>159.1</b>	<b>3,709</b>	<b>62.9</b>	<b>68.6</b>
Adams	38	231.3	285.4	29	176.5	216.9	11	67.0	84.7
Asotin	48	233.6	174.7	32	155.7	119.3	19	92.5	65.9
Benton	242	169.9	210.7	160	112.3	140.3	77	54.0	70.6
Chelan	173	259.7	229.4	136	204.2	181.4	40	60.0	52.3
Clallam	222	344.1	220.9	161	249.5	159.2	70	108.5	65.7
Clark	583	168.9	217.0	429	124.3	158.6	193	55.9	74.1
Columbia	10	246.1	171.7	5	123.0	89.5	5	123.0	84.2
Cowlitz	235	252.8	235.0	176	189.4	176.5	91	97.9	90.3
Douglas	69	211.6	217.5	51	156.4	160.2	24	73.6	76.1
Ferry	14	192.8	213.4	14	192.8	213.4	2	*	*
Franklin	57	115.5	172.7	40	81.1	122.9	34	68.9	113.6
Garfield	8	333.8	188.8	7	292.0	166.3	1	*	*
Grant	152	203.5	233.9	128	171.4	196.1	46	61.6	71.4
Grays Harbor	219	325.9	277.0	169	251.5	213.2	72	107.2	91.1
Island	136	190.1	181.9	102	142.5	134.9	44	61.5	63.1
Jefferson	69	265.9	174.4	51	196.5	127.9	25	96.3	63.7
King	2,916	167.9	188.6	2,204	126.9	143.1	989	56.9	63.9
Kitsap	420	181.1	207.1	329	141.8	162.1	148	63.8	74.0
Kittitas	54	161.9	168.7	45	134.9	140.6	18	54.0	54.5
Klickitat	43	224.4	205.8	28	146.1	133.5	13	67.8	64.3
Lewis	231	336.7	275.6	183	266.8	216.5	54	78.7	62.2
Lincoln	37	363.3	242.9	32	314.2	211.8	16	157.1	92.3
Mason	123	249.0	216.7	95	192.3	167.9	39	78.9	69.6
Okanogan	87	219.9	200.8	58	146.6	133.9	16	40.4	38.0
Pacific	99	471.8	300.7	85	405.1	257.9	17	81.0	50.1
Pend Oreille	27	230.1	206.8	21	179.0	158.4	6	51.1	52.2
Pierce	1,407	200.8	246.7	1,119	159.7	196.3	416	59.4	73.9
San Juan	17	120.8	85.2	12	85.2	59.8	11	78.1	52.9
Skagit	198	192.3	164.9	146	141.8	120.8	87	84.5	71.4
Skamania	17	172.2	193.6	12	121.6	134.6	3	*	*
Snohomish	960	158.4	209.3	738	121.8	161.2	332	54.8	74.0
Spokane	968	231.6	221.9	732	175.1	168.6	300	71.8	67.5
Stevens	107	267.1	259.1	85	212.1	205.7	28	69.9	69.0
Thurston	373	179.9	192.5	266	128.3	137.2	122	58.8	63.8
Wahkiakum	18	470.7	346.9	12	313.8	228.2	1	*	*
Walla Walla	130	235.6	182.3	89	161.3	128.9	50	90.6	65.7
Whatcom	329	197.2	205.3	233	139.7	146.4	103	61.7	63.8
Whitman	82	201.3	259.0	60	147.3	188.8	31	76.1	94.1
Yakima	431	193.6	207.6	339	152.3	163.8	155	69.6	74.2

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

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

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

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

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Mortality Table C8. Influenza & Pneumonia, Chronic Lower Respiratory Disease, and Chronic Liver Disease & Cirrhosis by County of Residence, 2000

County	<u>Pneumonia and Influenza</u> <u>(J10-J18)</u>			<u>Chronic Lower Resp. Dis.</u> <u>(J40-J47)</u>			<u>Chronic Liver Disease &amp;</u> <u>Cirrhosis (K70,K73-K74)</u>		
	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>
<b>State Total</b>	<b>1,005</b>	<b>17.1</b>	<b>18.6</b>	<b>2,642</b>	<b>44.8</b>	<b>49.3</b>	<b>493</b>	<b>8.4</b>	<b>8.7</b>
Adams	1	*	*	5	30.4	37.5	0	*	*
Asotin	7	34.1	22.7	9	43.8	32.2	1	*	*
Benton	18	12.6	16.2	62	43.5	54.7	12	8.4	8.9
Chelan	8	12.0	10.1	33	49.5	44.8	7	10.5	10.3
Clallam	19	29.4	18.5	51	79.0	47.7	9	13.9	10.7
Clark	31	9.0	12.0	145	42.0	55.0	17	4.9	5.6
Columbia	0	*	*	8	196.9	136.3	0	*	*
Cowlitz	22	23.7	21.4	52	55.9	52.2	14	15.1	14.0
Douglas	4	*	*	10	30.7	31.2	0	*	*
Ferry	1	*	*	2	*	*	1	*	*
Franklin	9	18.2	28.9	25	50.7	78.7	5	10.1	13.7
Garfield	0	*	*	4	*	*	0	*	*
Grant	9	12.0	13.9	27	36.1	41.0	3	*	*
Grays Harbor	41	61.0	51.9	53	78.9	66.1	16	23.8	20.4
Island	8	11.2	12.3	23	32.1	31.1	5	7.0	6.4
Jefferson	5	19.3	13.2	18	69.4	43.5	0	*	*
King	315	18.1	20.2	573	33.0	37.9	136	7.8	8.2
Kitsap	26	11.2	12.8	127	54.7	63.3	28	12.1	12.2
Kittitas	8	24.0	25.1	16	48.0	50.3	2	*	*
Klickitat	4	*	*	10	52.2	51.2	1	*	*
Lewis	23	33.5	26.3	54	78.7	63.2	12	17.5	15.0
Lincoln	2	*	*	13	127.7	82.5	2	*	*
Mason	8	16.2	15.6	37	74.9	60.9	6	12.1	9.6
Okanogan	8	20.2	18.5	14	35.4	33.4	5	12.6	11.2
Pacific	6	28.6	17.6	13	62.0	35.5	3	*	*
Pend Oreille	4	*	*	6	51.1	48.4	1	*	*
Pierce	89	12.7	16.0	347	49.5	60.6	52	7.4	8.2
San Juan	1	*	*	6	42.6	28.6	3	*	*
Skagit	23	22.3	18.8	52	50.5	42.7	13	12.6	11.3
Skamania	1	*	*	8	81.0	86.2	0	*	*
Snohomish	91	15.0	20.0	219	36.1	48.8	54	8.9	10.1
Spokane	74	17.7	16.7	265	63.4	62.1	47	11.2	11.5
Stevens	5	12.5	12.5	19	47.4	45.4	5	12.5	10.8
Thurston	31	15.0	16.0	104	50.2	53.8	13	6.3	6.3
Wahkiakum	0	*	*	1	*	*	0	*	*
Walla Walla	6	10.9	7.8	38	68.9	62.1	0	*	*
Whatcom	42	25.2	26.2	79	47.4	50.2	11	6.6	6.9
Whitman	6	14.7	18.7	11	27.0	33.9	1	*	*
Yakima	49	22.0	22.6	103	46.3	51.0	8	3.6	4.1

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

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

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

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

## D. Cancer

Cancer is the second leading cause of death for residents of Washington State and comprised 24.3 percent of all deaths in 2000. Cancer may occur in many different sites and has many different risk factors, some of which include smoking, diet, exercise, and sun exposure.

Mortality Table D1. Age-Adjusted Rates<sup>1</sup> for Leading Causes of Cancer for Residents, 1990-2000

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

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

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

**Note:**

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

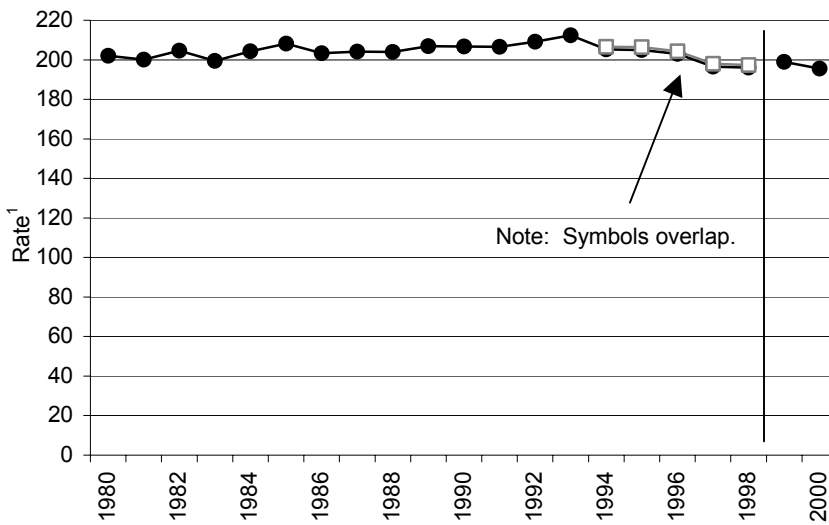
All Sites: ICD-9: 140-208; ICD-10: C00-C97; CR=1.0068  
 Lung: ICD-9: 162; ICD-10: C33-C34; CR=0.9837  
 Colorectal: ICD-9: 153-154; ICD-10: C18-C21; CR=0.9993  
 Female Breast: ICD-9: 174; ICD-10: C50; CR=1.0056  
 Prostate: ICD-9: 185; ICD-10: C61; CR=1.0134  
 Pancreas: ICD-9: 157; ICD-10: C25; CR=0.9980

Mortality rates for all sites observed in Mortality Table D1 were lower in 2000 than 1990. Slight decreases over time have occurred for all sites. Deaths due to female breast cancer and prostate cancer have had the largest decreases over time.

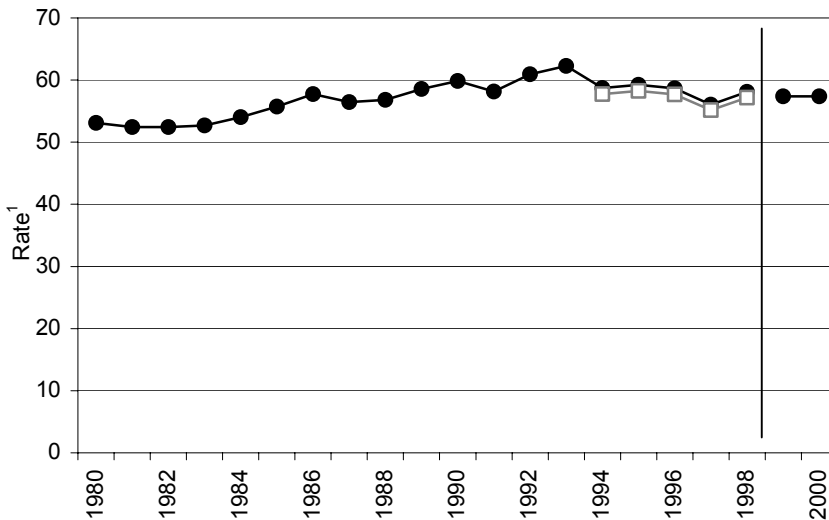


Mortality Figure 6. Malignant Neoplasm (Cancer) Mortality Rates for Residents, 1980-2000

a. Cancer, All Sites Combined



b. Lung Cancer



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

- Unmodified Rates
- Comparability-Modified Rates

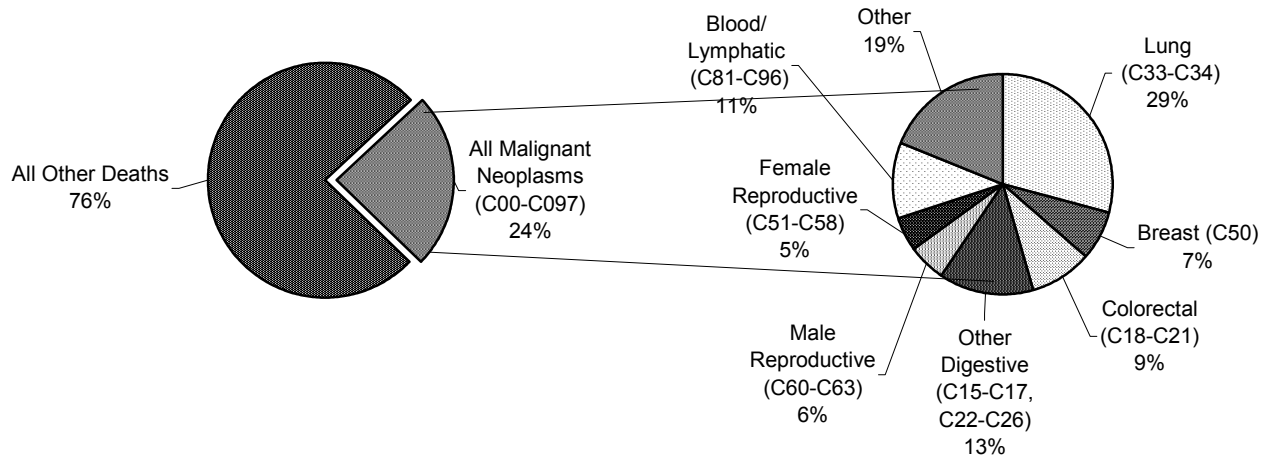
Note:

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

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

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

Mortality Figure 7. Percent of Deaths Due to Malignant Neoplasms (Cancer) for Washington State Residents, 2000



Note:  
 Percents may not add to 100% due to rounding.  
 International Classification of Diseases, Tenth Revision (ICD-10) codes are provided in parentheses.

Mortality Table D2. Cancer by Primary Site by Sex for Residents, 2000

Cause with ICD-10 Codes	Total			Male			Female		
	No.	Crude Rate <sup>1</sup>	Age-Adj. Rate <sup>2</sup>	No.	Crude Rate <sup>1</sup>	Age-Adj. Rate <sup>2</sup>	No.	Crude Rate <sup>1</sup>	Age-Adj. Rate <sup>2</sup>
<b>All Sites Combined (C00-C97)</b>	<b>10,656</b>	<b>180.8</b>	<b>195.6</b>	<b>5,449</b>	<b>185.7</b>	<b>234.0</b>	<b>5,207</b>	<b>175.9</b>	<b>169.6</b>
Bladder (C67)	247	4.2	4.6	175	6.0	8.0	72	2.4	2.2
Brain, Meninges, & CNS (C70-C72) <sup>3</sup>	323	5.5	5.8	179	6.1	6.9	144	4.9	4.8
Brain (C71)	320	5.4	5.7	177	6.0	6.9	143	4.8	4.8
Breast (C50)	762	12.9	13.8	15	0.5	0.6	747	25.2	24.4
Cervix (C53)	n/a	n/a	n/a	n/a	n/a	n/a	61	2.1	2.0
Colorectal (C18-C21) <sup>3</sup>	996	16.9	18.3	509	17.3	22.0	487	16.5	15.4
Colorectal (C18-C20,C26.0)	991	16.8	18.2	504	17.2	21.8	487	16.5	15.4
Endometrium & Uterus (C54-C55) <sup>3</sup>	n/a	n/a	n/a	n/a	n/a	n/a	120	4.1	3.9
Endometrium (C54)	n/a	n/a	n/a	n/a	n/a	n/a	62	2.1	2.0
Esophagus (C15)	282	4.8	5.2	213	7.3	8.7	69	2.3	2.2
Hodgkin's Disease (C81)	26	0.4	0.5	13	0.4	0.6	13	0.4	0.4
Kidney & Renal Pelvis (C64-C65)	239	4.1	4.4	151	5.1	6.3	88	3.0	2.9
Larynx (C32)	65	1.1	1.2	46	1.6	1.9	19	0.6	0.6
Leukemia (C91-C95) <sup>3</sup>	433	7.3	8.0	225	7.7	9.9	208	7.0	6.7
Leukemia (C90.1,C91-C95)	435	7.4	8.0	227	7.7	10.0	208	7.0	6.7
Liver (C22) <sup>3</sup>	259	4.4	4.7	160	5.5	6.6	99	3.3	3.2
Liver (C22.0,C22.2-C22.4,C22.7,C22.9)	199	3.4	3.6	128	4.4	5.2	71	2.4	2.3
Lung, Bronchus & Trachea (C33-C34) <sup>3</sup>	3,102	52.6	57.4	1,668	56.8	70.5	1,434	48.4	47.7
Lung & Bronchus (C34)	3,100	52.6	57.3	1,668	56.8	70.5	1,432	48.4	47.6
Melanoma of Skin (C43)	139	2.4	2.5	85	2.9	3.4	54	1.8	1.8
Multiple Myeloma & Immunoproliferative (C88,C90) <sup>3</sup>	227	3.9	4.2	136	4.6	5.9	91	3.1	2.9
Multiple Myeloma (C90.0,C90.2)	218	3.7	4.0	131	4.5	5.7	87	2.9	2.8
Non-Hodgkin's Lymphoma (C82-C85)	468	7.9	8.6	257	8.8	11.0	211	7.1	6.8
Oral Cavity & Pharynx (C00-C14)	152	2.6	2.8	94	3.2	3.8	58	2.0	1.9
Ovary (C56)	n/a	n/a	n/a	n/a	n/a	n/a	325	11.0	10.7
Pancreas (C25)	591	10.0	10.9	289	9.8	12.1	302	10.2	9.7
Prostate (C61)	n/a	n/a	n/a	574	19.6	27.5	n/a	n/a	n/a
Stomach (C16)	225	3.8	4.1	130	4.4	5.6	95	3.2	3.0
Testis (C62)	n/a	n/a	n/a	12	0.4	0.4	n/a	n/a	n/a
Thyroid & Endocrine Glands (C73-C75) <sup>3</sup>	32	0.5	0.6	13	0.4	0.5	19	0.6	0.6
Thyroid (C73)	19	0.3	0.3	8	0.3	0.3	11	0.4	0.4
Site Unspecified (C80)	416	7.1	7.7	199	6.8	8.8	217	7.3	6.9
All Other Sites <sup>4</sup>	569	9.7	10.4	299	10.2	12.8	270	9.1	8.7

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

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

<sup>3</sup>The ICD-10 codes selected for these groups differ slightly from Cancer Registry groups. See

<http://www3.doh.wa.gov/WSCR/> to obtain reports of the Washington State Cancer Registry or to obtain information about other cancer sites.

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

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

Mortality Table D3. Cancer for Total All Sites, Lung, and Colo-Rectal by County of Residence, 2000

County	<b>Malignant Neoplasms Total</b>			<b>Lung<sup>1</sup> (C33-C34)</b>			<b>Colo-Rectal<sup>1</sup> (C18-C21)</b>		
	<b>All Sites (C00-C97)</b>								
	Number	Crude Rate <sup>2</sup>	Age-Adj Rate <sup>3</sup>	Number	Crude Rate <sup>2</sup>	Age-Adj Rate <sup>3</sup>	Number	Crude Rate <sup>2</sup>	Age-Adj Rate <sup>3</sup>
<b>State Total</b>	<b>10,656</b>	<b>180.8</b>	<b>195.6</b>	<b>3,102</b>	<b>52.6</b>	<b>57.4</b>	<b>996</b>	<b>16.9</b>	<b>18.3</b>
Adams	19	115.7	139.0	5	30.4	36.3	1	*	*
Asotin	43	209.2	165.0	9	43.8	37.9	2	*	*
Benton	258	181.1	214.0	71	49.8	59.4	28	19.7	23.6
Chelan	124	186.1	168.5	40	60.0	54.9	7	10.5	9.6
Clallam	179	277.4	180.5	51	79.0	50.7	13	20.1	12.5
Clark	581	168.3	208.8	158	45.8	57.1	59	17.1	21.8
Columbia	10	246.1	172.9	6	147.6	101.0	1	*	*
Cowlitz	221	237.8	224.9	76	81.8	77.6	20	21.5	20.1
Douglas	63	193.2	193.4	19	58.3	57.8	4	*	*
Ferry	12	165.3	171.5	5	68.9	82.2	1	*	*
Franklin	78	158.1	233.1	28	56.7	82.3	8	16.2	22.2
Garfield	7	292.0	174.8	1	*	*	1	*	*
Grant	117	156.6	175.2	31	41.5	46.1	12	16.1	18.7
Grays Harbor	190	282.8	239.8	59	87.8	73.6	20	29.8	24.7
Island	154	215.2	196.8	52	72.7	64.8	7	9.8	9.7
Jefferson	81	312.1	200.5	21	80.9	51.6	7	27.0	17.4
King	2,806	161.5	182.0	793	45.7	52.4	251	14.4	16.2
Kitsap	411	177.2	199.2	108	46.6	52.3	40	17.2	19.6
Kittitas	74	221.8	233.8	17	51.0	53.7	11	33.0	34.7
Klickitat	48	250.5	227.5	18	93.9	82.4	2	*	*
Lewis	195	284.3	235.8	57	83.1	68.6	16	23.3	18.8
Lincoln	24	235.7	165.4	8	78.6	51.8	1	*	*
Mason	141	285.4	231.4	51	103.2	83.0	20	40.5	34.8
Okanogan	74	187.0	170.9	26	65.7	59.4	7	17.7	15.5
Pacific	79	376.5	235.1	23	109.6	65.9	13	62.0	38.8
Pend Oreille	29	247.2	218.9	8	68.2	61.1	2	*	*
Pierce	1,222	174.4	206.5	400	57.1	67.5	93	13.3	16.0
San Juan	32	227.3	150.0	13	92.3	60.2	1	*	*
Skagit	238	231.1	204.6	76	73.8	65.2	22	21.4	18.2
Skamania	23	233.0	252.3	10	101.3	109.7	2	*	*
Snohomish	928	153.1	193.4	253	41.7	53.5	93	15.3	19.4
Spokane	821	196.4	196.1	230	55.0	55.7	82	19.6	19.3
Stevens	88	219.6	208.3	29	72.4	67.4	6	15.0	14.8
Thurston	420	202.6	212.4	124	59.8	63.3	43	20.7	21.9
Wahkiakum	17	444.6	321.1	3	*	*	3	*	*
Walla Walla	122	221.1	191.5	31	56.2	50.0	14	25.4	22.1
Whatcom	276	165.5	175.3	68	40.8	43.7	26	15.6	16.6
Whitman	54	132.5	177.8	11	27.0	37.5	9	22.1	26.6
Yakima	397	178.4	197.8	113	50.8	56.9	48	21.6	23.3

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

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

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

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

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

Mortality Table D4. Cancer for Female Breast, Prostate, and Pancreas by County of Residence, 2000

County	Female Breast (C50)			Prostate (C61)			Pancreas (C25)		
	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>
<b>State Total</b>	<b>747</b>	<b>25.2</b>	<b>24.4</b>	<b>574</b>	<b>19.6</b>	<b>27.5</b>	<b>591</b>	<b>10.0</b>	<b>10.9</b>
Adams	3	*	*	0	*	*	2	*	*
Asotin	4	*	*	1	*	*	5	24.3	19.6
Benton	22	30.7	32.6	10	14.1	20.9	12	8.4	10.2
Chelan	11	32.9	26.3	8	24.1	26.1	9	13.5	11.9
Clallam	12	37.0	26.0	17	53.0	37.6	8	12.4	7.6
Clark	49	28.2	30.6	28	16.3	29.6	37	10.7	13.2
Columbia	1	*	*	0	*	*	1	*	*
Cowlitz	14	29.9	26.9	10	21.7	26.4	9	9.7	9.1
Douglas	2	*	*	6	37.1	44.7	5	15.3	15.1
Ferry	0	*	*	1	*	*	0	*	*
Franklin	4	*	*	5	19.4	44.1	3	*	*
Garfield	0	*	*	2	*	*	0	*	*
Grant	8	21.9	22.3	5	13.1	15.7	7	9.4	10.3
Grays Harbor	10	29.6	22.7	11	32.9	32.7	7	10.4	8.9
Island	8	22.4	20.0	7	19.5	18.2	8	11.2	10.5
Jefferson	1	*	*	7	55.1	39.0	2	*	*
King	210	24.1	23.5	133	15.4	23.2	168	9.7	11.0
Kitsap	29	25.3	24.1	24	20.4	31.5	22	9.5	11.0
Kittitas	5	29.8	29.8	7	42.2	54.1	1	*	*
Klickitat	3	*	*	2	*	*	3	*	*
Lewis	12	34.7	28.0	13	38.2	38.8	12	17.5	14.5
Lincoln	2	*	*	4	*	*	0	*	*
Mason	7	29.3	22.1	4	*	*	5	10.1	8.2
Okanogan	1	*	*	2	*	*	5	12.6	11.2
Pacific	5	47.3	29.6	7	67.3	44.7	5	23.8	14.0
Pend Oreille	2	*	*	3	*	*	1	*	*
Pierce	106	30.1	31.5	52	14.9	24.5	65	9.3	10.9
San Juan	0	*	*	3	*	*	1	*	*
Skagit	17	32.7	28.2	15	29.4	29.6	11	10.7	9.9
Skamania	1	*	*	3	*	*	1	*	*
Snohomish	59	19.5	21.5	49	16.2	27.4	52	8.6	10.7
Spokane	52	24.4	21.9	52	25.3	32.6	57	13.6	13.5
Stevens	8	39.7	35.2	4	*	*	4	*	*
Thurston	26	24.6	23.6	24	23.6	31.8	20	9.6	10.3
Wahkiakum	1	*	*	1	*	*	1	*	*
Walla Walla	10	36.9	30.8	10	35.6	35.3	5	9.1	8.4
Whatcom	15	17.7	17.4	22	26.8	34.4	11	6.6	6.9
Whitman	4	*	*	2	*	*	3	*	*
Yakima	23	20.6	20.8	20	18.0	24.6	23	10.3	11.7

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

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

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

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

## E. External Causes or Injuries

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

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

Mortality Table E1. Age-Adjusted Rates<sup>1</sup> for External Causes for Residents, 1990-2000

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

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

<sup>2</sup>These categories include some causes that are classified as "natural" deaths (e.g., alcoholic cirrhosis of the liver).

na: Comparability ratio not available.

Note:

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

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

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

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

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

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

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

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

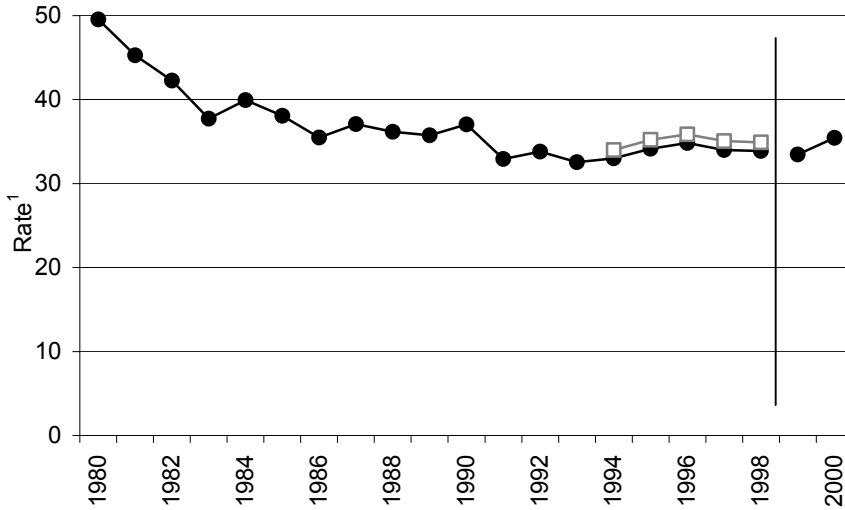
Falls: ICD-9 E880-E886,E888; ICD-10 W00-W19; CR is not available.

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

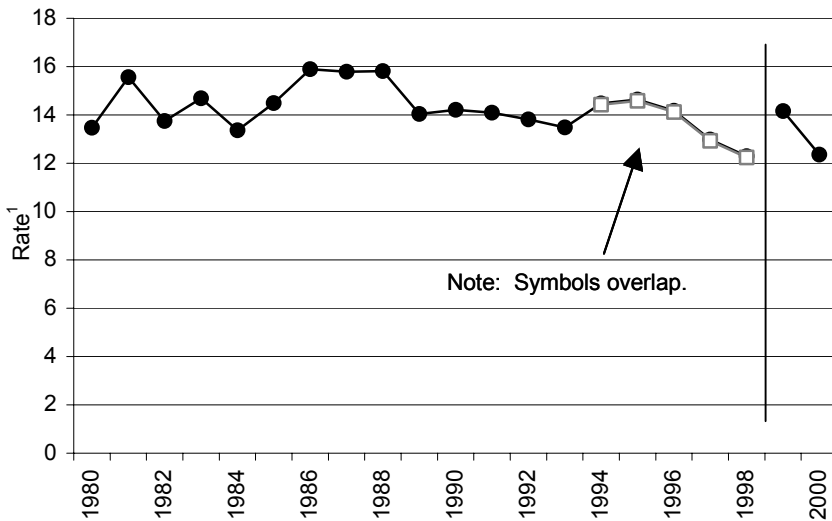
Mortality from drug and alcohol-induced causes have both increased during the past decade while assaults and motor vehicle traffic accidents have declined during this time period.

Mortality Figure 8. Mortality Rates for Residents, 1980-2000

a. Unintentional Injury (Accident)



b. Intentional Self-Harm (Suicide)



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

- Unmodified Rates
- Comparability-Modified Rates

Note:

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

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

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

Mortality Table E2-a. External Causes of Injury With Crude Rates for Residents, 2000

Cause	Total		Unintentional or Accident		Suicide		Homicide		Undeter- mined		Legal Intervention & War <sup>1</sup>	
	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>
<b>All Injuries<sup>3</sup></b>	<b>(3,114)</b>	<b>(52.8)</b>	<b>(2,048)</b>	<b>(34.7)</b>	<b>(727)</b>	<b>(12.3)</b>	<b>(200)</b>	<b>(3.4)</b>	<b>(133)</b>	<b>(2.3)</b>	<b>(6)</b>	<b>(0.1)</b>
Cut/Pierce	25	0.4	0	*	9	0.2	16	0.3	0	*	0	*
Drowning	(113)	(1.9)	(92)	(1.6)	(6)	(0.1)	(1)	(*)	(14)	(0.2)	--	--
Boating-Related	20	0.3	20	0.3	--	--	--	--	--	--	--	--
Other	72	1.2	72	1.2	(6)	(0.1)	(1)	(*)	(14)	(0.2)	--	--
Fall/Jump/Push	478	8.1	458	7.8	13	0.2	0	*	7	0.1	--	--
Fire/Hot Object or Substance	(62)	(1.1)	(59)	(1.0)	(0)	(*)	(2)	(*)	(1)	(*)	(0)	(*)
Fire/Flame	61	1.0	58	1.0	0	*	2	*	1	*	--	--
Hot Object/Substance	1	*	1	*	0	*	0	*	0	*	--	--
Firearm	522	8.9	8	0.1	390	6.6	112	1.9	9	0.2	3	*
Machinery	18	0.3	18	0.3	--	--	--	--	--	--	--	--
All Transport	(779)	(13.2)	(776)	(13.2)	(2)	(*)	(1)	(*)	(0)	(*)	(0)	(*)
Motor Vehicle Traffic	(690)	(11.7)	(690)	(11.7)	--	--	--	--	--	--	--	--
Occupant	531	9.0	531	9.0	--	--	--	--	--	--	--	--
Motorcyclist	47	0.8	47	0.8	--	--	--	--	--	--	--	--
Pedal Cyclist	9	0.2	9	0.2	--	--	--	--	--	--	--	--
Pedestrian	82	1.4	82	1.4	--	--	--	--	--	--	--	--
Other	0	*	0	*	--	--	--	--	--	--	--	--
Unspecified	21	0.4	21	0.4	--	--	--	--	--	--	--	--
Pedal Cyclist, Other	5	0.1	5	0.1	--	--	--	--	--	--	--	--
Pedestrian, Other	10	0.2	10	0.2	--	--	--	--	--	--	--	--
Other Land Transport	25	0.4	25	0.4	(2)	(*)	(1)	(*)	(0)	(*)	--	--
Watercraft/Air/Space	46	0.8	46	0.8	--	--	--	--	--	--	(0)	(*)
Natural/Environmental	(14)	(0.2)	(14)	(0.2)	--	--	--	--	--	--	--	--
Bites/Stings	4	*	4	*	--	--	--	--	--	--	--	--
Other	10	0.2	10	0.2	--	--	--	--	--	--	--	--
Overexertion	0	*	0	*	--	--	--	--	--	--	--	--
Poisoning	646	11.0	420	7.1	149	2.5	3	*	74	1.3	0	*
Struck By or Against	39	0.7	31	0.5	0	*	8	0.1	0	*	0	*
Suffocation	246	4.2	92	1.6	140	2.4	10	0.2	4	*	--	--
Other Specified, Classifiable	(35)	(0.6)	(25)	(0.4)	(8)	(0.1)	(0)	(*)	(2)	(*)	(0)	(*)
Sequelae (Late Effects)	19	0.3	19	0.3	--	--	--	--	--	--	--	--
Other	16	0.3	6	0.1	8	0.1	0	*	2	*	0	*
Other Specified, NEC <sup>4</sup>	(43)	(0.7)	(11)	(0.2)	(6)	(0.1)	(20)	(0.3)	(3)	(*)	(3)	(*)
Sequelae (Late Effects)	14	0.2	10	0.2	1	*	3	*	0	*	--	--
Other	29	0.5	1	*	5	0.1	17	0.3	3	*	3	*
Unspecified	94	1.6	44	0.7	4	*	27	0.5	19	0.3	0	*
Adverse Effects <sup>3</sup>	(21)	(0.4)	--	--	--	--	--	--	--	--	--	--
Drugs	3	*	--	--	--	--	--	--	--	--	--	--
Medical Care	18	0.3	--	--	--	--	--	--	--	--	--	--

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

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

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

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

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

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

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

With the exception of drowning, bites/stings, all transport, and sequelae, cause-of-death categories for this table follow the guidelines of National Center for Health Statistics (NCHS) International Collaborative Effort (ICE) on Injury Statistics. These groupings differ from previously published Vital Statistics reports and from other NCHS groupings. More injury tables can be obtained from Injury Prevention Program, Washington State Department of Health web site: <http://www.doh.wa.gov/cfh/Injury/Default.htm>



Mortality Table E2-b. External Causes of Injury With Age-Adjusted Rates for Residents, 2000

Cause	Total		Unintentional or Accident		Suicide		Homicide		Undeter- mined		Legal Intervention & War <sup>1</sup>	
	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>
<b>All Injuries<sup>3</sup></b>	<b>(3,114)</b>	<b>(53.5)</b>	<b>(2,048)</b>	<b>(35.5)</b>	<b>(727)</b>	<b>(12.4)</b>	<b>(200)</b>	<b>(3.4)</b>	<b>(133)</b>	<b>(2.2)</b>	<b>(6)</b>	<b>(0.1)</b>
Cut/Pierce	25	0.4	0	*	9	0.2	16	0.3	0	*	0	*
Drowning	(113)	(1.9)	(92)	(1.6)	(6)	(0.1)	(1)	(*)	(14)	(0.2)	--	--
Boating-Related	20	0.3	20	0.3	--	--	--	--	--	--	--	--
Other	72	1.2	72	1.2	(6)	(0.1)	(1)	(*)	(14)	(0.2)	--	--
Fall/Jump/Push	478	8.7	458	8.4	13	0.2	0	*	7	0.1	--	--
Fire/Hot Object or Substance	(62)	(1.1)	(59)	(1.0)	(0)	(*)	(2)	(*)	(1)	(*)	(0)	(*)
Fire/Flame	61	1.1	58	1.0	0	*	2	*	1	*	--	--
Hot Object/Substance	1	*	1	*	0	*	0	*	0	*	--	--
Firearm	522	8.9	8	0.1	390	6.7	112	1.9	9	0.2	3	*
Machinery	18	0.3	18	0.3	--	--	--	--	--	--	--	--
All Transport	(779)	(13.3)	(776)	(13.2)	(2)	(*)	(1)	(*)	(0)	(*)	(0)	(*)
Motor Vehicle Traffic	(690)	(11.8)	(690)	(11.8)	--	--	--	--	--	--	--	--
Occupant	531	9.1	531	9.1	--	--	--	--	--	--	--	--
Motorcyclist	47	0.8	47	0.8	--	--	--	--	--	--	--	--
Pedal Cyclist	9	0.2	9	0.2	--	--	--	--	9	--	--	--
Other	82	1.4	82	1.4	--	--	--	--	--	--	--	--
Pedestrian	0	*	0	*	--	--	--	--	--	--	--	--
Unspecified	21	0.4	21	0.4	--	--	--	--	--	--	--	--
Pedal Cyclist, Other	5	0.1	5	0.1	--	--	--	--	--	--	--	--
Pedestrian, Other	10	0.2	10	0.2	--	--	--	--	--	--	--	--
Other Land Transport	25	0.4	25	0.4	(2)	(*)	(1)	(*)	(0)	(*)	--	--
Watercraft/Air/Space	46	0.8	46	0.8	--	--	--	--	--	--	(0)	(*)
Natural/Environmental	(14)	(0.2)	(14)	(0.2)	--	--	--	--	--	--	--	--
Bites/Stings	4	*	4	*	--	--	--	--	--	--	--	--
Other	10	0.2	10	0.2	--	--	--	--	--	--	--	--
Overexertion	0	*	0	*	--	--	--	--	--	--	--	--
Poisoning	646	10.7	420	6.9	149	2.5	3	*	74	1.2	0	*
Struck By or Against	39	0.7	31	0.5	0	*	8	0.1	0	*	0	*
Suffocation	246	4.2	92	1.6	140	2.4	10	0.2	4	*	--	--
Other Specified, Classifiable	(35)	(0.6)	(25)	(0.4)	(8)	(0.1)	(0)	(*)	(2)	(*)	(0)	(*)
Sequelae (Late Effects)	19	0.3	19	0.3	--	--	--	--	--	--	--	--
Other	16	0.3	6	0.1	8	0.1	0	*	2	*	0	*
Other Specified, NEC <sup>4</sup>	(43)	(0.7)	(11)	(0.2)	(6)	(0.1)	(20)	(0.3)	(3)	(*)	(3)	(*)
Sequelae (Late Effects)	14	0.2	10	0.2	1	*	3	*	0	*	--	--
Other	29	0.5	1	*	5	0.1	17	0.3	3	*	3	*
Unspecified	94	1.7	44	0.8	4	*	27	0.5	19	0.3	0	*
Adverse Effects <sup>3</sup>	(21)	(0.4)	--	--	--	--	--	--	--	--	--	--
Drugs	3	*	--	--	--	--	--	--	--	--	--	--
Medical Care	18	0.3	--	--	--	--	--	--	--	--	--	--

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

<sup>2</sup>Rate per 100,000 population age-adjusted to U.S. 2000 population.

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

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

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

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

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

With the exception of drowning, bites/stings, all transport, and sequelae, cause-of-death categories for this table follow the guidelines of National Center for Health Statistics (NCHS) International Collaborative Effort (ICE) on Injury Statistics. These groupings differ from previously published Vital Statistics reports and from other NCHS groupings. More injury tables can be obtained from Injury Prevention Program, Washington State Department of Health web site: <http://www.doh.wa.gov/cfh/Injury/Default.htm>

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

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

Mortality Table E3. External Causes by Place of Injury for Residents, 2000

Place of Injury <sup>1</sup>	Total	Uninten-	Uninten-	Intentional	Assault	Undetermined	Other
		tional Injury (Accident), Non- Transport	tional Injury (Accident), Transport	Self-Harm (Suicide)	(Homicide)		
<b>State Total</b>	<b>3,135</b>	<b>1,233</b>	<b>815</b>	<b>727</b>	<b>200</b>	<b>133</b>	<b>27</b>
Home	1,483	705	11	559	114	94	0
Nursing Home	115	112	0	0	1	2	0
Agriculture	11	4	6	1	0	0	0
Industry	133	79	6	33	11	3	1
Prison	11	1	0	10	0	0	0
Public	1,183	194	777	120	58	28	6
Unknown	199	138	15	4	16	6	20

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

Note:

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

Mortality Table E4. Type of Firearm by Intent for Residents, 2000

Intent	<u>Total</u>			<u>Handgun</u>			<u>Rifle or Shotgun</u>			<u>Other &amp; Unspecified</u>		
	No.	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>	No.	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>	No.	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>	No.	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>
<b>Total</b>	<b>522</b>	<b>8.9</b>	<b>8.9</b>	<b>288</b>	<b>4.9</b>	<b>4.9</b>	<b>108</b>	<b>1.8</b>	<b>1.8</b>	<b>126</b>	<b>2.1</b>	<b>2.1</b>
Unintentional Injury (Accident)	8	0.1	0.1	5	0.1	0.1	2	*	*	1	*	*
Self-Harm (Suicide)	390	6.6	6.7	245	4.2	4.2	90	1.5	1.5	55	0.9	1.0
Assault (Homicide)	112	1.9	1.9	34	0.6	0.6	16	0.3	0.3	62	1.1	1.0
Undetermined	9	0.2	0.2	4	*	*	0	*	*	5	0.1	0.1
Legal Intervention	3	*	*	0	*	*	0	*	*	3	*	*

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

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

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

Note:

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

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

Mortality Table E5. Poisoning by Intent and Substance for Residents, 2000

Substance and ICD-10 Code	<b>Total</b>			<b>Unintentional Injury (Accident)</b>			<b>Self-Harm (Suicide)</b>			<b>Undetermined</b>		
	No.	Crude	Age-Adj	No.	Crude	Age-Adj	No.	Crude	Age-Adj	No.	Crude	Age-Adj
		Rate <sup>1</sup>	Rate <sup>2</sup>		Rate <sup>1</sup>	Rate <sup>2</sup>		Rate <sup>1</sup>	Rate <sup>2</sup>		Rate <sup>1</sup>	Rate <sup>2</sup>
<b>Total</b>	<b>643</b>	<b>10.9</b>	<b>10.7</b>	<b>420</b>	<b>7.1</b>	<b>6.9</b>	<b>149</b>	<b>2.5</b>	<b>2.5</b>	<b>74</b>	<b>1.3</b>	<b>1.2</b>
Drugs (X40-X44,X60-X64,Y10-Y14) <sup>3</sup>	(557)	(9.5)	(9.2)	(402)	(6.8)	(6.6)	(88)	(1.5)	(1.5)	(67)	(1.1)	(1.1)
Non-Opioid Analgesics, Anti-Pyretics & Anti-Rheumatics (e.g., nonsteroidal anti-inflammatory drugs, salicylates, etc.) (X40, X60, Y10)	14	0.2	0.2	5	0.1	0.1	4	*	*	5	0.1	0.1
Anti-Epileptic, Sedative-Hypnotic, Anti-Parkinson & Psychotropic (e.g., antidepressants, barbiturates, psychostimulants, etc.) (X41, X61, Y11)	78	1.3	1.3	34	0.6	0.6	26	0.4	0.4	18	0.3	0.3
Narcotics & Psychodysleptics (e.g., cannabis, cocaine, heroin, etc.) (X42, X62, Y12)	248	4.2	4.1	218	3.7	3.6	11	0.2	0.2	19	0.3	0.3
Other Drugs Acting on Autonomic Nervous System (e.g., anticholinergics, cholinergics, antiadrenergics, etc.) (X43, X63, Y13)	0	*	*	0	*	*	0	*	*	0	*	*
Other, Unspecified, or Mixtures of Any of the Above (e.g., anaesthetics, hormones, antibiotics, etc.) (X44, X64, Y14)	217	3.7	3.6	145	2.5	2.4	47	0.8	0.8	25	0.4	0.4
Alcohol (X45, X65, Y15)	6	0.1	0.1	6	0.1	0.1	0	*	*	0	*	*
Organic Solvents, Halogenated Hydrocarbons, Vapors (e.g., benzene, petroleum, etc.) (X46, X66, Y16)	1	*	*	1	*	*	0	*	*	0	*	*
Other Gases & Vapors(e.g., carbon monoxide, nitrogen oxides, etc.) (X47, X67, Y17)	74	1.3	1.2	9	0.2	0.2	58	1.0	1.0	7	0.1	0.1
Pesticides (e.g., fumigants, herbicides, insecticides, wood preservatives, etc.) (X48, X68, Y18)	0	*	*	0	*	*	0	*	*	0	*	*
Other & Unspecified Chemicals & Noxious Substances (e.g., acids, glues, paints, soaps, etc.) (X49, X69, Y19)	5	0.1	0.1	2	*	*	3	*	*	0	*	*

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

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

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

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

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

Poisoning due to homicides are not included in this table.

Mortality Table E6. Suicide, Homicide, and Undetermined by County of Residence, 2000

County	<u>Intentional Self-Harm</u> <u>(Suicide) (X60-X84,Y87.0)</u>			<u>Assault (Homicide) (X85-</u> <u>Y09,Y87.1)</u>			<u>Undetermined (Y10-</u> <u>Y34,Y87.2,Y89.9)</u>		
	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>
<b>State Total</b>	<b>727</b>	<b>12.3</b>	<b>12.4</b>	<b>200</b>	<b>3.4</b>	<b>3.4</b>	<b>133</b>	<b>2.3</b>	<b>2.2</b>
Adams	2	*	*	0	*	*	0	*	*
Asotin	1	*	*	0	*	*	0	*	*
Benton	14	9.8	10.3	1	*	*	1	*	*
Chelan	9	13.5	13.1	2	*	*	3	*	*
Clallam	11	17.0	14.3	1	*	*	2	*	*
Clark	60	17.4	18.1	10	2.9	3.0	4	*	*
Columbia	0	*	*	0	*	*	0	*	*
Cowlitz	17	18.3	18.3	1	*	*	0	*	*
Douglas	5	15.3	16.2	1	*	*	0	*	*
Ferry	1	*	*	2	*	*	1	*	*
Franklin	2	*	*	4	*	*	1	*	*
Garfield	0	*	*	0	*	*	0	*	*
Grant	1	*	*	4	*	*	4	*	*
Grays Harbor	8	11.9	11.7	4	*	*	3	*	*
Island	5	7.0	6.5	2	*	*	0	*	*
Jefferson	2	*	*	1	*	*	0	*	*
King	177	10.2	9.9	60	3.5	3.3	50	2.9	2.8
Kitsap	30	12.9	13.4	7	3.0	3.2	10	4.3	4.1
Kittitas	1	*	*	0	*	*	0	*	*
Klickitat	2	*	*	0	*	*	0	*	*
Lewis	10	14.6	15.7	5	7.3	7.4	0	*	*
Lincoln	1	*	*	0	*	*	0	*	*
Mason	5	10.1	8.2	2	*	*	1	*	*
Okanogan	5	12.6	13.7	3	*	*	0	*	*
Pacific	6	28.6	24.8	0	*	*	1	*	*
Pend Oreille	1	*	*	0	*	*	0	*	*
Pierce	91	13.0	13.0	34	4.9	4.7	14	2.0	2.0
San Juan	3	*	*	0	*	*	0	*	*
Skagit	15	14.6	15.0	3	*	*	0	*	*
Skamania	1	*	*	0	*	*	0	*	*
Snohomish	84	13.9	14.0	16	2.6	2.6	13	2.1	2.2
Spokane	58	13.9	13.9	11	2.6	2.6	17	4.1	4.1
Stevens	7	17.5	17.2	5	12.5	11.8	1	*	*
Thurston	29	14.0	13.8	1	*	*	3	*	*
Wahkiakum	1	*	*	0	*	*	0	*	*
Walla Walla	9	16.3	16.8	0	*	*	0	*	*
Whatcom	22	13.2	13.8	8	4.8	5.0	3	*	*
Whitman	1	*	*	0	*	*	0	*	*
Yakima	30	13.5	14.7	12	5.4	5.2	1	*	*

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

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

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

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

Mortality Table E7. Drug and Alcohol-Induced Causes for Residents, 2000

County	Drug-Induced			Alcohol-Induced		
	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>
<b>State Total</b>	<b>599</b>	<b>10.2</b>	<b>9.9</b>	<b>515</b>	<b>8.7</b>	<b>9.0</b>
Adams	1	*	*	0	*	*
Asotin	2	*	*	1	*	*
Benton	9	6.3	6.3	11	7.7	8.3
Chelan	6	9.0	8.7	8	12.0	11.8
Clallam	6	9.3	10.6	10	15.5	12.0
Clark	38	11.0	10.7	25	7.2	8.0
Columbia	0	*	*	0	*	*
Cowlitz	14	15.1	15.5	9	9.7	9.0
Douglas	2	*	*	1	*	*
Ferry	0	*	*	1	*	*
Franklin	4	*	*	5	10.1	14.7
Garfield	0	*	*	0	*	*
Grant	5	6.7	7.6	3	*	*
Grays Harbor	7	10.4	10.7	12	17.9	15.1
Island	3	*	*	6	8.4	7.8
Jefferson	1	*	*	0	*	*
King	199	11.5	10.7	141	8.1	8.3
Kitsap	22	9.5	9.1	26	11.2	11.2
Kittitas	1	*	*	3	*	*
Klickitat	0	*	*	2	*	*
Lewis	11	16.0	16.1	10	14.6	12.8
Lincoln	0	*	*	2	*	*
Mason	5	10.1	9.5	5	10.1	8.8
Okanogan	1	*	*	8	20.2	19.3
Pacific	4	*	*	6	28.6	21.1
Pend Oreille	0	*	*	1	*	*
Pierce	96	13.7	13.7	48	6.8	7.3
San Juan	1	*	*	2	*	*
Skagit	12	11.7	11.7	12	11.7	10.6
Skamania	0	*	*	2	*	*
Snohomish	61	10.1	9.5	58	9.6	10.6
Spokane	42	10.0	10.0	49	11.7	12.0
Stevens	2	*	*	3	*	*
Thurston	11	5.3	5.2	14	6.8	6.6
Wahkiakum	0	*	*	0	*	*
Walla Walla	1	*	*	3	*	*
Whatcom	13	7.8	8.2	13	7.8	8.0
Whitman	0	*	*	1	*	*
Yakima	19	8.5	9.6	14	6.3	7.2

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

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

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

Note: Source for Selected Disease Conditions is International Classification of Diseases, Tenth Revision, (ICD-10): Drug-Induced: F11.0-F11.5, F11.7-F11.9, F12.0-F12.5, F12.7-F12.9, F13.0-F13.5, F13.7-F13.9, F14.0-F14.5, F14.7-F14.9, F15.0-F15.5, F15.7-F15.9, F16.0-F16.5, F16.7-F16.9, F17.0, F17.3-F17.5, F17.7-F17.9, F18.0-F18.5, F18.7-F18.9, F19.0-F19.5, F19.7-F19.9, X40-X44, X60-X64, X85, Y10-Y14; Alcohol-Induced: F10, G31.2, G62.1, I42.6, K29.2, K70, R78.0, X45, X65, Y15.

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

Mortality Table E8. Unintentional Injury (Accident), Motor Vehicle Traffic, and Falls by County of Residence, 2000

County	Unintentional Injury (Accident)(V01-X59,Y85-Y86)			Motor Vehicle Traffic <sup>1</sup>			Falls (W00-W19)		
	Number	Crude	Age-Adj	Number	Crude	Age-Adj	Number	Crude	Age-Adj
		Rate <sup>2</sup>	Rate <sup>3</sup>		Rate <sup>2</sup>	Rate <sup>3</sup>		Rate <sup>2</sup>	Rate <sup>3</sup>
<b>State Total</b>	<b>2,048</b>	<b>34.7</b>	<b>35.5</b>	<b>690</b>	<b>11.7</b>	<b>11.8</b>	<b>458</b>	<b>7.8</b>	<b>8.4</b>
Adams	4	*	*	2	*	*	0	*	*
Asotin	13	63.3	61.9	6	29.2	30.0	2	*	*
Benton	54	37.9	40.9	20	14.0	14.6	11	7.7	9.9
Chelan	22	33.0	31.9	9	13.5	13.7	6	9.0	7.6
Clallam	35	54.2	51.5	12	18.6	19.7	12	18.6	11.9
Clark	89	25.8	28.0	29	8.4	8.8	20	5.8	7.1
Columbia	4	*	*	4	*	*	0	*	*
Cowlitz	57	61.3	61.3	12	12.9	13.1	15	16.1	15.0
Douglas	14	42.9	45.1	8	24.5	25.9	4	*	*
Ferry	2	*	*	1	*	*	0	*	*
Franklin	20	40.5	40.3	11	22.3	23.9	1	*	*
Garfield	0	*	*	0	*	*	0	*	*
Grant	38	50.9	53.7	26	34.8	35.4	4	*	*
Grays Harbor	22	32.7	32.7	5	7.4	7.7	5	7.4	6.4
Island	18	25.2	24.9	7	9.8	9.8	2	*	*
Jefferson	13	50.1	49.2	8	30.8	28.3	1	*	*
King	509	29.3	29.7	127	7.3	7.4	112	6.4	7.2
Kitsap	70	30.2	32.3	24	10.3	10.4	22	9.5	11.0
Kittitas	8	24.0	24.3	3	*	*	3	*	*
Klickitat	12	62.6	63.5	6	31.3	30.5	1	*	*
Lewis	32	46.6	45.7	10	14.6	15.3	6	8.7	7.6
Lincoln	6	58.9	48.2	2	*	*	2	*	*
Mason	24	48.6	48.5	13	26.3	27.3	4	*	*
Okanogan	25	63.2	67.5	12	30.3	33.5	2	*	*
Pacific	12	57.2	50.9	3	*	*	3	*	*
Pend Oreille	5	42.6	47.1	3	*	*	1	*	*
Pierce	243	34.7	37.2	87	12.4	12.9	47	6.7	8.5
San Juan	3	*	*	1	*	*	1	*	*
Skagit	42	40.8	39.5	16	15.5	16.1	8	7.8	6.5
Skamania	7	70.9	83.5	3	*	*	2	*	*
Snohomish	186	30.7	33.4	59	9.7	10.1	41	6.8	8.9
Spokane	201	48.1	46.6	57	13.6	13.4	72	17.2	16.0
Stevens	19	47.4	50.4	13	32.4	34.0	3	*	*
Thurston	73	35.2	35.7	30	14.5	14.4	17	8.2	8.8
Wahkiakum	1	*	*	0	*	*	1	*	*
Walla Walla	17	30.8	27.2	3	*	*	7	12.7	10.0
Whatcom	56	33.6	34.5	16	9.6	10.1	9	5.4	5.3
Whitman	11	27.0	27.6	7	17.2	14.1	0	*	*
Yakima	81	36.4	37.8	35	15.7	16.1	11	4.9	5.2

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

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

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

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

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

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



Mortality Table E9. Drowning, Fires, and Other Unintentional Injury (Accident) by County of Residence, 2000

County	<u>Drownings (V90.V92.W65-W74)</u>			<u>Fires (X00-X09)</u>			<u>Other Inintentional Injury (Accident) (remainder)</u>		
	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>	Number	Crude Rate <sup>1</sup>	Age-Adj Rate <sup>2</sup>
<b>State Total</b>	<b>92</b>	<b>1.6</b>	<b>1.6</b>	<b>58</b>	<b>1.0</b>	<b>1.0</b>	<b>750</b>	<b>12.7</b>	<b>12.7</b>
Adams	0	*	*	0	*	*	2	*	*
Asotin	0	*	*	0	*	*	5	24.3	24.0
Benton	4	*	*	3	*	*	16	11.2	11.3
Chelan	2	*	*	0	*	*	5	7.5	7.5
Clallam	2	*	*	1	*	*	8	12.4	14.3
Clark	3	*	*	1	*	*	36	10.4	10.7
Columbia	0	*	*	0	*	*	0	*	*
Cowlitz	3	*	*	3	*	*	24	25.8	26.4
Douglas	0	*	*	0	*	*	2	*	*
Ferry	0	*	*	0	*	*	1	*	*
Franklin	1	*	*	0	*	*	7	14.2	12.9
Garfield	0	*	*	0	*	*	0	*	*
Grant	0	*	*	0	*	*	8	10.7	12.1
Grays Harbor	2	*	*	4	*	*	6	8.9	9.0
Island	2	*	*	0	*	*	7	9.8	10.0
Jefferson	1	*	*	1	*	*	2	*	*
King	24	1.4	1.5	17	1.0	1.1	229	13.2	12.6
Kitsap	1	*	*	6	2.6	2.7	17	7.3	7.7
Kittitas	1	*	*	0	*	*	1	*	*
Klickitat	1	*	*	2	*	*	2	*	*
Lewis	2	*	*	0	*	*	14	20.4	19.8
Lincoln	1	*	*	0	*	*	1	*	*
Mason	1	*	*	0	*	*	6	12.1	11.0
Okanogan	2	*	*	0	*	*	9	22.7	22.5
Pacific	1	*	*	2	*	*	3	*	*
Pend Oreille	0	*	*	0	*	*	1	*	*
Pierce	12	1.7	1.7	3	*	*	94	13.4	13.7
San Juan	0	*	*	0	*	*	1	*	*
Skagit	0	*	*	1	*	*	17	16.5	15.9
Skamania	0	*	*	0	*	*	2	*	*
Snohomish	6	1.0	1.1	6	1.0	1.0	74	12.2	12.4
Spokane	8	1.9	1.9	2	*	*	62	14.8	14.8
Stevens	0	*	*	0	*	*	3	*	*
Thurston	5	2.4	2.4	2	*	*	19	9.2	9.0
Wahkiakum	0	*	*	0	*	*	0	*	*
Walla Walla	2	*	*	0	*	*	5	9.1	8.5
Whatcom	3	*	*	2	*	*	26	15.6	16.1
Whitman	0	*	*	1	*	*	3	*	*
Yakima	2	*	*	1	*	*	32	14.4	15.0

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

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

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

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

Mortality Table E10. Suicide, Homicide, and Undetermined to Residents by County of Injury, 2000

County of Injury	Intentional Self-Harm (Suicide) (X60-X84, Y87.0)	Assault (Homicide) (X85-Y09, Y87.1)	Undetermined (Y10-Y34, Y87.2, Y89.9)
<b>State Total</b>	<b>727</b>	<b>200</b>	<b>133</b>
Adams	2	0	0
Asotin	2	1	0
Benton	13	2	1
Chelan	9	1	3
Clallam	12	1	2
Clark	52	8	2
Columbia	0	0	0
Cowlitz	16	1	0
Douglas	4	1	0
Ferry	2	1	1
Franklin	3	4	0
Garfield	0	0	0
Grant	1	3	2
Grays Harbor	8	5	3
Island	4	1	1
Jefferson	1	0	0
King	159	57	53
Kitsap	23	6	10
Kittitas	6	1	0
Klickitat	2	0	0
Lewis	8	3	0
Lincoln	2	0	0
Mason	5	4	0
Okanogan	4	1	0
Pacific	7	0	0
Pend Oreille	1	0	0
Pierce	71	22	8
San Juan	3	0	0
Skagit	14	2	0
Skamania	1	0	0
Snohomish	73	10	10
Spokane	53	10	17
Stevens	5	6	0
Thurston	29	2	3
Wahkiakum	1	0	0
Walla Walla	6	0	0
Whatcom	18	7	0
Whitman	1	0	0
Yakima	26	12	0
Unknown	16	1	6
Out of State	64	27	11

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

Mortality Table E11. Unintentional Injury (Accident) to Residents by County of Injury, 2000

County of Injury	All Unintentional Injury (Accident)	Motor Vehicle			Other	
		Traffic	Falls	Drownings	Fires	Accidents
<b>State Total</b>	<b>2,048</b>	<b>690</b>	<b>458</b>	<b>92</b>	<b>58</b>	<b>750</b>
Adams	10	9	0	0	0	1
Asotin	3	2	1	0	0	0
Benton	45	18	10	3	2	12
Chelan	31	16	7	2	0	6
Clallam	30	12	10	2	1	5
Clark	60	21	14	1	1	23
Columbia	0	0	0	0	0	0
Cowlitz	51	13	12	4	3	19
Douglas	7	4	2	0	0	1
Ferry	4	2	0	0	0	2
Franklin	11	8	0	0	0	3
Garfield	1	0	0	1	0	0
Grant	32	18	3	2	0	9
Grays Harbor	21	6	4	2	4	5
Island	14	5	2	2	0	5
Jefferson	11	8	1	0	0	2
King	417	115	92	17	14	179
Kitsap	49	14	21	0	7	7
Kittitas	19	14	1	2	0	2
Klickitat	9	5	1	1	2	0
Lewis	28	10	5	1	0	12
Lincoln	3	1	1	1	0	0
Mason	20	12	2	1	0	5
Okanogan	22	13	3	2	0	4
Pacific	10	1	2	2	2	3
Pend Oreille	3	1	1	1	0	0
Pierce	179	64	37	12	3	63
San Juan	2	1	0	0	0	1
Skagit	39	17	9	1	1	11
Skamania	4	3	0	0	0	1
Snohomish	150	48	35	4	8	55
Spokane	158	48	66	4	2	38
Stevens	18	9	2	3	0	4
Thurston	62	26	17	3	2	14
Wahkiakum	2	0	1	1	0	0
Walla Walla	16	8	5	1	0	2
Whatcom	45	12	12	4	2	15
Whitman	12	6	0	0	1	5
Yakima	53	27	9	1	1	15
Unknown	150	60	10	8	1	71
Out of State	247	33	60	3	1	150

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

## F. Infant Mortality

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

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

Mortality Table F1. Selected Causes for Infant (Age < 1 Year) Residents, 1990-2000

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

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

### Note:

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

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

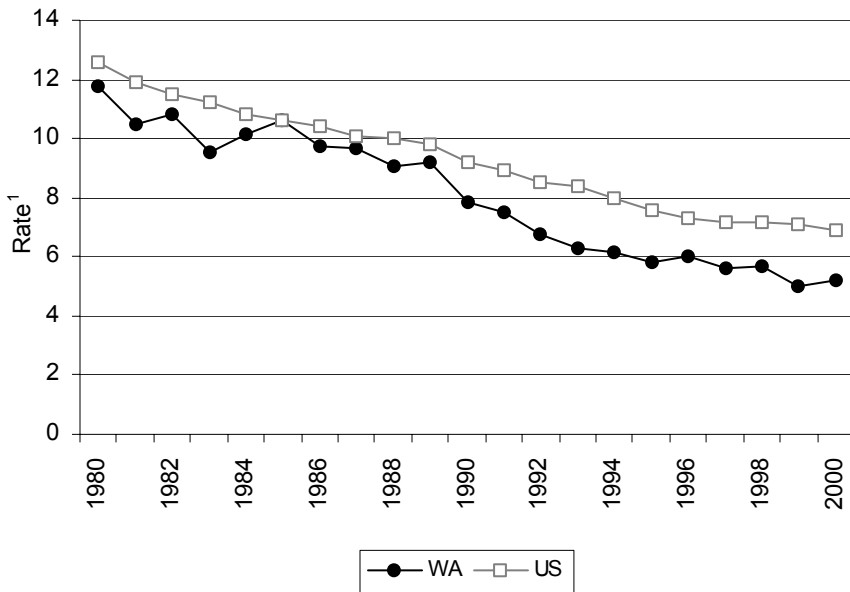
Congenital Malformations: ICD-9: 740-759; ICD-10: Q00-Q99; CR=0.9064

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

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

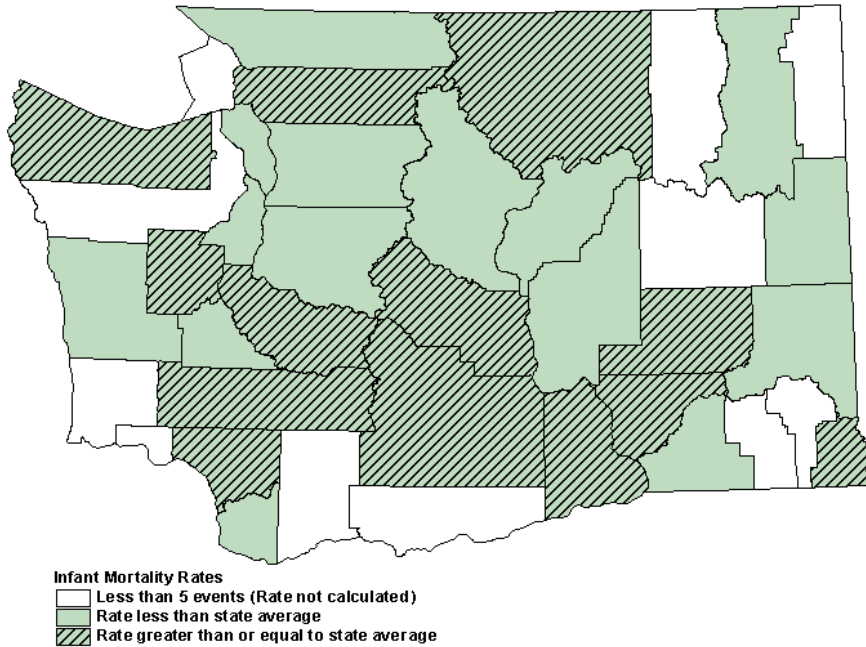
Total infant mortality has dramatically decreased since 1990. During this time period, SIDS deaths have declined by 59% and deaths from other causes have also decreased. Possible reasons for the change include emphasis on preventive measures such as proper sleep position (the 'Back to Sleep' campaign),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

Mortality Figure 9. Infant Mortality Rates<sup>1</sup>, Washington State Residents Compared to National, 1980-2000



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

Mortality Figure 10. Washington State Infant Mortality Rates<sup>1</sup> by County of Residence, 1998-2000 (Washington State Rate=5.31)



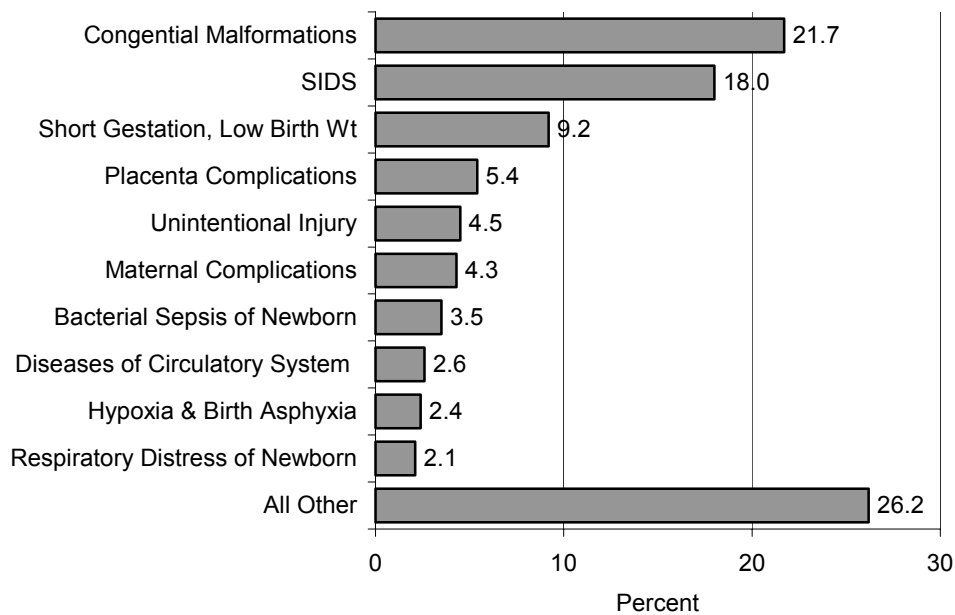
<sup>1</sup> Rate per 1,000 live births.

Mortality Table F2. Leading Causes of Infant (Age < 1 Year) Death for Residents, 2000

Rank	Causes of Death and ICD-10 Codes	Number	Percent <sup>1</sup>	Cumulative Percent
	<b>State Total</b>	<b>423</b>	<b>100.0</b>	
1	Congenital Malformations (Q00-Q99)	92	21.7	21.7
2	Sudden Infant Death Syndrome (R95)	76	18.0	39.7
3	Short Gestation & Low Birth Weight (P07)	39	9.2	48.9
4	Complic. of Placenta, Cord & Membranes (P02)	23	5.4	54.4
5	Unintentional Injury (Accident) (V01-X59, Y85-Y86)	19	4.5	58.9
6	Maternal Complications of Pregnancy (P01)	18	4.3	63.1
7	Bacterial Sepsis of Newborn (P36)	15	3.5	66.7
8	Diseases of the Circulatory System (I00-I99)	11	2.6	69.3
9	Intrauterine Hypoxia & Birth Asphyxia (P20-P21)	10	2.4	71.6
10	Respiratory Distress of Newborn (P22)	9	2.1	73.8
	All Other Causes	111	26.2	100.0

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

Mortality Figure 11. Leading Causes of Infant (Age < 1 Year) Death for Residents, 2000



Mortality Table F3. Birth Weight and Age for Infant (Age < 1 Year) Residents, 2000

Birth Weight in Grams	Total		< 1 Day	1 Day to < 7 Days	7 Days to <28 Days	28 Days to < 6 Months	6 Months to < 12 Months
	Number	Rate <sup>1</sup>					
<b>State Totals</b>	<b>423</b>	<b>5.2</b>	<b>149</b>	<b>42</b>	<b>57</b>	<b>126</b>	<b>49</b>
Under 500	61	792.2	59	1	0	1	0
500 - 749	49	445.5	28	8	7	6	0
750 - 999	31	191.4	8	4	8	7	4
1,000 - 1,499	28	66.0	12	4	5	6	1
1,500 - 1,999	25	27.7	6	5	3	6	5
2,000 - 2,499	27	9.5	7	3	3	9	5
2,500 - 2,999	42	3.8	5	6	5	15	11
3,000 - 3,499	73	2.6	6	7	14	38	8
3,500 - 3,999	43	1.6	0	3	4	26	10
4,000 - 4,499	13	1.5	1	0	3	9	0
4,500 and over	4	*	0	0	1	1	2
Unknown	27	77.1	17	1	4	2	3

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

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

Mortality Table F4-a. Selected Causes by Age and Sex for Infant (Age &lt; 1 Year) Residents, 2000

Cause and ICD-10 Code	Total			Under 1 Day			1 Day to Under 7 Days		
	Total	Male	Fem.	Total	Male	Fem.	Total	Male	Fem.
<b>Total All Causes<sup>1</sup></b>	<b>(423)</b>	<b>(225)</b>	<b>(198)</b>	<b>(149)</b>	<b>(84)</b>	<b>(65)</b>	<b>(42)</b>	<b>(22)</b>	<b>(20)</b>
<b>Infectious &amp; Parasitic Diseases (A00-B99)</b>	7	5	2	0	0	0	0	0	0
<b>Diseases of the Nervous System (G00-G98)</b>	6	2	4	0	0	0	0	0	0
<b>Diseases of the Circulatory System (I00-I99)</b>	11	4	7	1	1	0	2	1	1
<b>Diseases of the Respiratory System (J00-J98)</b>	10	4	6	0	0	0	0	0	0
<b>Conditions Originating in Perinatal Period(P00-P96)</b>	(172)	(93)	(79)	(113)	(62)	(51)	(25)	(14)	(11)
Newborn Affected by Maternal Factors (P00-P04)	(51)	(28)	(23)	(50)	(27)	(23)	(1)	(1)	(0)
Incompetent Cervix (P01.0)	7	2	5	7	2	5	0	0	0
Premature Rupture of Membranes (P01.1)	8	5	3	8	5	3	0	0	0
Other Maternal Complications of Pregnancy (P01.2-P01.9)	3	0	3	3	0	3	0	0	0
Complications Involving Placenta (P02.0-P02.3)	13	10	3	13	10	3	0	0	0
Complications of Cord & Membranes (P02.4-P02.9)	10	5	5	9	4	5	1	1	0
Other (P00,P03,P04)	10	6	4	10	6	4	0	0	0
Short Gestation & Low Birth Weight (P07)	39	23	16	33	20	13	4	2	2
Intrauterine Hypoxia & Birth Asphyxia (P20-P21)	10	6	4	2	1	1	6	5	1
Respiratory Distress of Newborn (P22)	9	5	4	5	3	2	2	1	1
Other Respiratory Conditions (P23-P28)	16	5	11	6	2	4	2	0	2
Infections Specific to Perinatal Period (P35-P39)	17	9	8	8	4	4	4	1	3
Neonatal Hemorrhage (P50-P52,P54)	4	3	1	0	0	0	2	2	0
Necrotizing Enterocolitis of Newborn (P77)	5	2	3	0	0	0	0	0	0
Hydrops Fetalis Not Due to Hemolytic Disease (P83.2)	6	3	3	3	1	2	2	1	1
Other(P05-P06,P08-P15,P29-P34,P53,P55-P76,P78-P83.1,P83.3-P96)	15	9	6	6	4	2	2	1	1
<b>Congenital Malformations (Q00-Q99)</b>	(92)	(49)	(43)	(32)	(18)	(14)	(12)	(5)	(7)
Anencephaly and Similar Malformations (Q00)	6	2	4	4	2	2	1	0	1
Malformations of Heart (Q20-Q24)	42	21	21	9	6	3	5	2	3
Other Malformations of Circulatory System (Q25-Q28)	2	1	1	0	0	0	1	0	1
Malformations of Respiratory System (Q30-Q34)	4	3	1	1	1	0	2	1	1
Malformations of Genitourinary System (Q50-Q64)	4	4	0	2	2	0	1	1	0
Malform. of Musculoskeletal Sys. & Skin (Q65-Q85)	5	2	3	1	0	1	0	0	0
Down's Syndrome (Q90)	0	0	0	0	0	0	0	0	0
Edward's Syndrome (Q91.0-Q91.3)	4	2	2	4	2	2	0	0	0
Patau's Syndrome (Q91.4-Q91.7)	3	2	1	2	1	1	1	1	0
Other (Q01-Q18,Q35-Q45,Q86-Q89)	14	9	5	3	2	1	1	0	1
Other Chromosomal Abnormalities (Q92-Q99)	8	3	5	6	2	4	0	0	0
<b>Sudden Infant Death Syndrome (R95)</b>	76	41	35	0	0	0	0	0	0
<b>Other(C00-F99,H00-H99,K00-N99,R00-R94,R96-R99)</b>	22	12	10	2	2	0	3	2	1
<b>External Causes of Mortality (V01-Y89)</b>	(27)	(15)	(12)	(1)	(1)	(0)	(0)	(0)	(0)
Unintentional Injury (Accident) (V01-X59, Y85-Y86)	(19)	(8)	(11)	(1)	(1)	(0)	(0)	(0)	(0)
Suffocation & Strangulation (W75-W77,W81-W84)	6	1	5	0	0	0	0	0	0
Other (V00-W74,W78-W80,W85-X59,Y85-Y86)	13	7	6	1	1	0	0	0	0
Assault (Homicide) (X85-Y09, Y87.1)	7	7	0	0	0	0	0	0	0
Other (X60-X84,Y10-Y84,Y87.0,Y87.2-Y89)	1	0	1	0	0	0	0	0	0

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



Mortality Table F4-b. Selected Causes by Age and Sex for Infant (Age < 1 Year) Residents, 2000

Cause and ICD-10 Code	<u>7 Days to Under</u>			<u>28 Days to Under</u>			<u>6 Months to Under</u>		
	<u>28 Days</u>			<u>6 Months</u>			<u>12 Months</u>		
	Total	Male	Fem.	Total	Male	Fem.	Total	Male	Fem.
<b>Total All Causes<sup>1</sup></b>	<b>(57)</b>	<b>(27)</b>	<b>(30)</b>	<b>(126)</b>	<b>(64)</b>	<b>(62)</b>	<b>(49)</b>	<b>(28)</b>	<b>(21)</b>
<b>Infectious &amp; Parasitic Diseases (A00-B99)</b>	0	0	0	6	4	2	1	1	0
<b>Diseases of the Nervous System (G00-G98)</b>	2	0	2	2	2	0	2	0	2
<b>Diseases of the Circulatory System (I00-I99)</b>	1	0	1	4	1	3	3	1	2
<b>Diseases of the Respiratory System (J00-J98)</b>	0	0	0	8	4	4	2	0	2
<b>Conditions Originating in Perinatal Period(P00-P96)</b>	(27)	(16)	(11)	(5)	(0)	(5)	(2)	(1)	(1)
Newborn Affected by Maternal Factors (P00-P04)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Incompetent Cervix (P01.0)	0	0	0	0	0	0	0	0	0
Premature Rupture of Membranes (P01.1)	0	0	0	0	0	0	0	0	0
Other Maternal Pregnancy Complications (P01.2-P01.9)	0	0	0	0	0	0	0	0	0
Complications Involving Placenta (P02.0-P02.3)	0	0	0	0	0	0	0	0	0
Complications of Cord & Membranes (P02.4-P02.9)	0	0	0	0	0	0	0	0	0
Other (P00,P03,P04)	0	0	0	0	0	0	0	0	0
Short Gestation & Low Birth Weight (P07)	1	1	0	1	0	1	0	0	0
Intrauterine Hypoxia & Birth Asphyxia (P20-P21)	2	0	2	0	0	0	0	0	0
Respiratory Distress of Newborn (P22)	2	1	1	0	0	0	0	0	0
Other Respiratory Conditions (P23-P28)	5	2	3	2	0	2	1	1	0
Perinatal Infections (P35-P39)	5	4	1	0	0	0	0	0	0
Neonatal Hemorrhage (P50-P52,P54)	2	1	1	0	0	0	0	0	0
Necrotizing Enterocolitis of Newborn (P77)	4	2	2	1	0	1	0	0	0
Hydrops Fetalis Not Due to Hemolytic Disease (P83.2)	1	1	0	0	0	0	0	0	0
Other(P05-P06,P08-P15,P29-P34,P53,P55-P76,P78-P83.1,P83.3-P96)	5	4	1	1	0	1	1	0	1
<b>Congenital Malformations (Q00-Q99)</b>	(19)	(8)	(11)	(20)	(12)	(8)	(9)	(6)	(3)
Anencephaly and Similar Malformations (Q00)	1	0	1	0	0	0	0	0	0
Malformations of Heart (Q20-Q24)	10	3	7	13	7	6	5	3	2
Other Malformations of Circulatory System (Q25-Q28)	0	0	0	1	1	0	0	0	0
Malformations of Respiratory System (Q30-Q34)	0	0	0	1	1	0	0	0	0
Malformations of Genitourinary System (Q50-Q64)	0	0	0	0	0	0	1	1	0
Malform. of Musculoskeletal Sys. & Skin (Q65-Q85)	4	2	2	0	0	0	0	0	0
Down's Syndrome (Q90)	0	0	0	0	0	0	0	0	0
Edward's Syndrome (Q91.0-Q91.3)	0	0	0	0	0	0	0	0	0
Patau's Syndrome (Q91.4-Q91.7)	0	0	0	0	0	0	0	0	0
Other (Q01-Q18,Q35-Q45,Q86-Q89)	4	3	1	3	2	1	3	2	1
Other Chromosomal Abnormalities (Q92-Q99)	0	0	0	2	1	1	0	0	0
<b>Sudden Infant Death Syndrome (R95)</b>	7	3	4	54	27	27	15	11	4
<b>Other(C00-F99,H00-H99,K00-N99,R00-R94,R96-R99)</b>	0	0	0	13	6	7	4	2	2
<b>External Causes of Mortality (V01-Y89)</b>	(1)	(0)	(1)	(14)	(8)	(6)	(11)	(6)	(5)
Unintentional Injury (Accident) (V01-X59, Y85-Y86)	(1)	(0)	(1)	(10)	(4)	(6)	(7)	(3)	(4)
Suffocation & Strangulation (W75-W77,W81-W84)	1	0	1	4	1	3	1	0	1
Other (V00-W74,W78-W80,W85-X59,Y85-Y86)	0	0	0	6	3	3	6	3	3
Assault (Homicide) (X85-Y09, Y87.1)	0	0	0	4	4	0	3	3	0
Other (X60-X84,Y10-Y84,Y87.0,Y87.2-Y89)	0	0	0	0	0	0	1	0	1

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

Mortality Table F5. Selected Causes for Infant (Age &lt; 1 Year) County of Residence, 2000

County	Total All Causes	Maternal Factors	Hypoxia & Respiratory Conditions	Other Perinatal Conditions	Congenital Malformations	Sudden Infant Death	External Causes	All Other Causes
<b>State Total</b>	<b>423</b>	<b>51</b>	<b>35</b>	<b>86</b>	<b>92</b>	<b>76</b>	<b>27</b>	<b>56</b>
Adams	4	0	2	1	0	0	0	1
Asotin	3	0	0	1	1	0	1	0
Benton	19	5	0	4	6	1	0	3
Chelan	3	0	0	0	2	0	0	1
Clallam	5	0	0	1	1	2	1	0
Clark	19	3	3	3	4	4	0	2
Columbia	0	0	0	0	0	0	0	0
Cowlitz	11	1	2	2	2	1	2	1
Douglas	1	0	0	0	0	1	0	0
Ferry	0	0	0	0	0	0	0	0
Franklin	4	1	0	0	1	0	2	0
Garfield	0	0	0	0	0	0	0	0
Grant	8	1	0	1	0	2	1	3
Grays Harbor	2	0	0	0	1	1	0	0
Island	3	0	0	0	1	0	2	0
Jefferson	1	0	0	0	0	1	0	0
King	102	15	11	24	21	13	3	15
Kitsap	19	2	1	5	5	3	1	2
Kittitas	5	2	0	1	0	1	0	1
Klickitat	1	1	0	0	0	0	0	0
Lewis	8	0	0	1	3	2	2	0
Lincoln	1	0	0	0	0	0	1	0
Mason	3	0	0	1	1	1	0	0
Okanogan	5	0	0	0	2	0	2	1
Pacific	2	0	0	0	0	0	0	2
Pend Oreille	1	0	0	0	1	0	0	0
Pierce	62	6	6	19	8	14	2	7
San Juan	0	0	0	0	0	0	0	0
Skagit	11	2	2	1	3	2	0	1
Skamania	2	0	0	0	0	2	0	0
Snohomish	36	7	2	4	5	7	4	7
Spokane	28	2	4	6	8	4	1	3
Stevens	1	0	0	0	0	1	0	0
Thurston	11	0	1	3	4	1	0	2
Wahkiakum	0	0	0	0	0	0	0	0
Walla Walla	2	1	0	1	0	0	0	0
Whatcom	7	1	1	0	3	1	1	0
Whitman	2	0	0	1	1	0	0	0
Yakima	31	1	0	6	8	11	1	4

Note: Source for Selected Causes is International Classification of Diseases, Tenth Revision (ICD-10): Maternal Factors (ICD-10: P00-P04); Hypoxia, and Respiratory Conditions (ICD-10: P20-P28); Other Perinatal Conditions (ICD-10: P05-P15, P29-P96); Congenital Malformations (ICD-10: Q00-Q99); Sudden Infant Death Syndrome (ICD-10: R95); External Causes (ICD-10: V01-Y89)

Mortality Table F6. Mother's Race/Ethnicity<sup>1</sup> by Infant (Age < 1 Year) County of Residence<sup>2</sup>, 2000

County	African		Native		Asian	Other	Unk	Hispanic <sup>3</sup>
	Total	White	American	American				
<b>State Total</b>	<b>423</b>	<b>331</b>	<b>24</b>	<b>18</b>	<b>34</b>	<b>0</b>	<b>16</b>	<b>55</b>
<b>State Rate<sup>4</sup></b>	<b>5.2</b>	<b>5.0</b>	<b>7.2</b>	<b>9.4</b>	<b>5.2</b>	<b>*</b>	<b>n/a</b>	<b>4.8</b>
Adams	4	4	0	0	0	0	0	3
Asotin	3	3	0	0	0	0	0	0
Benton	19	18	0	0	0	0	1	5
Chelan	3	3	0	0	0	0	0	1
Clallam	5	4	0	1	0	0	0	0
Clark	19	15	2	0	2	0	0	1
Columbia	0	0	0	0	0	0	0	0
Cowlitz	11	10	0	0	1	0	0	0
Douglas	1	1	0	0	0	0	0	0
Ferry	0	0	0	0	0	0	0	0
Franklin	4	4	0	0	0	0	0	2
Garfield	0	0	0	0	0	0	0	0
Grant	8	7	1	0	0	0	0	3
Grays Harbor	2	1	0	0	0	0	1	0
Island	3	2	0	0	0	0	1	1
Jefferson	1	1	0	0	0	0	0	0
King	102	65	9	4	19	0	5	9
Kitsap	19	17	1	0	1	0	0	1
Kittitas	5	4	1	0	0	0	0	0
Klickitat	1	1	0	0	0	0	0	0
Lewis	8	8	0	0	0	0	0	1
Lincoln	1	1	0	0	0	0	0	0
Mason	3	3	0	0	0	0	0	1
Okanogan	5	3	0	2	0	0	0	0
Pacific	2	1	0	1	0	0	0	0
Pend Oreille	1	1	0	0	0	0	0	0
Pierce	62	48	9	0	3	0	2	8
San Juan	0	0	0	0	0	0	0	0
Skagit	11	10	0	1	0	0	0	5
Skamania	2	2	0	0	0	0	0	0
Snohomish	36	25	1	0	7	0	3	2
Spokane	28	27	0	0	0	0	1	1
Stevens	1	1	0	0	0	0	0	0
Thurston	11	9	0	1	1	0	0	0
Wahkiakum	0	0	0	0	0	0	0	0
Walla Walla	2	2	0	0	0	0	0	0
Whatcom	7	5	0	1	0	0	1	1
Whitman	2	2	0	0	0	0	0	0
Yakima	31	23	0	7	0	0	1	10

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

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

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

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

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

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Mortality Table F7. Mother's Age Group<sup>1</sup> by Infant (Age <1 Year) County of Residence<sup>2</sup>, 2000

County	All Ages	Under								45 and Over	Age Unk
		15	15-17	18-19	20-24	25-29	30-34	35-39	40-44		
<b>State Total</b>	<b>423</b>	<b>1</b>	<b>24</b>	<b>44</b>	<b>125</b>	<b>83</b>	<b>89</b>	<b>44</b>	<b>12</b>	<b>0</b>	<b>1</b>
<b>State Rate<sup>3</sup></b>	<b>5.2</b>	<b>*</b>	<b>9.4</b>	<b>7.9</b>	<b>6.3</b>	<b>3.8</b>	<b>4.6</b>	<b>4.6</b>	<b>6.1</b>	<b>*</b>	<b>n/a</b>
Adams	4	0	1	0	2	0	1	0	0	0	0
Asotin	3	0	0	1	1	0	1	0	0	0	0
Benton	19	0	0	3	5	3	5	2	1	0	0
Chelan	3	0	0	1	1	0	0	1	0	0	0
Clallam	5	0	0	1	1	3	0	0	0	0	0
Clark	19	0	0	1	7	1	7	3	0	0	0
Columbia	0	0	0	0	0	0	0	0	0	0	0
Cowlitz	11	0	1	2	6	1	0	1	0	0	0
Douglas	1	0	0	0	0	0	0	1	0	0	0
Ferry	0	0	0	0	0	0	0	0	0	0	0
Franklin	4	0	0	0	2	0	2	0	0	0	0
Garfield	0	0	0	0	0	0	0	0	0	0	0
Grant	8	0	1	0	5	0	0	2	0	0	0
Grays Harbor	2	0	0	1	0	1	0	0	0	0	0
Island	3	0	1	0	1	0	0	0	1	0	0
Jefferson	1	0	1	0	0	0	0	0	0	0	0
King	102	0	4	6	22	24	31	11	3	0	1
Kitsap	19	0	1	1	8	3	4	2	0	0	0
Kittitas	5	0	0	0	3	0	2	0	0	0	0
Klickitat	1	0	1	0	0	0	0	0	0	0	0
Lewis	8	0	1	0	4	0	2	1	0	0	0
Lincoln	1	0	0	1	0	0	0	0	0	0	0
Mason	3	0	0	2	1	0	0	0	0	0	0
Okanogan	5	0	0	2	1	2	0	0	0	0	0
Pacific	2	0	0	0	0	1	1	0	0	0	0
Pend Oreille	1	0	0	0	0	0	0	1	0	0	0
Pierce	62	0	7	8	22	10	7	6	2	0	0
San Juan	0	0	0	0	0	0	0	0	0	0	0
Skagit	11	0	0	3	5	2	0	1	0	0	0
Skamania	2	0	0	0	1	0	0	1	0	0	0
Snohomish	36	0	1	1	10	9	11	2	2	0	0
Spokane	28	0	1	3	5	6	8	3	2	0	0
Stevens	1	0	0	0	0	1	0	0	0	0	0
Thurston	11	0	0	1	1	5	4	0	0	0	0
Wahkiakum	0	0	0	0	0	0	0	0	0	0	0
Walla Walla	2	0	0	0	0	2	0	0	0	0	0
Whatcom	7	0	0	0	2	2	1	1	1	0	0
Whitman	2	0	0	0	0	1	0	1	0	0	0
Yakima	31	1	3	6	9	6	2	4	0	0	0

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

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

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

Mortality Table F8. Fetal Deaths, Perinatal, Neonatal, and Infant Mortality by County/City of Residence, 2000

County and City	Fetal Deaths		Perinatal Mortality		Neonatal Mortality		Infant Mortality	
	Number	Ratio <sup>1</sup>	Number	Rate <sup>2</sup>	Number	Rate <sup>3</sup>	Number	Rate <sup>4</sup>
<b>State Total</b>	<b>437</b>	<b>5.4</b>	<b>628</b>	<b>7.7</b>	<b>248</b>	<b>3.1</b>	<b>423</b>	<b>5.2</b>
Adams	2	*	5	14.9	3	*	4	*
Asotin	0	*	1	*	2	*	3	*
Benton	13	6.3	24	11.5	13	6.3	19	9.1
Kennewick	4	*	10	9.9	7	7.0	8	8.0
Richland	7	14.6	9	18.5	2	*	5	10.4
Chelan	3	*	5	5.1	2	*	3	*
Wenatchee	0	*	1	*	1	*	2	*
Clallam	2	*	4	*	2	*	5	8.0
Port Angeles	1	*	2	*	1	*	2	*
Clark	32	5.9	43	7.9	14	2.6	19	3.5
Vancouver	22	6.3	27	7.7	6	1.7	11	3.1
Columbia	0	*	0	*	0	*	0	*
Cowlitz	8	6.2	13	10.0	5	3.9	11	8.5
Longview	1	*	4	*	3	*	5	8.6
Douglas	1	*	1	*	0	*	1	*
Ferry	0	*	0	*	0	*	0	*
Franklin	10	9.1	12	10.8	2	*	4	*
Pasco	7	8.5	8	9.7	1	*	3	*
Garfield	0	*	0	*	0	*	0	*
Grant	7	4.9	10	6.9	3	*	8	5.6
Grays Harbor	6	7.6	7	8.8	2	*	2	*
Aberdeen	4	*	4	*	1	*	1	*
Island	3	*	4	*	1	*	3	*
Oak Harbor	1	*	1	*	0	*	1	*
Jefferson	2	*	2	*	0	*	1	*
King	127	5.6	178	7.9	68	3.0	102	4.5
Auburn	7	8.3	12	14.1	6	7.1	6	7.1
Bellevue	6	4.3	8	5.7	2	*	3	*
Bothell (part)	0	*	0	*	0	*	0	*
Burien	0	*	0	*	0	*	2	*
Des Moines	1	*	3	*	2	*	4	*
Federal Way	8	6.0	11	8.1	3	*	6	4.5
Kenmore	0	*	0	*	0	*	0	*
Kent	10	6.0	12	7.1	5	3.0	9	5.4
Kirkland	5	6.3	7	8.8	3	*	5	6.3
Mercer Island	0	*	2	*	2	*	2	*
Redmond	2	*	2	*	2	*	3	*
Renton	6	4.9	9	7.3	3	*	4	*
Sammamish	0	*	0	*	0	*	0	*
SeaTac	1	*	1	*	1	*	3	*
Seattle	45	6.1	69	9.2	29	3.9	38	5.1
Shoreline	4	*	4	*	0	*	3	*
Tukwila	4	*	6	26.2	3	*	3	*
Kitsap	16	5.1	26	8.3	12	3.9	19	6.1
Bainbridge Island	0	*	0	*	0	*	0	*
Bremerton	7	7.7	10	11.0	3	*	3	*

continued Mortality Table F8. Fetal Deaths, Perinatal, Neonatal, and Infant Mortality by County/City of Residence, 2000

County and City	Fetal Deaths		Perinatal Mortality		Neonatal Mortality		Infant Mortality	
	Number	Ratio <sup>1</sup>	Number	Rate <sup>2</sup>	Number	Rate <sup>3</sup>	Number	Rate <sup>4</sup>
Kittitas	2	*	5	13.5	4	*	5	13.6
Ellensburg	1	*	4	*	4	*	5	27.8
Klickitat	0	*	1	*	1	*	1	*
Lewis	12	13.8	15	17.0	4	*	8	9.2
Lincoln	0	*	0	*	0	*	1	*
Mason	5	8.9	6	10.6	2	*	3	*
Okanogan	3	*	3	*	0	*	5	9.9
Pacific	1	*	1	*	0	*	2	*
Pend Oreille	0	*	1	*	1	*	1	*
Pierce	50	4.9	75	7.3	36	3.5	62	6.1
Lakewood	2	*	4	*	4	*	9	10.7
Puyallup	0	*	1	*	1	*	3	*
Tacoma	22	5.6	28	7.1	11	2.8	20	5.1
University Place	0	*	0	*	0	*	1	*
San Juan	0	*	0	*	0	*	0	*
Skagit	8	5.7	13	9.3	7	5.0	11	7.9
Mount Vernon	1	*	2	*	1	*	4	*
Skamania	0	*	0	*	0	*	2	*
Snohomish	35	4.1	47	5.5	17	2.0	36	4.2
Edmonds	4	*	4	*	0	*	0	*
Everett	5	2.3	6	2.8	3	*	12	5.6
Lynnwood	6	6.8	7	7.9	3	*	4	*
Marysville	1	*	2	*	1	*	1	*
Mountlake Terrace	1	*	1	*	0	*	2	*
Mukilteo	2	*	5	29.2	3	*	5	29.6
Spokane	30	5.3	45	7.9	19	3.4	28	4.9
Spokane (city)	21	6.2	30	8.8	12	3.5	18	5.3
Stevens	1	*	1	*	0	*	1	*
Thurston	17	6.7	21	8.2	8	3.1	11	4.3
Lacey	3	*	4	*	1	*	2	*
Olympia	5	5.3	5	5.3	2	*	4	*
Wahkiakum	0	*	0	*	0	*	0	*
Walla Walla	4	*	5	7.5	1	*	2	*
Walla Walla (city)	2	*	2	*	0	*	1	*
Whatcom	13	6.3	17	8.1	4	*	7	3.4
Bellingham	7	7.5	8	8.5	1	*	2	*
Whitman	2	*	3	*	1	*	2	*
Pullman	2	*	2	*	0	*	1	*
Yakima	22	5.2	34	8.0	14	3.3	31	7.3
Yakima (city)	6	3.9	11	7.1	6	3.9	15	9.7

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

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

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

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

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

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

## G. Fetal Death

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

Mortality Table G1. Selected Causes of Fetal Death for Residents, 1990-2000

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

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

Note:

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

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

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

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

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

Fetal death ratios have fluctuated. The most recent ratio (2000) is one of the lowest in the past decade. Data for future years will show if this is just another fluctuation or part of a downward trend. Trends in cause-specific fetal death ratios generally parallel the all-cause trend.



Mortality Table G2. Fetal Deaths by Mother's Age Group by Place of Residence, 2000

County	All Ages	Under								45 and Over	Unk
		15	15-17	18-19	20-24	25-29	30-34	35-39	40-44		
<b>State Total</b>	<b>437</b>	<b>2</b>	<b>11</b>	<b>41</b>	<b>77</b>	<b>109</b>	<b>97</b>	<b>73</b>	<b>21</b>	<b>1</b>	<b>5</b>
<b>State Ratio<sup>1</sup></b>	<b>5.4</b>	<b>*</b>	<b>4.3</b>	<b>7.4</b>	<b>3.9</b>	<b>5.0</b>	<b>5.0</b>	<b>7.7</b>	<b>10.8</b>	<b>*</b>	<b>n/a</b>
Adams	2	0	0	0	2	0	0	0	0	0	0
Asotin	0	0	0	0	0	0	0	0	0	0	0
Benton	13	0	0	2	2	4	2	3	0	0	0
Chelan	3	0	0	0	0	0	1	0	2	0	0
Clallam	2	0	0	0	0	0	2	0	0	0	0
Clark	32	0	0	3	7	11	7	4	0	0	0
Columbia	0	0	0	0	0	0	0	0	0	0	0
Cowlitz	8	0	1	0	1	2	4	0	0	0	0
Douglas	1	0	0	0	1	0	0	0	0	0	0
Ferry	0	0	0	0	0	0	0	0	0	0	0
Franklin	10	0	0	1	2	5	1	1	0	0	0
Garfield	0	0	0	0	0	0	0	0	0	0	0
Grant	7	0	1	2	0	0	4	0	0	0	0
Grays Harbor	6	0	0	1	0	4	0	1	0	0	0
Island	3	0	0	1	1	0	1	0	0	0	0
Jefferson	2	0	0	0	0	1	1	0	0	0	0
King	127	0	0	11	18	27	29	32	8	0	2
Kitsap	16	0	0	3	4	2	2	4	1	0	0
Kittitas	2	0	0	0	1	1	0	0	0	0	0
Klickitat	0	0	0	0	0	0	0	0	0	0	0
Lewis	12	0	0	1	3	2	1	3	2	0	0
Lincoln	0	0	0	0	0	0	0	0	0	0	0
Mason	5	0	0	2	1	1	0	1	0	0	0
Okanogan	3	0	0	0	1	1	0	1	0	0	0
Pacific	1	0	0	1	0	0	0	0	0	0	0
Pend Oreille	0	0	0	0	0	0	0	0	0	0	0
Pierce	50	0	3	3	12	13	11	6	1	0	1
San Juan	0	0	0	0	0	0	0	0	0	0	0
Skagit	8	0	1	1	1	2	2	1	0	0	0
Skamania	0	0	0	0	0	0	0	0	0	0	0
Snohomish	35	0	1	2	4	9	8	6	4	0	1
Spokane	30	2	1	4	6	7	7	3	0	0	0
Stevens	1	0	0	0	0	0	0	1	0	0	0
Thurston	17	0	1	0	1	4	6	2	1	1	1
Wahkiakum	0	0	0	0	0	0	0	0	0	0	0
Walla Walla	4	0	1	0	1	0	2	0	0	0	0
Whatcom	13	0	1	1	1	5	2	2	1	0	0
Whitman	2	0	0	0	1	0	0	1	0	0	0
Yakima	22	0	0	2	6	8	4	1	1	0	0

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

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

Mortality Table G3. Fetal Deaths for Residents by Cause, 2000

Cause with ICD-10 Code	Number
<b>All causes<sup>1</sup></b>	<b>437</b>
<b>Perinatal conditions (P00-P96)</b>	<b>385</b>
Fetus Affected by Maternal Conditions (P00) <sup>2</sup>	(25)
Maternal Hypertensive Disorders (P00.0)	12
Maternal Injury (P00.5)	4
Other Maternal Conditions (P00.1-P00.4,P00.6-P00.9)	9
Fetus Affected by Maternal Complications of Pregnancy (P01)	(53)
Incompetent Cervix (P01.0)	18
Premature Rupture of Membranes (P01.1)	23
Multiple Pregnancy (P01.5)	5
Other (P01.2-P01.4,P01.6-P01.9)	7
Fetus Affected by Complications of Placenta, Cord & Membrane (P02)	(141)
Other Forms of Placental Separation & Hemorrhage (P02.1)	34
Other Morphological & Functional Abnormalities of Placenta (P02.2)	11
Placental Transfusion Syndrome (P02.3)	11
Other Compression of Umbilical Cord (P02.5)	32
Other & Unspecified Conditions of Umbilical Cord (P02.6)	38
Chorioamnionitis (P02.7)	11
Other (P02.0,P02.4,P02.8-P02.9)	4
Fetus Affected by Complications of Labor & Delivery (P03)	6
Fetus Affected by Noxious Influences Via Placenta (P04)	4
Slow Fetal Growth & Fetal Malnutrition (P05)	3
Disorders Related to Short Gestation, Low Birth Weight (P07)	24
Disorders Related to Long Gestation & High Birth Weight (P08)	0
Birth Trauma (P10-P15)	1
Intrauterine Hypoxia and Birth Asphyxia (P20-P21)	6
Fetal Hemorrhage (P50-P54)	1
Hydrops Fetalis Due to Hemolytic Disease (P56)	1
Transitory Endocrine & Metabolic Disorders (P70-P74)	3
Fetal Death of Unspecified Cause (P95)	99
All other (P22-P26,P28,P30-P49,P55,P57-P69,P75-P94,P96)	18
<b>Congenital Malformations &amp; Chromosomal Abnormalities (Q00-Q99)</b>	<b>51</b>
Congenital Malformations of Nervous System (Q00-Q07)	(10)
Anencephaly & Similar Malformations (Q00)	6
Other (Q01-Q07)	4
Congenital Malformations of Heart (Q20-Q24)	8
Congenital Malformations of Urinary System (Q60-Q64)	3
Congenital Malformations Musculoskeletal & Integument (Q65-Q85)	1
Chromosomal Abnormalities Not Elsewhere Classified, (Q90-Q99)	(18)
Down's Syndrome (Q90)	6
Edward's Syndrome (Q91.0-Q91.3)	6
Other (Q91.4-Q99)	6
Other (Q08-Q18,Q25-Q56,Q86-Q89)	11
<b>All Other Causes (A00-O00,R00-R99,V01-V84)</b>	<b>1</b>

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

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

Mortality Table G4. Fetal Deaths by Weight in Grams and Sex for Residents, 2000

<b>Weight in Grams</b>	<b>Total</b>	<b>Male</b>	<b>Female</b>	<b>Unknown</b>
<b>State Totals</b>	<b>437</b>	<b>234</b>	<b>202</b>	<b>1</b>
Under 250	14	7	7	0
250 - 499	99	47	51	1
500 - 749	60	39	21	0
750 - 999	26	11	15	0
1,000 - 1,499	28	12	16	0
1,500 - 1,999	31	17	14	0
2,000 - 2,499	19	13	6	0
2,500 - 2,999	22	13	9	0
3,000 - 3,499	25	15	10	0
3,500 - 3,999	14	6	8	0
4,000 - 4,499	8	5	3	0
4,500 and over	1	1	0	0
Unknown	90	48	42	0



# Marriage



## Marriage

Marriage Table 1. Marriages by County of Occurrence and County of Residence<sup>1</sup>, 2000

County	Occurrence		Wife's Residence		Husband's Residence	
	Number	Rate <sup>2,3</sup>	Number	Rate <sup>2</sup>	Number	Rate <sup>2</sup>
<b>State Total</b>	<b>41,408</b>	<b>7.0</b>	<b>38,306</b>	<b>6.5</b>	<b>37,716</b>	<b>6.4</b>
Adams	104	6.3	86	5.2	84	5.1
Asotin	85	4.1	62	3.0	55	2.7
Benton	901	6.3	861	6.0	857	6.0
Chelan	743	11.2	402	6.0	369	5.5
Clallam	474	7.3	411	6.4	398	6.2
Clark	2,585	7.5	2,021	5.9	1,947	5.6
Columbia	35	8.6	24	5.9	22	5.4
Cowlitz	708	7.6	671	7.2	658	7.1
Douglas	115	3.5	181	5.6	170	5.2
Ferry	38	5.2	31	4.3	36	5.0
Franklin	352	7.1	301	6.1	279	5.7
Garfield	22	9.2	18	7.5	13	5.4
Grant	421	5.6	415	5.6	411	5.5
Grays Harbor	570	8.5	464	6.9	471	7.0
Island	604	8.4	433	6.1	460	6.4
Jefferson	331	12.8	170	6.6	174	6.7
King	12,221	7.0	11,837	6.8	11,661	6.7
Kitsap	1,777	7.7	1,615	7.0	1,599	6.9
Kittitas	192	5.8	223	6.7	221	6.6
Klickitat	124	6.5	90	4.7	84	4.4
Lewis	489	7.1	455	6.6	456	6.6
Lincoln	48	4.7	45	4.4	47	4.6
Mason	302	6.1	292	5.9	294	6.0
Okanogan	276	7.0	209	5.3	206	5.2
Pacific	196	9.3	127	6.1	120	5.7
Pend Oreille	63	5.4	37	3.2	36	3.1
Pierce	5,462	7.8	5,068	7.2	5,014	7.2
San Juan	356	25.3	76	5.4	74	5.3
Skagit	934	9.1	724	7.0	703	6.8
Skamania	96	9.7	48	4.9	53	5.4
Snohomish	3,633	6.0	4,197	6.9	4,203	6.9
Spokane	2,318	5.5	2,131	5.1	2,056	4.9
Stevens	200	5.0	181	4.5	184	4.6
Thurston	1,451	7.0	1,390	6.7	1,326	6.4
Wahkiakum	26	6.8	19	5.0	21	5.5
Walla Walla	313	5.7	258	4.7	255	4.6
Whatcom	1,172	7.0	1,122	6.7	1,091	6.5
Whitman	153	3.8	166	4.1	171	4.2
Yakima	1,518	6.8	1,445	6.5	1,437	6.5
Tribal Authority	0	*	0	*	0	*
Out of State	0	*	3,102	na	3,692	na
Unknown	0	*	0	*	0	*

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

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

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

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

Marriage Table 2. Marriages by Woman's Age and County where Ceremony was Performed, 2000

County	Total	Under										65 and Over	
		20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	Unk	
<b>State Total</b>	<b>41,408</b>	<b>3,249</b>	<b>11,169</b>	<b>8,782</b>	<b>5,802</b>	<b>4,005</b>	<b>3,155</b>	<b>2,310</b>	<b>1,328</b>	<b>668</b>	<b>385</b>	<b>507</b>	<b>48</b>
Adams	104	18	43	20	6	1	4	6	4	1	0	1	0
Asotin	85	9	23	20	13	3	9	4	0	2	1	0	1
Benton	901	107	286	159	110	73	62	42	30	12	7	11	2
Chelan	743	60	190	137	102	85	72	48	28	8	2	11	0
Clallam	474	52	129	73	47	39	48	28	30	10	8	10	0
Clark	2,585	266	713	493	321	220	219	160	85	49	22	37	0
Columbia	35	1	15	5	3	4	3	2	1	0	1	0	0
Cowlitz	708	59	233	139	85	59	39	43	30	5	8	8	0
Douglas	115	10	36	15	16	14	12	5	2	1	1	3	0
Ferry	38	7	8	5	5	7	0	2	0	1	1	2	0
Franklin	352	56	118	65	40	22	23	15	5	3	0	5	0
Garfield	22	2	8	0	3	2	2	3	1	0	0	1	0
Grant	421	57	157	60	38	34	27	23	7	4	3	9	2
Grays Harbor	570	50	168	80	64	73	57	32	25	8	5	7	1
Island	604	66	175	114	75	48	49	31	21	7	6	11	1
Jefferson	331	12	49	77	50	35	30	29	15	19	8	7	0
King	12,221	536	2,790	3,155	2,114	1,291	887	638	393	185	107	112	13
Kitsap	1,777	171	515	359	245	155	125	95	55	24	21	10	2
Kittitas	192	15	54	37	19	20	16	14	7	2	3	4	1
Klickitat	124	14	25	22	21	13	12	5	7	1	1	3	0
Lewis	489	58	159	65	56	37	38	34	14	12	5	8	3
Lincoln	48	3	23	9	3	1	6	2	0	1	0	0	0
Mason	302	28	80	47	47	33	23	18	7	6	2	10	1
Okanogan	276	29	57	52	40	39	20	19	8	5	2	5	0
Pacific	196	19	42	22	19	18	30	17	16	5	3	5	0
Pend Oreille	63	11	19	8	8	7	5	3	0	0	1	1	0
Pierce	5,462	513	1,573	1,069	715	502	430	274	174	89	53	57	13
San Juan	356	3	47	88	85	46	37	23	18	4	1	3	1
Skagit	934	82	242	195	129	79	82	56	28	21	11	9	0
Skamania	96	7	16	12	10	7	9	16	7	3	4	5	0
Snohomish	3,633	261	957	767	478	398	289	221	108	62	37	49	6
Spokane	2,318	194	798	485	255	189	129	131	58	34	15	30	0
Stevens	200	18	54	32	25	22	22	9	7	5	1	5	0
Thurston	1,451	118	385	307	186	131	113	98	45	25	18	24	1
Wahkiakum	26	1	8	4	0	3	2	3	0	2	0	3	0
Walla Walla	313	37	93	50	38	28	24	19	9	6	0	9	0
Whatcom	1,172	87	328	232	151	123	84	69	43	21	18	16	0
Whitman	153	16	54	37	11	15	6	3	7	1	1	2	0
Yakima	1,518	196	499	266	169	129	110	70	33	24	8	14	0
Tribal Authority	0	0	0	0	0	0	0	0	0	0	0	0	0

Marriage Table 3. Marriages by Man's Age and County where Ceremony was Performed, 2000

County	Total	Under										65 and Over	
		20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	Unk	
<b>State Total</b>	<b>41,408</b>	<b>1,172</b>	<b>9,300</b>	<b>9,218</b>	<b>6,733</b>	<b>4,576</b>	<b>3,447</b>	<b>2,520</b>	<b>1,897</b>	<b>1,041</b>	<b>604</b>	<b>873</b>	<b>27</b>
Adams	104	3	35	25	17	8	2	6	2	2	3	1	0
Asotin	85	2	16	27	14	6	5	7	3	2	2	0	1
Benton	901	47	249	193	111	80	82	56	32	16	17	17	1
Chelan	743	18	146	158	130	76	82	48	42	18	9	14	2
Clallam	474	22	107	93	52	52	37	29	31	27	9	15	0
Clark	2,585	92	619	528	386	240	237	168	141	76	40	58	0
Columbia	35	1	10	4	4	8	1	1	6	0	0	0	0
Cowlitz	708	22	190	144	108	77	53	32	37	22	8	15	0
Douglas	115	4	33	18	12	13	12	8	7	2	1	5	0
Ferry	38	5	4	8	2	8	3	0	2	2	2	2	0
Franklin	352	20	112	74	49	35	17	17	14	4	5	5	0
Garfield	22	0	7	4	1	0	4	2	3	0	0	1	0
Grant	421	22	138	94	40	44	29	21	11	7	4	11	0
Grays Harbor	570	21	116	119	81	60	48	51	37	17	10	8	2
Island	604	31	161	113	91	65	38	31	34	13	11	16	0
Jefferson	331	2	43	44	69	39	39	23	31	17	10	14	0
King	12,221	167	2,090	3,004	2,445	1,544	1,024	748	536	301	141	212	9
Kitsap	1,777	54	524	370	239	182	124	126	80	32	18	27	1
Kittitas	192	2	50	43	25	20	13	11	11	9	1	7	0
Klickitat	124	6	27	20	23	15	10	7	4	4	5	3	0
Lewis	489	17	141	93	59	52	37	34	22	10	12	12	0
Lincoln	48	2	18	10	5	6	2	1	2	1	0	1	0
Mason	302	16	65	58	42	27	36	19	15	10	5	9	0
Okanogan	276	10	57	51	51	30	24	18	9	11	5	9	1
Pacific	196	8	36	25	31	16	22	24	11	8	4	11	0
Pend Oreille	63	2	24	7	6	8	3	3	2	3	1	4	0
Pierce	5,462	206	1,388	1,182	780	576	462	295	233	130	90	113	7
San Juan	356	1	26	78	65	66	41	33	24	9	5	8	0
Skagit	934	33	201	211	158	85	72	65	48	24	15	22	0
Skamania	96	3	14	16	12	5	11	12	6	4	7	6	0
Snohomish	3,633	101	765	783	595	434	353	214	170	82	58	75	3
Spokane	2,318	63	655	574	324	219	155	124	72	43	30	59	0
Stevens	200	8	38	39	33	23	18	15	9	7	3	7	0
Thurston	1,451	39	328	340	222	144	105	95	74	41	24	39	0
Wahkiakum	26	1	4	5	6	2	1	2	2	2	0	1	0
Walla Walla	313	13	84	60	36	36	21	19	16	11	2	15	0
Whatcom	1,172	32	273	240	178	128	98	71	63	39	25	25	0
Whitman	153	5	49	39	13	15	12	9	2	4	4	1	0
Yakima	1,518	71	457	324	218	132	114	75	53	31	18	25	0
Tribal Authority	0	0	0	0	0	0	0	0	0	0	0	0	0



# Divorce



## Divorce

Divorce Table 1. Divorces and Annulments by County of Decree and County of Residence<sup>1</sup>, 2000

County	Occurrence		Wife's Residence		Husband's Residence	
	Number	Rate <sup>2, 3</sup>	Number	Rate <sup>2</sup>	Number	Rate <sup>2</sup>
<b>State Total</b>	27,321	4.6	25,226	4.3	24,334	4.1
Adams	51	3.1	42	2.6	44	2.7
Asotin	110	5.4	110	5.4	92	4.5
Benton	683	4.8	663	4.7	576	4
Chelan	391	5.9	274	4.1	251	3.8
Clallam	311	4.8	310	4.8	285	4.4
Clark	1,545	4.5	1,568	4.5	1,503	4.4
Columbia	23	5.7	20	4.9	16	3.9
Cowlitz	487	5.2	493	5.3	448	4.8
Douglas	19	0.6	127	3.9	128	3.9
Ferry	26	3.6	30	4.1	42	5.8
Franklin	174	3.5	163	3.3	172	3.5
Garfield	10	4.2	9	3.8	13	5.4
Grant	266	3.6	266	3.6	253	3.4
Grays Harbor	345	5.1	336	5	338	5
Island	332	4.6	348	4.9	367	5.1
Jefferson	125	4.8	123	4.7	121	4.7
King	5,669	3.3	6,100	3.5	5,968	3.4
Kitsap	1,173	5.1	1,167	5	1,123	4.8
Kittitas	101	3	98	2.9	89	2.7
Klickitat	94	4.9	88	4.6	91	4.7
Lewis	383	5.6	351	5.1	342	5
Lincoln	3,542	347.8	49	4.8	39	3.8
Mason	211	4.3	228	4.6	237	4.8
Okanogan	131	3.3	138	3.5	141	3.6
Pacific	80	3.8	73	3.5	83	4
Pend Oreille	61	5.2	55	4.7	49	4.2
Pierce	2,942	4.2	3,628	5.2	3,558	5.1
San Juan	54	3.8	53	3.8	45	3.2
Skagit	532	5.2	484	4.7	466	4.5
Skamania	55	5.6	38	3.8	32	3.2
Snohomish	2,476	4.1	2,701	4.5	2,647	4.4
Spokane	1,823	4.4	1,984	4.7	1,893	4.5
Stevens	159	4	201	5	175	4.4
Thurston	1,053	5.1	1,097	5.3	983	4.7
Wahkiakum	11	2.9	8	2.1	8	2.1
Walla Walla	224	4.1	211	3.8	212	3.8
Whatcom	668	4	669	4	623	3.7
Whitman	112	2.7	102	2.5	94	2.3
Yakima	835	3.8	821	3.7	787	3.5
Tribal Authority	34	na	0	*	0	*
Out-of-State	0	*	1,626	na	2,291	na
Unknown	0	*	469	na	696	na

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

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

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

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

Divorce Table 2. Divorces, Annulments, and Legal Separations by County of Decree, 2000

County	Total	Divorce	Annulment	Legal Separation <sup>1</sup>
<b>State Total</b>	<b>28,019</b>	<b>27,160</b>	<b>161</b>	<b>698</b>
Adams	51	50	1	0
Asotin	110	109	1	0
Benton	689	680	3	6
Chelan	394	391	0	3
Clallam	314	308	3	3
Clark	1,574	1,544	1	29
Columbia	23	23	0	0
Cowlitz	493	485	2	6
Douglas	19	19	0	0
Ferry	27	26	0	1
Franklin	175	173	1	1
Garfield	10	10	0	0
Grant	270	265	1	4
Grays Harbor	351	345	0	6
Island	339	331	1	7
Jefferson	128	125	0	3
King	5,886	5,636	33	217
Kitsap	1,223	1,171	2	50
Kittitas	102	101	0	1
Klickitat	94	93	1	0
Lewis	391	379	4	8
Lincoln	3,639	3,498	44	97
Mason	215	208	3	4
Okanogan	131	131	0	0
Pacific	80	79	1	0
Pend Oreille	64	61	0	3
Pierce	3,028	2,921	21	86
San Juan	55	54	0	1
Skagit	536	530	2	4
Skamania	55	55	0	0
Snohomish	2,535	2,463	13	59
Spokane	1,868	1,814	9	45
Stevens	160	156	3	1
Thurston	1,088	1,051	2	35
Wahkiakum	12	11	0	1
Walla Walla	227	221	3	3
Whatcom	672	666	2	4
Whitman	117	111	1	5
Yakima	840	832	3	5
Tribal Authority	34	34	0	0

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

Divorce Table 3. Divorces and Annulments by Wife's Age and County of Decree, 2000

County	Total	Under										65 and	
		20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	Over	Unk
<b>State Total</b>	<b>27,321</b>	<b>137</b>	<b>2,410</b>	<b>4,291</b>	<b>4,596</b>	<b>4,696</b>	<b>4,117</b>	<b>2,998</b>	<b>1,686</b>	<b>760</b>	<b>326</b>	<b>336</b>	<b>968</b>
Adams	51	2	4	7	8	8	5	5	2	3	2	2	3
Asotin	110	0	13	18	14	11	19	15	10	3	1	4	2
Benton	683	2	68	119	126	105	105	82	34	17	7	6	12
Chelan	391	3	36	63	57	61	60	51	32	12	7	3	6
Clallam	311	2	25	45	49	56	47	37	22	11	3	8	6
Clark	1,545	10	143	225	256	260	249	159	87	36	15	25	80
Columbia	23	0	1	2	5	3	7	2	1	1	1	0	0
Cowlitz	487	0	50	84	94	93	52	48	34	16	7	9	0
Douglas	19	0	4	1	6	3	4	1	0	0	0	0	0
Ferry	26	1	3	1	3	6	3	6	1	1	0	1	0
Franklin	174	4	21	28	33	32	18	17	7	4	3	3	4
Garfield	10	0	0	3	3	1	1	1	0	0	1	0	0
Grant	266	4	36	54	43	40	32	23	12	5	5	4	8
Grays Harbor	345	0	31	47	43	76	54	41	28	10	5	6	4
Island	332	4	64	77	36	43	41	26	20	8	5	3	5
Jefferson	125	1	8	12	22	18	18	15	10	9	0	6	6
King	5,669	17	362	832	1,034	950	870	682	365	160	59	64	274
Kitsap	1,173	8	124	191	195	203	174	135	78	27	8	10	20
Kittitas	101	0	12	21	18	11	17	11	4	3	2	2	0
Klickitat	94	0	10	12	22	17	14	6	5	1	4	1	2
Lewis	383	3	45	54	46	68	67	46	18	14	7	6	9
Lincoln	3,542	23	383	675	639	588	495	333	200	71	41	32	62
Mason	211	4	19	27	27	41	32	26	16	6	4	0	9
Okanogan	131	4	18	14	15	23	16	17	9	8	0	5	2
Pacific	80	0	7	6	12	10	12	7	12	4	5	1	4
Pend Oreille	61	1	8	9	6	12	10	5	4	1	2	1	2
Pierce	2,942	12	255	487	474	529	472	302	189	72	37	27	86
San Juan	54	1	2	8	9	7	8	6	9	2	1	1	0
Skagit	532	3	43	71	86	95	76	52	33	22	4	6	41
Skamania	55	0	4	5	5	11	10	7	4	5	1	1	2
Snohomish	2,476	5	163	364	408	478	400	273	149	61	34	24	117
Spokane	1,823	14	176	255	289	305	266	207	99	53	26	25	108
Stevens	159	1	11	30	17	35	20	15	10	13	1	6	0
Thurston	1,053	3	91	159	184	179	161	133	64	40	11	14	14
Wahkiakum	11	1	0	2	3	1	1	1	0	1	0	1	0
Walla Walla	224	1	22	35	36	29	32	29	19	8	0	5	8
Whatcom	668	2	45	83	113	125	120	64	45	18	9	14	30
Whitman	112	0	18	27	19	15	14	9	5	4	0	1	0
Yakima	835	1	81	134	133	145	112	102	46	30	8	9	34
Tribal Authority	34	0	4	4	8	3	3	1	3	0	0	0	8

Divorce Table 4. Divorces and Annulments by Husband's Age and County of Decree, 2000

County	Total	Under										65 and Over	
		20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	Unk	
<b>State Total</b>	<b>27,321</b>	<b>31</b>	<b>1,412</b>	<b>3,604</b>	<b>4,487</b>	<b>4,610</b>	<b>4,295</b>	<b>3,488</b>	<b>2,194</b>	<b>1,220</b>	<b>553</b>	<b>618</b>	<b>809</b>
Adams	51	0	3	8	7	6	7	6	3	2	1	6	2
Asotin	110	0	9	16	13	15	23	17	7	5	1	3	1
Benton	683	0	41	113	98	121	124	63	57	30	13	13	10
Chelan	391	0	26	51	64	57	60	57	28	24	10	13	1
Clallam	311	1	14	37	40	57	49	45	21	17	9	11	10
Clark	1,545	1	92	185	256	231	257	190	142	64	32	36	59
Columbia	23	0	0	1	8	1	1	4	3	0	4	1	0
Cowlitz	487	0	19	78	99	81	70	55	35	21	14	13	2
Douglas	19	0	1	4	3	2	3	3	2	1	0	0	0
Ferry	26	0	1	2	3	4	1	6	3	3	1	2	0
Franklin	174	1	12	28	32	23	30	18	10	7	5	5	3
Garfield	10	0	0	1	2	3	2	1	0	0	1	0	0
Grant	266	0	29	37	43	50	42	27	14	8	6	4	6
Grays Harbor	345	0	16	42	43	52	56	61	36	20	10	8	1
Island	332	1	38	85	56	39	34	34	14	12	5	8	6
Jefferson	125	1	7	11	17	20	20	20	8	3	8	8	2
King	5,669	4	181	624	949	984	924	786	493	276	93	104	251
Kitsap	1,173	1	82	175	185	214	162	152	107	42	22	20	11
Kittitas	101	0	4	19	15	18	12	12	4	5	6	5	1
Klickitat	94	0	4	9	24	12	15	13	6	0	4	6	1
Lewis	383	0	22	53	51	63	57	54	33	20	12	13	5
Lincoln	3,542	6	232	609	644	590	524	374	244	140	55	66	58
Mason	211	1	12	26	29	36	31	32	19	10	6	4	5
Okanogan	131	0	9	14	16	16	18	18	12	8	6	7	7
Pacific	80	0	4	10	5	10	14	10	9	7	6	3	2
Pend Oreille	61	0	6	6	9	7	8	7	6	4	4	2	2
Pierce	2,942	6	180	397	467	519	475	375	212	127	63	51	70
San Juan	54	0	2	2	10	7	6	9	9	6	1	2	0
Skagit	532	1	21	67	84	81	79	75	43	25	9	18	29
Skamania	55	1	0	3	9	8	8	7	9	4	2	2	2
Snohomish	2,476	1	84	282	418	440	441	324	209	85	38	54	100
Spokane	1,823	2	121	212	271	310	285	235	133	82	36	44	92
Stevens	159	1	10	17	19	22	24	23	13	12	6	10	2
Thurston	1,053	0	50	126	197	174	150	149	96	61	19	26	5
Wahkiakum	11	0	1	1	0	4	0	3	0	0	1	1	0
Walla Walla	224	0	8	29	46	38	32	26	18	15	2	6	4
Whatcom	668	0	20	76	108	115	103	86	55	39	20	20	26
Whitman	112	2	5	29	19	14	17	7	9	4	3	3	0
Yakima	835	0	42	115	124	160	126	99	70	31	18	20	30
Tribal Authority	34	0	4	4	4	6	5	5	2	0	1	0	3

Divorce Table 5. Divorces and Annulments by Number of Children<sup>1</sup> and County of Wife's Residence<sup>2</sup>, 2000

County	Total	0	1	2	3	4 +	Unknown <sup>3</sup>
<b>State Total</b>	<b>27,321</b>	<b>12,705</b>	<b>5,756</b>	<b>5,768</b>	<b>1,888</b>	<b>724</b>	<b>480</b>
Adams	42	23	5	6	4	3	1
Asotin	110	44	32	28	4	2	0
Benton	663	288	132	149	61	26	7
Chelan	274	130	64	49	23	7	1
Clallam	310	129	62	73	24	13	9
Clark	1,568	661	357	356	136	36	22
Columbia	20	11	3	4	0	2	0
Cowlitz	493	212	103	117	41	20	0
Douglas	127	69	28	18	7	5	0
Ferry	30	14	6	6	4	0	0
Franklin	163	65	33	31	20	11	3
Garfield	9	4	2	2	0	1	0
Grant	266	114	60	48	26	13	5
Grays Harbor	336	152	62	76	27	14	5
Island	348	168	84	68	18	8	2
Jefferson	123	54	32	23	8	4	2
King	6,100	3,079	1,212	1,227	336	142	104
Kitsap	1,167	479	274	288	95	22	9
Kittitas	98	58	19	12	5	4	0
Klickitat	88	32	20	20	11	4	1
Lewis	351	151	84	78	28	7	3
Lincoln	49	25	13	7	3	1	0
Mason	228	98	61	42	15	4	8
Okanogan	138	54	33	28	10	3	10
Pacific	73	27	14	20	6	1	5
Pend Oreille	55	25	14	6	6	2	2
Pierce	3,628	1,616	822	820	243	93	34
San Juan	53	28	6	9	5	4	1
Skagit	484	204	113	103	35	17	12
Skamania	38	17	5	10	5	1	0
Snohomish	2,701	1,178	594	631	207	64	27
Spokane	1,984	902	408	422	145	58	49
Stevens	201	86	39	47	18	7	4
Thurston	1,097	490	237	251	68	23	28
Wahkiakum	8	2	2	2	2	0	0
Walla Walla	211	96	45	43	17	9	1
Whatcom	669	294	117	150	57	23	28
Whitman	102	55	16	20	9	2	0
Yakima	821	326	175	198	76	22	24
Out-of-State	1,626	987	285	222	64	34	34
Unknown	469	258	83	58	19	12	39

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

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

<sup>3</sup>Unknowns are higher and divorces with no children appear lower in 2000 than in prior years since cases in which the number of children was not reported were previously entered as "none" rather than "unknown."







# Appendices



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## **Appendix A. Technical Appendix**

### **Sources of Data**

#### Collection Year

Data for *Washington State Vital Statistics, 2000* are compiled from items on birth, death, fetal death, marriage, and dissolution certificates received before extraction of annual datafiles in 2001. (See Appendix F for samples of certificate forms used.)

#### Population

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

### **Classification of Data**

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

#### Demographics

##### *Age*

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

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

##### *Race*

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

The concept of race as used by the Census Bureau reflects self-identification; it does not denote any clear-cut scientific definition of biological stock. The data for race represents self-classification by people

according to the race with which they most closely identify. Furthermore, it is recognized that the categories of the race item include both racial and national origin or socio-cultural groups.<sup>1</sup>

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

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

### *Hispanic Origin*

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

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

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

The county of residence data reported by the informant was verified by a process called geocoding using software that identifies county based on street address. When the reported county differed from the one assigned through geocoding, the address was located on a base map and the correct county was assigned to the record. In the rare instances in which a post office box was given as the address, the reported county of residence was retained since the software cannot assign county without a street address. The geocoding was done since 1987 for births, deaths, and fetal deaths. Geocoding could not be done prior to 1987 because address information is not available for many records in those years. The county of residence assigned through geocoding matched the county originally reported by the informant in all but about 0.4% of the records. Most of the differences occurred in areas where zip codes cross county boundaries where informants may be less sure of whether an address is in one county or the other. In most instances where differences were found, the geocoded county was determined to be correct and, in these instances, it was used in place of the reported county. The differences amounted to very small proportions of births or deaths in the affected counties.

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

### *City of Residence*

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

The city of residence assigned for a record is based on whether or not the person lived within city limits using responses to an item on the certificate: "Inside city limits - yes/no." If the response to this item is "yes," "unknown," or blank, the place of residence is assigned to the reported city. If the response is "no," the

place of residence is assigned a “balance of county” code. Reporting on this item has been found to be somewhat unreliable when compared to locating addresses within city boundaries using geocoding software. For city of occurrence there is no “inside city limits” item to use for coding. If a city is given on the certificate, the event is coded as occurring within city limits of that city. However, if the place of occurrence lists a rural road, state park, or other remote location, the place of occurrence is coded to “balance of county.”

## Birth Risk Factors

### *Method of Delivery*

The method of delivery is selected by the data provider from a list of possible methods. This list just gives common methods with no hierarchy assumed by the order of the methods on the list. The data provider can check all methods that apply, although it is rare to have more than two methods given (<0.4% of births). For this report, the method of delivery was determined by the following algorithm: If there was a second method given and it was a ‘higher technology’ or more invasive method, it was assigned as the method of delivery. Otherwise, the first method was used. Thus, for example, if both vaginal and forceps were reported, forceps was the method chosen. This is a departure from previous tables where only the first method was used. Since vaginal delivery is numerically first on the check box list, using only the first method underestimates the use of other methods which appear later on the list, particularly forceps and vacuum delivery.

### *Low Birth Weight*

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

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

### *Calculated Gestational Age*

The gestational age is calculated by subtracting the date of last normal menses from the birth date, dividing by 7 and truncating the result to eliminate decimal places. If the menses day is missing but the month and year are present, a value of '15' is used for the day. In cases where the menses month and/or year are missing or the calculated gestational age is beyond a reasonable range (<18 or >45 weeks), the gestational age is estimated from the child's birth weight. Overall, about 18% of the calculated gestational ages are estimated from the birth weight. This percentage varies by gestational age from 34% for preterm births to 17% for term births to 0% for postterm births.

### *Increase in Unknowns*

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

### *Cause of Death*

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

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

### *Underlying Cause Of Death*

Tabulated causes of death in this report are based on the underlying cause of death. The underlying cause of death is defined as "(a) the disease or injury which initiated the train of events leading directly to death or (b) the circumstances of the accident or violence which produced the fatal injury." International (World Health Organization) rules are used to determine the

underlying cause of death using data supplied by the certifier in the “cause of death” and “other significant conditions” sections of the death certificate.

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

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

### *Cause of Death Groupings*

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

### *Maternal Death*

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

The death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from



any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.

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

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

In 1990-1996, deaths to Washington resident women were linked to births, fetal deaths and obstetric hospitalizations within 364 days prior to death. Information from the linkages was provided to the Department of Health Maternal and Child Health Office. Three perinatologists, an obstetrician and an epidemiologist reviewed the information available on each death from the death certificate, birth/fetal death certificate and hospitalization information. All linked deaths were considered pregnancy-associated deaths (deaths which occurred within 365 days of pregnancy regardless of cause) and were further classified as to pregnancy-related (deaths caused by pregnancy or by condition exacerbated by pregnancy) or not. Deaths considered not pregnancy-related included all deaths due to cancer, injury, or deaths with a vague or indefinite cause. Deaths due to epilepsy or seizures, deep vein thrombosis, infection, or intracerebral hemorrhage if they occurred  $\geq 42$  days post delivery were also considered not pregnancy-related. Deaths considered pregnancy-related included deaths due to deep vein thrombosis, pneumonia or aneurysm that occurred during pregnancy or less than 42 days post delivery. Cardiovascular deaths within three months of delivery, and deaths due to epilepsy/seizures or infection that occurred within 42 days of delivery were considered on a case by case basis.

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

### *Perinatal Death*

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

in this report with rates from other sources unless it is certain that the same definition has been used.

## Marriage and Divorce Data

### *Residence vs. Occurrence Data*

Information on the number of marriages or divorces for all residents of Washington State is not available since residents may go elsewhere to have a marriage performed or to obtain a divorce. For marriage and divorce statistics, unlike other vital records such as births, deaths, or fetal deaths, there is no interstate agreement for the exchange of information on marriages or divorces for residents of Washington State that occur in other states or countries. Marriages are tabulated in this report according to the county in which the marriage was performed. Divorces, annulments and legal separations also include tabulations by the county in which the legal certificate was issued. Thus, statistics calculated with these data reflect the place of occurrence of the legal activity (e.g. marriage ceremony performed, divorce decree issued) rather than the place of residence of the individuals involved. Please note that tabulations by occurrence include events that were issued in Washington State for residents of other states.

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

### *Legal Separations*

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

### *Court Orders*

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

### *Number of Children*

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

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

## Definitions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## Rates and Ratios

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

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

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

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

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

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

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

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

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

and  $i$  = agegroup

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

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

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

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

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

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

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

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

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

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

One pound = 453.59 grams

**Appendix C. Estimated Population, State of Washington, by Age Group by Sex,  
April 1, 2000**

<b>Age Group</b>	<b>Total</b>	<b>Male</b>	<b>Female</b>
<b>Total</b>	5,975,123	2,975,872	2,999,251
Under 1 Year <sup>1</sup>	81,002	41,572	39,430
1 - 4	394,306	202,065	192,241
5 - 14	860,745	441,438	419,307
15 - 19	427,968	220,412	207,556
20 - 24	390,185	200,812	189,373
25 - 34	841,130	430,203	410,927
35 - 44	975,087	490,298	484,789
45 - 54	845,972	420,567	425,405
55 - 64	496,580	246,520	250,060
65 - 74	337,166	156,922	180,244
75 - 84	240,897	98,846	142,051
85 and Over	84,085	26,217	57,868

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

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

## Appendix D. Estimated Population of Counties and Cities of 15,000 Population and Over, April 1, 2000

Name	City	County	Name	City	County
<b>State Total</b>		5,894,121	Sammamish	34,104	
Adams		16,428	Kitsap		231,969
Asotin		20,551	Bremerton	37,259	
Benton		142,475	Bainbridge Island	20,308	
Kennewick	54,693		Kittitas		33,362
Richland	38,708		Ellensburg	15,414	
Chelan		66,616	Klickitat		19,161
Wenatchee	27,856		Lewis		68,600
Clallam		64,525	Lincoln		10,184
Port Angeles	18,397		Mason		49,405
Clark		345,238	Okanogan		39,564
Vancouver	143,560		Pacific		20,984
Columbia		4,064	Pend Oreille		11,732
Cowlitz		92,948	Pierce		700,820
Longview	34,660		Tacoma	193,556	
Douglas		32,603	Puyallup	33,011	
Ferry		7,260	Lakewood	58,211	
Franklin		49,347	University Place	29,933	
Pasco	32,066		San Juan		14,077
Garfield		2,397	Skagit		102,979
Grant		74,698	Mount Vernon	26,232	
Grays Harbor		67,194	Skamania		9,872
Aberdeen	16,461		Snohomish		606,024
Island		71,558	Everett	91,488	
Oak Harbor	19,795		Edmonds	39,515	
Jefferson		25,953	Lynnwood	33,847	
King		1,737,034	Marysville	25,315	
Seattle	563,374		Mountlake Terrace	20,362	
Renton	50,052		Mukilteo	18,019	
Auburn	40,168		Spokane		417,939
Kent	79,524		Spokane (city)	195,629	
Kirkland	45,054		Stevens		40,066
Bellevue	109,569		Thurston		207,355
Mercer Island	22,036		Olympia	42,514	
Redmond	45,256		Lacey	31,226	
Bothell part	16,185		Wahkiakum		3,824
Des Moines	29,267		Walla Walla		55,180
Tukwila	17,181		Walla Walla (city)	29,686	
Federal Way	83,259		Whatcom	166,814	
SeaTac	25,496		Bellingham	67171	
Burien	31,881		Whitman		40,740
Shoreline	53025		Pullman	24675	
Kenmore	18,678		Yakima		222581
			Yakima (city)	71845	

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

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

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

continued Appendix E. Comparison Between Current and Previous Table Numbers

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

continued Appendix E. Comparison Between Current and Previous Table Numbers

**Table Numbers**

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

continued Appendix E. Comparison Between Current and Previous Table Numbers

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

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

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

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

## **Appendix F. Sample Certificates**

Live Birth, Death, Fetal Death, Dissolution and Marriage



## **Certificate of Live Birth**

## Certificate of Death

## **Certificate of Fetal Death**

## Certificate of Dissolution

# Certificate of Marriage



## CERTIFICATE OF MARRIAGE

Please type or print clearly in permanent black ink.

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

DOH 110-009 FRONT (REV 2/2000)

continued Certificate of Marriage

<b>Department of Health is required to collect your Social Security Number in order to assist in enforcement of child support laws (Section 7, Chapter 160 Laws of 1998). If you do not have a Social Security Number, you are required to complete the Social Security Declaration.</b>	
41. GROOM'S SOCIAL SECURITY NUMBER	42. BRIDE'S SOCIAL SECURITY NUMBER
<b>SOCIAL SECURITY DECLARATION</b>	
<i>I have not furnished a Social Security Number on my application for registration of a marriage certificate, because I do not have a Social Security Number.</i>	
<i>I declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.</i>	
Groom's Signature _____	Date _____
Bride's Signature _____	Date _____

Center for Health Statistics  
**MARRIAGE CERTIFICATE  
INSTRUCTIONS**

**(RCW 26.04.090)**

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

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

DOH 110-009 BACK (REV 2/2000)