Summary
In 2011, 49,386 Washington State residents died. More than a quarter of those deaths were among people younger than age 65. Cancer was the leading cause of death overall followed by heart disease.

The 2011 age-adjusted death rate for Washington was 695 per 100,000 people, one of the lowest in the past 30 years. Washington’s death rates have been consistently lower than the U.S. rates. Washingtonians are living longer: the average life expectancy for those born in 2011 is 80.3 years, about five years longer than for those born in 1980.

Mortality rates and life expectancy can be improved by reducing specific causes of diseases and eliminating disparities.

Time Trends
Washington’s age-adjusted death rate fell from 962 per 100,000 people in 1980 to 695 per 100,000 in 2011—an overall decrease of 28%. During that period, two distinct trends were identified: one from 1980 to 2001, when the rates fell by less than 1% a year, and another from 2001 to 2011, when the rates fell by 1.5% a year.

From 1980 to 2002, women’s age-adjusted mortality rates fell by 0.5% a year; however, in 2002, the mortality rate for women began to fall by 1.4% per year and continued declining at that pace until 2011. Overall, from 1980 to 2011, the age-adjusted rates for women fell from 767 per 100,000 in 1980 to 598 per 100,000 in 2011, a total decline of 22%.

From 1980 to 1996, the age-adjusted death rates among men decreased by 1% per year and from 1996 to 2011 the rate decreased by 1.7% per year. Overall, rates among men fell 34%, from a high of 1,227 per 100,000 in 1980 to 812 per 100,000 in 2011.

The overall state decline might mask trends for some groups. A 2013 study found that female mortality rates may be increasing in some parts of Washington. The authors examined all-cause, age-adjusted mortality rates by gender for county residents aged 75 or younger for 1992–1996 and 2002–2006. Fourteen Washington counties showed increased female mortality rates between the two time periods. In contrast, no Washington county had increased mortality rates for males.¹

2010 and 2020 Goals
There are no Healthy People 2010 or Healthy People 2020 goals for total death rates.
Geographic Variation
Age-adjusted death rates vary widely across Washington counties. During 2009–2011 combined, Pacific County had the highest death rate (858 per 100,000 people); San Juan County had the lowest death rate (465 per 100,000 people).

Leading Causes
Leading causes of death are classified and ranked according to the List of 113 Selected Causes of Death and guidelines published by the National Center for Health Statistics. During 2009–2011 combined Washington’s 10 leading causes of death were: cancer, heart disease, Alzheimer’s disease, chronic lower respiratory disease, unintentional injury, cerebrovascular disease, diabetes, suicide, and influenza and pneumonia.

Leading Causes of Mortality
WA Death Certificates 2009–2011

<table>
<thead>
<tr>
<th>Cause</th>
<th>Number of Deaths</th>
<th>Percent of Deaths</th>
<th>Age-Adjusted Rate per 100,000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>35,669</td>
<td>25</td>
<td>259</td>
</tr>
<tr>
<td>Heart disease</td>
<td>31,475</td>
<td>22</td>
<td>227</td>
</tr>
<tr>
<td>Alzheimer’s Disease</td>
<td>9,166</td>
<td>6</td>
<td>67</td>
</tr>
<tr>
<td>Chronic lower respiratory disease</td>
<td>8,741</td>
<td>6</td>
<td>65</td>
</tr>
<tr>
<td>Unintentional injury</td>
<td>7,924</td>
<td>5</td>
<td>57</td>
</tr>
<tr>
<td>Cerebrovascular Disease</td>
<td>7,667</td>
<td>5</td>
<td>56</td>
</tr>
<tr>
<td>Diabetes</td>
<td>4,652</td>
<td>3</td>
<td>34</td>
</tr>
<tr>
<td>Suicide</td>
<td>2,854</td>
<td>2</td>
<td>21</td>
</tr>
<tr>
<td>Influenza and pneumonia</td>
<td>2,043</td>
<td>1</td>
<td>15</td>
</tr>
</tbody>
</table>

Leading causes of death, however, vary with age. For example, in Washington, stroke, heart disease, chronic lower respiratory disease and cancer cause proportionately more deaths among the elderly, while unintentional injuries cause more deaths among the young.

While heart disease and cancer accounted for almost half of all deaths in Washington, age-
adjusted mortality rates for these diseases have been declining over time.

This trend is particularly pronounced for heart disease, for which the death rate in 2011 was 60 percent lower than in 1980. Most of the decline in heart disease is due to large declines in coronary heart disease mortality which are attributable to improved treatment, greater control of blood pressure and cholesterol, reductions in smoking, and increased physical activity.4,5 (See Coronary Heart Disease.)

For all cancers combined, age-adjusted mortality rates increased from 1980 to 1993. Since 1993, the trend has been downward. Improvements in cancer treatments, early detection, and the decline in tobacco use have likely contributed to the overall decline.6 For men, the decline parallels a decline in incidence of cancer. For women, incidence has been stable since 1998.7 Cancer is many different diseases, each of which might have its own causes, risk factors, treatments and preventive measures.

Age and Gender

Children ages 1–4 and 5–14 have the lowest mortality rates, with no gender differences. In each of the remaining age groups, however, male death rates are higher than female death rates, including among those aged 85 or older who are not shown below. During 2009–2011 combined, age-adjusted mortality rates for Washington residents aged 85 or older were about 13,000 per 100,000 women and 15,500 per 100,000 men. During 2009–2011 on average, the rates for males were 1.5 times higher than the rates for females. But among youth and young adults ages 15–24, the rate for males was more than 2.5 times higher than the rate for females. Similarly, the rate for males ages 25–34 was more than twice the female rate.

Overall, 32% of all male deaths occurred among those younger than age 65; in contrast, only 20% of all female deaths occurred in that age group.

Economic Factors and Education

Individuals with higher education or income generally experience better health outcomes than people with lower levels of education or income.8 However, people’s health and mortality risk may also be affected by the education and income level of the community in which they live.1

During 2009–2011 combined, census tract death rates increased as the proportion of people living in poverty in those census tracts increased. The age-adjusted death rate for people who lived in census tracts where 20% or more of the population lived in poverty was about 40% higher than the rate in...
census tracts where less than 5% of the population lived in poverty.

During 2009–2011, the age-adjusted death rates for people living in census tracts with the lowest percent of residents completing college was about 50% higher than the death rate in census tracts with the highest percent of residents ages 25 and older having completed college.

During 2009–2011 combined, American Indians and Alaska Natives had the highest age-adjusted death rates—significantly higher than whites, blacks, Hispanics or Asians. Asians had the lowest mortality rates. The death data may underreport American Indians and Alaska Natives because the recording of race on the death certificate by coroners, funeral directors or medical examiners can be based on decedent’s appearance rather than asking next-of-kin for the information; consequently the mortality rates for that population may be even higher than shown here.9

Pronounced differences were also identified when rates were computed by both gender and race and Hispanic ethnicity. American Indian and Alaska Native males had the highest age-adjusted death rate of 1,222 per 100,000. This rate was higher than the rates for all other groups, and was more than 3.2 times higher than the age-adjusted death rate for Asian females (387 per 100,000), the group with the lowest rate.

Race and Hispanic Origin

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Social and economic conditions likely underlie these differences among racial and ethnic groups and include such factors as poverty or other early life stressors, limited or culturally acquired lifestyles, lack of access to medical care and unsafe environments. These factors are discussed in detail in the Health of Washington State chapter on Social and Economic Determinants of Health.

Life Expectancy at Birth

Trends in life expectancy show that Washingtonians are living longer: the average life expectancy for those born in 2011 is 80 years, about five years longer than for those born in 1980. Life expectancy differs by gender. Life expectancy for females born in 2011 is 82 years, compared to males born in 2011, who have a life expectancy of 78 years. However, some counties in Washington have shown a decline in life expectancy, particularly in the female population.¹

Patterns in life expectancy data by race indicate that American Indian and Alaska Native, and Native Hawaiian and Other Pacific Islanders have the shortest life expectancy: 72 and 75 years, respectively. Hispanics and Asians have the longest life expectancy: 87 and 86 years.

Intervention Strategies

Mortality rates and life expectancy can be improved by reducing specific causes of diseases and eliminating disparities, as discussed in other chapters of this report. Some of the underlying causes of morality are amenable to public health interventions. Chief among these are reducing tobacco use, unhealthy diets, physical inactivity, and excessive alcohol consumption. Each chapter in Health of Washington State discusses approaches to these or other interventions important for health. The chapter on Social and Economic Determinants of Health discusses approaches for mitigating the effects of low socioeconomic position on health, as well as structural approaches to reduce social and economic disparities.

For More Information


Technical Notes

Leading Cause of Death Definitions

<table>
<thead>
<tr>
<th>Cause</th>
<th>ICD-10 Coding Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alzheimer's Disease</td>
<td>G30</td>
</tr>
<tr>
<td>Cancer</td>
<td>C00-C97</td>
</tr>
<tr>
<td>Chronic lower respiratory disease</td>
<td>J40-J47</td>
</tr>
<tr>
<td>Diabetes</td>
<td>E10-E14</td>
</tr>
<tr>
<td>Heart disease</td>
<td>I00-I09, I11, I13, I20-I51</td>
</tr>
<tr>
<td>Influenza and pneumonia</td>
<td>J10-J18</td>
</tr>
<tr>
<td>Liver disease</td>
<td>K70, K73-K74</td>
</tr>
<tr>
<td>Stroke</td>
<td>I60-I69</td>
</tr>
<tr>
<td>Suicide</td>
<td>X60-X84, X87.0</td>
</tr>
<tr>
<td>Unintentional injury</td>
<td>V01-X59, Y85-Y86</td>
</tr>
</tbody>
</table>

¹See Related Chapters in the sections on Chronic Disease, Injury and Violence, and The Context of Health.
Acknowledgments

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Endnotes