
Mortality

As Oregon's population both ages and increases, the annual number of deaths generally trends upward. In 2015, the number of deaths increased to 35,709, up from 34,160 the previous year.* The crude death rate increased from 862.0 per 100,000 population in 2014 to 889.6 in 2015 (see Figure 6-1 and Table 6-1). (Unless otherwise specified, references to death rates mean crude death rates; see the Appendix for further discussion of crude and age-adjusted rates.) The age-adjusted death rate increased from 702.8 to 718.6 (see Table 6-47t).

In 2014, the most recent year for which final U.S. data are available (1), Oregon's age-adjusted death rate was 2.5% lower than the U.S. rate and ranked 35th among the states and the District of Columbia (see Table 6-55). During the past 25 years, the greatest difference between the United States and Oregon rates occurred in 1991 when Oregon's rate was 6.8% lower than the U.S. rate (859.6 vs. 921.9) and 36th among the states and the District of Columbia.

Oregon's age-adjusted, cause-specific death rates ranked among the top 10 highest rates in the states and the District of Columbia for three causes: alcohol-induced deaths (fifth), viral hepatitis (seventh), and hypertension (ninth). At the same time, Oregon was among the states with the 10 lowest rates for eight causes (excluding states with unreliable data for each cause): influenza and pneumonia (lowest); septicemia, HIV/AIDS and heart disease (third lowest); atherosclerosis (fourth lowest); nephritis and nephrosis (sixth lowest); homicide (seventh lowest); and congenital malformations (eighth lowest).

Life expectancy at birth

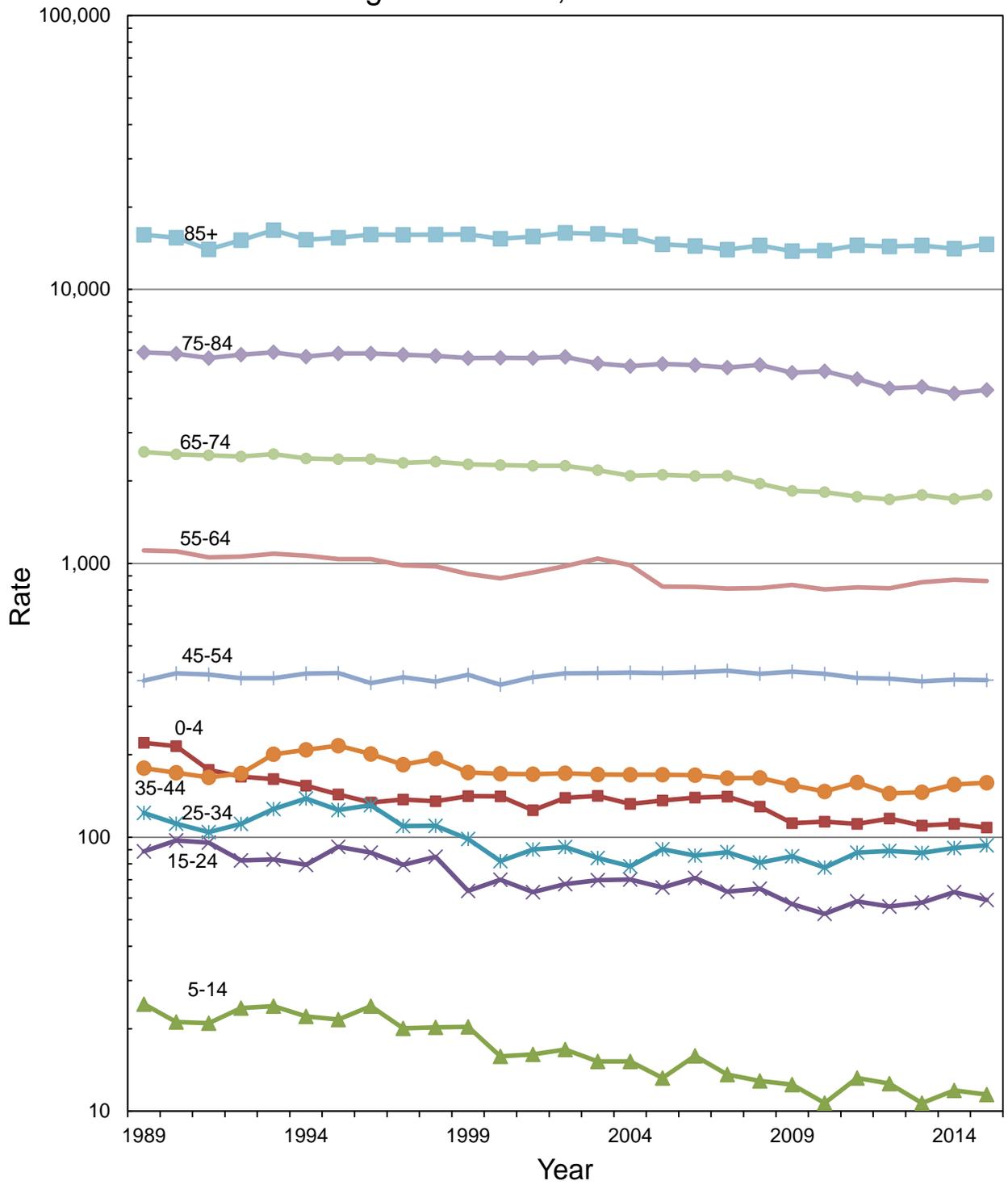
The longest living Oregonian ever recorded was a Siberian-born man who died in 1999 at 117 years of age. Most of

The age-adjusted death rate increased from 702.8 to 718.6.

* State vital records offices within the United States maintain an inter-jurisdictional exchange agreement to provide a copy of the death record, or electronic equivalent, to the vital records office of the decedent's residence state if the person dies outside his or her home state. This exchange is highly dependent on the forwarding state of death's capacity to provide those files to Oregon.



Figure 6-2.
Age-specific death rates,
Oregon residents, 1989-2015



Rates per 100,000 population.
Note: A logarithmic scale is used for the vertical axis.

Table A - Life expectancy, Oregon and the United States, 1960-2015						
Year	Oregon			United States		
	Total	Male	Female	Total	Male	Female
1960	70.9	N.A.	N.A.	69.7	66.6	73.1
1970	72.1	68.4	76.2	70.8	67.1	74.7
1980	75.0	71.4	78.8	73.7	70.0	77.4
1990	76.7	73.3	80.1	75.4	71.8	78.8
2000	78.0	75.6	80.4	76.8	74.1	79.3
2005	78.5	76.3	80.7	77.4	74.9	79.9
2010	79.5	77.4	81.6	78.7	76.2	81.0
2014	79.8	77.5	82.1	78.8	76.4	81.2
2015	79.6	77.3	81.8	N/A	N/A	N/A

2014 is the most recent year for which final U.S. data are available. U.S. data source: National Center for Health Statistics. Deaths: Final Data for 2014. National Vital Statistics Reports, Vol 65 no 4. (www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65_04.pdf)

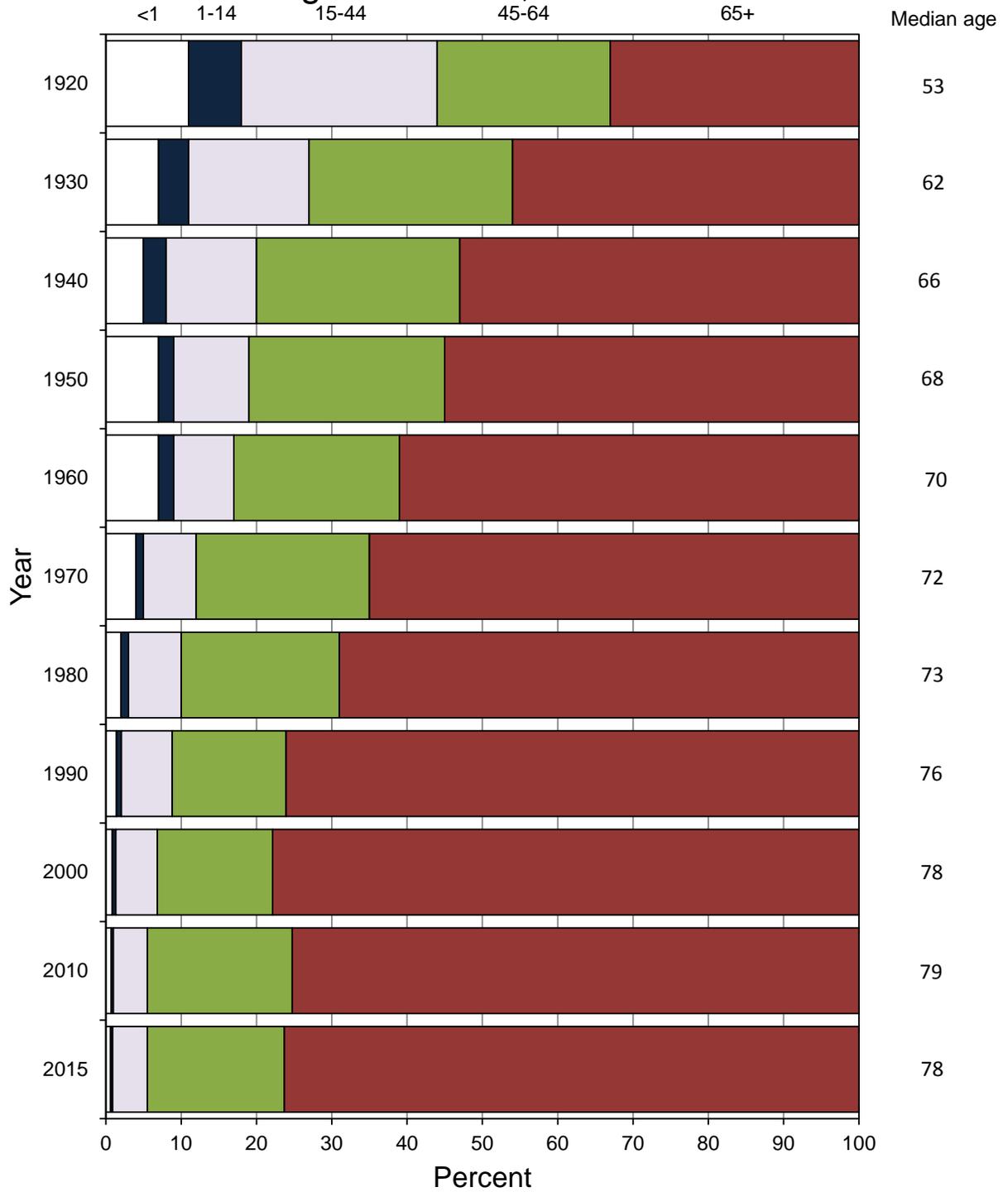
the state's residents have far shorter lives, but the long-term trend is for an increasing life expectancy. Since 1960, the life expectancy of Oregonians at the time of their birth has increased from 70.9 years to 79.6 in 2015 (see Table A).

Life expectancy is a hypothetical construct representing the average number of years a group of infants will live if they were to experience, throughout their lives, the age-specific death rates present at the time of their birth. Such factors as the environment, the economy, health behaviors and changing medical technology affect life expectancy.

The life expectancy of Oregonians decreased slightly from 79.8 years in 2014 to 79.6 in 2015. Life expectancy decreased slightly among both females and males between 2014 and 2015. The female life expectancy decreased from 82.1 to 81.8, and the male life expectancy decreased from 77.5 to 77.3.

Life expectancy varied by 6.8 years among Oregon's counties, using a five-year average from 2011 through 2015. Six counties had a life expectancy significantly longer than the state average in 2011–2015 (79.7): Benton (82.8), Grant (82.8), Washington (82.2), Hood River (80.9), Clackamas (80.8) and Deschutes (80.4). The 14 counties with significantly shorter life expectancy were Curry (76.0), Coos (76.9), Josephine (77.0), Jefferson (77.1), Klamath (77.2), Douglas (77.5), Harney (77.6), Wasco (77.9), Clatsop (78.1), Lincoln (78.1), Linn (78.4), Malheur (78.6), Jackson (79.0) and Multnomah (79.1) (see Table 6-57).

Figure 6-3.
Proportion of deaths by selected age groups,
Oregon residents, 1920-2015



Demographic characteristics

Sex

Between 2014 and 2015, mortality rates for both males and females increased, resulting in an increase in Oregon's crude death rate (see Table 6-1). The male rate increased 2.0% (891.3 per 100,000 population in 2014 compared to 908.9 in 2015), and the female rate increased 4.5% (833.5 in 2014 compared to 870.9 in 2015).

During 2015, the female crude death rate was lower than the male rate. While this was typical during the 20th century, the female rate has occasionally been higher than the male rate in recent years (see Table 6-1). Increases in female crude death rates vis-à-vis male rates seen over the past decade are largely due to the changing age distribution within these two groups, rather than a decline in the health status of females. There are simply more elderly women than men, and the elderly — even under the best of circumstances — are more likely to die than their younger counterparts. Despite recent fluctuations in crude death rates, the age-adjusted death rates for males have consistently been higher than for females. In 2013–2015, the male age-adjusted death rate was 37.6% higher than the female rate—837.8 compared to 609.0 (see Table 6-48m and Table 6-48f). (See Appendix B for further information about age-specific and age-adjusted death rates.)

Age

Compared with rates in 2000, age-specific death rates have declined for five of the six age groups shown in Table 6-1; the exception is Oregonians aged 45 through 64, where the rate increased. Those aged 5–14 years saw the greatest decline (27.7%). (See Figure 6-2 and Figure 6-3.)

Table 6-1 shows the disparity in age-specific death rates by sex. Male rates are higher than female rates in all six age categories. The age-specific death rate for males 15–24 years old was more than twice as high as the rate for women in the same age group—85.5 per 100,000 vs. 31.6 per 100,000. For both sexes combined, the median age at death was 78 years, the same as in 2014 (see Table 6-2). The median age at death for males (74 years) and females (82 years) was unchanged from the previous year.

Table B - Age-adjusted death rates by county of residence, 2015	
County	Rate
Oregon total	718.6
Baker	777.4
Benton**	514.8
Clackamas**	660.6
Clatsop	745.6
Columbia	717.8
Coos*	875.1
Crook	775.0
Curry*	968.6
Deschutes	708.4
Douglas*	830.2
Gilliam	601.4
Grant	605.1
Harney	788.8
Hood River**	624.9
Jackson*	766.6
Jefferson	806.1
Josephine*	842.4
Klamath*	810.5
Lake	758.3
Lane	726.2
Lincoln*	787.3
Linn*	827.3
Malheur*	812.5
Marion	716.4
Morrow	746.6
Multnomah*	749.6
Polk	703.6
Sherman	748.4
Tillamook	783.2
Umatilla	751.0
Union	761.4
Wallowa	670.9
Wasco	785.7
Washington**	597.7
Wheeler	885.2
Yamhill	728.3
Rates per 100,000 population.	
* Significantly higher than the state rate.	
** Significantly lower than the state rate.	

County of residence

In 2015, the state age-adjusted death rate was 718.6 per 100,000 population. Ten counties had significantly higher age-adjusted rates, while four counties had significantly lower rates (see Table B). Simply residing in a particular county will not necessarily increase or decrease one's chance of dying in a given year. Mortality is a consequence of many factors including availability and quality of medical care, environmental exposure, smoking, other personal health behaviors, socioeconomic status and heredity.

Elevated age-adjusted death rates within a county do not necessarily indicate that residing there will reduce longevity. For example, persons with chronic diseases may move in disproportionate numbers to an area with a lower cost of living or to an area with specialized medical facilities.

Hispanic ethnicity and race

Beginning in 2006, staff at the Oregon Center for Health Statistics changed the methodology for collecting race and Hispanic ethnicity information. Previously, the informant on the death record could report only one race for the decedent. The informant — usually an immediate family member — can now report multiple race categories for the decedent.

There are four Hispanic ethnicity choices based on the country or countries of origin: Mexican, Cuban, Puerto Rican and Other Hispanic. A person of Hispanic ethnicity may belong to any race category. There are six major race categories: White, Black or African American, American Indian/Alaska Native, Asian, Hawaiian or Pacific Islander, and Other Specified.

The data collected for the Asian categories allow for differentiation by Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese and Other Asian. Among Pacific Islanders, the data collected allow for differentiation among Hawaiian, Guamanian, Samoan and Other Pacific Islander. However, the counts in these more specific race categories are too small for reliable statistical reporting.

Most (92.7%) decedents are reported as non-Hispanic White only. Multiple race categories were marked on the death

records of 204 decedents in 2015 (see Table 6-9 and Table C). A majority of decedents with multiple race categories (91.7%) identified, in part, as White (in combination with one or two other races), and 67.6% of those selecting multiple race categories identified, in part, as American Indian. Allowing multiple race selections raises the mortality counts for all race categories. For instance, when looking at single-mention race categories, the count of American Indian decedents in 2015 was 356 (see Table 6-9). This count increased by 38.8% to 494 when also including multiple race decedents identifying in part as American Indian, in combination with other races (see Table 6-10). Other databases such as birth, youth surveys and adult telephone surveys are now also collecting multiple race categories. The younger participants in those databases more frequently report multiple races.

Race group*	Number	Percent
Total multiple race	204	100.0
White	187	91.7
African American	33	16.2
American Indian	138	67.6
Asian ¹	36	17.6
Hawaiian & Pac. Isl. ²	16	7.8

* Decedents of Hispanic ethnicity may belong to any race. Columns will not add to total due to multiple race selections.
¹ Includes Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, and other Asian.
² Includes Native Hawaiian, Guamanian, Samoan, and other Pacific Islander.

Leading causes of death*†

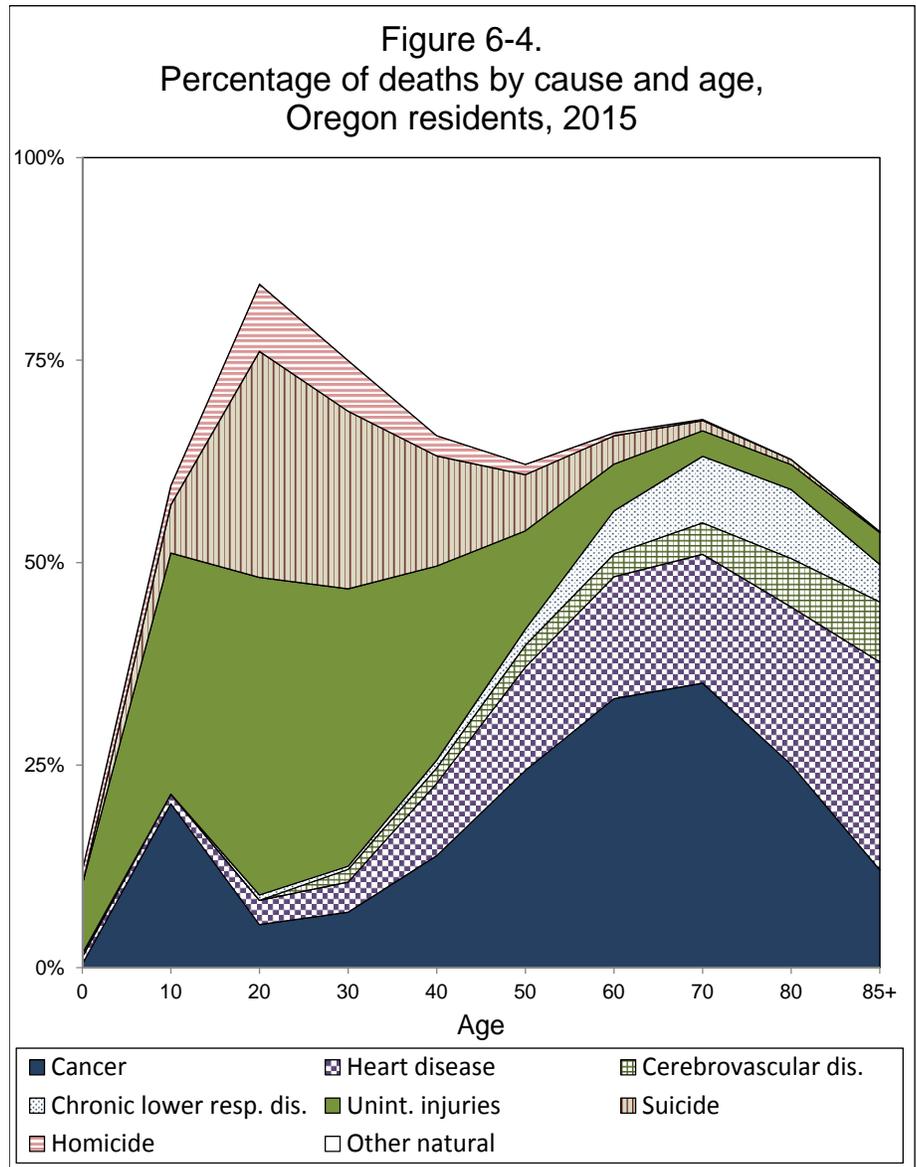
Overview

During the 20th century, with the notable exception of the great influenza pandemic of 1918–1919, heart disease was the leading cause of death among Oregonians. The 21st century, however, has been marked by the emergence of cancer as the leading cause of death. In 2001, for the first time, more Oregonians died from cancer (malignant neoplasms) than from diseases of the heart. During 2015, 8,094 Oregonians died from cancer while 6,858 died from heart disease.

The first and second leading causes of death during 2015 were malignant neoplasms and heart disease; combined, they accounted for 41.9% of all deaths. Malignant neoplasms resulted in the loss of more than twice as many years of potential life as heart disease. This is a reflection of the younger ages of cancer's victims (see Table 6-14). The

* Statewide records of cause of death were first collected in 1908.

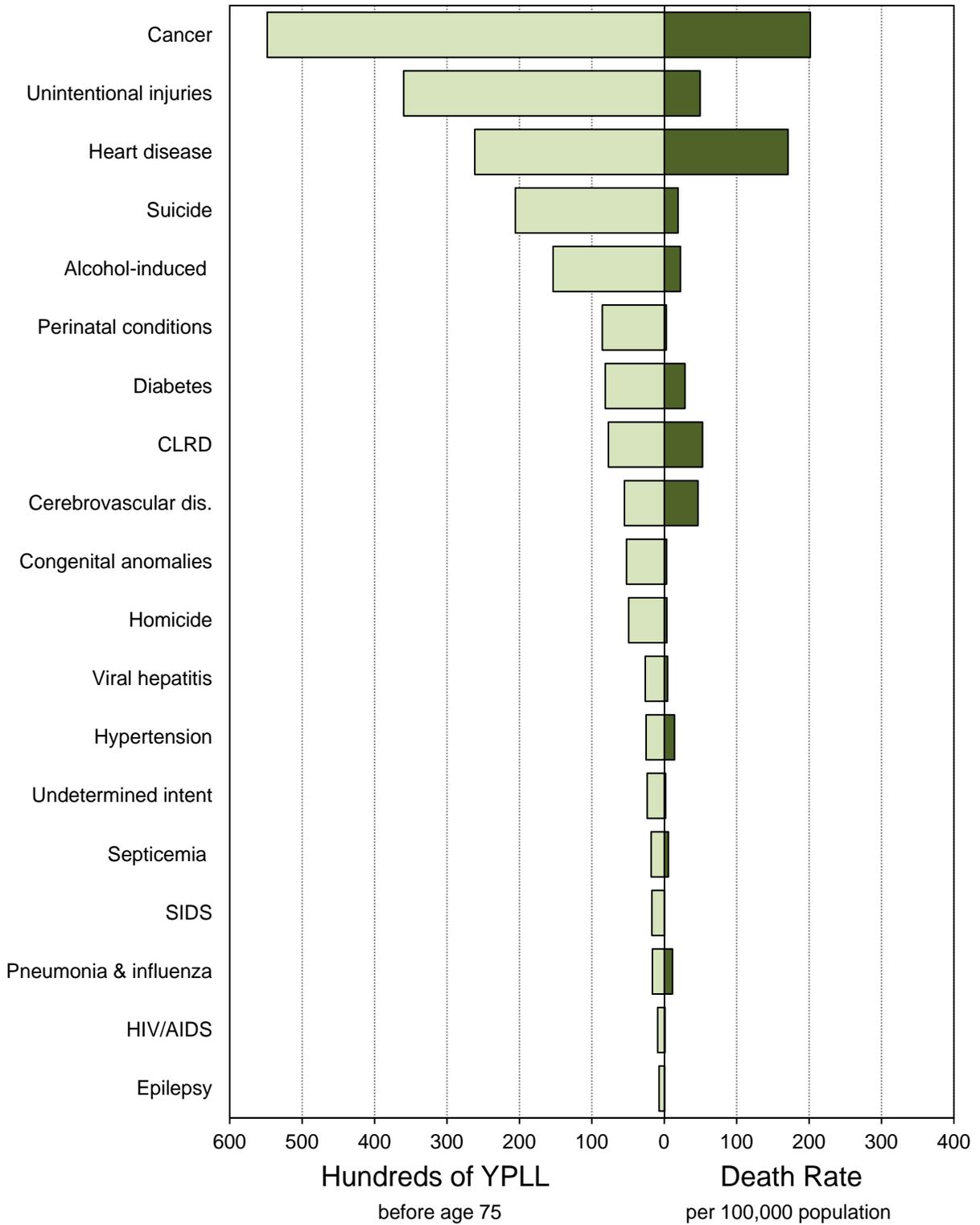
† The International Classification of Disease manual is periodically revised. The 10th revision was implemented in 1999. It had considerably greater detail for some diseases and less for others; shifts of inclusion in terms and titles from one category, section or chapter to another; regrouping of diseases; new titles in sections; and modification of the coding rules. As a result, serious breaks in the comparability occurred for a number of causes of death. Readers wishing to compare numbers of deaths or rates for 1999 and subsequent years to prior years should use the final comparability ratios described in Appendix B. Table 6-3 data applies final comparability ratios.



apparent increasing risk of cancer vis-à-vis heart disease during the 21st century is not the result of an increasing cancer death rate, but rather a declining heart disease death rate. In fact, the malignant neoplasm death rate has trended downward in the past decade, but the heart disease death rate has fallen more rapidly.

Causes of death varied by age group. Among infants, perinatal conditions were most common. Unintentional injuries ranked first for Oregonians aged 1 through 44. From age 45 through 84, cancer was the leading cause of death. Among residents 85 or older, heart disease ranked first (see Table 6-4 and Figure 6-4).

Figure 6-5.
 Leading causes of years of potential life lost and corresponding death rates, Oregon residents, 2015



Years of potential life lost

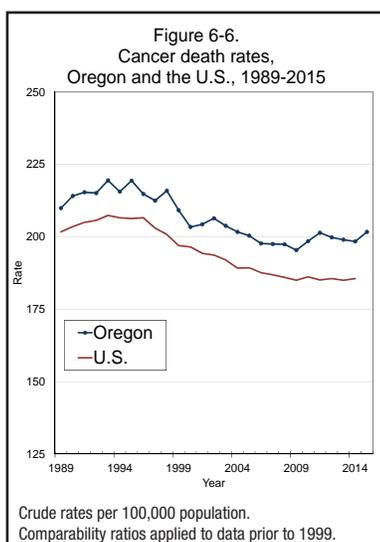
Mortality rates alone do not show the full impact upon society of certain causes of death. The deaths of young people are a greater cost to society in terms of years of potential life lost (YPLL) than are the deaths of older people. The YPLL yardstick quantifies premature mortality occurring in younger age groups by measuring the number of years between age at death and a set standard age. With the standard set at 75 years, a death at age 21 results in 54 years lost. The numbers of YPLL for all decedents are then totaled. Figure 6-5 shows the disparity between death rates and the years of potential life lost. In all references to YPLL in this report, the standard is 75 years unless otherwise noted. Use of YPLL measures in Figure 6-5 highlights the impact of death due to unintentional injuries.

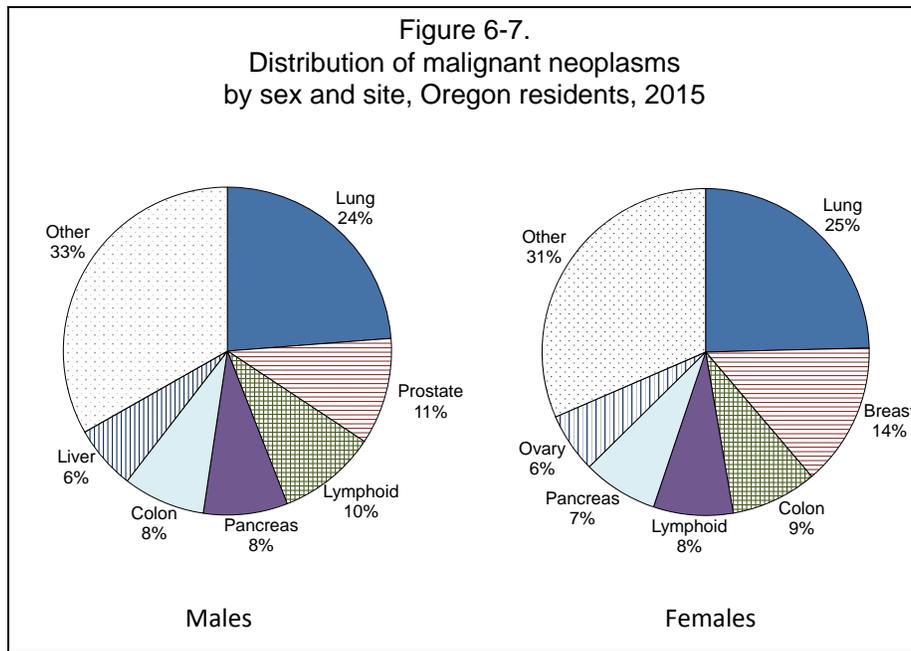
Cancer

During 2015, cancer was the leading cause of death among Oregonians, claiming 8,094 lives. Malignant neoplasms were also a contributing factor, but not the underlying cause, in another 1,049 deaths. For many decades, the cancer crude death rate increased inexorably. However, in the 1990s, it hit a plateau and the rate has since trended downward (see Figure 6-6). In 2015, the crude death rate increased slightly to 201.7 per 100,000 population compared to 198.4 in 2014 (see Table 6-3). Age-adjusted death rates increased from 159.3 in 2014 to 159.5 in 2015 (see Table 6-47t).

Malignant neoplasms were the leading cause of death for both sexes, but the difference in death rates between males and females has narrowed greatly during the past two decades. During 2015, the crude death rate for cancer was 11.1% higher for males than females — 212.4 vs. 191.1 (see Table 6-4). The disparity was far greater when age-adjusted death rates were compared: 185.8 for males vs. 140.0 for females, a 32.7% difference (see Table 6-47m and Table 6-47f).

Cancer was one of the five leading causes of death among Oregonians of all ages except infants, and was the leading cause of death for residents ages 45 through 84. The median age at death was unchanged from 2014 at 72 years. Malignant neoplasms were the leading cause of premature death and accounted for 54,811 years of potential life lost (see Table 6-13).





During 2013–2015, five Oregon counties had age-adjusted cancer death rates significantly higher than the state rate (160.6): Coos (203.8), Douglas (183.1), Josephine (180.3), Linn (179.2) and Marion (171.6). Five counties recorded significantly lower rates than the state rate: Grant (115.1), Benton (127.3), Washington (137.7), Clackamas (147.0) and Deschutes (148.1).

Prior to 2001, Oregon’s age-adjusted cancer death rate was typically lower than the U.S. rate. However, between 2001 and 2013, Oregon’s rate was slightly higher. In 2014, Oregon’s rate once again fell below that of the nation (160.2 compared to 161.2, or 0.6% lower) and ranked 32nd among the states and District of Columbia (1) (see Table 6-55).

The most common fatal cancer for both sexes is bronchus and lung cancer, which rarely occurs in the absence of smoking. The increasing prevalence of smoking, which peaked in 1993, drove the decades-long increase in the overall malignant neoplasm death rate — especially among women. In 1965, there were 5.5 male deaths due to lung cancer for every female death, but by 2015, there was one male death for every female death (see Table D). Although breast cancer is more often in the public eye, lung cancer claimed the lives of almost twice as many women as breast cancer did: 956 vs. 551, respectively (see Table 6-6 and Figure 6-7).

Lung cancer claimed the lives of almost twice as many women as did breast cancer.

Table D - Lung cancer deaths - ratio of males to females	
1965	5.5
1975	3.6
1985	2.0
1995	1.2
2005	1.2
2015	1.0

The heart disease death rate increased slightly in 2015.

Heart disease

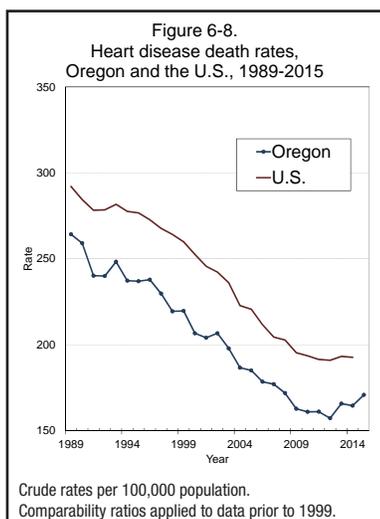
Despite brief occasional breaks in the long-term downward trend in its crude death rate, heart disease was the leading cause of death in Oregon during most of the 20th century. In 2001, for the first time, more deaths (five) resulted from cancer than from heart disease. During 2015, heart disease was the second leading cause of death; 6,858 Oregonians succumbed to it, 1,236 fewer than from malignant neoplasms. The crude death rate from heart disease increased from 164.6 in 2014 to 170.9 in 2015 (see Figure 6-8), while the age-adjusted death rate increased from 131.3 per 100,000 population to 135.3. By comparison, the age-adjusted death rate was 264.2 in 1990, 95.3% higher than the 2015 rate. An additional 6,837 death records listed heart disease as a contributing factor in decedents' death, but not the underlying cause.

The 2015 crude death rate for heart disease was 14.6% higher for males than for females (182.7 vs. 159.4). The 2015 age-adjusted death rate for heart disease was 60.3% higher for males than for females (170.4 vs. 106.3), reflecting the younger ages at which men are more likely than women to die from heart disease (see Table 6-47m and Table 6-47f).

Heart disease was the leading cause of death for Oregonians age 85 or older and one of the five leading causes among Oregonians age 35 and older. It was the second leading cause of death for residents aged 45–84 (see Table 6-4). The median age at death from heart disease was 83 years in 2015 (see Table 6-15). The relatively older ages at which Oregonians died from heart disease lower its rank among the causes of premature death. There were 26,157 years of potential life lost, making heart disease the third leading cause of premature death, following cancer and unintentional injuries (see Table 6-13).

During 2013–2015, nine Oregon counties had age-adjusted heart disease death rates significantly higher than the state's (133.7): Curry (181.1), Malheur (177.5), Jefferson (175.6), Linn (157.8), Coos (156.8), Clatsop (155.8), Columbia (153.5), Klamath (149.2) and Multnomah (142.2). Four counties had significantly lower rates: Benton (100.6), Washington (115.2), Clackamas (121.4) and Lane (122.7).

In 2014, the state's age-adjusted heart disease death rate was 20.9% lower than the U.S. rate, and Oregon ranked



49th (third lowest) among the states, including the District of Columbia (1) (see Table 6-55). Oregon's heart disease death rate has long been lower than the U.S. rate; however, the United States has seen a striking downward trend in the overall age-adjusted heart disease death rate. In 2004, the U.S. age-adjusted rate was 217.0, compared to 167.0 in 2014 (see Table 6-58).

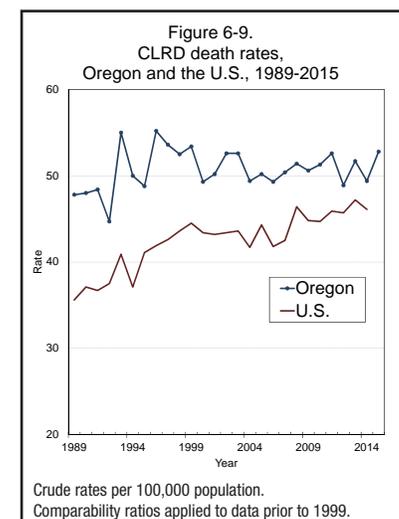
Chronic lower respiratory disease

Chronic lower respiratory disease (CLRD) includes a variety of conditions including emphysema, chronic obstructive pulmonary disease (COPD), bronchitis and asthma. CLRD crude death rates increased steadily for several decades, reaching a record high of 54.9 per 100,000 population in 1996. Increased smoking, particularly by women, drove the rising death rate. CLRD is now the third leading cause of death, with 249 more deaths than cerebrovascular disease. Between 2000 and 2015, the rate varied little, ranging between 48.9 and 52.8 per 100,000 (see Table 6-3 and Figure 6-9). The crude death rate for CLRD increased from 49.4 per 100,000 in 2014 to 52.8 in 2015. The age-adjusted death rate increased from 39.7 to 41.9 (see Table 6-47t). CLRD was the underlying cause of death for 2,118 of Oregon's residents, but it contributed to an even larger number of deaths (2,533) where it was not the underlying cause (see Table 6-6 and Table 6-51).

In 2015, more females than males died from CLRD (1,155 vs. 963), and the crude rate was also higher for females than for males (56.8 vs. 48.6). However, the age-adjusted death rate was higher for males: 44.2 per 100,000 population vs. 40.6 for females (see Table 6-47m and Table 6-47f). For most of the 20th century, far more males succumbed to CLRD than did females, but since 1999 this pattern has generally reversed (with the exceptions of 2002 and 2008). The increasing number of women dying from CLRD is a reflection of the higher numbers of older women than older men in Oregon. Even in years when more females than males died of CLRD, the age-adjusted death rates were still higher for males than females.

CLRD is the fifth leading cause of death for Oregonians aged 55 to 64 and third for decedents aged 65 to 84. Residents aged 75 to 84 had the largest number of CLRD deaths (710) (see Table 6-4). Although the third most

Oregon's 2014 age-adjusted heart disease death rate was the third lowest nationally.



common cause of death overall, chronic lower respiratory disease ranked eighth in the number of years of potential life lost (7,704). The median age at death was 78, one year older than during the previous year (see Table 6-13 and Table 6-15).

During 2013–2015, 13 counties had CLRD age-adjusted death rates significantly higher than the state’s (41.4): Lake (72.8), Klamath (62.0), Crook (60.1), Union (58.9), Tillamook (58.8), Wasco (55.9), Josephine (54.2), Douglas (53.8), Lincoln (53.7), Coos (53.4), Columbia (52.9), Umatilla (52.6) and Jackson (46.1). Five counties with 20 or more CLRD deaths had significantly lower rates: Washington (24.8), Hood River (25.2), Benton (27.5), Clackamas (35.4) and Marion (37.1).

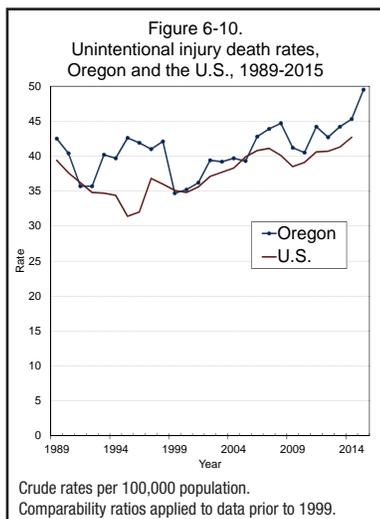
Oregon’s age-adjusted CLRD death rate has long been higher than the U.S. rate, but the disparity has abated somewhat in recent years. The greatest disparity occurred in 1987 when Oregon’s rate was 26.8% higher and ranked 11th among the states and District of Columbia. During 2014, the state’s rate was 1.0% lower than the nation’s rate and ranked 32nd (1) (see Table 6-55).

Unintentional injuries

The unintentional injury* crude death rate increased from 45.3 in 2014 to 49.5 in 2015 (see Table 6-3 and Figure 6-10). Fatal unintentional injuries claimed the lives of 1,987 Oregonians and contributed to the deaths of another 708 residents (see Table 6-6 and Table 6-51). The age-adjusted death rate increased from 40.7 in 2014 to 44.1 in 2015. Unintentional injuries were Oregon’s fourth leading cause of death.

A strong dichotomy exists in unintentional injury deaths between sexes. The crude death rate was higher for males than for females (61.2 vs. 38.1). The disparity in age-adjusted death rates was even greater; the male rate was 1.8 times the female rate: 54.0 vs. 29.7 (see Table 6-47m and Table 6-47f).

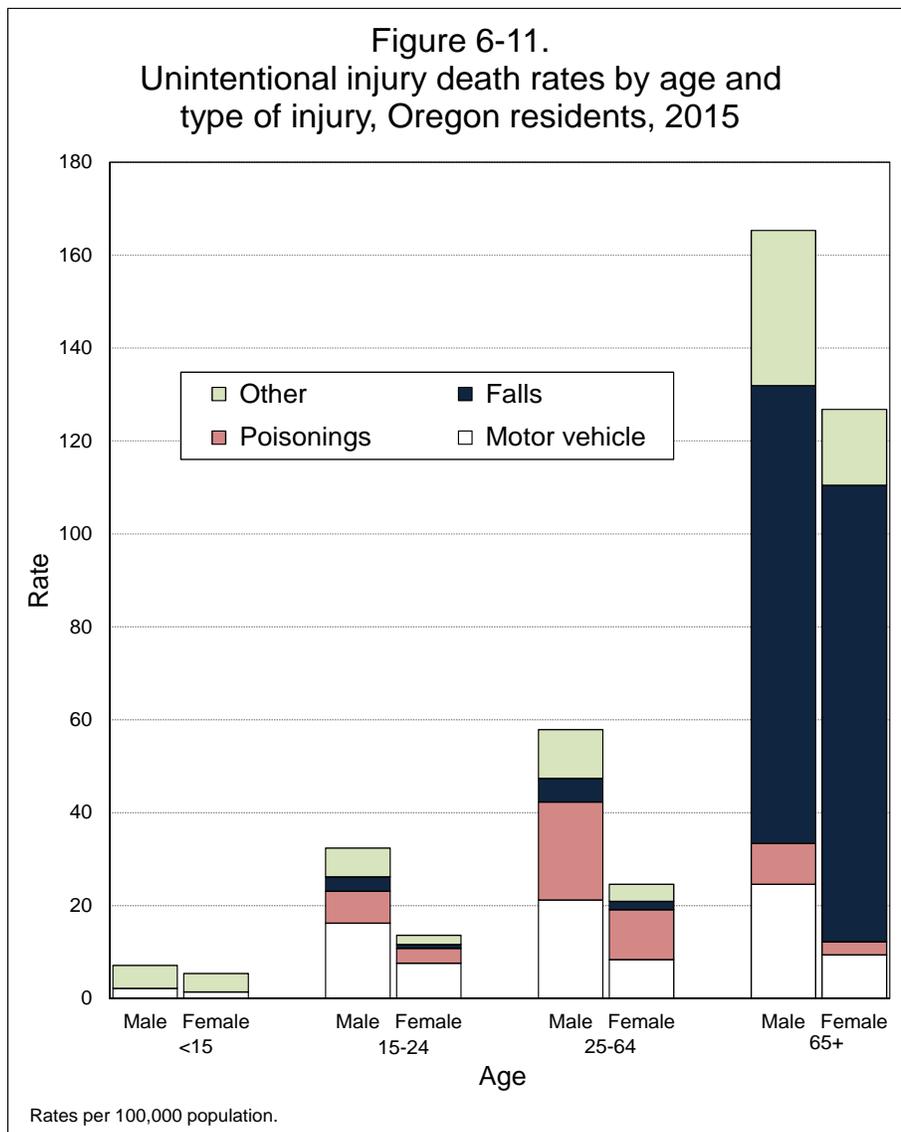
Unintentional injuries were the leading cause of death among children and adults aged 1–44 years (see Table 6-4). While age-specific rates vary little from the mid-



* The public health community prefers “unintentional injuries” to the term “accidents.”

teens until middle age, the oldest age groups have a greatly increased unintentional injury death rate largely due to the increased risk of falling (see Table 6-7t and Figure 6-11). Although it was the fourth leading cause of death, unintentional injuries ranked second in years of potential life lost (35,984, see Table 6-13 and Figure 6-5). This reflects unintentional injuries' role as the most common killer of young Oregonians. Despite this, the median age at death from unintentional injuries increased from 61 in 2014 to 63 in 2015. By comparison, the median age at death in 2001 was 52 (see Table 6-15).

During 2013–2015, nine counties had age-adjusted unintentional injury death rates significantly higher than the state rate (41.5): Curry (82.2), Wallowa (78.8), Jefferson (75.6), Lincoln (58.5), Josephine (58.0), Douglas (55.3), Linn (53.8), Lane (53.0) and Coos (52.4). Three counties



had significantly lower rates: Washington (26.9), Benton (29.7) and Clackamas (35.6).

During most of the past several decades, Oregon's unintentional injury death rate has, with few exceptions, been higher than the nation's. In 2014, the state's age-adjusted death rate from unintentional injuries was 1.2% above the national rate and ranked 35th among the states and District of Columbia.(1)

In 2015, 47 work-related deaths occurred in Oregon to both residents and non-residents. The victims were overwhelmingly male (39 males vs. eight females), with motor vehicle crashes being the most common cause of death from unintentional work-related injuries (see Table 6-50).

Just as the leading cause of death varies by age, so does the type of fatal unintentional injury (see Figure 6-11). Unintentional injury deaths occurring to children under 5 years of age most commonly resulted from suffocation or obstruction. Transportation-related injuries were the most common unintentional injury cause among decedents aged 5–44. Among those ages 45–54, poisoning (usually of drugs used in an illicit or inappropriate manner) was the most common cause of unintentional injury death. Transportation-related injuries were the most common unintentional injury cause among decedents aged 55–64. Falls were the most common type of unintentional injury death among Oregonians 65 or older (see Table 6-27).

Falls. Falls were the most common type of fatal unintentional injury in 2015; they claimed the lives of 730 Oregonians, most of whom (88.6%) were 65 or older (see Table 6-27). Falls commonly occurred on the same level (70.3%), most often from slipping or tripping. Thirty-five involved falls on and from stairs; 19 involved falls from beds. Falls involving wheelchairs or ladders caused 17 deaths (see Table 6-28). The age-adjusted death rate for fatal falls among males was 42.6% higher than among females (17.4 vs. 12.2) (see Table 6-47m and Table 6-47f). The age-adjusted death rate for falls increased 51.0% since 2005, from 9.6 per 100,000 population to 14.5 per 100,000 in 2014, a statistically significant difference (see Table 6-47t).

Transportation and related fatalities. Transportation-related injuries accounted for the second largest number of unintentional injury deaths (541) among Oregon residents, with motor vehicle traffic accidents accounting for 87.4% of all transportation injury deaths (see Table 6-27). Of the 473 motor vehicle traffic accidents, 69.8% occurred among males. The age-adjusted motor vehicle traffic accident death rate for males was more than twice as high as the rate for females (16.0 per 100,000 population vs. 6.7) (see Table 6-47m and Table 6-47f). Although teens and young adults aged 15–24 accounted for 12.5% of all motor vehicle traffic accident fatalities, age-specific death rates were highest among adults aged 35–44 and aged 65–74 (15.8 per 100,000 population). The motor vehicle traffic accident death rates for other age groups, in descending order, are 55–64 (14.8), 75–84 (14.5), 85 and older (14.4), 25–34 (13.9), 45–54 (12.0), 15–24 (11.6), 5–14 (2.1), 1–4 (1.5) and less than one year of age (0.0) (see Table 6-7t).

In most motor vehicle land transport deaths occurring in Oregon, the fatalities occurred among persons traveling by car (189), foot (95), unspecified vehicle (71), motorcycle (66), or pickup or van (61). Less common were the deaths of those traveling by all-terrain vehicle (12), pedal cycle (11), heavy transport vehicle (7), animal-drawn vehicle (3), industrial or construction vehicle (2), bus/coach (1) and agricultural vehicle (1). Of all fatalities among persons in cars, 24.3% resulted from non-collisions (e.g., rollovers following loss of control); 26.2% of fatalities occurred among persons in pickups or vans involved in non-collisions (see Table 6-29).

Overdoses and poisonings. Unintentional poisonings involving drugs/medications, most often by narcotics and hallucinogens, ranked third among the types of fatal unintentional injuries, claiming the lives of 400 Oregonians in 2015 (see Table 6-27). The 2015 age-adjusted death rate for poisonings is 35.2% higher than the age-adjusted rate in 2005 (9.6 in 2015 vs. 7.1 in 2005), a statistically significant difference. As with most other types of unintentional injuries, age-adjusted poisoning death rates were far higher for males than females (12.9 vs. 6.3) (see Table 6-47m and Table 6-47f). The death rate peaked among residents aged 45–54 (19.5 per 100,000) (see Table 6-7t).

Although 400 deaths were attributed to unintentional poisonings, it alone does not account for all deaths resulting

from overdoses and poisonings. Depending on how the fatality was reported on the death record, a death could be attributed to an unintentional injury or to a mental/behavioral disorder (see Table 6-35, footnote 1).

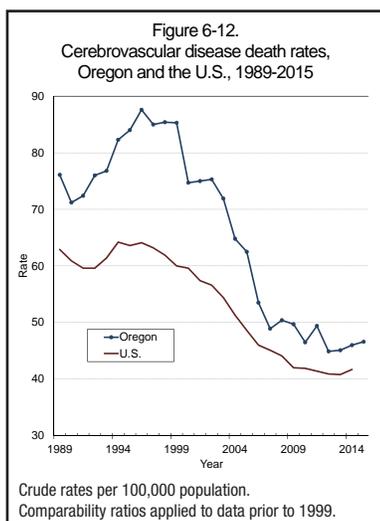
Suffocation or obstruction. Ranking fourth, suffocation or obstruction (including hanging and strangulation) accounted for the deaths of 89 residents. Of these deaths, 27 (30.3%) involved inhalation or ingestion of objects or substances other than food or gastric contents. Oregonians aged 0–4 years accounted for the highest number of suffocation or obstruction deaths (23 or 25.8%), and those aged 85 years and older accounted for the second highest number of deaths (17 or 19.1%) (see Table 6-27).

Drownings. Ranking fifth among causes of death from unintentional injuries, drownings (including those involving watercraft) accounted for the deaths of 60 residents (see Table 6-27). There were 71 resident and non-resident drowning deaths in Oregon; most of these deaths did not involve watercraft. Forty-one deaths occurred in natural water. Eight deaths occurred in bathtubs or hot tubs, and five occurred in swimming pools. Twelve deaths involved watercraft (see Table 6-32).

Cerebrovascular disease

Accounting for 5.2% of all deaths, cerebrovascular disease was the fifth leading cause of mortality among Oregonians. The number of deaths attributed to cerebrovascular disease increased from 1,821 in 2014 to 1,869 in 2015. The number of deaths in which this disease was a contributing factor decreased from 1,557 deaths in 2014 to 1,553 deaths in 2015 (see Table 6-3 and Table 6-51). Since 1996, the crude death rate for this cause has trended downward; however, between 2014 and 2015, the crude death rate increased slightly from 46.0 per 100,000 population to 46.6 per 100,000 population (see Figure 6-12). The age-adjusted death rate also increased from 37.0 in 2014 to 37.1 in 2015 (see Table 6-47t).

For trend analysis, researchers should be aware of a coding change that occurred between 2004 and 2005 when the National Center for Health Statistics altered the cause of death classification methodology. In prior years, “multi-infarct dementia” and “vascular dementia” were coded as forms of cerebrovascular disease (I63.9 and I67.9, respectively). Beginning in 2005, these diseases were



coded as forms of organic dementia (F01.1 and F01.9, respectively). This coding change resulted in a drop in the number and rate of deaths attributed to cerebrovascular disease following 2005.

More females than males died from cerebrovascular disease, and the male crude death rate was 28.1% lower than the female rate (38.9 vs. 54.1, see Table 6-2). However, the age-adjusted rate for males was 0.5% higher than the rate for females (36.9 vs. 36.7) (see Table 6-47m and Table 6-47f).

Fatal cerebrovascular disease was uncommon before age 45, but it was the fifth most common cause of death among Oregon residents aged 65–74 and fourth most common cause of death among Oregonians aged 75 and older (see Table 6-4). Despite its relatively high frequency of occurrence, cerebrovascular disease ranked ninth by years of potential life lost (5,488), a consequence of the older ages of decedents (compared to relatively younger ages at death for many other causes) (see Table 6-13). Three-fourths of the deaths occurred after age 74, and the median age at death increased from 83 years in the previous year to 84 in 2015 (see Table 6-6 and Table 6-15).

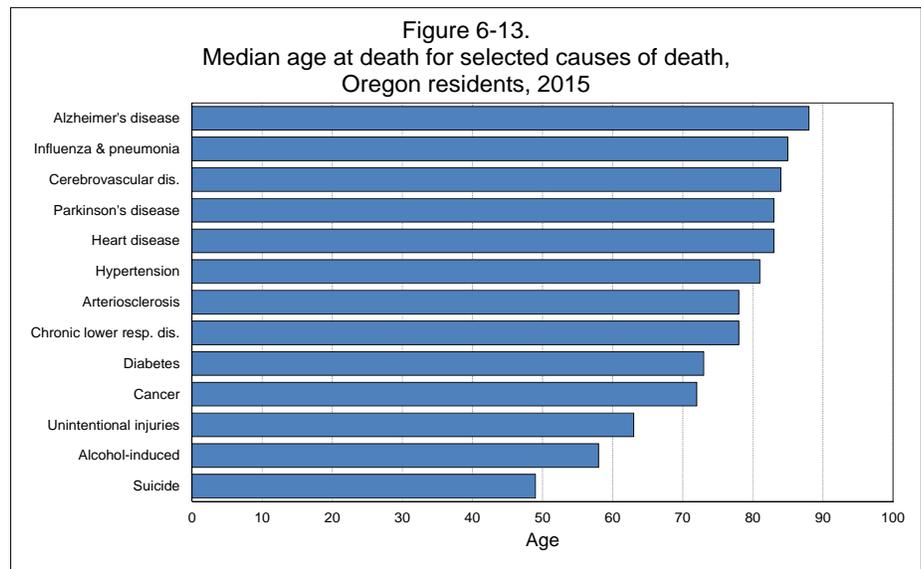
Excluding counties with fewer than 20 deaths due to cerebrovascular disease, the age-adjusted death rates for two counties during 2013–2015 were significantly higher than the state rate (37.1): Wasco (49.9) and Linn (45.6). One county had a significantly lower rate: Washington (31.8).

The cerebrovascular disease death rate has long been higher in Oregon than in the United States as a whole. In 2014, the age-adjusted death rate was 2.5% higher than the nation's rate and ranked 23rd among the states, including the District of Columbia (1) (see Table 6-55).

Intracerebral hemorrhages and cerebral infarctions are examples of two forms of cerebrovascular disease, but the more general term “stroke” appears most commonly on death records.

Alzheimer's disease

Historically, the number of deaths from Alzheimer's disease has mirrored the aging of Oregon's population. Deaths from Alzheimer's disease had fluctuated little in prior years but have recently increased. The number of deaths increased from 1,412 in 2014 to 1,650 in 2015—a record high. The



crude death rate from Alzheimer's disease increased 15.4%, from 35.6 per 100,000 in 2014 to a record high of 41.1 in 2015 (see Table 6-3).

The age-adjusted death rate from Alzheimer's disease also increased, from 28.3 in 2014 to 32.6 in 2015 (see Table 6-47t). While the age-adjusted death rate held relatively steady in the last five years, it has increased over time. The 2015 age-adjusted rate is 102.5% higher than the 1990 rate (16.1). This is the largest increase seen among the top 10 leading causes of death. Alzheimer's disease also contributed to the deaths of 394 residents (where it was not the underlying cause).

Women are at greater risk of dying from this disease, in part because they are less likely to die from causes that most commonly lead to death at younger ages. The age-adjusted Alzheimer's disease death rate for women was 36.8% higher than that for men (36.4 vs. 26.6) (see Table 6-47m and Table 6-47f). Alzheimer's disease was the ninth leading cause of death among men but fourth among women (see Table 6-2).

People with Alzheimer's disease tend to die at an older age than people who die from other causes. In 2015, 93.8% of Alzheimer's deaths occurred after the decedent's 75th birthday (see Table 6-6). The median age at death from Alzheimer's disease in 2015 was 88 years, which was the same median age as in 2014 and the highest median age at death among Oregon's most common causes of death (see Table 6-15 and Figure 6-13). Alzheimer's disease was the sixth leading cause of death overall.

Excluding those with fewer than 20 deaths in this category, four counties had significantly higher age-adjusted death rates from Alzheimer’s disease than the state (29.4) during 2013–2015: Linn (36.2), Lane (35.8), Jackson (33.1) and Multnomah (32.7). Six counties had significantly lower rates: Wasco (14.3), Curry (15.1), Josephine (18.7), Union (18.8), Marion (21.3) and Douglas (23.3).

Oregonians have long had higher rates of death than U.S. residents from Alzheimer’s disease. In 2014, the state’s age-adjusted death rate was 12.2% higher than the nation’s (28.5 and 25.4, respectively) and ranked 20th among the states and District of Columbia (1) (see Table 6-55).

Although deaths resulting from Alzheimer’s disease are counted here, deaths attributed to dementia, organic dementia, presenile dementia, multi-infarct dementia and vascular dementia are included in ICD-10 codes F00 (dementia in Alzheimer’s disease), F01 (vascular dementia), and F03 (unspecified dementia).

As noted in the section on cerebrovascular disease, a coding change beginning in 2005 resulted in an increase in the number of deaths attributed to organic dementia and a decline in deaths from cerebrovascular disease (see Table 6-6, footnote 10 for more information). During 2015, the deaths of 2,118 Oregonians were attributed under the rubric “organic dementia” (ICD codes F01 and F03). Together, organic dementia and Alzheimer’s disease/dementia accounted for 3,768 deaths, surpassing the third leading cause of death, chronic lower respiratory disease (2,118).

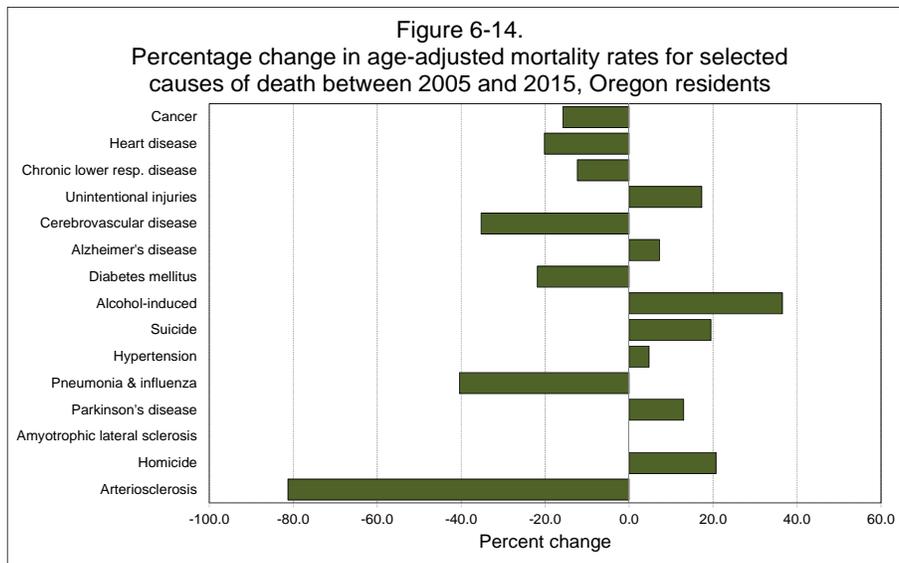


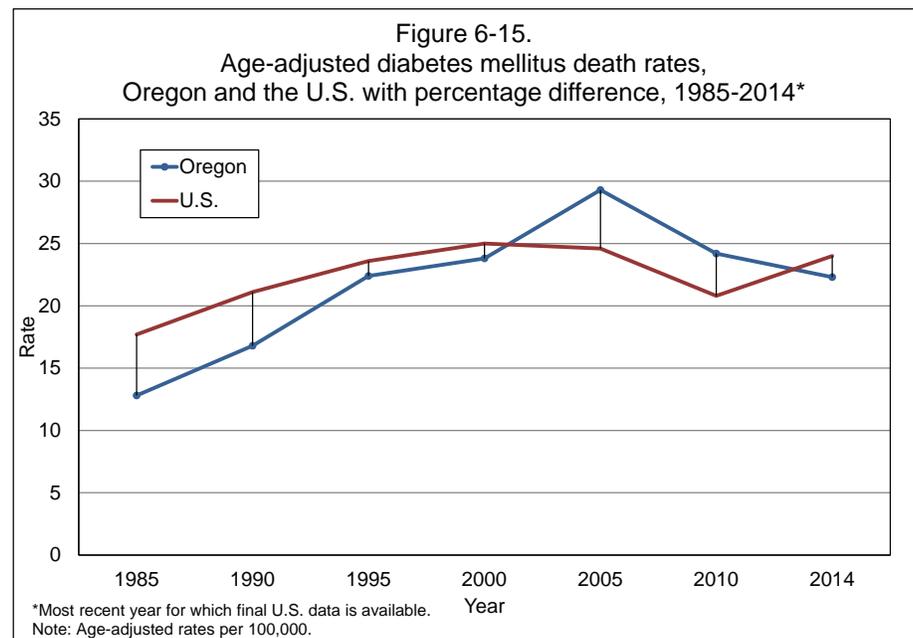
Table E - Diabetes death rates and state ranking		
Year	U.S.	Oregon
1982	17.2	12.2
Percent difference: -29.1		
Rank: Lowest		
2014	20.9	22.4
Percent difference: +7.2		
Rank: 18th highest		

Diabetes mellitus

During 2015, diabetes mellitus was the seventh leading cause of mortality. Although the death rate for diabetes generally increased during 1985–2001, it stabilized during 2001–2004. Since reaching a high of 31.1 per 100,000 population in 2005, the rate has trended downward. The 2015 rate increased slightly to 28.6, up from 27.3 in 2014 (see Table 6-3). The age-adjusted rate in 2015 (22.9) was 33.1% higher than the rate in 1990 (17.2) and 21.8% lower than 2005's record high (29.3) (see Figure 6-14 and Table 6-15). Diabetes was a contributing factor more often than it was the underlying cause of death: 3,038 vs. 1,149 (see Table 6-51).

The diabetes crude death rate for males was 31.4% higher than the rate for females (32.6 vs. 24.8) (see Table 6-2). The difference between male and female rates was even larger when looking at age-adjusted rates. The age-adjusted death rate for males was 60.0% higher than the rate for females (28.8 vs. 18.0) (see Table 6-47m and Table 6-47f).

Most diabetes deaths (89.7%) occurred after age 54. Two Oregonians younger than 25 years old died from diabetes in 2015. It was the fourth leading cause of death among Oregonians aged 65–74 (see Table 6-4). The median age at death was unchanged from 2014 at 73 years (see Table 6-15). Diabetes resulted in a loss of 8,141 years of potential life (see Table 6-13).



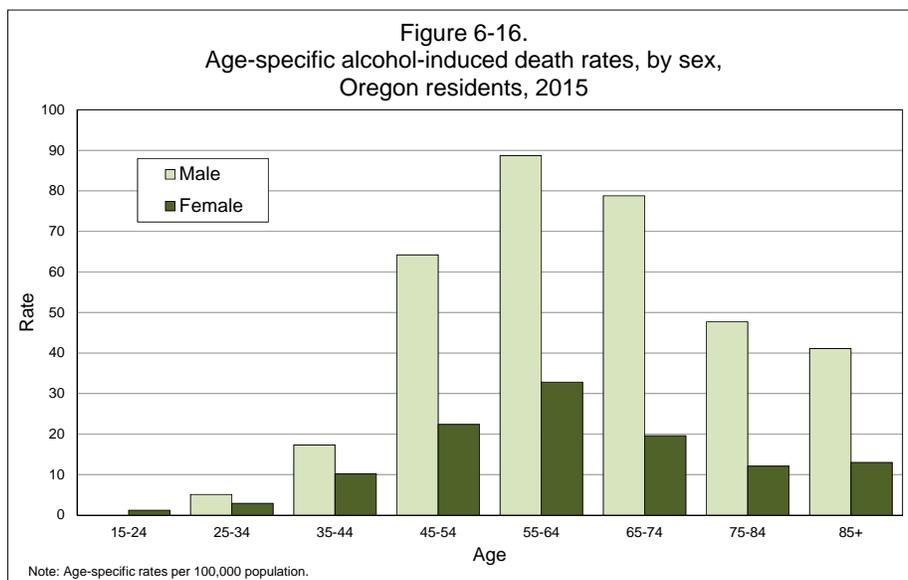
During 2013–2015, seven counties had significantly higher age-adjusted diabetes death rates compared to the state’s (22.9): Jefferson (37.7), Wasco (35.9), Coos (33.3), Linn (30.5), Douglas (29.1), Marion (26.4) and Multnomah (25.3). Four counties had a significantly lower rate: Benton (12.1), Clatsop (13.0), Clackamas (18.9) and Washington (19.9).

Prior to 1987, Oregon’s age-adjusted diabetes death rate was consistently 25% to 30% lower than the national rate. The Oregon advantage gradually diminished thereafter. Oregon’s rate exceeded the U.S. rate for the first time in 1997. In 2014, Oregon’s age-adjusted rate was 7.2% higher than the U.S. rate, ranking 18th among the states and District of Columbia (1) (see Table 6-55 and Table E).

Diagnosis	Count
Alcoholic liver disease	559
Mental/behavioral disorders	267
Poisoning, accidental	38
Cardiomyopathy	19
Acute or chronic pancreatitis	5
Nervous system degeneration	5
Polyneuropathy	1

Alcohol-induced deaths*

The alcohol-induced deaths category summarizes alcohol-related deaths, but excludes alcohol-related injury deaths. It is not typically reported as a leading cause of death within the National Center for Health Statistics’ leading causes of death taxonomy. However, when alcohol conditions are combined, it becomes the eighth leading cause of death in Oregon. This category comprises alcohol-related disorders from multiple organ systems, with alcoholic liver disease accounting for the greatest number of deaths (62.5%, see Table F). If intentional



* Chronic liver disease and cirrhosis as well as nephritis were not discussed as leading causes in the narrative section, although they would be ranked respectively as the ninth and 13th leading causes of death under the NCHS rubric. Most of these deaths were counted under alcohol-induced deaths in the narrative section.

and unintentional injury deaths where alcohol was a factor (e.g., motor vehicle crashes and homicides) were included in this category, the count would be considerably higher. The role, if any, of alcohol in injury deaths is rarely reported on death records.

Alcohol-induced deaths claimed the lives of 894 Oregonians during 2015 (see Table 6-6). Additionally, alcohol was a contributing factor but not the direct cause in 735 deaths (see Table 6-51). The crude death rate increased to 22.3 per 100,000 population in 2015 from 19.2 during 2014, and the age-adjusted death rate increased from 16.4 in 2014 to 18.7 in 2015 (see Table 6-47t).

Oregon's 2014 age-adjusted alcohol-induced death rate was the fifth highest nationally.

Fatal alcohol abuse was the sixth leading cause of death among men and the ninth leading cause among women, but the difference was greater when age-adjusted. The age-adjusted death rate for males was 2.8 times the rate for females, 27.9 vs. 10.1, respectively (see Table 6-47m and Table 6-47f).

Age-specific alcohol-induced death rates ranked third among the leading causes of death for residents aged 55–64 (see Table 6-4 and Figure 6-16). This category was the fourth leading cause of death among residents aged 45–54 years, and the fifth leading cause among those aged 25–44. The median age at death increased from 57 years in 2014 to 58 in 2015 (see Table 6-15). Oregonians are dying at markedly younger ages from this cause than they were in 1988 when the median age of alcohol-induced death was 62. In 2015, alcohol-induced death was the fifth leading cause of premature death, accounting for 15,347 years of potential life lost (see Table 6-13).

Excluding counties with fewer than 20 deaths in this category, seven counties had age-adjusted alcohol-induced death rates significantly higher than the state's rate (16.9) during 2012–2014: Jefferson (41.9), Klamath (32.1), Coos (30.6), Lincoln (30.3), Linn (24.9), Josephine (23.4) and Douglas (22.1). Rates were significantly below the state rate in three counties: Polk (9.7), Washington (10.6) and Clackamas (12.6).

The Oregon alcohol-induced death rate has long been higher than that for the United States. In 2014, Oregon's age-adjusted rate was 92.9% higher than the nation's and ranked fifth among the states and the District of Columbia.⁽¹⁾ However, at least part of the difference between the state and the nation likely

results from a reporting artifact: Staff at the Oregon Center for Health Statistics ask physicians for more information when causes listed on death records (e.g., esophageal varices) suggest alcohol use, while many states do not.

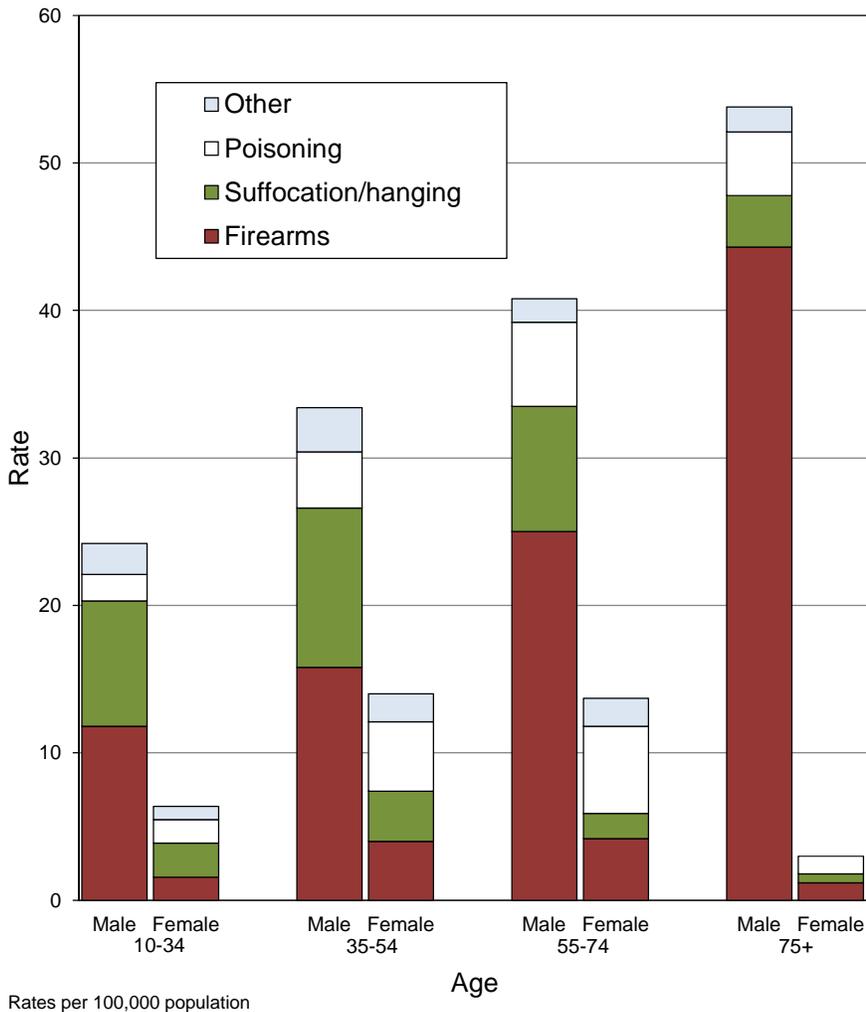
Suicide

Suicide was reported as the manner of death for 761 Oregonians during 2015, decreasing from 781 deaths the previous year. The crude death rate decreased from 19.7 per 100,000 population in 2014 to 19.0 in 2015 (see Table 6-3). In 2015, the age-adjusted death rate was 17.8, 4.3% lower than 2014’s record high rate of 18.6 (see Table 6-47t).

Males are at much greater risk of suicide death than females, with age-adjusted death rates of 27.6 and 8.5, respectively (see Table 6-47m and Table 6-47f). Sex-specific rate differences were greatest among the elderly (see Table

Table G - Number of times more likely a male Oregonian was to die by suicide than a female, by age, 2011-2015	
5-14	1.4
15-24	3.9
25-34	4.2
35-44	3.4
45-54	2.5
55-64	3.3
65-74	3.8
75-84	8.2
85+	12.3

Figure 6-17.
Suicide death rates by method, sex and age,
Oregon residents, 2015



Age	Metro ¹	Coastal ²	Other
<25	12.3%	9.8%	11.6%
25-64	70.4%	65.6%	67.4%
65+	17.3%	24.6%	21.0%
Method	Metro ¹	Coastal ²	Other
Poison	18.4%	23.0%	14.7%
Hanging/suff.	24.9%	24.6%	26.5%
Firearm	45.1%	45.9%	52.2%
Other	11.6%	6.6%	6.6%

¹ Metro counties: Clackamas, Multnomah, and Washington.
² Coastal counties: Clatsop, Coos, Curry, Lincoln, and Tillamook.

6-7m, Table 6-7f and Table G).

Overall, suicide rates peak among the elderly, but this masks a dichotomy between the sexes: Females were more likely to die by suicide in middle age where the crude rate peaked at 17.4 among 45 to 54 year-olds, while rates among males generally increased with age, with the highest crude rate (57.0) recorded among those 75–84 (see Table 6-7t, Table 6-7m and Table 6-7f). Although suicide death rates are high among the elderly, 59.3% of deaths occurred before age 55, resulting in the fourth largest number of years of potential life lost (20,564) by cause (see Table 6-13). Suicide was the second-leading cause of death among residents aged 15–34 and third among those aged 35–44; it was the fifth leading cause among those aged 5–14 and 45–54 (see Table 6-4). The median age at death was unchanged at 49 years (see Table 6-15). The youngest person to die by suicide was a 10-year-old male and the oldest a 95-year-old male.

Eight Oregon counties had age-adjusted suicide death rates that were significantly higher than the state's rate (17.7) during 2013–2015: Curry (45.7), Lincoln (30.0), Coos (28.2), Clatsop (28.2), Douglas (26.7), Josephine (26.5), Jackson (23.8) and Lane (20.6). Three counties had significantly lower rates: Benton (11.6), Marion (12.7) and Washington (12.7). See Table H for more information.

Oregonians have long had higher suicide rates than residents of most other states. In 2014, Oregon's age-adjusted suicide rate was 43.1% higher than the nation's and ranked 11th among the states and District of Columbia.(1)

The method of suicide varied by age and sex but, overall, almost half of suicide deaths (49.1%) resulted from fatal gunshot injuries (see Table 6-33 and Figure 6-17). Firearms were the most common method of suicide for males (55.7%) and second most common for females (28.6%). Handguns were used in 76.2% of firearm suicides.

Hanging/suffocation was the second most common method of suicide (25.8%). A slightly higher proportion of males died by suicide in this manner than females (26.7% and 22.7%, respectively) (see Table 6-33).

Poisoning was the third most common method of suicide (16.7%). However, it was the most common method for females. The proportion of females who poisoned themselves was about three times that of males (35.1% vs.

10.8%). Drugs and medications were the most common method of poisoning for both females (87.7%) and males (61.3%) (see Table 6-33).

Hypertension

During 2015, 567 Oregonians died as a consequence of hypertension (including hypertensive renal disease, see Table 6-6), making it the 10th leading cause of death. However, the number of deaths attributed to hypertension does not include all deaths related to this cause because many have been classified to more specific manifestations of cardiovascular disease. The crude death rate increased from 12.6 in 2014 to a record high of 14.1 in 2015, which is 2.8 times higher than the 1990 rate of 5.0 (see Table 6-3). The age-adjusted death rate increased from 9.8 in 2014 to 11.1 in 2015 (see Table 6-47t).

The hypertension crude death rate for females was higher than the rate for males (15.3 vs. 12.9). However, the age-adjusted death rate for males was higher than the rate for females, 11.7 vs. 10.4 (see Table 6-47m and Table 6-47f).

Deaths from hypertension are rare among middle-aged and younger Oregonians, but by age 55, the number of deaths begins to increase sharply. Age-specific hypertension death rates are 12.0 times as high among residents 85 or older as among those aged 65–74 (292.2 vs. 24.4, see Table 6-7t).

Excluding counties with fewer than 20 deaths in this category, one county had age-adjusted hypertension death rates significantly higher than the state rate (10.6) from 2013 to 2015: Lane (12.8). Two counties had rates significantly lower than that of the state: Yamhill (6.4) and Benton (6.6).

Oregon's age-adjusted hypertension death rate was markedly lower than the U.S. rate through 1985, but this trend has since reversed. In 2014, Oregon's age-adjusted hypertension death rate was 19.5% higher than the U.S. rate (9.8 vs. 8.2) and ranked ninth nationally (1) (see Table 6-55).

Influenza and pneumonia

In 1918, influenza spread across the United States in less than a week and around the world in three months. The pandemic persisted into 1919, with influenza the leading cause of death in Oregon during both years. In 1918 alone, the pandemic claimed the lives of 2,105 Oregonians at a time when Oregon's population was much smaller than it is today.

Oregon's age-adjusted hypertension death rate reached a record high in 2015.

Oregon's 2014 age-adjusted influenza and pneumonia death rate was the lowest in the nation.

During 2015, influenza and pneumonia claimed the lives of 357 Oregonians, down from 408 a year earlier. The crude death rate was 11.3, the same as in 2014 (see Table 6-3). In addition, the age-adjusted rate decreased slightly from 9.1 to 9.0 (see Table 6-47t). Influenza and pneumonia contributed to 1,204 deaths, more than three times as many deaths as they directly caused (see Table 6-51).

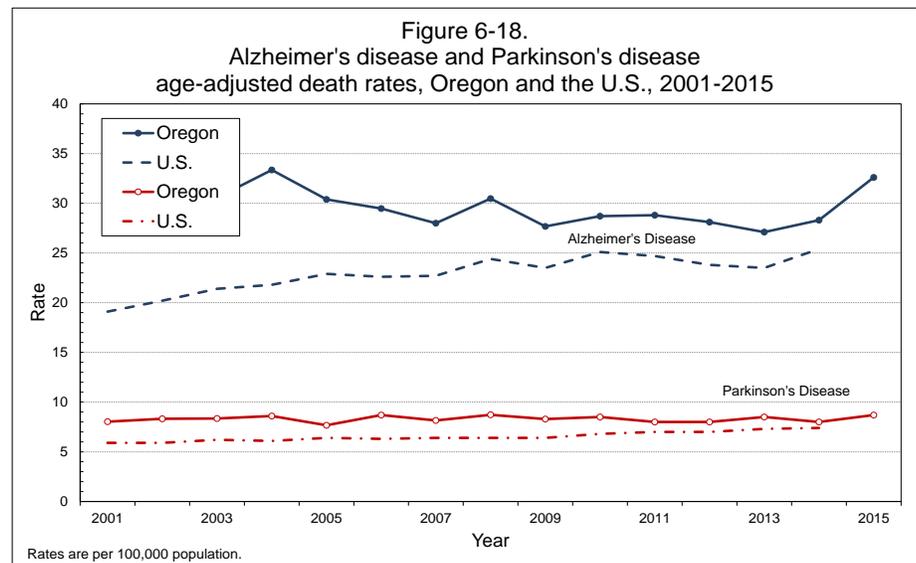
Although more women than men died from these two infectious diseases in 2015 (244 vs. 209, respectively, see Table 6-2), age-adjusted death rates revealed the greater risk for males (10.2 per 100,000 population vs. 8.0) (see Table 6-47m and Table 6-47f). Although these two related types of respiratory infections caused deaths across age groups, 73.4% of the deaths occurred after age 74. The median age at death increased from 81 in 2014 to 85 in 2015 (see Table 6-15).

Excluding counties with fewer than 20 deaths in this category, one county had an age-adjusted influenza and pneumonia death rate significantly higher than the state rate (9.5) during 2013–2015: Jackson (12.2). No counties had rates significantly lower than that of the state.

In recent years, Oregon's age-adjusted death rate for influenza and pneumonia has been markedly lower than the rates for most other states. In 2014, Oregon's age-adjusted death rate was 39.7% lower than the U.S. rate and the lowest of all states and the District of Columbia (1) (see Table 6-55).

Parkinson's disease

Ranking 12th among causes of death during 2015, Parkinson's disease claimed the lives of 428 Oregon residents.



The 2015 crude death rate increased to 10.7 per 100,000 population from 9.6 in 2014 (see Table 6-3). The 2015 age-adjusted death rate increased slightly from 8.0 in 2014 to 8.7 in 2015 (see Table 6-47t). While the mortality rates for many causes fell in recent decades, the rate for this neurological disorder continues to trend upward, despite short-term fluctuations (see Table 6-3). The age-adjusted Parkinson's death rate for males was 2.2 times as high as that of females (12.9 vs. 5.9) (see Table 6-47m and Table 6-47f).

Parkinson's disease most often kills persons age 55 or older (see Table 6-6). The median age at death has fluctuated little during the previous decade, ranging between 82 and 84. The median age of death was unchanged in 2015 at 83 years (see Table 6-15).

Excluding counties with fewer than 20 deaths in this category, no counties had age-adjusted rates significantly higher or lower than the state rate (8.4) during 2013–2015.

Oregon's age-adjusted Parkinson's disease death rate has long been higher than the nation's, as have two other neurological disorders: Alzheimer's disease and amyotrophic lateral sclerosis (see Table 6-55 and Figure 6-18). During 2014, Oregon's age-adjusted Parkinson's disease death rate was 10.8% higher than the U.S. rate and ranked 14th among the states and District of Columbia.(1)

Oregon's 2014 age-adjusted Parkinson's disease death rate was the 14th highest nationally.

Homicide

Oregon's homicide rate increased in 2015 from 2.5 per 100,000 population in 2014 to 3.5 (see Table 6-3). With 139 victims, homicide was the 19th leading cause of death

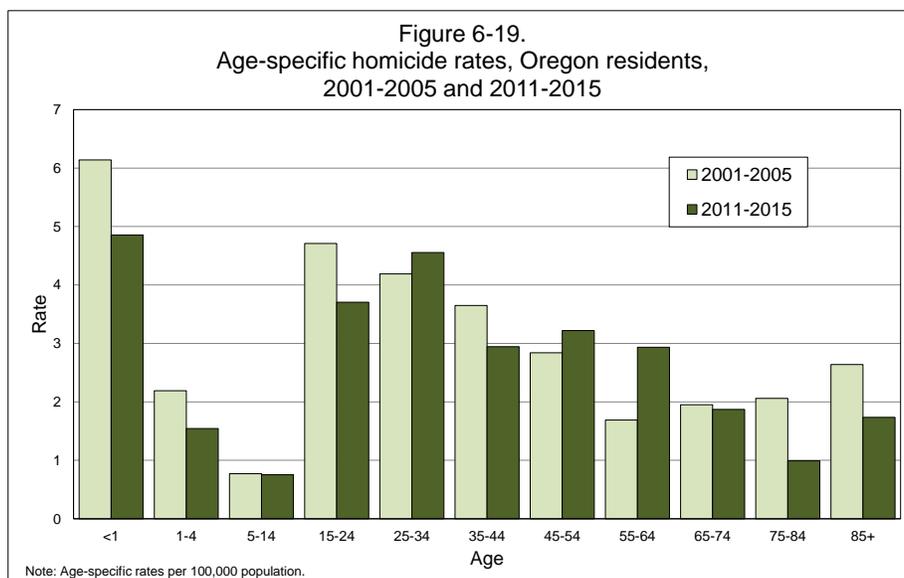


Table I - Leading methods of homicide, 2015

Method	Count
Firearms	94
Sharp objects	13
Hanging/strang./suff.	3
Neglect & maltreatment	3

Oregon's 2014 age-adjusted homicide death rate was the seventh lowest nationally.

during 2015. Only four counties – Clackamas, Douglas, Lane and Multnomah – had more than 10 residents die from homicide in 2015 (see Table 6-36). Nine of Douglas County's homicide deaths occurred in a single incident at Umpqua Community College on Oct. 1, 2015.

Every year, more males than females are murdered, and 2015 was no exception. The male age-adjusted death rate increased from 3.2 per 100,000 population in 2014 to 5.1 in 2015. The female age-adjusted rate was 1.9 in 2015 — an increase from 1.7 in 2014. The total (both sexes) age-adjusted rate was 3.5 in 2015, up from 2.4 in 2014 (see Table 6-47t, Table 6-47m and Table 6-47f).

Infants had higher homicide death rates than Oregonians in any other age category. During 2011–2015, infants' homicide rate was 4.9. The group with the second highest homicide death rate was aged 25–34 (4.6). Children between the ages of 5 and 14 had a homicide death rate of 0.8, the lowest of all age groups during 2011–2015 (see Figure 6-19). Data for five years were aggregated for analysis because rates based on multiple years' data yield more representative values than those based on the relatively small numbers recorded for any single year.

The median age at death for homicide victims in 2015 was 40 years, which was a decrease from the median age of 42 in 2014 (see Table 6-15). However, homicide continues to have the lowest median age at death among the leading causes (except for causes associated with infancy). With 4,918 years of potential life lost, homicide was the 11th leading cause of premature death (see Table 6-13).

Excluding counties with fewer than 20 deaths in this category, one county had an age-adjusted rate significantly higher than the state rate (2.7) during 2013–2015: Douglas (9.6).

Historically, Oregon's homicide death rate has been markedly lower than the nation's. During 2014, the state's rate was 52.9% lower and ranked 42nd (seventh lowest) among 47 states and the District of Columbia (states with unreliable rates excluded) (1) (see Table 6-55).

Firearms were the most common implement of homicide, accounting for 94 (67.6% of) homicide deaths in 2015 (see Table 6-33 and Table I).

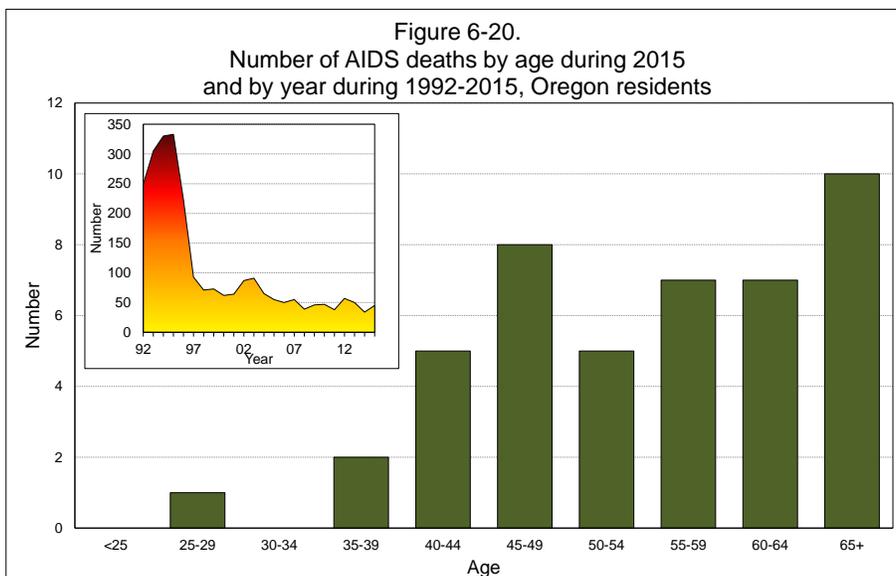
AIDS/HIV

After peaking at 360 deaths in 1995, the number of AIDS/HIV deaths has declined. The age-adjusted death rate has also greatly decreased since 1995, from 11.5 per 100,000 population to 1.0 in 2015 (see Table 6-47t). In 2015, the number of deaths increased from 34 in 2014 to 45 (see Table 6-3).

In 2015, AIDS/HIV was the 28th leading cause of death among Oregonians. There is a large disparity by sex when looking at risk of death from AIDS/HIV. The male age-adjusted rate during 2011–2015 was 6.0 times as high as the female rate (1.8 and 0.3, respectively) (see Table 6-47m and Table 6-47f). Data for five years were aggregated for analysis because rates based on multiple years' data yield more representative values than those based on the relatively small numbers recorded for any single year.

Unlike most causes of death, AIDS/HIV most often claims middle-aged adults (see Figure 6-20). Age-specific death rates rose sharply in adulthood with the highest rate among those aged 55–64 (2.7), and the second highest among those aged 65–74 (2.6). These rates are mainly driven by deaths among males (see Table 6-7t, Table 6-7m and Table 6-7f). The youngest person to die from this disease was a 27-year-old woman and the oldest a 73-year-old man. The median age at death from AIDS/HIV has gradually increased over time: in 2001, the median age at death was 42 compared to 56 in 2015 (see Table 6-15). There were 909 years of potential life lost (see Table 6-13) in 2015.

Oregon's 2014 age-adjusted HIV/AIDS death rate was 60% lower than the national rate.



During 2013–2015, only Multnomah County had more than 20 deaths due to AIDS/HIV. Its age-adjusted death rate (2.1) was significantly higher than the state rate (1.0).

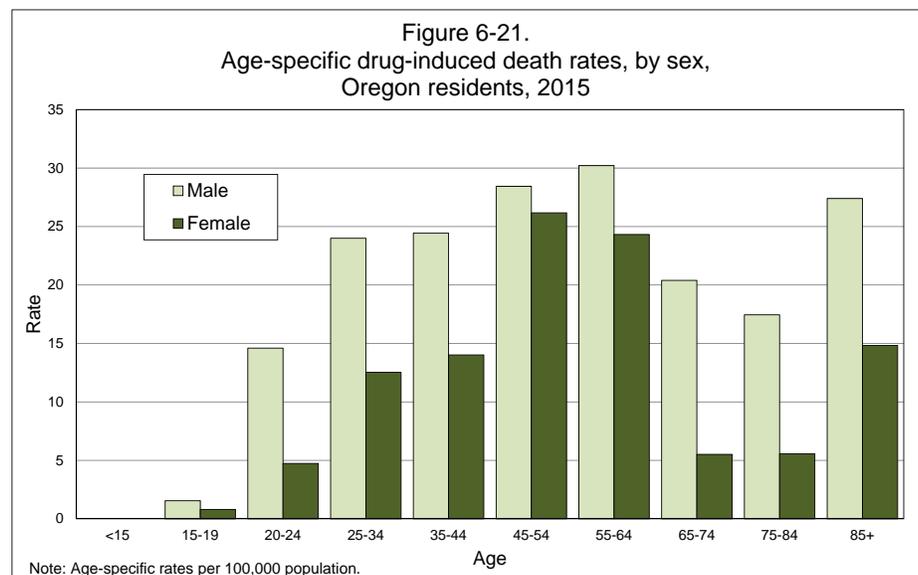
Oregon’s AIDS/HIV age-adjusted death rate has long been lower than the nation’s; in 2014 it was 60.0% lower than the national rate, ranking 24th (13th lowest) among 35 states and the District of Columbia (states with unreliable data excluded) (1) (see Table 6-55).

Drug-induced deaths

During 2015, fewer deaths were attributed to drug-related causes compared to those attributed to alcohol, 601 vs. 894 (see Table 6-6). Drug-induced death is not counted as a leading cause due to a considerable overlap with other cause-of-death categories. Nevertheless, with a crude death rate of 15.0 per 100,000 population, drugs/poisonings represented a significant cause of mortality among Oregonians (see Table 6-7t). The drug-induced death rate has trended up during recent years, with the rate in 2006 (15.7) representing the record high.

Males were more likely to die from drug-induced causes than females (see Figure 6-21). Their age-adjusted death rate was 17.4 per 100,000 population compared to 10.9 for females. Nearly two-thirds of all drug-induced deaths (64.6%) occurred among residents aged 35–64.

Excluding counties with fewer than 20 deaths in this category, three counties had age-adjusted rates significantly higher than the state rate (13.9) from 2013 to 2015: Lincoln (24.5),

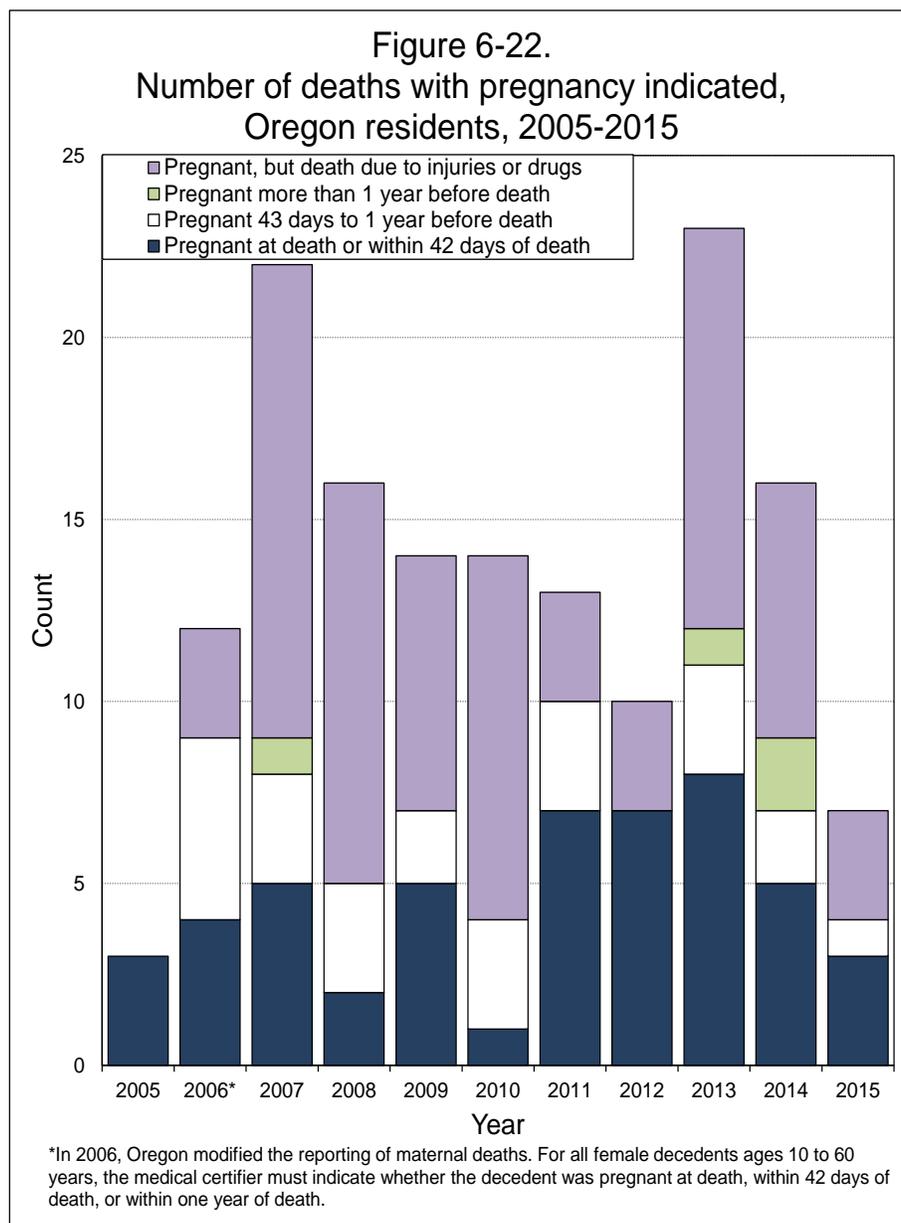


Lane (19.7) and Multnomah (17.4). Two counties had rates significantly lower than that of the state: Marion (8.7) and Washington (9.2).

This category consists of ICD codes included in other cause of death rubrics, with the majority of deaths categorized as mental disorders, unintentional injuries and suicide.

Maternal deaths

Before 2006, the category for maternal death (ICD10 codes O00–O99) included only fatalities where the female was either pregnant at the time of death or pregnant within 42 days of death. In addition, for every death of a female between 17 and 44 attributable to such causes as infections, cerebrovascular disease, digestive diseases or ill-



defined unknown causes, the Center for Health Statistics re-contacted the physician and asked if the woman was pregnant at the time of death or within 42 days prior to death. These queries might typically yield one additional maternal death record. However, the types of records queried were small in number.

Beginning in 2006, Oregon modified the reporting of maternal deaths by adding to the death record an item-specific checkbox under the section for causes of death. For all female decedents between 10 and 60 years of age, the medical certifier must now indicate if the decedent was pregnant at death, pregnant within 42 days of death, or pregnant within one year of death. As shown in Figure 6-22, the addition of this question has increased the count of maternal deaths. Under this expanded definition, 2015 saw four maternal deaths in Oregon.

Male veteran deaths

In 2015, there were 9,751 veteran deaths— 351 women and 9,400 men. Due to the small number of female veterans in Oregon, throughout this section of the report the terms “non-veterans” and “veterans” refer only to males aged 18 and older. Table 6-22 contains cause-of-death information for veterans and non-veterans. Male veteran population figures for rate calculation were obtained from the U.S. Department of Veteran Affairs, VetPop 2014 State Data Tables(2), and those shown in Appendix A, Table A-3. (Veteran population data for 2015 were not available at the time of publishing.)

The death rate for veterans in 2015 was almost five times as high as the rate for non-veterans (3,100.8 per 100,000 population vs. 666.8). However, much of this difference was due to a larger number of veterans in the older age groups. In the youngest age groups (18–34 years and 35–54 years), the ratios of veteran deaths to non-veteran deaths were 1:14 and 1:6, respectively. The ratio of veteran deaths to non-veteran deaths in the 55 to 74 year age group was nearly 1:1 (with slightly more non-veteran deaths than veteran deaths). In the oldest age group (aged 75 and older), veteran deaths outnumbered non-veteran deaths by a ratio of nearly 3:1 (see Table 6-22).

The age-specific death rates were higher for veterans than

for non-veterans for all age groups, and significantly higher among those aged 55–74 (1,957.9 vs. 1,263.9) and ages 75 and up (9,158.0 vs. 5,544.6). Rate differences for those aged 18–34 (171.8 vs. 114.9) and ages 35–54 (334.8 vs. 319.8) were not significant (see Table 6-22).

The top two causes of both veteran and non-veteran deaths in 2015 were cancer and heart disease. The third most cited cause of death was chronic lower respiratory disease (CLRD) for veterans and unintentional injuries for non-veterans (see Table 6-22). Because there are more veteran deaths than non-veteran deaths in the oldest age group, veteran death rates for causes seen primarily in older persons tend to be higher for veterans than for non-veterans (for instance, CLRD).

Suicide is the 10th leading cause of death for veterans and the fourth leading cause of death for non-veterans. However, the overall veteran suicide rate was 40% higher than for non-veterans (47.5 vs. 33.9). The suicide rates for veterans were higher than the rates for non-veterans in all age groups. The difference in rates was greatest among those 18–34 where the veteran suicide rate is 2.6 times higher than the rate for non-veterans (78.9 vs. 30.0) (see Table 6-22). The second greatest difference in rates was observed among the 35–54 age group, in which the veteran suicide rate was 20% higher than the rate for non-veterans (39.6 vs. 32.3) (see Table 6-22).

Male veteran and combat status

Suicide among young veterans is receiving more attention. This is especially true for combat veterans and those who experienced multiple deployments. In order to collect information needed for exploring the associations between veterans' experience and suicide, Oregon House Bill 3611 was signed into law in May 2011 and took effect Jan. 1, 2012. This law requires the collection of decedents' veteran and combat status. If the decedent was a veteran and had been in combat, combat zone(s) are also recorded on the death record. Table 6-23 presents observations based on the 2013–2015 data.

In 2013–2015, 54.2% of Oregon deaths among male residents 18 years or older were veterans; one-third (33.4%) of them were combat veterans. Combat status was unknown

in 26.2% of veteran deaths. The Center for Health Statistics has published multiple newsletter articles, provided data reports to funeral homes, conducted phone call follow-up, and mailed out written communications to increase compliance with the new death record questions.

Between 2013 and 2015, veterans experienced a lower percentage of deaths from suicide (1.2%, or 460) than among non-veterans (5.1%, or 1,211). Among veterans who died from suicide, 23.5% had been in combat; 59.3% were non-combat veterans. Another 17.2% of veterans had unknown combat status.

During 2013–2015, combat veterans aged 18–49 had a higher percentage of deaths due to suicide than non-combat veterans (26.9% versus 23.3%). For male veterans aged 50 or older, combat veterans had a lower percentage of deaths due to suicide than non-combat veterans (0.9% vs. 2.0%).

Deaths due to military operations

The Oregon vital statistics data files do not include deaths to Oregon residents who died in military operations outside the United States. Death records of military personnel are registered with the U.S. Department of Defense and are not forwarded

Table J - Oregon resident military deaths in Operation Iraqi Freedom, Operation Enduring Freedom, and Operation New Dawn, 2002-2015¹

County	2002 to 2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Characteristics
Benton	2	2	-	-	-	-	-	1	-	-	Sex
Clackamas	3	1	-	1	1	-	1	-	-	-	Male
Clatsop	1	1	-	-	-	-	-	-	-	-	Female
Columbia	-	1	-	-	-	-	-	-	-	-	Total
Coos	1	2	1	-	-	-	-	-	-	-	109
Deschutes	1	1	2	-	-	-	1	1	-	-	
Douglas	3	-	1	1	1	-	-	-	-	-	
Hood River	1	-	-	-	1	-	-	-	-	-	
Jackson	1	1	1	-	-	-	-	-	-	-	Age
Jefferson	1	-	-	-	-	-	-	-	-	-	<20
Josephine	-	1	-	-	-	-	-	-	-	-	20-24
Klamath	2	1	-	-	-	-	-	-	-	-	25-29
Lane	-	1	1	-	-	-	-	-	-	-	30+
Lincoln	2	2	-	-	-	-	-	-	-	-	Total
Linn	4	-	1	-	1	1	-	-	-	-	109
Malheur	-	1	-	-	-	-	-	-	-	-	
Marion	2	1	-	-	-	1	-	1	-	-	
Multnomah	15	1	-	-	-	1	-	-	1	-	Race
Polk	2	1	-	1	1	-	-	-	-	-	White
Umatilla	4	-	-	-	-	-	-	-	-	-	Black
Union	1	-	-	-	-	-	-	-	-	-	Hawaiian
Wasco	1	-	-	-	-	-	-	-	-	-	Asian
Washington	7	2	1	1	-	1	1	-	-	-	Hispanic
Yamhill	1	-	-	-	-	-	-	-	-	-	Multiple
N.S.	1	-	-	1	-	1	2	1	-	-	Unknown ²
Total	56	20	8	5	5	5	5	4	1	0	Total
											109

¹Source: <https://www.dmdc.osd.mil/dcas/pages/casualties.xhtml>. Accessed 11/07/2016.

²Race and ethnicity are unknown for all decedents after 2010, since the Defense Casualty Analysis System no longer provides race or ethnicity in the record-level datasets available on the website.

to the decedents' state of residence. However, these deaths (with each decedent's name, date of death, home city, age and sex) are posted weekly on the Department of Defense's website.⁽³⁾ They are presented here in tabular form for Oregon residents for 2002–2014. In 2015, no Oregon residents died in military operations (see Table J).

Endnotes

1. These data are from the federal Centers for Disease Control and Prevention's (CDC) WONDER online database (<http://wonder.cdc.gov/mortSQL.html>). The most recent year for which final mortality data are available was 2014 at the time this report was compiled. Oregon mortality data from the WONDER database may vary slightly from Oregon data presented elsewhere within this annual report due to different file closure dates, different population estimate methodologies, out-of-state reporting by other states to CDC and incorporation of Oregon's physician query results. Accessed Nov. 15, 2016.
2. Male veteran population estimates for calculating crude death rates were obtained from the U.S. Department of Veteran Affairs, VetPop 2014 State Data Tables: www.va.gov/vetdata/Veteran_Population.asp (most recent available). Accessed Nov. 15, 2016.
3. Counts of Oregon residents who died in military operations outside the United States were obtained from U.S. Department of Defense: <https://www.dmdc.osd.mil/dcas/pages/casualties.xhtml>. Accessed Nov. 15, 2016.