Annual Wisconsin Death Report

20

18

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Wisconsin Department of Health Services Division of Public Health Office of Health Informatics

FORWARD

The Department of Health Services is mandated by Wis. Stat. § 69.03(9) to prepare annual reports on vital statistics. The *Wisconsin Death Report, 2018*, associated technical notes, and additional tables represent relevant public health information collected by the State Vital Records Office. Data tables are available for all figures in this report. Tables, as well as technical notes are <u>available for reference</u> as is additional health-related <u>statistical information for Wisconsin</u>. Further data are available on <u>Wisconsin Interactive Statistics on Health (WISH)</u>, an online data query system which includes death data for multiple years and geographic areas in Wisconsin.

Mortality data presented in this report are primarily based on the underlying cause of death, which the World Health Organization defines as "the disease or injury that initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury." ¹

This report presents information about deaths that occurred in 2018 among Wisconsin residents. Information from previous years (2009 onward) is also presented to show changes over time. This report includes information on the number and rate of deaths, demographic characteristics of decedents, such as age, race, and ethnicity, characteristics of deaths by geographic location, and disposition of bodies.

County and state rates in the report are age-adjusted rates per 100,000 or 10,000 population using the 2000 U.S. standard population.

All data refer to Wisconsin residents, and deaths have been assigned to the area where the person lived (usually legal residence) regardless of where the events occurred.

The cancer mortality data in this report are classified differently from what appears in publications from the <u>Wisconsin Cancer Reporting System</u> (WCRS) and its public use interactive query systems: WISH Query on <u>Cancer Mortality</u> and <u>Cancer-Rates.Info</u>. WCRS follows the <u>National Cancer Institute's definition</u> of mortality cancer site groupings which are defined consistently over time to facilitate reporting of long-term cancer mortality trends. Due to this different site group classification used by WCRS, the numbers in this report may not match the numbers found in the WCRS cancer-specific query modules or publications.

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EXECUTIVE SUMMARY: 2018 DEATHS IN WISCONSIN

53,680

726.9

deaths

deaths per 100,000 residents







Notable Trends

- There were more deaths in Wisconsin in 2018
- Wisconsin had 18 percent more deaths compared to 10 years ago (20 percent more male deaths and 15 percent more female deaths.) The age-adjusted mortality rate also significantly increased, up three percent in the past ten years.
- The majority of deaths (78 percent) are among people over 65 years old.
- Age-adjusted mortality rate varies by county, from under 60 per 100,000 to almost 100 per 100,000



- Counties with the highest death rates are Ashland, Menominee, Forest, Milwaukee, and Marquette counties.
- The lowest death rates are found in Ozaukee, Iowa, Pepin, Door, and Langlade counties.
- Suicide remains one of the top 10 most common causes of death in Wisconsin.



- In 2018, there were 886 deaths due to suicide (14.8 per 100,000). The age-adjusted suicide mortality rate increased 20 percent (up from 12.3 per 100,000) in the past decade.
- The diabetes mortality rate (7th leading) also increased 19 percent from 17.1 to 20.3 per 100,000.
- The kidney disease mortality rate (9th leading) decreased 19 percent from 15.0 to 12.2 per 100,000.

Top Causes of Death

As with previous years, deaths due to cardiovascular disease and cancer are, overall, decreasing, and deaths due to unintentional injury are increasing.



Heart Disease

- #1 cause of death overall, with
 12,053 deaths
- Wisconsin rate (158.7 per 100,000) is similar to the U.S. rate (163.2)¹
- Mortality rate for men (202 per 100,000) is almost twice that of women (123 per 100,000)
- Ischemic heart disease is the most common type



Cancer

- #2 leading cause of death with 11,453 deaths
- Wisconsin rate (152 per 100,000) is similar to the U.S. rate (149.8)¹
- 75 percent of cancer deaths occur in individuals over 65 years old
- Lung and trachea cancer cause one in four cancer deaths
- Cancer rates have decreased over the past 10 years, with reductions unequal by race



Unintentional Injury

- #3 cause of death with 3,776 deaths
- Wisconsin rate (57/100,000) is 20 percent higher than U.S. rate (48)¹
- Falls account for 44 percent of unintentional injuries and occur mainly in 65+ year-olds
- Poisonings (including unintentional drug overdoses) account for 26 percent and mainly occur in 26 to 64 year olds

There were 53,680 deaths of Wisconsin residents in 2018.

The age-adjusted mortality rate has increased three percent since 2009, a statistically significant increase.

The number of deaths in Wisconsin continues to increase, as expected given the aging population. However the ageadjusted mortality rate¹ is increasing, indicating a larger number of deaths among younger people. In 2018, the ageadjusted mortality rate was 726.9 per 100,000. Up until 2012, Wisconsin had a significantly lower age-adjusted mortality rate compared to the U.S. However, Wisconsin's mortality rates have been increasing, unlike the national rates which have been decreasing. The Wisconsin ageadjusted mortality rate has now reached the national rate (Figure 1).

In 2018, the Wisconsin crude mortality rate was 928.6 deaths per 100,000 population.

Slight increases in male mortality since 2014 drive some of the of the overall increase in Wisconsin. However, the ageadjusted mortality for females, which was previously lower in Wisconsin than nationally, has steadily increased by a total of five percent in the past ten years to reach national levels. Male mortality rates remain around 40 percent higher than female mortality rates (age-adjusted), both nationally and in Wisconsin (Figure 2).

Figure 1. Age-adjusted mortality rates for the United States and Wisconsin

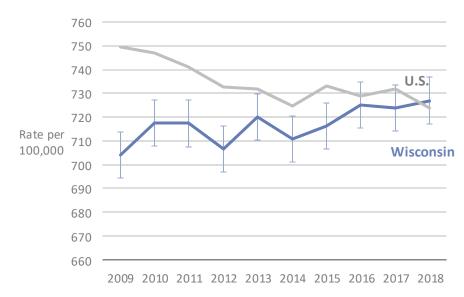
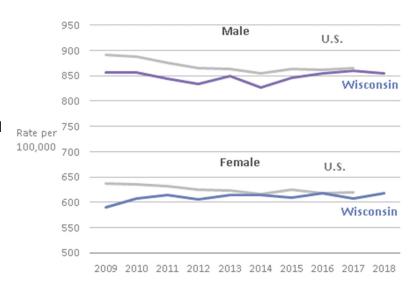


Figure 2. Age-adjusted mortality rates by sex for the United States and Wisconsin



^{1.} See Technical Notes for a description of rate calculation and age-adjustment for mortality data.

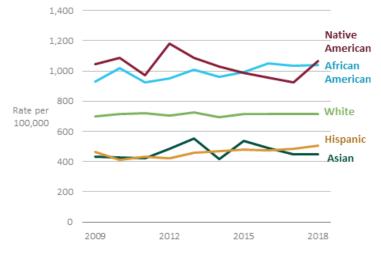
OVERVIEW

The majority of deaths occurred in individuals aged 65 and over (78 percent) with a mortality rate of 4,256 per 100,000. Age-adjusted rates allow for comparisons across populations where deaths occur at different ages; females have lower age-adjusted rates than males, meaning they are more likely to die at older ages. Comparing the age-adjusted mortality rates by race and ethnicity demonstrates that Non-Hispanic (NH) Native Americans and NH African Americans died at a younger age compared to the NH White population. There is no statistical difference in age-adjusted mortality rates between the regions of the state (Table 1).

Table 1. Number of deaths and age-adjusted rates by demographic, 2018

Demographic	Total deaths	Percent of deaths	Crude rate per 100,000 population	Age-adjusted rate per 100,000 population
Age				
Less than 5	458	0.9%	137.7	N/A
5 to 17	160	0.3%	17.0	N/A
18 to 25	476	0.9%	87.2	N/A
26 to 64	10,857	20.2%	364.0	N/A
65 and older	41,729	77.7%	4,255.9	N/A
Sex				
Female	26,515	49.4%	912.4	618.5
Male	27,165	50.6%	944.8	854.1
Race/Ethnicity				
Hispanic	906	1.7%	225.4	505.1
Non-Hispanic African American	2,841	5.3%	705.9	1,040.4
Non-Hispanic Asian	426	0.8%	234.1	450.2
Non-Hispanic Native American	488	0.9%	850.2	1063.3
Non-Hispanic White	48,969	91.3%	1,033.7	714.7
DHS Region ¹				
Northeastern	12,007	22.4%	963.0	711.3
Northern	5,172	9.6%	1,062.6	704.3
Southeastern	19,418	36.2%	917.4	765.0
Southern	9,656	18.0%	847.3	687.8
Western	7,412	13.8%	936.3	724.1
Total	53,680	100.0	928.6	726.9

Figure 3. Age-adjusted mortality rates by race/ethnicity



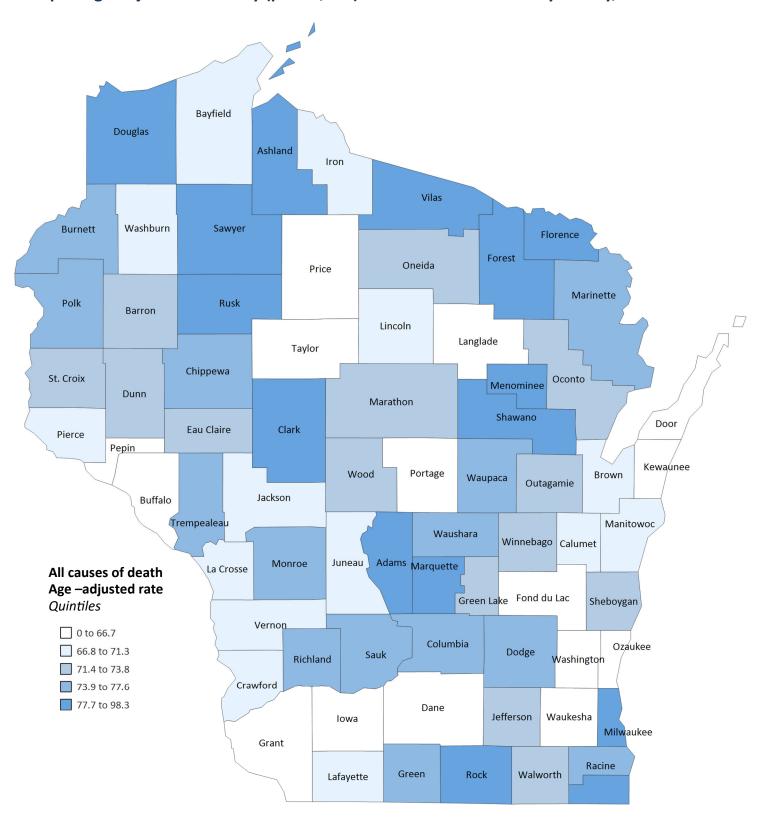
Health disparities and inequities lead to deaths of younger Native American and African American Wisconsinites. Thus, those two racial groups had higher than average age-adjusted mortality rates in 2018 and in past years. Asians and Hispanics experienced lower age-adjusted mortality rates than the average death rate due to far lower age-adjusted rates of cancer and heart disease among those groups².

- For a description of the counties included in each region see page 7 of the Technical Notes.
- 2. Leading Causes of Death by Race and Ethnicity in Wisconsin, 2011-2015 at https://www.dhs.wisconsin.gov/publications/p02252.pdf

OVERVIEW

After adjusting for an aging population, mortality rates in 2018 were highest in Ashland, Menominee, Forest, and Milwaukee, the same counties as in 2017 (Map 1). The lowest age-adjusted mortality rates were found in Langlade, Door, Pepin, and Iowa counties. See Appendix H for detailed age-adjusted mortality rates by county.

Map 1. Age-adjusted mortality (per 10,000) for all causes of death by county, 2018



LEADING CAUSES OF DEATH

Heart disease, cancer, and unintentional injury are the three major leading causes of death in Wisconsin, accounting for half of all deaths in 2018.

In Wisconsin, 12,053 individuals died from heart disease, making it the top cause of death, followed closely by cancer at 11,454 deaths. Deaths nationally follow the same pattern. The U.S. age-adjusted death rate for heart disease is 165 per 100,000, slightly higher than the rate in Wisconsin, and the national cancer mortality rate is 151.5 per 100,000, which is comparable to the Wisconsin rate¹.

Table 2. Age-adjusted mortality rates for the top 10 causes of death*

2018

	Cause of death	Mortality rate per 100,000
1	Heart disease	158.7
2	Cancer	152.3
3	Unintentional injury	57.3
4	Chronic lower respiratory	38.1
5	Stroke	33.7
6	Alzheimer	31.9
7	Diabetes	20.3
8	Pneumonia and influenza	14.2
9	Kidney disease	12.2
10	Suicide	14.8

^{*}Ranked by number of deaths.

Figure 4. Distribution of the three leading causes of death

2018

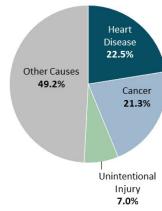


Figure 5. Ten-year change in age-adjusted rates for the top three causes of death

2018



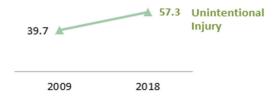
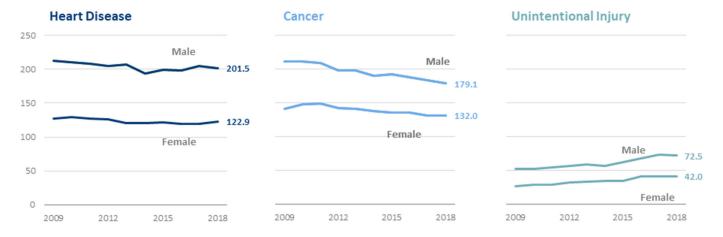


Figure 6. Age-adjusted mortality rates for the top three causes of death, by sex

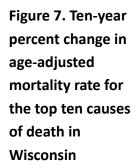


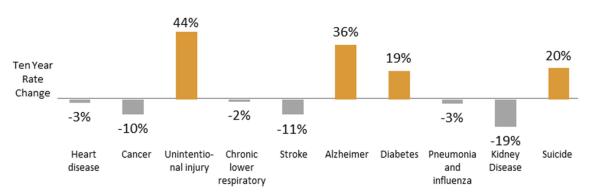
^{1.} Heron M. Deaths: Leading causes for 2017. National Vital Statistics Reports; vol 68 no 6. Hyattsville, MD: National Center for Health Statistics. 2019.

LEADING CAUSES OF DEATH

Adjusting for age, males were more likely to die from heart disease (1.6 times more likely), cancer (1.4 times), or unintentional injuries (1.7 times) than females in 2018. Rates of heart disease and cancer are going down for both men and women, with a slightly larger decrease in female heart disease deaths, down seven percent in the last 10 years. Age-adjusted rates of unintentional injury deaths have increased more for women (54 percent increase) than for men (36 percent increase) in the last 10 years. While death rates for unintentional injury increased overall in the last ten years (Figure 7), the rates decreased slightly in 2018 for both males and females.

The top 10 causes of death remain steady from year to year. Age-adjusted mortality rates of heart disease and cancer decreased 3 percent and 10 percent, respectively from 2009 to 2018. Age-adjusted unintentional injury mortality rates increased 44 percent to 57.3 per 100,000 in 2018. Deaths from Alzheimer's disease and diabetes have all gone up significantly in the past 10 years, while deaths to other diseases such as stroke and kidney disease have gone down. Suicide continues to be a top leading cause of death nationally and in Wisconsin in 2018¹; in Wisconsin the age-adjusted mortality rate increased 20 percent over the last decade.





The 33 categories of deaths, categorized by the National Center for Health Statistics in Table 3 below make up 83 percent of all deaths in Wisconsin in 2018. The chart on the following page shows the top ten causes of death by age group.

Table 3. Top 33 causes of death * 2018

Rank	Disease	Count
1	Heart disease	12,053
2	Malignant neoplasm	11,454
3	Unintentional injury	3,776
4	Chronic lower respiratory	2,865
5	Stroke	2,549
6	Alzheimer	2,452
7	Diabetes	1,508
8	Pneumonia/influenza	1,074
9	Kidney Disease	914
10	Suicide	886
11	Chronic liver disease	731

Rank	Disease	Count
12	Parkinson	691
13	Septicemia	579
14	Hypertension	514
15	Pneumonitis	418
16	In situ neoplasm	334
17	Aneurysm aorta	216
18	Congenital	211
19	Homicide	204
20	Perinatal disease	180
21	Nutritional deficiencies	152
22	Atherosclerosis	107

Rank	Disease	Count
23	Anemia	105
24	Enterocolitis difficile	100
25	Gall bladder	89
26	Complication care	76
27	Peptic ulcer	73
28	Hernia	52
29	Viral hepatitis	38
30	HIV	30
31	Pneumoconiosis	8
32	Appendix disease	7
33	Pregnancy-related	7

^{*}All other causes = 9,029

^{1.} Heron M. Deaths: Leading causes for 2017. National Vital Statistics Reports; vol 68 no 6. Hyattsville, MD: National Center for Health Statistics. 2019.

LEADING CAUSES OF DEATH

The chart below shows the top 10 leading causes of death in Wisconsin in 2018 by age group. Across all age groups, heart disease and cancer were the leading causes of death. Unintentional injury has been the third leading cause of death for the past three years. These three causes accounted for a little over 50 percent of all deaths. For infants (under 1 year), congenital malformations, short gestation and low birth weight were the leading cause of death. Among people ages 1-44, unintentional injury was the leading cause, while cancer was the leading cause for those ages 45 -64. Heart disease was the leading cause of death for those age 65 and older.

Top 10 causes of death by age, 2018

	Infants < 1	1 to 4	5 to 14	15 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65+	All Ages
1	Congenital Malformations (78)	Unintentional Injury (16)	Unintentional Injury (21)	Unintentional Injury (193)	Unintentional Injury (435)	Unintentional Injury (318)	Cancer (617)	Cancer (2,024)	Heart Disease (10,094)	Heart Disease (12,053)
2	Short Gestation/ Low Birth Weight (69)	Congenital Malformations (9)	Cancer (13)	Suicide (102)	Suicide (167)	Cancer (170)	Heart Disease (455)	Heart Disease (1,274)	Cancer (8,563)	Cancer (11,454)
3	Maternal Complications (25)	Cancer (6)	Congenital Malformations (11)	Homicide (54)	Heart Disease (53)	Heart Disease (155)	Unintentional Injury (371)	Unintentional Injury (438)	Chronic Lower Respiratory (2,520)	Unintentional Injury (3,776)
4	Unintentional Injury (24)	Homicide (<5)	Suicide (11)	Cancer (25)	Homicide (53)	Suicide (136)	Suicide (156)	Chronic Lower Respiratory (275)	Alzheimer's (2,424)	Chronic Lower Respiratory (2,865)
5	Circulatory (13)	Influenza/ Pneumonia (<5)	Perinatal (<5)	Heart Disease (11)	Cancer (36)	Chronic Liver Disease (55)	Chronic Liver Disease (112)	Chronic Liver Disease (238)	Stroke (2,258)	Stroke (2,549)
6	Placenta/Cord/ Membrane (13)	Chronic Lower Respiratory (<5)	Homicide (<5)	Congenital Malformations (7)	Chronic Liver Disease (27)	Homicide (42)	Diabetes (103)	Diabetes (235)	Unintentional Injury (1,960)	Alzheimer's (2,452)
7	Respiratory Distress (11)	Septicemia (<5)	Heart Disease (<5)	Diabetes (5)	Diabetes (13)	Diabetes (32)	Stroke (75)	Suicide (182)	Diabetes (1,120)	Diabetes (1,508)
8	SIDS (11)	Anemia (<5)	Stroke (<5)	Septicemia (<5)	Congenital Malformations (11)	Stroke (20)	Chronic Lower Respiratory (57)	Stroke (179)	Influenza/ Pneumonia (937)	Influenza/ Pneumonia (1,074)
9	Homicide (10)	Perinatal (<5)	Influenza/ Pneumonia (<5)	In Situ Neoplasms (<5)	Stroke (9)*	Influenza/ Pneumonia (13)	Kidney Disease (34)*	Kidney Disease (76)	Kidney Disease (788)	Kidney Disease (914)
10	Bacteria Sepsis (9)	-	Septicemia (<5)	Influenza/ Pneumonia (<5)	Influenza/ Pneumonia (8)*	HIV (10)*	Septicemia (32)	Influenza/ Pneumonia (75)	Parkinson's (676)	Suicide (886)

^{* =} new cause in the top 10 leading causes of death

LEADING CAUSES OF DEATH: HEART DISEASE

1st 12,053 158.7

leading deaths deaths per 100,000 residents

158.7

deaths per 100,000 per 100,000 per 100,000

Heart disease represents disease of the anatomical parts that constitute the heart, lining, muscle, and vessels of the heart, particularly the coronaries that supply blood to the heart. Heart disease is a consequence of other conditions that affect heart function. For example, hypertension leads to an increase in heart output and subsequently causes congestive heart failure. Coronary heart disease can also lead to heart attacks or congestive heart failure. Some infectious diseases may also cause inflammation which could lead to congestive heart failure. Heart disease is often caused by socioeconomic, dietary, and community factors.

Figure 8. Age-adjusted rate of heart disease deaths for the United States and Wisconsin

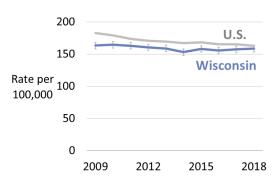
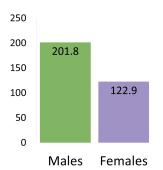


Figure 9. Age-adjusted rate of heart disease deaths by sex 2018

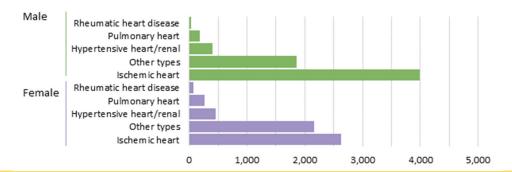


Ischemic heart disease, caused by narrowed arteries, is the most common cause of heart disease death, causing 6,620 deaths in 2018 (55 percent of all heart disease deaths).

Nationally and in Wisconsin, heart disease is the leading cause of death. Wisconsin's age-adjusted heart disease mortality rate has decreased almost 30% in the last 10 years, but the national rate has dropped more sharply, leaving Wisconsin's rate (158.7 per 100,000) now comparable to the national rate (163.2), when it was previously significantly lower.

Males have a higher age-adjusted rate of heart disease deaths. The rate of heart disease deaths is higher among African American (235.3 per 100,000) and Native American (217.4) residents, and lowest among Asian (91.1) and Hispanic residents (82.9). The majority of heart disease deaths (84 percent) occur in individuals over the age of 65.

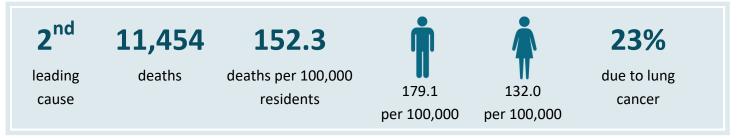
Figure 10. Percent of heart disease deaths by type and sex 2018



For more information:

Appendix Tables A and B show heart disease mortality rates by select demographic factors and by county. Additional information about heart disease is available at https://www.dhs.wisconsin.gov/heart-disease/index.htm.

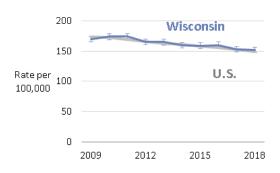
LEADING CAUSES OF DEATH: CANCER



Malignant neoplasms, referred to as cancer, represent disorders of the cells that affect primary or secondary organs. Malignant neoplasms can be well-defined or ill-defined as well as specific or not specific to the affected tissue in any anatomical location, including blood and related tissues. Cancer mortality does not include in-situ neoplasms where the cancer has not expanded to the supporting structure of the organ where it originated.

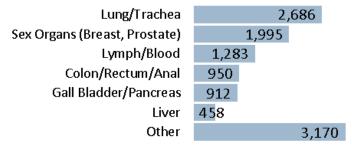
The age-adjusted rate of cancer deaths in Wisconsin has decreased about 10 percent over the past 10 years, though the raw number of deaths due to cancer has slightly increased. The Wisconsin rate (152.3 per 100,000) is comparable to the national rate (149.8).

Figure 11. Age-adjusted rate of cancer deaths for the United States and Wisconsin



Lung and tracheal cancers continue to be the leading cause of cancer deaths, constituting 2,686 deaths, or 23

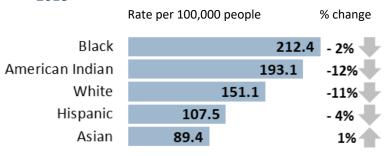
Figure 12. Number of cancer deaths by type 2018



The majority (75 percent) of cancer deaths occur in individuals over 65. About the same number of females and males die of cancer. African Americans and Native Americans had the highest age-adjusted cancer mortality rates, followed by Whites.

percent of all cancer deaths. Only male lung cancer deaths decreased in the past 10 years, with 232 fewer male deaths in 2018 compared to 2009. In men, lymph/blood cancers (715 deaths) are second, followed by prostate cancers (658). Breast cancer is the second leading cause of cancer deaths in women (775 deaths), followed by lymph/blood (567) and female genital system cancers (553).

Figure 13. Age-adjusted cancer death rate by race and ethnicity, and 10-year percent change 2018



For more information:

Appendix Tables C and D show cancer mortality rates by select demographic factors and by county. Further cancer data is available at https://www.dhs.wisconsin.gov/wcrs/data-pubs.htm

LEADING CAUSES OF DEATH: UNINTENTIONAL INJURY

3rd 3,776 57.3

leading cause deaths per 100,000 residents

The state of the state

Injuries represent any harm or damage to the body resulting from an external force, which can be physical (e.g., fire, blast, shock) or chemical (e.g., poison or a drug overdose). The intent of injuries is classified as unintentional, self-inflicted, assaults, or undetermined (when the intent is unknown); This page shows only unintentional deaths.

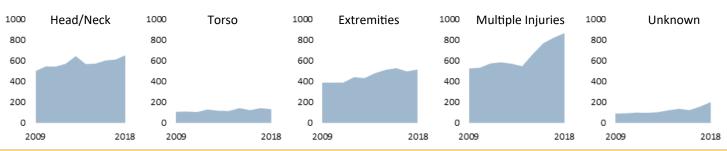
The 2018 age-adjusted rate of unintentional injury in Wisconsin (57.3 deaths per 100,000) is significantly higher than the national rate (48.0).

Falls make up the majority of unintentional injury deaths, and of the 1,647 fall deaths, 59 percent were females. Falls mainly affect individuals over age 65 (92 percent). Poisonings, the second leading cause of unintentional injury deaths, mainly occur in males (68 percent), and those between the ages of 26 to 64 for all sexes. Motor vehicle crash deaths also mainly occurred in men (73 percent), and for both sexes, in 26 to 64 year olds (56 percent) (Figure 16).

Figure 16. Percent of injury deaths by type of injury and age 2018

Injury Type	<5	5-17	18-25	26-64	65+
Falls	0%	<1%	<1%	7%	92%
Motor vehicle crash	1%	3%	18%	56%	23%
Poisoning	0%	<1%	8%	87%	5%

Figure 17. Number of injuries by physical location



For more information:

Appendix Tables E and F show unintentional injury mortality rates by select demographic factors and by county. Additional information on fall prevention is available here: https://www.dhs.wisconsin.gov/injury-prevention/falls/index.htm, and drug overdose data are available at https://www.dhs.wisconsin.gov/aoda/drug-overdose-deaths.htm

Figure 14. Age-adjusted rate of unintentional injury deaths for the United States and Wisconsin

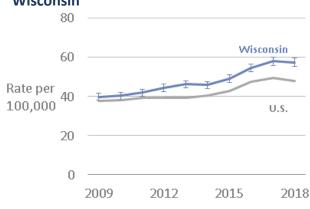
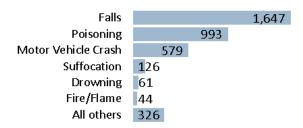


Figure 15. Number of unintentional injury



Of the 2,366 physical injury deaths in 2018, the largest category was to multiple body parts (36 percent), followed by injuries to the head and neck, and the lower extremities. Injuries to the head and neck have increased 30 percent in the past 10 years (Figure 17).

Just under eight percent of Wisconsin residents receive an autopsy after death.

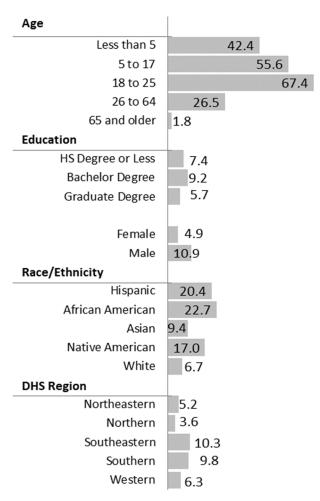
Autopsies were more likely to be performed on younger people (42 percent of children under five; 56 percent of those aged 5 to 17; and 67 percent of those aged 18 to 25) compared to people aged 65 and older (two percent). The proportion of autopsies performed was higher among males (11 percent) than among females (five percent), and higher among African Americans (23 percent), Hispanics (20 percent), and Native Americans (17 percent) than among Asians (nine percent) and Whites (seven percent) (Table 4).

Table 4. Number of autopsies performed by demographic, 2018

Demographic	No Autopsy	Autopsy	Total
Age			
Less than 5	264	194	458
5 to 17	71	89	160
18 to 25	155	321	476
26 to 64	7,985	2,872	10,857
65 and older	40,964	765	41,729
Education			
High School Degree or Less	32,598	2,597	35,195
Associates, Bachelor Degree, or Some College	13,560	1,379	14,939
Graduate Degree	2,666	161	2,827
Sex			
Male	25,222	1,293	26,515
Female	24,217	2,948	27,165
Race/ethnicity			
Hispanic	721	185	906
Non-Hispanic African American	2,195	646	2,841
Non-Hispanic Asian	386	40	426
Non-Hispanic Native American	405	83	488
Non-Hispanic White	45,700	3,269	48,969
DHS region			
Northeastern	11,379	628	12,007
Northern	4,984	188	5,172
Southeastern	17,411	2,007	19,418
Southern	8,709	947	9,656
Western	6,948	464	7,412
Total	49,439	4,241	53,680

Figure 18. Percent of various demographic groups receiving an autopsy 2018

Statewide average = 7.9%



Autopsies were more likely to be performed in the case of injuries (Table 5), with 41 percent of unintentional injury deaths receiving autopsies. Autopsies occurred in 99 percent of homicide/assault cases and 62 percent of self-inflicted injury deaths. Autopsies also occurred more frequently in deaths due to drowning (90 percent), poisoning (89 percent), fire (78 percent), and firearms (70 percent).

Table 5. Number and percent of autopsies performed by leading causes of death, intent, and causes of injury 2018

Cause of Death	No Autopsy	Autopsy	Total	Percent	
By leading causes					
Heart disease	11,201	852	12,053	7.1%	
Cancer	11,343	111	11,454	1.0%	
Unintentional injury	2,230	1,546	3,776	40.9%	
By injury intent					
Unintentional	2,230	1,546	3,776	40.9%	
Self-inflicted (Suicide)	337	549	886	62.0%	
Assault (Homicide)	2	202	204	99.0%	
Undetermined	13	50	63	79.4%	
Legal/War	1	12	13	92.3%	
By selected causes of injury					
Fall	1,570	93	1,663	5.6%	
Poisoning	134	1,028	1,162	88.5%	
Firearm	178	420	598	70.2%	
Motor vehicle crash	255	324	579	56.0%	
Suffocation	192	216	408	52.9%	
Drowning	7	67	74	90.5%	
Fire	11	40	51	78.4%	
All Other	236	171	407	42.0%	

Cremation continued to be a more popular option over burials in 2018.

Table 6 shows the number and percent of body dispositions by demographic, education, marital status, and region of residence. The percent of decedents being cremated continues to increase in Wisconsin. Of the 53,680 deaths in 2018, 61.1 percent were cremated, a slight increase from the 59.1 percent cremated in 2017. Thus Wisconsin has a slightly higher cremation rate than the United States as a whole at an estimated 54.8 percent of decedents¹.

The proportion of decedents in Wisconsin who were cremated was higher among those aged 18 to 64. Among males, about 63 percent of decedents were cremated compared to 55 percent among females.

Other 5.4%

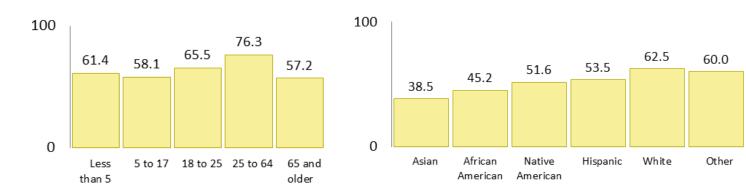
Burial 33.5%

Cremation 61.1%

Figure 19. Disposition percentage

Figure 20. Percent cremated by age group 2018

Figure 21. Percent cremated by race 2018



White residents (62.5 percent) and Hispanics (53.5 percent) had the highest proportion of decedents cremated compared to other race/ethnicity categories. Asian residents had the lowest proportion of decedents cremated (38.5 percent) followed by African American residents (45.2 percent). Decedents with an education level higher than high school were more likely to be cremated compared to those with less than a high school education.

There were 325 Wisconsin residents who donated their body for science or other reasons, ten percent of whom were between the ages of 25 and 64, with the majority (90 percent) being individuals over the age of 65 (Table 6).

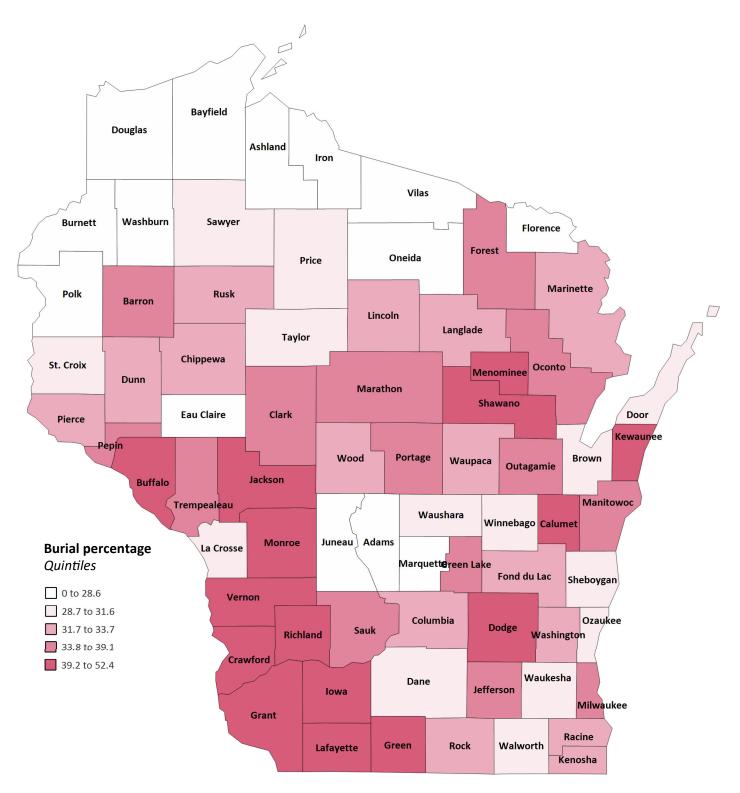
NFDA 2019 Cremation and Burial Report. National Funeral Directors Association. Brookfield, WI. Accessed online at https://www.nfda.org/news/statistics.

Table 6. Disposition of bodies by demographic, 2018

	Bur	rial	Crem	Cremation Don		onation Entom		ntombment		Other	
Characteristic	N	%	N	%	N	%	N	%	N	%	N
Age						,					
Less than 5	174	38.0	281	61.4	1	0.2	1	0.2	1	0.2	458
5 to 17	63	39.4	93	58.1	0	0.0	2	1.3	2	1.3	160
18 to 25	155	32.6	312	65.5	0	0.0	3	0.6	6	1.3	476
25 to 64	2,388	22.0	8,284	76.3	32	0.3	123	1.1	30	0.3	10,857
65 and older	15,184	36.4	23,855	57.2	292	0.7	2,350	5.6	48	0.1	41,729
Sex											
Female	9,781	36.9	15,079	56.9	183	0.7	1,441	5.4	31	0.1	26,515
Male	8,183	30.1	17,746	65.3	142	0.5	1,038	3.8	56	0.2	27,165
Race/Ethnicity											
Hispanic	394	43.5	485	53.5	2	0.2	20	2.2	5	0.6	906
Non-Hispanic African American	1,458	51.3	1,285	45.2	1	0.0	86	3.0	11	0.4	2,841
Non-Hispanic Asian	253	59.4	164	38.5	1	0.2	6	1.4	2	0.5	426
Non-Hispanic Native American	231	47.3	252	51.6	0	0.0	4	0.8	1	0.2	488
Non-Hispanic White	15,609	31.9	30,609	62.5	321	0.7	2,363	4.8	67	0.1	48,969
Other	19	38.0	30	60.0	0	0.0	0	0.0	1	2.0	50
Education											
High School Degree or Less	12,597	35.8	20,553	58.4	164	0.5	1,841	5.2	40	0.1	35,195
Associates, Bachelor Degree or Some College	4,196	28.1	10,045	67.2	120	0.8	544	3.6	34	0.2	14,939
Graduate Degree	871	30.8	1,826	64.6	38	1.3	82	2.9	10	0.4	2,827
Unknown	300	41.7	401	55.8	3	0.4	12	1.7	3	0.4	719
Marital status											
Single	2,446	33.0	4,780	64.5	24	0.3	147	2.0	19	0.3	7,416
Married	5,792	30.1	12,442	64.7	120	0.6	839	4.4	37	0.2	19,230
Divorced	1,544	19.3	6,256	78.2	66	0.8	129	1.6	9	0.1	8,004
Widowed	8,107	43.0	9,225	49.0	115	0.6	1,364	7.2	21	0.1	18,832
Unknown	75	37.9	122	61.6	0	0.0	0	0.0	1	0.5	198
DHS Region											
Northeastern	3,974	33.1	7,127	59.4	53	0.4	833	6.9	20	0.2	12,007
Northern	1,620	31.3	3,395	65.6	17	0.3	133	2.6	7	0.1	5,172
Southeastern	6,646	34.2	11,280	58.1	151	0.8	1,311	6.8	30	0.2	19,418
Southern	3,406	35.3	6,037	62.5	62	0.6	134	1.4	17	0.2	9,656
Western	2,316	31.2	4,975	67.1	42	0.6	68	0.9	11	0.1	7,412
Unknown	2	13.3	11	73.3	0	0.0	0	0.0	2	13.3	15
Total	17,964	33.5	32,825	61.1	325	0.6	2,479	4.6	87	0.2	53,680

The counties of Grant (52 percent), Lafayette (49 percent), and Vernon (48 percent) had the highest percentage of decedents buried in 2018, the same as in 2017.

Map 2. Percent distribution of burials by county, 2018



The counties with the highest percentage of cremation in 2018 were Iron (87 percent), Florence (82 percent), Bayfield (82 percent), and Burnett (78 percent).

Map 3. Percent distribution of cremation by county, 2018

