



2B.

LEADING CAUSES OF DEATH

In 2010, the Office of Vital Records (OVR) of the Arizona Department of Health Services implemented the new (version 2003) Standard U.S. death certificate. The new certificate added several new questions: 1) whether tobacco use contributed to the death, and 2) whether, if the decedent was a female, the death was “pregnancy-associated” (defined as death from any cause during pregnancy or within one calendar year of delivery or pregnancy termination).

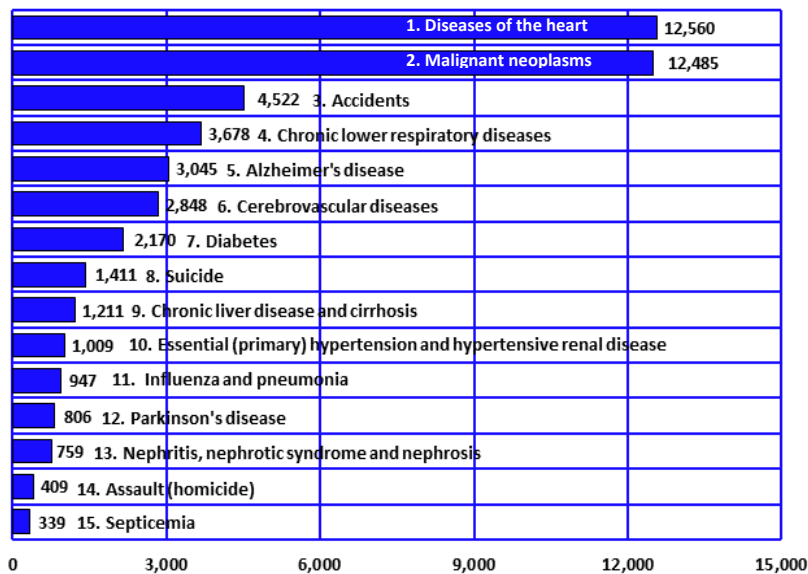
The death certificate now includes a new classification of the decedent’s racial/ethnic status, consistent with the revised federal standards for collecting and reporting racial and ethnic status. These standards were published in the Federal Register on October 30, 1997, as “Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity.” The revised standards are available on the OMB (the Office of Management and Budget) web-site at: <https://www.whitehouse.gov/omb>.

There are now 15 racial categories (including Guamanian or Chamorro; Samoan or Native Hawaiian) to choose from. It is also permitted to indicate more than one race for a decedent. To create frequency counts of race and ethnicity that were adequate to compute statistically reliable mortality rates, race was “bridged”, or essentially collapsed into 5 categories; White non-Hispanic, Hispanic or Latino, Black or African American, Native American or Alaska Native, and Asian or Pacific Islander. When an individual was identified as both Hispanic and any other race, that person was added to the racial/ethnic group with the lowest population. For example, a person identified as both White and Hispanic would be coded as Hispanic, where a person identified as American Indian and Hispanic would be coded as American Indian. Please refer to the technical appendix for further explanation of the racial bridging used in this report.

2B. LEADING CAUSES OF DEATH

Figure 2B-1A
Leading Causes of Death among Arizona Residents in 2019

BASED ON THE NUMBER OF DEATHS DUE TO THE UNDERLYING CAUSE:

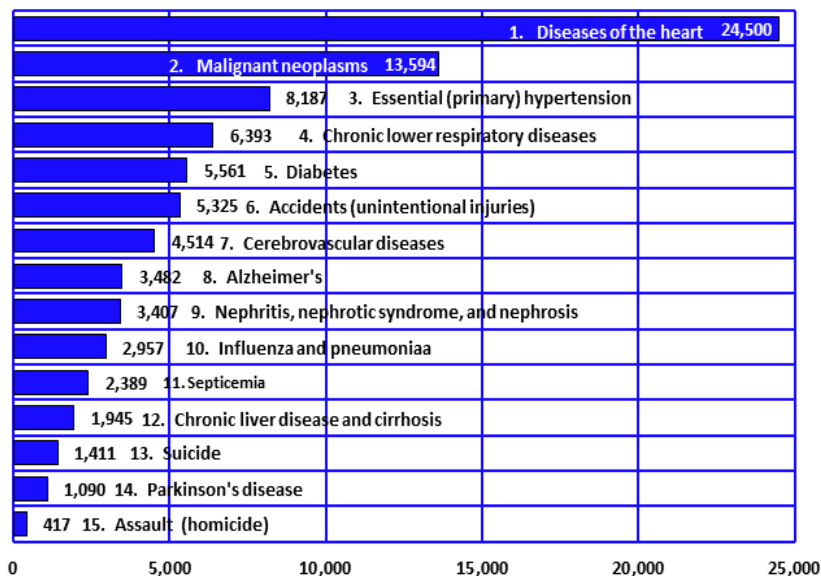


Based on the number of deaths (but not age-adjusted mortality rate), the leading underlying cause of death to Arizona residents in 2019 was *heart disease* (12,560 or 20.9 percent of all deaths), closely followed by *cancer*, which accounted for 12,485 or 20.8 percent of deaths (**Figure 2B-1A, Table 2B-1, Table 5E-14**).

The third leading cause of death, *accidents (unintentional injuries)*, accounted for 4,522 or 7.5 percent of total deaths. Deaths due to *chronic lower respiratory diseases* ranked fourth in 2019, with 3,678 (6.1 percent) resident deaths reported. Deaths due to *Alzheimer's disease* ranked fifth in 2019, with 3,045 resident deaths reported. Together, these five causes accounted for 60.3 percent of total deaths in 2019. The fifteen leading causes accounted for 80.1 percent of all deaths among Arizona residents.

Figure 2B-1B
Leading Causes of Death among Arizona Residents in 2019

BASED ON THE NUMBER OF DEATHS DUE TO ANY MENTION OF A CAUSE:



For the purpose of mortality statistics, every death is attributed to one underlying condition or underlying cause of death. The underlying cause is defined as the disease or injury that initiated the chain of events leading directly to death. It is selected from up to 20 causes and conditions entered by the physician on the death certificate. The totality of all these conditions is known as multiple cause of death.

In addition to 12,560 deaths that had diseases of the heart assigned as the underlying cause, another 11,940 deaths had diseases of the heart assigned as a secondary cause of death. The sum of these two counts (24,500, **Figure 2B-1B**) is the total number of deaths that had any mention of diseases of the heart on the 2019 death certificates. The ranking based on any mention of the 15 diagnostic categories is different from ranking of the leading causes of death based on the underlying cause. In particular, *Essential hypertension* ranked 10th as the underlying cause but ranked 3rd when any mention of it was counted.

2B. LEADING CAUSES OF DEATH
Five Leading Causes by Gender

Figure 2B-2
Age-adjusted Mortality Rates^a for the Five Leading Causes of Death for Both Genders by Race/Ethnicity, Arizona, 2019

It is important to note that (Figures 2B-2, 2B-3, 2B-4, and 2B-5) are based on the age-adjusted mortality rates and not on the number of deaths.

In 2019, diseases of the heart were the leading cause of death for White non-Hispanics, Blacks, and American Indians but placed second for the remaining racial/ethnic groups. Cancer was the second leading cause of death for White non-Hispanics, Black or African Americans, and American Indians but ranked first for Hispanics and Asians. Unintentional injury was the third leading cause of death for all racial/ethnic groups except Asians (cerebrovascular diseases) (Figure 2B-2, Table 2B-4).

In 2019, chronic lower respiratory diseases were the fourth leading cause of death specific to White non-Hispanics. Diabetes ranked fourth among the leading causes of death for Hispanics and American Indians, but place fifth for Black and Asians. Alzheimer's disease was the fourth leading cause of death for Blacks, and the fifth leading cause of death for White non-Hispanics. Chronic liver disease and cirrhosis was the fifth leading cause of death specific to American Indians (Table 2B-4).

Rank	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
1	Diseases of heart 140.4	Cancer 118.3	Diseases of heart 188.3	Diseases of heart 132.8	Cancer 98.4
2	Cancer 136.9	Diseases of heart 107.9	Cancer 173.5	Cancer 132.3	Diseases of heart 86.7
3	Unintentional injury 60.5	Unintentional injury 48.3	Unintentional injury 60.4	Unintentional injury 129.4	Cerebrovascular diseases 23.2
4	Chronic lower respiratory diseases 43.7	Diabetes 34.6	Alzheimer's disease 44.8	Diabetes 91.4	Unintentional injury 22.9
5	Alzheimer's disease 33.6	Cerebrovascular diseases 33.9	Diabetes 43.6	Chronic liver disease and cirrhosis 82.7	Diabetes 19.5

Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Figure 2B-3
Age-adjusted Mortality Rates^a for the Five Leading Causes of Death by Race/Ethnicity among Females, Arizona, 2019

Based on age-adjusted mortality rates, diseases of the heart were the leading cause of death for Black or African American females, while cancer was the leading cause of death for the remaining racial/ethnic groups. (Figure 2B-3, Table 2B-4).

Chronic lower respiratory diseases were the third leading cause of death specific to White non-Hispanic females. Alzheimer's disease ranked third among the leading cause of death for Hispanic and Black females, but placed fourth for White and Asian females.

Diabetes ranked fourth among Black and American Indian females but fifth among Hispanic and Asian females. Chronic liver disease and cirrhosis was unique to American Indian women and ranked fifth among the leading causes of death. While unintentional injury was the third leading cause of death for American Indian women, it ranked fifth for White non-Hispanic and Black women.

Rank	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
1	Cancer 118.6	Cancer 103.7	Diseases of heart 175.5	Cancer 112.5	Cancer 89.8
2	Diseases of heart 108.5	Diseases of heart 81.1	Cancer 147.1	Diseases of heart 100.6	Diseases of heart 63.8
3	Chronic lower respiratory diseases 42.5	Alzheimer's disease 39.7	Alzheimer's disease 42.1	Unintentional injury 81.6	Cerebrovascular diseases 21.7
4	Alzheimer's disease 38.9	Cerebrovascular diseases 33.5	Diabetes 42.0	Diabetes 78.5	Alzheimer's disease 20.8
5	Unintentional injury 38.0	Diabetes 28.8	Unintentional injury 40.3	Chronic liver disease and cirrhosis 68.8	Diabetes 16.6

Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

2B. LEADING CAUSES OF DEATH
Five Leading Causes by Gender

Figure 2B-4
Age-adjusted Mortality Rates^a for the Five Leading Causes of Death
by Race/Ethnicity among Males, Arizona, 2019

Rank	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
1	Diseases of heart 175.7	Diseases of heart 141.6	Cancer 210.0	Unintentional injury 183.3	Diseases of heart 118.0
2	Cancer 158.3	Cancer 137.3	Diseases of heart 201.7	Diseases of heart 176.0	Cancer 113.1
3	Unintentional injury 83.0	Unintentional injury 70.8	Unintentional injury 80.0	Cancer 162.6	Unintentional injury 31.5
4	Chronic lower respiratory diseases 45.1	Diabetes 42.0	Chronic lower respiratory diseases 49.7	Diabetes 106.3	Cerebro-vascular diseases 25.0
5	Intentional Self-harm Suicide 36.4	Cerebro-vascular diseases 33.7	Alzheimer's disease 48.1	Chronic liver disease and cirrhosis 98.2	Diabetes 23.4

Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Based on age-adjusted mortality rates, diseases of the heart followed by cancer were the two leading causes of death for males in all racial/ethnic groups, except for Black and American Indian males (**Figure 2B-4; Table 2B-4**). Unintentional injury ranked third among the leading cause of death for almost all the racial/ethnic groups, but placed first for American Indian males.

In 2019, based on the age-adjusted mortality rates, diabetes was the fourth leading cause of death for Hispanic and American Indian males, while chronic lower respiratory diseases ranked fourth for White non-Hispanic and Black males and Cerebrovascular diseases occupied the same rank for Asians.

Ranking fifth was suicide (White males) cerebrovascular diseases (Hispanic males), Alzheimer's disease (Black males) and diabetes (Asian males). Chronic liver disease and cirrhosis was specific to American Indian males and ranked fifth among the leading cause of death for that group.

Figure 2B-5
Age-adjusted Mortality Rates^a for the Five Leading Causes of Death
by Gender in Urban^b and Rural Areas, Arizona, 2019

Rank	Urban male	Urban female	Rural male	Rural female
1	Diseases of heart 168.9	Cancer 113.5	Diseases of heart 186.2	Cancer 129.1
2	Cancer 153.4	Diseases of heart 105.4	Cancer 168.9	Diseases of heart 110.2
3	Unintentional injury 79.1	Alzheimer's disease 39.1	Unintentional injury 97.2	Unintentional injury 47.3
4	Chronic lower respiratory diseases 38.4	Chronic lower respiratory diseases 34.7	Chronic lower respiratory diseases 54.5	Chronic lower respiratory diseases 46.7
5	Diabetes 29.9	Unintentional injury 34.0	Intentional Self-harm (suicide) 45.6	Alzheimer's disease 34.5

Notes: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard; ^b Urban = Maricopa, Pima, Pinal, and Yuma counties. The remaining counties comprise Arizona's rural areas.

In 2019, the profile of the leading causes of death differed by gender for residents of the urban (Maricopa, Pima, Pinal, and Yuma counties) and rural (all the remaining counties) areas of the state (**Figure 2B-5, Table 2B-5**). Diseases of the heart exceeded cancer as the leading causes of death among urban males and rural males. Unintentional injury placed third among the leading cause for males regardless of area of residence, and rural females, but placed fifth for urban females.

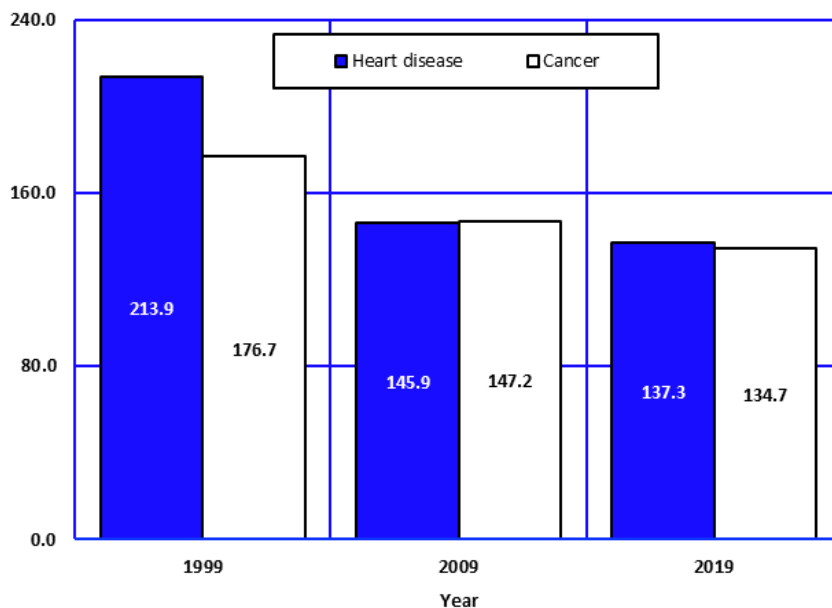
Alzheimer's disease was the third leading cause of death among urban females but the fifth among rural females. Chronic lower respiratory diseases were the fourth leading cause of death for all subgroups. Suicide was the fifth leading cause of death specific to rural males.

2B. LEADING CAUSES OF DEATH
Diseases of heart and malignant neoplasm (cancer)

Figure 2B-6
Comparison of Age-adjusted Mortality Rates^a for Heart Disease and Cancer
(Malignant Neoplasm), Arizona, 1999, 2009, and 2019

The age-adjusted mortality rate for diseases of the heart decreased by 35.8 percent from 213.9 deaths per 100,000 population in 1999 to 137.3/100,000 in 2019 (**Figure 2B-6**). The age-adjusted mortality rate for cancer declined less, by 23.8 percent, from 1999-2019. In Arizona, the relative risk of death from heart disease versus cancer changed from 21.1 percent greater in 1999 to 1.9 percent less in 2019.

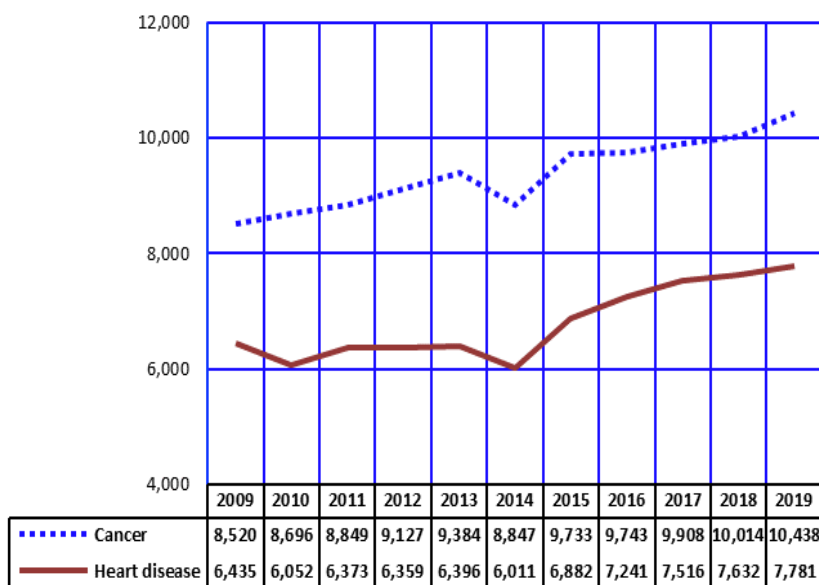
In 2009, 4 more Arizonans died from diseases of the heart than cancer (**Table 2B-1**). In 2019, the number of deaths due to diseases of the heart exceeded by 75 cases (**Table 2B-4**).



Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

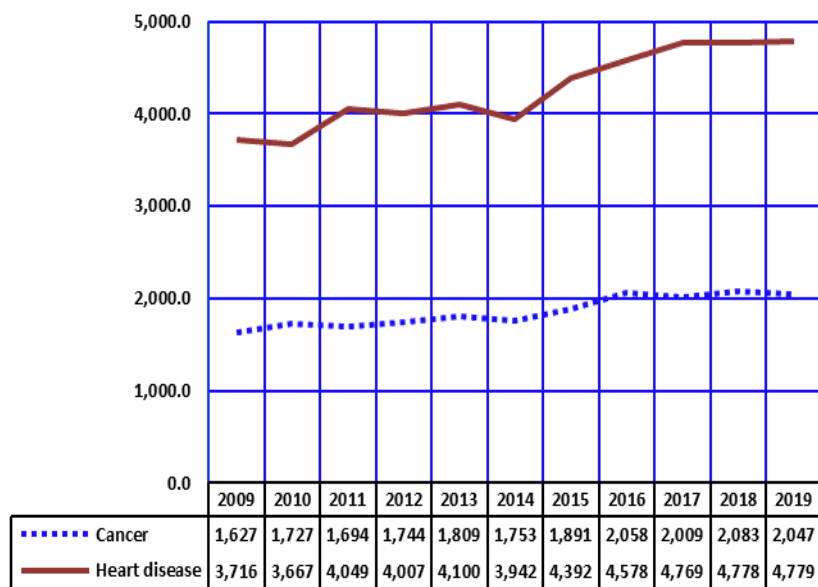
Figure 2B-7
Number of Deaths from Heart Disease and Cancer among
Arizonans 0-84 Years, 2009-2019

For the past several years, cancer has been the number one cause of death among Arizonans aged 0-84 years (**Figure 2B-7**). Beginning in 1996, the annual number of cancer deaths exceeded the number of deaths from heart disease. In 2019, 2,657 more Arizonans 0-84 years old died from cancer (10,438) than heart disease (7,781).



2B. LEADING CAUSES OF DEATH
Diseases of heart and malignant neoplasm (cancer)

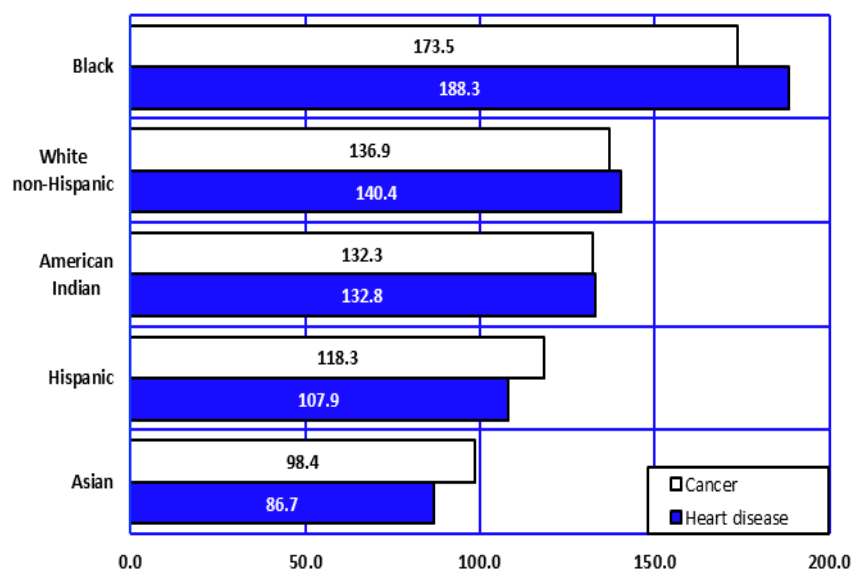
Figure 2B-8
Deaths from Heart Disease and Cancer among Arizonans 85+, 2009-2019



Among Arizonans age 85 and over, heart disease is the number one leading cause of death by a wide margin. In 2019, adults aged 85 and over accounted for 16.4 percent of all deaths from cancer but 38.0 percent of all deaths from heart disease. In 2019, the median age at death for heart disease was 80 years (**Table 2D-3**); and a minority of deaths (44.8 percent, **Table 2D-4**) were premature, i.e., before reaching the expected years of life at birth for all U.S. residents (78.8 years).

However, from 2009 to 2019, the number of deaths from cancer increased by 25.8 percent among Arizonans 85 years or older, less than the increase observed in diseases of the heart (28.6 percent increase).

Figure 2B-9
Age-adjusted Mortality Rates^a for Heart Disease and Cancer by Race/Ethnicity, Arizona, 2019



In Arizona, Black or African Americans were 2.2 times more likely to die from diseases of the heart and 1.8 times more likely to die from malignant neoplasms in 2019 than Asians, the group with the lowest risk of each respective cause of death (**Figure 2B-9**, **Table 2B-4**). Compared to Asians, White non-Hispanic Arizonans were 1.6 times more likely to die of heart disease and 1.4 times more likely to die of cancer.

In 2019, the relative risk of death from heart disease exceeded cancer mortality risk (**Table 2B-3**) for all the racial/ethnic groups, except for Hispanics and Asians.

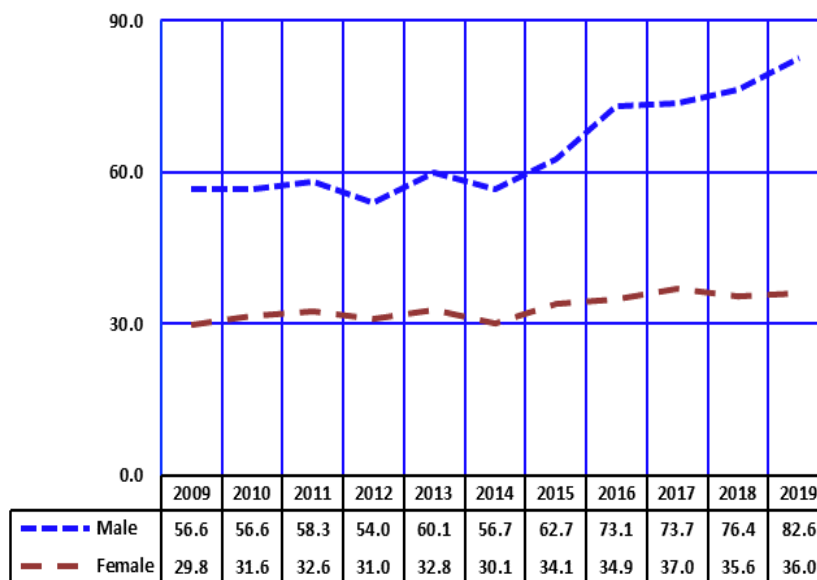
Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

2B. LEADING CAUSES OF DEATH
Accidents (unintentional injury)

Figure 2B-10
Age-adjusted Mortality Rates^a for Accidents (Unintentional Injuries) by Gender and Year, Arizona, 2009-2019

The number of deaths from unintentional injuries increased by 7.4 percent from 4,211 in 2018 to 4,522 in 2019 (**Table 2B-1**). In 2019, based on age-adjusted mortality rates, accidents ranked third as a leading cause of death for males and sixth for females (**Table 2B-4**). From 2018 to 2019, the age-adjusted mortality rate for accidents increased both for males (8.1 percent) and females (1.1 percent; **Figure 2B-10**).

In 2019, 970 deaths were caused by motor vehicle accidents, a decrease of 6.0 percent from 2018. Heat induced mortality has seen an increase of 25.5 percent between 2018 and 2019. Deaths due to accidental drowning and submersion increased by 8.7 percent from 2018 (n=92) to 2019 (n=100). Additionally, Arizonans experienced a 17.8 percent increase in the number of accidental poisonings due to drugs and/or medicaments from 1,425 fatalities in 2018 to 1,679 in 2019 (**Table 2B-9**).

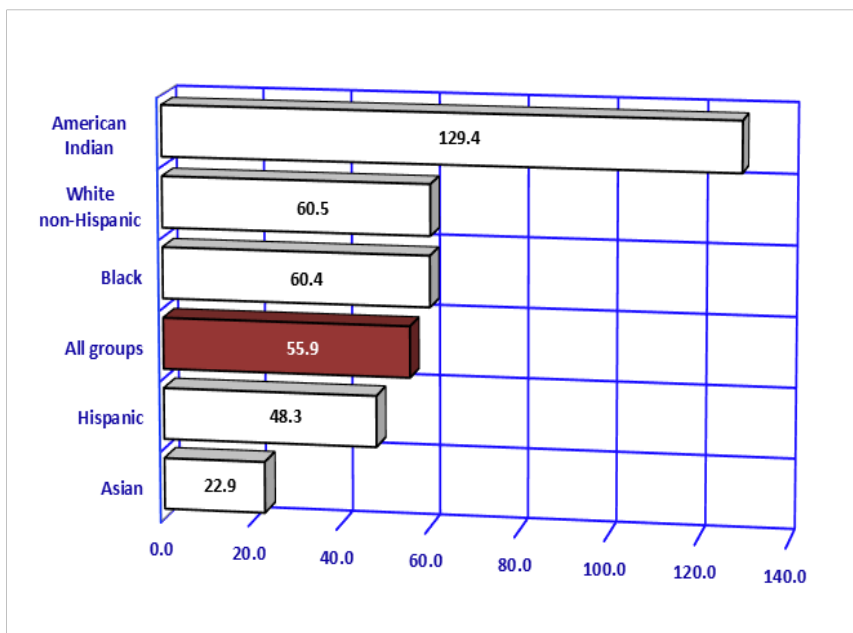


Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Figure 2B-11
Age-adjusted Mortality Rates^a for Accidents (Unintentional Injuries) by Race/Ethnicity, Arizona, 2019

The American Indian death rate for unintentional injuries (129.4/100,000) was 5.7 times greater than the rate for Asians (22.9/100,000), the group with the lowest risk of unintentional injury death among racial/ethnic groups in the state (**Figure 2B-11, Table 2B-4**).

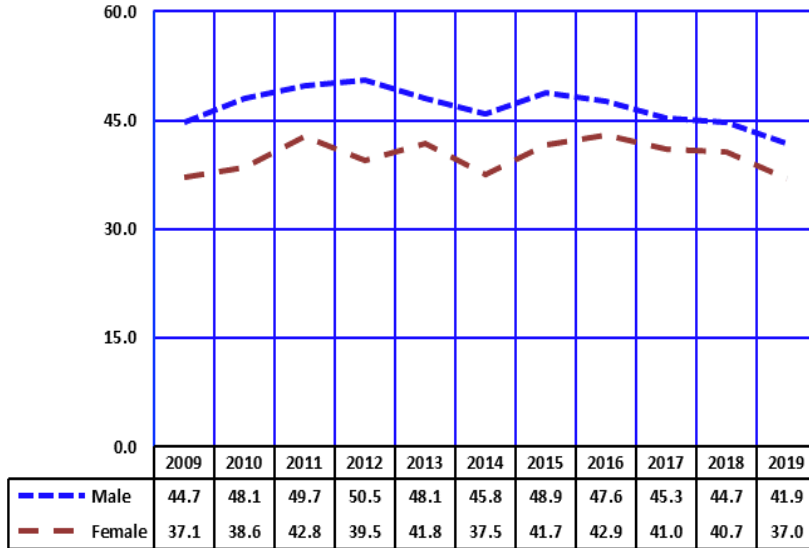
In 2019, Apache (127.1/100,000) and Navajo (112.1/100,000) counties had the two highest age-adjusted mortality rates for unintentional injuries (**Table 5E-11**).



Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

2B. LEADING CAUSES OF DEATH
Chronic lower respiratory diseases

Figure 2B-12
Age-adjusted Mortality Rates^a for Chronic Lower Respiratory Diseases^b by Gender and Year, Arizona, 2009-2019

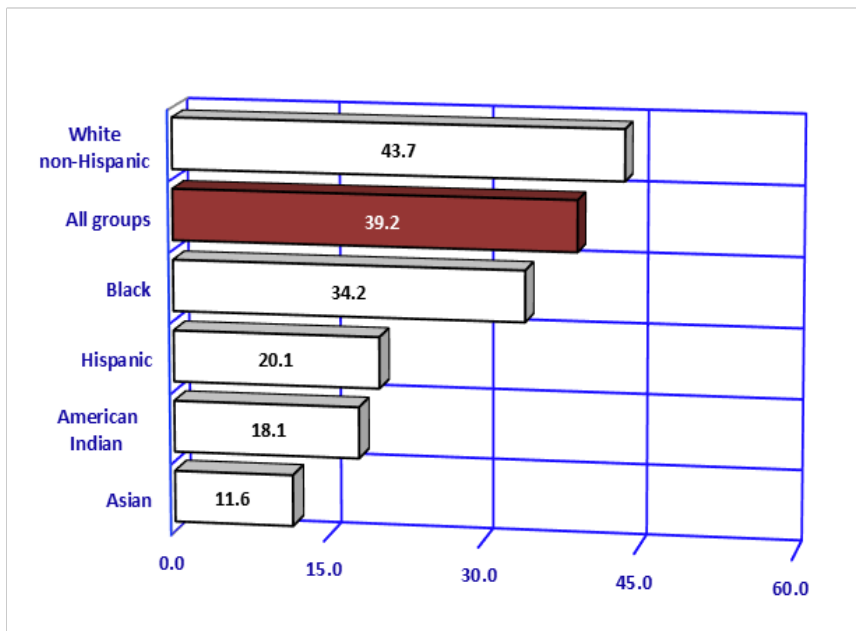


In 2019 as in 2018, chronic lower respiratory diseases (bronchitis, emphysema, asthma) were the 4th leading cause of death among Arizona residents (**Table 2B-1**). The mortality rate for chronic lower respiratory diseases decreased for both genders between 2018 and 2019, but more so among females (9.1 percent) than males (6.3 percent; **Figure 2B-12**, **Table 2B-2**).

Among genders and regional groups, rural males and females experienced the highest mortality due to chronic lower respiratory diseases with rates of 54.5/100,000 and 46.7/100,000, respectively) (**Table 2B-5**).

Notes: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard; ^b This ICD-10 title corresponds to Chronic Obstructive Pulmonary Disease (ICD-9 title).

Figure 2B-13
Age-adjusted Mortality Rates^a for Chronic Lower Respiratory Diseases by Race/Ethnicity, Arizona, 2019



Mortality rates for emphysema, chronic bronchitis, asthma, and other lower respiratory disorders were substantially higher among White non-Hispanics (43.7 deaths per 100,000) than any other racial/ethnic groups. Asians recorded the lowest rate at 11.6 deaths per 100,000 population (**Figure 2B-13**, **Table 2B-4**).

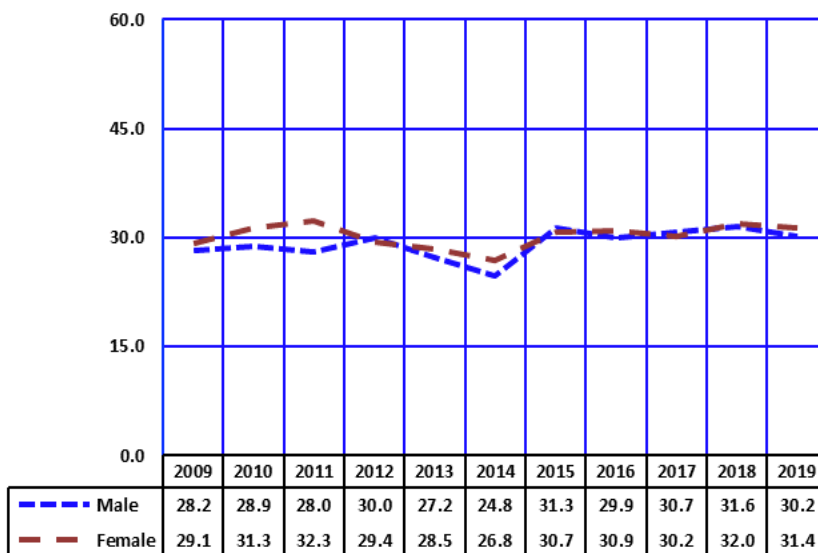
Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

2B. LEADING CAUSES OF DEATH
Cerebrovascular diseases

Figure 2B-14
Age-adjusted Mortality Rates^a for Cerebrovascular Disease by Gender and Year, Arizona, 2009-2019

Cerebrovascular disease and diseases of the heart are two of the leading causes of death that share many risk factors such as hypertension, smoking, obesity, and high levels of cholesterol. The age-adjusted mortality rate for cerebrovascular diseases decreased by 3.4 percent from 32.1/100,000 in 2018 to 31.0 deaths per 100,000 population in 2019 (Table 2B-3).

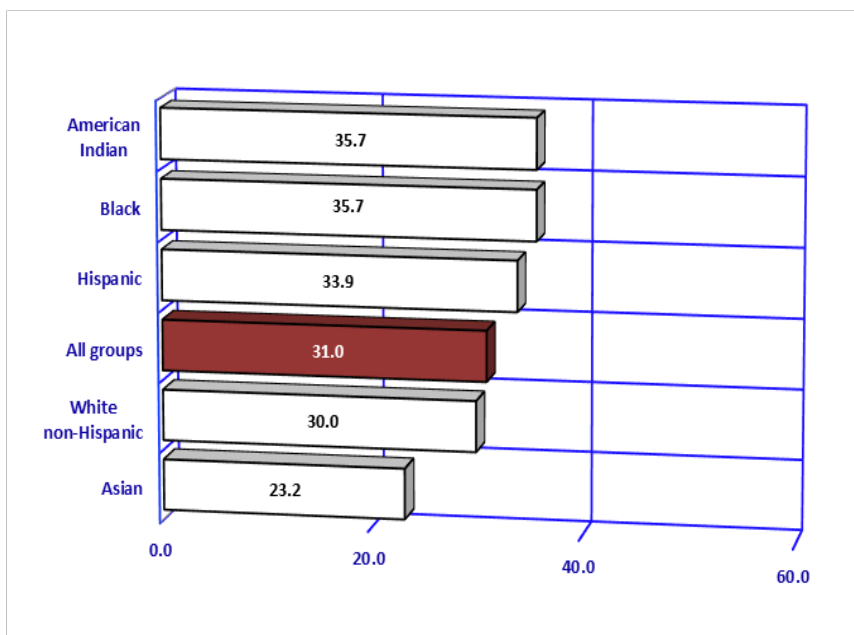
With some exceptions, the risk of dying from cerebrovascular diseases was generally higher among females than males for the period 2009-2019. In 2012, as in 2015 and 2017, males experienced a higher risk of dying from cerebrovascular diseases than females. (Figure 2B-14, Table 2B-2).



Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Figure 2B-15
Age-adjusted Mortality Rates^a for Cerebrovascular Disease by Race/Ethnicity, Arizona, 2019

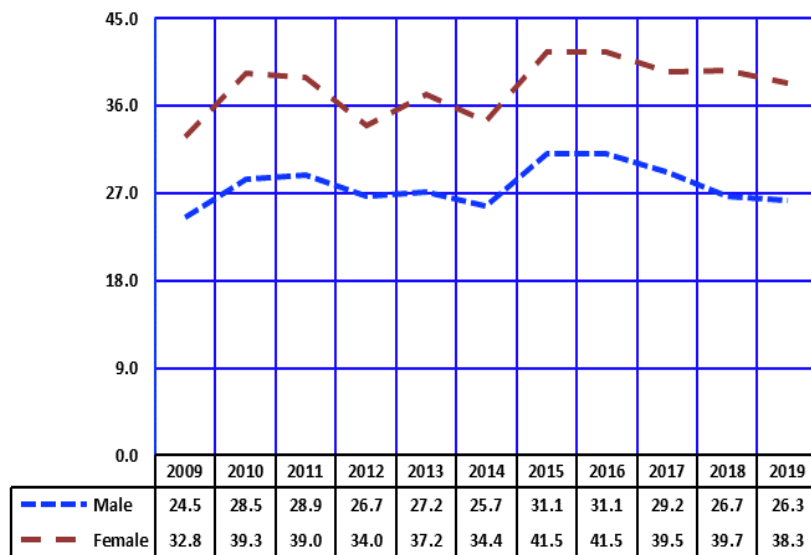
Compared to Arizona's overall rate, Black or African Americans were 1.2 times more likely to die from cerebrovascular disease in 2019 (Figure 2B-15, Table 2B-4). The 2019 mortality rate for cerebrovascular disease among Asians (23.2/100,000) was the lowest among racial/ethnic groups.



Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

2B. LEADING CAUSES OF DEATH
Alzheimer's disease

Figure 2B-16
Age-adjusted Mortality Rates^a for Alzheimer's Disease by Gender and Year, Arizona, 2009-2019

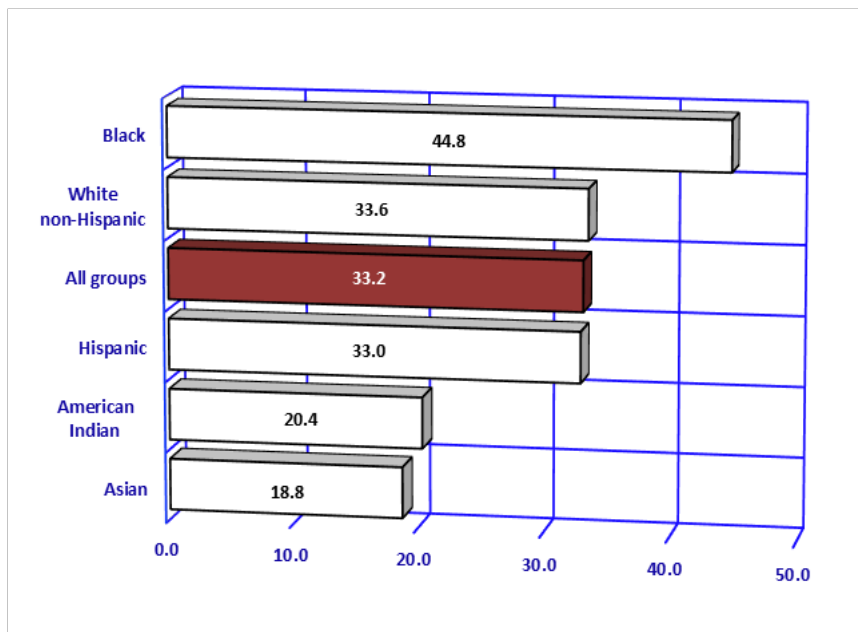


Based on the number of deaths in 2019, Alzheimer's disease was the 3rd leading cause of death for females and 8th leading cause for males (**Table 2B-4**)

From 2018 to 2019, the age-adjusted mortality rate for Alzheimer's disease decreased for both males (1.5/100,000) and females (3.5/100,000) (**Figure 2B-16**).

Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Figure 2B-17
Age-adjusted Mortality Rates^a for Alzheimer's Disease by Race/Ethnicity, Arizona, 2019



The age-adjusted mortality rates for Alzheimer's disease in 2019 were higher among Black or African Americans (44.8/100,000), White non-Hispanics (33.6/100,000) than the other racial/ethnic groups. Rates lower than the state average were recorded among Asians (18.8/100,000), American Indians (20.4/100,000), and Hispanics (33.0/100,000; **Figure 2B-17, Table 2B-4**).

White non-Hispanic residents of Arizona disproportionately contributed to mortality from Alzheimer's disease. In 2019, White non-Hispanics accounted for 55.4 percent (**Table 10C-1**) of the state's population, but 83.3 percent of all deaths from Alzheimer's disease (2,535 out of 3,045; **Table 2B-4**).

In 2019, the overall median age at death from Alzheimer's disease was 87, specifically 85 years for males and 88 years for females (**Table 2D-3**).

Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

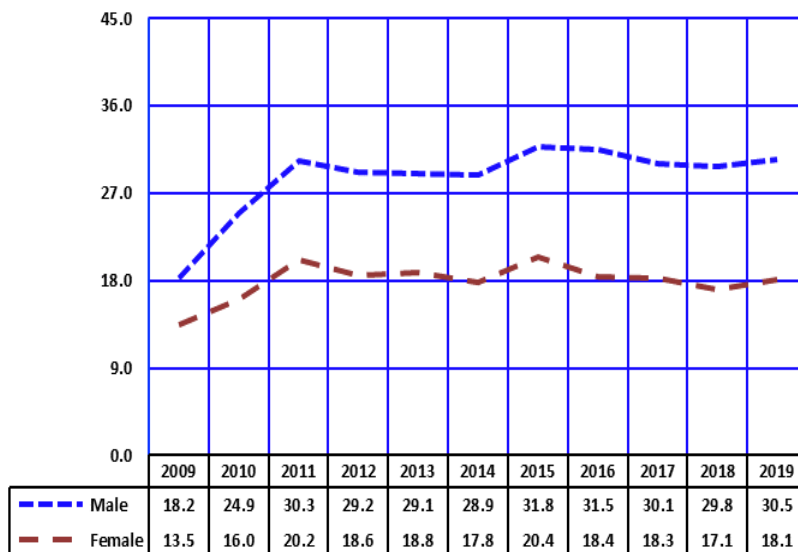
2B. LEADING CAUSES OF DEATH
Diabetes

Figure 2B-18
Age-adjusted Mortality Rates^a for Diabetes by Gender and Year,
Arizona, 2009-2019

From 2009-2019, mortality rates for diabetes increased for both males (2.3 percent) and females (5.8 percent; **Figure 2B-18**).

In addition to 2,170 deaths that had diabetes assigned as the underlying cause in 2019, another 3,391 deaths had diabetes assigned as a contributing factor. The diabetes-related death rate of 60.9/100,000 (**Table 6A-6**) was 2.5 times greater than the rate for diabetes as an underlying cause (23.9/100,000; **Table 2B-2**).

The diabetes-related death rate includes all mentions of diabetes on the death certificate as the underlying or other than underlying cause.

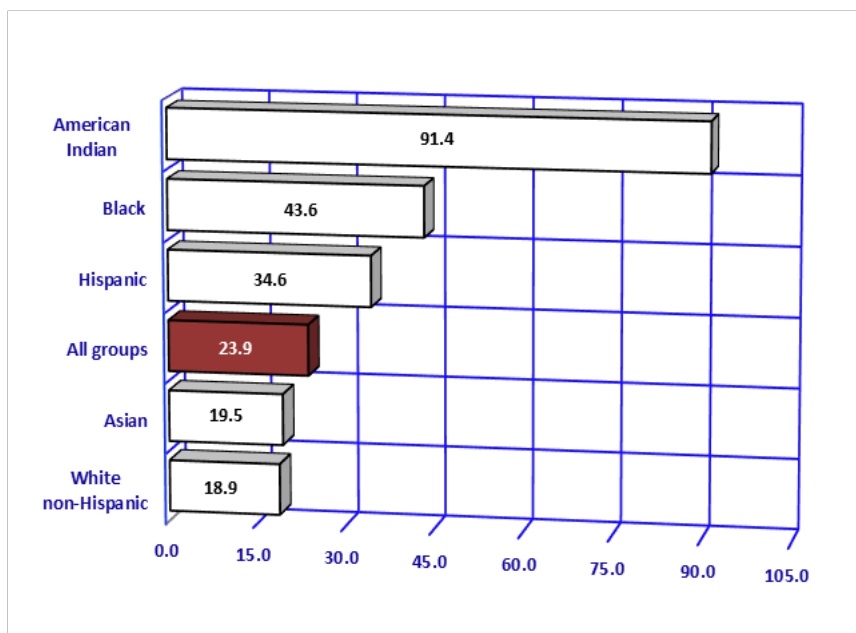


Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Figure 2B-19
Age-adjusted Mortality Rates^a for Diabetes by Race/Ethnicity,
Arizona, 2019

In 2019, compared to Arizona's rate, American Indians were 3.8 times more likely to die from diabetes (91.4 deaths per 100,000; **Figure 2B-19, Table 2B-4**). The rate of 18.9 deaths per 100,000 among White non-Hispanics was the lowest rate among all racial/ethnic groups in the state.

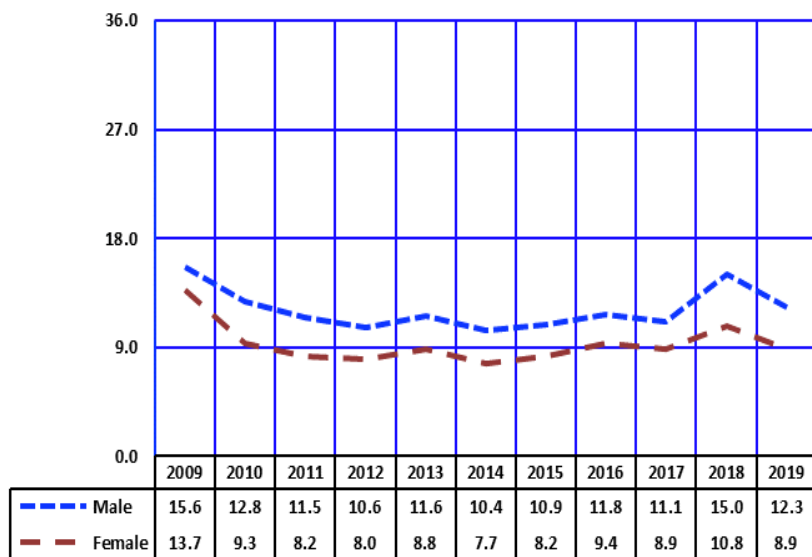
Among the 15 Arizona counties, Apache (67.8/100,000) and Navajo (51.6/100,000) counties had the highest mortality rates for diabetes recorded in 2019 (**Table 5E-11**).



Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

2B. LEADING CAUSES OF DEATH
Influenza and pneumonia

Figure 2B-20
Age-adjusted Mortality Rates^a for Influenza and Pneumonia by Gender and Year, Arizona, 2009-2019



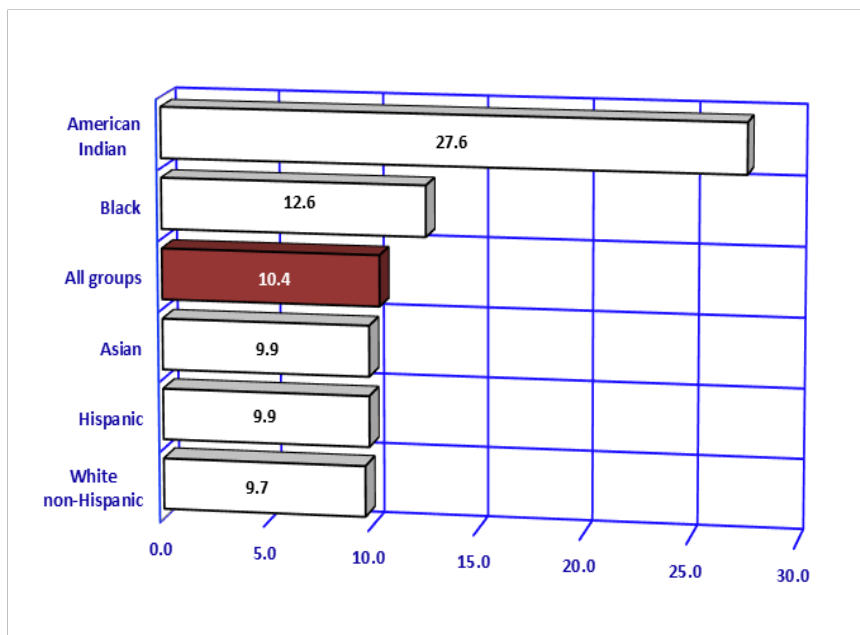
The number of deaths from influenza and pneumonia increased by 6.0 percent from 1,007 in 2009 to 947 in 2019. (Table 2B-1). Among the 947 deaths, influenza was identified as the underlying cause for 82 of them, while pneumonia was listed as the underlying cause on 865 death certificates (Table 2B-6).

The mortality rate for influenza and pneumonia decreased for females from 10.8 deaths per 100,000 in 2018 to 8.9 deaths in 2019 (Figure 2B-20, Table 2B-2). The mortality rate for influenza and pneumonia also decreased for males from 15.6/100,000 in 2009 to 12.3 deaths per 100,000 in 2019.

In 2019, the age-adjusted mortality rate for Arizona males was 38.2 percent greater than that of Arizona females.

Note: ^a Number of deaths per 100,000 population age-adjusted 2000 U.S. standard.

Figure 2B-21
Age-adjusted Mortality Rates^a for Influenza and Pneumonia by Race/Ethnicity, Arizona, 2019



In 2019, American Indian residents of Arizona had the highest mortality rate for influenza and pneumonia (27.6 deaths per 100,000) among the racial/ethnic groups. Mortality due to influenza and pneumonia for White non-Hispanics (9.7/100,000), Hispanics (9.9 /100,000) and Asians (9.9/100,000) were lower than the state rate. (Figure 2B-21, Table 2B-4).

County comparisons show that in 2019 influenza and pneumonia mortality rates were higher in Navajo (19.9/100,000), Apache (16.8/100,000), Graham (16.7/100,000), and Gila (15.8/100,000) Counties than in the remaining counties (Table 5E-11).

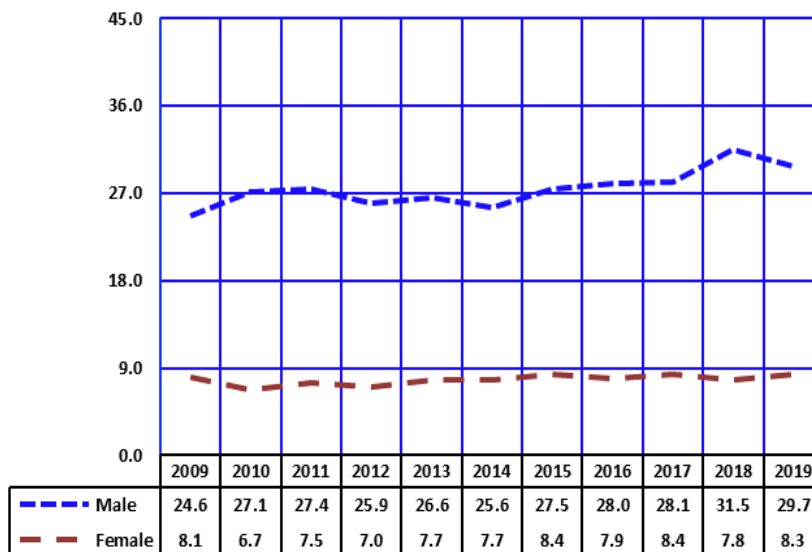
Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

2B. LEADING CAUSES OF DEATH
Suicide

Figure 2B-22
Age-adjusted Mortality Rates^a for Suicide by Gender and Year,
Arizona, 2009-2019

In 2019, based on age-adjusted mortality rates, suicide was the 7th leading cause of death among males. It ranked as the 11th cause of mortality for females. The overall age-adjusted suicide rate decreased from 19.5 suicides per 100,000 in 2018 to 18.9 in 2019 (**Table 2B-4**).

From 2018 to 2019, suicide mortality decreased by 5.7 percent among males, while it increased 6.4 percent among females (**Figure 2B-22, Table 2B-4**). In 2019, suicide posed a 3.6 times greater mortality risk for males (29.7/100,000) than for females (8.3/100,000).

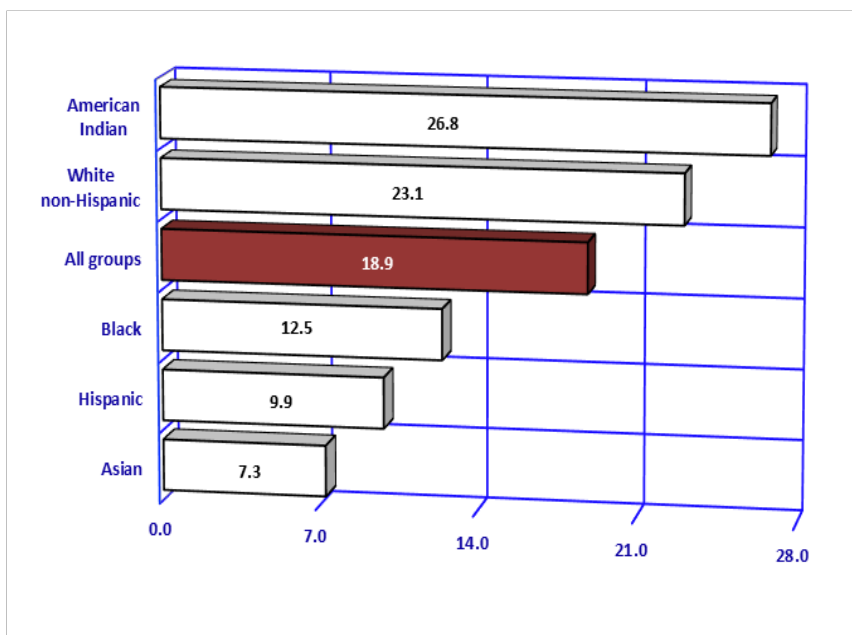


Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Figure 2B-23
Age-adjusted Mortality Rates^a for Suicide by Race/Ethnicity,
Arizona, 2019

In 2019, American Indians had the highest age-adjusted suicide rate (26.8 suicides per 100,000) among racial/ethnic groups, followed by White non-Hispanics (23.1/100,000), while Asians recorded the lowest age-adjusted suicide rate (7.3/100,000; **Figure 2B-23, Table 2B-4**).

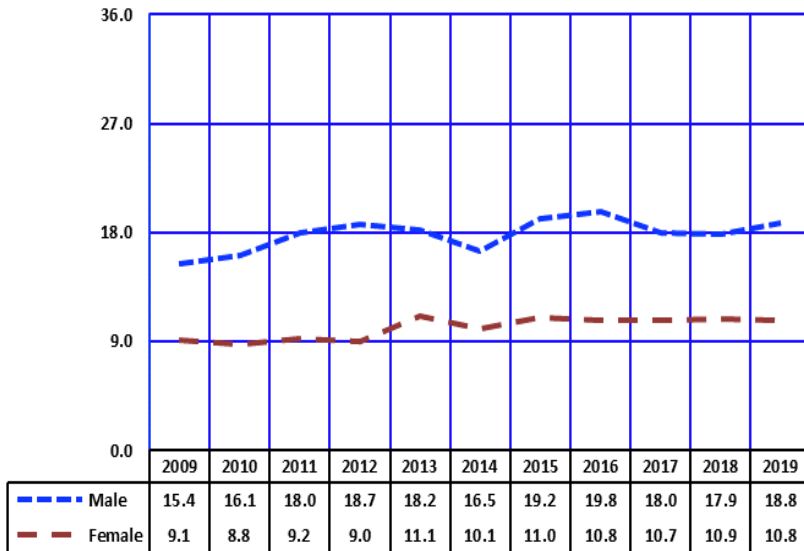
The 2019 age-adjusted mortality rates for suicide varied across the state, from a low rate of 8.1 suicides per 100,000 residents in Graham County to a high of 44.9 suicides per 100,000 residents in Gila County (**Table 5E-11**).



Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

2B. LEADING CAUSES OF DEATH
Chronic liver disease and cirrhosis

Figure 2B-24
Age-adjusted Mortality Rates^a for Chronic Liver Disease and Cirrhosis
by Gender and Year, Arizona, 2009-2019



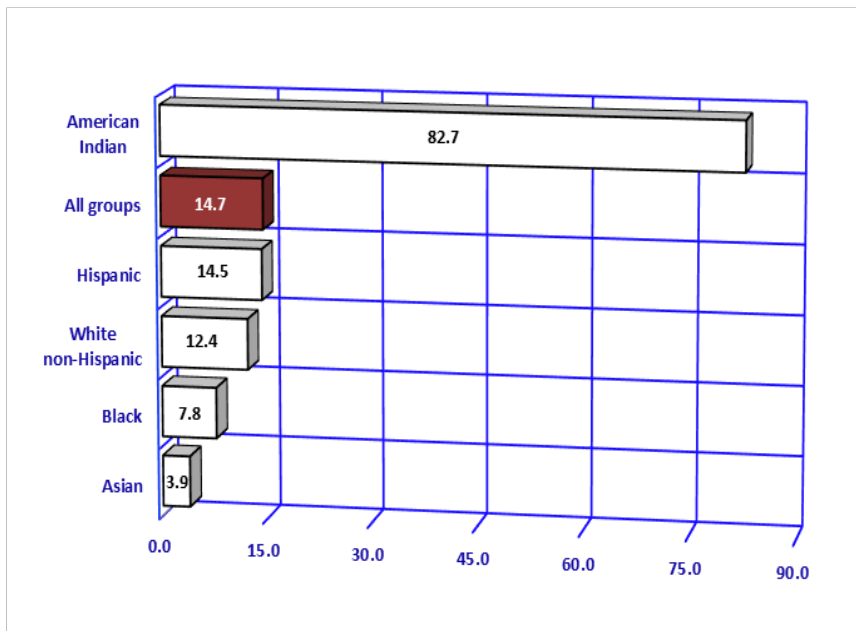
Chronic liver disease and cirrhosis was the 9th leading cause of death in Arizona in 2019 (**Figure 2B-1, Table 2B-1**). Among the 1,211 deaths due to chronic liver disease and cirrhosis, 754 (62.3 percent) were males (**Table 2B-4**).

Among females, the age-adjusted mortality rate for chronic liver disease and cirrhosis decreased 0.9 percent from 2018 to 2019. Among males, the mortality rate increased 5.0 percent from 17.9/100,000 in 2018 to 18.8/100,000 in 2019 (**Figure 2B-24, Table 2B-3**).

In 2019, La Paz, Apache, Gila, and Navajo counties had the highest mortality rates for chronic liver disease and cirrhosis (**Table 5E-11**).

Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Figure 2B-25
Age-adjusted Mortality Rates^a for Chronic Liver Disease and Cirrhosis
by Race/Ethnicity, Arizona, 2019



In 2019, chronic liver disease and cirrhosis mortality rate was exceedingly high among American Indians (82.7 deaths per 100,000 population) than any racial/ethnic groups in the state (**Figure 2B-25, Table 2B-4**). Death rate for chronic liver disease and cirrhosis among Asians, Blacks, White non-Hispanics, and Hispanics were all below the state average (14.7 deaths per 100,000 population).

Compared to the median age at death from all causes (76 years), those who died from chronic liver disease and cirrhosis were on average 16 years younger (60 years, **Table 2D-3**). In 2019, the median age at death of American Indians who died from chronic liver disease and cirrhosis was 51 years, which was 9 years younger than all the other race/ethnic groups (**Table 2D-3**).

Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.