



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).

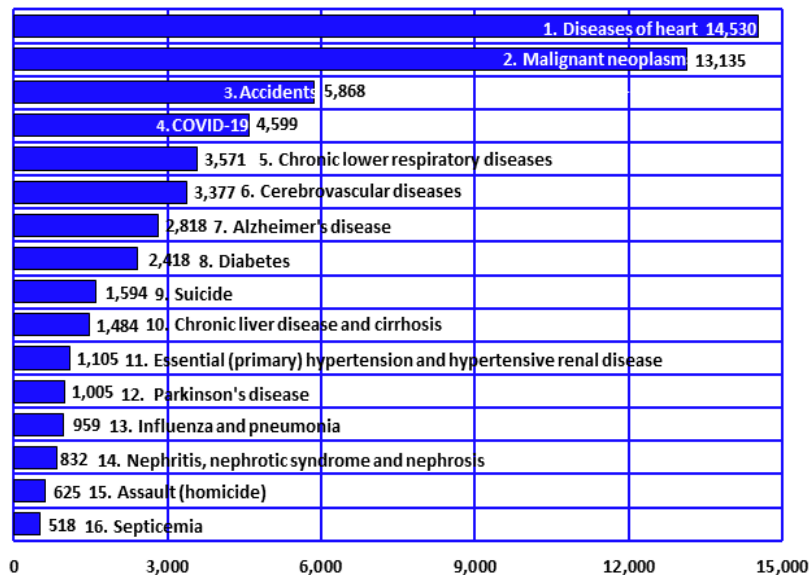
The death certificate now includes a new classification of the decedent’s racial/ethnic status, consistent with the revised federal standards for collecting and reporting racial and ethnic status. These standards were published in the Federal Register on October 30, 1997, as “Revisions to the Standards 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 2022

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

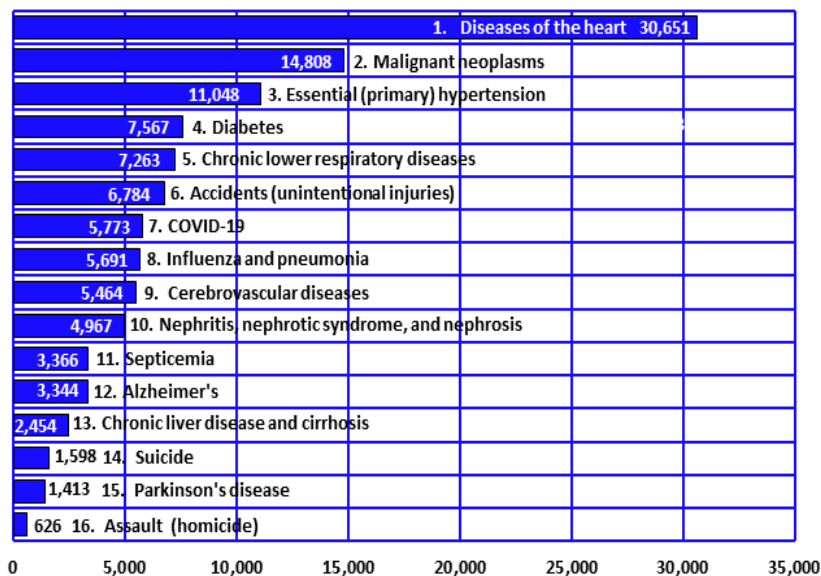


Based on the number of deaths (but not age-adjusted mortality rate), the leading underlying cause of death to Arizona residents in 2022 was *heart disease* (14,530 or 19.7 percent of all deaths), closely followed by *cancer*, which accounted for 13,135 or 17.8 percent of deaths (**Figure 2B-1A, Table 2B-1, Table 5E-14**).

The third leading cause of death, *accidents (unintentional injuries)* accounted for 5,868 or 7.9 percent of total deaths. Deaths due to *COVID-19* ranked fourth in 2022, with 4,599 (6.2 percent) resident deaths reported. Deaths due to *chronic lower respiratory diseases* ranked fifth in 2022, with 3,571 (4.8 percent) resident deaths reported. Together, these five causes accounted for 56.5 percent of total deaths in 2022. The fifteen leading causes accounted for 78.4 percent of all deaths among Arizona residents.

Figure 2B-1B
Leading Causes of Death among Arizona Residents in 2022

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 14,530 deaths that had diseases of the heart assigned as the underlying cause, another 16,121 deaths had diseases of the heart assigned as a secondary cause of death. The sum of these two counts (30,651, **Figure 2B-1B**) is the total number of deaths that had any mention of diseases of the heart on the 2022 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 (primary) hypertension* ranked 11th as the underlying cause but ranked 3rd when any mention of it was counted.

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

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 2022, diseases of the heart were the leading cause of death for White non-Hispanics, Hispanics, and Blacks, placed 2nd for American Indians and Asians. Cancer ranked 1st leading cause of death for Asians, 2nd for White non-Hispanics, Hispanics, and Blacks, and 3rd for American Indians. In 2022, unintentional injury ranked 1st leading cause for American Indians, 3rd for White non-Hispanics, Hispanics, Blacks, and Asians. (Figure 2B-2, Table 2B-4). COVID-19 was the 4th leading cause of death for White non-Hispanics, Hispanics, American Indians, and Asians, and ranked 5th for Black or African Americans.

In 2022, cerebrovascular diseases ranked 4th leading cause of death for Black or African Americans and 5th for Asians, while chronic lower respiratory disease came in as the fifth leading cause of death specific to White non-Hispanics, diabetes also ranked 5th among Hispanics, and chronic liver disease and cirrhosis was unique to American Indians in making the top five ranking. (Table 2B-4).

Figure 2B-2
Age-adjusted Mortality Rates^a for the Five Leading Causes of Death for Both Genders by Race/Ethnicity, Arizona, 2022

Rank	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
1	Diseases of heart 151.3	Diseases of heart 121.2	Diseases of heart 194.9	Unintentional injury 206.5	Cancer 102.7
2	Cancer 136.5	Cancer 113.8	Cancer 166.1	Diseases of heart 156.1	Diseases of heart 88.9
3	Unintentional injury 71.8	Unintentional injury 63.3	Unintentional injury 91.2	Cancer 139.3	Unintentional injury 31.1
4	COVID-19 41.7	COVID-19 62.7	Cerebro-vascular diseases 54.2	COVID-19 116.7	COVID-19 30.1
5	Chronic lower respiratory diseases 40.1	Diabetes 39.5	COVID-19 52.7	Chronic liver disease and cirrhosis 106.0	Cerebro-vascular diseases 29.4

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, 2022

Based on age-adjusted mortality rates, cancer was the leading cause of death for all females. Disease of the heart ranked 2nd for White non-Hispanic, Hispanic, Black or African American, and Asian females, while coming in 4th as the leading cause of death for American Indian females. Unintentional injury ranked 2nd leading cause of death for American Indian, 3rd among White-non-Hispanic, and 4th to Black or African American females. COVID-19 ranked 3rd to Hispanic and American Indians, while 5th for Black or African American and Asian females. Alzheimer's disease ranked 4th leading cause of death for Asians and 5th for White non-Hispanics and Hispanic females. (Figure 2B-3, Table 2B-4).

Chronic lower respiratory diseases was the fourth leading cause of death specific to White non-Hispanic females. Chronic liver disease and cirrhosis ranked fifth among the leading cause of death unique to American Indian women.

Cerebrovascular diseases ranked third among Black or African American and Asian females, while ranking fourth among Hispanic women.

Rank	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
1	Cancer 120.8	Cancer 98.6	Cancer 158.7	Cancer 120.0	Cancer 100.1
2	Diseases of heart 117.4	Diseases of heart 93.8	Diseases of heart 145.3	Unintentional injury 105.4	Diseases of heart 73.0
3	Unintentional injury 42.4	COVID-19 43.8	Cerebro-vascular diseases 59.1	COVID-19 100.9	Cerebro-vascular diseases 31.2
4	Chronic lower respiratory diseases 40.2	Cerebro-vascular diseases 36.5	Unintentional injury 46.1	Diseases of heart 99.4	Alzheimer's disease 22.9
5	Alzheimer's disease 34.0	Alzheimer's disease 35.0	COVID-19 43.1	Chronic liver disease and cirrhosis 99.0	COVID-19 20.2

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, 2022

Rank	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
1	Diseases of heart 188.8	Diseases of heart 153.1	Diseases of heart 255.3	Unintentional injury 320.5	Diseases of heart 110.5
2	Cancer 154.8	Cancer 133.8	Cancer 176.9	Diseases of heart 231.2	Cancer 106.1
3	Unintentional injury 101.0	Unintentional injury 95.8	Unintentional injury 134.1	Cancer 166.6	COVID-19 45.0
4	COVID-19 52.2	COVID-19 88.0	COVID-19 64.3	COVID-19 139.8	Unintentional injury 43.7
5	Chronic lower respiratory diseases 39.8	Diabetes 52.5	Diabetes 53.9	Chronic liver disease and cirrhosis 112.5	Cerebrovascular diseases 26.7

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

Based on age-adjusted mortality rates for Arizona males, diseases of the heart ranked first as the leading cause of death for all racial/ethnic groups except for American Indians who ranked second. Cancer was the second leading cause for White non-Hispanic, Hispanic, Black or African American, and Asian males, and third for American Indian males. (**Figure 2B-4; Table 2B-4**).

Unintentional injury ranked the second leading cause of death for American Indian males, fourth among White non-Hispanic, Hispanic, Black, and fourth among Asian males.

In 2022, based on the age-adjusted mortality rates, COVID-19 was the third leading cause of death to Asian males and fourth leading cause to White non-Hispanic, Hispanic, Black or African American, and American Indian males. Chronic lower respiratory diseases ranked fifth specific to White non-Hispanic males, chronic liver disease and cirrhosis unique among American Indian males, cerebrovascular diseases also unique to Asian males, as well as ranking fifth for diabetes among Hispanic and Black males.

Figure 2B-5
Age-adjusted Mortality Rates^a for the Five Leading Causes of Death
by Gender in Urban^b and Rural Areas, Arizona, 2022

Rank	Urban male	Urban female	Rural male	Rural female
1	Diseases of heart 180.4	Cancer 116.0	Diseases of heart 212.3	Cancer 124.4
2	Cancer 147.4	Diseases of heart 112.0	Cancer 169.8	Diseases of heart 120.8
3	Unintentional injury 99.7	Unintentional injury 39.5	Unintentional injury 144.7	Unintentional injury 53.5
4	COVID-19 57.7	COVID-19 34.9	COVID-19 70.5	COVID-19 46.4
5	Cerebrovascular diseases 34.5	Alzheimer's disease 33.7	Intentional Self-harm (suicide) 60.3	Chronic lower respiratory diseases 46.0

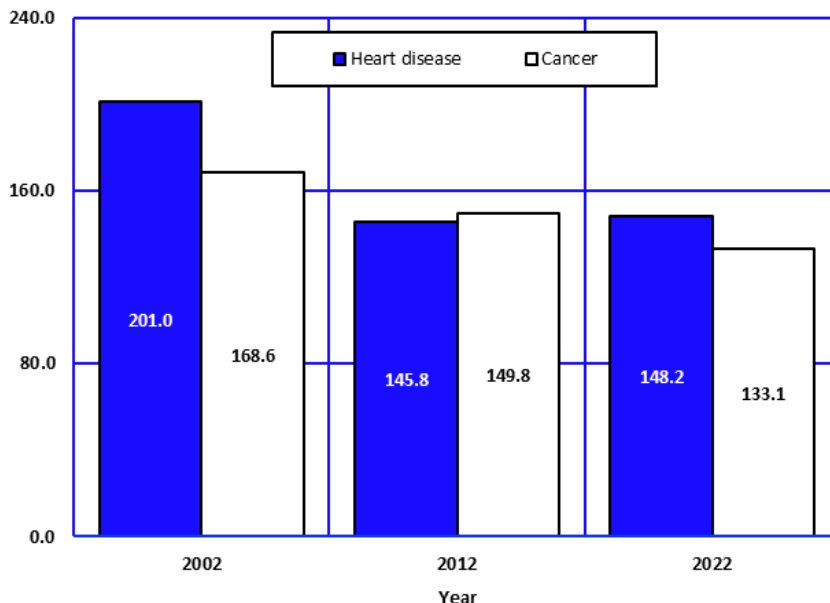
Notes: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard; ^b Urban = Maricopa, Pima, Pinal, and Yuma counties. The remaining counties comprise Arizona's rural areas.

In 2022, the ranking of the leading causes of death were mostly similar 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 both urban and rural males, but came in 2nd among urban and rural females. Cancer did the opposite of heart disease ranking first to urban and rural females and ranked 2nd among urban and rural males. Unintentional injury placed third among the leading cause for males and females regardless of area of residence. COVID-19 was ranked the fourth among both urban and rural males and females.

The leading causes of death which ranked fifth were cerebrovascular disease specific to urban males, Alzheimer's disease unique to urban females, Intentional self-harm (suicide) was specific to rural males, and chronic lower respiratory diseases to rural females.

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, 2002, 2012, and 2022

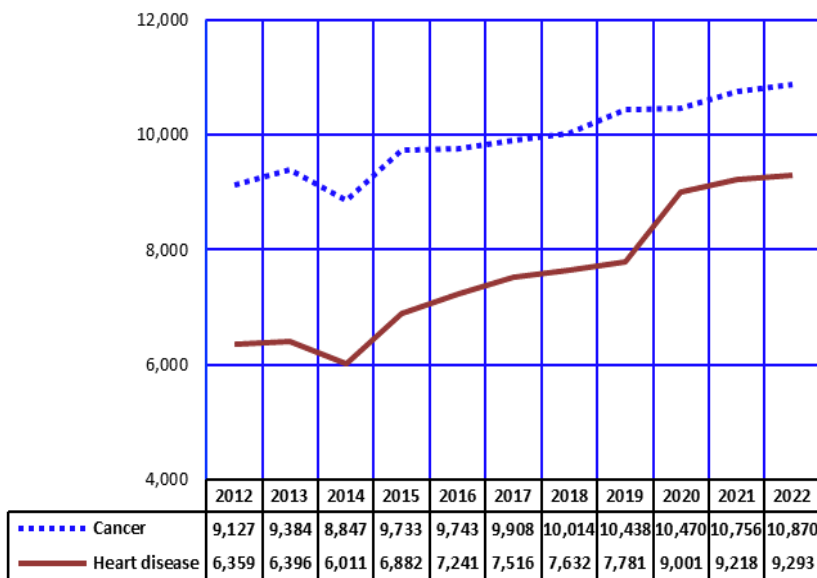


The age-adjusted mortality rate for diseases of the heart decreased by 26.3 percent from 201.0 deaths per 100,000 population in 2002 to 148.2/100,000 in 2022 (**Figure 2B-6**). The age-adjusted mortality rate for cancer declined less, by 21.1 percent, from 2002-2022. In Arizona, the relative risk of death from heart disease versus cancer declined from 19.2 percent greater in 2002 to 11.3 percent in 2022.

In 2012, 505 less Arizonans died from diseases of the heart than cancer (**Table 2B-1**). In 2022, the number of deaths due to diseases of the heart exceeded cancer by 1,395 cases (**Table 2B-4**).

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

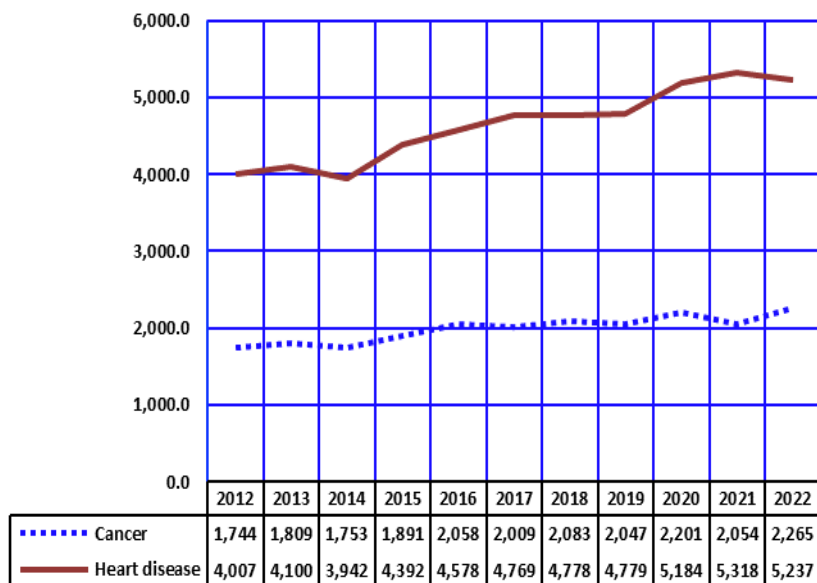
Figure 2B-7
Number of Deaths from Heart Disease and Cancer among
Arizonans 0-84 Years, 2012-2022



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 this age group. In 2022, 1,577 more Arizonans 0-84 years old died from cancer (10,870) than heart disease (9,293).

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

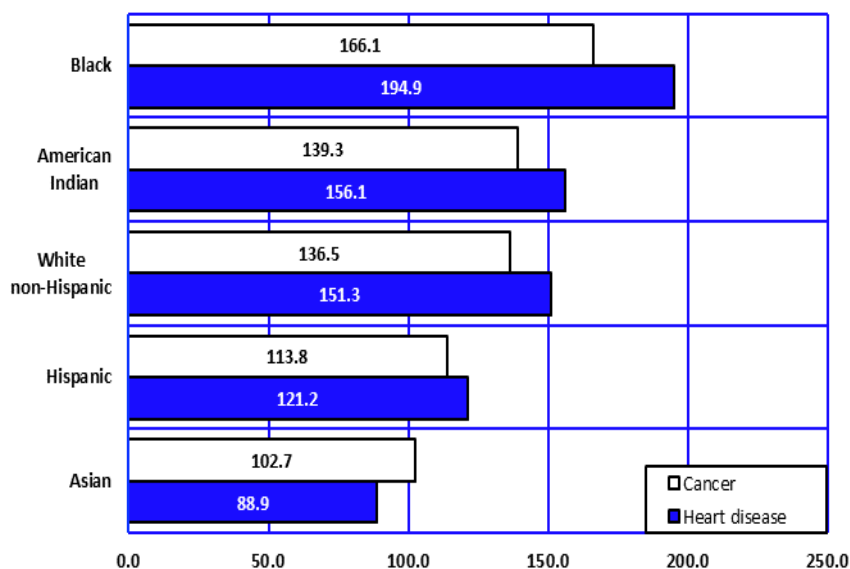
Figure 2B-8
Deaths from Heart Disease and Cancer among Arizonans 85+, 2012-2022



Among Arizonans age 85 and over, heart disease is the number one leading cause of death by a wide margin. In 2022, adults aged 85 and over accounted for 17.2 percent of all deaths from cancer but 36.0 percent of all deaths from heart disease. In 2022, the median age at death for heart disease was 80 years (**Table 2D-3**); and a minority of deaths (42.7 percent, **Table 2D-4**) were premature, i.e., before reaching the expected years of life at birth for all U.S. residents (77.5 years).

However, from 2012 to 2022, the number of deaths from cancer increased by 29.9 percent among Arizonans 85 years or older, less than the increase observed in diseases of the heart (30.7 percent increase).

Figure 2B-9
Age-adjusted Mortality Rates^a for Heart Disease and Cancer by Race/Ethnicity, Arizona, 2022



In Arizona, Black or African Americans were 2.2 times more likely to die from diseases of the heart and 1.6 times more likely to die from malignant neoplasms in 2022 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 1.7 times more likely to die of heart disease and 1.3 times more likely to die of cancer.

In 2022, the age-adjusted relative risk of death from heart disease exceeded cancer mortality risk (**Table 2B-3**) for all the racial/ethnic groups.

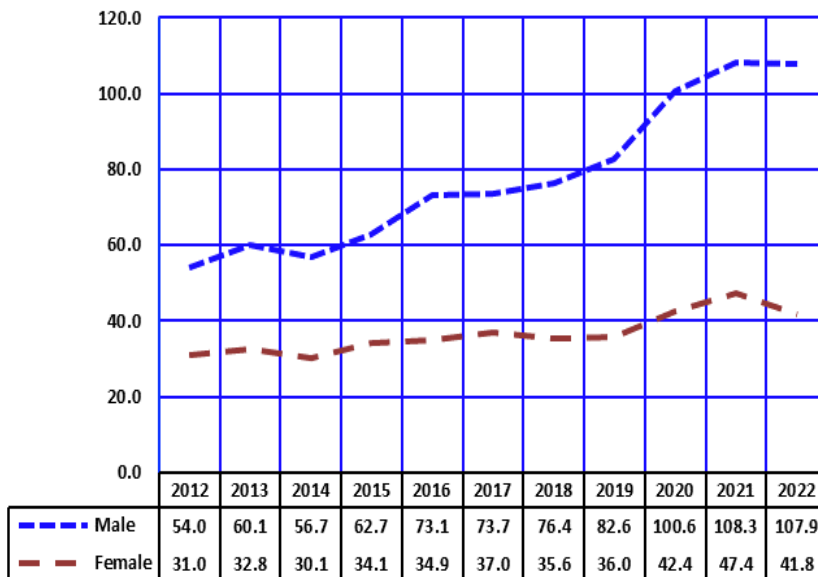
Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

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

Figure 2B-10
Age-adjusted Mortality Rates^a for Accidents (Unintentional Injuries) by Gender and Year, Arizona, 2012-2022

The number of deaths from unintentional injuries decreased by 1.3 percent from 5,945 in 2021 to 5,868 in 2022 (**Table 2B-1**). In 2022, based on age-adjusted mortality rates, accidents ranked third as a leading cause of death for males seventh for females (**Table 2B-4**). From 2021 to 2022, the age-adjusted mortality rate for accidents decreased both for males (0.4 percent) and females (11.8 percent; **Figure 2B-10**).

In 2022, 1,344 deaths were caused by motor vehicle accidents, a decrease of 1.1 percent from 2021. Heat induced mortality has seen an increase of 25.3 percent between 2021 and 2022. Deaths due to accidental drowning and submersion increased by 9.6 percent from 2021 (n=115) to 2022 (n=126). Additionally, Arizonans experienced a 4.8 percent decrease in the number of accidental poisonings due to drugs and/or medicaments from 2,508 fatalities in 2021 to 2,388 in 2022 (**Table 2B-9**).

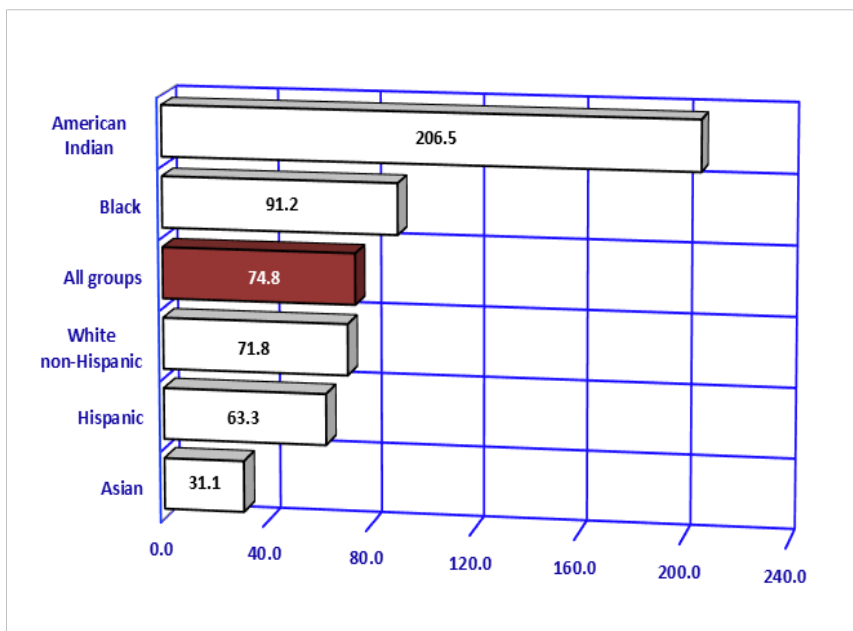


Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Figure 2B-11
Age-adjusted Mortality Rates^a for Accidents (Unintentional Injuries) by Race/Ethnicity, Arizona, 2022

The American Indian death rate for unintentional injuries (206.5/100,000) was 6.6 times greater than the rate for Asians (31.1/100,000), the group with the lowest risk of unintentional injury death among racial/ethnic groups in the state (**Figure 2B-11, Table 2B-4**).

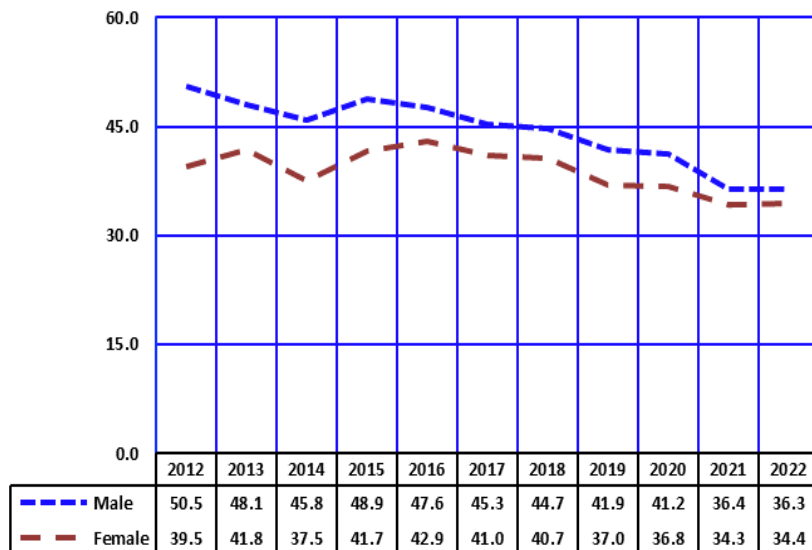
In 2022, Apache (198.5/100,000) and La Paz (173.4/100,000) counties had the two highest age-adjusted mortality rates for unintentional injuries (**Table 5E-11**).



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, 2012-2022

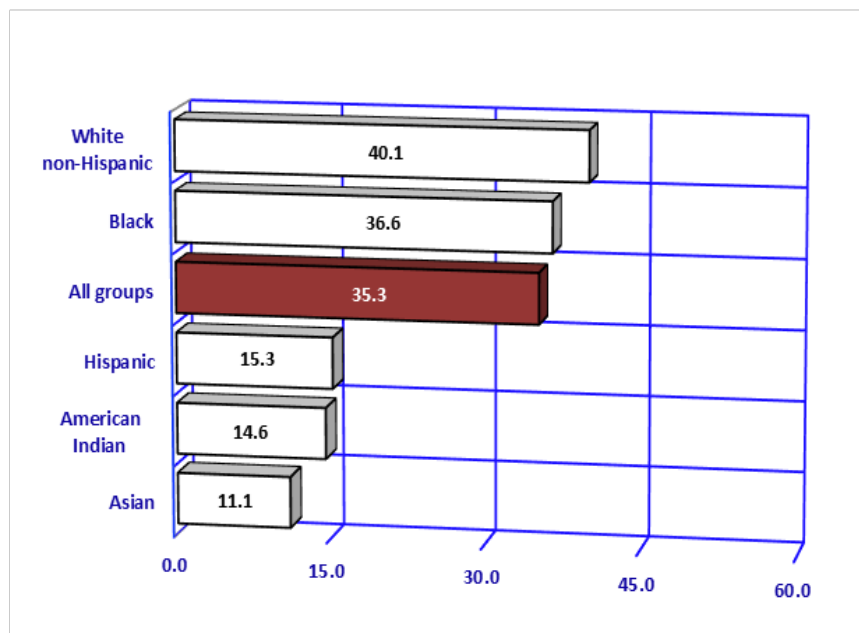


In 2022, chronic lower respiratory diseases (bronchitis, emphysema, asthma) was the 5th leading cause of death among Arizona residents (**Table 2B-1**). The mortality rate for chronic lower respiratory diseases decreased slightly for males between 2021 and 2022 (0.3 percent), but had a slight increase for females (0.3 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 46.3/100,000 and 46.0/100,000, 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, 2022



Mortality rates for emphysema, chronic bronchitis, asthma, and other lower respiratory disorders were highest among White non-Hispanics (40.1 deaths per 100,000) when compared to any other racial/ethnic groups in 2022. Asians recorded the lowest rate at 11.1 deaths per 100,000 population (**Figure 2B-13, Table 2B-4**).

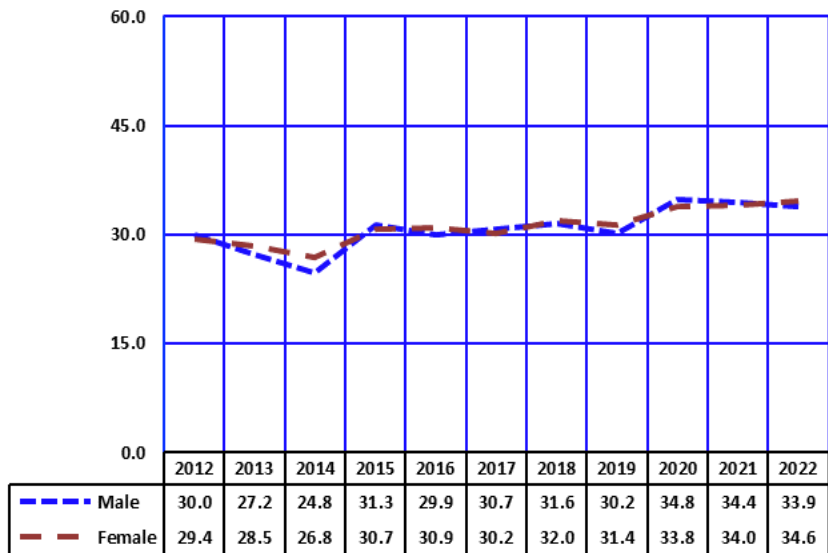
Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

2B. LEADING CAUSES OF DEATH
Cerebrovascular diseases

Figure 2B-14
Age-adjusted Mortality Rates^a for Cerebrovascular Disease by Gender and Year, Arizona, 2012-2022

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 0.3 percent from 34.4/100,000 in 2021 to 34.5 deaths per 100,000 population in 2022 (Table 2B-2).

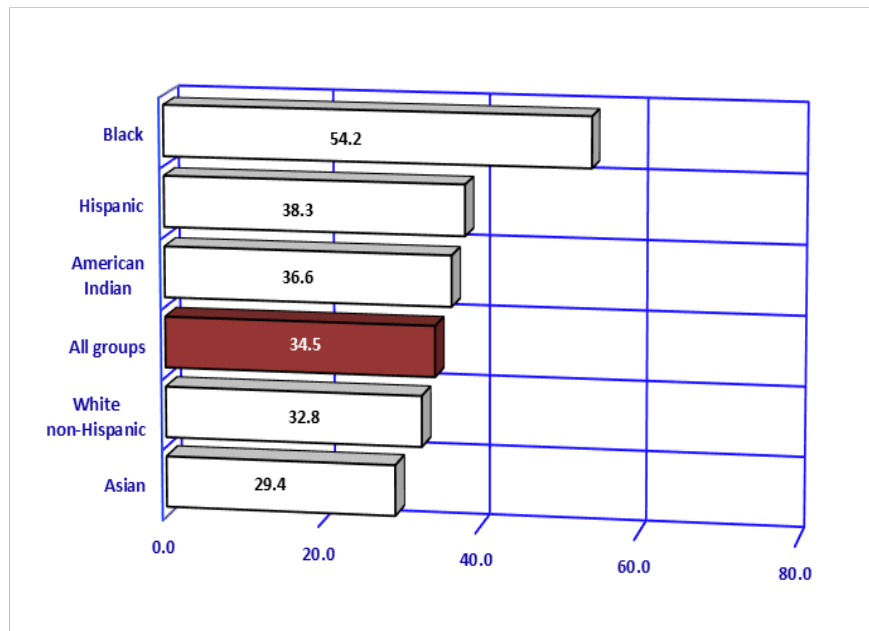
With some exceptions, the risk of dying from cerebrovascular diseases was slightly higher among females than males for the period 2012-2022 (6 of the last 11 years), but the rates were very similar. (Figure 2B-14, Table 2B-2).



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, 2022

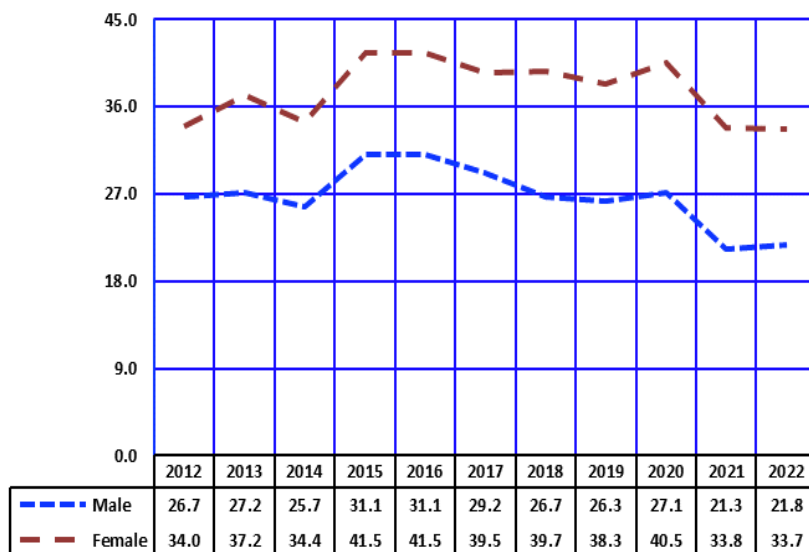
Compared to Arizona's overall rate, Black or African Americans were 1.6 times more likely to die from cerebrovascular disease in 2022 (Figure 2B-15, Table 2B-4). The 2022 mortality rate for cerebrovascular disease among Asians (29.4/100,000) was the lowest among racial/ethnic groups.



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, 2012-2022

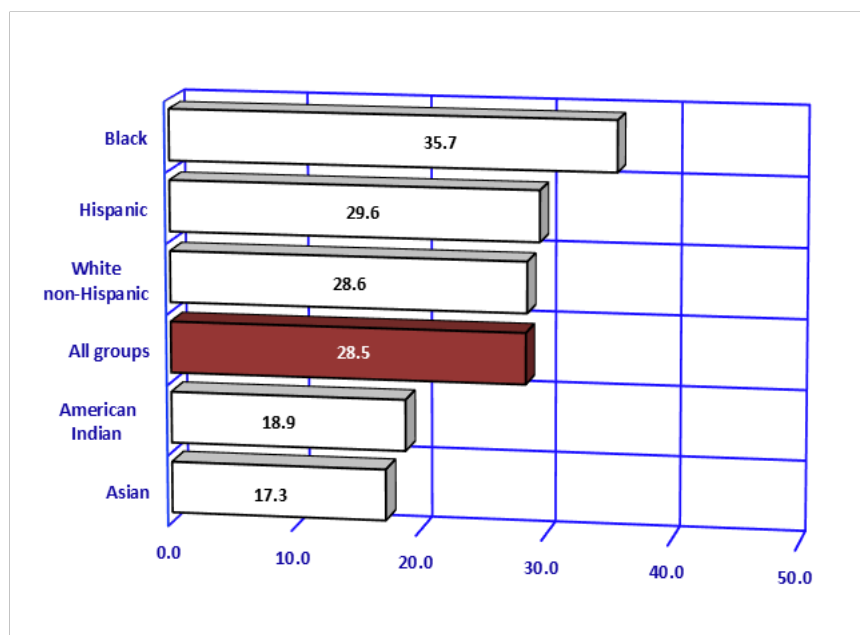


Based on the number of deaths in 2022, Alzheimer's disease was the 6th leading cause of death for females and 9th leading cause for males (**Table 2B-4**)

From 2021 to 2022, the age-adjusted mortality rate for Alzheimer's disease increased slightly for males (2.3 percent) and decreased for females (0.3 percent) (**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, 2022



The age-adjusted mortality rates for Alzheimer's disease in 2022 were higher among Black or African Americans (35.7/100,000), Hispanic or Latinos (29.6/100,000), and White non-Hispanics (28.6/100,000) than the other racial/ethnic groups. Rates lower than the state average (28.5/100,000) were recorded among American Indians (18.9/100,000) and Asians (17.3/100,000) (**Figure 2B-17, Table 2B-4**).

White non-Hispanic residents of Arizona disproportionately contributed to mortality from Alzheimer's disease. In 2022, White non-Hispanics accounted for 55.0 percent (**Table 10C-1**) of the state's population, but 82.3 percent of all deaths from Alzheimer's disease (2,318 out of 2,818; **Table 2B-4**).

In 2022, the overall median age at death from Alzheimer's disease was 86, specifically 85 years for males and 86 years for females (**Table 2D-3**).

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

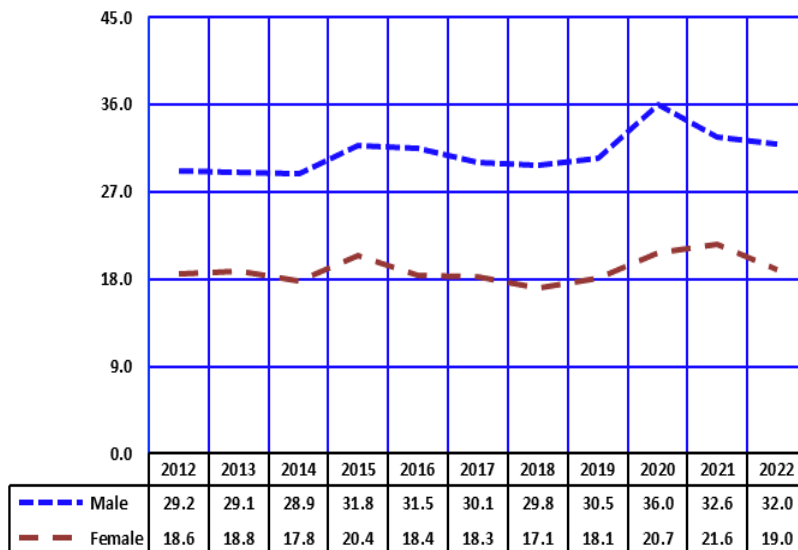
2B. LEADING CAUSES OF DEATH
Diabetes

Figure 2B-18
Age-adjusted Mortality Rates^a for Diabetes by Gender and Year, Arizona, 2012-2022

From 2012-2022, mortality rates for diabetes decreased for both males (1.8 percent) and females (12.0 percent; **Figure 2B-18**).

In addition to 2,418 deaths that had diabetes assigned as the underlying cause in 2022, another 5,149 deaths had diabetes assigned as a contributing factor. The diabetes-related death rate of 77.9/100,000 (**Table 6A-6**) was 3.1 times greater than the rate for diabetes as an underlying cause (25.1/100,000; **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.

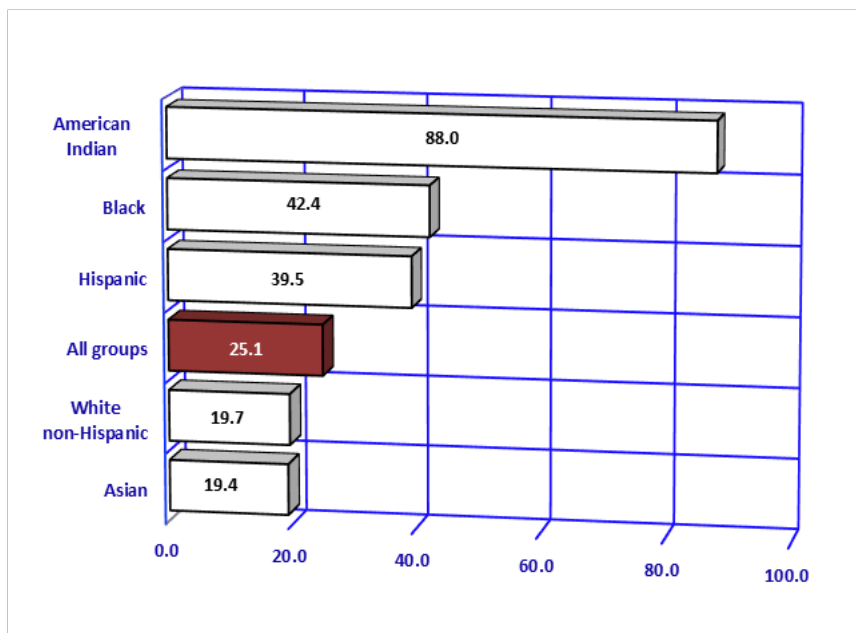


Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Figure 2B-19
Age-adjusted Mortality Rates^a for Diabetes by Race/Ethnicity, Arizona, 2022

In 2022, compared to Arizona's rate, American Indians were 3.5 times more likely to die from diabetes (88.0 deaths per 100,000; **Figure 2B-19, Table 2B-4**). The rate of 19.4 deaths per 100,000 among Asian or Pacific Islanders was the lowest rate among all racial/ethnic groups in the state.

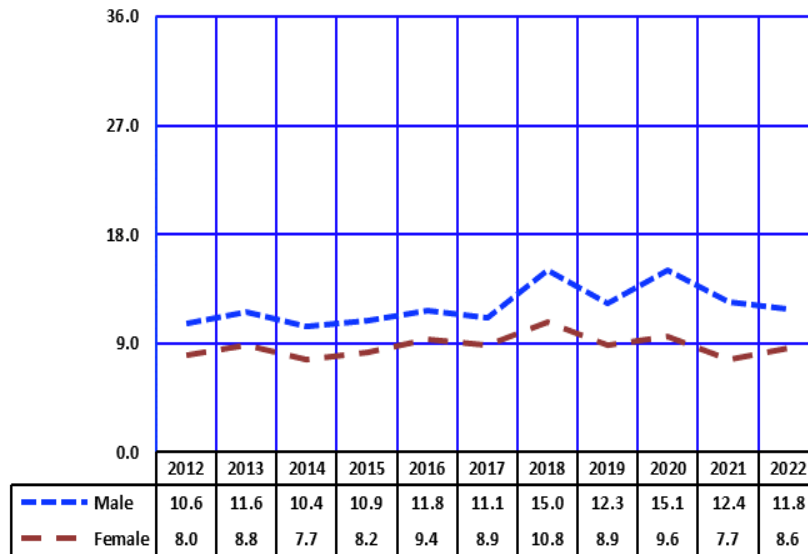
Among the 15 Arizona counties, La Paz (72.8/100,000) and Graham (57.0/100,000) counties had the highest mortality rates for diabetes recorded in 2022 (**Table 5E-11**).



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, 2012-2022



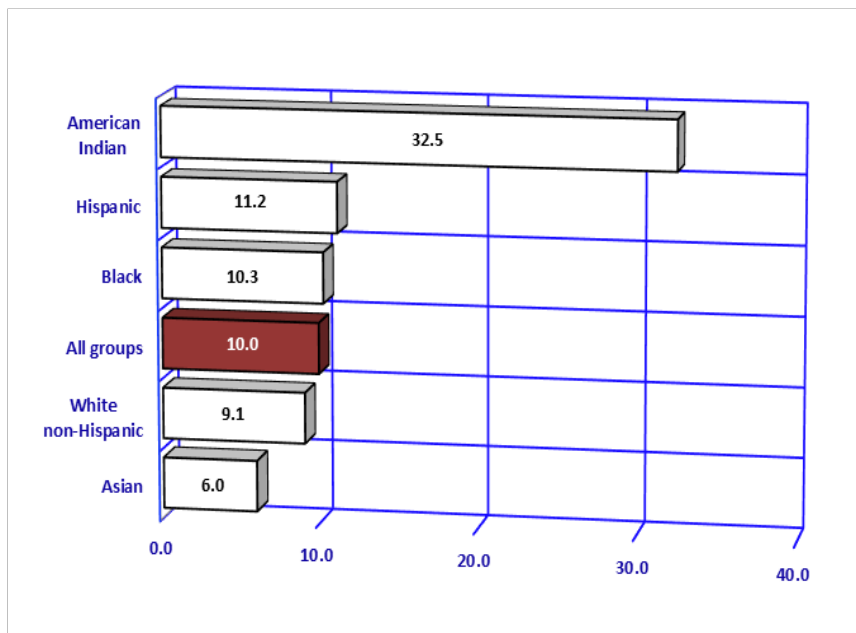
The number of deaths from influenza and pneumonia increased by 51.0 percent from 635 in 2012 to 959 in 2022. (**Table 2B-1**). Among the 959 deaths, influenza was identified as the underlying cause for 95 of them, while pneumonia was listed as the underlying cause on 864 death certificates (**Table 2B-6**).

The mortality rate for influenza and pneumonia increased for females from 7.7 deaths per 100,000 in 2021 to 8.6 deaths in 2022 (**Figure 2B-20, Table 2B-2**). However, the mortality rate for influenza and pneumonia decreased for males from 12.4 per 100,000 in 2021 to 11.8 deaths per 100,000 in 2022.

In 2022, the age-adjusted mortality rate for Arizona males was 37.2 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, 2022



In 2022, American Indian residents of Arizona had the highest mortality rate for influenza and pneumonia (32.5 deaths per 100,000) among the racial/ethnic groups. Mortality due to influenza and pneumonia for White non-Hispanics (9.1/100,000) and Asians (6.0/100,000) were lower than the state rate. (**Figure 2B-21, Table 2B-4**).

County comparisons show that in 2022 influenza and pneumonia mortality rates were highest in Apache (25.8/100,000), Greenlee (20.2/100,000), and Navajo (19.5/100,000) counties compared to the remaining counties (**Table 5E-11**).

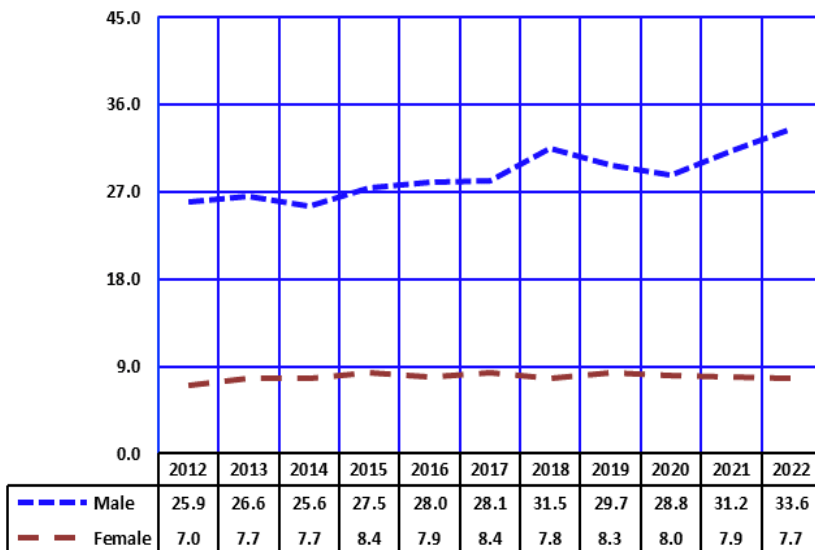
Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

2B. LEADING CAUSES OF DEATH
Suicide

Figure 2B-22
Age-adjusted Mortality Rates^a for Suicide by Gender and Year, Arizona, 2012-2022

In 2022, based on age-adjusted mortality rates, suicide was the 7th leading cause of death among males. It ranked as the 12th cause of mortality for females. The overall age-adjusted suicide rate increased from 19.4 suicides per 100,000 in 2021 to 20.5 in 2022 (**Table 2B-4**).

From 2021 to 2022, suicide mortality increased by 7.7 percent among males and decreased 2.5 percent among females (**Figure 2B-22, Table 2B-4**). In 2022, suicide posed a 4.4 times greater mortality risk for males (33.6/100,000) than for females (7.7/100,000).

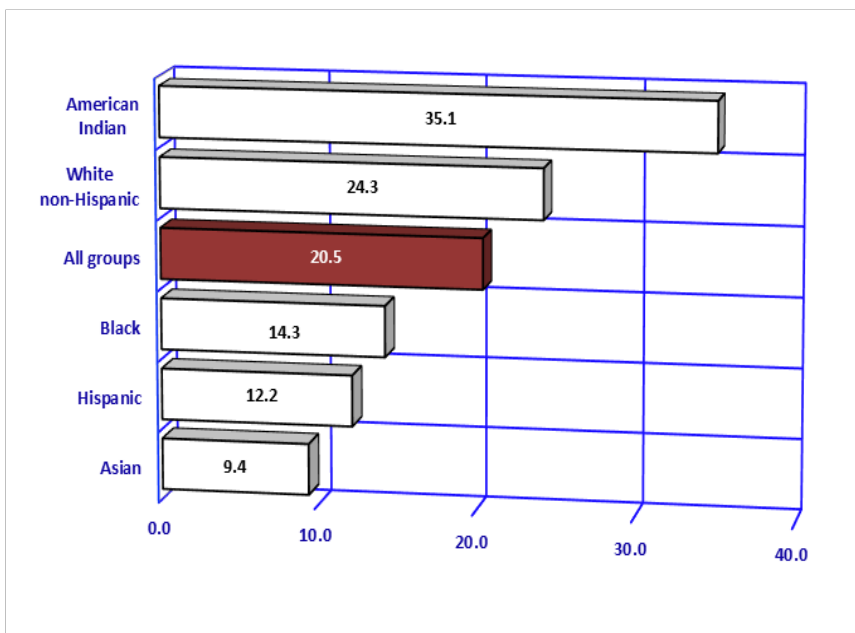


Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Figure 2B-23
Age-adjusted Mortality Rates^a for Suicide by Race/Ethnicity, Arizona, 2022

In 2022, American Indians had the highest age-adjusted suicide rate (35.1 suicides per 100,000) among racial/ethnic groups, followed by White non-Hispanics (24.3/100,000), while Asians recorded the lowest age-adjusted suicide rate (9.4/100,000; **Figure 2B-23, Table 2B-4**).

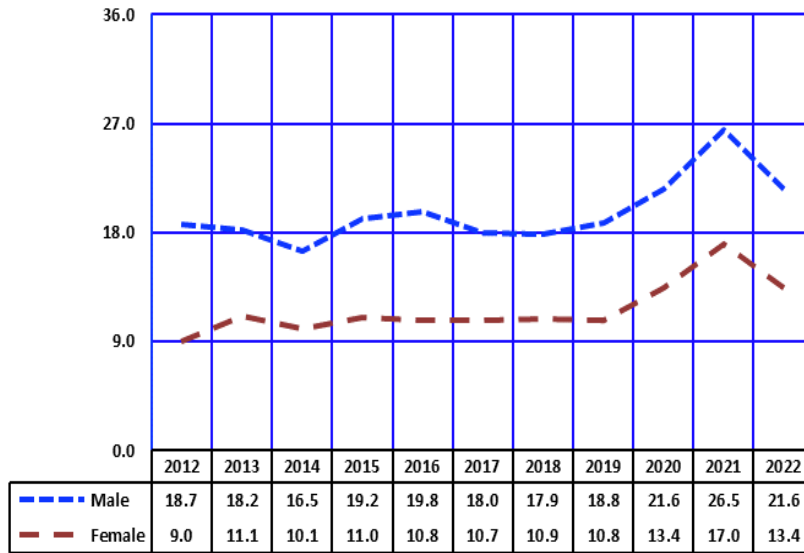
The 2022 age-adjusted mortality rates for suicide varied across the state, from a low rate of 7.5 suicides per 100,000 residents in Santa Cruz County to a high of 63.6 suicides per 100,000 residents in Greenlee County (**Table 5E-11**).



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, 2012-2022



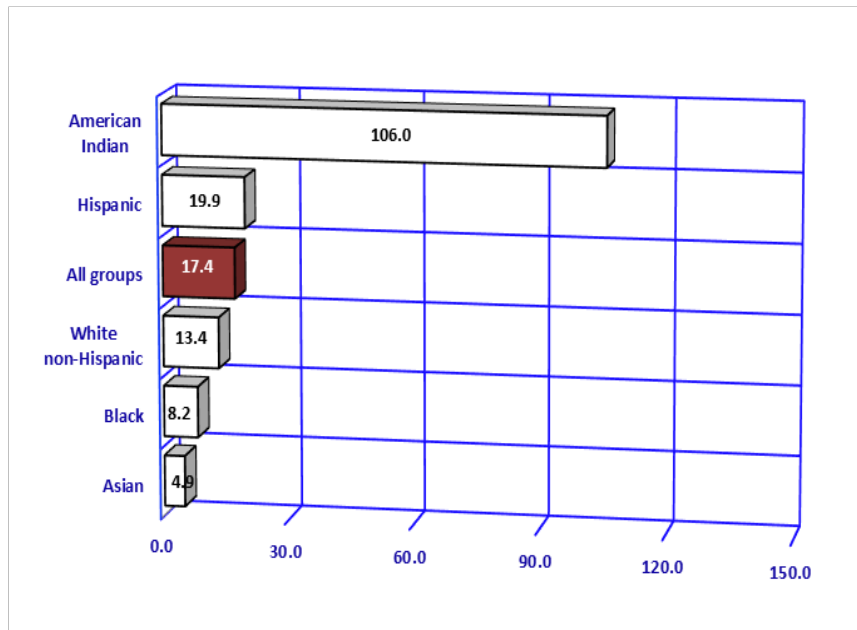
Chronic liver disease and cirrhosis was the 10th leading cause of death in Arizona in 2022 (**Figure 2B-1, Table 2B-1**). Among the 1,484 deaths due to chronic liver disease and cirrhosis, 901 (60.7 percent) were males (**Table 2B-4**).

Among females, the age-adjusted mortality rate for chronic liver disease and cirrhosis decreased 21.2 percent from 2021 to 2022. Among males, the mortality rate also decreased 18.5 percent from 26.5/100,000 in 2021 to 21.6/100,000 in 2022 (**Figure 2B-24, Table 2B-3**).

In 2022, Apache, Navajo, La Paz, and Gila 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, 2022



In 2022, chronic liver disease and cirrhosis mortality rate was exceedingly high among American Indians (106.0 deaths per 100,000 population) compared to other racial/ethnic groups in the state (**Figure 2B-25, Table 2B-4**). The death rate for chronic liver disease and cirrhosis among Asians, Blacks, and White non-Hispanics, were all below the state average (17.4 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 2022, the median age at death of American Indians who died from chronic liver disease and cirrhosis was 46 years, which was at least 14 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.