2B.

LEADING CAUSES OF DEATH

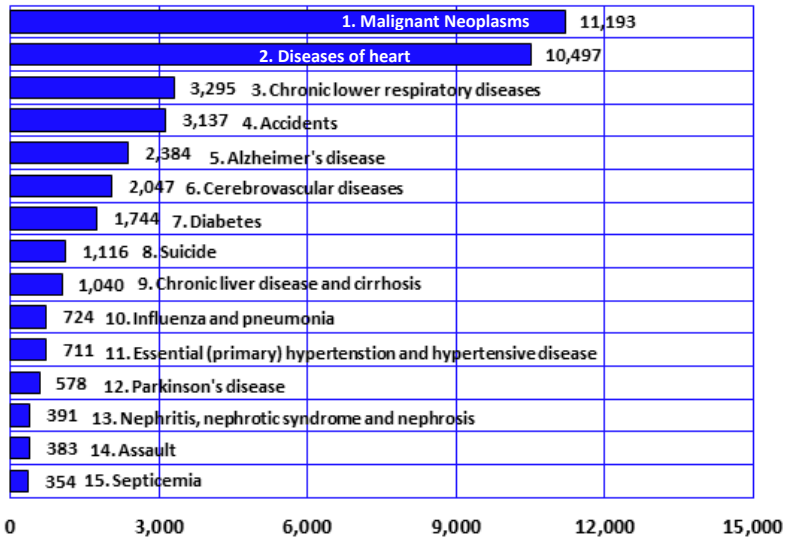
In 2010, the Office of Vital Records (OVR) of the Arizona Department of Health Services implemented the new (2003) Standard U.S. death certificate. The new certificate added several new questions: 1) whether tobacco use contributed to the death, and 2) whether, if the decedent was a female, the death 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: http://www.whitehouse.gov/omb/fedreg/ombdir15.html

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. In 2013, among the 49,929 deaths of Arizona residents, indication of "two or more races" appeared on only 398 certificates. The total number of deaths for decedents identified as Native Hawaiian was 15. 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, 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.

Figure 2B-1A
Leading Causes of Death among Arizona Residents in 2013

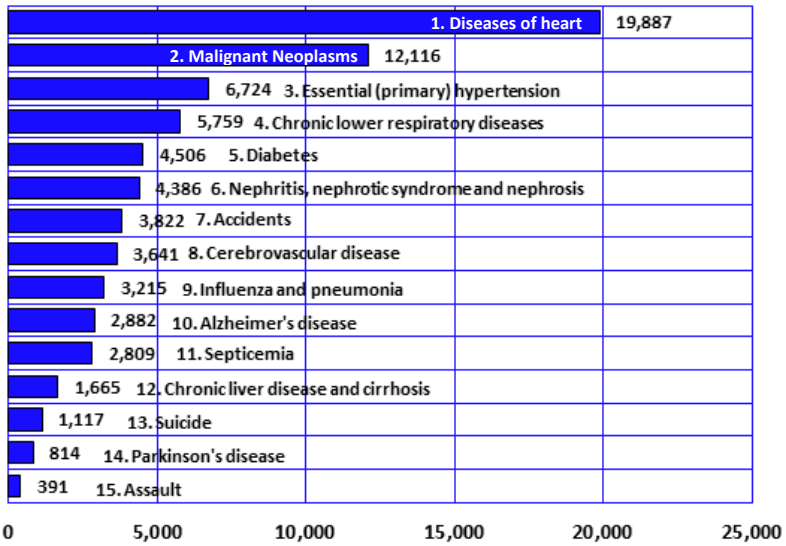
BASED ON THE NUMBER OF DEATHS DUE TO THE UNDERLYING CAUSE:



Based on the number of deaths (but not age-adjusted mortality rate), the leading underlying cause of death to Arizona residents in 2013 was cancer (11,193 or 22.4 percent of all deaths), closely followed by *heart disease*, which accounted for 10,497 or 21.0 percent of deaths (**Figure 2B-1A**, **Table 2B-1**, **Table 5E-14**). The third leading cause of death, *chronic lower respiratory diseases*, accounted for 3,295 or 6.6 percent of total deaths. Deaths due to *accidents (unintentional injuries)* ranked fourth in 2013, with 3,137 resident deaths reported. Deaths due to *Alzheimer's disease* ranked fifth in 2013, with 2,384 resident deaths reported. Together, these five causes accounted for 61.1 percent of total deaths in 2013. The fifteen leading causes accounted for 79.3 percent of all deaths among Arizona residents.

Figure 2B-1B
Leading Causes of Death among Arizona Residents in 2013

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 10,497 deaths that had diseases of the heart assigned as the underlying cause, another 9,390 deaths had diseases of the heart assigned as a secondary cause of death. The sum of these two counts (19,887, **Figure 2B-1B**) is the total number of deaths that had any mention of diseases of the heart on the 2013 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 10th as the underlying cause but ranked 3rd when any mention of it was counted.

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 2013, cancer was the number one cause of death for Asians or Pacific Islanders, Hispanic or Latinos, and White non-Hispanics. Diseases of the heart were the leading cause of death for American Indians and Blacks or African Americans (**Figure 2B-2, Table 2B-4**). Unintentional injury was the third leading cause of death only for American Indians. For Asians, Hispanics, and Whites, Alzheimer's disease was the 5th leading cause of death in 2013. Diabetes was among the third leading cause of death for Blacks and Hispanics (**Table 2B-4**).

Chronic liver disease and cirrhosis was the fifth leading cause of death specific to American Indians. Chronic lower respiratory diseases were the third leading cause of death specific to White non-Hispanics.

Figure 2B-2
Age-adjusted Mortality Rates[a] for the Five Leading Causes of Death for Both Genders by Race/Ethnicity, Arizona, 2013

Rank	Asian or Pacific Islander	American Indian or Alaska Native	Black or African American	Hispanic or Latino	White non-Hispanic
1	Cancer 100.1	Diseases of heart 122.9	Diseases of heart 200.5	Cancer 129.8	Cancer 154.3
2	Diseases of heart 82.5	Cancer 118.2	Cancer 190.4	Diseases of heart 116.1	Diseases of heart 147.6
3	Stroke 30.7	Unintentional injury 104.5	Diabetes 60.2	Diabetes 40.7	Chronic lower respiratory diseases 49.3
4	Chronic lower respiratory diseases 19.4	Diabetes 65.7	Stroke 54.4	Unintentional injury 38.5	Unintentional injury 47.9
5	Alzheimer's disease 18.2	Chronic liver disease and cirrhosis 62.0	Chronic lower respiratory diseases 46.7	Alzheimer's disease 35.6	Alzheimer's disease 33.4

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

Based on age-adjusted mortality rates, cancer was the leading cause of death followed by heart disease for females of all racial/ethnic groups excluding American Indians (**Figure 2B-3**, **Table 2B-4**). Diabetes was the 3rd leading cause of death for Black women, the 4th leading cause for Hispanic women, and the 5th leading cause for Asian and American Indian females. Alzheimer's disease was among the five leading causes of death for women of all racial/ethnic backgrounds excluding American Indians.

Chronic liver disease and cirrhosis was the 4th leading cause of death specific to American Indian females. Chronic lower respiratory diseases were the 3rd leading cause of death specific to White non-Hispanic females.

Figure 2B-3
Age-adjusted Mortality Rates[a] for the Five Leading Causes of Death by Race/Ethnicity among Females, Arizona, 2013

Rank	Asian or Pacific Islander	American Indian or Alaska Native	Black or African American	Hispanic or Latino	White non-Hispanic
1	Cancer 81.4	Diseases of heart 114.5	Cancer 176.5	Cancer 117.0	Cancer 133.3
2	Diseases of heart 70.9	Cancer 97.1	Diseases of heart 144.8	Diseases of heart 93.0	Diseases of heart 111.5
3	Stroke 31.2	Unintentional injury 62.9	Diabetes 55.8	Alzheimer's disease 39.6	Chronic lower respiratory diseases 47.0
4	Alzheimer's disease 18.3	Chronic liver disease and cirrhosis 55.0	Stroke 54.6	Diabetes 36.3	Alzheimer's disease 37.7
5	Diabetes 17.9	Diabetes 55.0	Alzheimer's disease 45.8	Stroke 28.5	Unintentional injury 34.7

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

Figure 2B-4
Age-adjusted Mortality Rates[a] for the Five Leading Causes of Death by Race/Ethnicity among Males, Arizona, 2013

Rank	Asian or Pacific Islander	American Indian or Alaska Native	Black or African American	Hispanic or Latino	White non-Hispanic
1	Cancer 131.4	Diseases of heart 159.8	Cancer 269.1	Cancer 147.2	Diseases of heart 190.0
2	Diseases of heart 98.8	Unintentional injury 150.5	Diseases of heart 209.3	Diseases of heart 144.4	Cancer 180.9
3	Chronic lower respiratory diseases 32.0	Cancer 126.0	Unintentional injury 68.7	Unintentional injury 51.4	Unintentional injury 61.2
4	Stroke 30.0	Diabetes 79.7	Diabetes 68.0	Diabetes 45.8	Chronic lower respiratory diseases 52.5
5	Essential (primary) hypertension and hypertensive renal disease 21.2	Chronic liver disease and cirrhosis 70.1	Chronic lower respiratory diseases 56.4	Stroke 30.8	Intentional Self-harm Suicide 32.4

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

Based on age-adjusted mortality rates, cancer followed by diseases of the heart were the two leading causes of death among Asian or Pacific Islander, Black or African American, and Hispanic or Latino males (**Figure 2B-4**; **Table 2B-4**). Age-adjusted mortality rates for diseases of the heart were the highest of all causes among American Indian and White non-Hispanic males.

Unintentional injury ranked among the top 5 leading causes of death for males in all racial/ethnic groups excluding Asians, but was the 2nd leading cause of death only for American Indian males.

In 2013, based on the age-adjusted mortality rates, diabetes was among the fourth leading causes of death for American Indian, Black or African American, and Hispanic or Latino 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, 2013

Rank	Urban male	Urban female	Rural male	Rural female
1	Diseases of heart 176.8	Cancer 127.4	Diseases of heart 208.3	Cancer 140.2
2	Cancer 172.2	Diseases of heart 104.7	Cancer 182.6	Diseases of heart 128.3
3	Unintentional injury 54.6	Chronic lower respiratory diseases 40.8	Unintentional injury 86.4	Chronic lower respiratory diseases 46.5
4	Chronic lower respiratory diseases 45.5	Alzheimer's disease 40.7	Chronic lower respiratory diseases 57.6	Unintentional injury 46.3
5	Alzheimer's disease 30.4	Unintentional injury 29.8	Intentional Self-harm Suicide 38.6	Stroke 28.2

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.

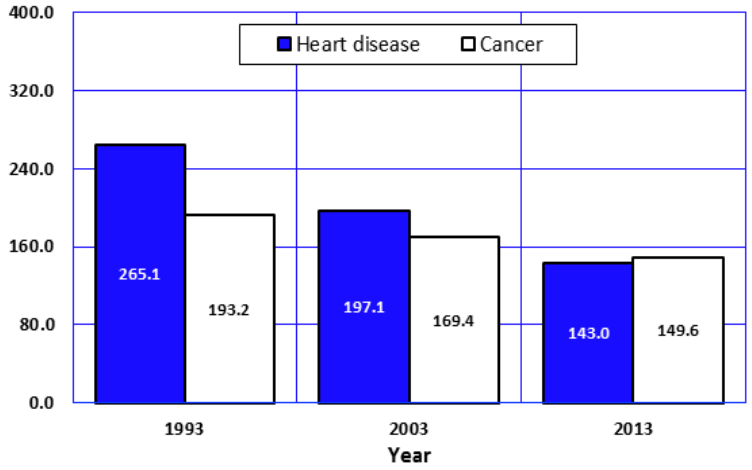
In 2013, the three leading causes of death for males and females were ordered similarly regardless of residence in urban (Maricopa, Pima, Pinal, and Yuma counties) or rural (all the remaining counties) areas of the State (Figure 2B-5, Table 2B-5). Diseases of the heart, cancer, and unintentional injuries were the leading causes of death for urban and rural males, and cancer, disease of the heart, and chronic lower respiratory diseases were leading causes for urban and rural females.

Reflecting differences in urban and rural living conditions, Alzheimer's disease was the 5th leading cause of death for urban males and the 4th leading cause for urban females, but was not in the 5 leading causes for rural males or females. Similarly, intentional self-harm was the 5th leading cause of death for rural males, but was not a leading cause for urban males.

The age-adjusted mortality rate for diseases of the heart decreased by 46.1 percent from 265.1 deaths per 100,000 population in 1993 to 143.0/100,000 in 2013 (**Figure 2B-6**). The age-adjusted mortality rate for cancer declined less, by 29.1 percent, from 1993-2013. In Arizona, the relative risk of death from heart disease versus cancer changed from 37.2 percent greater in 1993 to 4.4 percent less in 2013.

In 2003, 1,198 more Arizonans died from diseases of the heart than cancer (**Table 2B-1**). In 2013, the number of deaths from cancer exceeded the number of heart disease deaths by 696 (**Table 2B-4**).

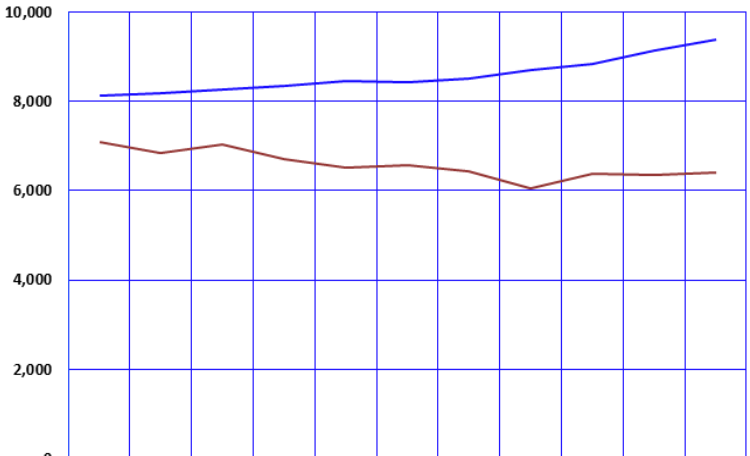
Figure 2B-6
Comparison of Age-adjusted Mortality Rates[a] for Heart Disease and Cancer (Malignant Neoplasm), Arizona, 1993, 2003, and 2013



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

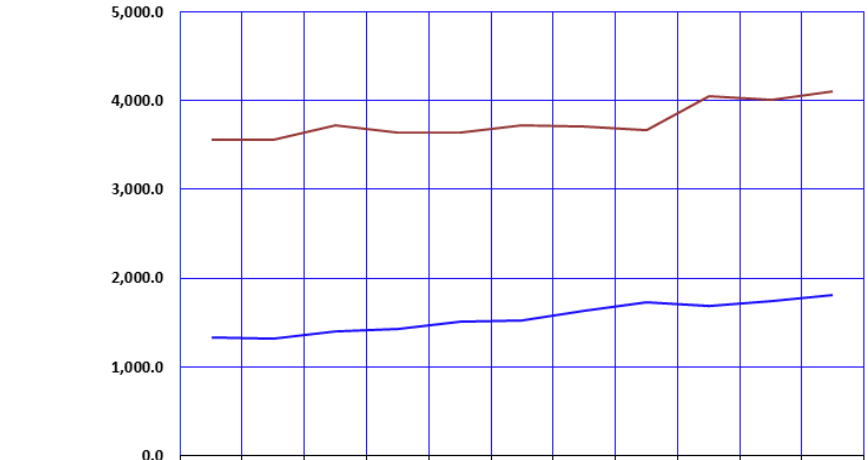
For the past several years, cancer has been the number one cause of death among Arizonans aged 0-84 years (**Figure 2B-7**). Beginning in 1996, the annual number of cancer deaths exceeded the number of deaths from heart disease. In 2013, 2,988 more Arizonans 0-84 years old died from cancer (9,384) than heart disease (6,396).

Figure 2B-7
Number of Deaths from Heart Disease and Cancer among Arizonans 0-84 Years, 2003-2013



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cancer	8,123	8,190	8,278	8,336	8,451	8,432	8,520	8,696	8,849	9,127	9,384
Heart disease	7,084	6,841	7,047	6,712	6,507	6,579	6,435	6,052	6,373	6,359	6,396

Figure 2B-8
Deaths from Heart Disease and Cancer among Arizonans 85+, 2003-2013

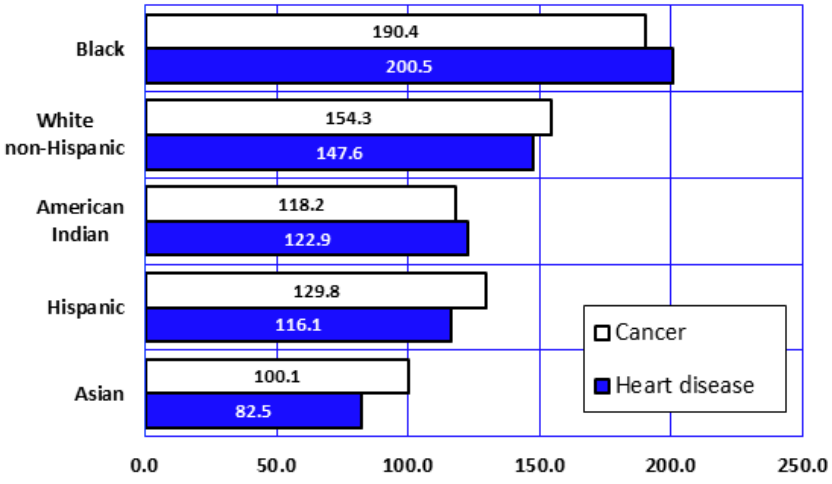


	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cancer	1,327	1,316	1,395	1,431	1,504	1,517	1,627	1,727	1,694	1,744	1,809
Heart disease	3,563	3,560	3,727	3,648	3,640	3,720	3,716	3,667	4,049	4,007	4,100

Among Arizonans age 85 and over, heart disease is the number one leading cause of death by a wide margin. In 2013, adults aged 85 and over accounted for 16.2 percent of all deaths from cancer but 39.1 percent of all deaths from heart disease. In 2013, the median age at death for heart disease was 81 years (**Table 2D-3**) and a minority of deaths (44.1 percent, **Table 2D-4**) were premature, i.e., before reaching the expected years of life at birth for all U.S. residents (78.7 years as of 2011).

However, from 2003 to 2013, the number of deaths from cancer increased by 36.3 percent among Arizonans 85 years or older, more than double the increase observed in diseases of the heart (a 15.1 percent increase).

Figure 2B-9
Age-adjusted Mortality Rates[a] for Heart Disease and Cancer by Race/Ethnicity, Arizona, 2013



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

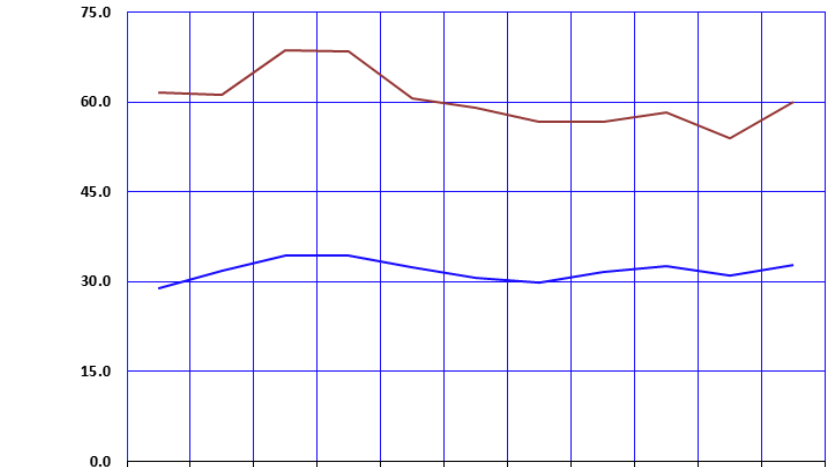
Arizona's White non-Hispanics were 78.9 percent more likely to die from diseases of the heart and 54.1 percent more likely to die from malignant neoplasms in 2013 than Asians, the groups with the lowest risk of each respective cause of death (**Figure 2B-9**, **Table 2B-4**). Compared to Asians, Black or African American Arizonans were 90.2 percent more likely to die of cancer and 2.4 times more likely to die of heart disease.

Among White non-Hispanics, Hispanics, and Asians, the relative risk of death from cancer exceeded the mortality risk of death from heart disease in 2013 (**Table 2B-3**).

The number of deaths from unintentional injuries increased by 13.2 percent from 2,804 in 2012 to 3,173 in 2013 (**Table 2B-1**). In 2013, based on age-adjusted mortality rates, accidents ranked third as a leading cause of death for males and fifth for females (**Table 2B-4**). From 2012 to 2013, the age-adjusted mortality rate for accidents increased 11.3 percent for males and 5.8 percent for females (**Figure 2B-10**).

A number of deaths due to common types of unintentional injuries increased from 2012 to 2013 (see **Table 2B-9**). Deaths due to excessive natural cold were more than two times higher in 2013 than in 2012, and deaths due to fire, flames, or smoke increased 58 percent (likely attributable to the Yarnell Hill Fire that killed 19 firefighters in June of 2013). Deaths due to poisoning by gases or vapors increased 30.2 percent over this period, as did poisonings due to drugs and/or medicaments (16.7 percent).

Figure 2B-10
Age-adjusted Mortality Rates[a] for Accidents (Unintentional Injuries) by Gender and Year, Arizona, 2003-2013



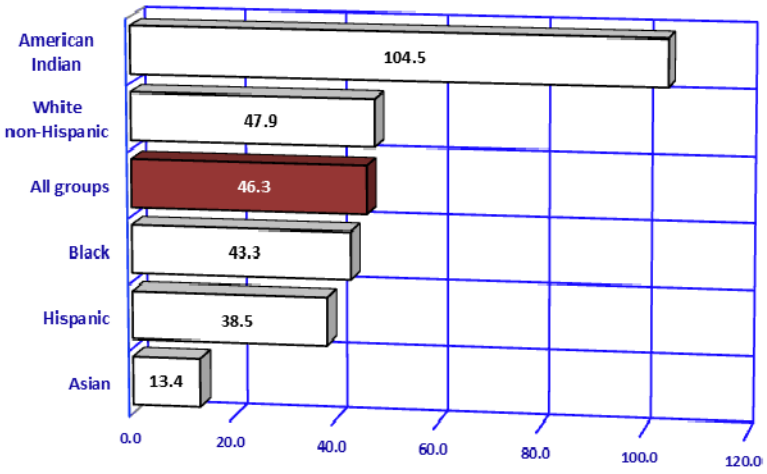
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	28.8	31.7	34.4	34.3	32.3	30.6	29.8	31.6	32.6	31.0	32.8
Male	61.6	61.1	68.7	68.5	60.6	59.0	56.6	56.6	58.3	54.0	60.1

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

The American Indian death rate for unintentional injuries (104.5/100,000) was 7.8 times greater than the rate for Asians (13.4/100,000), the group at the lowest risk of unintentional injury death among racial/ethnic groups in the State (**Figure 2B-11**, **Table 2B-4**).

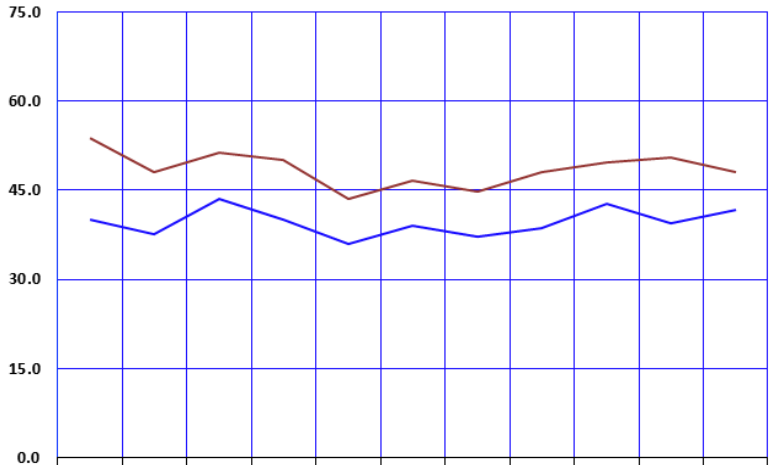
In 2013, Apache (108.7/100,000) and Navajo (106.1/100,000) counties had the two highest age-adjusted mortality rates for unintentional injuries (**Table 5E-11**).

Figure 2B-11
Age-adjusted Mortality Rates[a] for Accidents (Unintentional Injuries) by Race/Ethnicity, Arizona, 2013



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

Figure 2B-12
Age-adjusted Mortality Rates[a] for Chronic Lower Respiratory Diseases[b] by Gender and Year, Arizona, 2003-2013



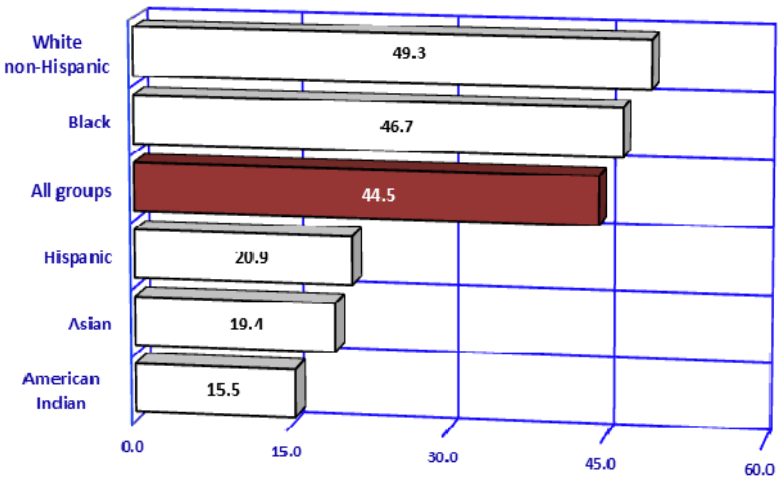
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	40.0	37.7	43.5	40.1	36.0	39.0	37.1	38.6	42.8	39.5	41.8
Male	53.8	48.1	51.3	50.2	43.5	46.6	44.7	48.1	49.7	50.5	48.1

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).

In 2013, chronic lower respiratory diseases (bronchitis, emphysema, asthma) were the 3rd leading cause of death among Arizona residents (**Table 2B-1**). From 2012 to 2013, the mortality rates for chronic lower respiratory diseases (CLRD) slightly increased for women and slightly decreased for men (**Figure 2B-12**, **Table 2B-2**).

Urban females had the lowest mortality rate for CLRD (40.8/100,000) by gender and regional group (**Table 2B-5**). Rural males were the group with the highest mortality risk for CLRD (57.6/100,000), followed by rural females (46.5/100,000) and urban males (45.5 deaths per 100,000).

Figure 2B-13
Age-adjusted Mortality Rates[a] for Chronic Lower Respiratory Diseases by Race/Ethnicity, Arizona, 2013



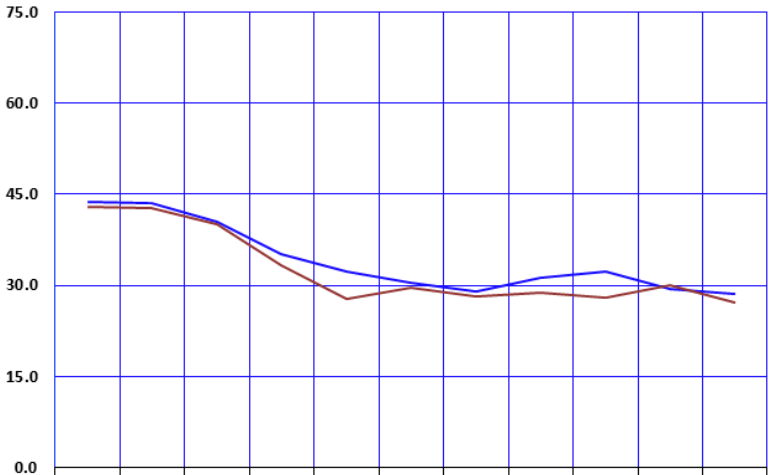
Notes: [a] Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Mortality rates for emphysema, chronic bronchitis, asthma, and other lower respiratory disorders were substantially higher among White non-Hispanics (49.3 deaths per 100,000) and Black or African Americans (46.7/100,000) than they were among Hispanics, (20.9/100,000), Asians (19.4/100,000), and American Indians (15.5/100,000; **Figure 2B-13**, **Table 2B-4**).

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 stroke decreased by 35.8 percent from 43.9 deaths per 100,000 population in 2003 to 28.2/100,000 in 2013 (**Table 2B-3**).

Females remained at greater risk than males to die from a stroke from 2003-2011, with male risk being slightly higher than female risk in 2012 (**Figure 2B-14**). In 2013, the stroke mortality rate for females was again greater than the rate for males (**Figure 2B-14**, **Table 2B-2**).

Figure 2B-14
Age-adjusted Mortality Rates[a] for Cerebrovascular Disease by Gender and Year, Arizona, 2003-2013



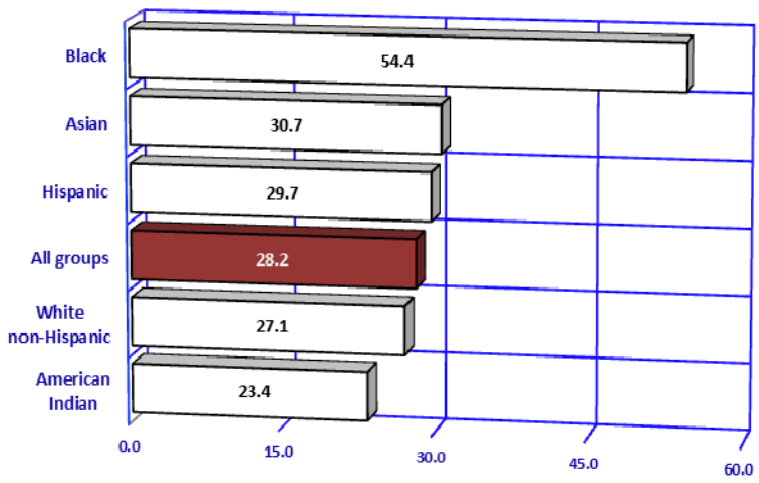
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	43.8	43.6	40.5	35.2	32.2	30.5	29.1	31.3	32.3	29.4	28.5
Male	42.9	42.7	40.0	33.4	27.7	29.6	28.2	28.9	28.0	30.0	27.2

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

Compared to Arizona's overall rate, Blacks or African Americans were 92.9 percent more likely to die from cerebrovascular disease in 2013 (**Figure 2B-15**, **Table 2B-4**). The 2013 mortality rate for cerebrovascular disease among American Indians (23.4/100,000) was the lowest among racial/ethnic groups.

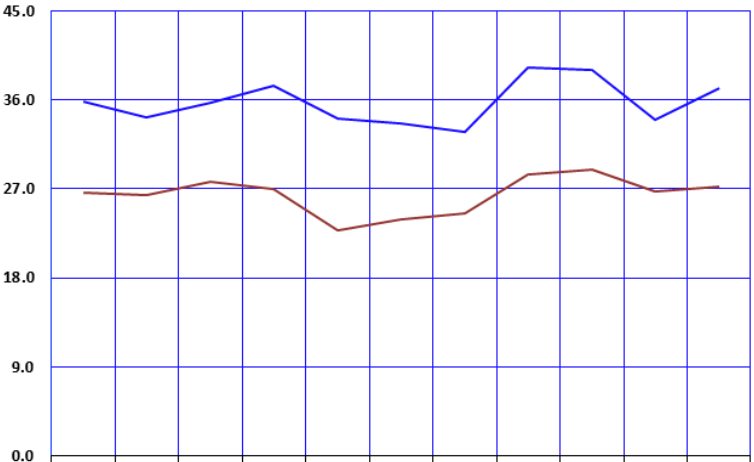
American Indian males had the lowest mortality rate for cerebrovascular disease among all gender and racial/ethnic subgroups (18.6 deaths per 100,000, **Table 2B-4**), while Black or African American females had the highest rate of 54.6 deaths per 100,000.

Figure 2B-15
Age-adjusted Mortality Rates[a] for Cerebrovascular Disease by Race/Ethnicity, Arizona, 2013



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

Figure 2B-16
Age-adjusted Mortality Rates[a] for Alzheimer's Disease by Gender and Year, Arizona, 2003-2013



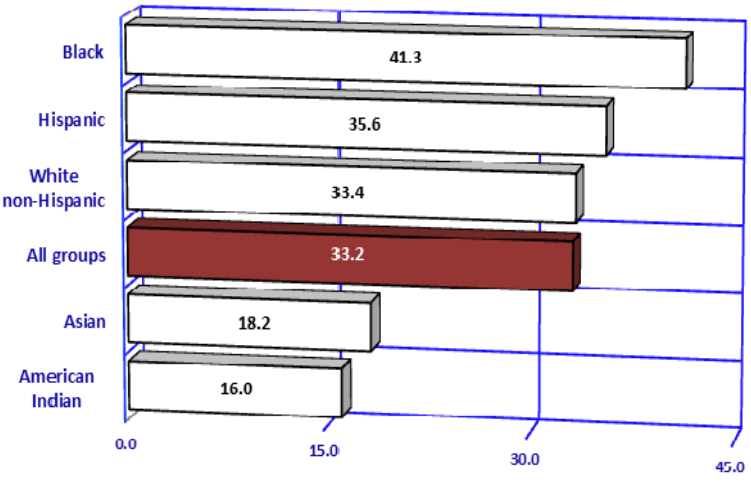
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	35.9	34.2	35.7	37.4	34.1	33.6	32.8	39.3	39.0	34.0	37.2
Male	26.6	26.4	27.7	27.0	22.8	23.9	24.5	28.5	28.9	26.7	27.2

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

Based on the number of deaths in 2013, Alzheimer's disease was the 4th leading cause of death for females and 8th leading cause for males (**Table 2B-4**).

Excluding 2012, the age-adjusted mortality rate for Alzheimer's disease among females remained between 37.2 and 39.3 deaths per 100,000 females (**Figure 2B-16**). During the same period, the male age-adjusted mortality rate for Alzheimer's disease was between 27.2 and 28.9 deaths per 100,000 males.

Figure 2B-17
Age-adjusted Mortality Rates[a] for Alzheimer's Disease by Race/Ethnicity, Arizona, 2013



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

The age-adjusted mortality rates for Alzheimer's disease in 2013 were higher among Black or African Americans (41.3/100,000), Hispanics (35.6/100,000), and White non-Hispanics (33.4/100,000) than among Asian (18.2/100,000) or American Indian residents of Arizona (16.0/100,000; **Figure 2B-17**, **Table 2B-4**).

White non-Hispanic residents of Arizona disproportionately contributed to mortality from Alzheimer's disease. In 2013, White non-Hispanics accounted for 58.4 percent (**Table 10C-1**) of the State's population, but 85.7 percent of all deaths from Alzheimer's disease (2,042 out of 2,384; **Table 2B-4**).

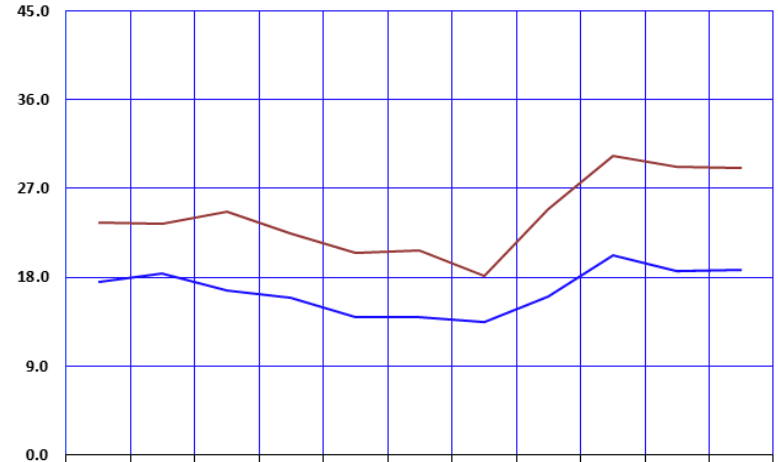
In 2013, the median age at death from Alzheimer's disease was 88 for females and 86 for males (**Table 2D-3**).

Both men and women experienced a decline in mortality rates for diabetes from 2005 to 2009 (**Figure 2B-18**), but from 2009 to 2013, the number of deaths from diabetes increased by 61.8 percent (based on the data in **Table 2B-1**).

In addition to 1,744 deaths that had diabetes assigned as the underlying cause in 2013, another 2,762 deaths had diabetes assigned as a contributing factor. The diabetes-related death rate of 60.7/100,000 (**Table 6A-6**) was 2.6 times greater than the rate for diabetes as underlying cause (23.6/100,000, **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.

Figure 2B-18
Age-adjusted Mortality Rates[a] for Diabetes by Gender and Year, Arizona, 2003-2013



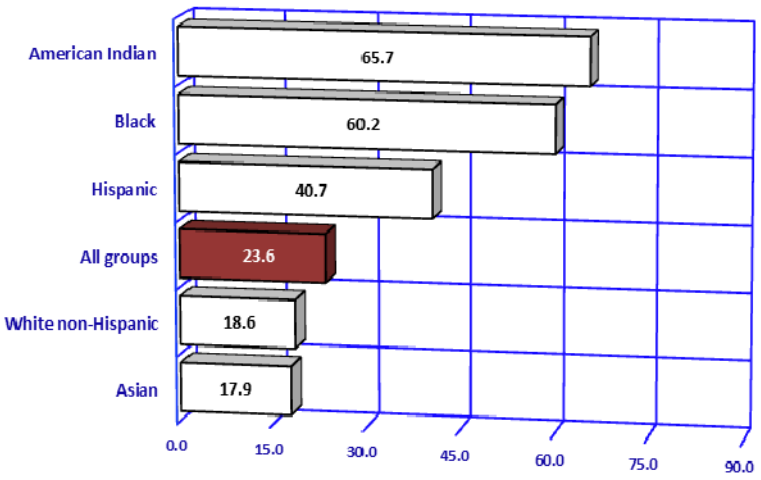
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	17.5	18.4	16.7	15.9	13.9	13.9	13.5	16.0	20.2	18.6	18.8
Male	23.6	23.4	24.7	22.5	20.5	20.7	18.2	24.9	30.3	29.2	29.1

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

In 2013, compared to Arizona's rate, American Indians were 2.8 times more likely to die from diabetes (65.7 deaths per 100,000; **Figure 2B-19**, **Table 2B-4**). The rate of 17.9 deaths per 100,000 among Asians was the lowest rate among all racial/ethnic groups in the State.

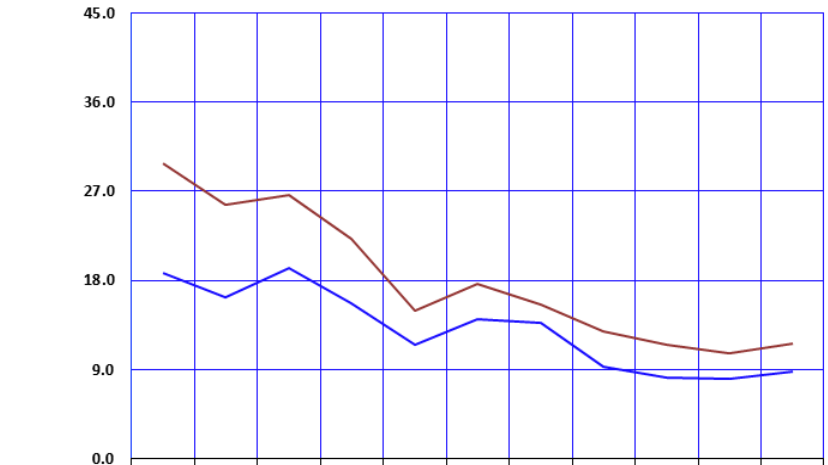
Among the 15 Arizona counties, in 2013 Apache (44.3/100,000), Graham (44.2/100,000), and Yuma (44.1/100,000) counties had the highest mortality rates for diabetes (**Table 5E-11**).

Figure 2B-19
Age-adjusted Mortality Rates[a] for Diabetes by Race/Ethnicity, Arizona, 2013



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

Figure 2B-20
Age-adjusted Mortality Rates[a] for Influenza and Pneumonia by Gender and Year, Arizona, 2003-2013



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	18.7	16.3	19.2	15.7	11.5	14.1	13.7	9.3	8.2	8.0	8.8
Male	29.8	25.7	26.6	22.2	14.9	17.7	15.6	12.8	11.5	10.6	11.6

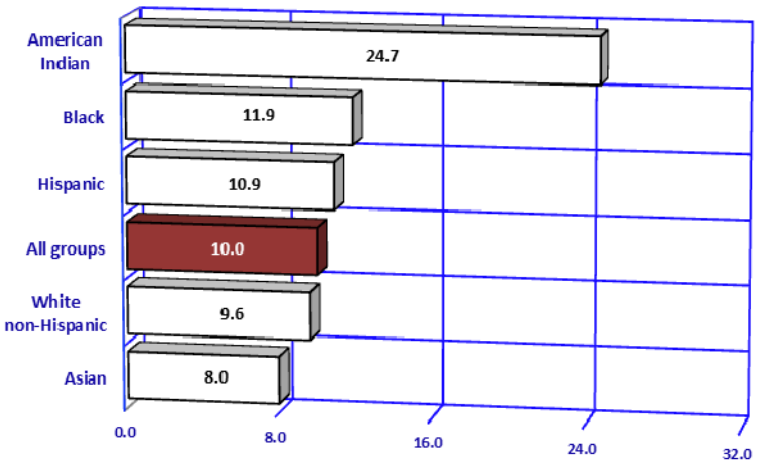
Notes: [a] Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

The number of deaths from influenza and pneumonia decreased by 43.4 percent from a recent high of 1,280 in 2005 to 724 in 2013, though the number of influenza deaths rose 14.0 percent from 2012 to 2013 (**Table 2B-1**). Among the 724 deaths, influenza was identified as the underlying cause for 42 of them, while pneumonia was listed as the underlying cause on 682 death certificates (**Table 2B-6**).

The mortality rate for influenza and pneumonia increased for females from 8.0 deaths per 100,000 in 2012 to 8.8 deaths in 2013 (**Figure 2B-20, Table 2B-2**). The mortality rate for influenza and pneumonia also increased for males from 10.6 deaths per 100,000 in 2012 to 11.6/100,000 in 2013.

In 2013, the age-adjusted mortality rate for Arizona males was 31.8 percent greater than that of Arizona females.

Figure 2B-21
Age-adjusted Mortality Rates[a] for Influenza and Pneumonia by Race/Ethnicity, Arizona, 2013



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

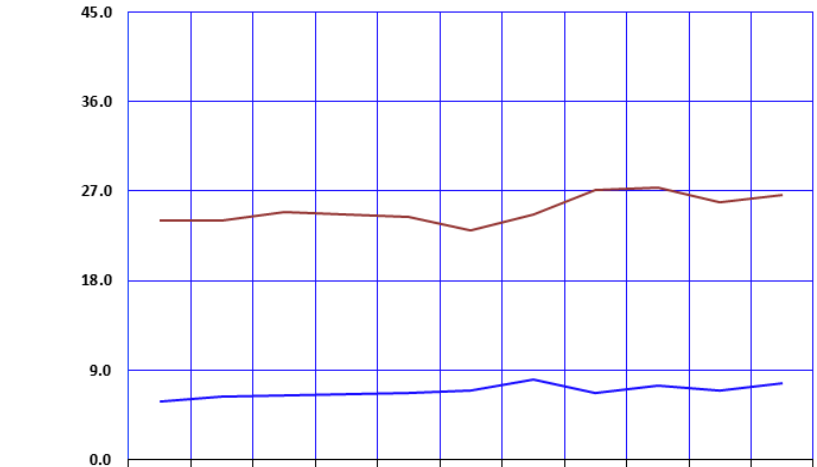
In 2013, American Indian residents of Arizona had the highest mortality rate for influenza and pneumonia (24.7 deaths per 100,000) among the racial/ethnic groups. The age-adjusted mortality of 8.0/100,000 among Asians was the lowest rate among racial/ethnic groups in the State (**Figure 2B-21**, **Table 2B-4**).

Compared to the State death rate for influenza and pneumonia, Apache County's rate was 2.6 times greater (26.4/100,000). The mortality rate was also elevated in Navajo County (20.1/100,000), Gila County (18.3/100,000), and Yuma County (17.8/100,000; **Table 5E-11**).

In 2013, suicide was the 7th leading cause of death among males. It ranked as the 11th cause of mortality for females. The age-adjusted suicide rate increased from 16.2 suicides per 100,000 in 2012 to 17.0/100,000 in 2013 (**Table 2B-3**).

From 2012 to 2013, the suicide rate increased for both males (2.7 percent) and females (10 percent; **Figure 2B-22**, **Table 2B-3**). In 2013, suicide posed a 3.5 times greater mortality risk for males (26.6/100,000) than for females (7.7/100,000).

Figure 2B-22
Age-adjusted Mortality Rates[a] for Suicide by Gender and Year, Arizona, 2003-2013



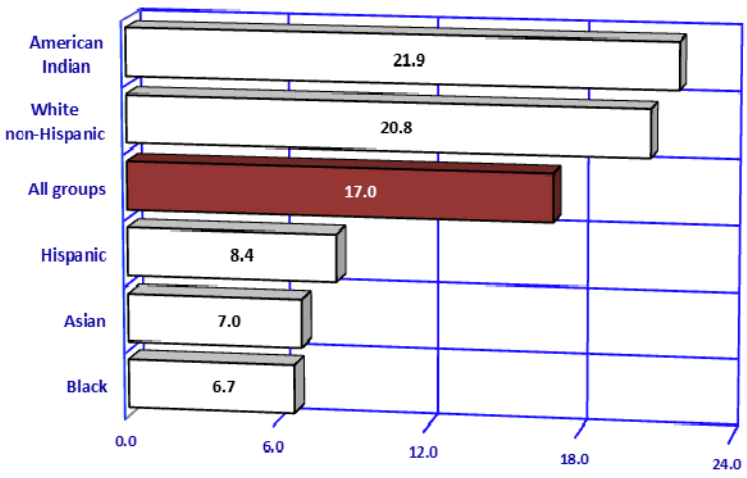
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	5.8	6.3	6.5	6.6	6.7	7.0	8.1	6.7	7.5	7.0	7.7
Male	24.0	24.1	24.9	24.7	24.4	23.0	24.6	27.1	27.4	25.9	26.6

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

In 2013, American Indians had the highest age-adjusted suicide rate (21.9 suicides per 100,000) among racial/ethnic groups, followed by White non-Hispanics (20.8/100,000), Hispanics (8.4/100,000), Asians (7.0/100,000), and Black or African Americans (6.7/100,000; **Figure 2B-23**, **Table 2B-4**).

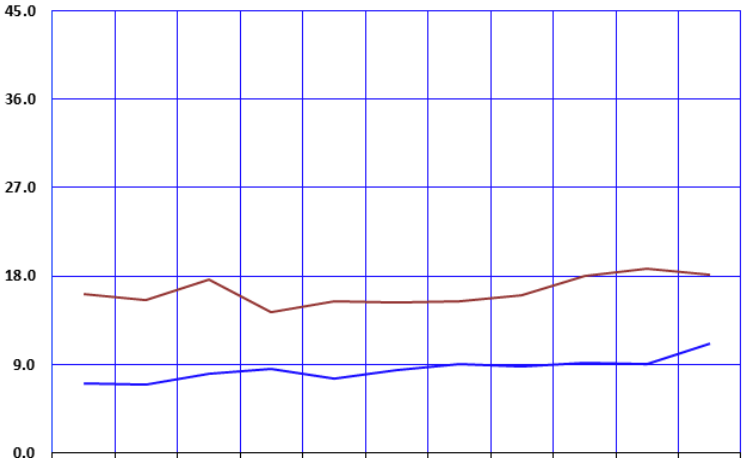
The age-adjusted mortality rates for suicide varied in Arizona in 2013 from 7.9 suicides per 100,000 residents of Yuma County to 38.1 suicides per 100,000 residents of Apache County (**Table 5E-11**).

Figure 2B-23
Age-adjusted Mortality Rates[a] for Suicide by Race/Ethnicity, Arizona, 2013



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

Figure 2B-24
Age-adjusted Mortality Rates[a] for Chronic Liver Disease and Cirrhosis by Gender and Year, Arizona, 2003-2013



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Female	7.1	6.9	8.1	8.5	7.6	8.4	9.1	8.8	9.2	9.0	11.1
Male	16.2	15.6	17.7	14.3	15.4	15.3	15.4	16.1	18.0	18.7	18.2

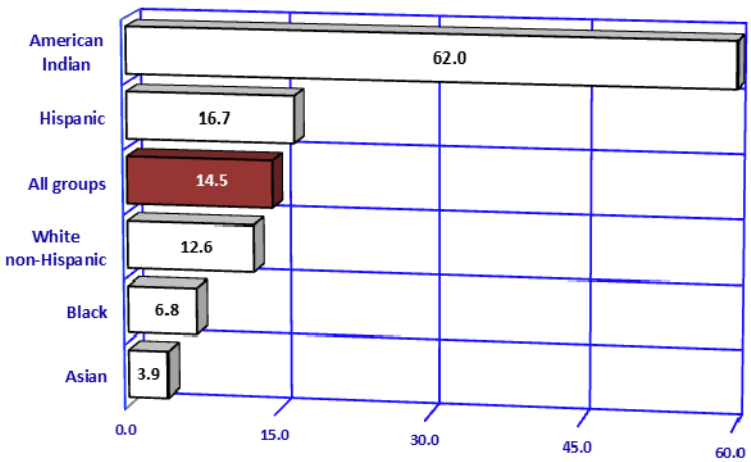
Notes: [a] Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Chronic liver disease and cirrhosis was the 9th leading cause of death in Arizona in 2013 (**Figure 2B-1, Table 2B-1**). Among the 1,040 deaths due to chronic liver disease and cirrhosis, 636 (61.2 percent) were males (**Table 2B-4**).

Among females, the age-adjusted mortality rate for chronic liver disease and cirrhosis slightly increased 23.3 percent from 2012 to 2013. Among males, the mortality rate decreased 2.7 percent from 18.7/100,000 in 2012 to 18.2/100,000 in 2013 (**Figure 2B-24**, **Table 2B-3**).

In 2013, Navajo, Apache, Gila, La Paz, Mohave, and Graham counties had the highest mortality rates for chronic liver disease and cirrhosis (**Table 5E-11**).

Figure 2B-25
Age-adjusted Mortality Rates[a] for Chronic Liver Disease and Cirrhosis by Race/Ethnicity, Arizona, 2013



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

The 2013 death rate for chronic liver disease and cirrhosis among American Indians (62.0 deaths per 100,000) was 4.3 times greater than the state average (14.5/100,000; **Figure 2B-25, Table 2B-4**). The rate for Hispanics (16.7 deaths per 100,000 population) was the second highest among racial/ethnic groups in the State.

Compared to the median age at death from all causes (76 years), those who died from chronic liver disease and cirrhosis were on average 18 years younger (58 years, **Table 2D-3**). In 2013, the median age at death of American Indians who died from chronic liver disease and cirrhosis was only 49 years (**Table 2D-3**).