2B.

LEADING CAUSES OF DEATH

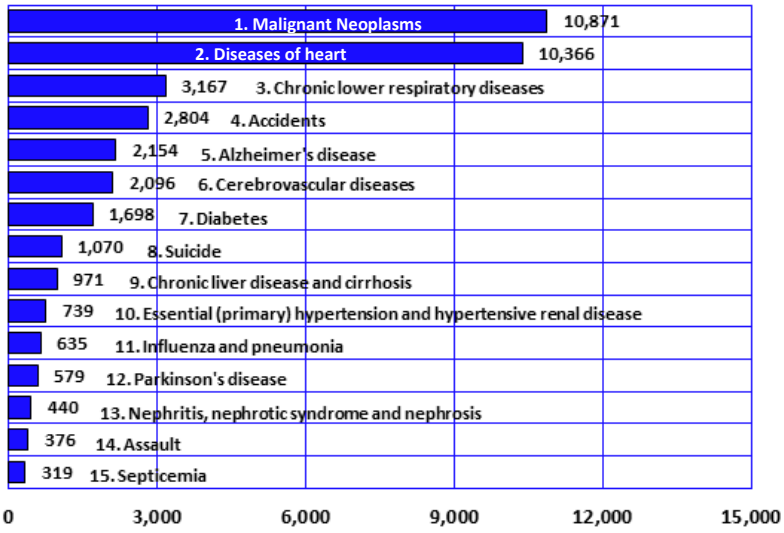
In 2010, the Office of Vital Records (OVR) of the Arizona Department of Health Services implemented the new (2003) Standard U.S. death certificate. The new certificate added several new questions: 1) whether tobacco use contributed to the death, and 2) whether, if the decedent was a female, the death 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 race/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 2012, among the 48,459 deaths of Arizona residents, indication of "two or more races" appeared on only 349 certificates. The total number of deaths for decedents identified as Native Hawaiian was 14. 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 2012

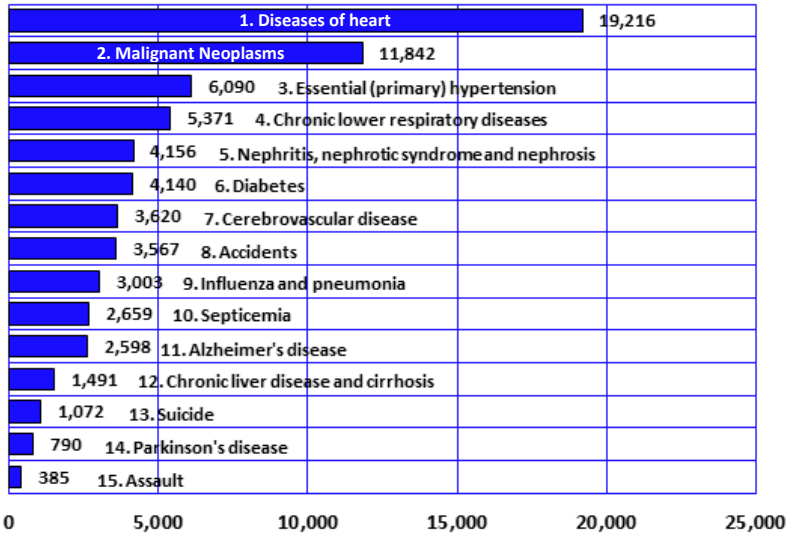
BASED ON THE NUMBER OF DEATHS DUE TO THE UNDERLYING CAUSE:



Based on the number of deaths (but not age-adjusted mortality rate), the leading underlying cause of death to Arizona residents in 2012 was cancer (10,871 or 22.4 percent of all deaths), closely followed by *heart disease*, which accounted for 10,366 or 21.4 percent of deaths (**Figure 2B-1A**, **Table 2B-1**, **Table 5E-14**). The third leading cause of death, *chronic lower respiratory diseases* accounted for 3,167 or 6.5 percent of total deaths. Deaths due to *accidents (unintentional injuries)* ranked fourth in 2012, with 2,804 resident deaths reported. Deaths due to *Alzheimer's disease* ranked fifth in 2012, with 2,154 resident deaths reported. Together, these five causes accounted for 60.6 percent of total deaths in 2012. The fifteen leading causes accounted for 79.0 percent of all deaths among Arizona residents.

Figure 2B-1B
Leading Causes of Death among Arizona Residents in 2012

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 10,366 deaths that had diseases of the heart assigned as the underlying cause, another 8,345 deaths had diseases of the heart assigned as the other than underlying cause. The sum of these two counts (19,216, **Figure 2B-1B**) is the total number of deaths that had any mention of diseases of the heart on the 2012 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 2012, 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, Alzheimer's disease was the 3rd leading cause of death in 2012. Diabetes was among the top five causes of death among Blacks, Hispanics, American Indians, and Asians, but not among White non-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, 2012

Rank	Asian or Pacific Islander	American Indian or Alaska Native	Black or African American	Hispanic or Latino	White non-Hispanic
1	Cancer 100.5	Diseases of heart 122.7	Diseases of heart 190.5	Cancer 127.2	Cancer 155.6
2	Diseases of heart 87.9	Cancer 100.8	Cancer 180.1	Diseases of heart 123.4	Diseases of heart 150.0
3	Alzheimer's disease 31.3	Unintentional injury 94.8	Stroke 56.0	Diabetes 40.8	Chronic lower respiratory diseases 49.4
4	Stroke 30.9	Diabetes 80.2	Diabetes 49.4	Stroke 35.5	Unintentional injury 43.3
5	Diabetes 27.6	Chronic liver disease and cirrhosis 59.2	Alzheimer's Disease 38.5	Unintentional injury 33.9	Alzheimer's Disease 31.6

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

Except American Indians and Black or African Americans, cancer was the number one cause of death among females in all other race/ethnic groups (**Figure 2B-3**, **Table 2B-4**). Diseases of the heart were the 2nd leading cause of female mortality among Asian or Pacific Islander, Hispanic or Latino, and White non-Hispanic females. Diabetes was the 3rd leading cause of death for American Indian and Hispanic or Latino women, and 5th leading cause for Asian and Black females. Alzheimer's disease was among the five leading causes of death for women of all racial/ethnic backgrounds excluding American Indian or Alaskan Natives.

Chronic liver disease and cirrhosis was the 5th 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, 2012

Rank	Asian or Pacific Islander	American Indian or Alaska Native	Black or African American	Hispanic or Latino	White non-Hispanic
1	Cancer 94.6	Diseases of heart 93.9	Diseases of heart 168.5	Cancer 102.4	Cancer 131.5
2	Diseases of heart 68.3	Cancer 90.4	Cancer 147.1	Diseases of heart 101.8	Diseases of heart 115.3
3	Alzheimer's disease 44.0	Diabetes 68.7	Stroke 57.7	Diabetes 35.4	Chronic lower respiratory diseases 44.8
4	Stroke 33.3	Unintentional injury 56.5	Alzheimer's Disease 41.3	Stroke 33.6	Alzheimer's Disease 34.4
5	Diabetes 26.6	Chronic liver disease and cirrhosis 55.5	Diabetes 40.6	Alzheimer's Disease 31.5	Unintentional injury 32.7

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, 2012

Rank	Asian or Pacific Islander	American Indian or Alaska Native	Black or African American	Hispanic or Latino	White non-Hispanic
1	Diseases of heart 116.9	Diseases of heart 160.6	Cancer 220.1	Cancer 161.8	Diseases of heart 190.9
2	Cancer 113.1	Unintentional injury 136.9	Diseases of heart 216.9	Diseases of heart 149.8	Cancer 185.9
3	Diabetes 27.8	Cancer 114.5	Diabetes 59.0	Diabetes 47.4	Chronic lower respiratory diseases 55.5
4	Stroke 26.4	Diabetes 94.1	Stroke 50.9	Unintentional injury 45.4	Unintentional injury 54.0
5	Unintentional injury 20.0	Chronic liver disease and cirrhosis 63.3	Unintentional injury 50.3	Stroke 37.8	Intentional Self-harm Suicide 32.2

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

Diseases of the heart followed by cancer were the two leading causes of death among Asian or Pacific Islander, and White non-Hispanic males (**Figure 2B-4**; **Table 2B-4**). Cancer was the first leading cause of death among Black or African American and Hispanic or Latino males, followed by diseases of the heart.

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

In 2012, based on the age-adjusted mortality rates, diabetes was among the four leading causes of death for Asian, 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, 2012

Rank	Urban male	Urban female	Rural male	Rural female
1	Cancer 177.9	Cancer 126.9	Diseases of heart 210.5	Diseases of heart 129.1
2	Diseases of heart 177.1	Diseases of heart 110.2	Cancer 188.6	Cancer 121.7
3	Unintentional injury 49.6	Chronic lower respiratory diseases 38.6	Unintentional injury 76.8	Unintentional injury 44.6
4	Chronic lower respiratory diseases 49.0	Alzheimer's Disease 36.3	Chronic lower respiratory diseases 55.9	Chronic lower respiratory diseases 43.8
5	Stroke 29.5	Stroke 29.6	Intentional Self-harm Suicide 40.3	Stroke 28.2

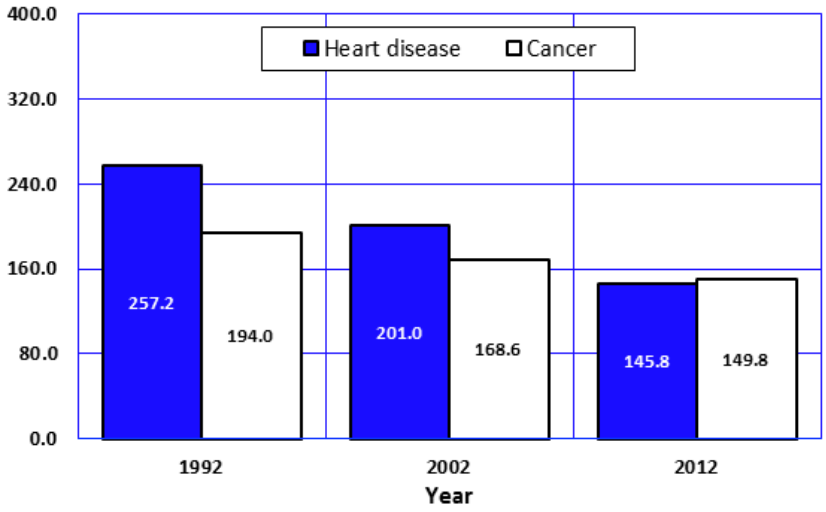
Notes: [a] Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard; [b] Urban = Maricopa, Pima, Pinal and Yuma counties. The remaining counties comprise Arizona's rural areas.

In 2012, the profile of the leading causes of death differed by gender for the 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**). Cancer exceeded diseases of the heart as the leading cause of death among urban males and females. For rural males and females, diseases of the heart followed by cancer were the two leading causes of death. For urban males, and for both urban and rural females, unintentional injury was the third leading cause of death and chronic lower respiratory was the 4th leading cause of death. For urban females, the 3rd, 4th, and 5th leading causes of death were chronic lower respiratory diseases, Alzheimer's disease, and stroke.

The age-adjusted mortality rate for diseases of the heart decreased by 43.3 percent from 257.2 deaths per 100,000 population in 1992 to 145.8/100,000 in 2012 (**Figure 2B-6**). The age-adjusted mortality rate for cancer declined less, by 22.8 percent, from 1992-2012. In Arizona, the relative risk of death from heart disease versus cancer changed from 32.6 percent greater in 1992 to 2.6 percent less in 2012.

In 2002, 1,403 more Arizonans died from diseases of the heart than cancer (**Table 2B-1**). In 2012, the number of deaths from cancer exceeded the number of heart disease deaths by 505 (**Table 2B-4**).

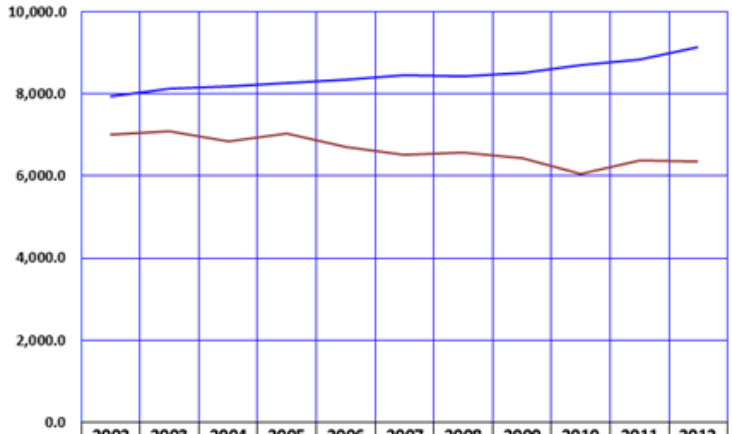
Figure 2B-6
Comparison of Age-adjusted Mortality Rates[a] for Heart Disease and Cancer (Malignant Neoplasm), Arizona, 1992, 2002, and 2012



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

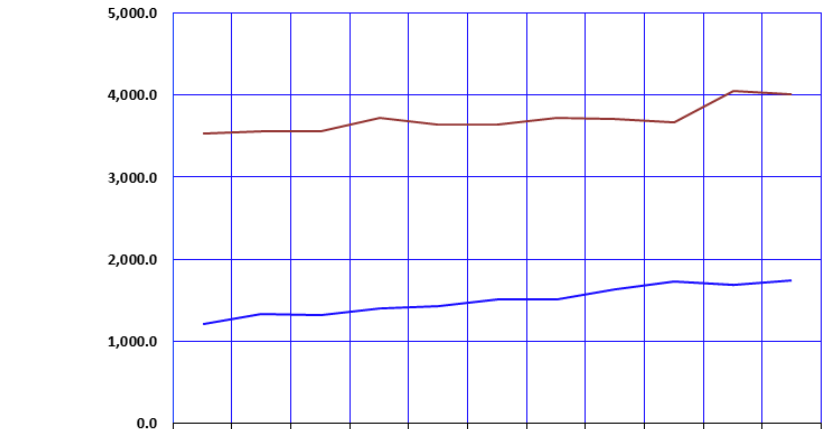
For the past several years, cancer has been the number one cause of death among Arizonans aged 0-84 years (**Figure 2B-7**). Beginning in 1996, the annual number of cancer deaths exceeded the number of deaths from heart disease. In 2012, 2,768 more Arizonans 0-84 years old died from cancer (9,127) than heart disease (6,359).

Figure 2B-7
Number of Deaths from Heart Disease and Cancer among Arizonans 0-84 Years, 2002-2012



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cancer	7,936	8,123	8,190	8,278	8,336	8,451	8,432	8,520	8,696	8,849	9,127
Heart disease	7,023	7,084	6,841	7,047	6,712	6,507	6,579	6,435	6,052	6,373	6,359

Figure 2B-8
Deaths from Heart Disease and Cancer among Arizonans 85+, 2002-2012

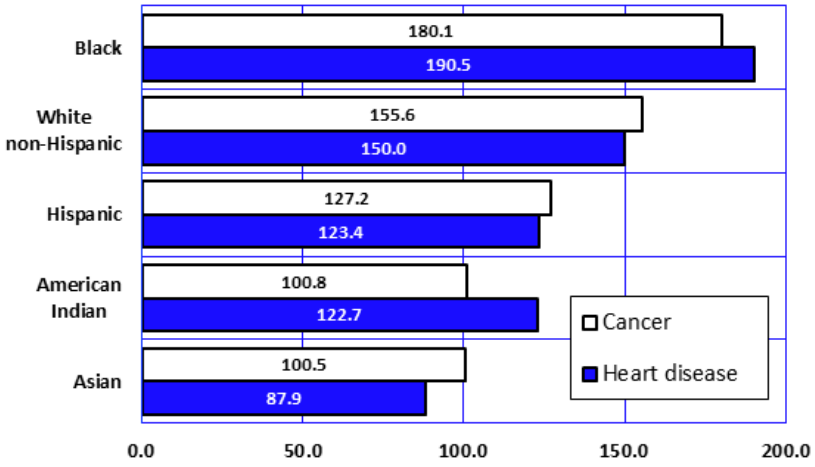


	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cancer	1,212	1,327	1,316	1,395	1,431	1,504	1,517	1,627	1,727	1,694	1,744
Heart disease	3,526	3,563	3,560	3,727	3,648	3,640	3,720	3,716	3,667	4,049	4,007

Among Arizonans age 85 and over, heart disease is the number one leading cause of death by a wide margin. In 2012, adults aged 85 and over accounted for 16.0 percent of all deaths from cancer but 38.7 percent of all deaths from heart disease. In 2012, the median age at death for heart disease was 81 years (**Table 2D-3**) and only a minority of deaths (38.5 percent, **Table 2D-4**) were premature, i.e., before reaching the expected years of life at birth for all U.S. residents (77.7 years).

However, from 2002 to 2012, the number of deaths from cancer increased by 43.9 percent among Arizonans 85 years or older, more than 3 times the increase observed in diseases of the heart (a 13.6 percent increase).

Figure 2B-9
Age-adjusted Mortality Rates[a] for Heart Disease and Cancer by Race/Ethnicity, Arizona, 2012



Arizona's White non-Hispanics were 70.6 percent more likely to die from diseases of the heart and 54.8 percent more likely to die from malignant neoplasms in 2012 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 79.2 percent more likely to die of cancer and more than twice as likely to die of heart disease.

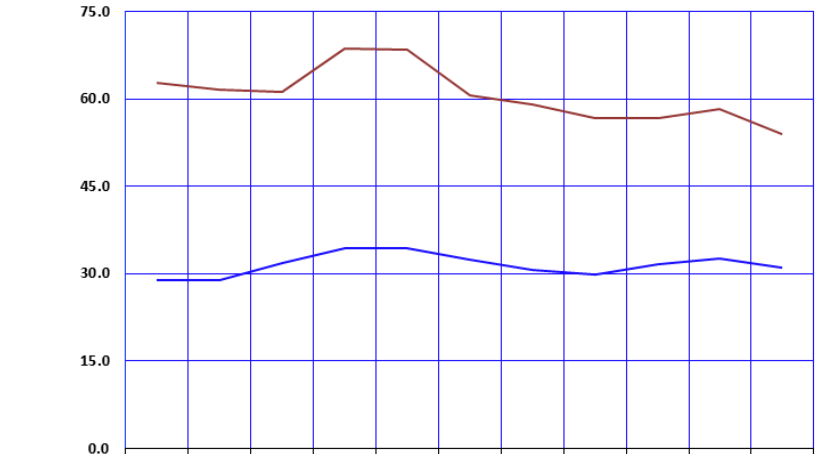
Among White non-Hispanics, Hispanics, and Asians, the relative risk of death from cancer exceeded the mortality risk of death from heart disease in 2012 (**Table 2B-3**).

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

The number of deaths from unintentional injuries decreased by 11.2 percent from a recent peak of 3,156 in 2006 to 2,804 in 2012 (**Table 2B-1**). In 2012, 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 2011 to 2012 the age-adjusted mortality rate for accidents slightly decreased for both males and females (**Figure 2B-10**).

In 2012, 747 deaths were caused by motor vehicle accidents, a decrease of 5.1 percent from 2011. Additionally, Arizonans experienced a 6.4 percent decrease in the number of accidental drug poisoning/overdoses from 2011 (n = 781) to 2012 (n = 731). In 2009 and 2010, the number of deaths from accidental poisoning by drugs exceeded the number of deaths from motor vehicle-related injuries (**Table 2B-9**), but in 2011 and 2012, motor vehicle accidents claimed a greater number of lives than accidental drug poisoning.

Figure 2B-10
Age-adjusted Mortality Rates[a] for Accidents (Unintentional Injuries) by Gender and Year, Arizona, 2002-2012



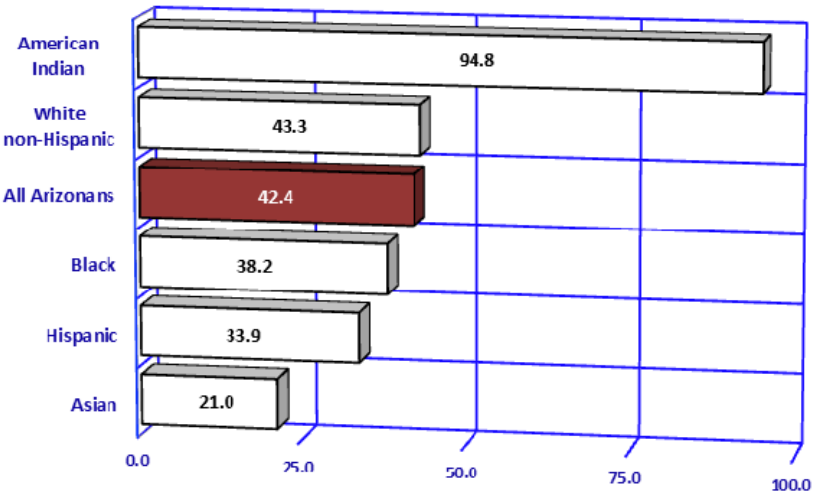
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Female	28.8	28.8	31.7	34.4	34.3	32.3	30.6	29.8	31.6	32.6	31.0
Male	62.8	61.6	61.1	68.7	68.5	60.6	59.0	56.6	56.6	58.3	54.0

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 (94.8/100,000) was 4.5 times greater than the rate for Asians (21.0/100,000), the group at the lowest risk of unintentional injury death among racial/ethnic groups in the State (**Figure 2B-11**, **Table 2B-4**).

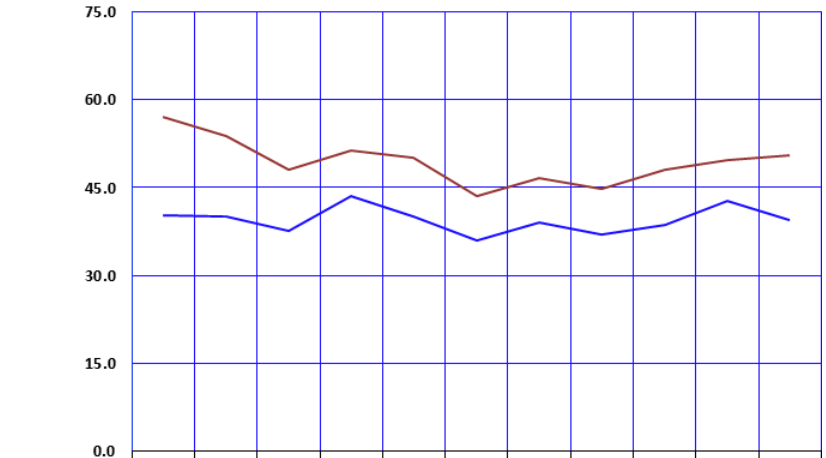
In 2012, Navajo (100.2/100,000) and Apache (98.2/100,000) counties had the two highest age-adjusted mortality rates for unintentional injuries (**Table 5E-11**).

Figure 2B-11
Age-adjusted Mortality Rates[a] for Accidents (Unintentional Injuries) by Race/Ethnicity, Arizona, 2012



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, 2002-2012



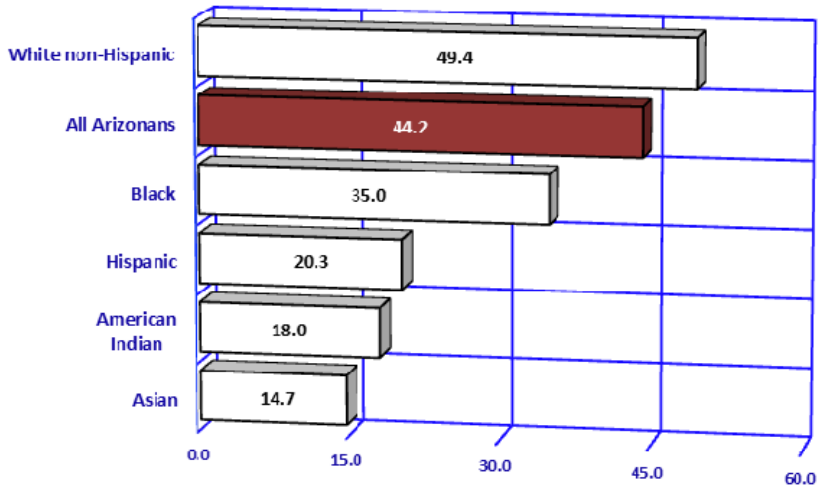
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Female	40.3	40.0	37.7	43.5	40.1	36.0	39.0	37.1	38.6	42.8	39.5
Male	57.1	53.8	48.1	51.3	50.2	43.5	46.6	44.7	48.1	49.7	50.5

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)

In 2012, chronic lower respiratory diseases (bronchitis, emphysema, asthma) were the 3rd leading cause of death among Arizona residents (**Table 2B-1**). From 2011 to 2012, the mortality rates for chronic lower respiratory diseases (CLRD) decreased for women and increased for men (**Figure 2B-12**, **Table 2B-2**).

Urban females had the lowest mortality rate for CLRD (38.6/100,000) among the gender by region groups (**Table 2B-5**). Rural males were the group with the highest mortality risk for CLRD (55.9/100,000), followed by urban males (49.0 deaths per 100,000), and rural females (43.8/100,000).

Figure 2B-13
Age-adjusted Mortality Rates[a] for Chronic Lower Respiratory Diseases by Race/Ethnicity, Arizona, 2012



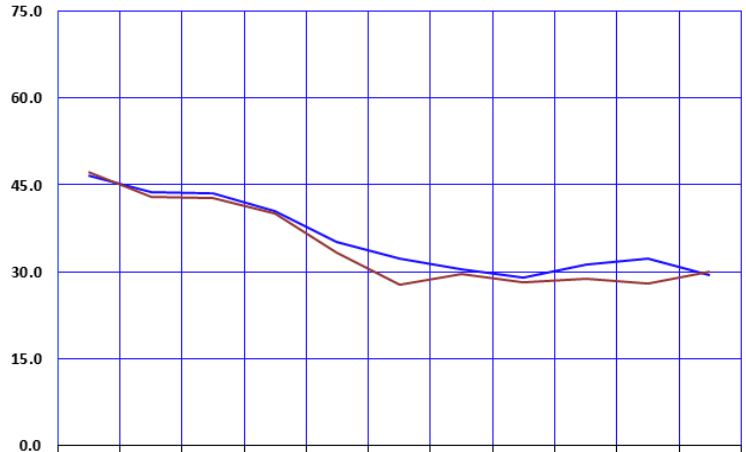
Notes: [a] Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Mortality rates for emphysema, chronic bronchitis, asthma, and other lower respiratory disorders were substantially higher among White non-Hispanics (49.4 deaths per 100,000) than they were among Black or African Americans (35.0/100,000), Hispanics, (20.3/100,000), American Indians (18.0/100,000), and Asians (14.7/100,000); **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 36.4 percent from 47.0 deaths per 100,000 population in 2002 to 29.9/100,000 in 2012 (**Table 2B-3**).

In 2012, the number of deaths from cerebrovascular disease was greater among females (1,186) than males (910, **Table 2B-4**). Females remained at greater risk than males to die from a stroke from 2003-2012 (**Figure 2B-14**). From 2011 to 2012, the age-adjusted mortality rate for stroke decreased for females but increased for males (**Figure 2B-14**, **Table 2B-2**).

Figure 2B-14
Age-adjusted Mortality Rates[a] for Cerebrovascular Disease by Gender and Year, Arizona, 2002-2012



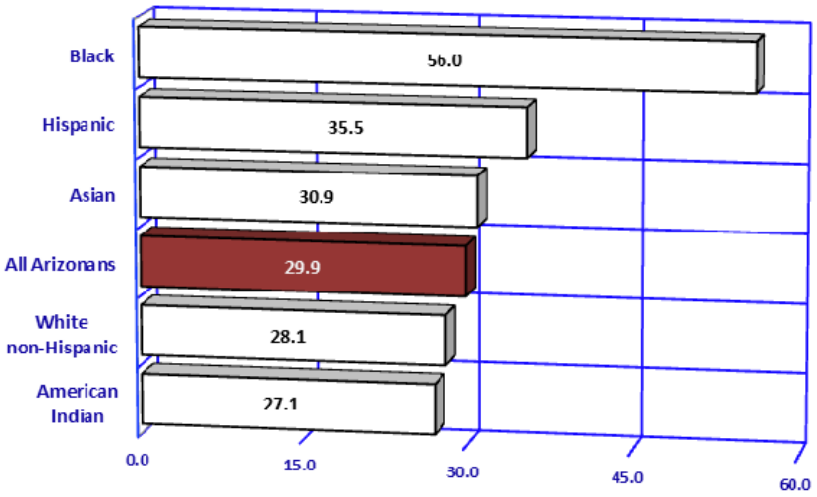
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Female	46.7	43.8	43.6	40.5	35.2	32.2	30.5	29.1	31.3	32.3	29.4
Male	47.3	42.9	42.7	40.0	33.4	27.7	29.6	28.2	28.9	28.0	30.0

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 87.3 percent more likely to die from cerebrovascular disease in 2012 (**Figure 2B-15**, **Table 2B-4**). The 2012 mortality rate for cerebrovascular disease among American Indians (27.1/100,000) was the lowest among racial/ethnic groups.

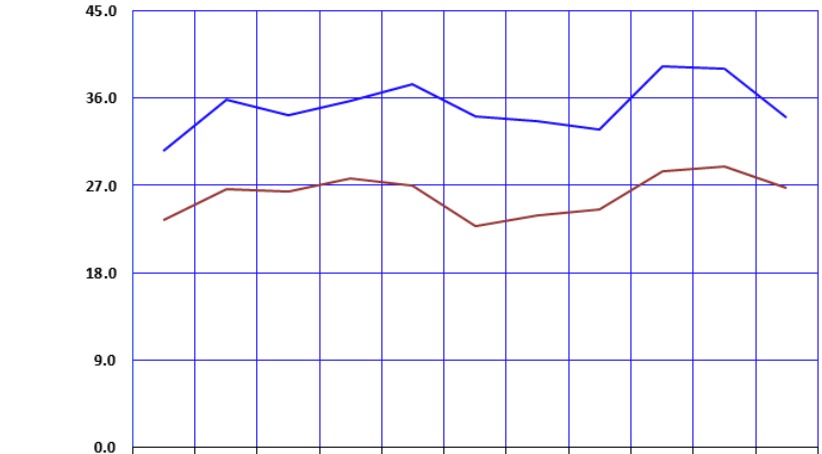
American Indian males had the lowest mortality rate for cerebrovascular disease among gender by racial/ethnic subgroups (24.5 deaths per 100,000, **Table 2B-4**), while Black or African American females had the highest rate of 57.7 deaths per 100,000.

Figure 2B-15
Age-adjusted Mortality Rates[a] for Cerebrovascular Disease by Race/Ethnicity, Arizona, 2012



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, 2002-2012



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Female	30.5	35.9	34.2	35.7	37.4	34.1	33.6	32.8	39.3	39.0	34.0
Male	23.4	26.6	26.4	27.7	27.0	22.8	23.9	24.5	28.5	28.9	26.7

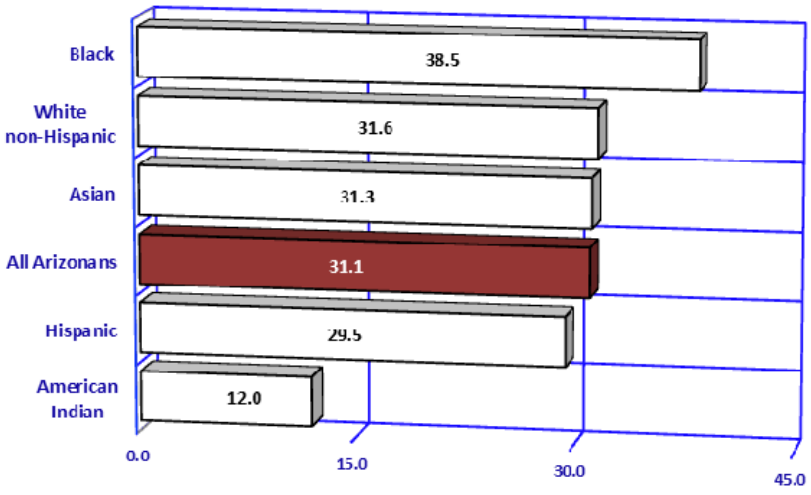
Notes: [a] Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Based on the number of deaths in 2012, Alzheimer's disease was the 6th leading cause of death for females and 12th leading cause for males (**Table 2B-4**).

From 2010 to 2012, the age-adjusted mortality rate for Alzheimer's disease among females decreased by 13.5 percent from 39.3/100,000 to 34.0/100,000 in 2012 (**Figure 2B-16**). During the same period, the age-adjusted mortality rate for Alzheimer's disease decreased by 6.3 percent from 28.5/100,000 in 2010 to 26.7/100,000 in 2012.

In 2012, the age-adjusted death rate for Alzheimer's disease was 27.3 percent greater for females than for males.

Figure 2B-17
Age-adjusted Mortality Rates[a] for Alzheimer's Disease by Race/Ethnicity, Arizona, 2012



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 2012 were higher among Black or African American (38.5/100,000) and White non-Hispanic (31.6 deaths per 100,000) than they were among Asian (31.3/100,000), Hispanic or Latino (29.5/100,000), and American Indian residents of Arizona (12.0/100,000; **Figure 2B-17**, **Table 2B-4**).

White non-Hispanic residents of Arizona disproportionately contributed to mortality from Alzheimer's disease. In 2012, White non-Hispanics accounted for 58.8 percent (**Table 10C-1**) of the State's population, but 86.8 percent of all deaths from Alzheimer's disease (1,869 out of 2,154; **Table 2B-4**).

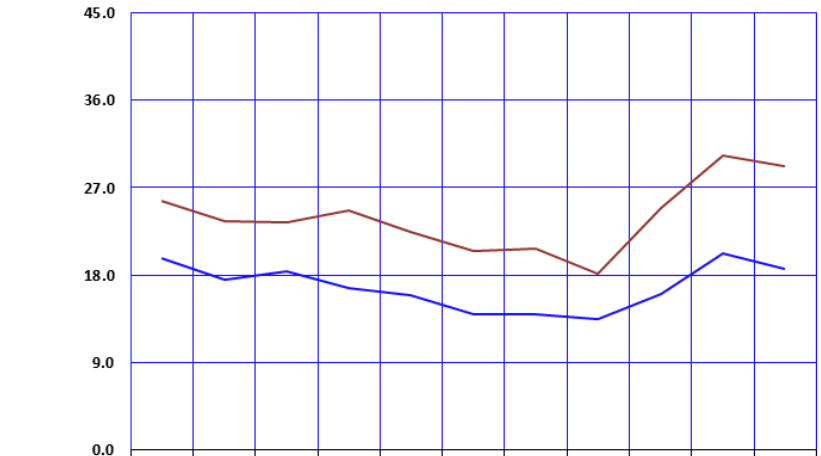
In 2012, the median age at death from Alzheimer's disease was 88 for females and 86 for males (**Table 2D-3**).

Both men and women experienced a decline in mortality rates for diabetes from 2005 to 2009 (**Figure 2B-18**), but from 2009 to 2012, the number of deaths from diabetes increased by 57.5 percent (based on the data in **Table 2B-1**).

In addition to 1,698 deaths that had diabetes assigned as the underlying cause in 2012, another 2,442 deaths had diabetes assigned as a contributing factor. The diabetes-related death rate of 57.4/100,000 (**Table 6A-6**) was 2.4 times greater than the rate for diabetes as underlying cause (23.5/100,000, **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, 2002-2012



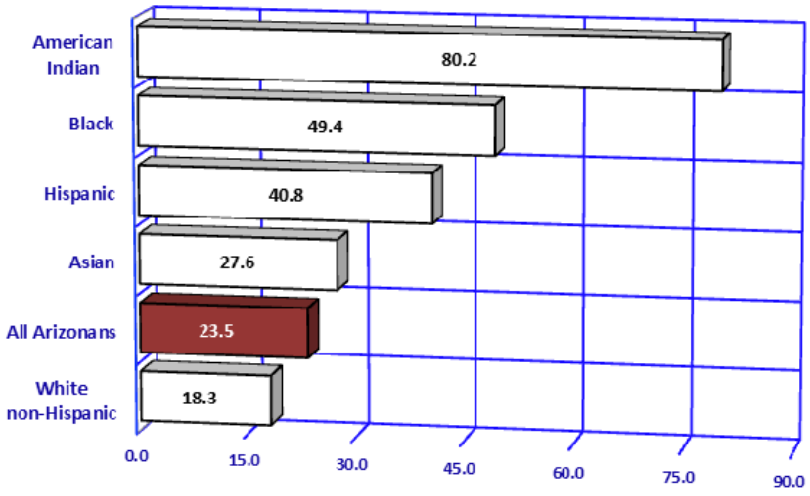
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Female	19.7	17.5	18.4	16.7	15.9	13.9	13.9	13.5	16.0	20.2	18.6
Male	25.6	23.6	23.4	24.7	22.5	20.5	20.7	18.2	24.9	30.3	29.2

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

In 2012, compared to Arizona's rate, American Indians were 3.4 times more likely to die from diabetes (80.2 deaths per 100,000; **Figure 2B-19**, **Table 2B-4**). The rate of 18.3 deaths per 100,000 among White non-Hispanics was the lowest rate among race/ethnic groups in the State.

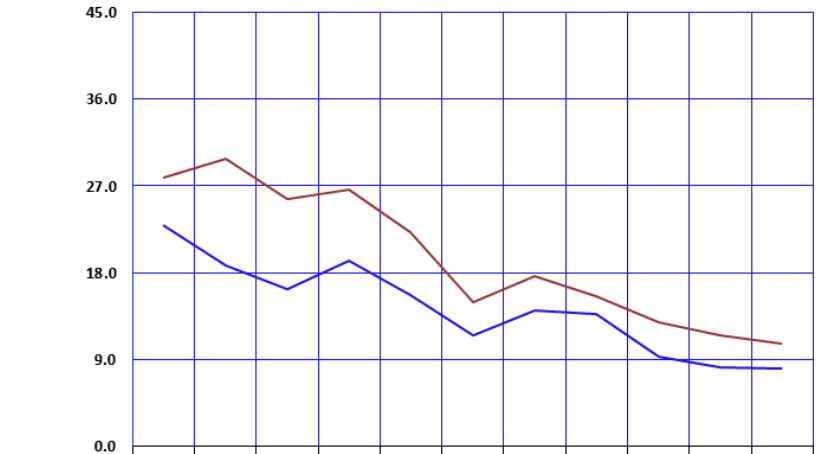
Among the 15 Arizona counties, in 2012 Greenlee (89.5/100,000), Graham (51.7/100,000), and Apache (36.9/100,000) counties had the highest mortality rates for diabetes (**Table 5E-11**).

Figure 2B-19
Age-adjusted Mortality Rates[a] for Diabetes by Race/Ethnicity, Arizona, 2012



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, 2002-2012



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Female	22.9	18.7	16.3	19.2	15.7	11.5	14.1	13.7	9.3	8.2	8.0
Male	27.8	29.8	25.7	26.6	22.2	14.9	17.7	15.6	12.8	11.5	10.6

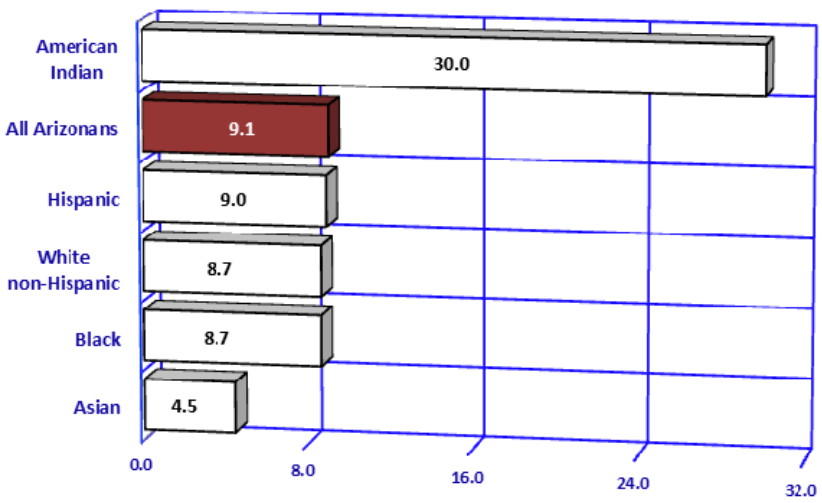
Notes: [a] Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

The number of deaths from influenza and pneumonia decreased by 50.4 percent from a recent high of 1,280 in 2005 to 635 in 2012 (**Table 2B-1**). In 2012, influenza and pneumonia were ranked the 10th leading cause of death in Arizona. Among the 635 deaths, influenza was identified as the underlying cause for 19 of them, while pneumonia was listed as the underlying cause on 616 death certificates (**Table 2B-6**).

The mortality rate for influenza and pneumonia decreased for females from 8.2 deaths per 100,000 in 2011 to 8.0 deaths in 2012 (**Figure 2B-20, Table 2B-2**). The mortality rate for influenza and pneumonia also decreased for males from 11.5 deaths per 100,000 in 2011 to 10.6/100,000 in 2012.

In 2012, the age-adjusted mortality rate for Arizona males was 32.5 percent greater than that of Arizona females.

Figure 2B-21
Age-adjusted Mortality Rates[a] for Influenza and Pneumonia by Race/Ethnicity, Arizona, 2012



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

In 2012, American Indian residents of Arizona had the highest mortality rate for influenza and pneumonia (30.0 deaths per 100,000) among the racial/ethnic groups. The age-adjusted mortality of 4.5/100,000 among Asians was the lowest rate among racial/ethnic groups in the State (**Figure 2B-21**, **Table 2B-4**).

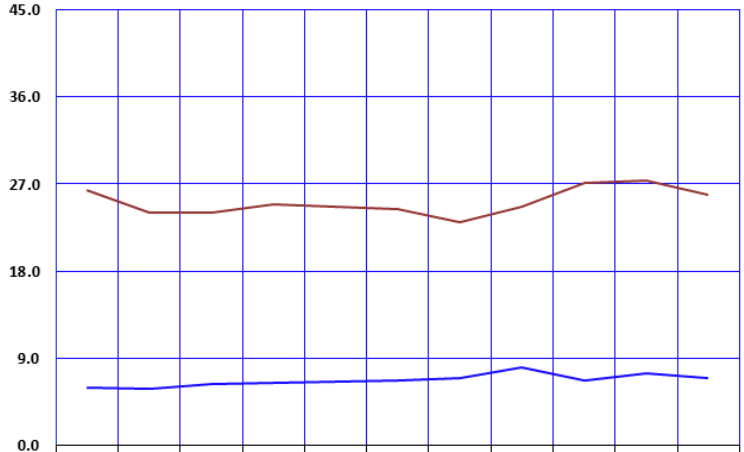
Compared to the State death rate for influenza and pneumonia, Yuma County's rate was 3.8 times greater (24.2/100,000). The mortality rate was also elevated in Apache County (20.2/100,000), Navajo County (19.7/100,000), Coconino County (16.5/100,000), and Graham County (15.3/100,000; **Table 5E-11**).

In 2012, suicide was the 9th leading cause of death among males. It ranked as the 12th cause of mortality for females. The age-adjusted suicide rate decreased from 17.2 per 100,000 residents of the State in 2011 to 16.2 suicides per 100,000 in 2012 (**Table 2B-3**).

The suicide rate decreased for females from 7.5/100,000 in 2011 to 7.0/100,000 in 2012 (**Figure 2B-22**, **Table 2B-3**). The male mortality risk for suicide decreased from the 2011 rate of 27.4/100,000 to 25.9/100,000 in 2012.

In 2012, suicide posed a 3.7 times greater mortality risk for males (25.9/100,000) than for females (7.0/100,000).

Figure 2B-22
Age-adjusted Mortality Rates[a] for Suicide by Gender and Year, Arizona, 2002-2012



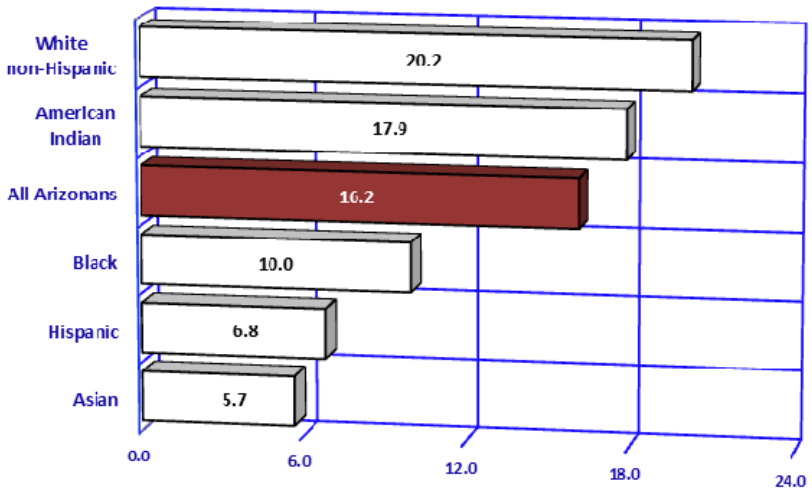
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Female	6.0	5.8	6.3	6.5	6.6	6.7	7.0	8.1	6.7	7.5	7.0
Male	26.4	24.0	24.1	24.9	24.7	24.4	23.0	24.6	27.1	27.4	25.9

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

In 2012, White non-Hispanics had the highest age-adjusted suicide rate (20.2 suicides per 100,000) among the racial/ethnic groups, followed by American Indians (17.9/100,000), Black or African Americans (10.0/100,000), Hispanics (6.8/100,000), and Asians (5.7/100,000; **Figure 2B-23**, **Table 2B-4**).

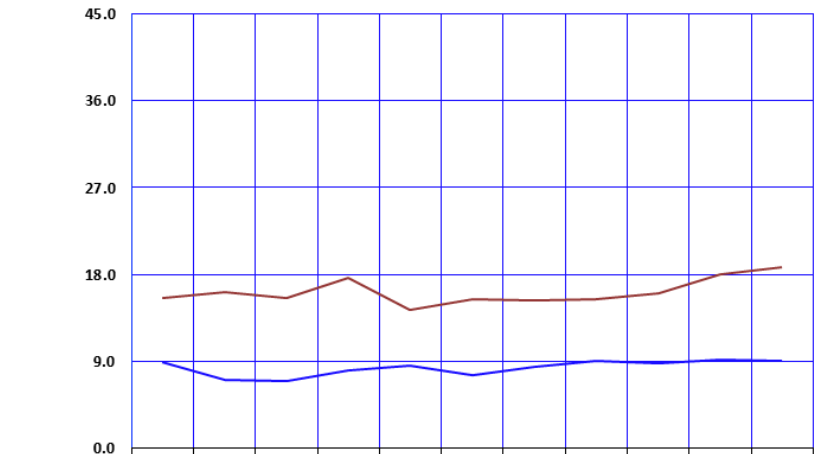
The age-adjusted mortality rates for suicide varied in Arizona in 2012 from 4.2 suicides per 100,000 residents of Santa Cruz County to 33.2 suicides per 100,000 residents of Apache County (**Table 5E-11**).

Figure 2B-23
Age-adjusted Mortality Rates[a] for Suicide by Race/Ethnicity, Arizona, 2012



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, 2002-2012



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Female	8.9	7.1	6.9	8.1	8.5	7.6	8.4	9.1	8.8	9.2	9.0
Male	15.6	16.2	15.6	17.7	14.3	15.4	15.3	15.4	16.1	18.0	18.7

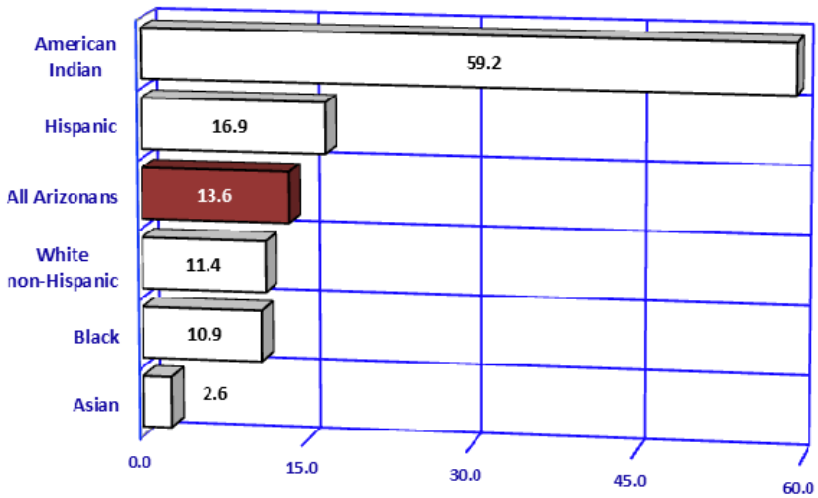
Notes: [a] Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Chronic liver disease and cirrhosis was the 9th leading cause of death in Arizona in 2012 (**Figure 2B-1, Table 2B-1**). Among the 971 deaths due to chronic liver disease and cirrhosis, 644 (66.3 percent) were males (**Table 2B-4**).

Among females, the age-adjusted mortality rate for chronic liver disease and cirrhosis slightly decreased from 9.2/100,000 in 2011 to 9.0 deaths per 100,000 in 2012. Among males, the mortality rate increased 3.9 percent from 18.0/100,000 in 2011 to 18.7/100,000 in 2012 (**Figure 2B-24**, **Table 2B-3**).

In 2012, La Paz, Apache, Navajo, Graham, and Gila 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, 2012



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

The 2012 death rate for chronic liver disease and cirrhosis among American Indians (59.2 deaths per 100,000) was 4.4 times greater than the state average (13.6/100,000; **Figure 2B-25, Table 2B-4**). The rate for Hispanics (16.9 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 (77 years), those who died from chronic liver disease and cirrhosis were on average 18 years younger (59 years, **Table 2D-3**). In 2012, the median age at death of American Indians who died from chronic liver disease and cirrhosis was only 50 years (**Table 2D-3**).