

## 2B.

### LEADING CAUSES OF DEATH

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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).

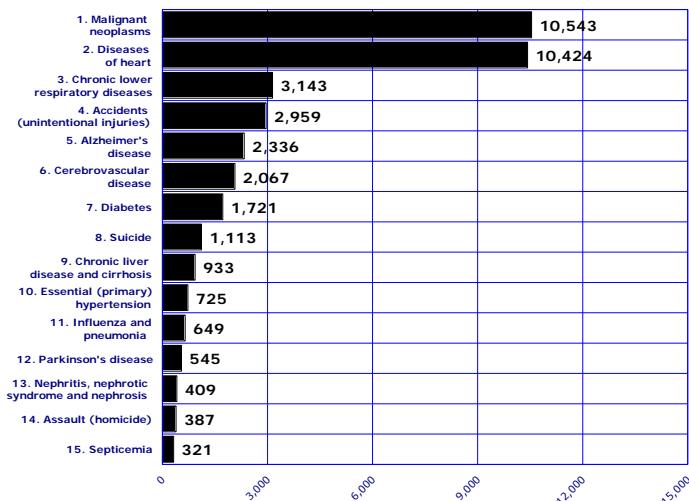
The death certificate now includes a new classification of the decedent's race/ethnic status, consistent with the revised federal standards for collecting and reporting racial and ethnic status. These standards were published in the Federal Register on October 30, 1997, as "Revisions to the Standards 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 2011, among the 47,547 deaths of Arizona residents, indication of "two or more races" appeared on only 354 certificates. The total number of deaths for decedents identified as Native Hawaiian was 19. Seven Samoan residents of the State died in 2011. These frequency counts are not large enough to compute statistically reliable mortality rates. They are certainly not large enough for any comparison of the top ten or fifteen leading causes of death.

## 2B. LEADING CAUSES OF DEATH

**Figure 2B-1A**  
Leading Causes of Death among Arizona Residents in 2011

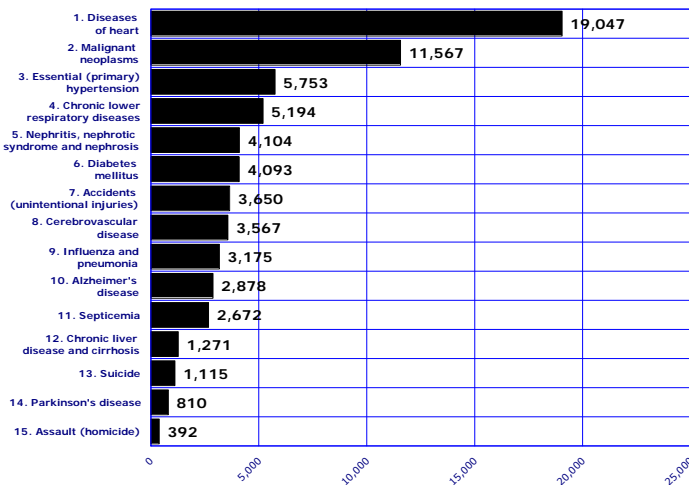
BASED ON THE NUMBER OF DEATHS DUE TO THE UNDERLYING CAUSE:



Based on the number of deaths (but not age-adjusted mortality rate), the leading underlying cause of death to Arizona residents in 2011 was cancer (10,543 or 22.2 percent of all deaths), closely followed by *heart disease*, which accounted for 10,424 or 21.9 percent of deaths (**Figure 2B-1A**, **Table 2B-1**, **Table 5E-14**). The third leading cause of death, *chronic lower respiratory diseases* accounted for 3,143 or 6.6 percent of total deaths. Deaths due to *accidents (unintentional injuries)* ranked fourth in 2011, with 2,959 resident deaths reported. Deaths due to *Alzheimer's disease* ranked fifth in 2011, with 2,336 resident deaths reported. Together, these five causes accounted for 61.8 percent of total deaths in 2011. The fifteen leading causes accounted for 80.5 percent of all deaths among Arizona residents.

**Figure 2B-1B**  
Leading Causes of Death among Arizona Residents in 2011

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 10,424 deaths that had diseases of the heart assigned as the underlying cause, another 8,623 deaths had diseases of the heart assigned as the other than underlying cause. The sum of these two counts (19,047, **Figure 2B-1B**) is the total number of deaths that had any mention of diseases of the heart on the 2011 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 10<sup>th</sup> as the underlying cause but ranked 3<sup>rd</sup> when any mention of it is counted.

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

Figure 2B-2  
Age-adjusted\* Mortality Rates for the Five Leading Causes of Death for Both Genders by Race/Ethnicity, Arizona, 2011

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 2011, diseases of the heart were the leading cause of death for American Indians, Blacks or African Americans, and Hispanics or Latinos. Cancer was the number one cause of death for Asians or Pacific Islanders and White non-Hispanics (Figure 2B-2, Table 2B-4). Unintentional injury was the third leading cause of death only for American Indians. For Asians, stroke was the 3<sup>rd</sup> leading cause of death in 2011. 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.

Rank	Asian or Pacific Islander	American Indian or Alaska Native	Black or African American	Hispanic or Latino	White non-Hispanic
1	Cancer 116.6	Diseases of heart 111.1	Diseases of heart 174.0	Diseases of heart 137.4	Cancer 170.3
2	Diseases of heart 77.0	Cancer 100.8	Cancer 167.1	Cancer 136.3	Diseases of heart 164.3
3	Stroke 29.1	Unintentional injury 100.6	Diabetes 57.8	Diabetes 41.7	Chronic lower respiratory diseases 55.3
4	Diabetes 23.3	Diabetes 61.3	Stroke 56.5	Unintentional injury 38.9	Unintentional injury 46.9
5	Alzheimer's disease 21.0	Chronic liver disease and cirrhosis 43.6	Alzheimer's disease 54.7	Stroke 34.9	Alzheimer's disease 36.3

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

Figure 2B-3  
Age-adjusted\* Mortality Rates for the Five Leading Causes of Death by Race/Ethnicity among Females, Arizona, 2011

Except American Indians and Hispanics or Latinos, 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 2<sup>nd</sup> leading cause of female mortality among Asian or Pacific Islander, Black or African American, and White non-Hispanic females. Diabetes was the 3<sup>rd</sup> leading cause of death for American Indian and Hispanic or Latino women, and 5<sup>th</sup> leading cause for Asian and Black females. Alzheimer's disease was the 4<sup>th</sup> leading cause of mortality among Asian, Black or African American, and White non-Hispanic women and 5<sup>th</sup> among Hispanic or Latino women.

Chronic liver disease and cirrhosis was the 5<sup>th</sup> leading cause of death specific to American Indian females. Chronic lower respiratory diseases were the 3<sup>rd</sup> leading cause of death specific to White non-Hispanic females.

Rank	Asian or Pacific Islander	American Indian or Alaska Native	Black or African American	Hispanic or Latino	White non-Hispanic
1	Cancer 110.2	Diseases of heart 92.7	Cancer 169.0	Diseases of heart 113.2	Cancer 132.4
2	Diseases of heart 57.3	Cancer 90.9	Diseases of heart 119.3	Cancer 107.3	Diseases of heart 120.4
3	Stroke 26.2	Diabetes 68.8	Stroke 64.3	Diabetes 35.9	Chronic lower respiratory diseases 48.5
4	Alzheimer's disease 19.5	Unintentional injury 58.0	Alzheimer's disease 54.3	Stroke 35.6	Alzheimer's disease 39.6
5	Diabetes 17.4	Chronic liver disease and cirrhosis 40.4	Diabetes 44.4	Alzheimer's disease 35.0	Unintentional injury 33.9

Number of deaths per 100,000 population U[ YI UX1 gHYX to the 2000 U.S. standard.

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

**Figure 2B-4**  
**Age-adjusted\* Mortality Rates for the Five Leading Causes of Death**  
**by Race/Ethnicity among Males, Arizona, 2011**

Rank	Asian or Pacific Islander	American Indian or Alaska Native	Black or African American	Hispanic or Latino	White non-Hispanic
1	Cancer 126.2	Diseases of heart 131.1	Diseases of heart 252.9	Cancer 176.0	Diseases of heart 196.2
2	Diseases of heart 105.3	Cancer 116.3	Cancer 170.6	Diseases of heart 167.1	Cancer 182.2
3	Stroke 34.2	Unintentional injury 146.7	Diabetes 71.9	Unintentional injury 51.9	Unintentional injury 57.3
4	Diabetes 32.4	Diabetes 50.7	Alzheimer's disease 52.4	Diabetes 48.4	Chronic lower respiratory diseases 53.3
5	Unintentional injury 28.4	Chronic liver disease and cirrhosis 46.7	Unintentional injury 50.3	Stroke 33.3	Intentional self-harm (suicide) 33.1

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

Unintentional injury ranked among the top 5 leading causes of death for all racial/ethnic groups. Unintentional injury was the 3<sup>rd</sup> leading causes of death among American Indian, Hispanic or Latino, and White non-Hispanic men, and 5<sup>th</sup> leading cause for Asian and Black or African American males.

In 2011, 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.

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

**Figure 2B-5**  
**Age-adjusted\* Mortality Rates for the Five Leading Causes of Death**  
**by Gender in Urban\*\* and Rural Areas, Arizona, 2011**

Rank	Urban male	Urban female	Rural male	Rural female
1	Diseases of heart 185.1	Cancer 129.1	Diseases of heart 220.2	Diseases of heart 139.7
2	Cancer 176.9	Diseases of heart 114.2	Cancer 185.2	Cancer 131.6
3	Unintentional injury 54.2	Alzheimer's disease 41.8	Unintentional injury 77.3	Chronic lower respiratory diseases 47.3
4	Chronic lower respiratory diseases 49.4	Chronic lower respiratory diseases 41.7	Chronic lower respiratory diseases 50.7	Unintentional injury 44.3
5	Alzheimer's disease 31.5	Unintentional injury 30.4	Intentional self-harm (suicide) 43.6	Stroke 33.7

In 2011, 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**). Diseases of the heart exceeded cancer as the leading cause of death among urban males and both rural males and rural females. For urban females cancer followed by diseases of the heart were the two leading causes of death. Alzheimer's disease was the third leading cause of death among urban females. Suicide was the 5<sup>th</sup> leading cause of death specific to rural males.

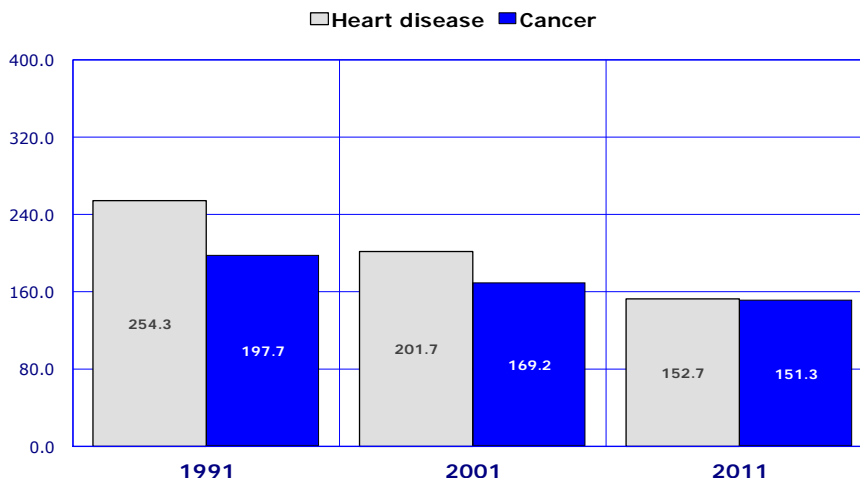
Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.  
\*\*Urban = Maricopa, Pima, Pinal, and Yuma counties. The remaining counties comprise Arizona's rural areas.

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

Figure 2B-6  
Comparison of Age-adjusted\* Mortality Rates for Heart Disease and Cancer (Malignant Neoplasm), Arizona, 1991, 2001, and 2011

The age-adjusted mortality rate for diseases of the heart decreased by 40.0 percent from 254.3 deaths per 100,000 population in 1991 to 152.7/100,000 in 2011 (Figure 2B-6). The age-adjusted mortality rate for cancer declined less, by 23.5 percent, during 1981-2011. In Arizona, the relative risk of death from heart disease versus cancer changed from 28.6 percent greater in 1991 to 0.9 percent greater in 2011.

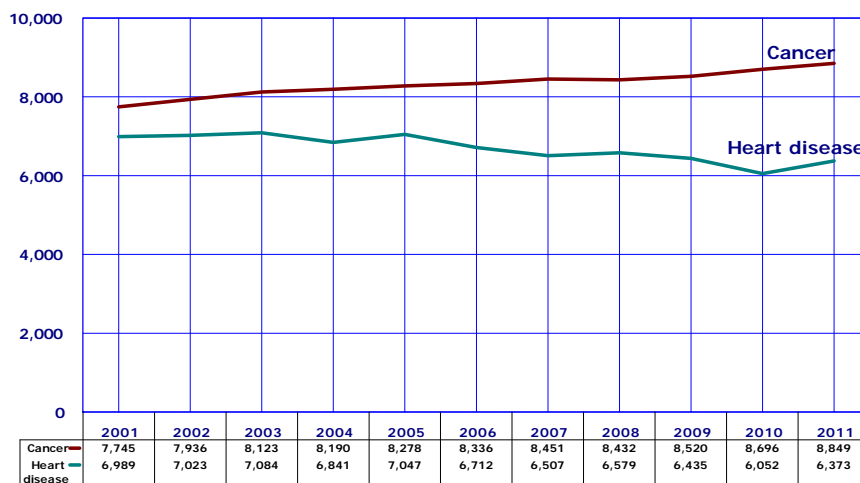
In 2001, 1,398 more Arizonans died from diseases of the heart than cancer (Table 2B-1). In 2011, the number of deaths from cancer exceeded the number of heart disease deaths by 119 (Table 2B-4).



\*Adjusted to the 2000 standard U.S. population.

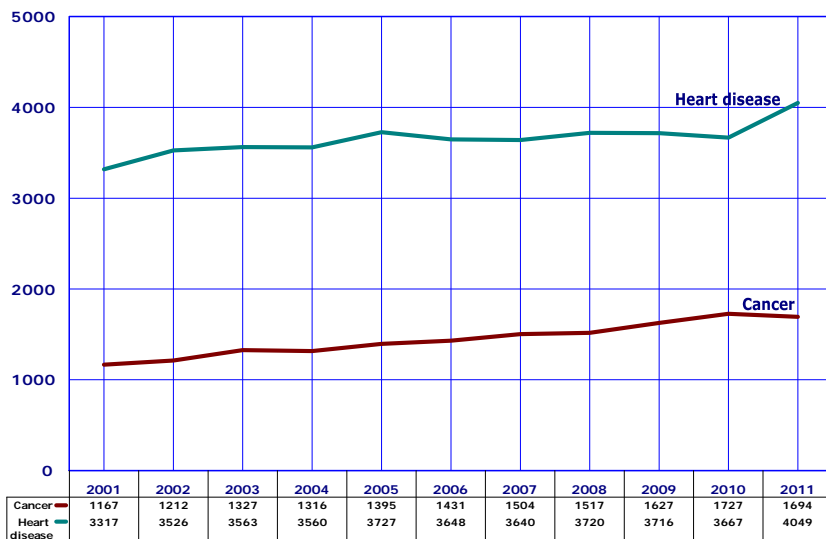
Figure 2B-7  
Number of Deaths from Heart Disease and Cancer among Arizonans 0-84 Years, 2001-2011

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 2011, 2,476 more Arizonans 0-84 years old died from cancer (8,849) than heart disease (6,373).



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

Figure 2B-8  
Deaths from Heart Disease and Cancer among Arizonans 85+, 2001-2011

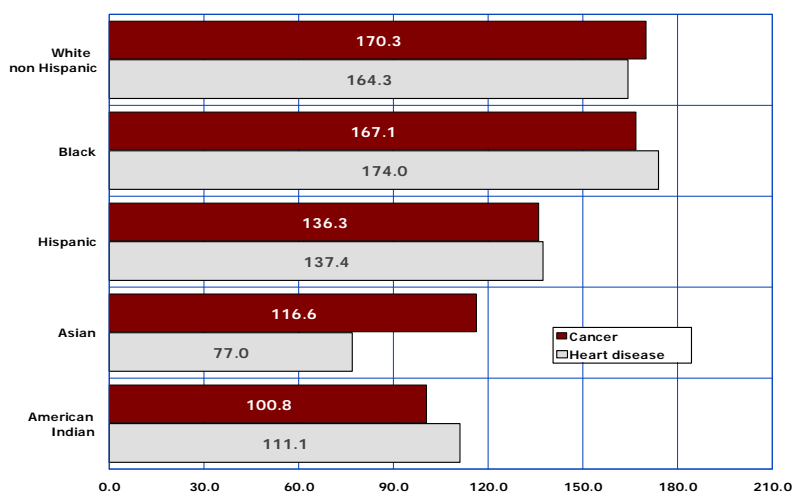


It is only among the oldest, 85 or older, that heart disease continues to be the number one cause of death (Figure 2B-8). In 2011, the elderly aged 85 years or older accounted for 16.1 percent of all deaths from cancer but 38.8 percent of all deaths from heart disease. In 2011, the median age at death from heart disease was 81 years (Table 2D-3) and only a minority of deaths (43.3 percent, Table 2D-4) were premature, i.e., before reaching the expected years of life at birth for all U.S. residents.

However, from 2001 to 2011, the number of deaths from cancer increased by 45.2 percent among Arizonans 85 years or older, twice the increase than the one seen for diseases of the heart (a 22.1 percent increase).

Note: there is more information available in our special online report "Heart Disease vs. Cancer: An Epidemiologic Transition in Mortality Risks, Arizona residents, 1990-2008". This publication can be accessed at <http://www.azdhs.gov/plan/report/epitrans/index.htm>

Figure 2B-9  
Age-adjusted Mortality Rates for Heart Disease and Cancer by Race/Ethnicity, Arizona, 2011



Arizona's White non-Hispanics were 2.1 times more likely to die from diseases of the heart than Asians, and 1.7 times more likely to die from malignant neoplasms in 2011 than American Indians, the groups with the lowest risk of each respective cause of death (Figure 2B-9, Table 2B-4).

Among White non-Hispanics, and Asians, the relative risk of death from cancer exceeded the mortality risk of death from heart disease in 2011 (Table 2B-3).

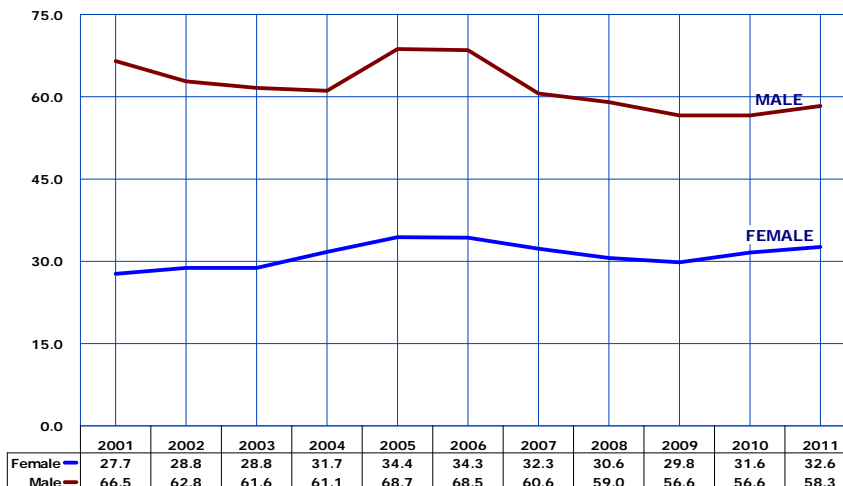
Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

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

The number of deaths from unintentional injuries decreased by 6.2 percent from a recent peak of 3,156 in 2006 to 2,959 in 2011 (Table 2B-1). In 2011, based on age-adjusted mortality rates, accidents ranked third as a leading cause of death for males and sixth for females (Table 2B-4). From 2010 to 2011 the age-adjusted mortality rate for accidents slightly increased for both males and females (Figure 2B-10).

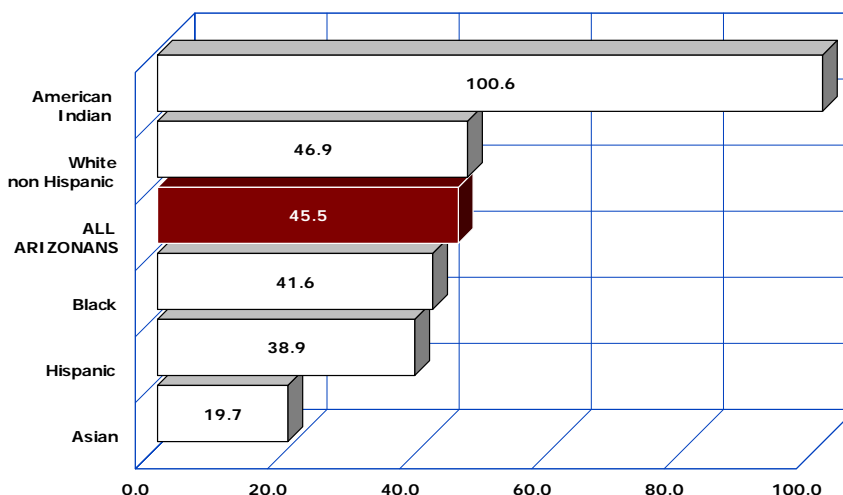
In 2011, 787 deaths were caused by motor vehicle accidents. In contrast, Arizonans experienced a large increase in the number of accidental drug poisoning/overdoses. They increased from 414 deaths in 2001 to 781 deaths in 2011. In both in 2009 and 2010, the number of deaths from accidental poisoning by drugs exceeded the number of deaths from motor vehicle-related injuries (Table 2B-9), but in 2011 motor vehicle accidents claimed 787 lives where accidental poisonings killed 781 Arizonans.

Figure 2B-10  
Age-adjusted Mortality Rates for Accidents (unintentional injuries) by Gender and Year, Arizona, 2001-2011



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

Figure 2B-11  
Age-adjusted Mortality Rates for Accidents (unintentional injuries) by Race/Ethnicity, Arizona, 2011



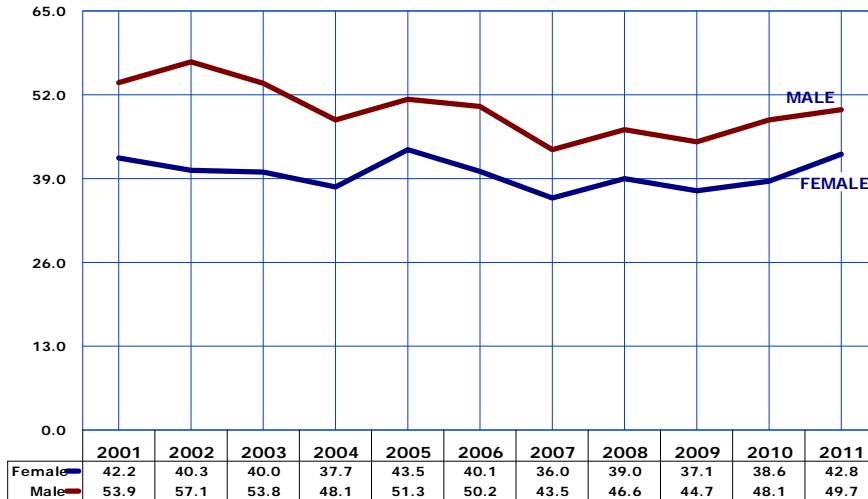
Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

The American Indian death rate for unintentional injuries (100.6/100,000) was 5.1 times greater than the rate for Asians (19.7/100,000), the group at the lowest risk of unintentional injury death among race/ethnic groups in the State (Figure 2B-11, Table 2B-4).

In 2011, Apache (135.5/100,000) and Navajo (96.2/100,000) counties had the two highest age-adjusted mortality rates for unintentional injuries (Table 5E-11).

2B. LEADING CAUSES OF DEATH  
Chronic lower respiratory diseases

Figure 2B-12  
Age-adjusted Mortality Rates for Chronic Lower\* Respiratory Diseases by Gender and Year, Arizona, 2001-2011

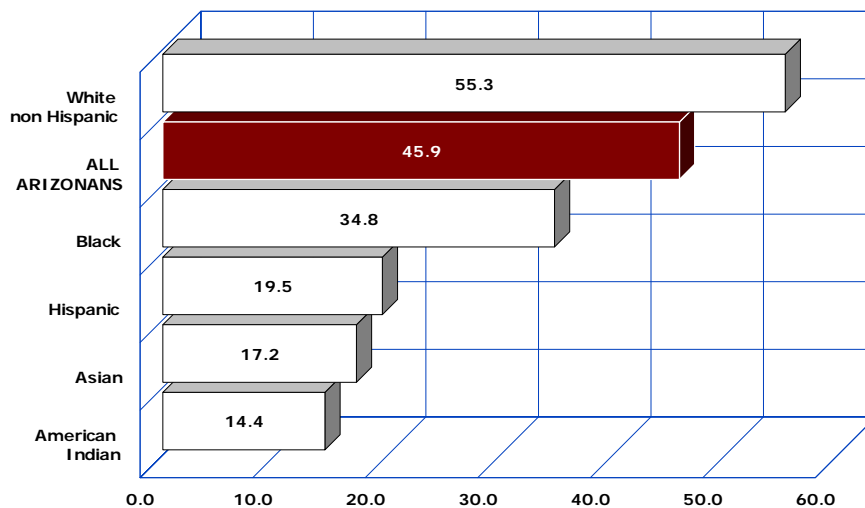


In 2011, chronic lower respiratory diseases (bronchitis, emphysema, asthma) were the 3rd leading cause of death among Arizona residents (Table 2B-1). From 2010 to 2011, the mortality rates for chronic lower respiratory diseases (CLRD) increased for both genders (Figure 2B-12, Table 2B-2).

Urban females had the lowest mortality rate for CLRD (41.7/100,000) among the gender by region groups (Table 2B-5). Rural males were the group with the highest mortality risk for CLRD (50.7/100,000), followed by urban males (49.4 deaths per 100,000), and rural females (47.3/100,000).

\*e number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.  
\*This ICD-10 title corresponds to Chronic Obstructive Pulmonary Disease (ICD-9 title)

Figure 2B-13  
Age-adjusted Mortality Rates for Chronic Lower Respiratory Diseases by Race/Ethnicity, Arizona, 2011



Death rates for emphysema, chronic bronchitis, asthma, and other lower respiratory disorders were substantially higher among White non-Hispanics (55.3 deaths per 100,000) than they were among Blacks or African Americans (34.8/100,000), Hispanics, (19.5/100,000), Asians (17.2/100,000), and American Indians (14.4/100,000); Figure 2B-13, Table 2B-4).

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

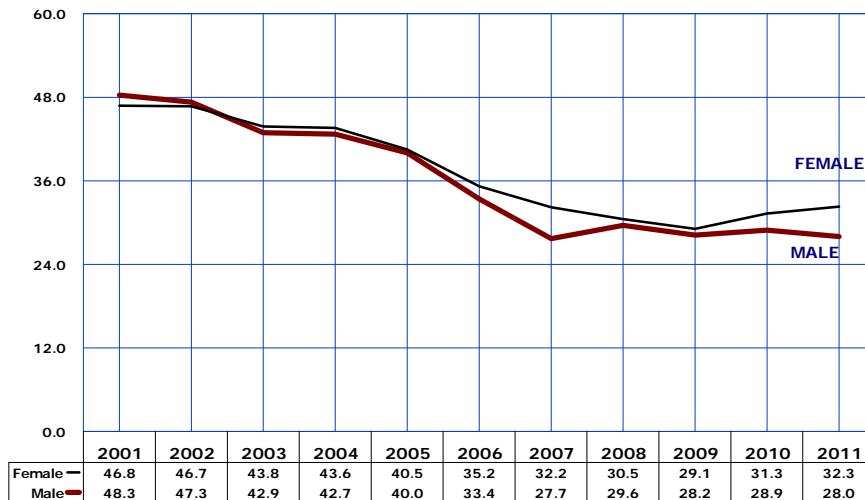


2B. LEADING CAUSES OF DEATH  
Cerebrovascular disease

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 47.7 deaths per 100,000 population in 2001 to 30.6/100,000 in 2011 (Table 2B-3).

In 2011, the number of deaths from cerebrovascular disease was greater among females (1,254) than males (813, Table 2B-4). Females remained at greater risk than males to die from a stroke in 2003-2011 (Figure 2B-14). In 2011 the age-adjusted mortality rates for stroke increased for females but decreased for males (Figure 2B-14, Table 2B-2).

Figure 2B-14  
Age-adjusted Mortality Rates for Cerebrovascular Disease by Gender and Year, Arizona, 2001-2011

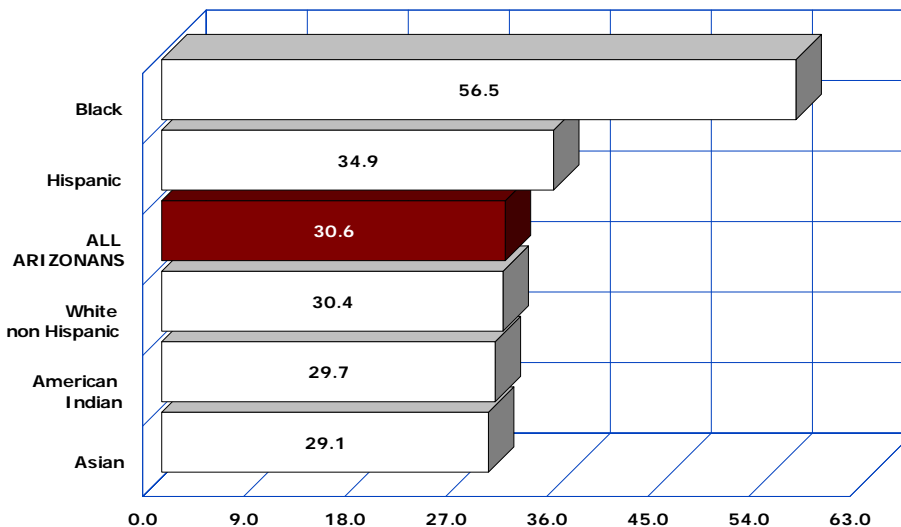


Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Figure 2B-15  
Age-adjusted Mortality Rates for Cerebrovascular Disease by Race/Ethnicity, Arizona, 2011

Compared to Arizona's rate, Blacks or African Americans were 84.6 percent more likely to die from cerebrovascular disease in 2011 (Figure 2B-15, Table 2B-4). The 2011 mortality rate for cerebrovascular disease among Asians (29.1/100,000) was the lowest among race/ethnic groups.

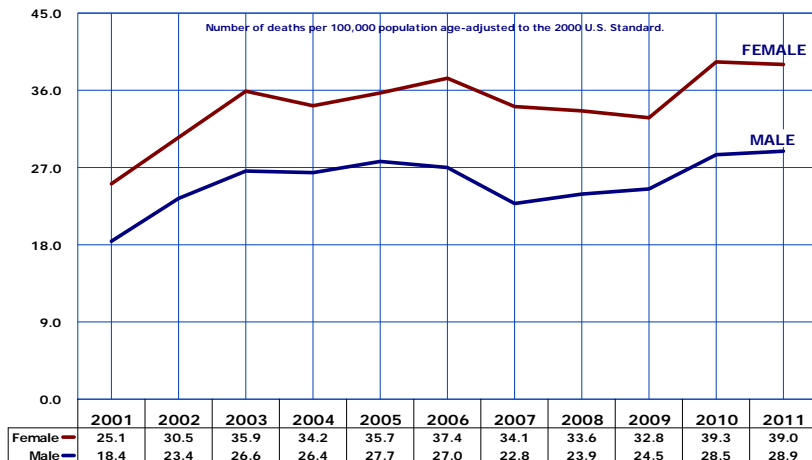
American Indian males had the lowest mortality rate for cerebrovascular disease among gender by racial/ethnic subgroups (24.8 deaths per 100,000, Table 2B-4), while Black or African American females had the highest rate of 64.3 deaths per 100,000.



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 for Alzheimer's Disease by Gender and Year, Arizona, 2001-2011

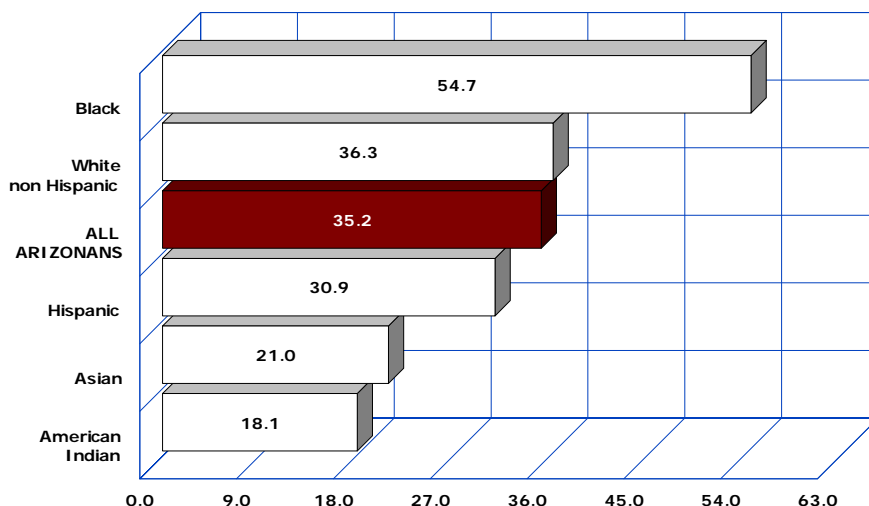


Based on the number of deaths in 2011, Alzheimer's disease was the 6<sup>th</sup> leading cause of death for females and 9<sup>th</sup> leading cause for males (**Table 2B-4**).

From 2009 to 2011, the age-adjusted mortality rate for Alzheimer's disease among females increased by 18.9 percent from 32.8/100,000 to 39.0/100,000 in 2011 (**Figure 2B-16**). The age-adjusted mortality rate for Alzheimer's disease increased for the 4<sup>th</sup> consecutive year for males from 22.8/100,000 in 2007 to 28.9/100,000 in 2010.

In 2011, the age-adjusted death rate for Alzheimer's disease was 34.9 percent higher for females than for males.

**Figure 2B-17**  
Age-adjusted Mortality Rates for Alzheimer's Disease by Race/Ethnicity, Arizona, 2011



The age-adjusted mortality rates for Alzheimer's disease in 2011 were higher among Black or African American (54.7/100,000) and White non-Hispanic (36.3 deaths per 100,000) than they were among Hispanic or Latino (30.9/100,000), Asian (21.0/100,000), and American Indian residents of Arizona (18.1/100,000; **Figure 2B-17**, **Table 2B-4**).

White non-Hispanic residents of Arizona disproportionately contributed to mortality from Alzheimer's disease. In 2011, White non-Hispanics accounted for 58.7 percent (**Table 10C-1**) of the State's population, but 87.2 percent of all deaths from Alzheimer's disease (2,038 out of 2,336; **Table 2B-4**).

In 2011, the median age at death from Alzheimer's disease was 88 for females and 85 for males (**Table 2D-3**).

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

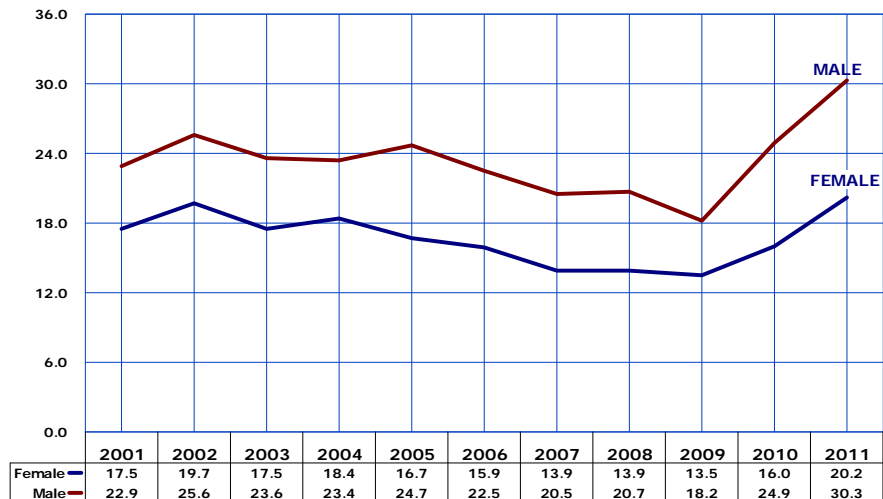
2B. LEADING CAUSES OF DEATH  
Diabetes

Both men and women experienced a decline in mortality rates for diabetes from 2005 to 2009 (Figure 2B-18), but from 2009 to 2011 the number of deaths from diabetes increased by 59.6 percent (based on the data in Table 2B-1).

In 2011, in addition to 1,721 deaths that had diabetes assigned as the underlying cause, another 2,372 deaths had diabetes assigned as a contributing factor. The diabetes-related death rate of 59.1/100,000 (Table 6A-6) was 2.4 times greater than the rate for diabetes as underlying cause (24.8/100,000, Table 2B-2).

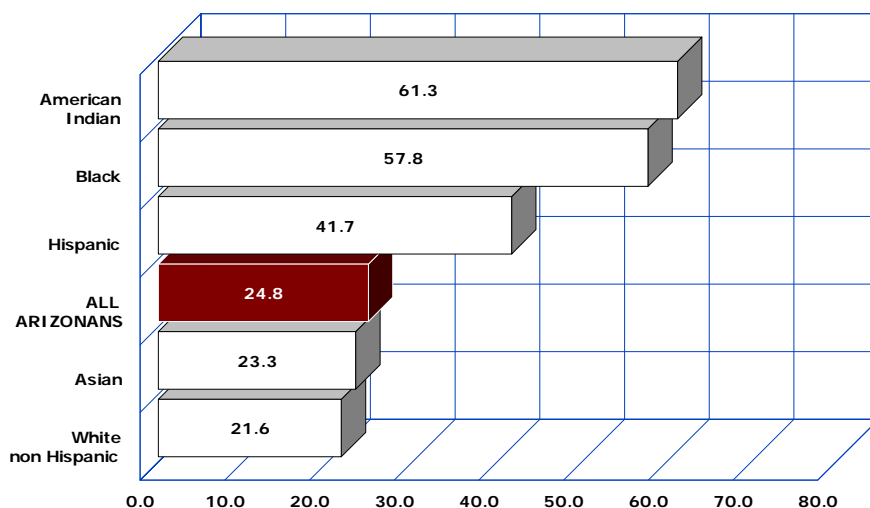
The diabetes-related death rate includes all mentions of diabetes on the death certificate as the underlying or other than underlying cause.

Figure 2B-18  
Age-adjusted Mortality Rates for Diabetes by Gender and Year,  
Arizona, 2001-2011



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

Figure 2B-19  
Age-adjusted Mortality Rates for Diabetes by Race/Ethnicity,  
Arizona, 2011



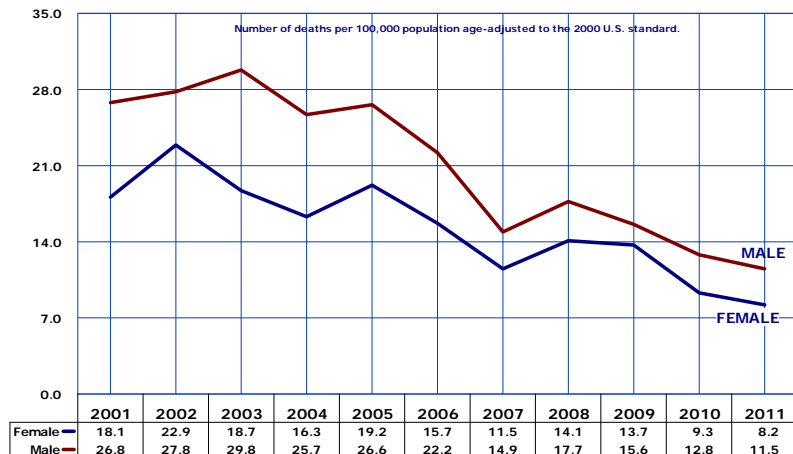
The number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

In 2011, compared to Arizona's rate, American Indians were 2.5 times more likely to die from diabetes (61.3 deaths per 100,000; Figure 2B-19, Table 2B-4). The rate of 21.6 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 2011 Apache (50.6/100,000), Navajo (43.4/100,000), and Greenlee (41.0/100,000) counties had the highest mortality rates for diabetes (Table 5E-11).

2B. LEADING CAUSES OF DEATH  
Influenza and pneumonia

Figure 2B-20  
Age-adjusted Mortality Rates for Influenza and Pneumonia by Gender and Year, Arizona, 2001-2011

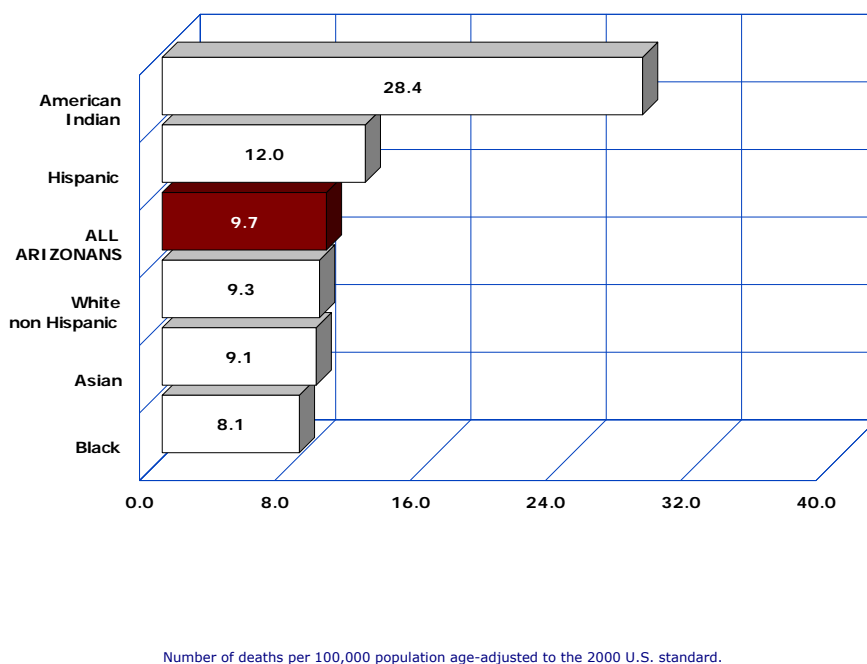


The number of deaths from influenza and pneumonia decreased by 49.3 percent from a recent high of 1,280 in 2005 to 649 in 2011 (Table 2B-1). In 2001, influenza and pneumonia were ranked the 7<sup>th</sup> leading cause of death in Arizona. Among the 649 deaths, influenza was identified as the underlying cause for 26 of them, while pneumonia was listed as the underlying cause on 623 death certificates (Table 2B-6).

The mortality rate for influenza and pneumonia decreased for females from 9.3 deaths per 100,000 in 2010 to 8.2 deaths in 2011 (Figure 2B-20, Table 2B-2). The mortality rate for influenza and pneumonia also decreased for males from 12.8 deaths per 100,000 in 2010 to 11.5/100,000 in 2011.

In 2011, Arizona males were 40.2 percent more likely to die from influenza and pneumonia than females.

Figure 2B-21  
Age-adjusted Mortality Rates for Influenza and Pneumonia by Race/Ethnicity, Arizona, 2011



In 2011, American Indian residents of Arizona had the highest mortality rate for influenza and pneumonia (28.4 deaths per 100,000) among the race/ethnic groups. The age-adjusted mortality of 8.1/100,000 among Black or African Americans was the lowest rate among race/ethnic groups in the State (Figure 2B-21, Table 2B-4).

Compared to the State death rate for influenza and pneumonia, Greenlee County's rate was 4.2 times greater (41.0/100,000). The mortality rate also was elevated in Apache County (34.6/100,000; Table 5E-11).

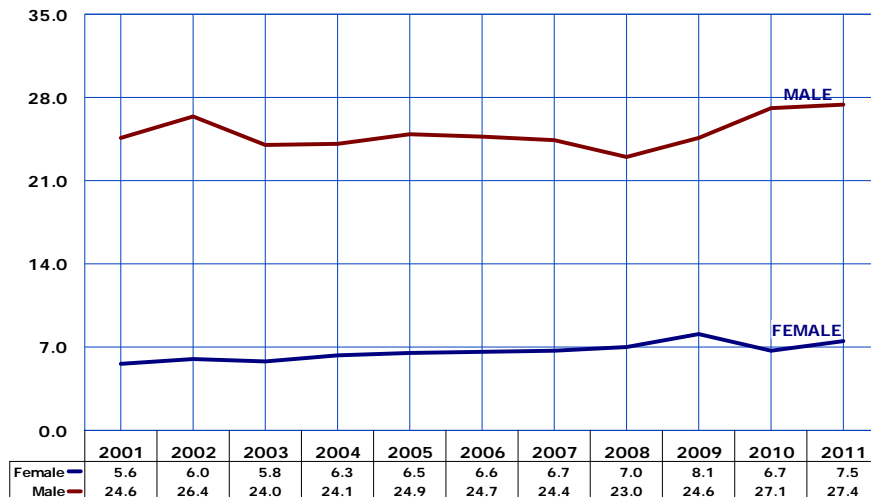
2B. LEADING CAUSES OF DEATH  
Suicide

Figure 2B-22  
Age-adjusted Mortality Rates for Suicide by Gender and Year,  
Arizona, 2001-2011

In 2011, suicide was the 6th leading cause of death among males. It ranked as the 13th cause of mortality for females. The age-adjusted suicide rate increased from 14.8 per 100,000 residents of the State in 2008 to 17.2 suicides per 100,000 in 2011 (Table 2B-3).

The suicide rate increased for females from 6.7/100,000 in 2010 to 7.5/100,000 in 2011 (Figure 2B-22, Table 2B-3). The male mortality risk for suicide increased from the 2010 rate of 27.1/100,000 to 27.4/100,000 in 2011.

In 2011, suicide posed a 3.7 times greater mortality risk for males (27.4/100,000) than females (7.5/100,000).

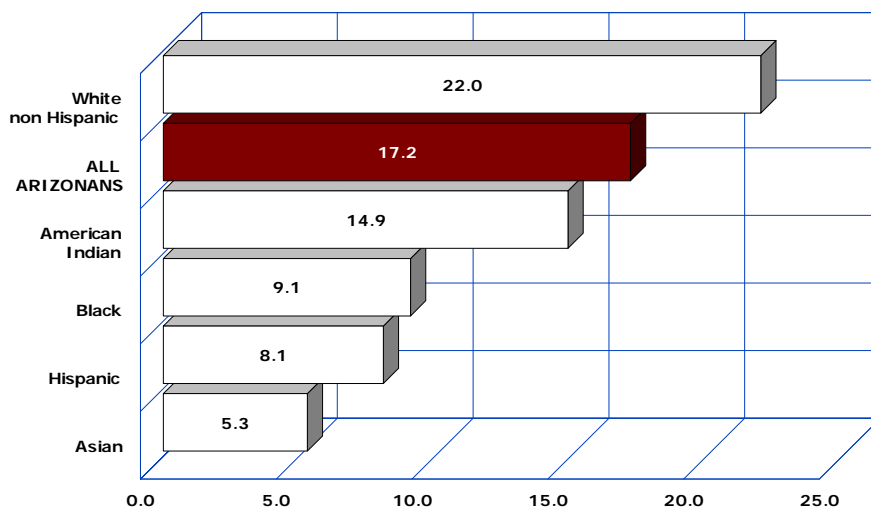


Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Figure 2B-23  
Age-adjusted Mortality Rates for Suicide by Race/Ethnicity,  
Arizona, 2011

In 2011, White non-Hispanics had the highest age-adjusted suicide rate (22.0 suicides per 100,000) among the race/ethnic groups, followed by American Indians (14.9/100,000), Black or African Americans (9.1/100,000), Hispanics (8.1/100,000), and Asians (5.3/100,000; Figure 2B-23, Table 2B-4).

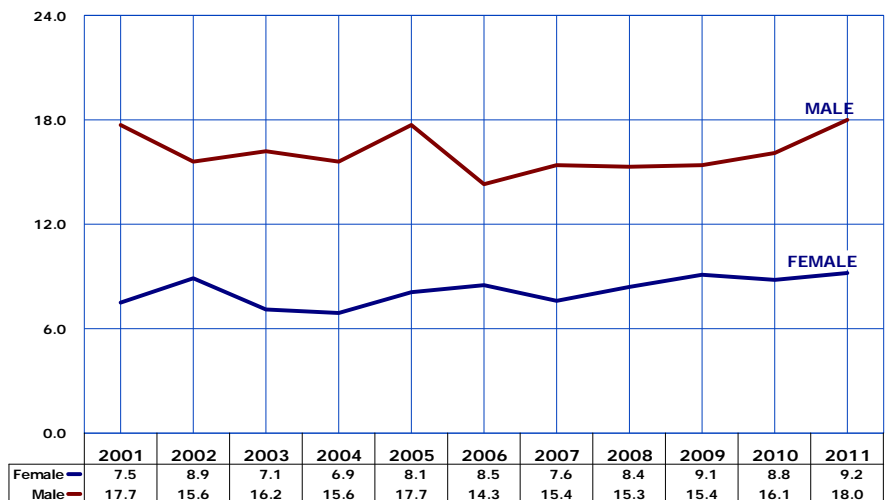
The age-adjusted mortality rates for suicide varied in Arizona in 2011 from 8.2 suicides per 100,000 residents of Santa Cruz County to 42.8 suicides per 100,000 residents of Apache County (Table 5E-11).



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 for Chronic Liver Disease and Cirrhosis  
by Gender and Year, Arizona, 2001-2011



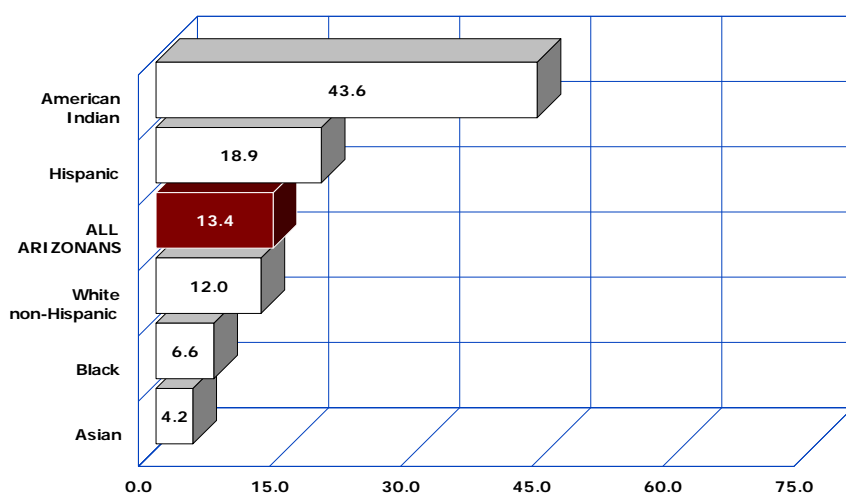
Chronic liver disease and cirrhosis was the 9<sup>th</sup> leading cause of death in Arizona in 2011 (Figure 2B-1, Table 2B-1). Among the 933 deaths due to chronic liver disease and cirrhosis, 608 (65.2 percent) were males (Table 2B-4).

Among females, the age-adjusted mortality rate for chronic liver disease and cirrhosis slightly increased from 8.8/100,000 in 2010 to 9.2 deaths per 100,000 in 2011. Among males, the mortality rate increased 11.8 percent from 16.1/100,000 in 2010 to 18.0/100,000 in 2011 (Figure 2B-24, Table 2B-3).

In 2011, Greenlee, Apache, and Navajo counties had the highest mortality rates for chronic liver disease and cirrhosis (Table 5E-11).

The number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

**Figure 2B-25**  
Age-adjusted Mortality Rates for Chronic Liver Disease and Cirrhosis  
by Race/Ethnicity, Arizona, 2011



The 2011 death rate for chronic liver disease and cirrhosis among American Indians (43.6 deaths per 100,000) was 3 times greater than the state average (13.4/100,000; Figure 2B-25, Table 2B-4). The rate for Hispanics (18.9 deaths per 100,000 population) was the second highest among race/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 18 years younger (59 years, Table 2D-3). In 2011, the median age at death of American Indians who died from chronic liver disease and cirrhosis was only 49 years (Table 2D-3).

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