

CHAPTER 2

TRENDS AND PATTERNS IN MORTALITY, ARIZONA, 2002-2012

2A. TOTAL MORTALITY

2B. LEADING CAUSES OF DEATH

2C. AGE-SPECIFIC MORTALITY

- **INFANT MORTALITY**
- **CHILDHOOD MORTALITY**
- **ADOLESCENT MORTALITY**
- **YOUNG ADULT MORTALITY**
- **MIDDLE-AGED ADULT MORTALITY**
- **ELDERLY MORTALITY**

2D. PATTERNS OF PREMATURE MORTALITY



2A.

TOTAL MORTALITY

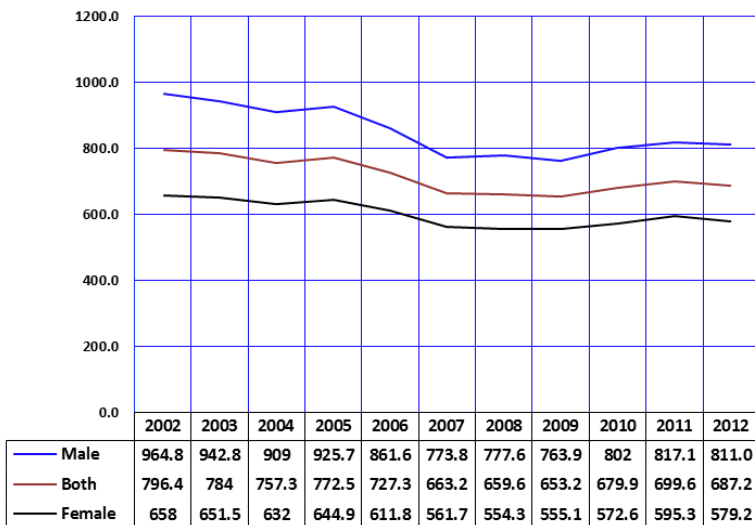
The total number of deaths from all causes among Arizona residents increased by 1.9 percent from 2011 (n = 47,547) to 2012 (n = 48,459; **Table 2A-1**). In contrast, the age-adjusted mortality rate for all causes of death decreased from 699.6/100,000 in 2011 to 687.2/100,000 in 2012.

Compared to 2011, there were fewer deaths in 2012 for some of the leading causes of mortality including Alzheimer's disease (7.8 percent), accidents (5.2 percent), suicide (3.9 percent), and assault (2.8 percent). The causes with the largest increases were nephritis (7.6 percent), Parkinson's disease (6.2 percent), chronic liver disease and cirrhosis (4.1 percent), and malignant neoplasms (3.1 percent). When comparing the differences in the number of deaths due to leading causes from 2010 to 2011 and 2011 to 2012, we see less dramatic changes from 2011 to 2012 than were observed from 2010 to 2011.

When considering race/ethnicity and gender, Black or African American females had a substantial increase in the number of deaths due to major cardiovascular diseases from 2011 (n = 182) to 2012 (n = 219). In terms of mortality due to diabetes, the overall mortality rate for males and females slightly decreased from 2011 (**Figure 2B-18**), a welcome respite from the increases observed from 2009 to 2011. Unfortunately the decrease in deaths due to diabetes did not hold true for all groups, with American Indians experiencing a 30.1 percent increase in the age-adjusted mortality rate due to diabetes from 2011. Specifically, the number of deaths caused by diabetes among American Indian males increased 60 percent from 2011 (n = 50) to 2012 (n = 80).

2A. TOTAL MORTALITY

Figure 2A-1
Age-adjusted Mortality Rates^a for all Causes by Gender and Year, Arizona, 2002-2012



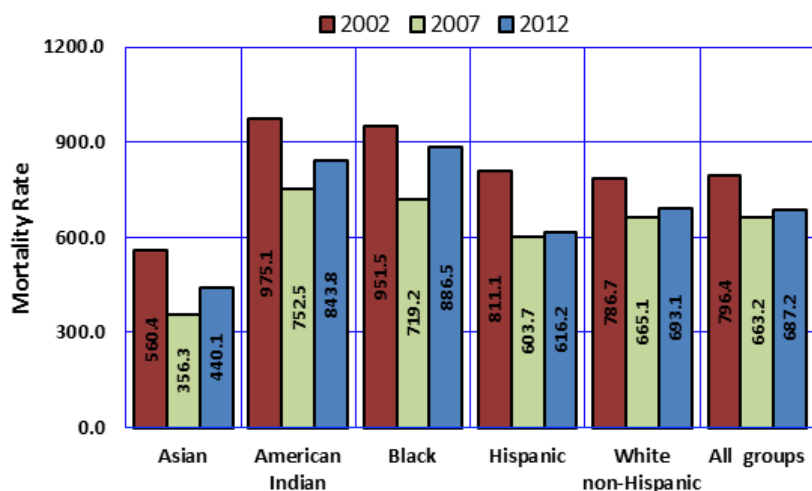
The age-adjusted mortality rates discussed below are based on the year 2000 population standard. All mortality rates in sections 2A and 2B are age-adjusted. A detailed explanation of the age-adjustment of mortality rates is given in **Technical Notes**.

The total age-adjusted mortality rate decreased by 1.8 percent from 699.6 in 2011 to 687.2 in 2012 (**Figure 2A-1, Table 2B-2**). The age-adjusted mortality rates decreased for both females and males.

The difference between male and female mortality rates narrowed slightly between 2002 and 2012 with the male age-adjusted mortality rate being 46.6 percent greater than the female age-adjusted mortality rate in 2002, and 40 percent greater in 2012. However, the parallel trend lines (**Figure 2A-1**) do not suggest that the full convergence in mortality risk between males and females is likely to happen anytime soon.

Notes: ^a Number of deaths per 100,000 persons (adjusted to the 2000 standard U.S. population).

Figure 2A-2
Age-adjusted Mortality Rates^a for all Causes by Race/Ethnicity and Year, Arizona Residents, 2002, 2007, and 2012



The 2012 age-adjusted death rates for the major race/ethnic groups were as follows: for Asian or Pacific Islander, 440.1 deaths per 100,000 population; Hispanic or Latino, 616.2; White non-Hispanic, 693.1; American Indian or Alaska Native, 843.8; and Black or African American, 886.5 (**Figure 2A-2, Table 2B-4**).

In 2012, as in 2002 and 2007, Blacks and American Indians had higher total mortality rates than White non-Hispanics, Hispanics, and Asians. The total mortality rates for Asians were lower than the rates of White non-Hispanics in 2002, 2007, and 2012.

Notes: ^a Number of deaths per 100,000 persons (adjusted to the 2000 standard U.S. population).

2A. TOTAL MORTALITY

If there was no monthly variation in proportional contribution to the annual deaths total, 8.3 percent (100/12) of deaths should occur monthly. However, when the monthly distribution of resident deaths is examined, March (9.1 percent), December (8.8 percent), January (8.7 percent), and both February and April (8.6 percent) were higher in 2012 from the expected value (Figure 2A-3). September, August, June, July, and November were the months with the lowest proportional contributions to the annual death total among Arizona residents.

The majority of the 2,103 non-residents who died in Arizona during 2012 did so during January, February, March, and December. September was the month with the lowest proportional contribution (5.4 percent) to the annual death total among out-of-State residents who died in Arizona.

Figure 2A-3
Percent Annual Deaths by Month of Occurrence and Residence Status, Arizona, 2012

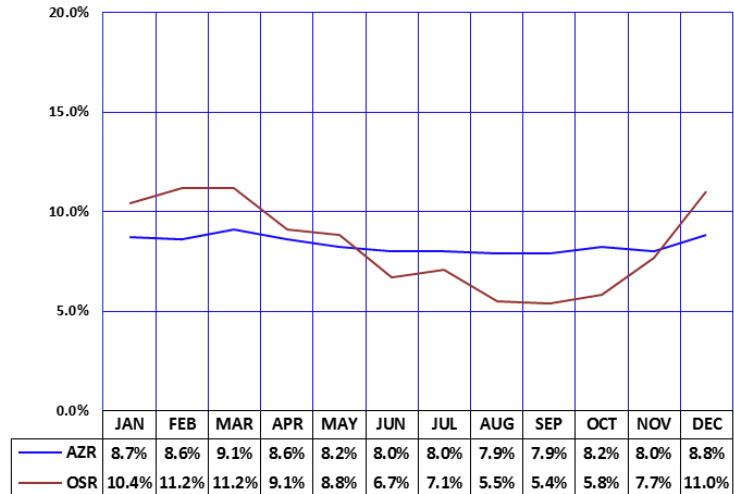
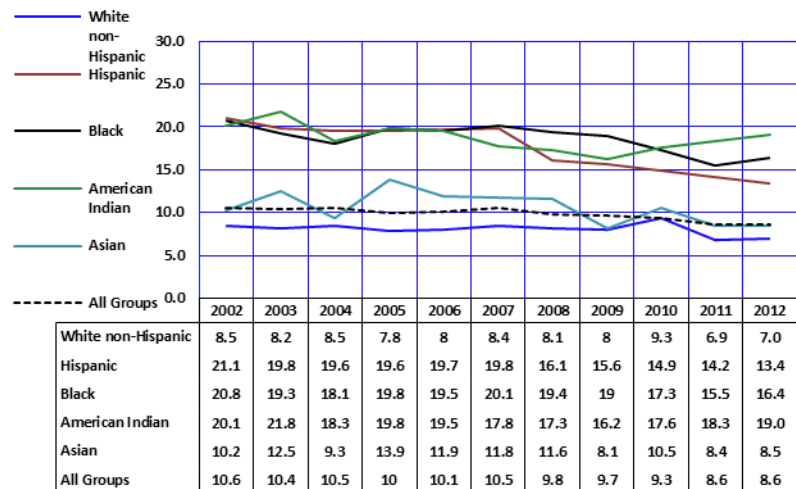


Figure 2A-4
Percentage of Deaths for which Autopsies were Reported by Race/Ethnicity and Year, Arizona Residents, 2002-2012

Autopsies were reported as performed on 4,148 decedents, or 8.6 percent of the deaths that occurred among Arizona residents in 2012. From 2002 - 2012, the percentage of deaths for which autopsies were reported varied from a high of 10.6 percent in 2002 to a low of 8.6 percent in 2011 and 2012.

The percentage autopsied varies by the decedent's demographic characteristics. By race/ethnicity (Figure 2A-4) the percentage autopsied was lower for the White non-Hispanic and Asian population than for other groups. The prevalence of autopsies was substantially greater among American Indian, Black, and Hispanic or Latino sub-populations. A substantial portion of the differential in the use of autopsy by race/ethnicity reflects differences in the age and manner of death. For example, autopsies tend to be more common at younger ages and for deaths by homicide, suicide, accidents, and undetermined manner.



**TABLE 2A-1
NUMBER OF DEATHS BY RACE/ETHNICITY, GENDER, AND YEAR, ARIZONA RESIDENTS, 2002-2012**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012 ^a
TOTAL^b											
Total	42,320	42,830	42,736	45,115	45,415	44,640	45,128	45,065	45,871	47,547	48,459
Male	22,317	22,452	22,400	23,614	23,658	23,321	23,744	23,535	24,163	24,775	25,577
Female	20,003	20,378	20,336	21,501	21,757	21,319	21,384	21,530	21,708	22,762	22,874
White non-Hispanic											
Total	34,845	34,906	34,813	36,558	36,952	35,805	36,235	35,829	36,066	37,779	38,629
Male	17,946	17,972	17,916	18,723	18,711	18,339	18,758	18,476	18,693	19,399	20,206
Female	16,899	16,934	16,897	17,835	18,241	17,466	17,477	17,353	17,373	18,378	18,416
Hispanic or Latino											
Total	4,670	4,914	5,009	5,323	5,284	5,496	5,313	5,401	5,374	5,714	5,963
Male	2,750	2,812	2,874	3,115	3,114	3,146	2,996	2,978	2,959	3,199	3,323
Female	1,920	2,102	2,135	2,208	2,170	2,350	2,317	2,423	2,415	2,515	2,640
Black or African American											
Total	950	1,138	1,095	1,173	1,274	1,276	1,295	1,334	1,336	1,367	1,509
Male	557	623	598	623	754	695	712	697	735	735	803
Female	393	515	497	550	520	581	583	637	601	632	706
American Indian or Alaska Native											
Total	1,536	1,527	1,402	1,651	1,543	1,661	1,722	1,871	1,781	1,703	1,806
Male	884	864	780	929	901	950	981	1,028	1,015	923	993
Female	652	663	622	722	642	711	741	843	766	780	812
Asian or Pacific Islander											
Total	264	289	300	338	336	365	449	469	487	511	552
Male	142	129	145	172	164	168	230	241	258	254	252
Female	122	160	155	166	172	197	219	228	229	257	300
Unspecified other or unknown race											
Total	55	56	117	72	26	37	114	161	827	473	^b
Male	38	52	87	52	14	23	67	115	503	265	^b
Female	17	4	30	20	12	14	47	46	324	200	^b

Notes: ^a Deaths with unknown gender (Total, n = 8; White non-Hispanic, n = 7; American Indian or Alaska Native = 1) were included in totals; ^b Bridging of race/ethnicity in 2012 differed from previous years. Individuals with unknown race were categorized as White non-Hispanic, while individuals with unknown race and Hispanic ethnicity were coded as Hispanic.

**TABLE 2A-2
RESIDENT MORTALITY BY MONTH OF OCCURRENCE AND YEAR, ARIZONA, 2002-2012**

Month of death	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
	JAN	Count 3,811 9.0%	Count 3,809 8.9%	Count 4,015 9.4%	Count 3,933 8.7%	Count 4,640 10.2%	Count 4,213 9.4%	Count 4,149 9.2%	Count 3,983 8.8%	Count 3,950 8.6%	Count 4,321 9.1%
FEB	Count 3,873 9.2%	Count 3,430 8.0%	Count 3,671 8.6%	Count 3,472 7.7%	Count 4,013 8.8%	Count 3,726 8.3%	Count 4,059 9.0%	Count 3,592 8.0%	Count 3,582 7.8%	Count 4,070 8.6%	Count 4,147 8.6%
MAR	Count 4,148 9.8%	Count 3,817 8.9%	Count 3,834 9.0%	Count 3,992 8.8%	Count 4,124 9.1%	Count 4,062 9.1%	Count 4,426 9.8%	Count 3,954 8.8%	Count 4,084 8.9%	Count 4,358 9.2%	Count 4,414 9.1%
APR	Count 3,550 8.4%	Count 3,599 8.4%	Count 3,456 8.1%	Count 3,972 8.8%	Count 3,765 8.3%	Count 3,781 8.5%	Count 3,949 8.8%	Count 3,945 8.8%	Count 3,845 8.4%	Count 3,967 8.3%	Count 4,176 8.6%
MAY	Count 3,450 8.2%	Count 3,705 8.7%	Count 3,627 8.5%	Count 3,992 8.8%	Count 3,729 8.2%	Count 3,656 8.2%	Count 3,754 8.3%	Count 3,699 8.2%	Count 3,811 8.3%	Count 3,899 8.2%	Count 3,980 8.2%
JUN	Count 3,298 7.8%	Count 3,337 7.8%	Count 3,333 7.8%	Count 3,514 7.8%	Count 3,489 7.7%	Count 3,427 7.7%	Count 3,542 7.8%	Count 3,500 7.8%	Count 3,651 8.0%	Count 3,823 8.0%	Count 3,868 8.0%
JUL	Count 3,270 7.7%	Count 3,331 7.8%	Count 3,456 8.1%	Count 3,591 8.0%	Count 3,630 8.0%	Count 3,636 8.1%	Count 3,467 7.7%	Count 3,741 8.3%	Count 3,843 8.4%	Count 3,791 8.0%	Count 3,862 8.0%
AUG	Count 3,221 7.6%	Count 3,398 7.9%	Count 3,442 8.1%	Count 3,571 7.9%	Count 3,417 7.5%	Count 3,466 7.8%	Count 3,512 7.8%	Count 3,617 8.0%	Count 3,756 8.2%	Count 3,913 8.2%	Count 3,850 7.9%
SEP	Count 3,225 7.6%	Count 3,335 7.8%	Count 3,262 7.6%	Count 3,414 7.6%	Count 3,414 7.5%	Count 3,554 8.0%	Count 3,279 7.3%	Count 3,604 8.0%	Count 3,633 7.9%	Count 3,678 7.7%	Count 3,849 7.9%
OCT	Count 3,496 8.3%	Count 3,425 8.0%	Count 3,461 8.1%	Count 3,524 7.8%	Count 3,767 8.3%	Count 3,651 8.2%	Count 3,636 8.1%	Count 3,739 8.3%	Count 3,678 8.0%	Count 3,888 8.2%	Count 3,956 8.2%
NOV	Count 3,377 8.0%	Count 3,439 8.0%	Count 3,344 7.8%	Count 3,608 8.0%	Count 3,527 7.8%	Count 3,608 8.1%	Count 3,519 7.8%	Count 3,694 8.2%	Count 3,806 8.3%	Count 3,753 7.9%	Count 3,894 8.0%
DEC	Count 3,601 8.5%	Count 4,205 9.8%	Count 3,835 9.0%	Count 4,532 10.0%	Count 3,900 8.6%	Count 3,860 8.6%	Count 3,836 8.5%	Count 3,997 8.9%	Count 4,232 9.2%	Count 4,086 8.6%	Count 4,253 8.8%
TOTAL	Count 43,320 100.0%	Count 42,830 100.0%	Count 42,736 100.0%	Count 45,115 100.0%	Count 45,415 100.0%	Count 44,640 100.0%	Count 45,128 100.0%	Count 45,065 100.0%	Count 45,871 100.0%	Count 47,547 100.0%	Count 48,459 100.0%

TABLE 2A-3
DEATHS BY DAY AND MONTH OF OCCURRENCE, ARIZONA RESIDENTS, 2012

Day of death	Month of death												Total
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	158	151	130	140	136	132	120	114	134	128	147	114	1,604
2	140	141	140	131	127	145	123	113	111	128	99	128	1,526
3	142	134	124	143	153	115	138	99	142	136	128	121	1,575
4	127	130	125	167	123	112	133	127	141	123	133	130	1,571
5	151	173	128	151	123	152	109	115	130	129	128	140	1,629
6	138	140	153	132	116	121	113	140	159	129	128	129	1,598
7	133	141	150	153	125	131	119	130	132	146	104	139	1,603
8	137	149	134	148	121	148	137	148	128	128	104	127	1,609
9	110	163	154	132	130	124	114	135	148	137	130	139	1,616
10	109	163	138	127	131	115	138	132	106	109	151	127	1,546
11	139	129	142	160	139	133	138	111	120	126	113	126	1,576
12	146	146	171	135	111	115	137	126	133	141	127	144	1,632
13	144	148	155	126	146	130	129	132	127	127	133	145	1,642
14	137	131	151	140	134	137	132	109	125	126	122	160	1,604
15	117	137	139	136	119	133	110	133	111	145	120	142	1,542
16	150	142	171	136	115	148	139	116	120	130	124	140	1,631
17	141	144	129	126	132	133	115	133	118	123	124	141	1,559
18	130	162	160	136	131	121	109	125	123	129	123	167	1,616
19	126	142	126	143	132	125	126	108	114	119	158	133	1,552
20	123	141	129	133	133	114	134	134	126	110	139	118	1,534
21	117	118	133	126	132	121	130	131	110	146	151	134	1,549
22	137	138	134	149	149	135	131	125	122	112	144	131	1,607
23	152	135	160	149	154	141	112	123	128	125	136	138	1,653
24	128	140	149	151	106	128	118	103	147	141	140	135	1,586
25	146	157	142	146	127	129	109	124	139	123	125	136	1,603
26	151	134	124	124	123	106	115	126	136	118	143	146	1,546
27	139	138	169	129	128	134	135	149	142	124	112	147	1,646
28	147	141	139	155	111	123	114	113	133	134	143	137	1,590
29	130	139	122	124	119	142	146	114	121	118	144	134	1,553
30	154		152	128	130	125	132	132	123	119	121	150	1,466
31	111		141		124		107	130		127		155	895
Total	4,210	4,147	4,414	4,176	3,980	3,868	3,862	3,850	3,849	3,956	3,894	4,253	48,459

**TABLE 2A-4
AGE-SPECIFIC MORTALITY BY PLACE OF DEATH AND DECEDENT STATUS, ARIZONA, 2012**

	Age											Total					
	<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+		Un- known				
IN HOSPITAL																	
In-patient	358	38	46	124	215	356	833	1,691	2,255	2,621	1,815	0	10,352				
Out-patient^a	83	41	18	118	162	201	377	480	454	450	324	0	2,708				
Died on arrival	0	0	0	0	*	*	*	*	10	*	6	0	40 ⁺				
Status unknown	28	21	17	172	317	496	1,217	2,322	2,984	3,651	3,815	0	15,040				
Subtotal	469	100	81	414	700 ⁺	1,060 ⁺	2,430 ⁺	4,500 ⁺	5,703	6,730 ⁺	5,960	0	28,135				
NOT IN HOSPITAL																	
Nursing home^b	19	8	19	17	57	137	485	1,140	1,908	2,789	3,035	0	9,614				
Residence	0	0	0	*	*	21	77	271	617	1,550	3,015	0	5,560 ⁺				
Other^c	*	10	28	209	270	223	330	374	428	1,013	2,157	8	5,060 ⁺				
Unspecified	*	0	*	*	*	*	7	16	16	22	20	0	100 ⁺				
Subtotal	30 ⁺	18	50 ⁺	230 ⁺	340 ⁺	390 ⁺	899	1,801	2,969	5,374	8,227	8	20,324				
TOTAL	495	118	129	646	1,033	1,441	3,331	6,299	8,672	12,100	14,187	8	48,459				

Notes: * Cell suppressed due to count less than 6; ⁺ Sum rounded to nearest tens unit due to addend less than 6; ^a Includes Emergency Room; ^b Includes other long-term care facilities; ^c Includes hospices.



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).

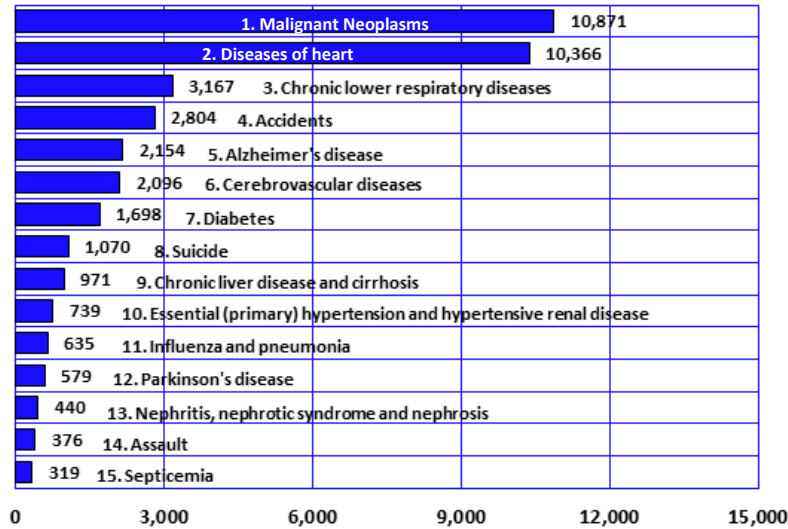
The death certificate now includes a new classification of the decedent's race/ethnic status, consistent with the revised federal standards for collecting and reporting racial and ethnic status. These standards were published in the Federal Register on October 30, 1997, as "Revisions to the Standards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

2B. LEADING CAUSES OF DEATH

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

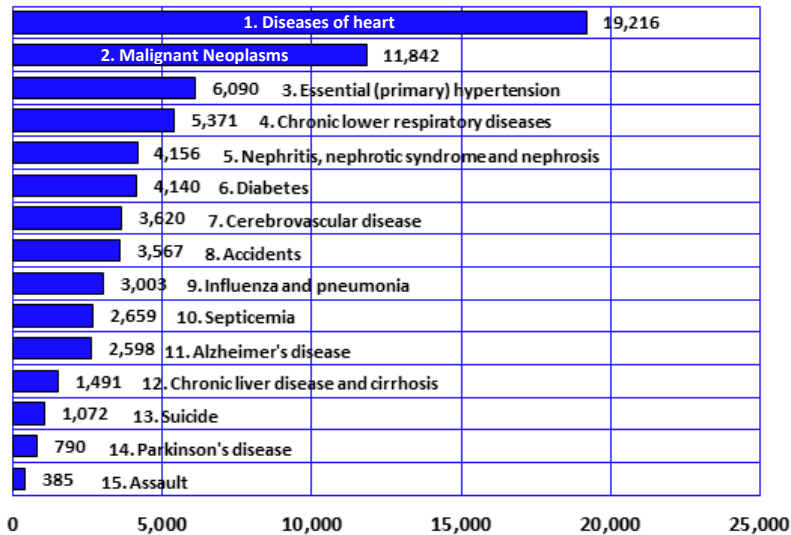
BASED ON THE NUMBER OF DEATHS DUE TO THE UNDERLYING CAUSE:



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.

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

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

In 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.

Figure 2B-3
Age-adjusted Mortality Rates^a for the Five Leading Causes of Death by Race/Ethnicity among Females, Arizona, 2012

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.

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.

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

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

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.

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

**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

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.

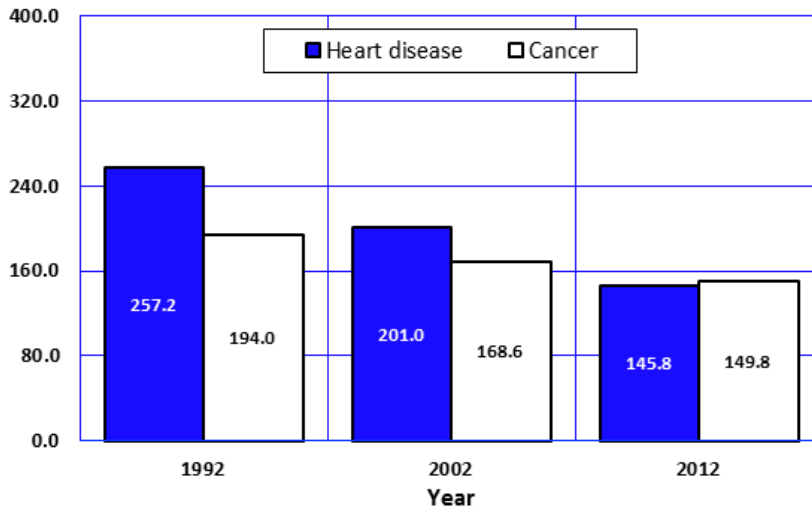
Notes: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard; ^b Urban = Maricopa, Pima, Pinal and Yuma counties. The remaining counties comprise Arizona's rural areas.

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

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

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.

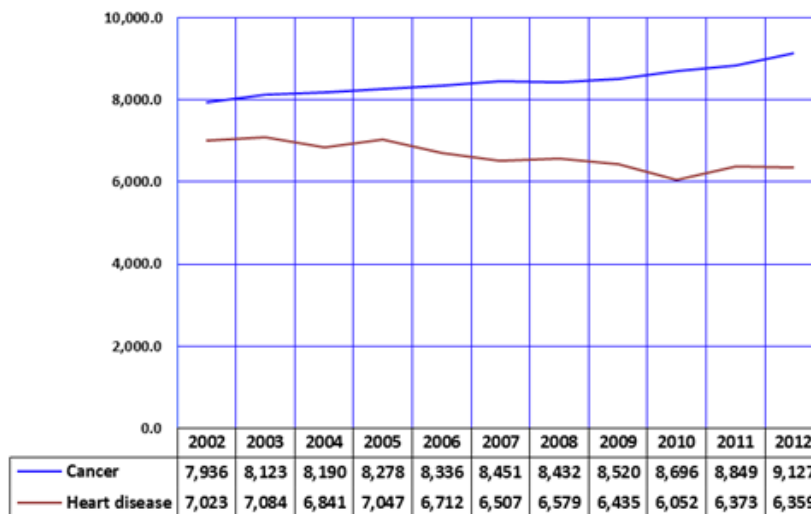
In 2002, 1,403 more Arizonans died from diseases of the heart than cancer (**Table 2B-1**). In 2012, the number of deaths from cancer exceeded the number of heart disease deaths by 505 (**Table 2B-4**).



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

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

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).



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

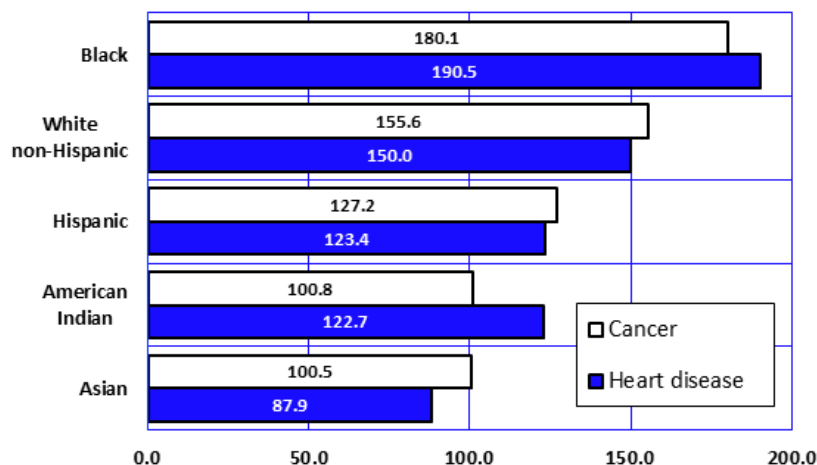
Figure 2B-8
Deaths from Heart Disease and Cancer among Arizonans 85+, 2002-2012



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**).

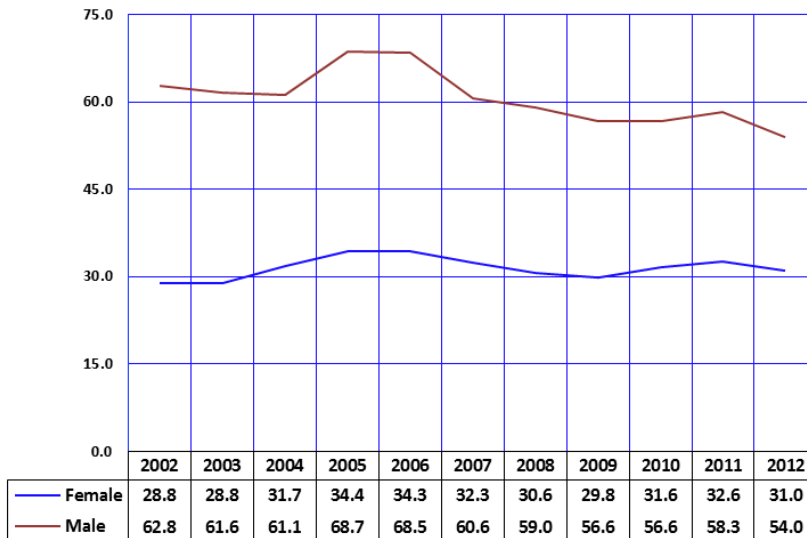
Notes: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

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

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**).

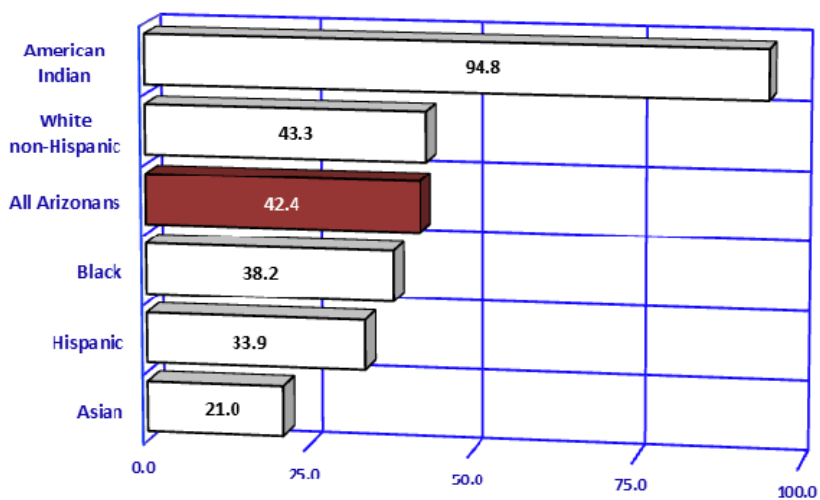
In 2012, 747 deaths were caused by motor vehicle accidents, a decrease of 5.1 percent from 2011. Additionally, Arizonans experienced a 6.4 percent decrease in the number of accidental drug poisoning/overdoses from 2011 (n = 781) to 2012 (n = 731). In 2009 and 2010, the number of deaths from accidental 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



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

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



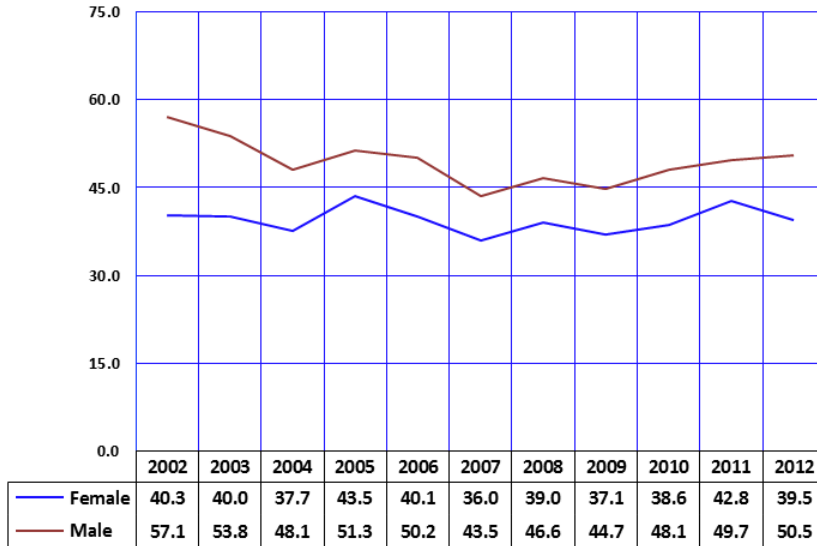
Notes: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

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**).

2B. LEADING CAUSES OF DEATH
Chronic lower respiratory diseases

Figure 2B-12
Age-adjusted Mortality Rates^a for Chronic Lower Respiratory Diseases^b by Gender and Year, Arizona, 2002-2012

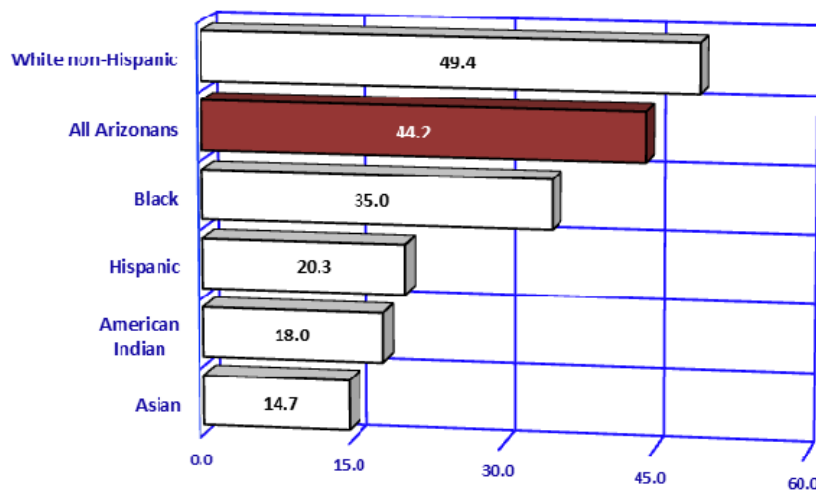


In 2012, chronic lower respiratory diseases (bronchitis, emphysema, asthma) were the 3rd leading cause of death among Arizona residents (**Table 2B-1**). From 2011 to 2012, the mortality rates for chronic lower respiratory diseases (CLRD) decreased for women and increased for men (**Figure 2B-12**, **Table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

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

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



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**.

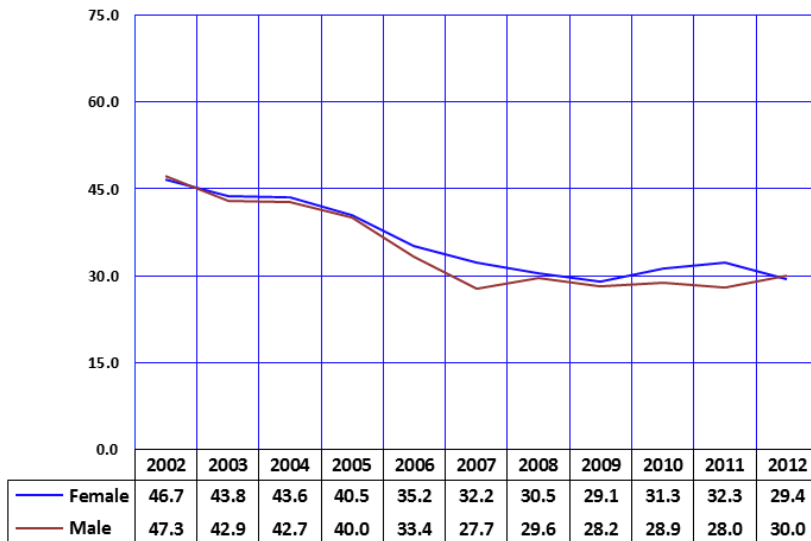
Notes: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

2B. LEADING CAUSES OF DEATH
Cerebrovascular disease

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

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**).

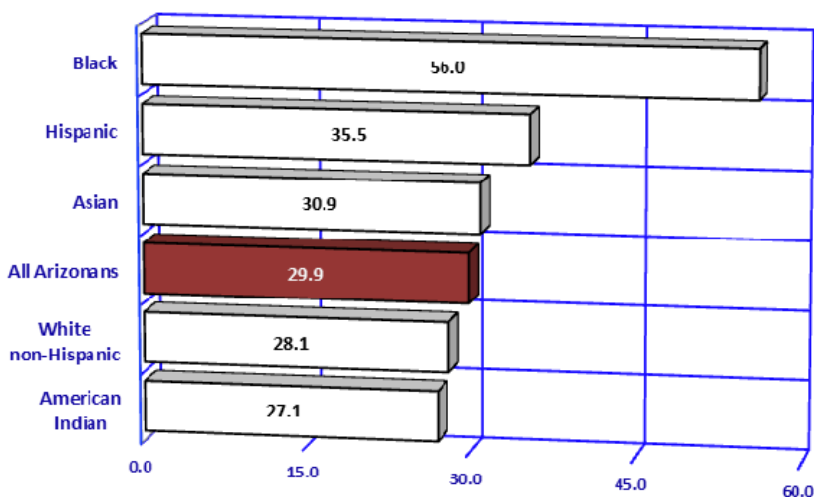


Notes: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

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

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.

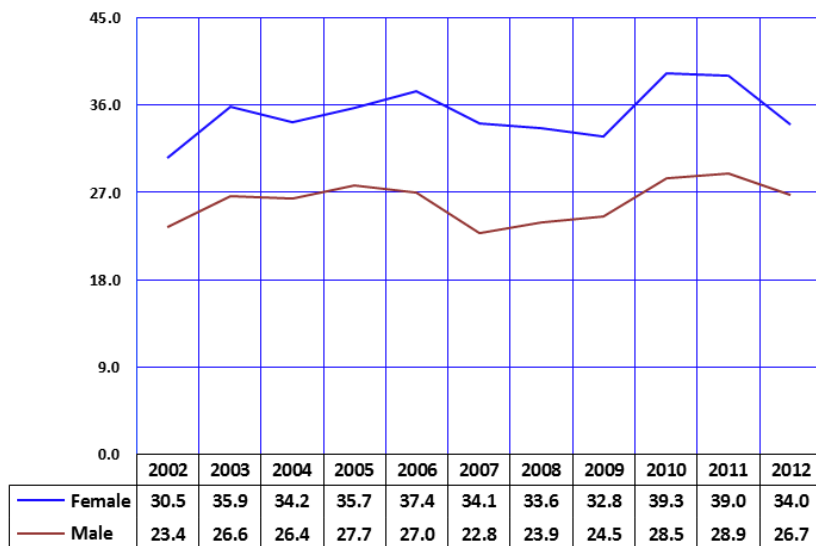
American Indian males had the lowest mortality rate for cerebrovascular disease among gender by racial/ethnic subgroups (24.5 deaths per 100,000, **Table 2B-4**), while Black or African American females had the highest rate of 57.7 deaths per 100,000.



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

2B. LEADING CAUSES OF DEATH
Alzheimer's disease

Figure 2B-16
Age-adjusted Mortality Rates^a for Alzheimer's Disease by Gender and Year, Arizona, 2002-2012



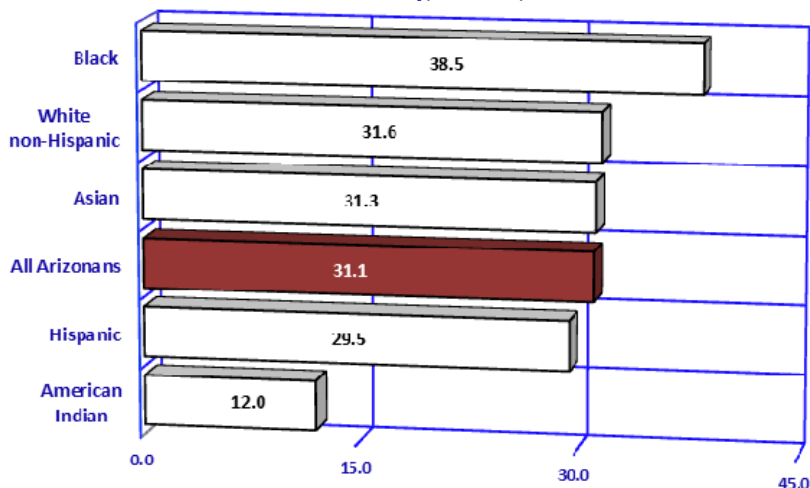
Based on the number of deaths in 2012, Alzheimer's disease was the 6th leading cause of death for females and 12th leading cause for males (**Table 2B-4**).

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.

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

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



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**).

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

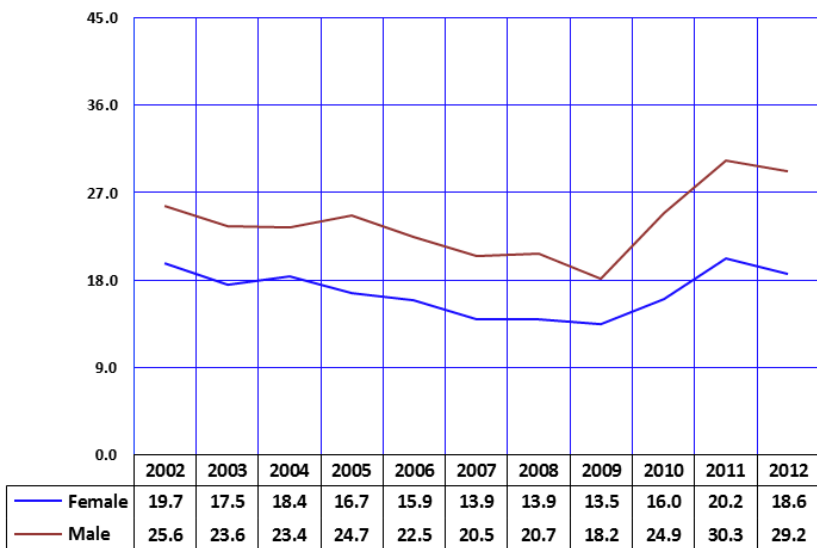
2B. LEADING CAUSES OF DEATH
Diabetes

Figure 2B-18
Age-adjusted Mortality Rates^a for Diabetes by Gender and Year,
Arizona, 2002-2012

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.

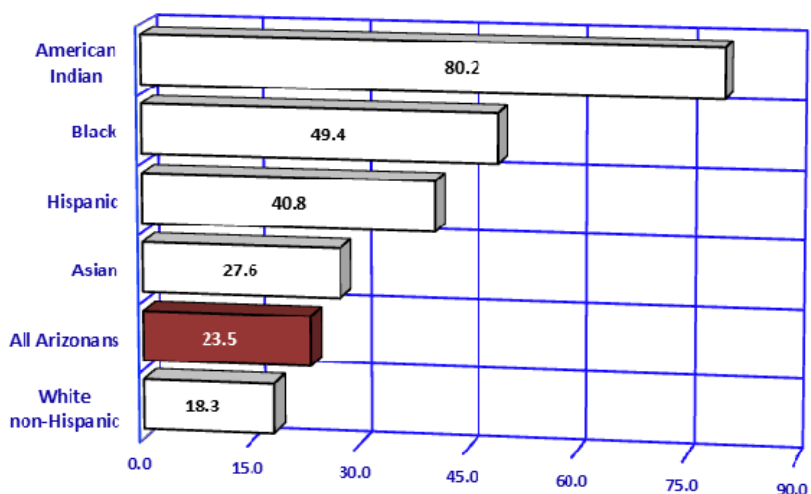


Notes: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

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

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.

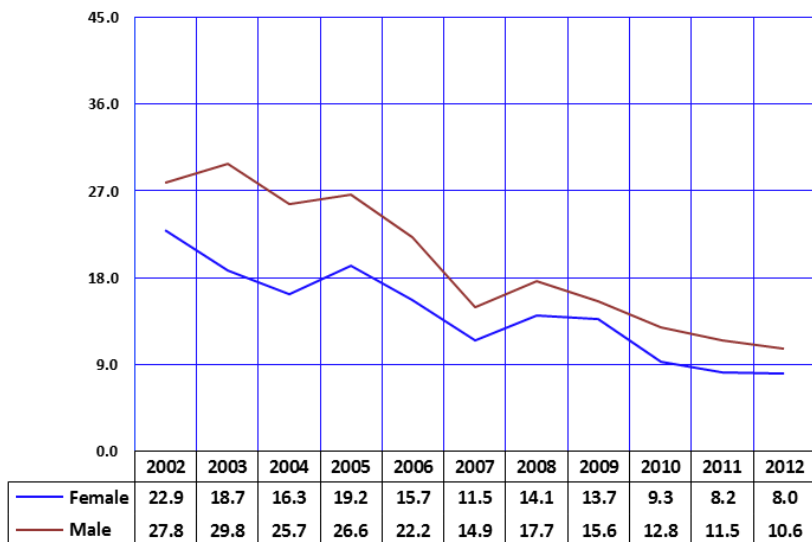
Among the 15 Arizona counties, in 2012 Greenlee (89.5/100,000), Graham (51.7/100,000), and Apache (36.9/100,000) counties had the highest mortality rates for diabetes (**Table 5E-11**).



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

2B. LEADING CAUSES OF DEATH
Influenza and pneumonia

Figure 2B-20
Age-adjusted Mortality Rates^a for Influenza and Pneumonia by Gender and Year, Arizona, 2002-2012



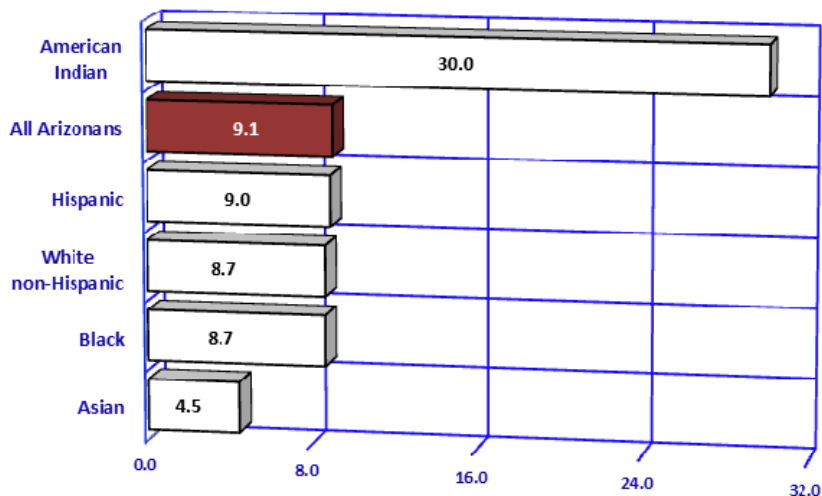
The number of deaths from influenza and pneumonia decreased by 50.4 percent from a recent high of 1,280 in 2005 to 635 in 2012 (**Table 2B-1**). In 2012, influenza and pneumonia were ranked the 10th leading cause of death in Arizona. Among the 635 deaths, influenza was identified as the underlying cause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

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

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



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**).

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

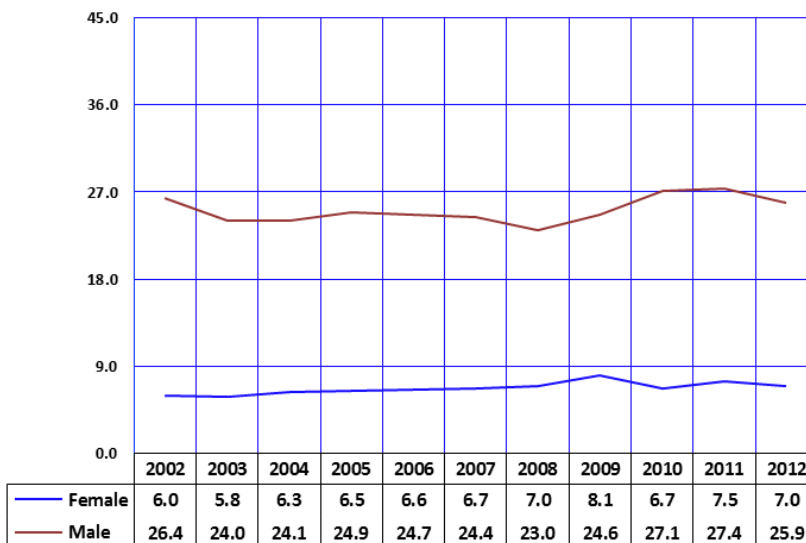
2B. LEADING CAUSES OF DEATH
Suicide

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

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).

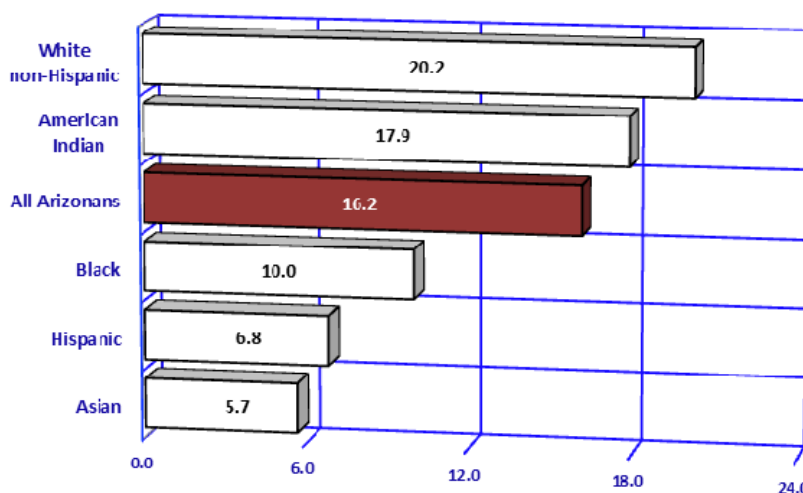


Notes: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

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

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**).

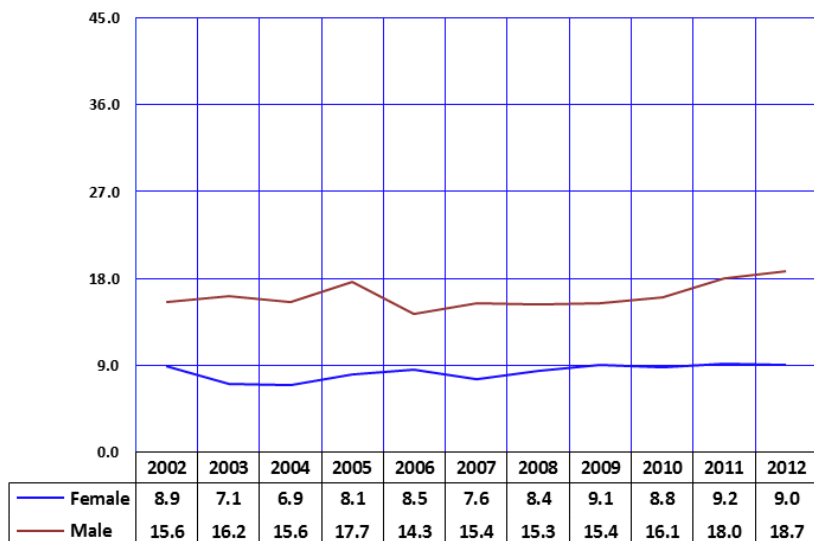
The age-adjusted mortality rates for suicide varied in Arizona in 2012 from 4.2 suicides per 100,000 residents of Santa Cruz County to 33.2 suicides per 100,000 residents of Apache County (**Table 5E-11**).



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

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

Figure 2B-24
Age-adjusted Mortality Rates^a for Chronic Liver Disease and Cirrhosis
by Gender and Year, Arizona, 2002-2012



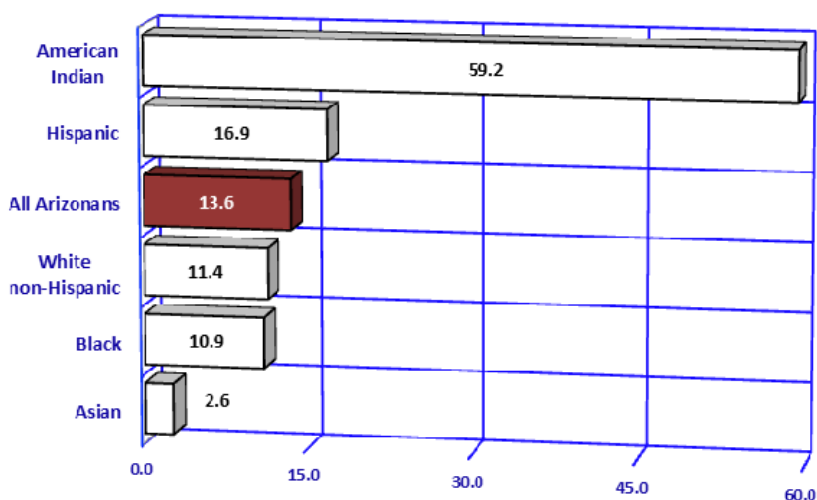
Notes: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

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**).

**TABLE 2B-1
NUMBER OF DEATHS FOR THE LEADING CAUSES OF MORTALITY BY YEAR, ARIZONA, 2002-2012**

Rank in 2002	Rank in 2012	Cause of death	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
2	1	Malignant neoplasms	9,148	9,451	9,506	9,673	9,768	9,955	9,949	10,147	10,423	10,543	10,871
1	2	Diseases of heart	10,551	10,649	10,402	10,779	10,362	10,147	10,299	10,151	9,719	10,424	10,366
3	3	Chronic lower respiratory diseases	2,530	2,522	2,392	2,778	2,771	2,651	2,896	2,808	2,892	3,143	3,167
5	4	Accidents (unintentional injury)	2,416	2,466	2,641	3,006	3,156	3,014	2,951	2,887	2,834	2,959	2,804
6	5	Alzheimer's disease	1,413	1,691	1,672	1,816	2,057	2,041	2,086	2,086	2,314	2,336	2,154
4	6	Cerebrovascular diseases	2,448	2,356	2,412	2,325	2,159	2,079	2,089	2,010	2,051	2,067	2,096
8	7	Diabetes	1,201	1,124	1,180	1,196	1,188	1,145	1,162	1,078	1,372	1,721	1,698
9	8	Intentional self-harm (suicide)	855	807	854	915	948	986	968	1,060	1,070	1,113	1,070
10	9	Chronic liver disease and cirrhosis	647	625	629	749	706	734	778	818	843	933	971
15	10	Essential primary hypertension and hypertensive renal disease	293	339	405	390	420	389	475	475	498	725	739
7	11	Influenza and pneumonia	1,294	1,248	1,108	1,280	1,147	875	1,075	1,007	729	649	635
14	12	Parkinson's disease	397	402	390	492	489	455	487	446	488	545	579
11	13	Nephritis, nephrotic syndrome and nephrosis	600	550	625	603	549	510	488	532	516	409	440
12	14	Assault (homicide)	478	480	486	503	525	494	461	360	404	387	376
13	15	Septicemia	445	463	456	496	539	547	539	528	425	321	319
ALL CAUSES			42,320	42,830	42,736	45,115	45,415	44,640	45,128	45,065	45,871	47,547	48,459

Notes: The cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10). The causes of death for 2002-2012 are classified by ICD-10, replacing the Ninth Revision (ICD-9) used during 1979-1999. The group titles, such as cardiovascular diseases, infectious and parasitic diseases, or other cardiovascular diseases are not ranked to determine the leading causes of death. The ICD-10 code for the underlying cause of death was missing for as many as 970 death records in 2001, 704 in 2002 and 140 in 2008.

**TABLE 2B-2
AGE-ADJUSTED MORTALITY RATES^a BY GENDER AND YEAR FOR SELECTED LEADING CAUSES OF DEATH,
ARIZONA, 2002-2012**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
TOTAL, ALL CAUSES											
Total	796.4	784.0	757.3	772.5	727.3	663.2	659.6	653.2	679.9	699.6	687.2
Male	964.8	942.8	909.0	925.7	861.6	773.8	777.6	763.9	802.0	817.1	811.0
Female	658.0	651.5	632.0	644.9	611.8	561.7	554.3	555.1	572.6	595.3	579.2
CARDIOVASCULAR DISEASE											
Total	265.5	258.4	248.5	245.7	216.4	194.4	194.1	188.8	188.6	201.0	193.3
Male	321.1	310.3	298.4	298.2	258.3	227.5	235.8	228.1	225.1	239.2	233.6
Female	221.0	215.8	207.8	203.8	181.0	164.3	158.1	154.9	156.7	168.0	159.1
-----DISEASES OF HEART											
Total	201.0	197.1	186.7	186.9	166.1	149.5	149.3	145.9	143.3	152.7	145.8
Male	253.6	246.6	234.2	237.4	207.3	184.0	189.3	183.1	179.8	192.8	184.4
Female	158.9	157.1	148.5	147.3	131.8	119.4	115.1	114.1	112.2	119.0	113.7
-----CEREBROVASCULAR DISEASE											
Total	47.0	43.9	43.6	40.6	34.8	30.6	30.3	28.9	30.7	30.6	29.9
Male	47.3	42.9	42.7	40.0	33.4	27.7	29.6	28.2	28.9	28.0	30.0
Female	46.7	43.8	43.6	40.5	35.2	32.2	30.5	29.1	31.3	32.3	29.4
MALIGNANT NEOPLASMS											
Total	168.6	169.4	164.7	161.8	154.7	148.0	145.5	147.2	150.5	151.3	149.8
Male	209.1	208.3	201.2	197.1	187.0	176.7	173.8	174.9	180.6	179.3	180.3
Female	139.1	141.3	138.6	136.1	131.0	125.6	123.0	125.8	127.1	129.5	125.9
CHRONIC LOWER RESPIRATORY											
Total	47.0	45.4	41.9	46.8	44.3	39.2	42.2	40.5	42.6	45.9	44.2
Male	57.1	53.8	48.1	51.3	50.2	43.5	46.6	44.7	48.1	49.7	50.5
Female	40.3	40.0	37.7	43.5	40.1	36.0	39.0	37.1	38.6	42.8	39.5
ACCIDENTS (UNINTENTIONAL)											
Total	45.2	44.8	46.0	51.1	51.2	46.6	44.7	43.1	43.8	45.5	42.4
Male	62.8	61.6	61.1	68.7	68.5	60.6	59.0	56.6	56.6	58.3	54.0
Female	28.8	28.8	31.7	34.4	34.3	32.3	30.6	29.8	31.6	32.6	31.0
-----MOTOR VEHICLE ACCIDENTS											
Total	18.5	18.0	18.1	18.9	19.6	16.2	13.6	11.6	11.1	12.1	11.4
Male	25.5	24.9	23.9	27.0	26.8	22.2	19.5	16.8	15.9	17.6	16.8
Female	11.6	11.2	12.5	11.1	12.4	10.1	7.9	6.5	6.4	6.9	6.3
INFLUENZA AND PNEUMONIA^b											
Total	25.0	23.4	20.1	22.3	18.4	12.9	15.6	14.6	10.9	9.7	9.1
Male	27.8	29.8	25.7	26.6	22.2	14.9	17.7	15.6	12.8	11.5	7.4
Female	22.9	18.7	16.3	19.2	15.7	11.5	14.1	13.7	9.3	8.2	5.6

**TABLE 2B-2 (continued)
AGE-ADJUSTED MORTALITY RATES^a BY GENDER AND YEAR FOR SELECTED LEADING CAUSES OF DEATH,
ARIZONA, 2002-2012**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ALZHEIMER'S DISEASE^b											
Total	28.0	32.5	31.3	32.7	33.4	29.6	29.8	29.5	35.1	35.2	29.9
Male	23.4	26.6	26.4	27.7	27.0	22.8	23.9	24.5	28.5	28.9	41.5
Female	30.5	35.9	34.2	35.7	47.4	34.1	33.6	32.8	39.3	39.0	52.8
DIABETES											
Total	22.3	20.3	20.7	20.1	18.9	17.0	17.0	15.7	20.1	24.8	23.5
Male	25.6	23.6	23.4	24.7	22.5	20.5	20.7	18.2	24.9	30.3	29.2
Female	19.7	17.5	18.4	16.7	15.9	13.9	13.9	13.5	16.0	20.2	18.6
CHRONIC LIVER DISEASE AND											
Total	12.1	11.5	11.1	12.7	11.4	11.3	11.7	12.2	12.3	13.4	13.6
Male	15.6	16.2	15.6	17.7	14.3	15.4	15.3	15.4	16.1	18.0	18.7
Female	8.9	7.1	6.9	8.1	8.5	7.6	8.4	9.1	8.8	9.2	9.0
NEPHRITIS, NEPHROTIC SYNDROME,											
Total	11.3	10.1	11.0	10.4	8.8	7.6	7.1	7.7	7.6	6.0	6.2
Male	12.9	12.0	13.4	12.7	10.5	8.8	8.6	9.2	9.0	7.2	8.9
Female	10.4	8.8	9.4	8.8	7.4	6.6	5.9	6.5	6.4	5.1	6.7
INTENTIONAL SELF-HARM (SUICIDE)											
Total	15.9	14.6	14.9	15.4	15.4	15.4	14.8	16.1	16.7	17.2	16.2
Male	26.4	24.0	24.1	24.9	24.7	24.4	23.0	24.6	27.1	27.4	25.9
Female	6.0	5.8	6.3	6.5	6.6	6.7	7.0	8.1	6.7	7.5	7.0
ASSAULT (HOMICIDE)											
Total	8.6	8.3	8.2	8.2	8.5	7.7	7.1	5.5	6.5	6.1	5.9
Male	13.9	12.8	13.3	13.5	13.5	11.8	11.2	8.0	10.5	9.6	8.6
Female	3.0	3.6	2.9	2.6	3.1	3.2	2.7	2.9	2.4	2.6	3.1
SEPTICEMIA^b											
Total	8.3	8.4	8.0	8.4	8.6	8.1	7.9	7.7	7.4	4.7	4.5
Male	9.6	9.4	9.4	9.7	9.4	8.4	9.4	8.2	10.8	5.4	6.1
Female	7.2	7.6	7.0	7.5	8.0	7.9	6.7	7.3	5.1	4.0	4.8

Notes: ^a The number of deaths per 100,000 population adjusted to the 2000 U.S. standard. The cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10). Beginning in 2000, the causes of death are classified by ICD-10. The causes of death for 1998-1999 are classified by the Ninth Revision (ICD-9). The rates for 1998-1999 were revised in this edition of the report for consistency with the newly recomputed mortality rates in Table 2B-3. ^b The rates for 1998-1999 are comparability-modified. In order to obtain comparability-modified data, the number of deaths or the death rate for a particular cause of death (such as Alzheimer's disease, Nephritis, Influenza and pneumonia, or Septicemia) classified by ICD-9 is adjusted by multiplying it by the comparability ratio for that cause. Comparability ratios are measures of comparison between ICD-9 and ICD-10. Comparability ratio of 1.0 indicates that the same number of deaths would be assigned to a cause-of-death when ICD-9 or ICD-10 was used. The comparability ratios for causes of death other than the four selected above are within 1.0-1.1 range (see Technical Notes).

TABLE 2B-3 (continued)
AGE-ADJUSTED MORTALITY RATES^a FOR SELECTED CAUSES OF DEATH BY RACE/ETHNICITY
AND GENDER, ARIZONA, 1980, 1990-2012

	All groups			White non-Hispanic			Hispanic or Latino			Black or African American			American Indian or Alaska Native			Asian or Pacific Islander		
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F
Intentional self-harm (suicide)																		
1980	17.5	27.9	8.1	18.5	28.7	9.3	11.3	21.1	2.0	10.9	16.8	4.5	18.6	33.1	5.6	8.7	19.6	0.0
1990	19.0	32.6	6.5	20.9	36.1	7.2	9.4	16.6	2.8	12.5	17.2	7.7	20.1	39.1	2.6	7.9	4.6	10.1
1991	18.0	30.8	6.4	19.1	32.8	6.7	12.1	20.3	4.6	17.8	23.6	12.3	18.9	35.1	4.0	2.5	5.5	0.0
1992	17.3	29.0	6.5	18.8	31.1	7.5	10.4	19.2	2.6	10.3	17.8	2.4	19.6	34.7	5.6	4.8	10.5	0.0
1993	18.9	32.2	6.9	21.2	35.7	8.2	8.8	14.9	2.4	8.0	12.4	3.0	21.7	39.1	5.5	5.2	7.7	3.2
1994	19.4	32.2	7.4	21.2	34.9	8.3	11.1	19.6	2.2	8.7	13.9	2.9	20.8	33.0	8.8	16.7	18.9	15.4
1995	19.5	31.1	8.6	22.2	35.1	10.2	9.7	15.8	3.4	14.4	24.6	5.8	16.3	30.0	3.5	4.1	5.0	4.0
1996	16.9	28.4	6.2	19.1	31.8	7.5	9.0	16.2	1.8	7.3	11.7	2.2	15.9	25.6	6.8	4.7	9.9	0.0
1997	17.2	28.7	6.3	19.4	31.8	7.7	8.8	16.3	1.3	12.3	21.5	3.5	18.7	30.5	7.4	11.0	18.2	5.7
1998	17.5	28.7	7.1	20.1	32.2	8.9	9.5	18.4	0.8	6.5	8.7	3.9	16.1	28.1	5.0	6.8	9.1	3.9
1999	15.7	25.5	6.5	16.7	27.1	7.0	10.5	17.8	3.7	12.8	26.1	0.0	16.6	27.6	6.4	6.4	10.3	3.4
2000	14.6	24.7	5.2	16.7	27.6	6.8	7.2	12.7	1.4	6.5	12.2	0.0	16.2	29.7	3.7	5.7	12.3	0.0
2001	14.9	24.6	5.6	12.8	21.0	5.1	5.9	9.9	1.6	9.2	15.2	2.4	15.4	26.4	5.2	9.4	15.4	4.7
2002	15.9	26.4	6.0	18.3	30.0	7.4	8.3	14.2	2.5	6.2	11.4	0.0	17.9	31.7	4.9	4.1	9.1	0.0
2003	14.6	24.0	5.8	16.4	27.1	6.4	8.2	11.8	4.2	11.3	16.6	4.8	15.2	27.4	3.6	6.0	7.0	5.9
2004	14.9	24.1	6.3	16.6	26.4	7.5	9.8	17.5	2.2	12.1	17.3	5.1	17.0	28.5	6.5	4.0	7.0	2.7
2005	15.4	24.9	6.5	16.6	26.7	7.3	10.5	17.8	3.0	3.3	4.7	1.8	17.5	28.7	6.8	11.7	8.9	14.1
2006	15.4	24.7	6.6	17.8	27.9	8.5	8.2	14.2	2.0	8.3	13.9	2.3	13.7	23.4	4.5	8.4	13.2	4.3
2007	15.4	24.4	6.7	18.7	29.4	8.3	9.2	14.7	3.6	6.2	10.1	1.7	9.8	16.3	3.6	6.1	49.2	2.4
2008	14.8	23.0	7.0	17.6	27.3	8.5	6.5	10.8	1.9	7.5	10.3	4.2	13.5	21.2	5.9	9.9	10.7	8.8
2009	16.1	24.6	8.1	18.4	28.0	9.5	9.0	14.0	3.9	10.5	12.7	7.7	15.9	22.9	9.3	9.9	19.9	2.3
2010	16.7	27.1	6.7	20.6	32.8	8.7	7.4	12.5	2.6	6.4	9.9	2.2	18.7	32.3	5.7	6.8	11.0	3.2
2011	17.2	27.4	7.5	22.0	33.1	10.1	8.1	14.8	1.8	9.1	13.7	4.3	14.9	24.0	5.8	5.3	6.9	3.5
2012	16.2	25.9	7.0	20.2	32.2	8.7	6.8	11.1	2.9	10.0	15.5	4.0	17.9	27.9	8.1	5.7	10.2	1.8

Notes: ^a The number of deaths per 100,000 resident population age-adjusted to the 2000 U.S. standard; ^b Chronic obstructive pulmonary diseases in 1980 and 1990; beginning in 2000, when the new standard for the age-adjustment of mortality rates was implemented, all previously published rates for 1979-1999 became obsolete. With the 2008 edition of this report we have added the recomputed age-adjusted mortality rates for 1991-1999. In order to compute these rates, we have used the population denominators consistent with both the 1990 and 2000 census. The mortality rates for 1989-1999 in Table 2B-2 also were revised for consistency; The denominators are available at: <http://www.azdhs.gov/plan/menu/info/pop/pop19/popsets19.htm>

**TABLE 2B-4
NUMBER OF DEATHS AND AGE-ADJUSTED MORTALITY RATES* FOR SELECTED CAUSES OF DEATH BY RACE/ETHNICITY AND
GENDER, ARIZONA, 2012**

	NUMBER OF DEATHS																									
	All groups						White non-Hispanic				Hispanic or Latino				Black or African American				American Indian or Alaska Native				Asian or Pacific Islander			
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F		
Total, all causes	48,459	25,577	22,874	38,629	20,206	18,416	5,963	3,323	2,640	1,509	803	706	1,806	993	812	552	252	300								
Major cardiovascular diseases	13,710	7,233	6,477	11,330	5,999	5,331	1,482	776	706	434	215	219	309	165	144	155	78	77								
Diseases of heart	10,366	5,731	4,635	8,704	4,817	3,887	1,039	573	466	299	159	140	223	126	97	101	56	45								
Coronary heart disease	8,055	4,654	3,401	6,758	3,908	2,850	804	462	342	242	136	106	161	97	64	90	51	39								
Malignant neoplasms	10,871	5,932	4,939	8,954	4,902	4,052	1,234	675	559	327	187	140	208	104	104	148	64	84								
Malignant neoplasm of trachea, bronchus and lung	2,772	1,512	1,260	2,452	1,329	1,123	195	116	79	77	42	35	17	7	10	31	18	13								
Malignant neoplasm of colon, rectum, and anus	950†	520†	423	763	416	347	122	77	45	31	17	14	16	9	7	10†	*	10								
Malignant neoplasm of breast	740†	0†	740	600†	*	593	91	0	91	31	0	31	10	0	10	15	0	15								
Malignant neoplasm of prostate	580†	580†	0	480	480	0	69	69	0	20	20	0	9	9	0	0†	*	0								
Malignant melanoma of skin	220†	150†	69	202	139	63	12	6	6	0†	*	0	0	0	0	0†	*	0								
Malignant neoplasm of cervix uteri	70†	0	70†	47	0	47	14	0	14	6	0	6	0†	0	*	0†	0	*								
Chronic lower respiratory diseases	3,167	1,584	1,583	2,904	1,446	1,458	163	86	77	56	28	28	30	18	12	14	6	8								
Accident (unintentional injury)	2,804	1,700	1,104	1,948	1,124	824	478	321	157	87	60	27	258	179	79	33	16	17								
Accidental poisoning	820†	510†	310†	571	340	231	136	96	40	35	22	13	68	45	23	10†	*	*								
Falls	780†	363	420†	666	300	366	73	37	36	10†	8	*	27	18	9	6	0	6								
Motor vehicle accidents	750†	540†	210†	406	299	107	190	138	52	26	19	7	115	80	35	10†	*	*								
Accidental drowning and submersion	80†	60†	20†	48	34	14	14	8	6	7	7	0	10†	8	*	10†	*	0								
Alzheimer's disease	2,150†	750†	1,406	1,869	658	1,211	199	70	129	41	13	28	20†	*	13	30†	*	25								
Cerebrovascular diseases	2,096	910	1,186	1,627	694	933	299	141	158	82	36	46	52	26	26	36	13	23								
Diabetes	1,698	965	733	1,042	619	423	378	201	177	82	46	36	163	83	80	33	16	17								
Intentional self-harm (suicide)	1,070†	837	230†	849	665	184	122	94	28	30†	22	*	60	46	14	10	*	*								
Chronic liver disease and cirrhosis	970†	640†	327	591	403	188	202	146	56	25	15	10	148	75	73	10†	*	0								
Essential (primary) hypertension and hypertensive renal disease	739	332	407	569	262	307	90	38	52	40	14	26	28	12	16	12	6	6								
Influenza and pneumonia	640†	310†	320†	498	246	252	71	34	37	10†	7	*	51	23	28	0†	*	*								
Parkinson's disease	580†	370†	210†	525	332	193	39	25	14	0†	*	0	10†	*	*	10†	*	*								
Nephritis, nephrotic syndrome and nephrosis	440†	220†	220†	311	156	155	71	39	32	28	13	15	26	11	15	0†	*	*								
Assault (homicide)	380†	270†	100†	159	108	51	120	96	24	39	28	11	54	39	15	0†	*	*								
Septicemia	320†	160†	160†	239	123	116	34	19	15	10†	8	*	30	10	20	10†	*	*								
Human immunodeficiency virus (HIV) disease	100†	90†	10†	60†	51	*	20†	21	*	10†	6	*	6	6	0	0†	*	*								
Injury by firearms	910†	766	150†	660	544	116	156	140	16	44	37	7	40†	35	*	10†	10	*								
Drug-induced deaths	1,040†	620†	420†	802	466	336	152	106	46	45	27	18	38	17	21	10†	*	*								
Alcohol-induced deaths	1,000†	730†	270†	601	432	169	168	137	31	20†	17	*	203	136	67	10†	*	0								

TABLE 2B-4 (continued)
NUMBER OF DEATHS AND AGE-ADJUSTED MORTALITY RATES^a FOR SELECTED CAUSES OF DEATH BY RACE/ETHNICITY AND GENDER, ARIZONA, 2012

	AGE-ADJUSTED MORTALITY RATES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	All groups						White non-Hispanic				Hispanic or Latino				Black or African American				American Indian or Alaska Native				Asian or Pacific Islander																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Total, all causes	687.2	811.0	579.2	693.1	817.9	583.0	616.2	743.0	512.8	886.5	985.3	793.1	843.8	1001.0	708.3	440.1	463.6	418.3	193.3	233.6	159.1	195.1	238.4	157.9	176.2	204.3	153.1	284.0	290.7	269.6	168.3	204.1	139.8	134.7	159.3	116.7	145.8	184.4	113.7	150.0	190.9	115.3	123.4	149.8	101.8	190.5	216.9	168.5	122.7	160.6	93.9	87.9	116.9	68.3	112.7	148.3	83.1	115.9	153.5	84.0	95.5	121.4	74.9	156.1	190.8	129.1	88.9	125.1	62.0	80.5	110.4	60.6	149.8	180.3	125.9	155.6	185.9	131.5	127.2	161.8	102.4	180.1	220.1	147.1	100.8	114.5	90.4	100.5	113.1	94.6	37.7	45.2	31.6	41.5	49.0	35.3	22.0	30.6	15.6	43.0	50.7	36.7	9.3	7.9	9.8	20.9	33.6	13.5	13.1	15.8	10.7	13.4	16.0	11.2	12.2	17.0	8.3	20.5	23.9	17.4	7.1	7.8	6.3	9.8	**	11.4	10.4	**	19.2	10.7	**	20.0	8.1	0.0	14.8	16.0	0.0	30.3	4.8	0.0	8.6	8.9	0.0	15.3	8.1	18.9	0.0	8.2	18.8	0.0	8.9	22.0	0.0	11.6	26.7	0.0	5.1	12.4	0.0	**	**	0.0	3.0	4.5	1.9	3.7	5.4	2.3	0.9	0.9	1.0	**	**	0.0	0.0	0.0	0.0	**	**	0.0	1.1	0.0	2.0	0.9	0.0	1.8	0.9	0.0	1.8	2.1	0.0	4.4	**	0.0	**	**	0.0	**	0.0	44.2	50.5	39.5	49.4	55.5	44.8	20.3	27.1	16.1	35.0	43.4	30.9	18.0	27.4	12.1	14.7	14.3	14.2	42.4	54.0	31.0	43.3	54.0	32.7	33.9	45.4	22.8	38.2	50.3	25.2	94.8	136.9	56.5	21.0	20.0	20.3	12.9	16.0	9.8	15.1	18.3	11.9	8.0	11.4	4.7	13.9	16.4	11.3	25.2	34.0	16.9	4.7	**	**	11.2	12.1	10.3	11.5	12.3	10.8	9.1	10.1	8.1	6.6	10.9	**	13.2	19.2	8.1	5.2	0.0	8.5	11.4	16.8	6.3	10.0	14.8	5.3	10.6	16.3	5.4	10.1	15.2	5.1	37.8	53.1	22.8	4.9	**	**	1.3	2.0	0.6	1.3	1.9	0.8	0.8	0.8	0.8	2.4	4.5	0.0	2.9	5.6	**	**	**	0.0	31.1	26.7	34.0	31.6	27.4	34.4	29.5	26.2	31.5	38.5	34.9	41.3	12.0	**	14.6	31.3	**	44.0	29.9	30.0	29.4	28.1	28.0	27.6	35.5	37.8	33.6	56.0	50.9	57.7	27.1	30.3	24.5	30.9	26.4	33.3	23.5	29.2	18.6	18.3	23.9	13.5	40.8	47.4	35.4	49.4	59.0	40.6	80.2	94.1	69.7	27.6	27.8	26.6	16.2	25.9	7.0	20.2	32.2	8.7	6.8	11.1	2.9	10.0	15.5	**	17.9	27.9	8.1	5.7	10.2	**	13.6	18.7	9.0	11.4	15.9	7.2	16.9	25.7	9.2	10.9	14.8	8.5	59.2	63.3	55.5	**	**	0.0	10.4	10.9	9.9	9.7	10.6	8.9	10.8	9.8	11.3	28.3	15.8	33.9	14.6	11.5	16.0	11.3	11.9	10.5	9.1	10.6	8.0	8.7	10.1	7.7	9.0	10.4	8.0	8.7	14.1	**	30.0	32.6	28.6	**	**	**	8.3	12.5	5.2	8.9	13.2	5.7	5.5	9.2	3.3	**	**	0.0	4.0	**	**	**	**	**	6.2	7.2	5.4	5.3	6.2	4.7	8.7	10.8	7.1	17.0	14.5	17.1	15.5	13.4	16.2	**	**	**	5.9	8.6	3.1	4.3	6.0	2.4	6.1	9.7	2.5	14.5	20.2	8.2	17.3	26.3	8.8	**	**	**	4.5	5.1	4.0	4.2	4.8	3.8	3.8	4.8	2.9	6.3	9.8	**	15.8	8.8	20.0	4.4	**	**	Human immunodeficiency virus (HIV) disease	1.5	2.7	0.3	1.3	2.5	**	1.4	2.6	**	4.5	4.5	**	2.0	3.9	0.0	**	**	**	13.8	23.6	4.3	15.7	26.3	5.3	8.2	14.9	1.6	15.5	24.4	5.4	12.6	22.3	**	5.3	10.2	**	16.3	19.4	13.1	20.6	24.3	16.7	9.0	12.5	5.5	17.6	20.0	15.1	13.4	12.1	14.8	**	**	**	14.2	21.2	7.7	12.0	17.5	6.9	12.8	22.4	4.3	9.6	16.2	**	78.6	112.4	49.0	**	**	0.0
Human immunodeficiency virus (HIV) disease	1.5	2.7	0.3	1.3	2.5	**	1.4	2.6	**	4.5	4.5	**	2.0	3.9	0.0	**	**	**	13.8	23.6	4.3	15.7	26.3	5.3	8.2	14.9	1.6	15.5	24.4	5.4	12.6	22.3	**	5.3	10.2	**	16.3	19.4	13.1	20.6	24.3	16.7	9.0	12.5	5.5	17.6	20.0	15.1	13.4	12.1	14.8	**	**	**	14.2	21.2	7.7	12.0	17.5	6.9	12.8	22.4	4.3	9.6	16.2	**	78.6	112.4	49.0	**	**	0.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										

Notes: * Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; ^a The number of deaths per 100,000 resident population age-adjusted to the 2000 U.S. standard, the rates for breast cancer and cervical cancer are per 100,000 females, the rate for prostate cancer is per 100,000 males.

**TABLE 2B-5
AGE-ADJUSTED MORTALITY RATES^a FOR SELECTED CAUSES OF DEATH BY URBAN/RURAL AREA AND GENDER,
ARIZONA, 2012**

	Arizona			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total, all causes	687.2	811.0	579.2	668.9	783.8	570.5	766.9	920.8	624.3
Cardiovascular diseases	193.3	233.6	159.1	188.2	226.8	156.2	212.6	257.3	171.3
Diseases of heart	145.8	184.4	113.7	140.2	177.1	110.2	167.7	210.5	129.1
Coronary heart disease	112.7	148.3	83.1	110.0	144.3	82.2	122.1	161.6	86.6
Malignant neoplasms	149.8	180.3	125.9	148.9	177.9	126.9	152.5	188.6	121.7
Lung cancer	37.7	45.2	31.6	37.6	44.4	32.2	37.8	47.6	28.9
Colorectal cancer	13.1	15.8	10.7	12.6	15.1	10.4	15.3	18.9	12.2
Breast cancer	10.4	0.0	19.2	10.5	0.0	19.4	9.8	0.0	18.6
Prostate cancer	8.1	18.9	0.0	8.0	18.8	0.0	8.9	19.9	0.0
Malignant melanoma of skin	3.0	4.5	1.9	3.1	4.8	1.7	2.9	3.0	2.8
Cervical cancer	1.1	0.0	2.0	1.0	0.0	2.0	1.2	0.0	2.5
Chronic lower respiratory diseases	44.2	50.5	39.5	42.9	49.0	38.6	49.1	55.9	43.8
Accident (unintentional injuries)	42.4	54.0	31.0	38.9	49.6	28.6	61.1	76.8	44.6
Accidental poisoning	12.9	16.0	9.8	11.9	14.7	9.0	18.7	22.7	14.4
Motor vehicle accidents	11.4	16.8	6.3	9.6	14.4	5.0	21.4	29.1	13.6
Falls	11.2	12.1	10.3	11.2	12.4	10.3	11.3	11.7	10.4
Accidental drowning	1.3	2.0	0.6	1.2	1.7	0.6	1.8	3.0	0.6
Alzheimer's disease	31.1	26.7	34.0	33.6	29.4	36.3	20.3	15.1	23.6
Cerebrovascular diseases	29.9	30.0	29.4	29.8	29.5	29.6	30.1	32.0	28.2
Diabetes	23.5	29.2	18.6	23.8	29.1	19.4	22.0	29.1	15.6
Intentional self-harm (suicide)	16.2	25.9	7.0	14.4	22.9	6.5	25.0	40.3	9.9
Chronic liver disease and cirrhosis	13.6	18.7	9.0	12.0	16.9	7.7	21.0	26.4	16.1
Essential (primary) hypertension and hypertensive renal disease	10.4	10.9	9.9	10.8	11.5	10.2	8.6	8.2	8.6
Influenza and pneumonia	9.1	10.6	8.0	8.2	9.4	7.3	13.1	15.8	11.4
Parkinson's disease	8.3	12.5	5.2	8.6	13.1	5.3	7.1	10.1	4.7
Assault (homicide)	6.2	7.2	5.4	5.1	5.7	4.6	11.0	12.3	9.6
Nephritis	5.9	8.6	3.1	5.4	8.0	2.7	8.5	11.3	5.5
Septicemia	4.5	5.1	4.0	3.9	4.5	3.4	7.1	7.3	7.1
(HIV) disease	1.5	2.7	0.3	1.6	2.8	0.4	1.1	2.0	0.1
Injury by firearms	13.8	23.6	4.3	12.7	21.6	4.0	18.6	31.9	5.5
Drug-induced deaths	16.3	19.4	13.1	15.5	18.5	12.5	20.4	23.9	16.9
Alcohol-induced deaths	14.2	21.2	7.7	12.3	18.7	6.6	23.8	34.6	13.4

Notes: ^a The number of deaths per 100,000 population in specified group age-adjusted to the 2000 standard U.S.; The causes of death for 2007 are classified by the Tenth Revision of the International Classification of Diseases (ICD-10); The rates for breast cancer and cervical cancer are per 100,000 females, the rates for prostate cancer is per 100,000 males.

**TABLE 2B-6
DEATHS AND DEATH RATES BY GENDER FOR SELECTED CAUSES,
ARIZONA RESIDENTS, 2012**

Cause of death (Tenth Revision, International Statistical Classification of Diseases)	Number of deaths:			Crude death rate per 100,000 persons:		
	Total	Male	Female	Total	Male	Female
Total, all causes	48,459	25,577	22,874	745.7	791.1	700.5
Salmonella infections	0	0	0	0.0	0.0	0.0
Shigellosis and amebiasis	0	0	0	0.0	0.0	0.0
Certain other intestinal infections	256	113	143	3.9	3.5	4.4
Enterocolitis due to Clostridium difficile	195	86	109	3.0	2.7	3.3
Tuberculosis	10†	*	0	**	**	0.0
Respiratory tuberculosis	10†	*	0	**	**	0.0
Other tuberculosis	0	0	0	0.0	0.0	0.0
Whooping cough	0	0	0	0.0	0.0	0.0
Scarlet fever and erysipelas	0	0	0	0.0	0.0	0.0
Meningococcal infection	0†	*	*	**	**	**
Septicemia	319	163	156	4.9	5.0	4.8
Syphilis	0†	*	0	**	**	0.0
Acute poliomyelitis	0	0	0	0.0	0.0	0.0
Arthropod-borne encephalitis	0	0	0	0.0	0.0	0.0
Measles	0	0	0	0.0	0.0	0.0
Viral hepatitis	288	199	89	4.4	6.2	2.7
Human immunodeficiency virus (HIV) disease	98	85	13	1.5	2.6	0.4
Malaria	0	0	0	0.0	0.0	0.0
Other and unspecified infectious and parasitic diseases	160	92	68	2.5	2.8	2.1
Malignant neoplasms	10,871	5,932	4,939	167.3	183.5	151.2
Malignant neoplasm of lip, oral cavity and pharynx	144	106	38	2.2	3.3	1.2
Malignant neoplasm of esophagus	325	260	65	5.0	8.0	2.0
Malignant neoplasm of stomach	204	118	86	3.1	3.6	2.6
Malignant neoplasm of colon, rectum, and anus	946	523	423	14.6	16.2	13.0
Malignant neoplasm of liver and intrahepatic bile ducts	446	302	144	6.9	9.3	4.4
Malignant neoplasm of pancreas	813	450	363	12.5	13.9	11.1
Malignant neoplasm of larynx	44	38	6	0.7	1.2	0.2
Malignant neoplasm of trachea, bronchus and lung	2,772	1,512	1,260	42.7	46.8	38.6
Malignant melanoma of skin	216	147	69	3.3	4.5	2.1
Malignant neoplasm of breast	740†	*	740	11.4	**	22.7
Malignant neoplasm of cervix uteri	73	0	73	1.1	0.0	2.2
Malignant neoplasm of corpus uteri and uterus, part unspecified	131	0	131	2.0	0.0	4.0
Malignant neoplasm of ovary	299	0	299	4.6	0.0	9.2
Malignant neoplasm of prostate	581	581	0	8.9	17.9	0.0
Malignant neoplasm of kidney and renal pelvis	252	171	81	3.9	5.3	2.5
Malignant neoplasm of bladder	316	244	72	4.9	7.5	2.2
Malignant neoplasm of meninges, brain and other parts of CNS	337	196	141	5.2	6.1	4.3
Malignant neoplasm of lymphoid, hematopoietic and related tissue	1,097	643	454	16.9	19.9	13.9
Hodgkin's disease	17	8	9	0.3	0.2	0.3
Non-Hodgkin's lymphoma	372	214	158	5.7	6.6	4.8
Leukemia	486	293	193	7.5	9.1	5.9
Multiple myeloma and immunoproliferative neoplasms	221	128	93	3.4	4.0	2.8
Other and unspecified malignant neoplasms of lymphoid tissue	0†	0	*	**	0.0	**
All other and unspecified malignant neoplasm	1,133	640	493	17.4	19.8	15.1
In situ neoplasms	279	151	128	4.3	4.7	3.9
Anemias	60	25	35	0.9	0.8	1.1
Diabetes	1,698	965	733	26.1	29.8	22.4

TABLE 2B-6 (continued)
DEATHS AND DEATH RATES BY GENDER FOR SELECTED CAUSES,
ARIZONA RESIDENTS, 2012

Cause of death (Tenth Revision, International Statistical Classification of Diseases)	Number of deaths:			Crude death rate per 100,000 persons:		
	Total	Male	Female	Total	Male	Female
Nutritional deficiencies	51	20	31	0.8	0.6	0.9
Malnutrition	48	20	28	0.7	0.6	0.9
Other nutritional deficiencies	0†	0	*	**	0.0	**
Obesity	191	91	100	2.9	2.8	3.1
Meningitis	14	7	7	0.2	0.2	0.2
Parkinson's disease	579	368	211	8.9	11.4	6.5
Alzheimer's disease	2,154	748	1,406	33.1	23.1	43.1
Major cardiovascular diseases	13,710	7,233	6,477	211.0	223.7	198.3
Diseases of heart	10,366	5,731	4,635	159.5	177.3	141.9
Acute rheumatic fever and chronic rheumatic heart disease	51	19	32	0.8	0.6	1.0
Hypertensive heart disease	761	375	386	11.7	11.6	11.8
Hypertensive heart and renal disease	51	28	23	0.8	0.9	0.7
Ischemic heart disease	7,294	4,279	3,015	112.2	132.4	92.3
Acute myocardial infarction	1,574	882	692	24.2	27.3	21.2
Other acute ischemic heart disease	31	16	15	0.5	0.5	0.5
Other forms of chronic ischemic heart disease	5,689	3,381	2,308	87.5	104.6	70.7
Atherosclerotic cardiovascular disease	1,803	1,130	673	27.7	35.0	20.6
All other forms of chronic ischemic heart disease	3,886	2,251	1,635	59.8	69.6	50.1
Other heart diseases	2,209	1,030	1,179	34.0	31.9	36.1
Acute and subacute endocarditis	27	18	9	0.4	0.6	0.3
Diseases of pericardium and acute myocarditis	14	7	7	0.2	0.2	0.2
Heart failure	610	273	337	9.4	8.4	10.3
All other forms of heart disease	1,558	732	826	24.0	22.6	25.3
Essential (primary) hypertension and hypertensive renal disease	739	332	407	11.4	10.3	12.5
Cerebrovascular diseases	2,096	910	1,186	32.3	28.1	36.3
Atherosclerosis	183	85	98	2.8	2.6	3.0
Other diseases of circulatory system	326	175	151	5.0	5.4	4.6
Aortic aneurysm and dissection	146	87	59	2.2	2.7	1.8
Other disease of arteries, arterioles and capillaries	180	88	92	2.8	2.7	2.8
Other disorders of circulatory system	79	31	48	1.2	1.0	1.5
Influenza and pneumonia	635	313	322	9.8	9.7	9.9
Influenza	19	13	6	0.3	0.4	0.2
Pneumonia	616	300	316	9.5	9.3	9.7
Other acute lower respiratory infections	10†	*	*	0.1	**	**
Acute bronchiolitis	10†	*	*	0.1	**	**
Unspecified acute lower respiratory infection	0	0	0	0.0	0.0	0.0
Chronic lower respiratory diseases	3,167	1,584	1,583	48.7	49.0	48.5
Bronchitis, chronic and unspecified	15	8	7	0.2	0.2	0.2
Emphysema	133	78	55	2.0	2.4	1.7
Asthma	73	24	49	1.1	0.7	1.5
Other chronic lower respiratory diseases	2,946	1,474	1,472	45.3	45.6	45.1
Pneumoconioses and chemical effects	10†	12	*	0.2	0.4	**
Pneumonitis due to solids and liquids	233	135	98	3.6	4.2	3.0
Other disease of respiratory system	499	272	227	7.7	8.4	7.0
Peptic ulcer	59	29	30	0.9	0.9	0.9
Diseases of appendix	10†	*	*	0.1	**	**
Hernia	40	14	26	0.6	0.4	0.8

TABLE 2B-6 (continued)
DEATHS AND DEATH RATES BY GENDER FOR SELECTED CAUSES,
ARIZONA RESIDENTS, 2012

Cause of death (Tenth Revision, International Statistical Classification of Diseases)	Number of deaths:			Crude death rate per 100,000 persons:		
	Total	Male	Female	Total	Male	Female
Chronic liver disease and cirrhosis	971	644	327	14.9	19.9	10.0
Alcoholic liver disease	673	470	203	10.4	14.5	6.2
Other chronic liver disease and cirrhosis	298	174	124	4.6	5.4	3.8
Cholelithiasis and other disorders of gallbladder	74	37	37	1.1	1.1	1.1
Nephritis, nephrotic syndrome and nephrosis	440	221	219	6.8	6.8	6.7
Acute and rapidly progressive nephritic and nephrotic syndrome	0†	*	*	**	**	**
Chronic glomerulonephritis	103	45	58	1.6	1.4	1.8
Renal failure	332	174	158	5.1	5.4	4.8
Others disorders of kidney	0†	0	*	**	0.0	**
Infections of kidney	16	7	9	0.2	0.2	0.3
Hyperplasia of prostate	18	18	0	0.3	0.6	0.0
Inflammatory diseases of female pelvic organs	0†	0	*	**	0.0	**
Pregnancy, childbirth and the puerperium	18	0	18	0.3	0.0	0.6
Pregnancy with abortive outcome	0	0	0	0.0	0.0	0.0
Other complications of pregnancy, childbirth and the puerperium	18	0	18	0.3	0.0	0.6
Perinatal conditions	240	136	104	3.7	4.2	3.2
Congenital malformations	229	111	118	3.5	3.4	3.6
Symptoms, signs, abnormal findings	1,677	765	904	25.8	23.7	27.7
Total accidents	2,804	1,700	1,104	43.1	52.6	33.8
Transport accidents	805	582	223	12.4	18.0	6.8
Motor vehicle accidents	747	541	206	11.5	16.7	6.3
Other land transport accidents	20†	16	*	0.3	0.5	**
Water, air, space	38	25	13	0.6	0.8	0.4
Nontransport accidents	1,999	1,118	881	30.8	34.6	27.0
Falls	782	363	419	12.0	11.2	12.8
Accidental discharge of firearms	10†	*	0	**	**	0.0
Accidental drowning and submersion	83	62	21	1.3	1.9	0.6
Accidental exposure to smoke, fire and flames	43	27	16	0.7	0.8	0.5
Accidental poisoning	817	507	310	12.6	15.7	9.5
Other and unspecified nontransport accidents	269	154	115	4.1	4.8	3.5
Intentional self-harm (suicide)	1,070	837	233	16.5	25.9	7.1
By discharge of firearms	638	552	86	9.8	17.1	2.6
By other means	432	285	147	6.6	8.8	4.5
Assault (homicide)	376	274	102	5.8	8.5	3.1
By discharge of firearms	246	191	55	3.8	5.9	1.7
By other means	130	83	47	2.0	2.6	1.4
Legal intervention	17	17	0	0.3	0.5	0.0
Events of undetermined intent	170	98	72	2.6	3.0	2.2
Discharge of firearms	10†	7	*	0.2	0.2	**
Other and unspecified events of undetermined intent	159	91	68	2.4	2.8	2.1
Operations of war	0	0	0	0.0	0.0	0.0
Complications of medical and surgical care	48	18	30	0.7	0.6	0.9
INJURY BY FIREARMS	911	766	145	14.0	23.7	4.4
DRUG-INDUCED DEATHS	1,042	619	423	16.0	19.1	13.0
ALCOHOL-INDUCED DEATHS	999	727	272	15.4	22.5	8.3

Note: * Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; The list of Causes of Death was developed for the general analysis of ICD-10 mortality statistics and for ranking of leading causes of death. It is similar in structure and content and replaces the list of 72 Selected Causes of Death used for ICD-9 mortality statistics.

**TABLE 2B-7
NUMBER OF DEATHS FROM DISEASES OF THE HEART BY CATEGORY, GENDER, AND YEAR, ARIZONA, 2002-2012**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
ALL FORMS OF HEART DISEASE											
TOTAL	10,551	10,649	10,402	10,779	10,362	10,147	10,052	10,151	9,719	10,424	10,366
Male	5,642	5,649	5,543	5,789	5,538	5,455	5,535	5,558	5,351	5,748	5,731
Female	4,909	5,000	4,859	4,990	4,834	4,692	4,517	4,593	4,368	4,675	4,635
Acute rheumatic fever and chronic rheumatic heart disease											
TOTAL	46	63	46	55	57	38	57	51	42	69	51
Male	14	25	18	16	15	15	24	16	15	22	19
Female	32	38	28	39	42	23	33	35	27	47	32
Hypertensive heart and renal disease^a											
TOTAL	31	33	32	39	24	29	48	35	36	49	51
Male	14	20	9	18	13	15	22	18	16	22	28
Female	17	13	23	21	11	14	26	17	20	27	23
Ischemic heart disease											
TOTAL	7,962	8,037	7,836	8,060	7,628	7,163	7,326	7,372	7,043	7,498	7,294
Male	4,449	4,402	4,344	4,509	4,202	4,005	4,225	4,233	4,076	4,409	4,279
Female	3,513	3,635	3,492	3,551	3,426	3,158	3,101	3,139	2,967	3,089	3,015
Hypertensive heart disease											
TOTAL	431	440	463	487	506	646	636	698	644	739	761
Male	197	215	223	226	256	332	322	340	302	348	375
Female	234	225	240	261	250	314	314	358	342	391	386
Other heart diseases											
TOTAL	2,104	2,076	2,025	2,138	2,147	2,271	1,985	1,995	1,954	2,069	2,209
Male	968	987	949	1,020	1,052	1,088	942	951	942	947	1,030
Female	1,136	1,089	1,076	1,118	1,095	1,183	1,043	1,044	1,012	1,121	1,179

Notes: Beginning in 2000, the causes of death are classified by ICD-10, replacing the Ninth Revision (ICD-9) used during 1979-1999; ^a The comparability ratio for hypertensive heart and renal disease is 1.5, indicating a 50 percent increase in hypertensive heart and renal disease deaths when classified by ICD-10.

**TABLE 2B-8
NUMBER OF DEATHS FOR SELECTED SUBCATEGORIES OF MALIGNANT NEOPLASMS BY GENDER AND YEAR,
ARIZONA, 2002-2012**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
ALL CANCERS	TOTAL^a	9,148	9,451	9,506	9,873	9,768	9,955	9,941	10,147	10,423	10,543	10,871
	Male	4,982	5,088	5,107	5,184	5,233	5,364	5,432	5,639	5,639	5,639	5,932
	Female	4,166	4,363	4,399	4,489	4,535	4,591	4,715	4,784	4,903	4,903	4,939
ICD-9 140-149/ICD-10 C00-C14 - Malignant neoplasm of lip, oral cavity and pharynx (oropharyngeal cancer)	TOTAL	122	114	127	140	115	133	151	125	134	132	144
	Male	91	85	87	95	80	91	101	89	98	105	106
	Female	31	29	40	45	35	42	50	36	36	27	38
ICD-9 150/ICD-10 C15 - Malignant neoplasm of esophagus	TOTAL	239	239	240	222	261	252	262	266	273	288	325
	Male	191	196	190	188	209	206	212	214	220	232	260
	Female	48	43	50	34	52	46	50	52	53	56	65
ICD-9 151/ICD-10 C16 - Malignant neoplasm of stomach	TOTAL	197	177	189	200	190	186	200	179	199	211	204
	Male	132	106	110	113	111	106	121	105	123	131	118
	Female	65	71	79	87	79	80	79	74	76	80	86
ICD-9 153, 154/ICD-10 C18-C21 - Malignant neoplasm of colon, rectum, rectosigmoid junction and anus	TOTAL	887	995	870	915	917	966	896	887	952	927	946
	Male	484	535	466	490	495	535	466	463	520	482	523
	Female	403	460	404	425	422	431	430	424	432	445	423
ICD-9 157/ICD-10 C25 - Malignant neoplasm of pancreas	TOTAL	477	474	551	579	575	629	636	622	707	708	813
	Male	244	240	306	305	301	362	340	304	373	355	450
	Female	233	234	245	274	274	267	296	318	334	353	363
ICD-9 162/ICD-10 C33-C34 - Malignant neoplasm of trachea, bronchus and lung	TOTAL	2,565	2,682	2,656	2,607	2,718	2,573	2,632	2,691	2,655	2,654	2,772
	Male	1,439	1,530	1,490	1,461	1,528	1,443	1,477	1,480	1,465	1,474	1,512
	Female	1,126	1,152	1,166	1,146	1,190	1,130	1,155	1,211	1,190	1,180	1,260
ICD-9 172/ICD-10 C43 - Malignant melanoma of skin	TOTAL	156	150	152	169	179	188	168	226	191	187	216
	Male	101	105	104	133	124	124	115	160	133	125	147
	Female	55	45	48	36	55	64	53	66	58	62	69
ICD-9 174,175/ICD-10 C50 - Malignant neoplasm of breast	TOTAL	656	670 [†]	660 [†]	677	745	724	734	716	732	747	740 [†]
	Male	10	*	*	7	6	6	9	8	12	6	*
	Female	646	667	663	670	739	718	725	708	720	741	740

**TABLE 2B-8 (continued)
NUMBER OF DEATHS FOR SELECTED SUBCATEGORIES OF MALIGNANT NEOPLASMS BY GENDER AND YEAR,
ARIZONA, 2002-2012**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
ICD-9 180/ICD-10 C53 - Malignant neoplasm of cervix uteri	TOTAL	63	63	64	65	54	62	60	64	68	72	73
	Female	63	63	64	65	54	62	60	64	68	72	73
ICD-9 179, 182/ ICD-10 C54-C55 - Malignant neoplasm of body of uterus and of uterus, part unspecified	TOTAL	75	81	98	107	97	97	115	108	138	159	131
	Female	75	81	98	107	97	97	115	108	138	159	131
ICD-9 185/ICD-10 C61 - Malignant neoplasm of prostate	TOTAL	533	544	544	564	522	548	568	551	549	574	581
	Male	533	544	544	564	522	548	568	551	549	574	581
ICD-9 188/ICD-10 C67 - Malignant neoplasm of bladder	TOTAL ^a	209	229	238	244	238	270	258	264	247	355	316
	Male	152	164	157	180	175	206	192	206	183	245	244
	Female	57	65	81	64	63	64	66	58	64	109	72
ICD-9 189/ICD-10 C64-C65 - Malignant neoplasm of kidney and other and unspecified urinary organs	TOTAL	230	215	227	248	238	231	247	240	286	267	252
	Male	152	137	149	150	156	147	154	161	189	178	171
	Female	78	78	78	98	82	84	93	79	97	89	81
ICD-9 191, 192/ICD-10 C70-C72 - Malignant neoplasm of brain	TOTAL	210	214	224	276	248	248	268	275	268	275	337
	Male	127	126	115	153	133	141	152	151	153	145	196
	Female	83	88	109	123	115	107	116	124	115	130	141
ICD-9 201/ICD-10 81 - Hodgkin's disease	TOTAL	26	16	20†	17	20†	30	17	16	22	19	17
	Male	15	10	12	9	14	19	10	9	12	9	8
	Female	11	6	*	8	*	11	7	7	10	10	9
ICD-9 200, 202/ICD-10 C82-C85 - Malignant lymphoma other than Hodgkin's disease	TOTAL	409	386	370	381	373	362	434	388	379	392	372
	Male	207	204	208	218	213	200	230	212	219	212	214
	Female	202	182	162	163	160	162	204	176	160	180	158
ICD-9 203/ICD-10 C88, C90 - Multiple myeloma and immunoproliferative neoplasms	TOTAL	192	169	202	201	199	213	203	189	206	219	221
	Male	124	89	119	107	110	118	123	107	117	133	128
	Female	68	80	83	94	89	95	80	82	89	86	93
Other malignant neoplasms	TOTAL	1,902	2,031	2,073	2,061	2,080	2,243	2,092	2,340	2,417	1,120	1,133
	Male	912	1,012	1,049	1,011	1,056	1,112	1,093	1,212	1,273	623	640
	Female	990	1,019	1,024	1,050	1,024	1,131	999	1,128	1,144	497	493

Notes: * Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; ^a Includes records with unknown gender; Beginning with the 2000 data year, the causes of death are classified by ICD-10, replacing the Ninth Revision (ICD-9) used during 1979-1999.

**TABLE 2B-9
NUMBER OF DEATHS FROM UNINTENTIONAL INJURIES IN ACCIDENTS BY CATEGORY AND YEAR AMONG
ARIZONA RESIDENTS, 2002-2012**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total unintentional injury deaths	2,416	2,466	2,641	3,006	3,156	3,014	2,951	2,887	2,834	2,959	2,804
Railway accident	*	10	11	10	17	12	9	8	12	6	7
Motor vehicle accident	1,003	1,005	1,060	1,137	1,220	1,035	891	771	711	787	747
Water transport accident	*	*	*	*	*	*	*	*	*	*	*
Accident involving aircraft	19	23	21	9	32	17	32	15	16	21	13
Poisoning by drugs/medicaments	458	447	517	549	624	669	689	802	798	781	731
Poisoning by gases and vapors	24	18	16	14	22	52	77	85	81	102	86
Falls	448	469	526	685	702	720	748	731	762	776	782
Fire, flames, smoke	41	42	30	56	43	31	50	31	25	33	43
Excessive natural heat	35	40	34	74	62	28	33	39	51	57	51
Excessive natural cold	15	15	17	28	17	20	25	24	17	22	9
Contact with venomous snakes and lizards	0	0	*	0	0	0	*	0	*	0	*
Contact with venomous spiders	0	0	*	*	0	*	0	0	0	0	0
Contact with scorpions	*	0	0	0	0	0	0	0	0	0	0
Contact with hornets, wasps, bees	0	0	0	0	0	0	0	0	0	0	0
Bitten or struck by dog	0	*	*	*	*	*	*	*	*	*	*
Lightning	0	*	0	*	*	*	0	*	*	*	*
Storms and floods	0	*	0	0	*	*	0	0	*	0	0
Accidental drowning and submersion	65	83	97	83	87	85	78	99	86	93	83
Choked on food	18	41	36	27	30	22	35	43	39	34	38
Choked on other objects	54	59	48	62	48	61	53	49	57	44	44
Mechanical suffocation	23	25	21	27	26	43	29	25	28	25	23
Accidental discharge of firearms	26	13	13	15	9	13	10	7	11	8	*
Exposure to electric current	6	*	9	15	*	11	6	7	*	6	0
Overexertion	0	*	0	0	0	0	0	0	*	0	0
Adverse effects of drugs in therapeutic use	9	6	*	*	*	*	7	8	10	*	6
Misadventures to patients during medical/surgical care	46	49	46	39	51	44	40	42	41	45	42

Notes: * Cell suppressed due to count less than 6; Beginning in 2000, the data are classified by the Tenth Revision of the International Classification of Diseases (ICD-10), replacing the Ninth Revision (ICD-9) used in Arizona during 1979-1999.

**TABLE 2B-10
NUMBER OF DEATHS FROM MOTOR VEHICLE-RELATED INJURIES BY PERSON INJURED, GENDER, AND YEAR,
ARIZONA RESIDENTS, 2002-2012**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
TOTAL											
Total	1,003	1,005	1,060	1,137	1,220	1,035	891	771	711	787	747
Male	684	689	693	801	831	710	632	554	501	562	541
Female	319	316	367	336	389	325	259	217	210	225	206
Motorcyclist											
Total	81	76	89	113	115	103	113	100†	69	113	130
Male	75	68	72	101	99	92	106	94	61	96	113
Female	6	8	17	12	16	11	7	*	8	17	17
Pedestrian											
Total	147	124	143	182	169	155	136	122	152	153	128
Male	103	88	99	141	123	103	101	90	115	111	88
Female	44	36	44	41	46	52	35	32	37	42	40
Pedal cyclist											
Total	8	10†	20†	40†	30†	20†	10†	20†	20†	20†	11
Male	8	12	18	36	29	17	11	19	20	16	11
Female	0	*	*	*	*	*	*	*	*	*	0
Other person											
Total	767	791	807	803	906	759	630	528	469	502	478
Male	498	521	504	523	580	498	414	351	305	339	329
Female	269	270	33	280	326	261	216	177	164	163	149

Notes: * Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; Beginning in 2000, the data are classified by the Tenth Revision of the International Classification of Diseases (ICD-10), replacing the Ninth Revision (ICD-9) used in Arizona during 1979-1999; the comparability ratio for motor vehicle accidents is 0.85, a decrease by 15 percent due to ICD-10.

TABLE 2B-11
LEADING CAUSES OF DEATH BY PLACE OF DEATH AND DECEDENT STATUS, ARIZONA, 2012

Causes of death	TOTAL	IN HOSPITAL				NOT IN HOSPITAL				
		In-patient	Out-patient ^a	Died on arrival	Subtotal	Nursing home ^b	Residence	Other ^c	Unspecified	Subtotal
TOTAL, ALL CAUSES	48,459	10,352	2,708	35	28,135	9,614	5,558	5,055	97	20,324
Diseases of heart	10,366	2,176	949	12	6,756	1,473	1,198	920	19	3,610
Coronary heart disease	8,055	1,585	801	10	5,368	1,061	868	745	13	2,687
Malignant neoplasms	10,870†	1,669	160	*	6,240†	3,325	709	581	12	4,627
Malignant neoplasm of trachea, bronchus and lung	2,770†	434	42	0	1,624	840	176	128	*	1,148
Malignant neoplasm of colon, rectum, and anus	950†	132	10	0	544	288	62	51	*	402
Malignant neoplasm of breast	740†	91	11	0	388	250	44	59	*	354
Malignant neoplasm of prostate	580†	66	*	0	310†	164	60	46	0	270
Malignant neoplasm of cervix uteri	70†	9	*	0	30†	30	*	*	0	40†
Chronic lower respiratory diseases	3,170†	640	107	*	1,790†	798	362	222	0	1,382
Accident (unintentional injury)	2,800†	614	400	*	1,640†	355	107	694	6	1,162
Accidental poisoning	820†	86	118	0	659	15	*	140	0	160†
Motor vehicle accidents	780†	260	32	*	370†	279	79	54	0	412
Falls	750†	151	171	*	330†	27	*	380	*	420†
Accidental drowning and submersion	80†	13	23	*	50†	*	0	37	0	40†
Alzheimer's disease	2,150†	52	11	*	500†	372	695	587	0	1,654
Cerebrovascular diseases	2,100†	500	67	0	907	652	354	178	*	1,189
Diabetes	1,700†	454	155	*	1,190†	245	169	93	*	509
Intentional self-harm (suicide)	1,070†	52	89	*	770†	7	*	286	*	300†
Chronic liver disease and cirrhosis	970†	333	32	0	593	291	59	26	*	378
Essential (primary) hypertension & hypertensive renal disease	739	171	44	0	410	153	101	75	0	329
Influenza and pneumonia	635	336	21	0	443	78	81	33	0	192
Parkinson's disease	579	39	6	0	205	138	129	107	0	374
Nephritis, nephrotic syndrome and nephrosis	440†	154	18	0	290	54	66	29	*	150
Assault (homicide)	380†	50	96	0	243	*	*	123	*	130†
Septicemia	319	229	13	0	257	33	22	7	0	62
Human immunodeficiency virus (HIV) disease	100†	39	*	0	60†	33	*	*	0	40†
Injury by firearms	910†	55	123	*	630†	6	*	270	*	280†
Drug-induced deaths	1,040†	120	141	*	860†	23	*	151	0	180†
Alcohol-induced deaths	1,000†	287	44	*	660†	236	45	55	*	337

Notes: * Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; ^a Includes Emergency Room; ^b Includes other long-term care facilities; ^c Includes hospices.



2C.

AGE-SPECIFIC MORTALITY

Six age-specific profiles of mortality are given on the following pages. The six developmental periods in the life span are:

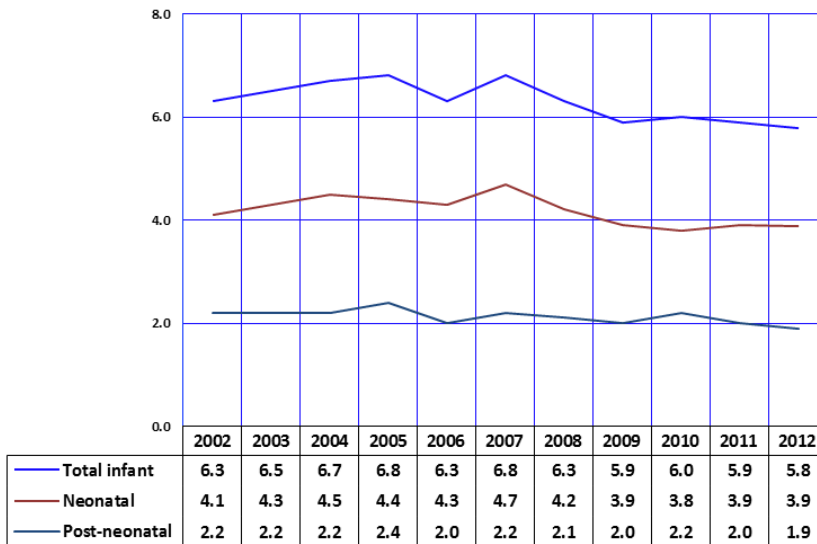
- **Infants** less than one year of age
- **Children** 1 to 14 years old
- **Adolescents** or persons 15 to 19 years old
- **Young adults** or persons 20 to 44 years old
- **Middle-aged adults** or persons 45 to 64 years old
- **Elderly** or persons 65 years or older.

For each age group, cause-specific mortality is compared between urban (i.e., Maricopa, Pima, Pinal, and Yuma counties) and rural (all other counties) regions and between genders. Urban and rural regions also are compared in gender-specific total mortality.

A comparison of age-specific mortality for causes of death is provided in **Table 2C-27**. A comparison of age-specific mortality rates is in **Table 2C-28**.

2C. AGE-SPECIFIC MORTALITY
Infant mortality

Figure 2C-1
Infant Mortality Rates by Neonatal/Postneonatal Age and Year, Arizona, 2002-2012



Notes: Neonatal deaths are those to infants age 0-27 days; Post-neonatal are deaths to infants age 28 days-1 year.

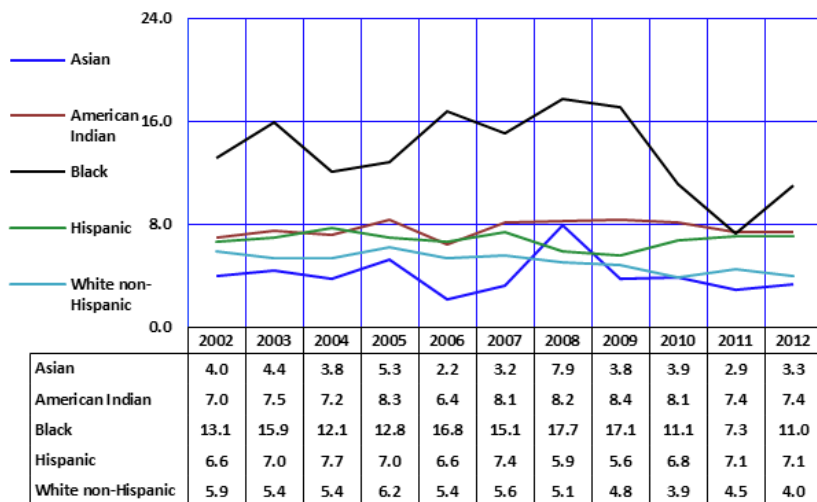
Infant mortality is defined as the number of deaths within the first year of life. The infant mortality rate (IMR) is computed as the number of infant deaths in a calendar year per 1,000 live births recorded for the same period.

In 2012, 495 Arizona infants died before reaching their first birthday, 206 fewer than the latest peak of 701 infant deaths in 2007 (**Table 2C-2**).

Even if the risk of infant mortality remained the same as it was in 2007, 115 fewer infant deaths can be attributed to the absolute reduction in the number births by 16,962 from 2007 to 2012 ($(16,962 \times 6.8)/1,000 = 119$).

Based on the actual number of infant deaths and live births in 2012, the infant mortality rate of 5.8/1,000 was the lowest IMR recorded in the past decade (**Figure 2C-1**).

Figure 2C-2
Infant Mortality Rates^a by Race/Ethnicity and Year, Arizona, 2002-2012



Notes: ^a Number of infant deaths per 1,000 live births in specified group.

In 2012, 96.0 percent (475/495)* of all infant death records were successfully matched to their corresponding birth records.

The mortality risk for infants varies by race/ethnicity. Infants of Asian or Pacific Islander mothers, followed by infants of White non-Hispanic mothers had the lowest infant mortality rates among the racial/ethnic groups in 2012 (**Figure 2C-2, Table 2C-2**).

In 2012, Black or African American infants had the worst survival chances among the ethnic groups (**Figure 2C-2**). American Indian and Hispanic or Latino infants also had elevated IMRs.

* Infant death records that were not linked to their corresponding birth certificates include unrecorded home births (i.e., no birth certificates was issued) and out-of-State births (i.e., the State issuing the certificate of birth did not send a copy to Arizona).

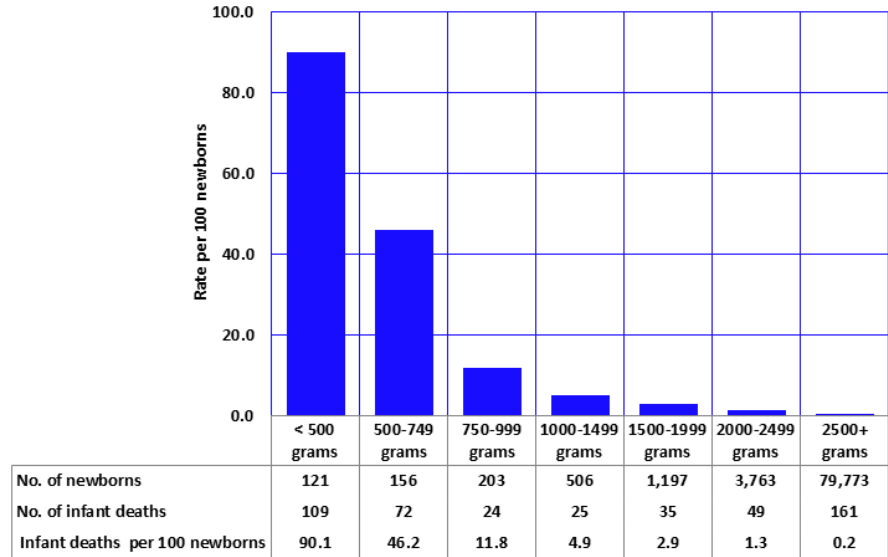
2C. AGE-SPECIFIC MORTALITY
Infant mortality

Figure 2C-3
Proportion of Infant Deaths by Birthweight, Arizona, 2012

Newborn weight at birth is one of the most important predictors of an infant's survival chances. In 2012, the mortality rate among babies weighing less than 500 grams at birth was 90.1 percent (**Figure 2C-3**).

The absolute number of low birthweight births actually declined for the fifth consecutive year from 7,285 in 2007 to 5,946 in 2012. In 2012 the proportion of babies whose weight at birth was less than 1,000 grams decreased from 8.3 percent of all low birthweight births in 2011 to 8.1 percent in 2012 (**Table 1B-3**).

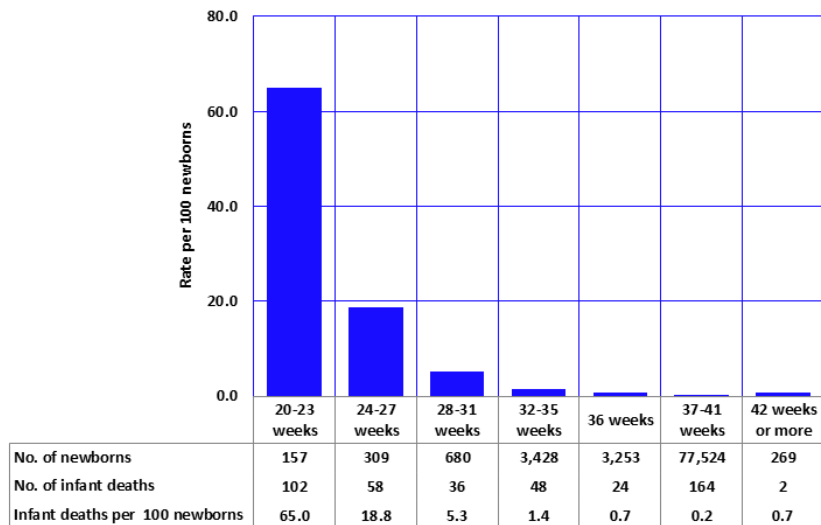
Together, births of infants weighing less than 1,500 grams accounted for 1.2 percent of births, and 48.4 percent of all infant deaths with a matching birth records.



Notes: 6 cases in the complete 2012 birth file had missing birthweight estimates.

Figure 2C-4
Proportion of Infant Deaths by Gestational Age, Arizona, 2012

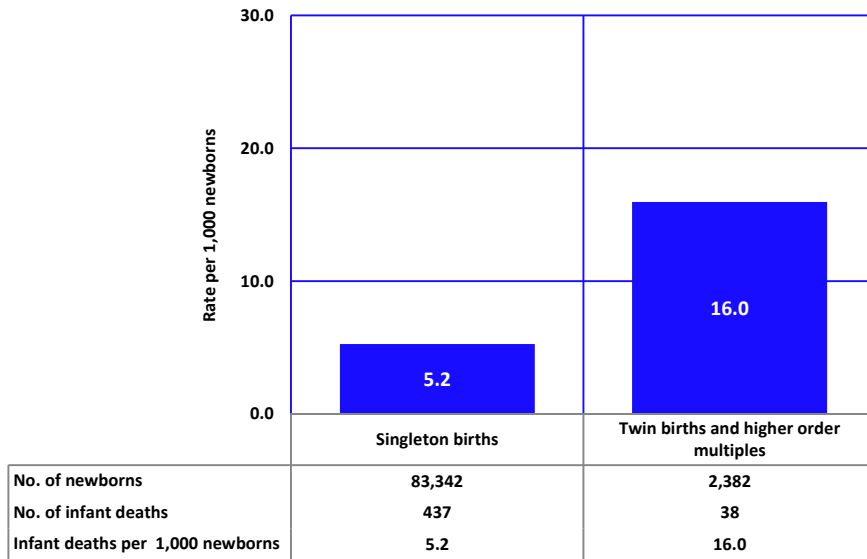
As with low birthweight, preterm and very preterm infants have a large impact on the total infant mortality rate because of their much higher risk of infant mortality. For example, births at 27 weeks or less of gestation accounted for only 0.5 percent of all births but 33.7 percent of infant deaths with a matching death record. Births at less than 24 weeks of gestation have a very high infant mortality rate of 65.0 percent (**Figure 2C-4**). Overall, preterm infants (those born at less than 37 weeks of gestation) accounted for 9.2 percent of all births (**Table 1B-2**) and 61.8 percent of all infant deaths (only those with matching death records).



Notes: 105 cases in the complete 2012 birth file had missing gestational age estimates, 41 of which in the linked infant death file.

2C. AGE-SPECIFIC MORTALITY
Infant mortality

Figure 2C-4.2
Infant Mortality Rates for Single and Multiple Births, Arizona, 2012



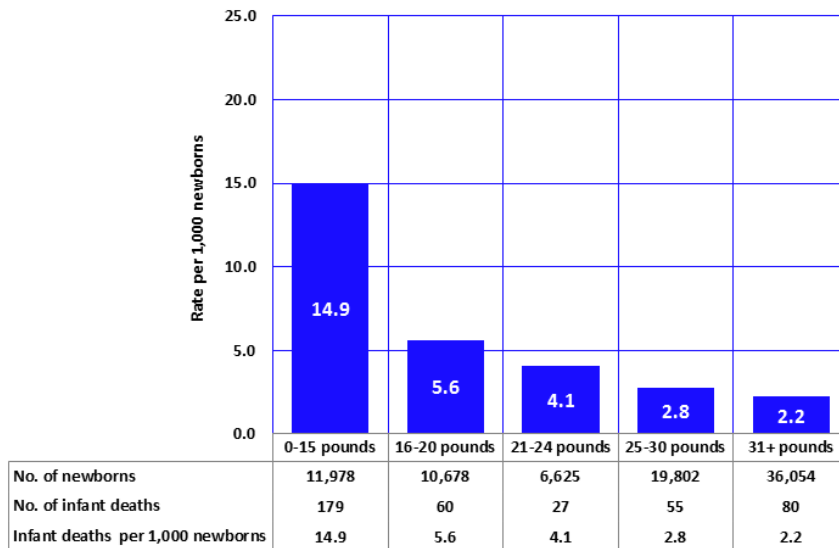
As already noted in Section 1B, infants born in multiple deliveries tend to be born at shorter gestations and smaller than those in singleton deliveries. In 2012, infants born in multiple deliveries were 13.3 times more likely (49.3 vs. 3.7 percent) to be born earlier than expected (at less than 37 completed weeks of gestation) and smaller (at less than 2,500 grams) than singleton births (**Figure 1B-10**).

The infant mortality rate for single births was 5.2 in 2012 (**Figure 2C-4.2**). The infant mortality rate for twin births or higher order multiples was 16.0.

Babies born in multiple deliveries accounted for 2.8 percent of births (**Table 1B-2**), but 8.7 percent of all infant deaths in Arizona in 2012 (only those with matching birth and death records).

Notes: 1 case in the complete 2012 birth file was missing plurality.

Figure 2C-4.3
Infant Mortality Rates by Maternal Weight Gain during Pregnancy, Arizona, 2012



Infant mortality rates vary with maternal weight gain during pregnancy. Insufficient or excessive weight gain during pregnancy can negatively impact both maternal and pregnancy outcome. In 2012, as in previous years, the risk of infant death decreased with increasing maternal weight gain, including maternal weight gain of 31 or more pounds (**Figure 2C-4.3**). Among the 36,054 women giving birth in 2012 who gained 31 or more pounds, the risk of infant mortality was 2.2/1,000.

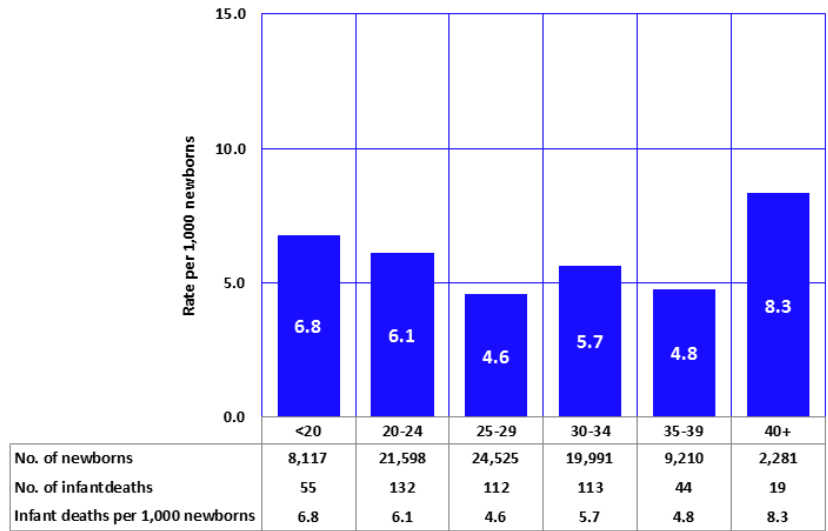
There is no coincidence that mother's weight gain has been shown to have a positive correlation with infant birthweight (**Figure 1B-22**).

Notes: 588 cases in the complete 2012 birth file were missing maternal weight gain.

2C. AGE-SPECIFIC MORTALITY
Infant mortality

Figure 2C-4.4
Infant Mortality Rates by Mother's Age Group, Arizona, 2012

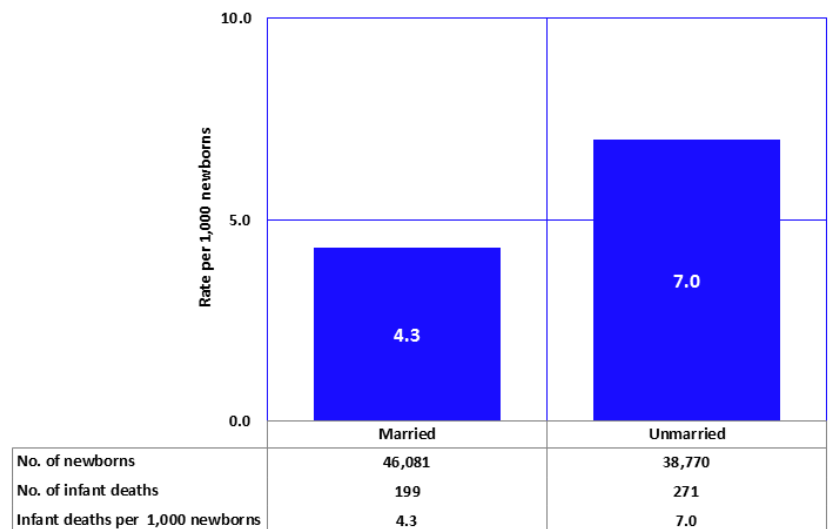
Infant mortality rates vary with maternal age. In 2012, infant mortality decreased with increasing maternal age through 29 years of age, but increased somewhat among mothers age 30 – 34. Infants born to mothers aged 40 and above had the highest infant mortality rate (**Figure 2C-4.4**).



Note: 3 cases in the complete 2012 birth file were missing mother's age.

Figure 2C-4.5
Infant Mortality Rates by Mother's Marital Status, Arizona, 2012

Infants born to unmarried mothers accounted for the absolute majority of infant deaths in 2012 (271 vs. 199). The number of births to married mothers exceeded by 18.9 percent the number of births to unmarried mothers (46,081 vs. 38,770; **Table 1B-26**). In 2012, infants of unmarried mothers had an infant mortality rate of 7.0 deaths per 1,000 live births, 62.8 percent higher than the rate for infants of married mothers (4.3 infant deaths per 1,000 live births; **Figure 2C-4.5**). The effect of marital status on infant mortality suggests that marital status is a proxy measure of factors traditionally related to infant mortality such as poverty conditions, access to health care, and social support. Mother's marital status may signify the presence or absence of emotional, social, and financial resources.



Note: 874 cases in the complete 2012 birth file were missing mother's marital status.

**TABLE 2C-1
INFANT, NEONATAL, AND POSTNEONATAL MORTALITY RATES AND PERCENT POSTNEONATAL DEATHS,
UNITED STATES, ARIZONA AND URBAN/RURAL COUNTIES OF ARIZONA, 2002-2012**

UNITED STATES	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Infant mortality ^a	7.0	6.9	6.7	6.9	6.7	6.7	6.7	6.6	6.1	6.1	NA
Neonatal mortality ^a	4.7	4.6	4.5	4.6	4.5	4.4	4.4	4.1	4.0	NA	NA
Postneonatal mortality ^a	2.3	2.3	2.2	2.3	2.2	2.3	2.3	2.2	2.1	NA	NA
Percent postneonatal mortality ^b	33.8	33.3	32.8	33.3	32.8	34.3	34.3	33.3	34.4	NA	NA
ARIZONA, STATEWIDE TOTAL											
Infant mortality ^a	6.3	6.5	6.7	6.8	6.3	6.8	6.3	5.9	6.0	5.9	5.8
Neonatal mortality ^a	4.1	4.3	4.5	4.4	4.3	4.7	4.2	3.9	3.8	3.9	3.9
Postneonatal mortality ^a	2.2	2.2	2.2	2.4	2.0	2.2	2.1	2.0	2.2	2.0	1.9
Percent postneonatal mortality ^b	35.0	33.8	32.8	35.3	31.5	32.4	33.3	34.0	36.7	34.3	32.9
URBAN COUNTIES											
Infant mortality ^a	6.4	6.4	6.7	6.5	6.3	6.6	6.3	5.9	5.7	4.9	5.7
Neonatal mortality ^a	4.2	4.4	4.7	4.3	4.3	4.6	4.3	4.0	3.7	3.3	3.9
Postneonatal mortality ^a	2.2	2.0	2.0	2.2	2.0	2.0	2.0	2.0	2.0	1.6	1.9
Percent postneonatal mortality ^b	34.4	31.5	29.9	33.8	31.3	30.3	31.8	33.0	35.1	32.6	32.9
RURAL COUNTIES											
Infant mortality ^a	6.2	7.1	6.9	8.6	6.3	8.0	6.2	5.5	7.4	0.9	5.9
Neonatal mortality ^a	3.8	3.8	3.8	5.0	4.3	4.8	3.5	3.9	4.5	0.5	3.9
Postneonatal mortality ^a	2.4	3.3	3.1	3.6	2.0	3.3	2.7	2.0	2.9	0.4	2.0
Percent postneonatal mortality ^b	38.7	46.2	44.9	41.9	32.6	41.3	43.6	38.7	37.7	43.8	33.8

Notes: ^a Rates per 1,000 live births; the U.S. rates are from the National Center for Health Statistics; the 2011 U.S. rates are provisional; ^b Total infant mortality = 100 percent; Urban = Maricopa, Pima, Pinal, and Yuma Counties. The remaining counties comprise Arizona's rural areas; records with unknown county of residence are included in the statewide totals, but are not distributed by urban/rural area.

**TABLE 2C-2
NUMBER AND RATE^a OF INFANT DEATHS BY RACE/ETHNICITY AND GENDER, ARIZONA, 2002-2012
NUMBER OF INFANT DEATHS**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
White non-Hispanic	Total	229	208	211	245	232	237	215	192	151	171
	Male	147	124	129	140	119	135	114	109	88	98
	Female	82	84	82	105	113	102	101	83	63	73
Hispanic or Latino	Total	238	274	314	296	297	338	251	215	235	229
	Male	139	148	168	161	173	186	142	115	144	122
	Female	99	126	146	135	124	152	109	100	91	107
Black or African American	Total	36	48	39	44	65	63	76	75	48	32
	Male	18	26	26	30	36	42	42	41	20	16
	Female	18	22	13	14	29	21	34	34	28	16
American Indian or Alaska Native	Total	39	44	44	52	41	52	52	52	47	43
	Male	22	22	24	25	28	29	27	28	28	15
	Female	17	22	20	27	13	23	25	24	19	28
Asian or Pacific Islander	Total	10†	10†	10†	15	10†	10†	27	13	10†	10†
	Male	6	6	*	7	*	7	15	6	9	8
	Female	*	*	6	8	*	*	12	7	*	*
All groups^b	Total	552	586	622	653	642	701	625	547	519	504
	Male	332	326	353	364	361	399	343	299	302	267
	Female	220	260	269	289	281	302	282	248	217	237

INFANT MORTALITY RATES

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
White non-Hispanic	Total	5.9	5.4	5.4	6.2	5.4	5.6	5.1	4.8	3.9	4.5
	Male	7.3	6.2	6.4	6.9	5.4	6.3	5.3	5.4	4.4	5.0
	Female	4.4	4.4	4.3	5.5	5.4	4.9	4.9	4.3	3.3	3.9
Hispanic or Latino	Total	6.6	7.0	7.7	7.0	6.6	7.4	5.9	5.6	6.8	7.1
	Male	7.5	7.4	8.0	7.5	7.5	7.9	6.5	5.8	8.3	8.1
	Female	5.6	6.6	7.3	6.6	5.7	6.8	5.2	5.3	5.4	6.1
Black or African American	Total	13.1	15.9	12.1	12.8	16.8	15.1	17.7	17.1	11.1	7.3
	Male	12.6	16.6	15.7	17.2	18.3	19.5	18.7	18.0	9.1	7.3
	Female	13.6	15.1	8.3	8.2	15.3	10.5	16.6	16.2	13.1	7.4
American Indian or Alaska Native	Total	7.0	7.5	7.2	8.3	6.4	8.1	8.2	8.4	8.1	7.4
	Male	7.9	7.6	7.7	7.8	8.8	9.0	8.5	9.0	9.5	5.1
	Female	6.2	7.4	6.7	8.7	4.1	7.2	7.9	7.8	6.6	9.7
Asian or Pacific Islander	Total	4.0	4.4	3.8	5.3	2.2	3.2	7.9	3.8	3.9	3.3
	Male	5.2	4.7	**	4.9	**	3.9	8.5	3.4	5.4	4.2
	Female	**	**	4.8	5.8	**	**	7.2	4.3	**	**
All groups^b	Total	6.3	6.5	6.7	6.8	6.3	6.8	6.3	5.9	6.0	5.8
	Male	7.4	7.0	7.4	7.4	6.9	7.6	6.8	6.3	6.8	6.1
	Female	5.2	5.9	5.9	6.2	5.6	6.0	5.8	5.5	5.1	5.4

Notes: * Cell suppressed due to count less than 6; ** Cell suppressed due to rate/ratio/percent based on non-zero count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; ^a Number of infant deaths per 1,000 live births in specified ethnic/gender group; infant deaths are by the race/ethnicity of the decedent; for consistency with the national data, the denominators used to calculate infant mortality rates were changed from race/ethnicity of parents to race/ethnicity of mother as stated on the birth certificate; the change in the basis for calculating infant mortality rates results in lower rates for white infants and higher rates for most minority infants than when they are computed by the previous method; ^b Includes records with other and unknown ethnic group.

**TABLE 2C-3
NUMBER AND RATE^a OF INFANT DEATHS BY RACE/ETHNICITY AND AGE GROUP, 2002-2012
NUMBER OF INFANT DEATHS**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
White non-Hispanic											
Total	229	208	211	245	232	237	215	192	151	171	154
Neonatal	151	143	155	163	161	161	138	129	96	120	100
Postneonatal	78	65	56	82	71	76	77	63	55	51	54
Hispanic or Latino											
Total	238	274	314	296	297	338	251	215	235	229	236
Neonatal	165	190	209	205	213	239	175	150	156	152	170
Postneonatal	73	84	105	91	84	99	76	65	79	77	66
Black or African American											
Total	36	48	39	44	65	63	76	75	48	32	52
Neonatal	16	31	25	19	37	43	51	46	32	20	34
Postneonatal	20	17	14	25	28	20	25	29	16	12	18
American Indian or Alaska Native											
Total	39	44	44	52	41	52	52	52	47	43	41
Neonatal	20	18	21	27	26	27	29	26	22	19	21
Postneonatal	19	26	23	25	15	25	23	26	25	24	20
Asian or Pacific Islander											
Total	10†	10†	10†	15	10†	10†	30†	10†	10†	10	10†
Neonatal	7	*	7	9	*	9	22	10	11	10	7
Postneonatal	*	6	*	6	*	*	*	*	*	0	*
All groups^b											
Total	552	586	622	653	642	701	625	547	519	504	495
Neonatal	360	388	421	424	440	479	419	361	330	331	332
Postneonatal	192	198	201	229	202	222	206	186	189	173	163

INFANT MORTALITY RATES

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
White non-Hispanic											
Total	5.9	5.4	5.4	6.2	5.4	5.6	5.1	4.8	3.9	4.5	4.0
Neonatal	3.9	3.7	3.9	4.1	3.7	3.8	3.3	3.2	2.5	3.1	2.6
Postneonatal	2.0	1.7	1.4	2.1	1.7	1.8	1.8	1.6	1.4	1.3	1.4
Hispanic or Latino											
Total	6.6	7.0	7.7	7.0	6.6	7.4	5.9	5.6	6.8	7.1	7.1
Neonatal	4.6	4.9	5.1	4.9	4.7	5.2	4.1	3.9	4.5	4.7	5.1
Postneonatal	2.0	2.1	2.6	2.1	1.9	2.2	1.8	1.7	2.3	2.4	2.0
Black or African American											
Total	13.1	15.9	12.1	12.8	16.8	15.1	17.7	17.1	11.1	7.3	11.0
Neonatal	5.8	10.3	7.8	5.5	9.6	10.3	11.9	10.5	7.4	4.6	7.2
Postneonatal	7.3	5.6	4.4	7.3	7.2	4.8	5.8	6.6	3.7	2.7	3.8
American Indian or Alaska Native											
Total	7.0	7.5	7.2	8.3	6.4	8.1	8.2	8.4	8.1	7.4	7.4
Neonatal	3.6	3.1	3.4	4.3	4.0	4.2	4.6	4.2	3.8	3.3	3.8
Postneonatal	3.4	4.4	3.8	4.0	2.4	3.9	3.6	4.2	4.3	4.1	3.6
Asian or Pacific Islander											
Total	4.0	4.4	3.8	5.3	2.2	3.2	7.9	3.8	3.9	2.9	3.3
Neonatal	3.1	**	2.7	3.2	**	2.6	6.4	2.9	3.3	2.9	1.9
Postneonatal	**	2.4	**	2.1	**	**	**	**	**	0.0	**
All groups^b											
Total	6.3	6.5	6.7	6.8	6.3	6.8	6.3	5.9	6.0	5.9	5.8
Neonatal	4.1	4.3	4.5	4.4	4.3	4.7	4.2	3.9	3.8	3.9	3.9
Postneonatal	2.2	2.2	2.2	2.4	2.0	2.2	2.1	2.0	2.2	2.0	1.9

Notes: * Cell suppressed due to count less than 6; ** Cell suppressed due to rate/ratio/percent based on non-zero count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; ^a Number of infant deaths per 1,000 live births in specified ethnic/gender group; infant deaths are by the race/ethnicity of the decedent; for consistency with the national data, the denominators used to calculate infant mortality rates were changed from race/ethnicity of parents to race/ethnicity of mother as stated on the birth certificate; the change in the basis for calculating infant mortality rates results in lower rates for white infants and higher rates for most minority infants than when they are computed by the previous method; ^b Includes records with other and unknown ethnic group.

**TABLE 2C-4
NEONATAL, POSTNEONATAL, AND TOTAL INFANT MORTALITY BY CHILD'S GENDER AND MOTHER'S RACE/ETHNICITY,
ARIZONA, 2012**

	NUMBER OF DEATHS BY AGE			MORTALITY RATES ^a		
	Total	Neonatal	Postneonatal	Total	Neonatal	Postneonatal
TOTAL, ALL GROUPS	495	332	163	5.8	3.9	1.9
Male	271	182	89	6.2	4.1	2.0
Female	224	150	74	5.4	3.6	1.8
White non-Hispanic	154	100	54	4.0	2.6	1.4
Male	81	49	32	4.1	2.5	1.6
Female	73	51	22	3.9	2.7	1.2
Hispanic or Latino	236	170	66	7.1	5.1	2.0
Male	138	99	39	8.1	5.8	2.3
Female	98	71	27	6.1	4.4	1.7
Black or African American	52	34	18	11.0	7.2	3.8
Male	20 [†]	18	*	9.2	7.6	**
Female	30	16	14	12.8	6.8	6.0
American Indian or Alaska Native	41	21	20	7.4	3.8	3.6
Male	22	12	10	7.8	4.3	3.6
Female	19	9	10	6.9	3.3	3.6
Asian or Pacific Islander	10 [†]	7	*	3.3	1.9	**
Male	10 [†]	*	*	4.2	**	**
Female	0 [†]	*	*	**	**	**

Notes: * Cell suppressed due to count less than 6; ** Cell suppressed due to rate/ratio/percent based on non-zero count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; ^a Number of deaths per 1,000 live births in specified gender group by mother's race/ethnicity; denominators are from Table 5B-8.

**TABLE 2C-5 (correction)
NUMBER OF DEATHS FOR SELECTED LEADING CAUSES OF INFANT MORTALITY^a BY YEAR, ARIZONA, 2002-2012**

Causes of death	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Congenital malformations, deformations and chromosomal abnormalities	99	126	152	149	142	159	145	122	114	107	118
of respiratory system	11	10	14	15	9	9	*	*	9	*	6
of brain, spinal cord or nervous system	18	23	20	19	28	20	24	15	21	13	19
Short gestation and low birth weight	95	85	84	79	93	95	91	101	64	60	62
Maternal complications	34	31	36	47	42	30	53	31	27	33	46
Sudden infant death syndrome	36	28	25	32	37	43	21	42	34	25	13
Accidents (unintentional injuries)	21	23	19	24	17	30	19	18	18	23	16
Influenza and pneumonia	19	21	17	19	13	*	*	10	*	*	*
Assault (homicide)	*	11	*	8	11	12	*	*	6	6	*
Intrauterine hypoxia or birth asphyxia	15	10	14	12	7	11	11	*	*	11	*
Respiratory distress syndrome	6	8	8	12	12	8	11	8	7	*	*
Total, all causes	550†	586	620†	653	642	700†	630†	550†	520†	500†	500†

Notes: * Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; ^a Leading causes of infant mortality are based on the list of 130 causes of infant death according to the Tenth Revision, International Classification of Diseases (ICD-10).

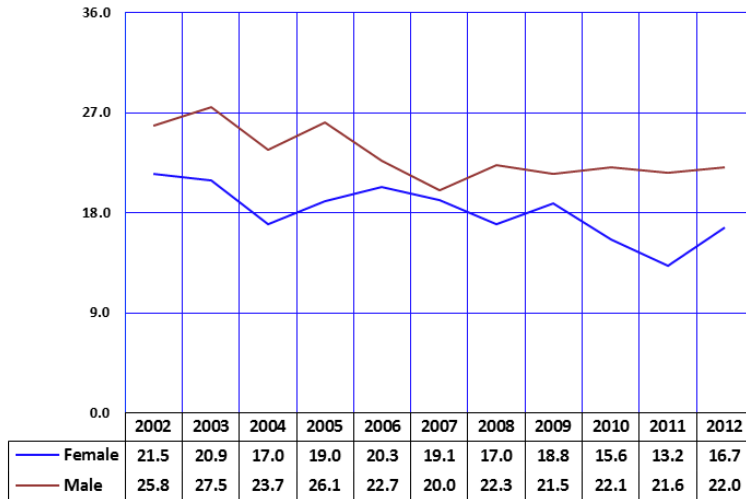
**TABLE 2C-6 (correction)
INFANT MORTALITY RATES^a FOR SELECTED LEADING CAUSES OF DEATH BY YEAR, ARIZONA, 2002-2012**

Causes of death	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Congenital malformations, deformations and chromosomal abnormalities	1.1	1.4	1.6	1.6	1.4	1.5	1.5	1.3	1.3	1.3	1.4
of respiratory system	0.1	0.1	0.1	0.2	0.1	0.1	**	**	0.1	**	0.1
of brain, spinal cord or nervous system	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Short gestation and low birth weight	1.1	0.9	0.9	0.8	0.9	0.9	0.9	1.1	0.7	0.7	0.7
Maternal complications	0.4	0.3	0.4	0.5	0.4	0.3	0.5	0.3	0.3	0.4	0.5
Sudden infant death syndrome	0.4	0.3	0.3	0.3	0.4	0.4	0.2	0.4	0.4	0.3	0.2
Accidents (unintentional injuries)	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.2
Influenza and pneumonia	0.2	0.2	0.2	0.2	0.1	**	**	0.1	**	**	**
Assault (homicide)	**	0.1	**	0.1	0.1	0.1	**	**	0.1	0.1	**
Intrauterine hypoxia or birth asphyxia	0.2	0.1	0.1	0.1	0.1	0.1	0.1	**	**	0.1	**
Respiratory distress syndrome	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	**	**
Total, all causes	6.3	6.5	6.7	6.8	6.3	6.8	6.3	5.9	6.0	5.9	5.8

Notes: ** Cell suppressed due to rate/ratio/percent based on non-zero count less than 6;^a Number of infant deaths per 1,000 live births; leading causes of infant mortality are based on the list of 130 causes of infant death according to the Tenth Revision, International Classification of Diseases (ICD-10).

2C.AGE-SPECIFIC MORTALITY
Childhood mortality (ages 1-14 years)

Figure 2C-5
Mortality Rates^a by Gender and Year among Children 1-14 Years,
Arizona, 2002-2012

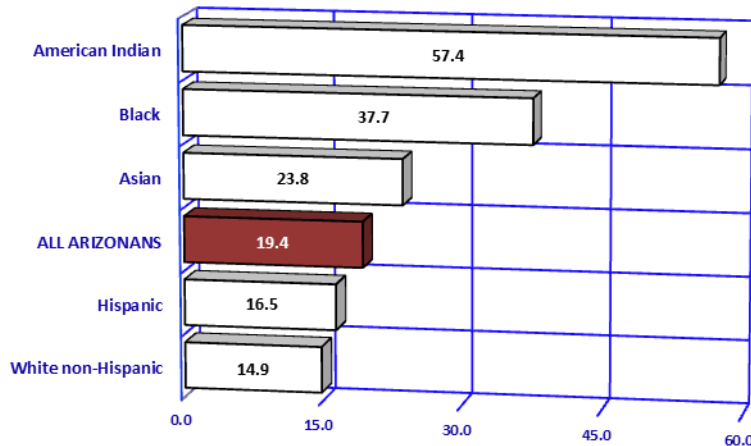


Death claimed the lives of 247 of the 1,270,887 children (1 to 14 years old) residing in Arizona in 2012. Their 2012 mortality rate of 19.4 per 100,000 was 10.9 percent greater than the rate of 17.5 in 2010 (**Table 2C-7**). Both males and females experienced an increase in their total mortality rates from 2011 to 2012 (**Figure 2C-5, Table 2C-7**).

The five causes with the greatest number of deaths in childhood from 2002-2012 were *accidents* (unintentional injuries), *malignant neoplasms*, *congenital malformations*, *homicide*, and *suicide* (**Table 2C-7**).

Notes: ^a Number of deaths per 100,000 persons, 1-14 years old in specified group.

Figure 2C-6
Mortality Rates^a by Race/Ethnicity among Children 1-14 Years,
Arizona, 2012



American Indian children had the highest 2012 total mortality rate (57.4 deaths per 100,000) followed by Black or African American children (37.7/100,000; **Figure 2C-6**). The mortality rates of Hispanic or Latino and White non-Hispanic children were lower than the average rate for all groups.

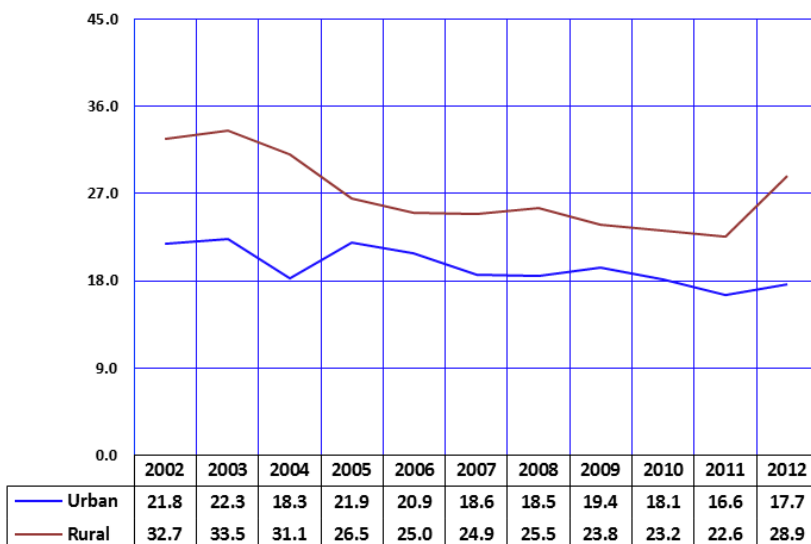
In 2012, there were 19 children who died of accidental drowning and submersion, 13 children who died of assault, and 8 completed *suicides* of children aged 1-14 years (**Table 2C-10**). The number of American Indian children killed in motor vehicle accidents nearly tripled from 2011 to 2012.

Notes: ^a Number of deaths per 100,000 persons, 1-14 years old in specified group.

2C.AGE-SPECIFIC MORTALITY
Childhood mortality (ages 1-14 years)

Figure 2C-7
Mortality Rates^a by Urban/Rural Area^b and Year among Children 1-14 Years, Arizona, 2002-2012

From 2011 to 2012, the mortality rates increased for both urban and rural children (**Figure 2C-7, Table 2C-8**). From 2002 to 2012 the total mortality rates decreased by 18.8 percent for urban children and by 11.6 percent for rural children.

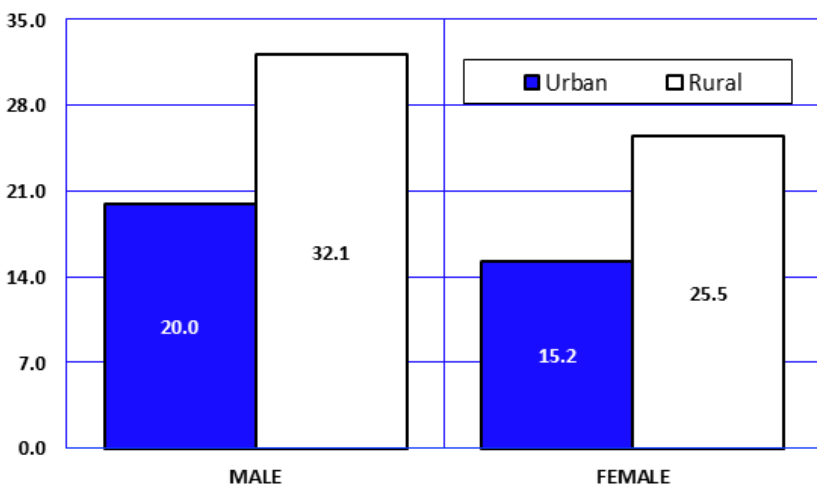


Notes: ^a Number of deaths per 100,000 persons, 1-14 years old in specified group; ^b Urban counties are Maricopa, Pima, Pinal, and Yuma Counties, Rural Counties are those remaining.

Figure 2C-8
Mortality Rates^a by Gender in Urban/Rural^b Areas among Children 1-14 Years, Arizona, 2012

From 2011 to 2012, the mortality rate for accidents slightly increased for urban children and slightly decreased for rural children (**Table 2C-8**). The mortality rate for unintentional injuries among rural children (10.9/100,000) was 2.3 times greater than the rate among urban children (4.7/100,000, **Table 2C-8**). The mortality rate for accidental drowning was similar for urban children (1.5/100,000) and rural children (1.6/100,000).

Urban females 1-14 years old had the lowest mortality risk among gender by area groups in 2012, followed by urban males, rural females, and rural males.



Notes: ^a Number of deaths per 100,000 persons, 1-14 years old in specified group; ^b Urban counties are Maricopa, Pima, Pinal, and Yuma Counties, Rural Counties are those remaining.

**TABLE 2C-7
MORTALITY RATES^a FOR THE FIVE LEADING CAUSES^b OF DEATH AMONG CHILDREN (1-14 YEARS) BY GENDER,
ARIZONA, 2002-2012**

Gender/Cause	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% change from 2002
MALE												
Accidents (unintentional injuries)	9.6	11.3	9.5	10.0	8.0	8.3	7.8	8.0	8.2	9.6	7.4	-22.9
Motor vehicle accidents	5.1	6.5	5.2	4.5	4.2	4.6	2.5	4.2	3.1	4.0	3.5	-30.5
Drowning	2.4	2.8	2.7	2.3	0.9	1.5	2.9	2.6	2.5	2.6	2.2	-10.1
Other	2.1	2.0	1.6	3.2	2.9	2.2	2.4	1.2	2.6	3.1	1.7	-19.0
Malignant neoplasms	1.4	2.7	1.6	1.7	1.7	2.2	2.5	3.1	1.9	1.7	2.8	98.1
Congenital malformations	1.2	1.7	1.6	1.9	2.3	0.7	1.8	1.5	1.5	1.7	1.8	54.1
Intentional self-harm (suicide)	1.0	1.2	0.3	1.1	0.5	0.4	0.9	0.4	1.2	1.1	1.1	7.9
Assault (homicide)	1.9	0.7	2.3	2.0	1.5	1.3	1.2	0.9	2.0	0.9	0.9	-51.3
ALL CAUSES	25.8	27.5	23.7	26.1	22.7	20.0	22.3	21.5	22.1	21.6	22.0	-14.6
(Number of all deaths)	(151)	(166)	(147)	(168)	(150)	(134)	(152)	(148)	(143)	(141)	(143)	(-5.3)
FEMALE												
Accidents (unintentional injuries)	7.3	6.8	6.6	7.8	7.8	6.3	4.6	5.5	5.1	3.2	3.7	-49.3
Motor vehicle accidents	4.5	4.2	4.1	4.6	4.1	3.6	2.8	2.9	2.4	1.1	1.8	-60.7
Drowning	1.4	1.2	1.2	1.6	2.1	0.8	0.9	0.6	1.3	1.3	0.8	-42.6
Other	1.4	1.4	1.0	1.6	1.6	1.9	0.9	2.0	1.4	0.8	1.1	-21.4
Malignant neoplasms	2.5	2.6	2.0	2.1	0.9	4.2	2.0	1.8	2.2	2.4	2.4	-3.5
Assault (homicide)	1.3	1.0	0.7	0.8	0.8	1.4	0.9	1.8	0.3	1.3	1.1	-13.4
Congenital malformations	1.8	1.9	1.4	1.8	2.1	1.3	1.5	1.4	1.6	1.0	2.3	25.0
Influenza and pneumonia	0.4	0.5	0.7	0.5	0.9	0.2	0.6	0.5	0.3	0.3	0.2	-50.0
ALL CAUSES	21.5	20.9	17.0	19.0	20.3	19.1	17.0	18.8	15.6	13.2	16.7	-22.2
(Number of all deaths)	(120)	(120)	(101)	(117)	(128)	(122)	(110)	(123)	(97)	(83)	(104)	(-13.3)
TOTAL												
Accidents (unintentional injuries)	8.5	9.1	8.1	8.9	7.9	7.3	6.2	6.8	6.7	6.5	5.6	-34.3
Motor vehicle accidents	4.8	5.4	4.6	4.5	4.2	4.1	2.6	3.6	2.8	2.6	2.7	-44.3
Drowning	1.9	2.0	2.0	2.0	1.5	1.1	2.0	1.6	1.9	2.0	1.5	-21.3
Other	1.8	1.7	1.5	2.4	2.2	2.1	1.6	1.6	2.0	2.0	1.4	-22.2
Malignant neoplasms	1.9	2.6	1.8	1.9	1.3	3.2	2.3	2.5	2.0	2.0	2.6	36.7
Congenital malformations	1.5	1.8	1.5	1.8	2.2	1.0	1.7	1.4	1.6	1.3	2.0	36.4
Assault (homicide)	1.6	0.8	1.5	1.4	1.2	1.4	1.1	1.3	1.2	1.1	1.0	-36.1
Intentional self-harm (suicide)	1.0	0.7	0.2	0.9	0.9	0.4	0.6	0.3	0.7	0.9	0.6	-37.1
ALL CAUSES	23.7	24.3	20.4	22.7	21.5	19.5	19.7	20.2	18.9	17.5	19.4	-18.0
(Number of all deaths)	(271)	(286)	(248)	(285)	(278)	(256)	(262)	(271)	(240)	(224)	(247)	(-8.9)

Notes: ^a Number of deaths per 100,000 children 1-14 years old; ^b The five causes with the greatest number of deaths over the 2002-2012 period; the cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10); the causes of death for 2002-2012 are classified by ICD-10, replacing the Ninth Revision (ICD-9); comparison between ICD-9 and ICD-10 – the “comparability ratios” – for the causes of death shown in this report are provided in the **Technical Notes**.

**TABLE 2C-8
MORTALITY RATES^a FOR THE FIVE LEADING CAUSES^b OF DEATH AMONG CHILDREN (1-14 YEARS)
IN URBAN AND RURAL AREAS^c, ARIZONA, 2002-2012**

Area/Cause	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% change from 2002
URBAN												
Accidents (unintentional injuries)	7.1	7.3	6.8	9.2	7.1	6.5	5.4	6.4	6.0	5.7	4.7	-33.9
Motor vehicle accidents	3.4	4.2	3.7	4.2	3.9	3.2	2.0	3.2	2.5	1.7	1.9	-43.2
Drowning	2.2	2.2	2.1	2.3	1.4	1.3	1.8	1.8	1.8	2.2	1.5	-33.1
Other	1.5	0.9	1.0	2.7	1.8	2.0	1.7	1.5	1.7	1.7	1.3	-13.3
Malignant neoplasms	2.0	2.8	1.6	2.2	1.5	3.4	2.6	2.6	2.3	2.1	2.6	28.8
Congenital malformations	1.6	1.6	1.5	1.7	2.4	0.8	1.7	1.3	1.8	1.3	2.1	32.2
Assault (homicide)	1.6	0.9	1.4	1.3	1.1	1.4	1.1	1.3	1.3	1.2	0.9	-42.5
Diseases of heart	0.7	0.5	0.8	0.4	1.0	0.4	0.4	0.3	0.3	0.4	0.6	-14.3
ALL CAUSES	21.8	22.4	18.3	21.9	20.9	18.6	18.5	19.4	18.1	16.6	17.7	-19.0
(Number of all deaths)	(207)	(219)	(184)	(229)	(228)	(206)	(210)	(221)	(197)	(182)	(192)	(-7.2)
RURAL												
Accidents (unintentional injuries)	15.3	18.0	14.6	7.6	12.0	12.0	10.3	8.8	10.8	11.3	10.9	-28.8
Motor vehicle accidents	11.8	11.0	9.2	6.2	5.5	9.0	6.4	5.8	4.3	7.5	7.1	-40.0
Drowning	0.5	1.5	1.5	0.5	2.0	0.5	2.5	1.0	2.2	0.5	1.6	226.9
Other	3.0	5.5	3.9	0.9	4.5	2.5	1.5	1.9	4.3	3.2	2.2	-26.7
Malignant neoplasms	1.5	2.0	2.9	0.5	0.5	2.0	0.5	1.9	0.5	1.6	2.2	45.3
Congenital malformations	1.0	2.5	1.5	2.4	1.0	2.0	1.5	1.9	0.5	1.6	1.6	63.4
Assault (homicide)	1.5	0.5	1.9	1.9	1.5	1.0	1.0	1.5	0.5	0.5	1.6	9.0
Intentional self-harm (suicide)	2.0	1.0	0.5	2.8	2.0	0.5	1.5	0.5	1.1	0.5	1.1	-45.5
ALL CAUSES	32.7	33.5	31.1	26.5	25.0	24.9	25.5	23.8	23.2	22.6	28.9	-11.7
(Number of all deaths)	(64)	(67)	(64)	(56)	(50)	(50)	(52)	(49)	(43)	(42)	(53)	(-17.2)
STATEWIDE												
Accidents (unintentional injuries)	8.5	9.1	8.1	8.9	7.9	7.3	6.2	6.8	6.7	6.5	5.6	-34.3
Motor vehicle accidents	4.8	5.4	4.6	4.5	4.2	4.1	2.6	3.6	2.8	2.6	2.7	-44.3
Drowning	1.9	2.0	2.0	2.0	1.5	1.1	2.0	1.6	1.9	2.0	1.5	-21.3
Other	1.8	1.7	1.5	2.4	2.2	2.1	1.6	1.6	2.0	2.0	1.4	-22.2
Malignant neoplasms	1.9	2.6	1.8	1.9	1.3	3.2	2.3	2.5	2.0	2.0	2.6	36.7
Congenital malformations	1.5	1.8	1.5	1.8	2.2	1.0	1.7	1.4	1.6	1.3	2.0	36.4
Assault (homicide)	1.6	0.8	1.5	1.4	1.2	1.4	1.1	1.3	1.2	1.1	1.0	-36.1
Intentional self-harm (suicide)	1.0	0.7	0.2	0.9	0.9	0.4	0.6	0.3	0.7	0.9	0.6	-37.1
ALL CAUSES	23.7	24.3	20.4	22.7	21.5	19.5	19.7	20.2	18.9	17.5	19.4	-18.0
(Number of all deaths)	(271)	(286)	(248)	(285)	(278)	(256)	(262)	(271)	(240)	(224)	(247)	(-8.9)

Notes: ^a Number of deaths per 100,000 children 1-14 years old; ^b The five causes with the greatest number of deaths over the 2002-2012 period; ^c Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; see **Technical Notes** for more information; records with unknown county of residence are included in the statewide totals, but are not distributed by urban/rural area; the cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10); the causes of death for 2002-2012 are classified by ICD-10; measures of comparison between ICD-9 and ICD-10 - the "comparability ratios" - for the causes of death shown in this report are provided in the **Technical Notes**.

**TABLE 2C-9
MORTALITY RATES^a FOR THE FIVE LEADING CAUSES OF DEATH AMONG CHILDREN (1-14 YEARS) BY GENDER
IN URBAN AND RURAL AREAS^b, ARIZONA, 2002-2012**

Area/Gender	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% change from 2002
URBAN												
Male	24.5	24.4	21.9	25.9	22.2	19.2	21.1	20.6	20.0	20.8	20.0	-18.4
Female	19.0	20.2	14.4	17.6	19.5	18.0	15.9	18.2	16.2	12.3	15.2	-19.8
TOTAL	21.8	22.3	18.3	21.9	20.9	18.6	18.5	19.4	18.1	16.6	17.7	-19.0
RURAL												
Male	32.0	42.1	31.8	27.0	25.5	24.4	27.9	25.7	33.9	26.4	32.1	0.5
Female	33.4	24.5	30.3	26.1	24.4	25.4	23.0	21.8	12.1	18.7	25.5	-23.7
TOTAL	32.7	33.5	31.1	26.5	25.0	24.9	25.5	23.8	23.2	22.6	28.9	-11.7
STATEWIDE												
Male	25.8	27.5	23.7	26.1	22.7	20.0	22.3	21.5	22.1	21.6	22.0	-14.6
Female	21.5	20.9	17.0	19.0	20.3	19.1	17.0	18.8	15.6	13.2	16.7	-22.2
TOTAL	23.7	24.3	20.4	22.7	21.5	19.5	19.7	20.2	18.9	17.5	19.4	-18.0

Notes: ^a Rates are presented per 100,000 children 1-14 years old; ^b Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; records with unknown county of residence are included in the statewide totals, but are not distributed by urban/rural area.

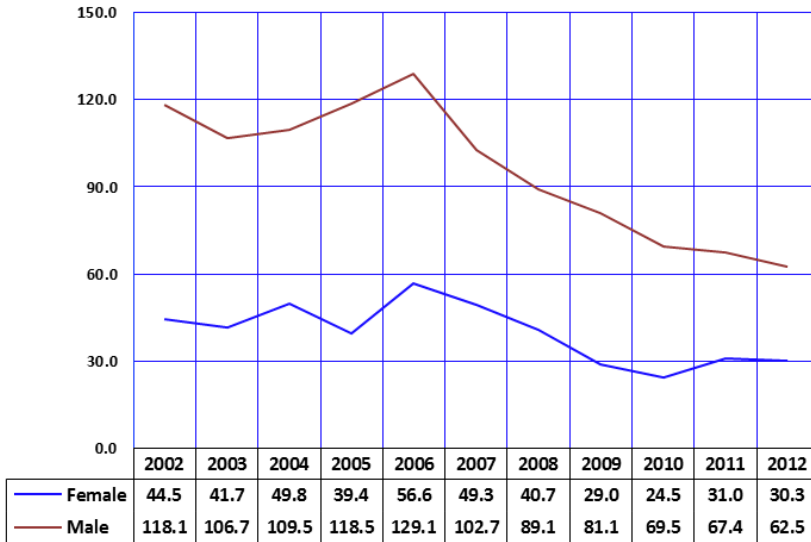
**TABLE 2C-10
LEADING CAUSES OF DEATH AMONG CHILDREN (1-14 YEARS) BY GENDER, AREA, AND RACE/ETHNICITY, ARIZONA, 2012**

Cause of death	Total ^a	Gender		Area ^b		Race/ethnicity				
		Male	Female	Urban	Rural	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or other Pacific Islander
Accidents (unintentional injury)	70 [†]	48	23	51	20	25	20	6	17	*
Motor vehicle accidents	30 [†]	23	11	21	13	8	10	*	14	0
Accidental drowning and submersion	20 [†]	14	*	16	*	11	*	*	*	*
Malignant neoplasms	30 [†]	18	15	28	*	10	15	*	*	*
Leukemia	10 [†]	*	*	*	*	*	*	*	*	0
Congenital malformations	30 [†]	12	14	23	*	7	11	*	*	*
Assault (homicide)	10 [†]	6	7	10	*	*	*	*	*	*
By discharge of firearms	10 [†]	*	*	6	0	*	*	0	0	*
By other means	10 [†]	*	*	*	*	0	*	*	*	0
Intentional self-harm (suicide)	10 [†]	7	*	6	*	*	*	*	*	0
Influenza and pneumonia	0 [†]	0	*	*	0	0	0	0	*	0
Total, all causes^c	247	140[†]	100[†]	190[†]	50[†]	80[†]	90[†]	20[†]	40[†]	10[†]

Notes: * Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; ^a May include death records where the county of residence could not be classified as urban or rural; ^b Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; ^c May include other causes of death not shown above.

2C.AGE-SPECIFIC MORTALITY
Adolescent mortality (ages 15-19 years)

Figure 2C-9
Mortality Rates^a by Gender and Year among Adolescents 15-19 Years, Arizona, 2002-2012

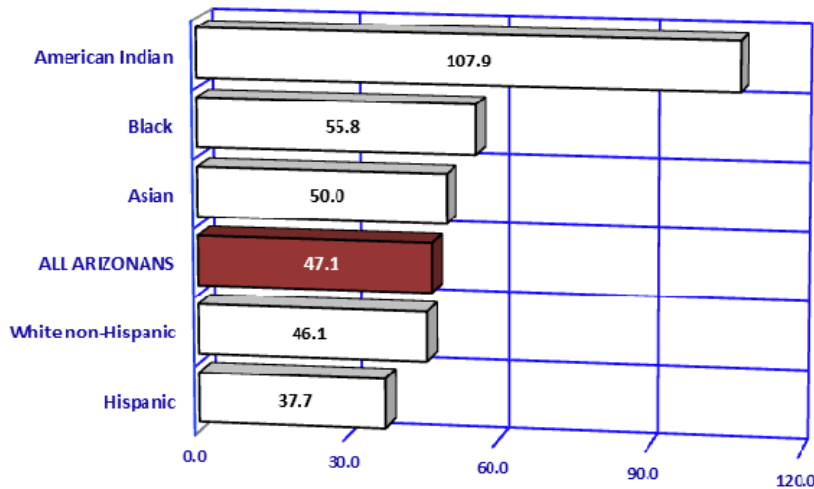


Adolescence refers to those individuals between the ages of 15 and 19, an important developmental period marking the transition from childhood to adulthood. In 2012, an estimated 467,382 adolescents resided in Arizona, comprising 7.2 percent of the State's population (**Table 10A-1**). The lives of 220 resident adolescents prematurely ended in 2012, resulting in a total mortality rate of 47.1 deaths per 100,000 adolescents. This mortality rate was 45.6 percent lower than the 2002 rate (**Table 2C-11**).

The likelihood of dying was 2.1 times as high for adolescent boys as girls in 2012 (**Figure 2C-9, Table 2C-11**).

Notes: ^a Number of deaths per 100,000 persons, 15 - 19 years old in specified group.

Figure 2C-10
Mortality Rates^a by Race/Ethnicity among Adolescents 15-19 Years, Arizona, 2012



The five causes with the greatest number of deaths over the 2002-2012 period were *unintentional injuries in accidents, suicide, homicide malignant neoplasms, and diseases of heart* (**Table 2C-11**).

From best to worst chances in 2012 of adolescents in survival was Hispanic, White non-Hispanic, Asian, Black, and American Indian (**Figure 2C-10**). If the 2012 mortality risk of Hispanic adolescents (i.e., their mortality rate) applied to all adolescents, only 176 would have died: 44 less than the 220 who actually did.

The number of deaths from accidental drug poisoning declined from 39 in 2009 and 25 in 2011 to 18 in 2012. The number of deaths from motor vehicle-related injuries increased from 50 in 2009 and 58 in 2011 to 74 in 2012.

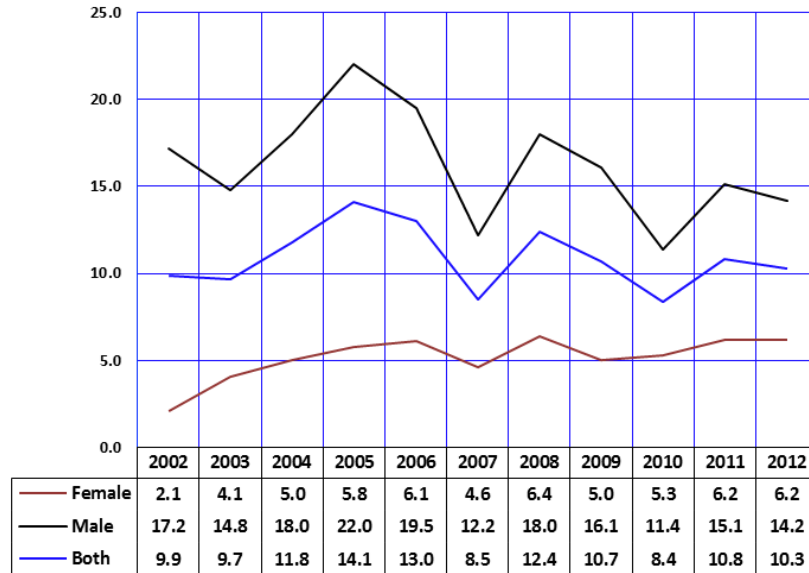
Notes: ^a Number of deaths per 100,000 persons, 15 - 19 years old in specified group.

2C.AGE-SPECIFIC MORTALITY
Adolescent mortality (ages 15-19 years)

Overall, the number of suicides among Arizonans age 15-19 years remained relatively stable from 2011 (n = 50) to 2012 (n = 48; **Table 2C-14**). In 2012, as in prior years, male adolescents accounted for the absolute majority (70.1 percent) of completed suicides.

Compared to 2010, the suicide rate slightly increased in 2011 and 2012 for both males and female adolescents (**Figure 2C-11, Table 2C-11**). The suicide death rate for adolescent males increased from 11.4 suicides per 100,000 in 2011 to 15.1/100,000 in 2012. The male to female ratio in suicide mortality rates decreased from 8.2:1 in 2002 to 2.3:1 in 2012. In other words, male adolescents were 2.3 times more likely to kill themselves in 2012 than female adolescents, compared to 8.2 times more likely in 2002.

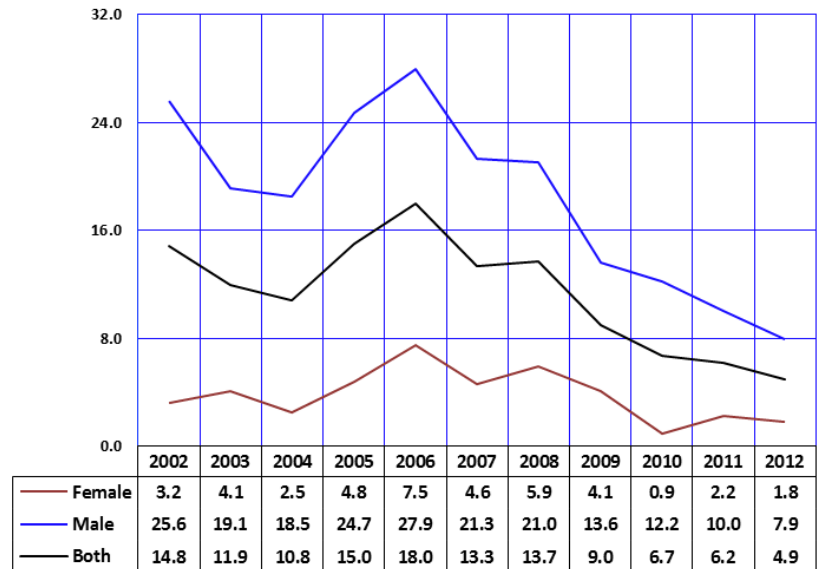
Figure 2C-11
Suicide Rates^a by Gender and Year among Adolescents 15-19 Years, Arizona, 2002-2012



Notes: ^a Number of suicide deaths per 100,000 persons, 15 - 19 years old in specified group.

Figure 2C-12
Homicide Rates^a by Gender and Year among Adolescents 15-19 Years, Arizona, 2002-2012

From 2004 to 2006, the homicide rates increased for both adolescent males and females (**Figure 2C-12, Table 2C-11**). From 2008 to 2012, the homicide rate decreased by 62.4 percent for adolescent males, and by 69.5 percent for adolescent females. Overall, the homicide rate decreased by 64.2 percent from 13.7/100,000 in 2008 to 4.9/100,000 in 2012. The male mortality risk due to homicide was 4.4 times greater than the female mortality risk in 2012.



Notes: ^a Number of homicide deaths per 100,000 persons, 15 - 19 years old in specified group.

**TABLE 2C-11
MORTALITY RATES^a FOR THE FIVE LEADING CAUSES^b OF DEATH AMONG ADOLESCENTS (15-19 YEARS) BY GENDER,
ARIZONA, 2002-2012**

Gender/Cause	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% change from 2002
MALE												
Accidents (unintentional injuries)	50.2	49.3	51.3	49.4	57.7	48.3	33.0	34.4	27.0	29.3	28.8	-42.7
Motor vehicle accidents	37.4	35.9	36.1	33.2	41.7	35.3	21.9	15.3	15.2	18.8	18.3	-51.0
Other	12.8	13.4	15.3	16.2	16.0	13.0	11.1	19.1	11.8	0.8	10.4	-18.6
Intentional self-harm (suicide)	17.2	14.8	18.0	22.0	19.5	12.2	18.0	16.1	11.4	15.1	14.2	-17.6
Assault (homicide)	25.6	19.1	18.5	24.7	27.9	21.3	21.0	13.6	12.2	10.0	7.9	-69.1
Malignant neoplasms	5.4	2.4	6.5	4.0	3.1	3.5	5.1	3.4	2.5	2.1	2.9	-46.0
Diseases of heart	2.5	1.9	1.8	1.8	1.8	2.2	0.4	1.3	2.1	1.3	0.0	-100.0
ALL CAUSES	118.1	106.7	109.5	118.5	129.1	102.7	89.1	81.1	69.5	67.4	62.5	-47.1
(Number of all deaths)	(240)	(223)	(237)	(264)	(291)	(236)	(208)	(191)	(165)	(161)	(150)	(-37.5)
FEMALE												
Accidents (unintentional injuries)	22.2	19.1	28.9	18.3	28.1	23.7	18.3	9.1	9.4	9.7	15.8	-28.7
Motor vehicle accidents	18.0	15.5	24.9	16.3	26.2	17.7	12.4	6.3	4.5	5.8	13.2	-26.7
Other	4.2	3.6	4.0	2.0	1.9	6.0	5.9	2.7	4.9	0.9	2.6	-37.2
Intentional self-harm (suicide)	2.1	4.1	5.0	5.8	6.1	4.6	6.4	5.0	5.3	6.2	6.2	193.2
Malignant neoplasms	3.2	2.6	2.5	1.4	3.7	4.2	4.1	3.2	2.7	4.4	1.8	-45.0
Assault (homicide)	3.2	4.1	2.5	4.8	7.5	4.6	5.9	4.1	0.9	2.2	1.8	-45.0
Diseases of heart	1.1	0.5	0.5	1.0	1.4	1.4	0.9	1.4	0.9	0.9	0.0	-100.0
ALL CAUSES	44.5	41.7	49.8	39.4	56.6	49.3	40.7	29.0	24.5	31.0	30.3	-31.8
(Number of all deaths)	(84)	(81)	(100)	(82)	(121)	(106)	(89)	(64)	(55)	(70)	(69)	(-17.9)
TOTAL												
Accidents (unintentional injuries)	36.7	34.7	40.5	34.3	43.3	36.4	25.9	22.1	18.4	19.8	22.5	-38.8
Motor vehicle accidents	28.1	26.0	30.7	25.0	34.2	26.8	17.3	11.0	10.0	12.5	15.8	-43.7
Other	8.6	8.7	9.8	9.3	9.1	9.6	8.6	11.2	8.4	0.9	6.6	-22.9
Intentional self-harm (suicide)	9.9	9.7	11.8	14.1	13.0	8.5	12.4	10.7	8.4	10.8	10.3	3.7
Assault (homicide)	14.8	11.9	10.8	15.0	18.0	13.3	13.7	9.0	6.7	6.2	4.9	-66.7
Malignant neoplasms	4.3	2.5	4.6	2.8	3.4	3.8	4.6	3.3	2.6	3.2	2.4	-45.3
Diseases of heart	1.8	1.2	1.2	1.4	1.6	1.8	0.9	1.3	1.5	1.1	0.0	-100.0
ALL CAUSES	82.7	75.4	80.8	80.1	93.8	76.9	65.7	55.9	47.7	49.7	47.1	-43.1
(Number of all deaths)	(324)	(304)	(337)	(346)	(412)	(342)	(297)	(255)	(220)	(231)	(220)	(-32.1)

Notes: ^a Number of deaths per 100,000 adolescents 15-19 years old; ^b The five causes with the greatest number of deaths over the 2002-2012 period; the cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10); the causes of death for 2002-2012 are classified by ICD-10, replacing the Ninth Revision (ICD-9); comparison between ICD-9 and ICD-10 – the “comparability ratios” – for the causes of death shown in this report are provided in the **Technical Notes**.

**TABLE 2C-12
MORTALITY RATES^a FOR THE FIVE LEADING CAUSES^b OF DEATH AMONG ADOLESCENTS (15-19 YEARS)
IN URBAN AND RURAL AREAS^c, ARIZONA, 2002-2012**

Area/Cause	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% change from 2002
URBAN												
Accidents (unintentional injuries)	36.1	29.9	37.3	28.9	40.3	30.9	23.7	18.7	17.0	18.4	17.0	-52.9
Motor vehicle accidents	27.4	22.0	27.1	20.5	32.2	21.9	14.8	9.6	9.3	10.8	11.9	-56.5
Other	8.7	7.9	10.2	8.4	8.1	9.0	8.9	9.1	7.7	1.0	5.1	-41.7
Intentional self-harm (suicide)	9.3	9.1	11.4	13.2	10.6	8.2	9.4	9.6	7.2	8.5	8.1	-12.8
Assault (homicide)	16.2	13.6	9.9	16.8	20.0	14.8	15.3	9.6	6.7	6.4	4.8	-70.3
Malignant neoplasms	4.4	2.4	4.1	2.8	2.8	3.8	4.6	3.2	2.3	2.8	2.8	-36.6
Diseases of heart	1.6	1.2	1.5	1.4	1.4	1.6	1.1	1.3	1.5	1.3	0.0	-100.0
ALL CAUSES	82.4	69.8	75.8	75.8	88.9	72.5	61.4	51.5	43.6	45.3	38.8	-52.9
(Number of all deaths)	(265)	(231)	(260)	(270)	(320)	(265)	(230)	(194)	(169)	(177)	(153)	(-42.3)
RURAL												
Accidents (unintentional injuries)	39.8	57.0	54.1	59.4	56.8	61.9	36.0	36.9	25.5	26.9	52.1	30.9
Motor vehicle accidents	31.3	44.5	46.0	46.2	42.9	49.2	28.6	17.2	13.4	21.5	37.0	18.3
Other	8.5	12.5	8.1	13.2	13.9	12.7	7.4	19.7	12.1	0.0	15.1	77.4
Intentional self-harm (suicide)	12.8	12.5	13.5	18.5	24.0	10.1	26.1	16.0	14.8	22.9	21.9	71.4
Assault (homicide)	8.5	4.2	14.9	6.6	8.8	6.3	7.5	6.1	6.7	5.4	5.5	-35.5
Malignant neoplasms	4.3	2.8	6.8	2.6	6.3	3.8	6.2	3.7	4.0	5.4	0.0	-100.0
Diseases of heart	2.8	1.4	0.0	1.3	2.5	2.5	0.0	1.2	1.3	0.0	0.0	-100.0
ALL CAUSES	83.9	101.5	102.7	100.3	116.2	97.2	83.3	75.0	68.6	72.7	90.5	7.8
(Number of all deaths)	(59)	(73)	(76)	(76)	(92)	(77)	(67)	(61)	(51)	(54)	(66)	11.9
STATEWIDE												
Accidents (unintentional injuries)	36.7	34.7	40.5	34.3	43.3	36.4	25.9	22.1	18.4	19.8	22.5	-38.8
Motor vehicle accidents	28.1	26.0	30.7	25.0	34.2	26.8	17.3	11.0	10.0	12.5	15.8	-43.7
Other	8.6	8.7	9.8	9.3	9.1	9.6	8.6	11.2	8.4	0.9	6.6	-22.9
Intentional self-harm (suicide)	9.9	9.7	11.8	14.1	13.0	8.5	12.4	10.7	8.4	10.8	10.3	3.7
Assault (homicide)	14.8	11.9	10.8	15.0	18.0	13.3	13.7	9.0	6.7	6.2	4.9	-66.7
Malignant neoplasms	4.3	2.5	4.6	2.8	3.4	3.8	4.6	3.3	2.6	3.2	2.4	-45.3
Diseases of heart	1.8	1.2	1.2	1.4	1.6	1.8	0.9	1.3	1.5	1.1	0.0	-100.0
ALL CAUSES	82.7	75.4	80.8	80.1	93.8	76.9	65.7	55.9	47.7	49.7	47.1	-43.1
(Number of all deaths)	(324)	(304)	(337)	(346)	(412)	(342)	(297)	(255)	(220)	(231)	(220)	(-32.1)

Notes: ^a Number of deaths per 100,000 adolescents 15-19 years old; ^b The five causes with the greatest number of deaths over the 2002-2012 period; ^c Urban = Maricopa, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; see **Technical Notes** for more information; records with unknown county of residence are included in the statewide totals, but are not distributed by urban/rural area; the cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10); the causes of death for 2002-2012 are classified by ICD-10; comparison between ICD-9 and ICD-10 - the "comparability ratios" - for the causes of death shown in this report are provided in the **Technical Notes**.

TABLE 2C-13
MORTALITY RATES^a FOR THE FIVE LEADING CAUSES OF DEATH AMONG ADOLESCENTS (15-19 YEARS)
BY GENDER IN URBAN AND RURAL AREAS^b, ARIZONA, 2002-2012

Area/Gender	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% change from 2002
URBAN												
Male	121.8	98.4	105.1	112.7	121.7	97.9	84.3	73.8	62.8	62.2	50.8	-58.3
Female	40.0	38.9	44.2	36.1	54.2	45.3	36.8	27.6	23.4	27.4	26.1	-34.8
TOTAL	82.4	69.8	75.8	75.8	88.9	72.5	61.4	51.5	43.6	45.3	38.8	-52.9
RURAL												
Male	101.5	144.8	127.9	142.5	162.3	125.2	109.0	112.6	104.9	94.6	123.3	21.5
Female	64.9	54.9	74.5	54.8	67.5	57.6	56.2	35.4	30.3	49.6	53.3	-17.8
TOTAL	83.9	101.5	102.7	100.3	116.2	97.2	83.3	75.0	68.6	72.7	90.5	7.8
STATEWIDE												
Male	118.1	106.7	109.5	118.5	129.1	102.7	89.1	81.1	69.5	67.4	62.5	-47.1
Female	44.5	41.7	49.8	39.4	56.6	49.3	40.7	29.0	24.5	31.0	30.3	-31.8
TOTAL	82.7	75.4	80.8	80.1	93.8	76.9	65.7	55.9	47.7	49.7	47.1	-43.1

Notes: ^a Rates are presented per 100,000 children 15-19 years old; ^b Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; see **Technical Notes** for more information; records with unknown county of residence are included in the statewide totals, but are not distributed by urban/rural area.

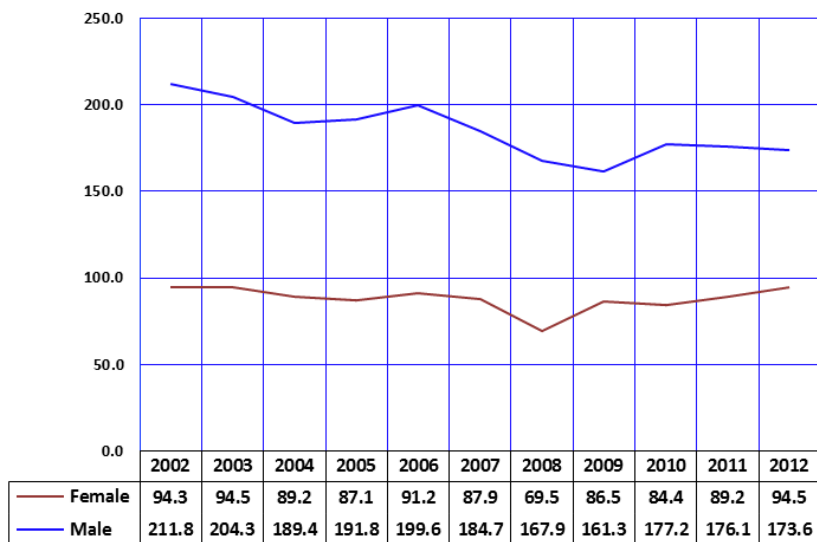
**TABLE 2C-14
LEADING CAUSES OF DEATH AMONG ADOLESCENTS (15-19 YEARS) BY GENDER, AREA, AND RACE/ETHNICITY,
ARIZONA, 2012**

Cause of death	Total	Gender		Area ^a		Race/ethnicity				
		Male	Female	Urban	Rural	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
Accidents (unintentional injury)	110†	69	36	67	38	46	36	*	14	*
Motor vehicle accidents	70†	44	30	47	27	30	28	*	10	*
Accidental poisoning	20†	13	*	14	*	11	6	0	0	*
Accidental drowning and submersion	10†	*	0	*	*	*	0	*	*	*
Intentional self-harm (suicide)	50†	34	14	32	16	27	9	*	9	*
By discharge of firearms	30†	24	*	17	11	17	*	*	*	*
By other means	20†	10	10	15	*	10	*	*	*	0
Assault (homicide)	20†	19	*	19	*	7	10	*	*	0
By discharge of firearms	20†	18	*	17	*	6	9	*	*	0
By other means	0†	*	*	*	*	*	*	0	*	0
Malignant neoplasms	10†	7	*	11	0	8	*	0	0	0
Malignant neoplasm of meninges, brain and other parts of central nervous system	0†	*	*	*	0	*	*	0	0	0
Symptoms, signs, abnormal findings	10†	7	0	*	*	*	*	*	*	0
Total, all causes^b	220	150†	70†	150†	70†	100†	70†	10†	30†	10†

Notes: * Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; ^a Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; ^b May include other causes of death not shown above.

2C.AGE-SPECIFIC MORTALITY
Young adult mortality (ages 20-44 years)

Figure 2C-13
Mortality Rates^a by Gender and Year among Young Adults 20-44 Years, Arizona, 2002-2012

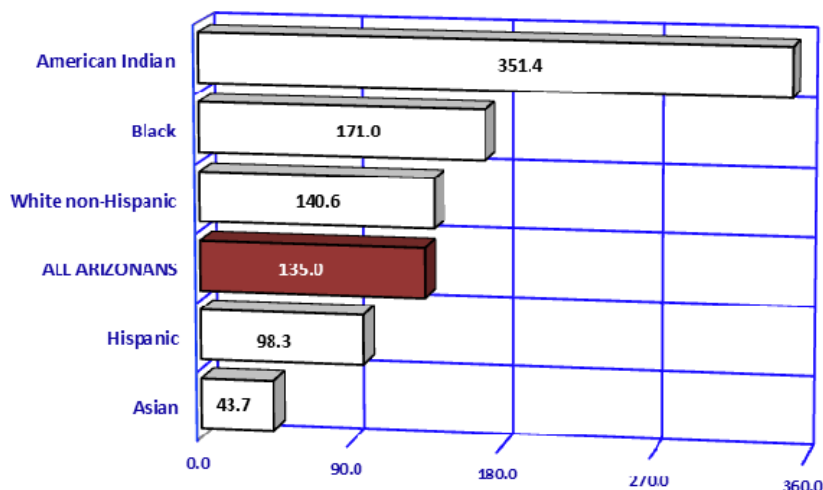


Notes: ^a Number of deaths per 100,000 persons, 20-44 years old in specified group.

In 2012, 33.1 percent of Arizona residents were between 20 and 44 years of age. Among the six developmental periods examined in the life span, young adulthood, with an estimated 2.2 million individuals, easily represented the largest segment of the population. However, only one in seventeen deaths in Arizona (or 6.0 percent) occurred during young adulthood.

The number of deaths among young adults decreased from 2,829 in 2008 to 2,796 in 2010, but increased in 2011 (n = 2,856) and 2012 (n = 2,900). The 2,900 premature deaths among 2,147,785 young adult Arizona residents produced a 2012 mortality rate of 135.0 deaths per 100,000, 1.0 percent greater than the 2010 rate of 133.6/100,000 (**Table 2C-15**). Compared to 2011, the mortality rate for male young adults slightly decreased while female young adults had mortality rates that slightly increased (**Figure 2C-13, Table 2C-15**).

Figure 2C-14
Mortality Rates^a by Race/Ethnicity among Young Adults 20-44 Years, Arizona, 2012



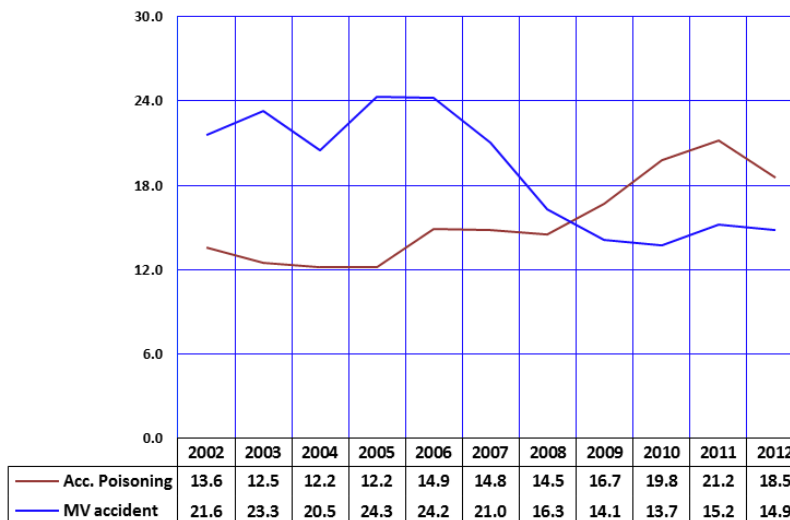
Notes: ^a Number of deaths per 100,000 persons, 20-44 years old in specified group.

The rank order of survival chances of young adults from best to worse by race/ethnicity in 2012 was Asian, Hispanic or Latino, White non-Hispanic, Black or African American, and American Indian. If the 2012 mortality risk of Asians (i.e., their mortality rate of 43.7/100,000) was applied to all young adults in Arizona, 939 would have died, rather than the 2,900 who actually did.

2C.AGE-SPECIFIC MORTALITY
Young adult mortality (ages 20-44 years)

Figure 2C-15
Mortality Rates^a for Motor Vehicle-Related Injuries and Accidental Poisoning by Year among Young Adults 20-44 Years, Arizona, 2002-2012

In 2012, 398 deaths of young adults were attributed to accidental poisoning (**Table 2C-18**), compared to 453 deaths in 2011. The mortality rate for accidental poisoning among young adults (18.5/100,000) for the fourth time exceeded the mortality rate for motor vehicle-related injuries (14.9/100,000; **Figure 2C-15**). In the 20-44 year age group, 394 of the 398 accidental poisonings (99.0 percent) were due to drug overdose.



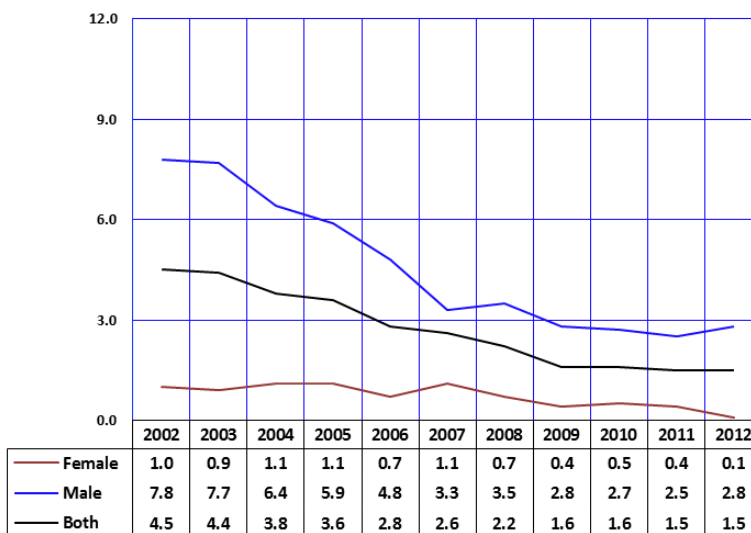
Notes: ^a Number of motor vehicle and accidental poisoning deaths per 100,000 persons, 20-44 years old in specified group.

Figure 2C-16
Mortality Rates^a for HIV Disease by Gender and Year among Young Adults 20-44 Years, Arizona, 2002-2012

In 2012, fewer Arizonans 20-44 years old died from the *human immunodeficiency virus (HIV) disease* (32) than from *morbid obesity* (40 deaths; **Table 2C-18**).

Of the 98 deaths from *HIV disease* in 2012, 32.7 percent occurred among Arizonans 20-44 years old (**Table 2C-27**). Males accounted for 96.9 percent of young adult deaths from *HIV disease* in 2012 (**Table 2C-18**).

The mortality rate for HIV disease among young male adults slightly increased from 2.5/100,000 in 2011 to 2.8/100,000 in 2012.



Notes: ^a Number of HIV deaths per 100,000 persons, 20-44 years old in specified group.

**TABLE 2C-15
MORTALITY RATES^a FOR THE FIVE LEADING CAUSES^b OF DEATH AMONG YOUNG ADULTS (20-44 YEARS) BY GENDER,
ARIZONA, 2002-2012**

Gender/Cause	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% change from 2002
MALE												
Accidents (unintentional injuries)	61.8	63.3	54.8	63.2	69.2	60.6	54.4	53.7	52.6	57.9	52.8	-14.6
Motor vehicle accidents	30.7	33.6	27.8	34.2	34.5	29.2	23.8	20.2	19.8	20.6	21.6	-29.5
Other	31.1	29.7	27.0	29.0	34.7	31.4	30.6	33.4	27.5	8.7	31.2	0.3
Intentional self-harm (suicide)	31.3	30.2	28.3	28.3	27.4	30.3	23.5	25.1	31.5	32.4	29.0	-7.4
Assault (homicide)	25.6	22.9	23.7	24.7	24.2	22.8	19.2	13.4	20.1	18.2	16.1	-37.2
Diseases of heart	17.2	16.3	15.4	15.3	15.9	14.3	13.3	14.0	11.7	14.7	13.5	-21.8
Malignant neoplasms	15.7	14.2	14.0	11.9	11.0	11.3	12.6	12.0	12.8	11.0	12.3	-21.9
ALL CAUSES	211.8	204.3	189.4	191.8	199.6	184.7	167.9	161.3	177.2	176.1	173.6	-18.0
(Number of all deaths)	(2186)	(2169)	(2091)	(2185)	(2290)	(2166)	(2001)	(1944)	(1920)	(1923)	(1910)	(-12.6)
FEMALE												
Accidents (unintentional injuries)	21.9	22.5	21.8	24.9	25.0	25.2	20.4	20.8	22.4	25.2	22.8	4.2
Motor vehicle accidents	12.0	12.2	12.7	13.8	13.1	12.2	8.3	7.5	7.4	9.7	7.7	-35.6
Other	9.9	10.3	9.1	11.1	11.9	13.0	12.1	13.3	15.0	2.1	15.1	52.5
Malignant neoplasms	18.7	15.9	18.2	13.4	16.4	15.5	13.7	15.9	14.0	15.7	17.6	-6.1
Intentional self-harm (suicide)	6.2	7.4	7.2	7.5	7.0	7.1	6.0	9.4	6.8	8.9	8.7	40.1
Diseases of heart	7.3	7.0	6.6	7.8	5.0	6.7	5.8	6.7	4.6	6.4	7.0	-4.5
Assault (homicide)	3.9	5.1	4.5	3.7	4.0	4.7	3.2	4.0	3.5	2.4	4.3	10.2
ALL CAUSES	94.3	94.5	89.2	87.1	91.2	87.9	69.5	86.5	84.4	89.2	94.5	0.2
(Number of all deaths)	(913)	(941)	(922)	(936)	(968)	(954)	(828)	(973)	(876)	(933)	(990)	8.4
TOTAL												
Accidents (unintentional injuries)	42.5	43.5	38.8	44.6	47.9	43.6	38.0	37.8	37.8	41.9	38.2	-10.2
Motor vehicle accidents	21.6	23.3	20.5	24.3	24.2	21.0	16.3	14.1	13.7	15.2	14.9	-31.2
Other	20.9	20.2	18.3	20.3	23.7	22.6	21.7	23.7	24.1	5.5	23.3	11.6
Intentional self-harm (suicide)	19.1	19.2	18.1	18.2	17.6	19.1	15.0	17.5	19.4	20.9	19.1	-0.1
Malignant neoplasms	17.1	15.0	16.0	12.6	13.6	13.3	9.7	13.9	13.4	13.3	14.9	-13.1
Diseases of heart	12.4	11.8	11.1	11.7	10.7	10.7	11.5	10.5	8.2	10.6	10.3	-17.0
Assault (homicide)	15.1	14.3	14.5	14.5	14.5	14.1	13.1	8.8	12.0	10.5	10.3	-31.5
ALL CAUSES	154.9	151.1	141.0	140.9	147.5	138.2	123.0	125.2	131.8	133.6	135.0	-12.8
(Number of all deaths)	(3099)	(3110)	(3013)	(3121)	(3258)	(3120)	(2829)	(2917)	(2796)	(2856)	(2900)	(-6.4)

Notes: ^a Rates are presented per 100,000 persons 20-44 years old; ^b The five causes with the greatest number of deaths over the 2002-2012 period; the cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10); the causes of death for 2002-2012 are classified by ICD-10, replacing the Ninth Revision (ICD-9); comparison between ICD-9 and ICD-10 – the “comparability ratios” – for the causes of death shown in this report are provided in the **Technical Notes**.

**TABLE 2C-16
MORTALITY RATES^a FOR THE FIVE LEADING CAUSES^b OF DEATH AMONG YOUNG ADULTS (20-44 YEARS)
IN URBAN AND RURAL AREAS^c, ARIZONA, 2002-2012**

Area/Cause	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% change from 2002
URBAN												
Accidents (unintentional injuries)	39.1	38.3	35.5	40.2	44.8	38.7	34.4	32.7	33.5	36.6	32.3	-17.4
Motor vehicle accidents	18.9	19.2	17.5	21.1	21.2	17.7	14.2	11.2	11.5	12.4	12.1	-36.1
Other	20.2	19.1	18.0	19.1	23.6	21.0	20.2	21.5	22.0	4.3	20.2	0.1
Intentional self-harm (suicide)	18.0	17.9	16.2	16.8	16.2	18.0	16.4	13.6	17.7	18.1	17.0	-5.5
Malignant neoplasms	16.2	14.7	16.0	11.8	13.5	12.9	14.2	15.6	13.3	13.5	14.1	-12.9
Assault (homicide)	15.6	14.8	15.2	14.9	15.1	14.3	13.2	9.7	11.0	10.0	9.5	-39.1
Diseases of heart	11.8	11.0	10.6	11.9	10.0	9.9	8.9	8.7	8.0	9.6	9.5	-19.1
ALL CAUSES	145.4	140.2	132.2	133.0	139.3	129.8	113.6	113.0	119.7	120.3	118.8	-18.3
(Number of all deaths)	(2494)	(2477)	(2426)	(2532)	(2640)	(2511)	(2239)	(2203)	(2203)	(2232)	(2215)	-11.2
RURAL												
Accidents (unintentional injuries)	63.2	75.5	58.9	72.0	66.9	73.2	57.1	64.7	63.9	71.9	74.4	17.7
Motor vehicle accidents	37.9	48.1	38.4	44.2	42.4	40.5	28.0	29.4	27.0	33.0	31.7	-16.3
Other	25.3	27.4	20.5	27.8	24.5	32.7	29.2	35.4	36.9	10.3	42.7	68.6
Intentional self-harm (suicide)	26.0	26.8	29.5	26.8	25.5	25.6	20.4	29.1	30.2	37.6	32.4	24.8
Malignant neoplasms	22.8	17.2	15.9	17.8	14.0	16.1	12.5	15.9	13.8	12.0	19.0	17.5
Assault (homicide)	11.9	11.3	9.9	12.6	11.2	12.7	14.6	7.8	16.0	12.8	14.8	24.5
Diseases of heart	16.2	16.8	14.2	10.0	15.0	15.1	9.4	15.0	9.6	16.7	14.5	-36.6
ALL CAUSES	212.2	217.3	194.3	189.9	196.9	188.1	174.2	191.6	203.7	210.2	233.4	10.0
(Number of all deaths)	(604)	(633)	(587)	(588)	(618)	(609)	(590)	(662)	(574)	(593)	(662)	9.6
STATEWIDE												
Accidents (unintentional injuries)	42.5	43.5	38.8	44.6	47.9	43.6	38.0	37.8	37.8	41.9	38.2	-10.2
Motor vehicle accidents	21.6	23.3	20.5	24.3	24.2	21.0	16.3	14.1	13.7	15.2	14.9	-31.2
Other	20.9	20.2	18.3	20.3	23.7	22.6	21.7	23.7	24.1	5.5	23.3	11.6
Intentional self-harm (suicide)	19.1	19.2	18.1	18.2	17.6	19.1	15.0	17.5	19.4	20.9	19.1	-0.1
Malignant neoplasms	17.1	15.0	16.0	12.6	13.6	13.3	9.7	13.9	13.4	13.3	14.9	-13.1
Diseases of heart	12.4	11.8	11.1	11.7	10.7	10.7	11.5	8.8	8.2	10.6	10.3	-17.0
Assault (homicide)	15.1	14.3	14.5	14.5	14.5	14.1	13.1	10.5	12.0	10.5	10.3	-31.5
ALL CAUSES	154.9	151.1	141.0	140.9	147.5	138.2	123.0	125.2	131.8	133.6	135.0	-12.8
(Number of all deaths)	(3099)	(3110)	(3013)	(3121)	(3258)	(3120)	(2829)	(2917)	(2796)	(2856)	(2900)	-6.4

Notes: ^a Rates are presented per 100,000 young adults 20-44 years old; ^b The five causes with the greatest number of deaths statewide over the 2002-2012 period; ^c Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; see **Technical Notes** for more information; records with unknown county of residence are included in the statewide totals, but are not distributed by urban/rural area; The cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10); the causes of death for 2002-2012 are classified by ICD-10, replacing the Ninth Revision (ICD-9); comparison between ICD-9 and ICD-10 – the "comparability ratios" – for the causes of death shown in this report are provided in the **Technical Notes**.

TABLE 2C-17
MORTALITY RATES^a FOR THE FIVE LEADING CAUSES OF DEATH AMONG YOUNG ADULTS (20-44 YEARS)
BY GENDER IN URBAN AND RURAL AREAS^b, ARIZONA, 2002-2012

Area/Gender	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% change from 2002
URBAN												
Male	197.0	190.5	176.7	181.5	188.7	172.2	154.2	143.9	159.4	158.7	154.0	-21.8
Female	89.9	86.1	84.4	81.0	85.3	83.6	69.4	79.5	78.4	80.3	81.9	-8.9
TOTAL	145.4	140.2	132.2	133.0	139.3	129.8	113.6	113.0	119.7	120.3	118.8	-18.3
RURAL												
Male	303.4	288.9	266.5	256.4	266.4	261.2	244.4	258.9	281.0	271.6	288.4	-4.9
Female	119.2	142.8	118.0	123.0	125.1	112.7	102.9	123.5	121.6	144.8	174.6	46.5
TOTAL	212.2	217.3	194.3	189.9	196.9	188.1	174.2	191.6	203.7	210.2	233.4	10.0
STATEWIDE												
Male	211.8	204.3	189.4	191.8	199.6	184.7	167.9	161.3	177.2	176.1	173.6	-18.0
Female	94.3	94.5	89.2	87.1	91.2	87.9	69.5	86.5	84.4	89.2	94.5	0.2
TOTAL	154.9	151.1	141.0	140.9	147.5	138.2	123.0	125.2	131.8	133.6	135.0	-12.8

Notes: ^a Rates are presented per 100,000 persons 20-44 years old; ^b Urban = Maricopa, Pima, and Yuma counties; the remaining counties comprise Arizona's rural areas; see **Technical Notes** for more information; records with unknown county of residence are included in the statewide totals, but are not distributed by urban/rural area.

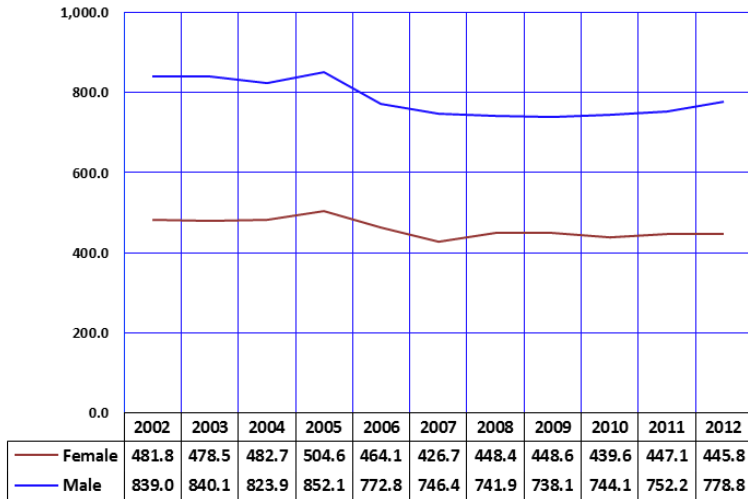
**TABLE 2C-18 (correction)
LEADING CAUSES OF DEATH AMONG YOUNG ADULTS (20-44 YEARS) BY GENDER, AREA, AND RACE/ETHNICITY,
ARIZONA, 2012**

Cause of death	Total ^b	Gender		Area ^a		Race/ethnicity				
		Male	Female	Urban	Rural	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
Accidents (unintentional injury)	820	581	239	602	211	456	192	35	128	9
Accidental poisoning	400†	264	134	303	92	267	71	15	43	*
Motor vehicle accidents	320†	238	81	225	90	138	99	15	63	*
Intentional self-harm (suicide)	410†	319	91	317	92	272	76	16	41	*
By discharge of firearms	220†	193	27	176	43	158	40	10	10	*
By other means	190†	126	64	141	49	114	36	6	31	*
Malignant neoplasms	319	135	184	263	54	176	95	20	17	11
Malignant neoplasm of breast	60†	0	55	45	9	29	16	*	*	*
Malignant neoplasm of meninges, brain and other parts of central nervous system	30†	17	15	29	*	22	6	*	*	0
Malignant neoplasm of lymphoid, hematopoietic and related tissue	50†	23	22	38	6	22	18	*	*	*
Assault (homicide)	220†	177	45	177	42	79	84	25	33	*
By discharge of firearms	150†	129	25	136	16	52	66	23	12	*
By other means	70†	48	20	41	26	27	18	*	21	0
Diseases of heart	220†	148	73	178	41	120	61	22	17	*
Chronic liver disease and cirrhosis	110†	63	46	64	45	47	15	*	46	0
Diabetes	70†	40	27	52	14	34	15	*	13	0
Cerebrovascular diseases	40†	24	16	36	*	18	14	*	*	*
Obesity	40†	22	14	29	7	16	9	*	*	*
Human immunodeficiency virus (HIV) disease	30†	31	*	26	*	15	8	*	*	*
Total, all causes	2,900	1,910	990†	2,215	660†	1,589	710	180†	390†	40†

Notes: * Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; ^a Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; ^b Records with unknown urban or rural residence of the decedent are not shown separately but are included in the total.

2C.AGE-SPECIFIC MORTALITY
Middle-aged adult mortality (ages 45-64 years)

Figure 2C-17
Mortality Rates^a by Gender and Year among Middle-Aged Adults 45-64 Years, Arizona, 2002-2012



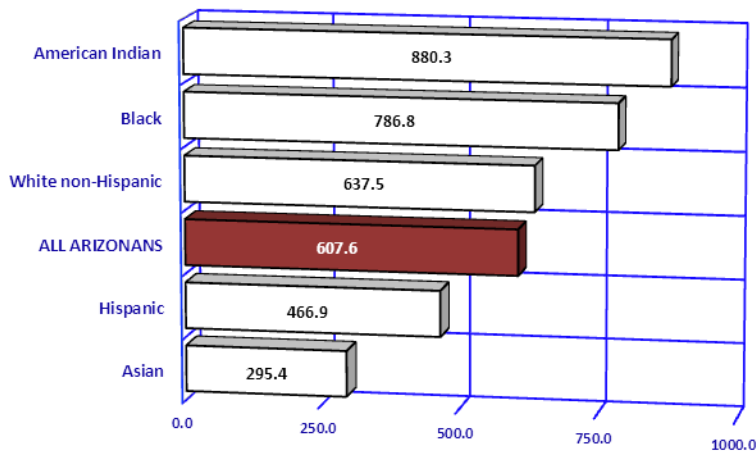
Notes: ^a Number of deaths per 100,000 persons, 45-64 years old in specified group.

In 2012, the 1,584,829 middle-aged adult residents aged 45 to 64 experienced 9,630 deaths, or an average of 26 deaths, per day. The total number of deaths among 45 - 64 year old Arizona residents was higher in 2012 (n = 9,630) than any year since 1980, and is likely the greatest number of deaths among this age group in Arizona's history (**Table 2C-19**).

The 2012 total mortality rate among middle-age females was 7.5 percent lower, and among middle-aged males 7.2 percent lower than their respective rates in 2002 (**Figure 2C-17, Table 2C-19**). In 2012, the mortality rate for males age 45 - 64 was 74.7 percent greater than for females of the same age group.

The five causes with the greatest number of deaths in 2002-2012 were *malignant neoplasms, diseases of heart, accidents, chronic liver disease and cirrhosis, and chronic lower respiratory diseases* (**Table 2C-19**).

Figure 2C-18
Mortality Rates^a by Race/Ethnicity among Middle-Aged Adults 45-64 Years, Arizona, 2012



Notes: ^a Number of deaths per 100,000 persons, 45-64 years old in specified group.

American Indian, Black or African American, and White non-Hispanic middle-aged adults had the three highest mortality rates (880.3/100,000, 786.8/100,000, and 637.5/100,000, respectively) among the racial/ethnic groups.

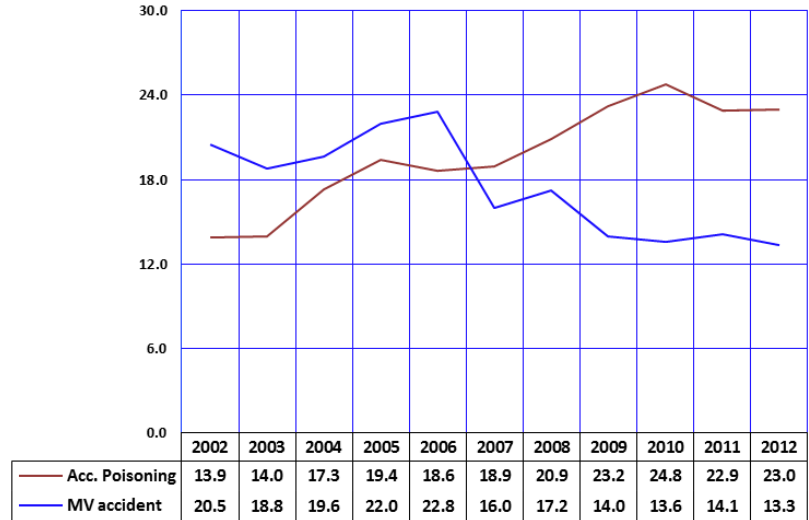
If the 2012 total mortality rate for Asian middle-aged adults applied to all Arizona residents 45-64 years old, 4,948 middle-aged adults would have died rather than the 9,630 who actually did.

2C.AGE-SPECIFIC MORTALITY
Middle-aged adult mortality (ages 45-64 years)

In recent years, middle-aged adults experienced an unprecedented increase in mortality from accidental poisoning, though the rate remained stable across 2011 - 2012. In 2012, 364 deaths were attributed to accidental poisoning (**Table 2C-22**), compared to 168 deaths in 2002. Of the 364 accidental poisoning deaths in this age group, 356 were drug overdoses (97.8 percent).

Beginning in 2007, the mortality rate for accidental poisoning exceeded the mortality rate for motor vehicle-related injuries among the middle-aged (**Figure 2C-19**). In 2012, the rate of 23.0 per 100,000 middle-aged adults was 72.9 percent greater than the mortality rate of 13.3/100,000 for motor vehicle accidents. White non-Hispanic accounted for 267 or 73.4 percent of all accidental poisoning deaths (**Table 2C-22**).

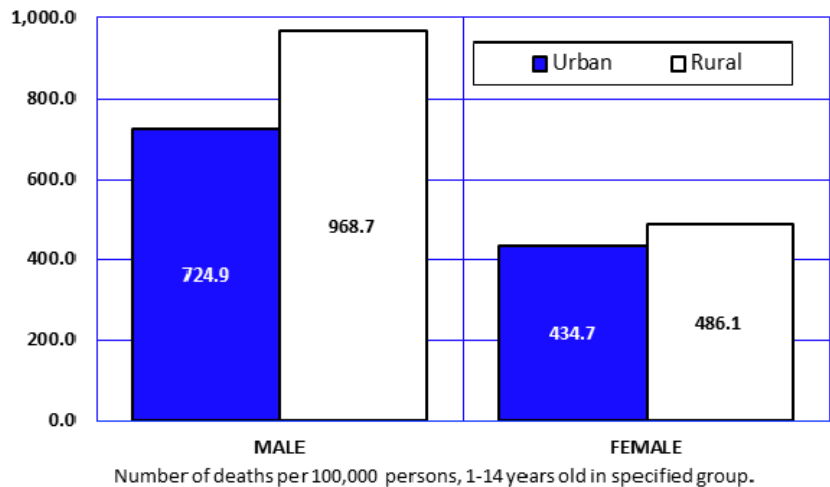
Figure 2C-19
Mortality Rates^a for Accidental Poisoning and Motor Vehicle-related Injuries by Year among Middle-Aged Adults 45-64 Years, Arizona, 2002-2012



Notes: ^a Number of deaths per 100,000 persons, 45-64 years old in specified group.

Figure 2C-20
Mortality Rates by Gender in Urban^a and Rural Areas among Middle-Aged Adults 45-64 Years, Arizona, 2012

In 2012, as in the past, rural middle-aged males had the poorest survival chances (**Figure 2C-20, Table 2C-21**). The mortality rate for rural middle-aged males in 2012 was 33.6 percent greater than for urban males, 99.3 percent greater than rural females, and 122.8 percent (2.2 times) greater than urban females.



Notes: ^a Urban = Maricopa, Pima, Pinal and Yuma Counties.

**TABLE 2C-19
MORTALITY RATES^a FOR THE FIVE LEADING CAUSES^b OF DEATH AMONG MIDDLE-AGED ADULTS (45-64 YEARS)
BY GENDER, ARIZONA, 2002-2012**

Gender/Cause	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% change from 2002
MALE												
Malignant neoplasms	228.3	220.6	213.1	210.6	192.1	192.1	184.5	182.2	188.3	186.3	196.6	-13.9
Diseases of heart	206.1	196.7	196.7	207.5	186.7	170.8	175.5	169.0	160.7	165.3	155.1	-24.7
Accidents (unintentional injuries)	70.9	68.8	75.7	86.2	81.2	73.2	76.5	71.9	69.2	68.9	68.0	-4.1
Motor vehicle accidents	29.3	26.2	27.7	33.7	31.9	23.1	24.6	20.8	19.9	21.4	20.1	-31.3
Other	41.6	42.6	48.0	52.5	49.3	50.1	51.9	51.1	54.6	47.9	47.9	15.2
Chronic liver disease and cirrhosis	36.0	42.7	42.3	45.1	34.4	35.5	39.2	38.0	42.1	49.6	50.2	39.6
Suicide	34.4	29.4	31.6	32.7	31.9	35.0	35.1	37.0	40.9	41.3	41.8	21.5
ALL CAUSES	839.0	840.1	823.9	852.1	772.8	746.4	741.9	738.1	744.1	752.2	778.8	-7.2
(Number of all deaths)	(4637)	(4776)	(4906)	(5232)	(5282)	(5397)	(5450)	(5472)	(5659)	(5760)	(5999)	29.4
FEMALE												
Malignant neoplasms	179.2	181.3	179.4	182.3	166.2	154.7	151.4	154.2	153.9	156.9	155.1	-13.5
Diseases of heart	78.0	72.8	74.8	74.2	66.4	65.0	63.4	59.4	55.9	61.8	60.5	-22.4
Accidents (unintentional injuries)	26.5	24.6	29.6	33.1	35.8	30.2	34.2	36.1	36.6	32.8	33.0	24.6
Motor vehicle accidents	12.2	11.9	11.8	10.9	14.2	9.2	10.0	7.6	7.7	7.1	6.9	-43.6
Other	14.3	12.7	17.8	22.2	21.6	21.0	24.2	28.5	29.0	7.4	26.1	82.9
Chronic lower respiratory diseases	19.9	22.5	18.5	25.4	21.6	23.6	24.3	19.2	19.3	21.6	24.2	21.5
Diabetes	19.5	17.2	19.0	20.1	19.1	14.0	16.0	14.2	17.0	21.3	22.3	14.4
ALL CAUSES	481.8	478.5	482.7	504.6	464.1	426.7	448.4	448.6	439.6	447.1	445.8	-7.5
(Number of all deaths)	(2837)	(2898)	(3022)	(3292)	(3336)	(3232)	(3449)	(3483)	(3553)	(3638)	(3631)	28.0
TOTAL												
Malignant neoplasms	203.0	200.3	195.8	196.0	178.8	173.0	167.6	167.9	170.6	171.2	175.2	-13.7
Diseases of heart	140.0	132.9	134.2	138.8	125.0	116.6	118.2	112.9	106.7	112.0	106.5	-23.9
Accidents (unintentional injuries)	48.0	46.0	52.1	58.8	57.9	51.2	54.9	53.6	52.4	50.3	50.0	4.2
Motor vehicle accidents	20.5	18.8	19.6	22.0	22.8	16.0	17.2	14.0	13.6	14.1	13.3	-35.1
Other	27.5	27.2	32.5	36.8	35.1	35.2	37.7	39.5	38.8	34.4	36.7	33.5
Chronic liver disease and cirrhosis	26.1	29.0	28.9	31.8	25.0	25.3	29.7	29.1	30.2	34.3	35.0	34.2
Chronic lower respiratory diseases	23.7	21.9	21.4	26.8	22.7	21.8	24.7	21.5	20.0	23.6	25.1	5.7
ALL CAUSES	654.8	653.7	649.1	673.1	614.6	582.8	591.8	590.0	587.2	595.0	607.6	-7.2
(Number of all deaths)	(7474)	(7675)	(7928)	(8524)	(8618)	(8629)	(8899)	(8855)	(9212)	(9398)	(9630)	28.8

Notes: ^a Rates are presented per 100,000 middle-aged adults 45-64 years old; ^b The five causes with the greatest number of deaths over the 2002-2012 period; the cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10); the causes of death for 2002-2012 are classified by ICD-10; measures of comparison between ICD-9 and ICD-10 – the “comparability ratios” – for the causes of death shown in this report are provided in the **Technical Notes**.

**TABLE 2C-20
MORTALITY RATES^a FOR THE FIVE LEADING CAUSES^b OF DEATH AMONG MIDDLE-AGED ADULTS (45-64 YEARS)
IN URBAN AND RURAL AREAS^c, ARIZONA, 2002-2012**

Area/Cause	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% change from 2002
URBAN												
Malignant neoplasms	202.4	198.0	188.9	190.5	174.8	169.6	162.8	165.4	164.6	166.5	171.8	-15.1
Diseases of heart	135.3	125.9	127.0	132.5	119.9	109.4	109.8	101.3	98.6	103.9	95.9	-29.1
Accidents (unintentional injuries)	45.1	40.6	47.6	55.7	54.2	47.8	51.6	48.8	47.5	45.4	47.6	5.5
Motor vehicle accidents	18.0	14.7	17.0	18.7	19.7	13.7	14.8	11.5	11.1	11.9	11.9	-34.0
Other	27.1	25.9	30.6	37.0	34.5	34.1	36.8	37.3	36.5	12.4	35.7	31.8
Chronic liver disease and cirrhosis	25.8	26.8	25.2	30.0	23.3	23.0	27.4	25.7	27.2	30.8	31.5	22.1
Chronic lower respiratory diseases	23.0	21.2	21.9	25.8	22.3	20.5	23.6	20.2	19.2	20.6	22.9	-0.4
ALL CAUSES	637.2	630.2	620.7	647.8	595.0	559.7	559.5	559.4	552.4	561.5	575.8	-9.6
(Number of all deaths)	(5878)	(5987)	(6140)	(6658)	(6834)	(6812)	(6918)	(6979)	(7098)	(7274)	(7513)	27.8
RURAL												
Malignant neoplasms	205.5	210.1	225.2	219.6	197.0	188.3	188.1	176.9	193.1	186.3	187.8	-8.6
Diseases of heart	159.4	162.4	164.5	165.9	148.1	149.6	156.0	164.3	137.4	143.7	152.5	-4.4
Accidents (unintentional injuries)	60.3	68.2	71.0	72.5	74.9	65.3	68.1	71.4	66.2	67.6	55.3	-8.2
Motor vehicle accidents	31.1	35.7	30.6	36.0	37.0	26.6	27.3	24.8	23.6	22.5	18.9	-39.2
Other	29.2	32.5	40.4	36.5	37.9	38.7	40.8	46.6	42.6	16.5	36.4	24.7
Chronic liver disease and cirrhosis	27.4	37.9	44.8	39.8	32.3	36.1	39.6	43.3	41.9	49.3	47.5	73.3
Chronic lower respiratory diseases	26.9	25.0	18.9	31.4	24.8	28.1	29.5	27.4	22.2	36.3	33.2	23.4
ALL CAUSES	725.8	750.7	768.9	781.4	702.9	687.3	727.8	713.2	708.3	716.6	720.2	-0.8
(Number of all deaths)	(1589)	(1683)	(1786)	(1865)	(1784)	(1810)	(1946)	(1927)	(2010)	(2035)	(2017)	26.9
STATEWIDE												
Malignant neoplasms	203.0	200.3	195.8	196.0	178.8	173.0	167.6	167.9	170.6	171.2	175.2	-13.7
Diseases of heart	140.0	132.9	134.2	138.8	125.0	116.6	118.2	112.9	106.7	112.0	106.5	-23.9
Accidents (unintentional injuries)	48.0	46.0	52.1	58.8	57.9	51.2	54.9	53.6	52.4	50.3	50.0	4.2
Motor vehicle accidents	20.5	18.8	19.6	22.0	22.8	16.0	17.2	14.0	13.6	14.1	13.3	-35.1
Other	27.5	27.2	32.5	36.8	35.1	35.2	37.7	39.5	38.8	13.4	36.7	33.5
Chronic liver disease and cirrhosis	26.1	29.0	28.9	31.8	25.0	25.3	29.7	29.1	30.2	34.3	35.0	34.2
Chronic lower respiratory diseases	23.7	21.9	21.4	26.8	22.7	21.8	24.7	21.5	20.0	23.6	25.1	5.7
ALL CAUSES	654.8	653.7	649.1	673.1	614.6	582.8	591.8	590.0	587.2	595.0	607.6	-7.2
(Number of all deaths)	(7474)	(7675)	(7928)	(8524)	(8618)	(8629)	(8899)	(8855)	(9212)	(9398)	(9630)	28.8

Notes: ^a Rates are presented per 100,000 middle-aged adults 45-64 years old; ^b The five causes with the greatest number of deaths over the 2002-2012 period; ^c Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; see **Technical Notes** for more information; records with unknown county of residence are included in the statewide totals, but are not distributed by urban/rural area; The cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10); the causes of death for 2002-2012 are classified by ICD-9 and ICD-10 – the "comparability ratios" – for the causes of death shown in this report are provided in the **Technical Notes**.

**TABLE 2C-21
MORTALITY RATES^a FOR THE FIVE LEADING CAUSES OF DEATH AMONG MIDDLE-AGED ADULTS (45-64 YEARS)
BY GENDER IN URBAN AND RURAL AREAS^b, ARIZONA, 2002-2012**

Area/Gender	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% change from 2002
URBAN												
Male	812.8	809.3	788.6	815.2	749.3	714.7	693.2	697.6	690.0	703.5	724.9	-10.8
Female	472.5	462.2	461.1	490.0	447.6	410.8	431.1	426.5	423.0	427.8	434.7	-8.0
TOTAL	637.2	630.1	620.7	647.8	595.0	559.7	559.5	559.4	552.4	561.5	575.8	-9.6
RURAL												
Male	943.6	966.6	972.3	1010.8	879.7	891.7	953.6	896.8	924.9	918.6	968.7	2.7
Female	520.2	546.9	575.1	567.2	536.9	497.7	518.4	543.0	504.0	526.1	486.1	-6.6
TOTAL	725.8	750.7	768.9	781.4	702.9	687.3	727.8	713.2	708.3	716.6	720.2	-0.8
STATEWIDE												
Male	839.0	840.1	823.9	852.1	772.8	746.4	741.9	738.1	744.1	752.2	778.8	-7.2
Female	481.8	478.5	482.7	504.6	464.1	426.7	448.4	448.6	439.6	447.1	445.8	-7.5
TOTAL	654.8	653.6	649.1	673.1	614.6	582.8	591.8	590.0	587.2	595.0	607.6	-7.2

Notes: ^a Rates are presented per 100,000 persons 45-64 years old; ^b Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; see **Technical Notes** for more information.

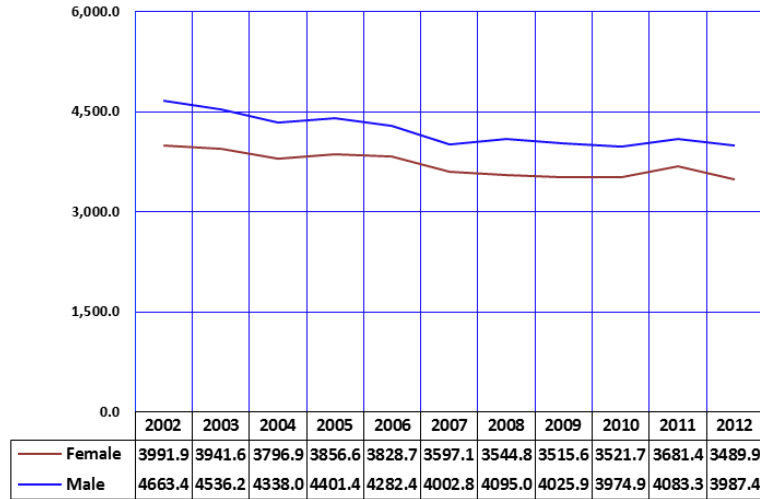
**TABLE 2C-22 (correction)
LEADING CAUSES OF DEATH AMONG MIDDLE-AGED ADULTS (45-64 YEARS) BY GENDER, AREA, AND RACE/ETHNICITY,
ARIZONA, 2012**

Cause of death	Total		Gender		Area ^a			Race/ethnicity				
	Male	Female	Urban	Rural	Unknown	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander		
Malignant neoplasms	1,514	1,263	2,242	526	9	2,102	411	134	73	57		
Malignant neoplasm of trachea, bronchus and lung	355	287	504	133	*	544	53	30	*	10		
Malignant neoplasm of breast	0	255	212	42	*	186	44	15	*	7		
Malignant neoplasm of colon, rectum, and anus	152	91	195	48	0	172	50	9	8	*		
Malignant neoplasm of pancreas	136	83	177	41	*	159	35	10	9	6		
Diseases of heart	1,195	493	1,251	427	10	1,283	236	91	58	20		
Accidents (unintentional injury)	524	269	621	155	17	569	127	23	69	*		
Accidental poisoning	212	152	293	64	7	267	56	18	22	*		
Motor vehicle accidents	155	56	155	53	*	142	40	*	25	*		
Falls	51	28	68	11	0	59	10	*	8	0		
Chronic liver disease and cirrhosis	387	168	411	133	11	325	128	18	80	*		
Diabetes	300	182	406	72	*	262	124	25	62	9		
Intentional self-harm (suicide)	322	94	312	97	7	368	30	*	7	6		
By discharge of firearms	199	39	176	60	*	214	15	*	*	*		
By other means	123	55	136	37	*	154	15	*	*	*		
Chronic lower respiratory diseases	200	197	299	93	*	348	28	15	*	*		
Cerebrovascular diseases	170	101	217	50	*	162	65	22	19	*		
Viral hepatitis	158	52	181	24	*	143	50	8	6	*		
Essential (primary) hypertension and hypertensive renal disease	76	42	97	20	*	73	19	12	11	*		
Assault (homicide)	58	27	60	21	*	49	15	6	14	*		
By discharge of firearms	34	16	39	9	*	33	11	*	*	*		
By other means	24	11	21	12	*	16	*	*	11	0		
Influenza and pneumonia	37	32	52	16	*	49	10	0	10	0		
Septicemia	41	26	51	15	*	43	11	*	7	*		
Human immunodeficiency virus (HIV) disease	50	9	55	*	0	36	14	6	*	*		
Nephritis, nephrotic syndrome and nephrosis	37	17	35	17	*	26	14	11	*	0		
Total, all causes	5,999	3,631	7,513	2,020†	100†	6,966	1,520†	460†	540†	130†		

Note: * Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; ^a Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas.

2C.AGE-SPECIFIC MORTALITY
Elderly mortality (ages 65 years and older)

Figure 2C-21
Mortality Rates^a by Gender and Year among Elderly 65 Years and Older, Arizona, 2002-2012



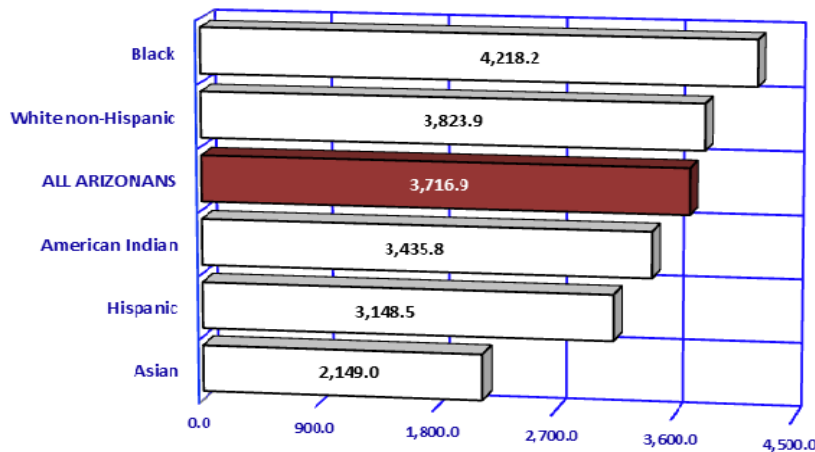
Notes: ^a Number of deaths per 100,000 persons, 65+ years old in specified group.

In 2012, an estimated 940,504 residents age 65 years and older resided in the State (**Table 10A-1**). No other age group has as great a disproportionate gender distribution as the elderly. As a result of the higher total mortality rates for males at earlier ages, 19.3 percent more elderly women than men were alive in 2012.

The 2012 elderly mortality rate of 3,716.9 per 100,000 was 13.4 percent lower than the 2002 rate of 4269.8 and was the lowest mortality rate since 1980, and likely the lowest mortality rate amongst this age group in Arizona's history (**Table 2C-23**).

Survival chances generally have improved from 2002 to 2012 for both elderly males and females. The 2012 total mortality rate among elderly females was 12.6 percent lower than their rate in 2002. The mortality rate among elderly males decreased 14.5 percent during the same period (**Figure 2C-21, Table 2C-23**).

Figure 2C-22
Mortality Rates^a by Race/Ethnicity among Elderly 65 Years and Older, Arizona, 2012



Notes: ^a Number of deaths per 100,000 persons, 65+ years old in specified group.

In 2012 the mortality rate for Arizona's Black or African American elderly residents was nearly 2 times that of the Asian elderly population. The mortality rate of 2,149.0 /100,000 among elderly Asians was the lowest rate among the racial/ethnic groups (**Figure 2C-22**). Hispanic or Latino elderly had the second lowest mortality rate in 2012 at 3,148.5/100,000.

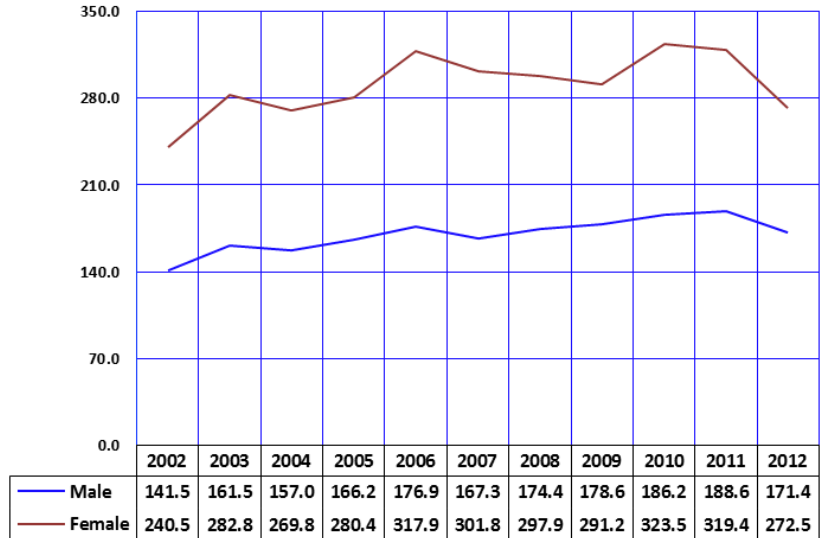
2C.AGE-SPECIFIC MORTALITY
Elderly mortality (ages 65 years and older)

Figure 2C-23
Trends in Mortality Rates for Alzheimer's Disease^a by Gender and Year among Elderly 65 Years and Older, Arizona, 2002-2012

Tables 2C-23 and 2C-24 provide mortality rates for the five causes with the greatest number of deaths over the 2002 – 2012 period.

In 2012, Alzheimer's disease (2,129 deaths) accounted for 6.1 percent of elderly mortality. From 2011 to 2012, gender-specific death rates for Alzheimer's disease decreased for both elderly males and elderly females (**Figure 2C-23**).

There were 1,394 deaths from Alzheimer's disease among elderly females in 2012, nearly twice the number of deaths from this cause among males (735; **Table 2C-26**). White non-Hispanic elderly accounted for 86.8 percent of the 2012 deaths from Alzheimer's disease (based on data in **Table 2C-26**).

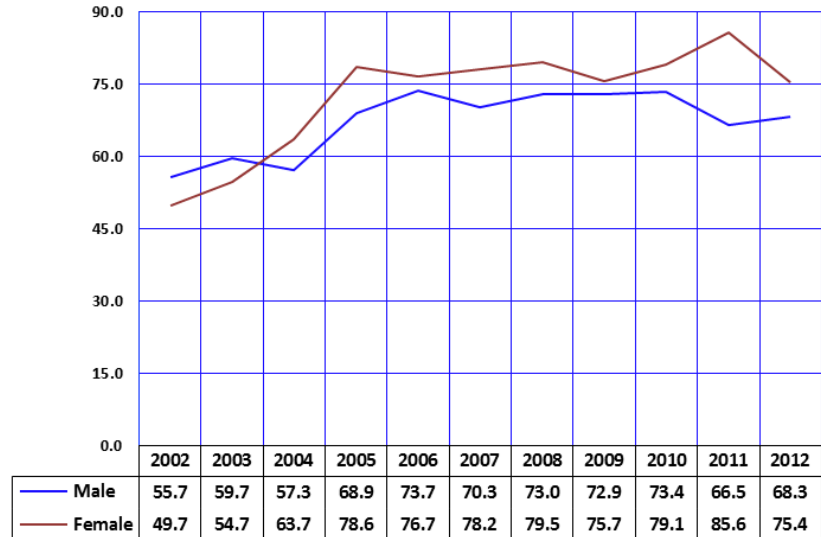


Notes: ^a Number of deaths due to Alzheimer's disease per 100,000 persons, 65+ years old in specified group.

Figure 2C-24
Trends in Mortality Rates for Falls and Fall-related Injuries^a by Gender and Year among Elderly 65 Years and Older, Arizona, 2002-2012

Among unintentional injury deaths unrelated to motor vehicles, Arizona's elderly experienced a substantial increase in mortality from *fall-related injuries* (**Figure 2C-24**). In 2012, 679 elderly Arizonans 65 years or older died from *fall-related injuries*, compared to 373 in 2002, and 6.3 times as many as the number of those who died from motor vehicle-related injuries (107; **Table 2C-26**).

In 2012, those 85 years old or older, experienced the largest number of *fall-related deaths* (347), followed by Arizonans 75-84 years old (227 deaths), and the youngest elderly 65-74 years old (105 fall-related deaths).



Notes: ^a Number of deaths due to falls and fall-related injuries per 100,000 persons, 65+ years old in specified group.

**TABLE 2C-23
MORTALITY RATES^a FOR THE FIVE LEADING CAUSES^b OF DEATH AMONG ELDERLY (65 YEARS AND OLDER) BY GENDER,
ARIZONA, 2002-2012**

Gender/Cause	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% change from 2002
MALE												
Diseases of heart	1363.9	1335.3	1241.4	1238.7	1138.7	1079.2	1114.1	1073.3	992.8	1065.5	1022.2	-25.1
Malignant neoplasms	1119.6	1126.0	1085.8	1068.2	1058.2	1020.4	1006.6	1017.3	1007.7	1007.4	992.6	-11.3
Chronic lower respiratory diseases	352.3	340.9	296.0	317.3	326.7	300.9	316.8	303.6	310.9	318.4	319.9	-9.2
Alzheimer's disease	141.5	161.5	157.0	166.2	176.9	167.3	174.4	178.6	186.2	188.6	171.4	21.1
Cerebrovascular diseases	269.4	248.9	242.2	224.9	195.2	168.6	188.9	182.8	169.3	164.4	165.5	-38.5
ALL CAUSES	4663.4	4536.2	4338.0	4401.4	4282.4	4002.8	4095.0	4025.9	3974.9	4083.3	3987.4	-14.5
(Number of all deaths)	(14733)	(14744)	(14614)	(15385)	(15273)	(14981)	(15589)	(15462)	(15967)	(16517)	(17101)	16.1
FEMALE												
Diseases of heart	1101.9	1098.6	1028.8	1013.9	968.0	891.9	860.8	855.9	804.8	847.2	794.5	-27.9
Malignant neoplasms	734.5	757.2	731.8	721.8	713.1	696.4	691.1	701.6	702.5	710.9	678.6	-7.6
Alzheimer's disease	240.5	282.8	269.8	280.4	317.9	301.8	297.9	291.2	323.5	319.4	272.5	13.3
Chronic lower respiratory diseases	281.6	276.2	264.0	297.4	286.3	255.0	279.3	273.5	272.6	301.4	268.6	-4.6
Cerebrovascular diseases	337.4	316.2	311.8	286.9	258.7	246.8	229.2	218.5	229.9	231.0	208.0	-38.4
ALL CAUSES	3991.9	3941.6	3796.9	3856.6	3828.7	3597.1	3544.8	3515.6	3521.7	3681.4	3489.9	-12.6
(Number of all deaths)	(15820)	(16070)	(15918)	(16778)	(16919)	(16601)	(16625)	(16636)	(16909)	(17798)	(17855)	12.9
TOTAL												
Diseases of heart	1218.1	1203.6	1123.5	1114.1	1044.8	975.7	974.3	953.3	890.4	946.8	898.3	-26.3
Malignant neoplasms	905.3	920.9	889.5	876.1	867.2	841.5	832.4	843.0	841.5	846.1	821.8	-9.2
Chronic lower respiratory diseases	313.0	304.9	278.3	306.3	304.3	275.6	296.1	287.0	290.1	309.1	292.0	-6.7
Alzheimer's disease	196.6	229.0	220.1	229.5	258.2	241.6	242.6	240.8	260.9	259.8	226.4	15.1
Cerebrovascular diseases	307.2	286.3	280.8	259.2	230.3	211.8	211.1	202.5	202.3	200.7	188.6	-38.6
ALL CAUSES	4289.8	4205.5	4038.0	4099.3	4031.3	3778.8	3791.3	3744.2	3728.2	3864.8	3716.9	-13.4
(Number of all deaths)	(30553)	(30815)	(30532)	(32163)	(32192)	(31852)	(32214)	(32098)	(32876)	(34318)	(34958)	14.4

Notes: ^a Rates are presented per 100,000 elderly persons 65 years and older; ^b The five causes with the greatest number of deaths over the 2002-2012 period; ^c Total (number of all deaths) includes 2 unknown gender; the cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10); the causes of death for 2002-2012 are classified by ICD-10, replacing the Ninth Revision (ICD-9).

**TABLE 2C-24
MORTALITY RATES^a FOR THE FIVE LEADING CAUSES^b OF DEATH AMONG ELDERLY (65 YEARS AND OLDER)
IN URBAN AND RURAL AREAS^c, ARIZONA, 2002-2012**

Area/Cause	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% change from 2002
URBAN												
Diseases of heart	1245.9	1217.0	1130.1	1110.7	1055.0	983.1	971.9	952.2	888.5	932.0	891.8	-28.4
Malignant neoplasms	906.5	907.5	869.3	863.6	854.5	834.1	817.9	835.0	834.0	846.2	825.5	-8.9
Chronic lower respiratory diseases	316.5	303.4	278.9	309.3	303.2	271.8	289.2	282.2	288.7	311.3	288.9	-8.7
Alzheimer's disease	208.6	235.7	232.9	244.6	270.7	262.4	261.3	263.2	284.9	288.9	251.5	20.6
Cerebrovascular diseases	313.7	289.5	287.8	257.3	234.6	211.3	206.4	206.1	201.5	202.0	192.8	-38.6
ALL CAUSES (Number of all deaths)	4314.8 (24619)	4192.3 (24633)	4021.7 (24384)	4083.4 (25740)	4053.0 (25585)	3792.4 (25143)	3765.0 (25374)	3765.4 (25596)	3738.3 (26043)	3886.0 (27302)	3740.3 (27824)	-13.3
RURAL												
Diseases of heart	1106.2	1146.3	1094.8	1127.8	1006.1	946.3	979.3	950.4	889.9	990.4	912.5	-17.5
Malignant neoplasms	900.1	974.1	966.6	927.4	915.2	868.7	883.7	865.3	864.6	840.5	802.6	-10.8
Chronic lower respiratory diseases	297.9	310.0	275.7	293.8	308.5	290.0	322.1	302.5	291.6	298.9	299.6	0.6
Cerebrovascular diseases	281.0	272.1	251.7	267.2	214.0	213.6	228.2	187.0	204.1	193.1	171.9	-38.8
Alzheimer's disease	144.6	140.5	195.6	168.0	195.5	161.5	166.7	152.1	169.6	145.1	130.2	-9.9
ALL CAUSES (Number of all deaths)	4185.5 (5929)	4249.8 (6169)	4093.4 (6132)	4164.3 (6421)	3949.5 (6607)	3723.8 (6434)	3863.1 (6789)	3628.5 (6441)	3657.5 (6773)	3741.1 (6935)	3590.0 (7058)	-14.2
STATEWIDE												
Diseases of heart	1218.1	1203.6	1123.5	1114.1	1044.8	975.7	974.3	953.3	890.4	946.8	898.3	-26.3
Malignant neoplasms	905.3	920.9	889.5	876.1	867.2	841.5	832.4	843.0	841.5	846.1	821.8	-9.2
Chronic lower respiratory diseases	313.0	304.9	278.3	306.3	304.3	275.6	296.1	287.0	290.1	309.1	292.0	-6.7
Alzheimer's disease	196.6	229.0	220.1	229.5	258.2	241.6	242.6	240.8	260.9	259.8	226.4	15.1
Cerebrovascular diseases	307.2	286.3	280.8	259.2	230.3	211.8	211.1	202.5	202.3	200.7	188.6	-38.6
ALL CAUSES (Number of all deaths)	4289.8 (30553)	4205.5 (30815)	4038.0 (30532)	4099.3 (32163)	4031.3 (32192)	3778.8 (31852)	3791.3 (32214)	3744.2 (32098)	3728.2 (32876)	3864.8 (34318)	3716.9 (34958)	-13.4

Notes: ^a Rates are presented per 100,000 elderly persons 65 years and older; ^b The five causes with the greatest number of deaths over the 2002-2012 period; ^c Urban = Maricopa, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; see **Technical Notes** for more information; records with unknown county of residence are included in the statewide totals, but are not distributed by urban/rural area; The cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10); the causes of death for 2002-2012 are classified by ICD-10, replacing the Ninth Revision (ICD-9); comparison between ICD-9 and ICD-10 – the “comparability ratios” – for the causes of death shown in this report are provided in the **Technical Notes**.

TABLE 2C-25
MORTALITY RATES^a FOR THE FIVE LEADING CAUSES OF DEATH AMONG ELDERLY (65 YEARS AND OLDER)
BY GENDER IN URBAN AND RURAL AREAS^b, ARIZONA, 2002-2012

Area/Gender	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	% change from 2002
URBAN												
Male	4674.4	4542.1	4323.1	4359.2	4283.2	3986.1	4053.2	4013.8	3976.9	4107.6	3980.1	-14.9
Female	4036.1	3920.8	3786.0	3866.8	3871.5	3638.1	3534.9	3567.5	3543.8	3705.0	3543.8	-12.2
TOTAL	4314.8	4192.1	4021.7	4083.4	4053.0	3792.4	3765.0	3765.4	3738.3	3886.0	3740.3	-13.3
RURAL												
Male	4617.9	4502.4	4379.8	4561.0	4279.7	4058.9	4216.1	4021.7	3917.1	3948.9	3952.6	-14.4
Female	3799.9	4024.4	3836.1	3811.3	3658.6	3432.7	3555.8	3286.5	3418.2	3547.4	3256.0	-14.3
TOTAL	4185.5	4249.8	4093.4	4164.3	3949.5	3723.8	3863.1	3628.5	3657.5	3741.1	3590.0	-14.2
STATEWIDE												
Male	4663.4	4536.2	4338.0	4401.4	4282.4	4002.8	4095.0	4025.9	3974.9	4083.3	3987.4	-14.5
Female	3991.9	3941.6	3796.9	3856.6	3828.7	3597.1	3544.8	3515.6	3521.7	3681.4	3489.9	-12.6
TOTAL	4289.8	4205.3	4038.0	4099.3	4031.3	3778.8	3791.3	3744.2	3728.2	3864.8	3716.9	-13.4

Notes: ^a Rates are presented per 100,000 persons 65 years and older; ^b Urban = Maricopa, Pima, and Yuma counties; the remaining counties comprise Arizona's rural areas; see **Technical Notes** for more information.

**TABLE 2C-26
LEADING CAUSES OF DEATH AMONG ELDERLY (65 YEARS AND OLDER) BY GENDER, AREA, AND RACE/ETHNICITY,
ARIZONA, 2012**

Cause of death	Gender		Area ^a		Race/ethnicity						
	Total	Male	Female	Urban	Rural	Unknown	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
Diseases of heart	8,449	4,384	4,065	6,634	1,794	21	7,297	739	186	148	79
Malignant neoplasms	7,729	4,257	3,472	6,141	1,578	10	6,656	710	170	114	79
Malignant neoplasm of trachea, bronchus and lung	2,109	1,144	965	1,689	418	*	1,895	139	44	12	19
Malignant neoplasm of lymphoid, hematopoietic and related tissue	850†	486	363	687	158	*	719	89	23	14	*
Malignant neoplasm of colon, rectum, and anus	673	354	319	513	160	0	568	66	22	7	10
Malignant neoplasm of pancreas	587	309	278	480	106	*	496	61	17	6	7
Malignant neoplasm of prostate	510†	513	0	407	106	0	431	57	14	8	*
Malignant neoplasm of breast	430†	*	430	353	79	0	380	31	11	*	*
Chronic lower respiratory diseases	2,746	1,372	1,374	2,149	589	8	2,539	131	38	26	12
Alzheimer's disease	2,129	735	1,394	1,871	256	*	1,848	195	41	17	28
Cerebrovascular diseases	1,774	710	1,064	1,434	338	*	1,447	212	56	29	30
Diabetes	1,148	624	524	935	210	*	746	238	52	88	24
Accidents (unintentional injury)	999	474	525	799	197	*	849	96	18	26	10
Falls	680†	293	386	555	124	0	597	58	7	12	*
Motor vehicle accidents	110†	80	27	82	22	*	88	12	*	*	0
Essential (primary) hypertension and hypertensive disease	613	249	364	520	91	*	493	69	26	16	9
Parkinson's disease	570†	359	206	470	92	*	512	38	*	6	*
Influenza and pneumonia	540†	263	279	395	146	*	435	56	11	36	*
Nephritis, nephrotic syndrome and nephrosis	370†	178	195	244	126	*	281	53	14	21	*
Septicemia	240†	117	121	162	75	*	192	19	6	17	*
Total, all causes^b	34,958	17,100†	17,855	27,824	7,058	80†	29,726	3,334	780†	760†	360†

Notes: * Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; ^a Urban = Maricopa, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; ^b Total all causes includes 2 unknown gender.

COMPARATIVE CAUSE-SPECIFIC MORTALITY BY AGE GROUP

**TABLE 2C-27
COMPARISON OF CAUSES OF MORTALITY BY AGE GROUP, ARIZONA, 2012**

	All ages	Infants <1	Children 1-14	Adolescents 15-19	Young adults 20-44	Middle-aged adults 45-64	Elderly 65+	Un-known
Total, all causes	48,459	495	247	220	2,900	9,630	34,958	9
Salmonella infections	0	0	0	0	0	0	0	0
Shigellosis and amebiasis	0	0	0	0	0	0	0	0
Certain other intestinal infections	256	7	*	0	*	29	215	0
Enterocolitis due to Clostridium difficile	195	0	0	0	0	23	172	0
Tuberculosis	5	0	0	0	0	*	*	0
Respiratory tuberculosis	5	0	0	0	0	*	*	0
Other tuberculosis	0	0	0	0	0	0	0	0
Whooping cough	0	0	0	0	0	0	0	0
Scarlet fever and erysipelas	0	0	0	0	0	0	0	0
Meningococcal infection	2	0	0	0	0	*	0	0
Septicemia	319	*	*	*	9	67	238	0
Syphilis	2	0	0	0	0	*	0	0
Acute poliomyelitis	0	0	0	0	0	0	0	0
Arthropod-borne encephalitis	0	0	0	0	0	0	0	0
Measles	0	0	0	0	0	0	0	0
Viral hepatitis	288	0	0	0	19	210	59	0
Human immunodeficiency virus (HIV) disease	98	0	0	0	32	59	7	0
Malaria	0	0	0	0	0	0	0	0
Other and unspecified infectious and parasitic diseases	160	*	*	0	7	49	97	0
Malignant neoplasms	10,871	*	33	11	319	2,777	7,729	0
Malignant neoplasm of lip, oral cavity and pharynx	144	0	0	0	*	54	89	0
Malignant neoplasm of esophagus	325	0	0	0	8	98	219	0
Malignant neoplasm of stomach	204	0	0	0	12	62	130	0
Malignant neoplasm of colon, rectum, and anus	946	0	0	0	30	243	673	0
Malignant neoplasm of liver and intrahepatic bile ducts	446	0	*	0	7	177	261	0
Malignant neoplasm of pancreas	813	0	0	0	7	219	587	0
Malignant neoplasm of larynx	44	0	0	0	0	15	29	0
Malignant neoplasm of trachea, bronchus and lung	2,772	0	*	0	20	642	2,109	0
Malignant melanoma of skin	216	0	0	0	18	65	133	0
Malignant neoplasm of breast	742	0	0	0	55	255	432	0
Malignant neoplasm of cervix uteri	73	0	0	0	14	33	26	0
Malignant neoplasm of corpus uteri and uterus, part unspecified	131	0	0	0	*	36	90	0
Malignant neoplasm of ovary	299	0	0	*	11	93	194	0
Malignant neoplasm of prostate	581	0	0	0	*	67	513	0
Malignant neoplasm of kidney and renal pelvis	252	0	*	0	*	74	171	0
Malignant neoplasm of bladder	316	0	0	0	*	52	262	0

**TABLE 2C-27 (continued)
COMPARISON OF CAUSES OF MORTALITY BY AGE GROUP, ARIZONA, 2012**

	All ages	Infants <1	Children 1-14	Adolescents 15-19	Young adults 20-44	Middle-aged adults 45-64	Elderly 65+	Un-known
Malignant neoplasm of meninges, brain and other parts of CNS	337	*	11	*	32	128	162	0
Malignant neoplasm of lymphoid, hematopoietic and related tissue	1,097	0	7	*	45	193	849	0
Hodgkin's disease	17	0	0	0	*	*	12	0
Non-Hodgkin's lymphoma	372	0	0	*	17	62	292	0
Leukemia	486	0	7	*	27	83	367	0
Multiple myeloma and immunoproliferative neoplasms	221	0	0	0	0	44	177	0
Other and unspecified malignant neoplasms of lymphoid tissue	1	0	0	0	0	0	*	0
All other and unspecified malignant neoplasm	1,133	*	10	*	47	271	800	0
In situ neoplasms	279	0	*	0	9	31	234	0
Anemias	60	0	0	0	*	8	48	0
Diabetes	1,698	0	0	*	67	482	1,148	0
Nutritional deficiencies	51	*	0	0	0	*	45	0
Malnutrition	48	*	0	0	0	*	42	0
Other nutritional deficiencies	3	0	0	0	0	0	*	0
Obesity	191	0	0	*	36	105	49	0
Meningitis	14	0	*	0	*	*	*	0
Parkinson's disease	579	0	0	0	0	14	565	0
Alzheimer's disease	2,154	0	0	0	0	25	2,129	0
Major cardiovascular diseases	13,710	*	14	*	279	2,137	11,275	0
Diseases of heart	10,366	*	6	0	221	1,688	8,449	0
Acute rheumatic fever and chronic rheumatic heart disease	51	0	0	0	*	6	44	0
Hypertensive heart disease	761	0	0	0	29	153	579	0
Hypertensive heart and renal disease	51	0	0	0	*	6	44	0
Ischemic heart disease	7,294	0	0	0	105	1,250	5,939	0
Acute myocardial infarction	1,574	0	0	0	26	276	1,272	0
Other acute ischemic heart disease	31	0	0	0	*	*	29	0
Other forms of chronic ischemic heart disease	5,689	0	0	0	78	973	4,638	0
Atherosclerotic cardiovascular disease	1,803	0	0	0	40	543	1,220	0
All other forms of chronic ischemic heart disease	3,886	0	0	0	38	430	3,418	0
Other heart diseases	2,209	*	6	0	85	273	1,843	0
Acute and subacute endocarditis	27	0	0	0	*	10	13	0
Diseases of pericardium and acute myocarditis	14	0	*	0	*	*	8	0
Heart failure	610	0	0	0	*	21	588	0
All other forms of heart disease	1,558	*	*	0	79	238	1,234	0
Essential (primary) hypertension and hypertensive renal disease	739	0	0	0	8	118	613	0
Cerebrovascular diseases	2,096	*	8	*	40	271	1,774	0
Atherosclerosis	183	0	0	0	0	14	169	0

TABLE 2C-27 (continued)
COMPARISON OF CAUSES OF MORTALITY BY AGE GROUP, ARIZONA, 2012

	All ages	Infants <1	Children 1-14	Adoles- cents 15-19	Young adults 20-44	Middle- aged adults 45-64	Elderly 65+	Un- known
Other diseases of circulatory system	326	0	0	0	10	46	270	0
Aortic aneurysm and dissection	146	0	0	0	9	21	116	0
Other disease of arteries, arterioles and capillaries	180	0	0	0	*	25	154	0
Other disorders of circulatory system	79	*	0	0	13	18	47	0
Influenza and pneumonia	635	*	*	*	19	69	542	0
Influenza	19	0	0	0	*	*	14	0
Pneumonia	616	*	*	*	15	68	528	0
Other acute lower respiratory infections	6	*	*	0	0	*	*	0
Acute bronchiolitis	6	*	*	0	0	*	*	0
Unspecified acute lower respiratory infection	0	0	0	0	0	0	0	0
Chronic lower respiratory diseases	3,167	0	0	*	23	397	2,746	0
Bronchitis, chronic and unspecified	15	0	0	0	0	*	13	0
Emphysema	133	0	0	0	*	24	108	0
Asthma	73	0	0	*	11	22	39	0
Other chronic lower respiratory diseases	2,946	0	0	0	11	349	2,586	0
Pneumoconioses and chemical effects	13	0	0	0	0	0	13	0
Pneumonitis due to solids and liquids	233	*	0	0	*	13	218	0
Other disease of respiratory system	499	7	*	0	10	73	406	0
Peptic ulcer	59	0	0	0	*	9	45	0
Diseases of appendix	7	0	0	0	0	*	*	0
Hernia	40	*	0	0	0	*	36	0
Chronic liver disease and cirrhosis	971	0	0	0	109	555	307	0
Alcoholic liver disease	673	0	0	0	92	426	155	0
Other chronic liver disease and cirrhosis	298	0	0	0	17	129	152	0
Cholelithiasis and other disorders of gallbladder	74	0	0	0	*	9	62	0
Nephritis, nephrotic syndrome and nephrosis	440	*	0	0	12	54	373	0
Acute and rapidly progressive nephritic and nephrotic syndrome	4	0	0	0	0	*	*	0
Chronic glomerulonephritis	103	0	0	0	*	6	92	0
Renal failure	332	*	0	0	7	47	277	0
Others disorders of kidney	1	0	0	0	0	0	*	0
Infections of kidney	16	0	0	0	0	6	10	0
Hyperplasia of prostate	18	0	0	0	0	0	18	0
Inflammatory diseases of female pelvic organs	1	0	0	0	0	0	*	0
Pregnancy, childbirth and the puerperium	18	0	0	0	15	*	0	0
Pregnancy with abortive outcome	0	0	0	0	0	0	0	0
Other complications of pregnancy, childbirth and the puerperium	18	0	0	0	15	*	0	0

TABLE 2C-27 (continued)
COMPARISON OF CAUSES OF MORTALITY BY AGE GROUP, ARIZONA, 2012

	All ages	Infants <1	Children 1-14	Adolescents 15-19	Young adults 20-44	Middle-aged adults 45-64	Elderly 65+	Un-known
Perinatal conditions	240	238	*	*	0	0	0	0
Congenital anomalies, deformations and chromosomal abnormalities	229	118	26	*	21	34	27	0
Symptoms, signs, abnormal findings	1,677	60	21	8	170	253	1,156	9
Total accidents	2,804	16	71	105	820	793	999	0
Transport accidents	805	*	36	76	330	237	124	0
Motor vehicle accidents	747	*	34	74	319	211	107	0
Other land transport accidents	20	0	*	*	*	10	*	0
Water, air, space	38	0	*	*	8	16	12	0
Nontransport accidents	1,999	14	35	29	490	556	875	0
Falls	782	0	0	*	20	79	679	0
Accidental discharge of firearms	5	0	0	0	*	*	0	0
Accidental drowning and submersion	83	*	19	*	24	23	9	0
Accidental exposure to smoke, fire and flames	43	0	*	0	8	11	20	0
Accidental poisoning	817	0	0	18	398	364	37	0
Other and unspecified nontransport accidents	269	11	12	*	37	77	130	0
Intentional self-harm (suicide)	1,070	*	8	48	410	416	187	0
By discharge of firearms	638	0	*	28	220	238	149	0
By other means	432	*	*	20	190	178	38	0
Assault (homicide)	376	*	13	23	222	85	28	0
By discharge of firearms	246	*	6	19	154	50	16	0
By other means	130	*	7	*	68	35	12	0
Legal intervention	17	0	0	*	6	9	0	0
Events of undetermined intent	170	8	7	*	58	77	18	0
Discharge of firearms	11	0	0	*	7	*	*	0
Other and unspecified events of undetermined intent	159	8	7	*	51	75	17	0
Operations of war	0	0	0	0	0	0	0	0
Complications of medical and surgical care	48	0	*	0	7	8	31	0
Injury by firearms	911	*	9	50	390	295	166	0
Drug-induced deaths	1,042	*	0	21	461	488	71	0
Alcohol-induced deaths	999	0	0	0	160	619	220	0

Note: * Cell suppressed due to count less than 6; the causes of death in this table are classified by the Tenth Revision of the International Classification of Diseases (ICD-10).

**TABLE 2C-28
COMPARISON OF CAUSE-SPECIFIC MORTALITY RATES^a BY AGE GROUP, ARIZONA, 2012**

	All ages	Infants <1	Children 1-14	Adoles- cents 15-19	Young adults 20-44	Middle- aged adults 45-64	Elderly 65+
Total, all causes	745.7	577.4	19.4	47.1	135.0	607.6	3717.0
Salmonella infections	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shigellosis and amebiasis	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Certain other intestinal infections	3.9	8.2	**	0.0	**	1.8	22.9
Enterocolitis due to Clostridium difficile	3.0	0.0	0.0	0.0	0.0	1.5	18.3
Tuberculosis	0.1	0.0	0.0	0.0	0.0	**	**
Respiratory tuberculosis	0.1	0.0	0.0	0.0	0.0	**	**
Other tuberculosis	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Whooping cough	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scarlet fever and erysipelas	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Meningococcal infection	0.0	0.0	0.0	0.0	0.0	**	0.0
Septicemia	4.8	**	**	**	0.4	4.1	25.1
Syphilis	0.0	0.0	0.0	0.0	0.0	**	0.0
Acute poliomyelitis	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Arthropod-borne encephalitis	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Measles	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Viral hepatitis	4.4	0.0	0.0	0.0	0.9	13.2	6.3
Human immunodeficiency virus (HIV) disease	1.5	0.0	0.0	0.0	1.5	3.7	0.7
Malaria	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other and unspecified infectious and parasitic diseases	2.5	**	**	0.0	0.3	3.1	10.3
Malignant neoplasms	166.4	**	2.6	2.4	14.8	174.0	818.1
Malignant neoplasm of lip, oral cavity and pharynx	2.2	0.0	0.0	0.0	**	3.4	9.4
Malignant neoplasm of esophagus	5.0	0.0	0.0	0.0	0.4	6.1	23.3
Malignant neoplasm of stomach	3.1	0.0	0.0	0.0	0.6	3.9	13.6
Malignant neoplasm of colon, rectum, and anus	14.5	0.0	0.0	0.0	1.4	15.3	71.2
Malignant neoplasm of liver and intrahepatic bile ducts	6.8	0.0	**	0.0	0.3	11.2	27.6
Malignant neoplasm of pancreas	12.5	0.0	0.0	0.0	0.3	13.8	62.1
Malignant neoplasm of larynx	0.7	0.0	0.0	0.0	0.0	0.9	3.0
Malignant neoplasm of trachea, bronchus and lung	42.4	0.0	**	0.0	0.9	40.3	223.2
Malignant melanoma of skin	3.3	0.0	0.0	0.0	0.8	4.1	14.0
Malignant neoplasm of breast	11.4	0.0	0.0	0.0	2.6	16.0	45.7
Malignant neoplasm of cervix uteri	1.1	0.0	0.0	0.0	0.7	2.1	2.8
Malignant neoplasm of corpus uteri and uterus, part unspecified	2.0	0.0	0.0	0.0	**	2.3	9.6
Malignant neoplasm of ovary	4.6	0.0	0.0	**	0.5	5.9	20.5
Malignant neoplasm of prostate	8.9	0.0	0.0	0.0	**	4.2	54.3
Malignant neoplasm of kidney and renal pelvis	3.8	0.0	**	0.0	**	4.5	18.1
Malignant neoplasm of bladder	4.8	0.0	0.0	0.0	**	3.2	27.8

TABLE 2C-28 (continued)
COMPARISON OF CAUSE-SPECIFIC MORTALITY RATES^a BY AGE GROUP, ARIZONA, 2012

	All ages	Infants <1	Children 1-14	Adolescents 15-19	Young adults 20-44	Middle-aged adults 45-64	Elderly 65+
Malignant neoplasm of meninges, brain and other parts of CNS	5.2	**	0.9	**	1.5	8.1	17.1
Malignant neoplasm of lymphoid, hematopoietic and related tissue	16.8	0.0	0.6	**	2.1	11.9	90.0
Hodgkin's disease	0.3	0.0	0.0	0.0	**	**	1.3
Non-Hodgkin's lymphoma	5.7	0.0	0.0	**	0.8	3.8	30.9
Leukemia	7.4	0.0	0.6	**	1.3	5.1	38.9
Multiple myeloma and immunoproliferative neoplasms	3.4	0.0	0.0	0.0	0.0	2.8	18.7
Other and unspecified malignant neoplasms of lymphoid tissue	0.0	0.0	0.0	0.0	0.0	0.0	**
All other and unspecified malignant neoplasm	17.3	**	0.8	**	2.1	16.9	84.8
In situ neoplasms	4.3	0.0	**	0.0	0.4	2.0	24.8
Anemias	0.9	0.0	0.0	0.0	**	0.5	5.0
Diabetes	26.1	0.0	0.0	**	3.1	30.4	121.6
Nutritional deficiencies	0.8	**	0.0	0.0	0.0	**	4.8
Malnutrition	0.7	**	0.0	0.0	0.0	**	4.5
Other nutritional deficiencies	0.0	0.0	0.0	0.0	0.0	0.0	**
Obesity	2.9	0.0	0.0	**	1.7	6.6	5.0
Meningitis	0.2	0.0	**	0.0	**	**	**
Parkinson's disease	8.9	0.0	0.0	0.0	0.0	0.9	59.9
Alzheimer's disease	33.0	0.0	0.0	0.0	0.0	1.6	225.4
Major cardiovascular diseases	209.5	**	1.1	**	12.9	133.8	1190.9
Diseases of heart	158.5	**	0.5	0.0	10.2	105.6	892.9
Acute rheumatic fever and chronic rheumatic heart disease	0.8	0.0	0.0	0.0	**	0.4	4.7
Hypertensive heart disease	11.6	0.0	0.0	0.0	1.3	9.6	60.8
Hypertensive heart and renal disease	0.8	0.0	0.0	0.0	**	0.4	4.7
Ischemic heart disease	111.7	0.0	0.0	0.0	4.9	78.3	628.7
Acute myocardial infarction	24.1	0.0	0.0	0.0	1.2	17.3	134.7
Other acute ischemic heart disease	0.5	0.0	0.0	0.0	**	**	3.1
Other forms of chronic ischemic heart disease	87.1	0.0	0.0	0.0	3.6	61.0	490.9
Atherosclerotic cardiovascular disease	27.5	0.0	0.0	0.0	1.9	33.9	128.9
All other forms of chronic ischemic heart disease	59.6	0.0	0.0	0.0	1.8	27.0	362.0
Other heart diseases	33.6	**	0.5	0.0	3.9	16.9	194.0
Acute and subacute endocarditis	0.4	0.0	0.0	0.0	**	0.6	1.3
Diseases of pericardium and acute myocarditis	0.2	0.0	**	0.0	**	**	0.9
Heart failure	9.3	0.0	0.0	0.0	**	1.3	62.0
All other forms of heart disease	23.7	**	**	0.0	3.6	14.8	129.9
Essential (primary) hypertension and hypertensive renal disease	11.2	0.0	0.0	0.0	0.4	7.4	64.1
Cerebrovascular diseases	32.1	**	0.6	**	1.9	17.0	187.9
Atherosclerosis	2.8	0.0	0.0	0.0	0.0	0.9	17.5

TABLE 2C-28 (continued)
COMPARISON OF CAUSE-SPECIFIC MORTALITY RATES^a BY AGE GROUP, ARIZONA, 2012

	All ages	Infants <1	Children 1-14	Adolescents 15-19	Young adults 20-44	Middle-aged adults 45-64	Elderly 65+
Other diseases of circulatory system	5.0	0.0	0.0	0.0	0.4	2.9	28.4
Aortic aneurysm and dissection	2.2	0.0	0.0	0.0	0.4	1.3	12.0
Other disease of arteries, arterioles and capillaries	2.8	0.0	0.0	0.0	**	1.6	16.4
Other disorders of circulatory system	1.2	**	0.0	0.0	0.6	1.1	5.0
Influenza and pneumonia	9.7	**	**	**	0.9	4.4	57.4
Influenza	0.3	0.0	0.0	0.0	**	**	1.5
Pneumonia	9.4	**	**	**	0.7	4.3	55.9
Other acute lower respiratory infections	0.1	**	**	0.0	0.0	**	**
Acute bronchiolitis	0.1	**	**	0.0	0.0	**	**
Unspecified acute lower respiratory infection	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chronic lower respiratory diseases	48.6	0.0	0.0	**	1.1	25.0	291.2
Bronchitis, chronic and unspecified	0.2	0.0	0.0	0.0	0.0	**	1.4
Emphysema	2.0	0.0	0.0	0.0	**	1.5	11.5
Asthma	1.1	0.0	0.0	**	0.5	1.4	4.1
Other chronic lower respiratory diseases	45.2	0.0	0.0	0.0	0.5	22.0	274.2
Pneumoconioses and chemical effects	0.2	0.0	0.0	0.0	0.0	0.0	1.4
Pneumonitis due to solids and liquids	3.6	**	0.0	0.0	**	0.8	23.1
Other disease of respiratory system	7.6	8.2	**	0.0	0.5	4.6	42.6
Peptic ulcer	0.9	0.0	0.0	0.0	**	0.6	4.8
Diseases of appendix	0.1	0.0	0.0	0.0	0.0	**	**
Hernia	0.6	**	0.0	0.0	0.0	**	3.8
Chronic liver disease and cirrhosis	14.8	0.0	0.0	0.0	5.0	34.6	32.6
Alcoholic liver disease	10.3	0.0	0.0	0.0	4.2	26.6	16.5
Other chronic liver disease and cirrhosis	4.5	0.0	0.0	0.0	0.8	8.0	16.2
Cholelithiasis and other disorders of gallbladder	1.1	0.0	0.0	0.0	**	0.6	6.6
Nephritis, nephrotic syndrome and nephrosis	6.7	**	0.0	0.0	0.6	3.4	39.2
Acute and rapidly progressive nephritic and nephrotic syndrome	0.1	0.0	0.0	0.0	0.0	**	**
Chronic glomerulonephritis	1.6	0.0	0.0	0.0	**	0.4	9.8
Renal failure	5.0	**	0.0	0.0	0.3	3.0	29.0
Others disorders of kidney	0.0	0.0	0.0	0.0	0.0	0.0	**
Infections of kidney	0.2	0.0	0.0	0.0	0.0	0.4	1.0
Hyperplasia of prostate	0.3	0.0	0.0	0.0	0.0	0.0	1.9
Inflammatory diseases of female pelvic organs	0.0	0.0	0.0	0.0	0.0	0.0	**
Pregnancy, childbirth and the puerperium	0.3	0.0	0.0	0.0	0.7	**	0.0
Pregnancy with abortive outcome	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other complications of pregnancy, childbirth and the puerperium	0.3	0.0	0.0	0.0	0.7	**	0.0

**TABLE 2C-28 (continued)
COMPARISON OF CAUSE-SPECIFIC MORTALITY RATES^a BY AGE GROUP, ARIZONA, 2012**

	All ages	Infants <1	Children 1-14	Adoles- cents 15-19	Young adults 20-44	Middle- aged adults 45-64	Elderly 65+
Perinatal conditions	3.6	274.1	**	0.0	**	0.0	0.0
Congenital anomalies, deformations and chromosomal abnormalities	3.5	137.6	2.0	**	1.0	2.1	2.8
Symptoms, signs, abnormal findings	24.7	68.8	1.5	1.5	7.5	15.1	117.8
Total accidents	42.7	18.7	5.6	22.3	37.7	49.7	105.2
Transport accidents	12.2	**	2.8	16.0	15.0	14.8	13.0
Motor vehicle accidents	11.3	**	2.7	15.6	14.6	13.1	11.2
Other land transport accidents	0.3	0.0	**	**	**	0.6	**
Water, air, space	0.6	0.0	**	**	0.4	1.0	1.3
Nontransport accidents	30.6	16.3	2.8	6.2	22.7	34.9	92.2
Falls	11.9	0.0	0.0	**	0.9	5.0	71.6
Accidental discharge of firearms	0.1	0.0	0.0	0.0	**	**	0.0
Accidental drowning and submersion	1.3	**	1.5	**	1.1	1.5	1.0
Accidental exposure to smoke, fire and flames	0.6	0.0	**	0.0	0.4	0.7	2.0
Accidental poisoning	12.6	0.0	0.0	3.9	18.5	22.9	3.9
Other and unspecified nontransport accidents	4.1	12.8	0.9	**	1.7	4.7	13.7
Intentional self-harm (suicide)	16.4	**	0.6	10.3	19.0	26.2	19.8
By discharge of firearms	9.8	0.0	**	6.0	10.2	15.0	15.7
By other means	6.6	**	**	4.3	8.8	11.2	4.0
Assault (homicide)	5.7	**	1.0	4.7	10.1	5.3	3.0
By discharge of firearms	3.7	**	0.5	3.9	7.1	3.1	1.7
By other means	2.0	**	0.6	**	3.1	2.2	1.3
Legal intervention	0.3	0.0	0.0	**	0.3	0.6	0.0
Events of undetermined intent	2.6	9.3	0.6	**	2.7	4.7	1.9
Discharge of firearms	0.2	0.0	0.0	**	0.3	**	**
Other and unspecified events of undetermined intent	2.4	9.3	0.6	**	2.4	4.7	1.8
Operations of war	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Complications of medical and surgical care	0.7	0.0	**	0.0	0.3	0.5	3.3
Injury by firearms ^b	13.9	**	0.7	10.5	18.1	18.5	17.5
Drug-induced deaths ^b	15.9	**	0.0	4.5	21.5	30.6	7.2
Alcohol-induced deaths ^b	15.3	0.0	0.0	0.0	7.4	38.7	23.3

Notes: ** Cell suppressed due to rate/ratio/percent based on non-zero count less than 6; ^a The rates for infants <1 year of age are per 100,000 births; all other rates are per 100,000 population in specified group; the rates for malignant neoplasm of cervix uteri, corpus uteri, ovary, inflammatory disease of female pelvic organs and complications of pregnancy are per 100,000 females; the rates for prostate cancer and hyperplasia of prostate are per 100,000 males; ^b Included in selected categories above.



2D.

PATTERNS OF PREMATURE MORTALITY

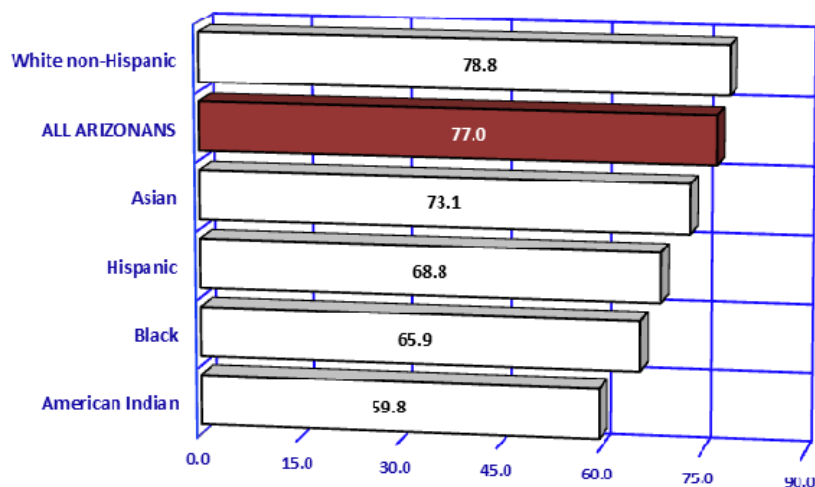
Compared with White non-Hispanics, the racial/ethnic minority groups in Arizona had greater percentages of people younger than 25 years in 2012 (46.1 vs. 27.4 percent). In contrast, people aged 65 years and older accounted for 20.3 percent of White non-Hispanics, but only 6.1 percent of all ethnic minority groups combined (percentages based on race-and-age-specific population denominators in **Table 10C-1**).

Arizona's population distribution by age and race/ethnicity is related to patterns of mortality among these subgroups. In 2012, of all deaths among the elderly (65 years and older), 85.1 percent were White non-Hispanics, 9.5 percent were Hispanic or Latino, with the three remaining racial/ethnic groups comprising only 5.4 percent of all deaths in this age group (**Table 2C-26**). Looking at younger ages, Native American children comprised only 6.0 percent of Arizona's population age 1 – 14, but accounted for 17.8 percent of all childhood deaths. Native American adolescents represented only 5.9 percent off all adolescents but accounted for 13.6 percent of all adolescent deaths. Finally, Native American young adults (ages 20 – 44) represented 5.2% of all young adults but comprised 13.4 percent of all young adult deaths. In summary, Arizona's White non-Hispanics tend to experience mortality later in life than members of Arizona's racial/ethnic minority groups.

Beginning with the 2005 edition of the report, information about the arithmetic mean age at death was supplemented with information about the median age, or the age in the center of the distribution when sorted by age (see **Table 2D-1**). The median age is higher than the arithmetic mean age in negatively skewed distributions.

2D. PATTERNS OF PREMATURE MORTALITY

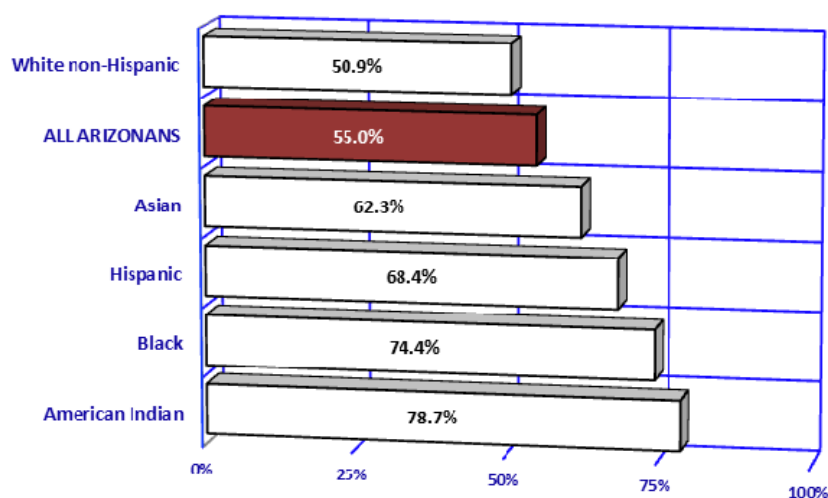
Figure 2D-1
Median Age at Death by Race/Ethnicity, Arizona, 2012



The median age at death remained stable at 77 years from 2010 to 2012 (**Table 2D-1**). In other words, one of every two Arizonans who died in 2012 was older than 77 years of age. Among Arizona females, fifty percent were older than 81 years when they died in 2012. Among males, the median age at death was 74 years in 2012. **Table 2D-1** shows both the average and the median age at death by race/ethnicity and gender in 2002-2012.

In 2012, compared to White non-Hispanics, on average Asians were 7 years younger at time of death, Blacks were 13 years younger, Hispanics were 11 years younger, and American Indian residents of Arizona were 17 years younger (based on the mean age at death).

Figure 2D-2
Percent of Deaths before Expected^a Years of Life Reached by Race/Ethnicity, Arizona, 2012



The percent of deaths before expected years of life reached (a premature death ratio) slightly increased for all Arizonans from 53.8 in 2011 to 55.0 in 2012 (**Figure 2D-2**).

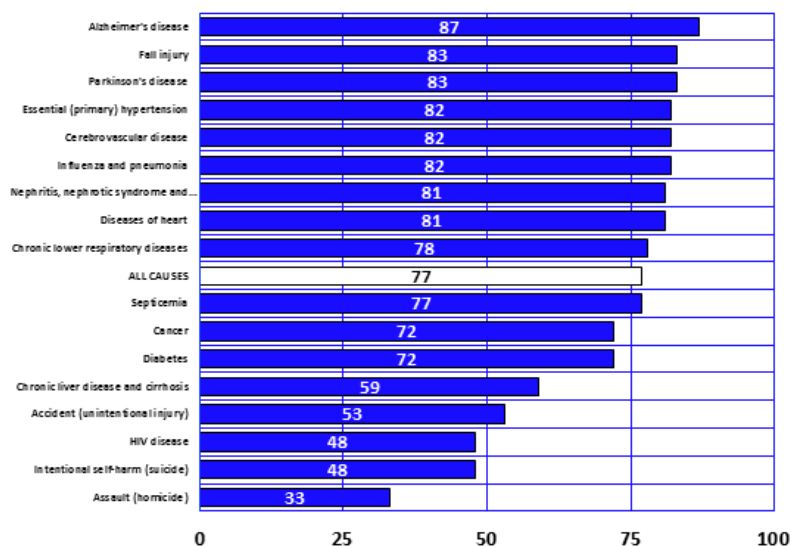
As expected, based on the findings for average and median age at death, White non-Hispanics were the only group with nearly 50 percent of all deaths (50.9 percent) occurring before the expected years of life were reached (**Figure 2D-2**). On average, 71.0 percent of the deaths among racial/ethnic minority groups occurred prematurely.

Among American Indians, nearly eight out of ten deaths (78.7 percent) were premature (**Table 2D-2**).

Notes: ^a Expected years of life at birth for all U.S. residents (78.7 years).

2D. PATTERNS OF PREMATURE MORTALITY

Figure 2D-3
Median Age at Death for Selected Leading Causes of Death, Arizona, 2012

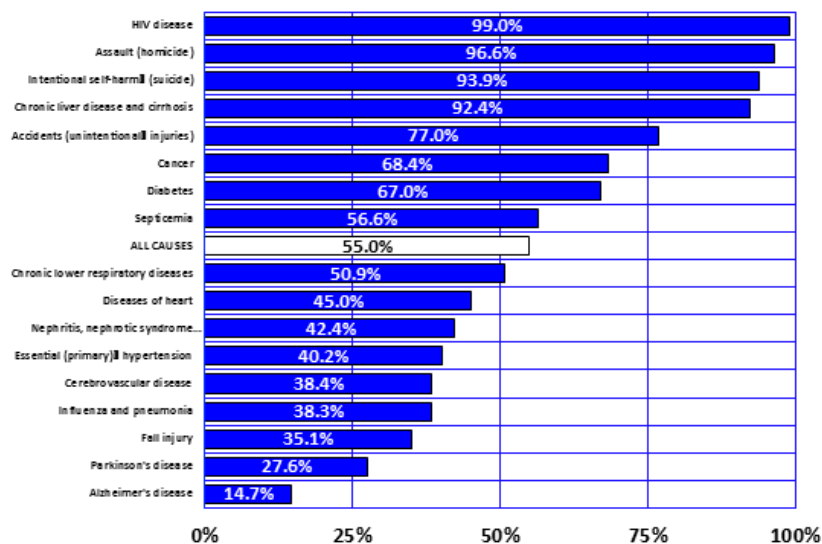


In 2012, *Alzheimer's disease* had the highest median age of death at 87 years (**Figure 2D-3**), exceeding by 10 years the median age at death for all causes (**Figure 2D-3, Table 2D-3**).

Among the leading causes of death, *homicide* had the lowest median age at death of 33 years.

From 2002 to 2012, *cancer* has replaced *diseases of the heart* as the leading cause of death (based on the number of deaths). This epidemiologic transition in mortality risks is likely to have long lasting implications for the life expectancy of Arizonans, because the median age at death from *cancer* (72 years) is substantially lower than the median age at death from *diseases of the heart* (81 years).

Figure 2D-4
Percent of Deaths before Expected Years of Life^a Reached for Selected Leading Causes of Death, Arizona, 2012



Only 14.7 percent of deaths from *Alzheimer's disease* occurred before the age of 78.7 years, i.e., before the expected years of life were reached. In contrast, almost all deaths from *HIV disease* were premature at 99.0 percent (**Figure 2D-4, Table 2D-4**) and the median age at death from *HIV disease* remained increased from the previous year at 48 years (**Figure 2D-3, Table 2D-3**).

A minority of deaths from *diseases of heart* were premature (45.0 percent). In contrast 68.4 percent of deaths from *cancer* occurred before the expected years of life were reached.

Notes: ^a Expected years of life at birth for all U.S. residents (78.7 years).

**TABLE 2D-1
AVERAGE AND MEDIUM AGE AT DEATH FROM ALL CAUSES BY GENDER AND RACE/ETHNICITY, ARIZONA, 2002-2012**

Year	Gender	Race/ethnicity													
		All ethnic groups		White non-Hispanic		Hispanic or Latino		Black or African American		American Indian or Alaska Native		Asian or Pacific Islander			
		Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median		
2002	Total	71.5	76.0	74.3	78.0	58.6	65.0	60.9	65.0	55.8	57.0	67.4	74.0		
	Male	68.1	73.0	71.3	75.0	54.9	59.0	56.9	60.0	52.5	52.0	64.2	72.0		
	Female	75.3	79.0	77.5	80.0	63.9	72.0	66.4	72.0	60.4	64.0	71.1	75.0		
2003	Total	72.2	76.0	74.4	78.0	60.4	66.0	62.4	66.0	54.7	56.0	64.3	70.0		
	Male	69.6	73.0	71.6	75.0	57.5	60.0	60.0	60.0	50.3	51.0	63.5	70.0		
	Female	75.1	80.0	77.4	81.0	64.4	72.0	65.3	71.0	60.4	65.0	65.0	71.0		
2004	Total	71.0	76.0	73.8	78.0	58.5	65.0	60.4	64.0	55.9	58.0	65.3	69.0		
	Male	67.7	73.0	70.9	75.0	54.6	60.0	55.4	59.0	52.4	53.0	63.5	68.0		
	Female	74.6	80.0	76.9	81.0	63.8	72.0	66.5	70.0	60.4	64.0	67.0	70.0		
2005	Total	71.5	77.0	74.4	79.0	59.0	65.0	60.7	64.0	56.8	59.0	65.5	72.0		
	Male	68.1	73.0	71.4	76.0	55.5	61.0	55.7	58.0	53.4	54.0	64.3	71.0		
	Female	75.2	80.0	77.6	81.0	63.8	71.0	66.3	71.0	61.2	66.0	66.8	73.0		
2006	Total	71.2	76.0	74.0	78.0	58.7	65.0	60.2	63.0	55.4	57.0	68.7	73.0		
	Male	67.9	73.0	71.1	75.0	55.1	59.0	57.3	59.0	51.5	52.0	64.5	71.5		
	Female	74.8	80.0	76.9	81.0	64.0	73.0	64.4	70.0	60.9	65.0	72.7	73.0		
2007	Total	71.2	76.0	74.2	78.0	58.4	64.0	60.1	62.0	57.2	59.0	64.9	70.0		
	Male	67.8	73.0	71.3	75.0	54.6	59.0	54.8	57.0	53.7	54.0	60.2	64.0		
	Female	74.9	80.0	77.4	81.0	63.4	71.0	66.5	70.0	61.9	67.0	69.0	73.0		
2008	Total	71.5	77.0	74.3	78.0	61.2	68.0	58.5	62.0	57.3	59.0	63.5	70.0		
	Male	68.4	73.0	71.6	76.0	57.1	62.0	55.3	59.0	53.7	54.0	61.5	67.5		
	Female	75.0	80.0	77.2	81.0	66.4	74.0	62.5	67.0	62.0	67.0	65.6	73.0		
2009	Total	71.9	76.0	74.3	78.0	61.8	67.0	60.0	64.0	57.6	59.0	66.7	74.0		
	Male	69.3	73.0	71.6	75.0	58.6	63.0	56.9	60.0	54.2	54.0	63.6	69.0		
	Female	74.8	80.0	77.2	81.0	65.7	72.0	63.4	68.0	61.8	66.0	70.1	77.0		
2010	Total	72.1	77.0	74.8	79.0	62.4	68.0	62.6	65.0	57.0	58.0	65.7	71.0		
	Male	69.1	73.0	72.1	75.0	58.3	63.0	60.5	63.0	52.7	53.0	64.2	70.0		
	Female	75.4	80.0	77.7	82.0	67.4	74.0	65.3	69.0	62.6	65.0	67.4	74.0		
2011	Total	72.8	77.0	75.3	79.0	63.6	68.0	63.6	66.0	58.4	60.0	68.2	72.0		
	Male	69.7	73.0	72.5	76.0	59.8	63.0	61.0	64.0	54.4	54.0	65.6	69.0		
	Female	76.2	81.0	78.3	82.0	68.5	75.0	66.6	69.0	63.2	67.0	70.8	75.0		
2012	Total	72.7	77.0	75.2	78.8	63.8	68.8	62.6	65.9	57.8	59.8	68.6	73.1		
	Male	69.9	73.7	72.6	75.9	60.7	64.3	59.6	63.2	54.3	55.5	64.2	68.7		
	Female	75.9	80.6	78.1	82.1	67.8	74.7	66.0	69.6	62.0	65.0	72.3	78.5		

Notes: Average age at death = the arithmetic mean of the ages of Arizonans who died in a given year; Median age at death = the middle of the age distribution; half died at age greater than the median and half at age below the median; The mean is lower than the median in negatively skewed distributions.

**TABLE 2D-2
PERCENT OF DEATHS BEFORE EXPECTED YEARS OF LIFE REACHED
BY GENDER AND RACE/ETHNICITY, ARIZONA, 2002-2012**

Year/gender	All race/ethnic groups	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
2002 Total	50.2	45.6	70.3	71.7	78.3	59.8
Male	58.4	53.6	77.0	79.2	82.8	60.6
Female	41.1	37.0	60.7	61.1	72.2	59.0
2003 Total	50.8	46.1	70.0	70.6	78.4	65.7
Male	59.0	54.2	76.8	79.1	84.4	66.7
Female	41.7	37.4	61.0	60.4	70.5	65.0
2004 Total	53.0	48.3	71.5	74.3	80.3	64.3
Male	61.0	56.4	78.3	81.9	85.9	69.0
Female	44.1	39.9	62.4	65.2	73.3	60.0
2005 Total	52.7	47.9	71.3	75.1	78.4	65.1
Male	60.8	56.2	76.9	83.3	83.3	64.5
Female	43.7	39.2	63.3	65.8	72.2	65.7
2006 Total	52.7	48.2	70.8	73.9	77.4	61.0
Male	61.0	56.2	78.4	80.9	82.9	61.0
Female	43.7	40.1	60.0	63.7	69.8	61.0
2007 Total	52.6	47.7	71.6	73.3	75.8	64.9
Male	61.5	56.4	79.2	82.6	82.0	73.8
Female	42.9	38.5	61.3	62.1	67.5	57.4
2008 Total	52.4	48.0	67.6	74.7	76.5	66.4
Male	60.0	55.4	75.4	81.6	82.6	68.7
Female	43.9	40.0	57.6	66.4	68.6	63.9
2009 Total	52.5	48.0	68.0	73.0	76.4	60.6
Male	59.9	55.4	74.4	79.3	81.1	66.8
Female	44.5	40.1	60.1	66.1	70.6	53.9
2010 Total	54.5	49.9	68.7	73.4	79.6	65.1
Male	62.4	57.8	76.2	78.4	85.3	69.0
Female	45.8	41.5	59.5	67.4	71.9	60.7
2011 Total	53.8	49.6	67.4	74.4	77.7	66.3
Male	61.8	57.5	75.4	80.7	84.3	71.3
Female	45.1	41.2	57.3	67.1	70.0	61.5
2012^a Total	55.0	50.9	68.4	74.4	78.7	62.3
Male	62.3	58.1	75.7	81.6	83.9	74.2
Female	46.7	43.0	59.1	66.1	72.2	51.9

Note: ^a Based on updated expected years of life at birth for all U.S. residents (78.7 years in 2011).

**TABLE 2D-3
MEDIAN AGE AT DEATH FOR LEADING CAUSES OF MORTALITY BY GENDER, RACE/ETHNICITY, AND
URBAN/RURAL AREAS^a, ARIZONA, 2012**

	ARIZONA			Area/gender						Race/ethnicity				
	Total	Male	Female	Total Urban	Urban		Total Rural	Rural		White Non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
					Male	Female		Male	Female					
Total, all causes	77.0	73.0	80.0	77.0	74.0	80.0	75.0	72.0	79.0	78.0	68.0	65.0	59.0	73.0
Major cardiovascular diseases	81.0	78.0	85.0	82.0	78.0	85.0	79.0	76.0	83.0	82.0	76.0	71.0	71.0	78.0
Diseases of heart	81.0	77.0	85.0	81.0	78.0	85.0	78.0	75.0	83.0	82.0	76.0	69.0	72.0	78.0
Coronary heart disease	80.0	76.0	84.0	81.0	77.0	85.0	77.0	73.5	81.5	81.0	75.5	70.5	73.0	79.0
Malignant neoplasms	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	73.0	68.0	65.0	66.0	66.0
Lung cancer	73.0	72.0	73.0	73.0	73.0	73.0	72.0	72.0	73.0	73.0	73.0	65.0	73.0	68.0
Prostate cancer	80.0	80.0	NA	80.0	80.0	NA	78.0	78.0	NA	80.0	80.0	69.0	73.0	85.0
Breast cancer	68.0	77.5	68.0	68.0	77.5	68.0	68.0	0.0	68.0	70.0	57.0	60.0	62.5	58.0
Colorectal cancer	72.0	70.0	75.0	71.0	69.0	74.0	73.0	72.0	79.0	73.0	66.0	71.0	63.5	70.5
Malignant melanoma of skin	70.0	71.0	69.0	71.0	71.5	69.0	69.0	69.0	60.5	71.0	48.5	34.0	0.0	64.0
Cerebrovascular diseases	82.0	79.0	84.0	82.0	79.0	84.0	83.0	79.0	85.0	84.0	77.0	74.5	68.0	76.0
Chronic lower respiratory diseases	78.0	78.0	79.0	79.0	78.0	79.0	77.0	77.0	78.0	78.0	77.0	71.0	78.0	84.0
Accidents (unintentional injuries)	53.0	49.0	63.0	55.0	50.0	64.0	48.5	45.0	56.0	60.0	41.0	43.0	38.0	35.0
Motor vehicle accidents	39.0	40.0	35.0	40.0	40.5	36.5	35.0	37.0	31.0	48.5	31.5	28.5	31.0	25.0
Falls	83.0	81.0	85.0	83.0	81.0	85.0	82.0	76.0	86.0	84.0	79.0	73.0	58.0	75.0
Accidental poisoning	44.0	43.0	46.0	45.0	43.0	47.0	42.0	41.0	43.5	45.0	40.0	46.0	40.5	51.0
Accidental drowning	33.0	33.5	33.0	33.0	31.0	36.5	37.0	39.0	12.0	42.5	36.5	18.0	37.0	19.0
Influenza and pneumonia	82.0	82.0	82.5	82.0	81.0	82.5	83.0	83.0	82.5	83.5	79.0	77.0	79.0	85.0
Alzheimer's disease	87.0	86.0	88.0	87.0	86.0	88.0	87.0	84.0	88.0	87.0	86.0	87.0	87.0	84.5
Diabetes	72.0	70.0	74.0	71.5	70.0	74.0	72.0	71.0	73.0	73.0	69.5	70.0	66.0	76.0
Intentional self-harm (suicide)	48.0	48.0	48.0	48.0	48.0	48.0	49.0	50.0	48.0	52.0	34.0	33.0	25.5	43.5
Chronic liver disease and cirrhosis	59.0	59.0	59.0	59.0	58.5	59.5	58.5	59.0	58.0	60.0	58.0	57.0	50.0	59.0
Nephritis, nephrotic syndrome and nephrosis	81.0	79.0	84.0	82.0	81.0	83.0	81.0	77.0	84.0	83.0	78.0	66.0	78.0	72.0
Septicemia	77.0	75.0	79.0	77.0	74.5	79.0	78.0	76.0	78.5	78.0	75.5	74.5	70.0	73.5
Assault (homicide)	33.0	32.0	37.0	32.0	31.0	39.0	36.0	36.0	35.0	41.0	28.0	30.0	32.0	21.5
Parkinson's disease	83.0	83.0	85.0	83.0	83.0	85.0	82.5	82.0	83.0	83.0	83.0	74.5	80.0	88.0
Essential (primary) hypertension and hypertensive renal disease	82.0	78.0	85.0	82.0	78.0	85.0	81.0	79.0	85.0	84.0	76.0	79.0	66.5	76.5
Human immunodeficiency virus (HIV) disease	48.0	48.0	61.0	48.0	48.0	60.0	43.0	40.0	64.0	50.5	46.0	49.0	32.5	59.0
INJURY BY FIREARMS	45.0	44.0	49.0	42.0	41.0	50.0	51.0	53.0	49.0	51.5	30.0	28.0	28.0	40.0
DRUG-INDUCED DEATHS	46.0	44.0	48.0	46.0	45.0	48.0	45.0	44.0	47.5	47.0	40.0	48.0	39.5	23.0
ALCOHOL-INDUCED DEATHS	56.0	57.0	55.0	57.0	57.0	55.0	55.0	55.0	56.0	58.0	57.0	56.0	49.0	59.0

Notes: ^a Urban = Maricopa, Pima, Pinal and Yuma counties; median age at death = the middle of the age distribution; half died at age greater than the median and half at age below the median.

**TABLE 2D-4
PERCENT DEATHS BEFORE EXPECTED^a YEARS OF LIFE REACHED FOR THE LEADING CAUSES OF MORTALITY BY
GENDER, RACE/ETHNICITY, AND URBAN/RURAL AREAS^b, ARIZONA, 2012**

	ARIZONA				Area/gender				Race/ethnicity						
	Total	Male	Female	Total	Urban	Urban Male	Urban Female	Total Rural	Rural Male	Rural Female	White Non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
Total, all causes	55.0%	62.3%	46.7%	53.4%	60.9%	45.4%	58.4%	64.9%	49.9%	50.9%	68.4%	74.4%	78.7%	62.3%	
Major cardiovascular diseases	43.7%	53.2%	32.9%	41.4%	50.8%	31.3%	48.4%	57.6%	36.7%	40.5%	55.7%	65.6%	67.6%	57.4%	
Diseases of heart	45.0%	54.1%	33.5%	42.4%	51.3%	31.7%	50.8%	59.4%	38.7%	42.3%	55.3%	70.3%	65.8%	55.5%	
Coronary heart disease	47.3%	56.3%	34.6%	44.0%	52.9%	32.3%	55.3%	63.6%	41.7%	44.8%	56.6%	70.1%	65.9%	52.5%	
Malignant neoplasms	68.4%	69.0%	67.6%	67.7%	68.4%	66.9%	69.6%	70.0%	69.0%	66.5%	74.9%	83.0%	77.9%	79.2%	
Lung cancer	70.9%	71.6%	70.2%	70.4%	71.1%	69.7%	73.2%	73.4%	72.9%	70.5%	70.4%	82.3%	66.7%	85.3%	
Prostate cancer	47.1%	47.0%	NA	45.2%	45.1%	NA	52.0%	52.0%	NA	45.8%	47.1%	76.2%	66.7%	0.0%	
Breast cancer	73.9%	50.0%	74.0%	72.6%	50.0%	72.7%	77.7%	0.0%	77.7%	71.6%	82.4%	87.5%	80.0%	81.3%	
Colorectal cancer	66.3%	72.1%	59.1%	67.6%	73.3%	60.8%	61.3%	69.9%	49.4%	63.4%	81.5%	62.5%	88.2%	78.6%	
Malignant melanoma of skin	74.8%	73.5%	77.5%	72.9%	73.0%	72.5%	84.6%	76.2%	94.4%	73.9%	91.7%	100.0%	0.0%	100.0%	
Cerebrovascular diseases	38.4%	49.2%	30.0%	37.8%	49.0%	29.5%	35.4%	46.8%	24.9%	32.6%	56.6%	57.3%	75.5%	60.0%	
Chronic lower respiratory diseases	50.9%	53.1%	48.8%	49.8%	51.5%	48.1%	53.8%	56.4%	50.9%	50.2%	57.5%	75.4%	53.1%	21.4%	
Accidents (unintentional injuries)	77.0%	83.6%	66.2%	74.4%	81.4%	63.7%	80.8%	87.4%	70.6%	70.7%	89.2%	91.7%	95.7%	82.5%	
Motor vehicle accidents	94.2%	94.6%	93.2%	94.0%	94.6%	92.1%	95.1%	94.3%	96.9%	91.5%	97.2%	96.6%	99.2%	92.9%	
Falls	35.1%	42.9%	28.0%	32.8%	39.5%	27.0%	41.4%	53.7%	30.8%	31.5%	48.0%	70.0%	75.0%	50.0%	
Accidental poisoning	99.2%	99.4%	98.8%	99.1%	99.2%	98.8%	99.4%	100.0%	98.5%	99.2%	100.0%	100.0%	100.0%	100.0%	
Accidental drowning	92.5%	92.3%	92.9%	92.3%	93.6%	88.9%	94.1%	92.9%	100.0%	87.9%	95.5%	100.0%	100.0%	100.0%	
Influenza and pneumonia	38.3%	39.8%	37.0%	37.9%	39.2%	36.8%	37.9%	39.3%	36.3%	36.0%	47.3%	58.3%	48.1%	0.0%	
Alzheimer's disease	14.7%	18.7%	12.6%	14.5%	17.8%	12.7%	17.0%	27.6%	11.6%	14.0%	22.6%	14.3%	17.6%	6.9%	
Diabetes	67.0%	70.9%	61.8%	67.1%	71.5%	61.7%	65.9%	68.6%	61.3%	63.5%	71.8%	72.9%	77.8%	55.9%	
Intentional self-harm (suicide)	93.9%	93.0%	97.0%	93.7%	92.8%	96.7%	93.5%	92.5%	98.0%	92.5%	98.4%	100.0%	100.0%	100.0%	
Chronic liver disease and cirrhosis	92.4%	92.4%	92.3%	91.4%	91.4%	91.4%	94.1%	94.4%	93.5%	91.8%	91.8%	96.0%	94.7%	100.0%	
Nephritis, nephrotic syndrome and nephrosis	42.4%	47.4%	37.2%	40.6%	41.6%	39.7%	44.2%	54.4%	32.4%	36.0%	54.8%	64.3%	57.7%	75.0%	
Septicemia	56.6%	63.2%	49.4%	57.9%	65.5%	49.5%	52.1%	54.3%	50.0%	54.6%	60.0%	63.6%	68.8%	42.9%	
Assault (homicide)	96.6%	98.0%	92.5%	97.6%	99.5%	91.9%	98.7%	100.0%	96.3%	91.9%	100.0%	100.0%	100.0%	100.0%	
Parkinson's disease	27.6%	29.9%	23.6%	27.4%	29.5%	23.7%	27.7%	30.0%	23.5%	26.4%	40.0%	75.0%	33.3%	16.7%	
Essential (primary) hypertension and hypertensive renal disease	40.2%	50.6%	31.8%	40.0%	50.9%	31.0%	40.7%	47.9%	35.4%	34.9%	57.1%	50.0%	71.4%	61.5%	
Human immunodeficiency virus (HIV) disease	99.0%	100.0%	92.9%	98.9%	100.0%	91.7%	100.0%	100.0%	100.0%	98.3%	100.0%	100.0%	100.0%	100.0%	
INJURY BY FIREARMS	93.6%	93.5%	94.6%	94.3%	94.2%	94.8%	93.1%	92.5%	96.6%	91.5%	98.8%	100.0%	100.0%	100.0%	
DRUG-INDUCED DEATHS	98.0%	98.8%	96.8%	97.5%	98.6%	95.9%	99.5%	99.1%	100.0%	97.4%	100.0%	100.0%	100.0%	100.0%	
ALCOHOL-INDUCED DEATHS	96.2%	95.8%	97.5%	95.7%	95.1%	97.4%	97.4%	97.4%	97.4%	95.8%	95.4%	95.5%	98.1%	100.0%	

Notes: ^a Expected years of life at birth for all U.S. residents (78.7 years in 2011); ^b Urban = Maricopa, Pima, Pinal and Yuma counties.