

# **CHAPTER 2**

## **TRENDS AND PATTERNS IN MORTALITY, ARIZONA, 2003-2013**

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### **2D. PATTERNS OF PREMATURE MORTALITY**





## 2A.

### TOTAL MORTALITY

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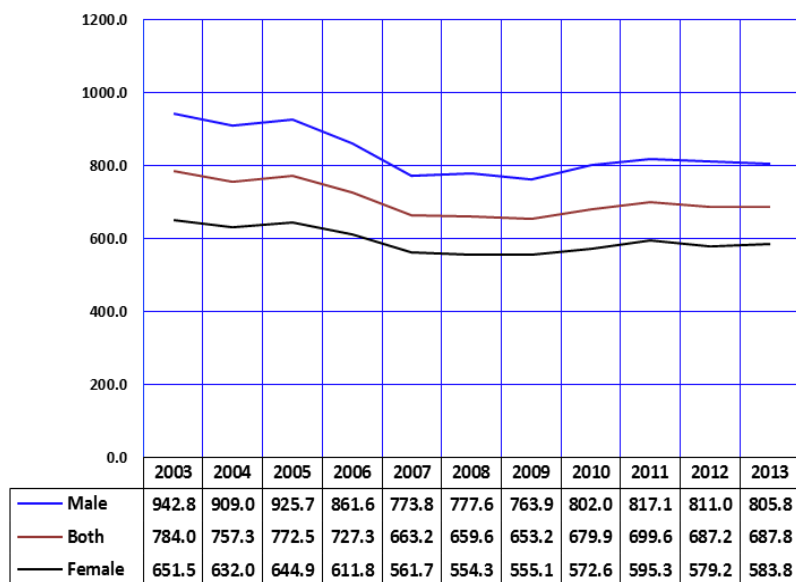
The total number of deaths from all causes among Arizona residents increased by 3.0 percent from 2012 (n = 48,459) to 2013 (n = 49,929; **Table 2A-1**). The age-adjusted mortality rate for all causes of death also increased from 687.2/100,000 in 2012 to 687.8/100,000 in 2013.

Compared to 2012, there were fewer deaths in 2013 for some of the leading causes of mortality including nephritis (11.1 percent), hypertension (3.8 percent), and cerebrovascular disease (2.3 percent). The causes with the largest increases were influenza and pneumonia (14.0 percent), accidents (11.9 percent), septicemia (11.0 percent), Alzheimer's disease (10.7 percent), and chronic liver disease and cirrhosis (7.1 percent).

When considering race/ethnicity and gender, the age-adjusted mortality rate for deaths due to major cardiovascular diseases among Black or African Americans males increased 21.8 percent from 2012 to 2013. In terms of mortality due to diabetes, the overall mortality rate for males and females remained stable over 2012 and 2013 (**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 the age-adjusted mortality rate among Black males increasing 15.3 percent from 2012 to 2013 and increasing 37.4 percent for Black females over the same period.

## 2A. TOTAL MORTALITY

**Figure 2A-1**  
Age-adjusted Mortality Rates<sup>a</sup> for all Causes by Gender and Year, Arizona, 2003-2013



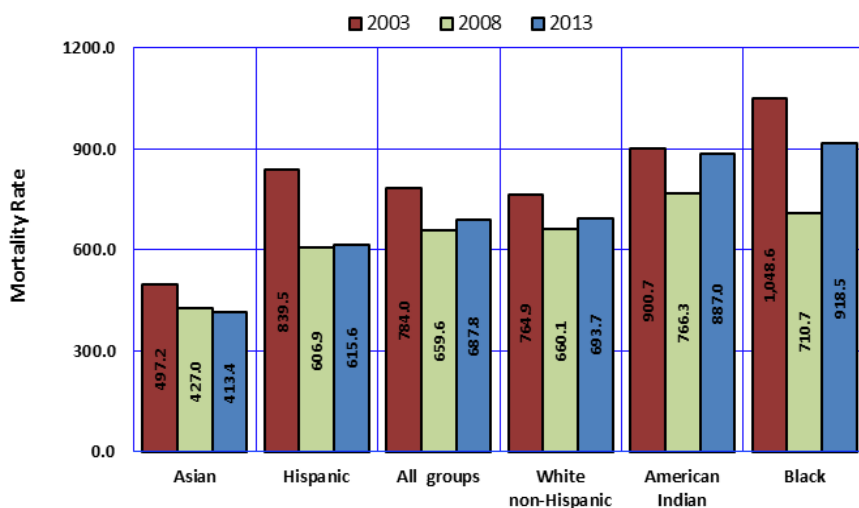
Notes: <sup>a</sup> Number of deaths per 100,000 persons (adjusted to the 2000 standard U.S. population).

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 the **Technical Notes**.

The total age-adjusted mortality rate remained relatively consistent from 2012 to 2013 (**Figure 2A-1, Table 2B-2**). Over this period, the age-adjusted mortality rates decreased slightly for males but increased slightly for females.

The difference between male and female mortality rates narrowed slightly between 2003 and 2013 with the male age-adjusted mortality rate being 44.7 percent greater than the female age-adjusted mortality rate in 2003, and 38.0 percent greater in 2013. 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.

**Figure 2A-2**  
Age-adjusted Mortality Rates<sup>a</sup> for all Causes by Race/Ethnicity and Year, Arizona Residents, 2003, 2008, and 2013



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

The 2013 age-adjusted death rates for the major racial/ethnic groups were as follows: for Asian or Pacific Islander, 413.4 deaths per 100,000 population; Hispanic or Latino, 615.6; White non-Hispanic, 693.7; American Indian or Alaska Native, 887.0; and Black or African American, 918.5 (**Figure 2A-2, Table 2B-4**).

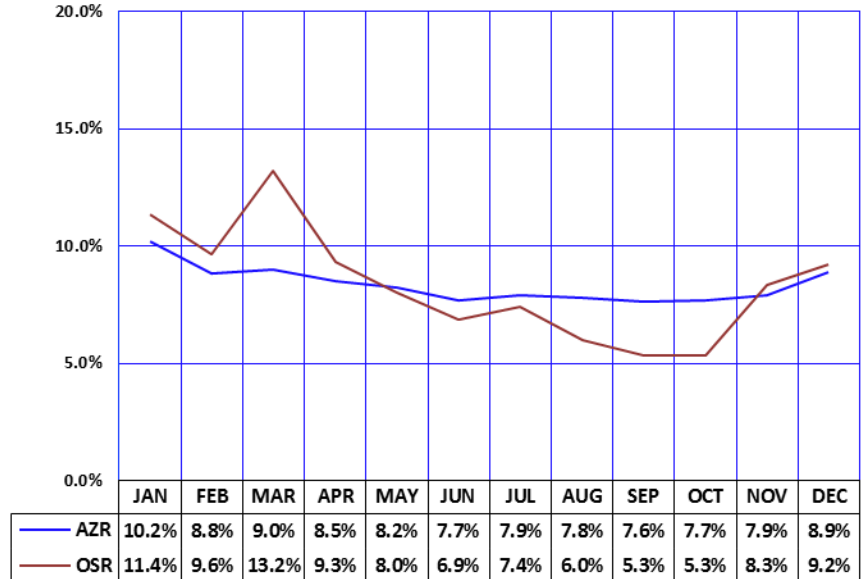
In 2013, as in 2003 and 2008, Blacks and American Indians had higher total mortality rates than White non-Hispanics, Hispanics, and Asians. The total mortality rates for Asians were lower than the rates of both White non-Hispanics and Hispanics in 2003, 2008, and 2013.

## 2A. TOTAL MORTALITY

If there was no monthly variation in proportional contribution to total annual deaths, 8.3 percent (100/12) of deaths should occur monthly. However, when the monthly distribution of resident deaths is examined, January (10.2 percent), March (9.0 percent), December (8.9 percent), February (8.8 percent), and April (8.5 percent) were higher in 2013 from the expected value (**Figure 2A-3**). September, June, October, August, July, and November were the months with the lowest proportional contributions to the total annual deaths among Arizona residents.

The majority of the 2,103 non-residents who died in Arizona during 2013 did so during March, January, February, and December. September was the month with the lowest proportional contribution (5.3 percent) to the annual death total among out-of-State residents who died in Arizona.

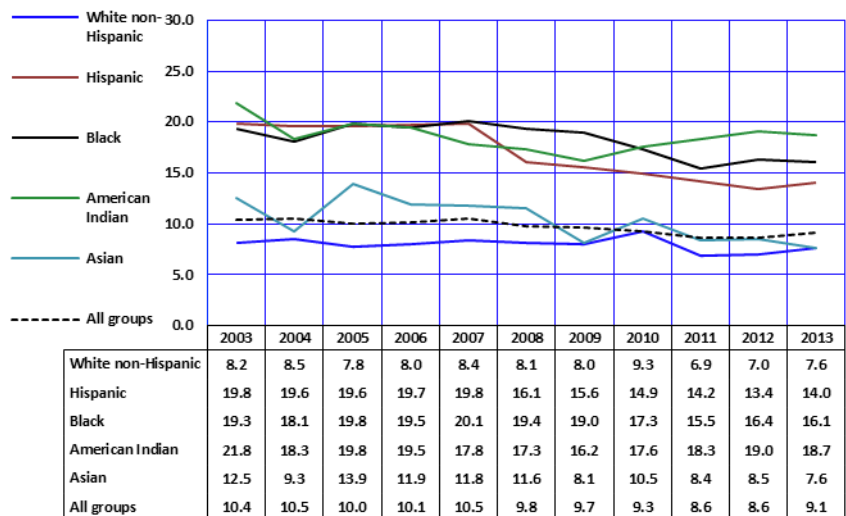
**Figure 2A-3**  
Percent Annual Deaths by Month of Occurrence and Residence Status, Arizona, 2013



**Figure 2A-4**  
Percentage of Deaths for which Autopsies were Reported by Race/Ethnicity and Year, Arizona Residents, 2003-2013

Autopsies were reported as performed on 4,543 decedents, or 9.1 percent of the deaths that occurred among Arizona residents in 2013. From 2003 - 2013, the percentage of deaths for which autopsies were reported varied from a high of 10.5 percent in 2004 and 2007 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, 2003-2013**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012 <sup>a</sup>	2013 <sup>a</sup>
<b>TOTAL<sup>b</sup></b>											
<b>Total</b>	42,830	42,736	45,115	45,415	44,640	45,128	45,065	45,871	47,547	48,459	49,929
<b>Male</b>	22,452	22,400	23,614	23,658	23,321	23,744	23,535	24,163	24,785	25,577	26,222
<b>Female</b>	20,378	20,336	21,501	21,757	21,319	21,384	21,530	21,708	22,762	22,874	23,703
<b>White non-Hispanic</b>											
<b>Total</b>	34,906	34,813	36,558	36,952	35,805	36,235	35,829	36,066	37,211	38,629	39,543
<b>Male</b>	17,972	17,916	18,723	18,711	18,339	18,758	18,476	18,693	19,307	20,206	20,550
<b>Female</b>	16,934	16,897	17,835	18,241	17,466	17,477	17,353	17,373	17,904	18,416	18,989
<b>Hispanic or Latino</b>											
<b>Total</b>	4,914	5,009	5,323	5,284	5,496	5,313	5,401	5,374	5,575	5,963	6,300
<b>Male</b>	2,812	2,874	3,115	3,114	3,146	2,996	2,978	2,959	2,982	3,323	3,412
<b>Female</b>	2,102	2,135	2,208	2,170	2,350	2,317	2,423	2,415	2,593	2,640	2,888
<b>Black or African American</b>											
<b>Total</b>	1,138	1,095	1,173	1,274	1,276	1,295	1,334	1,336	1,399	1,509	1,593
<b>Male</b>	623	598	623	754	695	712	697	735	734	803	897
<b>Female</b>	515	497	550	520	581	583	637	601	665	706	696
<b>American Indian or Alaska Native</b>											
<b>Total</b>	1,527	1,402	1,651	1,543	1,661	1,722	1,871	1,781	1,681	1,806	1,955
<b>Male</b>	864	780	929	901	950	981	1,028	1,015	876	993	1,103
<b>Female</b>	663	622	722	642	711	741	843	766	805	812	852
<b>Asian or Pacific Islander</b>											
<b>Total</b>	289	300	338	336	365	449	469	487	528	552	538
<b>Male</b>	129	145	172	164	168	230	241	258	269	252	260
<b>Female</b>	160	155	166	172	197	219	228	229	259	300	278
<b>Unspecified or other unknown race</b>											
<b>Total</b>	60†	117	72	26	37	114	161	827	1,153	<sup>b</sup>	<sup>b</sup>
<b>Male</b>	52	87	52	14	23	67	115	503	617	<sup>b</sup>	<sup>b</sup>
<b>Female</b>	*	30	20	12	14	47	46	324	536	<sup>b</sup>	<sup>b</sup>

Notes: \* Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; <sup>a</sup> Deaths with unknown gender (Total, n=4; White non-Hispanic, n=4) were included in totals; <sup>b</sup> Bridging of race/ethnicity in 2012 and 2013 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, 2003-2013**

Month of death	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	<b>JAN</b>										
Count	3,809	4,015	3,933	4,640	4,213	4,149	3,983	3,950	4,321	4,210	5,079
Percent	8.9%	9.4%	8.7%	10.2%	9.4%	9.2%	8.8%	8.6%	9.1%	8.7%	10.2%
<b>FEB</b>											
Count	3,430	3,671	3,472	4,013	3,726	4,059	3,592	3,582	4,070	4,147	4,383
Percent	8.0%	8.6%	7.7%	8.8%	8.3%	9.0%	8.0%	7.8%	8.6%	8.6%	8.8%
<b>MAR</b>											
Count	3,817	3,834	3,992	4,124	4,062	4,426	3,954	4,084	4,358	4,414	4,484
Percent	8.9%	9.0%	8.8%	9.1%	9.1%	9.8%	8.8%	8.9%	9.2%	9.1%	9.0%
<b>APR</b>											
Count	3,599	3,456	3,972	3,765	3,781	3,949	3,945	3,845	3,967	4,176	4,231
Percent	8.4%	8.1%	8.8%	8.3%	8.5%	8.8%	8.8%	8.4%	8.3%	8.6%	8.5%
<b>MAY</b>											
Count	3,705	3,627	3,992	3,729	3,656	3,754	3,699	3,811	3,899	3,980	4,076
Percent	8.7%	8.5%	8.8%	8.2%	8.2%	8.3%	8.2%	8.3%	8.2%	8.2%	8.2%
<b>JUN</b>											
Count	3,337	3,333	3,514	3,489	3,427	3,542	3,500	3,651	3,823	3,868	3,831
Percent	7.8%	7.8%	7.8%	7.7%	7.7%	7.8%	7.8%	8.0%	8.0%	8.0%	7.7%
<b>JUL</b>											
Count	3,331	3,456	3,591	3,630	3,636	3,467	3,741	3,843	3,791	3,862	3,926
Percent	7.8%	8.1%	8.0%	8.0%	8.1%	7.7%	8.3%	8.4%	8.0%	8.0%	7.9%
<b>AUG</b>											
Count	3,398	3,442	3,571	3,417	3,466	3,512	3,617	3,756	3,913	3,850	3,893
Percent	7.9%	8.1%	7.9%	7.5%	7.8%	7.8%	8.0%	8.2%	8.2%	7.9%	7.8%
<b>SEP</b>											
Count	3,335	3,262	3,414	3,414	3,554	3,279	3,604	3,633	3,678	3,849	3,804
Percent	7.8%	7.6%	7.6%	7.5%	8.0%	7.3%	8.0%	7.9%	7.7%	7.9%	7.6%
<b>OCT</b>											
Count	3,425	3,461	3,524	3,767	3,651	3,636	3,739	3,678	3,888	3,956	3,868
Percent	8.0%	8.1%	7.8%	8.3%	8.2%	8.1%	8.3%	8.0%	8.2%	8.2%	7.7%
<b>NOV</b>											
Count	3,439	3,344	3,608	3,527	3,608	3,519	3,694	3,806	3,753	3,894	3,924
Percent	8.0%	7.8%	8.0%	7.8%	8.1%	7.8%	8.2%	8.3%	7.9%	8.0%	7.9%
<b>DEC</b>											
Count	4,205	3,835	4,532	3,900	3,860	3,836	3,997	4,232	4,086	4,253	4,430
Percent	9.8%	9.0%	10.0%	8.6%	8.6%	8.5%	8.9%	9.2%	8.6%	8.8%	8.9%
<b>TOTAL</b>											
Count	42,830	42,736	45,115	45,415	44,640	45,128	45,065	45,871	47,547	48,459	49,929
Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**TABLE 2A-3  
DEATHS BY DAY AND MONTH OF OCCURRENCE, ARIZONA RESIDENTS, 2013**

Day of death	Month of death												Total
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1	160	173	150	136	135	135	143	112	119	109	126	142	1,640
2	145	183	141	135	132	130	126	129	131	130	111	123	1,616
3	164	162	138	160	137	106	144	111	121	132	163	122	1,660
4	148	172	151	145	113	133	132	106	127	130	123	133	1,613
5	180	159	157	140	133	129	149	128	137	126	134	134	1,706
6	147	153	169	148	135	129	131	127	128	125	151	157	1,700
7	159	163	139	138	129	132	118	109	125	129	126	133	1,600
8	160	171	164	141	128	124	122	132	132	135	133	145	1,687
9	161	144	132	129	141	139	137	143	131	130	140	148	1,675
10	174	133	143	134	127	135	121	125	129	112	144	142	1,619
11	166	191	152	161	137	146	130	122	136	115	150	165	1,771
12	172	119	155	140	161	133	117	123	115	147	123	170	1,675
13	173	171	136	154	129	145	138	136	108	101	125	141	1,657
14	181	165	134	141	141	132	119	141	138	109	140	161	1,702
15	166	169	139	147	120	114	119	110	117	119	123	133	1,576
16	184	158	149	156	139	131	136	121	150	134	125	149	1,732
17	179	163	155	109	116	130	119	142	154	141	114	155	1,677
18	165	126	150	144	141	120	123	125	115	127	144	143	1,623
19	143	158	134	154	142	117	119	133	122	130	137	146	1,635
20	172	146	135	160	123	108	111	138	130	125	132	147	1,627
21	163	159	132	138	135	126	122	114	128	125	105	138	1,585
22	175	129	143	144	105	124	117	101	102	140	127	141	1,548
23	165	178	160	129	124	124	128	118	111	133	134	158	1,662
24	138	116	112	123	136	120	162	127	116	128	126	134	1,538
25	169	170	155	129	141	124	133	130	125	136	126	120	1,658
26	160	152	129	154	143	127	115	148	120	135	118	137	1,638
27	167	137	159	146	131	118	115	114	136	105	124	146	1,598
28	178	163	136	120	122	116	121	138	130	129	137	145	1,635
29	153		151	133	140	153	118	123	135	111	138	140	1,495
30	152		154	143	124	131	123	143	136	97	125	125	1,453
31	160		130		116		118	124		123		157	928
<b>Total</b>	5,079	4,383	4,484	4,231	4,076	3,831	3,926	3,893	3,804	3,868	3,924	4,430	49,929



**TABLE 2A-4  
AGE-SPECIFIC MORTALITY BY PLACE OF DEATH AND DECEDENT STATUS, ARIZONA, 2013**

		Age											Un- known	Total
		<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+		
<b>IN HOSPITAL</b>	<b>In-patient</b>	330	48	40	127	234	404	882	1,712	2,365	2,512	1,831	*	10,487
	<b>Out-patient<sup>a</sup></b>	62	41	27	144	181	203	340	494	504	452	308	0	2,756
	<b>Died on arrival</b>	0	0	0	*	*	0	*	*	*	*	*	0	20 <sup>†</sup>
	<b>Status unknown</b>	32	16	24	164	320	529	1,221	2,331	3,085	3,771	4,120	*	15,616
	<b>Subtotal</b>	424	105	91	440 <sup>†</sup>	740 <sup>†</sup>	1,136	2,450 <sup>†</sup>	4,540 <sup>†</sup>	5,960 <sup>†</sup>	6,740 <sup>†</sup>	6,260 <sup>†</sup>	10 <sup>†</sup>	28,877
<b>NOT IN HOSPITAL</b>	<b>Nursing home<sup>b</sup></b>	14	18	12	19	55	134	473	1,148	1,849	2,578	3,111	0	9,411
	<b>Residence</b>	*	0	0	*	6	29	100	306	721	1,648	3,109	*	5,920 <sup>†</sup>
	<b>Other<sup>c</sup></b>	8	7	17	203	279	282	388	469	546	1,109	2,297	14	5,619
	<b>Unspecified</b>	0	*	*	*	*	*	12	17	18	16	24	0	100 <sup>†</sup>
	<b>Subtotal</b>	20 <sup>†</sup>	26	30	230 <sup>†</sup>	344	449	973	1,940	3,134	5,351	8,541	20 <sup>†</sup>	21,052
<b>TOTAL</b>	447	131	121	663	1,081	1,585	3,418	6,480	9,091	12,091	14,801	20	49,929	

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





## 2B.

### LEADING CAUSES OF DEATH

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In 2010, the Office of Vital Records (OVR) of the Arizona Department of Health Services implemented the new (2003) Standard U.S. death certificate. The new certificate added several new questions: 1) whether tobacco use contributed to the death, and 2) whether, if the decedent was a female, the death was "pregnancy-associated" (defined as death from any cause during pregnancy or within one calendar year of delivery or pregnancy termination).

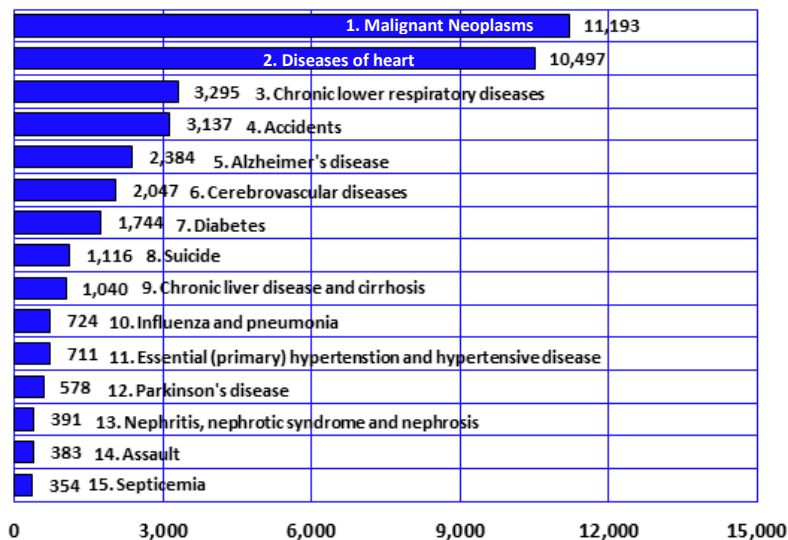
The death certificate now includes a new classification of the decedent's racial/ethnic status, consistent with the revised federal standards for collecting and reporting racial and ethnic status. These standards were published in the Federal Register on October 30, 1997, as "Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity". The revised standards are available on the OMB (the Office of Management and Budget) web-site at: <http://www.whitehouse.gov/omb/fedreg/ombdir15.html>

There are now 15 racial categories (including Guamanian or Chamorro; Samoan or Native Hawaiian) to choose from. It is also permitted to indicate more than one race for a decedent. In 2013, among the 49,929 deaths of Arizona residents, indication of "two or more races" appeared on only 398 certificates. The total number of deaths for decedents identified as Native Hawaiian was 15. To create frequency counts of race and ethnicity that were adequate to compute statistically reliable mortality rates, race was "bridged", or essentially collapsed into 5 categories; White non-Hispanic, Hispanic or Latino, Black or African American, Native American, and Asian or Pacific Islander. When an individual was identified as both Hispanic and any other race, that person was added to the racial/ethnic group with the lowest population. For example, a person identified as both White and Hispanic would be coded as Hispanic, where a person identified as American Indian and Hispanic would be coded as American Indian. Please refer to the technical appendix for further explanation of the racial bridging used in this report.

## 2B. LEADING CAUSES OF DEATH

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

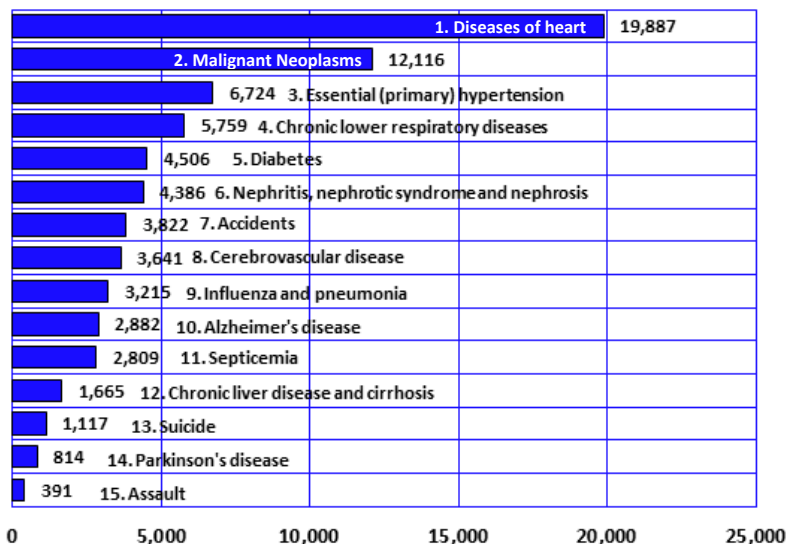
**BASED ON THE NUMBER OF DEATHS DUE TO THE UNDERLYING CAUSE:**



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

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

**BASED ON THE NUMBER OF DEATHS DUE TO ANY MENTION OF A CAUSE:**



For the purpose of mortality statistics, every death is attributed to one underlying condition or underlying cause of death. The underlying cause is defined as the disease or injury that initiated the chain of events leading directly to death. It is selected from up to 20 causes and conditions entered by the physician on the death certificate. The totality of all these conditions is known as multiple cause of death.

In addition to 10,497 deaths that had diseases of the heart assigned as the underlying cause, another 9,390 deaths had diseases of the heart assigned as a secondary cause of death. The sum of these two counts (19,887, **Figure 2B-1B**) is the total number of deaths that had any mention of diseases of the heart on the 2013 death certificates. The ranking based on any mention of the 15 diagnostic categories is different from ranking of the leading causes of death based on the underlying cause. In particular, essential (primary) hypertension ranked 10<sup>th</sup> as the underlying cause but ranked 3<sup>rd</sup> when any mention of it was counted.

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

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

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

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

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

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

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

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

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

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

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

Notes: <sup>a</sup> 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<sup>a</sup> for the Five Leading Causes of Death  
by Race/Ethnicity among Males, Arizona, 2013**

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

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

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

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

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

**Figure 2B-5  
Age-adjusted Mortality Rates<sup>a</sup> for the Five Leading Causes of Death  
by Gender in Urban<sup>b</sup> and Rural Areas, Arizona, 2013**

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

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

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

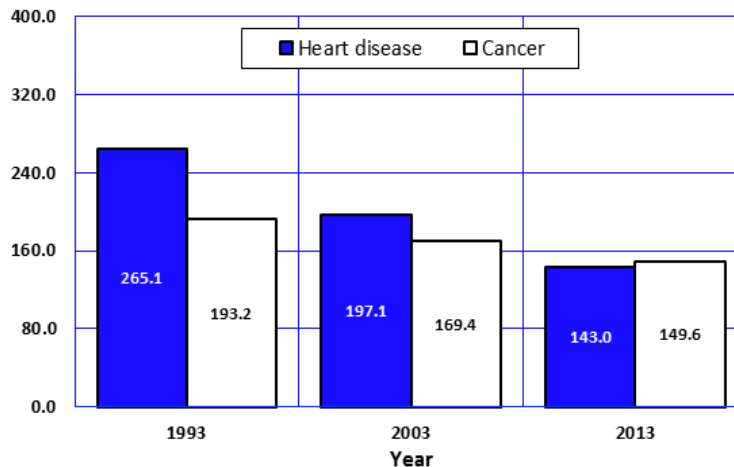
Reflecting differences in urban and rural living conditions, Alzheimer's disease was the 5<sup>th</sup> leading cause of death for urban males and the 4<sup>th</sup> leading cause for urban females, but was not in the 5 leading causes for rural males or females. Similarly, intentional self-harm was the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

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

**Figure 2B-6**  
**Comparison of Age-adjusted Mortality Rates<sup>a</sup> for Heart Disease and Cancer**  
**(Malignant Neoplasm), Arizona, 1993, 2003, and 2013**

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

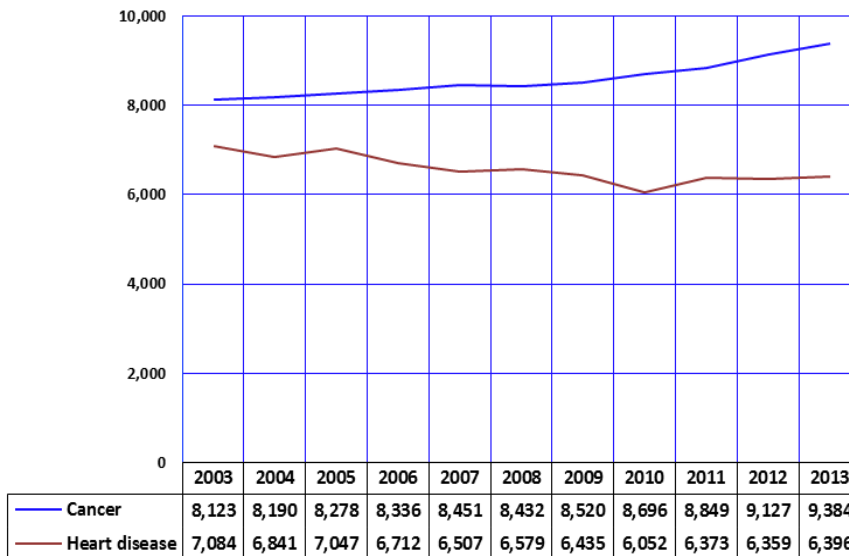
In 2003, 1,198 more Arizonans died from diseases of the heart than cancer (**Table 2B-1**). In 2013, the number of deaths from cancer exceeded the number of heart disease deaths by 696 (**Table 2B-4**).



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

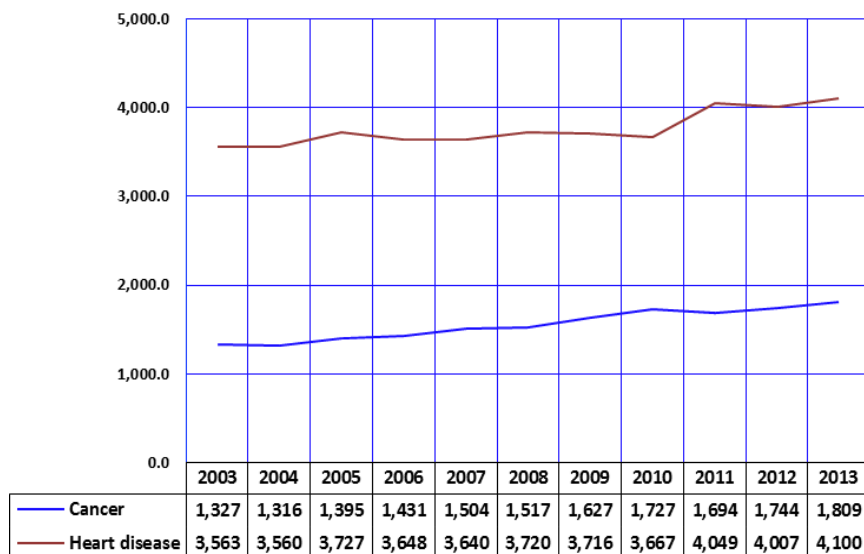
**Figure 2B-7**  
**Number of Deaths from Heart Disease and Cancer among**  
**Arizonans 0-84 Years, 2003-2013**

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



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

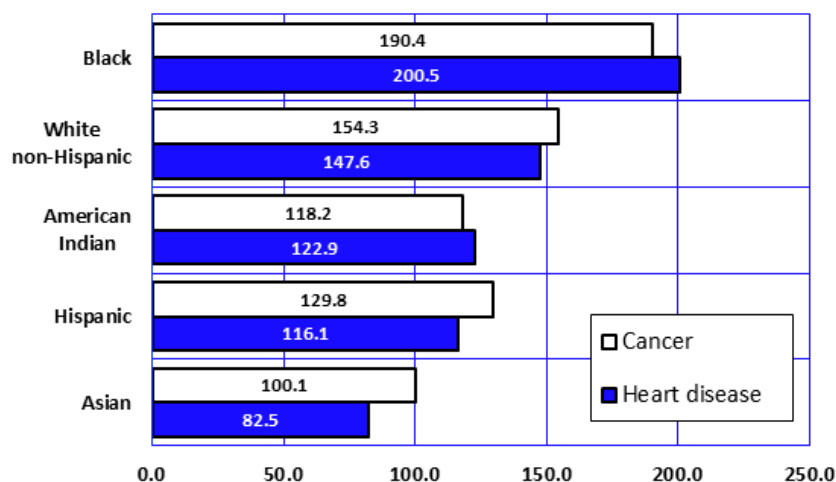
**Figure 2B-8**  
Deaths from Heart Disease and Cancer among Arizonans 85+, 2003-2013



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

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

**Figure 2B-9**  
Age-adjusted Mortality Rates<sup>a</sup> for Heart Disease and Cancer by Race/Ethnicity, Arizona, 2013



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

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

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

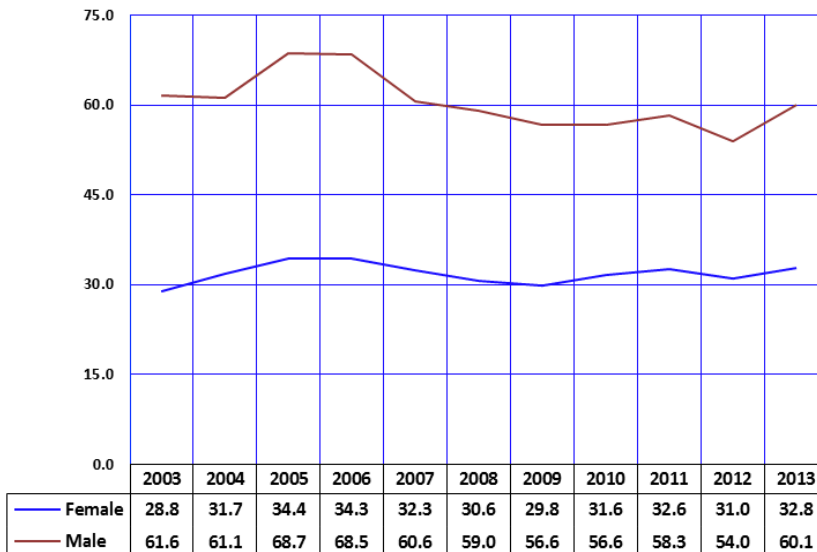


2B. LEADING CAUSES OF DEATH  
**Accidents (unintentional injury)**

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

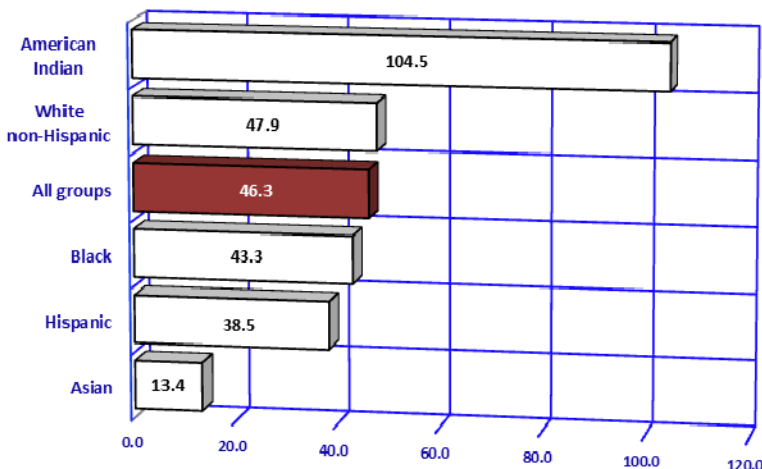
A number of deaths due to common types of unintentional injuries increased from 2012 to 2013 (see **Table 2B-9**). Deaths due to excessive natural cold were more than two times higher in 2013 than in 2012, and deaths due to fire, flames, or smoke increased 58 percent (likely attributable to the Yarnell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

**Figure 2B-10**  
**Age-adjusted Mortality Rates<sup>a</sup> for Accidents (Unintentional Injuries) by Gender and Year, Arizona, 2003-2013**



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

**Figure 2B-11**  
**Age-adjusted Mortality Rates<sup>a</sup> for Accidents (Unintentional Injuries) by Race/Ethnicity, Arizona, 2013**



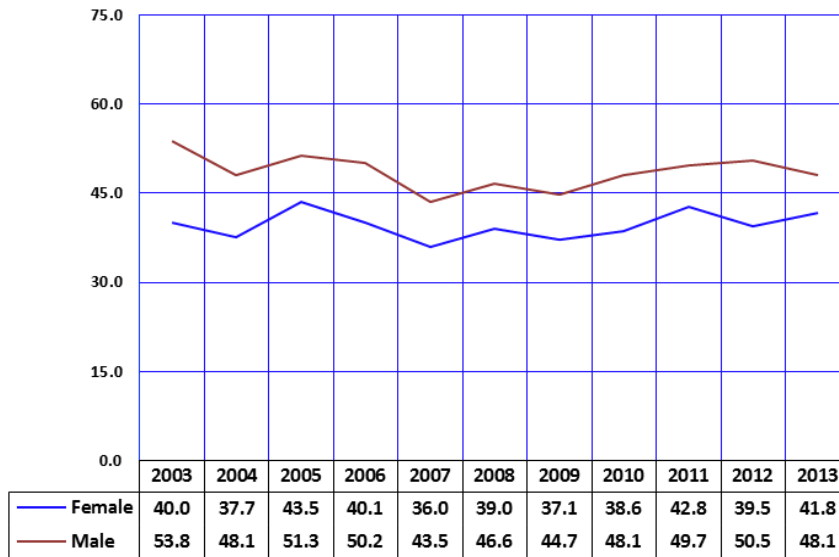
Notes: <sup>a</sup> Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

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

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

2B. LEADING CAUSES OF DEATH  
**Chronic lower respiratory diseases**

**Figure 2B-12**  
**Age-adjusted Mortality Rates<sup>a</sup> for Chronic Lower Respiratory Diseases<sup>b</sup> by Gender and Year, Arizona, 2003-2013**

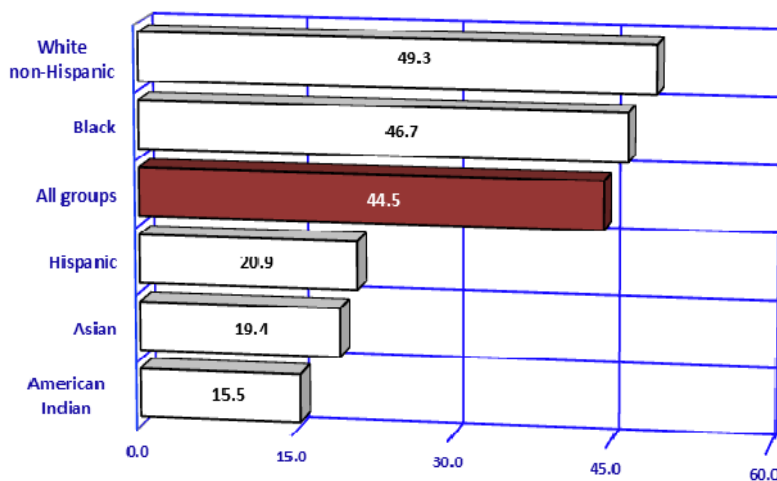


In 2013, chronic lower respiratory diseases (bronchitis, emphysema, asthma) were the 3rd leading cause of death among Arizona residents (**Table 2B-1**). From 2012 to 2013, the mortality rates for chronic lower respiratory diseases (CLRD) slightly increased for women and slightly decreased for men (**Figure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

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

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

**Figure 2B-13**  
**Age-adjusted Mortality Rates<sup>a</sup> for Chronic Lower Respiratory Diseases by Race/Ethnicity, Arizona, 2013**



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

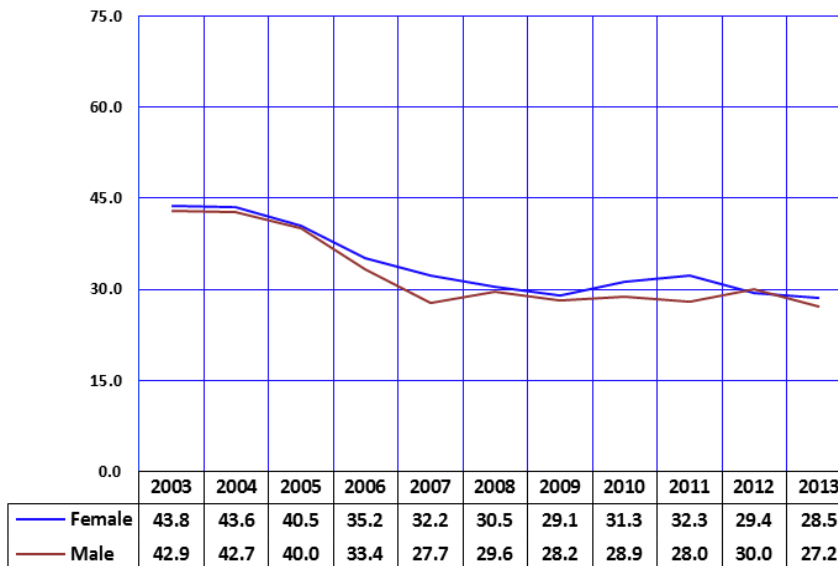
Notes: <sup>a</sup> Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

2B. LEADING CAUSES OF DEATH  
Cerebrovascular disease

**Figure 2B-14**  
Age-adjusted Mortality Rates<sup>a</sup> for Cerebrovascular Disease by Gender and Year, Arizona, 2003-2013

Cerebrovascular disease and diseases of the heart are two of the leading causes of death that share many risk factors such as hypertension, smoking, obesity, and high levels of cholesterol. The age-adjusted mortality rate for stroke decreased by 35.8 percent from 43.9 deaths per 100,000 population in 2003 to 28.2/100,000 in 2013 (Table 2B-3).

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

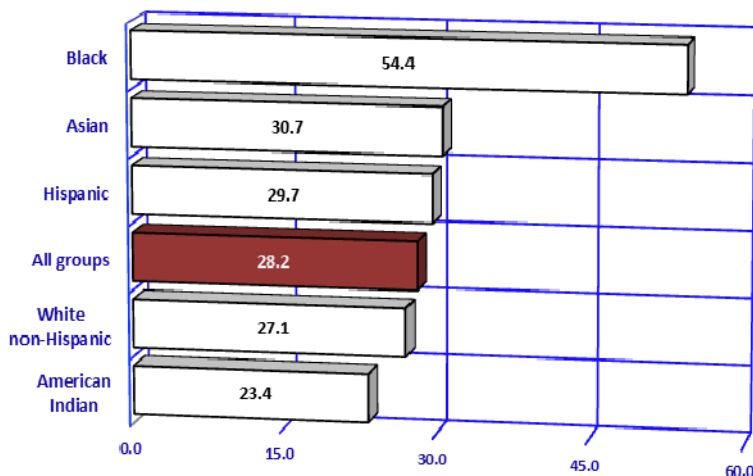


Notes: <sup>a</sup> Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

**Figure 2B-15**  
Age-adjusted Mortality Rates<sup>a</sup> for Cerebrovascular Disease by Race/Ethnicity, Arizona, 2013

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

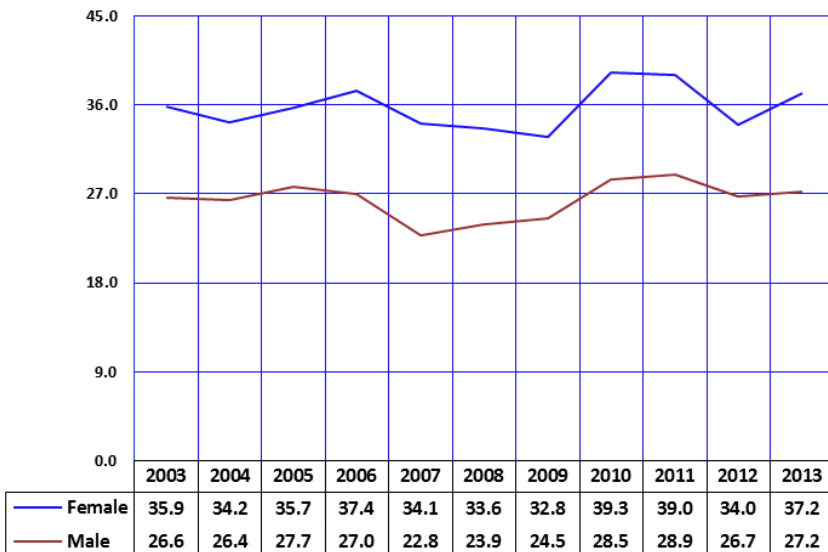
American Indian males had the lowest mortality rate for cerebrovascular disease among all gender and racial/ethnic subgroups (18.6 deaths per 100,000, Table 2B-4), while Black or African American females had the highest rate of 54.6 deaths per 100,000.



Notes: <sup>a</sup> 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<sup>a</sup> for Alzheimer's Disease by Gender and Year, Arizona, 2003-2013

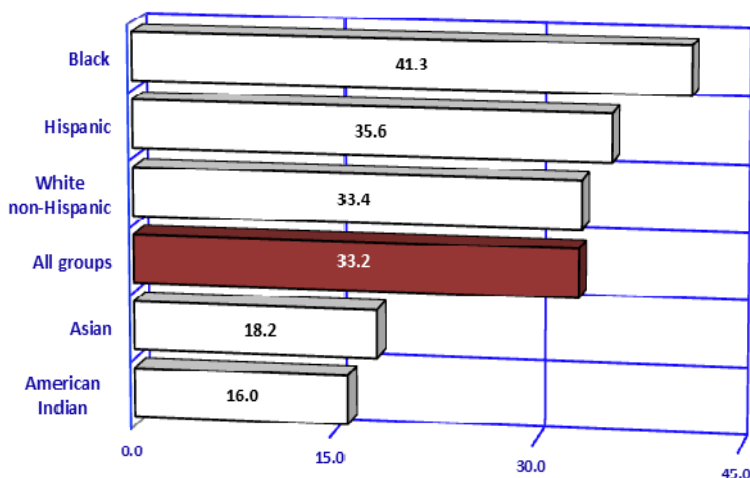


Based on the number of deaths in 2013, Alzheimer's disease was the 4<sup>th</sup> leading cause of death for females and 8<sup>th</sup> leading cause for males (**Table 2B-4**).

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

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

**Figure 2B-17**  
Age-adjusted Mortality Rates<sup>a</sup> for Alzheimer's Disease by Race/Ethnicity, Arizona, 2013



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

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

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

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

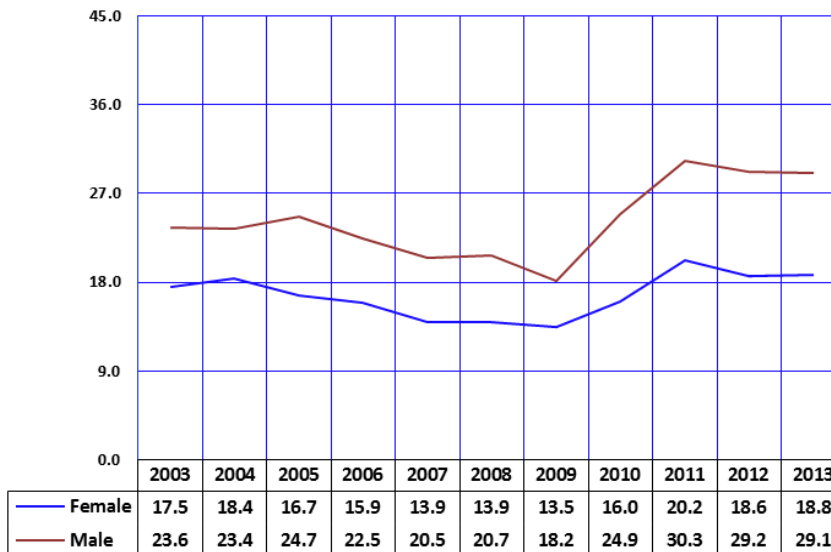
## 2B. LEADING CAUSES OF DEATH Diabetes

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

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

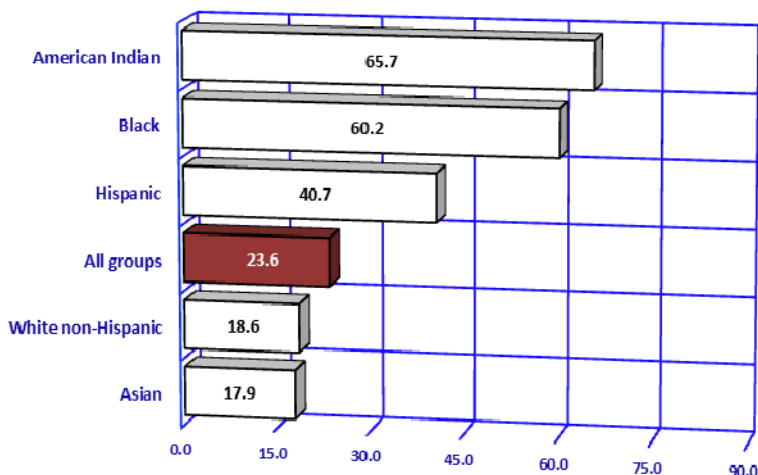
The diabetes-related death rate includes all mentions of diabetes on the death certificate as the underlying or other than underlying cause.

**Figure 2B-18**  
**Age-adjusted Mortality Rates<sup>a</sup> for Diabetes by Gender and Year, Arizona, 2003-2013**



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

**Figure 2B-19**  
**Age-adjusted Mortality Rates<sup>a</sup> for Diabetes by Race/Ethnicity, Arizona, 2013**



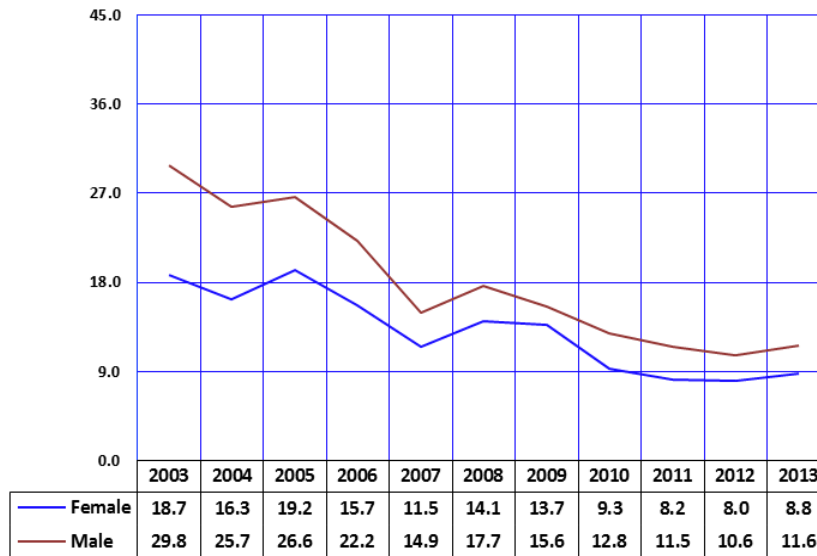
Notes: <sup>a</sup> Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

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

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

2B. LEADING CAUSES OF DEATH  
**Influenza and pneumonia**

**Figure 2B-20**  
**Age-adjusted Mortality Rates<sup>a</sup> for Influenza and Pneumonia by Gender and Year, Arizona, 2003-2013**



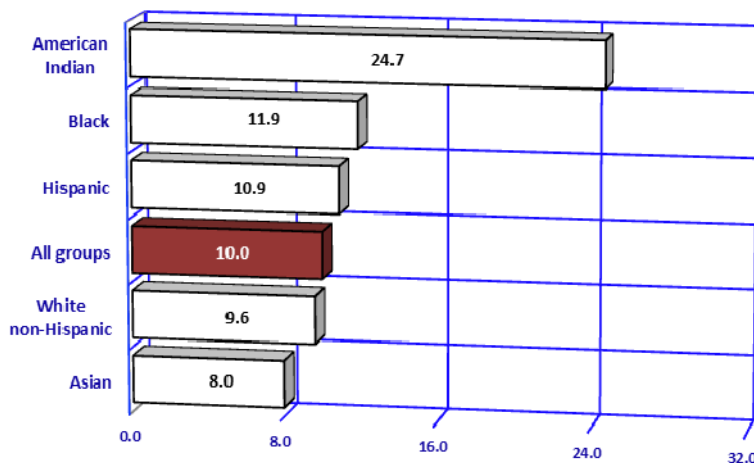
Notes: <sup>a</sup> Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

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

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

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

**Figure 2B-21**  
**Age-adjusted Mortality Rates<sup>a</sup> for Influenza and Pneumonia by Race/Ethnicity, Arizona, 2013**



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

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

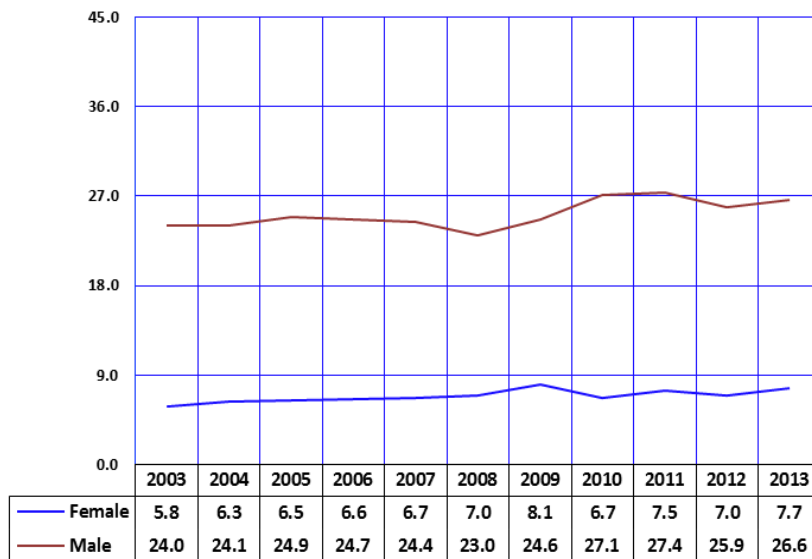
Compared to the State death rate for influenza and pneumonia, Apache County's rate was 2.6 times greater (26.4/100,000). The mortality rate was also elevated in Navajo County (20.1/100,000), Gila County (18.3/100,000), and Yuma County (17.8/100,000; **Table 5E-11**).

2B. LEADING CAUSES OF DEATH  
Suicide

**Figure 2B-22**  
Age-adjusted Mortality Rates<sup>a</sup> for Suicide by Gender and Year,  
Arizona, 2003-2013

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

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

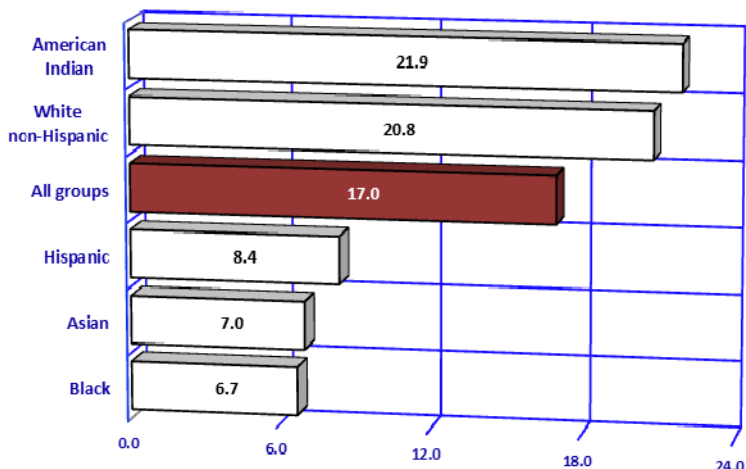


Notes: <sup>a</sup> Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

**Figure 2B-23**  
Age-adjusted Mortality Rates<sup>a</sup> for Suicide by Race/Ethnicity,  
Arizona, 2013

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

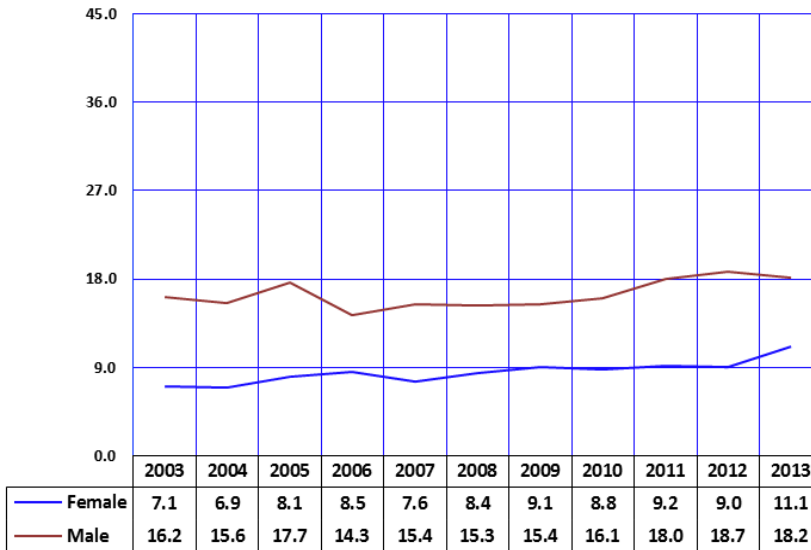
The age-adjusted mortality rates for suicide varied in Arizona in 2013 from 7.9 suicides per 100,000 residents of Yuma County to 38.1 suicides per 100,000 residents of Apache County (**Table 5E-11**).



Notes: <sup>a</sup> 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<sup>a</sup> for Chronic Liver Disease and Cirrhosis  
by Gender and Year, Arizona, 2003-2013



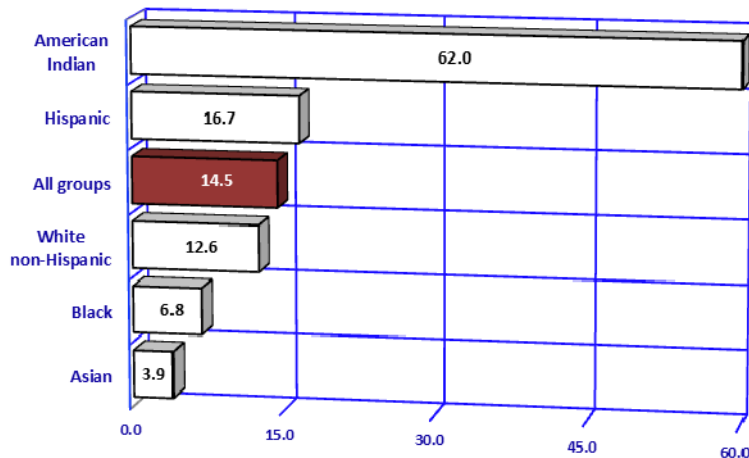
Notes: <sup>a</sup> Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

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

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

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

**Figure 2B-25**  
Age-adjusted Mortality Rates<sup>a</sup> for Chronic Liver Disease and Cirrhosis  
by Race/Ethnicity, Arizona, 2013



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

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

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



**TABLE 2B-1  
NUMBER OF DEATHS FOR THE LEADING CAUSES OF MORTALITY BY YEAR, ARIZONA, 2003-2013**

Rank in 2003	Rank in 2013	Cause of death	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
2	1	Malignant neoplasms	9,451	9,506	9,673	9,768	9,955	9,949	10,147	10,423	10,543	10,871	11,193
1	2	Diseases of heart	10,649	10,402	10,779	10,362	10,147	10,299	10,151	9,719	10,424	10,366	10,497
3	3	Chronic lower respiratory diseases	2,522	2,392	2,778	2,771	2,651	2,896	2,808	2,892	3,143	3,167	3,295
4	4	Accidents (unintentional injury)	2,466	2,641	3,006	3,156	3,014	2,951	2,887	2,834	2,959	2,804	3,137
6	5	Alzheimer's disease	1,691	1,672	1,816	2,057	2,041	2,086	2,086	2,314	2,336	2,154	2,384
5	6	Cerebrovascular diseases	2,356	2,412	2,325	2,159	2,079	2,089	2,010	2,051	2,067	2,096	2,047
8	7	Diabetes	1,124	1,180	1,196	1,188	1,145	1,162	1,078	1,372	1,721	1,698	1,744
9	8	Intentional self-harm (suicide)	807	854	915	948	986	968	1,060	1,070	1,113	1,070	1,116
10	9	Chronic liver disease and cirrhosis	625	629	749	706	734	778	818	843	933	971	1,040
7	10	Influenza and pneumonia	1,248	1,108	1,280	1,147	875	1,075	1,007	729	649	635	724
15	11	Essential primary hypertension and hypertensive renal disease	339	405	390	420	389	475	475	498	725	739	711
14	12	Parkinson's disease	402	390	492	489	455	487	446	488	545	579	578
11	13	Nephritis, nephrotic syndrome and nephrosis	550	625	603	549	510	488	532	516	409	440	391
12	14	Assault (homicide)	480	486	503	525	494	461	360	404	387	376	383
13	15	Septicemia	463	456	496	539	547	539	528	425	321	319	354
<b>ALL CAUSES</b>			42,830	42,736	45,115	45,415	44,640	45,128	45,065	45,871	47,547	48,459	49,929

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 2003-2013 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 140 in 2008.

**TABLE 2B-2  
AGE-ADJUSTED MORTALITY RATES\* BY GENDER AND YEAR FOR SELECTED LEADING CAUSES OF DEATH,  
ARIZONA, 2003-2013**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>TOTAL, ALL CAUSES</b>											
<b>Total</b>	784.0	757.3	772.5	727.3	663.2	659.6	653.2	679.9	699.6	687.2	687.8
<b>Male</b>	942.8	909.0	925.7	861.6	773.8	777.6	763.9	802.0	817.1	811.0	805.8
<b>Female</b>	651.5	632.0	644.9	611.8	561.7	554.3	555.1	572.6	595.3	579.2	583.8
<b>CARDIOVASCULAR DISEASE</b>											
<b>Total</b>	258.4	248.5	245.7	216.4	194.4	194.1	188.8	188.6	201.0	193.3	187.7
<b>Male</b>	310.3	298.4	298.2	258.3	227.5	235.8	228.1	225.1	239.2	233.6	229.0
<b>Female</b>	215.8	207.8	203.8	181.0	164.3	158.1	154.9	156.7	168.0	159.1	152.4
<b>-----DISEASES OF HEART</b>											
<b>Total</b>	197.1	186.7	186.9	166.1	149.5	149.3	145.9	143.3	152.7	145.8	143.0
<b>Male</b>	246.6	234.2	237.4	207.3	184.0	189.3	183.1	179.8	192.8	184.4	183.6
<b>Female</b>	157.1	148.5	147.3	131.8	119.4	115.1	114.1	112.2	119.0	113.7	109.2
<b>-----CEREBROVASCULAR DISEASE</b>											
<b>Total</b>	43.9	43.6	40.6	34.8	30.6	30.3	28.9	30.7	30.6	29.9	28.2
<b>Male</b>	42.9	42.7	40.0	33.4	27.7	29.6	28.2	28.9	28.0	30.0	27.2
<b>Female</b>	43.8	43.6	40.5	35.2	32.2	30.5	29.1	31.3	32.3	29.4	28.5
<b>MALIGNANT NEOPLASMS</b>											
<b>Total</b>	169.4	164.7	161.8	154.7	148.0	145.5	147.2	150.5	151.3	149.8	149.6
<b>Male</b>	208.3	201.2	197.1	187.0	176.7	173.8	174.9	180.6	179.3	180.3	175.0
<b>Female</b>	141.3	138.6	136.1	131.0	125.6	123.0	125.8	127.1	129.5	125.9	129.9
<b>CHRONIC LOWER RESPIRATORY DISEASE</b>											
<b>Total</b>	45.4	41.9	46.8	44.3	39.2	42.2	40.5	42.6	45.9	44.2	44.5
<b>Male</b>	53.8	48.1	51.3	50.2	43.5	46.6	44.7	48.1	49.7	50.5	48.1
<b>Female</b>	40.0	37.7	43.5	40.1	36.0	39.0	37.1	38.6	42.8	39.5	41.8
<b>ACCIDENTS (UNINTENTIONAL INJURIES)</b>											
<b>Total</b>	44.8	46.0	51.1	51.2	46.6	44.7	43.1	43.8	45.5	42.4	46.3
<b>Male</b>	61.6	61.1	68.7	68.5	60.6	59.0	56.6	56.6	58.3	54.0	60.1
<b>Female</b>	28.8	31.7	34.4	34.3	32.3	30.6	29.8	31.6	32.6	31.0	32.8
<b>-----MOTOR VEHICLE ACCIDENTS</b>											
<b>Total</b>	18.0	18.1	18.9	19.6	16.2	13.6	11.6	11.1	12.1	11.4	11.4
<b>Male</b>	24.9	23.9	27.0	26.8	22.2	19.5	16.8	15.9	17.6	16.8	16.3
<b>Female</b>	11.2	12.5	11.1	12.4	10.1	7.9	6.5	6.4	6.9	6.3	6.6
<b>INFLUENZA AND PNEUMONIA</b>											
<b>Total</b>	23.4	20.1	22.3	18.4	12.9	15.6	14.6	10.9	9.7	9.1	10.0
<b>Male</b>	29.8	25.7	26.6	22.2	14.9	17.7	15.6	12.8	11.5	7.4	11.6
<b>Female</b>	18.7	16.3	19.2	15.7	11.5	14.1	13.7	9.3	8.2	5.6	8.8

**TABLE 2B-2 (continued)  
AGE-ADJUSTED MORTALITY RATES<sup>a</sup> BY GENDER AND YEAR FOR SELECTED LEADING CAUSES OF DEATH,  
ARIZONA, 2003-2013**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>ALZHEIMER'S DISEASE</b>											
<b>Total</b>	32.5	31.3	32.7	33.4	29.6	29.8	29.5	35.1	35.2	29.9	33.2
<b>Male</b>	26.6	26.4	27.7	27.0	22.8	23.9	24.5	28.5	28.9	41.5	27.2
<b>Female</b>	35.9	34.2	35.7	47.4	34.1	33.6	32.8	39.3	39.0	52.8	37.2
<b>DIABETES</b>											
<b>Total</b>	20.3	20.7	20.1	18.9	17.0	17.0	15.7	20.1	24.8	23.5	23.6
<b>Male</b>	23.6	23.4	24.7	22.5	20.5	20.7	18.2	24.9	30.3	29.2	29.1
<b>Female</b>	17.5	18.4	16.7	15.9	13.9	13.9	13.5	16.0	20.2	18.6	18.8
<b>CHRONIC LIVER DISEASE AND CIRRHOSIS</b>											
<b>Total</b>	11.5	11.1	12.7	11.4	11.3	11.7	12.2	12.3	13.4	13.6	14.5
<b>Male</b>	16.2	15.6	17.7	14.3	15.4	15.3	15.4	16.1	18.0	18.7	18.2
<b>Female</b>	7.1	6.9	8.1	8.5	7.6	8.4	9.1	8.8	9.2	9.0	11.1
<b>NEPHRITIS, NEPHROTIC SYNDROME, AND NEPHROSIS</b>											
<b>Total</b>	10.1	11.0	10.4	8.8	7.6	7.1	7.7	7.6	6.0	6.2	5.3
<b>Male</b>	12.0	13.4	12.7	10.5	8.8	8.6	9.2	9.0	7.2	8.9	6.1
<b>Female</b>	8.8	9.4	8.8	7.4	6.6	5.9	6.5	6.4	5.1	6.7	4.8
<b>INTENTIONAL SELF-HARM (SUICIDE)</b>											
<b>Total</b>	14.6	14.9	15.4	15.4	15.4	14.8	16.1	16.7	17.2	16.2	17.0
<b>Male</b>	24.0	24.1	24.9	24.7	24.4	23.0	24.6	27.1	27.4	25.9	26.6
<b>Female</b>	5.8	6.3	6.5	6.6	6.7	7.0	8.1	6.7	7.5	7.0	7.7
<b>ASSAULT (HOMICIDE)</b>											
<b>Total</b>	8.3	8.2	8.2	8.5	7.7	7.1	5.5	6.5	6.1	5.9	5.9
<b>Male</b>	12.8	13.3	13.5	13.5	11.8	11.2	8.0	10.5	9.6	8.6	9.2
<b>Female</b>	3.6	2.9	2.6	3.1	3.2	2.7	2.9	2.4	2.6	3.1	2.5
<b>SEPTICEMIA</b>											
<b>Total</b>	8.4	8.0	8.4	8.6	8.1	7.9	7.7	7.4	4.7	4.5	4.8
<b>Male</b>	9.4	9.4	9.7	9.4	8.4	9.4	8.2	10.8	5.4	6.1	5.6
<b>Female</b>	7.6	7.0	7.5	8.0	7.9	6.7	7.3	5.1	4.0	4.8	4.3

Notes: <sup>a</sup> 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.













**TABLE 2B-3 (continued)**  
**AGE-ADJUSTED<sup>a</sup> MORTALITY RATES FOR SELECTED CAUSES OF DEATH BY RACE/ETHNICITY**  
**AND GENDER, ARIZONA, 1980, 1990-2013**

	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
<b>Intentional self-harm (suicide)</b>																		
<b>1980</b>	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
<b>1990</b>	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
<b>1991</b>	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
<b>1992</b>	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
<b>1993</b>	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
<b>1994</b>	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
<b>1995</b>	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
<b>1996</b>	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
<b>1997</b>	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
<b>1998</b>	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
<b>1999</b>	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
<b>2000</b>	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
<b>2001</b>	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
<b>2002</b>	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
<b>2003</b>	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
<b>2004</b>	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
<b>2005</b>	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
<b>2006</b>	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
<b>2007</b>	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
<b>2008</b>	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
<b>2009</b>	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
<b>2010</b>	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
<b>2011</b>	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
<b>2012</b>	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
<b>2013</b>	17.0	26.6	7.7	20.8	32.4	9.6	8.4	12.8	4.2	6.7	9.7	3.1	21.9	36.1	8.1	7.0	14.5	1.1

Notes: <sup>a</sup> Adjusted to the 2000 standard U.S. population; <sup>b</sup> 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/>

**TABLE 2B-4  
NUMBER OF DEATHS AND AGE-ADJUSTED MORTALITY RATES\* FOR SELECTED CAUSES OF DEATH BY RACE/ETHNICITY AND  
GENDER, ARIZONA, 2013**

	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		
<b>Total, all causes</b>	49,929	26,222	23,703	39,543	20,550	18,989	6,300	3,412	2,888	1,593	897	696	1,955	1,103	852	538	260	278	1,955	1,103	852	538	260	278		
<b>Major cardiovascular diseases</b>	13,746	7,360	6,386	11,376	6,050	5,326	1,438	788	650	457	274	183	309	168	141	166	80	86	309	168	141	166	80	86		
<b>Diseases of heart</b>	10,497	5,910	4,587	8,797	4,932	3,865	1,039	590	449	329	206	123	231	131	100	101	51	50	231	131	100	101	51	50		
<b>Coronary heart disease</b>	8,102	4,721	3,381	6,773	3,922	2,851	814	488	326	264	168	96	173	102	71	78	41	37	173	102	71	78	41	37		
<b>Malignant neoplasms</b>	11,193	5,950	5,243	9,123	4,921	4,202	1,349	677	672	336	169	167	243	111	132	142	72	70	243	111	132	142	72	70		
<b>Malignant neoplasm of trachea, bronchus and lung</b>	2,763	1,485	1,278	2,442	1,304	1,138	201	113	88	71	43	28	18	8	10	31	17	14	18	8	10	31	17	14		
<b>Malignant neoplasm of colon, rectum, and anus</b>	997	510	487	787	407	380	132	71	61	39	17	22	23	8	15	16	7	9	23	8	15	16	7	9		
<b>Malignant neoplasm of breast</b>	836	9	827	661	9	652	123	0	123	23	0	23	17	0	17	12	0	12	17	0	17	12	0	12		
<b>Malignant neoplasm of prostate</b>	570	570	0	473	473	0	58	58	0	18	18	0	13	13	0	8	8	0	13	13	0	8	8	0		
<b>Malignant melanoma of skin</b>	220†	140†	90†	214	134	80	10†	*	*	0†	*	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>Malignant neoplasm of cervix uteri</b>	90†	0	90†	50	0	50	31	0	31	0†	0	*	0†	0	*	0†	0	*	0†	0	*	0†	0	*		
<b>Chronic lower respiratory diseases</b>	3,295	1,564	1,731	2,989	1,407	1,582	182	93	89	75	43	32	27	9	18	22	12	10	27	9	18	22	12	10		
<b>Accident (unintentional injury)</b>	3,137	1,931	1,206	2,189	1,288	901	549	368	181	94	68	26	284	197	87	21	10	11	284	197	87	21	10	11		
<b>Accidental poisoning</b>	970†	610†	354	674	404	270	155	102	53	29	19	10	106	85	21	0†	*	0	106	85	21	0†	*	0		
<b>Falls</b>	870†	400†	470†	735	335	400	97	53	44	10†	6	*	20	9	11	10†	*	6	20	9	11	10†	*	6		
<b>Motor vehicle accidents</b>	770†	541	230†	425	309	116	204	140	64	33	27	6	95	59	36	10†	6	*	95	59	36	10†	6	*		
<b>Accidental drowning and submersion</b>	70†	50†	20†	41	26	15	20†	18	*	0†	*	*	0†	*	0	0†	*	*	0†	*	0	0†	*	*		
<b>Alzheimer's disease</b>	2,384	792	1,592	2,042	677	1,365	252	82	170	47	15	32	25	11	14	18	7	11	25	11	14	18	7	11		
<b>Cerebrovascular diseases</b>	2,047	863	1,184	1,621	665	956	256	120	136	87	43	44	43	18	25	40	17	23	43	18	25	40	17	23		
<b>Diabetes</b>	1,744	985	759	1,074	637	437	397	207	190	107	56	51	142	76	66	24	9	15	142	76	66	24	9	15		
<b>Intentional self-harm (suicide)</b>	1,120†	860	260†	863	667	196	151	110	41	20†	15	*	69	55	14	10†	13	*	69	55	14	10†	13	*		
<b>Chronic liver disease and cirrhosis</b>	1,040†	640†	400†	644	390	254	208	143	65	20†	11	*	166	89	77	10†	*	*	166	89	77	10†	*	*		
<b>Influenza and pneumonia</b>	720†	360†	370†	561	280	281	94	44	50	15	6	9	46	24	22	10†	*	*	46	24	22	10†	*	*		
<b>Essential (primary) hypertension and hypertensive renal disease</b>	711	331	380	533	235	298	98	52	46	34	20	14	25	14	11	21	10	11	25	14	11	21	10	11		
<b>Parkinson's disease</b>	580†	370†	210†	490	314	176	62	37	25	10†	6	*	10†	8	*	0†	*	*	10†	8	*	0†	*	*		
<b>Nephritis, nephrotic syndrome and nephrosis</b>	390†	190†	200†	294	147	147	43	19	24	17	10	7	31	15	16	10†	*	*	31	15	16	10†	*	*		
<b>Assault (homicide)</b>	380†	300†	80†	156	119	37	124	98	26	40†	39	*	55	45	10	0†	*	*	55	45	10	0†	*	*		
<b>Septicemia</b>	350†	180†	170†	258	127	131	57	33	24	10†	*	*	24	15	9	10†	*	*	24	15	9	10†	*	*		
<b>Human immunodeficiency virus (HIV) disease</b>	90†	80†	10†	50†	44	*	20†	19	*	20†	12	*	10†	*	*	0	0	0	10†	*	*	0	0	0		
<b>Injury by firearms</b>	930†	783	150†	660	554	106	172	141	31	49	43	6	40†	37	*	10†	8	*	40†	37	*	10†	8	*		
<b>Drug-induced deaths</b>	1,100†	660†	444	835	484	351	173	112	61	36	22	14	54	36	18	0†	*	0	54	36	18	0†	*	0		
<b>Alcohol-induced deaths</b>	1,100†	750†	340†	674	446	228	175	134	41	20†	12	*	229	160	69	0†	*	*	229	160	69	0†	*	*		

**TABLE 2B-4 (continued)**  
**NUMBER OF DEATHS AND AGE-ADJUSTED MORTALITY RATES<sup>a</sup> FOR SELECTED CAUSES OF DEATH BY RACE/ETHNICITY AND GENDER, ARIZONA, 2013**

	AGE-ADJUSTED MORTALITY RATES <sup>a</sup>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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<b>Total, all causes</b>	687.8	805.8	583.8	693.7	811.8	588.8	615.6	708.5	534.9	918.5	1061.5	782.1	887.0	1075.3	728.5	413.4	485.9	364.6	187.7	229.0	152.4	190.9	233.3	154.0	161.9	194.2	135.3	280.2	354.0	218.5	164.2	199.8	137.4	133.6	154.8	119.2	143.0	183.6	109.2	147.6	190.0	111.5	116.1	144.4	93.0	200.5	269.1	144.8	122.9	159.8	97.1	82.5	98.8	70.9	110.0	145.6	80.2	113.3	150.0	81.9	91.6	119.6	68.8	164.0	222.8	116.3	92.7	125.0	69.7	63.4	78.1	53.1	149.6	175.0	129.9	154.3	180.9	133.3	129.8	147.2	117.0	190.4	209.3	176.5	118.2	126.0	114.5	100.1	131.4	81.4	36.4	42.9	31.0	40.2	46.7	34.8	22.1	27.6	17.3	40.5	57.3	29.4	10.0	11.6	9.5	22.9	31.6	17.6	13.6	15.3	12.3	13.7	15.5	12.2	12.5	14.3	10.9	21.7	19.6	23.0	11.3	7.3	14.0	12.1	13.0	11.7	11.3	0.2	20.7	11.5	0.3	21.3	10.7	0.0	19.7	12.6	0.0	23.3	7.2	0.0	13.1	6.7	0.0	11.4	7.7	18.2	0.0	7.8	18.0	0.0	7.0	17.0	0.0	11.4	26.7	0.0	7.9	19.9	0.0	6.9	18.5	0.0	3.0	4.1	2.2	3.8	5.1	2.9	1.0	**	**	**	**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	2.4	1.1	0.0	2.1	2.3	0.0	4.4	**	**	**	0.0	**	**	**	0.0	**	**	44.5	48.1	41.8	49.3	52.5	47.0	20.9	24.6	**	**	**	**	**	**	0.0	**	**	**	46.3	60.1	32.8	47.9	61.2	34.7	38.5	51.4	26.3	43.3	68.7	23.5	104.5	150.5	62.9	13.4	12.7	13.2	15.0	19.1	10.8	17.7	21.7	13.5	8.8	11.2	6.3	11.1	13.9	8.3	37.7	63.0	14.3	0.4	0.8	0.0	0.0	12.1	13.2	11.0	12.4	13.4	11.4	12.0	14.3	9.9	8.8	14.3	5.9	10.3	9.3	11.0	**	**	0.0	11.4	16.3	6.6	10.2	15.1	5.3	11.4	15.5	7.3	12.0	18.1	**	31.7	40.3	23.5	5.8	**	3.8	1.1	1.6	0.6	1.1	1.4	0.8	1.0	1.8	0.3	0.7	0.7	0.8	1.3	2.7	0.0	1.5	1.8	**	33.2	27.2	37.2	33.4	27.3	37.7	35.6	28.9	39.6	41.3	30.0	45.8	16.0	16.4	15.4	18.2	17.4	18.3	28.2	27.2	28.5	27.1	25.7	27.7	29.7	30.8	28.5	54.4	51.4	54.6	23.4	18.6	25.3	30.7	30.0	31.2	23.6	29.1	18.8	18.6	24.0	14.0	40.7	45.8	36.3	60.2	68.0	55.8	65.7	79.7	55.0	17.9	18.5	17.9	17.0	26.6	7.7	20.8	32.4	9.6	8.4	12.8	4.2	6.7	9.7	**	21.9	36.1	8.1	7.0	14.5	**	14.5	18.2	11.1	12.6	15.5	10.0	16.7	23.0	10.8	6.8	9.9	**	62.0	70.1	55.0	3.9	**	**	10.0	11.6	8.8	9.6	11.4	8.1	10.9	11.4	10.5	11.9	12.7	11.5	24.7	27.4	21.9	8.0	**	**	9.7	10.4	9.1	8.9	9.2	8.7	11.4	13.2	9.8	21.3	26.9	16.9	12.7	14.8	10.8	17.0	21.2	14.5	8.0	12.0	5.1	8.1	12.1	5.1	7.9	12.4	5.2	6.7	8.5	**	7.5	12.1	**	**	**	**	5.9	9.2	2.5	4.0	6.2	1.7	5.8	9.0	2.4	15.4	25.4	3.6	17.7	29.6	6.2	1.9	**	**	5.3	6.1	4.8	4.9	5.7	4.4	4.5	4.3	4.7	12.2	20.6	**	15.8	16.1	15.1	**	**	**	4.8	5.6	4.3	4.5	4.9	4.2	6.1	8.8	4.4	7.4	**	**	11.4	15.3	8.3	3.8	**	**

Notes: \* Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; <sup>a</sup> 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<sup>a</sup> FOR SELECTED CAUSES OF DEATH BY URBAN/RURAL AREA AND GENDER,  
ARIZONA, 2013**

	Arizona			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
<b>Total, all causes</b>	687.8	805.8	583.8	665.6	779.2	567.6	782.7	915.6	656.3
<b>Major cardiovascular diseases</b>	187.7	229.0	152.4	182.5	223.0	148.7	207.3	250.4	167.3
<b>Diseases of heart</b>	143.0	183.6	109.2	137.1	176.8	104.7	166.4	208.3	128.3
Coronary heart disease	110.0	145.6	80.2	107.4	142.1	78.8	118.9	157.3	84.5
<b>Malignant neoplasms</b>	149.6	175.0	129.9	146.8	172.2	127.4	159.5	182.6	140.2
<b>Malignant neoplasm of trachea, bronchus and lung</b>	36.4	42.9	31.0	35.5	42.1	30.0	39.4	45.2	34.6
<b>Malignant neoplasm of colon, rectum, and anus</b>	13.6	15.3	12.3	13.1	15.0	11.7	15.6	16.1	14.8
<b>Malignant neoplasm of breast</b>	11.3	0.2	20.7	11.5	0.3	21.0	10.1	0.0	19.3
<b>Malignant neoplasm of prostate</b>	7.7	18.2	0.0	7.0	16.6	0.0	10.7	23.9	0.0
<b>Malignant melanoma of skin</b>	3.0	4.1	2.2	2.8	3.9	2.1	3.8	4.8	2.9
<b>Malignant neoplasm of cervix uteri</b>	1.2	0.0	2.4	1.1	0.0	2.2	1.8	0.0	3.6
<b>Chronic lower respiratory diseases</b>	44.5	48.1	41.8	42.7	45.5	40.8	51.4	57.6	46.5
<b>Accident (unintentional injury)</b>	46.3	60.1	32.8	41.9	54.6	29.8	66.6	86.4	46.3
<b>Accidental poisoning</b>	15.0	19.1	10.8	13.6	17.3	9.9	22.0	28.5	15.2
<b>Falls</b>	12.1	13.2	11.0	12.2	13.6	10.9	11.3	11.3	11.1
<b>Motor vehicle accidents</b>	11.4	16.3	6.6	9.8	14.3	5.5	18.9	25.6	12.0
<b>Accidental drowning and submersion</b>	1.1	1.6	0.6	1.1	1.6	0.7	1.2	1.9	0.4
<b>Alzheimer's disease</b>	33.2	27.2	37.2	36.6	30.4	40.7	18.1	14.1	21.0
<b>Cerebrovascular diseases</b>	28.2	27.2	28.5	28.1	27.0	28.5	28.3	27.4	28.2
<b>Diabetes</b>	23.6	29.1	18.8	23.5	28.9	19.1	24.2	30.4	18.3
<b>Intentional self-harm (suicide)</b>	17.0	26.6	7.7	15.3	24.2	6.8	25.7	38.6	13.1
<b>Chronic liver disease and cirrhosis</b>	14.5	18.2	11.1	13.0	16.4	10.0	22.4	27.4	17.6
<b>Influenza and pneumonia</b>	10.0	11.6	8.8	9.0	10.6	7.8	14.7	16.4	13.2
<b>Essential (primary) hypertension and hypertensive renal disease</b>	9.7	10.4	9.1	10.4	11.1	9.8	6.9	7.4	6.4
<b>Parkinson's disease</b>	8.0	12.0	5.1	8.0	11.9	5.3	7.9	12.1	4.5
<b>Assault (homicide)</b>	5.9	9.2	2.5	5.7	8.8	2.4	7.4	11.4	3.2
<b>Nephritis, nephrotic syndrome and nephrosis</b>	5.3	6.1	4.8	4.1	4.4	3.9	10.8	13.3	8.9
<b>Septicemia</b>	4.8	5.6	4.3	4.5	5.2	4.0	6.5	7.3	5.8
<b>(HIV) disease</b>	1.4	2.5	0.3	1.3	2.4	0.3	1.5	2.7	0.4
<b>Injury by firearms</b>	14.1	24.1	4.4	13.5	23.2	4.2	16.6	27.8	5.5
<b>Drug-induced deaths</b>	16.9	20.3	13.5	16.2	20.0	12.5	19.5	20.7	18.3
<b>Alcohol-induced deaths</b>	15.7	21.9	9.9	13.7	19.1	8.9	27.0	38.1	16.2

Notes: <sup>a</sup> 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

**TABLE 2B-6  
DEATHS AND DEATH RATES BY GENDER FOR SELECTED CAUSES,  
ARIZONA RESIDENTS, 2013**

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
<b>Total, all causes<sup>a</sup></b>	49,929	26,222	23,703	758.7	800.7	717.0
Salmonella infections	0	0	0	0.0	0.0	0.0
Shigellosis and amebiasis	0†	0	*	**	0.0	**
Certain other intestinal infections	246	97	149	3.7	3.0	4.5
Enterocolitis due to Clostridium difficile	189	71	118	2.9	2.2	3.6
Tuberculosis	15	9	6	0.2	0.3	0.2
Respiratory tuberculosis	10†	6	*	0.2	0.2	**
Other tuberculosis	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	354	181	173	5.4	5.5	5.2
Syphilis	0†	*	*	**	**	**
Acute poliomyelitis	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	277	185	92	4.2	5.6	2.8
Human immunodeficiency virus (HIV) disease	90	79	11	1.4	2.4	0.3
Malaria	0†	*	0	**	**	0.0
Other and unspecified infectious and parasitic diseases	166	93	73	2.5	2.8	2.2
Malignant neoplasms	11,193	5,950	5,243	170.1	181.7	158.6
Malignant neoplasm of lip, oral cavity and pharynx	150	101	49	2.3	3.1	1.5
Malignant neoplasm of esophagus	320	257	63	4.9	7.8	1.9
Malignant neoplasm of stomach	202	122	80	3.1	3.7	2.4
Malignant neoplasm of colon, rectum, and anus	997	510	487	15.1	15.6	14.7
Malignant neoplasm of liver and intrahepatic bile ducts	528	352	176	8.0	10.7	5.3
Malignant neoplasm of pancreas	755	392	363	11.5	12.0	11.0
Malignant neoplasm of larynx	52	38	14	0.8	1.2	0.4
Malignant neoplasm of trachea, bronchus and lung	2,763	1,485	1,278	42.0	45.3	38.7
Malignant melanoma of skin	222	137	85	3.4	4.2	2.6
Malignant neoplasm of breast	836	9	827	12.7	0.3	25.0
Malignant neoplasm of cervix uteri	86	0	86	1.3	0.0	2.6
Malignant neoplasm of corpus uteri and uterus, part unspecified	140	0	140	2.1	0.0	4.2
Malignant neoplasm of ovary	285	0	285	4.3	0.0	8.6
Malignant neoplasm of prostate	570	570	0	8.7	17.4	0.0
Malignant neoplasm of kidney and renal pelvis	274	179	95	4.2	5.5	2.9
Malignant neoplasm of bladder	293	221	72	4.5	6.7	2.2
Malignant neoplasm of meninges, brain and other parts of CNS	325	172	153	4.9	5.3	4.6
Malignant neoplasm of lymphoid, hematopoietic and related tissue	1,190	684	506	18.1	20.9	15.3
Hodgkin's disease	26	16	10	0.4	0.5	0.3
Non-Hodgkin's lymphoma	416	251	165	6.3	7.7	5.0
Leukemia	500	287	213	7.6	8.8	6.4
Multiple myeloma and immunoproliferative neoplasms	247	129	118	3.8	3.9	3.6
Other and unspecified malignant neoplasms of lymphoid tissue	0†	*	0	**	**	0.0
All other and unspecified malignant neoplasm	1,205	722	483	18.3	22.0	14.6
In situ neoplasms	300	182	118	4.6	5.6	3.6
Anemias	49	22	27	0.7	0.7	0.8
Diabetes	1,744	985	759	26.5	30.1	23.0

**TABLE 2B-6 (continued)**  
**DEATHS AND DEATH RATES BY GENDER FOR SELECTED CAUSES,**  
**ARIZONA RESIDENTS, 2013**

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	46	18	28	0.7	0.5	0.8
Malnutrition	42	16	26	0.6	0.5	0.8
Other nutritional deficiencies	0†	*	*	**	**	**
Obesity	160	95	65	2.4	2.9	2.0
Meningitis	12	6	6	0.2	0.2	0.2
Parkinson's disease	578	366	212	8.8	11.2	6.4
Alzheimer's disease	2,384	792	1,592	36.2	24.2	48.2
Major cardiovascular diseases	13,746	7,360	6,386	208.9	224.7	193.2
Diseases of heart	10,497	5,910	4,587	159.5	180.5	138.7
Acute rheumatic fever and chronic rheumatic heart disease	64	17	47	1.0	0.5	1.4
Hypertensive heart disease	943	462	481	14.3	14.1	14.5
Hypertensive heart and renal disease	49	27	22	0.7	0.8	0.7
Ischemic heart disease	7,159	4,259	2,900	108.8	130.0	87.7
Acute myocardial infarction	1,592	933	659	24.2	28.5	19.9
Other acute ischemic heart disease	32	20	12	0.5	0.6	0.4
Other forms of chronic ischemic heart disease	5,535	3,306	2,229	84.1	100.9	67.4
Atherosclerotic cardiovascular disease	1,683	1,068	615	25.6	32.6	18.6
All other forms of chronic ischemic heart disease	3,852	2,238	1,614	58.5	68.3	48.8
Other heart diseases	2,282	1,145	1,137	34.7	35.0	34.4
Acute and subacute endocarditis	26	17	9	0.4	0.5	0.3
Diseases of pericardium and acute myocarditis	10†	*	7	0.2	**	0.2
Heart failure	467	225	242	7.1	6.9	7.3
All other forms of heart disease	1,777	898	879	27.0	27.4	26.6
Essential (primary) hypertension and hypertensive renal disease	711	331	380	10.8	10.1	11.5
Cerebrovascular diseases	2,047	863	1,184	31.1	26.4	35.8
Atherosclerosis	150	68	82	2.3	2.1	2.5
Other diseases of circulatory system	340	187	153	5.2	5.7	4.6
Aortic aneurysm and dissection	181	111	70	2.8	3.4	2.1
Other disease of arteries, arterioles and capillaries	159	76	83	2.4	2.3	2.5
Other disorders of circulatory system	97	57	40	1.5	1.7	1.2
Influenza and pneumonia	724	357	367	11.0	10.9	11.1
Influenza	42	22	20	0.6	0.7	0.6
Pneumonia	682	335	347	10.4	10.2	10.5
Other acute lower respiratory infections	10†	*	*	0.1	**	**
Acute bronchiolitis	10†	*	*	0.1	**	**
Unspecified acute lower respiratory infection	0†	0	*	**	0.0	**
Chronic lower respiratory diseases	3,295	1,564	1,731	50.1	47.8	52.4
Bronchitis, chronic and unspecified	10†	*	*	0.1	**	**
Emphysema	160	89	71	2.4	2.7	2.1
Asthma	93	37	56	1.4	1.1	1.7
Other chronic lower respiratory diseases	3,035	1,435	1,600	46.1	43.8	48.4
Pneumoconioses and chemical effects	10†	12	*	0.2	0.4	**
Pneumonitis due to solids and liquids	270	158	112	4.1	4.8	3.4
Other disease of respiratory system	530	295	235	8.1	9.0	7.1
Peptic ulcer	80	52	28	1.2	1.6	0.8
Diseases of appendix	10†	*	*	**	**	**
Hernia	36	15	21	0.5	0.5	0.6

**TABLE 2B-6 (continued)**  
**DEATHS AND DEATH RATES BY GENDER FOR SELECTED CAUSES,**  
**ARIZONA RESIDENTS, 2013**

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	1,040	636	404	15.8	19.4	12.2
Alcoholic liver disease	742	482	260	11.3	14.7	7.9
Other chronic liver disease and cirrhosis	298	154	144	4.5	4.7	4.4
Cholelithiasis and other disorders of gallbladder	61	29	32	0.9	0.9	1.0
Nephritis, nephrotic syndrome and nephrosis	391	194	197	5.9	5.9	6.0
Acute and rapidly progressive nephritic and nephrotic syndrome	0†	0	*	**	0.0	**
Chronic glomerulonephritis	92	48	44	1.4	1.5	1.3
Renal failure	298	146	152	4.5	4.5	4.6
Others disorders of kidney	0	0	0	0.0	0.0	0.0
Infections of kidney	10†	*	6	0.1	**	0.2
Hyperplasia of prostate	9	9	0	0.1	0.3	0.0
Inflammatory diseases of female pelvic organs	0†	0	*	**	0.0	**
Pregnancy, childbirth and the puerperium	9	0	9	0.1	0.0	0.3
Pregnancy with abortive outcome	0†	0	*	**	0.0	**
Other complications of pregnancy, childbirth and the puerperium	8	0	8	0.1	0.0	0.2
Perinatal conditions	220	111	109	3.3	3.4	3.3
Congenital malformations	210	108	102	3.2	3.3	3.1
Symptoms, signs, abnormal findings	1,705	817	885	25.9	24.9	26.8
Total accidents	3,137	1,931	1,206	47.7	59.0	36.5
Transport accidents	834	593	241	12.7	18.1	7.3
Motor vehicle accidents	767	541	226	11.7	16.5	6.8
Other land transport accidents	33	24	9	0.5	0.7	0.3
Water, air, space	34	28	6	0.5	0.9	0.2
Nontransport accidents	2,303	1,338	965	35.0	40.9	29.2
Falls	870	404	466	13.2	12.3	14.1
Accidental discharge of firearms	9	9	0	0.1	0.3	0.0
Accidental drowning and submersion	72	51	21	1.1	1.6	0.6
Accidental exposure to smoke, fire and flames	68	47	21	1.0	1.4	0.6
Accidental poisoning	965	611	354	14.7	18.7	10.7
Other and unspecified nontransport accidents	319	216	103	4.8	6.6	3.1
Intentional self-harm (suicide)	1,116	860	256	17.0	26.3	7.7
By discharge of firearms	643	547	96	9.8	16.7	2.9
By other means	473	313	160	7.2	9.6	4.8
Assault (homicide)	383	303	80	5.8	9.3	2.4
By discharge of firearms	249	203	46	3.8	6.2	1.4
By other means	134	100	34	2.0	3.1	1.0
Legal intervention	20†	16	*	0.3	0.5	**
Events of undetermined intent	183	104	78	2.8	3.2	2.4
Discharge of firearms	20†	10	*	0.2	0.3	**
Other and unspecified events of undetermined intent	168	94	73	2.6	2.9	2.2
Operations of war	0	0	0	0.0	0.0	0.0
Complications of medical and surgical care	56	30	26	0.9	0.9	0.8
<b>INJURY BY FIREARMS</b>	<b>931</b>	<b>783</b>	<b>148</b>	<b>14.1</b>	<b>23.9</b>	<b>4.5</b>
<b>DRUG-INDUCED DEATHS</b>	<b>1,099</b>	<b>655</b>	<b>444</b>	<b>16.7</b>	<b>20.0</b>	<b>13.4</b>
<b>ALCOHOL-INDUCED DEATHS</b>	<b>1,098</b>	<b>754</b>	<b>344</b>	<b>16.7</b>	<b>23.0</b>	<b>10.4</b>

Note: \* Cell suppressed due to count less than 6; \*\* Cell suppressed due to rate based on non-zero count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; <sup>a</sup> Includes records with unknown gender; 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, 2003-2013**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>ALL FORMS OF HEART DISEASE</b>											
<b>TOTAL</b>	10,649	10,402	10,779	10,362	10,147	10,052	10,151	9,719	10,424	10,366	10,497
<b>Male</b>	5,649	5,543	5,789	5,538	5,455	5,535	5,558	5,351	5,748	5,731	5,910
<b>Female</b>	5,000	4,859	4,990	4,834	4,692	4,517	4,593	4,368	4,675	4,635	4,587
<b>Acute rheumatic fever and chronic rheumatic heart disease</b>											
<b>TOTAL</b>	63	46	55	57	38	57	51	42	69	51	64
<b>Male</b>	25	18	16	15	15	24	16	15	22	19	17
<b>Female</b>	38	28	39	42	23	33	35	27	47	32	47
<b>Hypertensive heart and renal disease</b>											
<b>TOTAL</b>	33	32	39	24	29	48	35	36	49	51	49
<b>Male</b>	20	9	18	13	15	22	18	16	22	28	27
<b>Female</b>	13	23	21	11	14	26	17	20	27	23	22
<b>Ischemic heart disease</b>											
<b>TOTAL</b>	8,037	7,836	8,060	7,628	7,163	7,326	7,372	7,043	7,498	7,294	7,159
<b>Male</b>	4,402	4,344	4,509	4,202	4,005	4,225	4,233	4,076	4,409	4,279	4,259
<b>Female</b>	3,635	3,492	3,551	3,426	3,158	3,101	3,139	2,967	3,089	3,015	2,900
<b>Hypertensive heart disease</b>											
<b>TOTAL</b>	440	463	487	506	646	636	698	644	739	761	943
<b>Male</b>	215	223	226	256	332	322	340	302	348	375	462
<b>Female</b>	225	240	261	250	314	314	358	342	391	386	481
<b>Other heart diseases</b>											
<b>TOTAL</b>	2,076	2,025	2,138	2,147	2,271	1,985	1,995	1,954	2,069	2,209	2,282
<b>Male</b>	987	949	1,020	1,052	1,088	942	951	942	947	1,030	1,145
<b>Female</b>	1,089	1,076	1,118	1,095	1,183	1,043	1,044	1,012	1,121	1,179	1,137



**TABLE 2B-8  
NUMBER OF DEATHS FOR SELECTED SUBCATEGORIES OF MALIGNANT NEOPLASMS BY GENDER AND YEAR,  
ARIZONA, 2003-2013**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
<b>ALL CANCERS</b>	<b>TOTAL*</b>	9,451	9,506	9,873	9,768	9,955	9,941	10,147	10,423	10,543	10,871	11,193
	Male	5,088	5,107	5,184	5,233	5,364	5,363	5,432	5,639	5,639	5,932	5,950
	Female	4,363	4,399	4,489	4,535	4,591	4,578	4,715	4,784	4,903	4,939	5,243
<b>ICD-9 140-149/ICD-10 C00-C14 - Malignant neoplasm of lip, oral cavity and pharynx (oropharyngeal cancer)</b>	<b>TOTAL</b>	114	127	140	115	133	151	125	134	132	144	150
	Male	85	87	95	80	91	101	89	98	105	106	101
	Female	29	40	45	35	42	50	36	36	27	38	49
<b>ICD-9 150/ICD-10 C15 - Malignant neoplasm of esophagus</b>	<b>TOTAL</b>	239	240	222	261	252	262	266	273	288	325	320
	Male	196	190	188	209	206	212	214	220	232	260	257
	Female	43	50	34	52	46	50	52	53	56	65	63
<b>ICD-9 151/ICD-10 C16 - Malignant neoplasm of stomach</b>	<b>TOTAL</b>	177	189	200	190	186	200	179	199	211	204	202
	Male	106	110	113	111	106	121	105	123	131	118	122
	Female	71	79	87	79	80	79	74	76	80	86	80
<b>ICD-9 153, 154/ICD-10 C18-C21 - Malignant neoplasm of colon, rectum, rectosigmoid junction and anus</b>	<b>TOTAL</b>	995	870	915	917	966	896	887	952	927	946	997
	Male	535	466	490	495	535	466	463	520	482	523	510
	Female	460	404	425	422	431	430	424	432	445	423	487
<b>ICD-9 157/ICD-10 C25 - Malignant neoplasm of pancreas</b>	<b>TOTAL</b>	474	551	579	575	629	636	622	707	708	813	755
	Male	240	306	305	301	362	340	304	373	355	450	392
	Female	234	245	274	274	267	296	318	334	353	363	363
<b>ICD-9 162/ICD-10 C33-C34 - Malignant neoplasm of trachea, bronchus and lung</b>	<b>TOTAL</b>	2,682	2,656	2,607	2,718	2,573	2,632	2,691	2,655	2,654	2,772	2,763
	Male	1,530	1,490	1,461	1,528	1,443	1,477	1,480	1,465	1,474	1,512	1,485
	Female	1,152	1,166	1,146	1,190	1,130	1,155	1,211	1,190	1,180	1,260	1,278
<b>ICD-9 172/ICD-10 C43 - Malignant melanoma of skin</b>	<b>TOTAL</b>	150	152	169	179	188	168	226	191	187	216	222
	Male	105	104	133	124	124	115	160	133	125	147	137
	Female	45	48	36	55	64	53	66	58	62	69	85
<b>ICD-9 174,175/ICD-10 C50 - Malignant neoplasm of breast</b>	<b>TOTAL</b>	670+	660+	677	745	724	734	716	732	747	740+	836
	Male	*	*	7	6	6	9	8	12	6	*	9
	Female	667	663	670	739	718	725	708	720	741	740	827

**TABLE 2B-8 (continued)  
NUMBER OF DEATHS FOR SELECTED SUBCATEGORIES OF MALIGNANT NEOPLASMS BY GENDER AND YEAR,  
ARIZONA, 2003-2013**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
<b>ICD-9 180/ICD-10 C53 - Malignant neoplasm of cervix uteri</b>	TOTAL	63	64	65	54	62	60	64	68	72	73	86
	Female	63	64	65	54	62	60	64	68	72	73	86
<b>ICD-9 179, 182/ ICD-10 C54-C55 - Malignant neoplasm of body of uterus and of uterus, part unspecified</b>	TOTAL	81	98	107	97	97	115	108	138	159	131	140
	Female	81	98	107	97	97	115	108	138	159	131	140
<b>ICD-9 185/ICD-10 C61 - Malignant neoplasm of prostate</b>	TOTAL	544	544	564	522	548	568	551	549	574	581	570
	Male	544	544	564	522	548	568	551	549	574	581	570
<b>ICD-9 188/ICD-10 C67 - Malignant neoplasm of bladder</b>	TOTAL*	229	238	244	238	270	258	264	247	355	316	293
	Male	164	157	180	175	206	192	206	183	245	244	221
	Female	65	81	64	63	64	66	58	64	109	72	72
<b>ICD-9 189/ICD-10 C64-C65 - Malignant neoplasm of kidney and other and unspecified urinary organs</b>	TOTAL	215	227	248	238	231	247	240	286	267	252	274
	Male	137	149	150	156	147	154	161	189	178	171	179
	Female	78	78	98	82	84	93	79	97	89	81	95
<b>ICD-9 191, 192/ICD-10 C70-C72 - Malignant neoplasm of brain</b>	TOTAL	214	224	276	248	248	268	275	268	275	337	325
	Male	126	115	153	133	141	152	151	153	145	196	172
	Female	88	109	123	115	107	116	124	115	130	141	153
<b>ICD-9 201/ICD-10 81 - Hodgkin's disease</b>	TOTAL	16	20+	17	20+	30	17	16	22	19	17	26
	Male	10	12	9	14	19	10	9	12	9	8	16
	Female	6	*	8	*	11	7	7	10	10	9	10
<b>ICD-9 200, 202/ICD-10 C82-C85 - Malignant lymphoma other than Hodgkin's disease</b>	TOTAL	386	370	381	373	362	434	388	379	392	372	416
	Male	204	208	218	213	200	230	212	219	212	214	251
	Female	182	162	163	160	162	204	176	160	180	158	165
<b>ICD-9 203/ICD-10 C88, C90 - Multiple myeloma and immunoproliferative neoplasms</b>	TOTAL	169	202	201	199	213	203	189	206	219	221	247
	Male	89	119	107	110	118	123	107	117	133	128	129
	Female	80	83	94	89	95	80	82	89	86	93	118
<b>Other malignant neoplasms</b>	TOTAL	2,031	2,073	2,061	2,080	2,243	2,092	2,340	2,417	1,120	1,133	1,205
	Male	1,012	1,049	1,011	1,056	1,112	1,093	1,212	1,273	623	640	722
	Female	1,019	1,024	1,050	1,024	1,131	999	1,128	1,144	497	493	483

Notes: \* Cell suppressed due to count less than 6; + Sum rounded to nearest tens unit due to addend less than 6; ° Includes records with unknown gender.

**TABLE 2B-9  
NUMBER OF DEATHS FROM UNINTENTIONAL INJURIES IN ACCIDENTS BY CATEGORY AND YEAR AMONG  
ARIZONA RESIDENTS, 2003-2013**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Total unintentional injury deaths</b>	2,466	2,641	3,006	3,156	3,014	2,951	2,887	2,834	2,959	2,804	3,137
<b>Railway accident</b>	10	11	10	17	12	9	8	12	6	7	7
<b>Motor vehicle accident</b>	1,005	1,060	1,137	1,220	1,035	891	771	711	787	747	767
<b>Water transport accident</b>	*	*	*	*	*	*	*	*	*	*	*
<b>Accident involving aircraft</b>	23	21	9	32	17	32	15	16	21	13	9
<b>Poisoning by drugs/medicaments</b>	447	517	549	624	669	689	802	798	781	731	853
<b>Poisoning by gases and vapors</b>	18	16	14	22	52	77	85	81	102	86	112
<b>Falls</b>	469	526	685	702	720	748	731	762	776	782	870
<b>Fire, flames, smoke</b>	42	30	56	43	31	50	31	25	33	43	68
<b>Excessive natural heat</b>	40	34	74	62	28	33	39	51	57	51	56
<b>Excessive natural cold</b>	15	17	28	17	20	25	24	17	22	9	28
<b>Contact with venomous snakes and lizards</b>	0	*	0	0	0	*	0	*	0	*	0
<b>Contact with venomous spiders</b>	0	*	*	0	*	0	0	0	0	0	*
<b>Contact with scorpions</b>	0	0	0	0	0	0	0	0	0	0	*
<b>Contact with hornets, wasps, bees</b>	0	0	0	0	0	0	0	0	0	0	*
<b>Bitten or struck by dog</b>	*	*	*	*	*	*	*	*	*	*	*
<b>Lightning</b>	*	0	*	*	*	0	*	*	*	*	*
<b>Storms and floods</b>	*	0	0	*	*	0	0	*	0	0	0
<b>Accidental drowning and submersion</b>	83	97	83	87	85	78	99	86	93	83	72
<b>Choked on food</b>	41	36	27	30	22	35	43	39	34	38	29
<b>Choked on other objects</b>	59	48	62	48	61	53	49	57	44	44	57
<b>Mechanical suffocation</b>	25	21	27	26	43	29	25	28	25	23	21
<b>Accidental discharge of firearms</b>	13	13	15	9	13	10	7	11	8	*	9
<b>Exposure to electric current</b>	*	9	15	*	11	6	7	*	6	0	6
<b>Overexertion</b>	*	0	0	0	0	0	0	*	0	0	0
<b>Adverse effects of drugs in therapeutic use</b>	6	*	*	*	*	7	8	10	*	6	10
<b>Misadventures to patients during medical/surgical care</b>	49	46	39	51	44	40	42	41	45	42	46

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).

**TABLE 2B-10  
NUMBER OF DEATHS FROM MOTOR VEHICLE-RELATED INJURIES BY PERSON INJURED, GENDER, AND YEAR,  
ARIZONA RESIDENTS, 2003-2013**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>TOTAL</b>											
<b>Total</b>	1,005	1,060	1,137	1,220	1,035	891	771	711	787	747	767
<b>Male</b>	689	693	801	831	710	632	554	501	562	541	541
<b>Female</b>	316	367	336	389	325	259	217	210	225	206	226
<b>Motorcyclist</b>											
<b>Total</b>	76	89	113	115	103	113	100†	69	113	130	111
<b>Male</b>	68	72	101	99	92	106	94	61	96	113	98
<b>Female</b>	8	17	12	16	11	7	*	8	17	17	13
<b>Pedestrian</b>											
<b>Total</b>	124	143	182	169	155	136	122	152	153	128	152
<b>Male</b>	88	99	141	123	103	101	90	115	111	88	105
<b>Female</b>	36	44	41	46	52	35	32	37	42	40	47
<b>Pedal cyclist</b>											
<b>Total</b>	10†	20†	40†	30†	20†	10†	20†	20†	20†	11	20†
<b>Male</b>	12	18	36	29	17	11	19	20	16	11	19
<b>Female</b>	*	*	*	*	*	*	*	*	*	0	*
<b>Other person</b>											
<b>Total</b>	791	807	803	906	759	630	528	469	502	478	481
<b>Male</b>	521	504	523	580	498	414	351	305	339	329	319
<b>Female</b>	270	33	280	326	261	216	177	164	163	149	162

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).

**TABLE 2B-11  
LEADING CAUSES OF DEATH BY PLACE OF DEATH AND DECEDENT STATUS, ARIZONA, 2013**

CAUSES OF DEATH	TOTAL	IN HOSPITAL				NOT IN HOSPITAL				
		In-patient	Out-patient <sup>a</sup>	Died on arrival	Subtotal	Nursing home <sup>b</sup>	Residence	Other <sup>c</sup>	Unspecified	Subtotal
<b>TOTAL, ALL CAUSES</b>	49,929	10,487	2,756	18	28,877	9,411	5,923	5,619	99	21,052
Diseases of heart	10,500†	2,211	910	*	6,770†	1,450	1,243	1,013	18	3,724
Coronary heart disease	8,100†	1,525	763	*	5,260†	1,072	974	785	13	2,844
Malignant neoplasms	11,193	1,633	131	0	6,361	3,361	802	662	7	4,832
Malignant neoplasm of trachea, bronchus and lung	2,763	393	39	0	1,586	825	185	167	0	1,177
Malignant neoplasm of colon, rectum, and anus	997	141	15	0	559	301	77	60	0	438
Malignant neoplasm of breast	836	96	6	0	477	231	59	69	0	359
Malignant neoplasm of prostate	570†	56	*	0	320†	145	70	40	0	255
Malignant neoplasm of cervix uteri	90†	12	*	0	50†	29	*	*	0	40†
Chronic lower respiratory diseases	3,300†	683	118	*	1,890†	757	405	243	*	1,406
Accident (unintentional injury)	3,140†	586	511	*	1,800†	371	165	790	9	1,335
Accidental poisoning	970†	78	156	*	740†	10	*	206	*	220†
Motor vehicle accidents	870†	235	52	0	370	313	121	62	*	500
Falls	770†	156	217	0	383	20	14	348	*	384
Accidental drowning and submersion	70†	*	22	0	40†	*	0	31	0	40†
Alzheimer's disease	2,380†	53	10	0	586	378	778	641	*	1,798
Cerebrovascular diseases	2,047	474	57	0	903	622	345	177	0	1,144
Diabetes	1,740†	409	162	*	1,210†	241	184	109	*	536
Intentional self-harm (suicide)	1,120†	69	83	0	780	7	*	325	*	340†
Chronic liver disease and cirrhosis	1,040†	370	28	*	640†	276	80	42	*	400
Influenza and pneumonia	724	390	29	0	500	106	74	44	0	224
Essential (primary) hypertension & hypertensive renal disease	711	141	43	0	400	113	125	73	0	311
Parkinson's disease	580†	28	*	0	210†	113	152	106	0	371
Nephritis, nephrotic syndrome and nephrosis	390†	130	21	0	247	55	66	22	*	144
Assault (homicide)	380†	60	100	0	237	*	*	140	0	150†
Septicemia	350†	259	14	0	292	43	15	*	*	62
<b>Human immunodeficiency virus (HIV) disease</b>	90†	39	*	0	60†	17	7	*	0	26
Injury by firearms	930†	72	121	0	619	7	*	302	*	310†
Drug-induced deaths	1,100†	127	158	0	867	16	10	205	*	232
Alcohol-induced deaths	1,100†	338	53	*	740†	223	47	90	*	361

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





## 2C.

### AGE-SPECIFIC MORTALITY

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

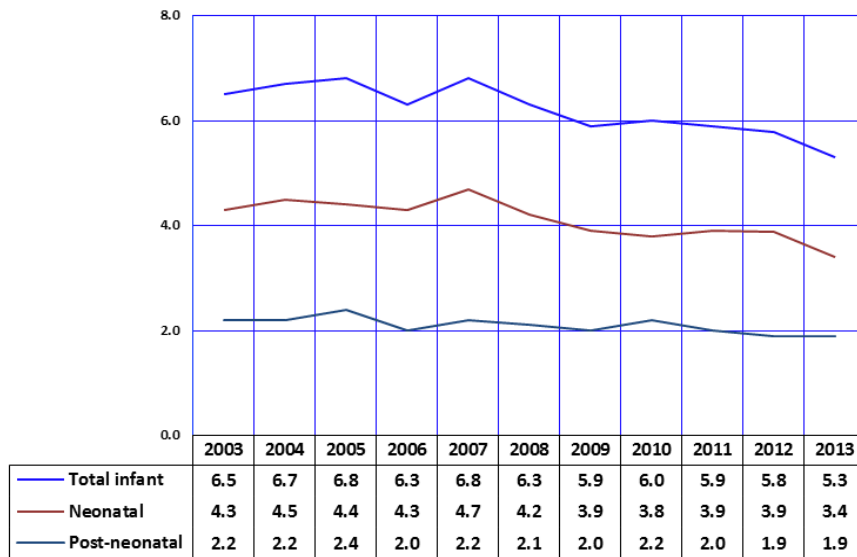
- **Infants** less than one year of age
- **Children** 1 to 14 years old
- **Adolescents** or persons 15 to 19 years old
- **Young adults** or persons 20 to 44 years old
- **Middle-aged adults** or persons 45 to 64 years old
- **Elderly** or persons 65 years or older.

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, 2003-2013**



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

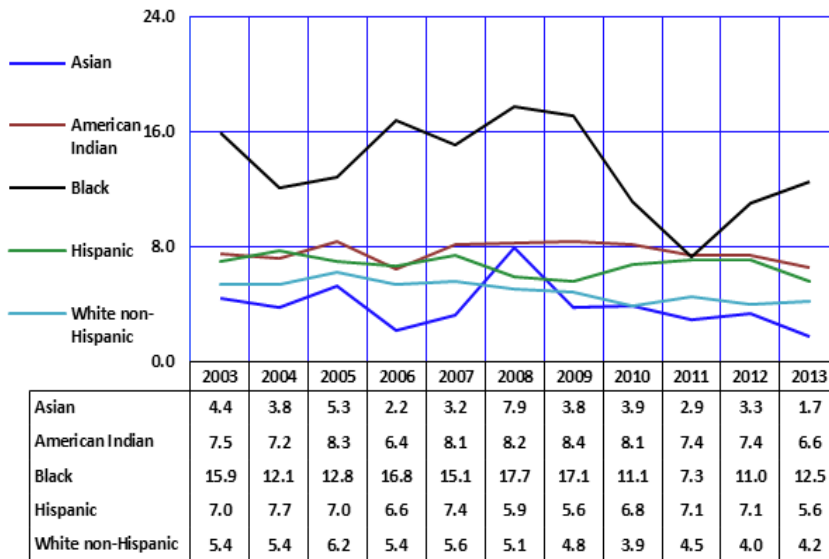
Infant mortality is defined as the number of deaths within the first year of life. The infant mortality rate (IMR) is computed as the number of infant deaths in a calendar year per 1,000 live births recorded for the same period.

In 2013, 447 Arizona infants died before reaching their first birthday, 254 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, 121 fewer infant deaths can be attributed to the absolute reduction in the number births by 17,724 from 2007 to 2013  $((17,724 \times 6.8)/1,000) = 121$ .

Based on the actual number of infant deaths and live births in 2013, the infant mortality rate of 5.3/1,000 was the lowest IMR recorded in the past decade (**Figure 2C-1**).

**Figure 2C-2**  
**Infant Mortality Rates<sup>a</sup> by Race/Ethnicity and Year, Arizona, 2003-2013**



Notes: <sup>a</sup> Number of infant deaths per 1,000 live births in specified group.

In 2013, 93.1 percent (416/447)\* 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 2013, 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).



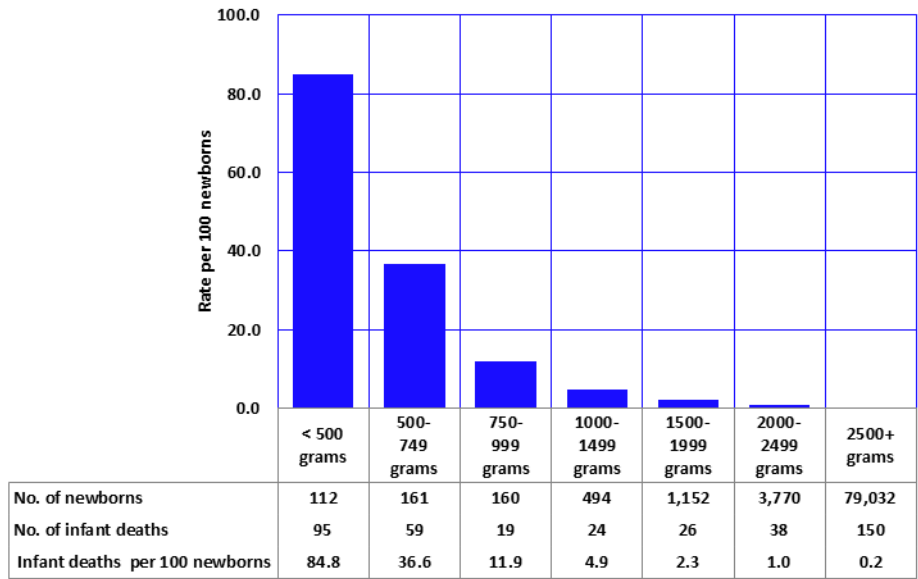
2C. AGE-SPECIFIC MORTALITY  
**Infant mortality**

Newborn weight at birth is one of the most important predictors of an infant's survival chances. In 2013, the mortality rate among babies weighing less than 500 grams at birth was 84.8 percent (**Figure 2C-3**).

The absolute number of low birthweight births actually declined for the sixth consecutive year from 7,285 in 2007 to 5,849 in 2013. In 2013 the proportion of babies whose weight at birth was less than 1,000 grams decreased from 8.1 percent of all low birthweight births in 2012 to 7.4 percent in 2013 (**Table 1B-3**).

Together, births of infants weighing less than 1,500 grams accounted for 1.1 percent of births, and 47.4 percent of all infant deaths with a matching birth record.

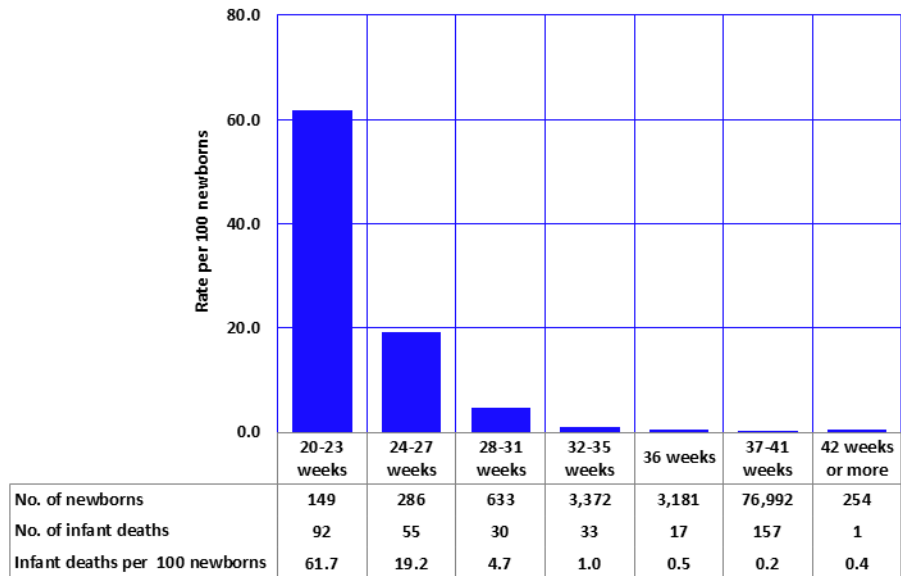
**Figure 2C-3**  
**Proportion of Infant Deaths by Birthweight, Arizona, 2013**



Notes: 82 cases in the complete 2013 birth file had missing birthweight estimates.

**Figure 2C-4**  
**Proportion of Infant Deaths by Gestational Age, Arizona, 2013**

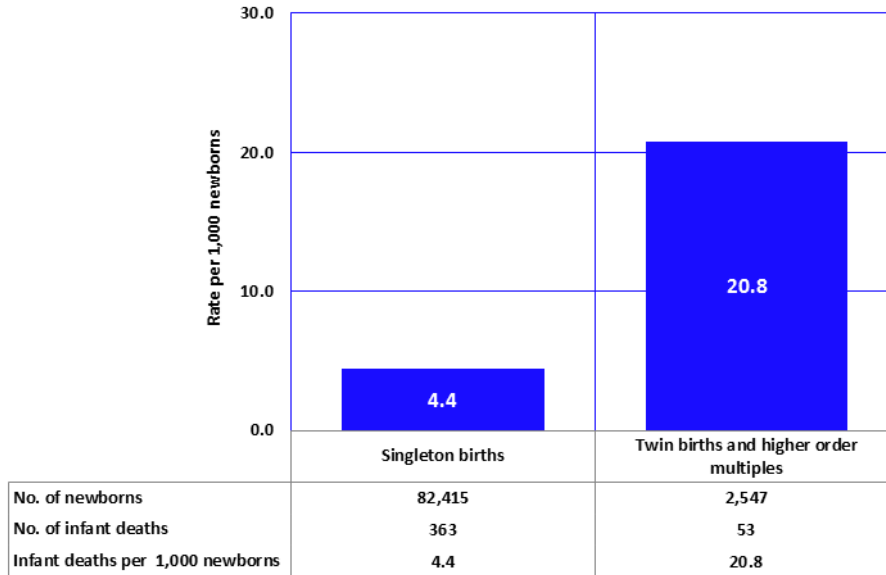
As with low birthweight, preterm and very preterm infants have a large impact on the total infant mortality rate because of their much higher risk of infant mortality. For example, births at 27 weeks or less of gestation accounted for only 0.5 percent of all births but 35.3 percent of infant deaths with a matching death record. Births at less than 24 weeks of gestation have a very high infant mortality rate of 61.7 percent (**Figure 2C-4**). Overall, preterm infants (those born at less than 37 weeks of gestation) accounted for 9.0 percent of all births (**Table 1B-26**) and 54.6 percent of all infant deaths (only those with matching death records).



Notes: 45 cases in the complete 2013 birth file had missing gestational age estimates, 31 of which were missing 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, 2013**



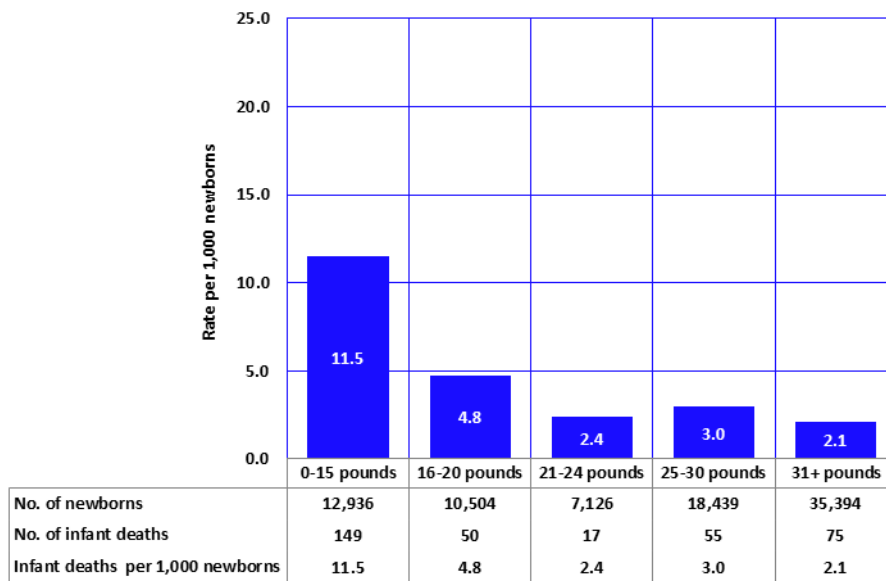
As already noted in Section 1B, infants born in multiple deliveries tend to be born at shorter gestations and smaller than those in singleton deliveries. In 2013, infants born in multiple deliveries were 12.7 times more likely (45.6 vs. 3.6 percent) to be born earlier than expected (at less than 37 completed 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 4.4 in 2013 (**Figure 2C-4.2**). The infant mortality rate for twin births or higher order multiples was 20.8.

Babies born in multiple deliveries accounted for 3.0 percent of births (**Table 1B-16**), but 12.7 percent of all infant deaths in Arizona in 2013 (only those with matching birth and death records).

Notes: 1 case in the complete 2013 birth file was missing plurality.

**Figure 2C-4.3**  
**Infant Mortality Rates by Maternal Weight Gain during Pregnancy, Arizona, 2013**



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 2013, 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 35,394 women giving birth in 2013 who gained 31 or more pounds, the risk of infant mortality was 2.1/1,000.

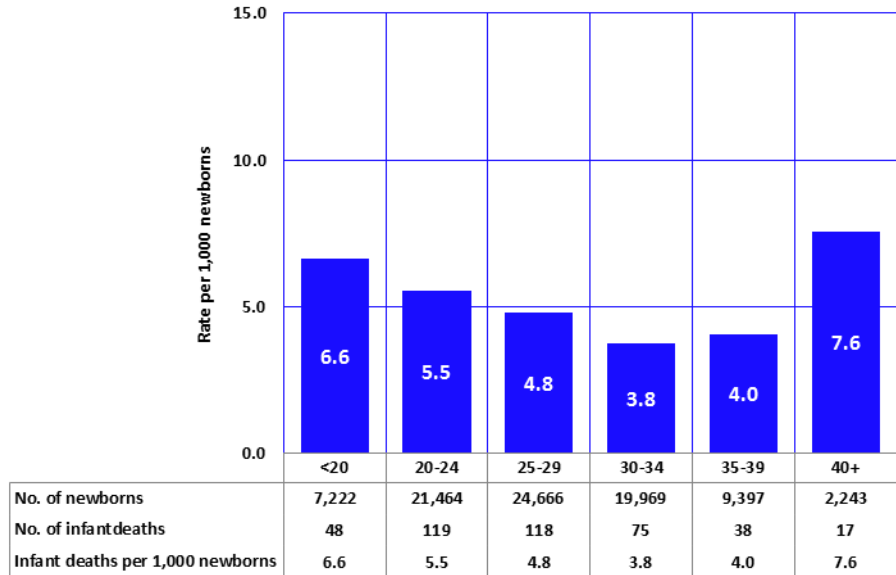
There is no coincidence that mother's weight gain has been shown to have a positive correlation with infant birthweight (**Figure 1B-22**).

Notes: 564 cases in the complete 2013 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, 2013**

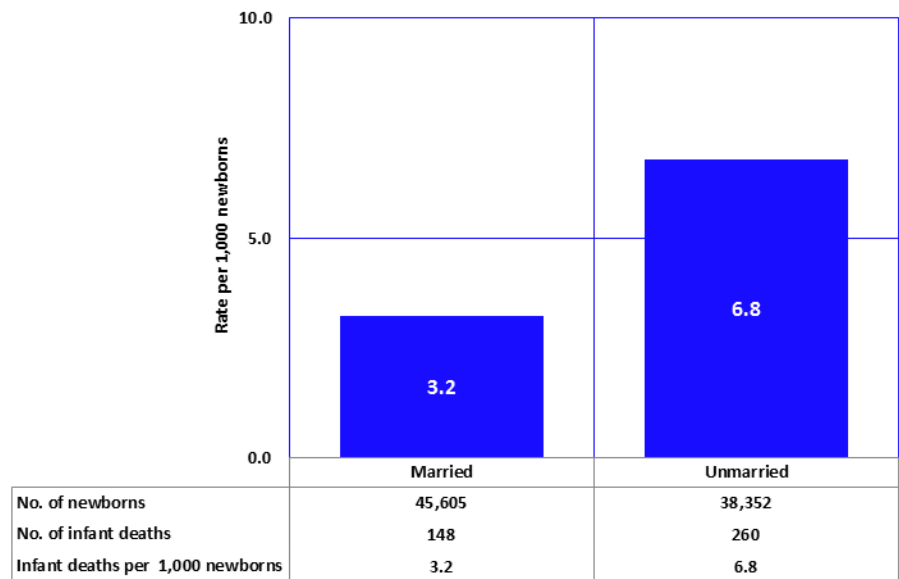
Infant mortality rates vary with maternal age. In 2013, infant mortality decreased with increasing maternal age through 34 years of age, but increased somewhat among mothers age 35-39. Infants born to mothers aged 40 and above had the highest infant mortality rate (**Figure 2C-4.4**).



Note: 2 cases in the complete 2013 birth file were missing mother's age.

Infants born to unmarried mothers accounted for the absolute majority of infant deaths in 2013 (260 vs. 148). The number of births to married mothers exceeded by 18.9 percent the number of births to unmarried mothers (45,605 vs. 38,352; **Table 1B-26**). In 2013, infants of unmarried mothers had an infant mortality rate of 6.8 deaths per 1,000 live births, 112.5 percent higher than the rate for infants of married mothers (3.2 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.

**Figure 2C-4.5**  
**Infant Mortality Rates by Mother's Marital Status, Arizona, 2013**



Note: 1,006 cases in the complete 2013 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, 2003-2013**

UNITED STATES	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Infant mortality <sup>a</sup>	6.9	6.7	6.9	6.7	6.7	6.7	6.6	6.1	6.0	NA	NA
Neonatal mortality <sup>a</sup>	4.6	4.5	4.6	4.5	4.4	4.4	4.1	4.0	4.0	NA	NA
Postneonatal mortality <sup>a</sup>	2.3	2.2	2.3	2.2	2.3	2.3	2.2	2.1	2.0	NA	NA
Percent postneonatal mortality <sup>b</sup>	33.3	32.8	33.3	32.8	34.3	34.3	33.3	34.4	NA	NA	NA
<b>ARIZONA, STATEWIDE TOTAL</b>											
Infant mortality <sup>a</sup>	6.5	6.7	6.8	6.3	6.8	6.3	5.9	6.0	5.9	5.8	5.3
Neonatal mortality <sup>a</sup>	4.3	4.5	4.4	4.3	4.7	4.2	3.9	3.8	3.9	3.9	3.4
Postneonatal mortality <sup>a</sup>	2.2	2.2	2.4	2.0	2.2	2.1	2.0	2.2	2.0	1.9	1.9
Percent postneonatal mortality <sup>b</sup>	33.8	32.8	35.3	31.5	32.4	33.3	34.0	36.7	34.3	32.9	35.3
<b>URBAN COUNTIES</b>											
Infant mortality <sup>a</sup>	6.4	6.7	6.5	6.3	6.6	6.3	5.9	5.7	5.8	5.7	5.2
Neonatal mortality <sup>a</sup>	4.4	4.7	4.3	4.3	4.6	4.3	4.0	3.7	3.9	3.9	3.3
Postneonatal mortality <sup>a</sup>	2.0	2.0	2.2	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.8
Percent postneonatal mortality <sup>b</sup>	31.5	29.9	33.8	31.3	30.3	31.8	33.0	35.1	32.6	32.9	35.1
<b>RURAL COUNTIES</b>											
Infant mortality <sup>a</sup>	7.1	6.9	8.6	6.3	8.0	6.2	5.5	7.4	6.6	5.9	5.8
Neonatal mortality <sup>a</sup>	3.8	3.8	5.0	4.3	4.8	3.5	3.9	4.5	3.7	3.9	3.7
Postneonatal mortality <sup>a</sup>	3.3	3.1	3.6	2.0	3.3	2.7	2.0	2.9	2.9	2.0	2.2
Percent postneonatal mortality <sup>b</sup>	46.2	44.9	41.9	32.6	41.3	43.6	38.7	37.7	43.8	33.8	37.3

Notes: <sup>a</sup> 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; <sup>b</sup> 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<sup>a</sup> OF INFANT DEATHS BY RACE/ETHNICITY AND GENDER, ARIZONA, 2003-2013  
NUMBER OF INFANT DEATHS**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>White non-Hispanic</b>											
<b>Total</b>	208	211	245	232	237	215	192	151	171	154	161
<b>Male</b>	124	129	140	119	135	114	109	88	98	81	93
<b>Female</b>	84	82	105	113	102	101	83	63	73	73	68
<b>Hispanic or Latino</b>											
<b>Total</b>	274	314	296	297	338	251	215	235	229	236	185
<b>Male</b>	148	168	161	173	186	142	115	144	122	138	97
<b>Female</b>	126	146	135	124	152	109	100	91	107	98	88
<b>Black or African American</b>											
<b>Total</b>	48	39	44	65	63	76	75	48	32	52	59
<b>Male</b>	26	26	30	36	42	42	41	20	16	22	30
<b>Female</b>	22	13	14	29	21	34	34	28	16	30	29
<b>American Indian or Alaska Native</b>											
<b>Total</b>	44	44	52	41	52	52	52	47	43	41	36
<b>Male</b>	22	24	25	28	29	27	28	28	15	22	19
<b>Female</b>	22	20	27	13	23	25	24	19	28	19	17
<b>Asian or Pacific Islander</b>											
<b>Total</b>	10 <sup>†</sup>	10 <sup>†</sup>	15	10 <sup>†</sup>	10 <sup>†</sup>	27	13	10 <sup>†</sup>	10 <sup>†</sup>	10 <sup>†</sup>	10 <sup>†</sup>
<b>Male</b>	6	*	7	*	7	15	6	9	8	8	*
<b>Female</b>	*	6	8	*	*	12	7	*	*	*	*
<b>All groups<sup>b</sup></b>											
<b>Total</b>	586	622	653	642	701	625	547	519	504	495	447
<b>Male</b>	326	353	364	361	399	343	299	302	267	271	242
<b>Female</b>	260	269	289	281	302	282	248	217	237	224	205

**INFANT MORTALITY RATES**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>White non-Hispanic</b>											
<b>Total</b>	5.4	5.4	6.2	5.4	5.6	5.1	4.8	3.9	4.5	4.0	4.2
<b>Male</b>	6.2	6.4	6.9	5.4	6.3	5.3	5.4	4.4	5.0	4.1	4.7
<b>Female</b>	4.4	4.3	5.5	5.4	4.9	4.9	4.3	3.3	3.9	3.9	3.7
<b>Hispanic or Latino</b>											
<b>Total</b>	7.0	7.7	7.0	6.6	7.4	5.9	5.6	6.8	7.1	7.1	5.6
<b>Male</b>	7.4	8.0	7.5	7.5	7.9	6.5	5.8	8.3	7.3	8.1	5.7
<b>Female</b>	6.6	7.3	6.6	5.7	6.8	5.2	5.3	5.4	6.8	6.1	5.5
<b>Black or African American</b>											
<b>Total</b>	15.9	12.1	12.8	16.8	15.1	17.7	17.1	11.1	7.3	11.0	12.5
<b>Male</b>	16.6	15.7	17.2	18.3	19.5	18.7	18.0	9.1	7.3	9.2	12.3
<b>Female</b>	15.1	8.3	8.2	15.3	10.5	16.6	16.2	13.1	7.4	12.8	12.7
<b>American Indian or Alaska Native</b>											
<b>Total</b>	7.5	7.2	8.3	6.4	8.1	8.2	8.4	8.1	7.4	7.4	6.6
<b>Male</b>	7.6	7.7	7.8	8.8	9.0	8.5	9.0	9.5	5.1	7.8	6.7
<b>Female</b>	7.4	6.7	8.7	4.1	7.2	7.9	7.8	6.6	9.7	6.9	6.4
<b>Asian or Pacific Islander</b>											
<b>Total</b>	4.4	3.8	5.3	2.2	3.2	7.9	3.8	3.9	2.9	3.3	1.7
<b>Male</b>	4.7	**	4.9	**	3.9	8.5	3.4	5.4	4.4	4.2	**
<b>Female</b>	**	4.8	5.8	**	**	7.2	4.3	**	**	**	**
<b>All groups<sup>b</sup></b>											
<b>Total</b>	6.5	6.7	6.8	6.3	6.8	6.3	5.9	6.0	5.9	5.8	5.3
<b>Male</b>	7.0	7.4	7.4	6.9	7.6	6.8	6.3	6.8	6.1	6.2	5.5
<b>Female</b>	5.9	5.9	6.2	5.6	6.0	5.8	5.5	5.1	5.7	5.4	5.0

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; <sup>a</sup> 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; <sup>b</sup> Includes records with other and unknown ethnic group.

**TABLE 2C-3  
NUMBER AND RATE<sup>a</sup> OF INFANT DEATHS BY RACE/ETHNICITY AND AGE GROUP, 2003-2013  
NUMBER OF INFANT DEATHS**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>White non-Hispanic</b>	208	211	245	232	237	215	192	151	171	154	161
<b>Neonatal</b>	143	155	163	161	161	138	129	96	120	100	97
<b>Postneonatal</b>	65	56	82	71	76	77	63	55	51	54	64
<b>Hispanic or Latino</b>	274	314	296	297	338	251	215	235	229	236	185
<b>Neonatal</b>	190	209	205	213	239	175	150	156	152	170	131
<b>Postneonatal</b>	84	105	91	84	99	76	65	79	77	66	54
<b>Black or African American</b>	48	39	44	65	63	76	75	48	32	52	59
<b>Neonatal</b>	31	25	19	37	43	51	46	32	20	34	38
<b>Postneonatal</b>	17	14	25	28	20	25	29	16	12	18	21
<b>American Indian or Alaska Native</b>	44	44	52	41	52	52	52	47	43	41	36
<b>Neonatal</b>	18	21	27	26	27	29	26	22	19	21	20
<b>Postneonatal</b>	26	23	25	15	25	23	26	25	24	20	16
<b>Asian or Pacific Islander</b>	10†	10†	15	10†	10†	30†	10†	10†	10	10†	10†
<b>Neonatal</b>	*	7	9	*	9	22	10	11	10	7	*
<b>Postneonatal</b>	6	*	6	*	*	*	*	*	0	*	*
<b>All groups<sup>b</sup></b>	586	622	653	642	701	625	547	519	504	495	447
<b>Neonatal</b>	388	421	424	440	479	419	361	330	331	332	289
<b>Postneonatal</b>	198	201	229	202	222	206	186	189	173	163	158

**INFANT MORTALITY RATES**

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>White non-Hispanic</b>	5.4	5.4	6.2	5.4	5.6	5.1	4.8	3.9	4.5	4.0	4.2
<b>Neonatal</b>	3.7	3.9	4.1	3.7	3.8	3.3	3.2	2.5	3.1	2.6	2.5
<b>Postneonatal</b>	1.7	1.4	2.1	1.7	1.8	1.8	1.6	1.4	1.3	1.4	1.7
<b>Hispanic or Latino</b>	7.0	7.7	7.0	6.6	7.4	5.9	5.6	6.8	7.1	7.1	5.6
<b>Neonatal</b>	4.9	5.1	4.9	4.7	5.2	4.1	3.9	4.5	4.7	5.1	4.0
<b>Postneonatal</b>	2.1	2.6	2.1	1.9	2.2	1.8	1.7	2.3	2.4	2.0	1.6
<b>Black or African American</b>	15.9	12.1	12.8	16.8	15.1	17.7	17.1	11.1	7.3	11.0	12.5
<b>Neonatal</b>	10.3	7.8	5.5	9.6	10.3	11.9	10.5	7.4	4.6	7.2	8.0
<b>Postneonatal</b>	5.6	4.4	7.3	7.2	4.8	5.8	6.6	3.7	2.7	3.8	4.4
<b>American Indian or Alaska Native</b>	7.5	7.2	8.3	6.4	8.1	8.2	8.4	8.1	7.4	7.4	6.6
<b>Neonatal</b>	3.1	3.4	4.3	4.0	4.2	4.6	4.2	3.8	3.3	3.8	3.7
<b>Postneonatal</b>	4.4	3.8	4.0	2.4	3.9	3.6	4.2	4.3	4.1	3.6	2.9
<b>Asian or Pacific Islander</b>	4.4	3.8	5.3	2.2	3.2	7.9	3.8	3.9	2.9	3.3	1.7
<b>Neonatal</b>	**	2.7	3.2	**	2.6	6.4	2.9	3.3	2.9	1.9	**
<b>Postneonatal</b>	2.4	**	2.1	**	**	**	**	**	0.0	**	**
<b>All groups<sup>b</sup></b>	6.5	6.7	6.8	6.3	6.8	6.3	5.9	6.0	5.9	5.8	5.3
<b>Neonatal</b>	4.3	4.5	4.4	4.3	4.7	4.2	3.9	3.8	3.9	3.9	3.4
<b>Postneonatal</b>	2.2	2.2	2.4	2.0	2.2	2.1	2.0	2.2	2.0	1.9	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; <sup>a</sup> 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; <sup>b</sup> 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, 2013**

	NUMBER OF DEATHS BY AGE			MORTALITY RATES <sup>a</sup>		
	Total	Neonatal	Postneonatal	Total	Neonatal	Postneonatal
<b>TOTAL, ALL GROUPS</b>	447	289	158	5.3	3.4	1.9
<b>Male</b>	242	151	91	5.5	3.5	2.1
<b>Female</b>	205	138	67	5.0	3.3	1.6
<b>White non-Hispanic</b>	161	97	64	4.2	2.5	1.7
<b>Male</b>	93	54	39	4.7	2.8	2.0
<b>Female</b>	68	43	25	3.7	2.3	1.3
<b>Hispanic or Latino</b>	185	131	54	5.6	4.0	1.6
<b>Male</b>	97	67	30	5.7	3.9	1.8
<b>Female</b>	88	64	24	5.5	4.0	1.5
<b>Black or African American</b>	59	38	21	12.5	8.0	4.4
<b>Male</b>	30	18	12	12.3	7.4	4.9
<b>Female</b>	29	20	9	12.7	8.8	3.9
<b>American Indian or Alaska Native</b>	36	20	16	6.6	3.7	2.9
<b>Male</b>	19	11	8	6.7	3.9	2.8
<b>Female</b>	17	9	8	6.4	3.4	3.0
<b>Asian or Pacific Islander</b>	10†	*	*	1.7	**	**
<b>Male</b>	0†	*	*	**	**	**
<b>Female</b>	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; <sup>a</sup> 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  
NUMBER OF DEATHS FOR SELECTED LEADING CAUSES OF INFANT MORTALITY<sup>a</sup> BY YEAR, ARIZONA, 2003-2013**

Causes of death	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Congenital malformations, deformations and chromosomal abnormalities</b>	126	152	149	142	159	145	122	114	107	118	101
<b>of respiratory system</b>	10	14	15	9	9	*	*	9	*	6	*
<b>of brain, spinal cord or nervous system</b>	23	20	19	28	20	24	15	21	13	19	13
<b>Short gestation and low birth weight</b>	85	84	79	93	95	91	101	64	60	62	56
<b>Maternal complications</b>	31	36	47	42	30	53	31	27	33	46	28
<b>Sudden infant death syndrome</b>	28	25	32	37	43	21	42	34	25	13	14
<b>Accidents (unintentional injuries)</b>	23	19	24	17	30	19	18	18	23	16	14
<b>Intrauterine hypoxia or birth asphyxia</b>	10	14	12	7	11	11	*	*	11	*	6
<b>Assault (homicide)</b>	11	*	8	11	12	*	*	6	6	*	*
<b>Respiratory distress syndrome</b>	8	8	12	12	8	11	8	7	*	*	*
<b>Influenza and pneumonia</b>	21	17	19	13	*	*	10	*	*	*	*
<b>Total, all causes</b>	586	622	653	642	701	625	547	519	504	495	447

Notes: \* Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; <sup>a</sup> 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).



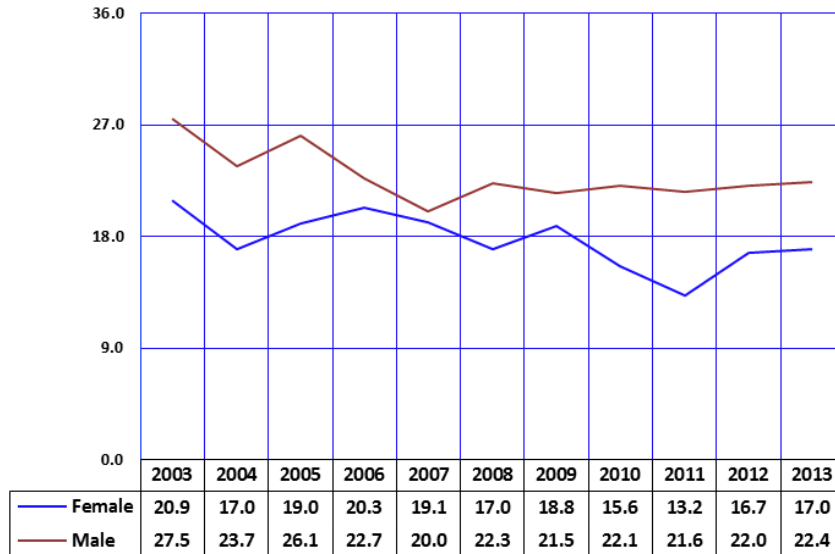
**TABLE 2C-6  
INFANT MORTALITY RATES<sup>a</sup> FOR SELECTED LEADING CAUSES OF DEATH BY YEAR, ARIZONA, 2003-2013**

Causes of death	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Congenital malformations, deformations and chromosomal abnormalities</b>	1.4	1.6	1.6	1.4	1.5	1.5	1.3	1.3	1.3	1.4	1.2
<b>of respiratory system</b>	0.1	0.1	0.2	0.1	0.1	**	**	0.1	**	0.1	**
<b>of brain, spinal cord or nervous system</b>	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
<b>Short gestation and low birth weight</b>	0.9	0.9	0.8	0.9	0.9	0.9	1.1	0.7	0.7	0.7	0.7
<b>Maternal complications</b>	0.3	0.4	0.5	0.4	0.3	0.5	0.3	0.3	0.4	0.5	0.3
<b>Sudden infant death syndrome</b>	0.3	0.3	0.3	0.4	0.4	0.2	0.4	0.4	0.3	0.2	0.2
<b>Accidents (unintentional injuries)</b>	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2
<b>Intrauterine hypoxia or birth asphyxia</b>	0.1	0.1	0.1	0.1	0.1	0.1	**	**	0.1	**	0.1
<b>Assault (homicide)</b>	0.1	**	0.1	0.1	0.1	**	**	0.1	0.1	**	**
<b>Respiratory distress syndrome</b>	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	**	**	**
<b>Influenza and pneumonia</b>	0.2	0.2	0.2	0.1	**	**	0.1	**	**	**	**
<b>Total, all causes</b>	6.5	6.7	6.8	6.3	6.8	6.3	5.9	6.0	5.9	5.8	5.3

Notes: \*\* Cell suppressed due to rate/ratio/percent based on non-zero count less than 6;<sup>b</sup> 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<sup>a</sup> by Gender and Year among Children 1-14 Years,**  
**Arizona, 2003-2013**

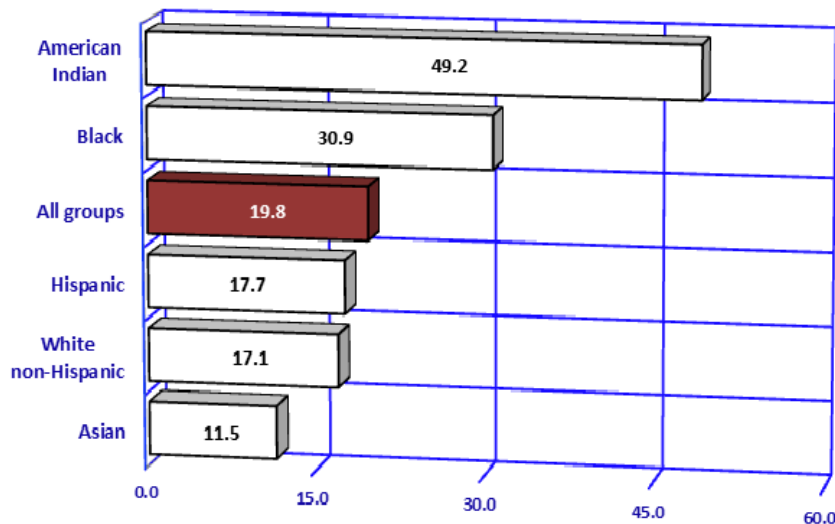


Notes: <sup>a</sup> Number of deaths per 100,000 persons, 1-14 years old in specified group.

Death claimed the lives of 252 of the 1,275,227 children (1 to 14 years old) residing in Arizona in 2013. Their 2013 mortality rate of 19.8 per 100,000 was 2.1 percent greater than the rate of 19.4 in 2012 (**Table 2C-7**). Both males and females experienced slight increases in their total mortality rates from 2012 to 2013 (**Figure 2C-5, Table 2C-7**).

The five causes with the greatest mortality rates in childhood from 2003-2013 were *accidents* (unintentional injuries), *malignant neoplasms*, *congenital malformations*, *homicide*, and *suicide* (**Table 2C-7**).

**Figure 2C-6**  
**Mortality Rates<sup>a</sup> by Race/Ethnicity among Children 1-14 Years,**  
**Arizona, 2013**



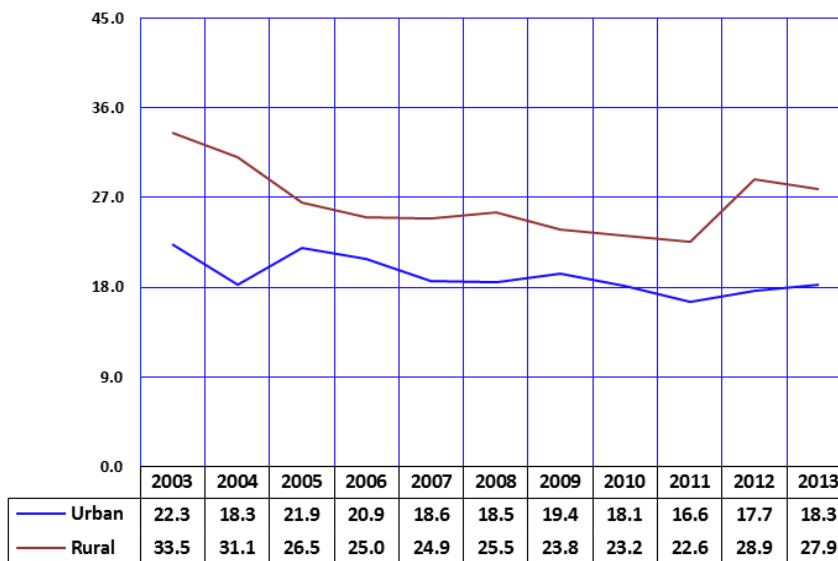
Notes: <sup>a</sup> Number of deaths per 100,000 persons, 1-14 years old in specified group.

American Indian children had the highest 2013 total mortality rate (49.2 deaths per 100,000) followed by Black or African American children (30.9/100,000; **Figure 2C-6**). The mortality rates of Hispanic or Latino, White non-Hispanic, and Asian children were lower than the average rate for all groups.

In 2013, there were 20 children who died of accidental drowning and submersion, 19 children who died of assault, and 8 completed *suicides* of children aged 1-14 years (**Table 2C-10**). The mortality rate for Native American children due to automobile accidents  $((10/77,196) \times 100,000 = 13.0)$  was 4.8 times greater than the automobile accident mortality rate for White non-Hispanic children  $((15/561,898) \times 100,000 = 2.7)$ .

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

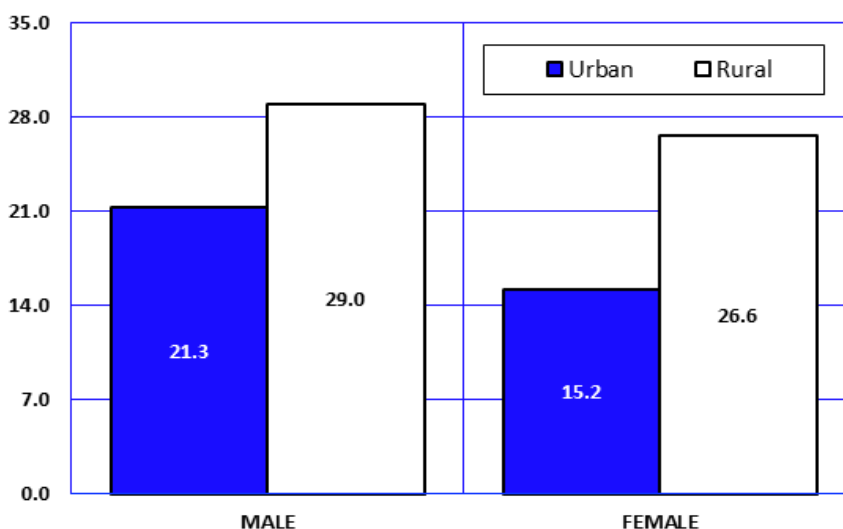
**Figure 2C-7**  
**Mortality Rates<sup>a</sup> by Urban/Rural Area<sup>b</sup> and Year among Children 1-14 Years, Arizona, 2003-2013**



From 2012 to 2013, overall mortality rates increased for urban children but decreased for rural children (**Figure 2C-7, Table 2C-8**). From 2003 to 2013 the total mortality rates decreased by 17.9 percent for urban children and by 16.7 percent for rural children.

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

**Figure 2C-8**  
**Mortality Rates<sup>a</sup> by Gender in Urban/Rural<sup>b</sup> Areas among Children 1-14 Years, Arizona, 2013**



From 2012 to 2013, the mortality rate for accidents slightly increased for both urban and rural children (**Table 2C-8**). The mortality rate for unintentional injuries among rural children (12.6/100,000) was 2.3 times greater than the rate among urban children (5.5/100,000, **Table 2C-8**). In 2013, 20 children in urban areas died of accidental drowning while no rural children died of this cause (**Table 2C-10**).

Urban females 1-14 years old had the lowest mortality risk among gender by area groups in 2013, followed by urban males, rural females, and rural males.

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

**TABLE 2C-7  
MORTALITY RATES<sup>a</sup> FOR THE FIVE LEADING CAUSES<sup>b</sup> OF DEATH AMONG CHILDREN (1-14 YEARS) BY GENDER,  
ARIZONA, 2003-2013**

Gender/Cause	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change from 2003
<b>MALE</b>												
Accidents (unintentional injuries)	11.3	9.5	10.0	8.0	8.3	7.8	8.0	8.2	9.6	7.4	8.6	-23.9
Motor vehicle accidents	6.5	5.2	4.5	4.2	4.6	2.5	4.2	3.1	4.0	3.5	4.5	-31.5
Other	2.0	1.6	3.2	2.9	2.2	2.4	1.2	2.6	3.1	1.7	2.3	15.2
Drowning	2.8	2.7	2.3	0.9	1.5	2.9	2.6	2.5	2.6	2.2	1.8	-34.2
Malignant neoplasms	2.7	1.6	1.7	1.7	2.2	2.5	3.1	1.9	1.7	2.8	2.5	-9.0
Assault (homicide)	0.7	2.3	2.0	1.5	1.3	1.2	0.9	2.0	0.9	0.9	1.4	97.4
Congenital malformations	1.7	1.6	1.9	2.3	0.7	1.8	1.5	1.5	1.7	1.8	0.9	-45.8
Intentional self-harm (suicide)	1.2	0.3	1.1	0.5	0.4	0.9	0.4	1.2	1.1	1.1	0.6	-48.8
ALL CAUSES	27.5 (166)	23.7 (147)	26.1 (168)	22.7 (150)	20.0 (134)	22.3 (152)	21.5 (148)	22.1 (143)	21.6 (141)	22.0 (143)	22.4 (146)	-18.5 (-12.0)
<b>FEMALE</b>												
Accidents (unintentional injuries)	6.8	6.6	7.8	7.8	6.3	4.6	5.5	5.1	3.2	3.7	4.5	-34.0
Motor vehicle accidents	4.2	4.1	4.6	4.1	3.6	2.8	2.9	2.4	1.1	1.8	2.6	-38.9
Drowning	1.2	1.2	1.6	2.1	0.8	0.9	0.6	1.3	1.3	0.8	1.3	6.8
Other	1.4	1.0	1.6	1.6	1.9	0.9	2.0	1.4	0.8	1.1	0.6	-54.2
Congenital malformations	1.9	1.4	1.8	2.1	1.3	1.5	1.4	1.6	1.0	2.3	2.4	26.5
Malignant neoplasms	2.6	2.0	2.1	0.9	4.2	2.0	1.8	2.2	2.4	2.4	2.1	-19.9
Assault (homicide)	1.0	0.7	0.8	0.8	1.4	0.9	1.8	0.3	1.3	1.1	1.6	60.3
Influenza and pneumonia	0.5	0.7	0.5	0.9	0.2	0.6	0.5	0.3	0.3	0.2	0.2	-60.0
ALL CAUSES	20.9 (120)	17.0 (101)	19.0 (117)	20.3 (128)	19.1 (122)	17.0 (110)	18.8 (123)	15.6 (97)	13.2 (83)	16.7 (104)	17.0 (106)	-18.7 (-11.7)
<b>TOTAL</b>												
Accidents (unintentional injuries)	9.1	8.1	8.9	7.9	7.3	6.2	6.8	6.7	6.5	5.6	6.6	-27.6
Motor vehicle accidents	5.4	4.6	4.5	4.2	4.1	2.6	3.6	2.8	2.6	2.7	3.5	-34.7
Drowning	2.0	2.0	2.0	1.5	1.1	2.0	1.6	1.9	2.0	1.5	1.6	-21.6
Other	1.7	1.5	2.4	2.2	2.1	1.6	1.6	2.0	2.0	1.4	1.5	-11.8
Malignant neoplasms	2.6	1.8	1.9	1.3	3.2	2.3	2.5	2.0	2.0	2.6	2.3	-12.5
Congenital malformations	1.8	1.5	1.8	2.2	1.0	1.7	1.4	1.6	1.3	2.0	1.6	-8.5
Assault (homicide)	0.8	1.5	1.4	1.2	1.4	1.1	1.3	1.2	1.1	1.0	1.5	86.2
Intentional self-harm (suicide)	0.7	0.2	0.9	0.9	0.4	0.6	0.3	0.7	0.9	0.6	0.6	-10.4
ALL CAUSES	24.3 (286)	20.4 (248)	22.7 (285)	21.5 (278)	19.5 (256)	19.7 (262)	20.2 (271)	18.9 (240)	17.5 (224)	19.4 (247)	19.8 (252)	-18.7 (-11.9)

Notes: <sup>a</sup> Number of deaths per 100,000 children 1-14 years old; <sup>b</sup> The five causes with the greatest number of deaths over the 2003-2013 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 2003-2013 are classified by ICD-10, replacing the Ninth Revision (ICD-9); 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-8  
MORTALITY RATES<sup>a</sup> FOR THE FIVE LEADING CAUSES<sup>b</sup> OF DEATH AMONG CHILDREN (1-14 YEARS)  
IN URBAN AND RURAL AREAS<sup>c</sup>, ARIZONA, 2003-2013**

Area/Cause	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change from 2003
<b>URBAN</b>												
Accidents (unintentional injuries)	7.3	6.8	9.2	7.1	6.5	5.4	6.4	6.0	5.7	4.7	5.5	-24.7
Motor vehicle accidents	4.2	3.7	4.2	3.9	3.2	2.0	3.2	2.5	1.7	1.9	2.6	-39.0
Drowning	2.2	2.1	2.3	1.4	1.3	1.8	1.8	1.8	2.2	1.5	1.8	-16.8
Other	0.9	1.0	2.7	1.8	2.0	1.7	1.5	1.7	1.7	1.3	1.1	22.1
Malignant neoplasms	2.8	1.6	2.2	1.5	3.4	2.6	2.6	2.3	2.1	2.6	2.4	-15.0
Congenital malformations	1.6	1.5	1.7	2.4	0.8	1.7	1.3	1.8	1.3	2.1	1.8	14.5
Assault (homicide)	0.9	1.4	1.3	1.1	1.4	1.1	1.3	1.3	1.2	0.9	1.5	62.8
Diseases of heart	0.5	0.8	0.4	1.0	0.4	0.4	0.3	0.3	0.4	0.6	0.3	-45.1
ALL CAUSES	22.4	18.3	21.9	20.9	18.6	18.5	19.4	18.1	16.6	17.7	18.3	-18.2
(Number of all deaths)	(219)	(184)	(229)	(228)	(206)	(210)	(221)	(197)	(182)	(192)	(200)	(-8.7)
<b>RURAL</b>												
Accidents (unintentional injuries)	18.0	14.6	7.6	12.0	12.0	10.3	8.8	10.8	11.3	10.9	12.6	-30.2
Motor vehicle accidents	11.0	9.2	6.2	5.5	9.0	6.4	5.8	4.3	7.5	7.1	8.7	-20.6
Other	5.5	3.9	0.9	4.5	2.5	1.5	1.9	4.3	3.2	2.2	3.8	-30.5
Drowning	1.5	1.5	0.5	2.0	0.5	2.5	1.0	2.2	0.5	1.6	0.0	-100.0
Malignant neoplasms	2.0	2.9	0.5	0.5	2.0	0.5	1.9	0.5	1.6	2.2	1.6	-18.1
Assault (homicide)	0.5	1.9	1.9	1.5	1.0	1.0	1.5	0.5	0.5	1.6	1.6	227.7
Intentional self-harm (suicide)	1.0	0.5	2.8	2.0	0.5	1.5	0.5	1.1	0.5	1.1	1.6	63.9
Congenital malformations	2.5	1.5	2.4	1.0	2.0	1.5	1.9	0.5	1.6	1.6	0.5	-78.2
ALL CAUSES	33.5	31.1	26.5	25.0	24.9	25.5	23.8	23.2	22.6	28.9	27.9	-16.9
(Number of all deaths)	(67)	(64)	(56)	(50)	(50)	(52)	(49)	(43)	(42)	(53)	(51)	(-23.9)
<b>STATEWIDE</b>												
Accidents (unintentional injuries)	9.1	8.1	8.9	7.9	7.3	6.2	6.8	6.7	6.5	5.6	6.6	-27.6
Motor vehicle accidents	5.4	4.6	4.5	4.2	4.1	2.6	3.6	2.8	2.6	2.7	3.5	-34.7
Drowning	2.0	2.0	2.0	1.5	1.1	2.0	1.6	1.9	2.0	1.5	1.6	-21.6
Other	1.7	1.5	2.4	2.2	2.1	1.6	1.6	2.0	2.0	1.4	1.5	-11.8
Malignant neoplasms	2.6	1.8	1.9	1.3	3.2	2.3	2.5	2.0	2.0	2.6	2.3	-12.5
Congenital malformations	1.8	1.5	1.8	2.2	1.0	1.7	1.4	1.6	1.3	2.0	1.6	-8.5
Assault (homicide)	0.8	1.5	1.4	1.2	1.4	1.1	1.3	1.2	1.1	1.0	1.5	86.2
Intentional self-harm (suicide)	0.7	0.2	0.9	0.9	0.4	0.6	0.3	0.7	0.9	0.6	0.6	-10.4
ALL CAUSES	24.3	20.4	22.7	21.5	19.5	19.7	20.2	18.9	17.5	19.4	19.8	-18.7
(Number of all deaths)	(286)	(248)	(285)	(278)	(256)	(262)	(271)	(240)	(224)	(247)	(252)	(-11.9)

Notes: <sup>a</sup> Number of deaths per 100,000 children 1-14 years old; <sup>b</sup> The five causes with the greatest number of deaths over the 2003-2013 period; <sup>c</sup> 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 2003-2013 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<sup>a</sup> FOR THE FIVE LEADING CAUSES OF DEATH AMONG CHILDREN (1-14 YEARS) BY GENDER  
IN URBAN AND RURAL AREAS<sup>b</sup>, ARIZONA, 2003-2013**

Area/Gender	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% Change from 2003
<b>URBAN</b>												
Male	24.4	21.9	25.9	22.2	19.2	21.1	20.6	20.0	20.8	20.0	21.3	-12.6
Female	20.2	14.4	17.6	19.5	18.0	15.9	18.2	16.2	12.3	15.2	15.2	-24.9
TOTAL	22.4	18.3	21.9	20.9	18.6	18.5	19.4	18.1	16.6	17.7	18.3	-18.2
<b>RURAL</b>												
Male	42.1	31.8	27.0	25.5	24.4	27.9	25.7	33.9	26.4	32.1	29.0	-31.0
Female	24.5	30.3	26.1	24.4	25.4	23.0	21.8	12.1	18.7	25.5	26.6	8.7
TOTAL	33.5	31.1	26.5	25.0	24.9	25.5	23.8	23.2	22.6	28.9	27.9	-16.9
<b>STATEWIDE</b>												
Male	27.5	23.7	26.1	22.7	20.0	22.3	21.5	22.1	21.6	22.0	22.4	-18.5
Female	20.9	17.0	19.0	20.3	19.1	17.0	18.8	15.6	13.2	16.7	17.0	-18.7
TOTAL	24.3	20.4	22.7	21.5	19.5	19.7	20.2	18.9	17.5	19.4	19.8	-18.7

Notes: <sup>a</sup> Rates are presented per 100,000 children 1-14 years old; <sup>b</sup> 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.

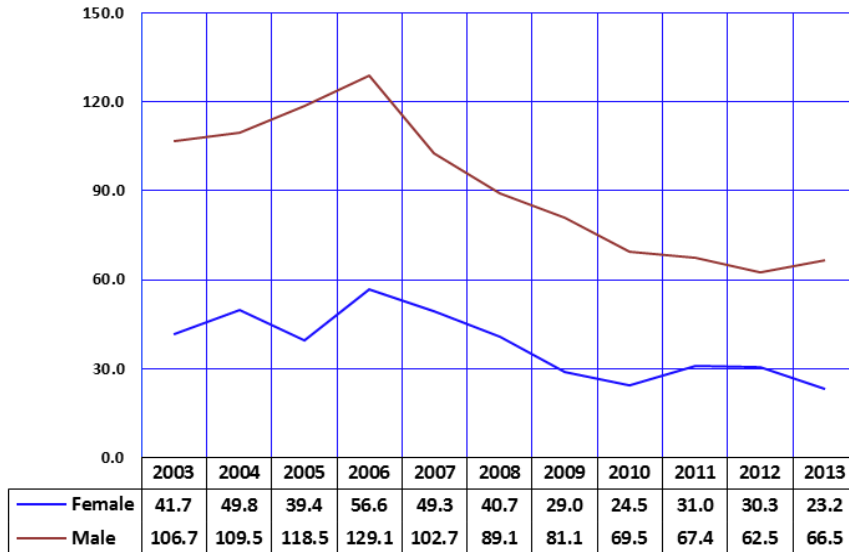
**TABLE 2C-10  
LEADING CAUSES OF DEATH AMONG CHILDREN (1-14 YEARS) BY GENDER, AREA, AND RACE/ETHNICITY, ARIZONA, 2013**

Cause of death	Total <sup>a</sup>	Gender		Area <sup>b</sup>			Race/ethnicity				
		Male	Female	Urban	Rural	Unknown	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or other Pacific Islander
Accidents (unintentional injury)	80 <sup>†</sup>	56	28	60	23	*	29	32	7	15	*
Motor vehicle accidents	45	29	16	28	16	*	15	14	6	10	0
Accidental drowning and submersion	20 <sup>†</sup>	12	8	20	0	0	8	10	*	0	*
Malignant neoplasms	30 <sup>†</sup>	16	13	26	*	0	10	18	0	*	0
Leukemia	10 <sup>†</sup>	7	*	7	*	0	*	6	0	*	0
Congenital malformations	20 <sup>†</sup>	6	15	20	*	0	9	10	0	*	0
Assault (homicide)	20 <sup>†</sup>	9	10	16	*	0	7	8	*	*	0
By discharge of firearms	0 <sup>†</sup>	*	*	*	0	0	*	*	0	0	0
By other means	20 <sup>†</sup>	8	8	13	*	0	*	7	*	*	0
Intentional self-harm (suicide)	10 <sup>†</sup>	*	*	*	*	0	*	*	0	*	0
Chronic lower respiratory diseases	10 <sup>†</sup>	6	*	*	*	0	*	0	*	*	0
Asthma	10 <sup>†</sup>	6	*	*	*	0	*	0	*	*	0
Influenza and pneumonia	0 <sup>†</sup>	*	*	*	*	0	*	*	0	*	0
<b>Total, all causes<sup>c</sup></b>	<b>252</b>	<b>146</b>	<b>106</b>	<b>200</b>	<b>51</b>	<b>1</b>	<b>96</b>	<b>96</b>	<b>18</b>	<b>38</b>	<b>4</b>

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

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

**Figure 2C-9**  
Mortality Rates<sup>a</sup> by Gender and Year among Adolescents 15-19 Years, Arizona, 2003-2013

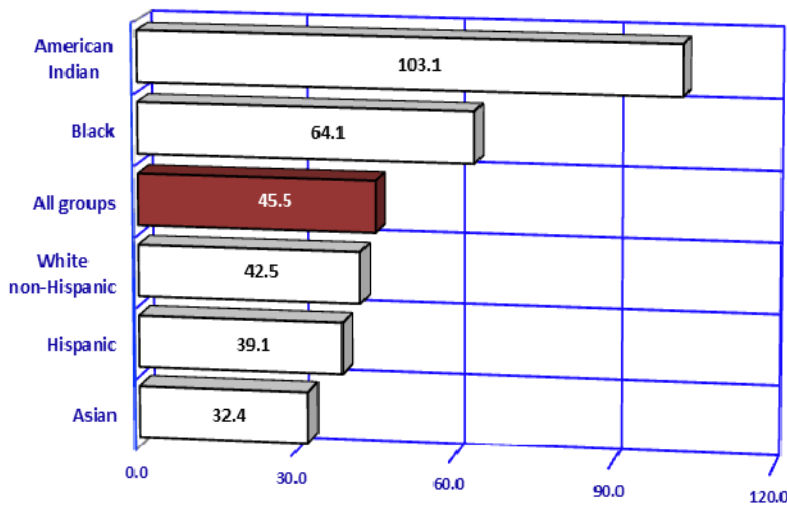


Notes: <sup>a</sup> Number of deaths per 100,000 persons, 15 - 19 years old in specified group.

Adolescence refers to individuals between the ages of 15 and 19, an important developmental period marking the transition from childhood to adulthood. In 2013, an estimated 470,793 adolescents resided in Arizona, comprising 7.2 percent of the State's population (**Table 10A-1**). The lives of 214 resident adolescents prematurely ended in 2013, resulting in a total mortality rate of 45.5 deaths per 100,000 adolescents. This mortality rate was 39.7 percent lower than the 2003 rate (**Table 2C-11**).

The likelihood of dying was 2.9 times greater for adolescent boys than for adolescent girls in 2013 (**Figure 2C-9, Table 2C-11**).

**Figure 2C-10**  
Mortality Rates<sup>a</sup> by Race/Ethnicity among Adolescents 15-19 Years, Arizona, 2013



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

The five causes with the greatest number of deaths over the 2003-2013 period were *unintentional injuries in accidents, suicide, homicide malignant neoplasms, and symptoms, signs, and abnormal findings* (**Table 2C-14**).

In 2013, adolescents who were Asian, Hispanic, or White non-Hispanic had greater survival chances than the state average for all adolescents, while American Indian and Black adolescents had lower survival chances than average (**Figure 2C-10**). If the 2013 mortality risk of Asian adolescents (i.e., their mortality rate) applied to all adolescents, only 153 would have died: 61 less than the 214 who actually did.

The number of deaths from accidental drug poisoning declined from 39 in 2009 and 25 in 2011 to 18 in 2012, but rose to 25 in 2013.

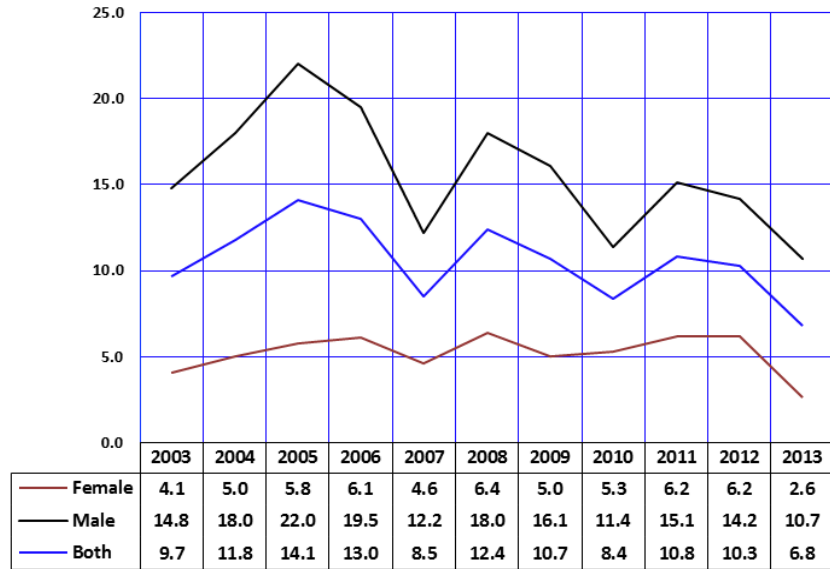


**2C.AGE-SPECIFIC MORTALITY**  
**Adolescent mortality (ages 15-19 years)**

The number of suicides among Arizonans age 15-19 years decreased 33.3 percent from 2012 (n = 48) to 2013 (n = 32; **Table 2C-14**). In 2013, as in prior years, male adolescents accounted for the absolute majority (81.3 percent) of completed suicides.

The adolescent suicide rate for males in 2013 was the lowest recorded since at least 1990 (**Figure 2C-11, Table 2C-11**). In 2013, the adolescent male suicide rate was 27.7 percent lower, and the adolescent female suicide rate was 36.6 percent lower, than in 2003, respectively. The male to female ratio in suicide mortality rates increased from 3.6:1 in 2003 to 4.1:1 in 2013. In other words, male adolescents were 4.1 times more likely to kill themselves in 2013 than female adolescents, compared to 3.6 times more likely in 2003.

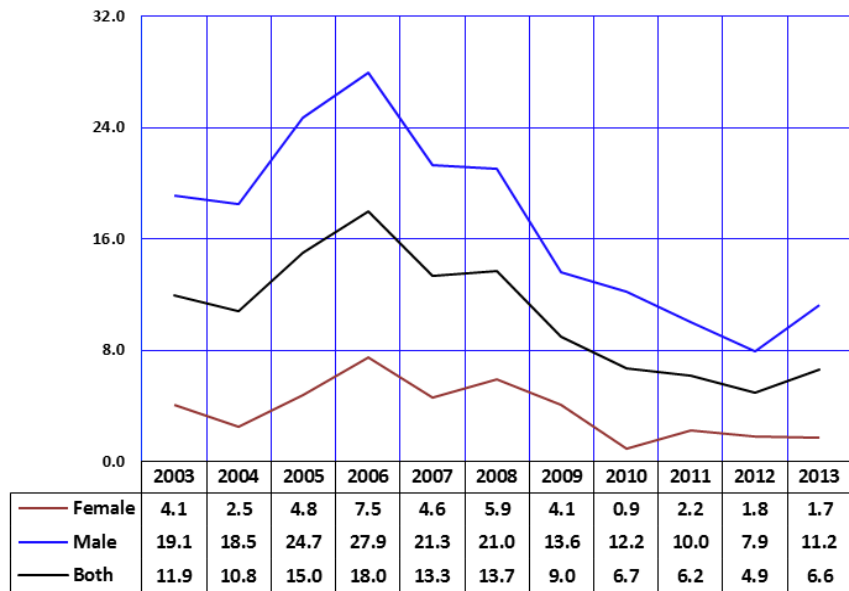
**Figure 2C-11**  
**Suicide Rates<sup>a</sup> by Gender and Year among Adolescents 15-19 Years, Arizona, 2003-2013**



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

**Figure 2C-12**  
**Homicide Rates<sup>a</sup> by Gender and Year among Adolescents 15-19 Years, Arizona, 2003-2013**

From 2004 to 2006, 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. The adolescent homicide mortality rate increased 41.8 percent for males from 2012 to 2013. The male mortality risk due to homicide was 6.6 times greater than the female mortality risk in 2013.



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

**TABLE 2C-11  
MORTALITY RATES<sup>a</sup> FOR THE FIVE LEADING CAUSES<sup>b</sup> OF DEATH AMONG ADOLESCENTS (15-19 YEARS) BY GENDER,  
ARIZONA, 2003-2013**

Gender/Cause	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change from 2003
<b>MALE</b>												
Accidents (unintentional injuries)	49.3	51.3	49.4	57.7	48.3	33.0	34.4	27.0	29.3	28.8	28.1	-43.0
Motor vehicle accidents	35.9	36.1	33.2	41.7	35.3	21.9	15.3	15.2	18.8	18.3	15.3	-57.4
Other	13.4	15.3	16.2	16.0	13.0	11.1	19.1	11.8	0.8	10.4	12.8	-4.5
Assault (homicide)	19.1	18.5	24.7	27.9	21.3	21.0	13.6	12.2	10.0	7.9	11.2	-41.6
Intentional self-harm (suicide)	14.8	18.0	22.0	19.5	12.2	18.0	16.1	11.4	15.1	14.2	10.7	-27.4
Malignant neoplasms	2.4	6.5	4.0	3.1	3.5	5.1	3.4	2.5	2.1	2.9	2.5	3.2
Diseases of heart	1.9	1.8	1.8	1.8	2.2	0.4	1.3	2.1	1.3	0.0	0.4	-78.7
ALL CAUSES	106.7	109.5	118.5	129.1	102.7	89.1	81.1	69.5	67.4	62.5	66.5	-37.7
(Number of all deaths)	(223)	(237)	(264)	(291)	(236)	(208)	(191)	(165)	(161)	(150)	(161)	(-27.8)
<b>FEMALE</b>												
Accidents (unintentional injuries)	19.1	28.9	18.3	28.1	23.7	18.3	9.1	9.4	9.7	15.8	7.9	-58.8
Motor vehicle accidents	15.5	24.9	16.3	26.2	17.7	12.4	6.3	4.5	5.8	13.2	6.1	-60.5
Other	3.6	4.0	2.0	1.9	6.0	5.9	2.7	4.9	0.9	2.6	1.7	-51.4
Malignant neoplasms	2.6	2.5	1.4	3.7	4.2	4.1	3.2	2.7	4.4	1.8	3.5	34.6
Intentional self-harm (suicide)	4.1	5.0	5.8	6.1	4.6	6.4	5.0	5.3	6.2	6.2	2.6	-36.0
Assault (homicide)	4.1	2.5	4.8	7.5	4.6	5.9	4.1	0.9	2.2	1.8	1.7	-57.3
Diseases of heart	0.5	0.5	1.0	1.4	1.4	0.9	1.4	0.9	0.9	0.0	0.9	74.9
ALL CAUSES	41.7	49.8	39.4	56.6	49.3	40.7	29.0	24.5	31.0	30.3	23.2	-44.4
(Number of all deaths)	(81)	(100)	(82)	(121)	(106)	(89)	(64)	(55)	(70)	(69)	(53)	(-34.6)
<b>TOTAL</b>												
Accidents (unintentional injuries)	34.7	40.5	34.3	43.3	36.4	25.9	22.1	18.4	19.8	22.5	18.3	-47.4
Motor vehicle accidents	26.0	30.7	25.0	34.2	26.8	17.3	11.0	10.0	12.5	15.8	10.8	-58.3
Other	8.7	9.8	9.3	9.1	9.6	8.6	11.2	8.4	0.9	6.6	7.4	-14.5
Intentional self-harm (suicide)	9.7	11.8	14.1	13.0	8.5	12.4	10.7	8.4	10.8	10.3	6.8	-29.9
Assault (homicide)	11.9	10.8	15.0	18.0	13.3	13.7	9.0	6.7	6.2	4.9	6.6	-44.7
Malignant neoplasms	2.5	4.6	2.8	3.4	3.8	4.6	3.3	2.6	3.2	2.4	3.0	18.9
Diseases of heart	1.2	1.2	1.4	1.6	1.8	0.9	1.3	1.5	1.1	0.0	0.6	-46.9
ALL CAUSES	75.4	80.8	80.1	93.8	76.9	65.7	55.9	47.7	49.7	47.1	45.5	-39.7
(Number of all deaths)	(304)	(337)	(346)	(412)	(342)	(297)	(255)	(220)	(231)	(220)	(214)	(-29.6)

Notes: <sup>a</sup> Number of deaths per 100,000 adolescents 15-19 years old; <sup>b</sup> The five causes with the greatest number of deaths over the 2003-2013 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 2003-2013 are classified by ICD-10, replacing the Ninth Revision (ICD-9); 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-12  
MORTALITY RATES<sup>a</sup> FOR THE FIVE LEADING CAUSES<sup>b</sup> OF DEATH AMONG ADOLESCENTS (15-19 YEARS)  
IN URBAN AND RURAL AREAS<sup>c</sup>, ARIZONA, 2003-2013**

Area/Cause	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change from 2003
<b>URBAN</b>												
Accidents (unintentional injuries)	29.9	37.3	28.9	40.3	30.9	23.7	18.7	17.0	18.4	17.0	15.8	-47.1
Motor vehicle accidents	22.0	27.1	20.5	32.2	21.9	14.8	9.6	9.3	10.8	11.9	9.3	-57.8
Other	7.9	10.2	8.4	8.1	9.0	8.9	9.1	7.7	1.0	5.1	6.5	-17.4
Assault (homicide)	13.6	9.9	16.8	20.0	14.8	15.3	9.6	6.7	6.4	4.8	6.8	-50.2
Intentional self-harm (suicide)	9.1	11.4	13.2	10.6	8.2	9.4	9.6	7.2	8.5	8.1	5.0	-44.8
Malignant neoplasms	2.4	4.1	2.8	2.8	3.8	4.6	3.2	2.3	2.8	2.8	3.5	46.4
Diseases of heart	1.2	1.5	1.4	1.4	1.6	1.1	1.3	1.5	1.3	0.0	0.5	-58.2
ALL CAUSES	69.8	75.8	75.8	88.9	72.5	61.4	51.5	43.6	45.3	38.8	42.4	-39.2
(Number of all deaths)	(231)	(260)	(270)	(320)	(265)	(230)	(194)	(169)	(177)	(153)	(169)	(-26.8)
<b>RURAL</b>												
Accidents (unintentional injuries)	57.0	54.1	59.4	56.8	61.9	36.0	36.9	25.5	26.9	52.1	31.8	-44.3
Motor vehicle accidents	44.5	46.0	46.2	42.9	49.2	28.6	17.2	13.4	21.5	37.0	19.3	-56.6
Other	12.5	8.1	13.2	13.9	12.7	7.4	19.7	12.1	0.0	15.1	12.4	-0.6
Intentional self-harm (suicide)	12.5	13.5	18.5	24.0	10.1	26.1	16.0	14.8	22.9	21.9	16.6	32.6
Assault (homicide)	4.2	14.9	6.6	8.8	6.3	7.5	6.1	6.7	5.4	5.5	5.5	31.5
Malignant neoplasms	2.8	6.8	2.6	6.3	3.8	6.2	3.7	4.0	5.4	0.0	0.0	-100.0
Diseases of heart	1.4	0.0	1.3	2.5	2.5	0.0	1.2	1.3	0.0	0.0	0.0	-100.0
ALL CAUSES	101.5	102.7	100.3	116.2	97.2	83.3	75.0	68.6	72.7	90.5	62.1	-38.8
(Number of all deaths)	(73)	(76)	(76)	(92)	(77)	(67)	(61)	(51)	(54)	(66)	(45)	(-38.4)
<b>STATEWIDE</b>												
Accidents (unintentional injuries)	34.7	40.5	34.3	43.3	36.4	25.9	22.1	18.4	19.8	22.5	18.3	-47.4
Motor vehicle accidents	26.0	30.7	25.0	34.2	26.8	17.3	11.0	10.0	12.5	15.8	10.8	-58.3
Other	8.7	9.8	9.3	9.1	9.6	8.6	11.2	8.4	0.9	6.6	7.4	-14.5
Intentional self-harm (suicide)	9.7	11.8	14.1	13.0	8.5	12.4	10.7	8.4	10.8	10.3	6.8	-29.9
Assault (homicide)	11.9	10.8	15.0	18.0	13.3	13.7	9.0	6.7	6.2	4.9	6.6	-44.7
Malignant neoplasms	2.5	4.6	2.8	3.4	3.8	4.6	3.3	2.6	3.2	2.4	3.0	18.9
Diseases of heart	1.2	1.2	1.4	1.6	1.8	0.9	1.3	1.5	1.1	0.0	0.6	-46.9
ALL CAUSES	75.4	80.8	80.1	93.8	76.9	65.7	55.9	47.7	49.7	47.1	45.5	-39.7
(Number of all deaths)	(304)	(337)	(346)	(412)	(342)	(297)	(255)	(220)	(231)	(220)	(214)	(-29.6)

Notes: <sup>a</sup> Number of deaths per 100,000 adolescents 15-19 years old; <sup>b</sup> The five causes with the greatest number of deaths over the 2003-2013 period; <sup>c</sup> 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 2003-2013 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-13  
MORTALITY RATES<sup>a</sup> FOR THE FIVE LEADING CAUSES OF DEATH AMONG ADOLESCENTS (15-19 YEARS)  
BY GENDER IN URBAN AND RURAL AREAS<sup>b</sup>, ARIZONA, 2003-2013**

Area/Gender	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change from 2003
<b>URBAN</b>												
Male	98.4	105.1	112.7	121.7	97.9	84.3	73.8	62.8	62.2	50.8	62.0	-37.0
Female	38.9	44.2	36.1	54.2	45.3	36.8	27.6	23.4	27.4	26.1	21.7	-44.2
TOTAL	69.8	75.8	75.8	88.9	72.5	61.4	51.5	43.6	45.3	38.8	42.4	-39.2
<b>RURAL</b>												
Male	144.8	127.9	142.5	162.3	125.2	109.0	112.6	104.9	94.6	123.3	91.4	-36.9
Female	54.9	74.5	54.8	67.5	57.6	56.2	35.4	30.3	49.6	53.3	31.2	-43.1
TOTAL	101.5	102.7	100.3	116.2	97.2	83.3	75.0	68.6	72.7	90.5	62.1	-38.8
<b>STATEWIDE</b>												
Male	106.7	109.5	118.5	129.1	102.7	89.1	81.1	69.5	67.4	62.5	66.5	-37.7
Female	41.7	49.8	39.4	56.6	49.3	40.7	29.0	24.5	31.0	30.3	23.2	-44.4
TOTAL	75.4	80.8	80.1	93.8	76.9	65.7	55.9	47.7	49.7	47.1	45.5	-39.7

Notes: <sup>a</sup> Rates are presented per 100,000 children 15-19 years old; <sup>b</sup> 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.

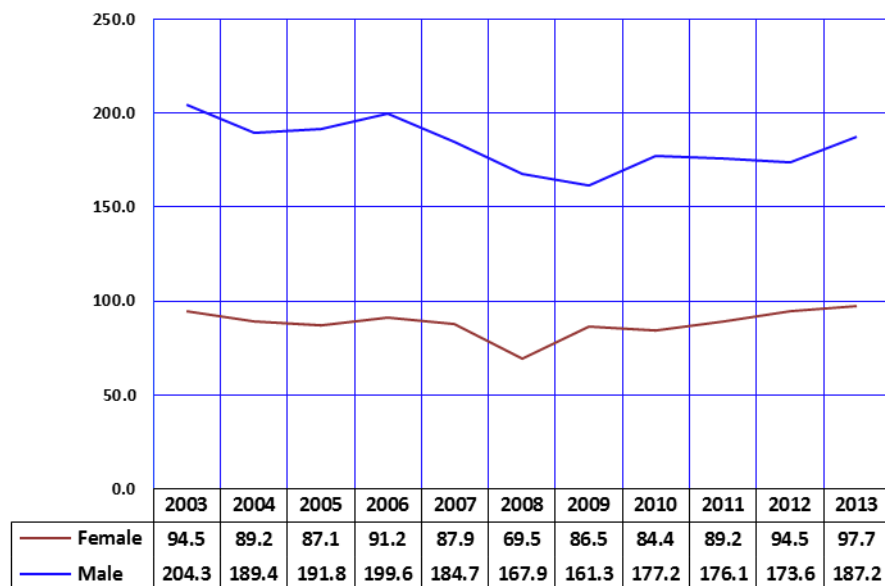
**TABLE 2C-14  
LEADING CAUSES OF DEATH AMONG ADOLESCENTS (15-19 YEARS) BY GENDER, AREA, AND RACE/ETHNICITY,  
ARIZONA, 2013**

Cause of death	Total	Gender		Area <sup>a</sup>		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)	90 <sup>†</sup>	68	18	63	23	43	23	*	15	*
Motor vehicle accidents	50 <sup>†</sup>	37	14	37	14	24	16	*	8	*
Accidental poisoning	30 <sup>†</sup>	23	*	20	*	17	*	0	*	0
Accidental drowning and submersion	0 <sup>†</sup>	*	*	*	0	0	*	0	0	*
Intentional self-harm (suicide)	30 <sup>†</sup>	26	6	20	12	16	7	*	7	*
By other means	20 <sup>†</sup>	15	*	8	11	9	*	0	7	0
By discharge of firearms	10 <sup>†</sup>	11	*	12	*	7	*	*	0	*
Assault (homicide)	30 <sup>†</sup>	27	*	27	*	7	16	*	*	0
By discharge of firearms	30 <sup>†</sup>	25	*	25	*	7	14	*	*	0
By other means	0 <sup>†</sup>	*	*	*	*	0	*	0	*	0
Malignant neoplasms	10 <sup>†</sup>	6	8	14	0	7	*	*	0	*
Symptoms, signs, abnormal findings	10 <sup>†</sup>	*	*	6	*	*	*	0	*	0
Diseases of the heart	0 <sup>†</sup>	*	*	*	0	*	*	*	0	0
<b>Total, all causes<sup>b</sup></b>	<b>214</b>	<b>161</b>	<b>53</b>	<b>169</b>	<b>45</b>	<b>94</b>	<b>73</b>	<b>15</b>	<b>28</b>	<b>4</b>

Notes: \* Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; <sup>a</sup> Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; <sup>b</sup> 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<sup>a</sup> by Gender and Year among Young Adults 20-44 Years, Arizona, 2003-2013**

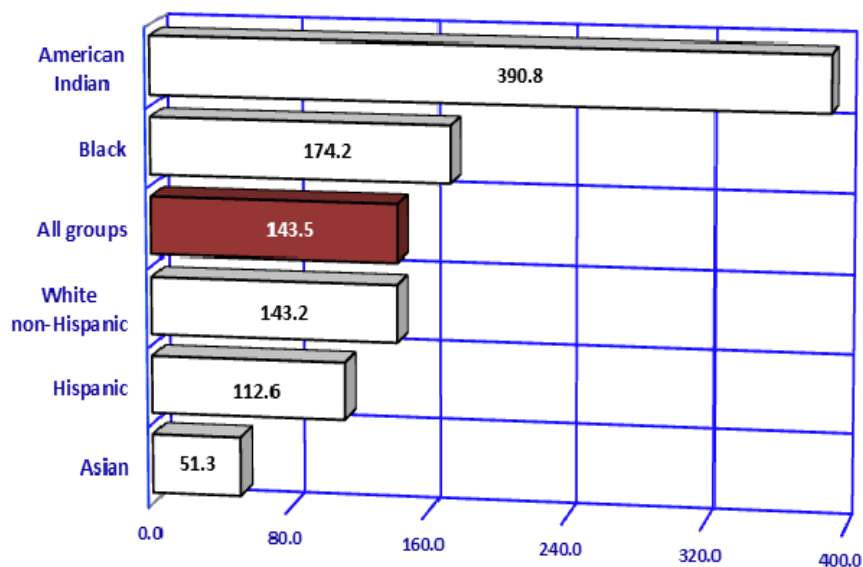


In 2013, 33.0 percent of Arizona residents were between 20 and 44 years of age. Among the six developmental periods examined in the life span, young adulthood, with an estimated 2.2 million individuals, easily represented the largest segment of the population. However, only one in sixteen deaths in Arizona (or 6.2 percent) occurred during young adulthood.

The number of deaths among young adults in 2003 and 2013 were nearly identical. Since 2008 (n = 2,829), deaths among young adults have increased 10.1 percent to 3,115 in 2013. Compared to 2012, the mortality rate for both male and female young adults increased, with mortality among young adult males increasing 7.8 percent between 2012 and 2013 (**Figure 2C-13, Table 2C-15**).

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

**Figure 2C-14**  
**Mortality Rates<sup>a</sup> by Race/Ethnicity among Young Adults 20-44 Years, Arizona, 2013**



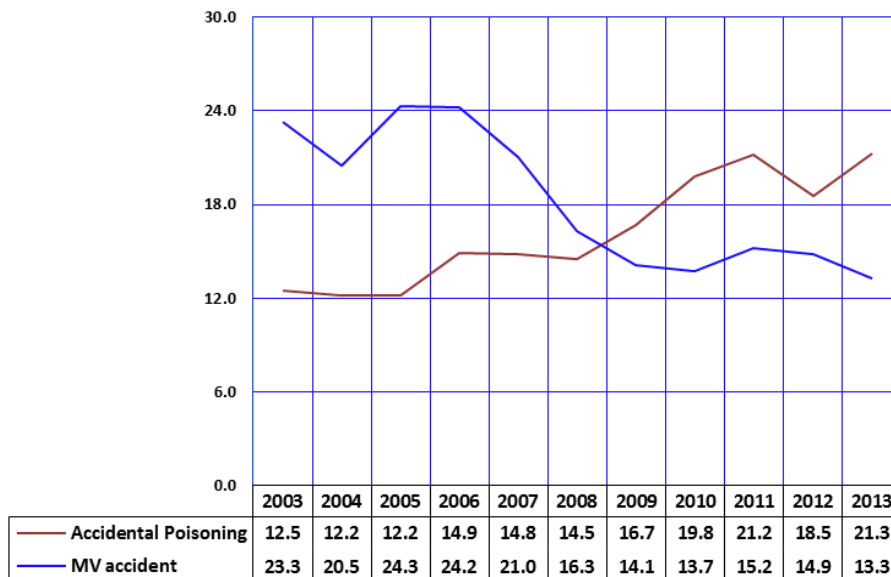
The rank order of survival chances of young adults from best to worse by race/ethnicity in 2013 was Asian, Hispanic or Latino, White non-Hispanic, Black or African American, and American Indian. American Indian young adults had a mortality rate 2.2 times greater than Black young adults, the racial/ethnic group with the second highest young adult mortality rate. The American Indian young adult mortality rate was 2.7 times greater than the state average for young adults and 7.6 times greater than Asian young adults.

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

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

**Figure 2C-15**  
**Mortality Rates<sup>a</sup> for Motor Vehicle-Related Injuries and Accidental Poisoning by Year among Young Adults 20-44 Years, Arizona, 2003-2013**

In 2013, 462 deaths of young adults were attributed to accidental poisoning (**Table 2C-18**), compared to 398 deaths in 2012. The mortality rate for accidental poisoning among young adults (21.3/100,000) for the fifth year exceeded the mortality rate for motor vehicle-related injuries (13.3/100,000; **Figure 2C-15**). In the 20-44 year age group, 407 of the 462 accidental poisoning were due to drug overdose (ICD10 X40-44) and 46 were due to alcohol poisoning (ICD10 X45).



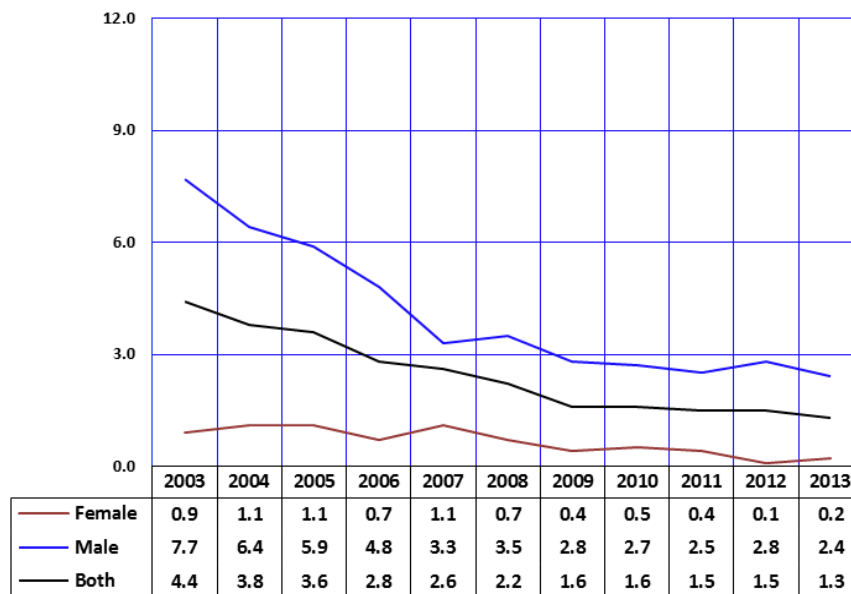
Notes: <sup>a</sup> Number of motor vehicle and accidental poisoning deaths per 100,000 persons, 20-44 years old in specified group.

**Figure 2C-16**  
**Mortality Rates<sup>a</sup> for HIV Disease by Gender and Year among Young Adults 20-44 Years, Arizona, 2003-2013**

In 2013, fewer Arizonans 20-44 years old died from the *human immunodeficiency virus (HIV) disease* (29) than from *morbid obesity* (36 deaths; **Table 2C-18**).

Of the 90 deaths from *HIV disease* in 2013, 32.2 percent occurred among Arizonans 20-44 years old (**Table 2C-27**). Males accounted for 93.1 percent of young adult deaths from *HIV disease* in 2013 (**Table 2C-18**).

The mortality rate for HIV disease among young male adults slightly decreased from 2.8/100,000 in 2012 to 2.4/100,000 in 2013.



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

**TABLE 2C-15  
MORTALITY RATES<sup>a</sup> FOR THE FIVE LEADING CAUSES<sup>b</sup> OF DEATH AMONG YOUNG ADULTS (20-44 YEARS) BY GENDER,  
ARIZONA, 2003-2013**

Gender/Cause	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change from 2003
<b>MALE</b>												
Accidents (unintentional injuries)	63.3	54.8	63.2	69.2	60.6	54.4	53.7	52.6	57.9	52.8	56.7	-10.4
Other	29.7	27.0	29.0	34.7	31.4	30.6	33.4	27.5	8.7	31.2	38.0	28.1
Motor vehicle accidents	33.6	27.8	34.2	34.5	29.2	23.8	20.2	19.8	20.6	21.6	18.7	-44.3
Intentional self-harm (suicide)	30.2	28.3	28.3	27.4	30.3	23.5	25.1	31.5	32.4	29.0	30.8	2.1
Assault (homicide)	22.9	23.7	24.7	24.2	22.8	19.2	13.4	20.1	18.2	16.1	16.1	-29.7
Diseases of heart	16.3	15.4	15.3	15.9	14.3	13.3	14.0	11.7	14.7	13.5	14.2	-12.8
Malignant neoplasms	14.2	14.0	11.9	11.0	11.3	12.6	12.0	12.8	11.0	12.3	13.4	-5.7
ALL CAUSES	204.3	189.4	191.8	199.6	184.7	167.9	161.3	177.2	176.1	173.6	187.2	-8.4
(Number of all deaths)	(2169)	(2091)	(2185)	(2290)	(2166)	(2001)	(1944)	(1920)	(1923)	(1910)	(2082)	(-4.0)
<b>FEMALE</b>												
Accidents (unintentional injuries)	22.5	21.8	24.9	25.0	25.2	20.4	20.8	22.4	25.2	22.8	24.5	8.8
Other	10.3	9.1	11.1	11.9	13.0	12.1	13.3	15.0	2.1	15.1	16.9	64.3
Motor vehicle accidents	12.2	12.7	13.8	13.1	12.2	8.3	7.5	7.4	9.7	7.7	7.6	-38.0
Malignant neoplasms	15.9	18.2	13.4	16.4	15.5	13.7	15.9	14.0	15.7	17.6	17.4	9.4
Intentional self-harm (suicide)	7.4	7.2	7.5	7.0	7.1	6.0	9.4	6.8	8.9	8.7	9.6	30.3
Diseases of heart	7.0	6.6	7.8	5.0	6.7	5.8	6.7	4.6	6.4	7.0	5.6	-20.3
Assault (homicide)	5.1	4.5	3.7	4.0	4.7	3.2	4.0	3.5	2.4	4.3	3.4	-33.3
ALL CAUSES	94.5	89.2	87.1	91.2	87.9	69.5	86.5	84.4	89.2	94.5	97.7	3.3
(Number of all deaths)	(941)	(922)	(936)	(968)	(954)	(828)	(973)	(876)	(933)	(990)	(1033)	9.8
<b>TOTAL</b>												
Accidents (unintentional injuries)	43.5	38.8	44.6	47.9	43.6	38.0	37.8	37.8	41.9	38.2	41.0	-5.7
Other	20.2	18.3	20.3	23.7	22.6	21.7	23.7	24.1	5.5	23.3	27.7	37.3
Motor vehicle accidents	23.3	20.5	24.3	24.2	21.0	16.3	14.1	13.7	15.2	14.9	13.3	-43.0
Intentional self-harm (suicide)	19.2	18.1	18.2	17.6	19.1	15.0	17.5	19.4	20.9	19.1	20.5	6.8
Malignant neoplasms	15.0	16.0	12.6	13.6	13.3	9.7	13.9	13.4	13.3	14.9	15.3	2.3
Diseases of heart	11.8	11.1	11.7	10.7	10.7	11.5	10.5	8.2	10.6	10.3	10.0	-15.3
Assault (homicide)	14.3	14.5	14.5	14.5	14.1	13.1	8.8	12.0	10.5	10.3	9.9	-30.7
ALL CAUSES	151.1	141.0	140.9	147.5	138.2	123.0	125.2	131.8	133.6	135.0	143.5	-5.0
(Number of all deaths)	(3110)	(3013)	(3121)	(3258)	(3120)	(2829)	(2917)	(2796)	(2856)	(2900)	(3115)	0.2

Notes: <sup>a</sup> Rates are presented per 100,000 persons 20-44 years old; <sup>b</sup> The five causes with the greatest number of deaths over the 2003-2013 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 2003-2013 are classified by ICD-10, replacing the Ninth Revision (ICD-9); 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-16  
MORTALITY RATES<sup>a</sup> FOR THE FIVE LEADING CAUSES<sup>b</sup> OF DEATH AMONG YOUNG ADULTS (20-44 YEARS)  
IN URBAN AND RURAL AREAS<sup>c</sup>, ARIZONA, 2003-2013**

Area/Cause	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change from 2003
<b>URBAN</b>												
Accidents (unintentional injuries)	38.3	35.5	40.2	44.8	38.7	34.4	32.7	33.5	36.6	32.3	35.4	-7.4
Other	19.1	18.0	19.1	23.6	21.0	20.2	21.5	22.0	4.3	20.2	23.9	25.3
Motor vehicle accidents	19.2	17.5	21.1	21.2	17.7	14.2	11.2	11.5	12.4	12.1	11.5	-40.0
Intentional self-harm (suicide)	17.9	16.2	16.8	16.2	18.0	16.4	13.6	17.7	18.1	17.0	18.3	2.3
Malignant neoplasms	14.7	16.0	11.8	13.5	12.9	14.2	15.6	13.3	13.5	14.1	15.3	4.0
Assault (homicide)	14.8	15.2	14.9	15.1	14.3	13.2	9.7	11.0	10.0	9.5	9.4	-36.2
Diseases of heart	11.0	10.6	11.9	10.0	9.9	8.9	8.7	8.0	9.6	9.5	9.3	-15.1
ALL CAUSES	140.2	132.2	133.0	139.3	129.8	113.6	113.0	119.7	120.3	118.8	130.1	-7.2
(Number of all deaths)	(2477)	(2426)	(2532)	(2640)	(2511)	(2239)	(2203)	(2203)	(2232)	(2215)	(2451)	(-1.0)
<b>RURAL</b>												
Accidents (unintentional injuries)	75.5	58.9	72.0	66.9	73.2	57.1	64.7	63.9	71.9	74.4	74.9	-0.8
Other	27.4	20.5	27.8	24.5	32.7	29.2	35.4	36.9	10.3	42.7	50.8	85.3
Motor vehicle accidents	48.1	38.4	44.2	42.4	40.5	28.0	29.4	27.0	33.0	31.7	24.2	-49.8
Intentional self-harm (suicide)	26.8	29.5	26.8	25.5	25.6	20.4	29.1	30.2	37.6	32.4	33.6	25.4
Malignant neoplasms	17.2	15.9	17.8	14.0	16.1	12.5	15.9	13.8	12.0	19.0	15.4	-10.4
Diseases of heart	16.8	14.2	10.0	15.0	15.1	9.4	15.0	9.6	16.7	14.5	14.0	-16.6
Assault (homicide)	11.3	9.9	12.6	11.2	12.7	14.6	7.8	16.0	12.8	14.8	13.0	14.6
ALL CAUSES	217.3	194.3	189.9	196.9	188.1	174.2	191.6	203.7	210.2	233.4	226.5	4.2
(Number of all deaths)	(633)	(587)	(588)	(618)	(609)	(590)	(662)	(574)	(593)	(662)	(647)	2.2
<b>STATEWIDE</b>												
Accidents (unintentional injuries)	43.5	38.8	44.6	47.9	43.6	38.0	37.8	37.8	41.9	38.2	41.0	-5.7
Other	20.2	18.3	20.3	23.7	22.6	21.7	23.7	24.1	5.5	23.3	27.7	37.3
Motor vehicle accidents	23.3	20.5	24.3	24.2	21.0	16.3	14.1	13.7	15.2	14.9	13.3	-43.0
Intentional self-harm (suicide)	19.2	18.1	18.2	17.6	19.1	15.0	17.5	19.4	20.9	19.1	20.5	6.8
Malignant neoplasms	15.0	16.0	12.6	13.6	13.3	9.7	13.9	13.4	13.3	14.9	15.3	2.3
Diseases of heart	11.8	11.1	11.7	10.7	10.7	11.5	8.8	8.2	10.6	10.3	10.0	-15.3
Assault (homicide)	14.3	14.5	14.5	14.5	14.1	13.1	10.5	12.0	10.5	10.3	9.9	-30.7
ALL CAUSES	151.1	141.0	140.9	147.5	138.2	123.0	125.2	131.8	133.6	135.0	143.5	-5.0
(Number of all deaths)	(3110)	(3013)	(3121)	(3258)	(3120)	(2829)	(2917)	(2796)	(2856)	(2900)	(3115)	0.2

Notes: <sup>a</sup> Rates are presented per 100,000 young adults 20-44 years old; <sup>b</sup> The five causes with the greatest number of deaths statewide over the 2003-2013 period; <sup>c</sup> 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 2003-2013 are classified by ICD-10, replacing the Ninth Revision (ICD-9); 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-17  
MORTALITY RATES<sup>a</sup> FOR THE FIVE LEADING CAUSES OF DEATH AMONG YOUNG ADULTS (20-44 YEARS)  
BY GENDER IN URBAN AND RURAL AREAS<sup>b</sup>, ARIZONA, 2003-2013**

Area/Gender	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change from 2003
<b>URBAN</b>												
Male	190.5	176.7	181.5	188.7	172.2	154.2	143.9	159.4	158.7	154.0	169.0	-11.3
Female	86.1	84.4	81.0	85.3	83.6	69.4	79.5	78.4	80.3	81.9	89.2	3.7
TOTAL	140.2	132.2	133.0	139.3	129.8	113.6	113.0	119.7	120.3	118.8	130.1	-7.2
<b>RURAL</b>												
Male	288.9	266.5	256.4	266.4	261.2	244.4	258.9	281.0	271.6	288.4	296.4	2.6
Female	142.8	118.0	123.0	125.1	112.7	102.9	123.5	121.6	144.8	174.6	151.6	6.2
TOTAL	217.3	194.3	189.9	196.9	188.1	174.2	191.6	203.7	210.2	233.4	226.5	4.2
<b>STATEWIDE</b>												
Male	204.3	189.4	191.8	199.6	184.7	167.9	161.3	177.2	176.1	173.6	187.2	-8.4
Female	94.5	89.2	87.1	91.2	87.9	69.5	86.5	84.4	89.2	94.5	97.7	3.3
TOTAL	151.1	141.0	140.9	147.5	138.2	123.0	125.2	131.8	133.6	135.0	143.5	-5.0

Notes: <sup>a</sup> Rates are presented per 100,000 persons 20-44 years old; <sup>b</sup> 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.

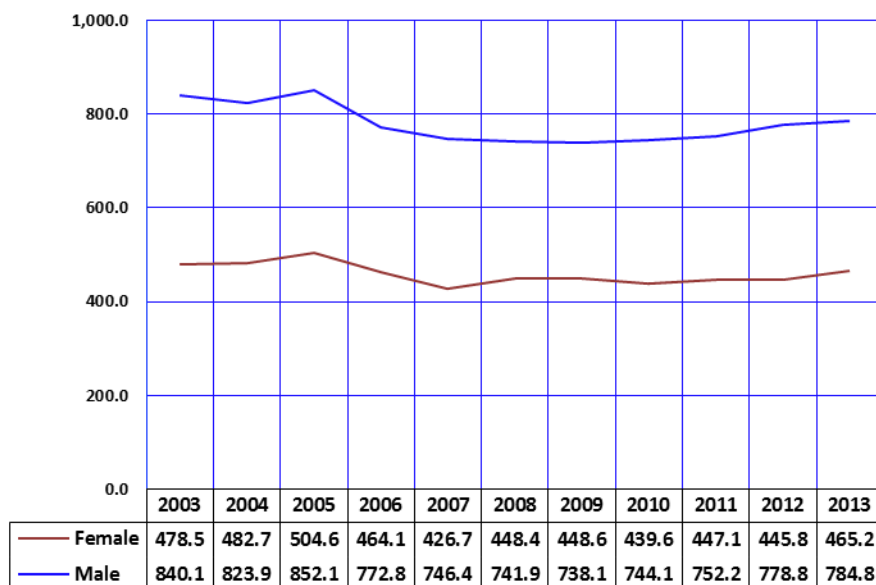
**TABLE 2C-18  
LEADING CAUSES OF DEATH AMONG YOUNG ADULTS (20-44 YEARS) BY GENDER, AREA, AND RACE/ETHNICITY,  
ARIZONA, 2013**

Cause of death	Total <sup>b</sup>	Gender		Area <sup>a</sup>			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
Accidents (unintentional injury)	890†	631	259	668	214	8	502	220	33	130	*
Accidental poisoning	460†	311	151	359	99	*	299	91	12	59	*
Motor vehicle accidents	290†	208	80	217	69	*	120	99	16	50	*
Intentional self-harm (suicide)	445	343	102	345	96	*	283	95	13	48	6
By discharge of firearms	230†	198	35	187	44	*	165	43	8	12	*
By other means	210†	145	67	158	52	*	118	52	*	36	*
Malignant neoplasms	333	149	184	288	44	*	162	117	17	23	14
Malignant neoplasm of lymphoid, hematopoietic and related tissue	50†	33	18	47	*	0	21	23	*	*	*
Malignant neoplasm of breast	50†	0	45	39	6	0	25	14	*	*	*
Malignant neoplasm of meninges, brain and other parts of central nervous system	30†	18	12	26	*	0	18	12	0	0	0
Diseases of heart	220†	158	59	176	40	*	117	62	19	15	*
Assault (homicide)	220†	179	36	178	37	0	62	84	31	35	*
By discharge of firearms	150†	125	25	140	10	0	46	66	26	10	*
By other means	70†	54	11	38	27	0	16	18	*	25	*
Chronic liver disease and cirrhosis	150†	82	63	101	44	0	64	25	*	55	0
Diabetes	84	47	37	65	19	0	39	15	8	22	0
Cerebrovascular diseases	40†	22	15	32	*	0	13	17	*	*	*
Obesity	40†	25	11	31	*	0	19	7	*	9	0
Human immunodeficiency virus (HIV) disease	30†	27	*	25	*	0	12	9	7	*	0
<b>Total, all causes</b>	<b>3,115</b>	<b>2,082</b>	<b>1,033</b>	<b>2,451</b>	<b>647</b>	<b>17</b>	<b>1,618</b>	<b>834</b>	<b>181</b>	<b>439</b>	<b>43</b>

Notes: \* Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; <sup>a</sup> Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; <sup>b</sup> 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<sup>a</sup> by Gender and Year among Middle-Aged Adults 45-64 Years, Arizona, 2003-2013**



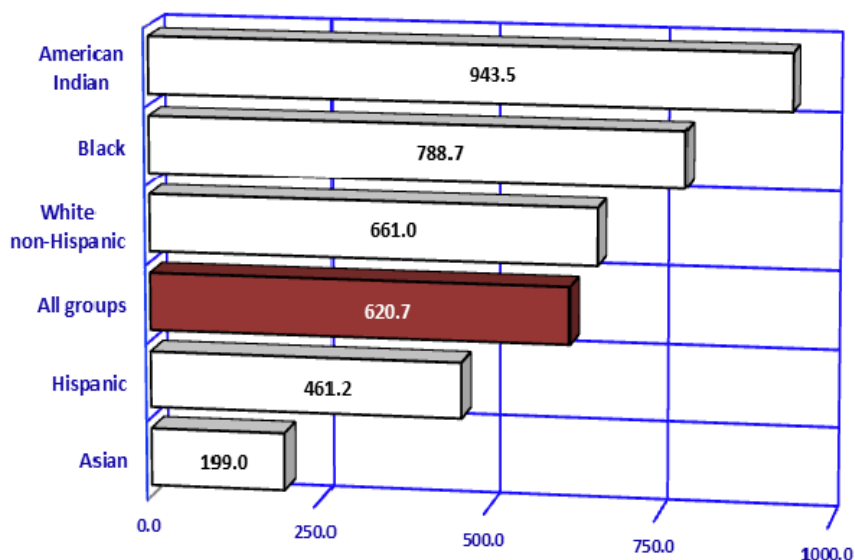
Notes: <sup>a</sup> Number of deaths per 100,000 persons, 45-64 years old in specified group.

In 2012, the 1,594,698 middle-aged adult residents aged 45 to 64 experienced 9,898 deaths, or an average of 27 deaths, per day. The total number of deaths among 45 – 64 year old Arizona residents was higher in 2013 (n = 9,898) 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 2013 total mortality rate among middle-age females was 2.8 percent lower, and among middle-aged males 6.6 percent lower than their respective rates in 2003 (**Figure 2C-17, Table 2C-19**). In 2013, the mortality rate for males age 45 – 64 was 68.7 percent greater than for females of the same age group.

The five causes with the greatest number of deaths in 2003-2013 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<sup>a</sup> by Race/Ethnicity among Middle-Aged Adults 45-64 Years, Arizona, 2013**



Notes: <sup>a</sup> 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 (943.5/100,000, 788.7/100,000, and 661.0/100,000, respectively) among the racial/ethnic groups.

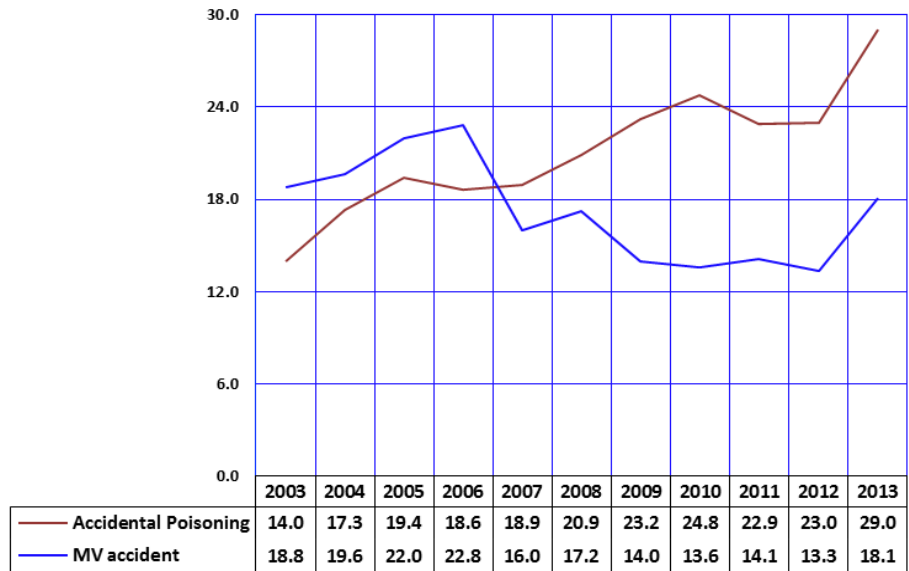
If the 2013 total mortality rate for Asian middle-aged adults applied to all Arizona residents 45-64 years old, 3,173 middle-aged adults would have died rather than the 9,898 who actually did.

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, increasing 26.1 percent from 2012 to 2013. In 2013, 426 deaths were attributed to accidental poisoning (Table 2C-22), compared to 168 deaths in 2003. Of the 426 accidental poisoning deaths in this age group, 386 were drug overdoses (ICD10 X40-X44) and 35 were alcohol poisoning (ICD10 X45).

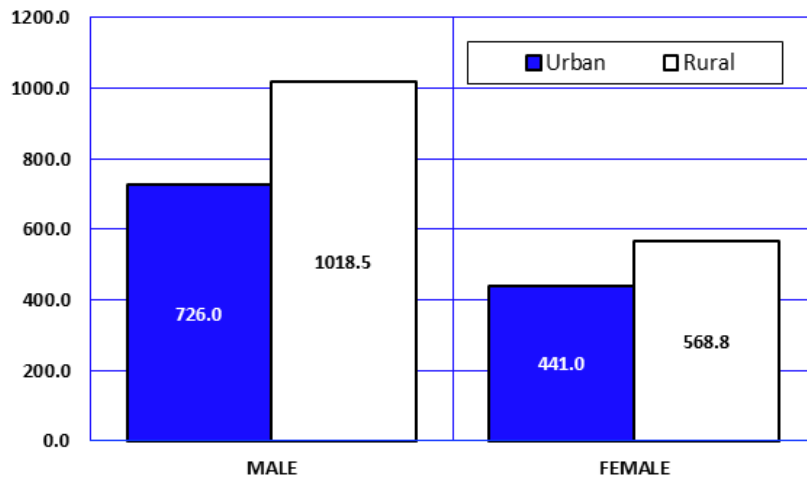
Beginning in 2007, the mortality rate for accidental poisoning exceeded the mortality rate for motor vehicle-related injuries among the middle-aged (Figure 2C-19). In 2013, the rate of 29.0 per 100,000 middle-aged adults was 60.2 percent greater than the mortality rate of 18.1/100,000 for motor vehicle accidents. White non-Hispanics accounted for 316 or 74.2 percent of all accidental poisoning deaths (Table 2C-22).

Figure 2C-19  
Mortality Rates<sup>a</sup> for Accidental Poisoning and Motor Vehicle-related Injuries by Year among Middle-Aged Adults 45-64 Years, Arizona, 2003-2013



Notes: <sup>a</sup> Number of deaths per 100,000 persons, 45-64 years old in specified group

Figure 2C-20  
Mortality Rates by Gender in Urban<sup>a</sup> and Rural Areas among Middle-Aged Adults 45-64 Years, Arizona, 2013



In 2013, 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 2013 was 40.3 percent greater than for urban males, 79.1 percent greater than rural females, and 131.0 percent (2.3 times) greater than urban females.

Notes: <sup>a</sup> Urban counties include Maricopa, Pima, Pinal and Yuma Counties.

**TABLE 2C-19  
MORTALITY RATES<sup>a</sup> FOR THE FIVE LEADING CAUSES<sup>b</sup> OF DEATH AMONG MIDDLE-AGED ADULTS (45-64 YEARS)  
BY GENDER, ARIZONA, 2003-2013**

Gender/Cause	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change from 2003
<b>MALE</b>												
Malignant neoplasms	220.6	213.1	210.6	192.1	192.1	184.5	182.2	188.3	186.3	196.6	191.4	-13.2
Diseases of heart	196.7	196.7	207.5	186.7	170.8	175.5	169.0	160.7	165.3	155.1	159.3	-19.0
Accidents (unintentional injuries)	68.8	75.7	86.2	81.2	73.2	76.5	71.9	69.2	68.9	68.0	77.9	13.2
Other	42.6	48.0	52.5	49.3	50.1	51.9	51.1	54.6	19.8	47.9	54.5	28.0
Motor vehicle accidents	26.2	27.7	33.7	31.9	23.1	24.6	20.8	19.9	21.4	20.1	23.3	-10.9
Chronic liver disease and cirrhosis	42.7	42.3	45.1	34.4	35.5	39.2	38.0	42.1	49.6	50.2	46.7	9.3
Suicide	29.4	31.6	32.7	31.9	35.0	35.1	37.0	40.9	41.3	41.8	38.3	30.2
ALL CAUSES	840.1	823.9	852.1	772.8	746.4	741.9	738.1	744.1	752.2	778.8	784.8	-6.6
(Number of all deaths)	(4776)	(4906)	(5232)	(5282)	(5397)	(5450)	(5472)	(5659)	(5760)	(5999)	(6088)	27.5
<b>FEMALE</b>												
Malignant neoplasms	181.3	179.4	182.3	166.2	154.7	151.4	154.2	153.9	156.9	155.1	160.7	-11.4
Diseases of heart	72.8	74.8	74.2	66.4	65.0	63.4	59.4	55.9	61.8	60.5	54.6	-25.0
Accidents (unintentional injuries)	24.6	29.6	33.1	35.8	30.2	34.2	36.1	36.6	32.8	33.0	38.0	54.4
Other	12.7	17.8	22.2	21.6	21.0	24.2	28.5	29.0	7.4	26.1	29.8	134.6
Motor vehicle accidents	11.9	11.8	10.9	14.2	9.2	10.0	7.6	7.7	7.1	6.9	8.2	-31.2
Chronic lower respiratory diseases	22.5	18.5	25.4	21.6	23.6	24.3	19.2	19.3	21.6	24.2	24.8	10.2
Diabetes	17.2	19.0	20.1	19.1	14.0	16.0	14.2	17.0	21.3	22.3	23.6	37.0
ALL CAUSES	478.5	482.7	504.6	464.1	426.7	448.4	448.6	439.6	447.1	445.8	465.2	-2.8
(Number of all deaths)	(2898)	(3022)	(3292)	(3336)	(3232)	(3449)	(3483)	(3553)	(3638)	(3631)	(3810)	31.5
<b>TOTAL</b>												
Malignant neoplasms	200.3	195.8	196.0	178.8	173.0	167.6	167.9	170.6	171.2	175.2	175.6	-12.3
Diseases of heart	132.9	134.2	138.8	125.0	116.6	118.2	112.9	106.7	112.0	106.5	105.5	-20.6
Accidents (unintentional injuries)	46.0	52.1	58.8	57.9	51.2	54.9	53.6	52.4	50.3	50.0	57.4	24.7
Other	27.2	32.5	36.8	35.1	35.2	37.7	39.5	38.8	13.4	36.7	41.8	53.8
Motor vehicle accidents	18.8	19.6	22.0	22.8	16.0	17.2	14.0	13.6	14.1	13.3	15.6	-17.3
Chronic liver disease and cirrhosis	29.0	28.9	31.8	25.0	25.3	29.7	29.1	30.2	34.3	35.0	34.7	19.6
Chronic lower respiratory diseases	21.9	21.4	26.8	22.7	21.8	24.7	21.5	20.0	23.6	25.1	24.7	12.8
ALL CAUSES	653.7	649.1	673.1	614.6	582.8	591.8	590.0	587.2	595.0	607.6	620.7	-5.1
(Number of all deaths)	(7675)	(7928)	(8524)	(8618)	(8629)	(8899)	(8855)	(9212)	(9398)	(9630)	(9898)	29.0

Notes: <sup>a</sup> Rates are presented per 100,000 middle-aged adults 45-64 years old; <sup>b</sup> The five causes with the greatest number of deaths over the 2003-2013 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 2003-2013 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<sup>a</sup> FOR THE FIVE LEADING CAUSES<sup>b</sup> OF DEATH AMONG MIDDLE-AGED ADULTS (45-64 YEARS)**  
**IN URBAN AND RURAL AREAS<sup>c</sup>, ARIZONA, 2003-2013**

Area/Cause	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change from 2003
<b>URBAN</b>												
Malignant neoplasms	198.0	188.9	190.5	174.8	169.6	162.8	165.4	164.6	166.5	171.8	169.1	-14.6
Diseases of heart	125.9	127.0	132.5	119.9	109.4	109.8	101.3	98.6	103.9	95.9	96.5	-23.4
Accidents (unintentional injuries)	40.6	47.6	55.7	54.2	47.8	51.6	48.8	47.5	45.4	47.6	51.5	26.9
Other	25.9	30.6	37.0	34.5	34.1	36.8	37.3	36.5	12.4	35.7	38.5	48.7
Motor vehicle accidents	14.7	17.0	18.7	19.7	13.7	14.8	11.5	11.1	11.9	11.9	13.0	-11.6
Chronic liver disease and cirrhosis	26.8	25.2	30.0	23.3	23.0	27.4	25.7	27.2	30.8	31.5	29.9	11.4
Chronic lower respiratory diseases	21.2	21.9	25.8	22.3	20.5	23.6	20.2	19.2	20.6	22.9	22.6	6.8
ALL CAUSES	630.2	620.7	647.8	595.0	559.7	559.5	559.4	552.4	561.5	575.8	579.8	-8.0
(Number of all deaths)	(5987)	(6140)	(6658)	(6834)	(6812)	(6918)	(6979)	(7098)	(7274)	(7513)	(7631)	27.5
<b>RURAL</b>												
Malignant neoplasms	210.1	225.2	219.6	197.0	188.3	188.1	176.9	193.1	186.3	187.8	204.7	-2.6
Diseases of heart	162.4	164.5	165.9	148.1	149.6	156.0	164.3	137.4	143.7	152.5	142.2	-12.4
Accidents (unintentional injuries)	68.2	71.0	72.5	74.9	65.3	68.1	71.4	66.2	67.6	55.3	75.8	11.1
Other	32.5	40.4	36.5	37.9	38.7	40.8	46.6	42.6	16.5	36.4	51.7	59.1
Motor vehicle accidents	35.7	30.6	36.0	37.0	26.6	27.3	24.8	23.6	22.5	18.9	24.1	-32.6
Chronic liver disease and cirrhosis	37.9	44.8	39.8	32.3	36.1	39.6	43.3	41.9	49.3	47.5	57.1	50.7
Chronic lower respiratory diseases	25.0	18.9	31.4	24.8	28.1	29.5	27.4	22.2	36.3	33.2	32.3	29.3
ALL CAUSES	750.7	768.9	781.4	702.9	687.3	727.8	713.2	708.3	716.6	720.2	786.8	4.8
(Number of all deaths)	(1683)	(1786)	(1865)	(1784)	(1810)	(1946)	(1927)	(2010)	(2035)	(2017)	(2191)	30.2
<b>STATEWIDE</b>												
Malignant neoplasms	200.3	195.8	196.0	178.8	173.0	167.6	167.9	170.6	171.2	175.2	175.6	-12.3
Diseases of heart	132.9	134.2	138.8	125.0	116.6	118.2	112.9	106.7	112.0	106.5	105.5	-20.6
Accidents (unintentional injuries)	46.0	52.1	58.8	57.9	51.2	54.9	53.6	52.4	50.3	50.0	57.4	24.7
Other	27.2	32.5	36.8	35.1	35.2	37.7	39.5	38.8	13.4	36.7	41.8	53.8
Motor vehicle accidents	18.8	19.6	22.0	22.8	16.0	17.2	14.0	13.6	14.1	13.3	15.6	-17.3
Chronic liver disease and cirrhosis	29.0	28.9	31.8	25.0	25.3	29.7	29.1	30.2	34.3	35.0	34.7	19.6
Chronic lower respiratory diseases	21.9	21.4	26.8	22.7	21.8	24.7	21.5	20.0	23.6	25.1	24.7	12.8
ALL CAUSES	653.7	649.1	673.1	614.6	582.8	591.8	590.0	587.2	595.0	607.6	620.7	-5.1
(Number of all deaths)	(7675)	(7928)	(8524)	(8618)	(8629)	(8899)	(8855)	(9212)	(9398)	(9630)	(9898)	29.0

Notes: <sup>a</sup> Rates are presented per 100,000 middle-aged adults 45-64 years old; <sup>b</sup> The five causes with the greatest number of deaths over the 2003-2013 period; <sup>c</sup> 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 2003-2013 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-21**  
**MORTALITY RATES<sup>a</sup> FOR THE FIVE LEADING CAUSES OF DEATH AMONG MIDDLE-AGED ADULTS (45-64 YEARS)**  
**BY GENDER IN URBAN AND RURAL AREAS<sup>b</sup>, ARIZONA, 2003-2013**

Area/Gender	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change from 2003
<b>URBAN</b>												
Male	809.3	788.6	815.2	749.3	714.7	693.2	697.6	690.0	703.5	724.9	726.0	-10.3
Female	462.2	461.1	490.0	447.6	410.8	431.1	426.5	423.0	427.8	434.7	441.0	-4.6
TOTAL	630.1	620.7	647.8	595.0	559.7	559.5	559.4	552.4	561.5	575.8	579.8	-8.0
<b>RURAL</b>												
Male	966.6	972.3	1010.8	879.7	891.7	953.6	896.8	924.9	918.6	968.7	1018.5	5.4
Female	546.9	575.1	567.2	536.9	497.7	518.4	543.0	504.0	526.1	486.1	568.8	4.0
TOTAL	750.7	768.9	781.4	702.9	687.3	727.8	713.2	708.3	716.6	720.2	786.8	4.8
<b>STATEWIDE</b>												
Male	840.1	823.9	852.1	772.8	746.4	741.9	738.1	744.1	752.2	778.8	784.8	-6.6
Female	478.5	482.7	504.6	464.1	426.7	448.4	448.6	439.6	447.1	445.8	465.2	-2.8
TOTAL	653.7	649.1	673.1	614.6	582.8	591.8	590.0	587.2	595.0	607.6	620.7	-5.1

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



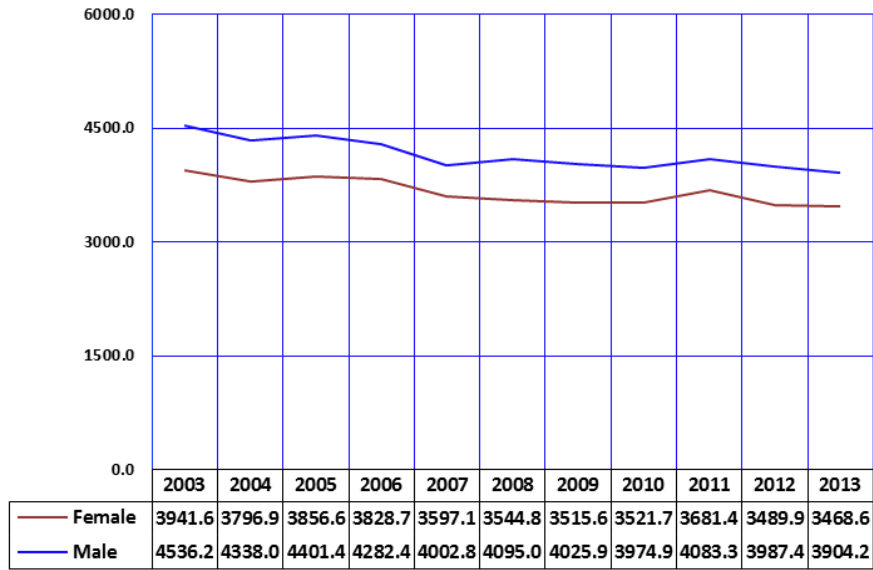
**TABLE 2C-22  
LEADING CAUSES OF DEATH AMONG MIDDLE-AGED ADULTS (45-64 YEARS) BY GENDER, AREA, AND RACE/ETHNICITY,  
ARIZONA, 2013**

Cause of death	Total	Gender		Area <sup>a</sup>			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	2,801	1,485	1,316	2,226	570	*	2,125	445	120	82	29
Malignant neoplasm of trachea, bronchus and lung	600†	332	268	474	126	0	525	43	23	*	*
Malignant neoplasm of colon, rectum, and anus	290†	168	121	231	57	*	215	51	16	*	*
Malignant neoplasm of breast	270†	*	271	232	40	0	190	57	11	7	7
Malignant neoplasm of pancreas	210†	123	85	164	44	0	148	38	15	*	*
Diseases of heart	1,683	1,236	447	1,270	396	17	1,283	223	103	59	15
Accidents (unintentional injury)	920†	604	311	678	211	26	650	147	29	87	*
Accidental poisoning	426	254	172	334	83	9	316	53	16	41	0
Motor vehicle accidents	250†	181	67	171	67	10	163	60	6	18	*
Falls	70†	47	26	64	9	0	57	9	*	*	*
Chronic liver disease and cirrhosis	550†	362	191	393	159	*	334	110	9	96	*
Diabetes	497	304	193	408	89	0	266	129	41	54	7
Intentional self-harm (suicide)	410†	297	109	299	105	*	348	38	*	10	*
By discharge of firearms	220†	183	41	160	64	0	194	22	*	*	*
By other means	180†	114	68	139	41	*	154	16	*	*	*
Chronic lower respiratory diseases	390†	191	203	298	90	6	346	26	17	*	*
Cerebrovascular diseases	272	160	112	222	48	*	179	49	27	9	8
Viral hepatitis	200	145	55	160	39	*	119	58	9	14	0
Essential (primary) hypertension and hypertensive renal disease	100†	67	30	79	18	0	56	21	9	8	*
Assault (homicide)	90†	68	19	68	18	*	52	14	8	12	*
By discharge of firearms	50†	41	11	42	10	0	32	8	*	7	0
By other means	40†	27	8	26	8	*	20	6	*	*	*
Influenza and pneumonia	80†	46	35	58	22	*	57	13	*	10	0
Septicemia	70†	40	33	49	23	*	52	12	*	6	*
Human immunodeficiency virus (HIV) disease	50†	46	8	42	10	*	32	10	9	*	0
Nephritis, nephrotic syndrome and nephrosis	50†	31	21	35	17	0	31	10	*	8	0
<b>Total, all causes</b>	<b>9,898</b>	<b>6,088</b>	<b>3,810</b>	<b>7,631</b>	<b>2,191</b>	<b>76</b>	<b>7,161</b>	<b>1,571</b>	<b>475</b>	<b>597</b>	<b>94</b>

Note: \* Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; <sup>a</sup> 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<sup>a</sup> by Gender and Year among Elderly 65 Years and Older, Arizona, 2003-2013**



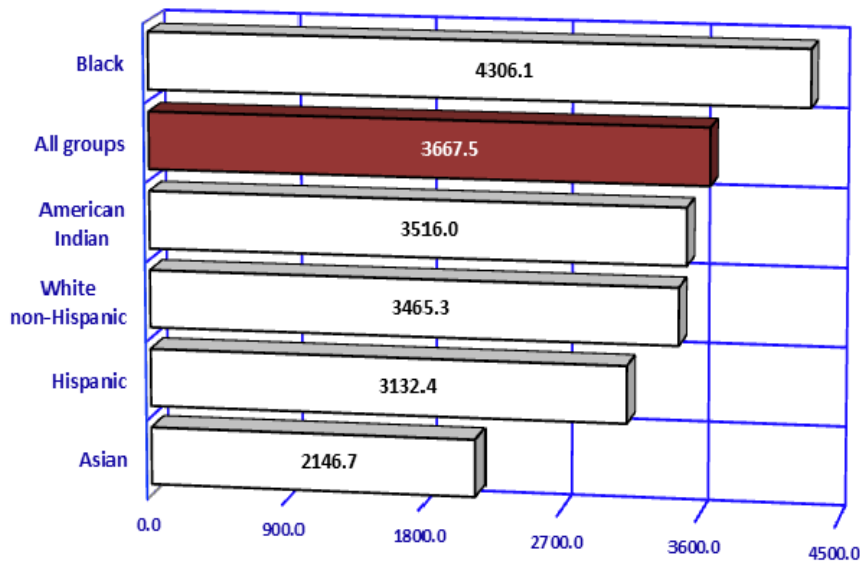
Notes: <sup>a</sup> Number of deaths per 100,000 persons, 65+ years old in specified group.

In 2013, an estimated 981,128 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, 19.0 percent more elderly women than men were alive in 2013.

The 2013 elderly mortality rate of 3,667.5 per 100,000 was 12.8 percent lower than the 2003 rate of 4,205.5 and was the lowest mortality rate among the elderly since 1980, and likely the lowest mortality rate amongst this age group in Arizona's history (**Table 2C-23**).

The 2013 total mortality rate among elderly females was 12.0 percent lower than their rate in 2003. The mortality rate among elderly males decreased 13.9 percent during the same period (**Figure 2C-21, Table 2C-23**).

**Figure 2C-22**  
**Mortality Rates<sup>a</sup> by Race/Ethnicity among Elderly 65 Years and Older, Arizona, 2013**



Notes: <sup>a</sup> Number of deaths per 100,000 persons, 65+ years old in specified group.

In 2013 the mortality rate for Arizona's Black or African American elderly residents was 2 times that of the Asian elderly population. The mortality rate of 2,146.7 /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 2013 at 3,132.4/100,000.

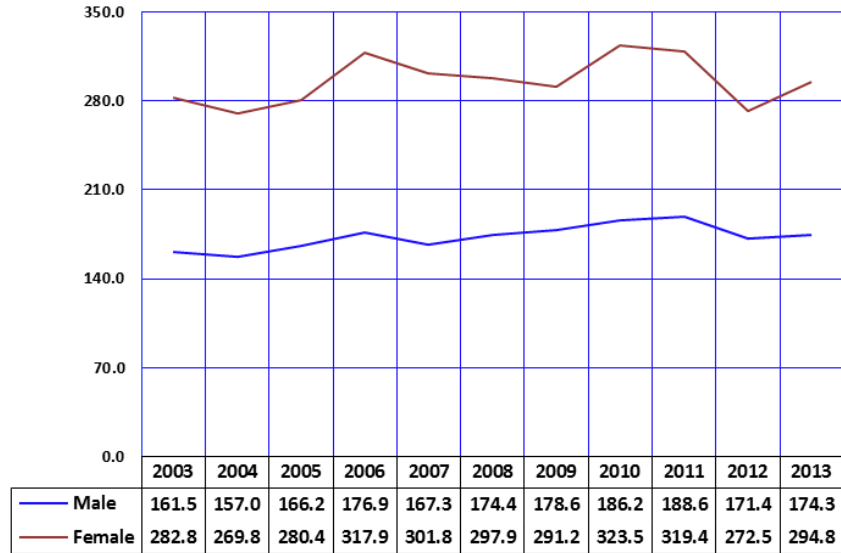
2C.AGE-SPECIFIC MORTALITY  
**Elderly mortality (ages 65 years and older)**

**Tables 2C-23 and 2C-24** provide mortality rates for the five causes with the greatest number of deaths over the 2003 – 2013 period.

In 2013, Alzheimer’s disease (2,353 deaths; **Table 2C-26**) accounted for 6.5 percent of elderly mortality. From 2012 to 2013, gender-specific death rates for Alzheimer’s disease increased for both elderly males and elderly females (**Figure 2C-23**).

There were 1,572 deaths from Alzheimer’s disease among elderly females in 2013, twice the number of deaths from this cause among males (781; **Table 2C-26**). White non-Hispanic elderly accounted for 85.7 percent of the 2013 deaths from Alzheimer’s disease (based on data in **Table 2C-26**).

**Figure 2C-23**  
**Trends in Mortality Rates for Alzheimer’s Disease<sup>a</sup> by Gender and Year among Elderly 65 Years and Older, Arizona, 2003-2013**

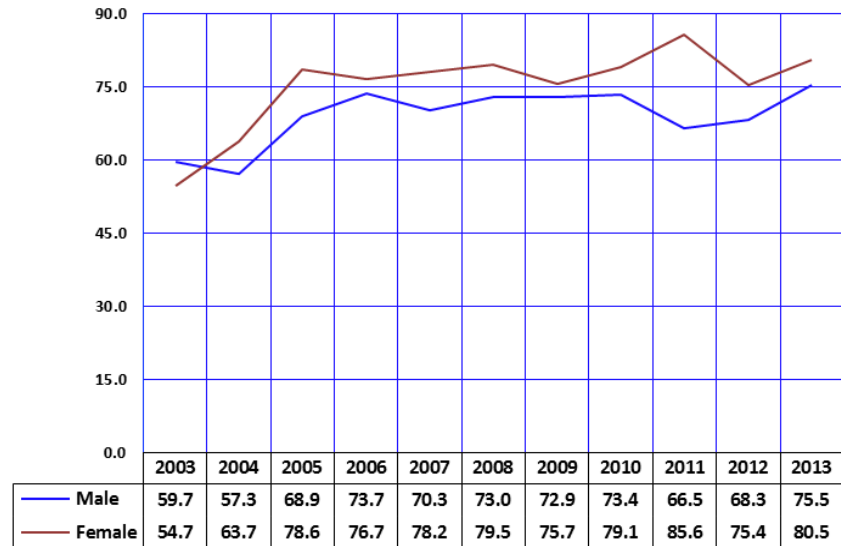


Notes: <sup>a</sup> Number of deaths due to Alzheimer’s disease per 100,000 persons, 65+ years old in specified group.

**Figure 2C-24**  
**Trends in Mortality Rates for Falls and Fall-related Injuries<sup>a</sup> by Gender and Year among Elderly 65 Years and Older, Arizona, 2003-2013**

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 2013, 767 elderly Arizonans 65 years or older died from *fall-related injuries*, compared to 679 in 2012, a 13.0 percent increase (**Table 2C-26**).

In 2013, those 85 years old or older experienced the largest number of *fall-related deaths* (n = 467), followed by Arizonans 75-84 years old (n = 208), and the youngest elderly 65-74 years old (n = 92 ).



Notes: <sup>a</sup> 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<sup>a</sup> FOR THE FIVE LEADING CAUSES<sup>b</sup> OF DEATH AMONG ELDERLY (65 YEARS AND OLDER) BY GENDER,**  
**ARIZONA, 2003-2013**

Gender/Cause	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change from 2003
<b>MALE</b>												
Diseases of heart	1335.3	1241.4	1238.7	1138.7	1079.2	1114.1	1073.3	992.8	1065.5	1022.2	1007.0	-24.6
Malignant neoplasms	1126.0	1085.8	1068.2	1058.2	1020.4	1006.6	1017.3	1007.7	1007.4	992.6	958.6	-14.9
Chronic lower respiratory diseases	340.9	296.0	317.3	326.7	300.9	316.8	303.6	310.9	318.4	319.9	302.7	-11.2
Alzheimer's disease	161.5	157.0	166.2	176.9	167.3	174.4	178.6	186.2	188.6	171.4	174.3	8.0
Cerebrovascular diseases	248.9	242.2	224.9	195.2	168.6	188.9	182.8	169.3	164.4	165.5	151.8	-39.0
ALL CAUSES	4536.2	4338.0	4401.4	4282.4	4002.8	4095.0	4025.9	3974.9	4083.3	3987.4	3904.2	-13.9
(Number of all deaths)	(14744)	(14614)	(15385)	(15273)	(14981)	(15589)	(15462)	(15967)	(16517)	(17101)	(17489)	18.6
<b>FEMALE</b>												
Diseases of heart	1098.6	1028.8	1013.9	968.0	891.9	860.8	855.9	804.8	847.2	794.5	763.7	-30.5
Malignant neoplasms	757.2	731.8	721.8	713.1	696.4	691.1	701.6	702.5	710.9	678.6	697.9	-7.8
Alzheimer's disease	282.8	269.8	280.4	317.9	301.8	297.9	291.2	323.5	319.4	272.5	294.8	4.3
Chronic lower respiratory diseases	276.2	264.0	297.4	286.3	255.0	279.3	273.5	272.6	301.4	268.6	283.6	2.7
Cerebrovascular diseases	316.2	311.8	286.9	258.7	246.8	229.2	218.5	229.9	231.0	208.0	198.1	-37.4
ALL CAUSES	3941.6	3796.9	3856.6	3828.7	3597.1	3544.8	3515.6	3521.7	3681.4	3489.9	3468.6	-12.0
(Number of all deaths)	(16070)	(15918)	(16778)	(16919)	(16601)	(16625)	(16636)	(16909)	(17798)	(17855)	(18494)	15.1
<b>TOTAL</b>												
Diseases of heart	1203.6	1123.5	1114.1	1044.8	975.7	974.3	953.3	890.4	946.8	898.3	874.8	-27.3
Malignant neoplasms	920.9	889.5	876.1	867.2	841.5	832.4	843.0	841.5	846.1	821.8	816.9	-11.3
Chronic lower respiratory diseases	304.9	278.3	306.3	304.3	275.6	296.1	287.0	290.1	309.1	292.0	292.3	-4.1
Alzheimer's disease	229.0	220.1	229.5	258.2	241.6	242.6	240.8	260.9	259.8	226.4	239.8	4.7
Cerebrovascular diseases	286.3	280.8	259.2	230.3	211.8	211.1	202.5	202.3	200.7	188.6	176.9	-38.2
ALL CAUSES	4205.5	4038.0	4099.3	4031.3	3778.8	3791.3	3744.2	3728.2	3864.8	3716.9	3667.5	-12.8
(Number of all deaths)	(30815)	(30532)	(32163)	(32192)	(31852)	(32214)	(32098)	(32876)	(34318)	(34958)	(35983)	16.8

Notes: <sup>a</sup> Rates are presented per 100,000 elderly persons 65 years and older; <sup>b</sup> The five causes with the greatest number of deaths over the 2003-2013 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 2003-2013 are classified by ICD-10, replacing the Ninth Revision (ICD-9).

**TABLE 2C-24  
MORTALITY RATES<sup>a</sup> FOR THE FIVE LEADING CAUSES<sup>b</sup> OF DEATH AMONG ELDERLY (65 YEARS AND OLDER)  
IN URBAN AND RURAL AREAS<sup>c</sup>, ARIZONA, 2003-2013**

Area/Cause	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change from 2003
<b>URBAN</b>												
Diseases of heart	1217.0	1130.1	1110.7	1055.0	983.1	971.9	952.2	888.5	932.0	891.8	862.3	-29.1
Malignant neoplasms	907.5	869.3	863.6	854.5	834.1	817.9	835.0	834.0	846.2	825.5	807.6	-11.0
Chronic lower respiratory diseases	303.4	278.9	309.3	303.2	271.8	289.2	282.2	288.7	311.3	288.9	286.3	-5.6
Alzheimer's disease	235.7	232.9	244.6	270.7	262.4	261.3	263.2	284.9	288.9	251.5	272.0	15.4
Cerebrovascular diseases	289.5	287.8	257.3	234.6	211.3	206.4	206.1	201.5	202.0	192.8	180.1	-37.8
ALL CAUSES	4192.3	4021.7	4083.4	4053.0	3792.4	3765.0	3765.4	3738.3	3886.0	3740.3	3663.4	-12.6
(Number of all deaths)	(24633)	(24384)	(25740)	(25585)	(25143)	(25374)	(25596)	(26043)	(27302)	(27824)	(28442)	15.5
<b>RURAL</b>												
Diseases of heart	1146.3	1094.8	1127.8	1006.1	946.3	979.3	950.4	889.9	990.4	912.5	919.1	-19.8
Malignant neoplasms	974.1	966.6	927.4	915.2	868.7	883.7	865.3	864.6	840.5	802.6	847.8	-13.0
Chronic lower respiratory diseases	310.0	275.7	293.8	308.5	290.0	322.1	302.5	291.6	298.9	299.6	314.0	1.3
Cerebrovascular diseases	272.1	251.7	267.2	214.0	213.6	228.2	187.0	204.1	193.1	171.9	164.1	-39.7
Alzheimer's disease	140.5	195.6	168.0	195.5	161.5	166.7	152.1	169.6	145.1	130.2	117.2	-16.6
ALL CAUSES	4249.8	4093.4	4164.3	3949.5	3723.8	3863.1	3628.5	3657.5	3741.1	3590.0	3665.4	-13.8
(Number of all deaths)	(6169)	(6132)	(6421)	(6607)	(6434)	(6789)	(6441)	(6773)	(6935)	(7058)	(7505)	21.7
<b>STATEWIDE</b>												
Diseases of heart	1203.6	1123.5	1114.1	1044.8	975.7	974.3	953.3	890.4	946.8	898.3	874.8	-27.3
Malignant neoplasms	920.9	889.5	876.1	867.2	841.5	832.4	843.0	841.5	846.1	821.8	816.9	-11.3
Chronic lower respiratory diseases	304.9	278.3	306.3	304.3	275.6	296.1	287.0	290.1	309.1	292.0	292.3	-4.1
Alzheimer's disease	229.0	220.1	229.5	258.2	241.6	242.6	240.8	260.9	259.8	226.4	239.8	4.7
Cerebrovascular diseases	286.3	280.8	259.2	230.3	211.8	211.1	202.5	202.3	200.7	188.6	176.9	-38.2
ALL CAUSES	4205.5	4038.0	4099.3	4031.3	3778.8	3791.3	3744.2	3728.2	3864.8	3716.9	3667.5	-12.8
(Number of all deaths)	(30815)	(30532)	(32163)	(32192)	(31852)	(32214)	(32098)	(32876)	(34318)	(34958)	(35983)	16.8

Notes: <sup>a</sup> Rates are presented per 100,000 elderly persons 65 years and older; <sup>b</sup> The five causes with the greatest number of deaths over the 2003-2013 period; <sup>c</sup> 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 2003-2013 are classified by ICD-10, replacing the Ninth Revision (ICD-9); 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-25  
MORTALITY RATES<sup>a</sup> FOR THE FIVE LEADING CAUSES OF DEATH AMONG ELDERLY (65 YEARS AND OLDER)  
BY GENDER IN URBAN AND RURAL AREAS<sup>b</sup>, ARIZONA, 2003-2013**

Area/Gender	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% change from 2003
<b>URBAN</b>												
Male	4542.1	4323.1	4359.2	4283.2	3986.1	4053.2	4013.8	3976.9	4107.6	3980.1	3898.2	-14.2
Female	3920.8	3786.0	3866.8	3871.5	3638.1	3534.9	3567.5	3543.8	3705.0	3543.8	3470.8	-11.5
TOTAL	4192.1	4021.7	4083.4	4053.0	3792.4	3765.0	3765.4	3738.3	3886.0	3740.3	3663.4	-12.6
<b>RURAL</b>												
Male	4502.4	4379.8	4561.0	4279.7	4058.9	4216.1	4021.7	3917.1	3948.9	3952.6	3895.3	-13.5
Female	4024.4	3836.1	3811.3	3658.6	3432.7	3555.8	3286.5	3418.2	3547.4	3256.0	3454.5	-14.2
TOTAL	4249.8	4093.4	4164.3	3949.5	3723.8	3863.1	3628.5	3657.5	3741.1	3590.0	3665.4	-13.8
<b>STATEWIDE</b>												
Male	4536.2	4338.0	4401.4	4282.4	4002.8	4095.0	4025.9	3974.9	4083.3	3987.4	3904.2	-13.9
Female	3941.6	3796.9	3856.6	3828.7	3597.1	3544.8	3515.6	3521.7	3681.4	3489.9	3468.6	-12.0
TOTAL	4205.3	4038.0	4099.3	4031.3	3778.8	3791.3	3744.2	3728.2	3864.8	3716.9	3667.5	-12.8

Notes: <sup>a</sup> Rates are presented per 100,000 persons 65 years and older; <sup>b</sup> Urban = Maricopa, Pima, Pinal, 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, 2013**

Cause of death	Total	Gender		Area <sup>a</sup>			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
Diseases of heart	8,583	4,511	4,072	6,695	1,882	6	7,393	751	203	156	80
Malignant neoplasms	8,015	4,294	3,721	6,270	1,736	9	6,819	765	196	137	98
Malignant neoplasm of trachea, bronchus and lung	2,147	1,143	1,004	1,666	479	*	1,908	154	46	13	26
Malignant neoplasm of lymphoid, hematopoietic and related tissue	901	516	385	698	203	0	760	92	22	14	13
Malignant neoplasm of colon, rectum, and anus	660	318	342	506	152	*	551	65	19	12	13
Malignant neoplasm of pancreas	540	264	276	431	109	0	458	47	11	16	8
Malignant neoplasm of prostate	526	526	0	380	145	*	442	50	15	12	7
Malignant neoplasm of breast	520†	8	511	417	102	0	446	52	11	7	*
Chronic lower respiratory diseases	2,868	1,356	1,512	2,223	643	*	2,630	145	53	20	20
Alzheimer's disease	2,353	781	1,572	2,112	240	*	2,016	251	45	24	17
Cerebrovascular diseases	1,736	680	1,056	1,398	336	*	1,428	189	57	32	30
Diabetes	1,162	633	529	938	223	*	769	252	58	66	17
Accidents (unintentional injury)	1,146	563	583	896	246	*	959	121	20	35	11
Falls	767	338	429	629	138	0	662	82	8	9	6
Motor vehicle accidents	130†	86	48	99	33	*	103	15	*	8	*
Influenza and pneumonia	608	285	323	453	154	*	486	71	13	30	8
Essential (primary) hypertension and hypertensive disease	601	256	345	521	80	0	469	76	23	16	17
Parkinson's disease	560†	358	203	451	110	0	481	56	8	12	*
Nephritis, nephrotic syndrome and nephrosis	328	157	171	198	130	0	259	30	13	20	6
Septicemia	260†	133	130	197	66	0	197	39	8	15	*
<b>Total, all causes</b>	<b>35,983</b>	<b>17,489</b>	<b>18,494</b>	<b>28,442</b>	<b>7,505</b>	<b>36</b>	<b>30,394</b>	<b>3,541</b>	<b>845</b>	<b>816</b>	<b>387</b>

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





# **COMPARATIVE CAUSE-SPECIFIC MORTALITY BY AGE GROUP**

**TABLE 2C-27  
COMPARISON OF CAUSES OF MORTALITY BY AGE GROUP, ARIZONA, 2013**

	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	49,929	447	252	214	3,115	9,898	35,983	20
Salmonella infections	0	0	0	0	0	0	0	0
Shigellosis and amebiasis	0†	0	0	0	0	0	*	0
Certain other intestinal infections	250†	7	0	0	*	27	208	0
Enterocolitis due to Clostridium difficile	190†	0	0	0	*	21	165	0
Tuberculosis	20†	0	*	0	0	*	9	0
Respiratory tuberculosis	10†	0	*	0	0	*	7	0
Other tuberculosis	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	0†	0	0	0	*	*	*	0
Septicemia	350†	*	0	0	14	73	263	0
Syphilis	0†	0	0	0	0	0	*	0
Acute poliomyelitis	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	280†	0	*	0	16	200	60	0
Human immunodeficiency virus (HIV) disease	90	0	0	0	29	54	7	0
Malaria	0†	0	0	0	0	*	0	0
Other and unspecified infectious and parasitic diseases	170†	6	8	*	15	39	96	0
Malignant neoplasms	11,190†	*	29	14	333	2,801	8,015	0
Malignant neoplasm of lip, oral cavity and pharynx	150†	0	0	0	*	42	107	0
Malignant neoplasm of esophagus	320†	0	0	0	*	90	226	0
Malignant neoplasm of stomach	202	0	0	0	16	56	130	0
Malignant neoplasm of colon, rectum, and anus	997	0	0	0	48	289	660	0
Malignant neoplasm of liver and intrahepatic bile ducts	530†	0	*	0	13	217	297	0
Malignant neoplasm of pancreas	755	0	0	0	7	208	540	0
Malignant neoplasm of larynx	52	0	0	0	0	17	35	0
Malignant neoplasm of trachea, bronchus and lung	2,763	0	0	0	16	600	2,147	0
Malignant melanoma of skin	220†	0	*	0	11	60	150	0
Malignant neoplasm of breast	836	0	0	0	45	272	519	0
Malignant neoplasm of cervix uteri	86	0	0	0	18	40	28	0
Malignant neoplasm of corpus uteri and uterus, part unspecified	140	0	0	0	6	44	90	0
Malignant neoplasm of ovary	285	0	0	0	10	94	181	0
Malignant neoplasm of prostate	570†	0	0	0	*	43	526	0
Malignant neoplasm of kidney and renal pelvis	274	0	0	0	10	78	186	0
Malignant neoplasm of bladder	290†	0	0	0	*	42	249	0

**TABLE 2C-27 (continued)**  
**COMPARISON OF CAUSES OF MORTALITY BY AGE GROUP, ARIZONA, 2013**

	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	330†	0	7	*	30	108	179	0
Malignant neoplasm of lymphoid, hematopoietic and related tissue	1,190†	*	8	6	51	223	901	0
Hodgkin's disease	30†	0	0	0	*	6	16	0
Non-Hodgkin's lymphoma	420†	0	0	*	14	75	326	0
Leukemia	500†	*	8	*	30	90	366	0
Multiple myeloma and immunoproliferative neoplasms	250†	0	0	0	*	52	192	0
Other and unspecified malignant neoplasms of lymphoid tissue	0†	0	0	0	0	0	*	0
All other and unspecified malignant neoplasm	1,205	0	12	7	44	278	864	0
In situ neoplasms	300†	*	*	*	11	49	234	0
Anemias	50†	0	0	*	6	*	39	0
Diabetes	1,740†	0	0	*	84	497	1,162	0
Nutritional deficiencies	50†	0	*	0	*	*	39	0
Malnutrition	40†	0	0	0	*	*	36	0
Other nutritional deficiencies	0†	0	*	0	0	0	*	0
Obesity	160	0	0	0	36	69	55	0
Meningitis	10†	*	*	0	*	*	*	0
Parkinson's disease	578	0	0	0	0	17	561	0
Alzheimer's disease	2,380†	0	0	0	*	30	2,353	0
Major cardiovascular diseases	13,750†	8	*	*	281	2,128	11,320	*
Diseases of heart	10,500†	6	*	*	217	1,683	8,583	*
Acute rheumatic fever and chronic rheumatic heart disease	60†	0	0	0	*	11	51	0
Hypertensive heart disease	943	0	0	0	31	182	730	0
Hypertensive heart and renal disease	50†	0	0	0	0	*	44	0
Ischemic heart disease	7,160†	*	*	0	92	1,186	5,878	*
Acute myocardial infarction	1,592	0	0	0	23	289	1,280	0
Other acute ischemic heart disease	30†	0	*	0	0	*	26	0
Other forms of chronic ischemic heart disease	5,540†	*	0	0	69	892	4,572	*
Atherosclerotic cardiovascular disease	1,683	0	0	0	40	480	1,162	*
All other forms of chronic ischemic heart disease	3,850†	*	0	0	29	412	3,410	0
Other heart diseases	2,280†	*	*	*	92	299	1,880	0
Acute and subacute endocarditis	30†	0	0	0	*	7	15	0
Diseases of pericardium and acute myocarditis	10†	0	*	0	0	*	7	0
Heart failure	470†	0	0	0	*	20	446	0
All other forms of heart disease	1,780†	*	*	*	87	268	1,412	0
Essential (primary) hypertension and hypertensive renal disease	711	0	0	0	13	97	601	0
Cerebrovascular diseases	2,050†	*	0	0	37	272	1,736	0
Atherosclerosis	150†	0	0	0	*	9	140	0

**TABLE 2C-27 (continued)  
COMPARISON OF CAUSES OF MORTALITY BY AGE GROUP, ARIZONA, 2013**

	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	340†	0	0	*	13	67	259	0
Aortic aneurysm and dissection	181	0	0	0	7	38	136	0
Other disease of arteries, arterioles and capillaries	160†	0	0	*	6	29	123	0
Other disorders of circulatory system	97	0	0	0	15	36	46	0
Influenza and pneumonia	720†	*	*	*	24	81	608	0
Influenza	40†	0	*	*	*	*	36	0
Pneumonia	680†	*	*	*	23	79	572	0
Other acute lower respiratory infections	10†	0	0	0	0	*	*	0
Acute bronchiolitis	10†	0	0	0	0	*	*	0
Unspecified acute lower respiratory infection	0†	0	0	0	0	0	*	0
Chronic lower respiratory diseases	3,300†	0	8	*	24	394	2,868	0
Bronchitis, chronic and unspecified	7	0	0	0	0	0	7	0
Emphysema	160	0	0	0	0	16	144	0
Asthma	90†	0	8	*	17	26	41	0
Other chronic lower respiratory diseases	3,035	0	0	0	7	352	2,676	0
Pneumoconioses and chemical effects	10†	0	0	0	0	*	11	0
Pneumonitis due to solids and liquids	270†	0	*	0	*	12	256	0
Other disease of respiratory system	530†	7	*	0	11	72	439	0
Peptic ulcer	80†	0	0	0	*	30	48	0
Diseases of appendix	10†	0	0	0	0	0	*	0
Hernia	40†	0	0	*	0	9	26	0
Chronic liver disease and cirrhosis	1,040	0	0	0	145	553	342	0
Alcoholic liver disease	742	0	0	0	129	434	179	0
Other chronic liver disease and cirrhosis	298	0	0	0	16	119	163	0
Cholelithiasis and other disorders of gallbladder	60†	0	0	0	*	7	52	0
Nephritis, nephrotic syndrome and nephrosis	390†	*	0	0	10	52	328	0
Acute and rapidly progressive nephritic and nephrotic syndrome	0†	0	0	0	0	0	*	0
Chronic glomerulonephritis	90†	0	0	0	*	8	82	0
Renal failure	300†	*	0	0	8	44	245	0
Others disorders of kidney	0	0	0	0	0	0	0	0
Infections of kidney	10†	0	0	0	0	*	6	0
Hyperplasia of prostate	9	0	0	0	0	0	9	0
Inflammatory diseases of female pelvic organs	0†	0	0	0	0	*	*	0
Pregnancy, childbirth and the puerperium	10†	0	0	0	*	*	0	0
Pregnancy with abortive outcome	0†	0	0	0	*	0	0	0
Other complications of pregnancy, childbirth and the puerperium	10†	0	0	0	*	*	0	0

**TABLE 2C-27 (continued)**  
**COMPARISON OF CAUSES OF MORTALITY BY AGE GROUP, ARIZONA, 2013**

	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	220†	214	*	0	0	0	0	*
Congenital anomalies, deformations and chromosomal abnormalities	210†	101	21	*	23	40	22	0
Symptoms, signs, abnormal findings	1,705	56	13	8	161	281	1,180	6
Total accidents	3,137	14	84	86	890	915	1,146	*
Transport accidents	830†	*	49	53	303	280	148	0
Motor vehicle accidents	770†	*	45	51	288	248	134	0
Other land transport accidents	30†	0	*	*	7	14	8	0
Water, air, space	30†	0	*	0	8	18	6	0
Nontransport accidents	2,303	13	35	33	587	635	998	*
Falls	870†	0	*	0	27	73	767	0
Accidental discharge of firearms	10†	0	*	*	*	*	*	0
Accidental drowning and submersion	70†	0	20	*	21	18	10	0
Accidental exposure to smoke, fire and flames	68	0	0	0	26	20	22	0
Accidental poisoning	970†	0	*	25	462	426	51	0
Other and unspecified nontransport accidents	320†	13	9	*	48	96	147	*
Intentional self-harm (suicide)	1,116	0	8	32	445	406	224	*
By discharge of firearms	640†	0	*	13	233	224	172	0
By other means	473	0	7	19	212	182	52	*
Assault (homicide)	380†	*	19	31	215	87	20	6
By discharge of firearms	250†	*	*	28	150	52	9	6
By other means	130†	*	16	*	65	35	11	0
Legal intervention	20†	0	0	*	14	*	*	0
Events of undetermined intent	180†	*	*	11	62	81	18	*
Discharge of firearms	20†	0	*	*	*	*	*	0
Other and unspecified events of undetermined intent	170†	*	*	9	57	76	16	*
Operations of war	0	0	0	0	0	0	0	0
Complications of medical and surgical care	60†	0	*	0	*	16	35	0
Injury by firearms	930†	*	7	45	404	284	184	6
Drug-induced deaths	1,100†	0	*	23	479	504	92	0
Alcohol-induced deaths	1,100†	0	0	*	216	634	244	0

Notes: \* 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<sup>a</sup> BY AGE GROUP, ARIZONA, 2013**

	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	758.7	526.1	19.8	45.5	143.5	620.7	3667.5
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	**
Certain other intestinal infections	3.7	8.2	0.0	0.0	**	1.7	21.2
Enterocolitis due to Clostridium difficile	2.9	0.0	0.0	0.0	**	1.3	16.8
Tuberculosis	0.2	0.0	**	0.0	0.0	**	0.9
Respiratory tuberculosis	0.2	0.0	**	0.0	0.0	**	0.7
Other tuberculosis	0.1	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	**	**	**
Septicemia	5.4	**	0.0	0.0	0.0	0.6	26.8
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	**
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	4.2	0.0	**	0.0	0.0	0.7	6.1
Human immunodeficiency virus (HIV) disease	1.4	0.0	0.0	0.0	1.3	3.4	0.7
Malaria	0.0	0.0	0.0	0.0	0.0	**	0.0
Other and unspecified infectious and parasitic diseases	2.5	7.1	0.6	**	**	2.4	9.8
Malignant neoplasms	170.1	**	2.3	3.0	15.3	175.6	816.9
Malignant neoplasm of lip, oral cavity and pharynx	2.3	0.0	0.0	0.0	**	2.6	10.9
Malignant neoplasm of esophagus	4.9	0.0	0.0	0.0	**	5.6	23.0
Malignant neoplasm of stomach	3.1	0.0	0.0	0.0	0.7	3.5	13.3
Malignant neoplasm of colon, rectum, and anus	15.1	0.0	0.0	0.0	2.2	18.1	67.3
Malignant neoplasm of liver and intrahepatic bile ducts	8.0	0.0	**	0.0	0.6	13.6	30.3
Malignant neoplasm of pancreas	11.5	0.0	0.0	0.0	0.3	13.0	55.0
Malignant neoplasm of larynx	0.8	0.0	0.0	0.0	0.0	1.1	3.6
Malignant neoplasm of trachea, bronchus and lung	42.0	0.0	0.0	0.0	0.7	37.6	218.8
Malignant melanoma of skin	3.4	0.0	**	0.0	0.5	3.8	15.3
Malignant neoplasm of breast	12.7	0.0	0.0	0.0	2.1	17.1	52.9
Malignant neoplasm of cervix uteri	2.6	0.0	0.0	0.0	1.7	4.9	5.3
Malignant neoplasm of corpus uteri and uterus, part unspecified	4.2	0.0	0.0	0.0	0.6	5.4	16.9
Malignant neoplasm of ovary	8.6	0.0	0.0	0.0	0.9	11.5	33.9
Malignant neoplasm of prostate	17.4	0.0	0.0	0.0	**	5.5	117.4
Malignant neoplasm of kidney and renal pelvis	4.2	0.0	0.0	0.0	0.5	4.9	19.0
Malignant neoplasm of bladder	4.5	0.0	0.0	0.0	**	2.6	25.4

**TABLE 2C-28 (continued)**  
**COMPARISON OF CAUSE-SPECIFIC MORTALITY RATES<sup>a</sup> BY AGE GROUP, ARIZONA, 2013**

	All ages	Infants <1	Children 1-14	Adoles- cents 15-19	Young adults 20-44	Middle- aged adults 45-64	Elderly 65+
Malignant neoplasm of meninges, brain and other parts of CNS	4.9	0.0	0.5	**	1.4	6.8	18.2
Malignant neoplasm of lymphoid, hematopoietic and related tissue	18.1	**	0.6	1.3	2.4	14.0	91.8
Hodgkin's disease	0.4	0.0	0.0	0.0	**	0.4	1.6
Non-Hodgkin's lymphoma	6.3	0.0	0.0	**	0.6	4.7	33.2
Leukemia	7.6	**	0.6	**	1.4	5.6	37.3
Multiple myeloma and immunoproliferative neoplasms	3.8	0.0	0.0	0.0	**	3.3	19.6
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	18.3	0.0	0.9	1.5	2.0	17.4	88.1
In situ neoplasms	4.6	**	**	**	0.5	3.1	23.9
Anemias	0.7	0.0	0.0	**	0.3	**	4.0
Diabetes	26.5	0.0	0.0	**	3.9	31.2	118.4
Nutritional deficiencies	0.7	0.0	**	0.0	**	**	4.0
Malnutrition	0.6	0.0	0.0	0.0	**	**	3.7
Other nutritional deficiencies	0.1	0.0	**	0.0	0.0	0.0	**
Obesity	2.4	0.0	0.0	0.0	1.7	4.3	5.6
Meningitis	0.2	**	**	0.0	**	**	**
Parkinson's disease	8.8	0.0	0.0	0.0	0.0	1.1	57.2
Alzheimer's disease	36.2	0.0	0.0	0.0	**	1.9	239.8
Major cardiovascular diseases	208.9	9.4	**	**	12.9	133.4	1153.8
Diseases of heart	159.5	7.1	**	**	10.0	105.5	874.8
Acute rheumatic fever and chronic rheumatic heart disease	1.0	0.0	0.0	0.0	**	0.7	5.2
Hypertensive heart disease	14.3	0.0	0.0	0.0	1.4	11.4	74.4
Hypertensive heart and renal disease	0.7	0.0	0.0	0.0	0.0	**	4.5
Ischemic heart disease	108.8	**	**	0.0	4.2	74.4	599.1
Acute myocardial infarction	24.2	0.0	0.0	0.0	1.1	18.1	130.5
Other acute ischemic heart disease	0.5	0.0	**	0.0	0.0	**	2.7
Other forms of chronic ischemic heart disease	84.1	**	0.0	0.0	3.2	55.9	466.0
Atherosclerotic cardiovascular disease	25.6	0.0	0.0	0.0	1.8	30.1	118.4
All other forms of chronic ischemic heart disease	58.5	**	0.0	0.0	1.3	25.8	347.6
Other heart diseases	34.7	**	**	**	4.2	18.7	191.6
Acute and subacute endocarditis	0.4	0.0	0.0	0.0	**	0.4	1.5
Diseases of pericardium and acute myocarditis	0.2	0.0	**	0.0	0.0	**	0.7
Heart failure	7.1	0.0	0.0	0.0	**	1.3	45.5
All other forms of heart disease	27.0	**	**	**	4.0	16.8	143.9
Essential (primary) hypertension and hypertensive renal disease	10.8	0.0	0.0	0.0	0.6	6.1	61.3
Cerebrovascular diseases	31.1	**	0.0	0.0	1.7	17.1	176.9
Atherosclerosis	2.3	0.0	0.0	0.0	**	0.6	14.3

TABLE 2C-28 (continued)  
**COMPARISON OF CAUSE-SPECIFIC MORTALITY RATES<sup>a</sup> BY AGE GROUP, ARIZONA, 2013**

	All ages	Infants <1	Children 1-14	Adoles- cents 15-19	Young adults 20-44	Middle- aged adults 45-64	Elderly 65+
Other diseases of circulatory system	5.2	0.0	0.0	**	0.6	4.2	26.4
Aortic aneurysm and dissection	2.8	0.0	0.0	0.0	0.3	2.4	13.9
Other disease of arteries, arterioles and capillaries	2.4	0.0	0.0	**	0.3	1.8	12.5
Other disorders of circulatory system	1.5	0.0	0.0	0.0	0.7	2.3	4.7
Influenza and pneumonia	11.0	**	**	**	1.1	5.1	62.0
Influenza	0.6	0.0	**	**	**	**	3.7
Pneumonia	10.4	**	**	**	1.1	5.0	58.3
Other acute lower respiratory infections	0.1	0.0	0.0	0.0	0.0	**	**
Acute bronchiolitis	0.1	0.0	0.0	0.0	0.0	**	**
Unspecified acute lower respiratory infection	0.0	0.0	0.0	0.0	0.0	0.0	**
Chronic lower respiratory diseases	50.1	0.0	0.6	**	1.1	24.7	292.3
Bronchitis, chronic and unspecified	0.1	0.0	0.0	0.0	0.0	0.0	0.7
Emphysema	2.4	0.0	0.0	0.0	0.0	1.0	14.7
Asthma	1.4	0.0	0.6	**	0.8	1.6	4.2
Other chronic lower respiratory diseases	46.1	0.0	0.0	0.0	0.3	22.1	272.7
Pneumoconioses and chemical effects	0.2	0.0	0.0	0.0	0.0	**	1.1
Pneumonitis due to solids and liquids	4.1	0.0	**	0.0	**	0.8	26.1
Other disease of respiratory system	8.1	8.2	**	0.0	0.5	4.5	44.7
Peptic ulcer	1.2	0.0	0.0	0.0	**	1.9	4.9
Diseases of appendix	0.1	0.0	0.0	0.0	0.0	0.0	**
Hernia	0.5	0.0	0.0	**	0.0	0.6	2.7
Chronic liver disease and cirrhosis	15.8	0.0	0.0	0.0	6.7	34.7	34.9
Alcoholic liver disease	11.3	0.0	0.0	0.0	5.9	27.2	18.2
Other chronic liver disease and cirrhosis	4.5	0.0	0.0	0.0	0.7	7.5	16.6
Cholelithiasis and other disorders of gallbladder	0.9	0.0	0.0	0.0	**	0.4	5.3
Nephritis, nephrotic syndrome and nephrosis	5.9	**	0.0	0.0	0.5	3.3	33.4
Acute and rapidly progressive nephritic and nephrotic syndrome	0.0	0.0	0.0	0.0	0.0	0.0	**
Chronic glomerulonephritis	1.4	0.0	0.0	0.0	**	0.5	8.4
Renal failure	4.5	**	0.0	0.0	0.4	2.8	25.0
Others disorders of kidney	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infections of kidney	0.1	0.0	0.0	0.0	0.0	**	0.6
Hyperplasia of prostate	0.3	0.0	0.0	0.0	0.0	0.0	2.0
Inflammatory diseases of female pelvic organs	0.1	0.0	0.0	0.0	0.0	**	**
Pregnancy, childbirth and the puerperium	0.3	0.0	0.0	0.0	**	**	0.0
Pregnancy with abortive outcome	0.0	0.0	0.0	0.0	**	0.0	0.0
Other complications of pregnancy, childbirth and the puerperium	0.2	0.0	0.0	0.0	**	**	0.0



TABLE 2C-28 (continued)  
COMPARISON OF CAUSE-SPECIFIC MORTALITY RATES<sup>a</sup> BY AGE GROUP, ARIZONA, 2013

	All ages	Infants <1	Children 1-14	Adolescents 15-19	Young adults 20-44	Middle-aged adults 45-64	Elderly 65+
Perinatal conditions	3.3	251.9	**	0.0	0.0	0.0	0.0
Congenital anomalies, deformations and chromosomal abnormalities	3.2	118.9	1.6	**	1.1	2.5	2.2
Symptoms, signs, abnormal findings	25.9	65.9	1.0	1.7	7.4	17.6	120.3
Total accidents	47.7	16.5	6.6	18.3	41.0	57.4	116.8
Transport accidents	12.7	**	3.8	11.3	14.0	17.6	15.1
Motor vehicle accidents	11.7	**	3.5	10.8	13.3	15.6	13.7
Other land transport accidents	0.5	0.0	**	**	0.3	0.9	0.8
Water, air, space	0.5	0.0	**	0.0	0.4	1.1	0.6
Nontransport accidents	35.0	15.3	2.7	7.0	27.1	39.8	101.7
Falls	13.2	0.0	**	0.0	1.2	4.6	78.2
Accidental discharge of firearms	0.1	0.0	**	**	**	**	**
Accidental drowning and submersion	1.1	0.0	1.6	**	1.0	1.1	1.0
Accidental exposure to smoke, fire and flames	1.0	0.0	0.0	0.0	1.2	1.3	2.2
Accidental poisoning	14.7	0.0	**	5.3	21.3	26.7	5.2
Other and unspecified nontransport accidents	4.8	15.3	0.7	**	2.2	6.0	15.0
Intentional self-harm (suicide)	17.0	0.0	0.6	6.8	20.5	25.5	22.8
By discharge of firearms	9.8	0.0	**	2.8	10.7	14.0	17.5
By other means	7.2	0.0	0.5	4.0	9.8	11.4	5.3
Assault (homicide)	5.8	**	1.5	6.6	9.9	5.5	2.0
By discharge of firearms	3.8	**	**	5.9	6.9	3.3	0.9
By other means	2.0	**	1.3	**	3.0	2.2	1.1
Legal intervention	0.3	0.0	0.0	**	0.6	**	**
Events of undetermined intent	2.8	**	**	2.3	2.9	5.1	1.8
Discharge of firearms	0.2	0.0	**	**	**	**	**
Other and unspecified events of undetermined intent	2.6	**	**	1.9	2.6	4.8	1.6
Operations of war	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Complications of medical and surgical care	0.9	0.0	**	0.0	**	1.0	3.6
Injury by firearms <sup>b</sup>	14.1	**	0.5	9.6	18.6	17.8	18.8
Drug-induced deaths <sup>b</sup>	16.7	0.0	**	4.9	22.1	31.6	9.4
Alcohol-induced deaths <sup>b</sup>	16.7	0.0	0.0	**	10.0	39.8	24.9

Notes: \*\* Cell suppressed due to rate/ratio/percent based on non-zero count less than 6;<sup>a</sup> 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; <sup>b</sup> Included in selected categories above.





## 2D.

### **PATTERNS OF PREMATURE MORTALITY**

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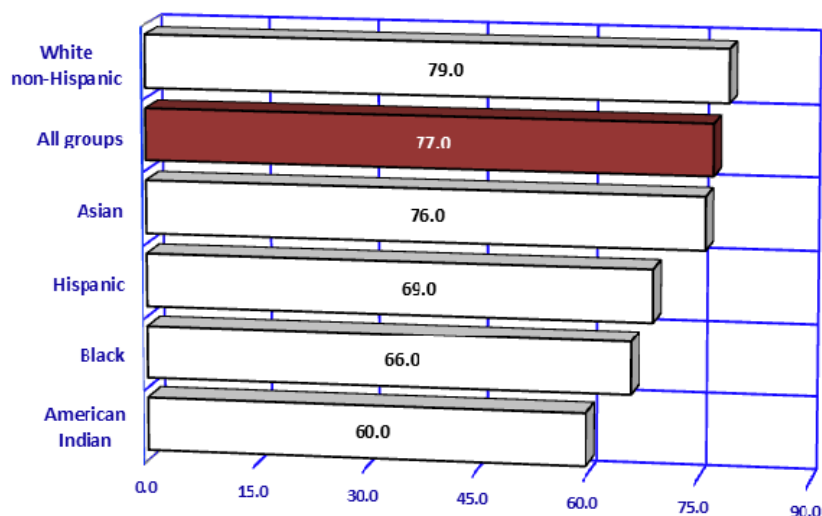
Compared with White non-Hispanics, the racial/ethnic minority groups in Arizona had greater percentages of people younger than 25 years in 2013 (45.7 vs. 26.3 percent). In contrast, people aged 65 years and older accounted for 21.0 percent of White non-Hispanics, but only 6.3 percent of all ethnic minority 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 2013, of all deaths among the elderly (65 years and older), 84.5 percent were White non-Hispanics, 9.8 percent were Hispanic or Latino, with the three remaining racial/ethnic groups comprising only 5.7 percent of all deaths in this age group (**Table 2C-26**). Looking at younger ages, Native American children comprised only 6.1 percent of Arizona's population age 1 – 14, but accounted for 15.1 percent of all childhood deaths. Native American adolescents represented only 5.8 percent off all adolescents but accounted for 13.1 percent of all adolescent deaths. Finally, Native American young adults (ages 20 – 44) represented 5.2% of all young adults but comprised 14.1 percent of all young adult deaths. In summary, Arizona's racial/ethnic minority groups tend to experience mortality earlier in life than Arizona's White non-Hispanics.

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

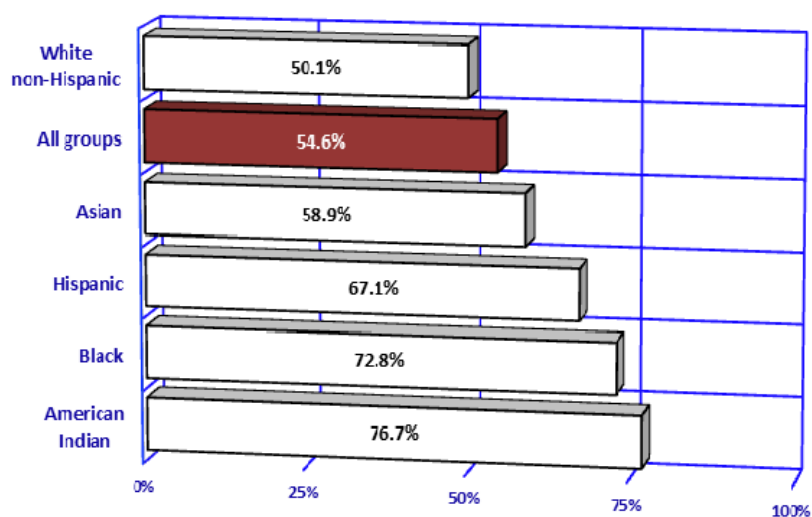
**Figure 2D-1**  
Median Age at Death by Race/Ethnicity, Arizona, 2013



The median age at death remained stable at 77 years from 2010 to 2013 (**Table 2D-1**). In other words, one of every two Arizonans who died in 2013 was older than 77 years of age. Among Arizona females, fifty percent were older than 80 years when they died in 2013. Among males, the median age at death was 73 years in 2013. **Table 2D-1** shows both the average and the median age at death by race/ethnicity and gender in 2003-2013.

In 2013, compared to White non-Hispanics, on average Asians were 3 years younger at time of death, Hispanics were 10 years younger, Blacks were 13 years younger, and American Indian residents of Arizona were 19 years younger (based on the median age at death).

**Figure 2D-2**  
Percent of Deaths before Expected<sup>a</sup> Years of Life Reached by Race/Ethnicity, Arizona, 2013



The percent of deaths before expected years of life reached (a premature death ratio) slightly decreased for all Arizonans from 55.0 in 2012 to 54.6 in 2013 (**Figure 2D-2**).

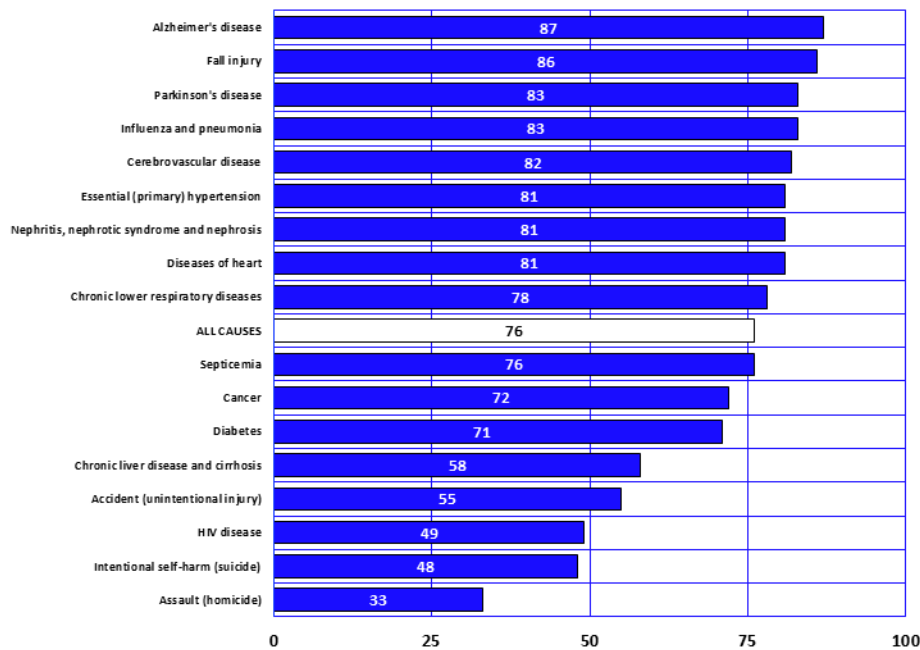
As expected, based on the findings for average and median age at death, White non-Hispanics were the only group with nearly 50 percent of all deaths (50.1 percent) occurring before the expected years of life were reached (**Figure 2D-2**). On average, 68.9 percent of the deaths among racial/ethnic minority groups occurred prematurely.

Among American Indians, nearly eight out of ten deaths (76.7 percent) were premature (**Table 2D-2**).

Notes: <sup>a</sup> 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, 2013

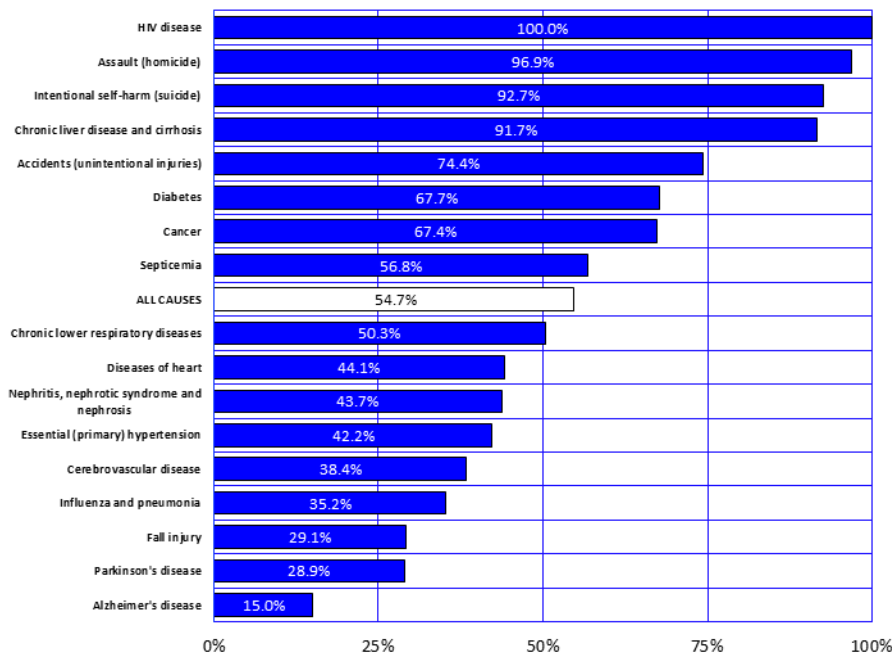


In 2013, *Alzheimer's disease* had the highest median age of death at 87 years (**Figure 2D-3**), exceeding by 11 years the median age at death for all causes (**Figure 2D-3, Table 2D-3**).

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

From 2003 to 2013, *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<sup>a</sup> Reached for Selected Leading Causes of Death, Arizona, 2013



Notes: <sup>a</sup> Expected years of life at birth for all U.S. residents (78.7 years).

Only 15.0 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, all deaths from *HIV disease* were premature (**Figure 2D-4, Table 2D-4**) and the median age at death from *HIV disease* increased from the previous year at 49 years (**Figure 2D-3, Table 2D-3**).

A minority of deaths from *diseases of heart* were premature (44.1 percent). In contrast 67.4 percent of deaths from *cancer* occurred before the expected years of life were reached.

**TABLE 2D-1  
AVERAGE AND MEDIUM AGE AT DEATH FROM ALL CAUSES BY GENDER AND RACE/ETHNICITY, ARIZONA, 2003-2013**

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		
2003	<b>Total</b>	72.2	76.0	74.4	78.0	60.4	66.0	62.4	66.0	54.7	56.0	64.3	70.0		
	<b>Male</b>	69.6	73.0	71.6	75.0	57.5	60.0	60.0	60.0	50.3	51.0	63.5	70.0		
	<b>Female</b>	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	<b>Total</b>	71.0	76.0	73.8	78.0	58.5	65.0	60.4	64.0	55.9	58.0	65.3	69.0		
	<b>Male</b>	67.7	73.0	70.9	75.0	54.6	60.0	55.4	59.0	52.4	53.0	63.5	68.0		
	<b>Female</b>	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	<b>Total</b>	71.5	77.0	74.4	79.0	59.0	65.0	60.7	64.0	56.8	59.0	65.5	72.0		
	<b>Male</b>	68.1	73.0	71.4	76.0	55.5	61.0	55.7	58.0	53.4	54.0	64.3	71.0		
	<b>Female</b>	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	<b>Total</b>	71.2	76.0	74.0	78.0	58.7	65.0	60.2	63.0	55.4	57.0	68.7	73.0		
	<b>Male</b>	67.9	73.0	71.1	75.0	55.1	59.0	57.3	59.0	51.5	52.0	64.5	71.5		
	<b>Female</b>	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	<b>Total</b>	71.2	76.0	74.2	78.0	58.4	64.0	60.1	62.0	57.2	59.0	64.9	70.0		
	<b>Male</b>	67.8	73.0	71.3	75.0	54.6	59.0	54.8	57.0	53.7	54.0	60.2	64.0		
	<b>Female</b>	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	<b>Total</b>	71.5	77.0	74.3	78.0	61.2	68.0	58.5	62.0	57.3	59.0	63.5	70.0		
	<b>Male</b>	68.4	73.0	71.6	76.0	57.1	62.0	55.3	59.0	53.7	54.0	61.5	67.5		
	<b>Female</b>	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	<b>Total</b>	71.9	76.0	74.3	78.0	61.8	67.0	60.0	64.0	57.6	59.0	66.7	74.0		
	<b>Male</b>	69.3	73.0	71.6	75.0	58.6	63.0	56.9	60.0	54.2	54.0	63.6	69.0		
	<b>Female</b>	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	<b>Total</b>	72.1	77.0	74.8	79.0	62.4	68.0	62.6	65.0	57.0	58.0	65.7	71.0		
	<b>Male</b>	69.1	73.0	72.1	75.0	58.3	63.0	60.5	63.0	52.7	53.0	64.2	70.0		
	<b>Female</b>	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	<b>Total</b>	72.8	77.0	75.3	79.0	63.6	68.0	63.6	66.0	58.4	60.0	68.2	72.0		
	<b>Male</b>	69.7	73.0	72.5	76.0	59.8	63.0	61.0	64.0	54.4	54.0	65.6	69.0		
	<b>Female</b>	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	<b>Total</b>	72.7	77.0	75.2	78.8	63.8	68.8	62.6	65.9	57.8	59.8	68.6	73.1		
	<b>Male</b>	69.9	73.7	72.6	75.9	60.7	64.3	59.6	63.2	54.3	55.5	64.2	68.7		
	<b>Female</b>	75.9	80.6	78.1	82.1	67.8	74.7	66.0	69.6	62.0	65.0	72.3	78.5		
2013	<b>Total</b>	72.5	77.0	75.2	79.0	64.3	69.0	63.1	66.0	58.3	60.0	70.9	76.0		
	<b>Male</b>	69.6	74.0	72.6	76.0	60.6	64.0	59.5	63.0	54.7	55.0	68.4	73.0		
	<b>Female</b>	75.8	81.0	78.0	82.0	68.6	75.0	67.7	73.0	63.1	67.0	73.3	78.0		

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, 2003-2013**

<b>Year/gender</b>	<b>All race/ethnic groups</b>	<b>White non-Hispanic</b>	<b>Hispanic or Latino</b>	<b>Black or African American</b>	<b>American Indian or Alaska Native</b>	<b>Asian or Pacific Islander</b>
<b>2003 Total</b>	50.8	46.1	70.0	70.6	78.4	65.7
<b>Male</b>	59.0	54.2	76.8	79.1	84.4	66.7
<b>Female</b>	41.7	37.4	61.0	60.4	70.5	65.0
<b>2004 Total</b>	53.0	48.3	71.5	74.3	80.3	64.3
<b>Male</b>	61.0	56.4	78.3	81.9	85.9	69.0
<b>Female</b>	44.1	39.9	62.4	65.2	73.3	60.0
<b>2005 Total</b>	52.7	47.9	71.3	75.1	78.4	65.1
<b>Male</b>	60.8	56.2	76.9	83.3	83.3	64.5
<b>Female</b>	43.7	39.2	63.3	65.8	72.2	65.7
<b>2006 Total</b>	52.7	48.2	70.8	73.9	77.4	61.0
<b>Male</b>	61.0	56.2	78.4	80.9	82.9	61.0
<b>Female</b>	43.7	40.1	60.0	63.7	69.8	61.0
<b>2007 Total</b>	52.6	47.7	71.6	73.3	75.8	64.9
<b>Male</b>	61.5	56.4	79.2	82.6	82.0	73.8
<b>Female</b>	42.9	38.5	61.3	62.1	67.5	57.4
<b>2008 Total</b>	52.4	48.0	67.6	74.7	76.5	66.4
<b>Male</b>	60.0	55.4	75.4	81.6	82.6	68.7
<b>Female</b>	43.9	40.0	57.6	66.4	68.6	63.9
<b>2009 Total</b>	52.5	48.0	68.0	73.0	76.4	60.6
<b>Male</b>	59.9	55.4	74.4	79.3	81.1	66.8
<b>Female</b>	44.5	40.1	60.1	66.1	70.6	53.9
<b>2010 Total</b>	54.5	49.9	68.7	73.4	79.6	65.1
<b>Male</b>	62.4	57.8	76.2	78.4	85.3	69.0
<b>Female</b>	45.8	41.5	59.5	67.4	71.9	60.7
<b>2011 Total</b>	53.8	49.6	67.4	74.4	77.7	66.3
<b>Male</b>	61.8	57.5	75.4	80.7	84.3	71.3
<b>Female</b>	45.1	41.2	57.3	67.1	70.0	61.5
<b>2012<sup>a</sup> Total</b>	55.0	50.9	68.4	74.4	78.7	62.3
<b>Male</b>	62.3	58.1	75.7	81.6	83.9	74.2
<b>Female</b>	46.7	43.0	59.1	66.1	72.2	51.9
<b>2013 Total</b>	54.6	50.1	67.1	72.8	76.7	58.9
<b>Male</b>	62.0	57.5	75.0	80.8	82.7	65.0
<b>Female</b>	46.2	42.1	57.7	62.4	68.9	53.2

Note: <sup>a</sup> 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<sup>a</sup>, ARIZONA, 2013**

	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					
<b>Total, all causes</b>	77.0	74.0	81.0	77.0	73.0	81.0	75.0	72.0	78.0	78.0	69.0	66.0	59.0	75.0
<b>Major cardiovascular diseases</b>	81.0	77.0	85.0	82.0	78.0	85.0	79.0	76.0	84.0	82.0	77.0	70.0	74.0	77.5
<b>Diseases of heart</b>	81.0	77.0	85.0	81.0	77.0	85.0	79.0	75.0	84.0	82.0	75.0	69.0	74.0	78.0
<b>Coronary heart disease</b>	80.0	76.0	85.0	81.0	77.0	85.0	78.0	75.0	83.0	81.0	76.0	71.0	74.0	77.5
<b>Malignant neoplasms</b>	72.0	72.0	72.0	72.0	72.0	73.0	72.0	73.0	72.0	73.0	68.0	67.0	68.0	72.0
<b>Lung cancer</b>	73.0	72.0	73.0	73.0	72.0	74.0	73.0	73.0	73.0	73.0	74.0	69.0	77.5	76.0
<b>Prostate cancer</b>	81.0	81.0	NA	81.0	81.0	NA	81.0	81.0	NA	82.0	79.0	71.5	76.0	78.5
<b>Breast cancer</b>	69.0	70.0	69.0	69.0	70.0	68.0	69.0	0.0	69.0	70.0	62.0	61.0	62.0	56.5
<b>Colorectal cancer</b>	72.0	70.0	75.0	72.0	71.0	74.0	72.0	69.0	76.0	74.0	64.0	64.0	69.0	76.0
<b>Malignant melanoma of skin</b>	72.0	72.0	72.0	73.0	73.5	72.5	72.0	72.0	71.0	72.0	85.0	55.0	0.0	0.0
<b>Cerebrovascular diseases</b>	82.0	78.0	84.0	82.0	79.0	85.0	82.0	79.0	84.5	84.0	79.0	72.0	74.0	76.5
<b>Chronic lower respiratory diseases</b>	78.0	78.0	79.0	79.0	78.0	80.0	77.0	77.0	78.0	79.0	77.0	71.0	80.0	78.5
<b>Accidents (unintentional injuries)</b>	54.0	51.0	62.0	55.0	51.0	64.0	55.0	51.0	62.0	60.0	44.0	46.5	41.0	67.0
<b>Motor vehicle accidents</b>	45.0	45.0	44.0	44.0	43.5	45.0	45.0	44.0	48.0	52.0	35.5	30.0	30.0	63.5
<b>Falls</b>	85.0	81.0	88.0	86.0	82.0	88.0	84.0	81.0	86.0	86.0	82.0	89.0	55.0	81.0
<b>Accidental poisoning</b>	44.0	42.0	47.0	44.0	42.0	47.0	44.0	42.0	47.0	46.0	40.0	28.0	41.0	29.0
<b>Accidental drowning</b>	36.0	36.0	26.0	29.0	35.0	24.0	47.0	39.0	47.0	47.0	17.0	28.5	30.5	15.0
<b>Influenza and pneumonia</b>	83.0	82.0	85.0	83.0	82.0	85.0	83.0	81.5	84.0	84.0	79.0	81.0	75.5	84.5
<b>Alzheimer's disease</b>	87.0	86.0	88.0	87.0	86.0	88.0	86.0	84.0	87.0	87.0	86.0	84.0	81.0	87.5
<b>Diabetes</b>	71.0	70.0	74.0	71.0	70.0	72.0	72.0	70.0	75.0	73.0	70.0	66.0	62.5	69.0
<b>Intentional self-harm (suicide)</b>	48.0	48.0	49.0	48.0	48.0	49.0	49.0	50.0	46.0	52.0	35.0	29.0	27.0	44.0
<b>Chronic liver disease and cirrhosis</b>	58.0	59.0	58.0	59.0	59.0	58.0	58.0	58.0	57.0	60.5	58.0	57.0	49.0	63.0
<b>Nephritis, nephrotic syndrome and nephrosis</b>	80.0	79.0	82.0	81.0	81.0	82.0	79.0	76.5	82.0	82.0	69.0	75.0	70.0	83.0
<b>Septicemia</b>	76.0	76.0	76.0	76.0	76.0	76.0	74.0	73.0	80.0	77.0	75.0	83.0	67.5	71.0
<b>Assault (homicide)</b>	33.0	33.0	36.0	32.0	31.0	36.0	36.0	35.5	38.0	43.5	25.0	30.5	31.0	41.0
<b>Parkinson's disease</b>	82.0	82.0	83.0	83.0	82.0	83.0	82.0	82.0	82.0	83.0	83.0	73.5	80.5	77.0
<b>Essential (primary) hypertension and hypertensive renal disease</b>	81.0	78.0	83.0	81.0	79.0	83.0	78.5	75.0	81.0	83.0	78.0	72.5	68.0	76.0
<b>Human immunodeficiency virus (HIV) disease</b>	49.0	48.0	56.0	49.0	47.5	54.0	49.0	49.0	47.0	53.0	46.5	49.5	48.0	0.0
<b>INJURY BY FIREARMS</b>	45.0	45.0	49.0	43.0	43.0	44.0	53.0	52.0	54.0	52.0	28.5	29.0	37.0	40.0
<b>DRUG-INDUCED DEATHS</b>	47.0	45.0	48.0	47.0	45.0	48.0	47.0	44.0	48.5	48.0	41.0	47.5	39.0	29.0
<b>ALCOHOL-INDUCED DEATHS</b>	56.0	56.0	53.0	57.0	57.0	53.0	53.0	54.0	51.0	58.0	55.0	61.0	47.0	53.0

Notes: <sup>a</sup> 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<sup>a</sup> YEARS OF LIFE REACHED FOR THE LEADING CAUSES OF MORTALITY BY  
GENDER, RACE/ETHNICITY, AND URBAN/RURAL AREAS<sup>b</sup>, ARIZONA, 2013**

	ARIZONA						Area/gender						Race/ethnicity					
	Total	Male	Female	Total	Urban	Male	Urban	Female	Total	Rural	Male	Female	White Non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	
																		Urban
<b>Total, all causes</b>	54.6%	62.0%	46.2%	53.0%	60.8%	44.6%	57.7%	64.4%	49.7%	50.1%	67.1%	72.8%	58.9%					
<b>Major cardiovascular diseases</b>	43.2%	53.1%	31.6%	41.4%	51.4%	30.2%	46.4%	56.3%	34.0%	39.5%	53.8%	68.1%	52.4%					
<b>Diseases of heart</b>	44.1%	53.7%	31.4%	42.2%	51.9%	29.9%	47.4%	57.1%	34.0%	40.5%	55.3%	69.0%	51.5%					
<b>Coronary heart disease</b>	45.3%	55.3%	31.1%	42.7%	53.0%	28.8%	51.2%	60.0%	37.4%	42.0%	55.2%	67.4%	52.6%					
<b>Malignant neoplasms</b>	66.8%	67.4%	66.2%	65.9%	66.9%	64.8%	69.0%	67.7%	70.6%	64.8%	74.4%	78.6%	66.9%					
<b>Lung cancer</b>	68.6%	70.4%	66.6%	67.0%	69.8%	63.9%	73.0%	71.1%	75.2%	68.6%	62.2%	83.1%	61.3%					
<b>Prostate cancer</b>	41.3%	41.2%	100.0%	41.9%	41.8%	100.0%	38.6%	38.6%	0.0%	38.7%	46.6%	72.2%	50.0%					
<b>Breast cancer</b>	72.1%	77.8%	72.0%	70.5%	77.8%	70.4%	78.4%	0.0%	78.4%	68.7%	84.6%	73.9%	91.7%					
<b>Colorectal cancer</b>	62.6%	67.1%	57.9%	62.4%	65.2%	59.4%	62.2%	70.4%	54.1%	60.5%	68.9%	79.5%	50.0%					
<b>Malignant melanoma of skin</b>	63.5%	63.4%	63.6%	60.7%	58.8%	63.6%	66.7%	71.4%	57.9%	63.6%	14.3%	100.0%	0.0%					
<b>Cerebrovascular diseases</b>	38.5%	49.3%	30.4%	37.5%	49.0%	29.4%	38.8%	49.1%	30.6%	33.6%	48.8%	64.4%	55.0%					
<b>Chronic lower respiratory diseases</b>	49.5%	52.0%	47.2%	47.9%	50.5%	45.6%	54.3%	55.9%	52.6%	48.7%	53.8%	70.7%	50.0%					
<b>Accidents (unintentional injuries)</b>	75.4%	82.7%	63.2%	73.0%	81.3%	60.0%	77.6%	85.2%	65.3%	68.5%	86.2%	86.2%	76.2%					
<b>Motor vehicle accidents</b>	93.6%	94.8%	91.0%	93.1%	94.2%	90.4%	94.5%	97.0%	89.2%	90.4%	98.0%	100.0%	90.0%					
<b>Falls</b>	29.5%	41.0%	19.4%	29.4%	41.3%	19.0%	25.8%	37.7%	15.9%	26.4%	40.2%	27.3%	42.9%					
<b>Accidental poisoning</b>	98.7%	98.9%	98.4%	99.1%	98.9%	99.3%	97.6%	99.2%	94.8%	98.4%	99.4%	100.0%	100.0%					
<b>Accidental drowning</b>	94.9%	98.2%	87.0%	93.4%	97.6%	84.2%	100.0%	100.0%	100.0%	90.2%	100.0%	100.0%	100.0%					
<b>Influenza and pneumonia</b>	34.4%	40.1%	28.8%	34.7%	40.0%	29.5%	34.4%	41.3%	27.8%	31.2%	45.7%	40.0%	25.0%					
<b>Alzheimer's disease</b>	14.5%	19.2%	12.2%	13.9%	18.1%	11.9%	19.7%	27.7%	15.5%	14.3%	14.3%	19.1%	22.2%					
<b>Diabetes</b>	67.2%	71.6%	61.3%	66.9%	70.8%	62.0%	68.6%	73.5%	60.6%	62.8%	71.8%	74.8%	62.5%					
<b>Intentional self-harm (suicide)</b>	92.6%	91.6%	96.2%	92.1%	91.4%	94.8%	94.0%	92.1%	100.0%	90.4%	99.3%	100.0%	100.0%					
<b>Chronic liver disease and cirrhosis</b>	91.6%	94.2%	87.5%	90.5%	93.6%	85.6%	95.2%	97.6%	91.4%	89.4%	91.3%	93.3%	100.0%					
<b>Nephritis, nephrotic syndrome and nephrosis</b>	43.8%	47.8%	39.7%	39.7%	41.8%	38.0%	48.7%	53.6%	42.6%	36.4%	69.8%	58.8%	16.7%					
<b>Septicemia</b>	55.6%	55.7%	55.6%	56.5%	54.5%	58.6%	54.9%	63.0%	46.7%	52.3%	61.4%	33.3%	100.0%					
<b>Assault (homicide)</b>	96.5%	96.9%	95.2%	97.4%	98.4%	93.8%	100.0%	100.0%	100.0%	92.3%	100.0%	100.0%	100.0%					
<b>Parkinson's disease</b>	28.3%	29.0%	27.0%	28.3%	29.4%	26.4%	27.9%	27.3%	29.4%	26.3%	35.5%	60.0%	50.0%					
<b>Essential (primary) hypertension and hypertensive renal disease</b>	42.0%	50.3%	34.7%	40.5%	48.2%	33.8%	49.0%	59.2%	38.8%	37.0%	49.0%	67.6%	52.4%					
<b>Human immunodeficiency virus (HIV) disease</b>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%					
<b>INJURY BY FIREARMS</b>	91.9%	91.5%	94.0%	91.6%	91.4%	92.4%	94.3%	93.2%	100.0%	88.5%	99.4%	100.0%	100.0%					
<b>DRUG-INDUCED DEATHS</b>	97.2%	97.4%	96.9%	97.4%	97.6%	97.1%	95.7%	95.8%	95.7%	96.4%	99.4%	100.0%	100.0%					
<b>ALCOHOL-INDUCED DEATHS</b>	96.1%	95.7%	96.9%	95.5%	95.2%	96.2%	97.9%	97.6%	98.8%	94.5%	96.6%	100.0%	100.0%					

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