

CHAPTER 2

TRENDS AND PATTERNS IN MORTALITY, ARIZONA, 2011-2021

2A. TOTAL MORTALITY

2B. LEADING CAUSES OF DEATH

2C. AGE-SPECIFIC MORTALITY

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

2D. PATTERNS OF PREMATURE MORTALITY



2A.

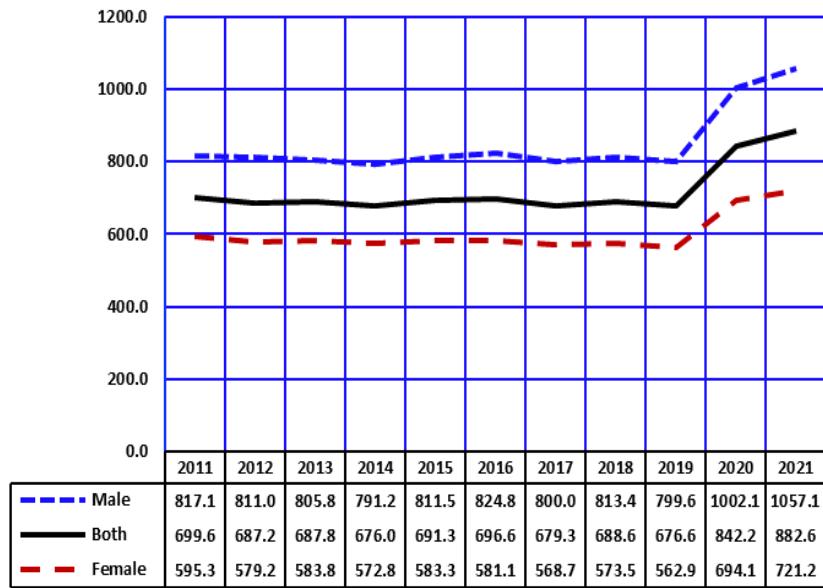
TOTAL MORTALITY

The total number of deaths from all causes among Arizona residents increased by 7.6 percent from 75,700 in 2020 to 81,482 in 2021 (**Table 2A-1**). The age-adjusted mortality rate for all causes of death increased 4.8 percent from 842.2/100,000 in 2020 to 882.6/100,000 in 2021. When considering race/ethnicity, we observe an increase in the age adjusted mortality of all racial/ethnic groups in 2021 compared to 2011 and 2016 (**Figure 2A-2**).

There were some disparities by gender and race/ethnicity for total mortality. Deaths in Arizona by residents in 2021 mostly occurred in January (12.3 percent) and the smallest counts were recorded in April (6.7 percent) (**Table 2A-3**).

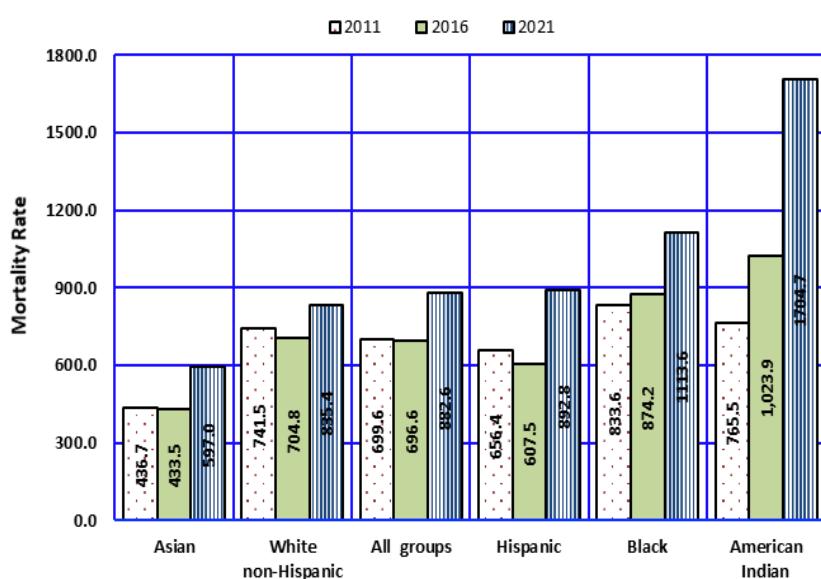
2A. TOTAL MORTALITY

Figure 2A-1
Age-adjusted Mortality Rates^a for all Causes by Gender and Year,
Arizona, 2011-2021



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

Figure 2A-2
Age-adjusted Mortality Rates^a for all Causes by Race/Ethnicity and Year,
Arizona Residents, 2011, 2016, and 2021



Note: ^a 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 increased by 4.8 percent, from 842.2 deaths per 100,000 population in 2020 to 882.6 deaths in 2021 (**Figure 2A-1, Table 2B-2**). Over this period, the age-adjusted mortality rates increased for both males (5.5 percent) and females (3.9 percent).

The gap between male and female mortality rates remained between 2011 and 2021. In each year during the 11-year period, the male age-adjusted mortality rate was almost 1.4 to 1.5 times higher than the female age-adjusted mortality annually.

The 2021 age-adjusted death rates for the major racial/ethnic groups were as follows: for Asian or Pacific Islander, 597.0 deaths per 100,000 population; Hispanic or Latino, 892.8; White non-Hispanic, 835.4; Black or African American, 1113.6; and American Indian or Alaska Native, 1704.7 (**Figure 2A-2, Table 2B-4**).

In 2021, as in 2011 and 2016, American Indians and Blacks 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 2011, 2016, and 2021.

2A. TOTAL MORTALITY

Figure 2A-3
Percent of Annual Deaths by Month of Occurrence and Residence Status, Arizona, 2021

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, the month of January (12.3 percent), December (10.2 percent), November (9.0 percent), September and October (8.4 percent) contributed more than the expected value (**Figure 2A-3**). April was the month with the lowest percent contribution to the total annual deaths among Arizona residents (AZR).

The majority of the 4,088 non-residents who died in Arizona during 2021 did so during the months of January, December, November, October, March, and September.

April was the month with the lowest percent contribution (6.5 percent) to the annual death among out-of-State residents (OSR) who died in Arizona.

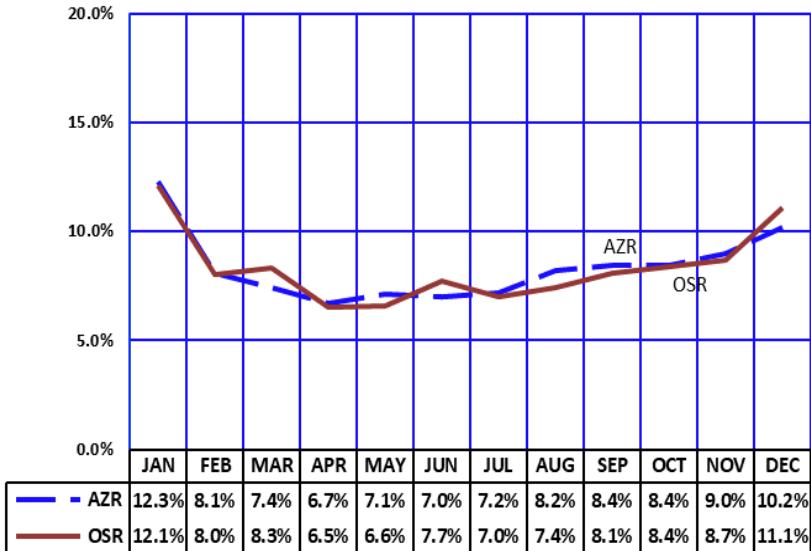


Figure 2A-4
Percentage of Deaths for which Autopsies were Reported by Race/Ethnicity and Year, Arizona Residents, 2011-2021

Autopsies were reported as performed on 7,003 decedents, or 8.6 percent of the deaths that occurred among Arizona residents in 2021. From 2011 – 2021, the percentage of deaths for which autopsies were reported varied from 8.6 percent in 2011 and 2012, a high of 10.1 percent in 2016, 9.8 percent in 2017 and 2019, 9.6 in 2018, 9.1 in 2013, then dropped back down to 8.6 percent in 2021. Additionally, a low of 8.5 percent in 2020, made it the lowest percentage among the time period.

The percentage autopsied varies by the decedent's demographic characteristics. By race/ethnicity (**Figure 2A-4**) the percentage autopsied was the lowest for White non-Hispanic than for other racial/ethnic groups. The prevalence of autopsies was substantially greater among Black, American Indian, 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.

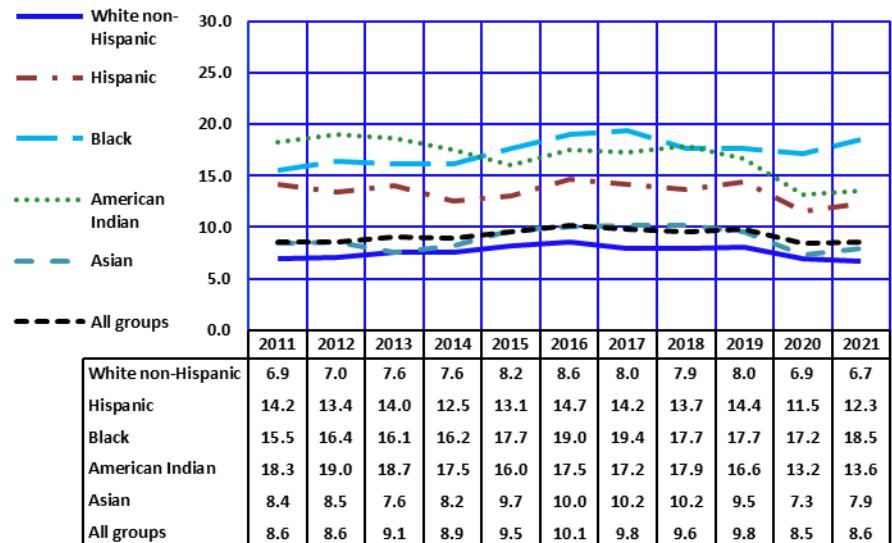


TABLE 2A-1
NUMBER OF DEATHS BY RACE/ETHNICITY, GENDER, AND YEAR, ARIZONA RESIDENTS, 2011-2021

	2011	2012^a	2013^a	2014^a	2015^a	2016^a	2017^a	2018^a	2019^a	2020	2021
TOTAL	Total	47,547	48,459	49,929	51,074	54,152	56,480	57,261	59,206	60,161	75,700
	Male	24,785	25,577	26,222	27,037	28,814	30,431	30,721	32,067	32,575	41,431
	Female	22,762	22,874	23,703	24,034	25,334	26,046	26,537	27,136	27,585	34,269
White non-Hispanic	Total	37,211	38,629	39,543	40,391	42,750	44,092	44,191	45,194	45,467	54,148
	Male	19,307	20,206	20,550	21,207	22,504	23,439	23,375	24,150	24,334	28,990
	Female	17,904	18,416	18,939	19,181	20,242	20,653	20,816	21,044	21,133	25,158
Hispanic or Latino	Total	5,575	5,963	6,300	6,444	6,839	7,343	7,539	8,088	8,488	12,504
	Male	2,982	3,323	3,412	3,543	3,814	4,154	4,197	4,629	4,770	7,277
	Female	2,593	2,640	2,888	2,901	3,025	3,189	3,341	3,458	3,718	5,227
Black or African American	Total	1,399	1,509	1,593	1,578	1,742	1,925	1,896	2,057	2,207	2,932
	Male	734	803	897	852	971	1,108	1,076	1,104	1,205	1,723
	Female	665	706	696	726	771	817	820	953	1,002	1,209
American Indian or Alaska Native	Total	1,681	1,806	1,955	2,074	2,140	2,346	2,355	2,527	2,599	4,290
	Male	876	993	1,103	1,152	1,187	1,365	1,334	1,445	1,463	2,412
	Female	805	812	852	922	953	981	1,021	1,081	1,136	1,878
Asian or Pacific Islander	Total	528	552	538	582	673	769	796	886	957	1,199
	Male	269	252	260	280	334	364	377	419	492	586
	Female	259	300	278	302	339	405	419	467	465	613
Refused/Unknown race	Total	1,153	^b	^b	10†	10†	0†	484	454	443	627
	Male	617	^b	^b	*	*	*	362	320	311	443
	Female	536	^b	^b	*	*	*	120	133	131	184

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;^a Deaths with unknown gender or unknown race/ethnicity were included in total;^b 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, 2011-2021

Month of death	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
JAN	Count	4,321	4,210	5,079	4,824	5,028	5,119	5,111	6,219	5,595	5,693
	Percent	9.1%	8.7%	10.2%	9.4%	9.3%	9.1%	8.9%	10.5%	9.3%	7.5%
FEB	Count	4,070	4,147	4,383	4,227	4,267	5,135	4,514	4,832	4,724	5,275
	Percent	8.6%	8.6%	8.8%	8.3%	7.9%	9.1%	7.9%	8.2%	7.9%	12.3%
MAR	Count	4,358	4,414	4,484	4,333	4,819	5,387	5,070	5,353	5,372	5,745
	Percent	9.2%	9.1%	9.0%	8.5%	8.9%	9.5%	8.9%	9.0%	8.9%	8.1%
APR	Count	3,967	4,176	4,231	4,278	4,547	4,689	4,854	4,922	5,029	5,768
	Percent	8.3%	8.6%	8.5%	8.4%	8.4%	8.3%	8.5%	8.3%	8.4%	5,457
MAY	Count	3,899	3,980	4,076	4,291	4,527	4,603	4,867	4,768	5,098	5,833
	Percent	8.2%	8.2%	8.2%	8.4%	8.4%	8.1%	8.5%	8.1%	8.5%	6.7%
JUN	Count	3,823	3,868	3,831	4,072	4,396	4,464	4,782	4,666	4,689	6,483
	Percent	8.0%	8.0%	7.7%	8.0%	8.1%	7.9%	8.4%	7.9%	7.9%	5,749
JUL	Count	3,791	3,862	3,926	4,071	4,338	4,496	4,739	4,761	4,923	8,243
	Percent	8.0%	8.0%	7.9%	8.0%	8.0%	8.0%	8.3%	8.0%	8.2%	5,836
AUG	Count	3,913	3,850	3,893	4,112	4,338	4,432	4,534	4,647	4,848	6,603
	Percent	8.2%	7.9%	7.8%	8.1%	8.0%	7.8%	7.9%	7.8%	8.1%	6,718
SEP	Count	3,678	3,849	3,804	3,994	4,183	4,253	4,423	4,505	4,755	5,390
	Percent	7.7%	7.9%	7.6%	7.8%	7.7%	7.5%	7.7%	7.6%	7.9%	6,865
OCT	Count	3,888	3,956	3,868	4,184	4,284	4,501	4,548	4,619	4,858	5,566
	Percent	8.2%	8.2%	7.7%	8.2%	7.9%	8.0%	7.9%	7.8%	8.1%	6,849
NOV	Count	3,753	3,894	3,924	4,239	4,543	4,518	4,547	4,706	5,058	6,048
	Percent	7.9%	8.0%	7.9%	8.3%	8.4%	8.0%	7.9%	7.9%	8.4%	7,328
DEC	Count	4,086	4,253	4,430	4,449	4,882	4,883	5,272	5,208	5,212	9,053
	Percent	8.6%	8.8%	8.9%	8.7%	9.0%	8.6%	9.2%	8.8%	8.7%	8,322
TOTAL	Count	47,547	48,459	49,929	51,074	54,152	56,480	57,261	59,206	60,161	75,700
	Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	81,482

TABLE 2A-3
DEATHS BY DAY AND MONTH OF OCCURRENCE, ARIZONA RESIDENTS, 2021

Day of death	Month of death											Total
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	
1	315	266	190	201	180	175	180	205	225	256	215	258
2	306	281	220	201	210	194	206	204	245	231	247	241
3	341	309	206	174	195	194	192	236	227	249	234	275
4	343	255	226	185	187	206	208	203	247	221	215	269
5	322	284	212	159	183	188	163	205	219	221	215	268
6	330	273	217	188	198	198	171	236	230	218	221	249
7	343	246	197	192	215	179	180	205	228	211	231	298
8	350	243	212	176	213	161	187	193	250	235	234	290
9	343	258	207	186	175	213	210	229	235	201	225	255
10	343	243	195	194	195	167	186	195	214	236	238	296
11	344	237	193	211	185	158	205	221	232	238	216	274
12	345	253	198	177	201	200	198	172	223	204	262	264
13	337	218	183	165	178	174	197	235	242	212	258	265
14	352	245	170	196	186	189	187	226	237	219	229	265
15	354	203	180	189	174	195	195	210	219	231	258	243
16	323	199	212	186	165	192	201	192	233	211	257	239
17	343	216	210	182	172	213	182	233	234	205	239	262
18	362	232	213	169	167	186	165	220	229	213	237	282
19	349	216	192	203	197	193	174	208	257	213	247	260
20	334	211	193	184	187	217	183	236	215	193	273	320
21	345	197	175	157	203	191	195	186	226	223	248	283
22	303	221	176	169	175	201	189	226	230	218	255	286
23	316	211	173	174	203	188	229	213	202	276	263	2,623
24	286	218	173	166	156	173	183	239	237	231	270	280
25	292	203	204	165	164	205	162	196	205	233	229	254
26	291	228	185	177	185	176	180	238	198	226	248	257
27	285	213	171	202	175	192	197	220	208	179	280	240
28	288	187	179	190	183	183	177	243	247	212	236	252
29	294	189	161	203	192	183	222	244	241	264	272	2,465
30	296	207	178	179	184	208	227	216	256	271	286	2,508
31	286	181	188	188	204	228	210	210	210	276	1,573	
Total	10,061	6,566	6,039	5,457	5,749	5,692	5,836	6,718	6,849	7,328	8,322	81,482

TABLE 2A-4
AGE-SPECIFIC MORTALITY BY PLACE OF DEATH AND DECEASED STATUS, ARIZONA, 2021

		Age												
		<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Un-known	Total
IN HOSPITAL	In-patient	316	31	45	239	639	1,170	2,233	4,474	6,684	6,181	3,278	0	25,290
	Out-patient	80	45	31	209	344	383	521	693	838	737	421	0	4,302
	Died on arrival	0	0	*	*	*	*	*	*	*	*	*	0	20†
	Status unknown	20	15	32	241	538	836	1,411	3,403	5,960	7,584	7,349	0	27,389
	Subtotal	416	91	110†	690†	1,520†	2,390†	4,170†	8,570†	13,490†	14,510†	11,050†	0	57,003
	Nursing home^b	10	6	*	15	39	122	243	687	1,304	1,675	1,666	0	5,770†
NOT IN HOSPITAL	Residence	0	0	0	*	9	34	95	444	1,237	2,483	4,051	0	8,350†
	Other^c	*	9	31	435	764	690	783	1,067	1,359	2,042	3,159	12	10,360†
	Unspecified	0	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal	10†	15	30†	450†	812	846	1,121	2,198	3,900	6,200	8,876	12	24,479
TOTAL		430	106	143	1,141	2,334	3,237	5,289	10,771	17,385	20,707	19,927	12	81,482

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

^c Includes hospices.



2B.

LEADING CAUSES OF DEATH

In 2010, the Office of Vital Records (OVR) of the Arizona Department of Health Services implemented the new (version 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).

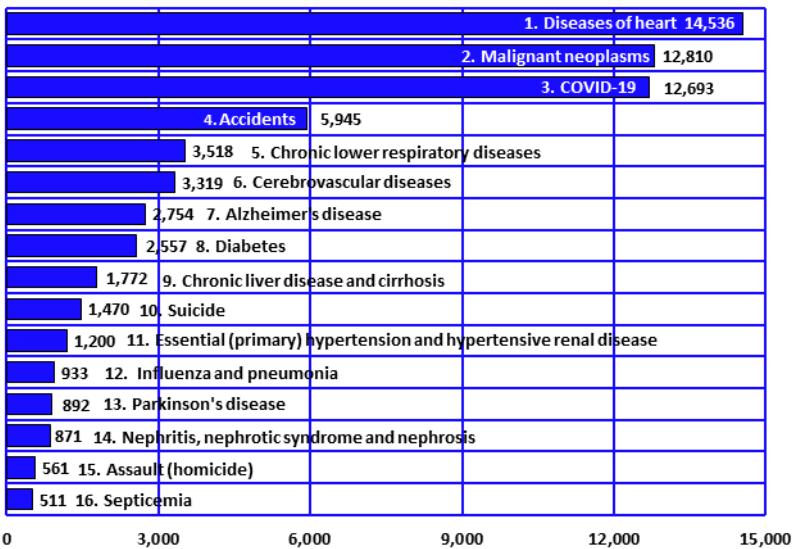
The death certificate now includes a new classification of the decedent's racial/ethnic status, consistent with the revised federal standards for collecting and reporting racial and ethnic status. These standards were published in the Federal Register on October 30, 1997, as "Revisions to the Standards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

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. 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 or Alaska Native, 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 2021

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

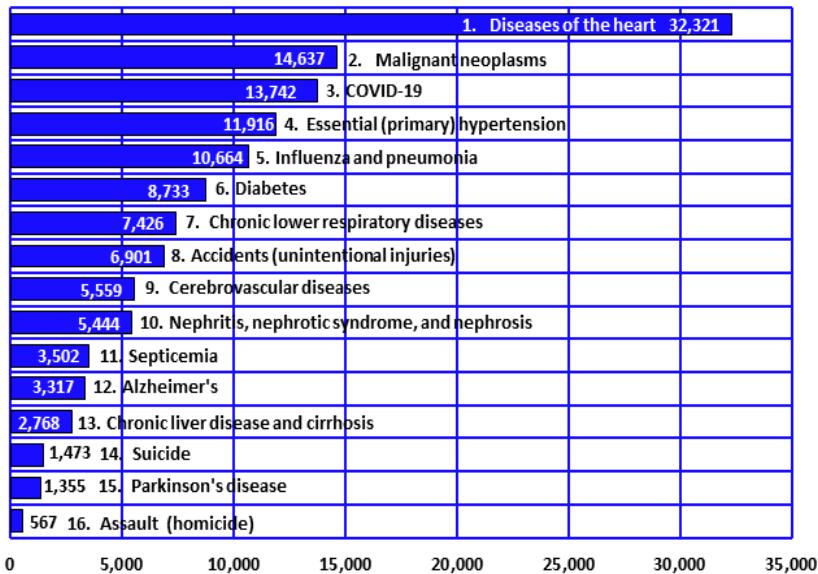


Based on the number of deaths (but not age-adjusted mortality rate), the leading underlying cause of death to Arizona residents in 2021 was *heart disease* (14,536 or 17.8 percent of all deaths), closely followed by *cancer*, which accounted for 12,810 or 15.7 percent of deaths (**Figure 2B-1A, Table 2B-1, Table 5E-14**).

The third leading cause of death, *COVID-19* accounted for 12,693 or 15.6 percent of total deaths. Deaths due to *accidents (unintentional injuries)* ranked fourth in 2021, with 5,945 (7.3 percent) resident deaths reported. Deaths due to *chronic lower respiratory diseases* ranked fifth in 2021, with 3,518 (4.3 percent) resident deaths reported. Together, these five causes accounted for 60.8 percent of total deaths in 2021. The fifteen leading causes accounted for 80.8 percent of all deaths among Arizona residents.

Figure 2B-1B
Leading Causes of Death among Arizona Residents in 2021

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 14,536 deaths that had diseases of the heart assigned as the underlying cause, another 17,785 deaths had diseases of the heart assigned as a secondary cause of death. The sum of these two counts (32,321, **Figure 2B-1B**) is the total number of deaths that had any mention of diseases of the heart on the 2021 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 11th as the underlying cause but ranked 4th when any mention of it was counted.

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

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

In 2021, diseases of the heart were the leading cause of death for White non-Hispanics and Blacks, placed 2nd for Hispanics and Asians, and 3rd for American Indians. Cancer ranked 2nd leading cause of death for White non-Hispanics, 3rd for Hispanics, Black or African Americans, and Asians but ranked 5th for American Indians. In 2021, COVID-19 was the leading cause of death for Hispanics, American Indians, and Asians, 2nd for Black or African Americans, and 3rd for White non-Hispanics. Unintentional injury ranked 2nd for American Indians, 4th for White non-Hispanics, Hispanics, and Blacks, and 5th for Asians. (**Figure 2B-2, Table 2B-4**).

In 2021, chronic liver disease and cirrhosis was unique to American Indians in making the five top ranking, while cerebrovascular diseases were the 4th leading cause of death specific to Asians and 5th to Black or African Americans. Diabetes ranked 5th among the leading causes of death for Hispanics. Chronic lower respiratory disease was the fifth leading cause of death specific to White non-Hispanics. (**Table 2B-4**).

Based on age-adjusted mortality rates, diseases of the heart was the leading cause of death for White non-Hispanic females but ranked 3rd for Hispanic, Black or African American, and Asian females. While cancer was the leading cause of death for Black or African American females, it was 2nd to White non-Hispanic, Hispanic, and Asian females, and 4th to American Indians. COVID-19 was the leading cause for Hispanic, American Indian, and Asian females, came in 2nd for Black or African Americans and 3rd for White non-Hispanic females. (**Figure 2B-3, Table 2B-4**).

Chronic liver disease and cirrhosis ranked second among the leading cause of death unique to American Indian women. Chronic lower respiratory diseases were the fifth leading cause of death specific to White non-Hispanic females.

Cerebrovascular diseases ranked fourth among Hispanic and Asian females, and fifth among Black or African American females. Diabetes ranked fifth among the leading causes of death for Hispanic and Asian women.

Figure 2B-2
Age-adjusted Mortality Rates^a for the Five Leading Causes of Death for Both Genders by Race/Ethnicity, Arizona, 2021

Rank	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
1	Diseases of heart 154.7	COVID-19 220.5	Diseases of heart 193.3	COVID-19 394.4	COVID-19 120.1
2	Cancer 136.0	Diseases of heart 123.5	COVID-19 168.5	Unintentional injury 206.9	Diseases of heart 97.6
3	COVID-19 103.5	Cancer 110.9	Cancer 154.4	Diseases of heart 145.9	Cancer 94.4
4	Unintentional injury 74.8	Unintentional injury 66.6	Unintentional injury 101.3	Chronic liver disease and cirrhosis 145.7	Cerebro-vascular diseases 32.3
5	Chronic lower respiratory diseases 39.8	Diabetes 42.5	Cerebro-vascular diseases 61.9	Cancer 128.9	Unintentional injury 30.5

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

Figure 2B-3
Age-adjusted Mortality Rates^a for the Five Leading Causes of Death by Race/Ethnicity among Females, Arizona, 2021

Rank	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
1	Diseases of heart 120.1	COVID-19 164.0	Cancer 158.3	COVID-19 339.8	COVID-19 92.7
2	Cancer 119.6	Cancer 98.5	COVID-19 153.8	Chronic liver disease and cirrhosis 123.9	Cancer 91.0
3	COVID-19 76.7	Diseases of heart 93.8	Diseases of heart 136.0	Unintentional injury 123.8	Diseases of heart 81.9
4	Unintentional injury 47.3	Cerebro-vascular diseases 36.1	Unintentional injury 63.3	Cancer 123.2	Cerebro-vascular diseases 33.3
5	Chronic lower respiratory diseases 39.5	Diabetes 35.1	Cerebro-vascular diseases 60.5	Diseases of heart 97.8	Diabetes 24.5

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

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

Figure 2B-4
Age-adjusted Mortality Rates^a for the Five Leading Causes of Death by Race/Ethnicity among Males, Arizona, 2021

Rank	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
1	Diseases of heart 193.0	COVID-19 287.5	Diseases of heart 258.1	COVID-19 464.6	COVID-19 159.0
2	Cancer 155.4	Diseases of heart 159.8	COVID-19 186.3	Unintentional injury 296.9	Diseases of heart 119.7
3	COVID-19 133.4	Cancer 128.0	Cancer 151.7	Diseases of heart 208.5	Cancer 100.1
4	Unintentional injury 102.0	Unintentional injury 99.0	Unintentional injury 138.0	Chronic liver disease and cirrhosis 170.0	Unintentional injury 42.0
5	Chronic lower respiratory diseases 40.0	Diabetes 51.6	Cerebro-vascular diseases 63.0	Cancer 139.9	Diabetes 38.6

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

Figure 2B-5
Age-adjusted Mortality Rates^a for the Five Leading Causes of Death by Gender in Urban^b and Rural Areas, Arizona, 2021

Rank	Urban male	Urban female	Rural male	Rural female
1	Diseases of heart 184.0	Cancer 114.6	Diseases of heart 222.1	COVID-19 132.7
2	COVID-19 163.9	Diseases of heart 113.2	COVID-19 217.6	Cancer 126.0
3	Cancer 146.4	COVID-19 97.8	Cancer 162.8	Diseases of heart 126.0
4	Unintentional injury 101.3	Unintentional injury 45.1	Unintentional injury 141.1	Unintentional injury 59.0
5	Cerebro-vascular diseases 33.7	Alzheimer's disease 33.9	Chronic liver disease and cirrhosis 56.2	Chronic lower respiratory diseases 46.5

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

Based on age-adjusted mortality rates for Arizona males, diseases of the heart ranked first or second as a leading cause of death for all racial/ethnic groups except for American Indians who ranked third. Cancer was the second leading cause for White non-Hispanic males, third for Hispanic, Black or African American, and Asian, and fifth for American Indian males. (**Figure 2B-4; Table 2B-4**).

Unintentional injury ranked the second leading cause of death for American Indian males, and fourth among White non-Hispanic, Hispanic, Black, and Asian males.

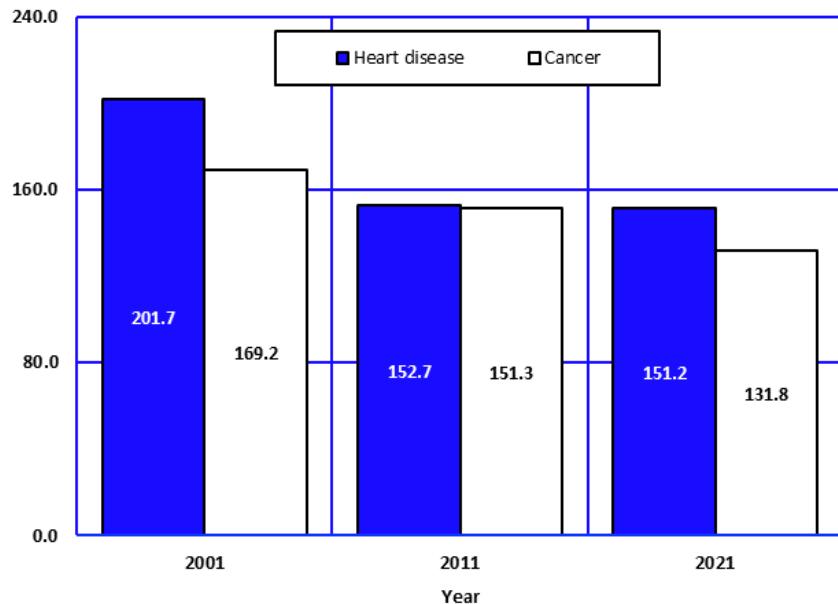
In 2021, based on the age-adjusted mortality rates, COVID-19 was the first leading cause of death for Hispanic, American Indian, and Asian males, second for Black males, and third for White non-Hispanic males. Chronic liver disease and cirrhosis ranked fourth for American Indian males. Chronic lower respiratory diseases specific to White non-Hispanic males and cerebrovascular diseases unique to Black males was ranked the fifth leading cause of death, and also ranked fifth was diabetes among Hispanic and Asian males.

In 2021, the ranking of the leading causes of death were mostly similar by gender for residents of the urban (Maricopa, Pima, Pinal, and Yuma counties) and rural (all the remaining counties) areas of the state (**Figure 2B-5, Table 2B-5**). Diseases of the heart exceeded cancer as the leading causes of death among both urban and rural males, but came in 2nd and 3rd among urban and rural females. COVID-19 was ranked the first among rural females, 2nd among urban and rural males, and third leading cause of death for urban females. Unintentional injury placed fourth among the leading cause for males and females regardless of area of residence.

The leading causes of death which ranked fifth were cerebrovascular disease specific to urban males, Alzheimer's disease unique to urban females, chronic liver disease and cirrhosis was specific to rural males and chronic lower respiratory diseases to rural females.

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

Figure 2B-6
Comparison of Age-adjusted Mortality Rates^a for Heart Disease and Cancer (Malignant Neoplasm), Arizona, 2001, 2011, and 2021

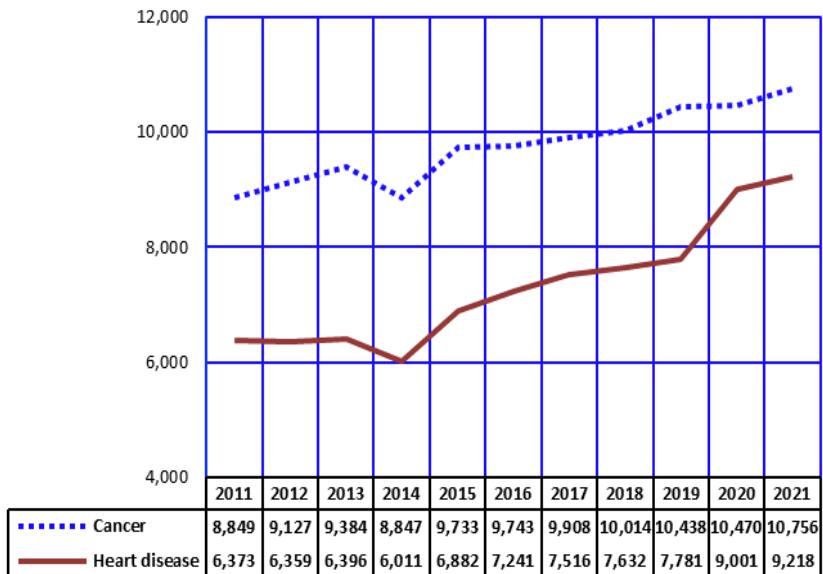


The age-adjusted mortality rate for diseases of the heart decreased by 25.0 percent from 201.7 deaths per 100,000 population in 2001 to 151.2/100,000 in 2021 (**Figure 2B-6**). The age-adjusted mortality rate for cancer declined less, by 22.1 percent, from 2001-2021. In Arizona, the relative risk of death from heart disease versus cancer declined from 19.2 percent greater in 2001 to 14.7 percent in 2021.

In 2011, 119 less Arizonans died from diseases of the heart than cancer (**Table 2B-1**). In 2021, the number of deaths due to diseases of the heart exceeded cancer by 1,726 cases (**Table 2B-4**).

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

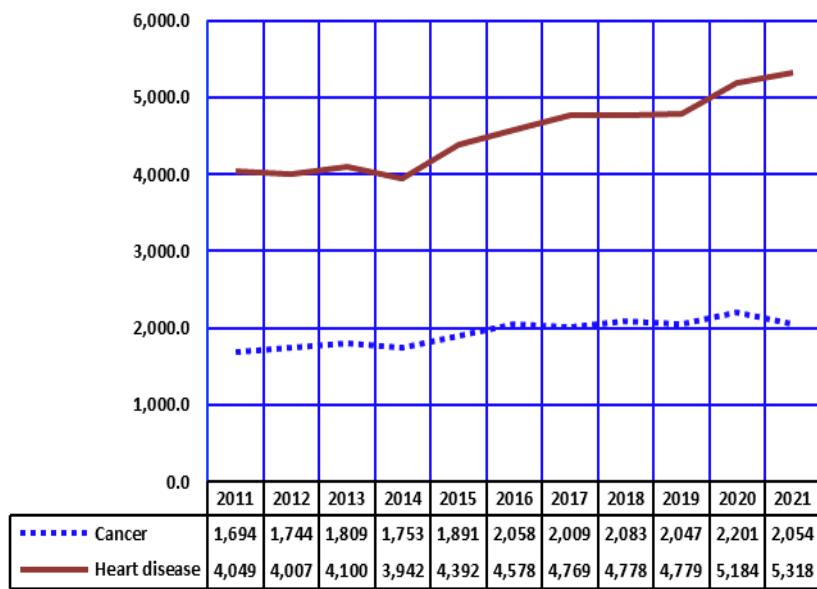
Figure 2B-7
Number of Deaths from Heart Disease and Cancer among Arizonans 0-84 Years, 2011-2021



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 this age group. In 2021, 1,538 more Arizonans 0-84 years old died from cancer (10,756) than heart disease (9,218).

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

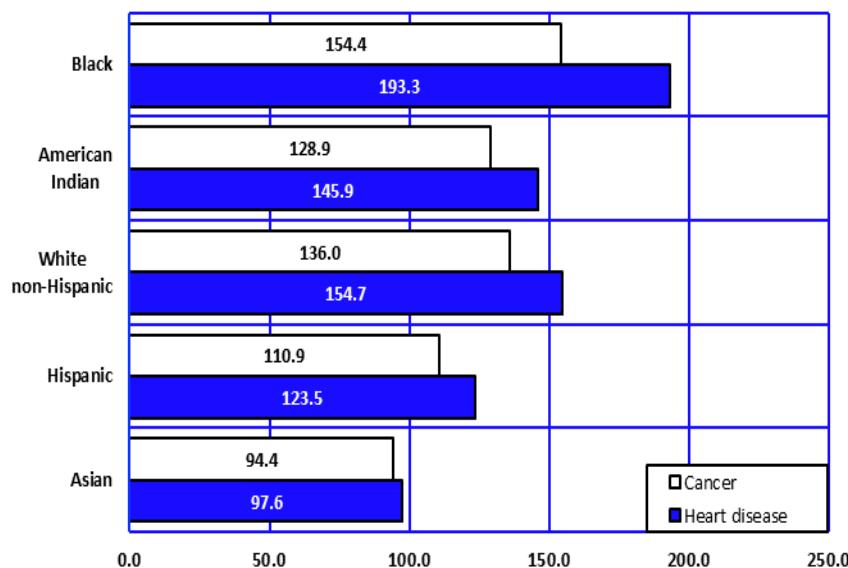
Figure 2B-8
Deaths from Heart Disease and Cancer among Arizonans 85+, 2011-2021



Among Arizonans age 85 and over, heart disease is the number one leading cause of death by a wide margin. In 2021, adults aged 85 and over accounted for 16.0 percent of all deaths from cancer but 36.6 percent of all deaths from heart disease. In 2021, the median age at death for heart disease was 80 years (**Table 2D-3**); and a minority of deaths (38.8 percent, **Table 2D-4**) were premature, i.e., before reaching the expected years of life at birth for all U.S. residents (76.1 years).

However, from 2011 to 2021, the number of deaths from cancer increased by 21.3 percent among Arizonans 85 years or older, less than the increase observed in diseases of the heart (31.3 percent increase).

Figure 2B-9
Age-adjusted Mortality Rates^a for Heart Disease and Cancer by Race/Ethnicity, Arizona, 2021



In Arizona, Black or African Americans were 2.0 times more likely to die from diseases of the heart and 1.6 times more likely to die from malignant neoplasms in 2021 than Asians, the group with the lowest risk of each respective cause of death (**Figure 2B-9, Table 2B-4**). Compared to Asians, White non-Hispanic Arizonans were 1.6 times more likely to die of heart disease and 1.4 times more likely to die of cancer.

In 2021, the age-adjusted relative risk of death from heart disease exceeded cancer mortality risk (**Table 2B-3**) for all the racial/ethnic groups.

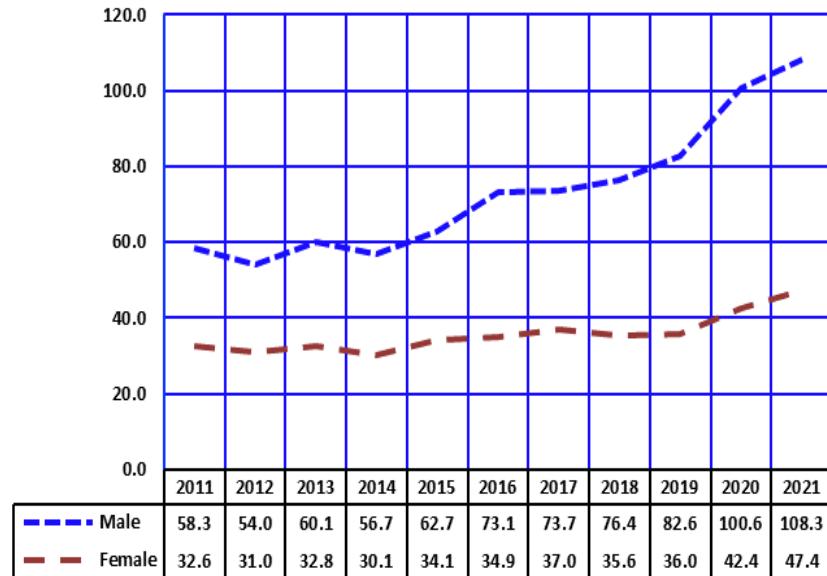
Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

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

Figure 2B-10
Age-adjusted Mortality Rates^a for Accidents (Unintentional Injuries) by Gender and Year, Arizona, 2011-2021

The number of deaths from unintentional injuries increased by 10.6 percent from 5,377 in 2020 to 5,945 in 2021 (**Table 2B-1**). In 2021, based on age-adjusted mortality rates, accidents ranked fourth as a leading cause of death for both males and females (**Table 2B-4**). From 2020 to 2021, the age-adjusted mortality rate for accidents increased both for males (7.7 percent) and females (11.8 percent; **Figure 2B-10**).

In 2021, 1,359 deaths were caused by motor vehicle accidents, an increase of 31.3 percent from 2020. Heat induced mortality has seen a decrease of 7.6 percent between 2020 and 2021. Deaths due to accidental drowning and submersion increased by 16.2 percent from 2020 (n=99) to 2021 (n=115). Additionally, Arizonans experienced an 8.6 percent increase in the number of accidental poisonings due to drugs and/or medicaments from 2,309 fatalities in 2020 to 2,508 in 2021 (**Table 2B-9**).

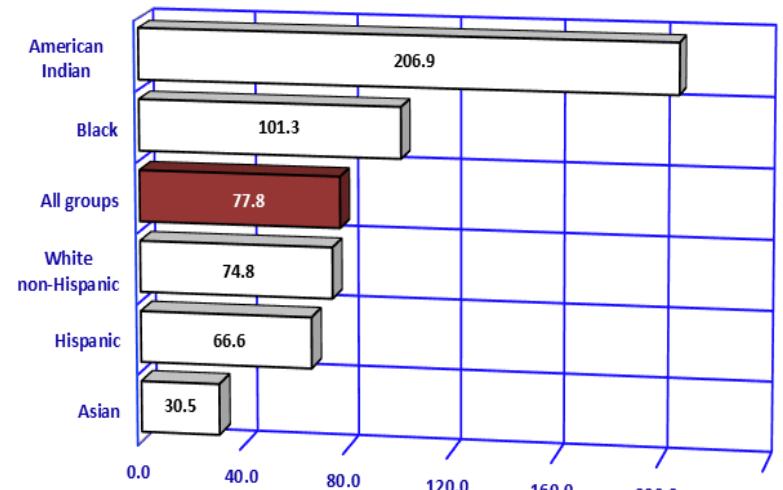


Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Figure 2B-11
Age-adjusted Mortality Rates^a for Accidents (Unintentional Injuries) by Race/Ethnicity, Arizona, 2021

The American Indian death rate for unintentional injuries (206.9/100,000) was 6.8 times greater than the rate for Asians 30.5/100,000), the group with the lowest risk of unintentional injury death among racial/ethnic groups in the state (**Figure 2B-11, Table 2B-4**).

In 2021, Apache (226.3/100,000) and Navajo (168.8/100,000) counties had the two highest age-adjusted mortality rates for unintentional injuries (**Table 5E-11**).

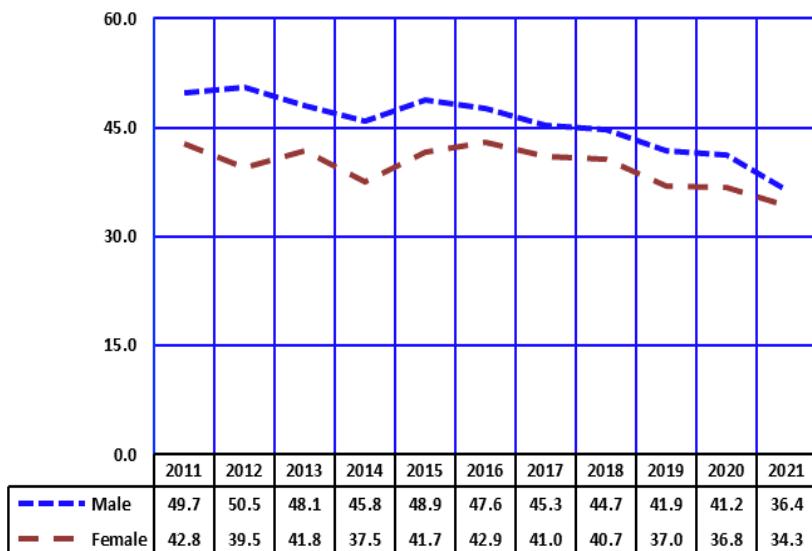


Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

2B. LEADING CAUSES OF DEATH

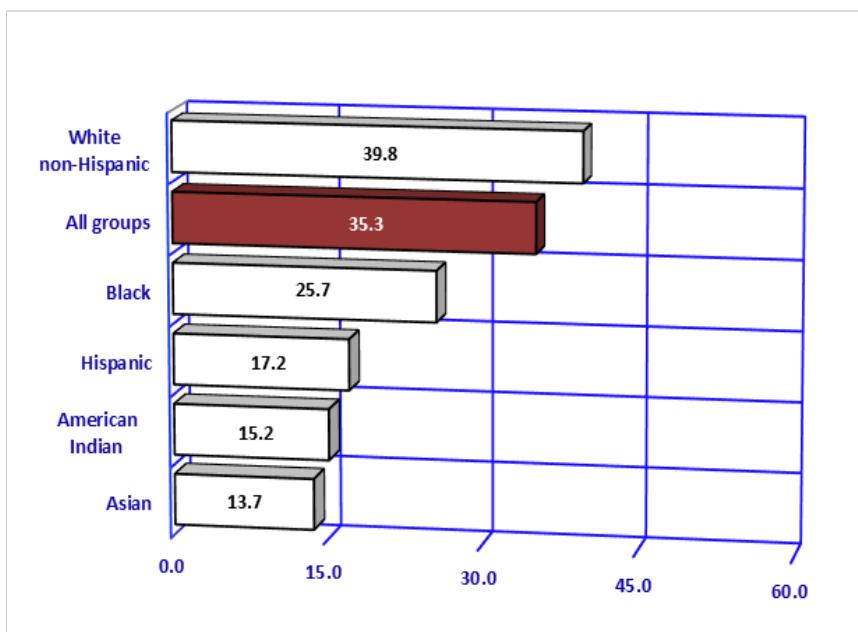
Chronic lower respiratory diseases

Figure 2B-12
Age-adjusted Mortality Rates^a for Chronic Lower Respiratory Diseases^b by Gender and Year, Arizona, 2011-2021



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

Figure 2B-13
Age-adjusted Mortality Rates^a for Chronic Lower Respiratory Diseases by Race/Ethnicity, Arizona, 2021



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

In 2021, chronic lower respiratory diseases (bronchitis, emphysema, asthma) was the 5th leading cause of death among Arizona residents (**Table 2B-1**). The mortality rate for chronic lower respiratory diseases decreased for both genders between 2020 and 2021, but more so among males (11.7 percent) than females (6.8 percent) (**Figure 2B-12, Table 2B-2**).

Among genders and regional groups, rural males and females experienced the highest mortality due to chronic lower respiratory diseases with rates of 49.5/100,000 and 46.5/100,000, respectively (**Table 2B-5**).

Mortality rates for emphysema, chronic bronchitis, asthma, and other lower respiratory disorders were highest among White non-Hispanics (39.8 deaths per 100,000) when compared to any other racial/ethnic groups in 2021. Asians recorded the lowest rate at 13.7 deaths per 100,000 population (**Figure 2B-13, Table 2B-4**).

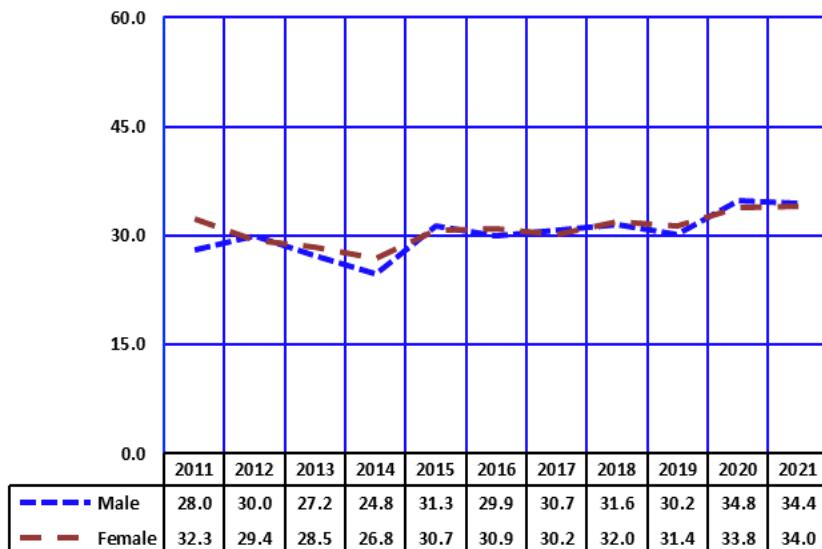
2B. LEADING CAUSES OF DEATH

Cerebrovascular diseases

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 cerebrovascular diseases decreased by 0.6 percent from 34.6/100,000 in 2020 to 34.4 deaths per 100,000 population in 2021 (**Table 2B-2**).

With some exceptions, the risk of dying from cerebrovascular diseases was slightly higher among females than males for the period 2011-2021 (6 of the last 11 years), but the rates were very similar. (**Figure 2B-14, Table 2B-2**).

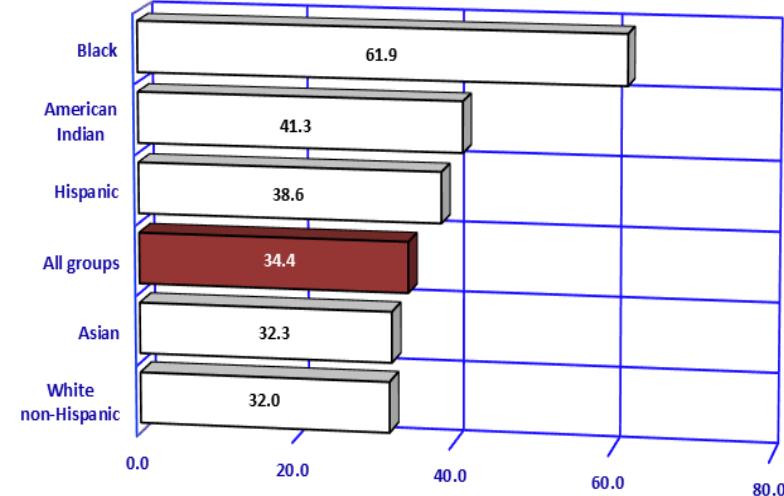
Figure 2B-14
Age-adjusted Mortality Rates^a for Cerebrovascular Disease by Gender and Year, Arizona, 2011-2021



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

Figure 2B-15
Age-adjusted Mortality Rates^a for Cerebrovascular Disease by Race/Ethnicity, Arizona, 2021

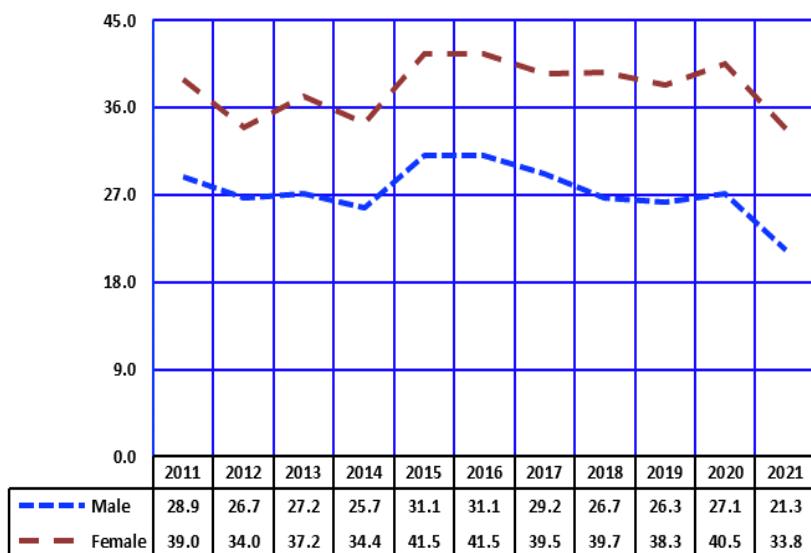
Compared to Arizona's overall rate, Black or African Americans were 1.8 times more likely to die from cerebrovascular disease in 2021 (**Figure 2B-15, Table 2B-4**). The 2021 mortality rate for cerebrovascular disease among White non-Hispanics (32.0/100,000) was the lowest among racial/ethnic groups.



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

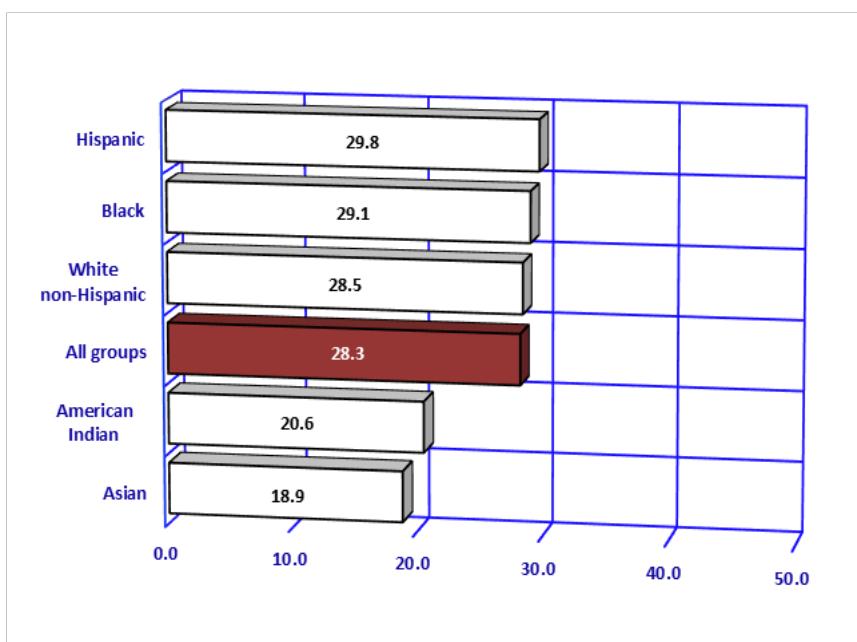
2B. LEADING CAUSES OF DEATH Alzheimer's disease

Figure 2B-16
Age-adjusted Mortality Rates^a for Alzheimer's Disease by Gender and Year, Arizona, 2011-2021



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

Figure 2B-17
Age-adjusted Mortality Rates^a for Alzheimer's Disease by Race/Ethnicity, Arizona, 2021



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

Based on the age-adjusted rate of deaths in 2021, Alzheimer's disease was the 7th leading cause of death for females and 10th leading cause for males (**Table 2B-4**).

From 2020 to 2021, the age-adjusted mortality rate for Alzheimer's disease decreased for both males (21.4 percent) and females (16.5 percent) (**Figure 2B-16**).

The age-adjusted mortality rates for Alzheimer's disease in 2021 were higher among Hispanic or Latinos (29.8/100,000), Black or African Americans (29.1/100,000), and White non-Hispanics (28.3/100,000) than the other racial/ethnic groups. Rates lower than the state average (28.3/100,000) were recorded among Asians (18.9/100,000) and American Indians (20.6/100,000) (**Figure 2B-17, Table 2B-4**).

White non-Hispanic residents of Arizona disproportionately contributed to mortality from Alzheimer's disease. In 2021, White non-Hispanics accounted for 55.0 percent (**Table 10C-1**) of the state's population, but 82.4 percent of all deaths from Alzheimer's disease (2,268 out of 2,754; **Table 2B-4**).

In 2021, the overall median age at death from Alzheimer's disease was 86, specifically 85 years for males and 87 years for females (**Table 2D-3**).

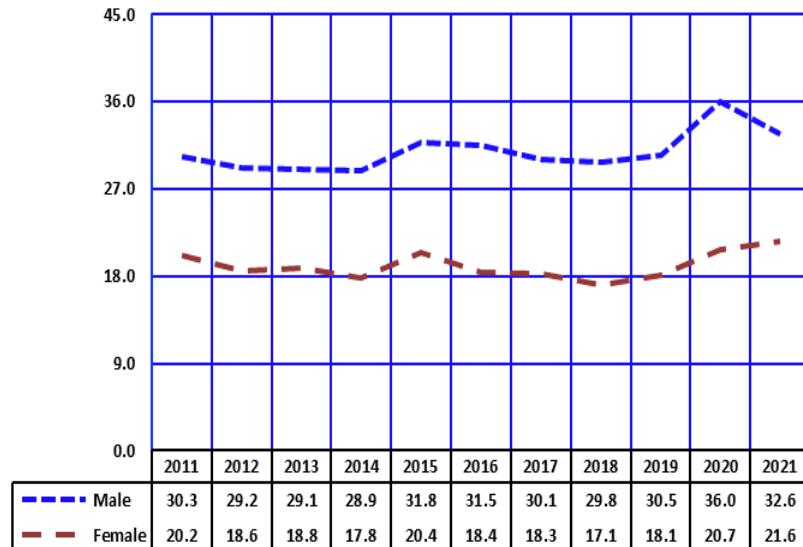
2B. LEADING CAUSES OF DEATH Diabetes

From 2011-2021, mortality rates for diabetes increased for both males (7.6 percent) and females (6.9 percent; **Figure 2B-18**).

In addition to 2,557 deaths that had diabetes assigned as the underlying cause in 2021, another 6,176 deaths had diabetes assigned as a contributing factor. The diabetes-related death rate of 91.3/100,000 (**Table 6A-6**) was 3.4 times greater than the rate for diabetes as an underlying cause (26.8/100,000; **Table 2B-2**).

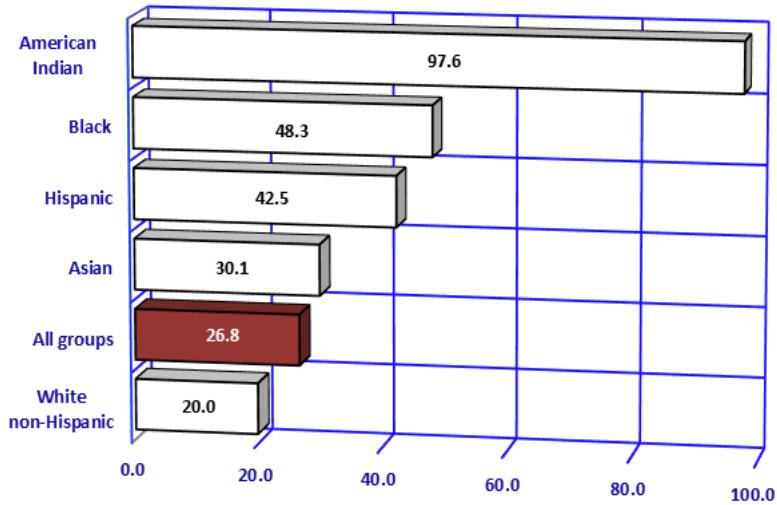
The diabetes-related death rate includes all mentions of diabetes on the death certificate as the underlying or other than underlying cause.

Figure 2B-18
**Age-adjusted Mortality Rates^a for Diabetes by Gender and Year,
Arizona, 2011-2021**



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

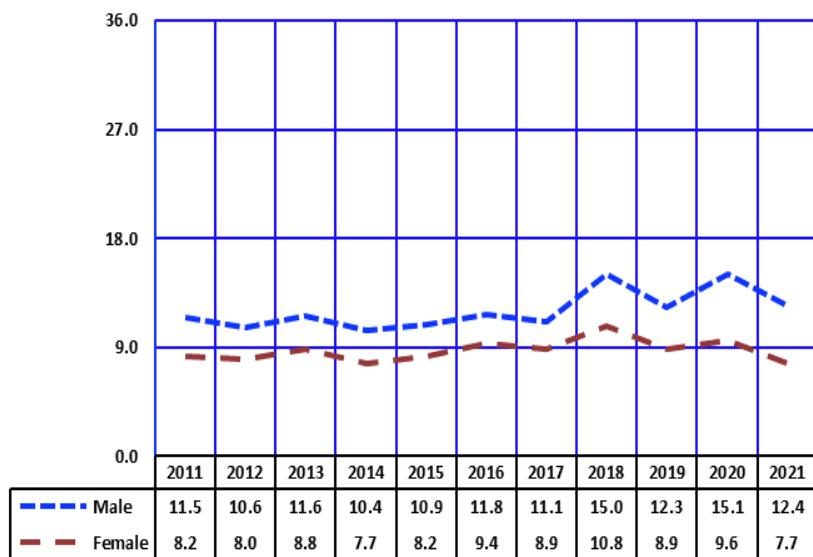
Figure 2B-19
**Age-adjusted Mortality Rates^a for Diabetes by Race/Ethnicity,
Arizona, 2021**



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

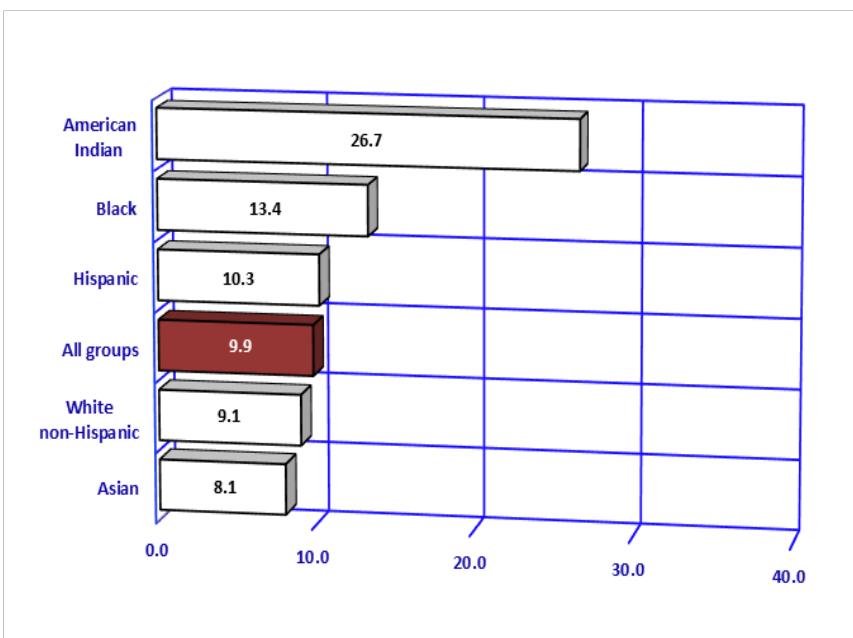
2B. LEADING CAUSES OF DEATH Influenza and pneumonia

Figure 2B-20
Age-adjusted Mortality Rates^a for Influenza and Pneumonia by Gender and Year, Arizona, 2011-2021



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

Figure 2B-21
Age-adjusted Mortality Rates^a for Influenza and Pneumonia by Race/Ethnicity, Arizona, 2021



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

The number of deaths from influenza and pneumonia increased by 43.8 percent from 649 in 2011 to 933 in 2021. (**Table 2B-1**). Among the 933 deaths, influenza was identified as the underlying cause for 9 of them, while pneumonia was listed as the underlying cause on 924 death certificates (**Table 2B-6**).

The mortality rate for influenza and pneumonia decreased for females from 9.6 deaths per 100,000 in 2020 to 7.7 deaths in 2021 (**Figure 2B-20, Table 2B-2**). The mortality rate for influenza and pneumonia also decreased for males from 15.1 per 100,000 in 2020 to 12.4 deaths per 100,000 in 2021.

In 2021, the age-adjusted mortality rate for Arizona males was 61.0 percent greater than that of Arizona females.

In 2021, American Indian residents of Arizona had the highest mortality rate for influenza and pneumonia (26.7 deaths per 100,000) among the racial/ethnic groups. Mortality due to influenza and pneumonia for White non-Hispanics (9.1/100,000) and Asians (8.1/100,000) were lower than the state rate. (**Figure 2B-21, Table 2B-4**).

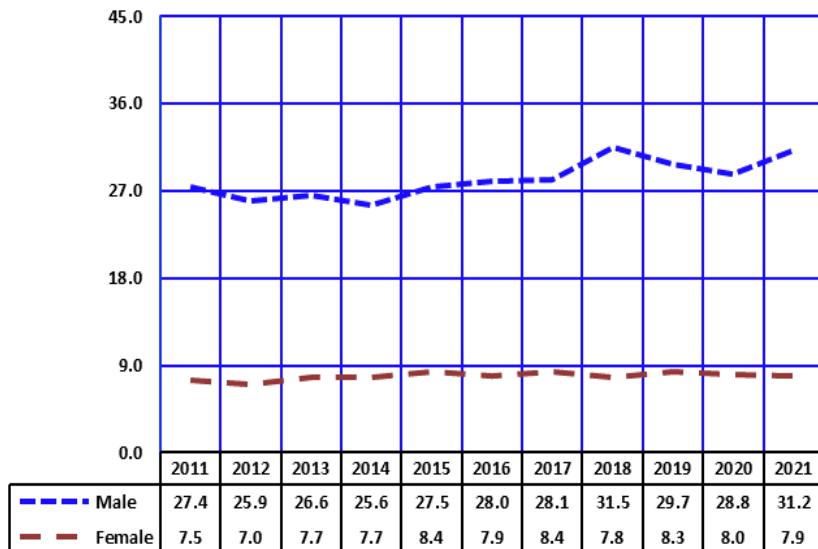
County comparisons show that in 2021 influenza and pneumonia mortality rates were highest in Apache (28.5/100,000), Navajo (18.4/100,000), and La Paz (18.0/100,000) counties compared to the remaining counties (**Table 5E-11**).

2B. LEADING CAUSES OF DEATH Suicide

Figure 2B-22
Age-adjusted Mortality Rates^a for Suicide by Gender and Year,
Arizona, 2011-2021

In 2021, based on age-adjusted mortality rates, suicide was the 8th leading cause of death among males. It ranked as the 11th cause of mortality for females. The overall age-adjusted suicide rate decreased from 18.2 suicides per 100,000 in 2020 to 19.4 in 2021 (**Table 2B-4**).

From 2020 to 2021, suicide mortality increased by 8.3 percent among males and decreased 1.3 percent among females (**Figure 2B-22, Table 2B-4**). In 2021, suicide posed a 3.9 times greater mortality risk for males (31.2/100,000) than for females (7.9/100,000).

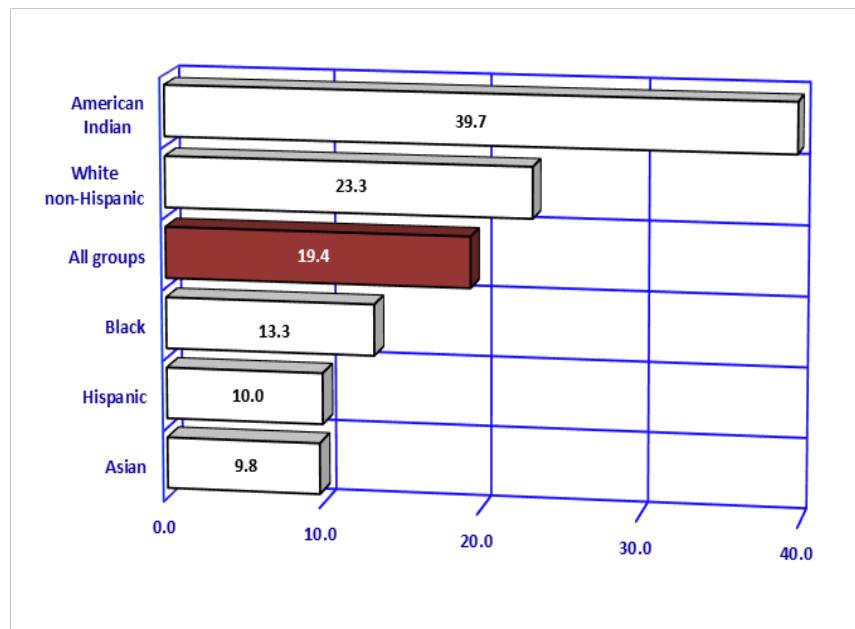


Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

Figure 2B-23
Age-adjusted Mortality Rates^a for Suicide by Race/Ethnicity,
Arizona, 2021

In 2021, American Indians had the highest age-adjusted suicide rate (39.7 suicides per 100,000) among racial/ethnic groups, followed by White non-Hispanics (23.3/100,000), while Asians recorded the lowest age-adjusted suicide rate (9.8/100,000; **Figure 2B-23, Table 2B-4**).

The 2021 age-adjusted mortality rates for suicide varied across the state, from a low rate of 7.9 suicides per 100,000 residents in Santa Cruz County to a high of 65.1 suicides per 100,000 residents in Apache County (**Table 5E-11**).

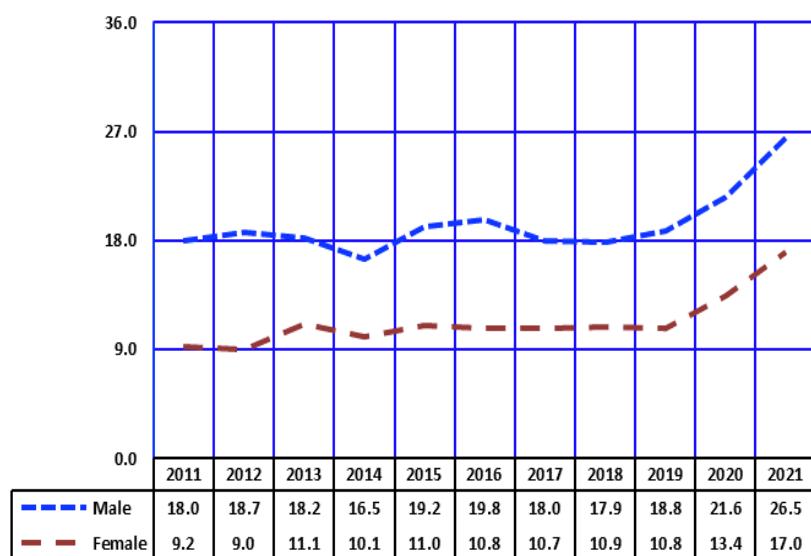


Note: ^a Number of deaths per 100,000 population age-adjusted to the 2000 U.S. standard.

2B. LEADING CAUSES OF DEATH

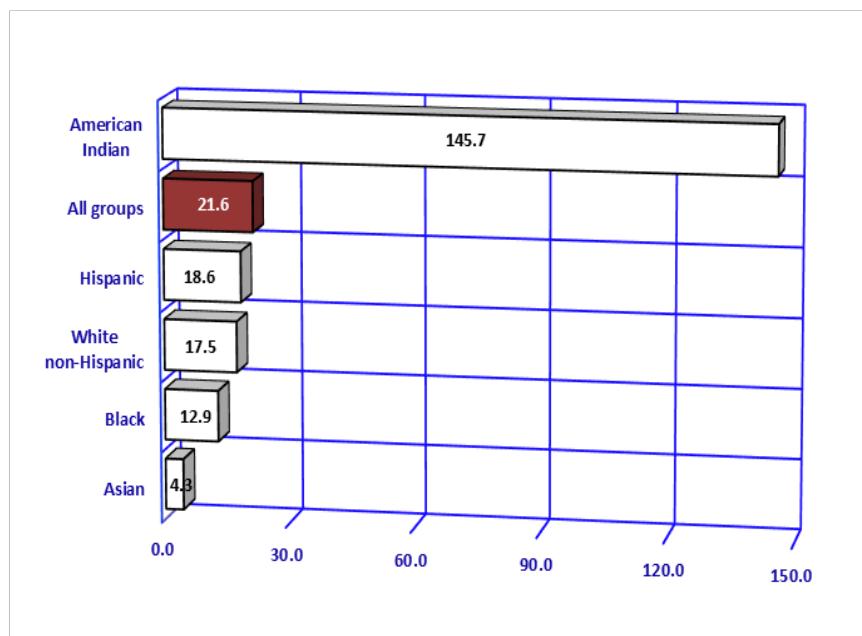
Chronic liver disease and cirrhosis

Figure 2B-24
Age-adjusted Mortality Rates^a for Chronic Liver Disease and Cirrhosis by Gender and Year, Arizona, 2011-2021



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

Figure 2B-25
Age-adjusted Mortality Rates^a for Chronic Liver Disease and Cirrhosis by Race/Ethnicity, Arizona, 2021



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

Chronic liver disease and cirrhosis was the 9th leading cause of death in Arizona in 2021 (**Figure 2B-1, Table 2B-1**). Among the 1,772 deaths due to chronic liver disease and cirrhosis, 1,061 (59.9 percent) were males (**Table 2B-4**).

Among females, the age-adjusted mortality rate for chronic liver disease and cirrhosis increased 26.9 percent from 2020 to 2021. Among males, the mortality rate increased 22.7 percent from 21.6/100,000 in 2020 to 26.5/100,000 in 2021 (**Figure 2B-24, Table 2B-3**).

In 2021, Apache, Gila, Navajo, and La Paz counties had the highest mortality rates for chronic liver disease and cirrhosis (**Table 5E-11**).

In 2021, chronic liver disease and cirrhosis mortality rate was exceedingly high among American Indians (145.7 deaths per 100,000 population) compared to other racial/ethnic groups in the state (**Figure 2B-25, Table 2B-4**). The death rate for chronic liver disease and cirrhosis among Asians, Blacks, White non-Hispanics, and Hispanics were all below the state average (21.6 deaths per 100,000 population).

Compared to the median age at death from all causes (74 years), those who died from chronic liver disease and cirrhosis were on average 16 years younger (58 years, **Table 2D-3**). In 2021, the median age at death of American Indians who died from chronic liver disease and cirrhosis was 47 years, which was at least 11 years younger than all the other race/ethnic groups (**Table 2D-3**).

TABLE 2B-1
NUMBER OF DEATHS FOR THE LEADING CAUSES OF MORTALITY BY YEAR, ARIZONA, 2011-2021

Rank in 2011	Rank in 2021	Cause of death	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
2	1	Diseases of heart	10,424	10,366	10,497	9,953	11,274	11,820	12,285	12,410	12,560	14,185	14,536
1	2	Malignant neoplasms	10,543	10,871	11,193	10,600	11,624	11,801	11,917	12,097	12,485	12,671	12,810
-	3	COVID-19	-	-	-	-	-	-	-	-	-	8,430	12,693
4	4	Accidents (unintentional injury)	2,959	2,804	3,137	3,011	3,403	3,899	4,085	4,211	4,522	5,377	5,945
3	5	Chronic lower respiratory diseases	3,143	3,167	3,295	3,185	3,648	3,788	3,779	3,820	3,678	3,698	3,518
6	6	Cerebrovascular diseases	2,067	2,096	2,047	1,995	2,463	2,536	2,647	2,829	2,848	3,225	3,319
5	7	Alzheimer's disease	2,336	2,154	2,384	2,345	2,942	3,081	3,050	3,011	3,045	3,235	2,754
7	8	Diabetes	1,721	1,698	1,744	1,776	2,050	2,013	2,037	2,041	2,170	2,563	2,557
9	9	Chronic liver disease and cirrhosis	933	971	1,040	984	1,120	1,169	1,122	1,159	1,211	1,426	1,772
8	10	Intentional self-harm (suicide)	1,113	1,070	1,116	1,124	1,233	1,256	1,304	1,432	1,411	1,359	1,470
10	11	Essential primary hypertension and hypertensive renal disease	725	739	711	758	896	1,010	1,018	928	1,009	1,131	1,200
11	12	Influenza and pneumonia	649	635	724	669	739	859	852	1,113	947	1,109	933
12	13	Parkinson's disease	545	579	578	569	719	712	749	790	806	1,016	892
13	14	Nephritis, nephrotic syndrome and nephrosis	409	440	391	353	498	485	535	680	759	772	871
14	15	Assault (homicide)	387	376	383	294	364	416	430	416	409	526	561
15	16	Septicemia	321	319	354	336	436	505	461	382	339	425	511
ALL CAUSES			47,547	48,459	49,929	51,074	54,152	56,480	57,261	59,206	60,161	75,700	81,482

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 2011-2021 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.

TABLE 2B-2
**AGE-ADJUSTED MORTALITY RATES^a BY GENDER AND YEAR FOR SELECTED LEADING CAUSES OF DEATH,
ARIZONA, 2011-2021**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
TOTAL, ALL CAUSES											
Total	699.6	687.2	687.8	676.0	691.3	696.6	679.3	688.6	676.6	842.2	882.6
Male	817.1	811.0	805.8	791.2	811.5	824.8	800.0	813.4	799.6	1002.1	1057.1
Female	595.3	579.2	583.8	572.8	583.3	581.1	568.7	573.5	562.9	694.1	721.2
CARDIOVASCULAR DISEASE											
Total	201.0	193.3	187.7	171.6	189.0	190.8	189.9	188.4	184.9	205.3	203.4
Male	239.2	233.6	229.0	206.9	226.7	230.7	228.6	225.2	221.2	246.9	244.8
Female	168.0	159.1	152.4	140.7	156.1	155.9	155.5	155.6	152.4	167.8	166.2
----DISEASES OF HEART											
Total	152.7	145.8	143.0	129.9	141.3	142.5	141.9	140.5	137.3	152.9	151.2
Male	192.8	184.4	183.6	164.1	177.1	180.5	179.4	176.3	172.5	192.2	191.3
Female	119.0	113.7	109.2	100.5	110.5	109.8	109.3	109.1	106.3	118.1	115.7
----CEREBROVASCULAR DISEASE											
Total	30.6	29.9	28.2	26.2	31.1	30.7	30.7	32.1	31.0	34.6	34.4
Male	28.0	30.0	27.2	24.8	31.3	29.9	30.7	31.6	30.2	34.8	34.4
Female	32.3	29.4	28.5	26.8	30.7	30.9	30.2	32.0	31.4	33.8	34.0
MALIGNANT NEOPLASMS											
Total	151.3	149.8	149.6	136.3	144.0	140.7	136.6	135.9	134.7	134.7	131.8
Male	179.3	180.3	175.0	160.8	169.0	166.3	161.0	161.8	156.7	156.1	150.3
Female	129.5	125.9	129.9	116.8	123.8	120.0	116.6	114.7	116.4	117.2	116.7
CHRONIC LOWER RESPIRATORY DISEASE											
Total	45.9	44.2	44.5	41.1	45.1	45.0	43.0	42.6	39.2	38.8	35.3
Male	49.7	50.5	48.1	45.8	48.9	47.6	45.3	44.7	41.9	41.2	36.4
Female	42.8	39.5	41.8	37.5	41.7	42.9	41.0	40.7	37.0	36.8	34.3
ACCIDENTS (UNINTENTIONAL INJURIES)											
Total	45.5	42.4	46.3	43.3	48.1	53.7	55.3	55.9	59.2	71.5	77.8
Male	58.3	54.0	60.1	56.7	62.7	73.1	73.7	76.4	82.6	100.6	108.3
Female	32.6	31.0	32.8	30.1	34.1	34.9	37.0	35.6	36.0	42.4	47.4
----MOTOR VEHICLE ACCIDENTS											
Total	12.1	11.4	11.4	10.3	12.6	13.9	13.8	14.1	13.1	14.0	18.4
Male	17.6	16.8	16.3	14.5	18.0	20.1	19.5	20.0	18.9	20.2	25.7
Female	6.9	6.3	6.6	6.0	7.2	7.8	8.2	8.3	7.5	7.8	11.2
INFLUENZA AND PNEUMONIA											
Total	9.7	9.1	10.0	8.9	9.4	10.4	9.9	12.7	10.4	12.2	9.9
Male	11.5	7.4	11.6	10.4	10.9	11.8	11.1	15.0	12.3	15.1	12.4
Female	8.2	5.6	8.8	7.7	8.2	9.4	8.9	10.8	8.9	9.6	7.7

TABLE 2B-2 (continued)
**AGE-ADJUSTED MORTALITY RATES^a BY GENDER AND YEAR FOR SELECTED LEADING CAUSES OF DEATH,
ARIZONA, 2011-2021**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
COVID-19											
Total	-	-	-	-	-	-	-	-	-	92.1	136.9
Male	-	-	-	-	-	-	-	-	-	118.3	174.0
Female	-	-	-	-	-	-	-	-	-	69.2	103.7
ALZHEIMER'S DISEASE											
Total	35.2	29.9	33.2	30.9	37.3	37.3	35.2	34.3	33.2	34.7	28.3
Male	28.9	41.5	27.2	25.7	31.1	31.1	29.2	26.7	26.3	27.1	21.3
Female	39.0	52.8	37.2	34.4	41.5	41.5	39.5	39.7	38.3	40.5	33.8
DIABETES											
Total	24.8	23.5	23.6	23.0	25.7	24.5	23.8	23.0	23.9	27.9	26.8
Male	30.3	29.2	29.1	28.9	31.8	31.5	30.1	29.8	30.5	36.0	32.6
Female	20.2	18.6	18.8	17.8	20.4	18.4	18.3	17.1	18.1	20.7	21.6
CHRONIC LIVER DISEASE AND CIRRHOSIS											
Total	13.4	13.6	14.5	13.2	14.9	15.1	14.2	14.2	14.7	17.4	21.6
Male	18.0	18.7	18.2	16.5	19.2	19.8	18.0	17.9	18.8	21.6	26.5
Female	9.2	9.0	11.1	10.1	11.0	10.8	10.7	10.9	10.8	13.4	17.0
NEPHRITIS, NEPHROTIC SYNDROME, AND NEPHROSIS											
Total	6.0	6.2	5.3	4.6	6.3	5.8	6.2	7.7	8.3	8.4	9.1
Male	7.2	8.9	6.1	5.2	7.7	6.9	7.7	9.0	10.3	9.8	10.6
Female	5.1	6.7	4.8	4.2	5.2	4.9	4.9	6.7	6.5	7.2	7.9
INTENTIONAL SELF-HARM (SUICIDE)											
Total	17.2	16.2	17.0	16.5	17.8	17.7	18.0	19.5	18.9	18.2	19.4
Male	27.4	25.9	26.6	25.6	27.5	28.0	28.1	31.5	29.7	28.8	31.2
Female	7.5	7.0	7.7	7.7	8.4	7.9	8.4	7.8	8.3	8.0	7.9
ASSAULT (HOMICIDE)											
Total	6.1	5.9	5.9	4.6	5.6	6.3	6.4	6.1	5.9	7.7	8.1
Male	9.6	8.6	9.2	7.1	8.6	9.9	10.0	9.8	9.1	12.1	13.2
Female	2.6	3.1	2.5	2.1	2.5	2.5	2.8	2.4	2.6	3.2	2.9
SEPTICEMIA											
Total	4.7	4.5	4.8	4.4	5.4	6.2	5.5	4.4	3.8	4.7	5.4
Male	5.4	6.1	5.6	5.0	6.4	7.1	5.9	5.0	4.4	5.1	6.1
Female	4.0	4.8	4.3	4.0	4.6	5.5	5.1	3.9	3.3	4.4	4.8

Notes: ^a The number of deaths per 100,000 population adjusted to the 2000 U.S. standard. The cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10). Beginning in 2000, the causes of death are classified by ICD-10.

TABLE 2B-3
**AGE-ADJUSTED^a MORTALITY RATES FOR SELECTED CAUSES OF DEATH BY RACE/ETHNICITY
AND GENDER, ARIZONA, 2000-2021**

	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
Total, all causes																		
2000	785.6	941.1	654.6	776.6	930.6	647.3	769.9	926.0	642.4	1057.5	1263.1	890.3	1011.4	1240.4	818.7	504.1	544.0	451.5
2001	791.2	952.4	656.7	778.1	936.3	647.1	787.6	958.7	644.5	1050.6	1211.7	923.5	1010.5	1213.3	836.9	560.7	592.9	517.2
2002	796.4	964.8	658.0	786.7	948.7	654.4	811.1	1007.5	651.5	951.5	1170.1	759.6	975.1	1201.3	792.3	560.4	661.8	452.6
2003	784.0	942.8	651.5	764.9	921.4	636.0	839.5	1007.3	698.7	1048.6	1201.7	901.9	900.7	1057.7	761.4	497.2	522.0	478.7
2004	757.3	909.0	632.0	734.6	885.2	612.8	834.0	1006.6	691.5	1021.7	1149.2	895.8	879.2	1040.6	741.7	557.5	446.5	715.3
2005	772.5	925.7	644.9	744.6	894.4	622.3	849.2	1062.1	679.8	1053.1	986.6	1125.9	1006.6	1215.2	835.6	629.5	670.8	593.1
2006	727.3	861.6	611.8	728.5	854.4	621.1	685.6	837.3	556.0	885.1	1109.5	693.6	744.5	933.9	593.0	393.4	478.0	340.5
2007	663.2	773.8	561.7	665.1	777.7	563.2	603.7	705.7	509.3	719.2	739.1	691.2	752.5	928.8	605.2	356.3	1008.6	342.1
2008	659.6	777.6	554.3	660.1	780.7	553.9	606.9	704.0	515.8	710.7	746.4	670.5	766.3	937.9	620.0	427.0	529.7	359.0
2009	653.2	763.9	555.1	647.3	761.9	546.8	614.9	712.3	528.4	736.8	728.4	736.1	823.5	972.5	695.0	472.8	561.7	408.7
2010	679.9	802.0	572.6	674.4	791.8	569.7	612.0	716.0	525.0	835.0	1009.6	698.5	891.8	1080.0	731.1	424.1	544.7	345.7
2011	699.6	817.1	595.3	741.5	810.1	595.9	656.4	781.9	549.7	833.6	981.9	718.5	765.5	871.4	669.5	436.7	521.8	377.8
2012	687.2	811.0	579.2	693.1	817.9	583.0	616.2	743.0	512.8	886.5	985.3	793.1	843.8	1001.0	708.3	440.1	463.6	418.3
2013	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
2014	676.0	791.2	572.8	685.7	802.3	579.5	636.9	752.5	538.1	739.9	850.5	646.5	818.5	971.5	684.9	371.8	416.1	337.6
2015	691.3	811.5	583.3	704.1	821.6	597.0	601.5	725.0	497.2	832.8	980.1	704.1	965.3	1171.5	790.6	413.8	498.8	360.5
2016	696.6	824.8	581.1	704.8	826.6	593.6	607.5	739.7	496.9	874.2	1029.9	724.6	1023.9	1314.1	783.5	433.5	485.6	392.8
2017	679.3	800.0	568.7	681.4	796.3	574.9	592.0	705.7	493.5	800.0	912.2	680.8	1001.9	1244.9	796.7	419.1	478.8	377.9
2018	688.6	813.4	573.5	690.2	808.2	579.8	607.1	736.8	493.9	843.2	945.3	746.7	1036.1	1293.0	816.9	429.7	487.7	388.2
2019	676.6	799.6	562.9	674.5	792.5	563.3	602.8	720.7	500.0	841.5	970.2	727.5	1051.0	1311.8	836.8	421.6	519.6	351.0
2020	842.2	1002.1	694.1	794.6	929.2	667.9	871.7	1085.5	689.9	1057.7	1275.0	854.0	1757.8	2199.1	1397.5	507.4	597.5	437.9
2021	882.6	1057.1	721.2	835.4	991.0	689.6	892.8	1097.9	714.1	1113.6	1295.6	942.7	1704.7	2104.2	1365.1	597.0	712.6	511.9
Cardiovascular diseases																		
2000	276.1	333.1	230.0	276.0	335.8	227.7	273.6	320.8	236.1	411.5	460.3	374.6	257.5	308.3	218.7	190.6	197.0	183.2
2001	267.3	321.6	223.0	265.8	322.0	220.1	281.4	325.8	242.8	388.1	422.3	354.6	234.1	275.6	202.5	184.3	190.8	179.9
2002	265.5	321.1	221.0	266.1	323.2	220.0	276.3	321.8	240.0	329.8	402.1	269.0	216.2	257.6	184.4	218.4	280.4	173.5
2003	258.4	310.3	215.8	257.2	309.3	214.2	278.2	339.9	230.3	390.1	426.5	348.3	188.6	239.3	150.6	145.3	137.2	150.7
2004	248.5	298.4	207.8	243.1	295.7	200.6	284.1	331.4	247.0	372.5	365.2	363.2	214.6	254.7	181.0	200.3	158.8	259.2
2005	245.7	298.2	203.8	241.3	295.8	198.2	266.1	331.8	217.5	343.3	304.3	385.9	235.6	279.7	201.6	243.0	244.9	241.3
2006	216.4	258.3	181.0	218.2	258.9	183.3	203.2	243.8	170.2	310.3	443.9	208.0	167.0	213.0	131.3	136.2	159.0	122.9
2007	194.4	227.5	164.3	196.9	234.0	163.5	179.8	201.8	159.1	225.9	210.0	239.7	155.0	181.8	132.4	108.9	265.9	108.3
2008	194.1	235.8	158.1	196.3	240.6	158.3	184.8	218.8	153.8	219.6	235.0	205.2	150.4	172.8	133.7	121.4	132.3	114.1
2009	188.8	228.1	154.9	188.3	229.4	152.9	179.8	211.3	151.9	245.7	228.8	252.2	164.2	209.1	130.0	150.8	182.3	127.9
2010	188.6	225.1	156.7	188.8	224.9	156.6	172.4	201.5	148.9	258.5	305.4	215.1	183.2	216.9	154.8	130.0	175.8	98.9
2011	201.0	239.2	168.0	212.6	239.9	167.1	193.4	223.9	168.0	266.1	329.3	219.6	149.2	160.8	136.3	122.4	148.6	103.7
2012	193.3	233.6	159.1	195.1	238.4	157.9	176.2	204.3	153.1	284.0	290.7	269.6	168.3	204.1	139.8	134.7	159.3	116.7
2013	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
2014	171.6	206.9	140.7	174.9	210.4	143.0	156.2	191.6	127.3	212.3	256.3	176.8	147.7	196.6	111.3	100.8	112.7	90.4
2015	189.0	226.7	156.1	192.4	231.6	157.8	165.1	191.3	141.7	266.8	306.2	232.1	167.0	205.0	136.2	119.1	153.6	97.6
2016	190.8	230.7	155.9	194.4	235.2	158.0	168.3	202.3	140.4	275.8	314.3	233.8	189.6	238.8	152.7	120.9	135.9	111.0
2017	189.9	228.6	155.5	191.4	228.9	157.3	166.2	204.8	134.8	258.3	297.4	220.1	204.2	268.3	157.4	125.2	150.3	110.3
2018	188.4	225.2	155.6	189.8	227.1	155.9	167.5	203.0	137.4	241.1	254.7	227.4	186.0	216.7	160.8	128.2	148.9	113.7
2019	184.9	221.2	152.4	185.9	221.9	152.9	160.4	196.4	131.0	254.7	270.6	237.7	192.7	238.6	156.7	128.0	159.5	104.4
2020	205.3	246.9	167.8	204.5	243.4	168.6	182.7	230.3	144.3	293.7	352.6	238.6	237.2	304.4	187.6	134.7	160.9	114.1
2021	203.4	244.8	166.2	203.4	242.3	167.8	182.6	219.9	150.7	289.1	363.3	221.6	210.8	280.6	156.5	146.5	165.6	132.4

TABLE 2B-3 (continued)
**AGE-ADJUSTED^a MORTALITY RATES FOR SELECTED CAUSES OF DEATH BY RACE/ETHNICITY
AND GENDER, ARIZONA, 2000-2021**

	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
-----Diseases of heart																		
2000	206.1	259.3	163.6	207.2	263.2	162.5	204.7	247.2	171.4	289.5	312.8	267.0	183.8	229.5	148.5	132.3	146.1	118.8
2001	201.7	251.3	161.5	202.1	252.9	160.9	206.1	255.8	165.4	273.6	300.5	248.5	177.7	218.4	146.8	116.1	116.8	116.0
2002	201.0	253.6	158.9	203.0	257.8	159.0	201.2	239.2	170.5	237.0	311.6	178.6	164.0	201.2	134.3	145.6	177.8	122.0
2003	197.1	246.6	157.1	197.9	248.4	157.2	198.5	252.7	155.9	299.4	335.2	259.2	141.9	181.6	111.0	97.6	88.8	103.5
2004	186.7	234.2	148.5	184.9	235.0	144.8	197.6	239.1	165.0	258.5	241.3	258.5	166.9	215.3	128.2	135.3	112.8	167.4
2005	186.9	237.4	147.3	185.2	237.7	144.5	189.6	242.2	149.9	250.3	235.7	266.2	179.1	231.7	139.9	159.8	177.7	143.9
2006	166.1	207.3	131.8	168.8	210.6	133.9	149.8	181.1	124.0	231.9	328.6	153.5	129.4	169.5	98.1	94.7	118.5	80.2
2007	149.5	184.0	119.4	153.2	191.3	120.0	131.5	158.9	107.7	171.3	160.4	182.5	115.2	140.5	94.7	58.6	152.9	56.4
2008	149.3	189.3	115.1	153.1	195.7	116.8	132.0	165.2	102.4	161.7	175.2	146.9	114.6	129.0	103.8	71.8	92.0	57.8
2009	145.9	183.1	114.1	147.5	186.5	114.2	130.5	159.6	105.4	171.3	176.1	160.4	125.8	156.1	100.5	96.7	118.1	80.9
2010	143.3	179.8	112.2	145.4	181.9	113.7	121.3	149.0	99.5	177.7	233.6	133.9	135.9	169.5	108.1	86.8	128.1	60.0
2011	152.7	192.8	119.0	164.3	196.2	120.4	137.4	167.1	113.2	174.0	252.9	119.3	111.1	131.1	92.7	77.0	105.3	57.3
2012	145.8	184.4	113.7	150.0	190.9	115.3	123.4	149.8	101.8	190.5	216.9	168.5	122.7	160.6	93.9	87.9	116.9	68.3
2013	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
2014	129.9	164.1	100.5	134.4	168.9	104.1	114.0	147.8	87.0	140.9	175.3	113.3	107.5	159.3	70.3	60.3	73.8	49.9
2015	141.3	177.1	110.5	146.0	183.7	112.9	117.6	140.7	97.5	184.4	216.8	155.9	119.9	158.9	89.1	75.0	99.0	59.6
2016	142.5	180.5	109.8	147.7	186.9	113.5	116.3	147.1	91.5	188.3	224.0	151.5	139.9	191.2	102.3	76.6	86.8	69.9
2017	141.9	179.4	109.3	146.1	183.4	112.8	112.5	144.9	86.6	169.6	210.0	134.3	150.9	217.2	103.9	87.2	105.3	76.4
2018	140.5	176.3	109.1	144.3	181.1	111.4	116.0	147.4	90.1	166.4	185.8	149.5	129.9	156.0	108.6	86.0	112.9	68.5
2019	137.3	172.5	106.3	140.4	175.7	108.5	107.9	141.6	81.1	188.3	201.7	175.5	132.8	176.0	100.6	86.7	118.0	63.8
2020	152.9	192.2	118.1	154.9	192.5	120.8	125.5	163.5	94.8	212.3	263.8	164.4	164.3	234.2	113.2	91.0	112.0	74.6
2021	151.2	191.3	115.7	154.7	193.0	120.1	123.5	159.8	93.8	193.3	258.1	136.0	145.9	208.5	97.8	97.6	119.7	81.9
-----Cerebrovascular diseases																		
2000	51.7	50.8	51.8	50.8	49.3	51.4	51.2	54.4	48.3	82.4	101.5	71.6	55.3	60.2	51.9	46.1	45.0	47.8
2001	47.7	48.3	46.8	46.2	47.1	45.0	55.4	50.8	57.7	79.6	80.0	76.2	44.3	46.6	42.9	51.1	49.2	52.1
2002	47.0	47.3	46.7	45.9	45.3	46.2	53.9	62.6	47.8	69.6	57.9	72.9	39.4	46.5	34.7	57.6	72.6	46.9
2003	43.9	42.9	43.8	41.7	40.1	42.1	61.9	65.7	59.2	69.0	60.6	73.5	36.4	45.8	29.9	35.9	42.5	31.1
2004	43.6	42.7	43.6	41.4	40.6	41.3	61.3	62.4	60.1	71.5	69.0	69.1	27.5	20.1	31.8	45.1	31.6	64.4
2005	40.6	40.0	40.5	38.8	38.1	38.8	51.0	59.8	44.3	66.0	40.3	94.1	32.3	29.9	33.7	64.6	49.0	78.3
2006	34.8	33.4	35.2	34.1	31.3	35.5	37.3	43.9	32.1	58.2	86.0	41.1	27.0	32.8	23.0	18.4	6.8	25.9
2007	30.6	27.7	32.2	29.7	26.9	31.2	34.9	30.0	37.8	34.1	30.9	36.5	22.0	23.9	20.3	37.7	85.6	40.0
2008	30.3	29.6	30.5	29.2	28.0	29.9	33.6	34.6	32.0	40.0	42.9	38.9	23.5	26.2	21.8	36.2	32.8	38.9
2009	28.9	28.2	29.1	27.5	26.6	27.9	33.8	34.3	32.7	42.8	31.4	54.5	24.7	33.5	20.0	39.2	43.6	35.9
2010	30.7	28.9	31.3	29.4	27.2	30.5	35.1	34.8	34.6	53.5	41.4	58.1	29.8	30.0	29.5	26.0	30.7	21.7
2011	30.6	28.0	32.3	30.4	26.2	30.7	34.9	33.3	35.6	56.5	43.3	64.3	29.7	24.8	33.1	29.1	34.2	26.2
2012	29.9	30.0	29.4	28.1	28.0	27.6	35.5	37.8	33.6	56.0	50.9	57.7	27.1	30.3	24.5	30.9	26.4	33.3
2013	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
2014	26.2	24.8	26.8	25.3	25.2	26.1	27.4	26.6	27.5	40.8	41.7	39.2	24.5	24.2	24.0	28.7	33.1	25.8
2015	31.1	31.3	30.7	30.1	29.6	30.1	32.4	34.0	30.6	51.8	59.6	45.5	31.6	31.7	31.1	30.4	36.7	27.0
2016	30.7	29.9	30.9	30.0	28.7	30.6	31.5	31.4	31.2	48.1	49.7	45.8	30.1	27.8	30.9	31.1	41.5	24.8
2017	30.7	30.7	30.2	29.2	28.5	29.3	34.5	38.1	31.3	49.2	45.6	50.3	31.7	30.7	31.1	23.6	26.2	22.0
2018	32.1	31.6	32.0	30.6	29.9	30.8	34.6	36.3	32.6	44.1	42.7	43.9	39.2	37.4	40.5	27.9	25.2	29.2
2019	31.0	30.2	31.4	30.0	28.8	30.7	33.9	33.7	33.5	35.7	38.6	32.7	35.7	34.9	35.8	23.2	25.0	21.7
2020	34.6	34.8	33.8	32.9	32.3	32.9	38.3	42.8	34.2	48.6	51.6	45.9	43.6	44.7	42.9	29.9	32.0	28.0
2021	34.4	34.4	34.0	32.0	31.4	32.4	38.6	40.6	36.1	61.9	63.0	60.5	41.3	44.6	38.3	32.3	30.0	33.3

TABLE 2B-3 (continued)
**AGE-ADJUSTED^a MORTALITY RATES FOR SELECTED CAUSES OF DEATH BY RACE/ETHNICITY
AND GENDER, ARIZONA, 2000-2021**

	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
Malignant neoplasms																		
2000	170.4	204.0	145.8	174.8	208.1	150.0	156.9	201.5	126.0	216.1	274.7	178.0	123.0	142.7	107.2	103.4	103.6	103.1
2001	169.2	199.8	147.5	173.1	203.7	151.4	155.6	196.8	126.9	213.0	247.6	195.0	121.7	128.8	115.4	147.0	175.5	127.1
2002	168.6	209.1	139.1	172.4	213.2	142.5	156.3	211.2	118.0	222.7	290.3	176.0	117.6	125.8	112.5	116.5	126.5	108.5
2003	169.4	208.3	141.3	171.2	212.4	141.2	168.5	209.2	140.1	218.5	245.6	200.8	120.7	112.6	126.7	132.9	132.8	132.6
2004	164.7	201.2	138.6	165.4	202.9	138.1	161.6	218.1	123.6	227.7	274.2	200.5	139.3	150.9	131.8	111.0	72.9	165.2
2005	161.8	197.1	136.1	162.4	197.6	136.8	165.9	217.1	130.8	217.9	216.7	219.3	122.2	159.7	97.5	112.7	122.5	104.0
2006	154.7	187.0	131.0	162.8	195.5	138.4	124.7	160.9	98.7	163.5	216.0	127.7	83.1	93.9	79.5	82.0	113.2	64.1
2007	148.0	176.7	125.6	154.6	184.4	131.1	118.6	144.3	99.0	153.4	178.3	135.2	113.9	135.0	100.1	84.2	248.1	81.6
2008	145.5	173.8	123.0	150.4	179.7	127.0	123.8	151.9	101.5	149.2	150.1	146.3	106.7	126.4	93.2	104.4	149.4	74.0
2009	147.2	174.9	125.8	151.1	179.8	128.7	128.4	157.1	105.9	153.1	160.3	154.2	113.3	127.5	103.5	108.1	122.0	98.7
2010	150.5	180.6	127.1	155.6	185.8	131.6	126.2	148.8	110.6	182.6	231.0	144.8	106.4	137.8	86.6	96.2	130.7	74.2
2011	151.3	179.3	129.5	170.3	182.2	132.4	136.3	176.0	107.3	167.1	170.6	169.0	100.8	116.3	90.9	116.6	126.2	110.2
2012	149.8	180.3	125.9	155.6	185.9	131.5	127.2	161.8	102.4	180.1	220.1	147.1	100.8	114.5	90.4	100.5	113.1	94.6
2013	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
2014	136.3	160.8	116.8	141.8	166.5	121.8	124.9	153.6	103.4	145.0	154.7	140.9	97.1	124.6	77.3	83.2	82.1	83.5
2015	144.0	169.0	123.8	149.8	173.9	129.9	120.4	152.9	96.2	154.7	181.5	135.0	124.4	142.1	112.4	104.8	133.4	88.2
2016	140.7	166.3	120.0	146.7	171.3	126.5	115.9	147.3	92.3	171.6	214.4	138.9	101.2	110.7	94.6	102.6	106.6	98.4
2017	136.6	161.0	116.6	141.4	167.7	119.1	110.9	130.9	95.9	158.5	164.8	151.2	117.1	114.6	118.2	99.4	121.4	85.6
2018	135.9	161.8	114.7	140.2	165.7	118.9	118.7	144.3	99.6	156.7	193.4	131.2	115.3	149.6	92.6	102.7	112.0	96.7
2019	134.7	156.7	116.4	136.9	158.3	118.6	118.3	137.3	103.7	173.5	210.0	147.1	132.3	162.6	112.5	98.4	113.1	89.8
2020	134.7	156.1	117.2	138.9	159.3	121.8	114.8	132.7	100.9	169.4	206.2	141.6	116.5	138.7	102.8	87.9	97.0	81.5
2021	131.8	150.3	116.7	136.0	155.4	119.6	110.9	128.0	98.5	154.4	151.7	158.3	128.9	139.9	123.2	94.4	100.1	91.0
-----Lung cancer																		
2000	46.1	59.2	35.8	49.1	61.9	39.1	31.6	49.6	18.1	65.8	79.8	52.1	8.9	13.1	5.5	29.6	29.0	29.8
2001	44.5	54.8	36.4	47.6	57.0	40.2	29.2	49.4	14.4	55.7	78.9	39.5	9.8	11.9	8.1	41.7	62.8	27.1
2002	46.6	58.6	37.1	50.1	62.4	40.4	27.7	40.0	18.3	61.2	74.7	49.5	13.1	13.4	13.0	24.7	24.5	24.6
2003	47.4	61.0	37.1	50.6	64.0	40.3	33.5	49.6	21.5	59.4	80.8	45.6	13.2	17.2	10.3	21.9	26.3	18.5
2004	45.4	57.3	36.3	48.2	59.6	39.3	29.4	49.4	14.7	61.4	74.4	53.0	17.3	21.5	14.2	21.5	15.7	30.3
2005	43.0	54.1	34.4	45.9	56.8	37.4	29.0	45.0	17.3	53.0	58.6	46.8	6.5	9.0	4.7	19.7	18.8	20.4
2006	42.7	53.5	34.2	47.4	58.6	38.5	21.4	31.6	13.8	45.9	65.9	33.9	4.7	4.3	4.9	18.4	32.5	9.2
2007	38.2	47.2	30.9	42.4	51.7	34.8	20.5	30.4	12.4	39.6	46.3	35.7	9.9	14.2	6.8	21.5	48.0	23.1
2008	38.5	47.7	31.2	42.3	51.7	34.8	20.0	27.7	13.7	37.1	45.4	27.8	11.2	10.1	11.7	32.7	49.1	21.8
2009	39.0	47.4	32.2	42.7	51.5	35.5	23.7	33.9	15.8	38.7	38.3	39.8	10.0	7.1	12.6	26.6	37.0	19.1
2010	38.1	46.1	31.5	41.7	49.5	35.3	20.6	28.5	14.6	36.6	41.7	31.4	7.5	12.5	3.6	22.1	36.9	12.8
2011	37.8	46.1	31.1	46.7	49.2	34.9	22.9	35.9	13.3	36.6	40.4	33.3	7.9	13.8	3.9	20.8	33.9	13.4
2012	37.7	45.2	31.6	41.5	49.0	35.3	22.0	30.6	15.6	43.0	50.7	36.7	9.3	7.9	9.8	20.9	33.6	13.5
2013	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
2014	32.2	38.1	27.3	35.3	41.0	30.5	21.6	30.4	15.2	29.5	37.5	22.7	10.2	12.0	8.7	26.7	27.8	25.4
2015	35.1	40.5	30.7	39.1	44.2	34.8	18.8	24.9	14.5	38.4	58.6	22.5	8.1	10.3	6.9	30.6	38.0	25.8
2016	31.4	36.6	26.9	34.8	40.0	30.5	17.8	22.0	14.3	37.8	48.7	31.5	7.4	10.7	4.7	19.5	20.1	18.4
2017	30.8	36.0	26.5	34.3	39.6	29.7	15.2	19.6	11.7	27.9	35.6	20.6	8.5	3.9	11.6	29.2	30.5	28.1
2018	28.9	33.8	24.6	31.5	36.4	27.3	17.6	20.7	15.0	35.6	47.7	26.2	9.0	17.9	2.8	22.8	26.3	20.4
2019	26.2	29.7	23.3	28.6	31.7	25.9	16.3	20.9	12.8	33.1	41.4	25.9	8.1	9.3	7.3	20.9	19.4	21.7
2020	26.8	29.9	24.2	29.4	32.0	27.3	15.3	18.8	12.6	36.0	47.9	26.8	9.6	12.5	7.6	14.8	16.6	13.6
2021	25.8	28.9	23.2	28.8	32.1	26.0	14.4	17.0	12.6	23.1	23.8	23.4	7.9	8.6	7.8	19.9	20.7	19.5

TABLE 2B-3 (continued)
**AGE-ADJUSTED^a MORTALITY RATES FOR SELECTED CAUSES OF DEATH BY RACE/ETHNICITY
AND GENDER, ARIZONA, 2000-2021**

	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
-----Colorectal cancer																		
2000	17.0	20.5	14.1	17.4	20.7	14.6	16.4	20.5	13.5	16.3	26.3	9.7	8.2	15.1	2.7	6.6	12.9	2.2
2001	16.7	19.0	14.8	16.9	19.0	15.2	16.6	22.1	12.9	27.4	26.2	25.2	7.2	7.8	6.3	10.6	15.3	7.2
2002	16.5	20.6	13.4	16.9	21.0	13.6	16.2	23.4	11.7	26.4	36.4	19.8	9.1	7.9	9.3	9.7	13.9	7.0
2003	17.9	21.8	14.7	17.9	22.0	14.4	21.2	25.5	17.9	26.3	22.3	28.2	6.3	10.2	3.7	3.0	4.8	1.8
2004	15.3	18.9	12.6	15.5	19.2	12.8	13.1	15.8	11.5	27.3	41.2	16.9	9.3	14.1	5.6	11.0	7.7	15.9
2005	15.4	18.9	12.8	15.2	18.8	12.5	17.6	21.5	14.8	27.0	23.7	30.6	7.5	10.0	6.0	12.5	18.7	7.1
2006	14.6	18.1	12.0	15.1	18.9	12.0	14.2	15.8	13.1	14.9	21.1	10.1	4.7	3.5	5.5	6.5	11.4	3.9
2007	14.4	17.7	11.5	15.0	18.1	12.3	12.0	16.5	8.6	15.7	19.3	11.8	8.0	10.6	5.3	9.4	28.7	9.8
2008	13.1	15.1	11.3	13.2	15.0	11.4	13.2	15.5	11.2	16.4	20.3	13.0	11.1	11.9	10.9	8.6	14.9	4.2
2009	12.9	14.9	11.2	12.9	15.1	11.0	13.8	16.7	11.5	14.1	14.0	14.9	8.5	7.4	9.1	13.8	16.4	12.5
2010	13.8	16.6	11.4	13.9	16.0	12.1	13.5	19.0	9.2	21.9	28.9	16.0	12.4	19.9	8.0	10.3	22.2	2.6
2011	13.4	15.4	11.6	14.4	15.3	11.4	13.6	16.5	11.2	20.2	12.6	25.6	9.9	12.0	7.4	14.3	16.2	12.7
2012	13.1	15.8	10.7	13.4	16.0	11.2	12.2	17.0	8.3	20.5	23.9	17.4	7.1	7.8	6.3	9.8	8.0	11.4
2013	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
2014	12.4	14.6	10.5	13.2	15.0	11.5	10.8	15.1	7.4	15.8	18.4	14.3	7.0	9.5	4.7	7.2	8.3	6.3
2015	12.9	15.6	10.5	12.9	15.1	10.9	11.8	16.6	8.0	19.5	25.1	15.0	13.3	18.8	9.6	9.4	17.1	4.9
2016	12.9	15.4	10.6	13.2	15.6	11.2	11.1	14.7	7.8	17.4	17.9	16.1	8.0	7.7	8.3	13.1	10.6	13.8
2017	13.0	16.0	10.2	13.2	16.4	10.3	12.7	16.6	9.5	15.1	13.8	16.1	11.1	14.1	8.4	6.0	11.3	2.4
2018	12.9	15.8	10.3	12.7	14.9	10.7	13.8	20.0	9.0	17.2	26.2	10.8	10.8	16.3	6.9	12.5	18.3	9.0
2019	12.3	14.6	10.1	12.4	15.0	10.0	11.2	12.5	9.8	14.2	17.3	11.3	12.9	17.2	10.4	11.0	10.2	11.6
2020	12.7	14.2	11.4	12.9	14.0	11.9	11.3	14.6	8.7	18.2	18.3	17.6	12.8	15.3	10.5	9.2	9.1	9.4
2021	12.4	14.6	10.4	12.6	14.6	10.8	11.9	15.1	9.2	15.9	15.0	16.1	8.2	10.7	5.8	9.6	10.5	9.0
-----Female breast cancer																		
2000	NA	NA	25.4	NA	NA	26.2	NA	NA	20.7	NA	NA	29.5	NA	NA	12.1	NA	NA	12.8
2001	NA	NA	23.6	NA	NA	24.7	NA	NA	17.5	NA	NA	55.8	NA	NA	11.7	NA	NA	12.7
2002	NA	NA	22.2	NA	NA	22.5	NA	NA	18.7	NA	NA	42.3	NA	NA	9.6	NA	NA	17.7
2003	NA	NA	22.1	NA	NA	22.3	NA	NA	18.9	NA	NA	41.2	NA	NA	16.4	NA	NA	19.6
2004	NA	NA	21.4	NA	NA	21.4	NA	NA	18.0	NA	NA	32.2	NA	NA	18.4	NA	NA	35.2
2005	NA	NA	20.7	NA	NA	20.5	NA	NA	19.8	NA	NA	35.7	NA	NA	14.9	NA	NA	17.3
2006	NA	NA	21.6	NA	NA	23.2	NA	NA	14.0	NA	NA	25.7	NA	NA	6.9	NA	NA	7.5
2007	NA	NA	20.1	NA	NA	20.5	NA	NA	16.9	NA	NA	23.9	NA	NA	16.2	NA	NA	11.3
2008	NA	NA	19.8	NA	NA	20.6	NA	NA	15.1	NA	NA	38.0	NA	NA	11.6	NA	NA	7.1
2009	NA	NA	19.2	NA	NA	19.8	NA	NA	16.4	NA	NA	30.7	NA	NA	11.6	NA	NA	5.9
2010	NA	NA	19.2	NA	NA	19.9	NA	NA	18.5	NA	NA	25.8	NA	NA	8.2	NA	NA	12.9
2011	NA	NA	19.7	NA	NA	20.8	NA	NA	12.2	NA	NA	24.1	NA	NA	7.5	NA	NA	15.6
2012	NA	NA	19.2	NA	NA	20.0	NA	NA	14.8	NA	NA	30.3	NA	NA	8.6	NA	NA	15.3
2013	NA	NA	20.7	NA	NA	21.3	NA	NA	19.7	NA	NA	23.3	NA	NA	13.1	NA	NA	11.4
2014	NA	NA	17.9	NA	NA	18.5	NA	NA	16.5	NA	NA	29.4	NA	NA	9.2	NA	NA	6.3
2015	NA	NA	19.2	NA	NA	20.7	NA	NA	12.9	NA	NA	23.1	NA	NA	12.8	NA	NA	13.3
2016	NA	NA	19.4	NA	NA	20.8	NA	NA	13.9	NA	NA	23.0	NA	NA	11.8	NA	NA	13.4
2017	NA	NA	18.2	NA	NA	18.7	NA	NA	13.3	NA	NA	36.7	NA	NA	13.0	NA	NA	14.5
2018	NA	NA	17.6	NA	NA	18.7	NA	NA	13.8	NA	NA	24.9	NA	NA	9.1	NA	NA	17.6
2019	N/A	N/A	18.8	N/A	N/A	19.1	N/A	N/A	15.2	N/A	N/A	39.3	N/A	N/A	17.6	N/A	N/A	13.8
2020	N/A	N/A	18.5	N/A	N/A	19.5	N/A	N/A	15.9	N/A	N/A	28.2	N/A	N/A	6.5	N/A	N/A	13.5
2021	N/A	N/A	19.5	N/A	N/A	19.9	N/A	N/A	15.5	N/A	N/A	30.5	N/A	N/A	18.3	N/A	N/A	17.7

TABLE 2B-3 (continued)
**AGE-ADJUSTED^a MORTALITY RATES FOR SELECTED CAUSES OF DEATH BY RACE/ETHNICITY
AND GENDER, ARIZONA, 2000-2021**

	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
-----Prostate cancer																		
2000	NA	28.4	NA	NA	28.0	NA	NA	30.0	NA	NA	74.8	NA	NA	27.1	NA	NA	8.9	NA
2001	NA	24.3	NA	NA	24.1	NA	NA	26.3	NA	NA	45.0	NA	NA	14.0	NA	NA	24.2	NA
2002	NA	24.8	NA	NA	24.1	NA	NA	35.3	NA	NA	48.6	NA	NA	12.5	NA	NA	8.4	NA
2003	NA	25.1	NA	NA	25.2	NA	NA	22.4	NA	NA	41.2	NA	NA	21.0	NA	NA	7.6	NA
2004	NA	24.0	NA	NA	22.6	NA	NA	35.0	NA	NA	54.6	NA	NA	31.2	NA	NA	6.1	NA
2005	NA	23.8	NA	NA	23.5	NA	NA	30.6	NA	NA	20.4	NA	NA	23.5	NA	NA	5.1	NA
2006	NA	20.1	NA	NA	19.2	NA	NA	25.9	NA	NA	34.9	NA	NA	16.9	NA	NA	24.0	NA
2007	NA	18.9	NA	NA	19.5	NA	NA	15.8	NA	NA	23.6	NA	NA	16.6	NA	NA	19.4	NA
2008	NA	19.1	NA	NA	18.9	NA	NA	20.3	NA	NA	20.5	NA	NA	14.7	NA	NA	25.5	NA
2009	NA	18.4	NA	NA	18.2	NA	NA	20.0	NA	NA	28.9	NA	NA	16.4	NA	NA	2.1	NA
2010	NA	19.1	NA	NA	18.4	NA	NA	23.9	NA	NA	35.2	NA	NA	21.6	NA	NA	12.6	NA
2011	NA	19.8	NA	NA	19.5	NA	NA	20.6	NA	NA	24.1	NA	NA	17.1	NA	NA	5.0	NA
2012	NA	18.9	NA	NA	18.8	NA	NA	22.0	NA	NA	26.7	NA	NA	12.4	NA	NA	9.8	NA
2013	NA	18.2	NA	NA	18.0	NA	NA	17.0	NA	NA	26.7	NA	NA	19.9	NA	NA	18.5	NA
2014	NA	17.0	NA	NA	17.0	NA	NA	15.5	NA	NA	24.0	NA	NA	23.0	NA	NA	7.4	NA
2015	NA	17.6	NA	NA	17.3	NA	NA	17.6	NA	NA	29.6	NA	NA	26.0	NA	NA	10.7	NA
2016	NA	18.8	NA	NA	18.6	NA	NA	19.4	NA	NA	39.5	NA	NA	15.9	NA	NA	6.4	NA
2017	NA	16.8	NA	NA	16.5	NA	NA	16.3	NA	NA	26.3	NA	NA	19.9	NA	NA	9.7	NA
2018	NA	17.4	NA	NA	17.1	NA	NA	15.8	NA	NA	30.5	NA	NA	23.7	NA	NA	12.1	NA
2019	N/A	17.4	N/A	N/A	17.0	N/A	N/A	16.9	N/A	N/A	41.9	N/A	N/A	19.0	N/A	N/A	9.9	N/A
2020	N/A	18.5	N/A	N/A	18.2	N/A	N/A	18.3	N/A	N/A	35.4	N/A	N/A	17.5	N/A	N/A	8.1	N/A
2021	N/A	17.2	N/A	N/A	16.6	N/A	N/A	18.2	N/A	N/A	37.0	N/A	N/A	13.0	N/A	N/A	9.3	N/A
Chronic lower respiratory diseases^b																		
2000	47.4	56.2	41.3	51.1	59.8	44.8	24.4	38.2	15.9	30.4	38.4	26.3	21.9	28.9	17.9	12.7	7.8	16.5
2001	46.9	53.9	42.2	51.0	58.1	46.2	17.7	25.4	12.5	37.9	48.9	32.2	26.8	30.0	24.3	21.4	19.2	23.0
2002	47.0	57.1	40.3	50.4	59.4	44.5	25.2	46.6	11.2	38.3	59.0	21.9	22.3	30.1	17.0	24.5	45.8	9.0
2003	45.4	53.8	40.0	48.3	56.5	42.9	28.7	39.9	22.1	30.3	39.7	23.1	19.4	20.8	18.4	15.5	34.4	2.1
2004	41.9	48.1	37.7	45.1	51.3	41.0	22.7	29.5	17.8	24.9	38.8	14.8	10.8	4.7	15.1	21.6	27.1	14.2
2005	46.8	51.3	43.5	49.6	53.6	46.7	31.6	42.7	24.0	43.9	49.4	37.9	12.0	12.9	11.4	17.9	22.6	13.8
2006	44.3	50.2	40.1	49.2	55.5	44.7	18.3	20.9	16.2	27.3	28.8	25.6	8.4	6.2	10.4	9.9	26.2	0.0
2007	39.2	43.5	36.0	43.7	47.9	40.7	18.8	26.4	13.4	18.7	10.1	26.7	13.0	20.1	8.4	7.5	19.9	6.1
2008	42.1	46.5	38.9	46.7	50.8	43.7	20.5	24.3	18.0	26.0	33.9	19.1	15.8	23.9	9.5	13.7	22.4	8.5
2009	40.5	44.7	37.1	45.0	48.7	42.1	16.4	20.2	13.4	26.8	34.1	20.8	19.2	29.5	12.3	18.0	33.4	8.1
2010	42.6	48.1	38.6	47.1	52.2	43.4	18.6	25.4	14.3	27.4	32.2	23.8	21.7	24.1	20.0	12.0	29.5	1.7
2011	45.9	49.7	42.8	55.3	53.3	48.5	19.5	26.5	14.7	34.8	48.5	24.7	14.4	14.7	14.4	17.2	26.4	11.9
2012	44.2	50.5	39.5	49.4	55.5	44.8	20.3	27.1	16.1	35.0	43.4	30.9	18.0	27.4	12.1	14.7	14.3	14.2
2013	44.5	48.1	41.8	49.3	52.5	47.0	20.9	24.6	18.2	46.7	56.4	37.5	15.5	11.7	18.4	19.4	32.0	12.4
2014	41.1	45.8	37.5	45.9	49.7	43.0	21.1	28.7	15.9	34.0	47.4	26.1	12.4	13.7	11.7	17.3	33.8	7.6
2015	45.1	48.9	41.7	50.8	53.7	48.0	21.5	27.9	16.8	34.0	51.8	20.6	14.8	16.5	13.0	18.1	17.5	18.4
2016	45.0	47.6	42.9	50.9	52.7	49.4	20.0	23.2	17.7	43.8	51.5	39.2	19.5	27.2	15.1	11.3	19.4	5.9
2017	43.0	45.3	41.0	48.0	49.7	46.5	19.9	23.7	17.1	28.8	21.3	34.3	22.9	27.4	19.9	20.1	29.6	14.3
2018	42.6	44.7	40.7	48.0	49.2	46.8	18.3	22.7	14.8	38.2	41.4	35.9	20.8	22.2	20.2	17.2	17.2	17.3
2019	39.2	41.9	37.0	43.7	45.1	42.5	20.1	25.9	16.1	34.2	49.7	23.4	18.1	21.5	15.6	11.6	13.2	10.6
2020	38.8	41.2	36.8	43.1	44.4	41.9	21.9	27.0	18.2	27.4	30.4	25.2	20.9	27.5	16.5	14.3	20.5	11.0
2021	35.3	36.4	34.3	39.8	40.0	39.5	17.2	21.4	14.1	25.7	23.9	27.9	15.2	19.4	12.4	13.7	22.1	8.4

TABLE 2B-3 (continued)
**AGE-ADJUSTED^a MORTALITY RATES FOR SELECTED CAUSES OF DEATH BY RACE/ETHNICITY
AND GENDER, ARIZONA, 2000-2021**

	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
Chronic liver disease and cirrhosis																		
2000	12.8	17.7	8.3	10.4	14.9	6.4	15.8	20.5	11.0	6.6	7.1	5.9	61.7	80.2	45.3	4.1	6.9	2.2
2001	12.3	17.7	7.5	10.6	15.0	6.6	17.4	27.0	8.7	11.7	24.1	2.0	39.1	51.1	28.4	4.0	3.8	4.2
2002	12.1	15.6	8.9	9.9	11.9	8.0	21.6	31.9	12.3	9.8	14.6	5.5	40.5	55.6	27.5	5.3	2.9	7.0
2003	11.5	16.2	7.1	9.7	13.8	5.8	17.6	25.1	10.6	3.5	6.3	1.0	38.8	49.6	29.8	3.3	0.0	5.8
2004	11.1	15.6	6.9	8.4	11.7	5.4	18.6	26.6	10.6	6.7	7.3	6.5	51.0	68.9	36.1	3.8	7.0	2.4
2005	12.7	17.7	8.1	10.7	15.1	6.6	19.4	28.6	11.4	12.8	14.7	10.7	51.2	60.3	42.8	4.9	10.4	0.0
2006	11.4	14.3	8.5	9.6	11.8	7.6	15.5	19.9	11.1	7.2	11.6	4.2	43.6	54.3	32.7	3.1	3.8	2.5
2007	11.3	15.4	7.6	9.6	13.0	6.6	16.3	23.5	9.4	5.9	9.9	2.3	36.8	46.9	28.3	3.2	5.5	4.2
2008	11.7	15.3	8.4	10.0	13.2	7.1	15.4	19.9	11.2	7.5	9.2	5.6	40.7	52.8	30.5	1.8	2.6	1.1
2009	12.2	15.4	9.1	9.5	12.8	6.4	18.7	21.4	15.7	3.1	3.4	2.7	54.0	57.9	49.9	3.1	6.4	1.1
2010	12.3	16.1	8.8	9.7	13.6	6.1	15.5	20.9	10.3	8.0	9.5	7.0	64.6	63.9	64.9	0.5	1.2	0.0
2011	13.4	18.0	9.2	12.0	14.7	8.1	18.9	29.2	9.8	6.6	5.5	7.6	43.6	46.7	40.4	4.2	9.0	0.9
2012	13.6	18.7	9.0	11.4	15.9	7.2	16.9	25.7	9.2	10.9	14.8	8.5	59.2	63.3	55.5	2.6	6.1	0.0
2013	14.5	18.2	11.1	12.6	15.5	10.0	16.7	23.0	10.8	6.8	9.9	3.9	62.0	70.1	55.0	3.9	4.3	3.4
2014	13.2	16.5	10.1	10.9	14.1	7.9	18.0	22.4	13.6	8.3	10.7	5.5	52.7	48.0	55.5	3.8	4.0	3.6
2015	14.9	19.2	11.0	13.1	16.1	10.3	14.0	22.0	7.0	8.4	12.3	4.6	77.6	91.8	66.1	4.0	8.3	0.8
2016	15.1	19.8	10.8	12.5	16.0	9.2	16.8	24.2	10.3	7.7	12.7	2.9	85.9	107.3	67.2	2.0	5.2	0.0
2017	14.2	18.0	10.7	11.9	14.6	9.3	15.8	23.1	9.6	4.6	7.2	2.1	74.0	85.4	63.7	4.8	8.8	2.0
2018	14.2	17.9	10.9	11.3	13.7	9.1	15.1	22.9	8.3	6.8	8.5	5.5	88.8	101.9	77.1	3.4	5.7	1.8
2019	14.7	18.8	10.8	12.4	15.6	9.3	14.5	21.0	8.7	7.8	9.9	6.0	82.7	98.2	68.8	3.9	1.8	5.4
2020	17.4	21.6	13.4	14.9	18.6	11.5	16.7	23.3	10.7	4.3	6.2	2.5	103.2	110.6	95.5	3.1	2.9	3.3
2021	21.6	26.5	17.0	17.5	21.3	14.1	18.6	24.2	13.2	12.9	16.0	9.6	145.7	170.0	123.9	4.3	4.9	3.6
Diabetes																		
2000	19.0	21.0	17.2	14.9	17.4	12.6	41.1	41.9	40.6	46.0	40.9	47.4	74.6	74.1	74.2	19.5	10.9	26.1
2001	19.9	22.9	17.5	15.4	19.2	12.2	42.9	43.5	42.3	55.7	42.2	64.1	72.8	71.2	73.9	14.8	3.0	23.3
2002	22.3	25.6	19.7	18.0	21.8	15.1	45.6	49.1	42.6	41.0	46.4	37.2	80.8	69.2	88.6	21.9	15.7	26.3
2003	20.3	23.6	17.5	16.5	20.6	13.1	39.1	35.9	40.9	53.6	55.0	49.8	55.8	48.2	60.3	15.7	22.2	11.6
2004	20.7	23.4	18.4	16.8	19.7	14.4	43.5	44.2	42.0	44.8	47.7	42.6	59.0	58.4	58.8	30.0	29.1	31.6
2005	20.1	24.7	16.7	15.5	20.2	12.1	46.0	49.9	42.4	55.2	56.2	54.0	69.9	73.5	68.2	17.8	17.7	18.0
2006	18.9	22.5	15.9	15.2	18.4	12.5	40.4	46.1	35.3	43.9	49.7	42.3	43.9	49.3	39.5	10.9	9.7	11.4
2007	17.0	20.5	13.9	13.7	17.4	10.4	30.8	32.6	28.9	30.3	32.0	30.0	51.1	61.1	42.1	5.1	12.8	4.4
2008	17.0	20.7	13.9	13.8	17.9	10.5	29.1	29.7	27.7	30.8	35.4	29.2	50.8	47.9	52.5	16.1	22.9	12.3
2009	15.7	18.2	13.5	12.2	15.5	9.4	28.1	29.2	27.2	31.1	28.6	34.9	54.2	46.6	59.9	16.2	18.5	14.4
2010	20.1	24.9	16.0	15.2	20.1	11.0	37.3	45.0	31.4	50.0	56.8	45.5	79.3	80.6	76.9	11.7	9.3	13.1
2011	24.8	30.3	20.2	21.6	25.1	15.7	41.7	48.4	35.9	57.8	71.9	44.4	61.3	50.7	68.8	23.3	32.4	17.4
2012	23.5	29.2	18.6	18.3	23.9	13.5	40.8	47.4	35.4	49.4	59.0	40.6	80.2	94.1	69.7	27.6	27.8	26.6
2013	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
2014	23.0	28.9	17.8	18.8	24.6	13.6	39.1	46.8	32.6	39.7	41.8	37.1	63.2	74.7	54.5	18.3	30.1	10.9
2015	25.7	31.8	20.4	20.1	25.8	15.1	45.3	53.2	38.7	53.0	67.5	42.6	73.9	85.6	65.3	22.7	29.3	18.4
2016	24.5	31.5	18.4	19.3	25.8	13.5	40.5	51.4	32.1	50.1	55.9	44.9	79.9	100.4	63.5	20.8	14.9	24.0
2017	23.8	30.1	18.3	18.1	23.5	13.3	39.4	48.7	31.7	45.9	49.5	42.3	81.6	101.9	64.8	21.3	22.6	20.3
2018	23.0	29.8	17.1	18.0	24.0	12.6	35.0	44.0	27.4	48.9	54.7	44.5	73.6	92.4	59.1	17.0	25.9	11.4
2019	23.9	30.5	18.1	18.9	25.6	12.9	34.6	42.0	28.8	43.6	44.6	42.0	91.4	106.3	78.5	19.5	23.4	16.6
2020	27.9	36.0	20.7	21.4	28.2	15.2	43.1	56.0	32.6	51.7	61.9	42.1	106.4	137.7	82.1	22.1	24.9	19.8
2021	26.8	32.6	21.6	20.0	24.8	15.8	42.5	51.6	35.1	48.3	51.2	46.2	97.6	116.1	81.5	30.1	38.6	24.5

TABLE 2B-3 (continued)
**AGE-ADJUSTED^a MORTALITY RATES FOR SELECTED CAUSES OF DEATH BY RACE/ETHNICITY
AND GENDER, ARIZONA, 2000-2021**

	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
Accidents (unintentional injuries)																		
2000	41.1	58.0	24.9	36.9	51.5	23.3	41.6	60.8	22.5	49.7	75.8	22.7	113.1	165.2	67.4	24.1	24.4	21.4
2001	46.6	66.5	27.7	42.5	59.5	26.8	45.6	63.9	25.9	52.6	83.2	22.4	112.7	177.5	53.9	29.9	41.3	46.6
2002	45.2	62.8	28.8	41.5	56.8	27.8	45.5	64.6	26.2	44.0	58.5	28.5	111.0	168.4	60.4	15.5	13.8	15.6
2003	44.8	61.6	28.8	40.9	55.2	27.6	44.7	63.3	26.3	52.4	69.8	35.0	108.6	153.5	66.3	25.3	35.2	17.8
2004	46.0	61.1	31.7	43.3	56.8	30.7	48.9	66.1	31.8	45.9	66.9	26.0	103.9	137.5	73.7	21.2	21.7	30.0
2005	51.1	68.7	34.4	46.2	62.4	31.4	54.8	71.5	37.2	64.3	80.3	46.9	117.8	174.1	67.4	34.2	41.2	28.1
2006	51.2	68.5	34.3	48.7	64.5	33.5	52.4	72.9	32.2	54.8	73.0	34.5	97.2	139.8	58.6	19.8	17.0	20.8
2007	46.6	60.6	32.3	44.9	57.7	32.2	40.6	53.5	27.5	48.1	62.8	29.6	95.0	143.9	50.3	20.3	72.6	20.3
2008	44.7	59.0	30.6	45.4	59.8	31.4	34.2	46.9	22.0	43.1	50.6	33.8	92.6	142.6	47.9	23.7	31.1	17.9
2009	43.1	56.6	29.8	43.3	56.6	30.4	35.3	48.2	23.3	36.5	42.1	30.0	92.6	144.4	46.4	24.5	27.6	21.1
2010	43.8	56.6	31.6	45.5	58.0	33.3	33.7	45.3	22.8	36.0	42.3	30.7	99.2	148.9	55.4	24.6	24.9	23.9
2011	45.5	58.3	32.6	46.9	57.3	33.9	38.9	51.9	26.4	41.6	50.3	34.4	100.6	146.7	58.0	19.7	28.4	14.0
2012	42.4	54.0	31.0	43.3	54.0	32.7	33.9	45.4	22.8	38.2	50.3	25.2	94.8	136.9	56.5	21.0	20.0	20.3
2013	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
2014	43.3	56.7	30.1	43.7	57.7	29.9	35.9	47.3	24.9	37.6	44.1	32.2	85.4	128.2	47.4	18.3	15.5	19.3
2015	48.1	62.7	34.1	49.3	62.4	36.7	36.7	48.4	24.9	50.5	59.5	40.6	139.0	203.9	82.7	21.7	23.7	20.2
2016	53.7	73.1	34.9	55.2	73.8	36.9	41.6	58.2	25.9	52.2	66.0	35.8	139.1	219.5	67.9	25.9	33.4	20.1
2017	55.3	73.7	37.0	54.5	71.5	37.3	45.9	61.4	30.4	60.3	89.3	31.1	142.0	206.1	88.1	24.3	31.2	19.3
2018	55.9	76.4	35.6	56.3	74.7	37.8	44.5	63.5	26.0	57.6	80.4	34.1	144.5	224.0	74.5	24.9	31.5	18.7
2019	59.2	82.6	36.0	60.5	83.0	38.0	48.3	70.8	26.1	60.4	80.0	40.3	129.4	183.3	81.6	22.9	31.5	15.0
2020	71.5	100.6	42.4	69.2	94.4	43.8	60.4	89.5	31.5	82.2	124.6	38.0	180.1	262.7	104.9	20.2	24.8	16.1
2021	77.8	108.3	47.4	74.8	102.0	47.3	66.6	99.0	34.9	101.3	138.0	63.3	206.9	296.9	123.8	30.5	42.0	20.5
-----Motor vehicle accidents																		
2000	17.5	24.4	10.6	13.8	18.5	9.2	18.2	28.5	7.5	19.3	33.1	6.8	74.2	106.4	46.3	15.3	11.6	12.8
2001	17.2	24.2	10.1	13.5	18.5	8.5	18.2	26.3	9.4	19.1	28.8	7.2	63.2	88.8	38.3	8.6	7.7	9.9
2002	18.5	25.5	11.6	14.7	20.3	9.3	21.1	27.4	14.0	11.9	15.9	7.5	65.9	100.2	35.3	10.1	8.2	11.1
2003	18.0	24.9	11.2	14.6	20.3	9.0	21.3	29.1	13.6	15.2	23.3	8.1	59.0	78.0	40.4	11.8	14.1	9.9
2004	18.1	23.9	12.5	15.3	20.3	10.6	23.2	30.0	16.0	14.8	18.2	10.8	54.1	63.9	44.1	11.3	13.7	13.9
2005	18.9	27.0	11.1	15.0	21.9	8.4	22.7	33.1	12.6	24.9	31.4	17.8	62.6	91.3	36.4	10.2	14.5	6.3
2006	19.6	26.8	12.4	16.6	22.8	10.7	21.9	29.9	13.3	15.3	22.9	7.7	56.9	76.5	38.5	5.9	5.3	6.1
2007	16.2	22.2	10.1	13.1	18.3	8.0	17.6	22.6	12.2	13.6	18.2	7.6	49.0	72.8	27.2	9.9	37.6	10.6
2008	13.6	19.5	7.9	12.0	17.7	6.5	13.1	18.5	7.7	11.5	16.8	5.6	41.9	55.0	29.3	4.4	6.9	2.0
2009	11.6	16.8	6.5	10.1	15.2	5.1	10.6	14.4	6.7	12.4	14.2	10.3	36.9	51.0	23.3	6.5	11.2	3.0
2010	11.1	15.9	6.4	9.2	13.6	4.8	11.1	15.6	6.9	10.8	14.2	7.2	41.7	60.2	24.0	5.5	4.3	6.3
2011	12.1	17.6	6.9	10.4	14.5	5.6	11.7	17.6	6.2	11.7	16.6	7.5	44.2	66.8	23.7	6.8	6.3	7.3
2012	11.4	16.8	6.3	10.0	14.8	5.3	10.6	16.3	5.4	10.1	15.2	5.1	37.8	53.1	22.8	4.9	5.4	4.5
2013	11.4	16.3	6.6	10.2	15.1	5.3	11.4	15.5	7.3	12.0	18.1	4.8	31.7	40.3	23.5	5.8	8.6	3.8
2014	10.3	14.5	6.0	8.3	12.5	4.1	10.3	14.2	6.5	7.9	11.1	4.4	35.6	49.2	23.1	2.5	2.8	2.2
2015	12.6	18.0	7.2	10.7	15.5	5.9	9.9	15.2	4.8	14.1	19.1	8.2	54.3	74.1	36.5	8.2	7.9	8.3
2016	13.9	20.1	7.8	11.5	17.3	5.9	13.3	19.9	7.2	19.1	22.6	14.7	52.2	77.6	29.5	7.2	9.0	6.2
2017	13.8	19.5	8.2	12.0	17.8	6.1	12.7	17.7	8.1	17.1	26.0	8.6	54.0	70.0	39.7	7.5	10.1	5.2
2018	14.1	20.0	8.3	12.3	17.3	7.4	12.1	18.7	6.0	13.9	17.0	10.7	60.7	91.1	33.1	6.2	7.9	4.8
2019	13.1	18.9	7.5	12.4	18.0	6.9	12.5	19.1	6.3	12.0	16.2	7.8	36.7	48.4	26.5	6.1	10.4	2.6
2020	14.0	20.2	7.8	12.0	17.9	6.2	13.7	19.7	7.6	12.2	19.3	4.6	44.7	59.4	30.8	6.8	6.0	7.4
2021	18.4	25.7	11.2	16.1	23.4	8.7	16.7	24.2	9.7	23.3	30.2	15.8	65.5	85.8	47.7	6.6	8.2	4.8

TABLE 2B-3 (continued)
**AGE-ADJUSTED^a MORTALITY RATES FOR SELECTED CAUSES OF DEATH BY RACE/ETHNICITY
AND GENDER, ARIZONA, 2000-2021**

	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
Assault (homicide)																		
2000	7.6	11.1	3.8	3.9	5.4	2.3	13.0	19.2	6.1	22.7	32.3	11.0	14.9	22.1	7.5	7.6	5.1	9.7
2001	8.7	13.7	3.6	4.3	6.1	2.6	15.5	24.8	5.0	22.2	35.7	6.8	17.2	24.8	10.0	4.9	9.7	1.2
2002	8.6	13.9	3.0	4.4	6.8	2.0	15.1	25.8	3.4	21.3	32.5	7.1	20.3	29.0	11.8	3.3	0.0	5.8
2003	8.3	12.8	3.6	3.7	5.1	2.2	14.7	23.7	4.8	24.9	38.7	9.0	18.8	31.5	6.9	5.4	2.5	5.8
2004	8.2	13.3	2.9	4.8	7.0	2.6	13.6	23.2	3.0	22.3	35.5	7.4	14.7	25.9	4.5	1.4	2.3	0.0
2005	8.2	13.5	2.6	3.5	5.6	1.3	14.6	24.2	3.9	27.4	45.7	7.5	14.0	22.4	5.8	5.1	8.0	2.5
2006	8.5	13.5	3.1	4.6	6.8	2.4	13.0	21.6	3.3	19.6	30.5	7.5	13.2	23.7	3.2	2.4	1.5	3.5
2007	7.7	11.8	3.2	3.9	5.5	2.2	12.0	19.5	3.7	23.4	32.3	12.7	13.1	21.7	4.8	2.6	16.0	1.6
2008	7.1	11.2	2.7	3.7	5.6	1.7	10.6	16.9	3.7	20.7	32.7	6.4	12.8	20.6	5.2	3.2	4.3	2.1
2009	5.5	8.0	2.9	3.2	4.9	1.5	8.1	12.1	4.0	14.2	18.5	9.1	13.2	18.0	8.5	0.9	0.0	1.5
2010	6.5	10.5	2.4	3.8	5.5	2.2	8.0	13.5	2.3	15.4	25.6	3.4	18.0	31.4	5.0	4.1	4.2	4.0
2011	6.1	9.6	2.6	3.5	5.1	1.8	7.9	14.0	2.0	16.5	23.8	7.9	11.9	18.9	4.8	3.9	5.5	2.7
2012	5.9	8.6	3.1	4.3	6.0	2.4	6.1	9.7	2.5	14.5	20.2	8.2	17.3	26.3	8.8	2.0	3.0	0.9
2013	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	2.1	1.7
2014	4.6	7.1	2.1	3.0	4.2	1.8	6.0	9.8	2.1	11.1	17.5	4.0	7.3	12.0	2.6	0.4	0.8	0.0
2015	5.6	8.6	2.5	4.0	5.7	2.3	5.3	8.3	2.2	15.5	25.7	3.6	15.7	25.7	5.8	2.4	3.0	1.7
2016	6.3	9.9	2.5	3.7	5.3	2.1	6.8	11.7	1.8	20.4	33.4	5.6	17.6	25.7	9.9	4.0	7.1	1.6
2017	6.4	10.0	2.8	4.1	5.5	2.7	6.8	11.1	2.5	17.9	30.0	4.1	17.9	30.7	5.5	0.7	0.8	0.6
2018	6.1	9.8	2.4	3.6	4.9	2.3	6.6	11.4	1.6	19.3	30.0	6.9	17.9	29.1	6.9	2.6	3.9	1.4
2019	5.9	9.1	2.6	3.7	5.5	1.9	5.8	9.3	2.1	15.2	22.8	6.6	20.3	32.6	8.6	2.3	4.2	0.6
2020	7.7	12.1	3.2	4.3	6.0	2.6	6.9	11.5	2.1	27.3	45.4	7.2	28.4	46.0	11.7	2.3	2.7	1.8
2021	8.1	13.2	2.9	4.0	6.6	1.3	9.1	14.9	3.1	29.5	46.9	10.5	23.7	35.1	12.4	3.8	5.8	2.0
Intentional self-harm (suicide)																		
2000	14.6	24.7	5.2	16.7	27.6	6.8	7.2	12.7	1.4	6.5	12.2	0.0	16.2	29.7	3.7	5.7	12.3	0.0
2001	14.9	24.6	5.6	12.8	21.0	5.1	5.9	9.9	1.6	9.2	15.2	2.4	15.4	26.4	5.2	9.4	15.4	4.7
2002	15.9	26.4	6.0	18.3	30.0	7.4	8.3	14.2	2.5	6.2	11.4	0.0	17.9	31.7	4.9	4.1	9.1	0.0
2003	14.6	24.0	5.8	16.4	27.1	6.4	8.2	11.8	4.2	11.3	16.6	4.8	15.2	27.4	3.6	6.0	7.0	5.9
2004	14.9	24.1	6.3	16.6	26.4	7.5	9.8	17.5	2.2	12.1	17.3	5.1	17.0	28.5	6.5	4.0	7.0	2.7
2005	15.4	24.9	6.5	16.6	26.7	7.3	10.5	17.8	3.0	3.3	4.7	1.8	17.5	28.7	6.8	11.7	8.9	14.1
2006	15.4	24.7	6.6	17.8	27.9	8.5	8.2	14.2	2.0	8.3	13.9	2.3	13.7	23.4	4.5	8.4	13.2	4.3
2007	15.4	24.4	6.7	18.7	29.4	8.3	9.2	14.7	3.6	6.2	10.1	1.7	9.8	16.3	3.6	6.1	9.2	2.4
2008	14.8	23.0	7.0	17.6	27.3	8.5	6.5	10.8	1.9	7.5	10.3	4.2	13.5	21.2	5.9	9.9	10.7	8.8
2009	16.1	24.6	8.1	18.4	28.0	9.5	9.0	14.0	3.9	10.5	12.7	7.7	15.9	22.9	9.3	9.9	19.9	2.3
2010	16.7	27.1	6.7	20.6	32.8	8.7	7.4	12.5	2.6	6.4	9.9	2.2	18.7	32.3	5.7	6.8	11.0	3.2
2011	17.2	27.4	7.5	22.0	33.1	10.1	8.1	14.8	1.8	9.1	13.7	4.3	14.9	24.0	5.8	5.3	6.9	3.5
2012	16.2	25.9	7.0	20.2	32.2	8.7	6.8	11.1	2.9	10.0	15.5	4.0	17.9	27.9	8.1	5.7	10.2	1.8
2013	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
2014	16.5	25.6	7.7	21.0	31.9	10.4	8.3	13.4	3.4	9.0	13.6	4.2	13.9	24.3	3.7	7.0	12.0	2.7
2015	17.8	27.5	8.4	23.6	36.4	11.1	6.7	10.4	3.2	6.6	9.2	3.7	19.0	28.4	10.0	7.0	9.9	4.5
2016	17.7	28.0	7.9	21.7	33.6	10.2	8.8	15.0	2.9	9.0	13.1	5.2	24.2	36.7	11.9	9.3	14.0	4.7
2017	18.0	28.1	8.4	22.1	33.8	10.8	8.5	14.1	3.0	10.5	19.1	2.3	26.2	40.4	12.7	9.3	10.6	7.8
2018	19.5	31.5	7.8	23.7	37.5	10.2	8.7	15.2	2.4	16.0	24.6	6.6	36.5	61.8	12.3	7.3	11.0	4.1
2019	18.9	29.7	8.3	23.1	36.4	10.1	9.9	16.4	3.7	12.5	14.1	11.1	26.8	41.8	12.4	7.3	11.5	3.9
2020	18.2	28.8	8.0	22.5	35.0	10.3	9.2	14.9	3.6	13.7	22.1	4.5	28.0	43.9	12.9	6.8	12.4	1.9
2021	19.4	31.2	7.9	23.3	37.5	9.3	10.0	16.6	3.6	13.3	21.3	4.4	39.7	62.8	17.5	9.8	12.5	7.4

Notes: ^a Adjusted to the 2000 standard U.S. population; ^b Chronic obstructive pulmonary diseases in 1990; Age-adjusted rates by race/ethnicity for COVID-19 may be found in Table 2b-4; 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://pub.azdhs.gov/health-stats/>

TABLE 2B-4
NUMBER OF DEATHS AND AGE-ADJUSTED MORTALITY RATES^a FOR SELECTED CAUSES OF DEATH BY RACE/ETHNICITY AND GENDER, ARIZONA, 2021

	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
Total, all causes^b	81,482	45,102	36,369	57,987	31,702	26,285	13,785	7,998	5,787	3,295	1,850	1,443	4,380	2,463	1,917	1,543	772	771
Major cardiovascular diseases	19,581	10,749	8,832	15,329	8,358	6,971	2,480	1,375	1,105	799	479	320	502	295	207	357	166	191
Diseases of heart	14,536	8,386	6,150	11,622	6,639	4,983	1,698	1,004	694	542	343	199	350	219	131	237	119	118
Coronary heart disease	10,434	6,312	4,122	8,360	5,018	3,342	1,199	738	461	399	264	135	232	147	85	175	96	79
Malignant neoplasms	12,810	6,825	5,985	10,018	5,450	4,568	1,697	869	828	453	207	246	327	146	181	256	110	146
Malignant neoplasm of trachea, bronchus and lung	2,595	1,348	1,247	2,234	1,169	1,065	206	108	98	71	31	40	20	8	12	51	20	31
Malignant neoplasm of colon, rectum, and anus	1,159	638	521	870	474	396	189	113	76	48	23	25	21	13	8	26	12	14
Malignant neoplasm of breast	970†	20†	956	722	11	711	140†	*	134	50†	*	48	28	0	28	29	0	29
Malignant neoplasm of prostate	779	779	0	605	605	0	101	101	0	46	46	0	12	0	10	10	0	0
Malignant melanoma of skin	220†	140†	80†	200	127	73	14	8	6	0†	0	*	0†	*	0	0	0	0
Malignant neoplasm of cervix uteri	100	0	100†	55	0	55	26	0	26	8	0	8	8	0	8	0†	0	*
COVID-19	12,693	7,521	5,172	7,300	4,408	2,892	3,502	2,116	1,386	499	259	240	1,019	527	492	324	179	145
Accidents (unintentional injury)	5,945	4,015	1,930	3,492	2,252	1,240	1,387	1,029	358	360	252	108	574	397	177	86	55	31
Accidental poisoning	2,650†	1,962	690†	1,392	985	407	749	602	147	202	149	53	260	192	68	30†	22	*
Motor vehicle accidents	1,359	954	405	685	497	188	374	264	110	87	59	28	187	119	68	19	12	7
Falls	1,146	562	584	925	441	484	130	74	56	15	7	8	45	25	20	26	12	14
Accidental drowning and submersion	120†	80†	30†	61	44	17	30†	22	*	14	8	6	10†	6	*	10†	*	*
Chronic lower respiratory diseases	3,518	1,658	1,860	3,125	1,454	1,671	226	120	106	68	27	41	35	18	17	33	21	12
Cerebrovascular diseases	3,319	1,514	1,805	2,445	1,097	1,348	514	252	262	165	78	87	94	46	48	80	32	48
Alzheimer's disease	2,754	909	1,845	2,268	758	1,510	332	104	228	63	20	43	41	8	33	42	14	28
Diabetes	2,557	1,457	1,100	1,439	848	591	633	350	283	142	71	246	133	113	77	40	37	37
Chronic liver disease and cirrhosis	1,772	1,061	711	978	589	389	336	214	122	41	26	15	396	219	177	13	7	6
Intentional self-harm (suicide)	1,470	1,179	291	1,032	831	201	223	181	42	52	44	8	122	95	27	29	18	11
Essential (primary) hypertension and hypertensive renal disease	1,200	567	633	847	402	445	202	82	120	71	45	26	49	24	25	28	11	17
Influenza and pneumonia	933	545	388	650	374	276	153	96	57	37	19	18	69	39	30	22	15	7
Parkinson's disease	890†	577	320†	760	499	261	76	43	33	10†	9	*	20	14	6	21	10	11
Nephritis, nephrotic syndrome and nephrosis	871	466	405	557	304	253	179	92	87	49	29	20	60	30	30	19	8	11
Assault (homicide)	560†	459	100†	143	118	25	221	186	35	115	95	20	69	50	19	10†	8	*
Septicemia	510†	270†	240†	356	190	166	86	46	40	24	15	9	37	19	18	10†	*	*
Human immunodeficiency virus (HIV) disease	90†	80†	10†	40†	36	*	30†	30	*	10†	10	*	10†	7	*	0†	*	0
Injury by firearms	1,360†	1,155	210†	807	693	114	326	269	57	128	109	19	79	65	14	20†	13	*
Drug-induced deaths	2,858	2,057	801	1,599	1,094	505	777	620	157	223	162	61	206	145	61	29	23	6
Opioid-induced deaths	1,960†	1,419	540†	1,058	729	329	576	456	120	165	124	41	132	89	43	20†	15	*
Alcohol-induced deaths	1,890†	1,295	600†	1,057	715	342	283	217	66	43	29	14	488	320	168	10†	6	*

TABLE 2B-4 (continued)
NUMBER OF DEATHS AND AGE-ADJUSTED MORTALITY RATES^a FOR SELECTED CAUSES OF DEATH BY RACE/ETHNICITY AND GENDER, ARIZONA, 2021

	AGE-ADJUSTED MORTALITY RATES ^a																	
	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
Total, all causes^b	882.6	1057.1	721.2	835.4	991.0	689.6	892.8	1097.9	714.1	1113.6	1295.6	942.7	1704.7	2104.2	1365.1	597.0	712.6	511.9
Major cardiovascular disease	203.4	244.8	166.2	203.4	242.3	167.8	182.6	219.9	150.7	289.1	363.3	221.6	210.8	280.6	156.5	146.5	165.6	132.4
Diseases of heart	151.2	191.3	115.7	154.7	193.0	120.1	123.5	159.8	93.8	193.3	258.1	136.0	145.9	208.5	97.8	97.6	119.7	81.9
Coronary heart disease	108.1	143.3	77.2	110.8	145.2	80.0	88.0	118.4	63.3	144.1	203.7	93.1	97.6	141.6	64.5	70.9	94.0	54.7
Malignant neoplasms	131.8	150.3	116.7	136.0	155.4	119.6	110.9	128.0	98.5	154.4	151.7	158.3	128.9	139.9	123.2	94.4	100.1	91.0
Malignant neoplasm of trachea, bronchus and lung	25.8	28.9	23.2	28.8	32.1	26.0	14.4	17.0	12.6	23.1	23.8	23.4	7.9	8.6	7.8	19.9	20.7	19.5
Malignant neoplasm of colon, rectum, and anus	12.4	14.6	10.4	12.6	14.6	10.8	11.9	15.1	9.2	15.9	15.0	16.1	8.2	10.7	5.8	9.6	10.5	9.0
Malignant neoplasm of breast	10.5	0.3	19.5	10.6	0.3	19.9	8.8	**	15.5	16.2	**	30.5	10.0	0.0	18.3	10.1	0.0	17.7
Malignant neoplasm of prostate	7.8	17.2	0.0	7.6	16.6	0.0	7.7	18.2	0.0	16.4	37.0	0.0	5.2	13.0	0.0	3.7	9.3	0.0
Malignant melanoma of skin	2.3	3.1	1.7	2.9	3.9	2.1	1.0	1.4	0.8	**	0.0	**	**	**	0.0	0.0	0.0	0.0
Malignant neoplasm of cervix uteri	1.3	0.0	2.5	1.1	0.0	2.1	1.4	0.0	2.7	2.3	0.0	4.7	2.6	0.0	5.0	**	0.0	**
COVID-19	136.9	174.0	103.7	103.5	133.4	76.7	220.5	287.5	164.0	168.5	186.3	153.8	394.4	464.6	339.8	120.1	159.0	92.7
Accidents (unintentional injury)	77.8	108.3	47.4	74.8	102.0	47.3	66.6	99.0	34.9	101.3	138.0	63.3	206.9	296.9	123.8	30.5	42.0	20.5
Accidental poisoning	37.9	55.9	19.5	37.3	52.9	21.3	32.8	52.8	12.6	54.1	76.7	30.1	92.4	142.9	45.7	8.2	14.4	**
Motor vehicle accidents	18.4	25.7	11.2	16.1	23.4	8.7	16.7	24.2	9.7	23.3	30.2	15.8	65.5	85.8	47.7	6.6	8.2	4.8
Falls	12.0	13.2	11.0	12.3	13.0	11.7	9.9	12.7	7.7	6.2	6.2	5.9	18.7	21.7	15.3	10.8	13.1	9.3
Accidental drowning and submersion	1.6	2.3	0.9	1.6	2.2	0.9	1.1	1.9	**	3.9	3.8	3.7	2.6	4.8	**	1.9	**	**
Chronic lower respiratory diseases	35.3	36.4	34.3	39.8	40.0	39.5	17.2	21.4	14.1	25.7	23.9	27.9	15.2	19.4	12.4	13.7	22.1	8.4
Cerebrovascular diseases	34.4	34.4	34.0	32.0	31.4	32.4	38.6	40.6	36.1	61.9	63.0	60.5	41.3	44.6	38.3	32.3	30.0	33.3
Alzheimer's disease	28.3	21.3	33.8	28.5	21.3	34.3	29.8	22.6	34.5	29.1	20.6	34.1	20.6	10.9	26.6	18.9	16.1	20.5
Diabetes	26.8	32.6	21.6	20.0	24.8	15.8	42.5	51.6	35.1	48.3	51.2	46.2	97.6	116.1	81.5	30.1	38.6	24.5
Chronic liver disease and cirrhosis	21.6	26.5	17.0	17.5	21.3	14.1	18.6	24.2	13.2	12.9	16.0	9.6	145.7	170.0	123.9	4.3	4.9	3.6
Intentional self-harm (suicide)	19.4	31.2	7.9	23.3	37.5	9.3	10.0	16.6	3.6	13.3	21.3	4.4	39.7	62.8	17.5	9.8	12.5	7.4
Essential (primary) hypertension and hypertensive renal disease	12.4	12.8	11.8	11.1	10.5	15.9	14.2	16.9	26.1	33.3	18.7	19.7	22.0	18.2	11.7	11.9	11.6	
Influenza and pneumonia	9.9	12.4	7.7	9.1	11.3	7.2	10.3	15.0	6.8	13.4	15.1	12.2	26.7	32.6	21.8	8.1	13.5	4.4
Nephritis, nephrotic syndrome and nephrosis	9.1	10.6	7.9	7.5	8.8	6.3	12.5	14.3	11.0	17.4	20.0	14.3	23.2	26.7	21.0	7.5	8.1	7.1
Parkinson's disease	9.0	13.0	5.8	9.5	13.6	6.0	6.4	8.7	4.8	5.8	9.5	**	9.5	17.1	4.7	9.1	11.1	7.8
Assault (homicide)	8.1	13.2	2.9	4.0	6.6	1.3	9.1	14.9	3.1	29.5	46.9	10.5	23.7	35.1	12.4	3.8	5.8	**
Septicemia	5.4	6.1	4.8	5.3	5.8	4.9	5.6	6.7	4.8	8.1	10.6	5.9	15.1	16.9	13.0	2.3	**	**
Human immunodeficiency virus (HIV) disease	1.3	2.3	0.2	0.9	1.6	**	1.6	3.1	**	3.8	5.6	**	3.3	5.4	**	**	**	0.0
Injury by firearms	18.3	30.9	5.7	18.2	31.2	5.3	13.8	22.7	4.9	33.2	53.9	10.4	26.6	44.7	9.2	5.3	8.9	**
Drug-induced deaths	40.6	58.3	22.5	42.1	57.9	25.9	34.0	54.4	13.4	59.6	83.4	34.3	72.7	106.8	41.0	9.3	15.4	3.7
Opioid-induced deaths	28.4	40.8	15.6	29.4	40.7	17.6	24.4	38.3	10.1	43.5	62.7	22.8	46.1	63.8	29.0	6.3	9.4	**
Alcohol-induced deaths	24.3	33.6	15.4	21.0	28.3	14.1	14.6	23.0	6.7	13.0	17.1	8.7	181.0	248.8	120.9	3.0	4.2	**

Notes: * Cell suppressed due to count less than 6; ** Cell suppressed due to rate/ratio/percent based on non-zero count less than 6; ^a Sum rounded to nearest tenths unit due to addend less than 6; ^b The number of deaths per 100,000 resident population age-adjusted to the 2000 U.S. standard; The rates for cervical cancer are per 100,000 females; The rate for prostate cancer is per 100,000 males; ^b Includes records with unknown gender and race/ethnicity.

TABLE 2B-5
AGE-ADJUSTED MORTALITY RATES^a FOR SELECTED CAUSES OF DEATH BY URBAN/RURAL AREA AND GENDER,
ARIZONA, 2021

	Arizona			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total, all causes	882.6	1057.1	721.2	844.1	1006.5	695.5	1070.0	1295.6	851.6
Major cardiovascular diseases	203.4	244.8	166.2	197.6	236.4	163.1	227.6	279.2	179.3
Diseases of heart	151.2	191.3	115.7	146.2	184.0	113.2	172.4	222.1	126.0
Coronary heart disease	108.1	143.3	77.2	103.6	137.1	74.6	127.3	169.1	88.4
Malignant neoplasms	131.8	150.3	116.7	128.7	146.4	114.6	143.2	162.8	126.0
Malignant neoplasm of trachea, bronchus and lung	25.8	28.9	23.2	25.1	27.7	23.0	28.4	32.6	24.4
Malignant neoplasm of colon, rectum, and anus	12.4	14.6	10.4	11.9	14.0	10.0	13.9	15.9	12.1
Malignant neoplasm of breast	10.5	0.3	19.5	10.3	0.3	19.2	10.7	0.5	20.3
Malignant neoplasm of prostate	7.8	17.2	0.0	7.6	17.0	0.0	8.3	17.7	0.0
Malignant melanoma of skin	2.3	3.1	1.7	2.4	3.3	1.7	1.9	2.3	1.4
Malignant neoplasm of cervix uteri	1.3	0.0	2.5	1.2	0.0	2.4	1.2	0.0	2.5
COVID-19	136.9	174.0	103.7	128.8	163.9	97.8	173.6	217.6	132.7
Accidents (unintentional injury)	77.8	108.3	47.4	73.2	101.3	45.1	100.4	141.1	59.0
Accidental drowning and submersion	37.9	55.9	19.5	37.0	54.7	19.1	40.9	60.4	20.7
Motor vehicle accidents	18.4	25.7	11.2	16.0	22.6	9.5	31.6	42.6	20.3
Falls	12.0	13.2	11.0	12.0	12.8	11.2	12.4	15.2	9.7
Chronic lower respiratory diseases	35.3	36.4	34.3	32.3	33.3	31.5	48.1	49.5	46.5
Cerebrovascular diseases	34.4	34.4	34.0	33.6	33.7	33.1	37.4	36.5	38.3
Alzheimer's disease	28.3	21.3	33.8	28.8	22.0	33.9	26.3	18.3	33.1
Diabetes	26.8	32.6	21.6	26.7	32.6	21.5	27.4	32.6	22.7
Chronic liver disease and cirrhosis	21.6	26.5	17.0	17.4	21.4	13.6	47.3	56.2	38.7
Intentional self-harm (suicide)	19.4	31.2	7.9	16.9	27.0	7.1	34.5	55.7	12.9
Essential (primary) hypertension and hypertensive renal disease	12.4	12.8	11.8	12.7	13.0	12.2	11.0	11.8	10.1
Influenza and pneumonia	9.9	12.4	7.7	9.4	12.0	7.2	12.4	14.8	10.4
Nephritis, nephrotic syndrome and nephrosis	9.1	10.6	7.9	8.3	9.6	7.2	13.2	15.3	11.2
Parkinson's disease	9.0	13.0	5.8	9.3	13.6	6.0	7.9	11.0	5.2
Assault (homicide)	8.1	13.2	2.9	8.2	13.3	2.8	7.7	11.8	3.5
Septicemia	5.4	6.1	4.8	5.2	6.0	4.7	6.2	6.9	5.4
(HIV) disease	1.3	2.3	0.2	1.2	2.3	0.2	1.3	2.4	0.2
Injury by firearms	18.3	30.9	5.7	17.4	29.2	5.6	22.9	39.5	6.1
Drug-induced deaths	40.6	58.3	22.5	39.9	57.5	22.1	42.7	59.7	25.0
Opioid-induced deaths	28.4	40.8	15.6	28.5	41.5	15.2	26.4	34.2	18.0
Alcohol-induced deaths	24.3	33.6	15.4	18.3	25.3	11.8	61.2	83.7	38.8

Notes: ^a The number of deaths per 100,000 population in specified group age-adjusted to the 2000 standard U.S.; The rates for cervical cancer are per 100,000 females; the rates for prostate cancer are per 100,000 males.

TABLE 2B-6
DEATHS AND DEATH RATES BY GENDER FOR SELECTED CAUSES,
ARIZONA RESIDENTS, 2021

Cause of death (Tenth Revision, International Statistical Classification of Diseases)	Number of deaths			Crude death rate per 100,000 persons		
	Total	Male	Female	Total	Male	Female
Total, all causes^a	81,482	45,102	36,369	1118.4	1246.8	991.5
Salmonella infections	0†	*	*	**	**	**
Shigellosis and amebiasis	0	0	0	0.0	0.0	0.0
Certain other intestinal infections	240	108	132	3.3	3.0	3.6
Enterocolitis due to Clostridium difficile	151	73	78	2.1	2.0	2.1
Tuberculosis	20†	12	*	0.2	0.3	**
Respiratory tuberculosis	10†	6	*	0.1	0.2	**
Other tuberculosis	10†	6	*	0.1	0.2	**
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	0	0	0.0	0.0	0.0
Septicemia	511	271	240	7.0	7.5	6.5
Syphilis	0†	0	*	**	0.0	**
Acute poliomyelitis	0	0	0	0.0	0.0	0.0
Arthropod-borne encephalitis	0	0	0	0.0	0.0	0.0
Measles	0	0	0	0.0	0.0	0.0
Viral hepatitis	80	53	27	1.1	1.5	0.7
Human immunodeficiency virus (HIV) disease	94	84	10	1.3	2.3	0.3
Malaria	0	0	0	0.0	0.0	0.0
Other and unspecified infectious and parasitic diseases	503	290	213	6.9	8.0	5.8
Malignant neoplasms	12,810	6,825	5,985	175.8	188.7	163.2
Malignant neoplasm of lip, oral cavity and pharynx	225	167	58	3.1	4.6	1.6
Malignant neoplasm of esophagus	361	301	60	5.0	8.3	1.6
Malignant neoplasm of stomach	233	142	91	3.2	3.9	2.5
Malignant neoplasm of colon, rectum, and anus	1,159	638	521	15.9	17.6	14.2
Malignant neoplasm of liver and intrahepatic bile ducts	574	365	209	7.9	10.1	5.7
Malignant neoplasm of pancreas	984	531	453	13.5	14.7	12.4
Malignant neoplasm of larynx	62	52	10	0.9	1.4	0.3
Malignant neoplasm of trachea, bronchus and lung	2,595	1,348	1,247	35.6	37.3	34.0
Malignant melanoma of skin	218	137	81	3.0	3.8	2.2
Malignant neoplasm of breast	972	16	956	13.3	0.4	26.1
Malignant neoplasm of cervix uteri	100	0	100	1.4	0.0	2.7
Malignant neoplasm of corpus uteri and uterus, part unspecified	233	0	233	3.2	0.0	6.4
Malignant neoplasm of ovary	303	0	303	4.2	0.0	8.3
Malignant neoplasm of prostate	779	779	0	10.7	21.5	0.0
Malignant neoplasm of kidney and renal pelvis	317	215	102	4.4	5.9	2.8
Malignant neoplasm of bladder	418	327	91	5.7	9.0	2.5
Malignant neoplasm of meninges, brain and other parts of central nervous system	395	227	168	5.4	6.3	4.6
Malignant neoplasm of lymphoid, hematopoietic and related tissue	1,270	740	530	17.4	20.5	14.4
Hodgkin's disease	25	14	11	0.3	0.4	0.3
Non-Hodgkin's lymphoma	433	246	187	5.9	6.8	5.1
Leukemia	559	332	227	7.7	9.2	6.2
Multiple myeloma and immunoproliferative neoplasms	250	147	103	3.4	4.1	2.8
Other and unspecified malignant neoplasms of lymphoid tissue	0†	*	*	**	**	**
All other and unspecified malignant neoplasm	1,612	840	772	22.1	23.2	21.0
In situ neoplasms	422	233	189	5.8	6.4	5.2
Anemias	76	36	40	1.0	1.0	1.1
Diabetes	2,557	1,457	1,100	35.1	40.3	30.0

TABLE 2B-6 (continued)
DEATHS AND DEATH RATES BY GENDER FOR SELECTED CAUSES,
ARIZONA RESIDENTS, 2021

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	742	307	435	10.2	8.5	11.9
Malnutrition	704	289	415	9.7	8.0	11.3
Other nutritional deficiencies	38	18	20	0.5	0.5	0.5
Obesity	302	168	134	4.1	4.6	3.7
Meningitis	32	21	11	0.4	0.6	0.3
Parkinson's disease	892	577	315	12.2	16.0	8.6
Alzheimer's disease	2,754	909	1,845	37.8	25.1	50.3
Major cardiovascular diseases	19,581	10,749	8,832	268.8	297.1	240.8
Diseases of heart	14,536	8,386	6,150	199.5	231.8	167.7
Acute rheumatic fever and chronic rheumatic heart disease	98	42	56	1.3	1.2	1.5
Hypertensive heart disease	1,943	987	956	26.7	27.3	26.1
Hypertensive heart and renal disease	240	121	119	3.3	3.3	3.2
Ischemic heart disease	8,491	5,325	3,166	116.5	147.2	86.3
Acute myocardial infarction	2,001	1,281	720	27.5	35.4	19.6
Other acute ischemic heart disease	104	60	44	1.4	1.7	1.2
Other forms of chronic ischemic heart disease	6,386	3,984	2,402	87.7	110.1	65.5
Atherosclerotic cardiovascular disease	1,755	1,172	583	24.1	32.4	15.9
All other forms of chronic ischemic heart disease	4,631	2,812	1,819	63.6	77.7	49.6
Other heart diseases	3,764	1,911	1,853	51.7	52.8	50.5
Acute and subacute endocarditis	35	24	11	0.5	0.7	0.3
Diseases of pericardium and acute myocarditis	23	15	8	0.3	0.4	0.2
Heart failure	997	506	491	13.7	14.0	13.4
All other forms of heart disease	2,709	1,366	1,343	37.2	37.8	36.6
Essential (primary) hypertension and hypertensive renal disease	1,200	567	633	16.5	15.7	17.3
Cerebrovascular diseases	3,319	1,514	1,805	45.6	41.9	49.2
Atherosclerosis	97	55	42	1.3	1.5	1.1
Other diseases of circulatory system	429	227	202	5.9	6.3	5.5
Aortic aneurysm and dissection	211	122	89	2.9	3.4	2.4
Other disease of arteries, arterioles and capillaries	218	105	113	3.0	2.9	3.1
Other disorders of circulatory system	151	81	70	2.1	2.2	1.9
Influenza and pneumonia	933	545	388	12.8	15.1	10.6
Influenza	10†	*	*	0.1	**	**
Pneumonia	924	540	384	12.7	14.9	10.5
COVID-19	12,693	7,521	5,172	174.2	207.9	141.0
Other acute lower respiratory infections	10†	*	*	**	**	**
Acute bronchiolitis	0†	*	*	**	**	**
Unspecified acute lower respiratory infection	0†	*	0	**	**	0.0
Chronic lower respiratory diseases	3,518	1,658	1,860	48.3	45.8	50.7
Bronchitis, chronic and unspecified	10†	*	*	**	**	**
Emphysema	187	99	88	2.6	2.7	2.4
Asthma	89	33	56	1.2	0.9	1.5
Other chronic lower respiratory diseases	3,237	1,523	1,714	44.4	42.1	46.7
Pneumoconioses and chemical effects	10†	8	*	0.2	0.2	**
Pneumonitis due to solids and liquids	218	137	81	3.0	3.8	2.2
Other disease of respiratory system	1,061	599	462	14.6	16.6	12.6
Peptic ulcer	126	70	56	1.7	1.9	1.5
Diseases of appendix	15	8	7	0.2	0.2	0.2
Hernia	45	20	25	0.6	0.6	0.7

TABLE 2B-6 (continued)
DEATHS AND DEATH RATES BY GENDER FOR SELECTED CAUSES,
ARIZONA RESIDENTS, 2021

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	1,772	1,061	711	24.3	29.3	19.4
Alcoholic liver disease	1,125	703	422	15.4	19.4	11.5
Other chronic liver disease and cirrhosis	647	358	289	8.9	9.9	7.9
Cholelithiasis and other disorders of gallbladder	100	48	52	1.4	1.3	1.4
Nephritis, nephrotic syndrome and nephrosis	871	466	405	12.0	12.9	11.0
Acute and rapidly progressive nephritic and nephrotic syndrome	10†	*	6	0.1	**	0.2
Chronic glomerulonephritis	10†	*	6	0.2	**	0.2
Renal failure	850	457	393	11.7	12.6	10.7
Others disorders of kidney	0	0	0	0.0	0.0	0.0
Infections of kidney	40	14	26	0.5	0.4	0.7
Hyperplasia of prostate	15	15	0	0.2	0.4	0.0
Inflammatory diseases of female pelvic organs	0†	0	*	**	0.0	**
Pregnancy, childbirth and the puerperium	38	0	38	0.5	0.0	1.0
Pregnancy with abortive outcome	0†	0	*	**	0.0	**
Other complications of pregnancy, childbirth and the puerperium	37	0	37	0.5	0.0	1.0
Perinatal conditions	221	124	95	3.0	3.4	2.6
Congenital malformations	224	121	103	3.1	3.3	2.8
Symptoms, signs, abnormal findings ^a	868	444	424	11.9	12.3	11.6
Total accidents	5,945	4,015	1,930	81.6	111.0	52.6
Transport accidents	1,452	1,033	419	19.9	28.6	11.4
Motor vehicle accidents	1,359	954	405	18.7	26.4	11.0
Other land transport accidents	40†	30	*	0.5	0.8	**
Water, air, space	58	49	9	0.8	1.4	0.2
Nontransport accidents	4,493	2,982	1,511	61.7	82.4	41.2
Falls	1,146	562	584	15.7	15.5	15.9
Accidental discharge of firearms	10†	*	*	0.1	**	**
Accidental drowning and submersion	115	83	32	1.6	2.3	0.9
Accidental exposure to smoke, fire and flames	57	31	26	0.8	0.9	0.7
Accidental poisoning	2,651	1,962	689	36.4	54.2	18.8
Other and unspecified non-transport accidents	516	340	176	7.1	9.4	4.8
Intentional self-harm (suicide)	1,470	1,179	291	20.2	32.6	7.9
By discharge of firearms	878	755	123	12.1	20.9	3.4
By other means	592	424	168	8.1	11.7	4.6
Assault (homicide)	561	459	102	7.7	12.7	2.8
By discharge of firearms	430	357	73	5.9	9.9	2.0
By other means	131	102	29	1.8	2.8	0.8
Legal intervention	30†	25	*	0.4	0.7	**
Events of undetermined intent	175	106	69	2.4	2.9	1.9
Discharge of firearms	22	14	8	0.3	0.4	0.2
Other and unspecified events of undetermined intent	153	92	61	2.1	2.5	1.7
Operations of war	0	0	0	0.0	0.0	0.0
Complications of medical and surgical care	143	74	69	2.0	2.0	1.9
Injury by firearms	1,364	1,155	209	18.7	31.9	5.7
Drug-induced deaths	2,858	2,057	801	39.2	56.9	21.8
Opioid-induced deaths	1,963	1,419	544	26.9	39.2	14.8
Alcohol-induced deaths	1,891	1,295	596	26.0	35.8	16.2

Notes: * Cell suppressed due to count less than 6; ** Cell suppressed due to rate/ratio/percent based on non-zero count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; ^a 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, 2011-2021

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
ALL FORMS OF HEART DISEASE		TOTAL	10,423	10,366	10,497	9,953	11,274	11,820	12,285	12,410	12,560	14,185	14,536
Male		5,748	5,731	5,910	5,575	6,286	6,702	6,973	7,030	7,129	8,097	8,386	
Female		4,675	4,635	4,587	4,378	4,988	5,118	5,312	5,380	5,431	6,088	6,150	
Acute rheumatic fever and chronic rheumatic heart disease		TOTAL	69	51	64	74	52	77	79	98	71	87	98
Male		22	19	17	26	20	33	27	41	31	31	42	
Female		47	32	47	48	32	44	52	57	40	56	56	
Hypertensive heart and renal disease		TOTAL	49	51	49	65	71	111	147	153	165	179	240
Male		22	28	27	31	36	56	73	81	77	82	121	
Female		27	23	22	34	35	55	74	72	88	97	119	
Ischemic heart disease		TOTAL	7,498	7,294	7,159	6,650	7,264	7,734	7,814	7,540	7,617	8,586	8,491
Male		4,409	4,279	4,259	3,957	4,391	4,703	4,829	4,670	4,642	5,295	5,325	
Female		3,089	3,015	2,900	2,693	2,873	3,031	2,985	2,870	2,975	3,291	3,166	
Hypertensive heart disease		TOTAL	739	761	943	991	1,118	1,114	1,122	1,400	1,409	1,619	1,943
Male		348	375	462	491	517	554	526	711	735	779	987	
Female		391	386	481	500	601	560	596	689	674	840	956	
Other heart diseases		TOTAL	2,069	2,209	2,282	2,173	2,769	2,784	3,123	3,219	3,298	3,714	3,764
Male		947	1,030	1,145	1,070	1,322	1,356	1,518	1,527	1,644	1,910	1,911	
Female		1,121	1,179	1,137	1,103	1,447	1,428	1,605	1,692	1,654	1,804	1,853	

TABLE 2B-8
NUMBER OF DEATHS FOR SELECTED SUBCATEGORIES OF MALIGNANT NEOPLASMS BY GENDER AND YEAR,
ARIZONA, 2011-2021

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
ALL CANCERS^a		TOTAL^b	10,543	10,871	11,193	10,600	11,624	11,801	11,917	12,097	12,485	12,671	12,810
	Male	5,639	5,932	5,950	5,731	6,263	6,429	6,493	6,675	6,740	6,821	6,825	
	Female	4,903	4,939	5,243	4,869	5,361	5,372	5,424	5,422	5,745	5,850	5,985	
ICD-9 140-149/ICD-10 C00-C14 - Malignant neoplasm of lip, oral cavity and pharynx (oropharyngeal cancer)	TOTAL	132	144	150	137	160	205	180	165	187	217	225	
	Male	105	106	101	98	109	157	128	127	141	154	167	
	Female	27	38	49	39	51	48	52	38	46	63	58	
ICD-9 150/ICD-10 C15 - Malignant neoplasm of esophagus	TOTAL	288	325	320	286	303	310	333	332	332	313	361	
	Male	232	260	257	230	249	246	273	271	270	263	301	
	Female	56	65	63	56	54	64	60	61	62	50	60	
ICD-9 151/ICD-10 C16 - Malignant neoplasm of stomach	TOTAL	211	204	202	186	211	226	203	236	226	215	233	
	Male	131	118	122	109	121	128	124	134	134	125	142	
	Female	80	86	80	77	90	98	79	102	92	90	91	
ICD-9 153, 154/ICD-10 C18-C21 - Malignant neoplasm of colon, rectum, rectosigmoid junction and anus	TOTAL	927	946	997	953	1,022	1,069	1,118	1,126	1,117	1,173	1,159	
	Male	482	523	510	510	568	591	639	641	621	602	638	
	Female	445	423	487	443	454	478	479	485	496	571	521	
ICD-9 157/ICD-10 C25 - Malignant neoplasm of pancreas	TOTAL	708	813	755	769	852	901	914	952	1,018	1,005	984	
	Male	355	450	392	400	461	494	484	513	541	545	531	
	Female	353	363	363	369	391	407	430	439	477	460	453	
ICD-9 162/ICD-10 C33-C34 - Malignant neoplasm of trachea, bronchus and lung	TOTAL	2,654	2,772	2,763	2,543	2,885	2,689	2,754	2,640	2,510	2,592	2,595	
	Male	1,474	1,512	1,485	1,385	1,533	1,452	1,487	1,436	1,315	1,336	1,348	
	Female	1,180	1,260	1,278	1,158	1,352	1,237	1,267	1,204	1,195	1,256	1,247	
ICD-9 172/ICD-10 C43 - Malignant melanoma of skin	TOTAL	187	216	222	215	213	191	190	209	206	212	218	
	Male	125	147	137	147	142	131	129	150	133	151	137	
	Female	62	69	85	68	71	60	61	59	73	61	81	
ICD-9 174,175/ICD-10 C50 - Malignant neoplasm of breast	TOTAL	747	740†	836	729	810†	853	834	815	911	894	972	
	Male	6	*	9	6	*	9	8	10	12	11	16	
	Female	741	740	827	723	809	844	826	805	899	883	956	

TABLE 2B-8 (continued)
NUMBER OF DEATHS FOR SELECTED SUBCATEGORIES OF MALIGNANT NEOPLASMS BY GENDER AND YEAR,
ARIZONA, 2011-2021

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
ICD-9 180/ICD-10 C53 - Malignant neoplasm of cervix uteri	TOTAL	72	73	86	75	84	82	78	78	84	74	100
Female	72	73	86	75	84	82	78	78	84	74	100	
ICD-9 179, 182/ ICD-10 C54-C55 - Malignant neoplasm of body of uterus and of uterus, part unspecified	TOTAL	159	131	140	176	180	168	200	180	203	212	233
Female	159	131	140	176	180	168	200	180	203	212	233	
ICD-9 185/ICD-10 C61 - Malignant neoplasm of prostate	TOTAL	574	581	570	572	633	697	659	695	734	795	779
Male	574	581	570	572	633	697	659	695	734	795	779	
ICD-9 188/ICD-10 C67 - Malignant neoplasm of bladder	TOTAL	355	316	293	305	355	367	362	358	362	416	418
Male	245	244	221	241	255	267	279	276	267	321	327	
Female	109	72	72	64	100	100	83	82	95	95	91	
ICD-9 189/ICD-10 C64-C65 - Malignant neoplasm of kidney and other and unspecified urinary organs	TOTAL	267	252	274	254	309	308	323	351	308	337	317
Male	178	171	179	177	224	205	208	250	202	242	215	
Female	89	81	95	77	85	103	115	101	106	95	91	
ICD-9 191, 192/ICD-10 C70-C72 - Malignant neoplasm of brain	TOTAL	275	337	325	339	323	340	339	366	379	390	395
Male	145	196	172	194	190	195	194	206	220	229	227	
Female	130	141	153	145	133	145	145	160	159	161	168	
ICD-9 201/ICD-10 81 - Hodgkin's disease	TOTAL	19	17	26	10†	30	22	29	22	22	20†	25
Male	9	8	16	10	21	10	15	12	14	13	14	
Female	10	9	10	*	9	12	14	10	8	*	11	
ICD-9 200, 202/ICD-10 C82-C85 - Malignant lymphoma other than Hodgkin's disease	TOTAL	392	372	416	371	397	399	388	398	409	452	433
Male	212	214	251	196	216	221	240	235	252	267	246	
Female	180	158	165	175	181	178	148	163	157	185	187	
ICD-9 203/ICD-10 C88, C90 - Multiple myeloma and immunoproliferative neoplasms	TOTAL	219	221	247	221	240	243	270	297	258	292	250
Male	133	128	129	133	139	149	162	181	150	162	147	
Female	86	93	118	88	101	94	108	116	108	130	103	
Other malignant neoplasms	TOTAL	2,357	2,409	2,571	2,455	2,613	2,731	2,743	2,877	3,219	1,564	1,612
Male	1,234	1,273	1,400	1,323	1,397	1,477	1,464	1,538	1,734	840	840	
Female	1,123	1,136	1,171	1,132	1,216	1,254	1,279	1,339	1,485	724	772	

Notes: * Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; ^a Includes other forms of cancer; ^b Total includes records with unknown gender.

TABLE 2B-9
**NUMBER OF DEATHS FROM UNINTENTIONAL INJURIES IN ACCIDENTS BY CATEGORY AND YEAR AMONG
ARIZONA RESIDENTS, 2011-2021**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total unintentional injury deaths	2,959	2,804	3,137	3,011	3,403	3,899	4,085	4,211	4,522	5,377	5,945
Railway accident	6	7	7	8	6	11	9	7	10	9	12
Motor vehicle accident	787	747	767	702	855	967	979	1,032	970	1,035	1,359
Water transport accident	*	*	*	0	*	*	7	7	*	*	*
Accident involving aircraft	21	13	9	*	7	10	17	10	13	14	18
Poisoning by drugs / medicaments	781	731	853	885	955	1,095	1,269	1,425	1,679	2,309	2,508
Poisoning by gases and vapors	102	86	112	94	105	153	105	120	118	174	143
Falls	776	782	870	881	1,014	1,103	1,076	1,090	1,109	1,127	1,146
Fire, flames, smoke	33	43	68	30	25	40	51	23	43	48	57
Excessive natural heat	57	51	56	32	43	99	108	94	118	210	194
Excessive natural cold	22	9	28	19	20	21	24	15	37	27	24
Contact with venomous snakes and lizards	0	*	0	0	0	0	*	*	0	0	*
Contact with venomous spiders	0	0	*	0	0	0	*	0	0	0	0
Contact with scorpions	0	0	*	0	0	0	0	0	0	0	*
Contact with hornets, wasps, bees	0	0	*	0	*	*	*	*	*	*	*
Bitten or struck by dog	*	*	*	0	*	*	*	0	*	*	*
Lightning	*	*	*	0	*	*	*	0	0	0	0
Storms and floods	0	0	0	0	0	0	12	*	*	0	*
Accidental drowning and submersion	86	83	72	78	81	105	106	92	100	99	115
Choked on food	34	38	29	33	34	33	38	40	38	38	42
Choked on other objects	44	44	57	56	53	38	39	40	31	48	
Mechanical suffocation	25	23	21	35	40	35	41	25	37	27	42
Accidental discharge of firearms	8	*	9	6	*	7	8	10	13	6	8
Exposure to electric current	6	0	6	*	*	10	*	*	8	*	
Overexertion	0	0	0	0	0	*	0	0	0	0	0
Adverse effects of drugs in therapeutic use	*	6	10	10	12	*	*	11	7	14	13
Misadventures to patients during medical/surgical care	45	42	46	32	20	43	96	103	108	113	130

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, 2011-2021

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
TOTAL	Total	787	747	767	702	855	967	979	1,032	970	1,035	1,359
	Male	562	541	541	492	605	693	691	729	692	747	954
	Female	225	206	226	210	250	274	288	303	278	288	405
Motorcyclist	Total	113	130	111	100	121	126	137	130	130†	154	189
	Male	96	113	98	93	106	118	122	114	130	139	172
	Female	17	17	13	7	15	8	15	16	*	15	17
Pedestrian	Total	153	128	152	138	160	218	245	251	227	235	307
	Male	111	88	105	100	115	150	161	171	166	166	209
	Female	42	40	47	38	45	68	84	80	61	69	98
Pedal cyclist	Total	20†	11	20†	20†	20†	30†	20†	20†	20†	30†	40†
	Male	16	11	19	15	15	18	24	18	18	23	34
	Female	*	0	*	*	*	*	*	*	*	*	*
Other person	Total	502	478	481	445	558	601	568	630	587	618	824
	Male	339	329	319	284	369	407	384	426	378	419	539
	Female	163	149	162	161	189	194	184	204	209	199	285

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, 2021**

Causes of death	TOTAL	IN HOSPITAL				NOT IN HOSPITAL		
		In-patient	Out-patient ^a	Status unknown	Subtotal	Nursing home ^b	Residence	Other ^c
TOTAL, ALL CAUSES	81,482	25,290	4,302	22	27,389	57,003	8,354	10,355
Diseases of heart	14,540†	3,058	1,149	*	5,931	10,140†	723	1,794
Coronary heart disease	10,430†	1,804	906	*	4,547	7,260†	465	1,260
Malignant neoplasms	12,810†	1,882	203	*	6,945	9,030†	1,714	1,026
Malignant neoplasm of trachea, bronchus and lung	2,600†	401	29	*	1,436	1,870†	303	212
Malignant neoplasm of colon, rectum, and anus	1,159	134	20	0	636	790	174	84
Malignant neoplasm of breast	972	127	19	0	498	644	136	103
Malignant neoplasm of prostate	779	65	12	0	479	556	87	68
Malignant neoplasm of cervix uteri	100†	16	*	0	51	70†	17	7
COVID-19	12,690†	9,724	376	*	1,207	11,310†	488	372
Accidents (unintentional injury)	5,950†	1,149	870	*	1,310	3,330†	290	168
Accidental drowning and submersion	3,520†	581	106	*	1,742	2,430†	249	463
Chronic lower respiratory diseases	3,319	853	71	0	904	1,828	488	617
Cerebrovascular diseases	2,754	36	10	0	932	978	113	960
Alzheimer's disease	2,560†	493	238	*	1,231	1,960†	174	217
Diabetes	1,772	774	42	0	514	1,330	240	113
Chronic liver disease and cirrhosis	1,470†	108	129	*	667	910†	9	*
Intentional self-harm (suicide)	1,200†	154	84	*	557	800†	85	179
Essential (primary) hypertension & hypertensive renal disease	933	693	41	0	79	813	47	50
Influenza and pneumonia	892	43	8	0	371	422	74	239
Parkinson's disease	871	314	36	0	301	651	47	98
Nephritis, nephrotic syndrome and nephrosis	560†	86	172	0	83	341	*	*
Assault (homicide)	511	408	21	0	20	449	35	18
Septicemia								62
Human immunodeficiency virus (HIV) disease		90†	44	8	0	22	74	9
Injury by firearms		1,360†	111	229	0	491	831	*
Drug-induced deaths		2,858	279	416	0	1,026	1,721	23
Opioid-induced deaths		1,960†	125	286	0	742	1,153	6
Alcohol-induced deaths		1,890†	554	81	*	698	1,330†	205

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



2C.

AGE-SPECIFIC MORTALITY

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

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

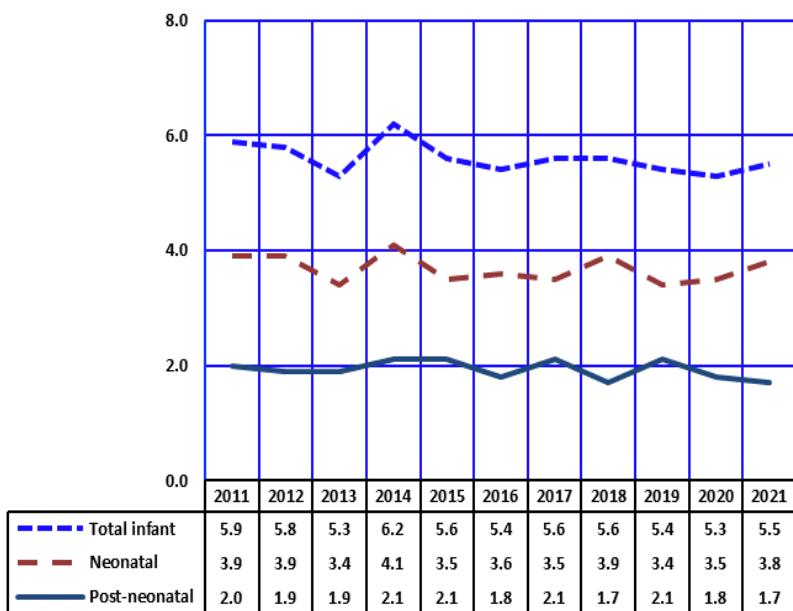
For each age group, cause-specific mortality is compared between urban (i.e., Maricopa, Pima, Pinal, and Yuma counties) and rural (all other counties) regions and between genders. Urban and rural regions also are compared in gender-specific total mortality.

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

2C.AGE-SPECIFIC MORTALITY

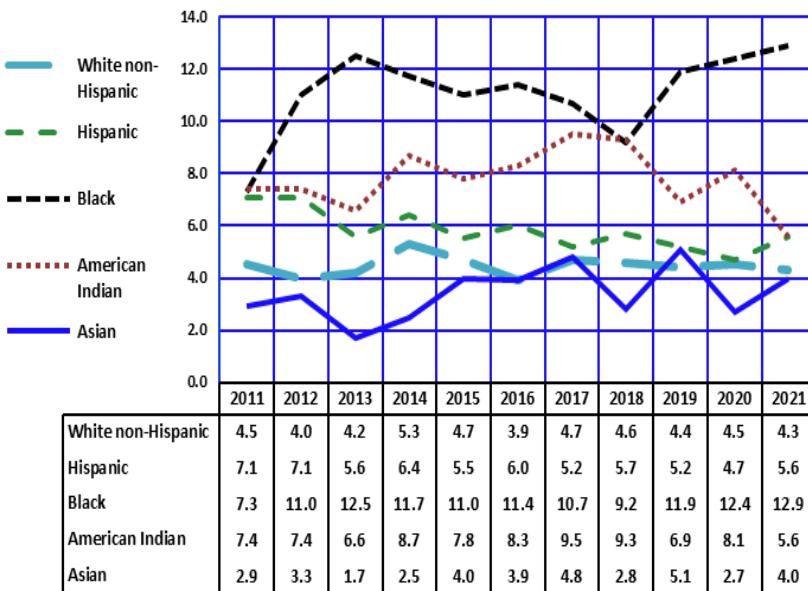
Infant mortality

Figure 2C-1
Infant Mortality Rates by Neonatal/Postneonatal Age and Year,
Arizona, 2011-2021



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

Figure 2C-2
Infant Mortality Rates^a by Race/Ethnicity and Year,
Arizona, 2011-2021



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

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

In 2021, 430 Arizona infants died before reaching their first birthday, 105 fewer than the latest peak of 535 infant deaths in 2014, and an increase of 26 deaths in comparison to 2020 (**Table 2C-2**).

Based on the actual number of infant deaths and live births in 2021, the infant mortality rate was slightly higher at 5.5 infant deaths per 1,000 live births in 2021 than in 2020 which had 5.3 infant deaths per 1,000 live births (**Figure 2C-1**).

In 2021, 95.3 percent (410/430)* 100 of all infant death records were successfully matched to their corresponding birth records.

The mortality risk for infants varies by race/ethnicity. During the 11-year period (2011-2021), infants born to Asian or Pacific Islander mothers witnessed the lowest mortality rates among all racial/ethnic groups for the most part (**Figure 2C-2, Table 2C-2**). The exception being 2017 and 2019, as the infant mortality for Whites was the lowest of all racial/ethnic groups.

In parallel, in each year from 2011 to 2021, Black or African American and American Indian infants had the worst survival chances among the racial/ethnic groups (**Figure 2C-2**).

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

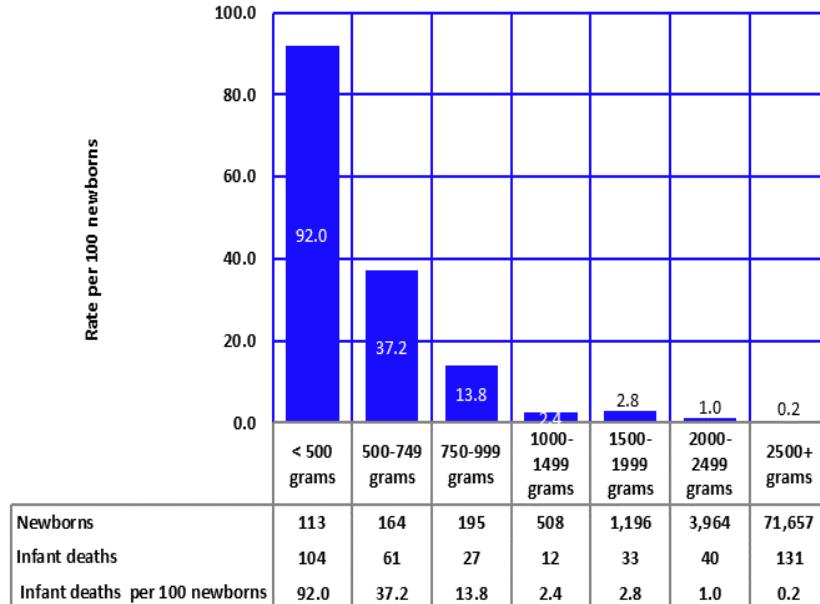
2C.AGE-SPECIFIC MORTALITY

Infant mortality

Figure 2C-3
Proportion of Infant Deaths by Birthweight, Arizona, 2021

Newborn weight at birth is one of the most important predictors of an infant's survival chances. In 2021, the mortality rate of very low birth weight babies (birthweight less than 500 grams) was 92.0 per 100 live births (**Figure 2C-3**).

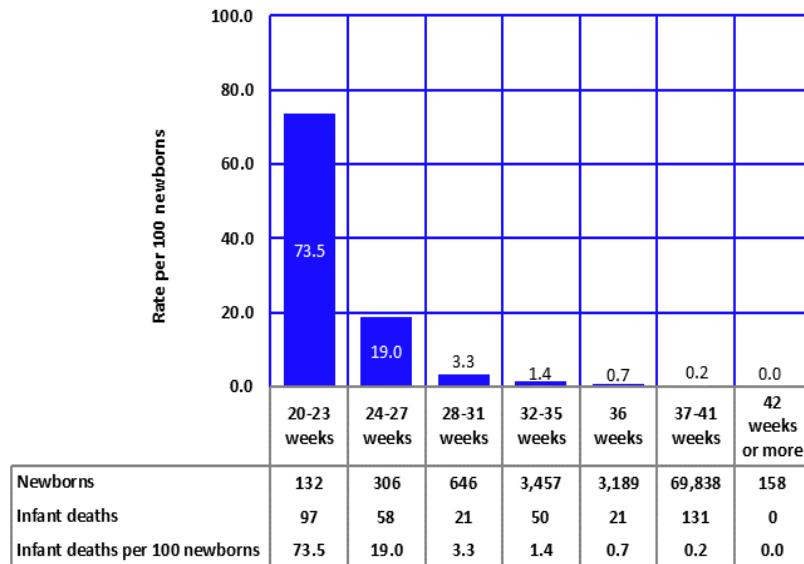
The absolute number of low birthweight births spiked in 2021 at 6,140 but remained lower than at its peak (n= 6,186) during the last 11 years, which occurred in 2016. The proportion of babies whose weight at birth was less than 1,000 grams decreased slightly from 7.8 percent of all low birthweight births in 2020 to 7.7 percent in 2021 (**Table 1B-3**).



Note: 60 cases in the complete 2021 birth file had missing birthweight estimates.

Figure 2C-4.1
Proportion of Infant Deaths by Gestational Age, Arizona, 2021

Similar to low birthweight infants, preterm and very preterm babies contribute greatly to the total infant mortality rate because of their higher risk of mortality. For example, in 2021 births occurring between 20-27 weeks of gestation accounted for only 0.6 percent of all births but 37.8 percent of infant deaths with a matching death record. Births at 20-23 weeks of gestation have a very high infant mortality rate of 73.5 per 100 live births (**Figure 2C-4**). Overall, in 2021 preterm infants (those born before 37 weeks of gestation) accounted for 10.0 percent of all births (**Table 1B-2**) and 60.2 percent of all infant deaths (only those with matching death records).

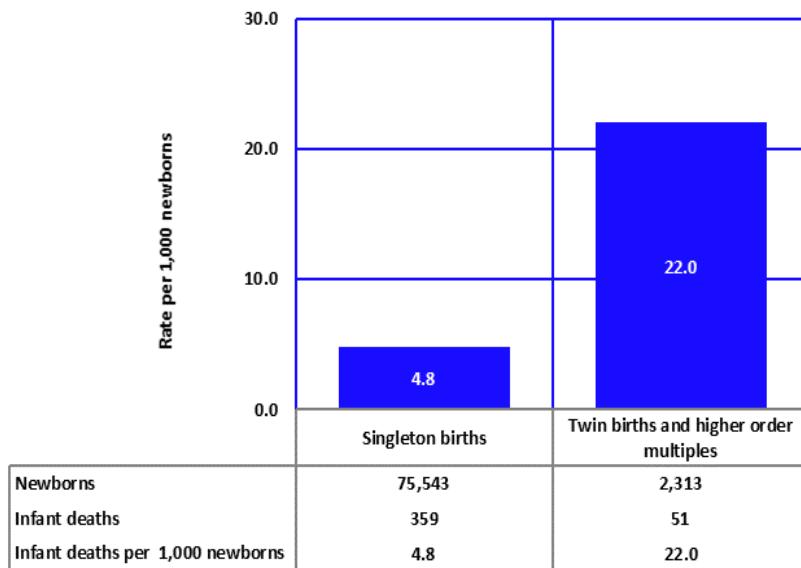


Note: 82 cases in the complete 2021 birth file had missing gestational age; one of which were missing in the linked infant death file.

2C. AGE-SPECIFIC MORTALITY

Infant mortality

Figure 2C-4.2
Infant Mortality Rates for Single and Multiple Births, Arizona, 2021



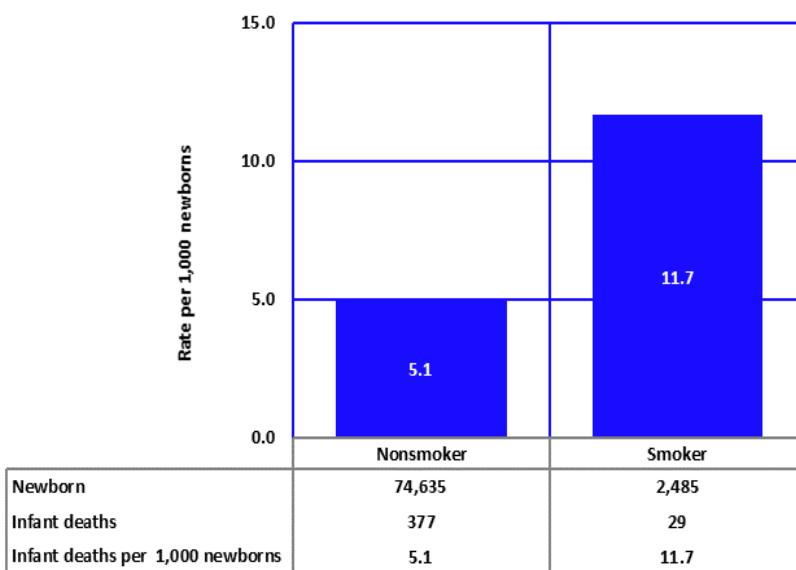
Note: 1 case in the complete 2021 birth file were missing plurality.

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 2021, infants born in multiple deliveries were 11.0 times more likely (47.0 vs. 4.3 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 4.8/1,000 live births in 2021 (**Figure 2C-4.2**). The infant mortality rate for twin births or higher order multiples (22.0/1,000 live births) was 4.6 times higher than the infant mortality for singleton births.

Babies born in multiple deliveries accounted for 3.0 percent of births (**Table 1B-16**), but 12.4 percent of all infant deaths in Arizona in 2021 (only those with matching birth and death records).

Figure 2C-4.3
Infant Mortality Rates by Mother's Smoking Status during Pregnancy, Arizona, 2021



Smoking during pregnancy has been shown to increase the risk of preterm delivery, low birth weight and infant mortality. In 2021, among the 2,485 mothers who smoked during pregnancy, the risk of infant mortality was 2.3 times higher than among nonsmoker mothers (**Figure 2C-4.3**).

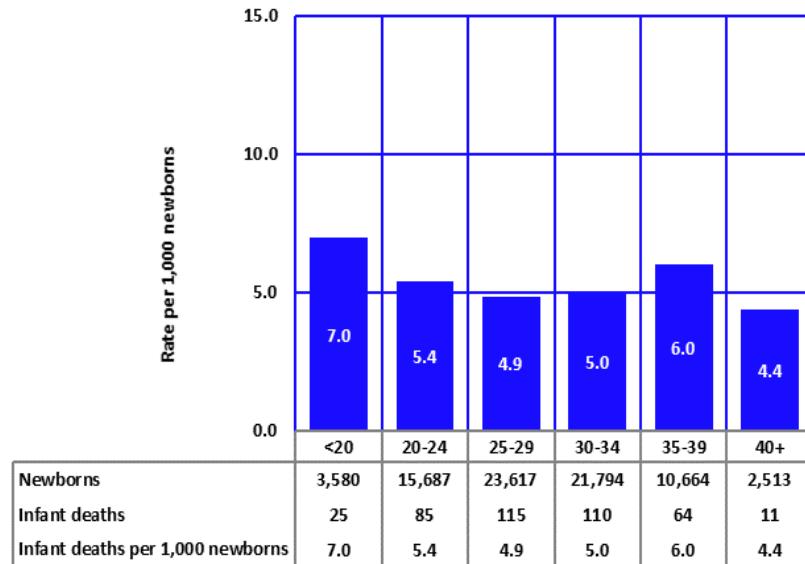
Note: 737 cases in the complete 2021 birth file were missing mothers' smoking status.

2C.AGE-SPECIFIC MORTALITY

Infant mortality

Figure 2C-4.4
Infant Mortality Rates by Mother's Age Group, Arizona, 2021

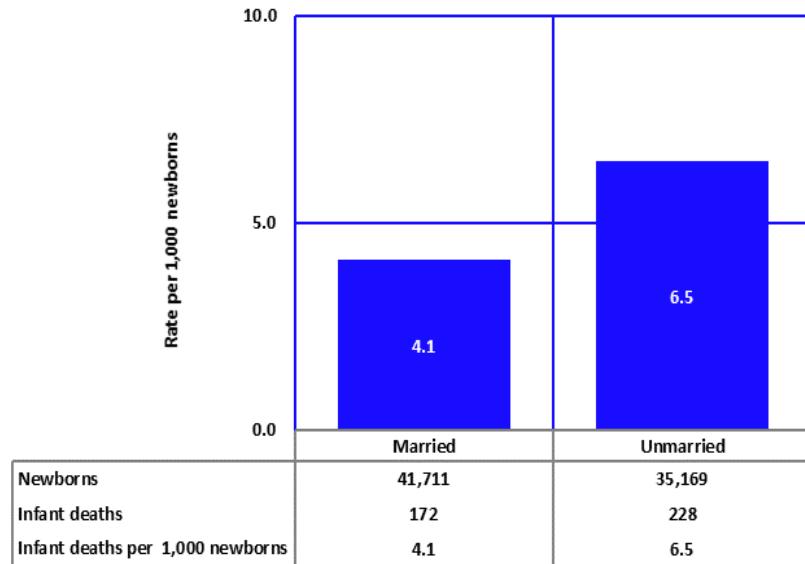
Infant mortality rates vary with maternal age. In 2021, infants born to younger mothers (less than 20 years) and older mothers (35-39 years) had the highest infant mortality rates of all age groups, 7.0/1,000 and 6.0/1,000 respectively (**Figure 2C-4.4**). For mothers aged 20 through 34 years and 40+ years, the infant mortality rates were consistently lower than 6 deaths/1,000.



Note: 2 cases in the complete 2021 birth file were missing mother's age.

Infants born to unmarried mothers accounted for the absolute majority of infant deaths in 2021 (228 infant deaths) compared to married mothers (172 infant deaths). In 2021, more children were born to married women (41,711) than their unmarried counterparts (35,169; **Table 1B-25**). Infants of unmarried mothers had an infant mortality rate of 6.5 deaths per 1,000 live births, 1.6 times higher than the rate for infants of married mothers (4.1 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, 2021



Note: 977 cases in the complete 2021 birth file were missing mother's marital status.

TABLE 2C-1
**INFANT, NEONATAL, AND POSTNEONATAL MORTALITY RATES AND PERCENT OF POSTNEONATAL DEATHS,
 UNITED STATES, ARIZONA AND URBAN/RURAL COUNTIES OF ARIZONA, 2011-2021**

UNITED STATES	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Infant mortality ^a	6.0	6.0	6.0	5.8	5.9	5.8	5.8	5.7	5.7	5.4	5.4
Neonatal mortality ^a	4.0	4.0	4.0	3.9	3.9	3.8	3.8	3.7	3.7	3.6	3.5
Postneonatal mortality ^a	2.0	2.0	1.8	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9
Percent postneonatal mortality ^b	33.3	33.3	33.3	31.0	32.2	34.5	32.8	33.3	33.9	34.3	35.8
ARIZONA, STATEWIDE TOTAL											
Infant mortality ^a	5.9	5.8	5.3	6.2	5.6	5.4	5.6	5.6	5.4	5.3	5.5
Neonatal mortality ^a	3.9	3.9	3.4	4.1	3.5	3.6	3.5	3.9	3.4	3.5	3.8
Postneonatal mortality ^a	2.0	1.9	1.9	2.1	2.1	1.8	2.1	1.7	2.1	1.8	1.7
Percent postneonatal mortality ^b	34.3	32.9	35.3	33.4	37.8	33.7	37.7	30.4	38.1	34.4	31.2
URBAN COUNTIES											
Infant mortality ^a	5.8	5.7	5.2	6.1	5.3	5.2	5.4	5.5	5.2	5.1	5.5
Neonatal mortality ^a	3.9	3.9	3.3	4.0	3.3	3.5	3.4	3.8	3.3	3.4	3.9
Postneonatal mortality ^a	1.9	1.9	1.8	2.1	2.0	1.7	2.0	1.6	2.0	1.7	1.6
Percent postneonatal mortality ^b	32.6	32.9	35.1	34.1	37.4	32.5	36.6	29.9	37.8	34.0	29.9
RURAL COUNTIES											
Infant mortality ^a	6.6	5.9	5.8	6.6	7.3	5.6	6.9	6.2	6.5	6.1	5.6
Neonatal mortality ^a	3.7	3.9	3.7	4.5	4.4	3.1	3.7	4.1	4.0	3.7	3.4
Postneonatal mortality ^a	2.9	2.0	2.2	2.1	3.0	2.4	3.2	2.1	2.5	2.3	2.2
Percent postneonatal mortality ^b	43.8	33.8	37.3	31.6	40.5	43.8	46.7	33.3	38.8	38.3	40.0

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

<http://www.cdc.gov/nchs/products/index.htm>

TABLE 2C-2
NUMBER AND RATES^a OF INFANT DEATHS BY RACE/ETHNICITY AND GENDER, ARIZONA, 2011-2021
NUMBER OF INFANT DEATHS

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
White non-Hispanic	Total	171	154	161	213	181	146	166	160	151	148	144
	Male	98	81	93	122	99	87	93	94	81	88	68
	Female	73	73	68	91	82	59	73	66	70	60	76
Hispanic or Latino	Total	229	236	185	216	189	203	173	187	170	149	181
	Male	122	138	97	108	94	111	98	110	99	84	102
	Female	107	98	88	108	95	92	74	76	71	65	79
Black or African American	Total	32	52	59	53	48	50	49	43	58	59	62
	Male	16	22	30	35	24	23	30	18	33	29	28
	Female	16	30	29	18	24	27	19	25	25	30	32
American Indian or Alaska Native	Total	43	41	36	45	39	42	46	44	31	33	22
	Male	15	22	19	24	21	22	23	20	19	16	13
	Female	28	19	17	21	18	20	23	23	12	17	9
Asian or Pacific Islander	Total	10†	10†	10†	10†	13	16	10†	10†	20†	10†	10†
	Male	8	8	*	*	6	*	7	10	*	13	7
	Female	*	*	*	*	9	6	6	*	*	*	*
All groups^b	Total	504	495	447	535	473	454	461	447	430	404	430
	Male	267	271	242	295	243	250	262	250	247	228	224
	Female	237	224	205	240	230	204	198	195	183	176	204

INFANT MORTALITY RATES

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
White non-Hispanic	Total	4.5	4.0	4.2	5.3	4.7	3.9	4.7	4.6	4.6	4.4	4.5
	Male	5.0	4.1	4.7	5.9	5.0	4.5	5.1	5.2	4.6	5.2	3.9
	Female	3.9	3.9	3.7	4.7	4.4	3.2	4.2	3.9	4.2	3.7	4.6
Hispanic or Latino	Total	7.1	7.1	5.6	6.4	5.5	6.0	5.2	5.7	5.2	4.7	5.6
	Male	7.3	8.1	5.7	6.2	5.4	6.4	5.8	6.5	6.0	5.2	6.2
	Female	6.8	6.1	5.5	6.6	5.6	5.5	4.5	4.7	4.4	4.2	5.0
Black or African American	Total	7.3	11.0	12.5	11.7	11.0	11.4	10.7	9.2	11.9	12.4	12.9
	Male	7.3	9.2	12.3	14.9	10.7	10.3	12.6	7.9	13.1	12.0	11.7
	Female	7.4	12.8	12.7	8.3	11.3	12.5	8.6	10.5	10.6	12.8	13.4
American Indian or Alaska Native	Total	7.4	7.4	6.6	8.7	7.8	8.3	9.5	9.3	6.9	8.1	5.6
	Male	5.1	7.8	6.7	9.4	8.3	8.7	9.2	8.2	8.3	7.6	6.5
	Female	9.7	6.9	6.4	8.1	7.3	8.0	9.8	10.2	5.5	8.6	4.7
Asian or Pacific Islander	Total	2.9	3.3	1.7	2.5	4.0	3.9	4.8	2.8	5.1	2.7	4.0
	Male	4.4	4.2	**	3.7	**	4.0	5.9	**	7.9	4.6	5.7
	Female	**	**	**	5.7	3.7	**	**	**	**	**	**
All groups^b	Total	5.9	5.8	5.3	6.2	5.6	5.4	5.6	5.6	5.4	5.3	5.5
	Male	6.1	6.2	5.5	6.6	5.6	5.8	6.3	6.1	5.8	5.6	5.6
	Female	5.7	5.4	5.0	5.7	5.5	4.9	4.9	5.0	4.7	4.7	5.4

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

TABLE 2C-3
NUMBER AND RATES^a OF INFANT DEATHS BY RACE/ETHNICITY AND AGE GROUP, 2011-2021
NUMBER OF INFANT DEATHS

	Total	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
White non-Hispanic	Total	171	154	161	213	181	146	166	160	151	148	144
	Neonatal	120	100	97	138	108	92	106	116	92	99	90
	Postneonatal	51	54	64	75	73	54	60	44	59	49	54
Hispanic or Latino	Total	229	236	185	216	189	203	173	187	170	149	181
	Neonatal	152	170	131	149	130	142	115	136	109	108	134
	Postneonatal	77	66	54	67	59	61	58	51	61	41	47
Black or African American	Total	32	52	59	53	48	50	49	43	58	59	62
	Neonatal	20	34	38	34	25	33	30	25	37	36	44
	Postneonatal	12	18	21	19	23	17	19	18	21	23	18
American Indian or Alaska Native	Total	43	41	36	45	39	42	46	44	31	33	22
	Neonatal	19	21	20	26	16	21	20	25	14	13	12
	Postneonatal	24	20	16	19	23	21	26	19	17	20	10
Asian or Pacific Islander	Total	10	10†	10†	10†	13	16	10†	20†	10†	10†	10†
	Neonatal	10	7	*	7	12	13	7	*	11	*	9
	Postneonatal	0	*	*	*	*	0	9	*	*	*	*
All groups^b	Total	504	495	447	535	473	454	461	447	430	404	430
	Neonatal	331	332	289	354	294	301	287	311	266	265	296
	Postneonatal	173	163	158	181	179	153	174	136	164	139	134

		INFANT MORTALITY RATES										
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
White non-Hispanic	Total	4.5	4.0	4.2	5.3	4.7	3.9	4.7	4.6	4.4	4.5	4.3
	Neonatal	3.1	2.6	2.5	3.4	2.8	2.4	3.0	3.3	2.7	3.0	2.7
	Postneonatal	1.3	1.4	1.7	1.9	1.4	1.7	1.3	1.7	1.5	1.6	1.6
Hispanic or Latino	Total	7.1	7.1	5.6	6.4	5.5	6.0	5.2	5.7	5.2	4.7	5.6
	Neonatal	4.7	5.1	4.0	4.4	3.8	4.2	3.5	4.1	3.3	3.4	4.2
	Postneonatal	2.4	2.0	1.6	2.0	1.7	1.8	1.7	1.5	1.9	1.3	1.5
Black or African American	Total	7.3	11.0	12.5	11.7	11.0	11.4	10.7	9.2	11.9	12.4	12.9
	Neonatal	4.6	7.2	8.0	7.5	5.7	7.5	6.5	5.4	7.6	7.6	9.2
	Postneonatal	2.7	3.8	4.4	4.2	5.3	3.9	4.1	3.9	4.3	4.8	3.8
American Indian or Alaska Native	Total	7.4	7.4	6.6	8.7	7.8	8.3	9.5	9.3	6.9	8.1	5.6
	Neonatal	3.3	3.8	3.7	5.1	3.2	4.2	4.1	5.3	3.1	3.2	3.1
	Postneonatal	4.1	3.6	2.9	3.7	4.6	4.2	5.3	4.0	3.8	4.9	2.6
Asian or Pacific Islander	Total	2.9	3.3	1.7	2.5	4.0	3.9	4.8	2.8	5.1	2.7	4.0
	Neonatal	2.9	1.9	**	2.2	3.7	3.9	2.1	**	3.5	**	3.0
	Postneonatal	0.0	**	**	**	0.0	0.0	2.7	**	**	**	**
All groups^b	Total	5.9	5.8	5.3	6.2	5.6	5.4	5.6	5.6	5.4	5.3	5.5
	Neonatal	3.9	3.9	3.4	4.1	3.5	3.6	3.5	3.9	3.4	3.5	3.8
	Postneonatal	2.0	1.9	1.9	2.1	2.1	1.8	2.1	1.7	2.1	1.8	1.7

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

TABLE 2C-4
**NEONATAL, POSTNEONATAL, AND TOTAL INFANT MORTALITY BY CHILD'S GENDER AND MOTHER'S RACE/ETHNICITY,
ARIZONA, 2021**

		NUMBER OF DEATHS BY AGE			MORTALITY RATES ^a		
		Total	Neonatal	Postneonatal	Total	Neonatal	Postneonatal
TOTAL, ALL GROUPS		430	296	134	5.5	3.8	1.7
Male		224	162	62	5.6	4.1	1.6
Female		204	132	72	5.4	3.5	1.9
White non-Hispanic		144	90	54	4.3	2.7	1.6
Male		68	45	23	3.9	2.6	1.3
Female		76	45	31	4.6	2.7	1.9
Hispanic or Latino		181	134	47	5.6	4.2	1.5
Male		102	80	22	6.2	4.9	1.3
Female		79	54	25	5.0	3.4	1.6
Black or African American		62	44	18	12.9	9.2	3.8
Male		28	20	8	11.7	8.3	3.3
Female		32	22	10	13.4	9.2	4.2
American Indian or Alaska Native		22	12	10	5.6	3.1	2.6
Male		13	7	6	6.5	3.5	3.0
Female		10†	*	*	4.7	**	**
Asian or Pacific Islander		10†	9	*	4.0	3.0	*
Male		10†	7	*	5.7	4.4	*
Female		0†	*	*	**	**	**

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

TABLE 2C-5
NUMBER OF DEATHS FOR SELECTED LEADING CAUSES OF INFANT MORTALITY^a BY YEAR, ARIZONA, 2011-2021

Causes of death	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Congenital malformations, deformations and chromosomal abnormalities	107	118	101	121	117	105	92	122	103	87	94
of brain, spinal cord or nervous system	13	19	13	24	20	14	18	17	12	12	14
of respiratory system	*	6	*	*	8	7	*	13	13	6	*
Short gestation and low birth weight	60	62	56	63	53	55	64	73	54	73	88
Maternal complications	33	46	28	39	39	28	31	21	23	20	17
Accidents (unintentional injuries)	23	16	14	27	29	16	23	13	20	17	31
Sudden infant death syndrome	25	13	14	13	15	7	14	14	17	13	13
Respiratory distress syndrome	*	*	*	*	*	*	6	*	*	8	8
Intrauterine hypoxia or birth asphyxia	11	*	6	9	*	6	11	*	6	11	7
Assault (homicide)	6	*	*	6	*	*	10	*	8	*	*
Influenza and pneumonia	*	*	*	*	*	*	*	*	*	*	*
COVID-19[‡]	-	-	-	-	-	-	-	-	-	0	*
Total, all causes	504	495	447	535	473	454	461	447	430	404	430

Notes: * Cell suppressed due to count less than 6; ^a Leading causes of infant mortality are based on the list of 130 causes of infant death according to the Tenth Revision, International Classification of Diseases (ICD-10); [‡] The COVID-19 data collection began in mid-March 2020.

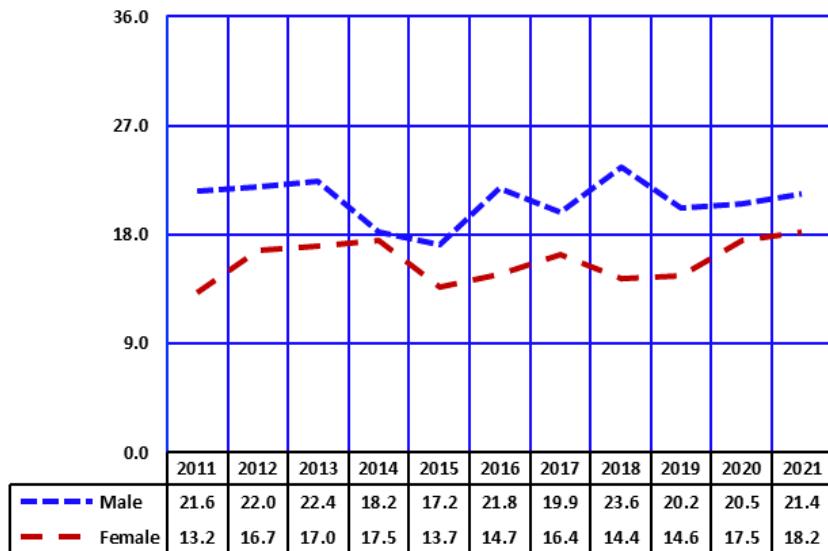
TABLE 2C-6
INFANT MORTALITY RATES^a FOR SELECTED LEADING CAUSES OF DEATH BY YEAR, ARIZONA, 2011-2021

Causes of death	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Congenital malformations, deformations and chromosomal abnormalities	1.3	1.4	1.2	1.4	1.4	1.2	1.1	1.5	1.3	1.1	1.2
of brain, spinal cord or nervous system	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
of respiratory system	**	0.1	**	**	0.1	0.1	**	0.2	0.2	0.1	**
short gestation and low birth weight	0.7	0.7	0.7	0.7	0.6	0.7	0.8	0.9	0.7	1.0	1.1
Maternal complications	0.4	0.5	0.3	0.5	0.5	0.3	0.4	0.3	0.3	0.3	0.2
Accidents (unintentional injuries)	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.4
Sudden infant death syndrome	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2
Respiratory distress syndrome	**	**	**	**	**	**	0.1	**	**	0.1	0.1
Intrauterine hypoxia or birth asphyxia	0.1	**	0.1	0.1	**	0.1	0.1	**	0.1	0.1	0.1
Assault (homicide)	0.1	**	**	0.1	**	**	0.1	**	0.1	**	**
Influenza and pneumonia	**	**	**	**	**	**	**	**	**	**	**
COVID-19[‡]	-	-	-	-	-	-	-	-	-	0.0	**
Total, all causes	5.9	5.8	5.3	6.2	5.6	5.4	5.6	5.6	5.4	5.3	5.5

Notes: ** Cell suppressed due to rate/ratio/percent based on non-zero count less than 6; ^a Number of infant deaths per 1,000 live births; leading causes of infant mortality are based on the list of 130 causes of infant death according to the Tenth Revision, International Classification of Diseases (ICD-10); [‡] The COVID-19 data collection began in mid-March 2020.

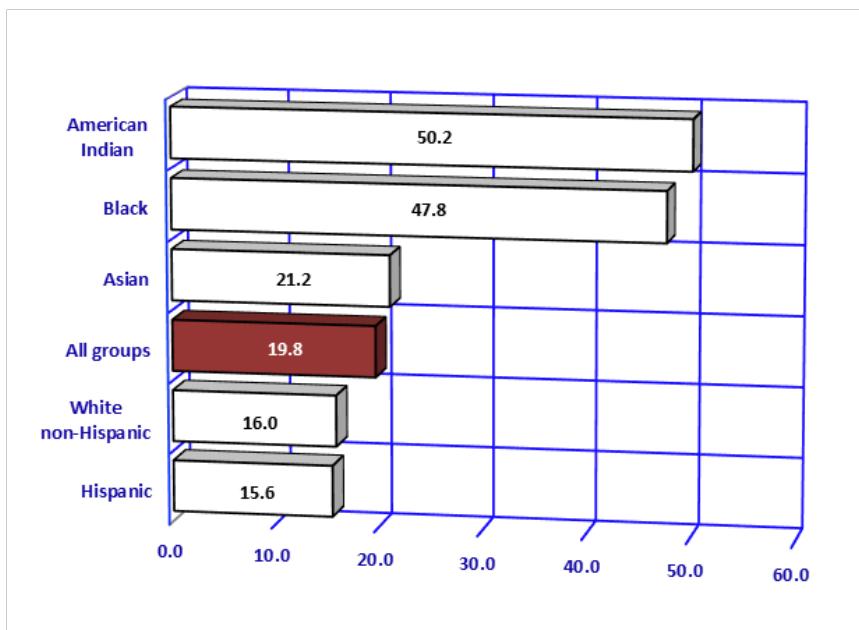
2C.AGE-SPECIFIC MORTALITY Childhood mortality (ages 1-14 years)

Figure 2C-5
**Mortality Rates^a by Gender and Year among Children 1-14 Years,
Arizona, 2011-2021**



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

Figure 2C-6
**Mortality Rates^a by Race/Ethnicity among Children 1-14 Years,
Arizona, 2021**



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

In 2021, a total of 249 deaths were recorded among 1,256,232 children aged 1-14 years residing in Arizona. The 2021 childhood mortality rate was 19.8 per 100,000, representing an increase from 19.1 the rate recorded in 2020 (**Table 2C-7**). Between 2020 and 2021 the mortality rate for male and female children witnessed a slight increase (**Figure 2C-5, Table 2C-7**).

The five causes with the greatest mortality rates in childhood from 2011-2021 were *accidents* (unintentional injuries), *malignant neoplasms*, *congenital malformations*, *suicide*, and *homicide* (**Table 2C-7**).

American Indian children had the highest total mortality rate (50.2 deaths per 100,000) in 2021, followed by Black or African American children (47.8/100,000; and Asian children (21.2/100,000 **Figure 2C-6**). The mortality rates of White non-Hispanic and Hispanic or Latino children were lower than the average rate for all groups.

It is important to note that the mortality rate of Asians is based on a very low death count ($n=10$) (**Table 2C-10**) thus not statistically reliable.

In 2021, there were 17 children who died from congenital anomalies and 16 by means of suicide among this age group (**Table 2C-10**).

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

Figure 2C-7
**Mortality Rates^a by Urban/Rural Area^b and Year among Children 1-14 Years,
Arizona, 2011-2021**

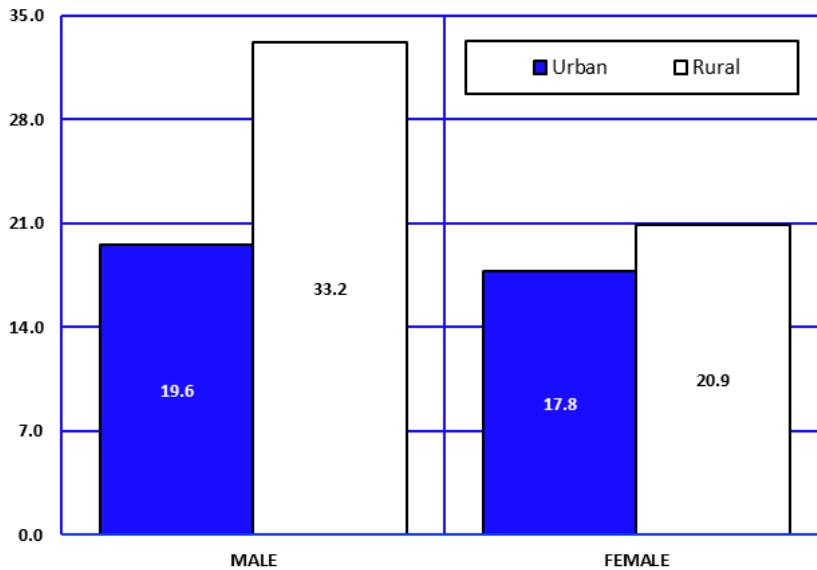


From 2020 to 2021, mortality rates increased for both rural and urban children (**Figure 2C-7, Table 2C-8**). Between 2011 and 2021, urban childhood mortality rates have been lower than rural childhood mortality rates in each year during the 11-year period.

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

Figure 2C-8
**Mortality Rates^a by Gender in Urban/Rural^b Areas
among Children 1-14 Years, Arizona, 2021**

The overall mortality rate among children 1-14 years residing in Arizona was higher for males in rural areas compared to urban with 33.2 deaths per 100,000 persons aged 1-14 years in rural areas versus 19.6 deaths per 100,000 persons aged 1-14 years in urban areas. Similarly, the mortality rate for females 1-14 years was 20.9 deaths per 100,000 persons aged 1-14 years in rural areas compared to 17.8 deaths per 100,000 persons aged 1-14 years in rural areas.



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

TABLE 2C-7
MORTALITY RATES^a FOR THE SELECTED FIVE LEADING CAUSES^b OF DEATH AMONG CHILDREN (1-14 YEARS)
BY GENDER, ARIZONA, 2011-2021

Gender/Cause	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change from 2011
MALE												
Accidents (unintentional injuries)	9.6	7.4	8.6	6.5	5.7	7.0	6.8	8.4	5.0	6.7	7.5	-21.9
Motor vehicle accidents	4.0	3.5	4.5	2.5	2.0	4.0	2.9	3.2	2.9	3.4	3.0	-25.0
Drowning	2.6	2.2	1.8	2.2	1.9	2.3	2.3	3.2	0.8	2.2	2.5	-3.8
Other	3.1	1.7	2.3	1.9	1.9	0.6	1.5	2.0	1.4	1.1	2.0	-35.5
Malignant neoplasms	1.7	2.8	2.5	1.7	1.7	1.6	2.3	2.3	3.1	2.0	1.9	11.8
Assault (homicide)	0.9	0.9	1.4	0.9	1.2	0.9	0.6	0.5	1.8	1.7	1.4	55.6
Intentional self-harm (suicide)	1.1	1.1	0.6	1.1	1.1	0.8	1.7	2.0	1.4	1.7	1.2	9.1
Congenital malformations	1.7	1.8	0.9	0.9	0.9	1.1	0.9	1.2	1.5	1.1	1.2	-29.4
ALL CAUSES	21.6	22.0	22.4	18.2	17.2	21.8	19.9	23.6	20.2	20.5	21.4	-0.9
(Number of all deaths)	(141)	(143)	(146)	(118)	(111)	(140)	(129)	(154)	(132)	(132)	(137)	(-2.8)
FEMALE												
Accidents (unintentional injuries)	3.2	3.7	4.5	3.7	4.3	4.5	5.1	3.3	4.1	5.3	7.0	118.8
Motor vehicle accidents	1.1	1.8	2.6	2.6	1.9	2.7	2.2	2.4	2.1	2.9	2.9	163.6
Drowning	1.3	0.8	1.3	0.5	0.6	0.8	1.3	0.5	0.6	1.0	2.1	61.5
Other	0.8	1.1	0.6	0.6	1.8	1.0	1.6	0.5	1.4	1.5	1.9	137.5
Malignant neoplasms	2.4	2.4	2.1	2.9	0.5	1.3	2.4	2.6	2.1	1.9	1.8	-25.0
Congenital malformations	1.0	2.3	2.4	1.3	2.1	0.6	1.1	1.3	1.0	1.8	1.5	50.0
Assault (homicide)	1.3	1.1	1.6	1.3	1.3	1.3	1.0	1.3	1.1	1.3	0.8	-38.5
Influenza and pneumonia	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	-33.3
ALL CAUSES	13.2	16.7	17.0	17.5	13.7	14.7	16.4	14.4	14.6	17.5	18.2	37.9
(Number of all deaths)	(83)	(104)	(106)	(109)	(85)	(91)	(102)	(90)	(92)	(108)	(112)	34.9
TOTAL												
Accidents (unintentional injuries)	6.5	5.6	6.6	5.1	5.0	5.8	6.0	5.9	4.6	6.0	7.2	10.8
Motor vehicle accidents	2.6	2.7	3.5	2.5	2.0	3.4	2.6	2.8	2.5	3.2	2.9	11.5
Drowning	2.0	1.5	1.6	1.3	1.3	1.6	1.8	1.9	0.7	1.6	2.3	15.0
Other	2.0	1.4	1.5	1.3	1.8	0.8	1.6	1.3	1.4	1.3	2.0	0.0
Malignant neoplasms	2.0	2.6	2.3	2.3	1.1	1.4	2.4	2.4	2.6	2.0	1.8	-10.0
Congenital malformations	1.3	2.0	1.6	1.1	1.5	0.9	1.0	1.3	1.2	1.4	1.4	7.7
Intentional self-harm (suicide)	0.9	0.6	0.6	0.9	0.9	0.7	1.3	1.3	1.2	1.3	1.3	44.4
Assault (homicide)	1.1	1.0	1.5	1.1	1.3	1.1	0.8	0.9	1.5	1.5	1.1	0.0
ALL CAUSES	17.5	19.4	19.8	17.9	15.4	18.3	18.2	19.1	17.5	19.1	19.8	13.1
(Number of all deaths)	(224)	(247)	(252)	(227)	(196)	(231)	(244)	(231)	(244)	(240)	(249)	11.2

Notes: ^a Number of deaths per 100,000 children 1-14 years old; ^b The five causes with the greatest number of deaths over the 2011-2021 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 2011-2021 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**; although COVID-19 was among the 5 leading causes of death, it has been excluded in this table because the ICD-10 definition had not been identified until 2020, thus there is no data for years 2011-2019 and making it impossible to show a trend and a percent change.

TABLE 2C-8
MORTALITY RATES^a FOR THE SELECTED FIVE LEADING CAUSES^b OF DEATH AMONG CHILDREN (1-14 YEARS)
IN URBAN AND RURAL AREAS^c, ARIZONA, 2011-2021

Area/Cause	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change from 2011
URBAN												
Accidents (unintentional injuries)	5.7	4.7	5.5	4.5	4.3	5.0	5.8	5.4	4.1	6.0	6.3	10.5
Drowning	2.2	1.5	1.8	1.4	1.2	1.8	2.1	2.0	0.7	1.8	2.3	4.5
Motor vehicle accidents	1.7	1.9	2.6	2.0	1.7	2.6	2.1	2.1	2.1	2.7	2.2	29.4
Other	1.7	1.3	1.1	1.1	1.4	0.6	1.6	1.4	1.3	1.5	1.8	5.9
Malignant neoplasms	2.1	2.6	2.4	2.3	1.1	1.4	2.5	2.5	2.5	2.0	1.8	-14.3
Congenital malformations	1.3	2.1	1.8	1.0	1.5	0.9	1.0	1.4	1.3	1.6	1.3	0.0
Assault (homicide)	1.2	0.9	1.5	1.0	1.2	1.1	0.6	0.7	1.6	1.3	1.3	8.3
Diseases of heart	0.4	0.6	0.3	0.3	0.3	0.5	0.2	0.5	0.3	0.5	0.4	0.0
ALL CAUSES	16.6	17.7	18.3	16.5	14.5	17.1	17.5	17.6	16.6	18.2	18.7	12.7
(Number of all deaths)	(182)	(192)	(200)	(180)	(158)	(186)	(192)	(194)	(184)	(199)	(204)	(12.1)
RURAL												
Accidents (unintentional injuries)	11.3	10.9	12.6	8.9	9.5	10.8	6.8	8.5	8.0	6.0	13.3	17.7
Motor vehicle accidents	7.5	7.1	8.7	5.5	3.3	8.5	5.1	7.4	5.1	6.0	7.9	5.3
Other	3.2	2.2	3.8	2.2	4.5	2.3	1.7	0.0	2.3	0.0	3.0	-6.3
Drowning	0.5	1.6	0.0	1.1	1.7	0.0	0.0	1.1	0.6	0.0	2.4	380.0
Intentional self-harm (suicide)	0.5	1.1	1.6	2.2	2.8	1.7	4.0	3.4	2.3	3.0	3.0	500.0
Malignant neoplasms	1.6	2.2	1.6	2.2	1.1	1.7	1.7	1.7	2.8	1.8	1.8	12.5
Congenital malformations	1.6	1.6	0.5	1.7	1.7	0.6	1.1	0.0	1.1	0.6	1.8	12.5
Assault (homicide)	0.5	1.6	1.6	1.7	1.7	1.1	1.7	1.7	0.6	3.0	0.0	-100.0
ALL CAUSES	22.6	28.9	27.9	26.0	21.2	24.9	21.6	27.3	22.8	24.5	27.2	20.4
(Number of all deaths)	(42)	(53)	(51)	(47)	(38)	(44)	(38)	(48)	(40)	(41)	(45)	7.1
TOTAL												
Accidents (unintentional injuries)	6.5	5.6	6.6	5.1	5.0	5.8	6.0	5.9	4.6	6.0	7.2	10.8
Motor vehicle accidents	2.6	2.7	3.5	2.5	2.0	3.4	2.6	2.8	2.5	3.2	2.9	11.5
Drowning	2.0	1.5	1.6	1.3	1.3	1.6	1.8	1.9	0.7	1.6	2.3	15.0
Other	2.0	1.4	1.5	1.3	1.8	0.8	1.6	1.3	1.4	1.3	2.0	0.0
Malignant neoplasms	2.0	2.6	2.3	2.3	1.1	1.4	2.4	2.4	2.6	2.0	1.8	-10.0
Congenital malformations	1.3	2.0	1.6	1.1	1.5	0.9	1.0	1.3	1.2	1.4	1.4	7.7
Intentional self-harm (suicide)	0.9	0.6	0.6	0.9	0.9	0.7	1.3	1.3	1.2	1.3	1.3	44.4
Assault (homicide)	1.1	1.0	1.5	1.1	1.3	1.1	0.8	0.9	1.5	1.5	1.1	0.0
ALL CAUSES	17.5	19.4	19.8	17.9	15.4	18.3	18.2	19.1	17.5	19.1	19.8	13.1
(Number of all deaths)	(224)	(247)	(252)	(227)	(196)	(231)	(244)	(224)	(240)	(249)	(249)	11.2

Notes: ^a Number of deaths per 100,000 children 1-14 years old; ^b The five causes with the greatest number of deaths over the 2011-2021 period; ^c Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; see **Technical Notes** for more information; records with unknown county of residence are included in the statewide totals, but are not distributed by urban/rural area; the cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10); the causes of death for 2011-2021 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**; although COVID-19 was among the 5 leading causes of death, it has been excluded in this table because the ICD-10 definition had not been identified until 2020, thus there is no data for years 2011-2019 and making it impossible to show a trend and a percent change.

TABLE 2C-9
**MORTALITY RATES^a FOR THE SELECTED FIVE LEADING CAUSES OF DEATH AMONG CHILDREN (1-14 YEARS)
 BY GENDER IN URBAN AND RURAL AREAS^b, ARIZONA, 2011-2021**

Area/Gender	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change from 2011
URBAN												
Male	20.8	20.0	21.3	16.2	16.2	19.9	18.4	22.2	19.6	19.4	19.6	-5.8
Female	12.3	15.2	15.2	16.8	12.7	14.3	16.6	12.8	13.5	17.0	17.8	44.7
TOTAL	16.6	17.7	18.3	16.5	14.5	17.1	17.5	17.6	16.6	18.2	18.7	12.7
RURAL												
Male	26.4	32.1	29.0	30.5	23.1	33.5	27.9	32.5	23.5	28.2	33.2	25.8
Female	18.7	25.5	26.6	21.3	19.3	16.1	15.0	21.9	22.1	20.7	20.9	11.8
TOTAL	22.6	28.9	27.9	26.0	21.2	24.9	21.6	27.3	22.8	24.5	27.2	20.4
TOTAL												
Male	21.6	22.0	22.4	18.2	17.2	21.8	19.9	23.6	20.2	20.5	21.4	-0.9
Female	13.2	16.7	17.0	17.5	13.7	14.7	16.4	14.4	14.6	17.5	18.2	37.9
TOTAL	17.5	19.4	19.8	17.9	15.4	18.3	18.2	19.1	17.5	19.1	19.8	13.1

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

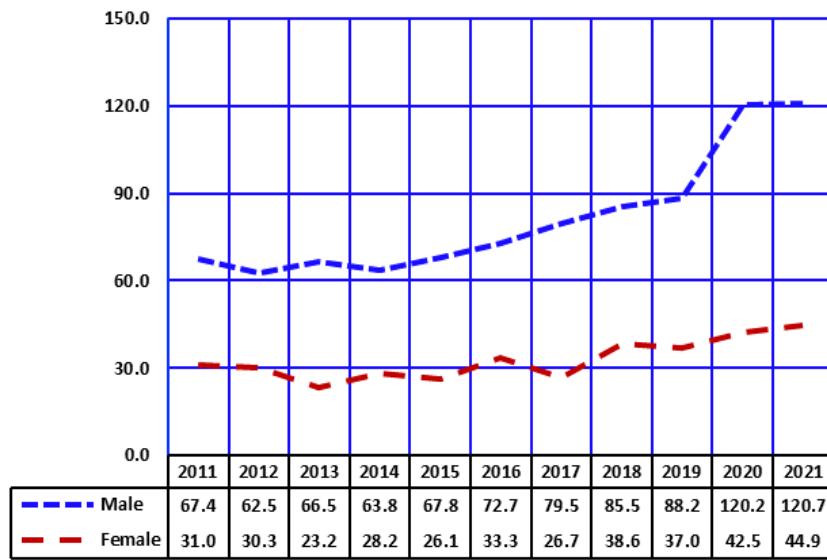
**TABLE 2C-10
LEADING CAUSES OF DEATH AMONG CHILDREN (1-14 YEARS) BY GENDER, AREA, AND RACE/ETHNICITY, ARIZONA, 2021**

Cause of death	Gender	Area ^a	Race/ethnicity				
			Total	Male	Female	Urban	Rural
Accidents (unintentional injury)			90†	48	43	69	22
Motor vehicle accidents			40†	19	18	24	13
Accidental drowning and submersion			30†	16	13	25	*
Malignant neoplasms			20†	12	11	20	*
Leukemia			10†	*	*	*	*
Congenital malformations			20†	8	9	14	*
Intentional self-harm (suicide)			20†	8	8	11	*
Assault (homicide)			10†	9	*	14	0
By other means			10†	6	*	9	0
By discharge of firearms			10†	*	*	0	*
COVID-19			10†	*	7	0	*
Influenza and pneumonia			0†	*	0	*	*
Chronic lower respiratory diseases			0†	*	0	0	*
Asthma			0†	*	0	0	*
Total, all causes			249	137	112	204	45

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

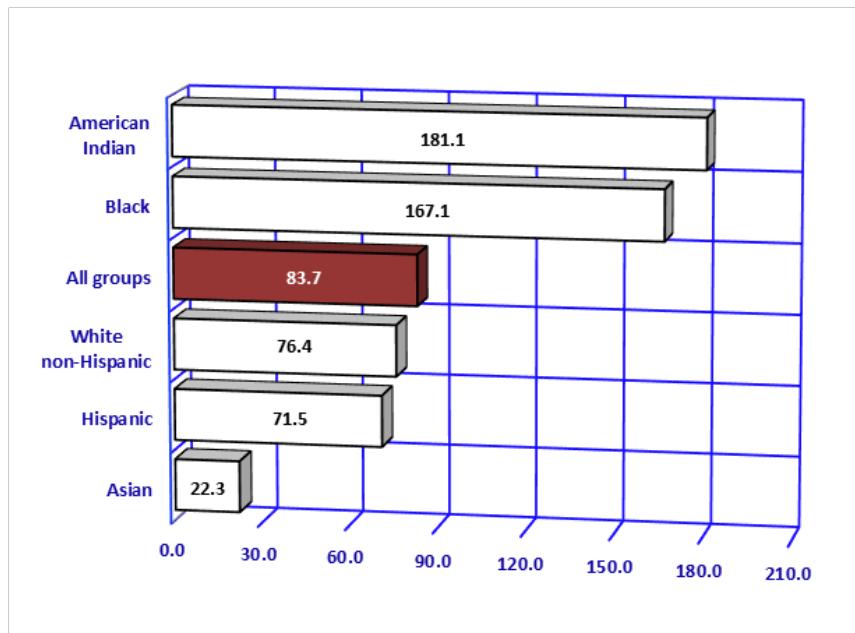
2C.AGE-SPECIFIC MORTALITY Adolescent mortality (ages 15-19 years)

Figure 2C-9
**Mortality Rates^a by Gender and Year among Adolescents 15-19 Years,
Arizona, 2011-2021**



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

Figure 2C-10
**Mortality Rates^a by Race/Ethnicity among Adolescents 15-19 Years,
Arizona, 2021**



Note: ^a 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 2021, an estimated 473,400 adolescents resided in Arizona, comprising 6.5 percent of the State's population (**Table 10A-1**). The lives of 396 resident adolescents prematurely ended in 2021, resulting in a total mortality rate of 83.7 deaths per 100,000 adolescents. This mortality rate was 68.4 percent higher than the 2011 rate (**Table 2C-11**).

The likelihood of dying was approximately 2.69 times higher for adolescent boys than for adolescent girls in 2021 (**Figure 2C-9, Table 2C-11**).

The five causes with the greatest number of deaths over the 2011-2021 period were *unintentional injuries in accidents, suicide, homicide, malignant neoplasms, and diseases of heart* (**Table 2C-14**).

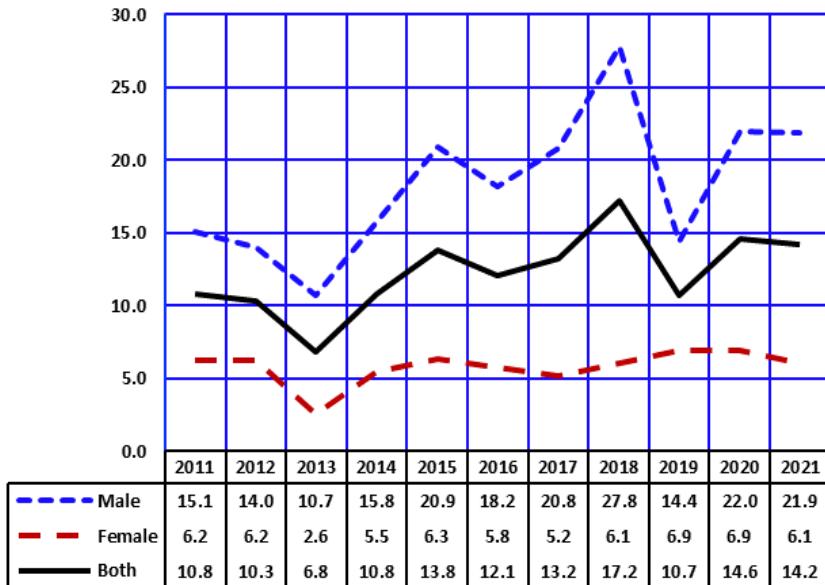
In 2021, adolescents who were Asian, Hispanic, or White had greater survival chances than the state average for all adolescents. American Indian had the lowest survival chances of all racial/ethnic groups (**Figure 2C-10**).

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

Figure 2C-11
**Suicide Rates^a by Gender and Year among Adolescents 15-19 Years,
Arizona, 2011-2021**

In 2021, sixty-seven suicide deaths were recorded among Arizonans age 15-19 years, a decrease from 69 recorded in 2020 (**Table 2C-14**). In 2021, as in prior years, male adolescents accounted for the absolute majority (79.1 percent) of completed suicides.

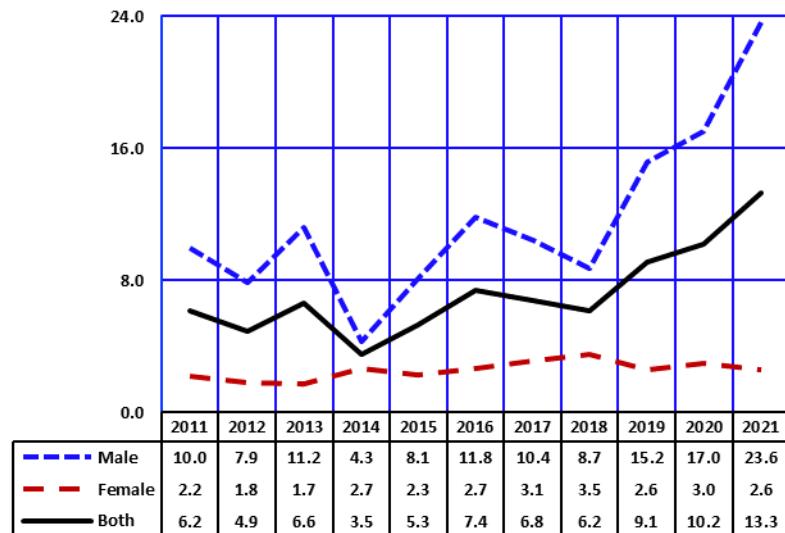
The suicide rate in 2013 was the lowest recorded since at least 1990 (**Figure 2C-11, Table 2C-11**). Between 2011 and 2021, the adolescent male suicide rate (21.9/100,000) increased 45.0 percent, while the adolescent female suicide rate (6.1) decreased by 1.6 percent. The male to female ratio in suicide mortality rates increased from 2.4:1 in 2011 to 3.6:1 in 2021. In other words, male adolescents were almost 3.6 times more likely to kill themselves than female adolescents in 2021, compared to 2.4 times in 2011.



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

Figure 2C-12
**Homicide Rates^a by Gender and Year among Adolescents 15-19 Years,
Arizona, 2011-2021**

During the 11-year period, from 2011 to 2021, the overall adolescent mortality rate due to homicide increased by 114.5 percent. However, there were some gender differences in homicide rates, marked by an increase of 136.0 percent among adolescent males and 18.2 percent among their female counterparts (**Figure 2C-12, Table 2C-11**). From 2020 to 2021, the overall mortality rate of adolescent homicide deaths increased by 30.4 percent. Looking at gender specific homicide mortality, there was a substantial increase of 38.8 percent for males and 13.3 percent decrease for females in the 2020-2021 years.



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

**TABLE 2C-11
MORTALITY RATES^a FOR THE SELECTED FIVE LEADING CAUSES^b OF DEATH AMONG ADOLESCENTS (15-19 YEARS)
BY GENDER, ARIZONA, 2011-2021**

Gender/Cause	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change from 2011
MALE												
Accidents (unintentional injuries)	29.3	28.8	28.1	22.3	20.9	27.9	33.3	32.4	42.0	58.0	55.4	89.1
Other	0.8	10.4	12.8	7.3	8.1	14.8	19.1	26.0	37.7	28.9	3512.5	
Motor vehicle accidents	18.8	18.3	15.3	15.0	12.8	13.1	15.4	13.3	16.1	20.3	26.4	40.4
Assault (homicide)	10.0	7.9	11.2	4.3	8.1	11.8	10.4	8.7	15.2	17.0	23.6	136.0
Intentional self-harm (suicide)	15.1	14.2	10.7	15.8	20.9	18.2	20.8	27.8	14.4	22.0	21.9	45.0
Malignant neoplasms	2.1	2.9	2.5	2.6	3.8	2.5	2.1	2.5	4.1	3.7	3.7	76.2
Diseases of heart	1.3	0.0	0.4	1.3	0.4	0.0	0.8	1.7	0.4	2.1	0.8	-38.5
All Causes (Number of all deaths)	67.4	62.5	66.5	63.8	67.8	72.7	79.5	85.5	88.2	120.2	120.7	79.1
(Number of all deaths)	(161)	(150)	(161)	(149)	(159)	(172)	(191)	(206)	(214)	(290)	(292)	81.4
FEMALE												
Accidents (unintentional injuries)	9.7	15.8	7.9	7.7	9.0	15.5	11.8	20.8	18.1	19.1	19.9	105.2
Motor vehicle accidents	5.8	13.2	6.1	5.0	6.3	11.5	8.3	13.0	10.8	9.1	9.9	70.7
Other	0.9	2.6	1.7	2.7	4.0	3.5	7.8	7.3	10.0	9.9	10.0	1000.0
Intentional self-harm (suicide)	6.2	6.2	2.6	5.5	6.3	5.8	5.2	6.1	6.9	6.9	6.1	-1.6
Assault (homicide)	2.2	1.8	1.7	2.7	2.3	2.7	3.1	3.5	2.6	3.0	2.6	18.2
Malignant neoplasms	4.4	1.8	3.5	4.1	2.7	2.2	1.3	0.9	3.9	0.9	2.2	-50.0
Diseases of heart	0.9	0.0	0.9	0.9	0.9	1.8	0.9	0.9	0.4	1.7	0.9	0.0
All Causes (Number of all deaths)	31.0	30.3	23.2	28.2	26.1	33.3	26.7	38.6	37.0	42.5	44.9	44.8
(Number of all deaths)	(70)	(69)	(53)	(62)	(58)	(75)	(61)	(89)	(86)	(98)	(104)	48.6
TOTAL												
Accidents (unintentional injuries)	19.8	22.5	18.3	15.2	15.1	21.9	22.8	26.7	30.3	39.0	38.0	91.9
Other	0.9	6.6	7.4	5.1	5.5	9.5	10.9	13.6	16.8	24.2	19.6	2077.8
Motor vehicle accidents	12.5	15.8	10.8	10.1	9.6	12.3	11.9	13.2	13.5	14.8	18.4	47.2
Intentional self-harm (suicide)	10.8	10.3	6.8	10.8	13.8	12.1	13.2	17.2	10.7	14.6	14.2	31.5
Assault (homicide)	6.2	4.9	6.6	3.5	5.3	7.4	6.8	6.2	9.1	10.2	13.3	114.5
Malignant neoplasms	3.2	2.4	3.0	3.3	3.3	2.4	1.7	4.0	2.3	3.0	-6.3	
Diseases of heart	1.1	0.0	0.6	1.1	0.7	0.9	0.9	1.3	0.4	1.9	0.8	-27.3
All Causes (Number of all deaths)	49.7	47.1	45.5	46.5	47.5	53.5	53.7	62.6	63.2	82.3	83.7	68.4
(Number of all deaths)	(231)	(220)	(214)	(211)	(217)	(247)	(252)	(295)	(300)	(388)	(396)	71.4

Notes: ^a Number of deaths per 100,000 adolescents 15-19 years old; ^b The five causes with the greatest number of deaths over the 2011-2021 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 2011-2021 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**; although COVID-19 was among the 5 leading causes of death, it has been excluded in this table because the ICD-10 definition had not been identified until 2020, thus there is no data for years 2011-2019 and making it impossible to show a trend and a percent change.

**TABLE 2C-12
MORTALITY RATES^a FOR THE SELECTED FIVE LEADING CAUSES^b OF DEATH AMONG ADOLESCENTS (15-19 YEARS)
IN URBAN AND RURAL AREAS^c, ARIZONA, 2011-2021**

Area/Cause	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change from 2011
URBAN												
Accidents (unintentional injuries)	18.4	17.0	15.8	12.5	13.4	20.4	19.6	25.9	31.1	39.0	37.8	105.4
Other	1.0	5.1	6.5	3.7	4.9	8.2	10.3	13.7	18.2	25.4	20.4	1940.0
Motor vehicle accidents	10.8	11.9	9.3	8.9	8.5	12.2	9.3	12.2	12.8	13.6	17.4	61.1
Assault (homicide)	6.4	4.8	6.8	3.7	5.9	7.9	6.5	10.1	10.9	14.7	129.7	
Intentional self-harm (suicide)	8.5	8.1	5.0	9.6	12.7	11.2	11.5	12.4	9.9	12.3	12.3	44.7
Malignant neoplasms	2.8	2.8	3.5	3.7	2.8	2.8	1.8	1.7	4.4	2.7	2.7	-3.6
Diseases of heart	1.3	0.0	0.5	1.3	0.5	0.8	1.0	1.0	0.5	2.2	0.7	-46.2
ALL CAUSES	45.3	38.8	42.4	42.5	44.2	50.7	49.9	57.2	65.6	80.0	82.7	82.6
(Number of all deaths)	(177)	(153)	(169)	(163)	(171)	(199)	(199)	(230)	(266)	(324)	(337)	90.4
RURAL												
Accidents (unintentional injuries)	26.9	52.1	31.8	29.9	24.5	30.3	39.9	30.2	24.5	37.7	34.9	29.7
Motor vehicle accidents	21.5	37.0	19.3	17.1	15.8	13.0	25.6	18.7	17.3	22.6	21.3	-0.9
Other	0.0	15.1	12.4	12.8	8.6	17.3	14.2	11.5	7.2	15.1	13.7	NA
Intentional self-harm (suicide)	22.9	21.9	16.6	17.1	20.2	17.3	22.8	44.5	15.9	28.6	25.8	12.7
Assault (homicide)	5.4	5.5	5.5	2.9	1.4	2.9	1.4	4.3	2.9	6.0	4.6	-14.8
Malignant neoplasms	5.4	0.0	0.0	1.4	5.8	0.0	1.4	1.4	1.4	0.0	4.6	-14.8
Diseases of heart	0.0	0.0	0.0	0.0	1.4	1.4	0.0	2.9	0.0	0.0	0.0	0.0
ALL CAUSES	72.7	90.5	62.1	68.4	66.2	66.4	74.1	91.9	47.6	93.5	82.0	12.8
(Number of all deaths)	(54)	(66)	(45)	(48)	(46)	(46)	(52)	(64)	(64)	(62)	(54)	0.0
TOTAL												
Accidents (unintentional injuries)	19.8	22.5	18.3	15.2	15.1	21.9	22.8	26.7	30.3	39.0	38.0	91.9
Other	0.9	6.6	7.4	5.1	5.5	9.5	10.9	13.6	16.8	24.2	19.6	2077.8
Motor vehicle accidents	12.5	15.8	10.8	10.1	9.6	12.3	11.9	13.2	13.5	14.8	18.4	47.2
Intentional self-harm (suicide)	10.8	10.3	6.8	10.8	13.8	12.1	13.2	17.2	10.7	14.6	14.2	31.5
Assault (homicide)	6.2	4.9	6.6	3.5	5.3	7.4	6.8	6.2	9.1	10.2	13.3	114.5
Malignant neoplasms	3.2	2.4	3.0	3.3	3.3	2.4	1.7	1.7	4.0	2.3	3.0	-6.3
Diseases of heart	1.1	0.0	0.6	1.1	0.7	0.9	0.9	1.3	0.4	1.9	0.8	-27.3
ALL CAUSES	49.7	47.1	45.5	46.5	47.5	53.5	53.7	62.6	63.2	82.3	83.7	68.4
(Number of all deaths)	(231)	(220)	(214)	(211)	(217)	(247)	(252)	(295)	(300)	(388)	(396)	71.4

Notes: ^a Number of deaths per 100,000 adolescents 15-19 years old; ^b The five causes with the greatest number of deaths over the 2011-2021 period; ^c Urban = Maricopa, Pima, Pinacate, 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 2011-2021 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**; although COVID-19 was among the 5 leading causes of death, it has been excluded in this table because the ICD-10 definition had not been identified until 2020, thus there is no data for years 2011-2019 and making it impossible to show a trend and a percent change.

TABLE 2C-13
**MORTALITY RATES^a FOR THE SELECTED FIVE LEADING CAUSES OF DEATH AMONG ADOLESCENTS (15-19 YEARS)
 BY GENDER IN URBAN AND RURAL AREAS^b, ARIZONA, 2011-2021**

Area/Gender	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change from 2011
URBAN												
Male	62.2	50.8	62.0	59.8	60.8	69.6	73.9	78.3	93.0	118.1	120.9	94.4
Female	27.4	26.1	21.7	24.2	26.6	30.9	24.7	35.2	36.9	40.0	42.7	55.8
TOTAL	45.3	38.8	42.4	42.5	44.2	50.7	49.9	57.2	65.6	80.0	82.7	82.6
RURAL												
Male	94.6	123.3	91.4	85.8	106.8	84.9	111.6	124.4	56.9	130.8	110.2	16.5
Female	49.6	53.3	31.2	50.0	23.6	47.1	34.9	58.4	38.0	55.0	52.7	6.3
TOTAL	72.7	90.5	62.1	68.4	66.2	66.4	74.1	91.9	47.6	93.5	82.0	12.8
TOTAL												
Male	67.4	62.5	66.5	63.8	67.8	72.7	79.5	85.5	88.2	120.2	120.7	79.1
Female	31.0	30.3	23.2	28.2	26.1	33.3	26.7	38.6	37.0	42.5	44.9	44.8
TOTAL	49.7	47.1	45.5	46.5	47.5	53.5	53.7	62.6	63.2	82.3	83.7	68.4

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

**TABLE 2C-14
LEADING CAUSES OF DEATH AMONG ADOLESCENTS (15-19 YEARS) BY GENDER, AREA, AND RACE/ETHNICITY,
ARIZONA, 2021**

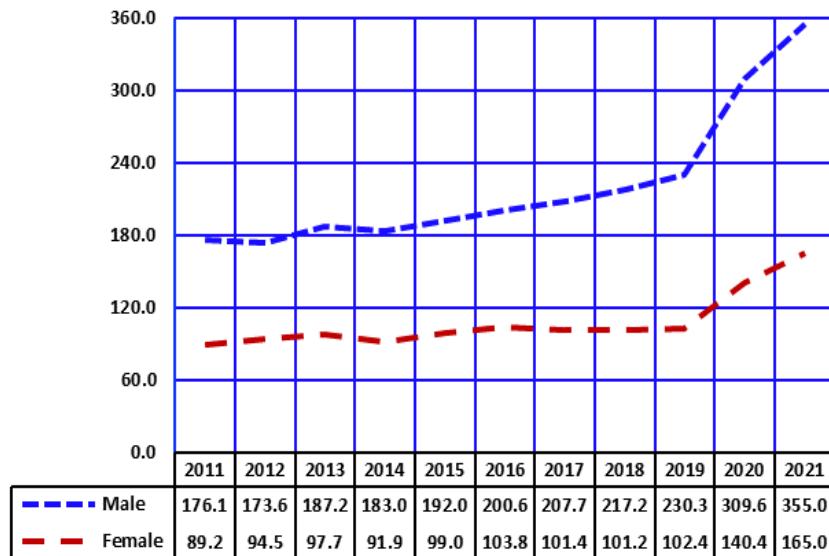
Cause of death	Gender	Area ^a		Race/ethnicity									
		Male	Female	Urban	Rural	White non-Hispanic	Hispanic or Latino	American Indian or Alaska Native	Asian or Pacific Islander	Unknown			
Accidents (unintentional injury)	Total	180†	134	46	154	23	*	78	65	20	16	*	0
Motor vehicle accidents		87	64	23	71	14	*	31	34	11	11	0	0
Accidental poisoning		80†	59	21	73	7	0	40	29	6	*	*	0
Accidental drowning and submersion		10†	8	0	6	*	*	*	*	*	*	0	0
Intentional self-harm (suicide)		67	53	14	50	17	0	32	16	9	10	0	0
By other means		40†	28	12	28	12	0	13	12	*	10	0	0
By discharge of firearms		30†	25	*	22	*	0	19	*	*	0	0	0
Assault (homicide)		60†	57	6	60	*	0	11	36	10	*	*	0
By discharge of firearms		60†	55	6	59	*	0	10	35	10	*	*	0
By other means		0†	*	0	*	*	0	*	0	0	0	0	0
COVID-19		20†	10	*	14	*	0	*	8	*	*	*	0
Malignant neoplasms		10†	9	*	11	*	0	7	*	0	*	0	0
Diseases of the heart		0†	*	*	0	*	*	*	0	0	0	0	*
Events of undetermined intent		0†	*	*	0	0	*	*	0	0	0	0	0
Total, all causes^b		396	292	104	337	54	5	152	147	47	41	4	5

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

2C.AGE-SPECIFIC MORTALITY

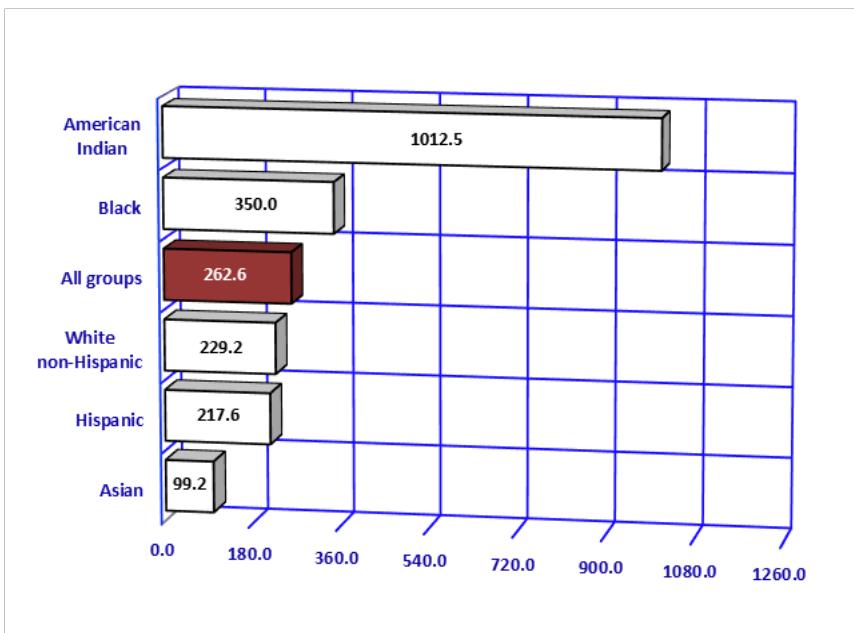
Young adult mortality (ages 20-44 years)

Figure 2C-13
**Mortality Rates^a by Gender and Year among Young Adults 20-44 Years,
 Arizona, 2011-2021**



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

Figure 2C-14
**Mortality Rates^a by Race/Ethnicity among Young Adults 20-44 Years,
 Arizona, 2021**



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

In 2021, 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 2.4 million individuals, easily represented the largest segment of the population. However, only 7.8 percent of all deaths occurred during young adulthood.

In each year from 2011 to 2021 period, males aged 20-44 years died at a higher rate than females. During the same period, the mortality rate for this age group increased by 101.6 percent for males and 85.0 percent for females. Compared to 2020, the young adult mortality rate increased both for males (14.7 percent) and females (17.5 percent; **Figure 2C-13, Table 2C-15**).

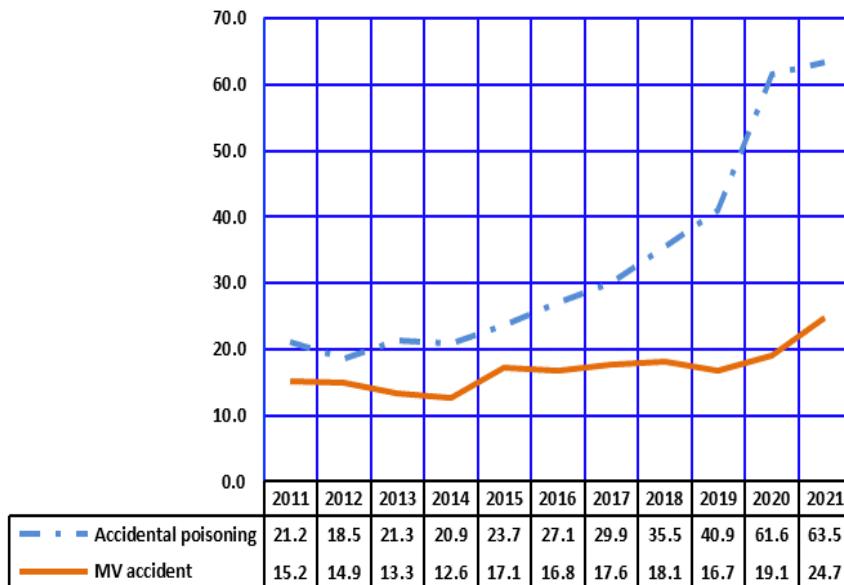
The 2021 mortality among young adults shows racial/ethnic disparities. American Indians aged 20-44 years had the highest mortality rates while Asians of the same age group recorded the lowest mortality rate across all groups.

American Indian young adults had a mortality rate 2.9 times greater than Black or African American adults, the racial/ethnic group with the second highest young adult mortality rate. The American Indian young adult mortality rate was 3.9 times higher than the state average for young adults and 10.2 times greater than Asian young adults.

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

Figure 2C-15
Mortality Rates^a for Motor Vehicle-Related Injuries and Accidental Poisoning by Year among Young Adults 20-44 Years, Arizona, 2011-2021

In 2021, 1,528 deaths of young adults were attributed to accidental poisoning (**Table 2C-18**), an increase of 4.9 percent from 2020. The mortality rate for accidental poisoning among young adults (63.5/100,000) exceeded the mortality rate for motor vehicle-related injuries. In the past decade, excess of mortality due to accidental poisoning has been consistently recorded in each year since 2011 (**Figure 2C-15**).

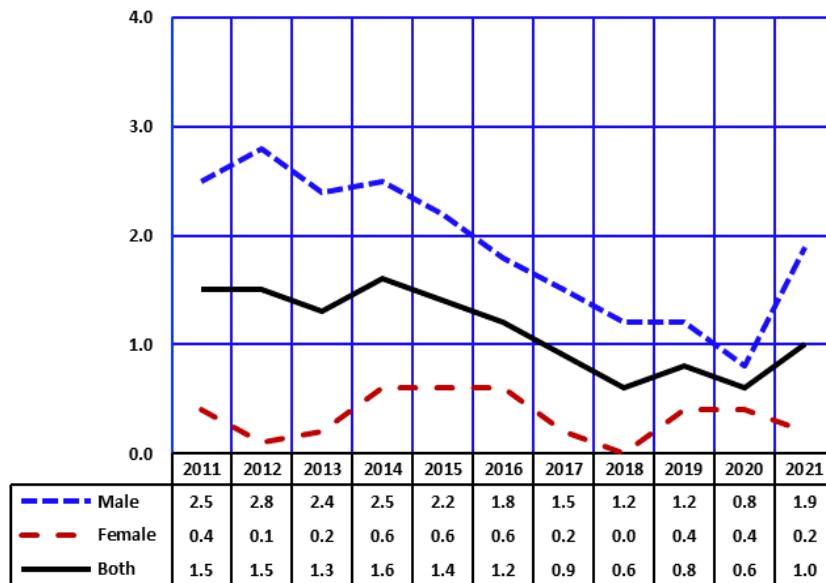


Note: ^a Number of motor vehicle and accidental poisoning deaths per 100,000 persons, 20-44 years old in specified group.

Figure 2C-16
Mortality Rates^a for HIV Disease by Gender and Year among Young Adults 20-44 Years, Arizona, 2011-2021

In 2021, of the 94 deaths from HIV disease about 26.6 percent occurred among Arizonans 20-44 years old (**Table 2C-27**), an increase from 20.5 percent of 73 deaths in 2020. Males accounted for the majority of the young adult deaths from HIV disease in 2021 (**Table 2C-18**).

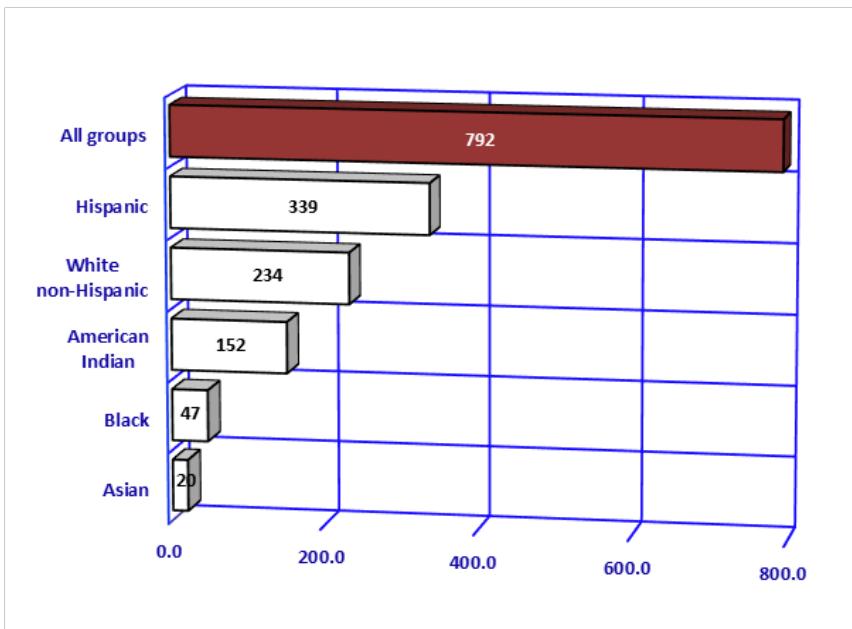
An analysis of HIV mortality rates by gender for the 2011-2021 period revealed a decrease of 24.0 percent in mortality among young males and 50.0 percent in mortality rate among their female counterparts.



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

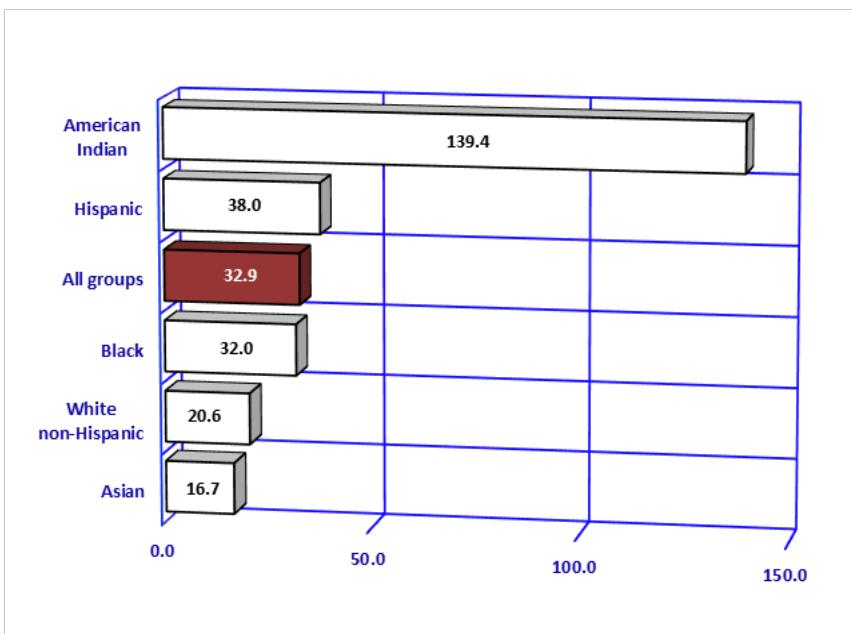
2C.AGE-SPECIFIC MORTALITY Young adult mortality (ages 20-44 years)

Figure 2C-17
**Mortality for COVID-19 by Race/Ethnicity among Young Adults 20-44 Years,
Arizona, 2021**



In 2021, 792 Arizona resident young adults age 20-44 died from COVID-19. Among the deaths, people who identified as Hispanic or Latino represented the largest amount of deaths compared to other race and ethnicities with 42.8% ($n=339$) of deaths in this age group. The least impacted race were Asians with 2.5% ($n=20$) of deaths in this age group (**Figure 2C-17, Table 2C-18**).

Figure 2C-18
**Mortality Rates^a for COVID-19 by Race/Ethnicity among Young Adults 20-44 Years,
Arizona, 2021**



The age-specific mortality rate of Arizona resident young adults aged 20-44 years found the highest risk among American Indians with a rate of 139.4 deaths per 100,000 people aged 20-44. This was approximately four times the rate among all race/ethnicity groups (32.9 deaths per 100,000 people aged 20-44). People who identified as Hispanic or Latino represented the second highest group with 38.0 deaths per 100,000 people aged 20-44 and was above the average of all groups (**Figure 2C-18**).

Note: ^a Number of deaths due to COVID-19 per 100,000 persons, 20-44 years old in specified group.

TABLE 2C-15
MORTALITY RATES^a FOR THE SELECTED FIVE LEADING CAUSES^b OF DEATH AMONG YOUNG ADULTS (20-44 YEARS) BY GENDER, ARIZONA, 2011-2021

Gender/Cause	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change from 2011
MALE												
Accidents (unintentional injuries)	57.9	52.8	56.7	54.3	63.3	71.2	76.7	86.0	94.3	128.5	138.4	139.0
Other	8.7	31.2	38.0	35.9	38.6	46.9	52.6	59.9	70.2	100.9	105.0	1106.9
Motor vehicle accidents	20.6	21.6	18.7	18.4	24.7	24.3	24.1	26.1	24.1	27.6	33.4	62.1
Intentional self-harm (suicide)	32.4	29.0	30.8	28.7	30.8	30.9	33.5	36.9	37.2	35.1	41.5	28.1
Assault (homicide)	18.2	16.1	16.1	13.3	16.6	17.8	19.4	17.9	15.0	20.3	23.2	27.5
Diseases of heart	14.7	13.5	14.2	14.0	13.6	12.0	14.7	13.3	14.8	18.9	17.4	18.4
Malignant neoplasms	11.0	12.3	13.4	11.2	13.0	11.3	12.0	10.9	12.0	12.6	14.1	28.2
ALL CAUSES (Number of all deaths)	176.1	173.6	187.2	183.0	192.0	200.6	207.7	217.2	230.3	309.6	355.0	101.6
FEMALE												
Accidents (unintentional injuries)	25.2	22.8	24.5	21.3	28.2	26.6	29.3	30.5	32.0	44.6	49.4	96.0
Other	2.1	15.1	16.9	14.7	19.1	17.5	18.6	20.8	23.1	34.5	33.9	1514.3
Motor vehicle accidents	9.7	7.7	7.6	6.6	9.1	9.0	10.7	9.7	8.9	10.1	15.6	60.8
Malignant neoplasms	15.7	17.6	17.4	14.0	13.5	16.7	14.5	16.2	14.1	14.5	16.2	3.2
Intentional self-harm (suicide)	8.9	8.7	9.6	9.0	10.5	9.9	11.2	9.6	8.1	10.9	10.3	15.7
Diseases of heart	6.4	7.0	5.6	6.6	7.2	5.1	7.0	6.3	6.1	7.6	7.4	15.6
Assault (homicide)	2.4	4.3	3.4	2.9	3.2	3.7	3.8	3.7	4.0	4.7	5.1	112.5
ALL CAUSES (Number of all deaths)	89.2	94.5	97.7	91.9	99.0	103.8	101.4	101.2	102.4	140.4	165.0	85.0
TOTAL												
Accidents (unintentional injuries)	41.9	38.2	41.0	38.2	46.1	49.4	53.6	59.0	64.0	87.7	95.1	127.0
Other	5.5	23.3	27.7	25.6	29.0	32.6	36.0	40.9	47.3	68.7	70.4	1180.0
Motor vehicle accidents	15.2	14.9	13.3	12.6	17.1	16.8	17.6	18.1	16.7	19.1	24.7	62.5
Intentional self-harm (suicide)	20.9	19.1	20.5	19.1	20.9	20.6	22.6	23.6	23.1	23.3	26.4	26.3
Malignant neoplasms	13.3	14.9	15.3	12.6	13.2	13.9	13.2	13.5	13.0	13.5	15.1	13.5
Assault (homicide)	10.5	10.3	9.9	8.2	10.0	11.0	11.8	11.0	9.7	12.7	14.4	37.1
Diseases of heart	10.6	10.3	10.0	10.4	10.5	8.6	10.9	9.9	10.6	13.4	12.6	18.9
ALL CAUSES (Number of all deaths)	133.6	135.0	143.5	138.6	146.6	153.3	155.9	160.9	168.2	227.3	262.6	96.6
	(2,856)	(2,900)	(3,115)	(3,062)	(3,271)	(3,062)	(3,541)	(3,727)	(3,973)	(5,377)	(6,316)	121.1

Notes:^a Rates are presented per 100,000 persons 20-44 years old; ^b The five causes with the greatest number of deaths over the 2011-2021 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 2011-2021 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**; although COVID-19 was among the 5 leading causes of death, it has been excluded in this table because the ICD-10 definition had not been identified until 2020, thus there is no data for years 2011-2019 and making it impossible to show a trend and a percent change.

TABLE 2C-16
MORTALITY RATES^a FOR THE SELECTED FIVE LEADING CAUSES^b OF DEATH AMONG YOUNG ADULTS (20-44 YEARS)
IN URBAN AND RURAL AREAS^c, ARIZONA, 2011-2021

Area/Cause	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change from 2011
URBAN												
Accidents (unintentional injuries)	36.6	32.2	35.4	33.8	40.1	43.9	49.0	55.2	60.6	82.6	89.0	143.2
Other	4.3	20.2	23.9	22.7	25.4	28.9	34.3	39.5	46.1	65.9	67.7	1474.4
Motor vehicle accidents	12.4	12.1	11.5	11.1	14.7	15.1	14.8	15.7	14.5	16.7	21.3	71.8
Intentional self-harm (suicide)	18.1	17.0	18.3	16.8	19.0	18.4	19.7	20.6	21.3	20.5	22.2	22.7
Malignant neoplasms	13.5	14.1	15.3	12.7	13.1	13.5	13.0	13.5	12.6	13.7	14.6	8.1
Assault (homicide)	10.0	9.5	9.4	8.1	9.6	10.7	11.3	11.1	9.8	12.1	14.3	43.0
Diseases of heart	9.6	9.5	9.3	9.7	10.1	8.3	10.3	9.2	10.1	13.3	12.1	26.0
ALL CAUSES	120.3	118.8	130.1	126.2	131.9	137.1	140.7	148.0	156.5	206.2	237.6	97.5
(Number of all deaths)	(2,232)	(2,215)	(2,451)	(2,422)	(2,557)	(2,676)	(2,783)	(2,986)	(3,224)	(4,270)	(5,007)	124.3
RURAL												
Accidents (unintentional injuries)	71.9	74.4	74.9	61.2	78.6	77.9	75.3	81.3	80.9	116.3	129.0	79.4
Other	10.3	42.7	50.8	39.6	47.9	51.3	39.4	48.5	52.8	81.6	83.0	705.8
Motor vehicle accidents	33.0	31.7	24.2	21.7	30.8	26.7	36.0	32.8	28.1	34.7	46.0	39.4
Intentional self-harm (suicide)	37.6	32.4	33.6	32.3	32.1	33.5	40.1	43.5	35.0	42.5	54.1	43.9
Malignant neoplasms	12.0	19.0	15.4	11.4	13.3	16.7	13.6	12.4	16.2	12.6	18.1	50.8
Diseases of heart	16.7	14.5	14.0	14.4	13.0	10.3	14.3	14.0	12.5	13.6	15.5	-7.2
Assault (homicide)	12.8	14.8	13.0	7.2	10.6	10.6	10.9	10.4	7.9	16.7	14.4	12.5
ALL CAUSES	210.2	233.4	226.5	207.1	224.7	240.9	236.6	238.1	237.7	361.3	422.1	100.8
(Number of all deaths)	(593)	(662)	(647)	(602)	(657)	(705)	(697)	(712)	(720)	(1,063)	(1,256)	111.8
TOTAL												
Accidents (unintentional injuries)	41.9	38.2	41.0	38.2	46.1	49.4	53.6	59.0	64.0	87.7	95.1	127.0
Other	5.5	23.3	27.7	25.6	29.0	32.6	36.0	40.9	47.3	68.7	70.4	1180.0
Motor vehicle accidents	15.2	14.9	13.3	12.6	17.1	16.8	17.6	18.1	16.7	19.1	24.7	62.5
Intentional self-harm (suicide)	20.9	19.1	20.5	19.1	20.9	20.6	22.6	23.6	23.1	23.3	26.4	26.3
Malignant neoplasms	13.3	14.9	15.3	12.6	13.2	13.9	13.2	13.5	13.0	13.5	15.1	13.5
Assault (homicide)	10.5	10.3	9.9	8.2	10.0	11.0	11.8	11.0	9.7	12.7	14.4	37.1
Diseases of heart	10.6	10.3	10.0	10.4	10.5	8.6	10.9	9.9	10.6	13.4	12.6	18.9
ALL CAUSES	133.6	135.0	143.5	138.6	146.6	153.3	155.9	160.9	168.2	227.3	262.6	96.6
(Number of all deaths)	(2,856)	(2,900)	(3,115)	(3,062)	(3,271)	(3,441)	(3,544)	(3,727)	(3,973)	(5,377)	(6,316)	121.1

Notes: ^a Rates are presented per 100,000 young adults 20-44 years old; ^b The five causes with the greatest number of deaths statewide over the 2011-2021 period; ^c Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; see **Technical Notes** for more information; records with unknown county of residence are included in the statewide totals, but are not distributed by urban/rural area; the cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10); the causes of death for 2011-2021 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**; although COVID-19 was among the 5 leading causes of death, it has been excluded in this table because the ICD-10 definition had not been identified until 2020, thus there is no data for years 2011-2019 and making it impossible to show a trend and a percent change.

TABLE 2C-17
**MORTALITY RATES^a FOR THE SELECTED FIVE LEADING CAUSES OF DEATH AMONG YOUNG ADULTS (20-44 YEARS)
 BY GENDER IN URBAN AND RURAL AREAS^b, ARIZONA, 2011-2021**

Area/Gender	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change from 2011
URBAN												
Male	158.7	154.0	169.0	165.6	171.9	178.4	187.7	198.0	216.0	282.9	322.9	103.5
Female	80.3	81.9	89.2	85.1	90.1	94.0	91.4	95.2	93.8	125.4	147.9	84.2
TOTAL	120.3	118.8	130.1	126.2	131.9	137.1	140.7	148.0	156.5	206.2	237.6	97.5
RURAL												
Male	271.6	288.4	296.4	278.8	294.2	315.6	307.7	332.7	309.8	475.6	553.3	103.7
Female	144.8	174.6	151.6	130.0	149.8	160.1	159.3	135.0	158.9	236.7	278.9	92.6
TOTAL	210.2	233.4	226.5	207.1	224.7	240.9	236.6	238.1	237.7	361.3	422.1	100.8
TOTAL												
Male	176.1	173.6	187.2	183.0	192.0	200.6	207.7	217.2	230.3	309.6	355.0	101.6
Female	89.2	94.5	97.7	91.9	99.0	103.8	101.4	101.2	102.4	140.4	165.0	85.0
TOTAL	133.6	135.0	143.5	138.6	146.6	153.3	155.9	160.9	168.2	227.3	262.6	96.6

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

TABLE 2C-18
**LEADING CAUSES OF DEATH AMONG YOUNG ADULTS (20-44 YEARS) BY GENDER, AREA, AND RACE/ETHNICITY,
ARIZONA, 2021**

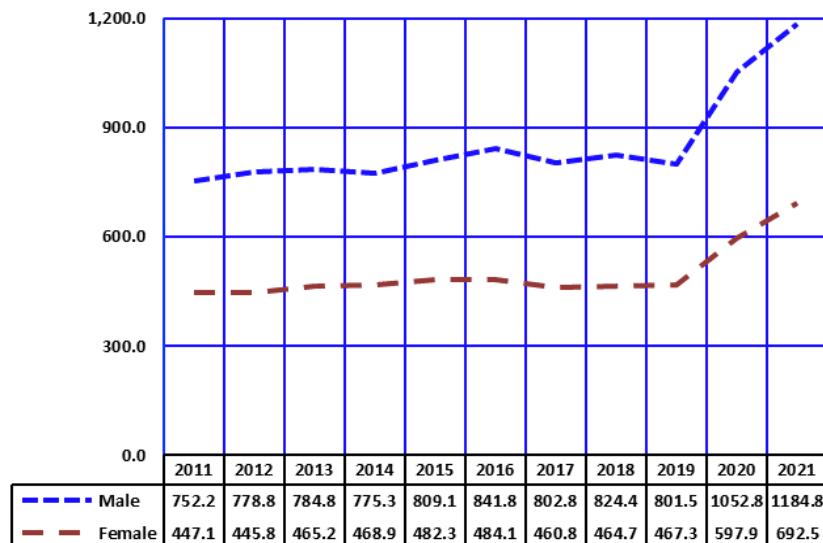
Cause of death	Gender		Area ^a		Race/ethnicity					
	Total	Male	Female	Rural	Urban	White non-Hispanic	Hispanic or Latino	American Indian or Alaska Native	Asian or Pacific Islander	Refused/Unknown
Accidents (unintentional injury)	2,288	1,710	578	1,876	384	28	1,040	727	176	305
Accidental poisoning	1,528	1,163	365	1,302	211	15	725	498	117	163
Motor vehicle accidents	595	413	182	449	137	9	243	189	45	108
COVID-19	792	494	298	653	139	0	234	339	47	152
Intentional self-harm (suicide)	634	513	121	468	161	*	347	139	34	100
By discharge of firearms	338	287	51	271	65	*	201	83	20	28
By other means	296	226	70	197	96	*	146	56	14	72
Malignant neoplasms	364	174	190	308	54	*	166	123	26	32
Malignant neoplasm of breast	60†	0	56	46	10	0	22	19	7	*
Malignant neoplasm of lymphoid, hematopoietic and related tissue	50†	35	17	46	6	0	22	20	*	*
Malignant neoplasm of meninges, brain and other parts of central nervous system	20†	14	10	21	*	0	15	6	*	*
Assault (homicide)	346	286	60	301	43	*	72	140	76	51
By discharge of firearms	280†	236	43	253	25	*	59	116	67	33
By other means	70†	50	17	48	18	*	13	24	9	18
Chronic liver disease and cirrhosis	350†	206	140	211	134	*	109	51	*	177
Diseases of heart	302	215	87	254	46	*	136	87	39	30
Diabetes	100†	59	41	77	23	0	35	27	10	23
Obesity	60	40	20	45	15	0	29	18	6	7
Cerebrovascular diseases	60†	36	20	47	9	0	21	20	*	9
Influenza and pneumonia	40†	24	17	30	11	0	17	13	*	8
Human immunodeficiency virus (HIV) disease	30†	23	*	22	*	*	7	11	*	0
Total, all causes	6,316	4,386	1,930	5,007	1,256	53	2,605	1,943	514	1,104
									119	31

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

2C.AGE-SPECIFIC MORTALITY

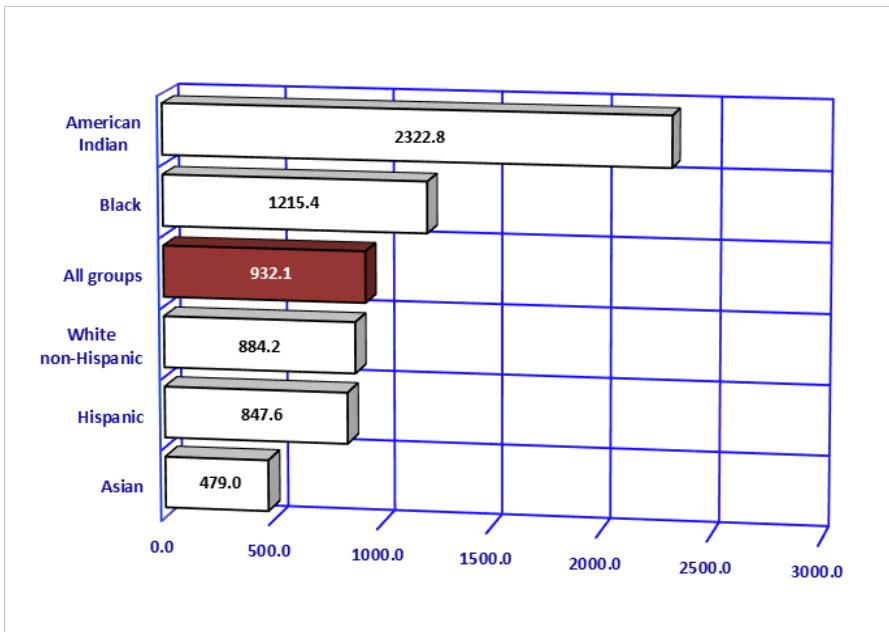
Middle-aged adult mortality (ages 45-64 years)

Figure 2C-19
**Mortality Rates^a by Gender and Year among Middle-Aged Adults 45-64 Years,
Arizona, 2011-2021**



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

Figure 2C-20
**Mortality Rates^a by Race/Ethnicity among Middle-Aged Adults 45-64 Years,
Arizona, 2021**



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

In 2021, the 1,723,031 middle-aged adult residents aged 45 to 64 experienced 16,060 deaths, or an average of 44 deaths per day. The total number of deaths among 45-64 years old Arizona residents in 2021 (16,060) is higher than the 2020 count (14,003), 2019 (10,834), and 2018 count (10,920). Overall, 2021 had the highest number of deaths for the age group of middle-aged adult residents 45-64 years recorded over the time period of 2011-2021 (**Table 2C-19**).

The 2021 total mortality rate among middle-age females was 54.9 percent higher, and among middle-aged males, 57.5 percent higher than their respective rates in 2011 (**Figure 2C-19, Table 2C-19**). In 2021, the mortality rate for males age 45 - 64 was 71.1 percent higher than the female mortality of the same age group.

The five causes with the greatest number of deaths in 2011-2021 were malignant neoplasms, diseases of heart, accidents, chronic liver disease and cirrhosis, and chronic lower respiratory diseases (**Table 2C-19**).

American Indian and Black or African American middle-aged adults had the two highest mortality rates (2322.8/100,000 and 1215.4/100,000, respectively) among the racial/ethnic groups.

If the 2021 total mortality rate for Asian middle-aged adults applied to all Arizona residents 45-64 years old, 8,253 middle-aged adults would have died rather than the 16,060 who actually did.

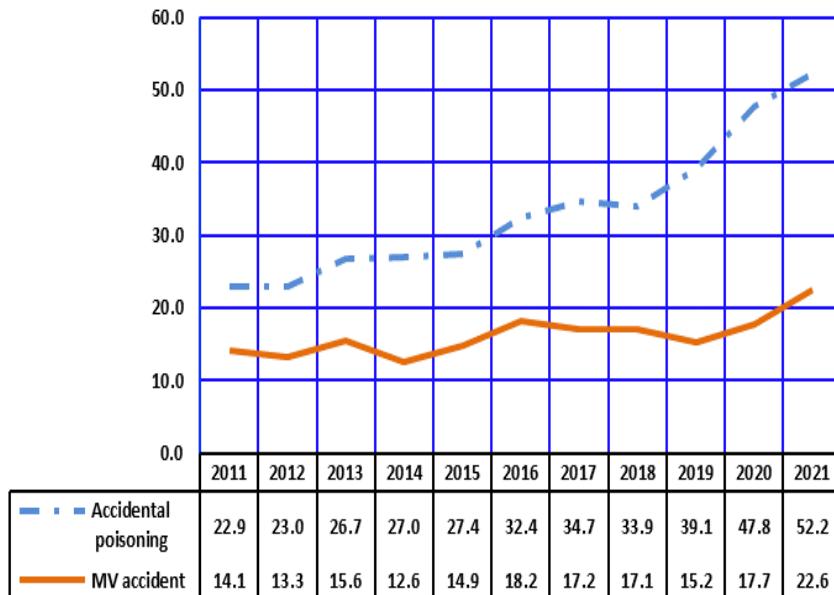
2C.AGE-SPECIFIC MORTALITY

Middle-aged adult mortality (ages 45-64 years)

The 2021 mortality rate due to accidental poisoning was 52.2 per 100,000 adults aged 45-64 years, an increase of 9.2 percent from 2020. In 2021, about 899 deaths were attributed to accidental poisoning (**Table 2C-22**). Of the accidental poisoning deaths in this age group, 831 were drug overdoses (ICD-10 X40-X44) and 66 were alcohol poisoning (ICD-10 X45).

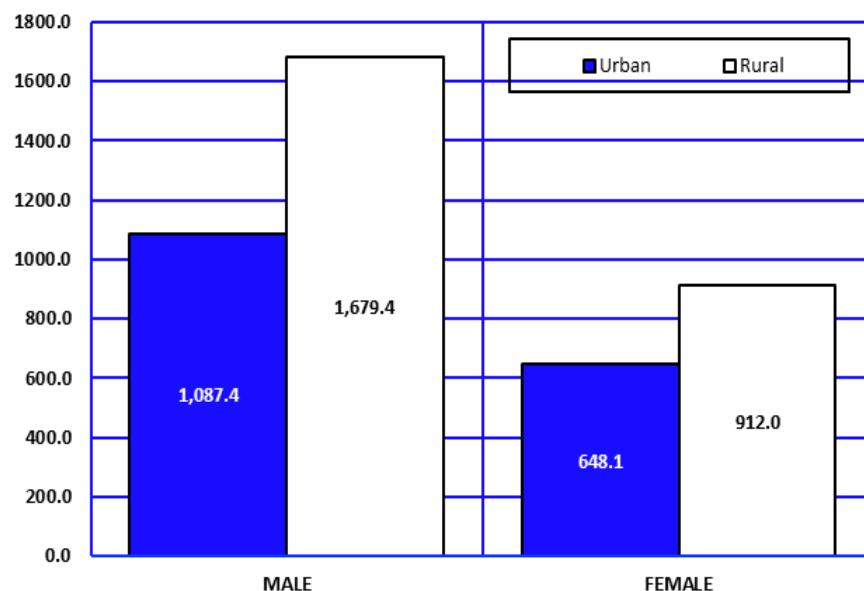
Since 2011, the mortality rate for accidental poisoning exceeded the mortality rate for motor vehicle-related injuries among the middle-aged (**Figure 2C-21**). In 2021, accidental poisoning mortality rate of 52.2 per 100,000 middle-aged adults was 2.3 times higher than the mortality rate of 22.6 per 100,000 for motor vehicle accidents. White non-Hispanics accounted for about 58.7 percent of all accidental poisoning deaths (**Table 2C-22**).

Figure 2C-21
Mortality Rates^a for Accidental Poisoning and Motor Vehicle-related Injuries by Year among Middle-Aged Adults 45-64 Years, Arizona, 2011-2021



Note: ^a Number of motor vehicle and accidental poisoning deaths per 100,000 persons, 45-64 years old in specified group.

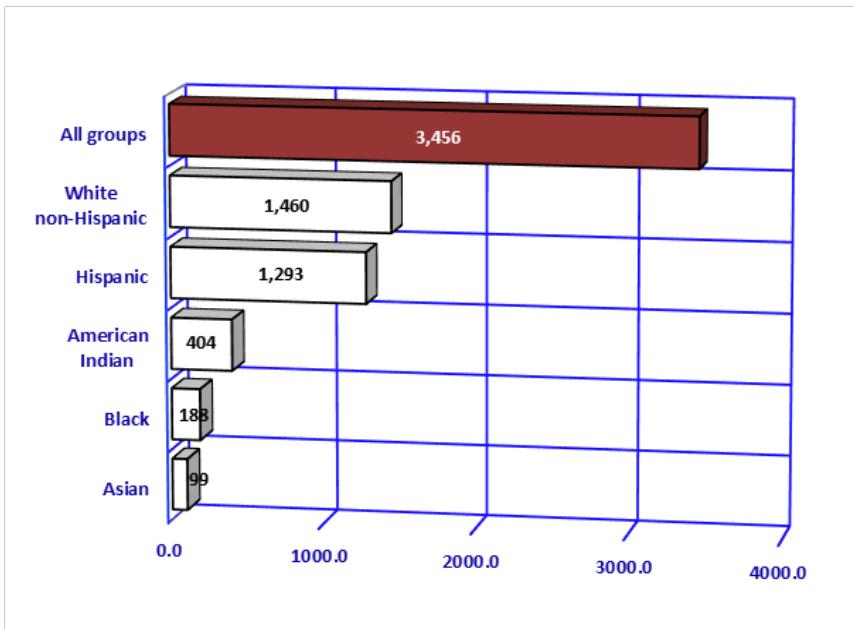
Figure 2C-22
Mortality Rates by Gender in Urban^a and Rural Areas among Middle-Aged Adults 45-64 Years, Arizona, 2021



Note: ^a Urban counties include Maricopa, Pima, Pinal, and Yuma counties.

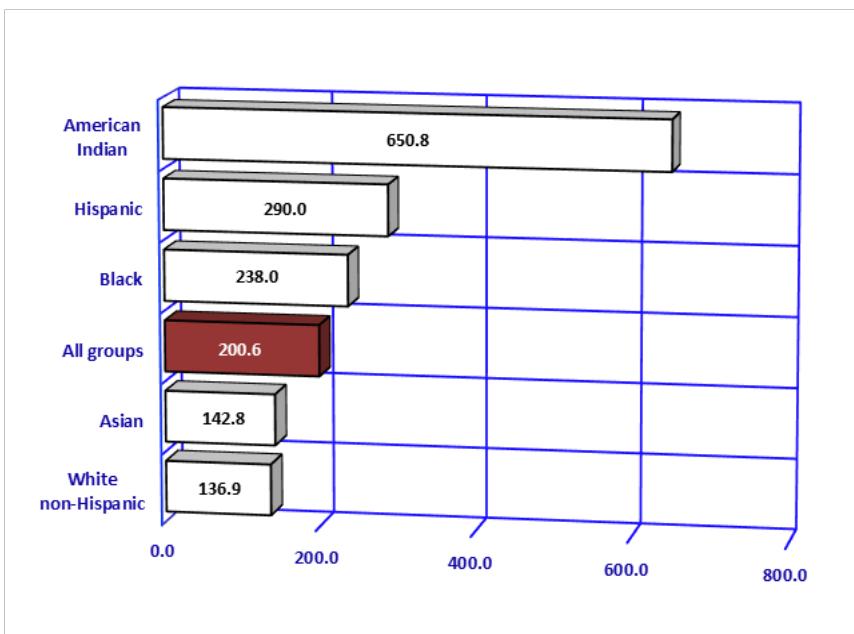
2C.AGE-SPECIFIC MORTALITY
Middle-aged adult mortality (ages 45-64 years)

Figure 2C-23
**Mortality for COVID-19 by Race/Ethnicity among Middle-Aged Adults 45-64 Years,
Arizona, 2021**



In 2021, 3,456 Arizona resident middle-aged adults age 45-64 died from COVID-19. Among the deaths, people who identified as White non-Hispanic represented the largest amount of deaths compared to other race and ethnicities with 42.2% (n= 1,460) of deaths in this age group. The least impacted race were Asians with 2.9% (n= 99) of deaths in this age group (**Figure 2C-23, Table 2C-22**).

Figure 2C-24
**Mortality Rates^a for COVID-19 by Race/Ethnicity among Middle-Aged Adults 45-64 Years,
Arizona, 2021**



The age-specific mortality rate of Arizona resident middle aged adults 45-64 years found the highest risk among American Indians with a rate of 650.8 deaths per 100,000 people aged 45-64. This was more than three times the rate among all race/ethnicity groups (200.6 deaths per 100,000 people aged 45-64). People who identified as Hispanic or Latino represented the second highest group with 290.0 deaths and Black or African Americans represented the third highest group at 238.0 per 100,000 people aged 45-64 deaths and were above the combined rate of all groups.

Note: ^a Number of deaths due to COVID-19 per 100,000 persons, 45-64 years old in specified group.

TABLE 2C-19
MORTALITY RATES^a FOR THE SELECTED FIVE LEADING CAUSES^b OF DEATH AMONG MIDDLE-AGED ADULTS (45-64 YEARS) BY GENDER, ARIZONA, 2011-2021

Gender/Cause	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change from 2011
MALE												
Diseases of heart	165.3	155.1	159.3	143.2	166.6	170.1	164.7	162.5	160.8	186.3	182.9	10.6
Malignant neoplasms	186.3	196.6	191.4	171.5	186.4	184.1	180.7	177.8	175.1	164.9	158.7	-14.8
Accidents (unintentional injuries)	68.9	68.0	77.9	73.5	76.8	100.4	98.8	95.5	105.7	128.1	137.6	99.7
Other	19.8	47.9	54.5	54.0	54.5	71.5	72.1	70.5	82.6	101.0	103.6	423.2
Motor vehicle accidents	21.4	20.1	23.3	19.4	22.3	28.9	26.8	25.0	23.1	27.1	34.0	58.9
Chronic liver disease and cirrhosis	49.6	50.2	46.7	43.1	48.1	47.8	45.5	45.7	43.8	49.7	61.8	24.6
Intentional self-harm (suicide)	41.3	41.8	38.3	37.7	40.3	41.2	37.4	43.3	39.7	38.7	38.0	-8.0
ALL CAUSES (Number of all deaths)	752.2	778.8	784.8	775.3	809.1	841.8	802.8	824.4	801.5	1052.8	1184.8	57.5
(5,760) (5,999) (6,088) (6,111) (6,444) (6,781) (6,570) (6,839) (6,702) (8,755) (9,935) (72.5)												
FEMALE												
Malignant neoplasms	156.9	155.1	160.7	145.0	155.6	150.9	143.9	146.3	147.5	147.9	153.3	-2.3
Diseases of heart	61.8	60.5	54.6	54.0	60.8	66.7	58.2	62.7	61.9	68.0	68.5	10.8
Accidents (unintentional injuries)	32.8	33.0	38.0	33.7	35.8	38.4	42.2	37.3	38.7	46.7	51.8	57.9
Other	7.4	26.1	29.8	27.4	27.9	30.4	18.6	27.7	31.0	37.8	40.0	440.5
Motor vehicle accidents	7.1	6.9	8.2	6.2	7.9	8.1	8.2	9.7	7.7	8.9	11.8	66.2
Diabetes	21.3	22.3	23.6	22.8	27.4	24.6	22.6	22.1	23.4	30.2	29.6	39.0
Chronic lower respiratory diseases	21.6	24.2	24.8	24.8	23.0	25.8	26.4	27.6	21.3	24.0	21.9	1.4
ALL CAUSES (Number of all deaths)	447.1	445.8	465.2	468.9	482.3	484.1	460.8	464.7	467.3	597.9	692.5	54.9
(3,638) (3,631) (3,810) (3,914) (4,066) (4,130) (3,997) (4,081) (4,132) (5,238) (6,125) (68.4)												
TOTAL												
Malignant neoplasms	171.2	175.2	175.6	157.9	170.6	167.0	161.8	161.6	160.9	156.1	155.9	-8.9
Diseases of heart	112.0	106.5	105.5	97.4	112.2	116.9	109.9	111.2	110.0	125.5	124.2	10.9
Accidents (unintentional injuries)	50.3	50.0	57.4	53.0	55.7	68.5	69.7	65.6	71.3	86.3	93.6	86.1
Other	13.4	36.7	41.8	40.4	40.8	50.3	52.5	48.5	56.1	68.6	71.0	429.9
Motor vehicle accidents	14.1	13.3	15.6	12.6	14.9	18.2	17.2	17.1	15.2	17.7	22.6	60.3
Chronic liver disease and cirrhosis	34.3	35.0	34.7	33.6	37.7	36.3	35.1	34.0	33.6	40.0	49.7	44.9
Chronic lower respiratory diseases	23.6	25.1	24.7	25.4	26.6	28.2	27.3	28.4	23.5	25.8	20.8	-11.9
ALL CAUSES (Number of all deaths)	595.0	607.6	620.7	617.7	641.0	657.8	626.8	639.4	629.7	819.2	932.1	56.7
(9,398) (9,630) (9,898) (10,025) (10,510) (10,911) (10,567) (10,920) (10,834) (14,003) (16,060) (70.9)												

Notes: ^a Rates are presented per 100,000 middle-aged adults 45-64 years old; ^b The five causes with the greatest number of deaths over the 2011-2021 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 2011-2021 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**; although COVID-19 was among the 5 leading causes of death, it has been excluded in this table because the ICD-10 definition had not been identified until 2020, thus there is no data for years 2011-2019 and making it impossible to show a trend and a percent change.

TABLE 2C-20
MORTALITY RATES^a FOR THE SELECTED FIVE LEADING CAUSES^b OF DEATH AMONG MIDDLE-AGED ADULTS (45-64 YEARS)
IN URBAN AND RURAL AREAS^c, ARIZONA, 2011-2021

Area/Cause	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change from 2011
URBAN												
Malignant neoplasms	166.5	171.8	169.1	153.8	164.8	162.1	156.3	156.4	153.7	150.9	151.6	-8.9
Diseases of heart	103.9	95.9	96.5	89.5	100.3	106.3	101.7	100.2	103.9	115.5	114.0	9.7
Accidents (unintentional injuries)	45.4	47.6	51.5	47.3	50.2	61.3	61.3	60.0	66.1	82.0	86.4	90.3
Other	12.4	35.7	38.5	36.7	37.8	45.3	46.6	46.0	52.4	65.7	67.0	440.3
Motor vehicle accidents	11.9	11.9	13.0	10.6	12.4	16.0	14.7	14.0	13.6	16.3	19.4	63.0
Chronic liver disease and cirrhosis	30.8	31.5	29.9	31.5	32.6	30.3	30.1	29.9	28.5	33.8	40.0	29.9
Chronic lower respiratory diseases	20.6	22.9	22.6	23.4	25.0	25.9	24.0	24.4	21.0	22.1	18.1	-12.1
ALL CAUSES (Number of all deaths)	561.5 (7,274)	575.8 (7,513)	579.8 (7,631)	584.2 (7,855)	596.5 (8,128)	613.0 (8,485)	583.1 (8,223)	595.1 (8,527)	586.3 (8,485)	759.7 (10,988)	862.3 (12,602)	53.6 73.2
RURAL												
Diseases of heart	143.7	152.5	142.2	133.3	163.5	159.6	140.1	162.6	139.1	176.9	175.9	22.4
Malignant neoplasms	186.3	187.8	204.7	175.4	196.4	184.3	182.9	186.2	196.3	182.9	175.5	-5.8
Accidents (unintentional injuries)	67.6	55.3	75.8	73.3	72.6	83.8	91.5	86.9	94.1	100.0	122.7	81.5
Other	16.5	36.4	51.7	52.8	46.6	58.3	64.2	55.6	71.4	78.0	85.3	417.0
Motor vehicle accidents	22.5	18.9	24.1	20.5	26.0	25.5	27.2	31.3	22.7	22.1	37.5	66.7
Chronic liver disease and cirrhosis	49.3	47.5	57.1	41.7	59.2	61.9	56.6	53.5	59.7	71.9	102.5	107.9
Chronic lower respiratory diseases	36.3	33.2	32.3	34.1	33.9	37.9	41.7	49.1	35.5	44.5	35.6	-1.9
ALL CAUSES (Number of all deaths)	716.6 (2,035)	720.2 (2,017)	786.8 (2,191)	751.4 (2,091)	821.2 (2,275)	808.3 (2,219)	781.1 (2,152)	842.7 (2,317)	839.6 (2,293)	1111.4 (3,292)	1281.7 (3,352)	78.9 64.7
TOTAL												
Malignant neoplasms	171.2	175.2	175.6	157.9	170.6	167.0	161.8	161.6	160.9	156.1	155.9	-8.9
Diseases of heart	112.0	106.5	105.5	97.4	112.2	116.9	109.9	111.2	110.0	125.5	124.2	10.9
Accidents (unintentional injuries)	50.3	50.0	57.4	53.0	55.7	68.5	69.7	65.6	71.3	86.3	93.6	86.1
Other	13.4	36.7	41.8	40.4	40.8	50.3	52.5	48.5	56.1	68.6	71.0	429.9
Motor vehicle accidents	14.1	13.3	15.6	12.6	14.9	18.2	17.2	17.1	15.2	17.7	22.6	60.3
Chronic liver disease and cirrhosis	34.3	35.0	34.7	33.6	37.7	36.3	35.1	34.0	33.6	40.0	49.7	44.9
Chronic lower respiratory diseases	23.6	25.1	24.7	25.4	26.6	28.2	27.3	28.4	23.5	25.8	20.8	-11.9
ALL CAUSES (Number of all deaths)	595.0 (9,398)	607.6 (9,630)	620.7 (9,898)	617.7 (10,025)	641.0 (10,510)	657.8 (10,911)	626.8 (10,567)	639.4 (10,920)	629.7 (14,003)	932.1 (16,060)	56.7 70.9	

Notes: ^a Rates are presented per 100,000 middle-aged adults 45-64 years old; ^b The five causes with the greatest number of deaths over the 2011-2021 period; ^c Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; see **Technical Notes** for more information; records with unknown county of residence are included in the statewide totals, but are not distributed by urban/rural area; the cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10); the causes of death for 2011-2021 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**; although COVID-19 was among the 5 leading causes of death, it has been excluded in this table because the ICD-10 definition had not been identified until 2020, thus there is no data for years 2011-2019 and making it impossible to show a trend and a percent change.

TABLE 2C-21
**MORTALITY RATES^a FOR THE SELECTED FIVE LEADING CAUSES OF DEATH AMONG MIDDLE-AGED ADULTS (45-64 YEARS)
 BY GENDER IN URBAN AND RURAL AREAS^b, ARIZONA, 2011-2021**

Area/Gender	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change from 2011
URBAN												
Male	703.5	724.9	726.0	728.1	746.1	769.7	736.7	762.1	743.8	974.4	1087.4	54.6
Female	427.8	434.7	441.0	448.0	454.8	464.5	437.4	436.6	436.6	555.5	648.1	51.5
TOTAL	561.5	575.8	579.8	584.2	596.5	613.0	583.1	595.1	586.3	759.7	862.3	53.6
RURAL												
Male	918.6	968.7	1018.5	953.9	1054.9	1079.2	1025.4	1110.2	1080.1	1432.6	1679.4	82.8
Female	526.1	486.1	568.8	561.6	603.7	557.3	556.0	596.9	617.8	812.9	912.0	73.4
TOTAL	716.6	720.2	786.8	751.4	821.2	808.3	781.1	842.7	839.6	1111.4	1281.7	78.9
TOTAL												
Male	752.2	778.8	784.8	775.3	809.1	841.8	802.8	824.4	801.5	1052.8	1184.8	57.5
Female	447.1	445.8	465.2	468.9	482.3	484.1	460.8	464.7	467.3	597.9	692.5	54.9
TOTAL	595.0	607.6	620.7	617.7	641.0	657.8	626.8	639.4	629.7	819.2	932.1	56.7

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

**TABLE 2C-22
LEADING CAUSES OF DEATH AMONG MIDDLE-AGED ADULTS (45-64 YEARS) BY GENDER, AREA, AND RACE/ETHNICITY,
ARIZONA, 2021**

Cause of death	Total	Male	Female	Area ^a		Race/ethnicity						
				Rural	Urban	White non-Hispanic	Hispanic or Latino	Black or African American	Alaska Native or Alaskan Indian	Asian or Pacific Islander	Unknown	
COVID-19	3,456	2,160	1,296	2,725	719	12	1,460	1,293	188	404	99	12
Malignant neoplasms	2,687	1,331	1,356	2,215	459	13	1,861	504	142	98	71	11
Malignant neoplasm of trachea, bronchus and lung	483	250	233	390	92	*	384	52	24	7	12	*
Malignant neoplasm of colon, rectum, and anus	337	205	132	288	46	*	214	83	22	7	10	*
Malignant neoplasm of breast	290†	*	286	245	40	*	196	45	19	14	14	0
Malignant neoplasm of pancreas	210†	107	102	167	40	*	146	44	6	12	*	0
Diseases of heart	2,140	1,534	606	1,666	460	14	1,414	384	184	111	34	13
Accidents (unintentional injury)	1,612	1,154	458	1,263	321	28	956	360	98	167	16	15
Accidental poisoning	899	638	261	749	136	14	528	206	68	81	6	10
Motor vehicle accidents	389	285	104	284	98	7	228	95	16	43	6	*
Falls	110†	69	37	87	18	*	67	24	*	11	*	0
Chronic liver disease and cirrhosis	860†	518	338	585	268	*	475	176	22	177	*	*
Diabetes	687	425	262	582	101	*	332	199	44	88	19	*
Intentional self-harm (suicide)	410†	319	95	324	89	*	347	41	*	7	11	*
By discharge of firearms	240†	194	47	187	54	0	213	23	*	0	*	0
By other means	170†	125	48	137	35	*	134	18	*	7	8	*
Cerebrovascular diseases	409	240	169	310	93	6	229	99	38	28	10	*
Chronic lower respiratory diseases	360†	164	194	264	93	*	301	27	16	6	*	6
Influenza and pneumonia	194	115	79	154	38	*	106	46	11	24	7	0
Essential (primary) hypertension and hypertensive renal disease	170†	110	63	142	28	*	100	30	22	18	*	*
Nephritis, nephrotic syndrome and nephrosis	152	82	70	120	32	0	63	43	18	19	6	*
Septicemia	120†	64	53	93	21	*	73	27	*	11	*	0
Assault (homicide)	110†	87	19	89	17	0	44	37	16	8	*	0
By discharge of firearms	70†	53	15	62	6	0	27	26	11	*	*	0
By other means	40†	34	*	27	11	0	17	11	*	0	0	*
Human immunodeficiency virus (HIV) disease	50†	49	*	41	11	*	22	16	7	6	*	*
Viral hepatitis	40†	26	13	32	*	*	18	16	*	*	*	0
Total, all causes^b	16,060	9,935	6,125	12,602	3,352	106	9,432	3,779	960	1,442	332	115

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

2C.AGE-SPECIFIC MORTALITY

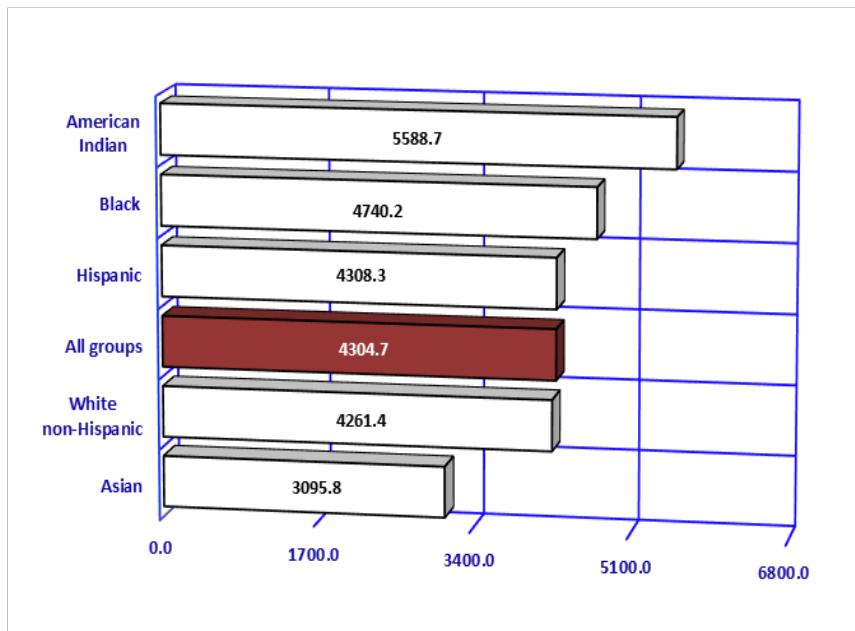
Elderly mortality (ages 65 years and older)

Figure 2C-25
**Mortality Rates^a by Gender and Year among Elderly 65 Years and Older,
Arizona, 2011-2021**



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

Figure 2C-26
**Mortality Rates^a by Race/Ethnicity among Elderly 65 Years and Older,
Arizona, 2021**



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

In 2021, an estimated 1,347,800 residents age 65 years and older resided in the state (**Table 10A-1**). No other age group has as great of a disproportionate gender distribution as the elderly. As a result of the higher total mortality rates for males at earlier ages, more elderly women than men were alive in 2021.

The 2021 elderly mortality rate of 4304.7 per 100,000 was 11.4 percent higher than the 2011 rate of 3,864.8 (**Table 2C-23**).

The 2021 total mortality rate among elderly females was 4.1 percent higher than their rate in 2011. The mortality rate among elderly males increased 19.0 percent during the same period (**Figure 2C-25, Table 2C-23**).

In 2021 the mortality rate for Arizona's American Indian elderly residents was 1.8 times that of the Asian elderly population. The mortality rate of 3,095.8 /100,000 among elderly Asians was the lowest rate among the racial/ethnic groups (**Figure 2C-26**). White non-Hispanic elderly had the second lowest mortality rate in 2021 at 4,261.4/100,000.

2C.AGE-SPECIFIC MORTALITY

Elderly mortality (ages 65 years and older)

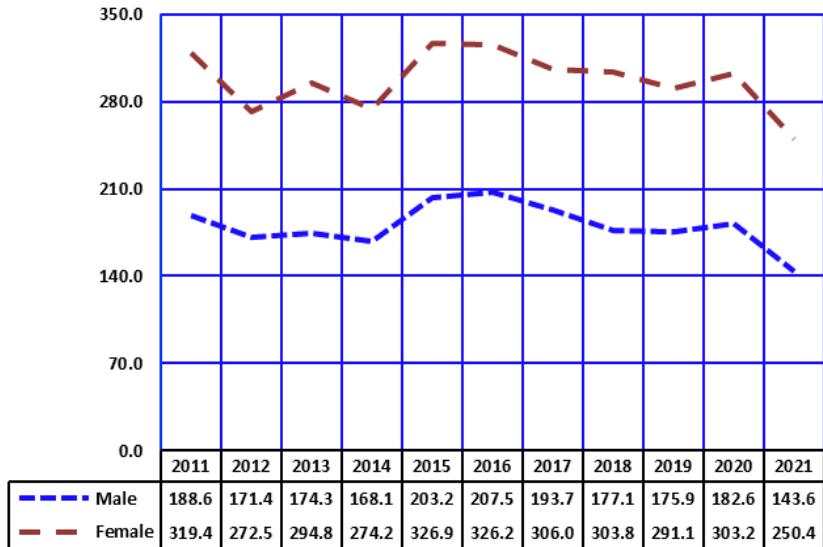
Tables 2C-23 and 2C-24 provide mortality rates for the five causes with the greatest number of deaths over the 2011-2021 period.

In 2021, Alzheimer's disease (2,713 deaths; **Table 2C-26**) accounted for 4.7 percent of elderly mortality. From 2020 to 2021, the mortality rate due to Alzheimer's disease decreased for both genders (**Figure 2C-27**).

There were 1,823 deaths from Alzheimer's disease among elderly females in 2021, approximately twice the number of deaths from this cause among males (890; **Table 2C-26**).

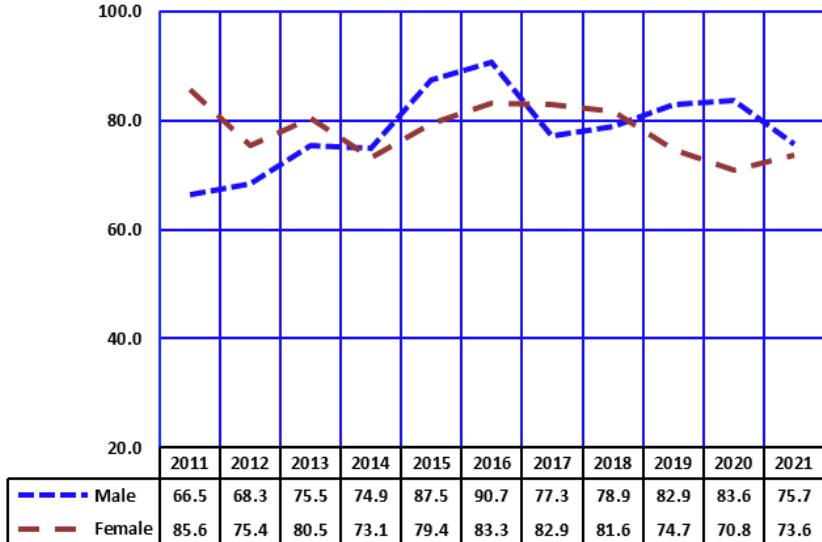
White non-Hispanic elderly accounted for 82.3 percent of the 2021 deaths from Alzheimer's disease (based on data in **Table 2C-26**).

Figure 2C-27
Trends in Mortality Rates for Alzheimer's Disease^a by Gender and Year
among Elderly 65 Years and Older, Arizona, 2011-2021



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

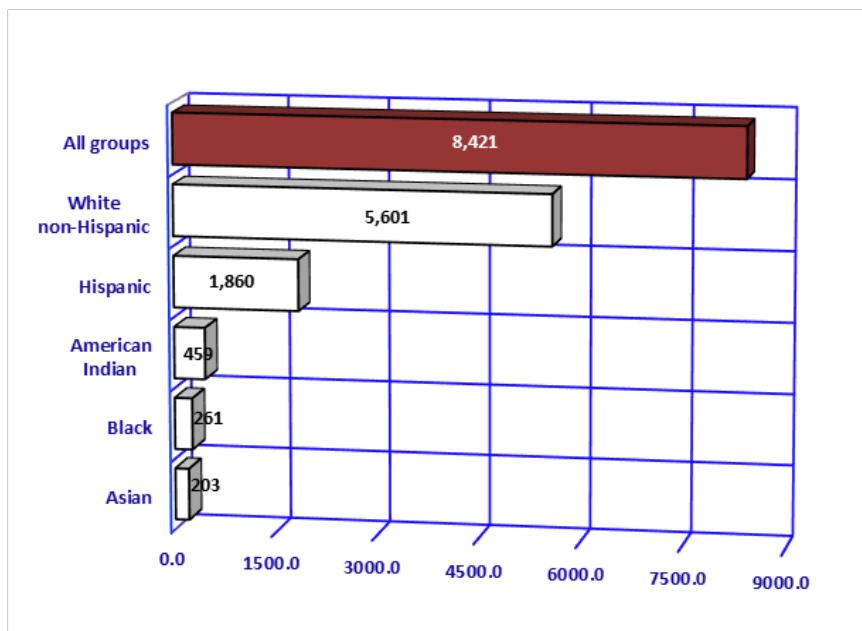
Figure 2C-28
Trends in Mortality Rates for Falls and Fall-related Injuries^a by Gender and Year among
Elderly 65 Years and Older, Arizona, 2011-2021



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

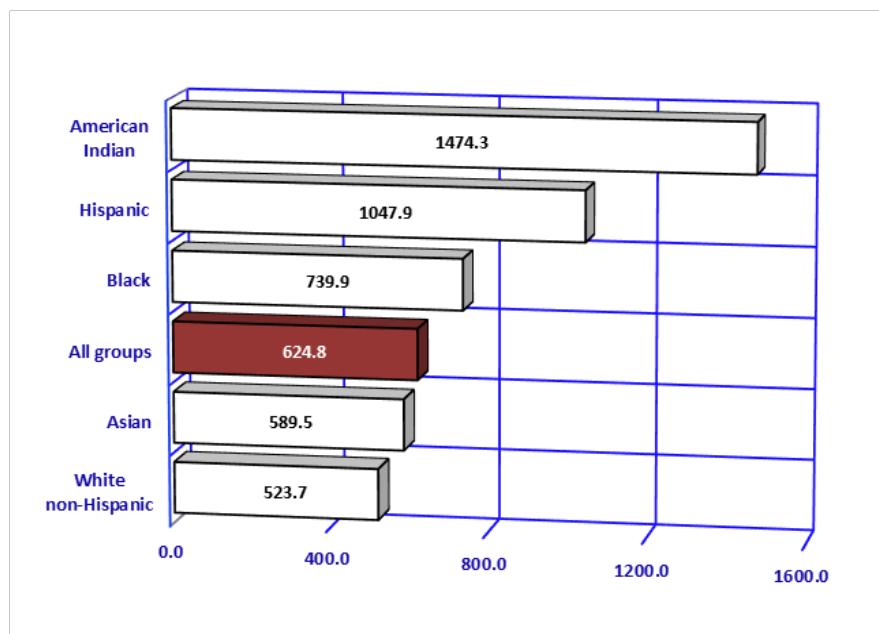
2C.AGE-SPECIFIC MORTALITY Elderly mortality (ages 65 years and older)

Figure 2C-29
**Mortality for COVID-19 by Race/Ethnicity among Elderly 65 Years and Older,
Arizona, 2021**



In 2021, 8,421 Arizona resident elderly adults 65 years of age and older died from COVID-19. Among the deaths, people who identified as White, non-Hispanic represented the largest amount of deaths compared to other race and ethnicities with 66.5% ($n=5,601$) of deaths in this age group. The least impacted race were Asians with 2.4% ($n=203$) of deaths in this age group (**Figure 2C-29, Table 2C-26**).

Figure 2C-30
**Mortality Rates^a for COVID-19 by Race/Ethnicity among Elderly 65 Years and Older,
Arizona, 2021**



The age-specific mortality rate of Arizona resident elderly adults 65 years of age and older found the highest risk among American Indians with a rate of 1,474.3 deaths per 100,000 people aged 65 years and older. This was approximately 2.4 times the rate among all race/ethnicity groups (624.8 deaths per 100,000 people aged 65+). People who identified as Hispanic or Latino represented the second highest group with 1,047.9 deaths per 100,000 people aged 65 years and older (**Figure 2C-30**).

Note: ^a Number of deaths due to COVID-19 per 100,000 persons, 65 years and older in specified group.

TABLE 2C-23
MORTALITY RATES^a FOR THE SELECTED FIVE LEADING CAUSES^b OF DEATH AMONG ELDERLY (65 YEARS AND OLDER)
BY GENDER, ARIZONA, 2011-2021

Gender/Cause	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change from 2011
MALE												
Diseases of heart	1065.5	1022.2	1007.0	908.6	970.0	1003.2	1002.5	984.3	961.0	1062.8	1070.0	0.4
Malignant neoplasms	1007.4	992.6	958.6	899.1	931.7	927.9	893.5	901.1	875.4	888.7	854.8	-15.1
Chronic lower respiratory diseases	318.4	319.9	302.7	290.2	308.7	298.2	288.3	280.8	265.2	260.6	238.3	-25.2
Cerebrovascular diseases	164.4	165.5	151.8	144.4	182.3	176.8	178.6	187.1	181.4	205.2	199.2	21.2
Alzheimer's disease	188.6	171.4	174.3	168.1	203.2	207.5	193.7	177.1	175.9	182.6	143.6	-23.9
ALL CAUSES	4083.3	3987.4	3904.2	3883.3	3975.4	4019.0	3892.3	3932.5	3858.4	4761.0	4859.7	19.0
(Number of all deaths)	(16,517)	(17,101)	(17,489)	(18,292)	(19,665)	(20,781)	(21,144)	(22,030)	(22,480)	(28,258)	(30,125)	82.4
FEMALE												
Diseases of heart	847.2	794.5	763.7	694.9	756.2	741.0	743.4	726.4	705.3	774.3	748.7	-11.6
Malignant neoplasms	710.9	678.6	697.9	628.1	670.5	642.2	628.7	601.8	624.4	627.5	607.5	-14.5
Alzheimer's disease	319.4	272.5	294.8	274.2	3269.0	326.2	306.0	303.8	291.1	303.2	250.4	-21.6
Chronic lower respiratory diseases	301.4	268.6	283.6	248.3	286.8	288.1	271.7	265.6	248.2	240.3	227.8	-24.4
Cerebrovascular diseases	231.0	208.0	198.1	191.1	210.5	218.4	208.0	215.3	207.8	224.3	221.5	-4.1
ALL CAUSES	3681.4	3489.9	3468.6	3378.3	3412.6	3371.1	3312.5	3293.6	3215.7	3881.4	3832.1	4.1
(Number of all deaths)	(17,798)	(17,855)	(18,494)	(18,718)	(19,815)	(20,408)	(21,055)	(21,542)	(21,918)	(27,025)	(27,894)	56.7
TOTAL												
Diseases of heart	946.8	898.3	874.8	793.1	854.5	861.8	862.8	845.4	823.1	907.0	896.5	-5.3
Malignant neoplasms	846.1	821.8	816.9	752.6	790.7	773.8	750.7	739.9	740.1	747.7	721.2	-14.8
Chronic lower respiratory diseases	309.1	292.0	292.3	267.6	296.8	292.8	279.3	272.6	256.0	249.6	232.6	-24.7
Cerebrovascular diseases	200.7	188.6	176.9	169.6	197.8	199.2	194.4	202.3	195.6	215.5	211.2	5.2
Alzheimer's disease	259.8	226.4	239.8	225.4	270.0	271.5	254.2	245.3	238.0	247.7	201.3	-22.5
ALL CAUSES	3864.8	3716.9	3667.5	3610.4	3671.5	3669.5	3579.6	3588.4	3511.9	4286.1	4304.7	11.4
(Number of all deaths)	(34,318)	(34,958)	(35,983)	(37,010)	(39,480)	(41,189)	(42,199)	(43,572)	(44,398)	(55,283)	(58,019)	69.1

Notes: ^a Rates are presented per 100,000 elderly persons 65 years and older; ^b The five causes with the greatest number of deaths over the 2011-2021 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 2011-2021 are classified by ICD-10, replacing the Ninth Revision (ICD-9); although COVID-19 was among the 5 leading causes of death, it has been excluded in this table because the ICD-10 definition had not been identified until 2020, thus there is no data for years 2011-2019 and making it impossible to show a trend and a percent change.

TABLE 2C-24
MORTALITY RATES^a FOR THE SELECTED FIVE LEADING CAUSES^b OF DEATH AMONG ELDERLY (65 YEARS AND OLDER)
IN URBAN AND RURAL AREAS^c, ARIZONA, 2011-2021

Area/Cause	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change from 2011
URBAN												
Diseases of heart	932.0	891.8	862.3	781.0	830.2	835.5	839.1	829.2	822.4	893.4	885.1	-5.0
Malignant neoplasms	846.2	825.5	807.6	748.7	783.6	756.6	737.1	724.0	726.2	732.2	705.1	-16.7
Chronic lower respiratory diseases	3111.3	288.9	286.3	267.8	292.0	285.8	265.3	257.5	238.0	235.6	215.1	-30.9
Cerebrovascular diseases	202.0	192.8	180.1	172.6	198.1	197.5	193.8	203.2	197.2	218.6	211.4	4.7
Alzheimer's disease	288.9	251.5	272.0	252.6	291.9	286.0	262.6	253.4	249.6	254.7	207.8	-28.1
ALL CAUSES	3886.0	3740.3	3663.4	3615.6	3650.2	3624.7	3531.0	3568.4	3488.5	4238.3	4220.5	8.6
(Number of all deaths)	(27,302)	(27,824)	(28,442)	(29,416)	(31,179)	(32,370)	(33,146)	(34,397)	(35,062)	(43,652)	(45,392)	66.3
RURAL												
Diseases of heart	990.4	912.5	919.1	834.0	935.2	947.2	940.3	900.8	819.6	950.5	929.5	-6.1
Malignant neoplasms	840.5	802.6	847.8	764.5	810.8	828.2	792.5	794.6	788.7	803.9	777.9	-7.4
Chronic lower respiratory diseases	298.9	299.6	314.0	264.3	311.1	311.2	328.6	327.6	323.4	304.0	301.2	0.8
Cerebrovascular diseases	193.1	171.9	164.1	157.9	195.8	204.0	193.6	196.1	187.2	202.0	206.8	7.1
Alzheimer's disease	145.1	130.2	117.2	118.7	184.1	211.9	218.2	211.3	190.6	218.6	174.1	20.0
ALL CAUSES	3741.1	3590.0	3665.4	3558.1	3706.3	3771.9	3708.2	3634.9	3566.0	4435.0	4588.6	22.7
(Number of all deaths)	(6,935)	(7,058)	(7,505)	(7,526)	(8,196)	(8,653)	(8,905)	(9,099)	(9,241)	(11,525)	(12,494)	80.2
TOTAL												
Diseases of heart	946.8	898.3	874.8	793.1	854.5	861.8	862.8	845.4	823.1	907.0	896.5	-5.3
Malignant neoplasms	846.1	821.8	816.9	752.6	790.7	773.8	750.7	739.9	740.1	747.7	721.2	-14.8
Chronic lower respiratory diseases	309.1	292.0	292.3	267.6	296.8	292.8	279.3	272.6	256.0	249.6	232.6	-24.7
Cerebrovascular diseases	200.7	188.6	176.9	169.6	197.8	199.2	194.4	202.3	195.6	215.5	211.2	5.2
Alzheimer's disease	259.8	226.4	239.8	225.4	270.0	271.5	254.2	245.3	238.0	247.7	201.3	-22.5
ALL CAUSES	3864.8	3716.9	3667.5	3610.4	3671.5	3669.5	3579.6	3588.4	3511.9	4286.1	4304.7	11.4
(Number of all deaths)	(34,318)	(34,958)	(35,983)	(37,010)	(39,480)	(41,189)	(42,199)	(43,572)	(44,398)	(55,283)	(58,019)	69.1

Notes: ^a Rates are presented per 100,000 elderly persons 65 years and older; ^b The five causes with the greatest number of deaths over the 2011-2021 period; ^c Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; see **Technical Notes** for more information; records with unknown county of residence are included in the statewide totals, but are not distributed by urban/rural area; the cause-of-death titles are according to the Tenth Revision of the International Classification of Diseases (ICD-10); the causes of death for 2011-2021 are classified by ICD-10, replacing the Ninth Revision (ICD-9); measures of comparability ratios - for the causes of death shown in this report are provided in the **Technical Notes**; although COVID-19 was among the 5 leading causes of death, it has been excluded in this table because the ICD-10 definition had not been identified until 2020, thus there is no data for years 2011-2019 and making it impossible to show a trend and a percent change.

TABLE 2C-25
**MORTALITY RATES^a FOR THE FIVE LEADING CAUSES OF DEATH AMONG ELDERLY (65 YEARS AND OLDER)
BY GENDER IN URBAN AND RURAL AREAS^b, ARIZONA, 2011-2021**

Area/Gender	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	% change from 2011
URBAN												
Male	4107.6	3980.1	3898.2	3888.6	3944.3	3960.2	3799.2	3891.3	3816.2	4695.5	4733.8	15.2
Female	3705.0	3543.8	3470.8	3388.5	3405.1	3344.3	3306.7	3297.9	3214.4	3856.4	3792.2	2.4
TOTAL	3886.0	3740.3	3663.4	3615.6	3650.2	3624.7	3531.0	3568.4	3488.5	4238.3	4220.5	8.6
RURAL												
Male	3948.9	3952.6	3895.3	3826.7	4027.0	4133.9	4142.9	4043.4	3971.6	4952.7	5262.3	33.3
Female	3547.4	3256.0	3454.5	3309.8	3409.1	3435.2	3304.1	3253.6	3188.9	3956.9	3966.8	11.8
TOTAL	3741.1	3590.0	3665.4	3558.1	3706.3	3771.9	3708.2	3634.9	3566.0	4435.0	4588.6	22.7
TOTAL												
Male	4083.3	3987.4	3904.2	3883.3	3975.4	4019.0	3892.3	3932.5	3858.4	4761.0	4859.7	19.0
Female	3681.4	3489.9	3468.6	3378.3	3412.6	3371.1	3312.5	3293.6	3215.7	3881.4	3832.1	4.1
TOTAL	3864.8	3716.9	3667.5	3610.4	3671.5	3669.5	3579.6	3588.4	3511.9	4286.1	4304.7	11.4

Notes: ^a Rates are presented per 100,000 persons 65 years and older; ^b 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, 2021**

Cause of death	Total	Male	Female	Area ^a		White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Refused/Unknown
				Rural	Urban						
Diseases of heart	12,083	6,633	5,450	9,519	2,531	33	10,066	1,225	317	209	195
Malignant neoplasms	9,721	5,299	4,422	7,584	2,118	19	7,976	1,051	284	194	169
Malignant neoplasm of trachea, bronchus and lung	2,100	1,092	1,008	1,633	462	*	1,843	151	46	13	38
Malignant neoplasm of lymphoid, hematopoietic and related tissue	1,039	594	445	829	208	*	866	105	32	22	14
Malignant neoplasm of colon, rectum, and anus	784	403	381	589	195	0	638	93	23	10	16
Malignant neoplasm of pancreas	764	420	344	602	161	*	602	103	22	18	15
Malignant neoplasm of prostate	705	705	0	552	152	*	559	88	36	8	9
Malignant neoplasm of breast	628	14	614	491	137	0	504	74	23	10	11
COVID-19	8,421	4,853	3,568	6,360	2,034	27	5,601	1,860	261	459	203
Chronic lower respiratory diseases	3,135	1,477	1,658	2,313	820	*	2,812	190	49	28	31
Cerebrovascular diseases	2,847	1,235	1,612	2,274	563	10	2,193	392	120	57	69
Alzheimer's disease	2,713	890	1,823	2,235	474	*	2,234	328	61	41	41
Diabetes	1,767	970	797	1,417	347	*	1,071	407	87	135	54
Accidents (unintentional injury)	1,742	954	788	1,357	374	11	1,382	192	47	66	36
Falls	1,005	469	536	817	186	*	837	99	12	27	25
Motor vehicle accidents	250†	172	77	181	64	*	179	39	8	15	*
Essential (primary) hypertension and hypertensive disease	1,015	448	567	846	169	0	742	170	46	29	26
Parkinson's disease	869	563	306	725	144	0	746	70	12	19	20
Influenza and pneumonia	692	403	289	535	155	*	523	93	24	37	13
Nephritis, nephrotic syndrome and nephrosis	684	364	320	497	186	*	483	124	28	32	13
Septicemia	360†	188	168	286	66	*	261	53	16	20	*
Total, all causes^b	58,019	30,125	27,894	45,392	12,494	133	45,574	7,647	1,672	1,740	1,066
											320

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

COMPARATIVE CAUSE-SPECIFIC MORTALITY BY AGE GROUP

TABLE 2C-27
COMPARISON OF CAUSES OF MORTALITY BY AGE GROUP, ARIZONA, 2021

	All ages	Infants <1	Children 1-14	Adoles- cents 15-19	Young adults 20-44	Middle- aged adults 45-64	Elderly 65+	Un- known
Total, all causes	81,482	430	249	396	6,316	16,060	58,019	12
Salmonella infections	0†	0	0	0	0	*	*	0
Shigellosis and amebiasis	0	0	0	0	0	0	0	0
Certain other intestinal infections	240†	*	0	0	*	52	182	0
Enterocolitis due to <i>Clostridium difficile</i>	150†	0	0	0	*	33	116	0
Tuberculosis	20†	0	0	0	*	*	10	0
Respiratory tuberculosis	10†	0	0	0	*	*	*	0
Other tuberculosis	10†	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	0	0	0
Septicemia	510†	*	*	*	31	117	356	0
Syphilis	0†	*	0	0	0	0	0	0
Acute poliomyelitis	0	0	0	0	0	0	0	0
Arthropod-borne encephalitis	0	0	0	0	0	0	0	0
Measles	0	0	0	0	0	0	0	0
Viral hepatitis	80	0	0	0	6	39	35	0
Human immunodeficiency virus (HIV) disease	94	0	0	0	25	53	16	0
Malaria	0	0	0	0	0	0	0	0
Other and unspecified infectious and parasitic diseases	500†	*	6	*	22	121	348	0
Malignant neoplasms	12,810†	*	23	14	364	2,687	9,721	0
Malignant neoplasm of lip, oral cavity and pharynx	225	0	0	0	8	50	167	0
Malignant neoplasm of esophagus	360†	0	0	0	*	80	276	0
Malignant neoplasm of stomach	233	0	0	0	16	68	149	0
Malignant neoplasm of colon, rectum, and anus	1,159	0	0	0	38	337	784	0
Malignant neoplasm of liver and intrahepatic bile ducts	570†	0	*	0	7	147	419	0
Malignant neoplasm of pancreas	984	0	0	0	11	209	764	0
Malignant neoplasm of larynx	62	0	0	0	0	19	43	0
Malignant neoplasm of trachea, bronchus and lung	2,595	0	0	0	12	483	2,100	0
Malignant melanoma of skin	218	0	0	0	12	49	157	0
Malignant neoplasm of breast	972	0	0	0	56	288	628	0
Malignant neoplasm of cervix uteri	100	0	0	0	28	43	29	0
Malignant neoplasm of corpus uteri and uterus, part unspecified	233	0	0	0	7	60	166	0
Malignant neoplasm of ovary	303	0	0	0	6	71	226	0
Malignant neoplasm of prostate	779	0	0	0	0	74	705	0
Malignant neoplasm of kidney and renal pelvis	317	0	0	0	10	71	236	0
Malignant neoplasm of bladder	420†	0	0	*	53	364	0	0

TABLE 2C-27 (continued)
COMPARISON OF CAUSES OF MORTALITY BY AGE GROUP, ARIZONA, 2021

	All ages	Infants <1	Children 1-14	Adoles- cents 15-19	Young adults 20-44	Middle- aged adults 45-64	Elderly 65+	Un- known
Malignant neoplasm of meninges, brain and other parts of central nervous system	400†	0	7	*	24	113	249	0
Malignant neoplasm of lymphoid, hematopoietic and related tissue	1,270†	0	7	*	52	170	1,039	0
Hodgkin's disease	30†	0	0	0	*	*	18	0
Non-Hodgkin's lymphoma	430†	0	0	*	12	68	352	0
Leukemia	560†	0	7	*	34	68	449	0
Multiple myeloma and immunoproliferative neoplasms	250†	0	0	0	*	29	219	0
Other and unspecified malignant neoplasms of lymphoid tissue	0†	0	0	0	*	*	*	0
All other and unspecified malignant neoplasm	1,610†	*	8	10	71	302	1,220	0
In situ neoplasms	420†	*	*	*	13	42	363	0
Anemias	80†	0	*	*	6	13	55	0
Diabetes	2,560†	0	0	*	100	687	1,767	0
Nutritional deficiencies	740†	0	0	0	*	47	691	0
Malnutrition	700†	0	0	0	*	45	655	0
Other nutritional deficiencies	40†	0	0	0	0	*	36	0
Obesity	300†	0	*	*	60	128	110	0
Meningitis	30†	*	0	0	*	10	19	0
Parkinson's disease	890†	0	0	0	*	22	869	0
Alzheimer's disease	2,750†	0	0	0	*	40	2,713	0
Major cardiovascular diseases	19,580†	*	10	*	389	2,801	16,373	0
Diseases of heart	14,540†	*	*	*	302	2,140	12,083	0
Acute rheumatic fever and chronic rheumatic heart disease	100†	0	0	0	*	14	80	0
Hypertensive heart disease	1,943	0	0	0	46	294	1,603	0
Ischemic heart disease	240†	0	0	0	*	23	216	0
Acute myocardial infarction	8,491	0	0	0	121	1,291	7,079	0
Other acute ischemic heart disease	2,001	0	0	0	35	381	1,585	0
Other forms of chronic ischemic heart disease	104	0	0	0	0	18	86	0
Atherosclerotic cardiovascular disease	6,386	0	0	0	86	892	5,408	0
All other forms of chronic ischemic heart disease	1,755	0	0	0	45	460	1,250	0
Other heart diseases	4,631	0	0	0	41	432	4,158	0
Acute and subacute endocarditis	3,760†	*	*	*	130	518	3,105	0
Diseases of pericardium and acute myocarditis	35	0	0	0	11	13	11	0
Heart failure	23	0	0	0	0	6	17	0
All other forms of heart disease	997	0	0	0	15	94	888	0
Essential (primary) hypertension and hypertensive renal disease	2,710†	*	*	*	104	405	2,189	0
Cerebrovascular diseases	1,200	0	0	0	12	173	1,015	0
Atherosclerosis	3,320†	*	*	*	56	409	2,847	0
	100†	0	0	0	0	0	92	0

TABLE 2C-27 (continued)
COMPARISON OF CAUSES OF MORTALITY BY AGE GROUP, ARIZONA, 2021

	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	429	0	0	0	1.9	74	336	0
Aortic aneurysm and dissection	211	0	0	0	1.2	43	156	0
Other disease of arteries, arterioles and capillaries	218	0	0	0	7	31	180	0
Other disorders of circulatory system	150†	0	0	*	16	51	83	0
Influenza and pneumonia	930†	*	*	0	41	194	692	0
Influenza	10†	0	0	*	*	*	6	0
Pneumonia	920†	*	*	0	39	193	686	0
COVID-19	12,690†	*	7	15	792	3,456	8,421	0
Other acute lower respiratory infections	10†	*	0	0	0	*	*	0
Acute bronchiolitis	0†	*	0	0	0	*	*	0
Unspecified acute lower respiratory infection	0†	0	0	0	0	0	*	0
Chronic lower respiratory diseases	3,520†	0	*	*	23	358	3,135	0
Bronchitis, chronic and unspecified	10†	0	0	0	0	*	*	0
Emphysema	190†	0	0	*	0	*	22	164
Asthma	90†	0	*	*	1.8	26	43	0
Other chronic lower respiratory diseases	3,240†	0	0	0	*	308	2,925	0
Pneumoconioses and chemical effects	11	0	0	0	0	0	11	0
Pneumonitis due to solids and liquids	218	0	0	0	7	31	180	0
Other disease of respiratory system	1,060†	*	*	*	27	151	874	0
Peptic ulcer	130†	0	0	*	*	25	97	0
Diseases of appendix	20†	0	*	0	*	*	10	0
Hernia	50†	0	0	*	0	*	6	36
Chronic liver disease and cirrhosis	1,772	0	0	0	346	856	570	0
Alcoholic liver disease	1,125	0	0	0	294	586	245	0
Other chronic liver disease and cirrhosis	647	0	0	0	52	270	325	0
Cholelithiasis and other disorders of gallbladder	100†	0	0	*	*	*	7	0
Nephritis, nephrotic syndrome and nephrosis	870†	*	0	0	32	152	684	0
Acute and rapidly progressive nephritic and nephrotic syndrome	10†	*	0	0	0	*	8	0
Chronic glomerulonephritis	10†	0	0	*	*	*	7	0
Renal failure	850†	*	0	0	31	148	669	0
Others disorders of kidney	0	0	0	0	0	0	0	0
Infections of kidney	40†	0	0	*	14	*	23	0
Hyperplasia of prostate	20†	0	0	0	0	*	13	0
Inflammatory diseases of female pelvic organs	0†	0	0	0	0	0	*	0
Pregnancy, childbirth and the puerperium	38	0	0	0	38	0	0	0
Pregnancy with abortive outcome	0†	0	0	*	0	0	0	0
Other complications of pregnancy, childbirth and the puerperium	37	0	0	0	37	0	0	0

TABLE 2C-27 (continued)
COMPARISON OF CAUSES OF MORTALITY BY AGE GROUP, ARIZONA, 2021

	All ages	Infants <1	Children 1-14	Adoles- cents 15-19	Young adults 20-44	Middle- aged adults 45-64	Elderly 65+	Un- known
Perinatal conditions	220†	214	*	0	*	*	0	0
Congenital anomalies, deformations and chromosomal abnormalities	224	94	17	8	23	44	38	0
Symptoms, signs, abnormal findings	870†	38	8	*	65	137	616	0
Total accidents	5,945	31	91	180	2,288	1,612	1,742	*
Transport accidents	1,260†	*	37	87	595	389	249	0
Motor vehicle accidents	1,450†	*	38	88	618	429	277	0
Other land transport accidents	35	0	0	0	12	12	11	0
Water, air, space	60†	0	*	*	11	28	17	0
Nontransport accidents	4,493	29	53	92	1,670	1,183	1,465	*
Falls	1,150†	0	*	*	33	106	1,005	0
Accidental discharge of firearms	10†	0	*	*	6	0	0	0
Accidental drowning and submersion	120†	*	29	8	31	20	25	0
Accidental exposure to smoke, fire and flames	60†	0	*	*	14	32	0	0
Accidental poisoning	2,650†	*	7	80	1,528	899	134	*
Other and unspecified nontransport accidents	520†	25	10	*	67	144	269	0
Intentional self-harm (suicide)	1,470	0	16	67	634	414	338	*
By discharge of firearms	880†	0	*	27	338	241	267	0
By other means	592	0	11	40	296	173	71	*
Assault (homicide)	560†	*	14	63	346	106	27	0
By discharge of firearms	430†	*	*	61	279	68	15	0
By other means	130†	*	9	*	67	38	12	0
Legal intervention	30†	0	*	0	20	*	*	0
Events of undetermined intent	180†	*	8	*	71	55	32	0
Discharge of firearms	20†	0	*	*	12	*	*	0
Other and unspecified events of undetermined intent	150†	*	7	*	59	51	29	0
Operations of war	0	0	0	0	0	0	0	0
Complications of medical and surgical care	140†	0	*	*	10	36	95	0
Injury by firearms	1,360†	*	12	92	655	317	286	0
Drug-induced deaths	2,860†	*	15	85	1,592	972	190	*
Opioid-induced deaths	1,960†	*	14	72	1,261	527	87	0
Alcohol-induced deaths	1,890†	0	0	*	493	976	421	0

Notes: * Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; the causes of death in this table are classified by the Tenth Revision of the International Classification of Diseases (ICD-10).

TABLE 2C-28
COMPARISON OF CAUSE-SPECIFIC MORTALITY RATES^a BY AGE GROUP, ARIZONA, 2021

	All ages	Infants <1	Children 1-14	Adolescents 15-19	Young adults 20-44	Middle-aged adults 45-64	Elderly 65+
Total, all causes	1118.4	552.3	19.8	83.7	262.6	932.1	4304.7
Salmonella infections	0.0	0.0	0.0	0.0	0.0	0.0	**
Shigellosis and amebiasis	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Certain other intestinal infections	3.3	**	0.0	0.0	**	3.0	13.5
Enterocolitis due to Clostridium difficile	2.1	0.0	0.0	0.0	**	1.9	8.6
Tuberculosis	0.2	0.0	0.0	0.0	**	**	0.7
Respiratory tuberculosis	0.1	0.0	0.0	0.0	**	**	**
Other tuberculosis	0.1	0.0	0.0	0.0	**	**	**
Whooping cough	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scarlet fever and erysipelas	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Meningococcal infection	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Septicemia	7.0	**	**	**	1.3	6.8	26.4
Syphilis	0.0	**	0.0	0.0	0.0	0.0	0.0
Acute poliomyelitis	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Arthropod-borne encephalitis	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Measles	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Viral hepatitis	1.1	0.0	0.0	0.0	0.2	2.3	2.6
Human immunodeficiency virus (HIV) disease	1.3	0.0	0.0	0.0	1.0	3.1	1.2
Malaria	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other and unspecified infectious and parasitic diseases	6.9	**	0.5	**	0.9	7.0	25.8
Malignant neoplasms	175.8	**	1.8	3.0	15.1	155.9	721.2
Malignant neoplasm of lip, oral cavity and pharynx	3.1	0.0	0.0	0.0	0.3	2.9	12.4
Malignant neoplasm of esophagus	5.0	0.0	0.0	0.0	**	4.6	20.5
Malignant neoplasm of stomach	3.2	0.0	0.0	0.0	0.7	3.9	11.1
Malignant neoplasm of colon, rectum, and anus	15.9	0.0	0.0	0.0	1.6	19.6	58.2
Malignant neoplasm of liver and intrahepatic bile ducts	7.9	0.0	**	0.0	0.3	8.5	31.1
Malignant neoplasm of pancreas	13.5	0.0	0.0	0.0	0.5	12.1	56.7
Malignant neoplasm of larynx	0.9	0.0	0.0	0.0	0.0	1.1	3.2
Malignant neoplasm of trachea, bronchus and lung	35.6	0.0	0.0	0.0	0.5	28.0	155.8
Malignant melanoma of skin	3.0	0.0	0.0	0.0	0.5	2.8	11.6
Malignant neoplasm of breast	13.3	0.0	0.0	0.0	2.3	16.7	46.6
Malignant neoplasm of cervix uteri	2.7	0.0	0.0	0.0	2.4	4.9	4.0
Malignant neoplasm of corpus uteri and uterus, part unspecified	6.4	0.0	0.0	0.0	0.6	6.8	22.8
Malignant neoplasm of ovary	8.3	0.0	0.0	0.0	0.5	8.0	31.0
Malignant neoplasm of prostate	21.5	0.0	0.0	0.0	0.0	8.8	113.7
Malignant neoplasm of kidney and renal pelvis	4.4	0.0	0.0	0.0	0.4	4.1	17.5
Malignant neoplasm of bladder	5.7	0.0	0.0	0.0	**	3.1	27.0

TABLE 2C-28 (continued)
COMPARISON OF CAUSE-SPECIFIC MORTALITY RATES^a BY AGE GROUP, ARIZONA, 2021

	All ages	Infants <1	Children 1-14	Adolescents 15-19	Young adults 20-44	Middle-aged adults 45-64	Elderly 65+
Malignant neoplasm of meninges, brain and other parts of central nervous system	5.4	0.0	0.6	**	1.0	6.6	18.5
Malignant neoplasm of lymphoid, hematopoietic and related tissue	17.4	0.0	0.6	**	2.2	9.9	77.1
Hodgkin's disease	0.3	0.0	0.0	0.0	**	0.5	1.3
Non-Hodgkin's lymphoma	5.9	0.0	0.0	**	0.5	3.9	26.1
Leukemia	7.7	0.0	0.6	**	1.4	3.9	33.3
Multiple myeloma and immunoproliferative neoplasms	3.4	0.0	0.0	0.0	**	1.7	16.2
Other and unspecified malignant neoplasms of lymphoid tissue	0.0	0.0	0.0	0.0	**	**	**
All other and unspecified malignant neoplasm	22.1	**	0.6	2.1	3.0	17.5	90.5
In situ neoplasms	5.8	**	**	**	0.5	2.4	26.9
Anemias	1.0	0.0	**	**	0.2	0.8	4.1
Diabetes	35.1	0.0	0.0	**	4.2	39.9	131.1
Nutritional deficiencies	10.2	0.0	0.0	0.0	**	2.7	51.3
Malnutrition	9.7	0.0	0.0	0.0	**	2.6	48.6
Other nutritional deficiencies	0.5	0.0	0.0	0.0	0.0	**	2.7
Obesity	4.1	0.0	**	**	2.5	7.4	8.2
Meningitis	0.4	**	0.0	0.0	**	0.6	1.4
Parkinson's disease	12.2	0.0	0.0	0.0	**	1.3	64.5
Alzheimer's disease	37.8	0.0	0.0	0.0	**	2.3	201.3
Major cardiovascular diseases	268.8	**	0.8	**	16.2	162.6	1214.8
Diseases of heart	199.5	**	**	**	12.6	124.2	896.5
Acute rheumatic fever and chronic rheumatic heart disease	1.3	0.0	0.0	0.0	**	0.8	5.9
Hypertensive heart disease	26.7	0.0	0.0	0.0	1.9	17.1	118.9
Hypertensive heart and renal disease	3.3	0.0	0.0	0.0	**	1.3	16.0
Ischemic heart disease	116.5	0.0	0.0	0.0	5.0	74.9	525.2
Acute myocardial infarction	27.5	0.0	0.0	0.0	1.5	22.1	117.6
Other acute ischemic heart disease	1.4	0.0	0.0	0.0	0.0	1.0	6.4
Other forms of chronic ischemic heart disease	87.7	0.0	0.0	0.0	3.6	51.8	401.2
Atherosclerotic cardiovascular disease	24.1	0.0	0.0	0.0	1.9	26.7	92.7
All other forms of chronic ischemic heart disease	63.6	0.0	0.0	0.0	1.7	25.1	308.5
Other heart diseases	51.7	**	**	**	5.4	30.1	230.4
Acute and subacute endocarditis	0.5	0.0	0.0	0.0	0.5	0.8	0.8
Diseases of pericardium and acute myocarditis	0.3	0.0	0.0	0.0	0.0	0.3	1.3
Heart failure	13.7	0.0	0.0	0.0	0.6	5.5	65.9
All other forms of heart disease	37.2	**	**	**	4.3	23.5	162.4
Essential (primary) hypertension and hypertensive renal disease	16.5	0.0	0.0	0.0	0.5	10.0	75.3
Cerebrovascular diseases	45.6	**	**	**	2.3	23.7	211.2
Atherosclerosis	1.3	0.0	0.0	0.0	0.0	**	6.8

TABLE 2C-28 (continued)
COMPARISON OF CAUSE-SPECIFIC MORTALITY RATES^a BY AGE GROUP, ARIZONA, 2021

	All ages	Infants <1	Children 1-14	Adolescents 15-19	Young adults 20-44	Middle-aged adults 45-64	Elderly 65+
Other diseases of circulatory system		5.9	0.0	0.0	0.0	0.8	4.3
Aortic aneurysm and dissection		2.9	0.0	0.0	0.0	0.5	2.5
Other disease of arteries, arterioles and capillaries		3.0	0.0	0.0	0.0	0.3	1.8
Other disorders of circulatory system		2.1	0.0	0.0	**	0.7	3.0
Influenza and pneumonia		12.8	**	0.0	0.0	1.7	11.3
Influenza		0.1	0.0	0.0	0.0	**	**
Pneumonia		12.7	**	**	0.0	1.6	11.2
COVID-19		174.2	**	0.6	3.2	32.9	200.6
Other acute lower respiratory infections		0.1	**	0.0	0.0	0.0	**
Acute bronchiolitis		0.1	**	0.0	0.0	0.0	**
Unspecified acute lower respiratory infection		0.0	0.0	0.0	0.0	0.0	**
Chronic lower respiratory diseases		48.3	0.0	**	**	1.0	20.8
Bronchitis, chronic and unspecified		0.1	0.0	0.0	0.0	0.0	**
Emphysema		2.6	0.0	0.0	0.0	**	1.3
Asthma		1.2	0.0	**	**	0.7	1.5
Other chronic lower respiratory diseases		44.4	0.0	0.0	0.0	0.0	**
Pneumoconioses and chemical effects		0.2	0.0	0.0	0.0	0.0	0.8
Pneumonitis due to solids and liquids		3.0	0.0	0.0	0.0	0.3	1.8
Other disease of respiratory system		14.6	**	**	1.1	8.8	64.8
Peptic ulcer		1.7	0.0	0.0	0.0	**	1.5
Diseases of appendix		0.2	0.0	**	0.0	**	0.7
Hernia		0.6	0.0	0.0	0.0	**	0.3
Chronic liver disease and cirrhosis		24.3	0.0	0.0	0.0	14.4	49.7
Alcoholic liver disease		15.4	0.0	0.0	0.0	12.2	34.0
Other chronic liver disease and cirrhosis		8.9	0.0	0.0	0.0	2.2	15.7
Cholelithiasis and other disorders of gallbladder		1.4	0.0	0.0	0.0	**	0.5
Nephritis, nephrotic syndrome and nephrosis		12.0	**	0.0	0.0	1.3	8.8
Acute and rapidly progressive nephritic and nephrotic syndrome		0.1	**	0.0	0.0	0.0	0.6
Chronic glomerulonephritis		0.2	0.0	0.0	0.0	**	0.5
Renal failure		11.7	**	0.0	0.0	1.3	8.6
Others disorders of kidney		0.0	0.0	0.0	0.0	0.0	0.0
Infections of kidney		0.5	0.0	0.0	0.0	**	0.8
Hyperplasia of prostate		0.4	0.0	0.0	0.0	0.0	**
Inflammatory diseases of female pelvic organs		0.1	0.0	0.0	0.0	0.0	**
Pregnancy, childbirth and the puerperium		1.0	0.0	0.0	0.0	3.2	0.0
Pregnancy with abortive outcome		0.0	0.0	0.0	0.0	**	0.0
Other complications of pregnancy, childbirth and the puerperium		1.0	0.0	0.0	0.0	3.2	0.0

TABLE 2C-28 (continued)
COMPARISON OF CAUSE-SPECIFIC MORTALITY RATES^a BY AGE GROUP, ARIZONA, 2021

	All ages	Infants <1	Children 1-14	Adolescents 15-19	Young adults 20-44	Middle-aged adults 45-64	Elderly 65+
Perinatal conditions	3.0	274.9	**	0.0	**	**	0.0
Congenital anomalies, deformations and chromosomal abnormalities	3.1	120.7	1.4	1.7	1.0	2.6	2.8
Symptoms, signs, abnormal findings	11.9	48.8	0.6	**	2.7	8.0	45.7
Total accidents	81.6	39.8	7.2	38.0	95.1	93.6	129.2
Transport accidents	19.9	**	3.0	18.6	25.7	24.9	20.6
Motor vehicle accidents	18.7	**	2.9	18.4	24.7	22.6	18.5
Other land transport accidents	0.5	0.0	0.0	0.0	0.5	0.7	0.8
Water, air, space	0.8	0.0	**	**	0.5	1.6	1.3
Nontransport accidents	61.7	37.2	4.2	19.4	69.4	68.7	108.7
Falls	15.7	0.0	**	**	1.4	6.2	74.6
Accidental discharge of firearms	0.1	0.0	**	**	0.2	0.0	0.0
Accidental drowning and submersion	1.6	**	2.3	1.7	1.3	1.2	1.9
Accidental exposure to smoke, fire and flames	0.8	0.0	**	**	**	0.8	2.4
Accidental poisoning	36.4	**	0.6	16.9	63.5	52.2	9.9
Other and unspecified nontransport accidents	7.1	32.1	0.8	**	2.8	8.4	20.0
Intentional self-harm (suicide)	20.2	0.0	1.3	14.2	26.4	24.0	25.1
By discharge of firearms	12.1	0.0	**	5.7	14.1	14.0	19.8
By other means	8.1	0.0	0.9	8.4	12.3	10.0	5.3
Assault (homicide)	7.7	**	1.1	13.3	14.4	6.2	2.0
By discharge of firearms	5.9	**	**	12.9	11.6	3.9	1.1
By other means	1.8	**	0.7	**	2.8	2.2	0.9
Legal intervention	0.4	0.0	0.0	**	0.8	**	**
Events of undetermined intent	2.4	**	0.6	**	3.0	3.2	2.4
Discharge of firearms	0.3	0.0	**	**	0.5	**	**
Other and unspecified events of undetermined intent	2.1	**	0.6	**	2.5	3.0	2.2
Operations of war	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Complications of medical and surgical care	2.0	0.0	**	**	0.4	2.1	7.0
Injury by firearms ^b	18.7	**	1.0	19.4	27.2	18.4	21.2
Drug-induced deaths ^b	39.2	**	1.2	18.0	66.2	56.4	14.1
Opioid-induced deaths ^b	26.9	**	1.1	15.2	52.4	30.6	6.5
Alcohol-induced deaths ^b	26.0	0.0	0.0	**	20.5	56.6	31.2

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



2D.

PATTERNS OF PREMATURE MORTALITY

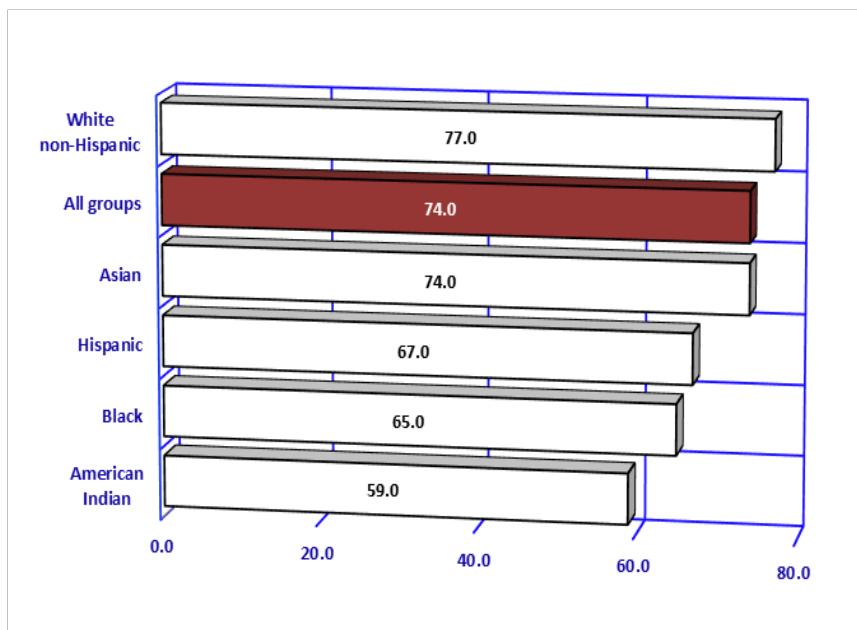
In 2021, among the race/ethnic minority groups (Hispanic or Latino, Black or African American, American Indian or Alaska Native, Asian or Pacific Islander), people younger than 25 years represented 41.4 percent of the group total ($n=3,281,312$), while among White non-Hispanics the same age demographic accounted for 23.6 percent of the group total ($n=4,004,058$). In contrast, people aged 65 years and older accounted for 26.7 percent of White non-Hispanics, but only 8.5 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 2021, of all deaths among the elderly (65 years and older), 78.6 percent were White non-Hispanics, 13.2 percent were Hispanic or Latino, with the remaining three racial/ethnic groups comprising only 7.7 percent of all deaths in this age group (**Table 2C-26**). Looking at younger ages, Native American children comprised only 4.9 percent of Arizona's population age 1–14, but accounted for 12.4 percent of all childhood deaths. Native American adolescents (ages 15–19) represented only 4.8 percent of all adolescents, but accounted for 10.4 percent of all adolescent deaths. Finally, Native American young adults (ages 20–44) represented 4.5 percent of all young adults but comprised 17.5 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

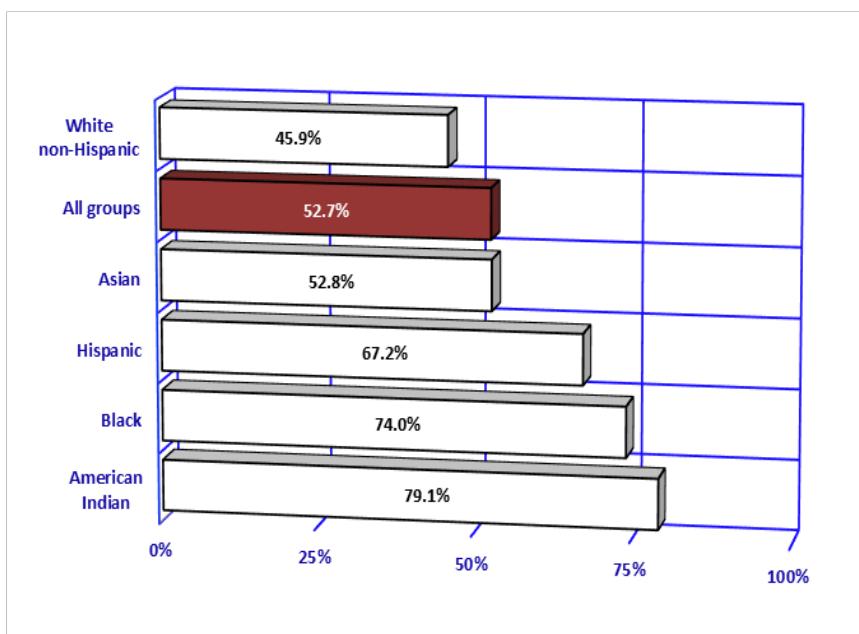
Figure 2D-1
Median Age at Death by Race/Ethnicity, Arizona, 2021



The median age at death reflected a change from 76 years in 2014 to 2020, to 74 years in 2021 (**Table 2D-1**). In other words, one of every two Arizonans who died in 2021 was older than 74 years of age. Among Arizona females, the median age at death was 77 years old when they died in 2021. Among males, the median age at death was 72 years in 2021. **Table 2D-1** shows both the median age at death by race/ethnicity and gender from 2011-2021.

In 2021, compared to White non-Hispanics, on average Asians were 3 years younger at time of death, Hispanics were 10 years younger, Blacks were 12 years younger, and American Indian residents of Arizona were 18 years younger (based on the median age at death).

Figure 2D-2
Percent of Deaths before Expected^a Years of Life Reached by Race/Ethnicity, Arizona, 2021



In 2021, the percent of deaths before expected years of life reached (a premature death ratio) was 52.7 percent, a level that changed from prior years (52.2 in 2020, 55.6 in 2019, and 55.1 for both 2018 and 2017 (**Figure 2D-2**)).

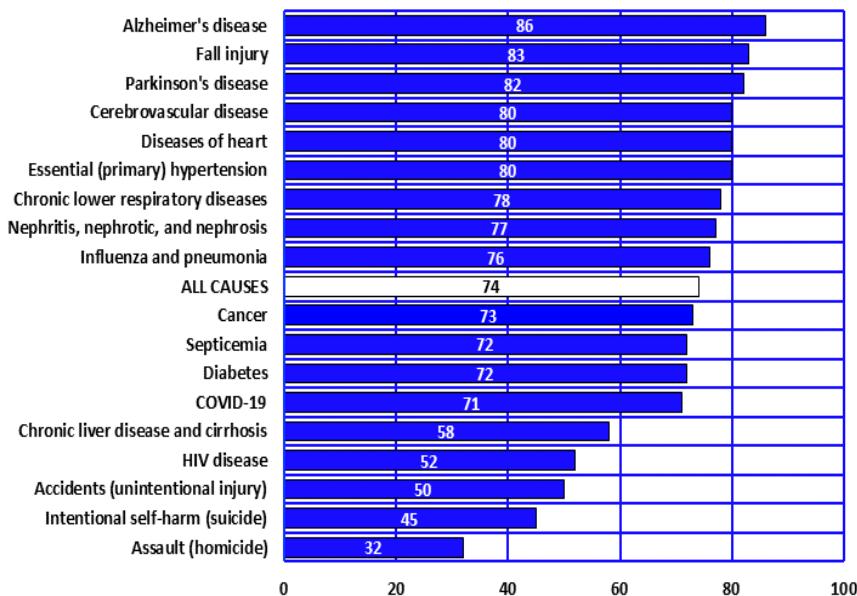
As expected, based on the findings for average and median age at death, White non-Hispanics were the only group with less than 50 percent of all deaths (45.9 percent) occurring before the expected years of life were reached (**Figure 2D-2**).

Among American Indians, nearly eight out of ten deaths (79.1 percent) were premature (**Table 2D-2**).

Note: ^a Expected years of life at birth for all U.S. residents (76.1 years).

2D. PATTERNS OF PREMATURE MORTALITY

Figure 2D-3
**Median Age at Death for Selected Leading Causes of Death,
 Arizona, 2021**

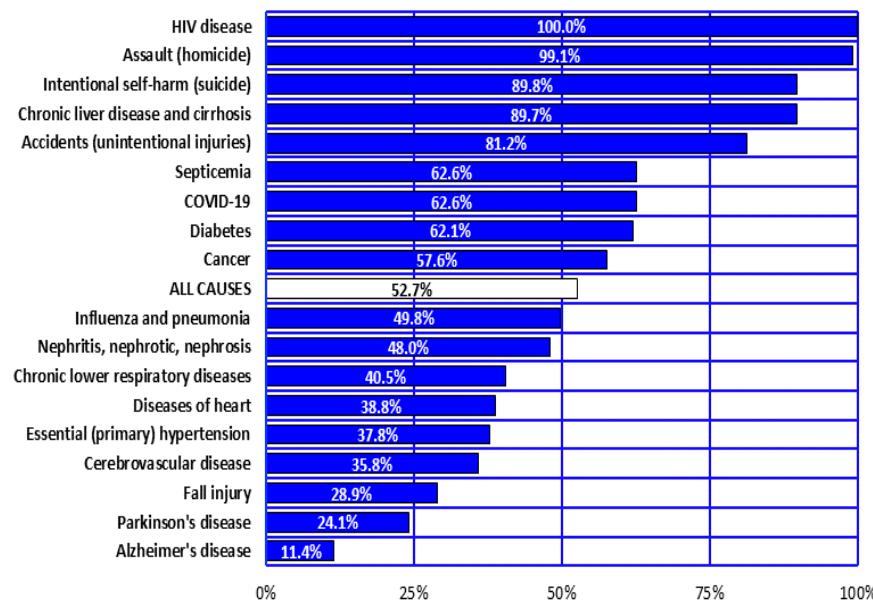


In 2021, *Alzheimer's disease* had the highest median age of death at 86 years (**Figure 2D-3**), exceeding by 12 years the median age at death for all causes (**Figure 2D-3, Table 2D-3**).

Among the leading causes of death, *homicide* had the lowest median age at death of 32 years.

From 2010-2015, *cancer* 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* (73 years) is substantially lower than the median age at death from *diseases of the heart* (80 years).

Figure 2D-4
**Percent of Deaths before Expected Years of Life^a Reached for
 Selected Leading Causes of Death, Arizona, 2021**



Only 11.4 percent of deaths from *Alzheimer's disease* occurred before the age of 76.1 years, i.e., before the expected years of life were reached. In contrast, almost all deaths from *homicide* were premature (99.1 percent; **Figure 2D-4, Table 2D-4**). The median age at death from *homicide* was 32 years in 2021, showing a decrease from 34 years recorded in 2020 (**Figure 2D-3, Table 2D-3**).

A minority of deaths from *diseases of heart* were premature (38.8 percent). In contrast 57.6 percent of deaths from *cancer* occurred before the expected years of life were reached.

Notes: ^a Expected years of life at birth for all U.S. residents (76.1 years);

TABLE 2D-1
AVERAGE AND MEDIAN AGE AT DEATH FROM ALL CAUSES BY GENDER AND RACE/ETHNICITY, ARIZONA, 2011-2021

Year	Gender	All ethnic groups		Race/ethnicity							
		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
2011	Total	72.8	77.0	75.3	79.0	63.6	68.0	63.6	66.0	58.4	60.0
	Male	69.7	73.0	72.5	76.0	59.8	63.0	61.0	64.0	54.4	54.0
	Female	76.2	81.0	78.3	82.0	68.5	75.0	66.6	69.0	63.2	67.0
2012	Total	72.7	77.0	75.2	78.8	63.8	68.8	62.6	65.9	57.8	59.8
	Male	69.9	73.7	72.6	75.9	60.7	64.3	59.6	63.2	54.3	55.5
	Female	75.9	80.6	78.1	82.1	67.8	74.7	66.0	69.6	62.0	65.0
2013	Total	72.5	77.0	75.2	79.0	64.3	69.0	63.1	66.0	58.3	60.0
	Male	69.6	74.0	72.6	76.0	60.6	64.0	59.5	63.0	54.7	55.0
	Female	75.8	81.0	78.0	82.0	68.6	75.0	67.7	73.0	63.1	67.0
2014	Total	72.7	76.0	75.1	78.0	64.7	69.0	62.7	65.0	59.3	61.0
	Male	70.0	73.0	72.6	75.0	61.7	65.0	60.5	63.0	55.7	57.0
	Female	75.8	80.0	77.9	81.0	68.4	74.0	65.3	67.0	63.8	66.0
2015	Total	72.5	76.0	74.9	78.0	64.8	69.0	62.8	66.0	58.5	60.0
	Male	69.9	73.0	72.5	75.0	61.7	66.0	60.4	64.0	55.0	56.0
	Female	75.5	79.0	77.5	81.0	68.7	74.0	65.9	69.0	62.9	66.0
2016	Total	72.9	76.0	75.4	78.0	65.0	69.0	63.4	66.0	58.9	60.0
	Male	70.3	73.0	73.2	75.0	61.9	65.0	60.3	63.0	55.8	56.0
	Female	75.9	79.0	78.0	81.0	69.1	75.0	67.6	71.0	63.3	66.0
2017	Total	72.6	76.0	75.2	78.0	64.9	69.0	62.7	65.0	58.9	61.0
	Male	69.9	73.0	72.8	76.0	61.5	65.0	58.7	62.0	55.7	57.0
	Female	75.8	79.0	77.9	81.0	69.3	75.0	67.8	69.0	63.1	67.0
2018	Total	72.5	76.0	75.2	78.0	65.2	70.0	63.5	67.0	58.2	60.0
	Male	69.7	73.0	72.8	76.0	61.4	65.0	60.2	63.0	54.7	56.0
	Female	75.9	80.0	77.9	81.0	67.0	73.0	66.0	70.0	62.9	65.0
2019	Total	72.5	76.0	75.3	78.0	65.0	70.0	62.3	66.0	59.7	62.0
	Male	69.8	74.0	72.9	76.0	61.1	65.0	59.9	65.0	56.5	58.0
	Female	75.7	79.0	78.0	81.0	70.0	75.0	65.1	68.0	63.8	67.0
2020	Total	72.1	76.0	75.3	78.0	65.4	69.0	62.1	65.0	60.2	62.0
	Male	69.5	73.0	73.0	76.0	62.1	66.0	59.3	63.0	57.4	59.0
	Female	75.4	79.0	77.8	80.0	70.0	74.0	66.2	69.0	63.7	66.0
2021	Total	71.2	74.0	74.5	77.0	64.0	67.0	61.2	65.0	57.8	59.0
	Male	68.8	72.0	72.5	75.0	60.9	64.0	58.6	62.0	54.9	56.0
	Female	74.2	77.0	77.0	79.0	68.3	72.0	64.6	68.0	61.6	63.0

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, 2011-2021

Year/gender	All racial/ethnic groups	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
2011 Total	53.8	49.6	67.4	74.4	77.7	66.3
Male	61.8	57.5	75.4	80.7	84.3	71.3
Female	45.1	41.2	57.3	67.1	70.0	61.5
2012 Total	55.0	50.9	68.4	74.4	78.7	62.3
Male	62.3	58.1	75.7	81.6	83.9	74.2
Female	46.7	43.0	59.1	66.1	72.2	51.9
2013 Total	54.6	50.1	67.1	72.8	76.7	58.9
Male	62.0	57.5	75.0	80.8	82.7	65.0
Female	46.2	42.1	57.7	62.4	68.9	53.2
2014^a Total	54.8	50.9	66.7	75.2	77.8	58.9
Male	62.0	58.0	74.1	79.7	84.1	68.9
Female	46.7	43.1	57.7	69.8	69.8	49.7
2015^a Total	54.9	50.9	67.4	74.1	77.4	59.9
Male	61.6	57.6	73.9	78.5	83.2	66.8
Female	47.2	43.4	59.1	68.6	70.2	53.1
2016 Total	55.3	51.4	66.7	73.5	77.1	58.5
Male	62.1	57.9	73.4	79.9	82.4	67.3
Female	47.5	44.1	57.9	64.9	69.7	50.6
2017 Total	55.1	50.6	67.0	75.1	77.9	58.7
Male	61.8	57.0	74.1	82.0	84.0	63.1
Female	47.3	43.3	58.0	66.1	69.9	54.7
2018 Total	55.1	50.8	65.6	73.3	78.8	57.7
Male	62.1	57.4	73.4	80.3	83.9	64.9
Female	46.9	43.2	55.1	65.2	71.9	51.2
2019 Total	55.6	50.8	67.3	75.3	77.8	60.2
Male	61.9	56.9	74.7	78.8	82.8	67.7
Female	48.2	43.9	57.9	71.0	71.5	52.3
2020 Total	52.2	46.1	65.0	72.9	75.6	51.0
Male	58.6	52.0	72.1	78.1	80.7	58.2
Female	44.5	39.3	55.0	65.3	69.1	44.2
2021 Total	52.7	45.9	67.2	74.0	79.1	52.8
Male	58.6	51.4	73.8	79.0	84.3	59.2
Female	45.4	39.3	58.1	67.5	72.5	46.4

Note: ^a Based on updated expected years of life at birth for all U.S. residents (76.1 years in 2021).

TABLE 2D-3
**MEDIAN AGE AT DEATH FOR LEADING CAUSES OF MORTALITY BY GENDER, RACE/ETHNICITY, AND
 URBAN/RURAL AREAS^a, ARIZONA, 2021**

	ARIZONA		Area/gender				Race/ethnicity						
	Total	Male	Female	Total Urban	Urban Male	Female	Total Rural	Rural Male	Rural Female	White Non-Hispanic or Latino	Hispanic or Latino	American Indian or Alaska Native	Asian or Pacific Islander
Total, all causes	74.0	72.0	77.0	75.0	72.0	78.0	74.0	72.0	77.0	67.0	65.0	59.0	74.0
Major cardiovascular diseases	80.0	77.0	83.0	80.0	77.0	84.0	79.0	76.0	82.0	81.0	76.0	70.0	80.0
Diseases of heart	80.0	77.0	84.0	80.0	77.0	84.0	79.0	76.0	83.0	81.0	75.0	68.0	80.0
Coronary heart disease	79.0	77.0	84.0	80.0	77.0	84.0	78.0	76.0	83.0	81.0	75.0	68.0	79.0
Malignant neoplasms	73.0	73.0	73.0	73.0	73.0	73.0	74.0	74.0	73.0	74.0	69.0	68.0	71.0
Lung cancer	74.0	74.0	74.0	74.0	75.0	73.0	73.0	73.0	73.0	74.0	73.0	67.0	76.0
Prostate cancer	79.0	79.0	0.0	79.0	79.0	0.0	77.0	77.0	0.0	79.0	77.0	72.0	72.0
Breast cancer	70.0	77.5	70.0	70.0	79.0	70.0	71.0	69.0	71.0	72.0	65.5	62.0	58.5
Colorectal cancer	72.0	69.0	74.0	70.0	68.0	74.0	75.0	74.0	78.0	73.0	64.0	63.5	63.0
Malignant melanoma of skin	74.0	74.0	75.0	75.0	75.0	74.5	71.0	69.5	78.0	74.0	74.5	71.0	52.0
Cerebrovascular diseases	80.0	77.0	83.0	81.0	78.0	83.0	79.0	77.0	81.0	82.0	77.0	73.0	79.0
Chronic lower respiratory diseases	78.0	77.0	79.0	78.0	77.0	79.0	77.0	77.0	78.0	78.0	78.0	74.0	77.0
Accidents (unintentional injuries)	50.0	46.0	57.0	49.0	45.0	57.0	54.0	53.0	58.0	58.0	38.0	39.0	51.5
Motor vehicle accidents	42.0	43.0	41.0	42.0	43.0	40.0	44.0	44.5	42.0	52.0	34.0	34.0	50.0
Falls	83.0	80.0	85.0	83.0	81.0	85.0	80.0	78.0	82.5	84.0	77.5	76.0	82.5
Accidental poisoning	39.0	39.0	41.0	39.0	38.0	41.0	39.0	39.0	39.0	42.0	35.0	38.0	36.5
Accidental drowning	35.0	30.0	46.0	28.0	27.5	41.0	36.0	35.0	55.0	48.0	21.0	10.5	36.0
Influenza and pneumonia	76.0	74.0	77.0	76.0	75.0	78.0	74.5	74.0	76.0	78.0	70.0	70.0	66.0
COVID-19	71.0	71.0	72.0	71.0	70.0	72.0	72.0	72.0	72.0	75.0	66.0	65.0	62.0
Alzheimer's disease	86.0	85.0	87.0	86.0	85.0	87.0	86.0	85.0	87.0	86.0	86.5	84.0	86.0
Diabetes	72.0	70.0	73.0	71.0	70.0	73.0	71.0	74.5	73.0	73.0	70.0	68.0	66.0
Intentional self-harm (suicide)	45.0	45.0	45.0	45.0	46.0	47.5	48.0	41.5	53.0	33.0	31.0	29.0	44.0
Chronic liver disease and cirrhosis	58.0	59.0	58.0	59.0	59.0	56.0	57.0	55.5	62.0	58.0	59.0	47.0	61.0
Nephritis, nephrotic syndrome and nephrosis	77.0	76.0	77.0	76.0	76.0	77.0	76.0	78.0	79.0	73.0	69.0	67.0	75.0
Septicemia	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	73.0	73.0	69.0	70.0	65.0
Assault (homicide)	32.0	31.0	34.0	31.0	31.0	33.0	39.0	41.0	38.0	29.0	31.0	33.0	35.0
Parkinson's disease	82.0	81.0	83.0	82.0	81.0	83.0	81.0	83.0	82.0	82.5	83.0	78.5	82.0
Essential (primary) hypertension and hypertensive renal disease	80.0	76.0	83.0	81.0	78.0	83.0	78.0	74.0	81.5	81.0	80.0	70.0	83.0
Human immunodeficiency virus (HIV) disease	51.5	50.5	59.0	52.0	51.0	57.0	51.5	49.0	63.0	54.0	51.0	53.0	47.0
Injury by firearms	40.5	40.0	41.0	38.0	38.0	39.0	53.0	53.0	52.5	53.0	29.0	32.0	34.5
Drug-induced deaths	40.0	39.0	42.0	40.0	39.0	43.0	39.0	40.0	43.0	35.0	39.0	36.0	39.0
Opioid-induced deaths	36.0	35.0	39.0	37.0	35.0	40.0	35.0	34.0	36.0	39.0	32.5	36.0	34.0
Alcohol-induced deaths	55.0	55.0	53.5	55.0	56.0	54.0	54.0	52.0	58.0	54.0	52.0	45.5	47.0

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

TABLE 2D-4
PERCENT DEATHS BEFORE EXPECTED^a YEARS OF LIFE REACHED FOR THE LEADING CAUSES OF MORTALITY BY GENDER, RACE/ETHNICITY, AND URBAN/RURAL AREAS^b, ARIZONA, 2021

	ARIZONA		Area/gender				Race/ethnicity						
	Total	Male	Female	Total	Urban	Rural	Total Male	Rural Male	White Non-Hispanic	Hispanic or Latino	American Indian or Alaskan Native	Pacific Islander or Asian	
Total, all causes	52.7%	58.6%	45.4%	52.2%	58.3%	44.9%	54.2%	59.4%	47.1%	45.9%	67.2%	74.0%	79.1%
Major cardiovascular diseases	38.5%	46.4%	28.9%	37.8%	45.8%	28.4%	40.7%	48.1%	30.4%	34.4%	49.6%	66.1%	62.2%
Diseases of heart	38.8%	46.3%	28.6%	38.2%	45.6%	28.5%	40.6%	48.3%	28.7%	34.7%	51.9%	68.3%	63.7%
Coronary heart disease	39.4%	46.8%	28.1%	38.7%	46.0%	27.7%	41.7%	49.2%	29.0%	35.8%	50.7%	66.4%	59.5%
Malignant neoplasms	57.6%	57.9%	57.7%	57.6%	57.8%	57.0%	56.3%	57.9%	54.2%	70.3%	71.5%	70.9%	64.5%
Lung cancer	55.9%	54.5%	54.2%	56.3%	52.1%	62.1%	60.6%	64.1%	54.7%	60.7%	76.1%	75.0%	49.0%
Colorectal cancer	60.4%	66.5%	53.0%	62.3%	68.6%	54.6%	52.8%	58.0%	46.3%	56.4%	72.5%	75.0%	76.2%
Breast cancer	65.5%	43.8%	65.9%	65.6%	27.3%	66.1%	64.7%	80.0%	64.3%	61.1%	74.6%	79.6%	92.9%
Prostate cancer	38.6%	38.6%	0.0%	37.5%	37.5%	0.0%	43.3%	43.3%	0.0%	35.0%	47.5%	63.0%	50.0%
Malignant melanoma of skin	55.5%	56.9%	53.1%	53.8%	53.4%	54.4%	63.6%	75.0%	46.2%	55.0%	57.1%	100.0%	66.7%
Accidents (unintentional injuries)	81.2%	86.6%	69.9%	80.9%	86.7%	68.9%	81.5%	85.3%	73.1%	73.2%	92.0%	94.2%	94.9%
Accidental poisoning	99.5%	99.5%	99.6%	99.6%	99.6%	99.7%	98.9%	98.9%	98.9%	99.3%	99.9%	99.5%	99.6%
Falls	28.9%	36.7%	21.4%	26.9%	33.7%	20.9%	36.7%	46.3%	24.5%	24.2%	44.6%	46.7%	68.9%
Motor vehicle accidents	92.9%	93.7%	91.1%	92.7%	93.3%	91.1%	93.9%	95.1%	91.3%	89.3%	96.0%	97.7%	98.4%
Accidental drowning	87.8%	89.2%	84.4%	89.0%	90.9%	84.0%	78.9%	76.9%	83.3%	82.0%	92.6%	92.9%	100.0%
Chronic lower respiratory diseases	40.5%	43.4%	38.0%	40.1%	43.1%	37.4%	41.7%	44.0%	39.6%	39.6%	44.2%	58.8%	45.7%
Alzheimer's disease	11.4%	12.9%	10.6%	11.4%	13.6%	10.4%	10.6%	9.2%	11.3%	11.0%	9.6%	27.0%	22.0%
Cerebrovascular diseases	35.8%	44.1%	28.9%	35.3%	44.1%	28.1%	37.6%	43.5%	32.3%	31.1%	46.1%	59.4%	54.3%
Diabetes	62.1%	66.1%	56.9%	62.2%	66.0%	57.3%	61.8%	66.7%	55.1%	57.3%	65.4%	71.8%	78.5%
Intentional self-harm (suicide)	89.8%	88.9%	93.5%	90.3%	89.8%	92.0%	88.3%	86.1%	98.5%	86.7%	96.0%	100.0%	93.1%
Chronic liver disease and cirrhosis	89.7%	90.1%	89.2%	88.4%	89.0%	87.4%	92.6%	92.3%	93.1%	85.7%	91.4%	90.2%	98.0%
Essential (primary) hypertension and hypertensive renal disease	37.8%	47.8%	28.8%	36.2%	45.9%	27.8%	44.7%	55.3%	33.3%	33.6%	37.6%	67.6%	65.3%
Influenza and pneumonia	49.8%	53.9%	44.1%	49.0%	53.4%	42.6%	51.9%	54.7%	48.3%	42.9%	64.1%	62.2%	72.5%
COVID-19	62.6%	64.6%	59.6%	62.8%	64.9%	59.7%	61.9%	63.5%	59.5%	53.4%	75.0%	76.0%	78.7%
Parkinson's disease	24.1%	26.2%	20.3%	23.7%	25.3%	20.8%	26.0%	30.3%	17.6%	23.9%	22.4%	30.8%	30.0%
Nephritis, nephrotic syndrome and nephrosis	48.0%	48.7%	47.2%	47.9%	48.5%	47.2%	48.5%	49.6%	47.1%	38.2%	60.3%	69.4%	83.3%
Septicemia	62.6%	63.1%	62.1%	61.1%	60.7%	61.5%	66.0%	69.2%	62.2%	59.0%	69.8%	79.2%	73.0%
Assault (homicide)	99.1%	99.3%	98.0%	99.4%	99.3%	100.0%	97.3%	100.0%	88.9%	97.9%	99.5%	100.0%	98.6%
Human immunodeficiency virus (HIV) disease	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Injury by firearms	90.8%	89.9%	96.2%	92.4%	91.8%	96.0%	84.2%	82.1%	97.2%	85.7%	97.5%	100.0%	100.0%
Drug-induced deaths	98.9%	99.2%	98.1%	98.8%	99.2%	97.9%	99.2%	99.3%	99.1%	98.4%	99.6%	99.6%	100.0%
Opioid-induced deaths	99.3%	99.7%	98.3%	99.3%	99.7%	98.3%	99.6%	100.0%	98.7%	98.9%	100.0%	100.0%	95.0%
Alcohol-induced deaths	95.1%	94.7%	96.0%	94.9%	94.8%	95.2%	95.5%	94.5%	93.0%	97.5%	97.7%	98.0%	100.0%

Notes: ^a Expected years of life at birth for all U.S. residents (76.1 years in 2021); ^b Urban = Maricopa, Pima, Pinal, and Yuma counties.