

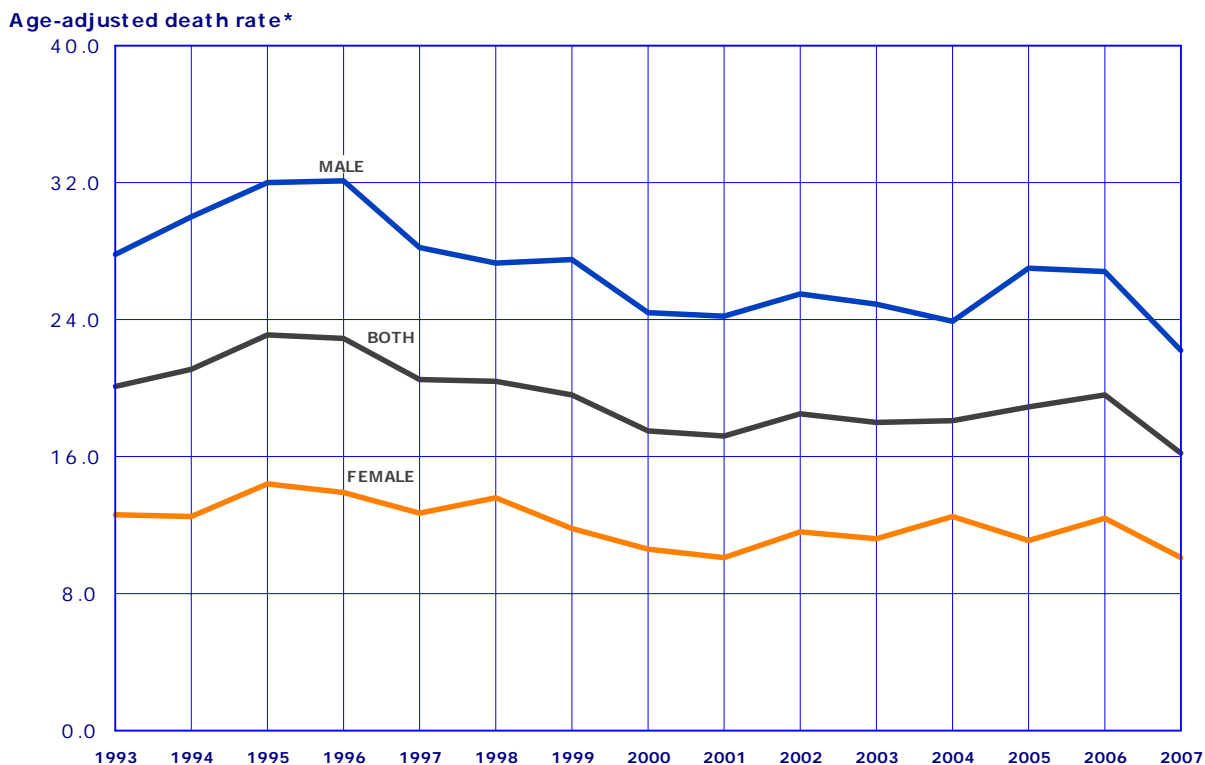
1.

**TRENDS IN AGE-ADJUSTED MORTALITY RATES
FOR MOTOR VEHICLE-RELATED INJURIES
BY GENDER AND RACE/ETHNICITY,
ARIZONA RESIDENTS,
1993-2007**

Age-adjustment of death rates controls for differences in the age composition of populations between time periods or between regions, genders, race/ethnic groups or other relevant demographic variables. The adjustment process makes age-adjusted mortality rates better indicators than crude death rates of temporal changes and differences among diverse populations or subgroups of the population. All mortality rates in this section are age-adjusted, using the 2000 standard population. Therefore, the reader should understand that the term age-adjusted precedes the word, mortality rate, even though it was eliminated from the text to make reading easier.

The mortality rate for motor vehicle-related injuries declined by 29.9 percent from a recent peak of 23.1 deaths per 100,000 age-adjusted population in 1995 to 16.2/100,000 in 2007 (**Figure 1-1**). Both males and females had nearly equal reductions in the death rates for motor vehicle-related injuries. However, each year from 1993 to 2007 males were more likely than females to be motor vehicle fatalities. In 2007, the male to female rate ratio was 2.2 (or the male mortality rate was 2.2 times greater than the rate for females). The disproportionality of males relative to females remained fairly stable in 1993 – 2007.

Figure 1-1
Age-Adjusted Mortality Rates* for Motor Vehicle-Related Injuries by Gender and Year, Arizona Residents, 1993-2007

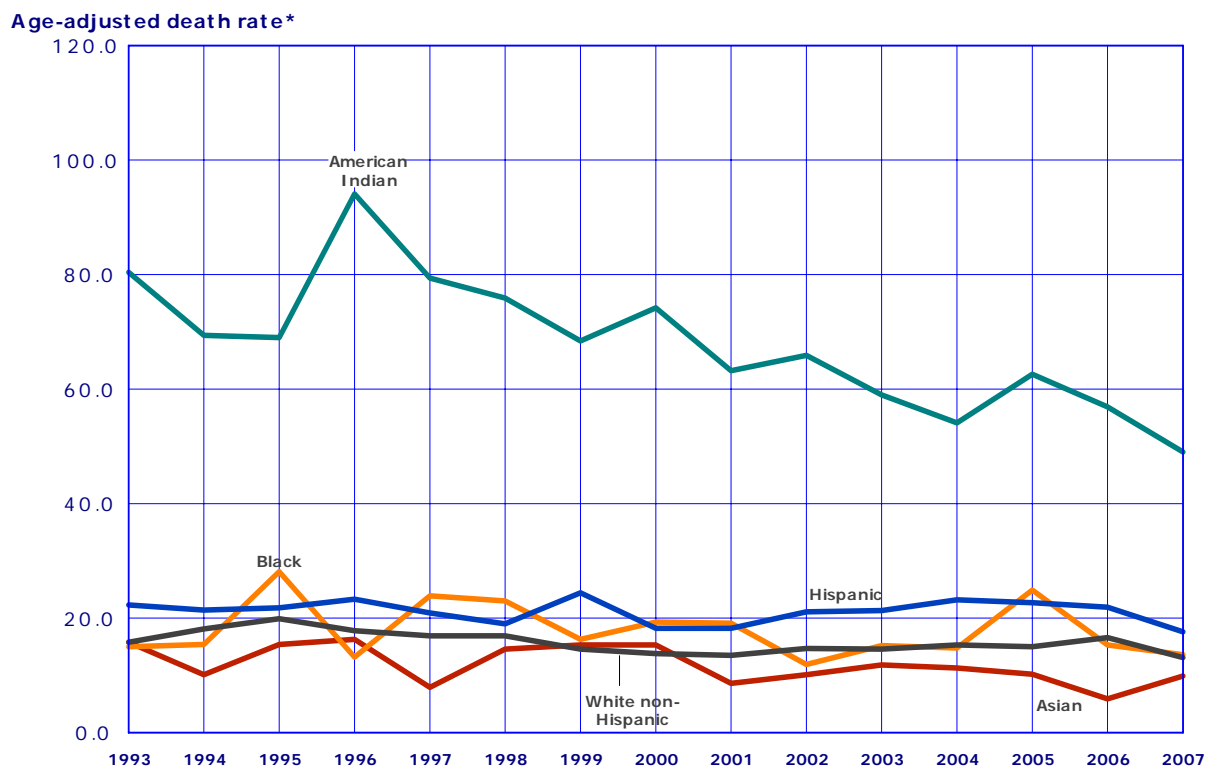


In 2007, the mortality rates for motor vehicle-related injuries ranged from 9.9 deaths per 100,000 Asian or Pacific Islander residents of the State to 49.0/100,000 among American Indians (**Figure 1-2**). In 1993 – 2007, the mortality rates of American Indians have been clearly in their own class, exceeding the average rates for all race/ethnic groups by 200 (in 2007) to 300 (1993) percent. However, American Indians also experienced a dramatic improvement in mortality rates for motor vehicle-related injuries. Compared to a rate of 94.1/100,000 in 1996, the 2007 mortality rate of 49.0/100,000 was 48 percent lower. Blacks or African Americans had an equally impressive reduction in their mortality risk for motor vehicle-related injuries. The mortality rate for Blacks or African Americans declined by 52 percent from a peak rate of 28.1/100,000 in 1995 to 13.6/100,000 in 2007.

For both White non-Hispanics and Hispanics or Latinos their respective 2007 mortality rates (13.1/100,000 and 17.6/100,000) were the lowest rates of the entire fifteen-year period from 1993 to 2007. Due to small number of events occurring in a relatively small subpopulation, the mortality rates for motor vehicle-related injuries varied erratically from year to year among Asian or Pacific Islander residents of the State.

If the 2007 mortality risk for motor vehicle-related injuries of American Indians applied to all Arizonans, 3,152 would have died in motor vehicle accidents, 2,117 more than the 1,035 who actually did.

Figure 1-2
Age-Adjusted Mortality Rates* for Motor Vehicle-Related Injuries by Race/Ethnicity and Year, Arizona Residents, 1993-2007

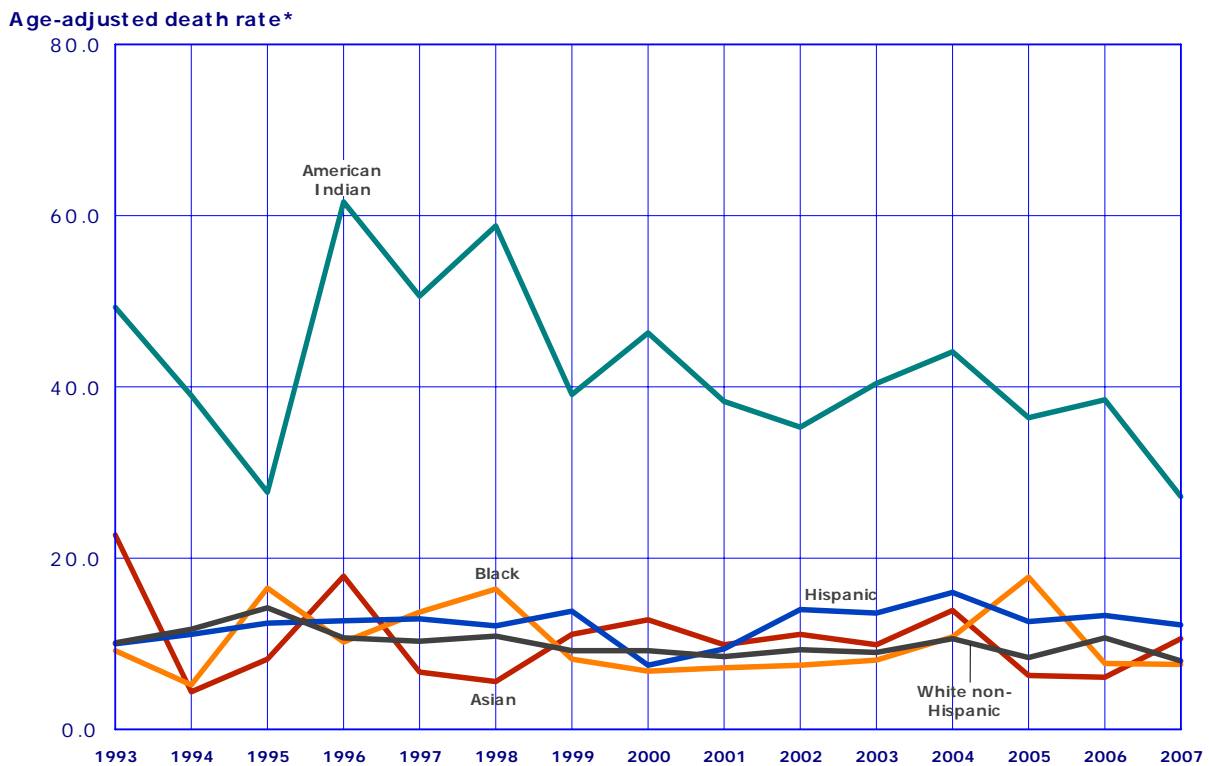


The changes over time in the mortality rates for motor vehicle-related injuries among Arizona female residents (**Figure 1-3**) resemble the temporal pattern for both genders by race/ethnicity. However, the reader is advised to notice that the scale required to accommodate the highest values in Figure 1-3 is only 2/3rd of the scale used in Figure 1-2.

In 2007, the mortality rate of American Indian females was 63 percent lower (27.2/100,000) than the mortality rate of their male counterparts (72.8/100,000). However, it continued to be in 1993 – 2007 the highest female mortality among the 5 race/ethnic groups in Arizona. The mortality rate for motor vehicle-related injuries among American Indian females declined by 55.8 percent from a recent peak of 61.6 deaths per 100,000 females in 1996 to 27.2/100,000 in 2007. The mortality rate for all Arizona female residents declined by 30 percent from a rate of 14.4/100,000 in 1995 to 10.1/100,000 in both 2001 and 2007. With only one exception (the mortality rate of Black or African American males in 1995), the mortality rates of American Indian females exceeded the corresponding mortality rates of their male counterparts in each year from 1993 to 2007, and in each race/ethnic group other than American Indians.

White non-Hispanic females were the only group whose mortality rates for motor vehicle-related injuries were consistently lower in each year from 1993 to 2007 than the yearly mortality rates of all Arizona female residents.

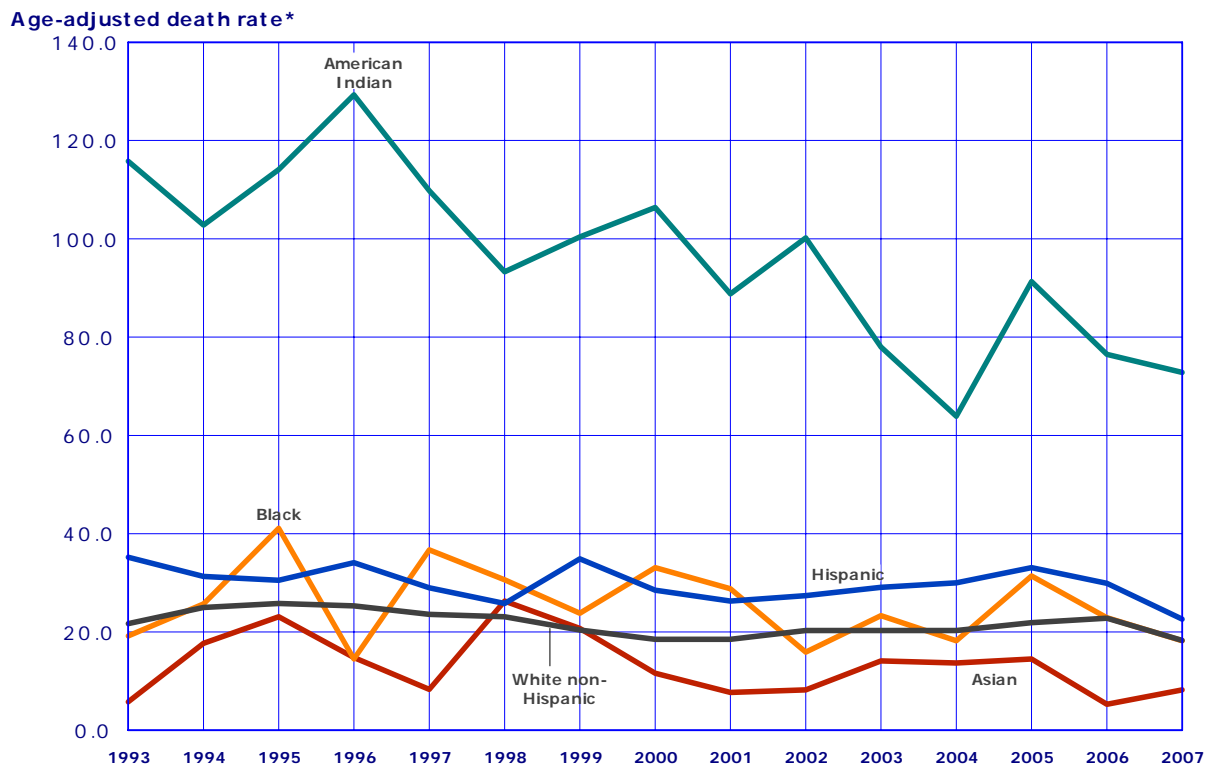
Figure 1-3
Age-Adjusted Mortality Rates* for Motor Vehicle-Related Injuries by Race/Ethnicity and Year, Arizona Female Residents, 1993-2007



In 2007, the mortality rates for motor vehicle-related injuries among Arizona male residents ranged from 8.2 deaths per 100,000 Asian or Pacific Islander males to 72.8/100,000 for American Indian males (**Figure 1-4**). In 1993 – 2007, the mortality rates of American Indian male residents of Arizona also have been in their own class, exceeding the average rates for all Arizona male residents by 185 (in 2006) to 340 (in 2000) percent. Again, the reader is advised to notice that the scale required to accommodate the highest values in Figure 1-4 (0-140) is greater than the scale used to depict the mortality rates for both genders in Figure 1-2 (0-120).

The mortality rate for motor vehicle-related injuries among Arizona male residents declined for the second consecutive year from 27.0 deaths per 100,000 persons in 2005 to 22.2/100,000 in 2007. The mortality rates for motor vehicle-related injuries also declined for the second consecutive year among American Indian males from 91.2/100,000 in 2005 to 72.8 deaths per 100,000 persons in 2007; Hispanic or Latino males (from 33.1/100,000 to 22.6/100,000; and Black or African American males (from 31.4/100,000 to 18.2/100,000). In contrast, Asian or Pacific Islander males experienced an increase from a mortality rate of 5.3/100,000 in 2006 to 8.2/100,000 in 2007. The mortality rates for motor vehicle-related injuries among Asian or Pacific Islander males varied erratically from a high of 26.3/100,000 in 1998 to a low of 5.3/100,000 in 2006.

Figure 1-4
Age-Adjusted Mortality Rates* for Motor Vehicle-Related Injuries by Race/Ethnicity and Year, Arizona Male Residents, 1993-2007



**Table 1-1
Age-Adjusted Mortality Rates* for Motor Vehicle-Related Injuries by Race/Ethnicity, Gender and Year,
Arizona Residents, 1993-2007**

Year	All groups			White non-Hispanic			Hispanic or Latino			Black or African American			American Indian or Alaska Native			Asian or Pacific Islander		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1993	20.1	27.8	12.6	15.8	21.7	10.1	22.3	35.2	10.0	15.0	19.2	9.2	80.4	115.8	49.3	15.8	5.8	22.7
1994	21.1	30.0	12.5	18.1	25.0	11.7	21.4	31.3	11.1	15.4	25.7	5.2	69.4	102.8	39.0	10.1	17.7	4.4
1995	23.1	32.0	14.4	19.9	25.8	14.2	21.8	30.5	12.4	28.1	41.1	16.5	69.0	114.1	27.7	15.4	23.1	8.2
1996	22.9	32.1	13.9	17.8	25.3	10.7	23.3	34.1	12.7	13.2	14.5	10.2	94.1	129.3	61.6	16.3	14.8	17.9
1997	20.5	28.2	12.7	16.9	23.6	10.3	20.9	29.0	12.9	23.9	36.7	13.7	79.4	109.8	50.6	7.9	8.3	6.7
1998	20.4	27.3	13.6	16.9	23.1	10.9	19.0	25.8	12.1	23.0	30.6	16.4	75.9	93.3	58.8	14.6	26.3	5.6
1999	19.6	27.5	11.8	14.6	20.4	9.2	24.4	34.9	13.8	16.3	23.8	8.2	68.4	100.4	39.1	15.3	20.7	11.1
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	8.2	10.6

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

