



2D.

### PATTERNS OF PREMATURE MORTALITY

Compared with the White non-Hispanics, the race/ethnic minority groups in Arizona have had greater percentages of people younger than 25 years (48.0 vs. 29.1 percent). In contrast, people aged 65 years and older accounted for 17.8 percent of White non-Hispanics, but only 5.1 percent of all ethnic minority groups combined (percentages based on race-and-age-specific population denominators in **Table 10C-1**).

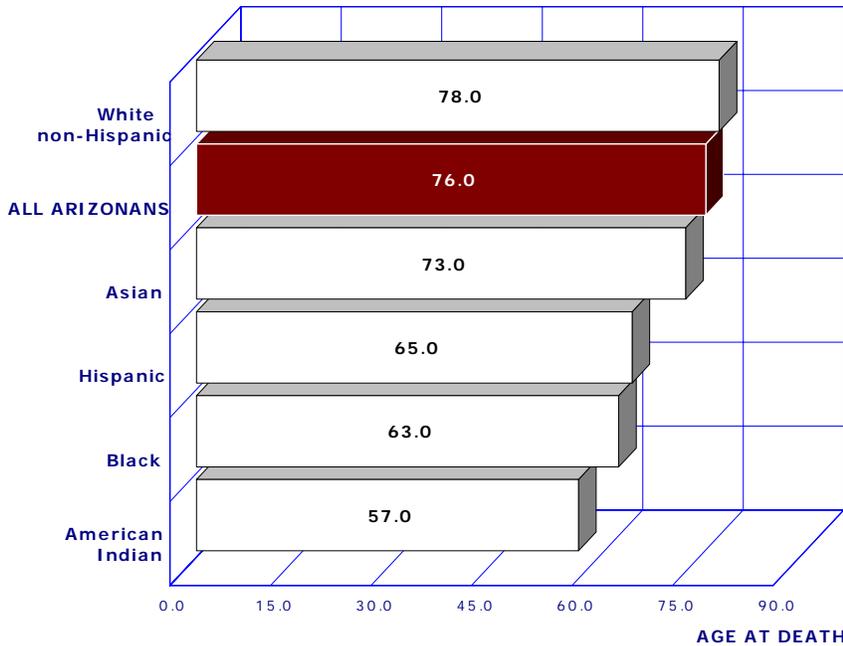
Similar to the differences in the age composition is the contrasting pattern of proportional mortality by age group. In 2006, the elderly (65 years and older) comprised 76.0 percent of the total mortality among White non-Hispanics, compared to 39.3 percent among American Indians, 47.6 percent among Blacks, 50.5 percent among Hispanics, and 61.9 percent among Asians. One out of fifty White non-Hispanics who died in 2006 was less than 25 years old (2.0 percent). In contrast, persons younger than 25 years of age accounted for one out of every eight (13.0 percent) deaths among Arizona ethnic minorities.

The smaller the proportion of elderly as well as the proportion of deaths at older age, the lower is the average age at death. In 2006, the average age at death among the residents of Sun City (a retirement community where the median age of residents is 75 years) was 82.4 years. In contrast, the average age in Gilbert (median age 30.1 years) was 67.7 years. Compared to residents of Sun City, on average residents of Gilbert were 14.7 years younger at time of death. It is not so much that the risk of premature death is higher in Gilbert than it is in Sun City. Rather, it is the lower proportional contribution of elderly deaths to total mortality in Gilbert that depresses the average age at death for this community.

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

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**Figure 2D-1**  
Median Age At Death by Race/Ethnicity,  
Arizona, 2006

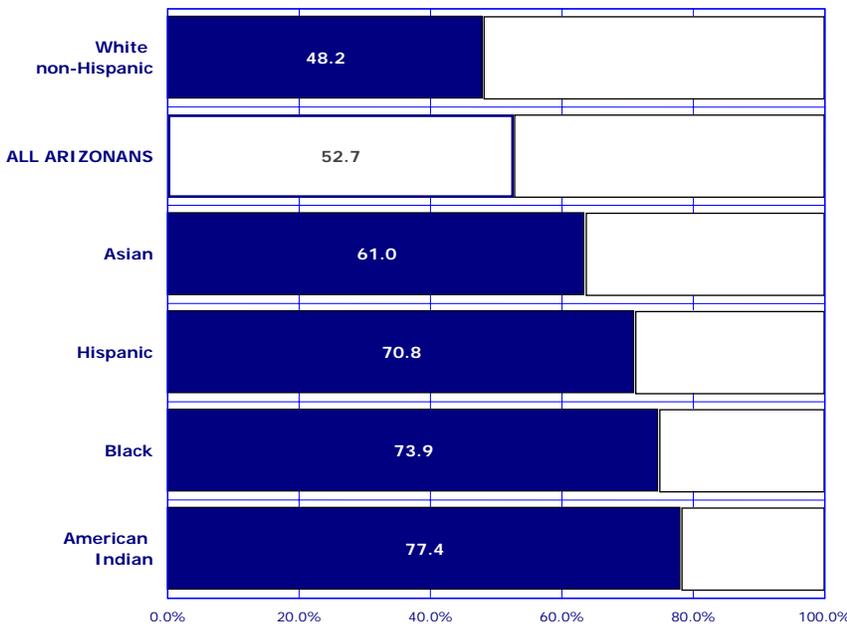


The median age at death declined from 77 years in 2005 to 76 years in 2006 (**Table 2D-1**). It does not mean that the life expectancy of Arizonans shortened in 2006. Rather, the age-specific and cause-specific pattern of mortality changed from 2005 to 2006. Compared to 2005, there were fewer deaths in 2006 from causes such as heart disease or stroke that have a high median age at death (eighty years and eighty-two years, respectively). On the other hand, the annual number of deaths increased in 2006 for accidents, homicide, and suicide, i.e., causes with the lowest median age at death (**Table 2B-1, Table 2D-3**).

One out of two Arizonans who died in 2006 was older than 76 years of age. Among Arizona females, fifty percent were older than 80 years when they died in 2006. Among males, the median age at death was 73 years in 2006. **Table 2D-1** shows both the average and the median age at death by race/ethnicity and gender in 1996-2006.

In 2006, compared to White non-Hispanics, on average Asians were 5 years younger at time of death, Hispanics were 13 years younger, Blacks were 15 years younger, and American Indian residents of Arizona were 21 years younger.

**Figure 2D-2**  
Percent of Deaths Before Expected Years of Life Reached\* by  
Race/Ethnicity, Arizona, 2006



\* Expected years of life at birth for all U.S. residents (77.9 years in 2004).

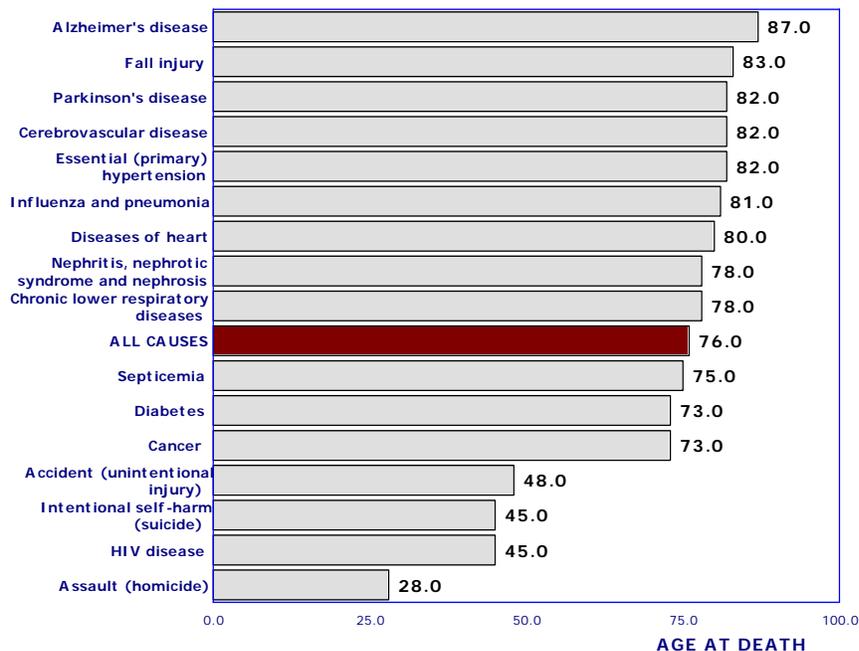
The percent of deaths before expected years of life reached (a premature death ratio) slightly decreased for all Arizonans from 53.0 in 2004 to 52.7 in both 2005 and 2006 (**Figure 2D-2**).

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 (48.2 percent) occurring before the expected years of life were reached (**Figure 2D-2**). In contrast, at least 61 percent among race/ethnic minority groups occurred prematurely.

Among American Indians, eight out of ten deaths (77.4 percent) were premature.

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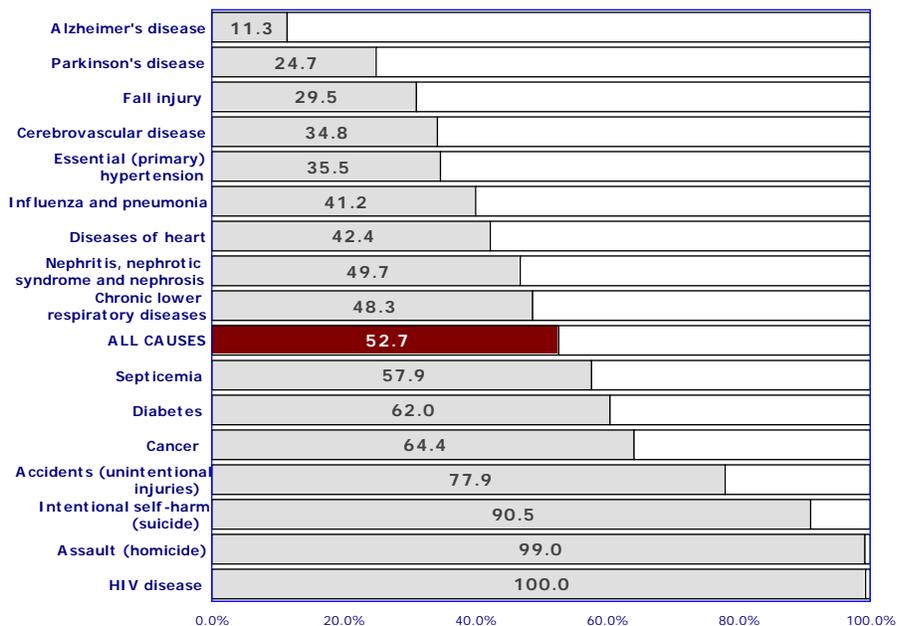
**Figure 2D-3**  
Median Age At Death for Selected Leading Causes of Death,  
Arizona, 2006



In 2006, *Alzheimer's disease* again ranked highest with median age at death of 87 years (Figure 2D-3), exceeding by 11 years the median age at death for all causes (Figure 2D-3, Table 2D-3).

Among the leading causes of death, homicide had the lowest median age at death of 28 years.

**Figure 2D-4**  
Percent Deaths Before Expected Years of Life Reached\*  
for Selected Leading Causes of Death,  
Arizona, 2006



Only 11.3 percent of deaths from *Alzheimer's disease* occurred before the age of 77.9 years, i.e., before the expected years of life were reached. In contrast, all deaths from *HIV disease* were premature at 100.0 percent (Figure 2D-4, Table 2D-4) and the median age at death from *HIV disease* was 45 years (Figure 2D-3, Table 2D-3).

\* Expected years of life at birth for all U.S. residents (77.9 years in 2004).