



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 (46.8 vs. 28.5 percent). In contrast, people aged 65 years and older accounted for 17.9 percent of White non-Hispanics, but only 5.6 percent of all ethnic minority groups combined (percentages based on race-and-age-specific population denominators in **Table 10C-1**).

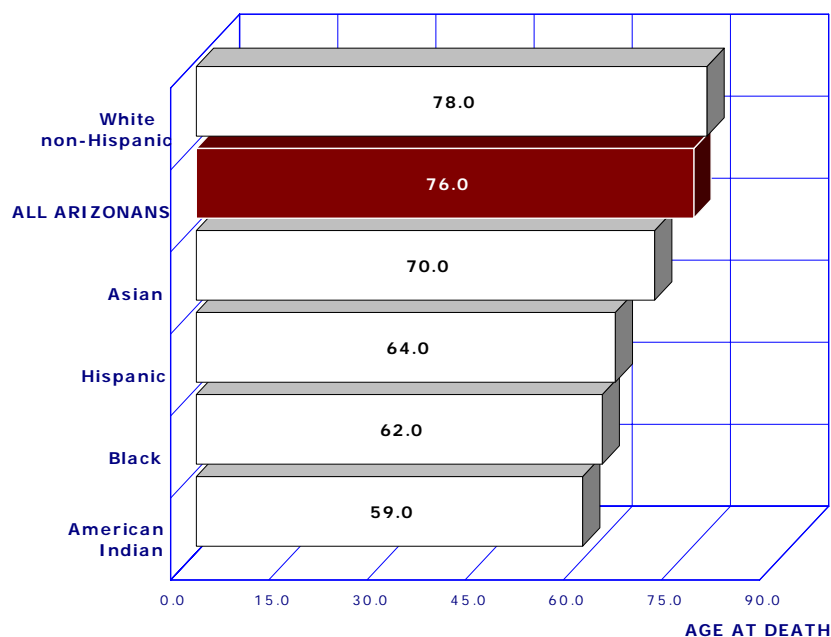
Similar to the differences in the age composition is the contrasting pattern of proportional mortality by age group. In 2007, the elderly (65 years and older) comprised 76.3 percent of the total mortality among White non-Hispanics, compared to 43.5 percent among American Indians, 46.6 percent among Blacks, 49.4 percent among Hispanics, and 58.9 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 (12.9 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 2007, the average age at death among the residents of Sun City (a retirement community where the median age of residents is 75 years) was 82.2 years. In contrast, the average age in Gilbert (median age 30.1 years) was 69 years. Compared to residents of Sun City, on average residents of Gilbert were 13.2 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, 2007

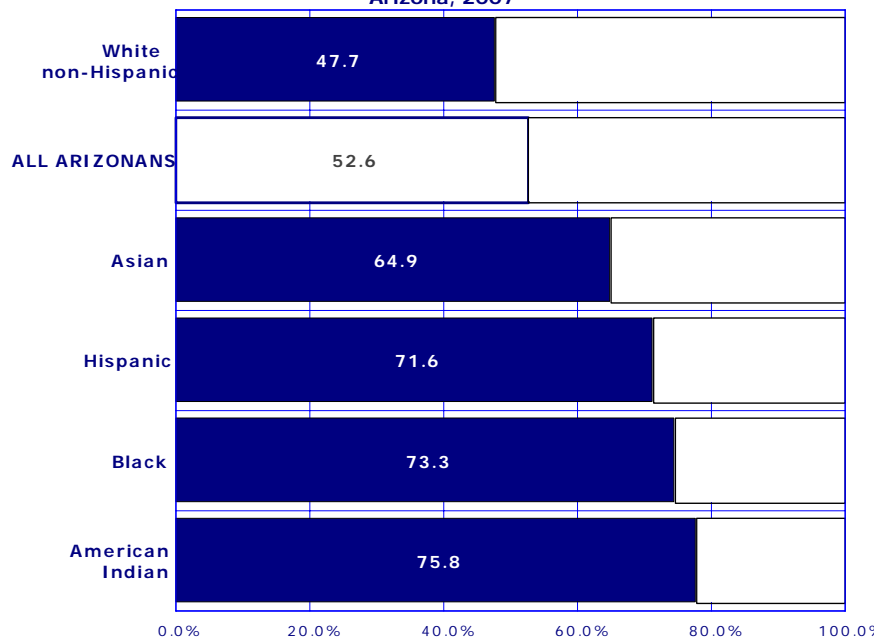


The median age at death was unchanged at 76 years in 2007 (**Table 2D-1**). Compared to 2006, there were fewer deaths in 2007 from causes such as heart disease or stroke that have a high median age at death (eighty years and eighty-two years, respectively). On the other hand, the annual number of deaths increased in 2007 for suicide, i.e., one of the causes with the lowest median age at death (45 years; **Table 2B-1, Table 2D-3**).

One out of two Arizonans who died in 2007 was older than 76 years of age. Among Arizona females, fifty percent were older than 80 years when they died in 2007. Among males, the median age at death was 73 years in 2007. **Table 2D-1** shows both the average and the median age at death by race/ethnicity and gender in 1997-2007.

In 2007, compared to White non-Hispanics, on average Asians were 6 years younger at time of death, Hispanics were 12 years younger, Blacks were 14 years younger, and American Indian residents of Arizona were 17 years younger.

**Figure 2D-2**  
Percent of Deaths before Expected Years of Life Reached\* by Race/Ethnicity, Arizona, 2007



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

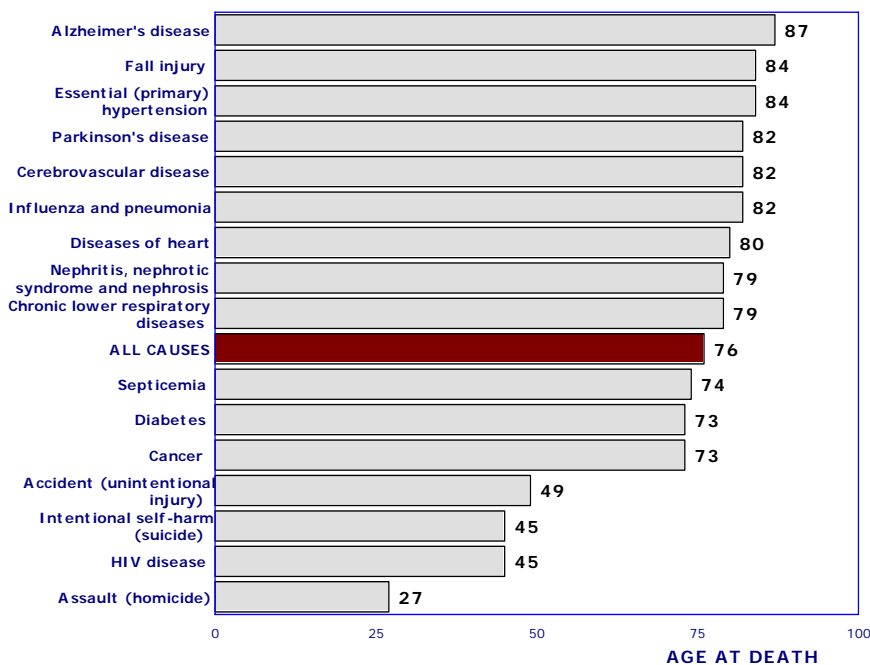
The percent of deaths before expected years of life reached (a premature death ratio) slightly decreased for all Arizonans from 53.0 in 2004 to 52.7 in 2005 and 2006, and 52.6 in 2007 (**Figure 2D-2**).

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 (47.7 percent) occurring before the expected years of life were reached (**Figure 2D-2**). In contrast, at least 64.9 percent among race/ethnic minority groups occurred prematurely.

Among American Indians, eight out of ten deaths (75.8 percent) were premature.

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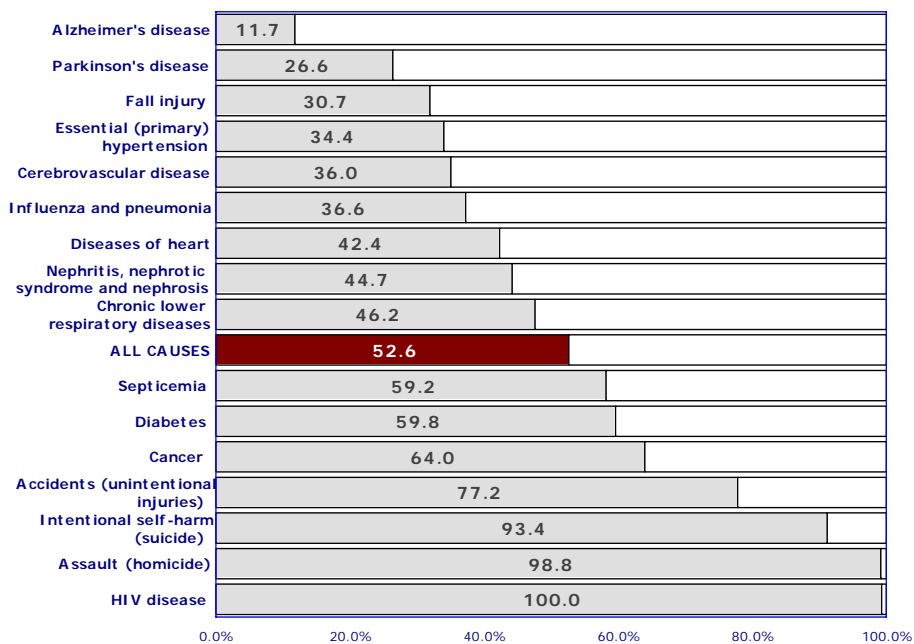
**Figure 2D-3**  
**Median Age at Death for Selected Leading Causes of Death, Arizona, 2007**



In 2007, *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 27 years.

**Figure 2D-4**  
**Percent of Deaths before Expected Years of Life Reached\* for Selected Leading Causes of Death, Arizona, 2007**



Only 11.7 percent of deaths from *Alzheimer's disease* occurred before the age of 77.8 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 unchanged from previous year at 45 years (**Figure 2D-3, Table 2D-3**).

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