



## 2A.

### TOTAL MORTALITY

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The total number of deaths from all causes among Arizona residents changed relatively little between 2005 and 2010 (**Table 2A-1**). The number of deaths occurring in Arizona (including the deaths of out-of-State residents) slightly increased from 46,429 in 2009 to 47,616 in 2010(**Table 5E-2**).

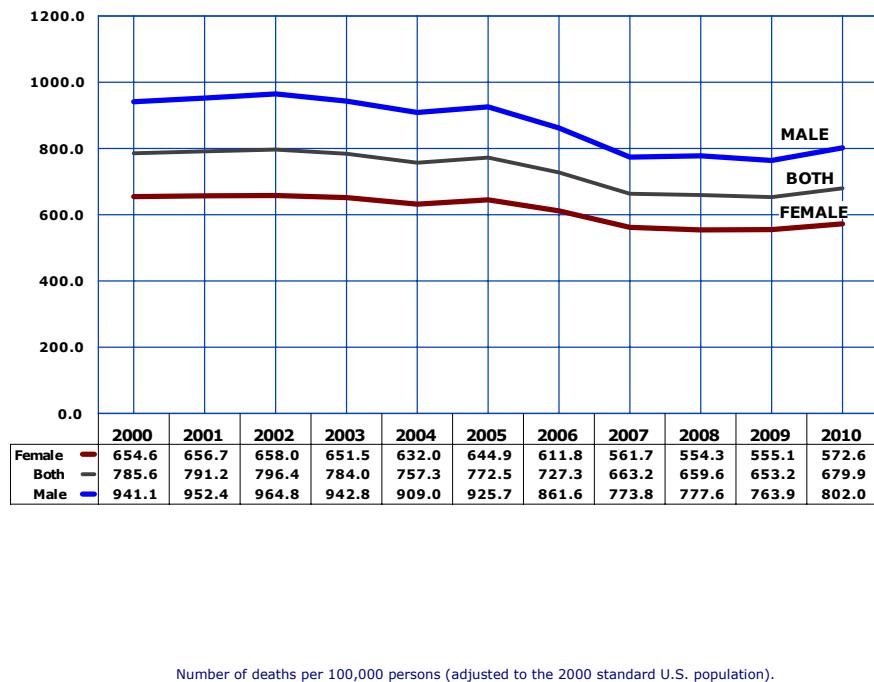
Neither American Indians nor Hispanics experienced an increase in mortality from 2009 to 2010. Based on age and race/ethnicity, the number of deaths among Hispanic or Latinos aged 15-34 years (the age and ethnic group most likely to be illegally in Arizona) declined by 30.2 percent from 2007 to 2010. Same as last year, we do not think that there was a miraculous improvement in the survival chances among Hispanics or Latinos aged 15-34 years. Rather, there were fewer deaths because the number of illegal Hispanic residents of the State was lower in 2010 than it was in 2007. From 2007 to 2010 the number of deaths decreased by 26.0 percent among infants less than 1 year of age (obviously associated with an unprecedeted decrease in the number of live births).

There were fewer deaths in 2010 for some of the leading causes of mortality including diseases of heart, accidents (unintentional injuries), influenza and pneumonia, and septicemia. The causes with the largest increases were diabetes (27.3 percent), homicide (12.2 percent), Alzheimer's disease (10.9 percent), and Parkinson's disease (9.4 percent).

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**Figure 2A-1**  
**Age-adjusted Mortality Rates for all Causes by Gender and Year,  
 Arizona, 2000-2010**

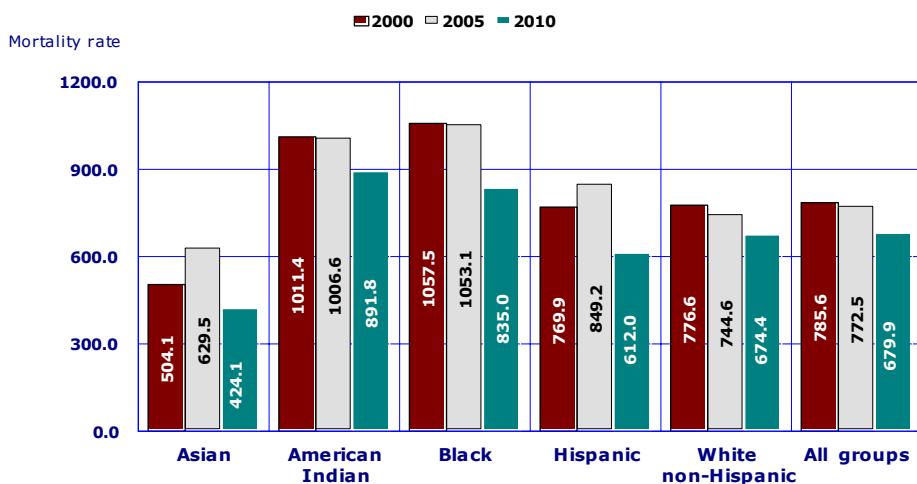


Beginning with the 2000 data year in Arizona, the age-adjusted mortality rates discussed below are based on the year 2000 population standard. The rates prior to 2000 were re-calculated using the new standard. All mortality rates in sections 2A and 2B are age-adjusted. A detailed explanation of the age-adjustment of mortality rates is given in **Technical Notes**.

The total age-adjusted mortality rate increased by 4.1 percent from 653.2 in 2009 to 679.9 in 2010 (**Figure 2A-1, Table 2B-2**). The age-adjusted mortality rates increased for both females and males.

The percent difference between male and female mortality rates slightly narrowed from 44 percent greater mortality rate in 2000 to 40 percent greater in 2010. However, the parallel trend lines (**Figure 2A-1**) do not seem to suggest that the full convergence in mortality risk between males and females is likely to happen anytime soon.

**Figure 2A-2**  
**Age-adjusted Mortality Rates\* for all Causes by Race/Ethnicity and Year,  
 Arizona Residents, 2000, 2005 and 2010**



The 2010 age-adjusted death rates for the major race/ethnic groups were as follows: for Asian or Pacific Islander, 424.1 deaths per 100,000 population; Hispanic or Latino, 612; White non-Hispanic, 674.4; Black or African American, 835.0 and American Indian or Alaska Native, 891.8 (**Figure 2A-2, Table 2B-4**).

In 2010, as in 2005 and 2000, Blacks and American Indians had higher total mortality rates than White non-Hispanics, Hispanics and Asians. In contrast, the total mortality rates for Asians were lower than the rates of White non-Hispanics in 2000, 2005 and 2010.

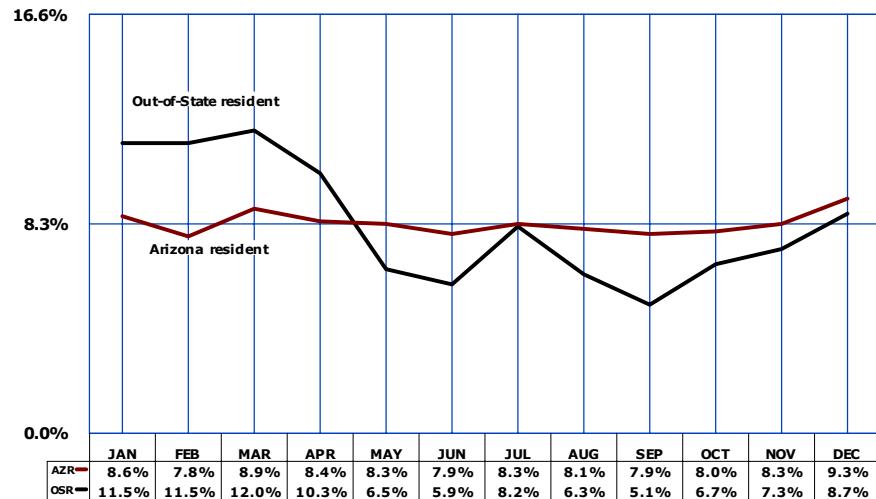
Number of deaths per 100,000 population age-adjusted to the 2000 standard U.S.

## 2A. TOTAL MORTALITY

**Figure 2A-3**  
**Percent Annual Deaths by Month of Occurrence and Residence Status, Arizona, 2010**

If there was no monthly variation in proportional contribution to the annual deaths total, 8.3 percent (100/12) of deaths should occur monthly. However, when the monthly distribution of resident deaths is examined, December (9.3 percent of annual deaths) and March (8.9 percent each) deviated higher in 2010 from the expected value (**Figure 2A-3**). February, June, and September were the three months with the lowest proportional contributions to the annual death total among Arizona residents.

The majority of the 2,098 non-residents who died in Arizona during 2010 did so during January, February, March, and April. September was the month with the lowest proportional contribution (5.1 percent) to the annual death total among out-of-State residents who died in Arizona.



**Figure 2A-4**  
**Percentage of Deaths for which Autopsies were Reported by Race/Ethnicity and Year, Arizona Residents, 2000-2010**

Autopsies were reported as performed on 4,263 decedents, or 9.3 percent of the deaths that occurred among Arizona residents in 2010. In 2000 – 2010, the percentage of deaths for which autopsies were reported varied from a high of 11.2 percent in 2001 to a low of 9.3 percent in 2010.

The percentage autopsied varies by the decedent's demographic characteristics. By race/ethnicity (**Figure 2A-4**) the percentage autopsied was lower for the White non-Hispanic population than for other 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 homicide, suicide, accidents, and undetermined manner.

