

2A.

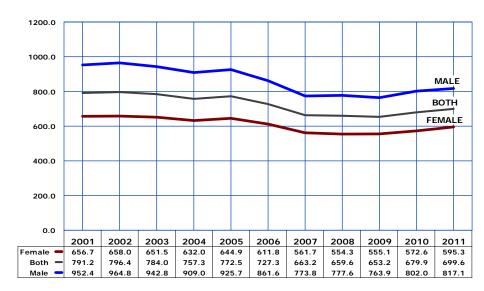
## **TOTAL MORTALITY**

The total number of deaths from all causes among Arizona residents increased by only 4.7 percent from 2006 to 2011 (**Table 2A-1**). The number of deaths occurring in Arizona (including the deaths of out-of-State residents) slightly increased from 45,871 in 2010 to 47,547 in 2011 (**Table 5E-2**).

Excluding American Indians, all racial/ethnic groups experienced an increase in mortality from 2010 to 2011. 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 30.1 percent from 2007 to 2011. 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 2011 than it was in 2007. From 2007 to 2011 the number of deaths decreased by 28.1 percent among infants less than 1 year of age (associated with an unprecedented decrease in the number of live births).

Compared to 2010, there were fewer deaths in 2011 for some of the leading causes of mortality including septicemia (24.5 percent), nephritis (20.7 percent), influenza and pneumonia (11.0 percent), and assault (4.2 percent). The causes with the largest increases were essential primary hypertension and hypertensive renal disease (45.6 percent), diabetes (25.4 percent), Parkinson's disease (11.7 percent), chronic lower respiratory diseases (10.7 percent), and diseases of the heart (7.3 percent).

Figure 2A-1
Age-adjusted Mortality Rates for all Causes by Gender and Year,
Arizona, 2001-2011



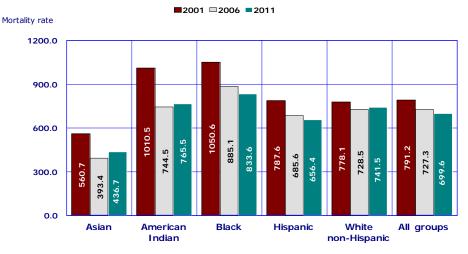
Beginning with the 2000 data year in Arizona, the age-adjusted mortality rates discussed below are based on the year 2000 population standard. The rates prior to 2000 were re-calculated using the new standard. All mortality rates in sections 2A and 2B are age-adjusted. A detailed explanation of the age-adjustment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

The total age-adjusted mortality rate increased by 2.9 percent from 679.9 in 2010 to 699.6 in 2011 (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 45.0 percent greater mortality rate in 2001 to 37.3 percent greater in 2011. However, the parallel trend lines (Figure 2A-1) do not suggest that the full convergence in mortality risk between males and females is likely to happen anytime soon.

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

Figure 2A-2
Age-adjusted Mortality Rates\* for all Causes by Race/Ethnicity and Year,
Arizona Residents, 2001, 2006, and 2011



The 2011 age-adjusted death rates for the major race/ethnic groups were as follows: for Asian or Pacific Islander, 436.7 deaths per 100,000 population; Hispanic or Latino, 656.4; White non-Hispanic, 741.5; American Indian or Alaska Native, 765.5; and Black or African American, 833.6 (Figure 2A-2, Table 2B-4).

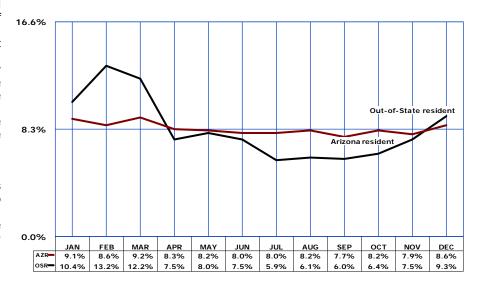
In 2011, as in 2001 and 2006, Blacks and American Indians had higher total mortality rates than White non-Hispanics, Hispanics, and Asians. In contrast, the total mortality rates for Asians were lower than the rates of White non-Hispanics in 2001, 2006 and 2011

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

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, March (9.2 percent), January (9.1 percent), and both February and December (8.6 percent each) were higher in 2011 from the expected value (Figure 2A-3). September, June, and July were the three months with the lowest proportional contributions to the annual death total among Arizona residents.

The majority of the 2,103 non-residents who died in Arizona during 2011 did so during January, February, March, and December. July was the month with the lowest proportional contribution (5.9 percent) to the annual death total among out-of-State residents who died in Arizona.

Figure 2A-3
Percent Annual Deaths by Month of Occurrence and Residence Status,
Arizona, 2011



Autopsies were reported as performed on 4,075 decedents, or 8.6 percent of the deaths that occurred among Arizona residents in 2011. In 2001 – 2011, the percentage of deaths for which autopsies were reported varied from a high of 11.2 percent in 2001 to a low of 8.6 percent in 2011.

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 and Asian population than for other groups. The prevalence of autopsies was substantially greater among American Indian, Black, 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.

Figure 2A-4
Percentage of Deaths for which Autopsies were Reported by Race/Ethnicity and Year, Arizona Residents, 2001-2011

