



## 2A.

### TOTAL MORTALITY

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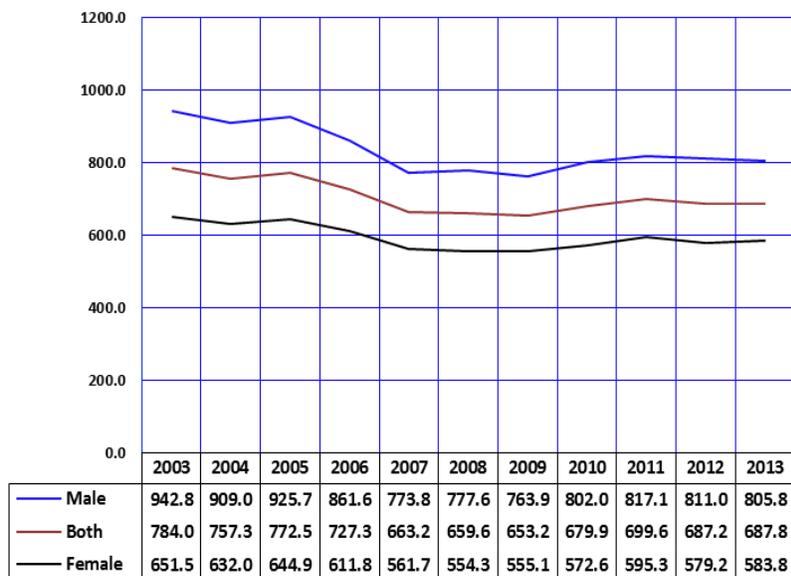
The total number of deaths from all causes among Arizona residents increased by 3.0 percent from 2012 (n = 48,459) to 2013 (n = 49,929; **Table 2A-1**). The age-adjusted mortality rate for all causes of death also increased from 687.2/100,000 in 2012 to 687.8/100,000 in 2013.

Compared to 2012, there were fewer deaths in 2013 for some of the leading causes of mortality including nephritis (11.1 percent), hypertension (3.8 percent), and cerebrovascular disease (2.3 percent). The causes with the largest increases were influenza and pneumonia (14.0 percent), accidents (11.9 percent), septicemia (11.0 percent), Alzheimer's disease (10.7 percent), and chronic liver disease and cirrhosis (7.1 percent).

When considering race/ethnicity and gender, the age-adjusted mortality rate for deaths due to major cardiovascular diseases among Black or African Americans males increased 21.8 percent from 2012 to 2013. In terms of mortality due to diabetes, the overall mortality rate for males and females remained stable over 2012 and 2013 (**Figure 2B-18**), a welcome respite from the increases observed from 2009 to 2011. Unfortunately the decrease in deaths due to diabetes did not hold true for all groups, with the age-adjusted mortality rate among Black males increasing 15.3 percent from 2012 to 2013 and increasing 37.4 percent for Black females over the same period.

## 2A. TOTAL MORTALITY

**Figure 2A-1**  
Age-adjusted Mortality Rates<sup>a</sup> for all Causes by Gender and Year, Arizona, 2003-2013



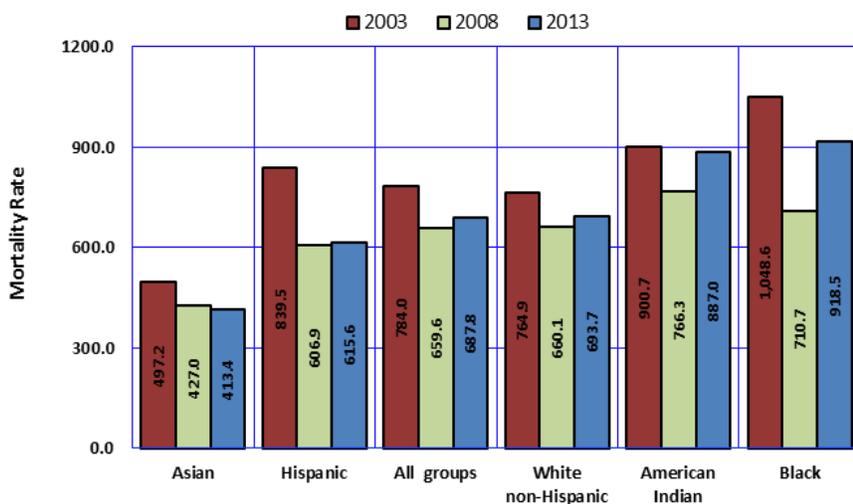
Notes: <sup>a</sup> Number of deaths per 100,000 persons (adjusted to the 2000 standard U.S. population).

The age-adjusted mortality rates discussed below are based on the year 2000 population 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 the **Technical Notes**.

The total age-adjusted mortality rate remained relatively consistent from 2012 to 2013 (**Figure 2A-1, Table 2B-2**). Over this period, the age-adjusted mortality rates decreased slightly for males but increased slightly for females.

The difference between male and female mortality rates narrowed slightly between 2003 and 2013 with the male age-adjusted mortality rate being 44.7 percent greater than the female age-adjusted mortality rate in 2003, and 38.0 percent greater in 2013. 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.

**Figure 2A-2**  
Age-adjusted Mortality Rates<sup>a</sup> for all Causes by Race/Ethnicity and Year, Arizona Residents, 2003, 2008, and 2013



Notes: <sup>a</sup> Number of deaths per 100,000 persons (adjusted to the 2000 standard U.S. population).

The 2013 age-adjusted death rates for the major racial/ethnic groups were as follows: for Asian or Pacific Islander, 413.4 deaths per 100,000 population; Hispanic or Latino, 615.6; White non-Hispanic, 693.7; American Indian or Alaska Native, 887.0; and Black or African American, 918.5 (**Figure 2A-2, Table 2B-4**).

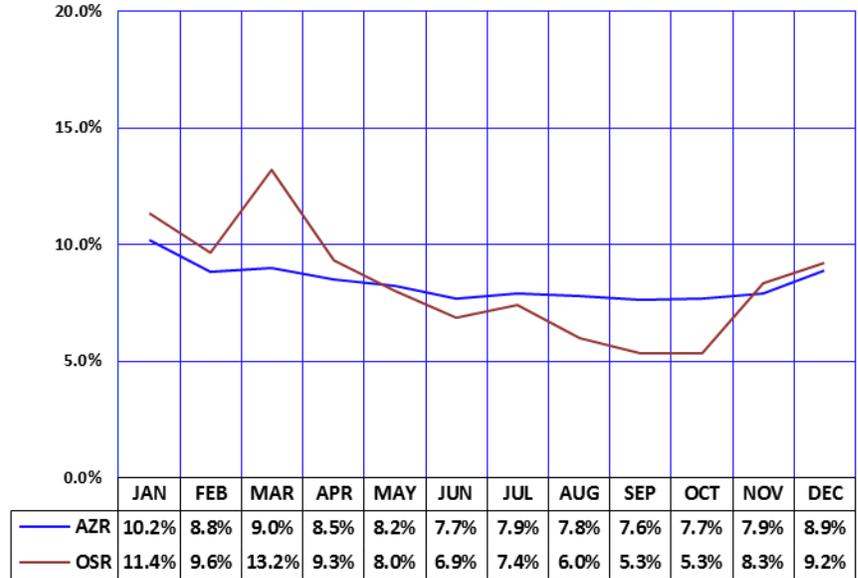
In 2013, as in 2003 and 2008, Blacks and American Indians had higher total mortality rates than White non-Hispanics, Hispanics, and Asians. The total mortality rates for Asians were lower than the rates of both White non-Hispanics and Hispanics in 2003, 2008, and 2013.

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If there was no monthly variation in proportional contribution to total annual deaths, 8.3 percent (100/12) of deaths should occur monthly. However, when the monthly distribution of resident deaths is examined, January (10.2 percent), March (9.0 percent), December (8.9 percent), February (8.8 percent), and April (8.5 percent) were higher in 2013 from the expected value (**Figure 2A-3**). September, June, October, August, July, and November were the months with the lowest proportional contributions to the total annual deaths among Arizona residents.

The majority of the 2,103 non-residents who died in Arizona during 2013 did so during March, January, February, and December. September was the month with the lowest proportional contribution (5.3 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, 2013



**Figure 2A-4**  
Percentage of Deaths for which Autopsies were Reported by Race/Ethnicity and Year, Arizona Residents, 2003-2013

Autopsies were reported as performed on 4,543 decedents, or 9.1 percent of the deaths that occurred among Arizona residents in 2013. From 2003 - 2013, the percentage of deaths for which autopsies were reported varied from a high of 10.5 percent in 2004 and 2007 to a low of 8.6 percent in 2011 and 2012.

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.

