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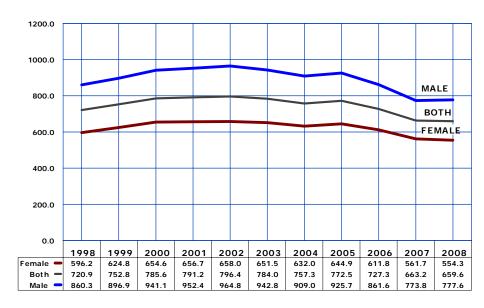
## **TOTAL MORTALITY**

The number of deaths among Arizona residents increased by 1.1 percent from 44,640 in 2007 to 45,128 in 2008 (**Table 2A-1**). The number of deaths occurring in Arizona (including the deaths of out-of-State residents) also slightly increased from 46,325 in 2007 to 46,515 in 2008 (**Table 5E-2**).

Only one population subgroup (based on age and race/ethnicity) did not experience an increase in mortality. The number of deaths among Hispanic or Latinos actually decreased from 2007 to 2008 (most likely because the number of illegal Hispanic residents of the State was lower in 2008 than it was in 2007). In contrast, the number of deaths increased among White non-Hispanics, Blacks or African Americans, American Indians or Alaska Native, and Asians or Pacific Islanders. The number of deaths decreased by 10.8 percent among infants under 1 year of age (obviously associated with an unprecedented decrease in the number of live births). The number of deaths also decreased among Arizonans 10-44 years old. Other age groups, including preschoolers 1-4 years old, and Arizonans aged 45 years or older experienced an increase in mortality between 2007 and 2008.

There were fewer deaths in 2008 for some of the leading causes of mortality including diseases of heart, cancer, accidents (unintentional injuries), and suicide. The causes with the largest increases were primary hypertension (22.1 percent), influenza and pneumonia (21.1 percent), chronic lower pulmonary diseases (9.2 percent), and Parkinson's disease (7 percent).

Figure 2A-1
Age-adjusted Mortality Rates for all Causes by Gender and Year,
Arizona, 1998-2008



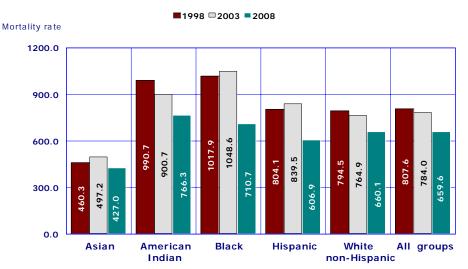
Beginning with the 2000 data year in Arizona, the age-adjusted mortality rates discussed below are based on the year 2000 population standard. The rates for 1998-1999 were re-calculated using the new standard. All mortality rates in sections 2A and 2B are age-adjusted. A detailed explanation of the age-adjustment of mortality rates is given in *Technical Notes*.

The total age-adjusted mortality rate decreased for the 3<sup>rd</sup> consecutive year from 772.5 in 2005 to 659.6 in 2008 (**Figure 2A-1, Table 2B-2**). The death rate for females in 2008 was 554.3, 15.8 percent lower than in 2002 when it reached its recent peak of 658.0. For males, the age-adjusted mortality rate increased by 0.5 percent from 773.8 in 2007 to 777.6 in 2008.

The percent difference between male and female mortality rates narrowed from 44 percent greater mortality rate in 1998 to 40 percent greater in 2008. However, the parallel trend lines (Figure 2A-1) do not seem to suggest that the 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, 1998, 2003 and 2008



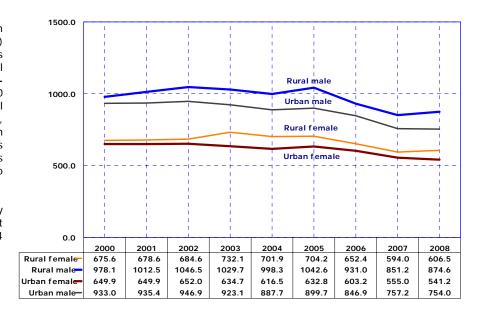
The 2008 age-adjusted death rates for the major race/ethnic groups were as follows: for Asian or Pacific Islander, 427.0 deaths per 100,000 population; Hispanic or Latino, 606.9; White non-Hispanic, 660.1; Black or African American, 710.7 and American Indian or Alaska Native, 766.3 (Figure 2A-2, Table 2B-4).

In 2008, as in 2003 and in 1998, 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 1998, 2003 and 2008.

Figure 2A-3
Age-adjusted Mortality Rates\* for all Causes by Gender in Urban and Rural Areas, Arizona Residents, 2000-2008

residents of Arizona's urban (Maricopa, Pima, Pinal, Yuma counties) but not rural (all other counties) areas experienced improvements in mortality from 2006 to 2008 (Figure 2A-3, Table 2B-5). In each year from 2000 to 2008, rural males had the highest total mortality rate, followed by urban males, rural females, and urban females. In 2000, the risk of death for rural males was 50.5 higher than for urban females (978.1 vs. 649.9). This ratio increased to 61.6 percent in 2008.

In 2008, per 100,000 persons, for every death of an urban female (the lowest mortality group), 1.1 rural females, 1.4 urban males, and 1.6 rural males died.



\*The number of deaths per 100,000 population in specified group age-adjusted to the 2000 U.S. standard.

Autopsies were reported as performed on 4,407 decedents, or 9.8 percent of the deaths that occurred among Arizona residents in 2008. In 1998 – 2008, the percentage of deaths for which autopsies were reported varied from a high of 12.0 percent in 1998 to a low of 9.8 percent in 2008.

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 Hispanic or Latino, American Indians and Black or African Americans. 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.

Figure 2A-4
Percentage of Deaths for which Autopsies were Reported by Race/Ethnicity and Year, Arizona Residents, 1998-2008

