

## 5. Patterns of Mortality among Aging Arizonans

### 5.1 Introduction

Consistent with national trends, Arizona's older adult population is both increasing in number and coming to represent a greater proportion of the total population. As the number and proportion of older Arizonans increase, it becomes ever more important to understand the leading causes of mortality among this age group. To illustrate the impact of longer lifespans on mortality, from 2002 and 2012, deaths among residents 65 years and older increased 16 percent. Deaths among persons in the oldest portion of this population, residents 85 years and older, showed the highest percent increase of 33.5 percent. Analyzing how chronic diseases, infectious diseases, and other causes of death influence patterns of mortality among older adults provides information that can be used to plan for the increasing societal costs associated with the mortality of an aging population.

### 5.2 Methodology

To investigate patterns of mortality among Arizona's older adults, we examined the leading causes of death among Arizonans age 65 and older, both as a whole as well as by age group (65 – 74 years, 75 – 84 years, and 85 + years) and gender. Initially, demographic characteristics of decedents were reported and include race/ethnicity, educational attainment, marital status, and urban or rural residence location (urban counties include Maricopa, Pinal, Pima, and Yuma counties and rural counties include Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Mohave, Navajo, Santa Cruz, and Yavapai counties). Next, mortality counts and rates among Arizonans age 65 and older in 2012 based on combined causes of death (common descriptions capturing broad disease categories such as diseases of the heart, all cancers, and chronic lower respiratory diseases) were compared to national death counts from 2011, which were the most recent available national death data. Individual causes of death represented by single ICD-10 codes were then used to assess the specific causes responsible for the greatest number of deaths and highest mortality rates among Arizona's older adults. Finally, trends in the leading specific causes of death identified for older Arizonans in 2012 were examined from 2002 – 2012.

Data in this section reported for Arizonans were collected from information reported on death certificates submitted to the Arizona Office of Vital Records by funeral directors, medical examiners, coroners, and physicians. Cause-of-death classifications are in accordance with the *International Statistical Classification of Diseases and Related Health Problems, 10th Revision* (ICD-10), 2008 Edition. Leading causes of death among Arizona residents 65 years and older were compiled based on 2012 death data and individual ICD-10 codes. Population denominators used to calculate death rates were produced by the Arizona Department of Health Services' (ADHS) Population Health and Vital Statistics Section in collaboration with the Arizona Department of Economic Security (AZDES) and the Office of Employment and Population Statistics within the Arizona Department of Administration (ADOA).