

## Mortality in the United States, 2012

Jiaquan Xu, M.D.; Kenneth D. Kochanek, M.A.; Sherry L. Murphy, B.S.; Elizabeth Arias, Ph.D.

### Key findings

#### Data from the National Vital Statistics System, Mortality

- Life expectancy at birth for the U.S. population reached a record high of 78.8 years in 2012.
- The age-adjusted death rate for the United States decreased 1.1% from 2011 to 2012 to a record low of 732.8 per 100,000 standard population.
- The 10 leading causes of death in 2012 remained the same as in 2011. Age-adjusted death rates decreased significantly from 2011 to 2012 for 8 of the 10 leading causes and increased significantly for one leading cause (suicide).
- The infant mortality rate decreased 1.5% from 2011 to 2012 to a historic low of 597.8 infant deaths per 100,000 live births. The 10 leading causes of infant death in 2012 remained the same as in 2011.

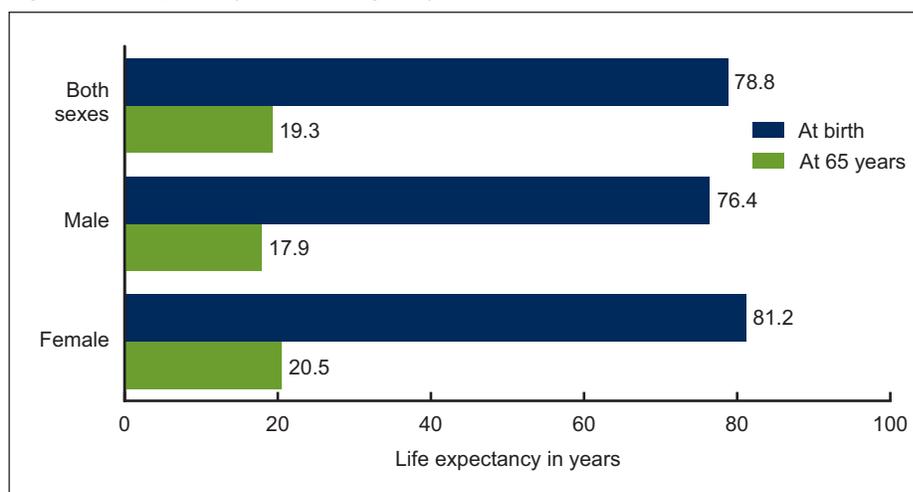
This report presents 2012 U.S. final mortality data on deaths and death rates by demographic and medical characteristics. These data provide information on mortality patterns among residents of the United States by such variables as sex, race and ethnicity, and cause of death. Information on mortality patterns is key to understanding changes in the health and well-being of the U.S. population (1). Life expectancy estimates, age-adjusted death rates by race and ethnicity and sex, 10 leading causes of death, and 10 leading causes of infant death were analyzed by comparing 2012 final data with 2011 final data.

*Keywords: vital statistics • life expectancy • leading cause • death rates*

### How long can we expect to live?

Life expectancy at birth represents the average number of years that a group of infants would live if the group was to experience throughout life the age-specific death rates present in the year of birth. U.S. life expectancy at birth for the total population was 78.8 years in 2012— an increase of 0.1 year from 78.7 years in 2011 (Figure 1). In 2012, life expectancy was 81.2 years for females and 76.4 for males. Life expectancy for females was consistently

Figure 1. Life expectancy at selected ages, by sex: United States, 2012



SOURCE: CDC/NCHS, National Vital Statistics System, Mortality.



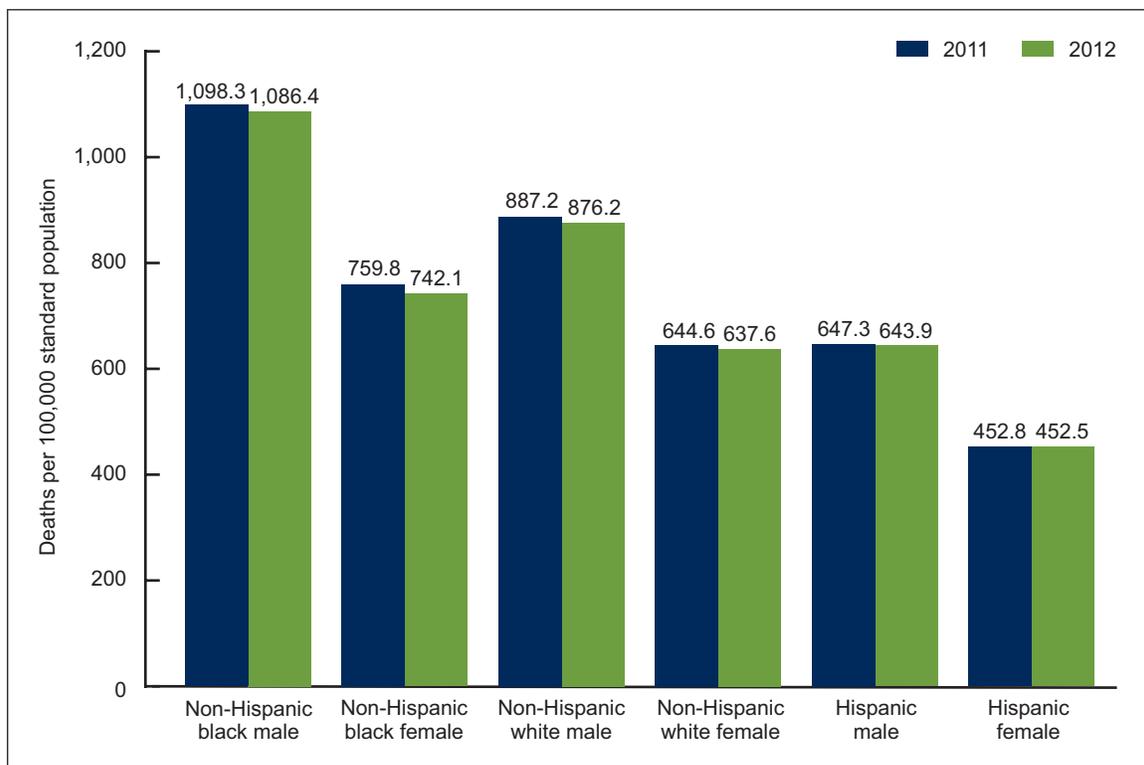
higher than that for males. In 2012, the difference in life expectancy between females and males was 4.8 years, the same as in 2011.

Life expectancy at 65 years for the total population was 19.3, 0.1 year higher than in 2011. Life expectancy at 65 years was 20.5 years for females and 17.9 years for males. The difference in life expectancy at 65 years between females and males increased 0.1 year from 2.5 years in 2011 to 2.6 years in 2012.

### Which population groups experienced reductions in mortality?

The age-adjusted death rate for the total non-Hispanic population declined 1.2% from 759.2 per 100,000 population in 2011 to 749.8 in 2012. From 2011 to 2012, age-adjusted death rates in the United States significantly decreased for both males and females among non-Hispanic white and non-Hispanic black populations. The rate decreased 1.2% for non-Hispanic white males, and 1.1% for non-Hispanic white females and for non-Hispanic black males (Figure 2). The largest decrease (2.3%) in mortality from 2011 to 2012 was among non-Hispanic black females. Age-adjusted death rates for Hispanic males and Hispanic females did not change significantly.

Figure 2. Age-adjusted death rates for selected populations: United States, 2011–2012



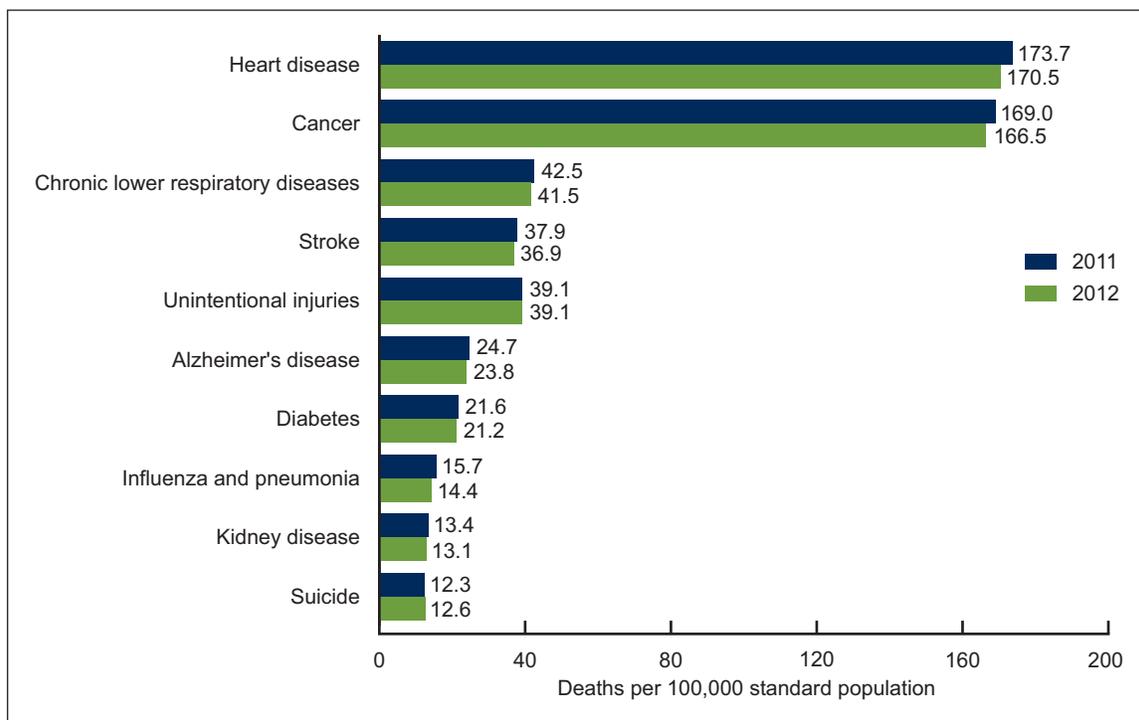
SOURCE: CDC/NCHS, National Vital Statistics System, Mortality.

## What are the leading causes of death?

In 2012, the 10 leading causes of death (heart disease, cancer, chronic lower respiratory diseases, stroke, unintentional injuries, Alzheimer’s disease, diabetes, influenza and pneumonia, kidney disease, and suicide) remained the same as in 2011 and accounted for 73.8% of all deaths in the United States (Figure 3) (1).

From 2011 to 2012, age-adjusted death rates declined significantly for 8 of 10 leading causes of death. The rate decreased 1.8% for heart disease, 1.5% for cancer, 2.4% for chronic lower respiratory diseases, 2.6% for stroke, 3.6% for Alzheimer’s disease, 1.9% for diabetes, 8.3% for influenza and pneumonia, and 2.2% for kidney disease. The rate for suicide increased 2.4%. The rate for unintentional injuries remained the same.

Figure 3. Age-adjusted death rates for the 10 leading causes of death in 2012: United States, 2011–2012



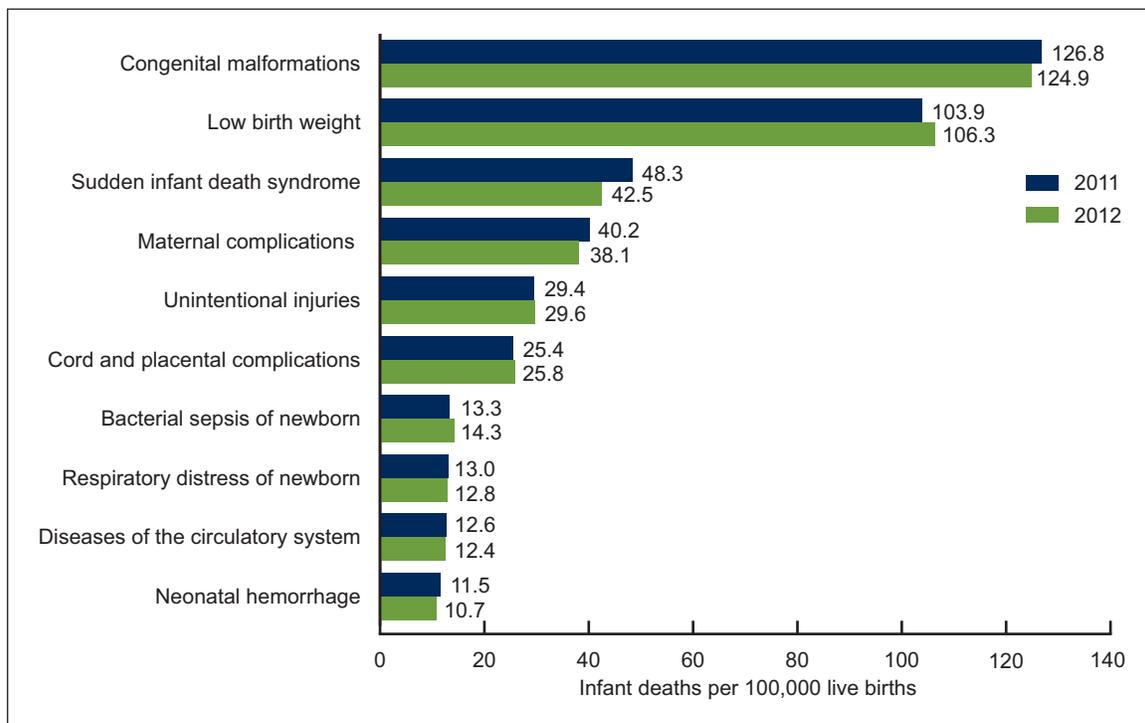
NOTE: Access data table for Figure 3 at: [http://www.cdc.gov/nchs/data/databriefs/db168\\_table.pdf#1](http://www.cdc.gov/nchs/data/databriefs/db168_table.pdf#1).  
 SOURCE: CDC/NCHS, National Vital Statistics System, Mortality.

## What are the leading causes of infant death?

The infant mortality rate (IMR) is the ratio of infant deaths to live births in a given year. IMR is generally regarded as a good indicator of the overall health of a population. In 2012, a total of 23,629 deaths occurred in children under age 1 year, which was 356 fewer infant deaths than in 2011. IMR decreased 1.5% from 606.7 infant deaths per 100,000 live births in 2011 to 597.8 in 2012.

The 10 leading causes of infant death in 2012 accounted for 69.8% of all infant deaths in the United States. The leading causes remained the same as in 2011. The IMR for Sudden infant death syndrome (SIDS) decreased 12.0% from 48.3 infant deaths per 100,000 live births in 2011 to 42.5 in 2012 (Figure 4). Mortality rates for the remaining leading causes of infant death did not change significantly.

Figure 4. Infant mortality rates for the 10 leading causes of infant death in 2012: United States, 2011–2012



NOTES: A total of 23,629 deaths occurred in children under age 1 year in the United States in 2012. Access data table for Figure 4 at: [http://www.cdc.gov/nchs/data/databriefs/db168\\_table.pdf#2](http://www.cdc.gov/nchs/data/databriefs/db168_table.pdf#2).

SOURCE: CDC/NCHS, National Vital Statistics System, Mortality.

## Summary

Much of the recent improvement in death rates and life expectancy for population groups examined can be attributed to reductions in death rates from major causes of death, such as heart disease, cancer, stroke, and chronic lower respiratory diseases (2).

Although continuing declines in mortality have slowly reduced longstanding gaps in life expectancy, differences in life expectancy at birth and at 65 years between sexes persist (3).

Death rates in 2012 continued to decline among most groups defined by sex, race, and Hispanic origin. Although changes in mortality are relatively small from one year to the next, long-term trends show the apparent progress in reducing mortality (4). For example, the age-adjusted death rate in the United States decreased 15.7% from 869.0 to 732.8 deaths per 100,000 standard population from 2000 to 2012.

## Definitions

Cause-of-death classification: Based on medical information— including injury diagnoses and external causes of injury—that is entered on death certificates filed in the United States. This information is classified and coded in accordance with the *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision* (ICD–10) (5).

Death rates: Death rates for 2012 are based on population estimates for July 1, 2012, that are consistent with the April 1, 2010, census. These population estimates (as well as population figures for the 2010 census) are available on the Centers for Disease Control and Prevention’s National Center for Health Statistics (NCHS) website (6). Age-adjusted death rates are useful when comparing different populations because they remove the potential bias that can occur when the populations being compared have different age structures. NCHS uses the “direct” method of standardization; see the Technical Notes of “Deaths: Final Data for 2010” (7) for more discussion.

Life expectancy: Is the expected average number of years of life remaining at a given age. It is denoted by  $e_x$ , which means the average number of subsequent years of life for someone now aged  $x$ . Life expectancy estimates for 2012 are based on a methodology first implemented with 2008 final mortality data (8).

Leading causes of death: Ranked according to the number of deaths assigned to rankable causes.

Infant mortality rate (IMR): Computed by dividing the number of infant deaths in a calendar year by the number of live births registered for that same period. IMR is the most widely used index for measuring the risk of dying during the first year of life.

## Data source and methods

The data shown in this report reflect information collected by NCHS from death certificates filed in 50 states and the District of Columbia that is compiled into national data known as the National Vital Statistics System for the years 2011 and 2012. Death rates shown in this report are calculated based on postcensal population estimates as of July 1, 2011 and 2012, that are consistent with the April 1, 2010, census.

## About the authors

Jiaquan Xu, Kenneth D. Kochanek, Sherry L. Murphy, and Elizabeth Arias are with CDC’s National Center for Health Statistics, Division of Vital Statistics.

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