

Deaths: Final Data for 2007

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Abstract

Objectives—This report presents final 2007 data on U.S. deaths, death rates, life expectancy, infant and maternal mortality, and trends by selected characteristics such as age, sex, Hispanic origin, race, marital status, educational attainment, injury at work, state of residence, and cause of death.

Methods—Information reported on death certificates, which are completed by funeral directors, attending physicians, medical examiners, and coroners, is presented in descriptive tabulations. The original records are filed in state registration offices. Statistical information is compiled in a national database through the Vital Statistics Cooperative Program of the Centers for Disease Control and Prevention's National Center for Health Statistics. Causes of death are processed in accordance with the *International Classification of Diseases, Tenth Revision*.

Results—In 2007, a total of 2,423,712 deaths were reported in the United States. The age-adjusted death rate was 760.2 deaths per 100,000 standard population, a decrease of 2.1 percent from the 2006 rate and a record low historical figure. Life expectancy at birth rose 0.2 year, from a 2006 value of 77.7 years to a record 77.9 in 2007. Age-specific death rates decreased for most age groups—15–24, 35–44, 45–54, 55–64, 65–74, 75–84, and 85 and over—and remained unchanged for the age groups of under age 1, 1–4, 5–14, and 25–34. The 15 leading causes of death in 2007 remained the same as in 2006 with the exception of two causes that exchanged ranks. Alzheimer's disease, the seventh leading cause of death in 2006, became the sixth leading cause in 2007, and Diabetes mellitus, the sixth leading cause in 2006, dropped to the seventh leading cause in 2007. Heart disease and cancer continued to be the leading and second-leading causes of death, respectively, together accounting for almost one-half of all deaths (48.6 percent). The infant mortality rate in 2007 was 6.75 deaths per 1,000 live births.

Conclusions—Mortality patterns in 2007, such as the decline in the age-adjusted death rate to a record historical low, were generally consistent with long-term trends. Life expectancy reached a record high in 2007, increasing 0.2 year from 2006.

Keywords: mortality • cause of death • life expectancy • vital statistics

Highlights

Mortality experience in 2007

- In 2007, a total of 2,423,712 resident deaths were registered in the United States.
- The age-adjusted death rate, which takes the aging of the population into account, was 760.2 deaths per 100,000 U.S. standard population.
- Life expectancy at birth was 77.9 years.
- The 15 leading causes of death in 2007 were:
 1. Diseases of heart (heart disease)
 2. Malignant neoplasms (cancer)
 3. Cerebrovascular diseases (stroke)
 4. Chronic lower respiratory diseases
 5. Accidents (unintentional injuries)
 6. Alzheimer's disease
 7. Diabetes mellitus (diabetes)
 8. Influenza and pneumonia
 9. Nephritis, nephrotic syndrome and nephrosis (kidney disease)
 10. Septicemia
 11. Intentional self-harm (suicide)
 12. Chronic liver disease and cirrhosis
 13. Essential hypertension and hypertensive renal disease (hypertension)
 14. Parkinson's disease
 15. Assault (homicide)
- In 2007, the infant mortality rate was 6.75 infant deaths per 1,000 live births.
- The 10 leading causes of infant death were:
 1. Congenital malformations, deformations and chromosomal abnormalities (congenital malformations)
 2. Disorders related to short gestation and low birth weight, not elsewhere classified (low birthweight)



3. Sudden infant death syndrome (SIDS)
4. Newborn affected by maternal complications of pregnancy (maternal complications)
5. Accidents (unintentional injuries)
6. Newborn affected by complications of placenta, cord and membranes (cord and placental complications)
7. Bacterial sepsis of newborn
8. Respiratory distress of newborn
9. Diseases of the circulatory system
10. Neonatal hemorrhage

Trends

- The age-adjusted death rate in 2007 declined to a record low.
- Life expectancy was 77.9 years, continuing a long-term rising trend. Life expectancy increased for the total population, as well as for the black and white populations. Black males and females and white males and females experienced an increase in life expectancy in 2007 compared with 2006.
- Age-adjusted death rates decreased significantly in 2007 from 2006 for 5 of the 15 leading causes of death, and increased for 2 of the 15 leading causes. Rates for the top three leading causes—heart disease, cancer, and stroke—continued a long-term decreasing trend. Significant increases occurred for suicide and Chronic liver disease and cirrhosis.
- The differences in mortality between men and women increased slightly in 2007 from 2006. The age-adjusted death rate for men was 40.8 percent greater than that for women, up from 40.6 percent in 2006, while the difference between male and female life expectancy was 5.0 years in 2007, a slight decrease from the 2006 gap of 5.1.
- Differences in mortality between the black and white populations persisted. The age-adjusted death rate was 1.3 times greater, infant mortality rate 2.3 times greater, and maternal mortality rate 2.7 times greater for the black population than for the white population. Differences in life expectancy between the black and white populations narrowed by 0.2 year, from 5.0 years in 2006 to 4.8 in 2007.
- The postneonatal mortality rate increased 4.5 percent in 2007 from 2006.

Introduction

This report presents detailed 2007 data on deaths and death rates according to a number of social, demographic, and medical characteristics. These data provide information on mortality patterns among residents of the United States by such variables as age, sex, Hispanic origin, race, marital status, educational attainment, injury at work, state of residence, and cause of death. Information on these mortality patterns is key to understanding changes in the health and well-being of the U.S. population (1).

Preliminary data for 2007 were presented in the report "Deaths: Preliminary Data for 2007" using a 91 percent (demographic file) sample of U.S. deaths weighted to independent control totals (2). The findings of this report, based on the final mortality file, are generally consistent with those based on preliminary data; the final mortality file

incorporates some modifications to the preliminary file as described in "Technical Notes." Separate companion reports will present additional details on leading causes of death and life expectancy in the United States (3,4).

Mortality data in this report can be used to monitor and evaluate the health status of the United States in terms of current mortality levels and long-term mortality trends, as well as to identify segments of the U.S. population at greater risk of death from specific diseases and injuries. Differences in death rates among various demographic subpopulations, including race and ethnic groups, may reflect subpopulation differences in factors such as socioeconomic status, access to medical care, and the prevalence of specific risk factors in a particular subpopulation.

Methods

Data in this report are based on information from all resident death certificates filed in the 50 states and the District of Columbia. More than 99 percent of deaths occurring in this country are believed to be registered (5). Tables showing data by state also provide information for Puerto Rico, Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands (Northern Marianas). Cause-of-death statistics presented in this report are classified in accordance with the *International Classification of Diseases, Tenth Revision* (ICD-10) (6). A discussion of the cause-of-death classification is provided in "Technical Notes."

Mortality data on specific demographic and medical characteristics except educational attainment cover all 50 states and the District of Columbia. Educational attainment data are provided separately for the 22 states and the District of Columbia that used the 2003 version of the standard death certificate, and the 26 states that used the 1989 version of the standard death certificate. Georgia and Rhode Island were excluded because the educational attainment item was not on their death certificate. Details on reporting areas for educational attainment are provided in "Technical Notes."

Measures of mortality in this report include the number of deaths; crude, age-specific, and age-adjusted death rates; infant, neonatal, postneonatal, and maternal mortality rates; life expectancy; and rate ratios. Changes in death rates in 2007 compared with 2006, and differences in death rates across demographic groups in 2007, are tested for statistical significance. Unless otherwise specified, reported differences are statistically significant. Additional information on these statistical methods, random variation and relative standard error, the computation of derived statistics and rates, population denominators, and the definition of terms is presented in "Technical Notes."

The populations used to calculate death rates for 2000–2007 and the intercensal period 1991–1999 shown in this report were produced under a collaborative arrangement with the U.S. Census Bureau and are consistent with the 2000 census. Reflecting the new guidelines issued in 1997 by the Office of Management and Budget (OMB), the 2000 census included an option for persons to report more than one race as appropriate for themselves and household members (7); see "Technical Notes." The 1997 OMB guidelines also provided for the reporting of Asian persons separately from Native Hawaiian or Other Pacific Islander (NHOPI) persons. Under the prior OMB standards issued in 1977, data for Asian or Pacific Islander (API) persons were collected as a single group (8). Most death certificates currently collect

only one race for the decedent in the same categories as specified in the 1977 OMB guidelines; that is, death certificate data do not report Asian persons separately from NHOPI persons. Death certificate data by race—the source of the numerators for death rates—are thus currently incompatible with the population data collected in the 2000 census and postcensal estimates—the denominators for the rates. To produce death rates by race for 2000–2007, and revised intercensal rates for the 1991–1999 period, the reported population data for multiple-race persons had to be “bridged” to single-race categories. In addition, the 2000 census counts were modified to be consistent with the 1977 OMB race categories; that is, to report the data for Asian and NHOPI persons as a combined category, API, and to reflect age as of the census reference date (9). The procedures used to produce the bridged populations are described in separate publications (10,11). The bridged population data are anticipated to be used over the next few years for computing population-based rates by race. Beginning with deaths occurring in 2003, some states allowed for multiple-race reporting on the death certificate. Multiple-race data for these states are bridged to single-race categories; see “Technical Notes.” Once all states are collecting data on race according to the 1997 OMB guidelines, use of the bridged-race algorithm is expected to be discontinued.

Note that the population data used to compile death rates by race in this report are based on special estimation procedures—they are not true counts. This is the case even for the 2000 populations. The estimation procedures used to develop these populations contain some error. Smaller population groups are affected much more than larger population groups (10). Over the next several years, additional information will be incorporated in the estimation procedures, possibly resulting in further revisions of the population estimates; see “Technical Notes.” Data presented in this report and other mortality tabulations are

available at the National Center for Health Statistics (NCHS) website, <http://www.cdc.gov/nchs/deaths.htm>. Availability of mortality microdata is described in “Technical Notes.”

Results and Discussion

Deaths and death rates

In 2007, a total of 2,423,712 resident deaths were registered in the United States, 2,552 fewer deaths than in 2006. The crude death rate for 2007, 803.6 deaths per 100,000 population, was 0.8 percent less than the 2006 rate (810.4) (Tables A, 1, and 3).

The age-adjusted death rate in 2007 was 760.2 deaths per 100,000 U.S. standard population, a record low value that was 2.1 percent lower than the 2006 rate of 776.5 (Tables 1 and A). Age-adjusted death rates are constructs that show what the level of mortality would be if no changes occurred in the age composition of the population from year to year. (For a discussion of age-adjusted death rates, see “Technical Notes.”) Thus, age-adjusted death rates are better indicators than unadjusted (crude) death rates for examining changes in the risk of death over a period of time when the age distribution of the population is changing. Age-adjusted death rates also are better indicators of relative risk when comparing mortality across geographic areas or between sex or race subgroups of the population that have different age distributions; see “Technical Notes.” Since 1980, the age-adjusted death rate has decreased every year except 1983, 1985, 1988, 1993, and 1999. Those years coincided with influenza outbreaks (12–15). The pace of decline for age-adjusted death rates during the last 7 years has been faster than for previous decades. From 1980

Table A. Percentage change in death rates and age-adjusted death rates in 2007 from 2006, by age, race, and sex: United States

[Based on death rates on an annual basis per 100,000 population, and age-adjusted rates per 100,000 U.S. standard population; see “Technical Notes.” Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see “Technical Notes.” Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards]

Age	All races			White ¹			Black ¹			American Indian or Alaska Native ^{1,2}			Asian or Pacific Islander ^{1,3}		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All ages	Percent change														
Crude	-0.8	-0.6	-1.1	-0.8	-0.5	-1.0	-1.3	-1.4	-1.2	1.3	2.3	0.0	0.4	0.2	0.6
Age adjusted	-2.1	-2.1	-2.2	-2.0	-1.9	-2.1	-2.4	-2.6	-2.4	-2.3	-0.4	-4.0	-3.2	-3.3	-3.3
Under 1 year ⁴	-0.9	-1.1	-0.6	-0.4	-0.8	0.1	-4.1	-3.1	-5.2	5.0	-4.5	20.4	6.5	2.9	11.4
1–4 years	0.7	2.6	-2.3	1.2	2.9	-1.7	-2.5	-3.8	-1.0	0.9	9.5	-8.9	10.7	39.8	-15.2
5–14 years	0.7	-1.1	2.3	1.4	-1.2	4.2	-1.4	-0.8	-2.3	7.7	34.9	-21.7	1.9	8.0	-4.9
15–24 years	-2.8	-2.9	-1.9	-2.9	-3.3	-1.2	-2.5	-1.9	-4.7	-6.9	-7.9	-3.5	-1.8	-1.1	-3.9
25–34 years	-1.3	-1.9	-0.2	-0.3	-0.9	1.2	-5.0	-5.5	-4.2	1.0	2.2	-1.6	-5.1	-7.6	-1.4
35–44 years	-3.0	-2.9	-3.3	-2.5	-2.8	-2.2	-4.7	-3.4	-6.5	-2.6	-1.8	-4.2	-1.0	0.5	-3.3
45–54 years	-1.5	-2.0	-0.8	-1.0	-1.3	-0.4	-3.7	-4.9	-2.0	-1.5	-3.2	1.2	-3.3	-1.5	-6.2
55–64 years	-1.5	-0.8	-2.5	-1.4	-0.8	-2.5	-1.8	-1.1	-2.7	0.8	0.7	1.0	-3.4	-5.0	-1.1
65–74 years	-2.5	-2.4	-2.7	-2.5	-2.4	-2.7	-1.6	-1.8	-1.3	-1.6	-0.7	-2.7	-4.2	-1.8	-7.3
75–84 years	-2.0	-2.3	-1.9	-1.9	-2.2	-1.8	-2.7	-3.0	-2.5	-4.5	-0.1	-8.3	-2.1	-1.9	-2.2
85 years and over	-2.3	-2.1	-2.5	-2.3	-2.0	-2.5	-1.7	-1.8	-1.6	-3.2	1.3	-5.8	-4.5	-6.4	-3.0

¹Multiple-race data were reported by 27 states and the District of Columbia in 2007. The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see “Technical Notes.”

²Includes Aleuts and Eskimos.

³Includes Chinese, Filipino, Hawaiian, Japanese, and Other Asian or Pacific Islander.

⁴Death rates for “under 1 year” (based on population estimates) differ from infant mortality rates (based on live births).

through 1989, the decline was 8.5 percent; from 1990 through 1999, 6.7 percent; and from 2000 through 2007, 12.5 percent (Figure 1 and Table 1).

Race—In 2007, age-adjusted death rates for the major race groups (Table 1) were:

- White population, 749.4 deaths per 100,000 U.S. standard population
- Black population, 958.0
- American Indian or Alaska Native (AIAN) population, 627.2
- API population, 415.0

Rates for the AIAN and API populations should be interpreted with caution because of reporting problems regarding correct identification of race on both the death certificate and in population censuses and surveys. The net effect of the reporting problems is for the AIAN rate to be approximately 30 percent understated and the API rate to be approximately 7 percent understated (16).

In 2007, the age-adjusted death rate for the black population was 1.3 times that for the white population (Table B); that is, the average risk of death for the black population was about 30.0 percent higher than for the white population. The ratio (shown to one decimal place) has remained constant since 1997. From 1960 through 1982, rates for the black and white populations declined by similar percentages—22.6 and 26.5 percent, respectively. From 1983 through 1988, rates diverged (17), increasing 5.2 percent for the black population and decreasing 1.7 percent for the white population. The disparity in age-adjusted death rates between the black and white populations reached its widest point in 1989 (1.4 times greater). Since then, the disparity between the two populations has narrowed as the age-adjusted rate for the black population declined by 24.9 percent and the rate for the white population declined by 18.6 percent. (Table 1 and Figure 2).

In 2007, decreases in age-adjusted death rates were observed for both white and black males and females compared with 2006. In order of relative magnitude of decrease, the reductions from 2006 were 2.6 percent for black males, 2.4 percent for black females, 2.1 percent for white females, and 1.9 percent for white males (Tables A and 1).

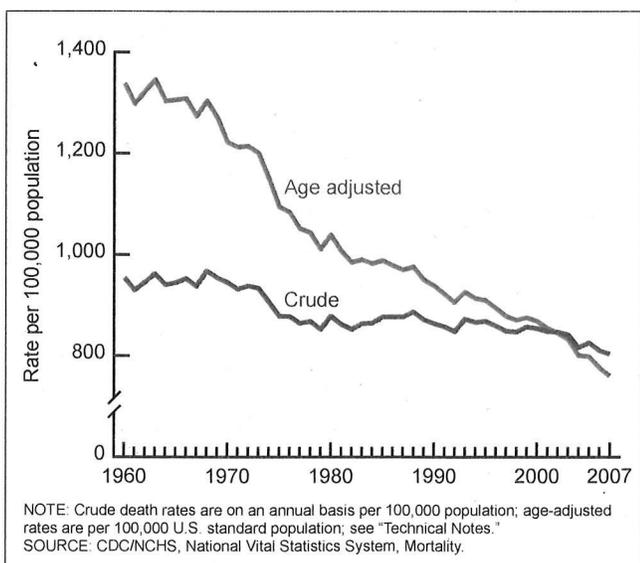


Figure 1. Crude and age-adjusted death rates: United States, 1960–2007

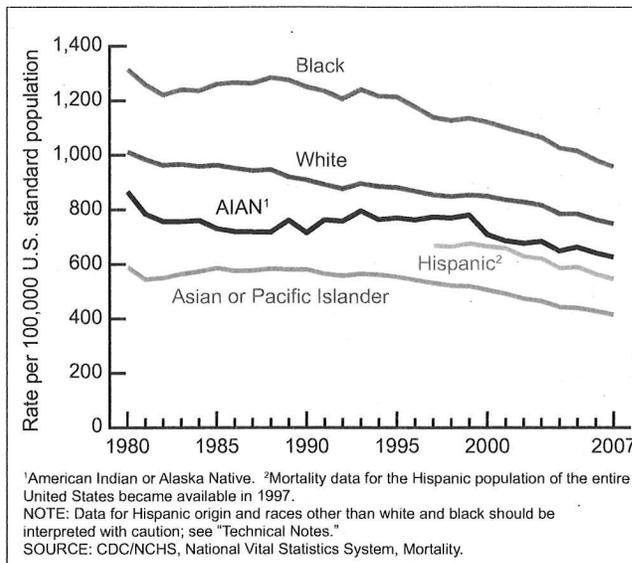


Figure 2. Age-adjusted death rates, by race and Hispanic origin: United States, 1980–2007

In general, age-adjusted death rates have declined from 1980 through 2007 for white males and females and black males and females. The rate decreased an average of 1.4 percent per year for white males, 0.8 percent for white females, 1.3 percent for black males, and 1.0 percent for black females during 1980–2007. However, increases were observed for both white males and white females in 1983, 1985, 1988, and 1993. In addition, the age-adjusted death rate for white females increased in 1995 and 1999. For black males, age-adjusted death rates tended to decrease, except for a period of increase from 1983 through 1988. Rates for black females decreased from 1980 through 2007, although with considerable variability in direction of change from year to year (Table 1).

In 2007, the age-adjusted death rate for the AIAN population was 0.8 times that for the white population (Table B); that is, the average risk of death for the AIAN population was about 20 percent lower than for the white population. Despite fluctuations over time and a trend toward convergence in rates from 1988 through 1999, the AIAN-to-white ratio has been consistently lower than 1.0 since 1980. The AIAN advantage in mortality is due in large part to the underreporting of AIAN mortality on death certificates. From 1980 through 1988, the age-adjusted rate for the AIAN population declined by 17.1 percent (Figure 2 and Table 1). However, the rate fluctuated from 1989 through 1999, peaking at 796.4 deaths per 100,000 U.S. standard population in 1993. Overall, the age-adjusted rate increased by 2.5 percent from 1989 through 1999, and has since trended downward. From 1999 through 2007, it declined by 19.7 percent. In 2007, the age-adjusted rate decreased by 4.0 percent from 2006 for AIAN females. The rate decreased by 2.3 percent from 2006 for both sexes, but the observed decrease was not statistically significant (Table A). The rate for AIAN males did not change significantly from year to year.

The age-adjusted death rate for the API population was 0.6 times that for the white population in 2007 (Table B). Some of this advantage is due to the underreporting of API mortality on death certificates. The API-to-white ratio has been consistently low over time, with a trend toward incremental divergence in rates since 1990 (Table 1 and

Table B. Percentage of total deaths, death rates, age-adjusted death rates for 2007, percentage change in age-adjusted death rates in 2007 from 2006, and ratio of age-adjusted death rates, by race and sex for the 15 leading causes of death for the total population in 2007: United States

[Crude death rates on an annual basis per 100,000 population; age-adjusted rates per 100,000 U.S. standard population. The asterisks preceding the cause-of-death codes indicate that they are not part of the *International Classification of Diseases, Tenth Revision (ICD-10)*, Second Edition; see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes." Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Cause-of-death coding changes in 2006 and 2007 may affect comparability of data between 2007 and previous years for various causes of death; see "Technical Notes"]

Rank ¹	Cause of death (based on ICD-10, 2004)	Number	Percent of total deaths	2007 crude death rate	Age-adjusted death rate						
					2006 to 2007	Ratio					
						Male to female	Black ² to white	AIAN ^{2,3} to white	API ^{2,4} to white	Hispanic ⁵ to non-Hispanic white	
...	All causes	2,423,712	100.0	803.6	760.2	-2.1	1.4	1.3	0.8	0.6	0.7
1	Diseases of heart (I00-I09,I11,I13,I20-I51)	616,067	25.4	204.3	190.9	-4.6	1.5	1.3	0.7	0.5	0.7
2	Malignant neoplasms (C00-C97)	562,875	23.2	186.6	178.4	-1.3	1.4	1.2	0.7	0.6	0.6
3	Cerebrovascular diseases (I60-I69)	135,952	5.6	45.1	42.2	-3.2	1.0	1.5	0.7	0.8	0.8
4	Chronic lower respiratory diseases (J40-J47)	127,924	5.3	42.4	40.8	0.7	1.3	0.7	0.7	0.3	0.4
5	Accidents (unintentional injuries) (V01-X59, Y85-Y86)	123,706	5.1	41.0	40.0	0.5	2.1	0.9	1.3	0.4	0.7
6	Alzheimer's disease (G30)	74,632	3.1	24.7	22.7	0.4	0.7	0.8	0.5	0.3	0.6
7	Diabetes mellitus (E10-E14)	71,382	2.9	23.7	22.5	-3.4	1.4	2.1	1.8	0.8	1.5
8	Influenza and pneumonia (J09-J18) ⁶	52,717	2.2	17.5	16.2	-9.0	1.4	1.2	0.9	0.9	0.8
9	Nephritis, nephrotic syndrome and nephrosis (N00-N07, N17-N19,N25-N27)	46,448	1.9	15.4	14.5	0.0	1.4	2.2	1.1	0.7	0.9
10	Septicemia (A40-A41)	34,828	1.4	11.5	11.0	0.0	1.2	2.2	1.0	0.5	0.8
11	Intentional self-harm (suicide) (*U03,X60-X84,Y87.0)	34,598	1.4	11.5	11.3	3.7	3.9	0.4	0.9	0.5	0.4
12	Chronic liver disease and cirrhosis (K70, K73-K74)	29,165	1.2	9.7	9.1	3.4	2.2	0.8	2.6	0.4	1.6
13	Essential hypertension and hypertensive renal disease (I10,I12,I15) ⁷	23,965	1.0	7.9	7.4	-1.3	1.0	2.5	0.9	1.0	1.0
14	Parkinson's disease (G20-G21)	20,058	0.8	6.7	6.4	1.6	2.2	0.5	0.5	0.5	0.6
15	Assault (homicide) (*U01-*U02, X85-Y09, Y87.1)	18,361	0.8	6.1	6.1	-1.6	3.8	5.7	1.8	0.6	2.5
...	All other causes (residual)	451,034	18.6	149.5

... Category not applicable.
¹Rank based on number of deaths; see "Technical Notes."
²Multiple-race data were reported by 27 states and the District of Columbia in 2007. The multiple-race data for these reporting areas were bridged to the single-race categories of the 1977 OMB standards for comparability with other reporting areas; see "Technical Notes."
³AIAN is American Indian or Alaska Native; includes Aleuts and Eskimos.
⁴API is Asian or Pacific Islander; includes Chinese, Filipino, Hawaiian, Japanese, and Other Asian or Pacific Islander.
⁵Persons of Hispanic origin may be of any race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys.
⁶New ICD-10 code J09 (Influenza due to identified avian influenza virus) was added to the category in 2007. No deaths occurred from this cause in 2007.
⁷Cause-of-death title was changed in 2006 to reflect the addition of Secondary hypertension (ICD-10 code I15).

Figure 2). From 1981 through 1985, the age-adjusted rate for the API population increased by 7.7 percent to reach a peak of 586.5 deaths per 100,000 U.S. standard population. The rate fluctuated from 1985 through 1993 before starting a persistent downward trend. From 1993 through 2007, the age-adjusted rate for the API population decreased by 26.7 percent. In 2007, the rate for the total API population decreased by 3.2 percent from 2006, while the rate for both API males and females decreased by 3.3 percent (Table A).

Hispanic origin—Problems of race and Hispanic-origin reporting affect Hispanic death rates and the comparison of rates for the Hispanic and non-Hispanic populations; see "Technical Notes." Mortality for Hispanics is somewhat understated because of net underreporting of Hispanic origin on the death certificate. Hispanic origin on the death certificate is underreported by an estimated 5 percent (16,18); see "Technical Notes." The age-adjusted death rate for the Hispanic population in 2007 was 546.1, a decrease of 3.2 percent from the rate of 564.0 observed in 2006 (Tables C and 2). The age-adjusted death rate for the total non-Hispanic population decreased by 1.9 percent relative to 2006. In 2007, the age-adjusted rate for the non-Hispanic white

population decreased by 1.8 percent from 2006, and that for the non-Hispanic black population declined by 2.3 percent.

Among Hispanic males, the age-adjusted death rate decreased by 3.1 percent in 2007 from 2006. The age-adjusted death rate for non-Hispanic white males declined 1.7 percent and for non-Hispanic black males, it decreased 2.4 percent. Among Hispanic females, the age-adjusted death rate decreased by 3.4 percent. Rates also decreased for non-Hispanic white females (1.9 percent) and non-Hispanic black females (2.2 percent) (Tables C and 2).

In 2007, the age-adjusted death rate (Table 2) was 29.7 percent lower for the Hispanic population than for the non-Hispanic population. Similarly, the age-adjusted death rate for the Hispanic population was 28.5 percent lower than the rate for the non-Hispanic white population, and considerably lower, at 44.2 percent, than that for the non-Hispanic black population. The large differences in mortality between the Hispanic and non-Hispanic populations are partly a function of the Hispanic population's lower age-specific death rates, particularly at older ages (Table 4). Part of the difference is also attributable to underreporting of Hispanic origin on death certificates. In addition, various hypotheses