Health, United States, 2013

In Brief

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Introduction

Monitoring the health of the American people is an essential step in making sound health policy and setting research and program priorities. In a Chartbook and detailed tables, *Health, United States* provides an annual picture of the health of the entire nation. *Health, United States, 2013*—which includes a Special Feature on Prescription Drugs—is the 37th report on the health status of the nation and is submitted by the Secretary of the Department of Health and Human Services to the President and the Congress of the United States in compliance with Section 308 of the Public Health Service Act. This report was compiled by the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics (NCHS).

Health, United States, 2013: In Brief is provided as a companion to the full report. This short report contains summary information on the health of the American people, including mortality and life expectancy, morbidity and risk factors such as cigarette smoking and overweight and obesity, health insurance coverage, access to and utilization of health care, and health expenditures. An At a Glance table and Highlights section summarize some of these key indicators at the national level and are followed by 29 figures from *Health, United States, 2013*, which focus on these topics in addition to this year's special feature on prescription drugs.

The full report—*Health, United States, 2013: With Special Feature on Prescription Drugs*—is available at http://www.cdc.gov/nchs/hus.htm. On this website, users can find:

- The full searchable report in PDF format, consisting of a Preface, the At a Glance table and Highlights, the Chartbook with 29 figures including the Special Feature on Prescription Drugs, 135 detailed Trend Tables, Data Sources, Definitions and Methods, and an Index.
- The Chartbook and Trend Tables, available as downloadable PDFs and spreadsheet files.
- Additional years of data for selected Trend Tables, in spreadsheet format.
- Updated data for Trend Tables when available.
- Standard errors for selected estimates in the spreadsheets.
- All charts in PowerPoint format.
- Charts and tables conveniently grouped by specific topics, such as older adults, racial and ethnic groups, and state data.
- *Health, United States, 2013: In Brief* in PDF format.
- Previous editions of *Health, United States*, beginning with 1975.

Health, United States, 2013: At a Glance

	Value (year)			*Health, United States, 2013* Figure/Table No.
Life Expectancy and Mortality				
Life Expectancy, in years				Table 18
At birth	76.8 (2000)	78.5 (2009)	78.7 (2010)	
Infant deaths per 1,000 live births				Figure 2/Table 13
All infants	6.91 (2000)	6.39 (2009)	6.15 (2010)	
Deaths per 100,000 population, age-adjusted				Table 20
All causes	869.0 (2000)	749.6 (2009)	747.0 (2010)	
Heart disease	257.6 (2000)	182.8 (2009)	179.1 (2010)	
Cancer	199.6 (2000)	173.5 (2009)	172.8 (2010)	
Chronic lower respiratory diseases	44.2 (2000)	42.7 (2009)	42.2 (2010)	
Stroke	60.9 (2000)	39.6 (2009)	39.1 (2010)	
Unintentional injuries	34.9 (2000)	37.5 (2009)	38.0 (2010)	
Alzheimer's disease	18.1 (2000)	24.2 (2009)	25.1 (2010)	
Diabetes	25.0 (2000)	21.0 (2009)	20.8 (2010)	
Influenza and pneumonia	23.7 (2000)	16.5 (2009)	15.1 (2010)	
Suicide	10.4 (2000)	11.8 (2009)	12.1 (2010)	
Morbidity and Risk Factors				
Fair or poor health, percent				Table 52
All ages	8.9 (2000)	10.4 (2011)	10.3 (2012)	
65 years and over	26.9 (2000)	24.7 (2011)	22.7 (2012)	
Heart disease (ever told), percent				Table 44
18 years and over	11.3 (2000–2001)	11.8 (2009–2010)	11.4 (2011–2012)	
65 years and over	30.9 (2000–2001)	30.4 (2009–2010)	30.3 (2011–2012)	
Cancer (ever told), percent				Table 44
18 years and over	5.0 (2000–2001)	6.3 (2009–2010)	6.2 (2011–2012)	
65 years and over	15.2 (2000–2001)	18.1 (2009–2010)	18.5 (2011–2012)	
Hypertension,[1] percent				Table 64
20 years and over	28.9 (1999–2000)	31.9 (2009–2010)	32.5 (2011–2012)	
High serum total cholesterol,[2] percent				Table 64
20 years and over	17.7 (1999–2000)	13.6 (2009–2010)	13.1 (2011–2012)	
Obese, percent				Figure 10/Table 64
Obese,[3] 20 years and over	30.3 (1999–2000)	35.9 (2009–2010)	35.1 (2011–2012)	
Obese (BMI at or above sex- and age-specific 95th percentile):				
2–5 years	10.3 (1999–2000)	12.1 (2009–2010)	8.4 (2011–2012)	
6–11 years	15.1 (1999–2000)	18.0 (2009–2010)	17.7 (2011–2012)	
12–19 years	14.8 (1999–2000)	18.4 (2009–2010)	20.5 (2011–2012)	
Cigarette smoking, percent				Table 56
18 years and over	23.2 (2000)	19.0 (2011)	18.1 (2012)	
Health Care Utilization				
No health care visit in past 12 months, percent				Table 78
Under 18 years	12.3 (2000)	8.3 (2011)	8.1 (2012)	
18–44 years	23.4 (2000)	23.7 (2011)	24.7 (2012)	
45–64 years	14.9 (2000)	14.6 (2011)	15.1 (2012)	
65 years and over	7.4 (2000)	5.5 (2011)	6.1 (2012)	
Emergency room visit in past 12 months, percent				Tables 86 and 87
Under 18 years	20.3 (2000)	18.5 (2011)	17.8 (2012)	
18–44 years	20.5 (2000)	20.6 (2011)	19.4 (2012)	

Health, United States, 2013: In Brief ■ Complete Report available from: http://www.cdc.gov/nchs/hus.htm.

	Value (year)			*Health, United States, 2013* Figure/Table No.
45–64 years	17.6 (2000)	18.2 (2011)	18.0 (2012)	
65 years and over	23.7 (2000)	23.3 (2011)	22.2 (2012)	
Dental visit in past year, percent				Table 91
2–17 years	74.1 (2000)	81.4 (2011)	82.3 (2012)	
18–64 years	65.1 (2000)	61.6 (2011)	61.6 (2012)	
65 years and over	56.6 (2000)	61.2 (2011)	61.8 (2012)	
Prescription drug in past 30 days, percent				Figure 20/Table 92
Under 18 years	20.5 (1988–1994)	23.8 (1999–2002)	24.0 (2007–2010)	
18–44 years	31.3 (1988–1994)	35.9 (1999–2002)	38.7 (2007–2010)	
45–64 years	54.8 (1988–1994)	64.1 (1999–2002)	66.2 (2007–2010)	
65 years and over	73.6 (1988–1994)	84.7 (1999–2002)	89.7 (2007–2010)	
Hospitalization in past year, percent				Table 94
18–44 years	7.0 (2000)	6.4 (2011)	6.1 (2012)	
45–64 years	8.4 (2000)	8.3 (2011)	8.0 (2012)	
65 years and over	18.2 (2000)	16.7 (2011)	15.9 (2012)	
Health Insurance and Access to Care				
Uninsured, percent				Table 125
Under 65 years	17.0 (2000)	17.2 (2011)	16.9 (2012)	
Under 18 years	12.6 (2000)	7.0 (2011)	6.6 (2012)	
18–44 years	22.4 (2000)	25.4 (2011)	24.8 (2012)	
19–25 years	32.3 (2000)	27.9 (2011)	26.3 (2012)	
45–64 years	12.6 (2000)	15.4 (2011)	15.6 (2012)	
Delayed or did not receive needed medical care in past 12 months due to cost, percent				Table 74
Under 18 years	4.6 (2000)	3.8 (2011)	3.2 (2012)	
18–44 years	9.5 (2000)	13.6 (2011)	12.7 (2012)	
45–64 years	8.8 (2000)	14.4 (2011)	14.0 (2012)	
65 years and over	4.5 (2000)	4.6 (2011)	4.1 (2012)	
Health Care Resources				
Patient care physicians per 10,000 population[4]				Table 101
United States	22.7 (2000)	24.0 (2010)	26.1 (2011)	
Highest state	34.4 (MA) (2000)	40.0 (MA) (2010)	41.1 (MA) (2011)	
Lowest state	14.4 (ID) (2000)	17.6 (MS) (2010)	17.7 (ID) (2011)	
Community hospital beds per 1,000 population[5]				Table 108
United States	2.9 (2000)	2.6 (2010)	2.6 (2011)	
Highest state	6.0 (ND) (2000)	5.1 (ND) (2010)	5.0 (SD) (2011)	
Lowest state	1.9 (NM,NV,OR, UT,WA) (2000)	1.7 (OR,WA) (2010)	1.7 (WA) (2011)	
Expenditures				
Personal health care expenditures, in dollars				Table 115
Total, in trillions	$1.2 (2000)	$2.2 (2010)	$2.3 (2011)	
Per capita	$4,128 (2000)	$7,090 (2010)	$7,326 (2011)	

[1]Having measured high blood pressure (systolic pressure of at least 140 mm Hg or diastolic pressure of at least 90 mm Hg) and/or respondent report of taking antihypertensive medication.

[2]Having high serum total cholesterol of 240 mg/dL or greater.

[3]Obesity is a body mass index (BMI) greater than or equal to 30. Height and weight are measured rather than self-reported.

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[5]Copyright 2013. Used with permission of Health Forum LLC, an affiliate of the American Hospital Association.

NOTES: Some estimates shown in this table are not shown in the PDF or printed versions but can be found in the spreadsheet version of the cited tables. For more information and the spreadsheet version of the tables, see the complete report, *Health, United States, 2013*, available from: http://www.cdc.gov/nchs/hus.htm.

Highlights

Life Expectancy and Mortality

In 2010, life expectancy at birth in the United States for the total population was 78.7 years—76.2 years for males and 81.0 years for females (Table 18).

Between 2000 and 2010, life expectancy at birth increased 2.1 years for males and 1.7 years for females. The gap in life expectancy between males and females narrowed from 5.2 years in 2000 to 4.8 years in 2010 (Table 18).

Between 2000 and 2010, life expectancy at birth increased more for the black than for the white population, thereby narrowing the gap in life expectancy between these two racial groups. In 2000, life expectancy at birth for the white population was 5.5 years longer than for the black population; by 2010, the difference had narrowed to 3.8 years (Table 18).

Between 2000 and 2010, the infant mortality rate decreased 11%, from 6.91 to 6.15 deaths per 1,000 live births. In 2000, the infant mortality rate for white mothers was 5.68, compared with 14.09 for black mothers; by 2010 the infant mortality rate declined to 5.20 among white mothers and 11.63 among black mothers (Table 13).

Between 2000 and 2010, the age-adjusted heart disease death rate decreased 30%, from 257.6 to 179.1 deaths per 100,000 population. In 2010, 24% of all deaths in the United States were from heart disease (Tables 22 and 26).

Between 2000 and 2010, the age-adjusted cancer death rate decreased 13%, from 199.6 to 172.8 deaths per 100,000 population. In 2010, 23% of all deaths in the United States were from cancer (Tables 22 and 28).

Fertility and Natality

Between 2002 and 2012, the birth rate among teenagers aged 15–19 fell 31%, from 42.6 to 29.4 live births per 1,000 females—a record low for the United States (Table 3).

The percentage of low-birthweight births [infants weighing less than 2,500 grams (5.5 pounds) at birth] was 7.99% in 2012, down 3% since 2006 when it was 8.26% (Table 6).

Health Risk Factors

Children

Between 2003–2004 and 2011–2012, the prevalence of obesity among children aged 2–5 years decreased from 14.0% to 8.4% (Table 64 and Figure 10).

The prevalence of obesity among children aged 6–11 was stable between 2003–2004 and 2011–2012. In 2011–2012, 17.7% of children aged 6–11 were obese (Table 64 and Figure 10).

In 2011–2012, 20.5% of adolescents aged 12–19 were obese, which was not significantly different from the prevalence in 2003–2004 (Table 64 and Figure 10).

In 2011, 15.8% of students in grades 9–12 seriously considered suicide, and the percentage was higher among female students (19.3%) than among male students (12.5%) (Table 62).

Adults

In 2012, 20.3% of adults aged 18 and over met the 2008 federal physical activity guidelines for both aerobic activity and muscle strengthening (Table 68).

Between 1988–1994 and 2009–2012, the percentage of adults aged 20 and over with grade 1 obesity [a body mass index (BMI) of 30.0–34.9] increased from 14.8% to 20.4%. Those with grade 2 obesity (BMI of 35.0–39.9) rose from 5.2% to 8.6%, and those with grade 3 or higher obesity (BMI of 40 or higher) doubled, from 3.0% to 6.3% (percentages are age-adjusted) (Table 69).

In 2012, 18.1% of adults aged 18 and over were current cigarette smokers, a decline from 2000 (23.2%). Men were more likely than women to be current cigarette smokers (20.5% compared with 15.8%) in 2012 (Table 56).

Measures of Health and Disease Prevalence

In 2010–2012, 5.5% of children under age 18 had an asthma attack in the past year, and 5.2% had a food allergy (Table 41).

Among children aged 5–17, 9.9% had attention deficit hyperactivity disorder and 5.8% had serious emotional or behavioral difficulties in 2010–2012 (Table 41).

In 2012, the percentage of noninstitutionalized adults who reported their health as fair or poor ranged from 6.4% of those aged 18–44 to 26.6% of those aged 75 and over (Table 52).

In 2012, 26.2% of noninstitutionalized adults aged 18–64 reported a disability (defined as any basic actions difficulty or complex activity limitation), compared with 58.7% of those aged 65 and over (Table 49).

In 2011–2012, among noninstitutionalized adults aged 75 and over, 43.5% of men and 31.5% of women had ever been

told by a physician or other health professional that they had heart disease (Table 44 and Figure 6).

In 2011–2012, among noninstitutionalized adults aged 75 and over, 24.7% of men and 19.3% of women had ever been told by a physician or other health professional that they had cancer (excluding squamous and basal cell skin cancers) (Table 44).

In 2009–2012, nearly one-half (47%) of adults aged 20 and over with hypertension continued to have uncontrolled high blood pressure (Table 65 and Figure 9).

Health Care Utilization

Use of Health Care Services

In 2012, 15.7% of persons had no health care visits in the past year, 47.3% had 1–3 health care visits, 24.0% had 4–9 visits, and 13.1% had 10 or more visits. Health care visits for illness, preventive care, or an injury include visits to see a health care provider at physician offices, emergency departments, clinics or some other place, and home visits by health care professionals (Table 78).

In 2011, there were 126 million visits to hospital outpatient departments and 136 million visits to hospital emergency departments (Table 89).

In 2012, 82.3% of children aged 2–17 years, 61.6% of adults aged 18–64, and 61.8% of adults aged 65 and over had visited a dentist in the past year (Table 91).

The percentage of the population taking at least one prescription drug during the past 30 days increased from 39.1% in 1988–1994 to 47.5% in 2007–2010. During the same period, the percentage taking three or more prescription drugs rose from 11.8% to 20.8%, and the percentage taking five or more drugs more than doubled, from 4.0% to 10.1% (percentages are age-adjusted) (Table 92 and Figure 20).

Use of Preventive Medical Care Services

In 2012, 68% of children aged 19–35 months had completed a combined series of childhood vaccinations (at least 4 doses of diphtheria/tetanus/pertussis vaccine, 3 doses of polio vaccine, 1 dose of measles-containing vaccine, 3 or 4 doses of *Haemophilus influenzae* type b vaccine depending on product type, 3 doses of hepatitis B vaccine, 1 dose of varicella vaccine, and 4 doses of pneumococcal conjugate vaccine) (Table 79).

In 2012, 37.7% of noninstitutionalized adults aged 18 and over had received an influenza vaccination in the past year. Influenza vaccination increased with age, with 26.3% of those aged 18–49, 42.8% of those aged 50–64, and 66.5% of those aged 65 and over reporting an influenza vaccination in the past year (Table 81 and Figure 12).

In 2012, 59.9% of noninstitutionalized adults aged 65 and over ever had a pneumococcal vaccination (Table 82 and Figure 12).

Nonreceipt of Needed Medical Care, Prescription Drugs, and Dental Care Due to Cost

Between 2002 and 2012, among adults aged 18–64, the percentage who reported not receiving or delaying seeking needed medical care due to cost in the past 12 months increased from 9.7% to 13.3%. The percentage not receiving needed prescription drugs due to cost increased from 7.6% to 9.4%, and the percentage not receiving needed dental care due to cost grew from 10.4% to 14.8% (Table 74).

In 2012, 33.0% of adults aged 18–64 who were uninsured during the past 12 months did not get or delayed seeking needed medical care due to cost in the past 12 months, compared with 6.6% of adults aged 18–64 who were insured continuously during the past 12 months (Table 74).

Health Care Resources

In 2011, there were 26.1 physicians in patient care per 10,000 population in the United States. The number of patient care physicians per 10,000 population ranged from 17.7 in Idaho to 41.1 in Massachusetts and 68.3 in the District of Columbia (Table 101).

In 2011, the United States had 4,973 community hospitals and 797,403 community hospital beds. Community hospital occupancy averaged 64.3% in 2011, similar to the level in 2010 (Table 107).

In 2012, there were 15,673 certified nursing homes with 1,703,213 nursing home beds. Nursing home occupancy averaged 81.2% in 2012. Nursing home occupancy ranged from 60.0% in Oregon to 91.9% in Rhode Island and 94.1% in the District of Columbia (Table 110).

Health Care Expenditures and Payers

Health Care Expenditures

In 2011, personal health care expenditures in the United States totaled $2.3 trillion, a 4.1% increase from 2010. The average per capita personal health care expenditure for the total U.S. population was $7,326 in 2011 (Table 112).

Expenditures for hospital care accounted for 31.5% of all national health care expenditures in 2011. Physician and clinical services accounted for 20.0% of the total, prescription drugs for 9.7%, and nursing care facilities and continuing care retirement communities for 5.5% (Table 114).

In 2011, prescription drug expenditures totaled $263 billion, a 2.9% increase from 2010 (Table 114).

In 2011, the average cost for the entire hospitalization involving a heart valve procedure was $53,282, a coronary artery bypass graft procedure was $38,707, cardiac pacemaker insertion or replacement was $33,194, and spinal fusion was $27,570 (Table 116).

Health Care Payers

In 2011, 34.5% of all personal health care expenditures were paid by private health insurance, 22.9% were paid by Medicare and 16.4% by Medicaid; consumers paid 13.5% out of pocket; and the remainder was paid by other types of insurance, payers, and programs (Table 115).

In 2010, children under age 21 accounted for 48.3% of Medicaid recipients but only 19.8% of Medicaid expenditures. Aged, blind, and persons with disabilities accounted for 20.8% of Medicaid recipients and 62.8% of Medicaid expenditures (Table 130).

In 2012, the Medicare program had 50.7 million enrollees and expenditures of $574.2 billion, up from $549.1 billion the previous year. Expenditures for the Medicare drug program (Part D) were $66.9 billion in 2012 (Table 127).

Health Insurance Coverage

Between 2002 and 2012, the percentage of the population under age 65 with private health insurance obtained through the workplace declined from 65.3% to 56.9% (Table 123).

In 2012, 6.6% of children under age 18 and 20.9% of adults aged 18–64 had no health insurance coverage (public or private) at the time of interview (Table 125).

Between 2002 and 2012, among children in families with income just above the poverty level (100%–199% of poverty), the percentage of uninsured children under age 18 dropped from 17.0% to 10.4%, while the percentage with coverage through Medicaid or the Children's Health Insurance Program (CHIP) increased from 38.6% to 57.3% (Tables 124 and 125).

Between 2010 and 2012, the percentage of adults aged 19–25 who were uninsured decreased from 33.8% to 26.3% (Table 125 and Figure 15).

Mortality
Life Expectancy at Birth

Figure 1. Life expectancy at birth, by selected characteristics: United States, 1980–2010

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig01
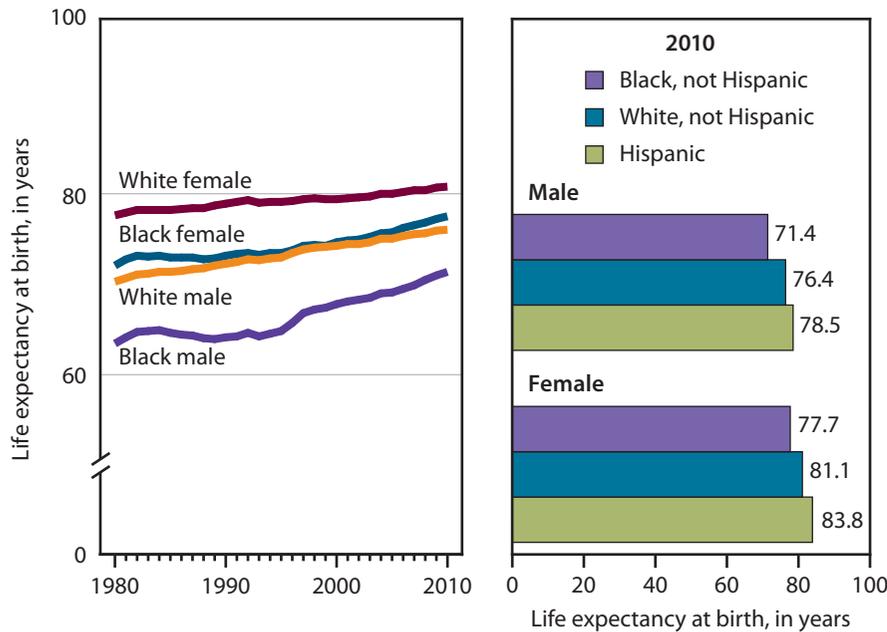
The gap in life expectancy at birth between white persons and black persons persists but has narrowed since 1990.

Life expectancy is a measure often used to gauge the overall health of a population. Between 1980 and 2010, life expectancy at birth in the United States increased from 70.0 years to 76.2 years for males and from 77.4 years to 81.0 years for females. Racial disparities in life expectancy at birth persisted for both males and females in 2010 but have narrowed since 1990 (1). Life expectancy at birth was 8.2 years longer for white males than for black males in 1990, and 4.7 years longer for white males than for black males in 2010. In 1990, life expectancy at birth was 5.8 years longer for white females than for black females; by 2010, life expectancy at birth was 3.3 years longer for white females than for black females. In 2010, Hispanic males and females had longer life expectancy at birth than non-Hispanic white or non-Hispanic black males and females.

NOTE: Life expectancy by Hispanic origin was available starting in 2006.
SOURCE: CDC/NCHS, *Health, United States, 2013*, Table 18. Data from the National Vital Statistics System (NVSS).

Mortality
Infant Mortality

Infant, neonatal, and postneonatal mortality rates declined between 2000 and 2010.

The infant mortality rate is the risk of death during the first year of life. The 2010 infant mortality rate of 6.15 per 1,000 live births—a historically low value—was 11% lower than in 2000. During the same period, the neonatal mortality rate (death rate among infants under 28 days, a subset of infant mortality) decreased 13% to 4.05 per 1,000 live births, and the postneonatal mortality rate (death rate among infants 28 days through 11 months, a subset of infant mortality) declined 8% to 2.10 per 1,000 live births.

SOURCE: CDC/NCHS, *Health, United States, 2013*, Table 13 and reference 2. Data from the National Vital Statistics System (NVSS).

**Figure 2. Infant, neonatal, and postneonatal mortality rates: United States, 2000–2010**

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig02
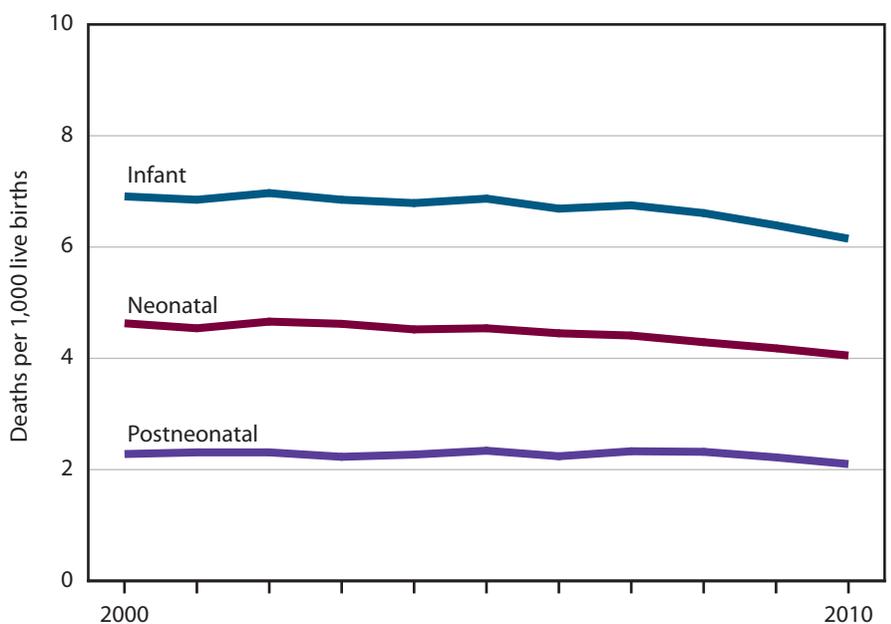
Mortality
Selected Causes of Death

Figure 3. Age-adjusted death rates for selected causes of death for all ages, by sex: United States, 2000–2010
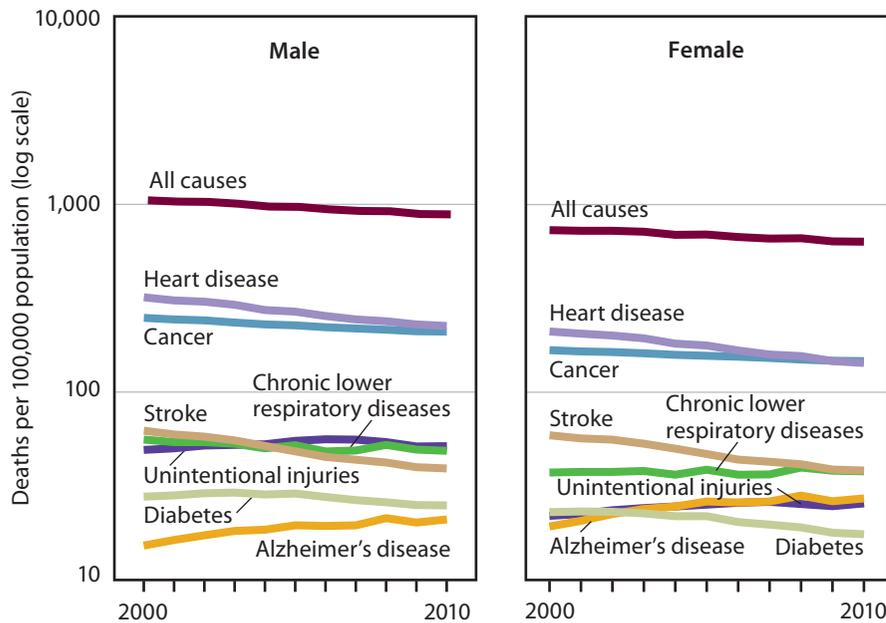
Between 2000 and 2010, the all-cause age-adjusted death rate decreased 16% among males and 13% among females.

During this 10-year period, age-adjusted death rates among males declined 37% for stroke, 30% for heart disease, 16% for cancer, and 13% for chronic lower respiratory diseases, while the age-adjusted death rate for Alzheimer's disease increased 38%, and the age-adjusted death rate for unintentional injury was stable. Among females, age-adjusted death rates declined 35% for stroke, 32% for heart disease, and 12% for cancer, while the age-adjusted death rates increased 41% for Alzheimer's disease, and 16% for unintentional injuries. In 2010, age-adjusted death rates were higher for males than females for heart disease, cancer, chronic lower respiratory diseases, diabetes, and unintentional injuries; were similar for stroke; and were higher among females than males for Alzheimer's disease.

SOURCE: CDC/NCHS, *Health, United States, 2013*, Table 20. Data from the National Vital Statistics System (NVSS).

*Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig03*

Mortality
Motor Vehicle-related Death Rates

Between 2000 and 2010, motor vehicle-related death rates declined among males and females aged 15–19 and 20–24.

Motor vehicle-related deaths are a significant cause of preventable death, accounting for 35,332 deaths in the United States in 2010 across all ages (3). Motor vehicle-related death rates were higher for males and females aged 15–24 than for most other age groups (Table 33). For males and females aged 15–19, motor vehicle-related death rates declined 47% from 2000 to 2010. Motor vehicle-related death rates declined 31% for males aged 20–24 and 26% for females in the same age group during this 10-year period.

SOURCE: CDC/NCHS, *Health, United States, 2013*, Table 33. Data from the National Vital Statistics System (NVSS).

Figure 4. Motor vehicle-related death rates among persons aged 15–24, by sex and age: United States, 2000–2010


Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig04
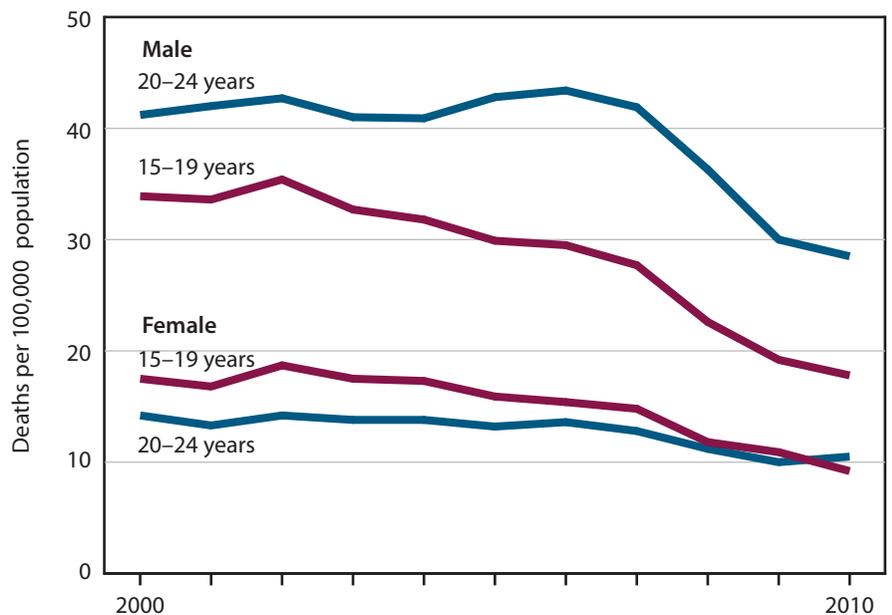
Natality

Teenage Childbearing

Figure 5. Teenage childbearing, by maternal age and race and Hispanic origin: United States, 2002–2012

Maternal age: 15–17 — Live births per 1,000 females; Black, not Hispanic; American Indian or Alaska Native; Hispanic; White, not Hispanic; Asian or Pacific Islander; 2002–2012

Maternal age: 18–19 — Hispanic; Black, not Hispanic; American Indian or Alaska Native; White, not Hispanic; Asian or Pacific Islander; 2002–2012
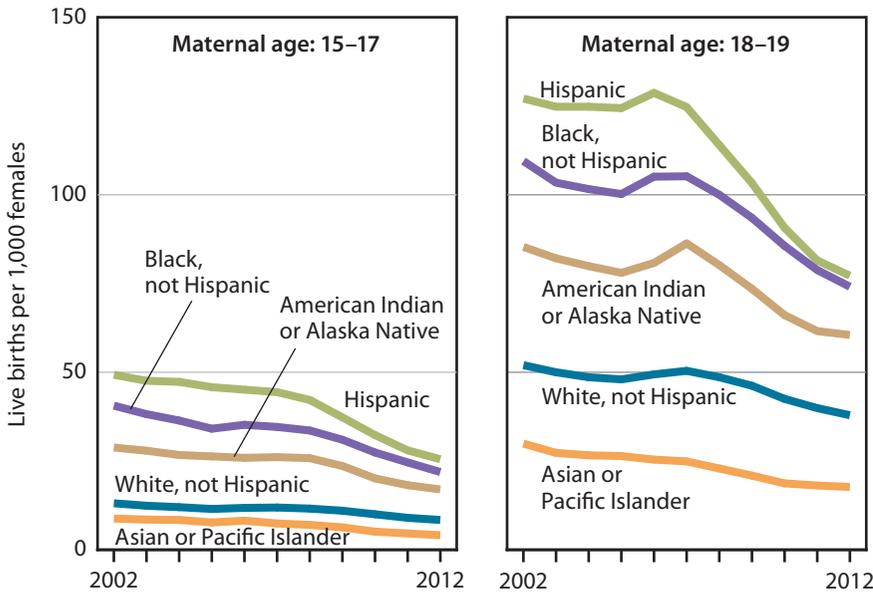
Between 2002 and 2012, teenage birth rates declined among all racial and ethnic groups.

In 2012, 2.3% of births were to teenagers under age 18 and 5.5% were to women aged 18–19 (Table 4). Between 2002 and 2012, birth rates declined 39% for teenagers aged 15–17 and 29% for women aged 18–19 (Table 3). Birth rates were higher among Hispanic and non-Hispanic black teenagers than among other racial and ethnic groups. Since 2002, birth rates have decreased 48% for Hispanic teenagers aged 15–17 and 46% for non-Hispanic black teenagers in the same age group. Also during this period, birth rates for those aged 18–19 decreased 39% for Hispanic teenagers and 32% for non-Hispanic black teenagers.

SOURCE: CDC/NCHS, *Health, United States, 2013*, Table 3. Data from the National Vital Statistics System (NVSS).

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig05

Morbidity

Heart Disease Prevalence

During 2001–2002 through 2011–2012, heart disease prevalence remained stable among men and women in most age groups.

Heart disease is the leading cause of death in the United States for both males and females, accounting for 307,384 deaths among males and 290,305 deaths among females across all ages in 2010 (Table 22). During 2001–2002 through 2011–2012, heart disease prevalence remained stable among men and women in all age groups except among women aged 65 and over, where the prevalence declined. In 2011–2012, the prevalence of respondent-reported heart disease among adults aged 18–54 was similar for men and women; among adults aged 55 and over, the prevalence was higher for men than for women. In 2011–2012, 43.5% of men aged 75 and over reported having ever been told by a physician that they had heart disease, compared with 31.5% of women in the same age group.

SOURCE: CDC/NCHS, *Health, United States, 2013*, Table 44. Data from the National Health Interview Survey (NHIS).

Figure 6. Respondent-reported heart disease prevalence among adults aged 18 and over, by sex and age: United States, average annual, 2001–2002 through 2011–2012

Men — Percent; 75 years and over; 65–74 years; 55–64 years; 45–54 years; 18–44 years; 2001–2002 to 2011–2012

Women — 75 years and over; 65–74 years; 55–64 years; 45–54 years; 18–44 years; 2001–2002 to 2011–2012

*Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig06*
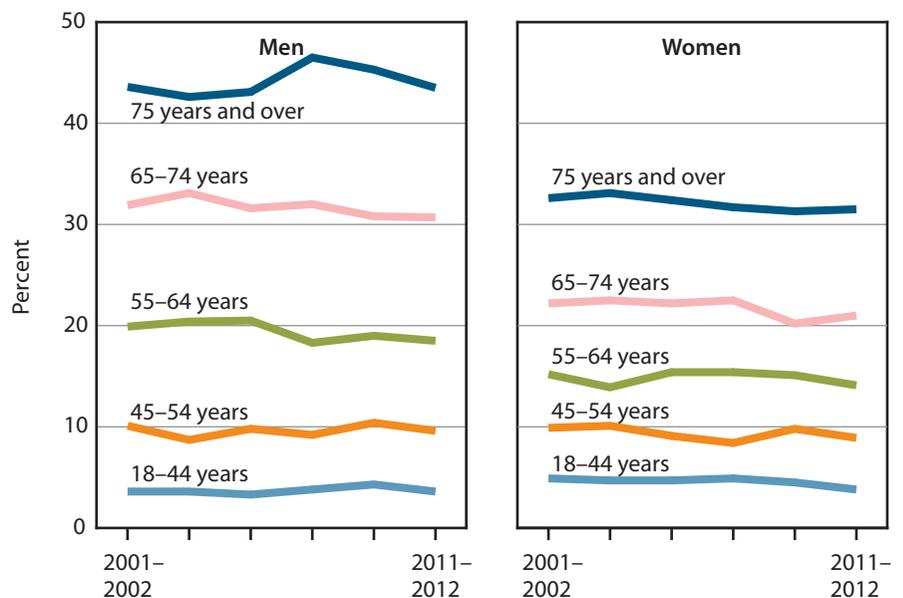
Disability Measures
Basic Actions Difficulty and Complex Activity Limitation

Figure 7. Basic actions difficulty and complex activity limitation among adults aged 18 and over, by sex and age: United States, 2002–2012
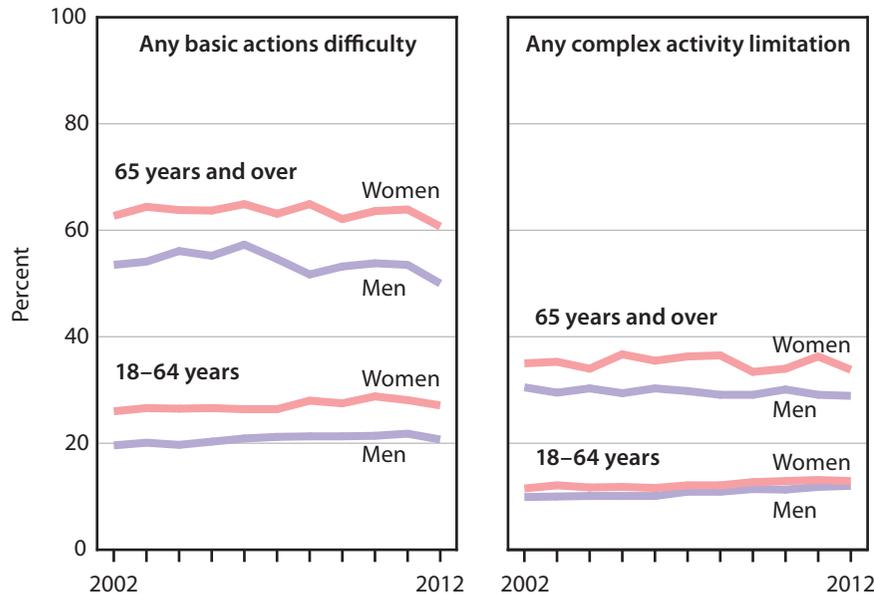
During 2002 through 2012, the percentage of the noninstitutionalized population with basic actions difficulty and the percentage of the noninstitutionalized population with complex activity limitation increased with age.

Basic actions difficulty and complex activity limitation are two constructs for defining and measuring disability status (4). Basic actions difficulty captures limitations in movement, emotional, sensory, or cognitive functioning associated with a health problem. Complex activity limitation is the inability to function successfully in certain social roles, such as working, maintaining a household, living independently, or participating in community activities. In 2012, the prevalence of each disability measure was higher for women than men in the same age group, with the exception of complex activity limitation among those aged 18–64, where the prevalence was similar for men and women (12.0%–12.9%).

SOURCE: CDC/NCHS, *Health, United States, 2013*, Table 49. Data from the National Health Interview Survey (NHIS).

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig07

Health Risk Factors
Current Cigarette Smoking

During 2002 through 2012, cigarette smoking prevalence declined among high school seniors and among adults aged 18–44 and women aged 45–64.

Smoking is associated with an increased risk of heart disease, stroke, lung and other types of cancers, and chronic lung diseases (5). Between 2002 and 2012, cigarette smoking among students in grade 12 decreased from 27.4% to 19.3% for male students and from 25.5% to 14.5% for female students. During 2002 through 2012, the percentage of adults who smoked cigarettes declined for men and women aged 18–44 and for women aged 45–64, while remaining stable for men aged 45–64 and for men and women aged 65 and over. In 2012, 20.5% of adult men aged 18 and over and 15.8% of adult women were current cigarette smokers (Table 56).

SOURCE: CDC/NCHS, *Health, United States, 2013*, Tables 56 and 61. Data from the National Health Interview Survey (NHIS) and the Monitoring the Future (MTF) Study.

Figure 8. Current cigarette smoking among high school seniors and adults aged 18 and over, by sex and age: United States, 2002–2012


Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig08
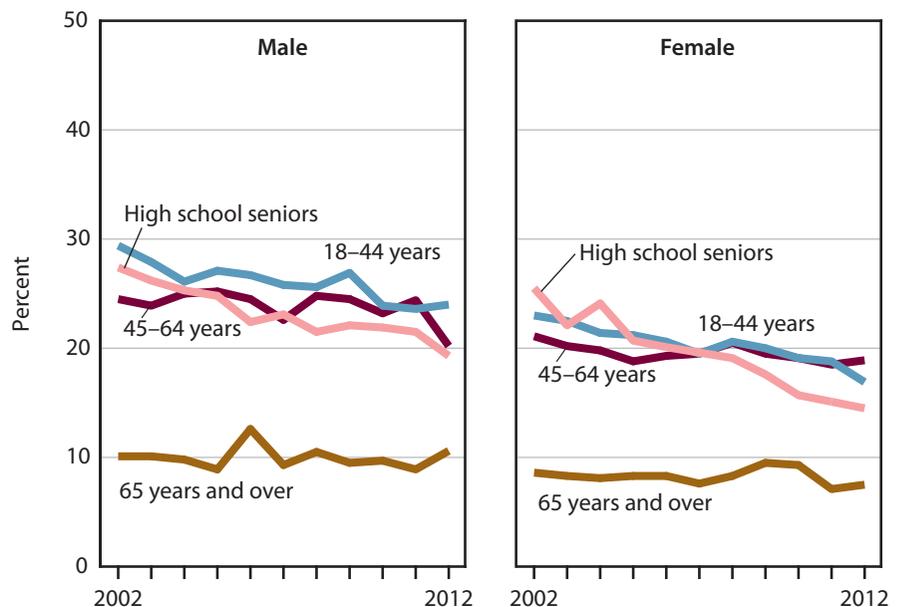
Health Risk Factors
Uncontrolled High Blood Pressure

Figure 9. Uncontrolled high blood pressure among adults aged 20 and over with hypertension, by sex and age: United States, 1988–1994 through 2009–2012
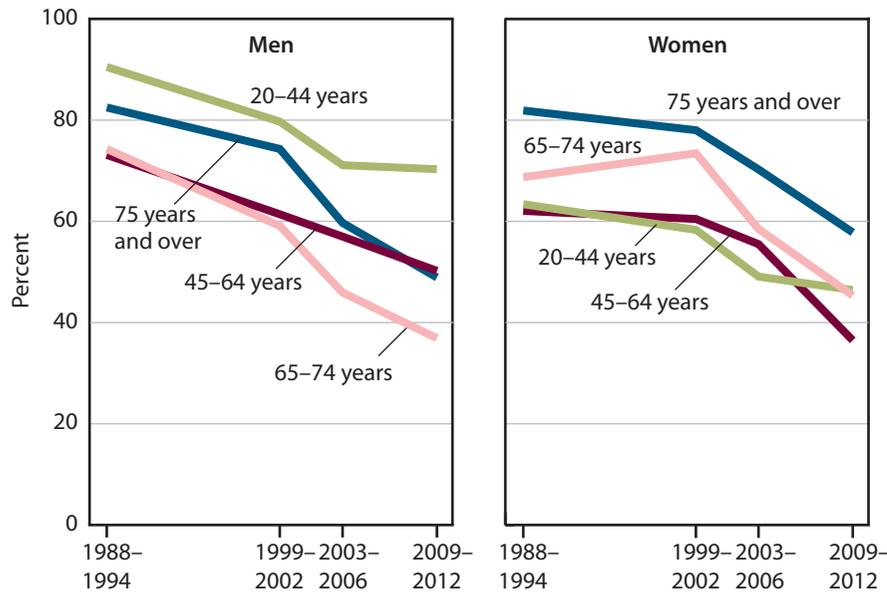
Although control of high blood pressure has improved since 1988–1994, nearly one-half of adults with hypertension had uncontrolled high blood pressure in 2009–2012.

Hypertension increases the risk for cardiovascular disease, including heart attack and stroke (6). Between 1988–1994 and 2009–2012, the prevalence of uncontrolled high blood pressure (defined as an average systolic blood pressure of 140 mm Hg or higher, or an average diastolic pressure of 90 mm Hg or higher, among those with hypertension) declined for all age groups of men and women. However, nearly one-half (47.4%) of adults aged 20 and over with hypertension continued to have uncontrolled high blood pressure in 2009–2012 (Table 65).

SOURCE: CDC/NCHS, *Health, United States, 2013*, Table 65. Data from the National Health and Nutrition Examination Survey (NHANES).

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig09

Health Risk Factors
Obesity Among Children

Between 2003–2004 and 2011–2012, the prevalence of obesity among children aged 2–5 decreased, while the prevalence of obesity among older children and adolescents remained stable.

Excess body weight in children is associated with excess morbidity in childhood and adulthood (7,8). Obesity among children is defined as a body mass index at or above the sex- and age-specific 95th percentile of the CDC growth charts. The percentage of children aged 2–5 who were obese decreased from 14.0% in 2003–2004 to 8.4% in 2011–2012. The prevalence of obesity among children aged 6–11 and adolescents aged 12–19 was stable between 2003–2004 and 2011–2012. In 2011–2012, 17.7% of children aged 6–11 and 20.5% of adolescents aged 12–19 were obese.

SOURCE: CDC/NCHS, *Health, United States, 2013*, Table 64. Data from the National Health and Nutrition Examination Survey (NHANES).

Figure 10. Obesity among children and adolescents, by age: United States, 2003–2004 through 2011–2012


Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig10
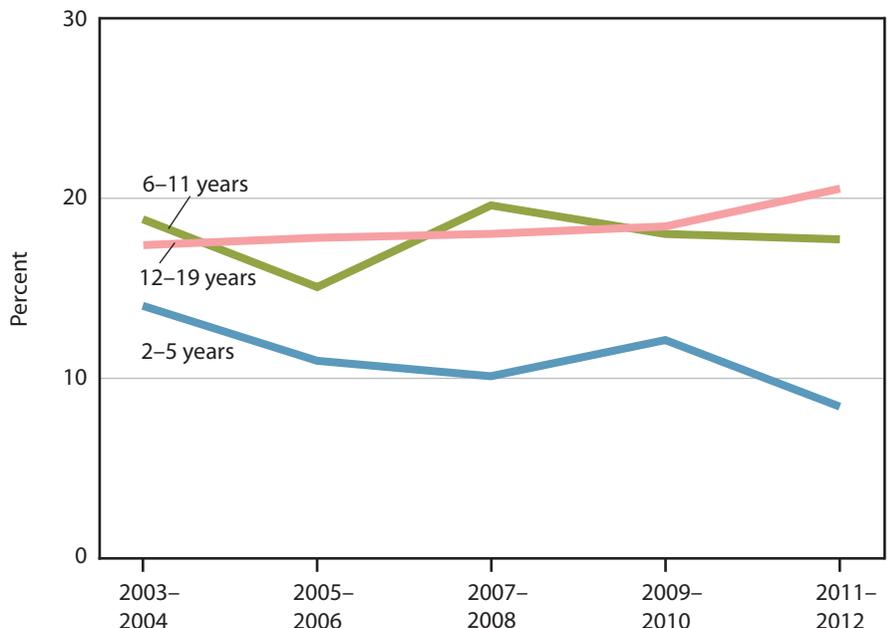
Health Risk Factors
Overweight and Obesity Among Adults

Figure 11. Overweight and obesity among adults aged 20 and over, by sex: United States, 1988–1994 through 2009–2012

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig11
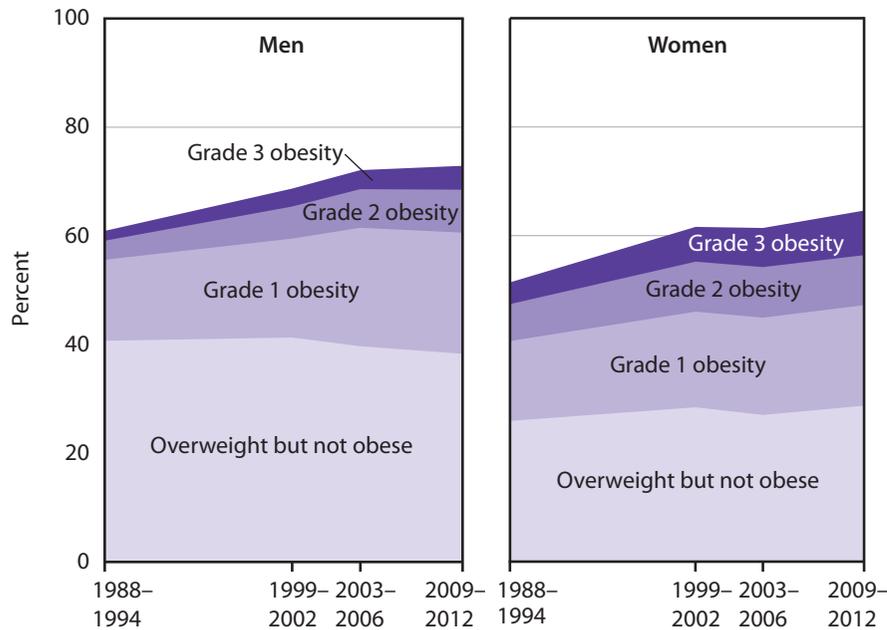
In 2009–2012, the percentage of adults aged 20 and over with Grade 1 obesity was higher for men than women, and the percentage with Grade 2 or Grade 3 obesity was higher for women than men.

Reducing the prevalence of obesity is a public health priority because obesity is correlated with excess morbidity and mortality (9–12). In particular, Grade 2 or higher obesity [a body mass index (BMI) of 35 or higher] significantly increases the risk of death (13). Between 1988–1994 and 2009–2012, the percentage of men and women aged 20 and over who were overweight but not obese (BMI greater than or equal to 25 but less than 30) was stable. During this period, the percentage of adults aged 20 and over with Grade 1 obesity (BMI greater than or equal to 30 but less than 35), Grade 2 obesity (BMI greater than or equal to 35 but less than 40), and Grade 3 obesity (BMI of 40 or higher) increased among both men and women. In 2009–2012, 4.4% of men and 8.2% of women aged 20 and over had Grade 3 obesity.

SOURCE: CDC/NCHS, *Health, United States, 2013*, Table 69. Data from the National Health and Nutrition Examination Survey (NHANES).

Prevention
Influenza and Pneumococcal Vaccination

During 2002 through 2012, influenza vaccination in the past 12 months increased among adults under age 65, while remaining stable among those aged 65 and over. The percentage of adults aged 65 and over who had ever received a pneumococcal vaccination increased during this period.

Vaccination of persons at risk for complications from influenza and invasive pneumococcal disease is an important public health strategy (14). During 2002 through 2012, influenza vaccination in the past 12 months for noninstitutionalized adults increased among those aged 18–49 and 50–64 but was stable among those aged 65 and over. Decreases in influenza vaccination coverage in 2005 were related to a vaccine shortage (15). During 2002 through 2012, the percentage of noninstitutionalized adults who had ever received pneumococcal vaccination was stable among high-risk persons aged 18–64, and increased among those aged 65–74 and 75 and over.

NOTE: See Table 82 for a definition of the high-risk category for pneumococcal vaccination.
SOURCE: CDC/NCHS, *Health, United States, 2013*, Tables 81 and 82. Data from the National Health Interview Survey (NHIS).

Figure 12. Influenza and pneumococcal vaccination among noninstitutionalized adults aged 18 and over, by type of vaccination and age: United States, 2002–2012


Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig12
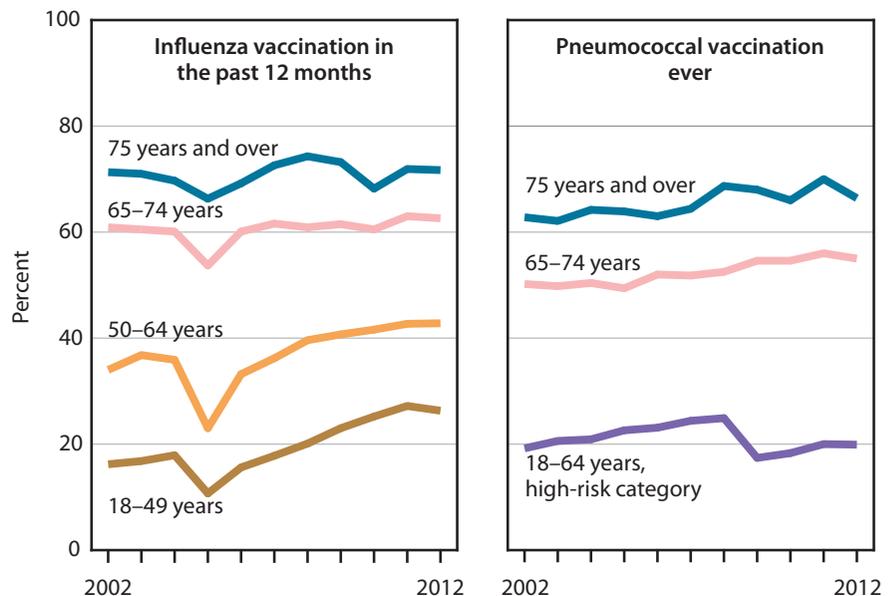
Prevention

Vaccination Coverage Among Adolescents Aged 13–17

Figure 13. Vaccination coverage among adolescents aged 13–17, by type of vaccine: United States, 2012
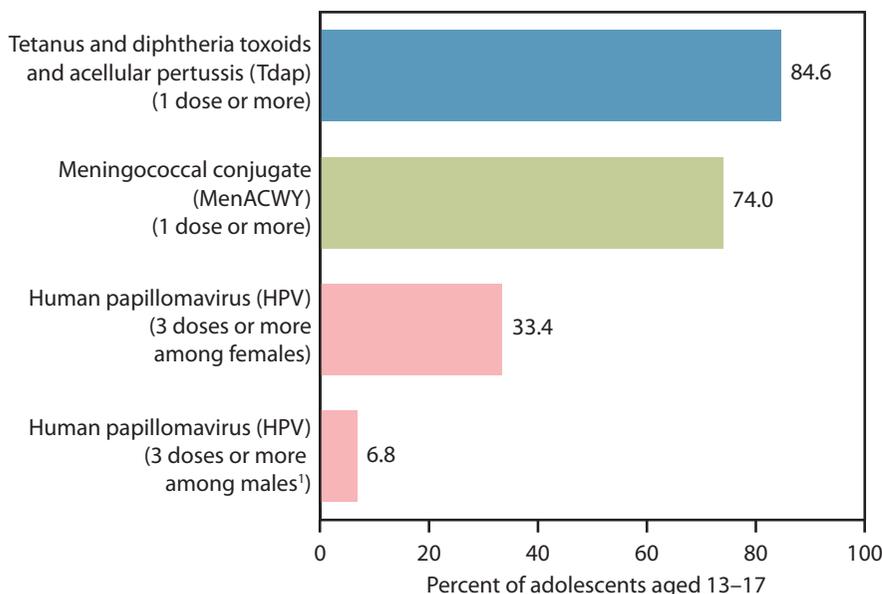
Vaccination coverage for adolescents aged 13–17 varied by type of vaccine.

Early adolescence (ages 11–12) is the recommended time for adolescents to catch up on missed childhood vaccinations and to receive three vaccines specifically recommended for them—Tetanus and diphtheria toxoids (Tdap), Meningococcal conjugate (MenACWY), and Human papillomavirus (HPV) (16,17). In 2012, among adolescents aged 13–17 who had time to obtain the recommended vaccinations, 84.6% had received Tdap vaccine and 74.0% had received MenACWY vaccine (17). The HPV vaccination series was recommended for females starting in June 2006 and for males in October 2011 (18,19). In 2012, 33.4% of females aged 13–17 had received three or more doses of HPV vaccine. Among males, 6.8% of those aged 13–17 had completed the HPV series in 2012—the first year following the recommendation for males.

[1]The HPV vaccination series was recommended for males in October 2011.
SOURCE: CDC/NCHS, *Health, United States, 2013*, Table 80. Data from the National Center for Immunization and Respiratory Diseases, National Immunization Survey–Teen.

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig13

Health Insurance

Coverage Among Adults Aged 18–64

During 2002 through 2012, the percentage of adults aged 18–44 and 45–64 with private health insurance coverage decreased, while the percentage with Medicaid and the percentage uninsured increased.

Health insurance is a major determinant of access to health care (20). Among adults aged 18–44, the percentage with private coverage declined from 68.7% in 2002 to 61.4% in 2012, while the percentage with Medicaid coverage increased from 7.1% to 11.6%. The percentage of adults aged 18–44 who were uninsured increased from 23.0% to 24.8% during this period (also see Figure 15). Similarly, the percentage of adults aged 45–64 with private coverage declined from 77.3% in 2002 to 70.0% in 2012. The percentage of adults aged 45–64 with Medicaid coverage increased from 5.3% to 8.0%, and the percentage uninsured increased from 13.1% to 15.6%.

Figure 14. Health insurance coverage among adults aged 18–64, by age and type of coverage: United States, 2002–2012

NOTES: The Medicaid category includes the Children's Health Insurance Program (CHIP). Adults categorized as having Medicaid or private coverage may have additional types of health insurance coverage.
SOURCE: CDC/NCHS, *Health, United States, 2013*, Tables 122, 124, and 125. Data from the National Health Interview Survey (NHIS).

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig14
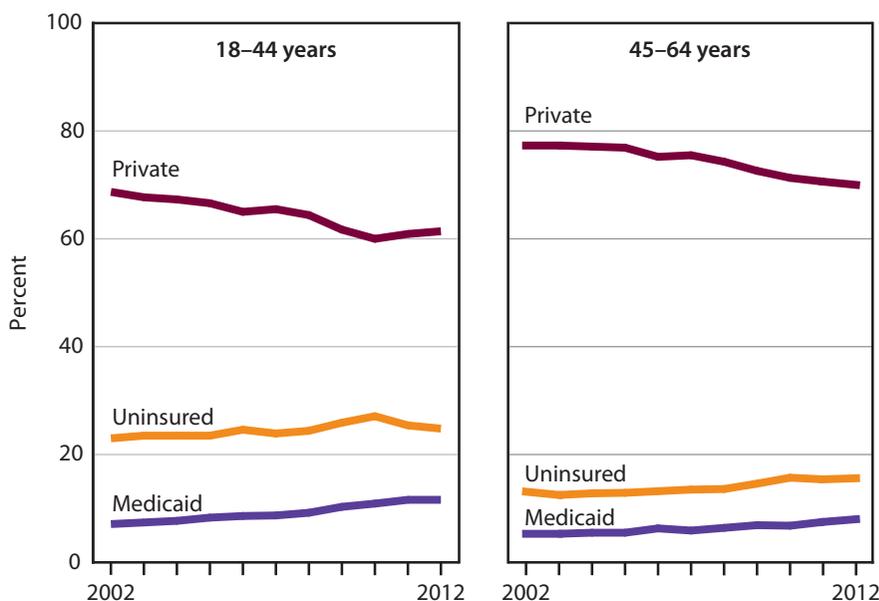
Health Insurance

Coverage Among Adults Aged 19–25

Figure 15. Health insurance coverage among adults aged 19–25, by type of coverage: United States, 2002–2012
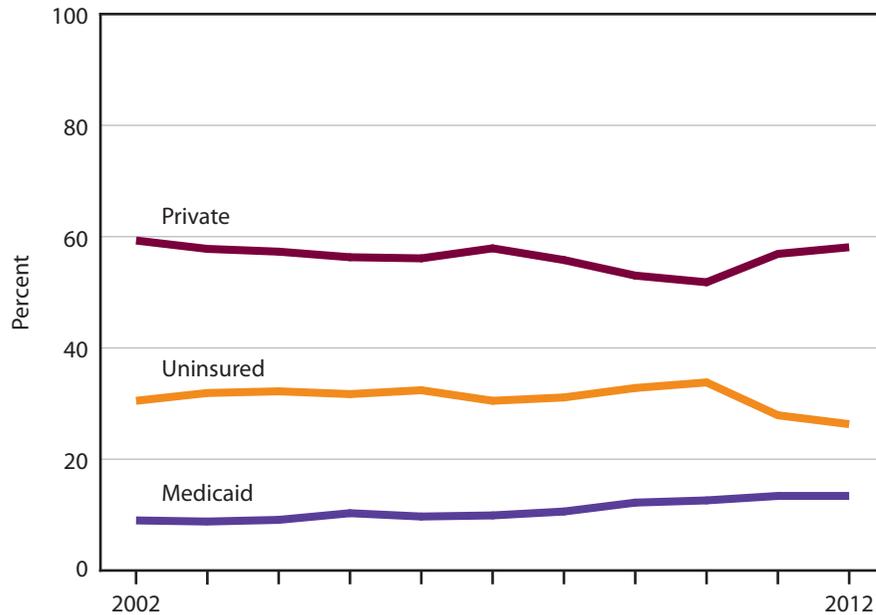
Between 2010 and 2012, the percentage of adults aged 19–25 who were uninsured decreased from 33.8% to 26.3%.

Historically, adults aged 19–25 have experienced high levels of uninsurance (Table 125). The percentage of adults aged 19–25 with private coverage declined from 59.3% in 2002 to 51.8% in 2010 and then rose to 58.1% in 2012. Between 2002 and 2010, the percentage of adults aged 19–25 who were uninsured fluctuated between 30.5% and 33.8%, and then decreased from 33.8% in 2010 to 26.3% in 2012. The section of the Patient Protection and Affordable Care Act (ACA) that allows most young adults to remain on their parent's coverage until age 26 came into effect with the policy year that began after September 23, 2010 (21–23). The percentage of adults aged 19–25 with Medicaid coverage [a category that includes the Children's Health Insurance Program (CHIP)] increased from 9.0% in 2002 to 12.6% in 2010 and was 13.4% in 2012.

NOTE: Adults categorized as having Medicaid or private coverage may have additional types of health insurance coverage.
SOURCE: CDC/NCHS, *Health, United States, 2013*, Tables 122, 124, and 125. Data from the National Health Interview Survey (NHIS).

Utilization and Access

Emergency Department Use

Children and adults aged 18–64 with Medicaid coverage were more likely to have at least one emergency department visit in the past year, compared with the uninsured and those with private coverage.

During 2002 through 2012, the percentage of children under age 18 with at least one emergency department visit in the past year declined for those with private coverage and for children with Medicaid coverage, while remaining stable for uninsured children. In 2012, 24.8% of children with Medicaid, 15.6% of uninsured children, and 13.0% of children with private coverage had an emergency department visit in the past year. During 2002 through 2012, the percentage of adults aged 18–64 with at least one emergency department visit was stable for those with Medicaid and for the uninsured. For adults with private coverage, the percentage with an emergency department visit declined during 2002 through 2012.

SOURCE: CDC/NCHS, *Health, United States, 2013*, Tables 86 and 87. Data from the National Health Interview Survey (NHIS).

Figure 16. One or more emergency department visits in the past 12 months, by age and type of coverage: United States, 2002–2012
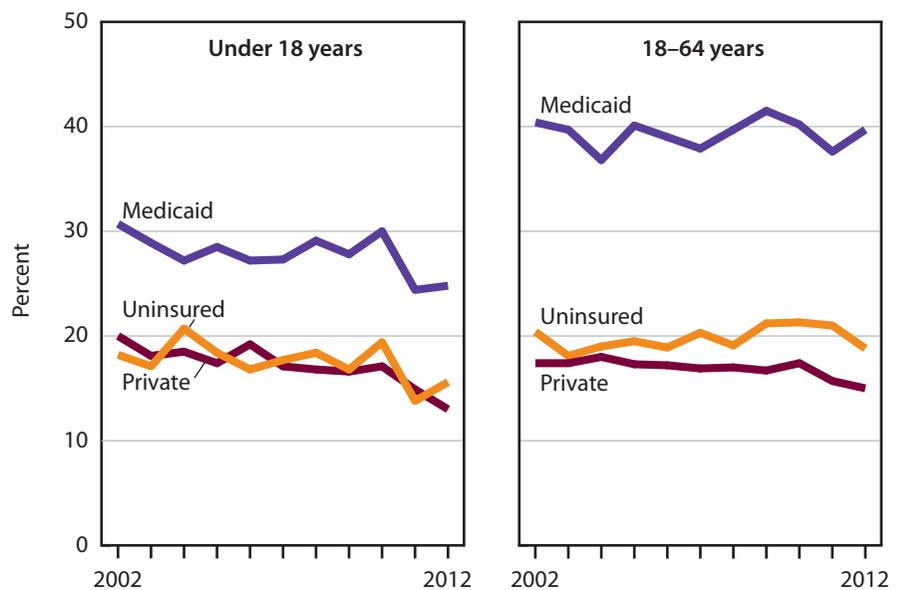
Utilization and Access
Usual Source of Care Among Children

Figure 17. No usual source of care among children under age 18, by type of coverage: United States, average annual, 2001–2002 through 2011–2012
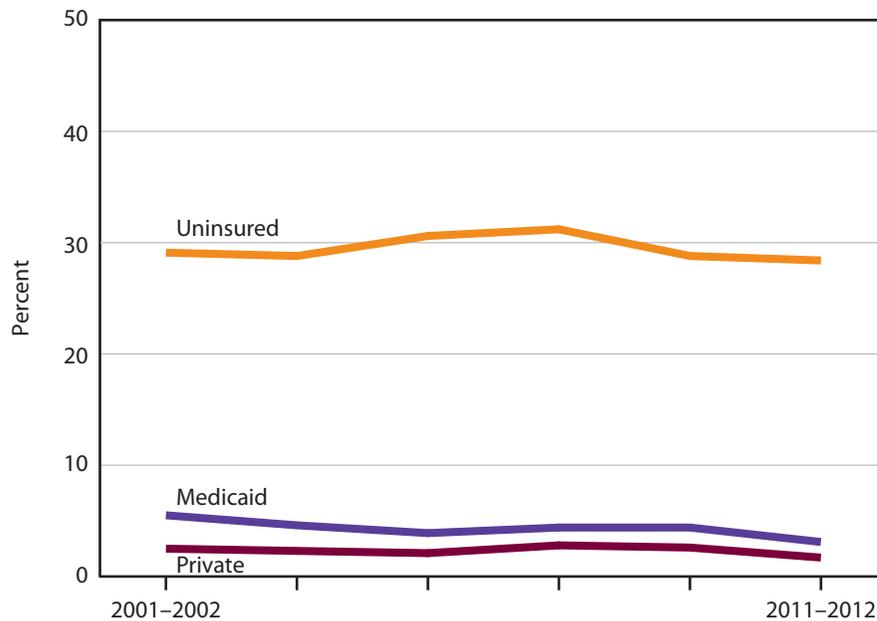
Uninsured children under age 18 were more likely than those with Medicaid and private coverage to lack a usual source of care.

Children benefit from having a usual source of health care for the provision of preventive services and treatment of acute and chronic conditions (24). During 2001–2002 through 2011–2012, the percentage of children without a usual source of care was stable for uninsured children and for those with private coverage, and decreased for those with Medicaid coverage. Throughout this period, uninsured children were more likely to lack a usual source of care than those with Medicaid or private coverage. In 2011–2012, 28.4% of uninsured children, 3.1% of children with Medicaid coverage, and 1.7% of those with private coverage lacked a usual source of care.

NOTE: Persons who reported the emergency department as their usual source of care were classified as not having a usual source of care.
SOURCE: CDC/NCHS, Health, United States, 2013, Table 72. Data from the National Health Interview Survey (NHIS).

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig17

Utilization and Access
Delay or Nonreceipt of Medical Care or Nonreceipt of Dental Care Due to Cost

During 2002 through 2012, the percentage of adults aged 18–64 who delayed or did not receive needed medical care in the past 12 months due to cost increased for those living below 400% of the poverty level; the percentage of adults who did not receive needed dental care due to cost increased for all family income groups.

During 2002–2012, the percentage of adults aged 18–64 who delayed or did not receive medical care in the past 12 months due to cost was higher for adults living below 200% of the poverty level than for those with higher family income (22.4% and 22.3%, compared with 13.2% for those at 200%–399% and 5.3% for those at 400% or more of the poverty level in 2012). Also during 2002 through 2012, nonreceipt of dental care due to cost was higher for adults living below 200% of the poverty level than for those with higher family income (26.9% and 25.3%, compared with 13.8% for those at 200%–399% and 5.5% for those at 400% or more of the poverty level in 2012).

SOURCE: CDC/NCHS, *Health, United States, 2013*, Table 74. Data from the National Health Interview Survey (NHIS).

Figure 18. Delay or nonreceipt of needed medical care or nonreceipt of needed dental care in the past 12 months due to cost among adults aged 18–64, by percent of poverty level: United States, 2002–2012

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig18
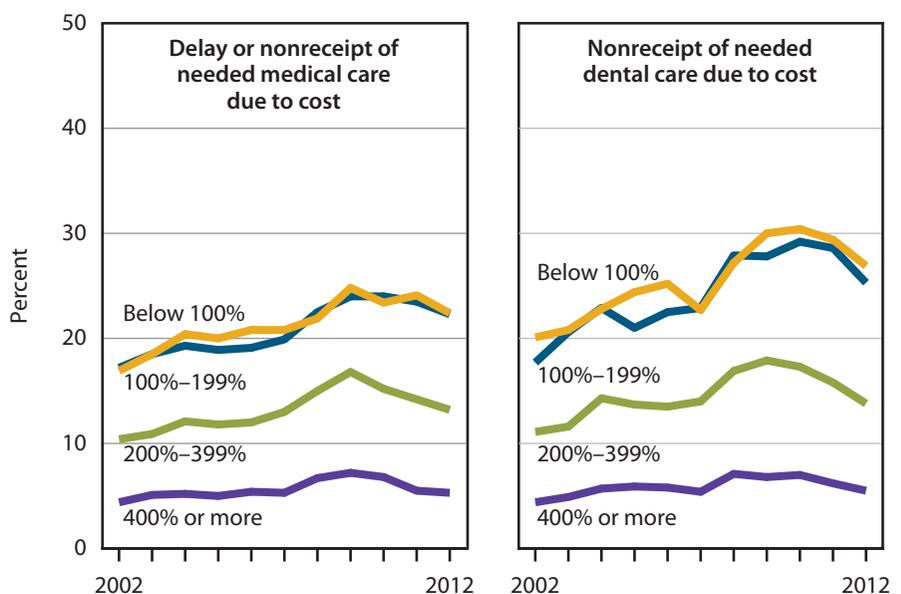
Personal Health Care Expenditures

Major Source of Funds

Figure 19. Personal health care expenditures, by source of funds: United States, 2001–2011
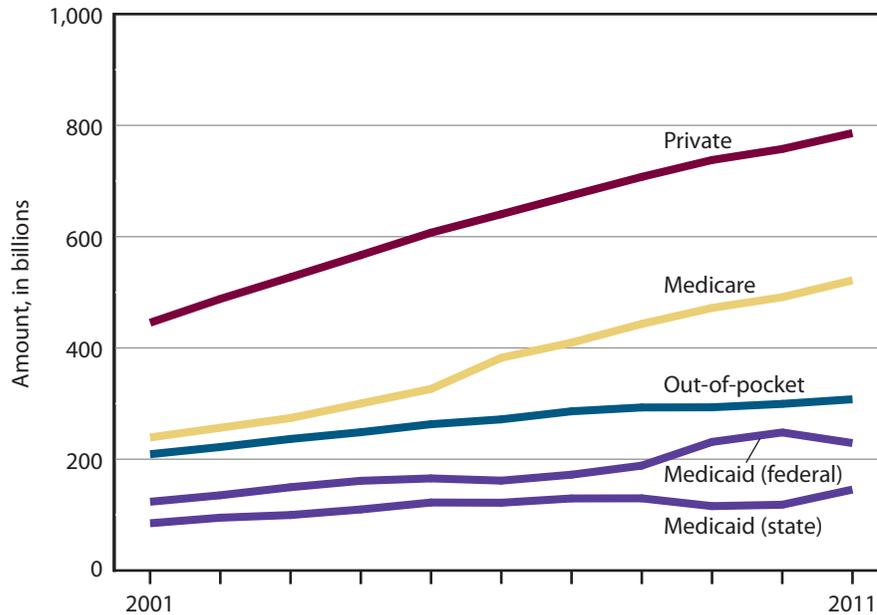
Out-of-pocket spending for personal health care expenditures grew less rapidly than Medicare, federal and state Medicaid, and private insurance spending between 2001 and 2011.

Between 2001 and 2011, total personal health care expenditures grew from $1.3 trillion to $2.3 trillion (Table 115). During this period, the average annual growth in Medicare expenditures was 8.1%; for Medicaid (federal) it was 6.4%, for Medicaid (state) it was 5.5%, for private health insurance 5.8%, and for out-of-pocket spending 3.9%. In 2011, private health insurance spending for personal health care expenditures was $786.1 billion; Medicare spending was $521.6 billion, out-of-pocket spending was $307.7 billion, Medicaid (federal) spending was $229.0 billion, and Medicaid (state) spending was $145.5 billion (Table 115).

NOTE: Average annual percent change computed from estimates shown in Table 115.
SOURCE: CDC/NCHS, *Health, United States, 2013*, Table 115. Data from the Centers for Medicare & Medicaid Services, National Health Expenditure Accounts (NHEA).

Excel and PowerPoint: *http://www.cdc.gov/nchs/hus/contents2013.htm#fig19*

Special Feature on Prescription Drugs
Introduction

Prescription drugs play an important role in U.S. health care. For millions of Americans, prescription drugs have saved lives, prevented or delayed the onset of chronic disease and disability, controlled or cured disease, and provided relief from pain (25). In 2007–2010, almost one-half of the U.S. population took at least one prescription drug in the preceding month and 1 in 10 reported taking five or more drugs (Table 93; data are for the civilian noninstitutionalized U.S. population only). Americans' use of prescription drugs has grown over the past half-century due to many factors, including the development of new and innovative drug therapies to treat infectious and chronic conditions, the expansion of prescription drug coverage by public and private payers, and the growth of marketing by pharmaceutical companies (25–27).

The introduction and widespread use of vaccines in the 20th century contributed to the control of infectious diseases such as measles, polio, and diphtheria, and the discovery of antibiotics led to significant declines in mortality from bacterial infections (28). By 2010, only pneumonia and influenza remained among the leading causes of death, accounting for just 2.0% of all U.S. deaths (Table 22). Newer drugs also help in the control of infectious disease. With the adoption of antiretroviral therapies, the death rate from human immunodeficiency virus (HIV) disease has decreased almost 80% since 1996 (Table 31 and Figure 24).

With the decline of infectious disease morbidity and mortality in the United States, prescription drug development and investment in the second half of the 20th century focused on chronic diseases such as cancer, heart disease, diabetes, and mental health. Drugs to treat these chronic conditions were among the most commonly used by adults (Figure 21) (29). The widespread use of chemotherapy and other biologics contributed to raising the 5-year, all-sites cancer survival rates to 67% in 2009 (30). Drug research has also led to better treatment and control of the risk factors for heart disease, such as hypertension, high cholesterol, and diabetes (6,31–34). The percentage of Americans with poor control of blood pressure, cholesterol, and diabetes is down since 1988–1994 (Tables 46, 65, and 66). Prescription drugs are an important component in the treatment of mental health disorders and have helped many patients avoid hospitalization (35,36). About 85% of people who received treatment for mental health conditions in 2009 received prescription drugs.

Several other factors have contributed to Americans' greater use of prescription drugs. These include the growth of third-party insurance coverage over the past few decades, which has made drugs more affordable (37,38). In 2006, Medicare Part D was introduced, offering a drug benefit as part of the insurance program relied on by most persons aged 65 and over. Discounts and other savings under the Affordable Care Act have already helped more than 6 million Medicare Part D enrollees save over $6 billion on prescription drugs since its introduction in 2010 (39). Another factor increasing the demand for drugs is more drug marketing to physicians and consumers since

companies began promoting their prescription drug products directly to consumers by means of direct-to-consumer advertising in the 1980s. Although the vast majority of promotional spending for all drugs is targeted toward physicians, spending on direct-to-consumer advertising for all drugs more than tripled between 1996 and 2005, to $4.2 billion (40–42).

The greater role of prescription drugs in U.S. health care is reflected in the amount spent on drugs: $263 billion in 2011. This was 9.7% of all national health expenditures, up from 5.6% in 1990 (Table 114). From 1990 to 2000, prescription drug spending grew 11.6%—much faster than spending for hospital (5.2%) and physician and clinic (6.2%) care (Table 114). In response, many insurers instituted cost control efforts, including copays, cost-sharing, formularies, tiered pricing, and mail order pharmacies (43). These efforts, along with other factors including the ending of patent protection for a number of popular drugs, has led to slower growth in prescription drug spending in recent years (44). During 2009 through 2011, spending on prescription drugs remained flat (Table 114).

Although prescription drugs have been instrumental in improving health outcomes, misuse of some prescription drugs has resulted in serious public health problems. For example, antibiotics continue to be prescribed to treat viral infections, even though they are ineffective for this purpose. This misuse contributes to the development of antibiotic-resistant bacterial infections (45,46). Educational outreach to physicians and patients has helped decrease the use of antibiotics for colds and other viral conditions (Figure 26). Opioid analgesic pain relievers play an important role in appropriate pain management, but their misuse is a growing public health problem (47). Opioid analgesic consumption increased 300% between 1999 and 2010 (48), and death rates for poisoning involving opioid analgesics more than tripled between 2000 and 2010 (Table 32 and Figure 28) (49,50).

This Special Feature examines the use of prescription drugs in the United States. Data are presented on the number and classes of drugs used by Americans. Access problems—those who did not get prescription drugs in the past 12 months due to cost—are presented by insurance and poverty status. The impact of specific groups of drugs used to control chronic disease (i.e., antiretrovirals to treat HIV disease and anti-depressant drugs) is presented. Quality issues are examined by looking at the misuse of antibiotics to treat cold symptoms; deaths from misuse of opioid analgesic drugs; and the adoption of electronic health record systems by providers, which may be used for ordering prescription drugs, providing warnings of drug interactions or contraindications, and other functions intended to improve safety. And finally, the growth in national spending on prescription drugs is shown. This group of charts provides an overview of the role of prescriptions drugs in the United States.

Prescription Drug Use

In 2007–2010, almost one-half of all Americans reported taking one or more prescription drugs in the past 30 days; use increased with age, from 1 in 4 children to 9 in 10 persons aged 65 and over.

Drugs are a frequently used therapy for reducing morbidity and mortality and improving the quality of life of Americans (29,51). In the past half-century, Americans' use of prescription drugs has increased (26,27). Prescription drug use is related to many factors, including health status, prescription drug coverage, and the availability of drug therapies. For many conditions, such as high cholesterol, high blood pressure, diabetes, and asthma, emphasis on treatment with evidence-based medications has increased (6,32–34,37,38).

Between 1988–1994 and 2007–2010, the percentage of Americans who reported taking no prescription drugs in the past 30 days decreased from 60.9% to 52.5%. The percentage taking five or more drugs in the past month increased from 4.0% in 1988–1994 to 10.1% in 2007–2010 (age-adjusted).

In 2007–2010, prescription drug use was higher among older age groups. About one-quarter of children (23.2%) reported taking one to four drugs in the past 30 days, compared with one-half (49.4%–50.0%) of adults aged 45 and over. The percentage taking five or more drugs in the past 30 days increased with age, from less than 1.0% of children to 39.7% of adults aged 65 and over.

Figure 20. Prescription drug use in the past 30 days, by number of drugs taken and age: United States, 1988–1994 through 2007–2010
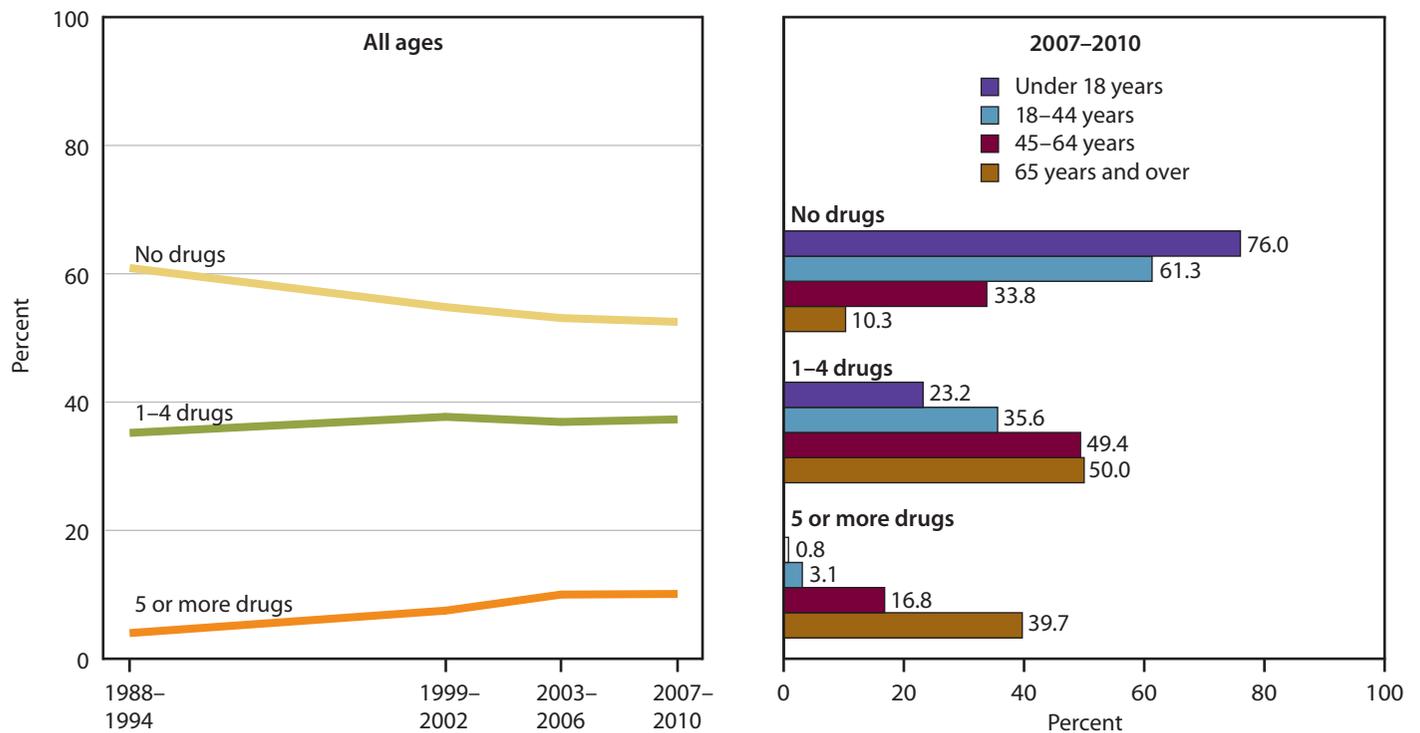
NOTES: Except for age group estimates, percentages are age-adjusted. See data table for Figure 20.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey. See Appendix I, National Health and Nutrition Examination Survey (NHANES).

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig20

Prescription Drug Use by Drug Class

In 2007–2010, cardiovascular agents (used to treat high blood pressure, heart disease, or kidney disease) and cholesterol-lowering (antihyperlipidemic) drugs were two of the most commonly used classes of prescription drugs among adults aged 18–64 and 65 and over.

Drugs increasingly play a role in the long-term treatment and control of chronic conditions, including hypertension, high cholesterol, and diabetes, which are major risk factors for heart disease (6,31–34). In 2007–2010, 17.7% of adults aged 18–64 took at least one cardiovascular agent in the past 30 days (29). Other commonly used prescription drug classes among this age group were cholesterol-lowering drugs, analgesics, and antidepressants. The use of cholesterol-lowering drugs among those aged 18–64 has increased more than six-fold since 1988–1994, due in part to the introduction and acceptance of statin drugs to lower cholesterol.

Among adults aged 65 and over, 70.2% took at least one cardiovascular agent and 46.7% took a cholesterol-lowering drug in the past 30 days in 2007–2010. Other commonly used classes for this age group include anti-acid reflux, antidiabetics, anticoagulants, and analgesics. The use of cholesterol-lowering drugs by this age group has increased more than seven-fold since 1988–1994. The use of antidepressants (4.6 times greater), anticoagulants (3.0 times greater), and anti-acid reflux drugs (2.9 times greater) also increased substantially between 1988–1994 and 2007–2010.

Figure 21. Prescription drug use in the past 30 days among adults aged 18 and over, by age and selected drug class: United States, 1988–1994 and 2007–2010
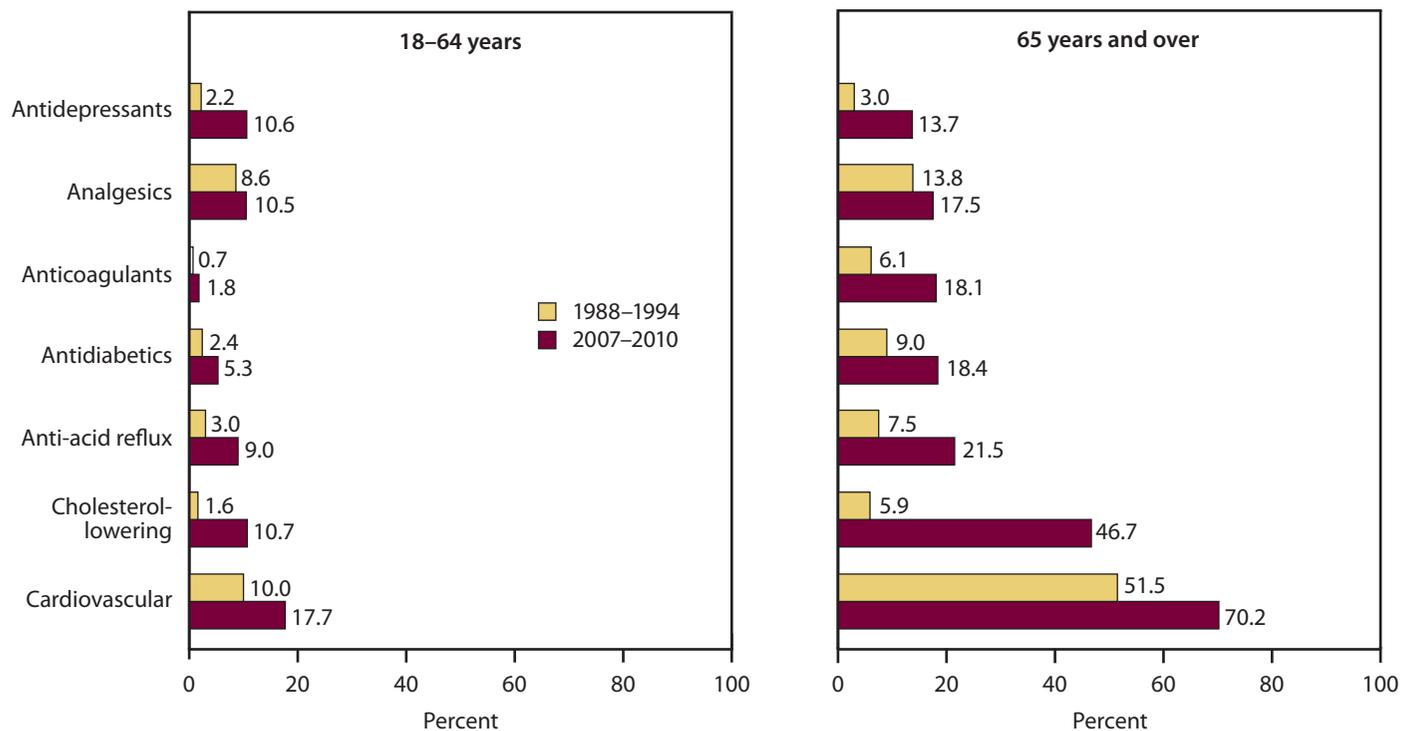
NOTES: Cardiovascular agents include drug classes such as angiotensin-converting enzyme (ACE) inhibitors, beta blockers, calcium channel blockers, and diuretics. See data table for Figure 21 for definitions of drug classes included in this chart. Also, data for children under age 18 are shown in the data table.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey. See Appendix I, National Health and Nutrition Examination Survey (NHANES).

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig21

Polypharmacy

In 2007–2010, adults taking five or more drugs in the past 30 days were more likely to be aged 65 and over and in fair or poor health than those taking one to four drugs.

Drugs offer the opportunity to prevent, treat, and control many acute and chronic conditions. As Americans rely more on prescription drugs, some are taking multiple drugs each month. This is known as polypharmacy, which may increase the likelihood of drug interactions, adverse effects, and dosing and compliance issues. In some cases, multiple physicians may be prescribing for the patient and be unaware of all drugs the patient is taking. Polypharmacy is important because patients taking multiple drugs are more likely to confuse medication, dose, and timing (52,53). Polypharmacy is of particular concern for the elderly, who may be more at risk for significant side effects with some commonly prescribed medicines (54). In 2007–2010,

13.9% of Americans aged 18 and over took five or more prescription drugs in the past 30 days (Figure 20) (55).

In 2007–2010, adults taking five or more drugs in the past 30 days were older, with 10.8% aged 18–44, 41.7% aged 45–64, and 47.5% aged 65 and over. Among those taking one to four drugs, 40.7% were aged 18–44, 39.8% were 45–64, and 19.5% were 65 and over. Adults taking five or more drugs were more likely to classify themselves as in fair or poor health (39.6%) compared with those taking one to four drugs (14.3%). Adults taking no drugs in the past 30 days were younger (69.2% were aged 18–44, 26.9% were 45–64, and 3.9% were 65 and over) and reported better health status (12.5% reported fair or poor health and 49.7% reported excellent or very good health) (see data table for Figure 22).

Figure 22. Number of prescription drugs taken in the past 30 days among adults aged 18 and over, by selected characteristics: United States, 2007–2010
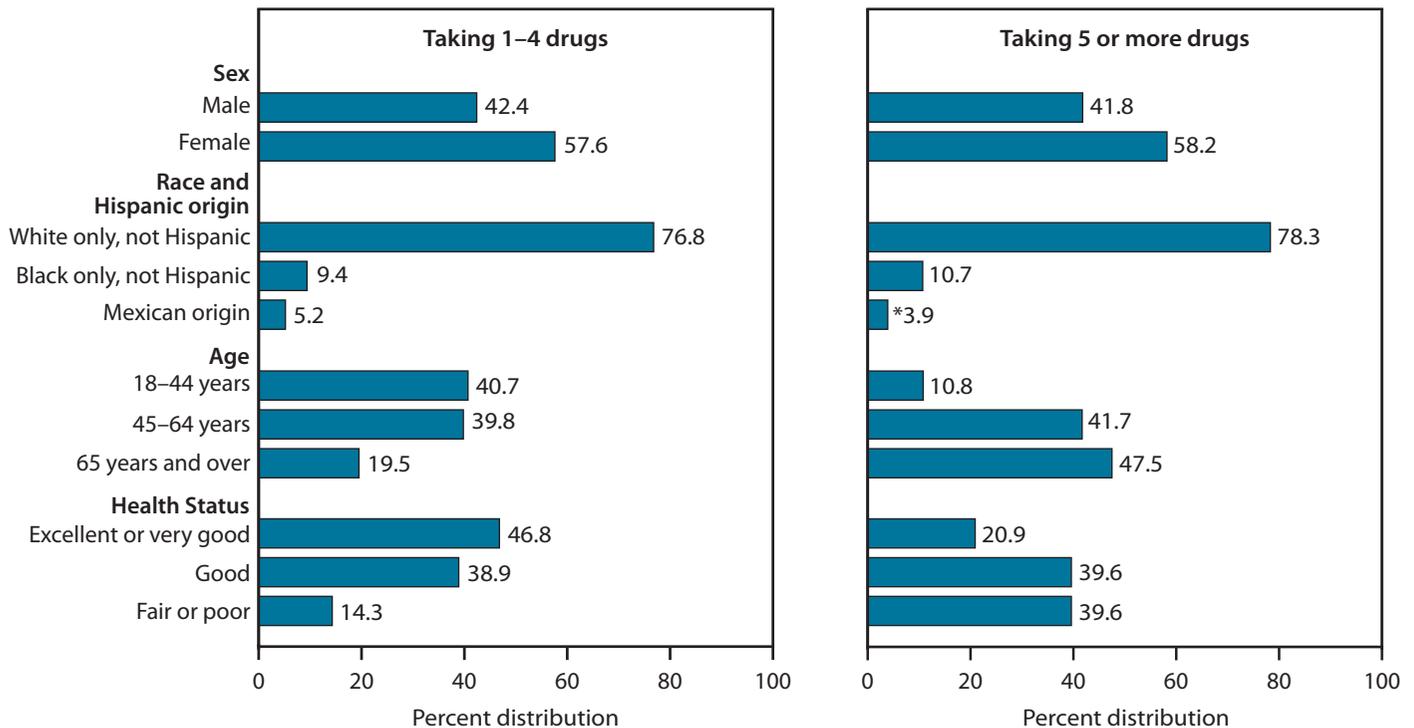
*Estimate is considered unreliable. Data preceded by an asterisk have a relative standard error of 20%–30%.

NOTES: Race and Hispanic origin estimates do not sum to 100% because of respondents in other racial and ethnic groups. See data table for Figure 22.

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig22

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey. See Appendix I, National Health and Nutrition Examination Survey (NHANES).

Nonreceipt of Needed Prescription Drugs Due to Cost

In 2012, adults aged 18–64 who were uninsured for all or part of the past year were more than four times as likely to report not getting needed prescription drugs due to cost as adults who were insured for the whole year.

Uninsured adults are more likely to delay or forego needed care, are less likely to receive needed medical care and prescription drugs due to cost, and are less likely to seek preventive care than the insured (20,56). Evidence suggests that underuse of medications due to cost concerns is associated with poorer health and increased use of other health care services (57,58).

During 2002 through 2012, the percentage of adults aged 18–64 who did not get prescription drugs in the past 12 months due to cost was at least four times as high for those who were uninsured for all or part of the past year as for those who were insured for the whole year. In 2012, 22.4% of uninsured adults aged 18–64 reported not getting needed prescription drugs due to cost, compared with 5.0% of adults who were insured for the whole year.

In 2011–2012, prescription drug access problems due to cost decreased as family income increased for both the insured and uninsured. Among adults insured for the whole year, those with family income levels below 200% of the poverty level were more likely to report problems getting needed prescription drugs due to cost than those with higher incomes. Among those uninsured for any part of the past year, access problems due to cost declined as family income increased. Of those living below the poverty level, 30.7% reported not getting needed prescription drugs due to cost, compared with 23.2% of those at 100%–199% of the poverty level, 19.4% of those at 200%–399% of the poverty level, and 14.9% of uninsured adults with incomes at 400% or more of the poverty level. The uninsured with high incomes (400% or more of the poverty level) were more likely to report prescription drug access problems (14.9%) than the insured with low incomes (below 200% of the poverty level) (10.8%–11.5%).

Figure 23. Nonreceipt of needed prescription drugs in the past 12 months due to cost among adults aged 18–64, by insurance status and percent of poverty level: United States, 2002–2012
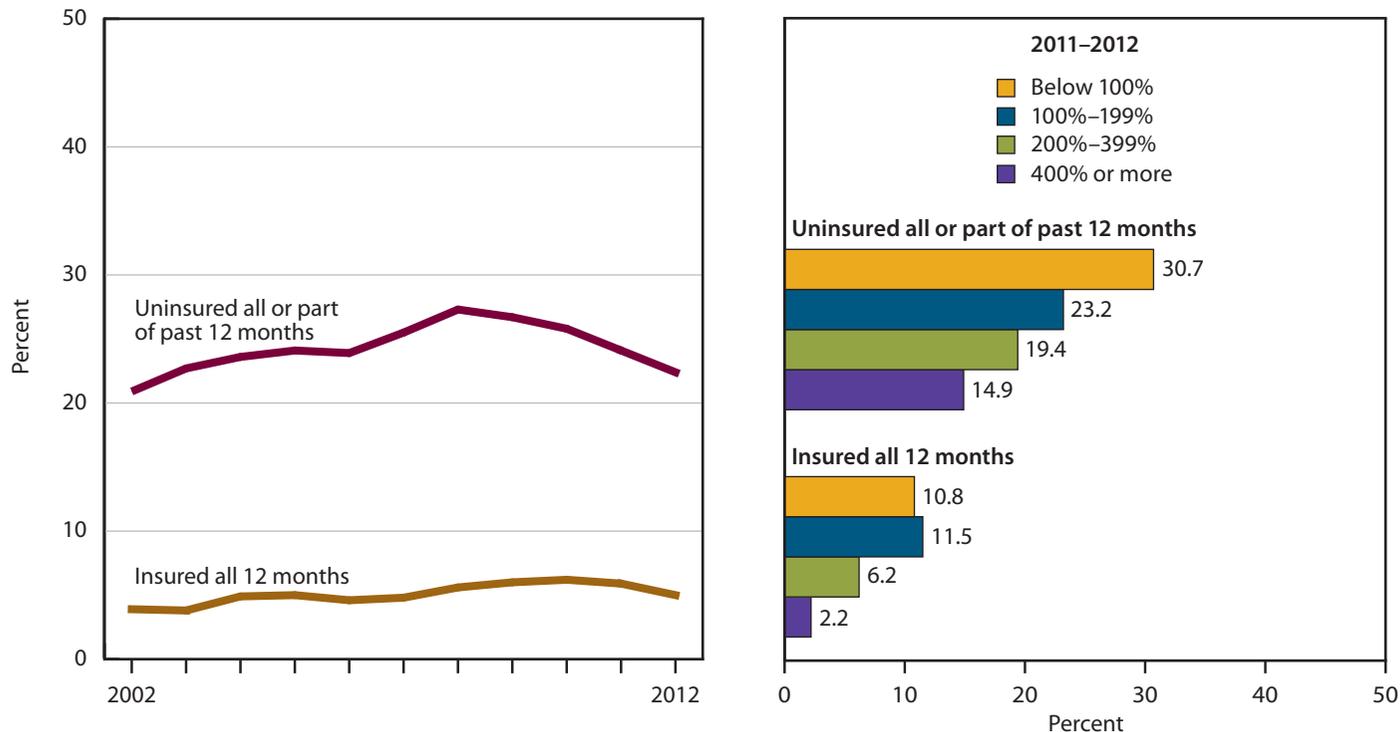
NOTE: See data table for Figure 23.

SOURCE: CDC/NCHS, National Health Interview Survey. See Appendix I, National Health Interview Survey (NHIS).

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig23

Deaths from HIV Disease

The introduction of highly active antiretroviral therapy (HAART) led to substantial declines in mortality from HIV disease, including a 73% decline among non-Hispanic white males and a 54% decline among non-Hispanic black males between 1995 and 1997.

Human immunodeficiency virus (HIV) disease, and the related acquired immunodeficiency syndrome (AIDS), emerged as a leading cause of death among adults aged 25–44 in the United States in the 1980s (59), and the death rate for HIV disease among this age group increased steadily through the early 1990s (60). During the early years of HIV, there were few treatment options and mortality was high (61,62). The first antiretroviral medication to treat HIV disease was approved in 1987 (62) and was soon followed by the introduction of other antiretroviral drugs. The health of individuals living with HIV improved when clinicians began to treat individuals with combinations of multiple

antiretroviral drugs that act at different stages of the HIV disease cycle (63)—regimens known as HAART.

After HAART became the standard of care in 1996, there were marked reductions in morbidity and mortality associated with HIV disease (63–67). Between 1995 and 1997, the death rate from HIV disease among males declined by two-thirds, from 27.3 deaths per 100,000 population in 1995 to 9.6 in 1997. The decline ranged from 54% for non-Hispanic black males, to 66% for Hispanic males, to 73% for non-Hispanic white males and Asian or Pacific Islander males (see data table for Figure 24). Declines in HIV death rates also were seen for females in each of the racial and ethnic groups examined. After 1997, the rate of decline for HIV mortality slowed across all groups, although gender and racial and ethnic differences in HIV mortality persist.

Figure 24. Age-adjusted death rates for human immunodeficiency virus (HIV) disease for all ages, by sex and race and Hispanic origin: United States, 1990–2010
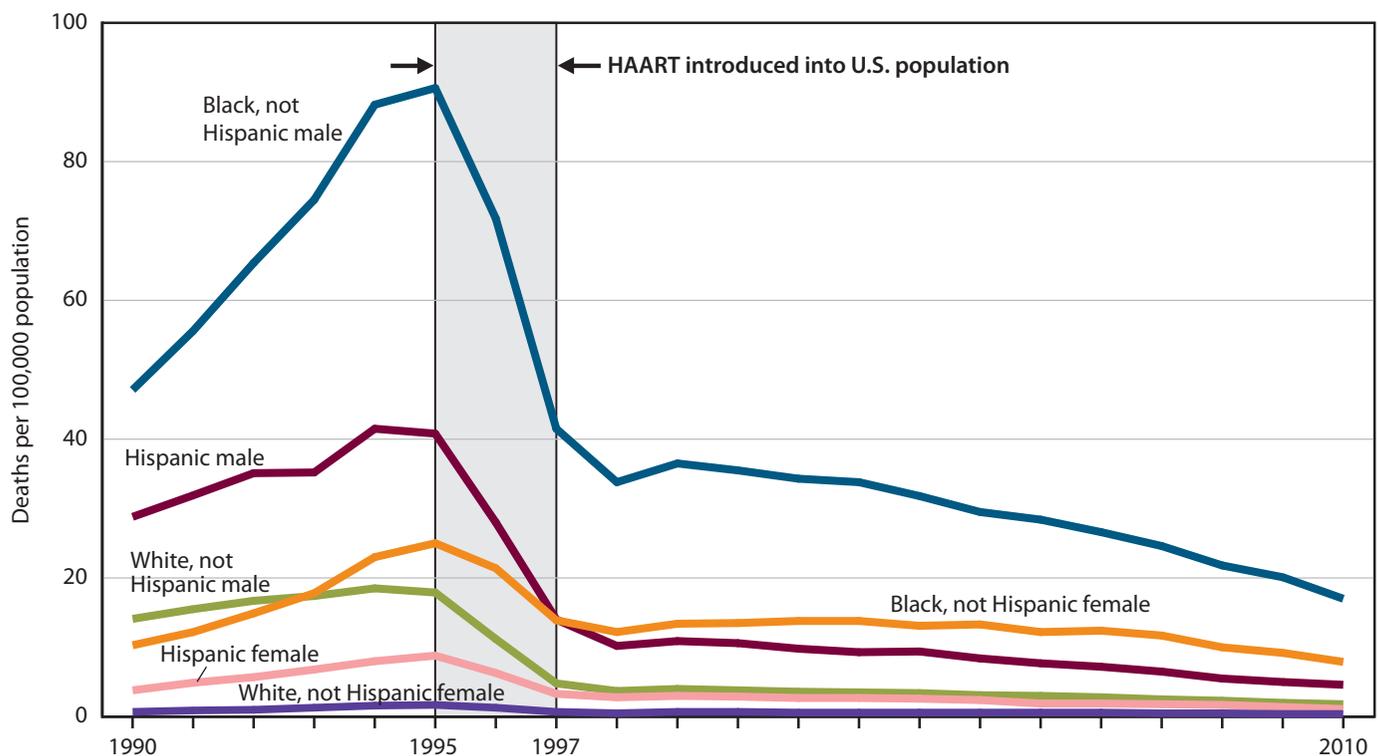
NOTES: HAART is highly active antiretroviral therapy. See data table for Figure 24 for rates for additional racial groups.

SOURCE: CDC/NCHS, National Vital Statistics System. See Appendix I, National Vital Statistics System (NVSS).

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig24

Health, United States, 2013: In Brief ■ Complete Report available from: http://www.cdc.gov/nchs/hus.htm.

Use of Antidepressants

Between 1988–1994 and 2007–2010, among adults aged 18 and over, the use of antidepressants increased more than four-fold, from 2.4% to 10.8%.

Depression is a common and serious illness that takes a toll on functional status, productivity, quality of life, and physical health (35,68–70). In 2009, 7% of adults had a major depressive episode in the past year (35). The increased use of prescription antidepressants may be the result of several factors, including the introduction of a new class of drugs known as selective serotonin reuptake inhibitors (SSRIs) in 1988, improved public attitudes about seeking care for mental health issues, increased direct-to-consumer marketing of antidepressants, and expanded recommendations for the use of antidepressants for conditions other than depression (71). In addition to depression, antidepressants are used to treat obsessive-compulsive disorder, panic disorder, anxiety disorders, and perimenopausal and menopausal symptoms (71).

The use of antidepressants increased more than four-fold for men (from 1.6% to 6.6%, age-adjusted) and women (from 3.2% to 14.8%, age-adjusted) between 1988–1994 and 2007–2010. Increased use of antidepressants during this time period was seen for each of the age groups examined: 18–44, 45–64, and 65 and over.

In 2007–2010, the use of prescription antidepressants was higher among women than among men overall, and for each age group. For both men and women, antidepressant use was higher for those aged 45 and over compared with younger adults. Among men, adults aged 45 and over (8.9%–9.4%) were twice as likely to take antidepressants as younger adults aged 18–44 (4.4%). Among women, those aged 45 and over (17.0%–19.6%) were about 1.5 times more likely to take antidepressants than younger adults aged 18–44 (11.3%).

Figure 25. Use of prescription antidepressants in the past 30 days among adults aged 18 and over, by sex and age: United States, 1988–1994 through 2007–2010
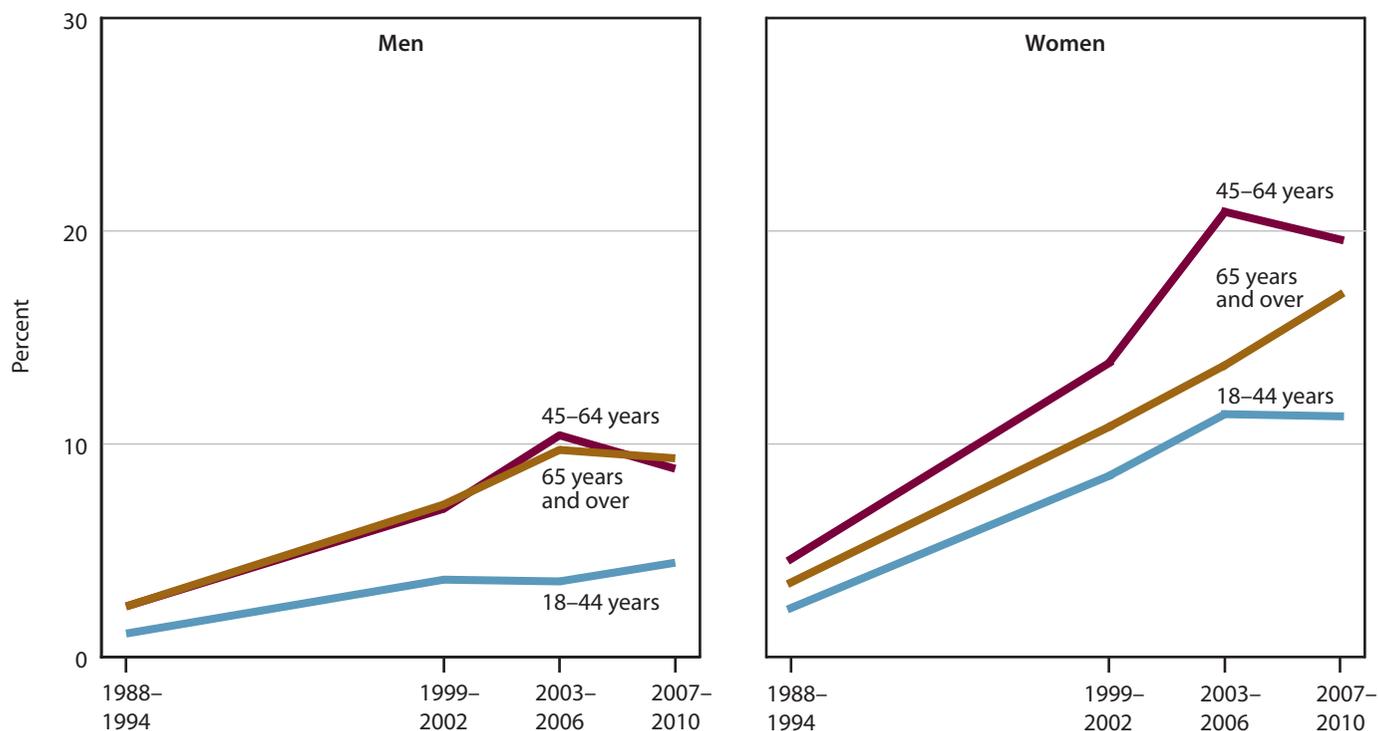
NOTE: The 1988–1994 estimates for men are considered unreliable because the estimates have relative standard errors of 20%–30%. See data table for Figure 25.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey. See Appendix I, National Health and Nutrition Examination Survey (NHANES).

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig25

Antibiotics Prescribed for Colds

Between 1995–1996 and 2009–2010, the prescribing of antibiotics during ambulatory care visits for cold symptoms declined 39%.

Antibiotics are a mainstay of treating bacterial infections, and the control of infectious diseases using antibiotics is considered one of the major public health achievements of the 20th century (28,46). But unnecessary antibiotic use can lead to adverse effects and contributes to antibiotic resistance, which may lead to longer hospital stays and unnecessary deaths (45,46,72). Of particular concern is the prescribing of antibiotics for colds and viral respiratory infections, because antibiotics are ineffective in treating these conditions (72).

Between 1995–1996 and 2009–2010, the prescribing of antibiotics during ambulatory care visits (to physician offices and hospital outpatient and emergency departments) for the sole diagnosis of cold symptoms has declined by two-fifths, from 44.7% of cold symptom visits to 27.1%. Significant declines were seen for both children and adults over this time frame.

Throughout the time period, prescribing of antibiotics for ambulatory care visits for the sole diagnosis of cold symptoms was higher for visits by adults aged 18 and over than for children. In 2009–2010, 21.5% of ambulatory care visits for cold symptoms among children aged 18 and under had antibiotics prescribed or ordered, compared with 39.5% for adults.

Figure 26. Antibiotics ordered or provided during emergency department, outpatient, and physician visits for cold symptom diagnoses, by age: United States, average annual, 1995–1996 through 2009–2010
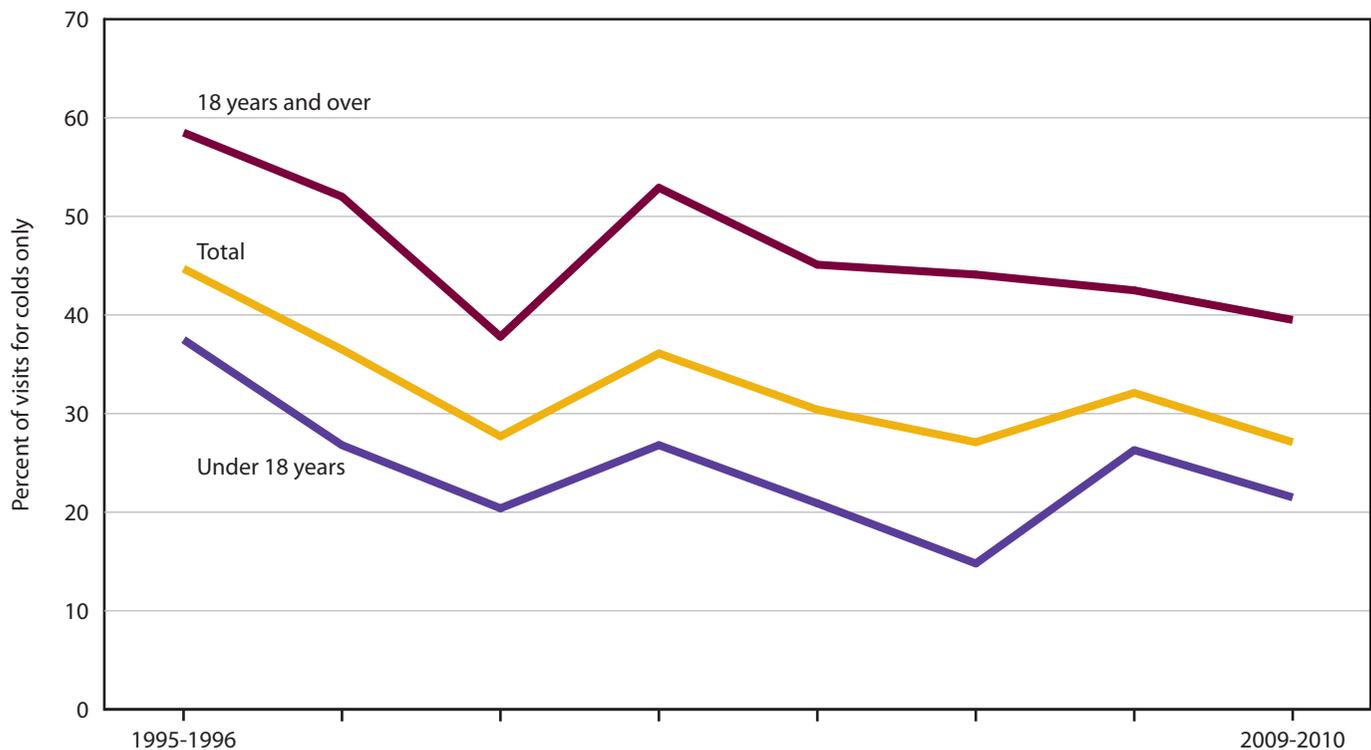
NOTE: See data table for Figure 26.

SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey: Emergency Department and Outpatient Components. See Appendix I, National Ambulatory Medical Care Survey (NAMCS); National Hospital Ambulatory Medical Care Survey (NHAMCS).

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig26

Computerized Systems for Prescription Drugs

In 2010, 53.7% of physician offices, 50.3% of hospital outpatient departments (OPDs), 58.1% of hospital emergency departments (EDs), and 19.7% of residential care facilities (RCFs) reported having computerized prescription ordering systems, a key element of electronic health records (EHRs).

EHRs and e-prescription software are thought to improve caregivers' decisions, coordination of care, health care safety, and patients' outcomes, and to make health care delivery systems more efficient (73,74).

To promote health care providers' adoption of EHRs, the Health Information Technology for Economic and Clinical Health Act (HITECH) authorized incentive payments through Medicare and Medicaid to providers who implement EHRs with specific elements that are thought to improve processes and outcomes (73,75). Several of these elements relate to prescription drugs, and in 2010, physician offices,

OPDs, EDs, and RCFs were surveyed about their EHR systems, including questions about specific elements related to prescription drugs.

In 2010, about one-half of physician offices and OPDs, 58.1% of EDs, and one-fifth of RCFs reported having a computerized system for ordering prescription drugs. Almost one-half of physician offices (46.0%) and EDs (45.9%), 38.7% of OPDs, and 17.9% of RCFs had a computerized system for warning of drug interactions or contraindications. Almost one-half of physician offices (44.6%), 30.3% of OPDs, 19.7% of EDs, and 8.2% of RCFs could submit prescriptions to the pharmacy electronically. More than one-half of physician offices (51.0%), 56.4% of OPDs, 66.0% of EDs, and 28.3% of RCFs had a computerized system of clinical notes, including a list of patient medications and allergies. In 2010, 33.3% of physician offices, 24.3% of OPDs, 15.7% of EDs, and 3.3% of RCFs had all four of these elements of EHRs.

Figure 27. Computerized systems for prescription drugs, by provider and system type: United States, 2010
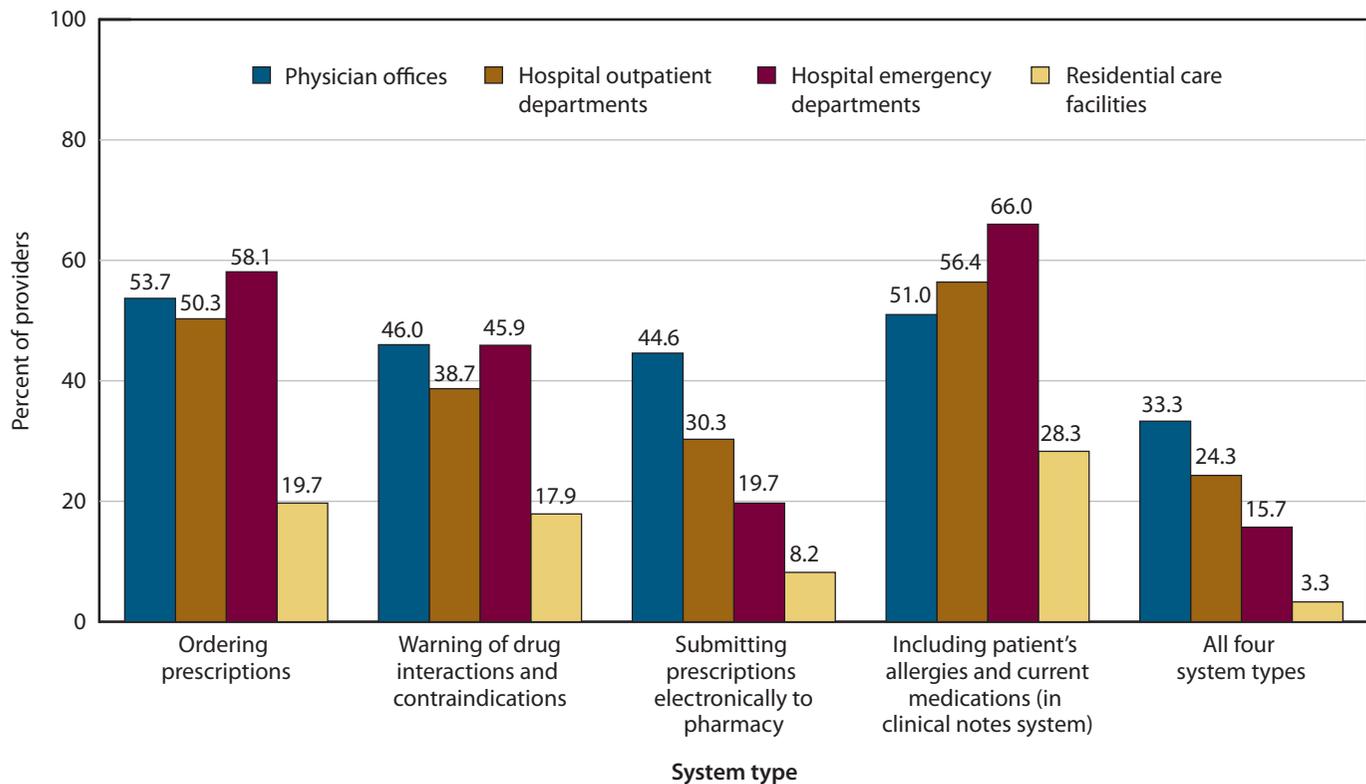
NOTE: See data table for Figure 27.

SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey: Emergency Department and Outpatient Components, and National Survey of Residential Care Facilities. See Appendix I, National Ambulatory Medical Care Survey (NAMCS); National Hospital Ambulatory Medical Care Survey (NHAMCS); and National Survey of Residential Care Facilities (NSRCF).

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig27

Deaths Involving Opioid Analgesics

Drug poisoning deaths involving opioid analgesics among those aged 15 and over more than tripled in the past decade, from 1.9 deaths per 100,000 population in 1999–2000 to 6.6 in 2009–2010 (age-adjusted).

Opioid analgesics are prescription pain relievers, such as oxycodone and hydrocodone, and they play an important role in the appropriate management of both acute and chronic pain, which are often difficult to treat (76). Opioid analgesic consumption increased 300% between 1999 and 2010 (48). Misuse of opioid analgesics is increasingly seen as a significant public health concern because poisoning death rates involving opioid analgesics more than tripled between 2000 and 2010 (Table 32) (47,49,50).

Between 1999–2000 and 2009–2010, among those aged 15 and over, the age-adjusted death rate for poisoning involving opioid analgesics increased from 1.9 deaths per 100,000 population to 6.6. Poisoning death rates involving

opioid analgesics in the past decade increased for both males and females, for all age groups aged 15 and over, and for all racial and Hispanic origin groups examined.

In 2009–2010, among racial and Hispanic origin groups, the death rate for non-Hispanic white persons aged 15 and over was highest, at 8.9 deaths per 100,000, followed by the rate among the American Indian and Alaska Native population (7.1). Opioid analgesic poisoning death rates among the non-Hispanic black (2.7) and Hispanic populations (2.4) were about one-third that of the non-Hispanic white population. Among those aged 15 and over, the death rate involving opioid analgesics for males was 8.1 deaths per 100,000, compared with 5.1 for females. Those aged 35–54 had the highest death rate for opioid analgesics (9.9), followed by those aged 25–34 (8.1) and 55–64 (6.0).

Figure 28. Drug poisoning deaths involving opioid analgesics among persons aged 15 and over, by race and Hispanic origin, sex, and age: United States, 1999–2000 through 2009–2010
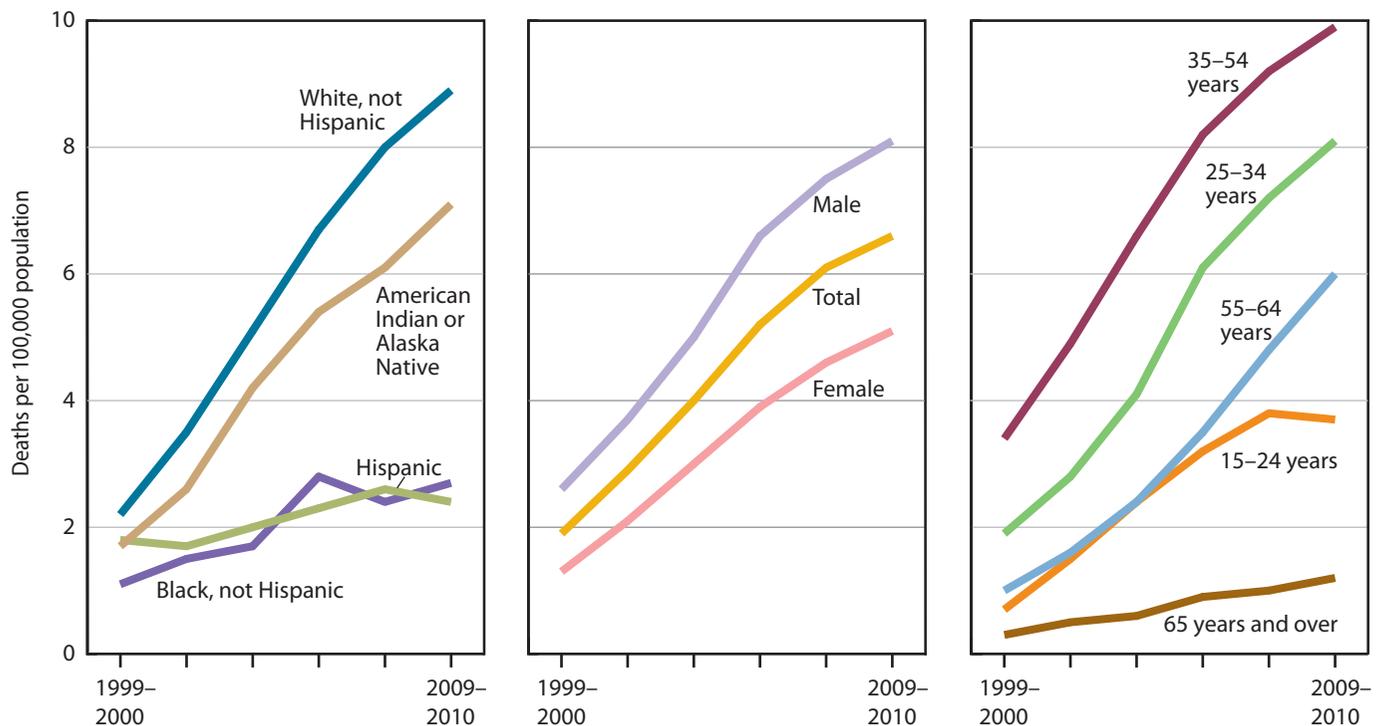
NOTES: Rates are age-adjusted, except for age group data. Drug poisoning deaths with the drug type unspecified (up to 25% of the total) are not included. See data table for Figure 28.

SOURCE: CDC/NCHS, National Vital Statistics System. See Appendix I, National Vital Statistics System (NVSS).

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig28

Spending on Prescription Drugs

The annual growth in spending on retail prescription drugs slowed from 14.7% in 2001 to 2.9% in 2011.

In 2011, spending on prescription drugs was $263 billion. Although hospital care (31.5%) and physician and clinical services (20.0%) accounted for greater shares of national health expenditures, the share for prescription drugs increased from 4.7% in 1980 to 9.7% of all national health spending in 2011 (Table 114).

The growth in spending on prescription drugs was in the double digits from the mid-1990s through the mid-2000s, when it fell below 10% (Table 115). Between 2001 and 2011, the annual percent change in spending on retail prescription drugs slowed from 14.7% to 2.9%. This recent slowdown is the result of a variety of factors, including cost control efforts introduced by insurers, such as copays, formularies, tiered pricing, generic substitution, and the use of mail order pharmacies. In addition, several popular drugs ended their patent protection during this time frame (43,44).

Spending on prescription drugs is projected to grow slowly through 2012 and 2013 (77–79). Starting in 2014, spending is expected to pick up due to expanded insurance coverage as a result of the Affordable Care Act (ACA) and because fewer drugs are expected to lose patent protection in 2013 compared with 2012 (21,78).

In 2011, private health insurance, out-of-pocket spending, and Medicare paid for almost 90% of all prescription drug spending. A decade earlier, in 2001, private health insurance, out-of-pocket spending, and Medicaid paid the biggest share of all prescription drug spending. The shift in spending from Medicaid to Medicare between 2001 and 2011 is largely the result of the introduction of Medicare Part D in 2006 (39,80). Dual eligibles (people with both Medicare and Medicaid) who enrolled in a Medicare Part D plan had much of their drug spending paid for in 2011 by Medicare instead of Medicaid.

Figure 29. Retail prescription drug expenditures, annual percent change, and spending by payer: United States, 2001–2011
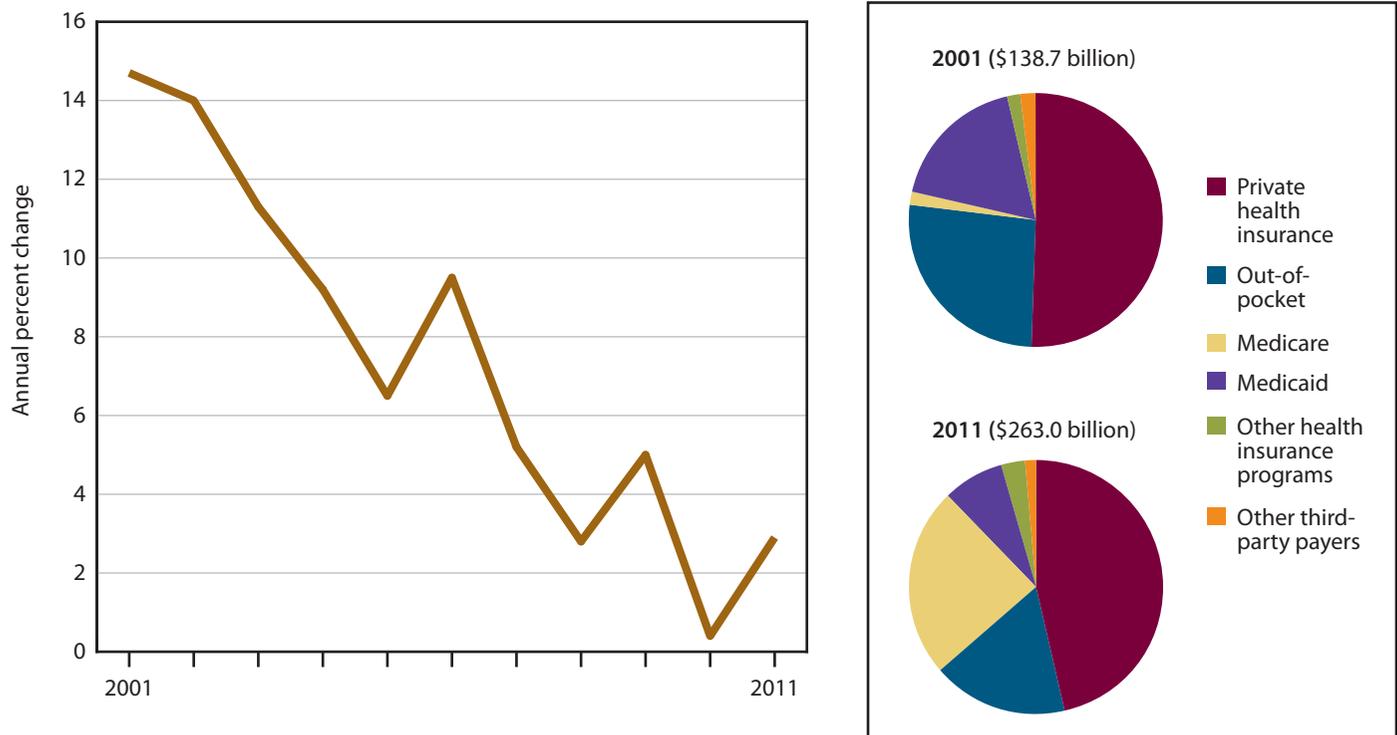
NOTES: Medicaid includes Children's Health Insurance Program (CHIP) expenditures. See data table for Figure 29.

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, National Health Expenditure Accounts. See Appendix I, National Health Expenditure Accounts (NHEA).

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig29

Data table for Figure 20. Prescription drug use in the past 30 days, by number of drugs taken and age: United States, 1988–1994 through 2007–2010

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig20

Characteristic	1988–1994		1999–2002		2003–2006		2007–2010	
	Percent	Standard error	Percent	Standard error	Percent	Standard error	Percent	Standard error
Number of prescription drugs in past 30 days								
Total, crude:								
No drugs	62.2	0.5	55.0	1.1	52.7	0.8	51.5	0.9
1–4 drugs.	34.2	0.5	37.6	0.6	37.1	0.5	37.9	0.7
5 or more drugs	3.6	0.2	7.4	0.3	10.1	0.5	10.6	0.5
Total, age-adjusted:[1]								
No drugs	60.9	0.5	54.8	0.9	53.1	0.6	52.5	0.7
1–4 drugs.	35.2	0.5	37.7	0.8	36.9	0.4	37.3	0.6
5 or more drugs	4.0	0.1	7.5	0.3	10.0	0.3	10.1	0.4

2007–2010	Under 18 years		18–44 years		45–64 years		65 years and over	
	Percent	Standard error	Percent	Standard error	Percent	Standard error	Percent	Standard error
No drugs	76.0	0.7	61.3	1.2	33.8	1.2	10.3	0.6
1–4 drugs	23.2	0.7	35.6	1.0	49.4	1.1	50.0	1.1
5 or more drugs	0.8	0.1	3.1	0.5	16.8	0.9	39.7	1.2

[1]Estimates are age-adjusted to the year 2000 standard population using four age groups: under 18 years, 18–44 years, 45–64 years, and 65 years and over.

NOTES: Data are for the civilian noninstitutionalized population. Only prescriptions the respondent themselves took are included. Prescriptions administered in other health care settings, such as physician offices and hospital outpatient departments, are not collected. See Appendix II, Age adjustment; Drug. See related Table 92.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey. See Appendix I, National Health and Nutrition Examination Survey (NHANES).

Data table for Figure 21. Prescription drug use in the past 30 days, by age and selected drug class: United States, 1988–1994 and 2007–2010

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig21

Age and drug class (common indications for use)	1988–1994		2007–2010	
	Percent	Standard error	Percent	Standard error
Under 18 years				
Antiasthmatics (asthma, allergies, breathing)[1]	3.2	0.4	6.8	0.4
Antibiotics (bacterial infections)[2]	10.1	0.6	6.1	0.5
Central nervous system stimulants (attention deficit disorder)[3]	*0.8	0.2	4.2	0.4
Analgesics (pain relief)[4]	1.2	0.2	1.3	0.2
Antidepressants (depression and related disorders)[5]	*	*	1.3	0.2
18–64 years				
Cardiovascular agents (high blood pressure, heart disease, kidney disease)[6]	10.0	0.4	17.7	0.7
Cholesterol-lowering drugs (high cholesterol)[7]	1.6	0.2	10.7	0.5
Anti-acid reflux drugs (gastric reflux, ulcers)[8]	3.0	0.2	9.0	0.7
Antidiabetic agents (diabetes)[9]	2.4	0.2	5.3	0.4
Anticoagulants (blood clot prevention)[10]	0.7	0.1	1.8	0.2
Analgesics (pain relief)[4]	8.6	0.4	10.5	0.7
Antidepressants (depression and related disorders)[5]	2.2	0.2	10.6	0.6
65 years and over				
Cardiovascular agents (high blood pressure, heart disease, kidney disease)[6]	51.5	0.9	70.2	1.2
Cholesterol-lowering drugs (high cholesterol)[7]	5.9	0.5	46.7	1.1
Anti-acid reflux drugs (gastric reflux, ulcers)[8]	7.5	0.7	21.5	1.2
Antidiabetic agents (diabetes)[9]	9.0	0.6	18.4	0.9
Anticoagulants (blood clot prevention)[10]	6.1	0.5	18.1	0.7
Analgesics (pain relief)[4]	13.8	0.7	17.5	1.1
Antidepressants (depression and related disorders)[5]	3.0	0.4	13.7	0.8

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Estimates not shown have an RSE greater than 30%.

[1]Includes one or more asthma drugs, including bronchodilators, mast cell stabilizers, inhaled corticosteroids, leukotriene modifiers, and antiasthmatic combinations (level 2, class 125, 130, 131, or 243). For a full list of drug classes included, see Technical Notes.

[2]Includes one or more antibiotic drugs, including penicillins, tetracyclines, cephalosporins, and macrolide derivatives (level 2, class 6, 8–18, 240, 315, or 406). For a full list of drug classes included, see Technical Notes.

[3]Includes one or more central nervous system stimulants (level 2, class 71).

[4]Includes one or more analgesic drugs (level 2, class 58).

[5]Includes one or more antidepressant drugs (level 2, class 249).

[6]Includes one or more cardiovascular agents, including drug classes such as ACE inhibitors, beta blockers, calcium channel blockers, and diuretics (level 1, class 40). For a full list of drug classes included, see Technical Notes.

[7]Includes one or more cholesterol-lowering (antihyperlipidemic) drugs (level 2, class 19).

[8]Includes one or more anti-acid reflux (proton pump inhibitors or H2 antagonists) drugs (level 2, class 94 or 272).

[9]Includes one or more antidiabetic drugs (level 2, class 99).

[10]Includes one or more anticoagulants or antiplatelet agents (level 2, class 82 or 83).

NOTES: Data are for the civilian noninstitutionalized population. Only prescriptions the respondent themselves took are included. Prescriptions administered in other health care settings, such as physician offices and hospital outpatient departments, are not collected. Drug classes are from Lexicon Plus (Cerner Multum, Denver, CO), a proprietary comprehensive database of all prescription and some nonprescription drug products available in the U.S. drug market. For more information on the drug classes in each category, see Technical Notes. See Appendix II, Drug; Multum Lexicon Plus therapeutic class. See related Table 93.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey. See Appendix I, National Health and Nutrition Examination Survey (NHANES).

Data table for Figure 22. Number of prescription drugs taken in the past 30 days among adults aged 18 and over, by selected characteristics: United States, 2007–2010

Excel and PowerPoint: *http://www.cdc.gov/nchs/hus/contents2013.htm#fig22*

| Characteristic | Number of drugs in past 30 days | | | | | | | |
| | Total | | No drugs | | 1–4 drugs | | 5 or more drugs | |
	Percent distribution	Standard error	Percent distribution	Standard error	Percent distribution	Standard error	Percent distribution	Standard error
Sex								
Male.	48.3	0.4	56.3	0.8	42.4	0.7	41.8	1.4
Female.	51.7	0.4	43.7	0.8	57.6	0.7	58.2	1.4
Race and Hispanic origin								
White only, not Hispanic.	68.4	2.5	56.9	3.0	76.8	1.9	78.3	2.3
Black only, not Hispanic	11.5	1.0	13.8	1.2	9.4	0.9	10.7	1.4
Mexican origin.	8.6	1.3	13.5	1.8	5.2	0.9	*3.9	1.1
Age								
18–44 years	48.9	0.9	69.2	1.0	40.7	1.1	10.8	1.4
45–64 years	34.5	0.7	26.9	1.0	39.8	0.9	41.7	1.1
65 years and over	16.6	0.5	3.9	0.3	19.5	0.7	47.5	1.5
Health status (respondent-assessed)								
Excellent or very good	44.4	1.2	49.7	1.2	46.8	1.4	20.9	1.6
Good	38.5	0.8	37.8	0.9	38.9	1.2	39.6	1.5
Fair or poor.	17.1	0.7	12.5	0.7	14.3	0.9	39.6	1.3

NOTES: Data are for the civilian noninstitutionalized population. In 2007–2010, 43.4% of adults took no drugs in the past 30 days, 42.8% took 1–4 drugs, and 13.9% took 5 or more drugs. Only prescriptions the respondent themselves took are included. Prescriptions administered in other health care settings, such as physician offices and hospital outpatient departments, are not collected. Estimates include all race and Hispanic origin groups not shown separately, except for the race and Hispanic origin-specific estimates. Race and Hispanic origin estimates do not sum to 100% because of respondents in other racial and ethnic groups. See Appendix II, Drug.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey. See Appendix I, National Health and Nutrition Examination Survey (NHANES).

Data table for Figure 23. Nonreceipt of needed prescription drugs in the past 12 months due to cost among adults aged 18–64, by insurance status and percent of poverty level: United States, 2002–2012

Excel and PowerPoint: *http://www.cdc.gov/nchs/hus/contents2013.htm#fig23*

Insurance status and poverty level	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Insurance status in the past 12 months						Percent					
Total.	7.6	8.1	9.2	9.4	9.3	9.6	10.7	11.2	11.2	10.5	9.4
Insured all 12 months	3.9	3.8	4.9	5.0	4.6	4.8	5.6	6.0	6.2	5.9	5.0
Uninsured all or part of past 12 months	20.9	22.7	23.6	24.1	23.9	25.5	27.3	26.7	25.8	24.1	22.4
						Standard error					
Total.	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2
Insured all 12 months	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Uninsured all or part of past 12 months	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9	0.7	0.6	0.7

Insurance status in the past 12 months and percent of poverty level, 2011–2012	Percent	Standard error
Insured all 12 months.	5.5	0.1
Below 100%	10.8	0.6
100%–199%	11.5	0.5
200%–399%	6.2	0.3
400% or more	2.2	0.1
Uninsured all or part of past 12 months	23.2	0.5
Below 100%	30.7	0.9
100%–199%	23.2	0.8
200%–399%	19.4	0.8
400% or more	14.9	1.3

NOTES: Data are based on household interviews of a sample of the civilian noninstitutionalized population. Based on adults responding to the question, "During the past 12 months was there any time when you needed prescription medicine but did not get it because [person] couldn't afford it?" Persons not covered by private insurance, Medicaid, Children's Health Insurance Program (CHIP), public assistance (through 1996), state-sponsored or other government-sponsored health plans (starting in 1997), Medicare, or military plans are considered to have no health insurance coverage. Persons with only Indian Health Service coverage are considered to have no health insurance coverage. Percent of poverty level is based on family income and family size and composition using U.S. Census Bureau poverty thresholds. Missing family income data were imputed. See Appendix II, Family income; Health insurance coverage; Poverty; Table VI. See related Table 74.

SOURCE: CDC/NCHS, National Health Interview Survey. See Appendix I, National Health Interview Survey (NHIS).

Data table for Figure 24. Age-adjusted death rates for human immunodeficiency virus (HIV) disease for all ages, by sex and race and Hispanic origin: United States, 1990–2010

Year	Male	Female	White, not Hispanic male	Black, not Hispanic male	Hispanic male	American Indian or Alaska Native male	Asian or Pacific Islander male	White, not Hispanic female	Black, not Hispanic female	Hispanic female	American Indian or Alaska Native female	Asian or Pacific Islander female
					Deaths per 100,000 population							
1990	18.5	2.2	14.1	47.1	28.8	3.3	4.3	0.7	10.3	3.8	*	*
1991	21.0	2.7	15.5	55.6	31.9	6.6	4.3	0.9	12.2	4.9	*	*
1992	23.3	3.2	16.7	65.4	35.1	4.8	4.6	1.0	14.9	5.7	*	0.5
1993	25.1	3.9	17.4	74.5	35.2	7.9	5.3	1.3	17.8	6.8	*	0.8
1994	27.5	4.8	18.5	88.2	41.5	8.9	6.7	1.6	23.0	8.0	*	0.7
1995	27.3	5.3	17.9	90.6	40.8	10.5	6.0	1.7	25.0	8.8	2.5	0.6
1996	19.0	4.2	11.2	71.8	28.0	6.4	4.4	1.3	21.4	6.3	*	0.5
1997	9.6	2.6	4.8	41.5	14.0	3.3	1.6	0.7	13.9	3.3	*	*
1998	7.6	2.2	3.7	33.8	10.2	3.5	1.3	0.5	12.2	2.8	*	*
1999	8.2	2.5	4.0	36.5	10.9	4.2	1.4	0.7	13.4	3.0	*	*
2000	7.9	2.5	3.8	35.5	10.6	3.5	1.2	0.7	13.5	2.9	*	*
2001	7.6	2.5	3.6	34.3	9.8	4.1	1.2	0.6	13.8	2.7	*	*
2002	7.4	2.5	3.5	33.8	9.3	3.3	1.5	0.6	13.8	2.7	*	*
2003	7.1	2.4	3.4	31.8	9.4	3.4	1.1	0.6	13.1	2.6	1.4	*
2004	6.6	2.4	3.1	29.5	8.4	4.1	1.2	0.6	13.3	2.4	1.4	*
2005	6.3	2.3	3.0	28.4	7.7	3.7	1.0	0.6	12.2	1.9	1.3	*
2006	5.9	2.2	2.8	26.6	7.2	2.9	1.1	0.6	12.4	1.9	1.3	*
2007	5.4	2.1	2.5	24.6	6.5	3.3	0.8	0.5	11.7	1.8	1.5	*
2008	4.8	1.9	2.3	21.8	5.5	2.8	1.0	0.5	10.0	1.7	*	0.3
2009	4.4	1.7	2.0	20.1	5.0	2.4	0.7	0.4	9.2	1.4	*	*
2010	3.8	1.4	1.8	17.0	4.6	2.6	0.7	0.4	7.9	1.1	*	*

* Rates based on fewer than 20 deaths are considered unreliable and are not shown.

NOTES: Rates are based on resident population. Rates are age-adjusted using 11 age groups. Age-adjusted rates are calculated using the year 2000 standard population with unrounded population numbers. Highly active antiretroviral therapy (HAART) was introduced in 1996. The lines in the data table around 1995 to 1997 denote the period from pre-HAART to widespread HAART use. Categories for the coding and classification of HIV disease were introduced in the United States in 1987. For the period 1990–1998, underlying cause of death was coded according to the 9th Revision of the *International Classification of Diseases* (ICD–9). Starting with 1999 data, cause of death is coded according to ICD–10. Persons of Hispanic origin may be of any race. See Appendix II, Age adjustment; Cause of death; Hispanic origin; Human immunodeficiency virus (HIV) disease; Table IV. See related Table 31.

SOURCE: CDC/NCHS, National Vital Statistics System. See Appendix I, National Vital Statistics System (NVSS).

Data table for Figure 25. Use of prescription antidepressants in the past 30 days among adults aged 18 and over, by sex and age: United States, 1988–1994 through 2007–2010

Excel and PowerPoint: *http://www.cdc.gov/nchs/hus/contents2013.htm#fig25*

Sex and age	1988–1994		1999–2002		2003–2006		2007–2010	
	Percent	Standard error	Percent	Standard error	Percent	Standard error	Percent	Standard error
Total, crude	2.3	0.2	8.0	0.4	10.9	0.4	11.1	0.5
Total, age-adjusted[1]	2.4	0.2	7.9	0.4	10.8	0.4	10.8	0.5
18–44 years	1.6	0.2	6.0	0.5	7.5	0.5	7.9	0.6
45–64 years	3.5	0.5	10.5	0.7	15.8	0.9	14.4	0.8
65 years and over	3.0	0.4	9.3	0.6	12.0	0.8	13.7	0.8
Male, crude	1.5	0.2	5.2	0.4	6.7	0.4	6.7	0.4
Male, age-adjusted[1]	1.6	0.2	5.2	0.4	6.7	0.4	6.6	0.4
18–44 years	*1.0	0.2	3.6	0.5	3.5	0.4	4.4	0.6
45–64 years	*2.3	0.5	7.0	0.7	10.5	1.0	8.9	0.7
65 years and over	*2.3	0.5	7.2	0.8	9.8	1.0	9.4	0.7
Female, crude	3.1	0.3	10.5	0.6	14.8	0.6	15.2	0.8
Female, age-adjusted[1]	3.2	0.3	10.5	0.6	14.6	0.6	14.8	0.8
18–44 years	2.3	0.4	8.5	0.7	11.4	0.8	11.3	0.9
45–64 years	4.6	0.7	13.8	1.2	20.9	1.2	19.6	1.2
65 years and over	3.5	0.4	10.8	0.8	13.7	1.1	17.0	1.2

* Estimates are considered unreliable. Data preceded by an asterisk have a relative standard error (RSE) of 20%–30%. Data not shown have an RSE greater than 30%.

[1]Estimates are age-adjusted to the year 2000 standard population using three age groups: 18–44 years, 45–64 years, and 65 years and over.

NOTES: Data are for the civilian noninstitutionalized population. Antidepressant use includes one or more antidepressant drugs (level 2, class 249). Only prescriptions the respondent themselves took are included. Prescriptions administered in other health care settings, such as physician offices and hospital outpatient departments, are not collected. Drug classes are from Lexicon Plus (Cerner Multum, Denver, CO), a proprietary comprehensive database of all prescription and some nonprescription drug products available in the U.S. drug market. See Appendix II, Age adjustment; Drug; Multum Lexicon Plus therapeutic class. See related Table 93.

SOURCE: CDC/NCHS, National Health and Nutrition Examination Survey. See Appendix I, National Health and Nutrition Examination Survey (NHANES).

Data table for Figure 26. Antibiotics ordered or provided during emergency department, outpatient, and physician visits for cold symptom diagnoses, by age: United States, average annual, 1995–1996 through 2009–2010

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig26

Year	All ages		Under 18 years		18 years and over	
	Percent of visits for colds	*Standard error*	*Percent of visits for colds*	*Standard error*	*Percent of visits for colds*	*Standard error*
1995–1996	44.7	3.0	37.5	4.3	58.5	3.4
1997–1998	36.5	2.6	26.8	2.8	52.0	3.9
1999–2000	27.7	2.8	20.4	2.5	37.8	5.1
2001–2002	36.1	3.0	26.8	2.8	52.9	4.9
2003–2004	30.4	3.6	20.9	3.0	45.1	6.3
2005–2006	27.1	2.9	14.8	2.4	44.1	4.4
2007–2008	32.1	2.3	26.3	2.9	42.5	3.8
2009–2010	27.1	2.8	21.5	2.9	39.5	4.3

NOTES: Visits for cold symptoms are those with the 9th Revision of the *International Classification of Diseases, Clinical Modification* codes 460 [acute nasopharyngitis (common cold)] or 465 (acute upper respiratory infections) and no other diagnoses. Until 2002, up to six prescription and nonprescription medications were recorded on the patient record form (PRF). Starting with 2003 data, up to eight prescription and nonprescription medications are recorded on the PRF. To be consistent over time, only the first six medication fields were considered. Antibiotics were identified based on drug codes. For a list of drug codes included, see Technical Notes. Visits with unknown drug codes (99980 and 99999) were excluded.

SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey: Emergency Department and Outpatient Components. See Appendix I, National Ambulatory Medical Care Survey (NAMCS); National Hospital Ambulatory Medical Care Survey (NHAMCS).

Data table for Figure 27. Computerized systems for prescription drugs, by provider and system type: United States, 2010

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig27

System type	Provider type							
	Physician offices		*Hospital outpatient departments*		*Hospital emergency departments*		*Residential care facilities[1]*	
	Percent of providers	*Standard error*	*Percent of providers*	*Standard error*	*Percent of providers*	*Standard error*	*Percent of providers*	*Standard error*
Ordering prescriptions	53.7	2.0	50.3	4.5	58.1	4.6	19.7	0.9
Warning of drug interactions and contraindications	46.0	2.0	38.7	4.5	45.9	4.6	17.9	0.9
Submitting prescriptions electronically to pharmacy	44.6	2.0	30.3	4.5	19.7	2.9	8.2	0.6
Including patient's allergies and current medications (in clinical notes system)	51.0	2.0	56.4	5.0	66.0	4.3	28.3	1.1
All four system types.	33.3	1.8	24.3	4.3	15.7	2.5	3.3	0.4

[1]Includes residential care facilities, assisted living residences, board and care homes, and other licensed shared housing establishments that offer help with personal care or health-related services and other services. Residences licensed to serve exclusively persons with mental illness, mental retardation, or developmental disabilities are excluded.

NOTE: For variables used, see Technical Notes.

SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey: Emergency Department and Outpatient Components, and National Survey of Residential Care Facilities. See Appendix I, National Ambulatory Medical Care Survey (NAMCS); National Hospital Ambulatory Medical Care Survey (NHAMCS); and National Survey of Residential Care Facilities (NSRCF).

Data table for Figure 28. Drug poisoning deaths involving opioid analgesics among persons aged 15 and over, by race and Hispanic origin, sex, and age: United States, 1999–2000 through 2009–2010

Excel and PowerPoint: *http://www.cdc.gov/nchs/hus/contents2013.htm#fig28*

Characteristic	1999–2000	2001–2002	2003–2004	2005–2006	2007–2008	2009–2010
	Deaths per 100,000 population					
Aged 15 and over, age-adjusted[1].	1.9	2.9	4.0	5.2	6.1	6.6
Aged 15 and over, crude	1.9	2.9	4.0	5.2	6.0	6.5
Age						
15–24 years	0.7	1.5	2.4	3.2	3.8	3.7
25–34 years	1.9	2.8	4.1	6.1	7.2	8.1
35–54 years	3.4	4.9	6.6	8.2	9.2	9.9
55–64 years	1.0	1.6	2.4	3.5	4.8	6.0
65 years and over	0.3	0.5	0.6	0.9	1.0	1.2
Sex[1]						
Male.	2.6	3.7	5.0	6.6	7.5	8.1
Female	1.3	2.1	3.0	3.9	4.6	5.1
Race and Hispanic origin[1,2]						
White, not Hispanic	2.2	3.5	5.1	6.7	8.0	8.9
Black, not Hispanic	1.1	1.5	1.7	2.8	2.4	2.7
Hispanic or Latino	1.8	1.7	2.0	2.3	2.6	2.4
American Indian or Alaska Native	1.7	2.6	4.2	5.4	6.1	7.1
Asian or Pacific Islander	0.2	0.3	0.3	0.6	0.5	0.7

[1]Rates are age-adjusted using eight age groups. Age-adjusted rates are calculated using the year 2000 standard population with unrounded population numbers. See Appendix II, Age adjustment.

[2]The race groups, Asian or Pacific Islander and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for the American Indian or Alaska Native, Asian or Pacific Islander, and Hispanic populations are known to be underestimated. Starting with 2003 data, some states allowed the reporting of more than one race on the death certificate. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards, for comparability with other states. See Appendix II, Race.

NOTES: Rates are based on resident population. Drug poisoning deaths with the drug type unspecified (up to 25% of the total) are not included. Drug poisoning deaths involving opioid analgesics among children under 15 is low, 0.1 per 100,000 population in 2010. Therefore this analysis is limited to those aged 15 and over. Opioid analgesics include pharmaceutical opioids such as hydrocodone, codeine, and methadone, and synthetic narcotics such as fentanyl, meperidine, and propoxyphene. Drug poisoning deaths involving opioid analgesics include those with an underlying cause of drug poisoning and with opioid analgesics mentioned in the 10th Revision of the *International Classification of Diseases* (ICD–10) multiple causes of death. See Appendix I, National Vital Statistics System (NVSS), Multiple Cause-of-death File, for information about tabulating cause-of-death data in this table. These deaths include all manners and intents. See Appendix II, Age adjustment; Cause of death; Hispanic origin; Table IV. See related Table 32.

SOURCE: CDC/NCHS, National Vital Statistics System. See Appendix I, National Vital Statistics System (NVSS).

Data table for Figure 29. Retail prescription drug expenditures, annual percent change, and spending by payer: United States, 2001–2011

Excel and PowerPoint: http://www.cdc.gov/nchs/hus/contents2013.htm#fig29

Year	Annual percent change
2001	14.7
2002	14.0
2003	11.3
2004	9.2
2005	6.5
2006	9.5
2007	5.2
2008	2.8
2009	5.0
2010	0.4
2011	2.9

Payer	2001	2011
	Percent	
Out-of-pocket	26.4	17.1
Private health insurance	50.9	46.5
Medicare	1.8	24.2
Medicaid[1]	17.1	7.8
Other health insurance programs[2]	1.8	3.0
Other third-party payers[3]	2.0	1.4

[1]Includes both the state and federal portions. Also includes Children's Health Insurance Program (CHIP) and Medicaid CHIP expansions.

[2]Includes Department of Defense and Department of Veterans Affairs programs.

[3]Includes worksite health care, other private revenues, Indian Health Service, workers' compensation, general assistance, maternal and child health, vocational rehabilitation, other federal programs, Substance Abuse and Mental Health Services Administration, other state and local programs, and school health.

NOTES: See Appendix II, Health expenditures, national. See related Table 115.

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, National Health Expenditure Accounts. See Appendix I, National Health Expenditure Accounts (NHEA).

Technical Notes

Data Sources and Comparability

Data for the *Health, United States, 2013* Chartbook come from many surveys and data systems and cover a broad range of years. Detailed descriptions of the data sources included in the Chartbook are provided in Appendix I. Additional information clarifying and qualifying the data are included in the table notes and in Appendix II. Definitions and Methods.

Data Presentation

Many measures in the Chartbook are shown for people in specific age groups because of the strong effect of age on most health outcomes. Some estimates are age-adjusted using the age distribution of the 2000 standard population; where this has been done, it is noted in the data tables that accompany the charts. Age-adjusted rates are computed to eliminate differences in observed rates that result from age differences in population composition (see Appendix II, Age adjustment). For some charts, data years are combined to increase sample size and the reliability of the estimates. Some charts present time trends, and others focus on differences in estimates among population subgroups for the most recent time point available. Trends are generally shown on a linear scale to emphasize absolute differences over time. The time trends for the overall mortality measures are shown on a logarithmic (log) scale to emphasize the rate of change and to enable measures with large differences in magnitude to be shown on the same chart. Point estimates and standard errors for Figures 1–19 are available in the Trend Table and Excel spreadsheet specified in the Note below the chart. Data tables with point estimates and standard errors (when appropriate) accompany Figures 20–29. Some data tables contain additional data that were not graphed because of space considerations.

Statistical Testing

Data trends can be described in many ways. For trend analyses presented in the Chartbook, increases or decreases in the estimates over time are measured by the annual percent change using the weighted least squares regression method. Statistically significant changes in the trend are assessed at the 0.05 level using the National Cancer Institute's Joinpoint software. For more information on Joinpoint, see: http://surveillance.cancer.gov/joinpoint/. For analyses that compare two time periods, differences between the two periods were assessed for statistical significance at the 0.05 level using two-sided significance tests (*z-tests*).

Terms such as "similar," "stable," and "no difference" used in the text indicate that the statistics being compared were not significantly different. Lack of comment regarding the difference between statistics does not necessarily suggest that the difference was tested and found to be not significant. Because statistically significant differences or trends are partly a function of sample size (the larger the sample, the smaller the change that can be detected), they do not necessarily have public health significance (81). Testing and comparisons use the estimates and standard errors in the trend and data tables.

Overall estimates generally have relatively small sampling errors, but estimates for certain population subgroups may be based on small numbers and have relatively large sampling errors. Numbers of deaths obtained from the National Vital Statistics System represent complete counts and therefore are not subject to sampling error. They are, however, subject to random variation, which means that the number of events that actually occur in a given year may be considered as one of a large series of possible results that could have arisen under the same circumstances. When the number of events is small and the probability of such an event is small, considerable caution must be observed in interpreting the conditions described by the charts. Estimates that are unreliable because of large sampling errors or small numbers of events have been noted with an asterisk. The criteria used to designate or suppress unreliable estimates are indicated in the notes to the applicable tables or charts.

For NCHS surveys, point estimates and their corresponding variances were calculated using the SUDAAN software package, which takes into consideration the complex survey design (82). Standard errors for other surveys or data sets were computed using the methodology recommended by the programs providing the data, or were provided directly by those programs.

Survey Questions and Coding

Additional information on data used in the Special Feature, including exact wording of questions and coding schemes, is contained in the full report available at: http://www.cdc.gov/nchs/hus.htm.

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Trend Tables in *Health United States, 2013*

The Chartbook section of *Health, United States, 2013* is followed by 135 Trend Tables organized around four major subject areas: health status and determinants, utilization of health resources, health care resources, and health care expenditures and payers. Trend Tables present data for selected years, to highlight major trends in health statistics. A key criterion used in selecting topics for the Trend Tables is the availability of comparable national data over a period of several years. A summary of the Trend Table topics for the 2013 edition is given below. Earlier editions of *Health, United States* may present data for additional years that are not included in the current printed report. Where available, these additional years of data are provided in spreadsheet files on the *Health, United States* website at: http://www.cdc.gov/nchs/hus.htm.

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