

Highlights

Major Findings From *Health, United States, 2003*

Health, United States, 2003 is the 27th report on the health status of the Nation. It assesses the Nation's health by presenting trends and current information on selected determinants and measures of health status in a chartbook followed by 151 trend tables organized around four major subject areas: health status and determinants, health care utilization, health care resources, and health care expenditures. The 2003 Chartbook on Trends in the Health of Americans features a section on diabetes, a serious and increasingly common chronic health condition and a significant cause of illness, disability, and death in the United States. Highlights on the featured topic, diabetes, follow other major findings from the report.

Health Status and Determinants

Population characteristics

Important changes in the U.S. population will shape future efforts to improve health and health care. Two major changes in the demographic characteristics of the U.S. population are the growth of the older population and the increasing racial and ethnic diversity of the Nation.

From 1950 to 2000 the proportion of the **population age 65 years and over** rose from 8 to 12 percent. By 2050 it is projected that one in five Americans will be 65 years of age or over (figure 2).

The **racial and ethnic composition** of the Nation has changed over time. The Hispanic population and the Asian and Pacific Islander population have grown more rapidly than other racial and ethnic groups in recent decades. In 2000 more than 12 percent of the U.S. population identified themselves as Hispanic and 4 percent as Asian or Pacific Islander (figure 3).

In 2001 the overall percent of Americans living in **poverty** was 11.7 percent, up from 11.3 percent in 2000, the first increase in the poverty rate since 1993. In 2001 more than one-half of black and Hispanic children under 18 years and

more than one-half of the black and Hispanic population age 65 years and over were either poor or near poor (figures 4 and 5 and table 2).

Fertility

Birth rates for teens continued their steady decline while birth rates for women 30–44 years of age increased in 2001.

The **birth rate for teenagers** declined for the 10th consecutive year in 2001, to 45.3 births per 1,000 women aged 15–19 years, the lowest rate in more than six decades. The birth rate for 15–17 year olds in 2001 was 34 percent lower than in 1990, and the birth rate for older teens 18–19 years of age was 14 percent lower than the rate in 1990 (table 3).

In 2001 the **fertility rate** for Hispanic women (96.0 births per 1,000 Hispanic women 15–44 years) was 66 percent higher than for non-Hispanic white women (57.7 per 1,000) (table 3).

Between 1995 and 2001 the **birth rate for unmarried women** was relatively stable, about 44–45 births per 1,000 unmarried women ages 15–44 years. The birth rate for unmarried black women declined steadily over the past decade to 70.1 per 1,000 in 2001, and the birth rate for unmarried Hispanic women increased for the third year in a row to 98.0 per 1,000 (table 9).

Health Behaviors and Risk Factors

Health behaviors and risk factors have a significant effect on health outcomes. Cigarette smoking increases the risk of lung cancer, heart disease, emphysema, and other respiratory diseases. Overweight and obesity increase the risk of death and disease as well as the severity of disease. Regular physical activity lessens the risk of disease and enhances physical functioning. Heavy and chronic use of alcohol and use of illicit drugs increase the risk of disease and injuries. Environmental exposures also affect health. For example, air pollution contributes to respiratory illness, cardiovascular disease, and some cancers.

Since 1990 the percent of **adults who smoke cigarettes** has declined only slightly. In 2001, 25 percent of men and 21 percent of women were smokers. Cigarette smoking by adults is strongly associated with educational attainment. Adults with less than a high school education were nearly three times as likely to smoke as were those with a

bachelor's degree or more education in 2001 (figure 12 and tables 59 and 60).

Between 1997 and 2001 the percent of **high school students who reported smoking cigarettes** in the past month declined from 36 percent to 29 percent, reversing an upward trend that began in the early 1990s (figure 12).

Cigarette smoking during pregnancy is a risk factor for poor birth outcomes such as low birthweight and infant death. In 2001 the proportion of mothers who smoked cigarettes during pregnancy declined to 12 percent, down from 20 percent in 1989. In 2001 the smoking rate during pregnancy for mothers ages 18–19 years (19 percent) remained higher than that for mothers of other ages (figure 12 and table 11).

In 2001, 38 percent of female **high school students** and 24 percent of male high school students did not engage in the recommended amounts of moderate or vigorous **physical activity**, about the same as in 1999 (figure 13).

In 2000 the percent of adults 18 years of age and over who were **inactive during their usual daily activity and leisure time** was higher for women than men (12 percent and 7 percent, age adjusted) and increased sharply with age. Nearly one-fifth of men age 65 years and over and more than one-quarter of women age 65 years and over were inactive (figure 14).

The prevalence of **overweight and obesity among adults** 20–74 years of age increased from 47 percent in 1976–80 to 65 percent in 1999–2000. During this period the prevalence of obesity among adults 20–74 years of age increased from 15 to 28 percent (percents are age adjusted) (figures 15 and 16 and table 68).

The prevalence of **obesity** among adults varies by **race and ethnicity**. In 1999–2000, 50 percent of non-Hispanic black women 20–74 years of age were obese, compared with 40 percent of women of Mexican origin and 30 percent of non-Hispanic white women (percents are age adjusted). Obesity among black women increased more than 60 percent since 1976–80, from 31 percent to 50 percent (figure 16 and table 68).

Between 1976–80 and 1999–2000 the prevalence of **overweight among children** 6–11 years of age more than doubled from 7 to 15 percent and the prevalence of overweight among **adolescents** 12–19 years of age more than tripled from 5 to 16 percent (figure 15 and table 69).

In 2001 among current drinkers age 18 years and over, 41 percent of men and 20 percent of women reported drinking **five or more alcoholic drinks** on at least 1 day in the past year (age-adjusted). This level of alcohol consumption was most common among young adults 18–24 years of age (table 65).

Between 2000 and 2001 the prevalence of **illicit drug use** within the past 30 days among youths 12–17 years of age increased 1 percentage point to 11 percent. The percent of youths reporting illicit drug use increased with age, from 4 percent among 12–13 year olds to 11 percent among those age 14–15 years and 18 percent among those 16–17 years in 2001 (table 62).

Between 1991 and 2001 the number of **cocaine-related emergency department episodes** per 100,000 population nearly tripled for persons 35 years and over, to 76 episodes per 100,000. The age group 26–34 years has the highest episode rate, 176 per 100,000 in 2001. The same patient may be involved in multiple drug-related episodes (table 64).

Air pollution causes premature death, cancer, and long-term damage to respiratory and cardiovascular systems. The presence of unacceptable levels of ground-level **ozone** is the largest source of air pollution. In 2001 approximately 41 percent of the U.S. population lived in areas designated as nonattainment areas for established health-based standards for ozone (table 51).

Morbidity

Limitation of activity due to chronic health conditions, limitations in activities of daily living, and self-assessed (or family member-assessed) health status are summary measures of morbidity presented in this report. Additional measures of morbidity that are presented include the incidence of specific diseases, injury-related emergency department use, and suicide attempts.

Limitation of activity due to chronic health conditions among children was more common among boys than among girls and was more than twice as high among school-age children (5–11 and 12–17 years of age) as among preschoolers (under 5 years of age) during the period 1999–2001. More than 9 percent of school-age and adolescent boys had an activity limitation compared with about 5 percent of girls, with the majority classified as having a limitation based on participation in special education. Between 1997 and 2001

levels of activity limitation among children remained about the same (figure 17 and table 56).

Limitations in handling personal care needs such as bathing (**activities of daily living or ADLs**) and routine needs such as shopping (**instrumental activities of daily living or IADLs**) increase sharply with age among the noninstitutionalized population. In 2001, about 14 percent of all Medicare beneficiaries 65 years of age and over were limited in at least one of six ADLs. Among noninstitutionalized persons age 65 years and over, about 10 percent had difficulty and received help or supervision with at least one ADL (figure 20).

Mental illness is a significant **cause of activity limitation** among working-age adults living in the community. In 1999–2001 mental illness was the second most frequently mentioned causal condition for activity limitation among adults 18–44 years of age and third among adults 45–54 years (figure 19).

In 2001 the percent of persons reporting **fair or poor health** was more than three times as high for persons living below the poverty level as for those with family income more than twice the poverty level (21 percent and 6 percent, age adjusted) (table 57).

New **pediatric AIDS cases** have been declining steadily since 1994 when U.S. Public Health Service guidelines recommended testing and treatment of pregnant women and neonates to reduce perinatal HIV transmission. The vast majority of pediatric AIDS cases occur through perinatal exposure. In 2001 fewer than 200 new AIDS cases were reported among children under the age of 13 years, compared with 745 in 1995 (table 53).

In 2001 **tuberculosis** incidence declined for the 9th consecutive year to 5.7 cases per 100,000 population, but the rate of decline slowed in 2001 compared with the previous 5 years (table 52).

Untreated **chlamydial infections** can lead to pelvic inflammatory disease (PID) with potentially serious complications including infertility, chronic pelvic pain, and life-threatening tubal pregnancy. In 2001 the reported rate for chlamydial infection was 278 cases per 100,000 persons. Rates of reported chlamydial infection have been increasing annually since the late 1980s when public programs for screening and treatment of women were first established to

avert pelvic inflammatory disease and related complications (table 52).

Incidence rates for **all cancers combined** declined in the 1990s for males. Between 1990 and 1999 age-adjusted cancer incidence rates declined on average nearly 2 percent per year for Hispanic males, non-Hispanic white males, and black males. Although there was no significant change in cancer incidence for females overall, among Hispanic females rates decreased on average 1 percent per year, and among Asian or Pacific Islander females rates increased 1 percent per year (table 54).

The most frequently diagnosed **cancer sites in males** are prostate, followed by lung and bronchus, and colon and rectum. Cancer incidence at these sites is higher for black males than for males of other racial and ethnic groups. In 1999 age-adjusted cancer incidence rates for black males exceeded those for white males by 58 percent for prostate, 48 percent for lung and bronchus, and 10 percent for colon and rectum (table 54).

Breast cancer is the most frequently diagnosed cancer among females. Breast cancer incidence is higher for non-Hispanic white females than for females in other racial and ethnic groups. In 1999 age-adjusted breast cancer incidence rates for non-Hispanic white females exceeded those for black females by 24 percent, for Asian or Pacific Islander females by 48 percent, and for Hispanic females by 80 percent (table 54).

Injuries accounted for 37 percent of all visits to emergency departments (ED) in 1999–2000. The proportion of ED visits that were injury-related declined with age from 41 percent for children and adults under 45 years of age to 33 percent for persons 45–64 years and 26 percent for those 65 years and over. In 1999–2000 falls was the most often cited reason for injury-related ED visits among persons 45 years of age and older (tables 82 and 83).

Between 1993 and 2001, the percent of high school students who reported attempting suicide (8–9 percent) and whose **suicide attempts** required medical attention (about 3 percent) remained fairly constant. Girls were more likely than boys to consider or attempt suicide and were also more likely to make an attempt that required medical attention. However in 2000 adolescent boys (15–19 years of age) were nearly five times as likely to die from suicide as were adolescent girls, in part reflecting their choice of more lethal methods, such as firearms (tables 46 and 58).

Mortality Trends

Life expectancy and infant mortality are measures often used to gauge the overall health of a population. Life expectancy shows a long term upward trend and infant mortality attained a record low in 2000 and remained unchanged in 2001.

In 2001 **life expectancy** at birth for the total population reached a record high of 77.2 years, based on preliminary data, up from 75.4 years in 1990 (table 27).

In 2001 the **infant mortality** rate did not change from its 2000 record low of 6.9 infant deaths per 1,000 live births, based on preliminary data (figure 22 and table 22).

Since 1950 **mortality among teens and young adults age 15–24 years** has declined by 38 percent to 80 deaths per 100,000 population in 2000. Overall mortality at ages 15–24 years has declined, in part, due to decreases in death rates for unintentional injuries, cancer, heart disease, and infectious diseases. Homicide and suicide rates generally increased over this period, but have declined since the mid-1990s (figures 24 and 25).

Between 1950 and 2000 **mortality among adults age 25–44 years** declined by 44 percent overall, to 155 deaths per 100,000 population. Death rates for unintentional injuries, cancer, heart disease, and tuberculosis decreased substantially during this period. Suicide rates rose through 1980 and have since declined slightly. HIV disease was the leading cause of death in this age group in the mid-1990s; with decreasing HIV disease death rates, it dropped to the fifth leading cause of death between 1997 and 2000 (figures 26 and 27).

Since 1950 **mortality among adults age 45–64 years** has decreased by 49 percent overall, to 648 deaths per 100,000 population in 2000. During this period death rates for heart disease, stroke, and unintentional injury decreased while cancer mortality rose slowly through the 1980s and then declined. Cancer was the leading cause of death for 45–64 year olds in 2000, accounting for more than one-third of deaths in this age group (figures 28 and 29).

During the past 50 years **mortality among persons 65 years of age and over** has dropped by 35 percent to 5,169 deaths per 100,000 population in 2000. During this period death rates for heart disease and stroke have declined sharply while the death rate for cancer rose until 1995 and has since decreased slightly (figures 30 and 31).

Disparities in Mortality

Despite overall declines in mortality, racial and ethnic disparities in mortality, as well as gender disparities, persist. The gap in life expectancy between the sexes and between the black and white populations has been narrowing. As a result of revised death rates that incorporate information from the 2000 Census, some of the racial disparities in mortality are not as large as previously reported, while others are wider.

Infant mortality rates have declined for all **racial and ethnic groups**, but large disparities remain. In 2000 the infant mortality rate was highest for infants of non-Hispanic black mothers (13.6 deaths per 1,000 live births) and lowest for infants of mothers of Chinese origin (3.5 per 1,000 live births) (table 19).

Infant mortality increases as **mother's level of education** decreases. In 2000 the mortality rate for infants of mothers with less than 12 years of education was 58 percent higher than for infants of mothers with 13 or more years of education. This disparity was more marked among non-Hispanic white infants, for whom mortality among infants of mothers with less than a high school education was more than twice that for infants of mothers with more than a high school education (table 20).

Between 1990 and 2001 **life expectancy at birth** increased by more than 2 years for **males** and by 1 year for **females**. The difference in life expectancy between males and females narrowed from 7 years in 1990 to 5.4 years in 2001 (based on preliminary data) (figure 21 and table 27).

Between 1990 and 2001 **mortality from lung cancer** declined for **men** and increased for **women**. Although these trends reduced the sex differential for this cause of death, the age-adjusted death rate for lung cancer was still 86 percent higher for men than for women in 2000 and 83 percent higher in 2001 (preliminary data) (table 39).

Since 1990 mortality from **chronic lower respiratory diseases** remained relatively stable for **men** while it increased for **women**. These trends reduced the gap between the sexes for this cause of death. In 1990 the age-adjusted death rate for males was more than 100 percent higher than for females. In 2000 the difference between the rates had been reduced to 49 percent, and in 2001, to 44 percent (preliminary data) (table 41).

Between 1990 and 2001 **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 1990 life expectancy at birth was 7 years longer for the white than for the black population. By 2000 the difference had narrowed to 5.7 years, and by 2001, to 5.5 years (preliminary data) (table 27).

Overall mortality was 31 percent higher for **black Americans** than for white Americans in 2001 compared with 37 percent higher in 1990. In 2001 age-adjusted death rates for the black population exceeded those for the white population by 40 percent for **stroke**, 29 percent for **heart disease**, 25 percent for **cancer**, and nearly 800 percent for **HIV disease** (based on preliminary data) (table 29).

The **5-year survival rate** for black females diagnosed in 1992–98 with breast cancer was 15 percentage points lower than the 5-year survival rate for white females (table 55).

In 2000 **breast cancer mortality** for black females was 31 percent higher than for white females, and in 2001, 34 percent higher, based on preliminary data, compared with 15 percent higher in 1990 (tables 40).

Homicide rates among young black males 15–24 years of age and among **young Hispanic males** were about 50 percent lower in 2000 than in the early 1990s when homicide rates peaked for these groups. In spite of these downward trends, homicide was still the leading cause of death for young black males and the second leading cause for young Hispanic males in 2000, and homicide rates for young black and Hispanic males remained substantially higher than for young non-Hispanic white males (table 45).

Since 1995 death rates for **HIV disease** declined sharply for **Hispanic males and black males** 25–44 years of age. In spite of these declines, HIV disease was still the second leading cause of death for Hispanic males 25–44 years of age and the third leading cause for black males 25–44 years of age in 2000, and HIV death rates remained much higher for Hispanic and black males than for non-Hispanic white males in this age group (table 42).

In 2000 death rates for **motor vehicle-related injury and suicide for young American Indian males** 15–24 years of age were about 45 percent higher than the rates for those causes for young white males. Death rates for the American Indian population are known to be underestimated (tables 44 and 46).

Overall mortality was almost 40 percent lower for **Asian males** than for white males throughout most of the 1990s. In 2000 age-adjusted death rates for **cancer and heart disease** for Asian males were 38–41 percent lower than corresponding rates for white males, whereas the death rate for **stroke** was only 3 percent lower. Death rates for the Asian population are known to be underestimated (tables 35–38).

Death rates vary by **educational attainment**. In 2000 the age-adjusted death rate for persons 25–64 years of age with fewer than 12 years of education was nearly three times the rate for persons with 13 or more years of education (table 34).

Occupational Health

Improvements in workplace safety constitute a major public health achievement in the twentieth century. Despite important accomplishments, preventable injuries and deaths continue to occur.

In 2001 the **occupational injuries with lost workdays** rate, 2.6 per 100 full-time equivalents (FTEs) in the private sector, was at its lowest level in three decades. The industries reporting the highest injury rates in 2001 were transportation, communication, and public utilities (4.2) and construction (3.9) (table 50).

Of the total 8,786 fatal work injuries in 2001, one-third resulted from the September 11th terrorist attacks. Excluding the September 11 fatalities, the **occupational injury death rate** in 2001 was the same as in 2000, 4.3 deaths per 100,000 employed workers. Mining (including oil and gas extraction), the industry with the highest death rate in 2001 (30.0 per 100,000), accounted for 3 percent of occupational injury deaths, excluding deaths from the September 11th attacks. The industry accounting for the largest percentage of occupational injury deaths, construction (21 percent), had a death rate of 13.3 per 100,000 (table 49).

A total of 2,859 **pneumoconiosis deaths**, for which pneumoconiosis was either the underlying or nonunderlying cause of death, occurred in 2000, compared with 4,151 deaths in 1980. Pneumoconiosis deaths are primarily associated with occupational exposures and can be prevented through effective control of worker exposure to occupational dusts (table 48).

Health Care Utilization and Health Care Resources

Major changes continue to occur in the delivery of health care in the United States, driven in part by changes in payment policies intended to rein in rising costs and by advances in technology that have allowed more complex treatments to be performed on an ambulatory basis. Use of hospital inpatient services has decreased while use of services such as outpatient surgery, home health care, and hospice care, has increased.

Between 1980 and 2000 the percent of all **office visits** to primary care physicians declined, while the percent of visits to specialty physicians increased. In 2000, 49 percent of all visits to physicians' offices were made to specialists, up from 43 percent in 1980 (table 84).

In 2001, 63 percent of all **surgical operations** in community hospitals were performed on outpatients, up from 51 percent in 1990 and 16 percent in 1980 (table 95).

Between 1985 and 2001 the **hospital discharge rate** declined 24 percent, from 151 to 115 discharges per 1,000 population, while **average length of stay** declined 1.7 days, from 6.6 to 4.9 days (data are age adjusted) (table 90).

Between 1995 and 2001, total **registered nurse graduates** per year declined from 97,000 to 69,000, **allopathic medicine graduates** remained stable at 16,000 per year, and **osteopathic medicine graduates** increased from 1,800 to 2,600 per year (table 103).

Between 1990 and 2001 the number of **community hospital beds** declined from about 927,000 to about 826,000. Community hospital occupancy, estimated at 64.5 percent in 2001, increased slightly from 62.5 percent in 1998, after declining from about 67 percent in 1990 (table 106).

Between 1996 and 2000 use of **home health care** by persons 65 years of age and over declined from 547 to 277 per 10,000 population, after increasing steadily between 1992 and 1996. The recent decline resulted in part from the Balanced Budget Act of 1997, which imposed stricter limits on the use of home health services funded by Medicare and interim limits on Medicare payments to home health agencies from October 1997 until a prospective payment system was implemented for Medicare home health agencies in October 2000 (data are age adjusted) (table 87).

Between 1994 and 2000 use of **hospice care** by persons 65 years of age and over increased by 83 percent to 25 patients per 10,000 population. Among persons age 65 and over, use of hospice services is slightly higher for males than for females (27 compared with 23 patients per 10,000 in 2000). Cancer is the most common diagnosis among hospice patients (data are age adjusted) (table 88).

In 1999 there were 1.5 million **nursing home residents** 65 years of age and over. More than one-half of the residents 65 years and over were at least 85 years of age and three-fourths were female. Between the mid-1970s and 1999, nursing home utilization rates increased for the black population and decreased for the white population (table 96).

In 2001 there were 1.8 million **nursing home beds** in facilities certified for use by Medicare and Medicaid beneficiaries. Between 1995 and 2001 nursing home bed occupancy in those facilities was relatively stable, estimated at 83 percent in 2001 (table 110).

Preventive Health Care

Use of preventive health services helps reduce morbidity and mortality from disease. Use of several different types of preventive services has been increasing. However disparities in use of preventive health care by race and ethnicity, and family income, remain.

The percent of mothers receiving **prenatal care** in the first trimester of pregnancy has continued to edge upward from 76 percent in 1990 to 83 percent in 2001. Although increases occurred for all racial and ethnic groups, in 2001 the percent of mothers with early prenatal care still varied substantially, from 69 percent for American Indian mothers to 90–92 percent for mothers of Japanese and Cuban origin (figures 8 and 9 and table 6).

In 2001, 77 percent of children 19–35 months of age received the combined **vaccination** series of four doses of DTaP (diphtheria-tetanus-acellular pertussis) vaccine, three doses of polio vaccine, one dose of MMR (measles-mumps-rubella vaccine), and three doses of Hib (Haemophilus influenzae type b) vaccine. Children living below the poverty threshold were less likely to have received the combined vaccination series than were children living at or above poverty (72 percent compared with 79 percent) (table 71).

Annual **influenza vaccination** can prevent influenza and its severe complications and one dose of **pneumococcal**

vaccine can reduce the risk of invasive pneumococcal disease. Between 1989 and 1999 the percent of noninstitutionalized adults 65 years of age and over who reported an influenza vaccination within the past year more than doubled, to 66 percent and then decreased slightly to 63 percent in 2001. Between 1989 and 2001 the percent of older adults ever having received a pneumococcal vaccine increased sharply from 14 percent to 54 percent (figure 10).

Between 1987 and 2000 the age-adjusted percent of women 18 years and over who reported a **Pap smear** in the past 3 years increased from 74 percent to 81 percent. In 2000 Pap smear use was lower among women living below the poverty level compared with women with family incomes at or above the poverty level (72 percent and 84 percent). Pap smear use was lower among women 65 years and over than among younger women (table 81).

Access to Care

Access to care is important for preventive care and for prompt treatment of illness and injuries. Indicators of access to health services include having a usual source of health care and having a recent health care contact. Health insurance coverage, and the generosity of coverage, are major determinants of access to care.

The percent of the **population under 65 years of age with no health insurance coverage** (either public or private) fluctuated around 16–17 percent between 1994 and 2001. Among the under 65 population, poor and near poor persons whose family incomes were less than 200 percent of poverty were much more likely than others to be uninsured (figures 6 and 7 and table 129).

The likelihood of being uninsured varies substantially among the **States**. In 2001 the percent of the population under 65 years of age with **no health insurance coverage** varied from less than 10 percent in Massachusetts, Rhode Island, Wisconsin, Iowa, and Minnesota to 20 percent or more in Florida, Louisiana, Oklahoma, Texas, Arizona, New Mexico, and California (table 151).

In 2001, 11 percent of **children** under 18 years of age had **no health insurance coverage**. Between 2000 and 2001 among children with family income just above the poverty level (1–1.5 times poverty), the percent uninsured dropped from 26 to 19 percent. However children with low family

income remain substantially more likely than higher-income children to lack coverage (table 129).

Persons of Hispanic origin and American Indians who are under 65 years of age are more likely to have **no health insurance coverage** than are those in other racial and ethnic groups. In 2001 among the Hispanic-origin population, persons of Mexican origin were the most likely to lack health insurance coverage (39 percent). Non-Hispanic white persons were the least likely to lack coverage (12 percent) (figure 7 and table 129).

Six percent of **children** under 18 years of age had **no usual source of health care** in 2000–01. Hispanic and non-Hispanic black children were more likely to be without a usual source of care than non-Hispanic white children (14 percent and 7 percent compared with 4 percent) (table 74).

Thirteen percent of **children** under 18 years of age had **no health care visit** to a doctor or clinic within the past 12 months in 2000–01. Hispanic and non-Hispanic black children were more likely to be without a recent visit than non-Hispanic white children (20 percent and 15 percent compared with 10 percent) (table 73).

One in 5 **children** under 18 years of age had an **emergency department (ED) visit** within the past 12 months in 2001. Children with Medicaid coverage were more likely than those with private coverage or the uninsured to have had an ED visit within the past 12 months (29 percent compared with 19 percent and 17 percent) (table 75).

In 2001 nearly three-quarters of **children** 2–17 years of age had a **dental visit** in the past year. Use of dental care was lower among Hispanic children and non-Hispanic black children than among non-Hispanic white children (61 percent and 68 percent compared with 78 percent) (table 78).

Young adults 18–24 years of age are more likely than adults of other ages to have **no usual source of health care**. Twenty-six percent of young adults were without a usual source of health care in 2000–01 (table 76).

Working age-adults 18–64 years of age living below the poverty level were more than twice as likely as those with family income above twice the poverty level to have **no usual source of health care** in 2000–01 (27 percent and 12 percent). Among working-age adults living in poverty Hispanic persons were twice as likely as non-Hispanic white and black persons to be without a usual source of health

care (44 percent compared with 22 percent and 21 percent) (percents are age adjusted) (table 76).

Use of hospital inpatient care is greater among the **poor** than among the nonpoor whose family income is at least twice the poverty level. In 2001 among persons under 65 years of age, the hospital discharge rate for the poor was almost twice the rate for nonpoor (168 and 87 per 1,000 population). Among those under 65 years of age, average length of stay was 1.4 days longer for poor than for nonpoor persons (5.1 and 3.7 days) (data are age adjusted) (table 89).

In 2001 among noninstitutionalized persons 65 years of age and over, those with Medicare fee-for-service coverage only were more likely to have had **no health care visits** within the past 12 months than were those with Medicare HMO, Medicaid, or private coverage (14 percent compared with 5–6 percent, data are age adjusted) (table 70).

In 2001 among noninstitutionalized persons 65 years of age and over, those with Medicaid coverage were twice as likely to be high volume users of the health care system with **10 or more visits within the past 12 months** than were those with Medicare HMO, private, or Medicare fee-for-service coverage only (44 percent compared to 21–25 percent, data are age adjusted) (table 70).

Health Care Expenditures

After 25 years of double-digit annual growth in national health expenditures, the rate of growth slowed during the 1990s. At the end of the decade the rate of growth started edging up again. Since the millennium, the rate has accelerated. This high rate of growth combined with a sluggish economy has resulted in health care expenditures claiming a larger share of the gross domestic product (GDP). The United States continues to spend more on health than any other industrialized country.

In 2001 **national health care expenditures** in the United States totaled \$1.4 trillion, increasing 8.7 percent from the previous year compared with a 7.4 percent increase in 2000. In the mid-1990s annual growth had slowed somewhat, following an average annual growth rate of 11 percent during the 1980s (table 112).

The United States spends a larger **share of the GDP on health** than does any other major industrialized country. In 2000 the United States devoted 13.3 percent of the GDP to

health compared with 10.6–10.7 percent each in Germany and Switzerland and 9.1–9.5 percent in Canada and France, countries with the next highest shares (table 111).

In 2001 **health expenditures as a percent of the gross domestic product (GDP)** increased to 14.1 percent, up from 13.3 percent the previous year (table 112).

The rate of increase in the medical care component of the **Consumer Price Index (CPI)** was 4.7 percent in 2002 and 4.6 percent in 2001, compared with 3.4 percent per year during 1995–2000. During the last 3 years, the CPI for hospital services showed the greatest price increases (6–7 percent in 2000 and 2001 and 9 percent in 2002), compared with other components of medical care (table 113).

Expenditures by Type of Care and Source of Funds

During the last few years expenditures for prescription drugs have grown at a faster rate than any other type of health expenditure. The sources of funds for medical care differ substantially according to the type of medical care being provided.

Expenditures for hospital care accounted for 32 percent of all national health expenditures in 2001. Physician services accounted for 22 percent of the total in 2001, prescription drugs for 10 percent, and nursing home care for 7 percent (table 115).

Since 1995 the **average annual rate of increase for prescription drug expenditures** (on average 15 percent per year between 1995 and 2001) was higher than for any other type of health expenditure. During the first half of the decade expenditures for home health care increased more rapidly (19 percent per year between 1990 and 1995) than other types of expenditures (table 115).

In 2001 **prescription drug expenditures** increased 16 percent, and prescription drugs posted a 5-percent rate of price increase in the Consumer Price Index in both 2001 and 2002 (tables 113 and 115).

In 2001, 47 percent of **prescription drug expenditures** were paid by private health **insurance** (up from one-quarter at the beginning of the decade), 31 percent by out-of-pocket payments (down from 59 percent in 1990), and 17 percent by Medicaid. Although Medicare is the federal program that funds health care for persons age 65 years and over, and older

persons are the highest per capita consumers of prescription drugs, Medicare paid only 2 percent of prescription drug expenses in 2001 (table 116).

In 1999, 88 percent of persons age 65 years and over in the civilian noninstitutionalized population had a **prescribed medicine expense**. The average annual out-of-pocket prescribed medicine expense per older person with expense was \$614, an increase of 16 percent over the previous year (table 117).

In 1999, 95 percent of **persons age 65 years and over** in the civilian noninstitutionalized population reported **medical expenses** averaging about \$6,300 per person with expense. Sixteen percent of expenses were paid out-of-pocket, 14 percent by private insurance, and two-thirds by public programs (mainly Medicare and Medicaid) (tables 117 and 118).

The burden of **out-of-pocket expenses** for health care varies considerably by age. In 1999 one-third of persons 75 years of age and over with expenses paid \$1,000 or more in out-of-pocket expenses compared with 18 percent of those 45–64 years of age. Eight percent of those 18–44 years of age incurred out-of-pocket expenses of \$1,000 or more in 1999, compared with only 1 percent of children under 6 years of age (table 119).

In 2001, 33 percent of **personal health care expenditures** were paid by the Federal Government and 11 percent by State and local government; private health insurance paid 35 percent and consumers paid 17 percent out-of-pocket (table 116).

In 2001 the major **sources of funds for hospital care** were Medicare (30 percent) and private health insurance (34 percent). **Physician services** were also primarily funded by private health insurance (48 percent) and Medicare (20 percent). In contrast, **nursing home care** was financed primarily by Medicaid (48 percent) and out-of-pocket payments (27 percent) (table 116).

In 1999 the average monthly charge per **nursing home** resident was \$3,891. Residents for whom the primary source of payment was private insurance, family support, or their own income paid close to the average charge, compared with an average monthly charge of \$5,800 when Medicare was the primary payor and \$3,500 when Medicaid was the primary source of payment (table 124).

In 1998 less than one-fifth of **mental health expenditures** incurred by mental health organizations was for State and county psychiatric hospitals. In 1975 this share was nearly one-half of expenditures. The decline in the proportion of mental health expenditures for State and county psychiatric hospitals reflects the shift from inpatient to outpatient mental health care (table 125).

Publicly Funded Health Programs

The two major publicly funded health programs are Medicare and Medicaid. Medicare is funded through the Federal Government and covers persons 65 years of age and over and disabled persons for their health care. Medicaid is jointly funded by the Federal and State Governments to provide health care for certain groups of low-income persons. Medicaid benefits and eligibility vary by State.

In 2001 the **Medicare** program had 40 million enrollees and expenditures of \$245 billion (table 134).

In 2001 **hospital insurance** (HI) accounted for 59 percent of **Medicare** expenditures. Expenditures for home health agency care decreased to 3 percent of HI expenditures in 2001, down from 13 percent in 1997 (table 134).

In 2001 **supplementary medical insurance** (SMI) accounted for 41 percent of **Medicare** expenditures. Seventeen percent of SMI expenditures in 2001 were payments to managed care organizations, compared with 20–22 percent in the previous 3 years. One-half of the \$84 billion SMI paid for fee-for-service utilization in 2001 went to physicians under the physician fee schedule (table 134).

Of the 33 million **Medicare enrollees in the fee-for-service program** in 2000, 11 percent were 85 years of age and over and 15 percent were under 65 years of age. Among fee-for-service Medicare enrollees age 65 years and over, payments in 2000 increased with age from an average of \$4,000 per year per enrollee for those age 65–74 years to \$7,700 for those 85 years and over. Average payments per fee-for-service enrollee increased in 2000 after declining the previous 2 years (table 135).

In 1999, 81 percent of **Medicare beneficiaries** were non-Hispanic white, 9 percent were non-Hispanic black, and 7 percent were Hispanic. Some 20–24 percent of Hispanic and non-Hispanic black beneficiaries were persons under 65 entitled to **Medicare through disability**, compared with 11 percent of non-Hispanic white beneficiaries (table 136).

In 2000 **Medicare payments per fee-for-service enrollee** varied by State, ranging from less than \$4,000 in Hawaii and New Mexico to more than \$6,300 in New York, New Jersey, Maryland, the District of Columbia, and Louisiana (table 148).

In 2000 **Medicaid** vendor payments totaled \$168 billion for 43 million recipients (table 137).

In 2000 children under the age of 21 years accounted for 46 percent of **Medicaid recipients** but only 16 percent of expenditures. Aged, blind, and disabled persons accounted for one-quarter of recipients and 70 percent of expenditures (table 137).

In 2000, 21 percent of **Medicaid payments** went to nursing facilities, 14 percent to inpatient general hospitals, 15 percent to capitated payment services, and 12 percent to prescribed drugs (table 138).

In 2000, **Medicaid payments per recipient varied by State** from less than \$2,300 in California and Tennessee to \$7,600 in New York. On average payments per recipient were lower in the Southeast, Southwest, and Far West States than in the New England and Mideast States (table 149).

In 2002 spending on health care by the **Department of Veterans Affairs** was \$23 billion. Forty-one percent of inpatients and 34 percent of outpatients were low-income veterans without a service-connected disability (table 139).

Private Health Insurance

More than 70 percent of the population under 65 years of age has private health insurance, most of which is obtained through the workplace. In private industry, the share of employees' total compensation devoted to health insurance decreased in 2002.

Between 1995 and 2001 the age-adjusted proportion of the population under 65 years of age with **private health insurance** fluctuated between 71 and 73 percent after declining from 77 percent in 1984. More than 90 percent of private coverage was obtained through the workplace (a current or former employer or union) in 2001 (figure 6 and table 127).

In 2002 **private employers' health insurance costs** per employee-hour worked were \$1.29, largely unchanged from \$1.28 in 2001, and an increase from \$1.09 in 2000. Among private employers the share of total compensation devoted to health insurance was 5.9 percent in 2002, down from

6.2 percent in 2001 but higher than the 2000 share, 5.5 percent (table 121).

Health Maintenance Organizations (HMOs)

An HMO is a prepaid health plan delivering comprehensive care to members through designated providers. More than one-quarter of all persons in the United States were enrolled in HMO in 2002. HMO enrollment peaked in 1999 and has declined slowly since then.

Enrollment in HMOs totaled 76 million persons or 26 percent of the U.S. population in 2002. HMO enrollment varied from 20–21 percent in the Midwest and South to 33 percent in the Northeast and 38 percent in the West. HMO enrollment increased steadily through 1999 but declined by more than 5 million between 1999 and 2002. The number of HMO plans decreased by 22 percent to 500 plans during these 3 years (table 132).

In 2002 the percent of the population enrolled in **HMOs** varied among the **States**, from 0 in Alaska to 51 percent in California. States with the next highest HMO enrollment were Massachusetts with 42 percent and Connecticut, Rhode Island, and Maryland, each with at least 35 percent (table 150).

In 2001, 27–29 percent of **children** under 18 years of age and **adults** age 18–44 and 45–64 years had health insurance coverage through a **private HMO**. Nine percent of children had coverage through a **Medicaid HMO** while less than 3 percent of adults under 65 years of age had this coverage (table 131).

State Health Expenditures

Total personal health care per capita expenditures and its components vary substantially among the States. State expenditures are affected by factors such as population age structure and health, payment rates, and supply of services.

Personal health care per capita expenditures averaged \$3,800 in 1998, but varied among the States from \$2,700 in Utah to \$4,800 in Massachusetts. Higher expenditures were clustered in the New England and Mideast States, with lower per capita expenditures in the Rocky Mountain, Southwest, and Far West States (table 140).

The components of personal health care expenditures vary significantly by State. **Hospital care** per capita expenditures

in 1998 ranged from \$1,016 in Utah to \$1,807 in Massachusetts. **Physician** and other professional services per capita expenditures varied from \$763 in Utah to \$1,347 in Minnesota. Per capita expenditures for **nursing home care** ranged from \$90 in Alaska to \$860 in Connecticut (tables 141–143).

Twenty-one percent of all personal health care expenditures were paid by **Medicare** in 1998, up from 17 percent in 1991. The Medicare share of State health expenditures in 1998 varied from 9 percent in Alaska to 25–26 percent in Mississippi, Louisiana, and Pennsylvania and 28 percent in Florida (table 145).

The share of personal health care expenditures paid by **Medicaid** increased from 13 percent in 1991 to 16 percent in 1995 through 1998. The Medicaid share of personal health care expenditures in 1998 ranged from less than 10 percent in Nevada and Virginia, to 21 percent in the District of Columbia, Rhode Island, and Maine, and 32 percent in New York (table 146).

Special Feature: Diabetes

Diabetes is characterized by high levels of blood glucose resulting from defects in insulin secretion, insulin action, or both. Diabetes can be associated with serious complications and premature death, especially if it is not well controlled. Complications can include disorders of the kidneys, nerves, blood vessels, and eye. Diabetes is a major contributing factor to blindness, end-stage renal disease, and lower extremity amputations. Complications, morbidity, and mortality associated with diabetes can be reduced through medical management of the disease. In addition, a healthy lifestyle—weight control, exercise, and healthy diet—can reduce or delay both incidence and complications.

The **age-adjusted prevalence of diagnosed diabetes** increased from 5.3 percent of the adult population in 1997 to 6.5 percent in 2002. Prevalence rises rapidly with age. Adults 65 years and over are more than twice as likely to have diabetes as are persons 45–54 years of age (figure 32).

Diabetes is a group of diseases characterized by high levels of blood glucose (sugar). Type 1 diabetes usually strikes children and young adults and accounts for 5–10 percent of all diagnosed cases. Type 2 diabetes accounts for about 90–95 percent of diagnosed cases. **Risk factors** for developing **type 2 diabetes** include obesity, being physically

inactive, older age, and a family history of diabetes. The rise in diabetes prevalence is likely related, in part, to the rise in obesity among adults and overweight among children and adolescents (figures 15 and 32).

Most people with diabetes visit medical practitioners to become better educated about their condition, to discuss behavioral changes, to receive prescriptions for medications to control their blood sugar levels, or to be monitored and treated for complications of the disease. The rate of **visits to physician's offices or hospital outpatient departments** with any diagnosis of **diabetes** has increased for persons age 45 years and over. Between 1995–96 and 1999–2000, the number of physician visits with any diagnosis of diabetes per 1,000 population increased 35 percent among persons 45–54 and increased 43 percent among persons 55–64 years of age (figure 33).

Persons with diabetes are at increased risk of health complications and hospitalization. Among persons 45 years of age and over **hospital discharges** with any mention of **diabetes** accounted for 22 percent of discharges in 2000–01. Between 1990–91 and 2000–01 the rate of hospital discharges with any mention of diabetes increased for all age groups (figure 34).

Diabetes is a major cause of mortality. In 2000 **diabetes** was the fifth **leading cause of death** among women and the sixth leading cause among men. Diabetes was the underlying cause of death for nearly 70,000 deaths in 2000 and mentioned on the death certificates of at least twice as many additional deaths, contributing to deaths due to such underlying causes as heart disease, stroke, and kidney disease (figures 28 and 30 and table 31).