

Appendix II

Definitions and Methods

Appendix II is an alphabetical listing of terms used in *Health, United States*. It includes cross-references to related terms and synonyms. It also describes the methods used for calculating age-adjusted rates, average annual rate of change, relative standard error, birth rates, death rates, and years of potential life lost. Appendix II includes standard populations used for age adjustment (tables I, II, and III); *International Classification of Diseases* (ICD) codes for cause of death from the Sixth through Tenth Revisions and the years when the Revisions were in effect (tables IV and V); comparability ratios between ICD-9 and ICD-10 for selected causes (table VI); ICD-9-CM codes for external cause-of-injury, diagnostic, and procedure categories (tables VII, IX, and X); and industry codes from the Standard Industrial Classification Manual (table VIII). New standards for presenting Federal data on race and ethnicity are described under *Race* and sample tabulations of National Health Interview Survey (NHIS) data comparing the 1977 and 1997 Standards for Federal data on race and Hispanic origin are presented in tables XI and XII.

Abortion—The Centers for Disease Control and Prevention's (CDC) surveillance system counts legal induced abortions only. For surveillance purposes, legal abortion is defined as a procedure performed by a licensed physician or someone acting under the supervision of a licensed physician to voluntarily terminate a pregnancy.

Acquired immunodeficiency syndrome (AIDS)—All 50 States and the District of Columbia report AIDS cases to CDC using a uniform surveillance case definition and case report form. The case reporting definitions were expanded in 1985 (*MMWR* 1985; 34:373-5); 1987 (*MMWR* 1987; 36 (supp. no. 1S): 1S-15S); 1993 for adults and adolescents (*MMWR* 1992; 41 (no. RR-17): 1-19); and 1994 for pediatric cases (*MMWR* 1994; 43 (no. RR-12): 1-19). The revisions incorporated a broader range of AIDS-indicator diseases and conditions and used HIV diagnostic tests to improve the sensitivity and specificity of the definition. The 1993 expansion of the case definition caused a temporary distortion of AIDS incidence trends. In 1995 new treatments for HIV and AIDS (protease inhibitors) were

approved. These therapies have prevented or delayed the onset of AIDS and premature death among many HIV-infected persons, which should be considered when interpreting trend data. AIDS surveillance data are published annually by CDC in the HIV/AIDS Surveillance Report at www.cdc.gov/hiv/stats/hasrlink.htm. See related *Human immunodeficiency virus (HIV) infection*.

Active physician—See *Physician*.

Activities of daily living (ADL)—Activities of daily living are activities related to personal care and include bathing or showering, dressing, getting in or out of bed or a chair, using the toilet, and eating. In the National Health Interview Survey respondents were asked about needing the help of another person with personal care because of a physical, mental, or emotional problem. Respondents are considered to have an ADL limitation if any condition causing the respondent to need help with the specific activities was chronic.

In the Medicare Current Beneficiary Survey (table 136), if a sample person had any difficulty performing an activity by him or herself and without special equipment, or did not perform the activity at all because of health problems, the person was categorized as having a limitation in that activity. The limitation may have been temporary or chronic at the time of the interview. In the *Chartbook on Trends in Health of Americans, 2003*, a sample person was categorized as having a limitation in their activities of daily living if, in addition to having any difficulty performing an activity or not performing the activity because of health problems, the sample person also received help or supervision with at least one of the following six activities: bathing or showering, dressing, eating, getting in or out of bed or chairs, walking, and using the toilet. Sample persons who were administered a community interview answered health status and functioning questions themselves, if able to do so. A proxy such as a nurse answered questions about the sample person's health status and functioning for those in a long-term care facility. Beginning in 1997, interview questions for persons in long-term care facilities were changed slightly from those administered to persons in the community in order to differentiate residents who were independent from those who received supervision or assistance with transferring, locomotion on unit, dressing, eating, toilet use, and bathing. See related *Condition; Instrumental activities of daily living (IADL); Limitation of activity*.

Addition—An addition to a mental health organization is defined by the Substance Abuse and Mental Health Services Administration’s Center for Mental Health Services as a new admission, a readmission, a return from long-term leave, or a transfer from another service of the same organization or another organization. See related *Mental health organization*; *Mental health service type*.

Admission—The American Hospital Association defines admissions as persons, excluding newborns, accepted for inpatient services during the survey reporting period. See related *Days of care*; *Discharge*; *Inpatient*.

Age—Age is reported as age at last birthday, that is, age in completed years, often calculated by subtracting date of birth from the reference date, with the reference date being the date of the examination, interview, or other contact with an individual.

Mother’s (maternal) age is reported on the birth certificate by all States. Birth statistics are presented for mother’s age 10–49 years through 1996 and 10–54 years starting in 1997, based on mother’s date of birth or age as reported on the birth certificate. The age of mother is edited for upper and lower limits. When the age of the mother is computed to be under 10 years or 55 years or over (50 years or over in 1964–96), it is considered not stated and imputed according to the age of the mother from the previous birth record of the same race and total birth order (total of fetal deaths and live births). Before 1963 not stated ages were distributed in proportion to the known ages for each racial group. Beginning in 1997 the birth rate for the maternal age group 45–49 years includes data for mother’s age 50–54 years in the numerator and is based on the population of women 45–49 years in the denominator.

Age adjustment—Age adjustment is used to compare risks of two or more populations at one point in time or one population at two or more points in time. Age-adjusted rates should be viewed as relative indexes rather than actual measures of risk. Age-adjusted rates are computed by the direct method by applying age-specific rates in a population of interest to a standardized age distribution, in order to eliminate differences in observed rates that result from age differences in population composition.

Age-adjusted rates are calculated by the direct method as follows:

Table I. United States standard population and proportion distribution by age for age adjusting death rates

Age	Population	Proportion distribution (weights)	Standard million
Total	274,634,000	1.000000	1,000,000
Under 1 year	3,795,000	0.013818	13,818
1–4 years	15,192,000	0.055317	55,317
5–14 years	39,977,000	0.145565	145,565
15–24 years	38,077,000	0.138646	138,646
25–34 years	37,233,000	0.135573	135,573
35–44 years	44,659,000	0.162613	162,613
45–54 years	37,030,000	0.134834	134,834
55–64 years	23,961,000	0.087247	87,247
65–74 years	18,136,000	0.066037	66,037
75–84 years	12,315,000	*0.044842	44,842
85 years and over	4,259,000	0.015508	15,508

*Figure is rounded up instead of down to force total to 1.0.

SOURCE: Anderson RN, Rosenberg HM. Age Standardization of Death Rates: Implementation of the Year 2000 Standard. National vital statistics reports; vol 47 no 3. Hyattsville, Maryland: National Center for Health Statistics. 1998.

Table II. Numbers of live births and mother’s age groups used to adjust maternal mortality rates to live births in the United States in 1970

Mother’s age	Number
All ages	3,731,386
Under 20 years	656,460
20–24 years	1,418,874
25–29 years	994,904
30–34 years	427,806
35 years and over	233,342

SOURCE: U.S. Bureau of the Census: Population estimates and projections. *Current Population Reports*. Series P-25, No. 499. Washington, D.C.: U.S. Government Printing Office, May 1973.

$$\sum_{i=1}^n r_i \times (p_i/P)$$

where r_i = rate in age group i in the population of interest

p_i = standard population in age group i

$$P = \sum_{i=1}^n p_i$$

n = total number of age groups over the age range of the age-adjusted rate

Age adjustment by the direct method requires use of a standard age distribution. The standard for age adjusting

death rates and estimates from surveys in *Health, United States* is the projected year 2000 U.S. resident population. Starting with *Health, United States, 2001*, the year 2000 U.S. standard population replaces the 1940 U.S. population for age adjusting mortality statistics. The U.S. standard population also replaces the 1970 civilian noninstitutionalized population and 1980 U.S. resident population, which previously had been used as standard age distributions for age adjusting estimates from NCHS surveys.

Changing the standard population has implications for racial and ethnic differentials in mortality. For example, the mortality ratio for the black to white populations is reduced from 1.6 using the 1940 standard to 1.4 using the 2000 standard, reflecting the greater weight that the 2000 standard gives to the older population where race differentials in mortality are smaller.

For more information on implementing the new population standard for age adjusting death rates, see Anderson RN, Rosenberg HM. Age Standardization of Death Rates: Implementation of the Year 2000 Standard. National vital statistics reports; vol 47 no 3. Hyattsville, Maryland: National Center for Health Statistics. 1998. For more information on the derivation of age adjustment weights for use with NCHS survey data, see Klein RJ, Schoenborn CA. Age Adjustment Using the 2000 Projected U.S. Population. Healthy People Statistical Notes no 20. Hyattsville, Maryland: National Center for Health Statistics. 2001. Both reports are available through the NCHS home page at www.cdc.gov/nchs. The United States standard population is available through the Bureau of the Census home page at www.census.gov/prod/1/pop/p25-1130/, table 2.

Mortality data—Death rates are age adjusted to the year 2000 U.S. standard population (table I). Age-adjusted rates are calculated using age-specific death rates per 100,000 population rounded to 1 decimal place. Adjustment is based on 11 age groups with two exceptions. First, age-adjusted death rates for black males and black females in 1950 are based on nine age groups, with under 1 year and 1–4 years of age combined as one group and 75–84 years and 85 years of age combined as one group. Second, age-adjusted death rates by educational attainment for the age group 25–64 years are based on four 10-year age groups (25–34 years, 35–44 years, 45–54 years, and 55–64 years).

Age-adjusted rates for years of potential life lost (YPLL) before age 75 years also use the year 2000 standard population and are based on eight age groups (under 1 year, 1–14 years, 15–24 years, and 10-year age groups through 65–74 years).

Maternal mortality rates for pregnancy, childbirth, and the puerperium are calculated as the number of deaths per 100,000 live births. These rates are age adjusted to the 1970 distribution of live births by mother's age in the United States as shown in table II. See related [Rate: Death and related rates; Years of potential life lost](#).

National Health and Nutrition Examination Survey—Estimates based on the National Health Examination Survey (NHES) and the National Health and Nutrition Examination Survey (NHANES) are age adjusted to the year 2000 U.S. standard population using five age groups: 20–34 years, 35–44 years, 45–54 years, 55–64 years, and 65–74 years. Beginning in 1999–2000 estimates are age adjusted using three age groups (20–39 years, 40–59 years, and 60–74 years or 60 years and over) due to a smaller sample size; however, use of three rather than five groups had virtually no effect on age-adjusted estimates (see table III). Prior to the 2000 edition of *Health, United States*, these estimates were age adjusted to the 1980 U.S. resident population.

National Health Care Surveys—Estimates based on the National Hospital Discharge Survey (NHDS), the National Survey of Ambulatory Surgery (NSAS), the National Ambulatory Medical Care Survey (NAMCS), the National Hospital Ambulatory Medical Care Survey (NHAMCS), the National Nursing Home Survey (NNHS) (resident rates table), and the National Home and Hospice Care Survey (NHHCS) are age adjusted to the year 2000 U.S. standard population (table III). Information on the age groups used in the age adjustment procedure is contained in the footnotes to the relevant tables.

National Health Interview Survey—Estimates based on the National Health Interview Survey (NHIS) are age adjusted to the year 2000 U.S. standard population (table III). Information on the age groups used in the age adjustment procedure is contained in the footnotes on the relevant tables. Prior to the 2000 edition of *Health, United States* these estimates were age adjusted to the 1970 civilian noninstitutionalized population.

AIDS—See *Acquired immunodeficiency syndrome*.

Alcohol abuse treatment clients—See *Substance abuse treatment clients*.

Alcohol consumption—Alcohol consumption is measured differently in various data systems.

Monitoring the Future Study—This school-based survey of secondary school students collects information on alcohol use using self-completed questionnaires. Information on consumption of alcoholic beverages, defined as beer, wine, wine coolers, and liquor, is based on the following question: “On how many occasions (if any) have you had alcohol to drink- more than just a few sips- in the last 30 days?” Students responding affirmatively are then asked “How many times have you had five or more drinks in a row in the last two weeks?” For this question, a “drink” means a 12-ounce can (or bottle) of beer, a 4-ounce glass of wine, a 12-ounce bottle (or can) of wine cooler, or a mixed drink or shot of liquor.

National Health Interview Survey (NHIS)—Starting with the 1997 NHIS, information on alcohol consumption is collected in the sample adult questionnaire. Adult respondents are asked two screening questions about lifetime alcohol consumption: “In any one year, have you had at least 12 drinks of any type of alcoholic beverage? In your entire life, have you had at least 12 drinks of any type of alcoholic beverage?” Persons who report at least 12 drinks in a lifetime are then asked a series of questions about alcohol consumption in the past year: “In the past year, how often did you drink any type of alcoholic beverage? In the past year, on those days that you drank alcoholic beverages, on the average, how many drinks did you have? In the past year, on how many days did you have 5 or more drinks of any alcoholic beverage?”

National Household Survey on Drug Abuse (NHSDA)—Starting in 1999 NHSDA information about the frequency of the consumption of alcoholic beverages in the past 30 days has been obtained for all persons surveyed who are 12 years of age and over. An extensive list of examples of the kinds of beverages covered was given to respondents prior to the question administration. A “drink” is defined as a can or bottle of beer, a glass of

Table III. United States standard population and age groups used to age adjust survey data

<i>Survey and age</i>	<i>Number in thousands</i>
NHIS, NAMCS, NHAMCS, NHHCS, NNHS, NHDS, and NSAS	
All ages	274,634
18 years and over	203,851
25 years and over	117,593
40 years and over	118,180
65 years and over	34,710
Under 18 years	70,783
2–17 years	63,229
18–44 years	108,150
18–24 years	26,258
25–34 years	37,233
35–44 years	44,659
45–64 years	60,991
45–54 years	37,030
55–64 years	23,961
65–74 years	18,136
75 years and over	16,574
18–49 years	127,956
40–64 years:	
40–49 years	42,285
50–64 years	41,185
NHES and NHANES I–III	
20–74 years	179,276
20–34 years	55,490
35–44 years	44,659
45–54 years	37,030
55–64 years	23,961
65–74 years	18,136
NHANES (1999–2000)	
20–74 years or 20 years and over:	
20–39 years	77,670
40–59 years	72,816
60–74 years	28,790
or	
60 years and over	45,364
SAMHSA's DAWN	
6 years and over	251,751
6–11 years	24,282
12–17 years	23,618
18–25 years	29,679
26–34 years	33,812
35 years and over	140,360

SOURCE: U.S. Bureau of Census: Current Population Reports, P25–1130. Population Projections of the United States by Age, Sex, Race, and Hispanic Origin, table 2. U.S. Government Printing Office, Washington, DC, 1996.

wine or a wine cooler, a shot of liquor, or a mixed drink with liquor in it. Those times when the respondent had only a sip or two from a drink are not considered consumption. Alcohol use is based on the following questions: “During the past 30 days, on how many days

did you drink one or more drinks of an alcoholic beverage?”, “On the days that you drank during the past 30 days, how many drinks did you usually have?”, and “During the past 30 days, on how many days did you have 5 or more drinks on the same occasion?”

Ambulatory care—In the National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey, ambulatory care is health care provided to persons in physician offices, hospital outpatient departments, and hospital emergency departments without their admission to a health facility. See related [Emergency department](#); [Office visit](#); [Outpatient department](#).

Ambulatory surgery—According to the National Survey of Ambulatory Surgery (NSAS), ambulatory surgery refers to previously scheduled surgical and nonsurgical procedures performed on an outpatient basis in a hospital or freestanding ambulatory surgery center’s general or main operating rooms, satellite operating rooms, cystoscopy rooms, endoscopy rooms, cardiac catheterization labs, and laser procedure rooms. Procedures performed in locations dedicated exclusively to dentistry, podiatry, abortion, pain block, or minor procedures are not included. In NSAS, data on up to six surgical and nonsurgical procedures are collected and coded. See related [Outpatient surgery](#); [Procedure](#).

Average annual rate of change (percent change)—In *Health, United States* average annual rates of change or growth rates are calculated as follows:

$$[(P_n / P_o)^{1/N} - 1] \times 100$$

where P_n = later time period

P_o = earlier time period

N = number of years in interval.

This geometric rate of change assumes that a variable increases or decreases at the same rate during each year between the two time periods.

Average length of stay—In the National Health Interview Survey, average length of stay per discharged inpatient is computed by dividing the total number of hospital days for a specified group by the total number of discharges for that group. Similarly, in the National Hospital Discharge Survey, average length of stay is computed by dividing the total number of days of care, counting the date of admission but

not the date of discharge, by the number of patients discharged. The American Hospital Association computes average length of stay by dividing the number of inpatient days by the number of admissions. See related [Days of care](#); [Discharge](#); [Inpatient](#).

Bed—For the American Hospital Association the bed count is the number of beds, cribs, and pediatric bassinets that are set up and staffed for use by inpatients on the last day of the reporting period. In the Center for Medicare & Medicaid Service’s Online Survey Certification and Reporting (OSCAR) database, all beds in certified facilities are counted on the day of certification inspection. The World Health Organization defines a hospital bed as one regularly maintained and staffed for the accommodation and full-time care of a succession of inpatients and situated in a part of the hospital where continuous medical care for inpatients is provided. The Center for Mental Health Services counts the number of beds set up and staffed for use in inpatient and residential treatment services on the last day of the survey reporting period. See related [Hospital](#); [Mental health organization](#); [Mental health service type](#); [Occupancy rate](#).

Birth cohort—A birth cohort consists of all persons born within a given period of time, such as a calendar year.

Birth rate—See [Rate: Birth and related rates](#).

Birthweight—The first weight of the newborn obtained after birth. Low birthweight is defined as less than 2,500 grams or 5 pounds 8 ounces. Very low birthweight is defined as less than 1,500 grams or 3 pounds 4 ounces. Before 1979 low birthweight was defined as 2,500 grams or less and very low birthweight as 1,500 grams or less.

Body mass index (BMI)—BMI is a measure that adjusts bodyweight for height. It is calculated as weight in kilograms divided by height in meters squared. Overweight for children and adolescents is defined as BMI at or above the sex- and age-specific 95th percentile BMI cut points from the 2000 CDC Growth Charts (www.cdc.gov/growthcharts/). Healthy weight for adults is defined as a BMI of 18.5 to less than 25; overweight, as greater than or equal to a BMI of 25; and obesity, as greater than or equal to a BMI of 30. BMI cut points are defined in the Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2000. U.S. Department of Agriculture, Agricultural Research Service, Dietary Guidelines Advisory Committee, p.23, or access on the Internet at

www.health.gov/dietaryguidelines/dgac/; NHLBI Obesity Education Initiative Expert Panel on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults. Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults—The Evidence Report. *Obes Res* 1998;6:51S-209S or access on the Internet at www.nhlbi.nih.gov/guidelines/obesity/ob_gdlns.htm; and in U.S. Department of Health and Human Services. *Tracking Healthy People 2010*. Washington, DC: U.S. Government Printing Office, November 2000. Objectives 19.1, 19.2, and 19.3, or access on the Internet at www.health.gov/healthypeople/document/html/volume2/19nutrition.htm.

Cause of death—For the purpose of national mortality statistics, every death is attributed to one underlying condition, based on information reported on the death certificate and using the international rules for selecting the underlying cause of death from the conditions stated on the death certificate. The underlying cause is defined by the World Health Organization (WHO) as the disease or injury that initiated the train of events leading directly to death, or the circumstances of the accident or violence, which produced the fatal injury. Generally more medical information is reported on death certificates than is directly reflected in the underlying cause of death. The conditions that are not selected as underlying cause of death constitute the nonunderlying cause of death, also known as multiple cause of death.

Cause of death is coded according to the appropriate revision of the *International Classification of Diseases (ICD)* (see [table IV](#)). Effective with deaths occurring in 1999, the United States began using the Tenth Revision of the ICD (ICD-10); during the period 1979–98, causes of death were coded and classified according to the Ninth Revision (ICD-9). [Table V](#) lists ICD codes for the Sixth through Tenth Revisions for causes of death shown in *Health, United States*.

Each of these revisions has produced discontinuities in cause-of-death trends. These discontinuities are measured using comparability ratios. These measures of discontinuity are essential to the interpretation of mortality trends. For further discussion, see the Mortality Technical Appendix available on the NCHS web site at www.cdc.gov/nchs/about/major/dvs/mortdata.htm. See related [Comparability ratio](#); [International Classification of Diseases](#); [Appendix I, National Vital Statistics System, Multiple Cause of Death File](#).

Table IV. Revision of the *International Classification of Diseases (ICD)* according to year of conference by which adopted and years in use in the United States

<i>Revision of the International Classification of Diseases</i>	<i>Year of conference by which adopted</i>	<i>Years in use in United States</i>
First	1900	1900–1909
Second	1909	1910–1920
Third	1920	1921–1929
Fourth	1929	1930–1938
Fifth	1938	1939–1948
Sixth	1948	1949–1957
Seventh	1955	1958–1967
Eighth	1965	1968–1978
Ninth	1975	1979–1998
Tenth	1992	1999–

Cause-of-death ranking—Selected causes of death of public health and medical importance comprise tabulation lists and are ranked according to the number of deaths assigned to these causes. The top-ranking causes determine the leading causes of death. Certain causes on the tabulation lists are not ranked if, for example, the category title represents a group title (such as Major cardiovascular diseases and Symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified); or the category title begins with the words “Other” and “All other.” In addition when one of the titles that represents a subtotal (such as Malignant neoplasms) is ranked, its component parts are not ranked. The tabulation lists used for ranking in the *Tenth Revision of the International Classification of Diseases (ICD)* include the List of 113 Selected Causes of Death, which replaces the ICD-9 List of 72 Selected Causes, HIV infection and Alzheimer’s disease; and the ICD-10 List of 130 Selected Causes of Infant Death, which replaces the ICD-9 List of 60 Selected Causes of Infant Death and HIV infection. Causes that are tied receive the same rank; the next cause is assigned the rank it would have received had the lower-ranked causes not been tied, i.e., skip a rank. See related [International Classification of Diseases](#).

Chronic condition—See [Condition](#).

Cigarette smoking—Cigarette smoking and related tobacco use are measured in several different data systems.

Birth File—Information on cigarette smoking of the mother during pregnancy is based on Yes No responses to the birth certificate item “Other risk factors for this

Table V. Cause-of-death codes, according to applicable revision of *International Classification of Diseases (ICD)*

Cause of death (Tenth Revision titles)	Sixth and Seventh Revisions	Eighth Revision	Ninth Revision	Tenth Revision
Communicable diseases . . . . .	...	...	001–139, 460–466, 480–487, 771.3	A00–B99, J00–J22
Chronic and noncommunicable diseases . . . . .	...	...	140–459, 470–478, 490–799	C00–I99, J30–R99
Injuries . . . . .	...	...	E800–E869, E880–E929, E950–E999	V01–Y34, Y85–Y87, Y89
Meningococcal Infection . . . . .	...	...	036	A39
Septicemia . . . . .	...	...	038	A40–A41
Human immunodeficiency virus (HIV) disease ¹ . . . . .	...	...	*042–*044	B20–B24
Malignant neoplasms	140–205	140–209	140–208	C00–C97
Colon, rectum, and anus	153–154	153–154	153, 154	C18–C21
Trachea, bronchus, and lung	162–163	162	162	C33–C34
Breast	170	174	174–175	C50
Prostate	177	185	185	C61
In situ neoplasms and benign neoplasms . . . . .	...	...	210–239	D00–D48
Diabetes mellitus	260	250	250	E10–E14
Anemias . . . . .	...	...	280–285	D50–D64
Meningitis . . . . .	...	...	320–322	G00, G03
Alzheimer's disease . . . . .	...	...	331.0	G30
Diseases of heart	6th: 410–443 7th: 400–402, 410–443	390–398, 402, 404, 410–429	390–398, 402, 404, 410–429	I00–I09, I11, I13, I20–I51
Ischemic heart disease . . . . .	...	...	410–414, 429.2	I20–I25
Cerebrovascular diseases	330–334	430–438	430–434, 436–438	I60–I69
Atherosclerosis . . . . .	...	...	440	I70
Influenza and pneumonia	480–483, 490–493	470–474, 480–486	480–487	J10–J18
Chronic lower respiratory diseases	241, 501, 502, 527.1	490–493, 519.3	490–494, 496	J40–J47
Chronic liver disease and cirrhosis	581	571	571	K70, K73–K74
Nephritis, nephrotic syndrome, and nephrosis . . . . .	...	...	580–589	N00–N07, N17–N19, N25–N27
Pregnancy, childbirth, and the puerperium	640–689	630–678	630–676	A34, O00–O95, O98–O99
Congenital malformations, deformations, and chromosomal abnormalities . . . . .	...	...	740–759	Q00–Q99
Certain conditions originating in the perinatal period . . . . .	...	...	760–779	P00–P96
Newborn affected by maternal complications of pregnancy . . . . .	...	...	761	P01
Newborn affected by complications of placenta, cord, and membranes . . . . .	...	...	762	P02
Disorders related to short gestation and low birthweight, not elsewhere classified . . . . .	...	...	765	P07
Birth trauma . . . . .	...	...	767	P10–P15
Intrauterine hypoxia and birth asphyxia . . . . .	...	...	768	P20–P21
Respiratory distress of newborn . . . . .	...	...	769	P22
Sudden infant death syndrome . . . . .	...	...	798.0	R95
Unintentional injuries ²	E800–E936, E960–E965	E800–E929, E940–E946	E800–E869, E880–E929	V01–X59, Y85–Y86
Motor vehicle-related injuries ²	E810–E835	E810–E823	E810–E825	V02–V04, V09.0, V09.2, V12–V14, V19.0–V19.2, V19.4–V19.6, V20–V79, V80.3–V80.5, V81.0–V81.1, V82.0–V82.1, V83–V86, V87.0–V87.8, V88.0–V88.8, V89.0, V89.2
Suicide	E963, E970–E979	E950–E959	E950–E959	X60–X84, Y87.0
Homicide	E964, E980–E983	E960–E969	E960–E969	X85–Y09, Y87.1
Injury by firearms . . . . .	...	E922, E955, E965, E970, E985	E922, E955.0–E955.4, E965.0–E965.4, E970, E985.0–E985.4	W32–W34, X72–X74, X93–X95, Y22–Y24, Y35.0

... Cause-of-death code numbers are not provided for causes not shown in *Health, United States*.

¹Categories for coding human immunodeficiency virus infection were introduced in 1987. The * indicates codes are not part of the Ninth Revision.

²In the public health community, the term "unintentional injuries" is preferred to "accidents" and "motor vehicle-related injuries" to "motor vehicle accidents."

pregnancy: Tobacco use during pregnancy.” See related [Tobacco use](#).

Monitoring the Future Survey—Information on current cigarette smoking is obtained for high school seniors (starting in 1975) and eighth and tenth graders (starting in 1991) based on the following question: “How frequently have you smoked cigarettes during the past 30 days?”

National Health Interview Survey (NHIS)—Information about cigarette smoking is obtained for adults 18 years of age and over. Starting in 1993 current smokers are identified based on the following two questions: “Have you smoked at least 100 cigarettes in your entire life?” and “Do you now smoke cigarettes every day, some days, or not at all?” Persons who smoked 100 cigarettes and who now smoke every day or some days are defined as current smokers. Before 1992 current smokers were identified based on positive responses to the following two questions: “Have you smoked 100 cigarettes in your entire life?” and “Do you smoke now?” (traditional definition). In 1992 the definition of current smoker in the NHIS was modified to specifically include persons who smoked on “some days.” (revised definition). In 1992 cigarette smoking data were collected for a half-sample with half the respondents (one-quarter sample) using the traditional smoking questions and the other half of respondents (one-quarter sample) using the revised smoking question (“Do you smoke every day, some days, or not at all?”). An unpublished analysis of the 1992 traditional smoking measure revealed that the crude percent of current smokers 18 years of age and over remained the same as 1991. The statistics for 1992 combine data collected using the traditional and the revised questions.

In 1993–95 estimates of cigarette smoking prevalence were based on a half-sample. Smoking data were not collected in 1996. Starting in 1997 smoking data were collected in the sample adult questionnaire. For further information on survey methodology and sample sizes pertaining to the NHIS cigarette smoking data for data years 1965–92 and other sources of cigarette smoking data available from the National Center for Health Statistics, see: National Center for Health Statistics, *Bibliographies and Data Sources, Smoking Data Guide*, no. 1, DHHS pub. no. (PHS) 91-1308-1, Public Health

Service. Washington, DC: U.S. Government Printing Office. 1991.

National Household Survey on Drug Abuse—Information on current cigarette smoking is obtained for all persons surveyed who are 12 years of age and over based on the following question: “During the past 30 days, have you smoked part or all of a cigarette?”

Youth Risk Behavior Survey—Information on current cigarette smoking is obtained from high school students (starting in 1991) based on the following question: “During the past 30 days, on how many days did you smoke cigarettes?”

Civilian noninstitutionalized population; Civilian population—See [Population](#).

Cocaine-related emergency department episodes—The Drug Abuse Warning Network monitors selected adverse medical consequences of cocaine and other drug abuse episodes by measuring contacts with hospital emergency departments. Contacts may be for drug overdose, unexpected drug reactions, chronic abuse, detoxification, or other reasons in which drug use is known to have occurred.

Cohort fertility—Cohort fertility refers to the fertility of the same women at successive ages. Women born during a 12-month period constitute a birth cohort. Cohort fertility for birth cohorts of women is measured by central birth rates, which represent the number of births occurring to women of an exact age divided by the number of women of that exact age. Cumulative birth rates by a given exact age represent the total childbearing experience of women in a cohort up to that age. Cumulative birth rates are sums of central birth rates for specified cohorts and show the number of children ever born up to the indicated age. For example, the cumulative birth rate for women exactly 30 years of age as of January 1, 1960, is the sum of the central birth rates for the 1930 birth cohort for the years 1944 (when its members were age 14) through 1959 (when they were age 29). Cumulative birth rates are also calculated for specific birth orders at each exact age of woman. The percent of women who have not had at least one live birth by a certain age is found by subtracting the cumulative first birth rate for women of that age from 1,000 and dividing by 10. For method of calculation, see Heuser RL. *Fertility tables for birth cohorts by color*:

United States, 1917–73. Rockville, Maryland: NCHS. 1976. See related [Rate: Birth and related rates](#).

Community hospitals—See [Hospital](#).

Comparability ratio—About every 10–20 years the *International Classification of Diseases (ICD)* is revised to stay abreast of advances in medical science and changes in medical terminology. Each of these revisions produces breaks in the continuity of cause-of-death statistics. Discontinuities across revisions are due to changes in classification and rules for selecting underlying cause of death. Classification and rule changes impact cause-of-death trend data by shifting deaths away from some cause-of-death categories and into others. Comparability ratios measure the effect of changes in classification and coding rules. For causes shown in [table VI](#), comparability ratios range between 0.9754 and 1.0588, except for influenza and pneumonia, with a comparability ratio of 0.6982, indicating that influenza and pneumonia is about 30 percent less likely to be selected as the underlying cause of death in ICD-10 than in ICD-9; and HIV disease with a comparability ratio of 1.1448, indicating that HIV disease is more than 14 percent more likely to be selected as the underlying cause using ICD-10 coding.

Another factor also contributes to discontinuities in death rates across revisions. For selected causes of death, the ICD-9 codes used to calculate death rates for 1980 through 1998 differ from the ICD-9 codes most nearly comparable with the corresponding ICD-10 cause-of-death category. Examples of these causes are ischemic heart disease, cerebrovascular diseases, trachea, bronchus and lung cancer, unintentional injuries, and homicide. To address this source of discontinuity, mortality trends for 1980–98 were recalculated using ICD-9 codes that are more comparable with codes for corresponding ICD-10 categories. [Table V](#) shows the ICD-9 codes used for these causes. While this modification may lessen the discontinuity between the Ninth and Tenth Revisions, the effect on the discontinuity between the Eighth and Ninth Revisions is not measured.

Preliminary comparability ratios shown in [table VI](#) are based on a comparability study in which the same deaths were coded by both the Ninth and Tenth Revisions. The comparability ratio was calculated by dividing the number of deaths classified by ICD-10 by the number of deaths classified by ICD-9. The resulting ratios represent the net effect of the Tenth Revision on cause-of-death statistics and can be used to adjust mortality statistics for causes of death

classified by the Ninth Revision to be comparable with cause-specific mortality statistics classified by the Tenth Revision.

The application of comparability ratios to mortality statistics helps to make the analysis of change between 1998 and 1999 more accurate and complete. The 1998 comparability-modified death rate is calculated by multiplying the comparability ratio by the 1998 death rate. Comparability-modified rates should be used to estimate mortality change between 1998 and 1999.

Caution should be taken when applying the comparability ratios presented in [table VI](#) to age-, race-, and sex-specific mortality data. Demographic subgroups may sometimes differ with regard to their cause-of-death distribution, and this would result in demographic variation in cause-specific comparability ratios.

For more information, see Anderson RN, Minino AM, Hoyert DL, Rosenberg HM. Comparability of cause of death between ICD-9 and ICD-10: Preliminary estimates; and Kochanek KD, Smith BL, Anderson RN. Deaths: Preliminary data for 1999. National vital statistics reports. vol 49 no 2 and vol 49 no 3. Hyattsville, MD: National Center for Health Statistics. 2001. See related [Cause of death; International Classification of Diseases; tables IV and V](#).

Compensation—See [Employer costs for employee compensation](#).

Condition—A health condition is a departure from a state of physical or mental well-being. In the National Health Interview Survey, each condition reported as a cause of an individual's activity limitation has been classified as "chronic," "not chronic," or "unknown if chronic," based on the nature of the condition and/or the duration of the condition. Conditions that are not cured once acquired (such as heart disease, diabetes, and birth defects in the original response categories, and amputee and "old age" in the ad hoc categories) are considered chronic, while conditions related to pregnancy are always considered not chronic. Additionally, other conditions must have been present 3 months or longer to be considered chronic. An exception is made for children less than 1 year of age who have had a condition "since birth," as these conditions are always considered chronic. The National Nursing Home Survey uses a specific list of chronic conditions, disregarding time of onset.

Table VI. Comparability of selected causes of death between the Ninth and Tenth Revisions of the *International Classification of Diseases (ICD)*

<i>Cause of death</i> ¹	<i>Preliminary comparability ratio</i> ²
Human immunodeficiency virus (HIV) disease	1.1448
Malignant neoplasms	1.0068
Colon, rectum, and anus	0.9993
Trachea, bronchus, and lung	0.9837
Breast	1.0056
Prostate	1.0134
Diabetes mellitus	1.0082
Diseases of heart	0.9858
Ischemic heart diseases	0.9990
Cerebrovascular diseases	1.0588
Influenza and pneumonia	0.6982
Chronic lower respiratory diseases	1.0478
Chronic liver disease and cirrhosis	1.0367
Pregnancy, childbirth, and the puerperium	*
Unintentional injuries	1.0305
Motor vehicle-related injuries	0.9754
Suicide	0.9962
Homicide	0.9983
Injury by firearms	0.9973
Chronic and noncommunicable diseases	1.0100
Injuries	1.0117
Communicable diseases	0.8536
HIV disease	1.1448
Other communicable diseases	0.8023

*Figure does not meet standards of reliability or precision.

¹See table V for ICD-9 and ICD-10 cause-of-death codes.

²Ratio of number of deaths classified by ICD-10 to number of deaths classified by ICD-9.

SOURCE: Anderson RN, Miniño AM, Hoyert DL, Rosenberg HM. Comparability of cause-of-death classification between ICD-9 and ICD-10: Preliminary estimates. *National Vital Statistics Reports*. Vol 49 No 2. Hyattsville, Maryland: National Center for Health Statistics. 2001.

Consumer Price Index (CPI)—The CPI is prepared by the U.S. Bureau of Labor Statistics. It is a monthly measure of the average change in the prices paid by urban consumers for a fixed market basket of goods and services. The medical care component of CPI shows trends in medical care prices based on specific indicators of hospital, medical, dental, and drug prices. A revision of the definition of CPI has been in use since January 1988. See related [Gross domestic product; Health expenditures, national; Appendix I, Consumer Price Index](#).

Crude birth rate; Crude death rate—See [Rate: Birth and related rates](#); [Rate: Death and related rates](#).

Days of care—Days of care is defined similarly in different data systems. See related [Admission](#); [Average length of stay](#); [Discharge](#); [Hospital](#); [Hospital Utilization](#); [Inpatient](#).

American Hospital Association—Days, hospital days, or inpatient days are the number of adult and pediatric days of care rendered during the entire reporting period. Days of care for newborns are excluded.

National Health Interview Survey (NHIS)—Hospital days during the year refer to the total number of hospital days occurring in the 12-month period before the interview week. A hospital day is a night spent in the hospital for persons admitted as inpatients. Starting in 1997 hospitalization data from NHIS are for all inpatient stays, whereas estimates for prior years published in *Health, United States* excluded hospitalizations for deliveries and newborns.

National Hospital Discharge Survey—Days of care refers to the total number of patient days accumulated by inpatients at the time of discharge from non-Federal short-stay hospitals during a reporting period. All days from and including the date of admission but not including the date of discharge are counted.

Death rate—See [Rate: Death and related rates](#).

Dental visit—Starting in 1997 National Health Interview Survey respondents were asked “About how long has it been since you last saw or talked to a dentist? Include all types of dentists, such as orthodontists, oral surgeons, and all other dental specialists as well as hygienists.” Starting in 2001 the question was modified slightly to ask respondents how long has it been since they last saw a dentist. Questions about dental visits were not asked for children under 2 years of age for years 1997–99 and under 1 year of age for 2000 and beyond. Estimates are presented for persons with a dental visit in the past year. Prior to 1997 dental visit estimates were based on a 2-week recall period.

Diagnosis—See [First-listed diagnosis](#).

Diagnostic and other nonsurgical procedures—See [Procedure](#).

Discharge—The National Health Interview Survey defines a hospital discharge as the completion of any continuous period of stay of 1 night or more in a hospital as an inpatient. According to the National Hospital Discharge Survey, a discharge is a completed inpatient hospitalization. A hospitalization may be completed by death or by releasing the patient to the customary place of residence, a nursing

home, another hospital, or other locations. See related [Admission](#); [Average length of stay](#); [Days of care](#); [Inpatient](#).

Domiciliary care homes—See [Nursing home](#).

Drug abuse—See [Illicit drug use](#).

Drug abuse treatment clients—See [Substance abuse treatment clients](#).

Education—Several approaches to defining educational categories are used in this report. In survey data educational categories are based on information about educational credentials, such as diplomas and degrees. In vital statistics educational attainment is based on years of school completed.

Birth File—Information on educational attainment of mother is based on number of years of school completed, as reported by the mother on the birth certificate. Between 1970 and 1992 the reporting area for maternal education expanded.

Mother's education was reported on the birth certificate by 38 States in 1970. Data were not available from Alabama, Arkansas, California, Connecticut, Delaware, District of Columbia, Georgia, Idaho, Maryland, New Mexico, Pennsylvania, Texas, and Washington. In 1975 these data became available from four additional States, Connecticut, Delaware, Georgia, Maryland, and the District of Columbia, increasing the number of States reporting mother's education to 42 and the District of Columbia. Between 1980 and 1988 only three States, California, Texas, and Washington, did not report mother's education. In 1988 mother's education was also missing from New York State outside New York City. In 1989–91 mother's education was missing only from Washington and New York State outside New York City. Starting in 1992 mother's education was reported by all 50 States and the District of Columbia.

Mortality File—Information on educational attainment of decedent became available for the first time in 1989 due to revision of the U.S. Standard Certificate of Death. Decedent's educational attainment is reported on the death certificate by the funeral director based on information provided by an informant such as next of kin. Mortality data by educational attainment for 1989 were based on data from 20 States and by 1994–96 increased

to 45 States and the District of Columbia. In 1994–96 the following States either did not report educational attainment on the death certificate or the information was more than 20 percent incomplete: Georgia, Kentucky, Oklahoma, Rhode Island, and South Dakota. In 1997–2000 information on decedent's education was available from Oklahoma, increasing the reporting area to 46 States and the District of Columbia (DC). With the addition of Kentucky in 2001, the reporting area increased to 47 States and DC.

Calculation of unbiased death rates by educational attainment based on the National Vital Statistics System requires that the reporting of education on the death certificate be complete and consistent with the reporting of education on the Current Population Survey, the source of population estimates for denominators for death rates. Death records that are missing information about decedent's education are not included in the calculation of rates. Therefore the levels of death rates by educational attainment shown in this report are underestimated by approximately the percent with not stated education, which ranges from 3 to 9 percent.

The validity of information about the decedent's education was evaluated by comparing self-reported education obtained in the Current Population Survey with education on the death certificate for decedents in the National Longitudinal Mortality Survey (NLMS). (Sorlie PD, Johnson NJ: Validity of education information on the death certificate, *Epidemiology* 7(4):437–9, 1996.) Another analysis compared self-reported education collected in the first National Health and Nutrition Examination Survey (NHANES I) with education on the death certificate for decedents in the NHANES I Epidemiologic Followup Study. (Makuc DM, Feldman JJ, Mussolino ME: Validity of education and age as reported on death certificates, *American Statistical Association. 1996 Proceedings of the Social Statistics Section*, 102–6, 1997.) Results of both studies indicated that there is a tendency for some people who did not graduate from high school to be reported as high school graduates on the death certificate. This tendency results in overstating the death rate for high school graduates and understating the death rate for the group with less than 12 years of education. The bias was greater among older than younger decedents and somewhat greater among black than white decedents.

In addition, educational gradients in death rates based on the National Vital Statistics System were compared with those based on the NLMS, a prospective study of persons in the Current Population Survey. Results of these comparisons indicate that educational gradients in death rates based on the National Vital Statistics System were reasonably similar to those based on NLMS for white persons 25–64 years of age and black persons 25–44 years of age. The number of deaths for persons of Hispanic origin in NLMS was too small to permit comparison for this ethnic group. For further information on measurement of education, see: Kominski R and Siegel PM. Measuring education in the Current Population Survey. *Monthly Labor Review*, September 1993: 34–38.

National Health Interview Survey (NHIS)—Beginning in 1997 the NHIS questionnaire was changed to ask “What is the highest level of school ___ has completed or the highest degree received?” Responses were used to categorize individuals according to educational credentials (for example, no high school diploma or general educational development (GED) high school equivalency diploma; high school diploma or GED; some college, no bachelor’s degree; bachelor’s degree or higher).

Prior to 1997 the education variable in NHIS was measured by asking, “What is the highest grade or year of regular school ___ has ever attended?” and “Did ___ finish the grade/year?” Responses were used to categorize individuals according to years of education completed (for example, less than 12 years, 12 years, 13–15 years, and 16 or more years).

Data from the 1996 and 1997 NHIS were used to compare distributions of educational attainment for adults 25 years of age and over using categories based on educational credentials (1997) with categories based on years of education completed (1996). A larger percent of persons reported “some college” than “13–15 years” of education and a correspondingly smaller percent reported “high school diploma or GED” than “12 years of education.” In 1997, 19 percent of adults reported no high school diploma, 31 percent a high school diploma or GED, 26 percent some college, and 24 percent a bachelor’s degree or higher. In 1996, 18 percent of adults reported less than 12 years of education,

37 percent 12 years of education, 20 percent 13–15 years, and 25 percent 16 or more years of education.

Emergency department—According to the National Hospital Ambulatory Medical Care Survey (NHAMCS), an emergency department is a hospital facility that provides unscheduled outpatient services to patients whose conditions require immediate care and is staffed 24 hours a day. Off-site emergency departments open less than 24 hours are included if staffed by the hospital’s emergency department. See related [Emergency department visit](#); [Outpatient department](#).

Emergency department visit—Starting with the 1997 National Health Interview Survey, respondents to the sample adult and sample child questionnaires are asked about the number of visits to hospital emergency rooms during the past 12 months, including visits that resulted in hospitalization. In the National Hospital Ambulatory Medical Care Survey an emergency department visit is a direct personal exchange between a patient and a physician or other health care providers working under the physician’s supervision, for the purpose of seeking care and receiving personal health services. See related [Emergency department](#); [Injury-related visit](#).

Employer costs for employee compensation—This is a measure of the average cost per employee hour worked to employers for wages and salaries and benefits. Wages and salaries are defined as the hourly straight-time wage rate, or for workers not paid on an hourly basis, straight-time earnings divided by the corresponding hours. Straight-time wage and salary rates are total earnings before payroll deductions, excluding premium pay for overtime and for work on weekends and holidays, shift differentials, nonproduction bonuses, and lump-sum payments provided in lieu of wage increases. Production bonuses, incentive earnings, commission payments, and cost-of-living adjustments are included in straight-time wage and salary rates. Benefits covered are paid leave—paid vacations, holidays, sick leave, and other leave; supplemental pay—premium pay for overtime and work on weekends and holidays, shift differentials, nonproduction bonuses, and lump-sum payments provided in lieu of wage increases; insurance benefits—life, health, and sickness and accident insurance; retirement and savings benefits—pension and other retirement plans and savings and thrift plans; legally required benefits—social security, railroad retirement and supplemental retirement, railroad unemployment insurance, Federal and State unemployment

insurance, workers' compensation, and other benefits required by law, such as State temporary disability insurance; and other benefits—severance pay and supplemental unemployment plans. See related [Appendix I, National Compensation Survey](#).

Environmental Protection Agency Standards—The Federal Clean Air Act of 1970, amended in 1977 and 1990, requires the Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards. EPA has set specific standards for each of six major pollutants: carbon monoxide, lead, nitrogen dioxide, ozone, sulfur dioxide, and particulate matter whose aerodynamic size is equal to or less than 10 microns (PM-10). Each pollutant standard represents a maximum concentration level (micrograms per cubic meter) that cannot be exceeded during a specified time interval. For more information, see www.epa.gov/oar/oaqps.

Ethnicity—See [Hispanic origin](#).

Expenditures—See [Health expenditures, national](#); [Appendix I, National Health Accounts](#).

Family income—For purposes of the National Health Interview Survey (NHIS) and National Health and Nutrition Examination Survey (NHANES), all people within a household related to each other by blood, marriage, or adoption constitute a family. Each member of a family is classified according to the total income of the family. Unrelated individuals are classified according to their own income. In the NHIS (in years prior to 1997) and NHANES, family income was the total income received by members of a family (or by an unrelated individual) in the 12 months before the interview. Starting in 1997 the NHIS collected family income data for the calendar year prior to the interview (for example, 1997 family income data were based on 1996 calendar year information). Family income includes wages, salaries, rents from property, interest, dividends, profits and fees from their own businesses, pensions, and help from relatives. Family income data are used in the computation of poverty level. For data years 1990–96, about 16–18 percent of persons had missing data on poverty level. Missing values were imputed for family income using a sequential hot deck within matrix cells imputation approach. A detailed description of the imputation procedure as well as data files with imputed annual family income for 1990–96 are available from NCHS on CD-ROM NHIS Imputed Annual Family Income 1990–96, series 10, no 9A. See related [Poverty level](#).

Federal hospitals—See [Hospital](#).

Federal physicians—See [Physician](#).

Fee-for-service health insurance—This is private (commercial) health insurance that reimburses health care providers on the basis of a fee for each health service provided to the insured person. It is also known as indemnity health insurance. Medicare Parts A and B are sometimes referred to as “Medicare fee-for-service.” See related [Health insurance coverage](#); [Medicare](#).

Fertility rate—See [Rate: Birth and related rates](#).

Fetal death—A fetal death is death before the complete expulsion or extraction from its mother, irrespective of the duration of pregnancy; the death is indicated by the fact that after such separation, the fetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. For statistical purposes, fetal deaths are classified according to gestational age. In this report tabulations are shown for fetal deaths with stated or presumed gestation of 20 weeks or more and of 28 weeks or more, the latter gestational age group also known as late fetal deaths. See related [Gestation](#); [Live birth](#); [Rate: Death and related rates](#).

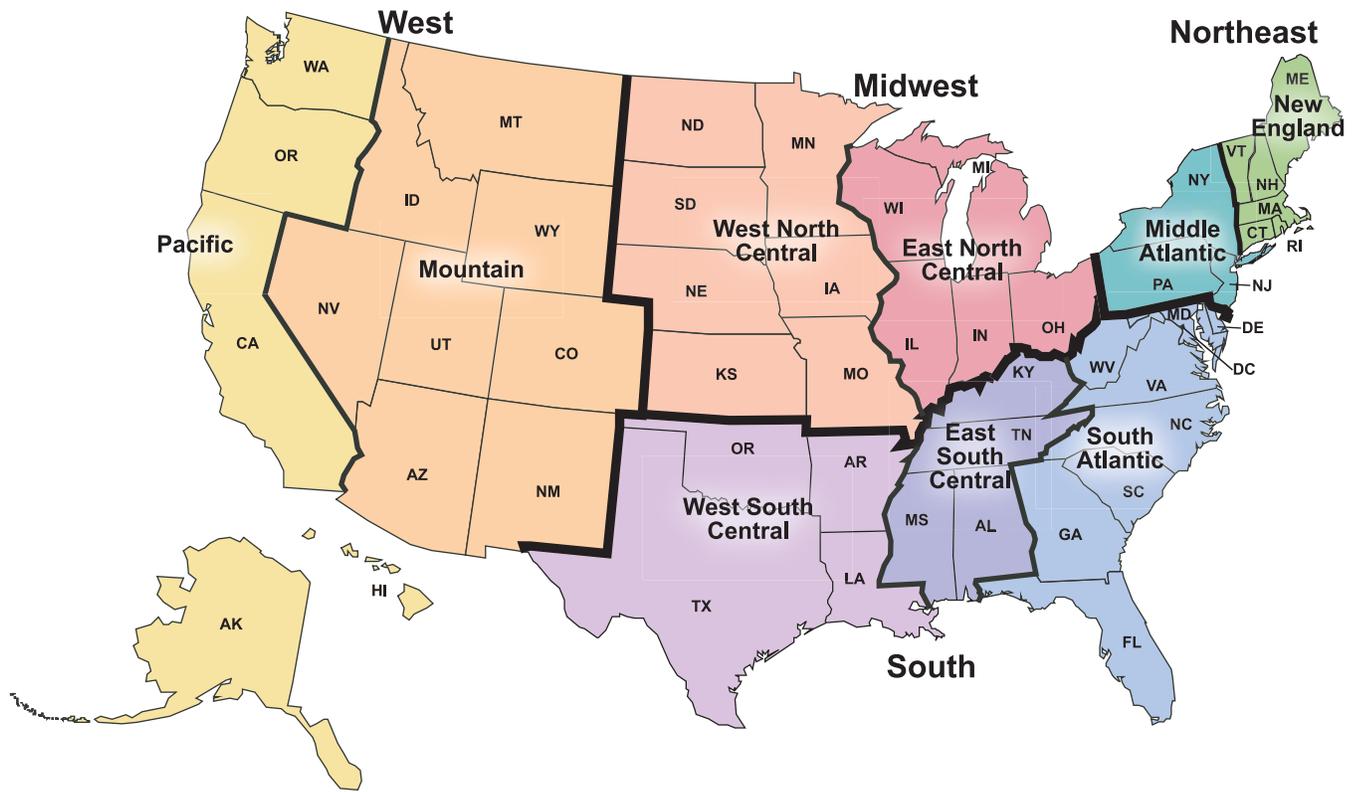
First-listed diagnosis—In the National Hospital Discharge Survey, this is the first recorded diagnosis on the medical record face sheet (summary sheet).

First-listed external cause of injury—In the National Hospital Ambulatory Medical Care Survey, this is the first-listed external cause of injury coded from the Patient Record Form (PRF). Up to three causes of injury can be reported on the PRF. Injuries are coded by NCHS to the *International Classification of Diseases, Ninth Revision, Clinical Modification* Supplementary Classification of External Causes of Injury and Poisoning. See [table VII](#) for a listing of injury categories and codes. See related [Injury-related visit](#).

General hospitals—See [Hospital](#).

General hospital psychiatric services—See [Mental health organization](#).

Figure I. Census Bureau: Four Geographic Regions and 9 Divisions of the United States



Geographic region and division—The U.S. Bureau of the Census groups the 50 States and the District of Columbia for statistical purposes into four geographic regions—Northeast, Midwest, South, and West—and nine divisions, based on geographic proximity. See [figure I](#).

The Department of Commerce’s Bureau of Economic Analysis (BEA) groups States into eight regions based on their homogeneity with respect to income characteristics, industrial

composition of the employed labor force, and such noneconomic factors as demographic, social, and cultural characteristics. See [figure II](#).

Three Census Bureau divisions—West North Central, East North Central, and New England—and three BEA regions—Plains, Great Lakes, and New England—are composed of the same States. The States composing the remaining Census Bureau divisions differ from those composing the corresponding BEA regions.

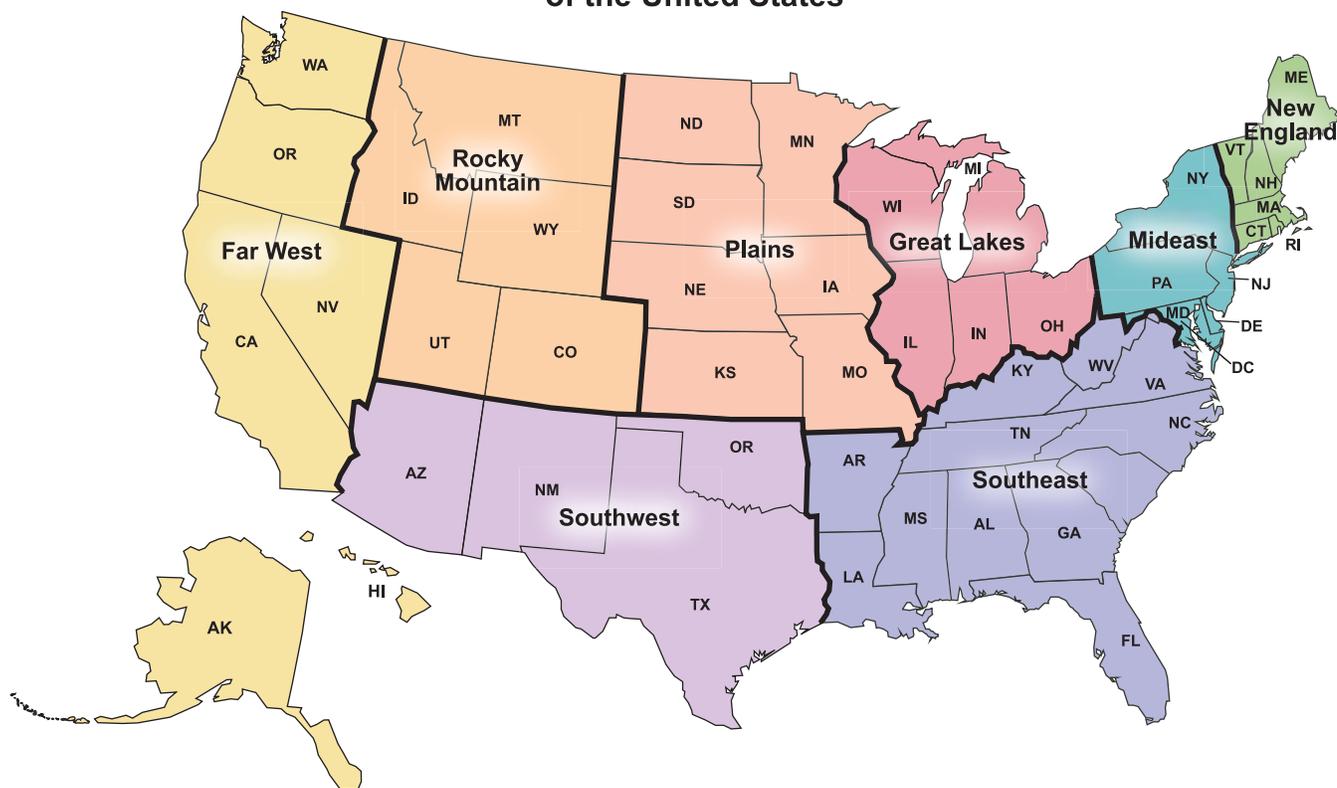
Table VII. Codes for first-listed external causes of injury from the *International Classification of Diseases, Ninth Revision, Clinical Modification*

<i>External cause of injury category</i>	<i>E-Code numbers</i>
Unintentional	E800–E869, E880–E929
Motor vehicle traffic	E810–E819
Falls	E880–E886, E888
Struck by or against objects or persons	E916–E917
Caused by cutting and piercing instruments or objects	E920
Intentional (suicide and homicide)	E950–E969

Gestation—For the National Vital Statistics System and the Centers for Disease Control and Prevention’s Abortion Surveillance, the period of gestation is defined as beginning with the first day of the last normal menstrual period and ending with the day of birth or day of termination of pregnancy. See related [Abortion](#); [Fetal death](#); [Live birth](#).

Gross domestic product (GDP)—GDP is the market value of the goods and services produced by labor and property located in the United States. As long as the labor and property are located in the United States, the suppliers (that

Figure II. Bureau of Economic Analysis: Eight Geographic Regions of the United States



is, the workers and, for property, the owners) may be U.S. residents or residents of other countries. See related [Consumer Price Index](#); [Health expenditures, national](#).

Health care contact—Starting in 1997 the National Health Interview Survey has been collecting information on health care contacts with doctors and other health care professionals using the following questions: “During the past 12 months, how many times have you gone to a hospital emergency room about your own health?”; “During the past 12 months, did you receive care at home from a nurse or other health care professional? What was the total number of home visits received?” “During the past 12 months, how many times have you seen a doctor or other health care professional about your own health at a doctor’s office, a clinic, or some other place? Do not include times you were hospitalized overnight, visits to hospital emergency rooms, home visits, or telephone calls.” Beginning in 2000 this question was amended to also exclude dental visits. For each question respondents were shown a flashcard with response categories of 0, 1, 2–3, 4–9, 10–12, or 13 or more visits in 1997–99. Starting in 2000

response categories were expanded to: 0, 1, 2–3, 4–5, 6–7, 8–9, 10–12, 13–15, 16 or more. Analyses of the percent of persons with health care visits were tabulated as follows: For tabulation of the 1997–99 data, responses of 2–3 were recoded to 2 and responses of 4–9 were recoded to 6. Starting in 2000 tabulation of responses of 2–3 were recoded to 2 and other responses were recoded to the midpoint of the range. A summary measure of health care visits was constructed by adding recoded responses for these questions and categorizing the sum as: none, 1–3, 4–9, or 10 or more health care visits in the past 12 months.

Analyses of the percent of children without a health care visit are based upon the following question: “During the past 12 months, how many times has ___ seen a doctor or other health care professional about (his/her) health at a doctor’s office, a clinic, or some other place? Do not include times ___ was hospitalized overnight, visits to hospital emergency rooms, home visits, or telephone calls.” See related [Emergency department visit](#); [Home visit](#).

Health expenditures, national—See related *Consumer price index*; *Gross domestic product*.

Health services and supplies expenditures—These are outlays for goods and services relating directly to patient care plus expenses for administering health insurance programs and government public health activities. This category is equivalent to total national health expenditures minus expenditures for research and construction.

National health expenditures—This measure estimates the amount spent for all health services and supplies and health-related research and construction activities consumed in the United States during the calendar year. Detailed estimates are available by source of expenditures (for example, out-of-pocket payments, private health insurance, and government programs), and by type of expenditures (for example, hospital care, physician services, and drugs), and are in current dollars for the year of report. Data are compiled from a variety of sources.

Nursing home expenditures—These cover care rendered in establishments primarily engaged in providing inpatient nursing and rehabilitative services and continuous personal care services to persons requiring nursing care (skilled nursing and intermediate care facilities, including those for the mentally retarded) and continuing care retirement communities with on-site nursing care facilities. The costs of long-term care provided by hospitals are excluded.

Personal health care expenditures—These are outlays for goods and services relating directly to patient care. The expenditures in this category are total national health expenditures minus expenditures for research and construction, expenses for administering health insurance programs, and government public health activities.

Private expenditures—These are outlays for services provided or paid for by nongovernmental sources—consumers, insurance companies, private industry, philanthropic, and other nonpatient care sources.

Public expenditures—These are outlays for services provided or paid for by Federal, State, and local government agencies or expenditures required by

governmental mandate (such as workmen's compensation insurance payments).

Health insurance coverage—The term "health insurance" is broadly defined to include both public and private payors who cover medical expenditures incurred by a defined population in a variety of settings.

National Health Interview Survey (NHIS)—NHIS respondents were asked about their health insurance coverage in the previous month in 1993–96 and at the time of the interview in other years. Questions on health insurance coverage were expanded starting in 1993 compared with previous years. In 1997 the entire questionnaire was redesigned and data were collected using a computer-assisted personal interview (CAPI).

Respondents are covered by private health insurance if they indicate private health insurance or if they are covered by a single-service hospital plan, except in 1997 and 1998 when no information on single-service plans was obtained. Private health insurance includes managed care such as health maintenance organizations (HMOs).

Until 1996 persons were defined as having Medicaid or other public assistance coverage if they indicated that they had either Medicaid or other public assistance, or if they reported receiving Aid to Families with Dependent Children (AFDC) or Supplemental Security Income (SSI). After welfare reform in late 1996, Medicaid was delinked from AFDC and SSI. Starting in 1997 persons have been considered covered by Medicaid if they report Medicaid or a State-sponsored health program. Starting in 1998 persons are considered covered by Medicaid if they report being covered by the State Children's Health Insurance Program (SCHIP). Medicare or military health plan coverage is also determined in the interview and, starting in 1997, other government-sponsored program coverage is determined as well.

If respondents do not report coverage under one of the above types of plans and they have unknown coverage under either private health insurance or Medicaid, they are considered to have unknown coverage.

The remaining respondents are considered uninsured. The uninsured are persons who do not have coverage under private health insurance, Medicare, Medicaid, public assistance, a State-sponsored health plan, other government-sponsored programs, or a military health

plan. Persons with only Indian Health Service coverage are considered uninsured. Estimates of the percent of persons who are uninsured based on the NHIS (table 129) may differ slightly from those based on the March Current Population Survey (CPS) (table 151) due to differences in survey questions, recall period, and other aspects of survey methodology.

In 2001 in the NHIS 1.3 percent of persons age 65 years and over had no health insurance but the small sample size precludes the presentation of separate estimates for this population. Therefore the term “uninsured” refers only to the population under age 65.

See related [Fee-for-service health insurance](#); [Health maintenance organization](#); [Managed care](#); [Medicaid](#); [Medicare](#); [State Children’s Health Insurance Program \(SCHIP\)](#); [Uninsured](#).

Health maintenance organization (HMO)—An HMO is a health care system that assumes or shares both the financial risks and the delivery risks associated with providing comprehensive medical services to a voluntarily enrolled population in a particular geographic area, usually in return for a fixed, prepaid fee. Pure HMO enrollees use only the prepaid capitated health services of the HMO panel of medical care providers. Open-ended HMO enrollees use the prepaid HMO health services but, in addition may receive medical care from providers who are not part of the HMO panel. There is usually a substantial deductible, copayment, or coinsurance associated with use of nonpanel providers.

HMO model types are:

Group model HMO—An HMO that contracts with a single multi-specialty medical group to provide care to the HMO’s membership. The group practice may work exclusively with the HMO, or it may provide services to non-HMO patients as well. The HMO pays the medical group a negotiated per capita rate, which the group distributes among its physicians, usually on a salaried basis.

Staff model HMO—A type of closed-panel HMO (where patients can receive services only through a limited number of providers) in which physicians are employees of the HMO. The providers see members in the HMO’s own facilities.

Network model HMO—An HMO model that contracts with multiple physician groups to provide services to HMO members; may involve large single and multi-specialty groups.

Individual practice association (IPA)—A type of healthcare provider organization composed of a group of independent practicing physicians who maintain their own offices and band together for the purpose of contracting their services to HMOs, PPOs (preferred provider organizations), and insurance companies. An IPA may contract with and provide services to both HMO and non-HMO plan participants.

Mixed model HMO—An HMO that combines features of more than one HMO model.

See related [Managed care](#); [Point-of-service plan](#); [Preferred provider organization](#).

Health services and supplies expenditures—See [Health expenditures, national](#).

Health status, respondent-assessed—Health status was measured in the National Health Interview Survey by asking the respondent “Would you say _____’s health is excellent, very good, good, fair, or poor?”

Healthy People 2010—Healthy People 2010 is the prevention agenda for the Nation. It is a statement of national health objectives designed to identify the most significant preventable threats to health and to establish national goals to reduce these threats. Healthy People 2010 is a set of health objectives for the Nation to achieve over the first decade of the new century. More information on Healthy People 2010 is available at www.health.gov/healthypeople. See related [Leading Health Indicators](#).

Hispanic origin—Hispanic or Latino origin includes persons of Mexican, Puerto Rican, Cuban, Central and South American, and other or unknown Latin American or Spanish origins. Persons of Hispanic origin may be of any race. In the National Health Interview Survey questionnaire, questions on Hispanic origin are self-reported and precede questions on race.

Birth File—The reporting area for an Hispanic-origin item on the birth certificate expanded between 1980 and 1993. Trend data on births of Hispanic and non-Hispanic

parentage in this report are affected by expansion of the reporting area and by immigration. These two factors affect numbers of events, composition of the Hispanic population, and maternal and infant health characteristics.

In 1980 and 1981 information on births of Hispanic parentage was reported on the birth certificate by the following 22 States: Arizona, Arkansas, California, Colorado, Florida, Georgia, Hawaii, Illinois, Indiana, Kansas, Maine, Mississippi, Nebraska, Nevada, New Jersey, New Mexico, New York, North Dakota, Ohio, Texas, Utah, and Wyoming. In 1982 Tennessee, and in 1983 the District of Columbia began reporting this information. Between 1983 and 1987 information on births of Hispanic parentage was available for 23 States and the District of Columbia. In 1988 this information became available for Alabama, Connecticut, Kentucky, Massachusetts, Montana, North Carolina, and Washington, increasing the number of States reporting information on births of Hispanic parentage to 30 States and the District of Columbia. In 1989 this information became available from an additional 17 States, increasing the number of Hispanic-reporting States to 47 and the District of Columbia. In 1989 only Louisiana, New Hampshire, and Oklahoma did not report Hispanic parentage on the birth certificate. With the inclusion of Oklahoma in 1989 and Louisiana in 1990 as Hispanic-reporting States, 99 percent of birth records included information on mother's origin. Hispanic origin of the mother was reported on the birth certificates of 49 States and the District of Columbia in 1991 and 1992; only New Hampshire did not provide this information. Starting in 1993 Hispanic origin of mother was reported by all 50 States and the District of Columbia.

Mortality File—The reporting area for an Hispanic-origin item on the death certificate expanded between 1985 and 1997. In 1985 mortality data by Hispanic origin of decedent were based on deaths to residents of the following 17 States and the District of Columbia whose data on the death certificate were at least 90 percent complete on a place-of-occurrence basis and of comparable format: Arizona, Arkansas, California, Colorado, Georgia, Hawaii, Illinois, Indiana, Kansas, Mississippi, Nebraska, New York, North Dakota, Ohio, Texas, Utah, and Wyoming. In 1986 New Jersey began reporting Hispanic origin of decedent, increasing the

number of reporting States to 18 and the District of Columbia in 1986 and 1987. In 1988 Alabama, Kentucky, Maine, Montana, North Carolina, Oregon, Rhode Island, and Washington were added to the reporting area, increasing the number of States to 26 and the District of Columbia. In 1989 an additional 18 States were added, increasing the Hispanic reporting area to 44 States and the District of Columbia. In 1989 only Connecticut, Louisiana, Maryland, New Hampshire, Oklahoma, and Virginia were not included in the reporting area. Starting with 1990 data in this book, the criterion was changed to include States whose data were at least 80 percent complete. In 1990 Maryland, Virginia, and Connecticut, in 1991 Louisiana, and in 1993 New Hampshire were added, increasing the reporting area for Hispanic origin of decedent to 47 States and the District of Columbia in 1990, 48 States and the District of Columbia in 1991 and 1992, and 49 States and the District of Columbia in 1993–96. Only Oklahoma did not provide this information in 1993–96. Starting in 1997 Hispanic origin of decedent was reported by all 50 States and the District of Columbia. Based on data from the U.S. Bureau of the Census, the 1990 reporting area encompassed 99.6 percent of the U.S. Hispanic population. In 1990 more than 96 percent of death records included information on Hispanic origin of decedent.

See related [Race](#).

HIV—See [Human immunodeficiency virus \(HIV\) disease](#).

Home health care—Home health care as defined by the National Home and Hospice Care Survey is care provided by a home health care agency to individuals and families in their place of residence for promoting, maintaining, or restoring health; or for minimizing the effects of disability and illness including terminal illness.

Home visit—Starting in 1997 the National Health Interview Survey has been collecting information on home visits received during the past 12 months. Respondents are asked “During the past 12 months, did you receive care at home from a nurse or other health care professional? What was the total number of home visits received?” These data are combined with data on visits to doctors' offices, clinics, and emergency departments to provide a summary measure of health care visits. See related [Emergency department visit](#); [Health care contact](#).

Hospice care—Hospice care as defined by the National Home and Hospice Care Survey is a program of palliative and supportive care services providing physical, psychological, social, and spiritual care for dying persons, their families, and other loved ones by a hospice program or agency. Hospice services are available in home and inpatient settings.

Hospital—According to the American Hospital Association, hospitals are licensed institutions with at least six beds whose primary function is to provide diagnostic and therapeutic patient services for medical conditions by an organized physician staff, and have continuous nursing services under the supervision of registered nurses. The World Health Organization considers an establishment to be a hospital if it is permanently staffed by at least one physician, can offer inpatient accommodation, and can provide active medical and nursing care. Hospitals may be classified by type of service, ownership, size in terms of number of beds, and length of stay. In the National Hospital Ambulatory Medical Care Survey, hospitals include all those with an average length of stay for all patients of less than 30 days (short-stay) or hospitals whose specialty is general (medical or surgical) or children's general. Federal hospitals and hospital units of institutions and hospitals with fewer than six beds staffed for patient use are excluded. See related [Average length of stay](#); [Bed](#); [Days of care](#); [Emergency department](#); [Inpatient](#); [Outpatient department](#).

Community hospital, based on the American Hospital Association definition, includes all non-Federal short-term general and special hospitals whose facilities and services are available to the public. Special hospitals include obstetrics and gynecology; eye, ear, nose, and throat; rehabilitation; orthopedic; and other specialty services. Short-term general and special childrens hospitals are also considered to be community hospitals. A hospital may include a nursing-home-type unit and still be classified as short-term, provided that the majority of its patients are admitted to units where the average length of stay is less than 30 days. Hospital units of institutions such as prisons and college infirmaries that are not open to the public and are contained within a nonhospital facility are not included in the category of community hospitals. Traditionally the definition included all non-Federal short-stay hospitals except facilities for the mentally retarded. In a revised definition the following additional sites were excluded: hospital units of

institutions, and alcoholism and chemical dependency facilities.

Federal hospitals are operated by the Federal Government.

For profit hospitals are operated for profit by individuals, partnerships, or corporations.

General hospitals provide diagnostic, treatment, and surgical services for patients with a variety of medical conditions. According to the World Health Organization, these hospitals provide medical and nursing care for more than one category of medical discipline (for example, general medicine, specialized medicine, general surgery, specialized surgery, and obstetrics). Excluded are hospitals, usually in rural areas, that provide a more limited range of care.

Nonprofit hospitals are controlled by nonprofit organizations, including religious organizations, fraternal societies, and others.

Psychiatric hospitals are ones whose major type of service is psychiatric care. See related [Mental health organization](#).

Registered hospitals are hospitals registered with the American Hospital Association. About 98 percent of hospitals are registered.

Short-stay hospitals in the National Hospital Discharge Survey are those in which the average length of stay is less than 30 days. The National Health Interview Survey defines short-stay hospitals as any hospital or hospital department in which the type of service provided is general; maternity; eye, ear, nose, and throat; childrens; or osteopathic.

Specialty hospitals, such as psychiatric, tuberculosis, chronic disease, rehabilitation, maternity, and alcoholic or narcotic, provide a particular type of service to the majority of their patients.

Hospital-based physician—See [Physician](#).

Hospital days—See [Days of care](#).

Hospital utilization—Estimates of hospital utilization (such as hospital discharge rate, days of care rate, and average length

of stay) presented in *Health, United States* are based on data from two different sources—the National Health Interview Survey (NHIS) and the National Hospital Discharge Survey (NHDS). Estimates of hospital utilization from these two surveys may differ because NHIS data are based on household interviews of the civilian noninstitutionalized population whereas NHDS data are based on hospital discharge records of all persons. Starting in 1997 hospital utilization data from the NHIS are for all hospital discharges whereas estimates for prior years excluded hospitalizations for delivery and newborns. NHDS includes hospital discharge records for all persons discharged alive or deceased and institutionalized persons, and excludes data for newborn infants. Differences in hospital utilization estimated by the two surveys are particularly evident for children and the elderly. For children NHIS estimates are higher than NHDS estimates due to inclusion of data for newborns. For the elderly NHDS estimates are higher than NHIS estimates because of inclusion of data for institutionalized persons and persons who died while hospitalized. See related [Average length of stay](#); [Days of care](#); [Discharge](#); [Appendix I, National Health Interview Survey](#), [National Hospital Discharge Survey](#).

Human immunodeficiency virus (HIV) disease—Mortality and morbidity coding for HIV disease are similar and have evolved over time.

Mortality coding—Starting with data year 1999 and the introduction of the Tenth Revision of the *International Classification of Diseases* (ICD-10), the title for this cause of death was changed to “HIV disease” from “HIV infection” and the ICD codes changed to B20-B24. Beginning with data for 1987, NCHS introduced category numbers *042-044 for classifying and coding HIV infection as a cause of death in ICD-9. The asterisk before the category numbers indicates that these codes were not part of the original ICD-9. HIV infection was formerly referred to as human T-cell lymphotropic virus-III/lymphadenopathy-associated virus (HTLV-III/LAV) infection. Before 1987 deaths involving HIV infection were classified to Deficiency of cell-mediated immunity (ICD-9 279.1) contained in the title All other diseases; to Pneumocystosis (ICD-9 136.3) contained in the title All other infectious and parasitic diseases; to Malignant neoplasms, including neoplasms of lymphatic and hematopoietic tissues; and to a number of other causes. Therefore, before 1987, death statistics for HIV infection

are not strictly comparable with data for 1987 and later years, and are not shown in this report.

Morbidity coding—The National Hospital Discharge Survey codes diagnosis data using the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM). Discharges with diagnosis of HIV as shown in *Health, United States* have at least one HIV diagnosis listed on the face sheet of the medical record and are not limited to the first-listed diagnosis. During 1984 and 1985 only data for AIDS (ICD-9-CM 279.19) were included. In 1986–94 discharges with the following diagnoses were included: acquired immunodeficiency syndrome (AIDS), human immunodeficiency virus (HIV) infection and associated conditions, and positive serological or viral culture findings for HIV (ICD-9-CM 042–044, 279.19, and 795.8). Beginning in 1995 discharges with the following diagnoses were included: human immunodeficiency virus (HIV) disease and asymptomatic human immunodeficiency virus (HIV) infection status (ICD-9-CM 042 and V08).

See related [Acquired immunodeficiency syndrome](#); [Cause of death](#); [International Classification of Diseases](#); [International Classification of Diseases, Ninth Revision, Clinical Modification](#).

ICD; ICD codes—See [Cause of death](#); [International Classification of Diseases](#).

Illicit drug use—Illicit drug use refers to use and misuse of illegal and controlled drugs.

Monitoring the Future Study—In this school-based survey of secondary school students, information on marijuana use is collected using self-completed questionnaires. The information is based on the following questions: “On how many occasions (if any) have you used marijuana in the last 30 days?” and “On how many occasions (if any) have you used hashish in the last 30 days?” Questions on cocaine use include the following: “On how many occasions (if any) have you taken “crack” (cocaine in chunk or rock form) during the last 30 days?” and “On how many occasions (if any) have you taken cocaine in any other form during the last 30 days.”

National Household Survey on Drug Abuse—Information on illicit drug use is collected for all persons 12 years of age and over. Information on any illicit drug use, including marijuana or hashish, cocaine, heroin, hallucinogens, and nonmedical use of prescription drugs is based on the following question: “During the past 30 days, on how many days did you use (specific illicit drug)?” See related [Substance use](#).

Incidence—Incidence is the number of cases of disease having their onset during a prescribed period of time. It is often expressed as a rate (for example, the incidence of measles per 1,000 children 5–15 years of age during a specified year). Incidence is a measure of morbidity or other events that occur within a specified period of time. See related [Prevalence](#).

Income—See [Family Income](#).

Individual practice association (IPA)—See [Health maintenance organization \(HMO\)](#).

Industry of employment—Industries are classified according to the *Standard Industrial Classification (SIC) Manual* of the Office of Management and Budget. Two editions of the SIC are used for coding industry data in *Health, United States*: the 1977 supplement to the 1972 edition and the 1987 edition. The changes between versions include a few detailed titles created to correct or clarify industries or to recognize changes within the industry. Codes for major industry divisions ([table VIII](#)) were not changed between versions.

Health data by industry shown in *Health, United States* are from two different surveys conducted by the Bureau of Labor Statistics, the Census of Fatal Occupational Injuries (CFOI) and the Survey of Occupational Injuries and Illnesses (SOII).

Table VIII. Codes for industries, according to the *Standard Industrial Classification (SIC) Manual*

Industry	Code numbers
Agriculture, forestry, and fishing	01–09
Mining	10–14
Construction	15–17
Manufacturing	20–39
Transportation and public utilities	40–49
Wholesale trade	50–51
Retail trade	52–59
Finance, insurance, and real estate	60–67
Services	70–89
Public administration	91–97

Establishments engaged in the same kind of economic activity are classified by the same industry code, regardless of whether ownership is by corporations or sole proprietorships in the private sector, or government agencies. The category “private sector” includes all industry divisions except public administration and military, which are in the public sector. The category “not classified” is used when there is insufficient information to determine a specific industry classification. Data from CFOI are presented separately for private sector and government. Data from SOII are presented for the private sector only and exclude the self-employed.

Infant death—An infant death is the death of a live-born child before his or her first birthday. Age at death may be further classified according to neonatal and postneonatal. Neonatal deaths are those that occur before the 28th day of life; postneonatal deaths are those that occur between 28 and 365 days of age. See related [Live birth](#); [Rate: Death and related rates](#).

Injury—See [First-listed external cause of injury](#).

Injury-related visit—In the National Hospital Ambulatory Medical Care Survey an emergency department visit was considered injury related if, on the Patient Record Form (PRF), the checkbox for injury was indicated. In addition, injury visits were identified if the physician’s diagnosis was injury related (ICD-9-CM code of 800–999), an external cause-of-injury code was present (ICD-9-CM E800–E999), or the patient’s reason for visit code was injury related. See related [Emergency department visit](#); [First-listed external cause of injury](#).

Inpatient—An inpatient is a person who is formally admitted to the inpatient service of a hospital for observation, care, diagnosis, or treatment. See related [Admission](#); [Average length of stay](#); [Days of care](#); [Discharge](#); [Hospital](#).

Inpatient care—See [Mental health service type](#).

Inpatient days—See [Days of care](#).

Instrumental activities of daily living (IADL)—Instrumental activities of daily living are activities related to independent living and include preparing meals, managing money, shopping for groceries or personal items, performing light or heavy housework, and using a telephone. In the Medicare Current Beneficiary Survey if a sample person had any difficulty performing an activity by him or herself and without

special equipment, or did not perform the activity at all because of health problems, the person was categorized as having a limitation in that activity. The limitation may have been temporary or chronic at the time of the interview. Sample persons in the community answered health status and functioning questions themselves, if able to do so. For sample persons in a long-term care facility, a proxy such as a nurse answered questions about the sample person's health status and functioning.

In the National Health Interview Survey (NHIS) respondents are asked about needing the help of another person for handling routine IADL needs due to a physical, mental, or emotional problem. Persons are considered to have an IADL limitation in the NHIS if any causal condition is chronic.

See related [Activities of daily living \(ADL\)](#); [Limitation of activity](#).

Insured—See [Health insurance coverage](#).

Intermediate care facilities—See [Nursing home](#).

International Classification of Diseases—The ICD provides the ground rules for coding and classifying cause-of-death data. The ICD is developed collaboratively between the World Health Organization (WHO) and 10 international centers, one of which is housed at NCHS. The purpose of the ICD is to promote international comparability in the collection, classification, processing, and presentation of health statistics. Since the beginning of the century, the ICD has been modified about once every 10 years, except for the 20-year interval between ICD-9 and ICD-10 (see [table IV](#)). The purpose of the revisions is to stay abreast with advances in medical science. New revisions usually introduce major disruptions in time series of mortality statistics (see [tables V](#) and [VI](#)). For more information, see www.cdc.gov/nchs/about/major/dvs/icd10des.htm. See related [Cause of death](#); [Comparability ratio](#); [International Classification of Diseases, Ninth Revision, Clinical Modification](#).

International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)—The ICD-9-CM is based on and is compatible with the World Health Organization's *International Classification of Diseases, Ninth Revision* (ICD-9). The United States currently uses ICD-9-CM to code morbidity diagnoses and inpatient procedures. ICD-9-CM consists of three volumes. Volumes 1 and 2 contain the

diagnosis tabular list and index. Volume 3 contains the procedure classification (tabular and index combined).

ICD-9-CM is divided into 17 chapters and 2 supplemental classifications. The chapters are arranged primarily by body system. In addition there are chapters for infectious and parasitic diseases; neoplasms; endocrine, nutritional, and metabolic diseases; mental disorders; complications of pregnancy, childbirth and puerperium; certain conditions originating in the perinatal period; congenital anomalies; and symptoms, signs and ill-defined conditions. The two supplemental classifications are for factors influencing health status and contact with health service and external causes of injury and poisoning. For additional information about ICD-9-CM, see www.cdc.gov/nchs/icd9.htm. See related [International Classification of Diseases](#).

In *Health, United States* morbidity data are classified using ICD-9-CM. Diagnostic categories and codes for ICD-9-CM are shown in [table IX](#); ICD-9-CM procedure categories and codes are shown in [table X](#). Starting with data year 1999 the United States began using ICD-10 to code mortality data.

Late fetal death rate—See [Rate: Death and related rates](#).

Leading causes of death—See [Cause-of-death ranking](#).

Leading Health Indicators—Leading Health Indicators (LHIs) are used to measure important determinants of the Nation's health during the first decade of the twenty-first century. Five of the indicators relate primarily to individual behaviors including physical activity, overweight and obesity, tobacco use, substance abuse, and responsible sexual behavior. The other five address mental health, injury and violence, environmental quality, immunization, and access to health care. More information on the LHIs is available at www.health.gov/healthypeople/LHI/. See related [Healthy People 2010](#).

Length of stay—See [Average length of stay](#).

Life expectancy—Life expectancy is the average number of years of life remaining to a person at a particular age and is based on a given set of age-specific death rates, generally the mortality conditions existing in the period mentioned. Life expectancy may be determined by race, sex, or other characteristics using age-specific death rates for the population with that characteristic. See related [Rate: Death and related rates](#).

Table IX. Codes for diagnostic categories from the *International Classification of Diseases, Ninth Revision, Clinical Modification*

<i>Diagnostic category</i>	<i>Code numbers</i>
Females with delivery	V27
Human immunodeficiency virus (HIV) (1984–85)	279.19
(1986–94)	042–044, 279.19, 795.8
(Beginning in 1995)	042, V08
Malignant neoplasms	140–208
Large intestine and rectum	153–154, 197.5
Trachea, bronchus, and lung	162, 197.0, 197.3
Breast	174–175, 198.81
Prostate	185
Diabetes	250
Alcohol and drug	291–292, 303–305
Serious mental illness	295–298
Diseases of the nervous system and sense organs	320–389
Diseases of the circulatory system	390–459
Diseases of heart	391–392.0, 393–398, 402, 404, 410–416, 420–429
Ischemic heart disease	410–414
Acute myocardial infarction	410
Congestive heart failure	428.0
Cerebrovascular diseases	430–438
Diseases of the respiratory system	460–519
Pneumonia	466.1, 480–487.0
Asthma	493
Hyperplasia of prostate	600
Decubitus ulcers	707.0
Diseases of the musculoskeletal system and connective tissue	710–739
Osteoarthritis	715
Intervertebral disc disorders	722
Injuries and poisoning	800–999
Fracture, all sites	800–829
Fracture of neck of femur (hip)	820

Table X. Codes for procedure categories from the *International Classification of Diseases, Ninth Revision, Clinical Modification*

<i>Procedure category</i>	<i>Code numbers</i>
Extraction of lens	13.1–13.6
Insertion of prosthetic lens (pseudophakos)	13.7
Myringotomy with insertion of tube	20.01
Tonsillectomy, with or without adenoidectomy	28.2–28.3
Coronary angioplasty (Prior to 1997)	36.0
(Beginning in 1997)	36.01–36.05, 36.09
Coronary artery bypass graft	36.1
Cardiac catheterization	37.21–37.23
Pacemaker insertion or replacement	37.7–37.8
Carotid endarterectomy	38.12
Endoscopy of large or small intestine with or without biopsy	45.11–45.14, 45.16, 45.21–45.25
Cholecystectomy	51.2
Prostatectomy	60.2–60.6
Bilateral destruction or occlusion of fallopian tubes	66.2–66.3
Hysterectomy	68.3–68.7, 68.9
Cesarean section	74.0–74.2, 74.4, 74.99
Repair of current obstetrical laceration	75.5–75.6
Reduction of fracture	76.7, 79.0–79.3
Arthroscopy of knee	80.26
Excision or destruction of intervertebral disc	80.5
Total hip replacement	81.51
Lumpectomy	85.21
Mastectomy	85.4
Angiocardiology with contrast material	88.5

Limitation of activity—In the National Health Interview Survey limitation of activity refers to a long-term reduction in a person’s capacity to perform the usual kind or amount of activities associated with his or her age group due to a chronic condition. Limitation of activity is assessed by asking respondents a series of questions about limitations in their ability to perform activities usual for their age group because of a physical, mental, or emotional problem. Respondents are asked about limitations in activities of daily living, instrumental activities of daily living, play, school, work, difficulty walking or remembering, and any other activity limitations. For reported limitations, the causal health conditions are determined and respondents are considered limited if one or more of these conditions is chronic. See related [Activities of daily living](#); [Condition](#); [Instrumental activities of daily living](#).

Live birth—A live birth is the complete expulsion or extraction of the neonate from its mother, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life such as heartbeat, umbilical cord pulsation, or definite movement of voluntary muscles, whether the umbilical cord has been cut or the placenta is attached. Each product of such a birth is considered live born. See related [Gestation](#); [Rate: Birth and related rates](#).

Live-birth order—In the National Vital Statistics System this item from the birth certificate refers to the total number of live births the mother has had, including the present birth as recorded on the birth certificate. Fetal deaths are excluded. See related [Live birth](#).

Long term care facility—See [Nursing home](#).

Low birthweight—See [Birthweight](#).

Mammography—Mammography is an x-ray image of the breast used to detect irregularities in breast tissue. In the National Health Interview Survey questions concerning use of mammography differed slightly across the years for which data are shown. In 1987 and 1990 women were asked to report when they had their last mammogram. In 1991 women were asked whether they had a mammogram in the past 2 years. In 1993 and 1994 women were asked whether they had a mammogram within the past year, between 1 and 2 years ago, or over 2 years ago. In 1998 women were asked whether they had a mammogram a year ago or less, more than 1 year but not more than 2 years, or more than 2 years

ago. In 1999 women were asked when they had their most recent mammogram in days, weeks, months, or years. In 1999, 10 percent of women in the sample responded “2 years ago” and in this analysis these women were coded as “within the past 2 years” although a response of “2 years ago” may include women whose last mammogram was more than 2 but less than 3 years ago. Thus estimates for 1999 are overestimated to some degree in comparison with estimates in previous years. In 2000 women were asked when they had their most recent mammogram (give month and year). Women who did not respond were given a followup question that used the 1999 wording and women who did not answer the followup question were asked a second followup question that used the 1998 wording. In 2000, 2 percent of women in the sample answered “2 years ago” using the 1999 wording and they were coded as “within the past 2 years.” Thus estimates for 2000 may be slightly overestimated in comparison with estimates for years prior to 1999.

Managed care—A term originally used to refer to the prepaid health care sector (e.g., health maintenance organizations or HMOs) where care is provided under a fixed budget and costs are therein capable of being “managed.” Increasingly, the term is being used to include preferred provider organizations (PPOs) and even forms of indemnity insurance coverage (or fee-for-service insurance) that incorporate preadmission certification and other utilization controls. See related [Health maintenance organization](#); [Preferred provider organization](#).

Marital status—Marital status is classified through self-reporting into the categories married and unmarried. The term married encompasses all married people including those separated from their spouses. Unmarried includes those who are single (never married), divorced, or widowed. The abortion surveillance program classified separated people as unmarried before 1978.

Birth File—In 1970, 39 States and the District of Columbia (DC) and in 1975, 38 States and DC included a direct question about mother’s marital status on the birth certificate. Since 1980 national estimates of births to unmarried women have been based on two methods for determining marital status, a direct question in the birth registration process and inferential procedures. In 1980–96 marital status was reported on the birth certificates of 41–45 States and DC; with the addition of California in 1997, 46 States and DC; and in 1998–2001,

48 States and DC. In 1997, all but four States (Connecticut, Michigan, Nevada, and New York) and, in 1998, all but two States (Michigan and New York) included a direct question about mother's marital status on their birth certificates. In 1998–2001 marital status was imputed as “married” on those 0.03–0.05 percent of birth records with missing information in the 48 States and DC where this information was obtained by a direct question.

For States lacking a direct question, marital status was inferred. Before 1980 the incidence of births to unmarried women in States with no direct question on marital status was assumed to be the same as the incidence in reporting States in the same geographic division. Starting in 1980 for States without a direct question, marital status was inferred by comparing the parents' and child's surnames. Inferential procedures in current use depend on the presence of a paternity acknowledgment or missing information on the father. Changes in reporting procedures by some States in 1995 and 1997 had little effect on national totals, but did affect trends for age groups and some State trends. Details of the changes in reporting procedures are described in Ventura SJ, Bachrach CA. Nonmarital Childbearing in the United States, 1940–99. National vital statistics reports; vol 48 no 16. Hyattsville, Maryland: National Center for Health Statistics. 2000, available at www.cdc.gov/nchs/births.htm.

Maternal age—See [Age](#).

Maternal death—Maternal death is defined by the World Health Organization as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes. A maternal death is one for which the certifying physician has designated a maternal condition as the underlying cause of death. Maternal conditions are those assigned to pregnancy, childbirth, and the puerperium, ICD-10 codes A34, O00-O95, O98-O99 (see [table V](#)). Changes have been made in the classification and coding of maternal deaths between ICD-9 and ICD-10, effective with mortality data for 1999. ICD-10 changes pertain to indirect maternal causes and timing of death relative to pregnancy. If only indirect maternal causes of death (i.e., a previously existing disease or a disease that developed during pregnancy which was not due to direct obstetric causes but

was aggravated by physiologic effects of pregnancy) are reported in Part I of the death certificate and pregnancy is reported in either Part I or Part II, ICD-10 classifies this as a maternal death. ICD-9 only classified the death as maternal if pregnancy was reported in Part I. Some State death certificates include a separate question regarding pregnancy status. A positive response to the question is interpreted as “pregnant” being reported in Part II of the cause-of-death section of the death certificate. If the medical certifier did not specify when death occurred relative to the pregnancy, it is assumed that the pregnancy terminated 42 days or less prior to death. Under ICD-10 a new category has been added for deaths from maternal causes that occurred more than 42 days after delivery or termination of pregnancy (O96-O97). In 1999 there were 15 such deaths and in 2000, there were 8. See related [Rate: Death and related rates](#).

Maternal education—See [Education](#).

Maternal mortality rate—See [Rate: Death and related rates](#).

Medicaid—Medicaid was authorized by Title XIX of the Social Security Act in 1965 as a jointly funded cooperative venture between the Federal and State governments to assist States in the provision of adequate medical care to eligible needy persons. Within broad Federal guidelines, each of the States establishes its own eligibility standards; determines the type, amount, duration, and scope of services; sets the rate of payment for services; and administers its own program.

Medicaid is the largest program providing medical and health-related services to America's poorest people. However, Medicaid does not provide medical assistance for all poor persons. Under the broadest provisions of the Federal statute, Medicaid does not provide health care services even for very poor persons unless they are in a designated group, which include:

- Individuals who meet the requirements for the Aid to Families with Dependent Children (AFDC) program that were in effect in their State on July 16, 1996, or, at State option, more liberal criteria (with some exceptions).
- Children under age 6 whose family income is at or below 133 percent of the Federal poverty level.
- Pregnant women whose family income is below 133 percent of the Federal poverty level (services to these women are limited to those related to pregnancy, complications of pregnancy, delivery, and postpartum care).

- Supplemental Security Income (SSI) recipients in most States (some States use more restrictive Medicaid eligibility requirements that predate SSI).
- Recipients of adoption or foster care assistance under Title IV of the Social Security Act.
- Special protected groups (typically individuals who lose their cash assistance due to earnings from work or from increased Social Security benefits, but who may keep Medicaid for a period of time).
- All children born after September 30, 1983, who are under age 19 and in families with incomes at or below the Federal poverty level (this process phases in coverage).
- Certain Medicare beneficiaries (low income is only one test for Medicaid eligibility for those within these groups; their resources also are tested against threshold levels, as determined by each State within Federal guidelines).

States also have the option of providing Medicaid coverage for other “categorically related” groups.

Medicaid operates as a vendor payment program. States may pay health care providers directly on a fee-for-service basis, or States may pay for Medicaid services through various prepayment arrangements, such as health maintenance organizations (HMOs) or other forms of managed care. Within Federally imposed upper limits and specific restrictions, each State for the most part has broad discretion in determining the payment methodology and payment rate for services. Thus, the Medicaid program varies considerably from State to State, as well as within each State over time. See related [Health expenditures, national](#); [Health insurance coverage](#); [Health maintenance organization](#); [Managed care](#); [Appendix I, Medicaid Data System](#).

Medical specialties—See [Physician specialty](#).

Medical vendor payments—Under the Medicaid program, medical vendor payments are payments (expenditures) to medical vendors from the State through a fiscal agent or to a health insurance plan. Adjustments are made for Indian Health Service payments to Medicaid, cost settlements, third party recoupments, refunds, voided checks, and other financial settlements that cannot be related to specific provided claims. Excluded are payments made for medical care under the emergency assistance provisions, payments made from State medical assistance funds that are not federally matchable, disproportionate share hospital payments,

cost sharing or enrollment fees collected from recipients or a third party, and administration and training costs.

Medicare—This is a nationwide health insurance program providing health insurance protection to people 65 years of age and over, people entitled to social security disability payments for 2 years or more, and people with end-stage renal disease, regardless of income. The program was enacted July 30, 1965, as Title XVIII, *Health Insurance for the Aged of the Social Security Act*, and became effective on July 1, 1966. From its inception, it has included two separate but coordinated programs, hospital insurance (Part A) and supplementary medical insurance (Part B). In 1999, additional choices were allowed for delivering Medicare Part A and Part B benefits. Medicare+Choice (Part C) is an expanded set of options for the delivery of health care under Medicare, created in the Balanced Budget Act passed by Congress in 1997. The term Medicare+Choice refers to options other than original Medicare. While all Medicare beneficiaries can receive their benefits through the original fee-for-service (FFS) program, most beneficiaries enrolled in both Part A and Part B can choose to participate in a Medicare+Choice plan instead. Organizations that seek to contract as Medicare+Choice plans must meet specific organizational, financial, and other requirements. Most Medicare+Choice plans are coordinated care plans, which include health maintenance organizations (HMOs), provider-sponsored organizations (PSOs), preferred provider organizations (PPOs), and other certified coordinated care plans and entities that meet the standards set forth in the law. The Medicare+Choice program also includes Medical savings account (MSA) plans, which provide benefits after a single high deductible is met, and private, unrestricted FFS plans, which allow beneficiaries to select certain private providers. These programs are available in only a limited number of States. For those providers who agree to accept the plan’s payment terms and conditions, this option does not place the providers at risk, nor does it vary payment rates based on utilization. Only the coordinated care plans are considered “managed care” plans. Except for MSA plans, all Medicare+Choice plans are required to provide at least the current Medicare benefit package, excluding hospice services. Plans may offer additional covered services and are required to do so (or return excess payments) if plan costs are lower than the Medicare payments received by the plan.

In the National Health Interview Survey (NHIS), the category “Medicare HMO” is defined as persons who are age 65 years or over and who responded “yes” when asked if they were under a Medicare managed care arrangement such as an HMO. This is a subset of Medicare Part C. Respondents who stated they had Medicare coverage but did not answer yes to the “managed care arrangement such as an HMO” are included in the Medicare fee-for-service category. “Medicare fee-for-service” is defined as Medicare Part A and/or Part B.

See related [Fee-for-service health insurance](#); [Health insurance coverage](#); [Health maintenance organization](#); [Managed care](#); [Appendix I, Medicare Administrative Data](#).

Mental health organization—The Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration defines a mental health organization as an administratively distinct public or private agency or institution whose primary concern is provision of direct mental health services to the mentally ill or emotionally disturbed. Excluded are private office-based practices of psychiatrists, psychologists, and other mental health providers; psychiatric services of all types of hospitals or outpatient clinics operated by Federal agencies other than the Department of Veterans Affairs (for example, Public Health Service, Indian Health Service, Department of Defense, and Bureau of Prisons); general hospitals that have no separate psychiatric services but admit psychiatric patients to nonpsychiatric units; and psychiatric services of schools, colleges, halfway houses, community residential organizations, local and county jails, State prisons, and other human service providers. The major types of mental health organizations are described below.

Freestanding psychiatric outpatient clinics provide only outpatient mental health services on either a regular or emergency basis. A psychiatrist generally assumes the medical responsibility for services.

Psychiatric hospitals (public or private) primarily provide 24-hour inpatient care and treatment in a hospital setting to persons with mental illnesses. Psychiatric hospitals may be under State, county, private for profit, or private nonprofit auspices.

General hospital psychiatric services provide psychiatric services with assigned staff for 24-hour inpatient or residential care and/or less than 24-hour outpatient care in a separate ward, unit, floor, or wing of the hospital.

Department of Veterans Affairs medical centers are hospitals operated by the Department of Veterans Affairs (formerly Veterans Administration) and include Department of Veterans Affairs general hospital psychiatric services (including large neuropsychiatric units) and Department of Veterans Affairs psychiatric outpatient clinics.

Residential treatment centers for emotionally disturbed children must meet all of the following criteria: (a) Provide 24-hour residential services; (b) Are not licensed as a psychiatric hospital and have the primary purpose of providing individually planned mental health treatment services in conjunction with residential care; (c) Include a clinical program directed by a psychiatrist, psychologist, social worker, or psychiatric nurse with a graduate degree; (d) Serve children and youth primarily under the age of 18; and (e) Have the primary diagnosis as mental illness, classified as other than mental retardation, developmental disability, or substance-related disorders, according to DSM-II/ICDA-8 or DSM-III-R/ICD-9-CM codes, for the majority of admissions.

Multiservice mental health organizations provide services in both 24-hour and less than 24-hour settings and are not classifiable as a psychiatric hospital, general hospital, or residential treatment center for emotionally disturbed children. (The classification of a psychiatric or general hospital or residential treatment center for emotionally disturbed children takes precedence over a multiservice classification, even if two or more services are offered.)

Partial care organizations provide a program of ambulatory mental health services, or rehabilitation, habitation, or education programs.

See related [Addition](#); [Mental health service type](#).

Mental health service type—This term refers to the following types of mental health services:

24-hour mental health care, formerly called inpatient care, provides care in a mental health hospital setting.

Less than 24-hour care, formerly called outpatient or partial care treatment, provides mental health services on an ambulatory basis.

Residential treatment care provides overnight mental health care in conjunction with an intensive treatment program in a setting other than a hospital. Facilities may offer care to emotionally disturbed children or mentally ill adults.

See related [Addition](#); [Mental health organization](#).

Metropolitan statistical area (MSA)—The Office of Management and Budget (OMB) defines metropolitan areas according to published standards that are applied to Census Bureau data. The collective term “metropolitan area” includes metropolitan statistical areas (MSAs), consolidated metropolitan statistical areas (CMSAs), and primary metropolitan statistical areas (PMSAs). An MSA is a county or group of contiguous counties that contains at least one city with a population of 50,000 or more or a Census Bureau-defined urbanized area of at least 50,000 with a metropolitan population of at least 100,000. In addition to the county or counties that contain all or part of the main city or urbanized area, an MSA may contain other counties that are metropolitan in character and are economically and socially integrated with the main city. If an MSA has a population of 1 million or more and meets requirements specified in the standards, it is termed a CMSA, consisting of two or more major components, each of which is recognized as a PMSA. In New England, cities and towns, rather than counties, are used to define MSAs. Counties that are not within an MSA are considered to be nonmetropolitan.

For National Health Interview Survey (NHIS) data before 1995, metropolitan population is based on MSAs as defined by OMB in 1983 using the 1980 Census. Starting with the 1995 NHIS, metropolitan population is based on MSAs as defined by OMB in 1993 using the 1990 Census. For further information on metropolitan areas, see U.S. Department of Commerce, Bureau of the Census, *State and Metropolitan Area Data Book*. See related [Urbanization](#).

Multiservice mental health organizations—See [Mental health organization](#).

National ambient air quality standards—See [Environmental Protection Agency Standards](#).

Neonatal mortality rate—See [Rate: Death and related rates](#).

Non-Federal physicians—See [Physician](#).

Nonpatient revenues—Nonpatient revenues are those revenues received for which no direct patient care services are rendered. The most widely recognized source of nonpatient revenues is philanthropy. Philanthropic support may be direct from individuals or may be obtained through philanthropic fund-raising organizations such as the United Way. Support may also be obtained from foundations or corporations. Philanthropic revenues may be designated for direct patient care use or may be contained in an endowment fund where only the current income may be tapped.

Nonprofit hospitals—See [Hospital](#).

Notifiable disease—A notifiable disease is one that, when diagnosed, health providers are required, usually by law, to report to State or local public health officials. Notifiable diseases are those of public interest by reason of their contagiousness, severity, or frequency.

Nursing care—The following definition of nursing care applies to data collected in National Nursing Home Surveys through 1977. Nursing care is provision of any of the following services: application of dressings or bandages; bowel and bladder retraining; catheterization; enema; full bed bath; hypodermic, intramuscular, or intravenous injection; irrigation; nasal feeding; oxygen therapy; and temperature-pulse-respiration or blood pressure measurement. See related [Nursing home](#).

Nursing care homes—See [Nursing home](#).

Nursing home—In the Online Survey Certification and Reporting database, a nursing home is a facility that is certified and meets the Center for Medicare & Medicaid Services’ long-term care requirements for Medicare and Medicaid eligibility.

In the National Master Facility Inventory (NMFI), which provided the sampling frame for 1973–74, 1977, and 1985 National Nursing Home Surveys, a nursing home was an establishment with three or more beds that provided nursing or personal care services to the aged, infirm, or chronically ill. The following definitions of nursing home types applied to facilities listed in the NFMI. The 1977 National Nursing Home Survey included personal care homes and domiciliary care

homes while the National Nursing Home Surveys of 1973–74, 1985, 1995, 1997, and 1999 excluded them.

Nursing care homes employ one or more full-time registered or licensed practical nurses and provide nursing care to at least one-half the residents.

Personal care homes with nursing have fewer than one-half the residents receiving nursing care. In addition, such homes employ one or more registered or licensed practical nurses or provided administration of medications and treatments in accordance with physicians' orders, supervision of self-administered medications, or three or more personal services.

Personal care homes without nursing have no residents who receive nursing care. These homes provide administration of medications and treatments in accordance with physicians' orders, supervise self-administered medications, or provide three or more personal services.

Domiciliary care homes primarily provide supervisory care but also provided one or two personal services.

The following definitions of certification levels apply to data collected in National Nursing Home Surveys of 1973–74, 1977, and 1985:

Skilled nursing facilities provide the most intensive nursing care available outside a hospital. Facilities certified by Medicare provide posthospital care to eligible Medicare enrollees. Facilities certified by Medicaid as skilled nursing facilities provide skilled nursing services on a daily basis to individuals eligible for Medicaid benefits.

Intermediate care facilities are certified by the Medicaid program to provide health-related services on a regular basis to Medicaid eligibles who do not require hospital or skilled nursing facility care but do require institutional care above the level of room and board.

Not certified facilities are not certified as providers of care by Medicare or Medicaid.

Beginning with the 1995 through 1999 National Nursing Home Surveys, nursing homes have been defined as facilities that routinely provide nursing care services and have three or

more beds set up for residents. Facilities may be certified by Medicare or Medicaid or not certified but licensed by the State as a nursing home. The facilities may be freestanding or a distinct unit of a larger facility.

After October 1, 1990, long-term care facilities which met the Omnibus Budget Reconciliation Act of 1987 (OBRA 87) nursing home reform requirements that were formerly certified under the Medicaid program as skilled nursing, nursing home, or intermediate care facilities were reclassified as “nursing facilities.” The Medicare program continues to certify skilled nursing facilities, but not intermediate care facilities. State Medicaid programs can certify intermediate care facilities for the mentally retarded or developmentally disabled. Nursing facilities must also be certified to participate in the Medicare program in order to be certified for participation in Medicaid, with the exception of those facilities that have obtained waivers. Thus most nursing home care is now provided in skilled care facilities.

See related [Nursing care](#); [Resident](#).

Nursing home expenditures—See [Health expenditures, national](#).

Obesity—See [Body mass index \(BMI\)](#).

Occupancy rate—In American Hospital Association statistics, hospital occupancy rate is calculated as the average daily census divided by the number of hospital beds, cribs, and pediatric bassinets set up and staffed on the last day of the reporting period, expressed as a percent. Average daily census is calculated by dividing the total annual number of inpatients, excluding newborns, by 365 days to derive the number of inpatients receiving care on an average day during the annual reporting period. The occupancy rate for facilities other than hospitals is calculated as the number of residents at the facility reported on the day of the interview divided by the number of reported beds. In the Online Survey Certification and Reporting database, occupancy is determined as of the day of certification inspection as the total number of residents on that day divided by the total number of beds on that day.

Office—In the National Ambulatory Medical Care Survey, a physician's ambulatory practice (office) can be in any location other than in a hospital, nursing home, other extended care facility, patients' home, industrial clinic, college clinic, or family planning clinic. Offices in health maintenance organizations

and private offices in hospitals are included. See related [Office visit](#); [Outpatient visit](#); [Physician](#).

Office-based physician—See [Physician](#).

Office visit—In the National Ambulatory Medical Care Survey, an office visit is any direct personal exchange between an ambulatory patient and a physician or members of his or her staff for the purposes of seeking care and rendering health services. See related [Outpatient visit](#).

Operations—See [Procedure](#).

Outpatient department—According to the National Hospital Ambulatory Medical Care Survey (NHAMCS), an outpatient department (OPD) is a hospital facility where nonurgent ambulatory medical care is provided. The following types of OPDs are excluded from the NHAMCS: ambulatory surgical centers, chemotherapy, employee health services, renal dialysis, methadone maintenance, and radiology. See related [Emergency department](#); [Outpatient visit](#).

Outpatient surgery—According to the American Hospital Association, outpatient surgery is a surgical operation, whether major or minor, performed on patients who do not remain in the hospital overnight. Outpatient surgery may be performed in inpatient operating suites, outpatient surgery suites, or procedure rooms within an outpatient care facility. A surgical operation involving more than one surgical procedure is considered one surgical operation. See related [Ambulatory surgery](#); [Procedure](#).

Outpatient visit—The American Hospital Association defines outpatient visits as visits for receipt of medical, dental, or other services at a hospital by patients who are not lodged in the hospital. Each appearance by an outpatient to each unit of the hospital is counted individually as an outpatient visit, including all clinic visits, referred visits, observation services, outpatient surgeries, and emergency department visits. In the National Hospital Ambulatory Medical Care Survey an outpatient department visit is a direct personal exchange between a patient and a physician or other health care provider working under the physician's supervision for the purpose of seeking care and receiving personal health services. See related [Emergency department visit](#); [Outpatient department](#).

Overweight—See [Body mass index \(BMI\)](#).

Ozone—See [Environmental Protection Agency Standards](#).

Pap smear—A Pap smear (also known as a Papanicolaou smear or Pap test) is a microscopic examination of cells scraped from the cervix that is used to detect cancerous or precancerous conditions of the cervix or other medical conditions. In the National Health Interview Survey questions concerning use of Pap smear differed slightly across the years for which data are shown. In 1987 women were asked to report when they had their most recent Pap smear in days, weeks, months, or years. Women who did not respond were asked a followup question, "Was it 3 years ago or less, between 3 and 5 years, or 5 years or more ago?" In 1993 and 1994 women were asked whether they had a Pap smear within the past year, between 1 and 3 years ago, or more than 3 years ago. In 1998 women were asked whether they had a Pap smear 1 year ago or less, more than 1 year but not more than 2 years, more than 2 years but not more than 3 years, more than 3 years but not more than 5 years, or more than 5 years ago. In 1999 women were asked when they had their most recent Pap smear in days, weeks, months, or years. In 1999, 4 percent of women in the sample responded "3 years ago." In this analysis these women were coded as "within the past 3 years," although a response of "3 years ago" may include women whose last Pap smear was more than 3 but less than 4 years ago. Thus estimates for 1999 are overestimated to some degree in comparison with estimates for previous years. In 2000 women were asked when they had their most recent Pap smear (give month and year). Women who did not respond were given a followup question that used the 1999 wording and women who did not answer the followup question were asked a second followup question that used the 1998 wording. In 2000 less than 1 percent of women in the sample answered "3 years ago" using the 1999 wording and they were coded as "within the past 3 years." Thus estimates for 2000 may be slightly overestimated in comparison with estimates for years prior to 1999.

Partial care organization—See [Mental health organization](#).

Partial care treatment—See [Mental health service type](#).

Patient—See [Ambulatory care](#); [Home health care](#); [Hospice care](#); [Inpatient](#); [Office visit](#); [Outpatient visit](#).

Percent change—See [Average annual rate of change](#).

Perinatal mortality rate; ratio—See [Rate: Death and related rates](#).

Personal care homes with or without nursing—See [Nursing home](#).

Personal health care expenditures—See [Health expenditures, national](#).

Physician—Data on physician characteristics are obtained through physician self-report for the American Medical Association's Physician Masterfile. The AMA tabulates data only for doctors of medicine (MDs), but some tables in *Health, United States* include data for both MDs and doctors of osteopathy (DOs).

Active (or professionally active) physicians are currently engaged in patient care or other professional activity for a minimum of 20 hours per week. Other professional activity includes administration, medical teaching, research, and other activities, such as employment with insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, and the like. Physicians who are retired, semi-retired, working part-time, or not practicing are classified as inactive and are excluded. Also excluded are physicians with address unknown and physicians who did not provide information on type of practice or present employment (not classified).

Federal physicians are those employed full time by the Federal Government, including the Army, Navy, Air Force, Veterans' Administration, Public Health Service, and other federally-funded agencies. The majority of U.S. physicians are employed outside the Federal Government (97.4 percent).

Hospital-based physicians are employed under contract with hospitals to provide direct patient care and include physicians in residency training (including clinical fellows) and full-time members of the hospital staff.

Office-based physicians are engaged in seeing patients in solo practice, group practice, two-physician practice, other patient care employment, or inpatient services such as those provided by pathologists and radiologists.

Data for physicians are presented by type of education (doctors of medicine and doctors of osteopathy); place of

education (U.S. medical graduates and international medical graduates); activity status (professionally active and inactive); employment setting (Federal and non-Federal); area of specialty; and geographic area. See related [Office; Physician specialty](#).

Physician specialty—A physician specialty is any specific branch of medicine in which a physician may concentrate. Data are based on physician self-reports of their primary area of specialty. Physician data are broadly categorized into two areas of practice: generalists and specialists.

Primary care generalists practice in the general fields of family and general practice, general internal medicine, and general pediatrics. They specifically exclude primary care specialists.

Primary care specialists practice in the subspecialties of general and family practice, internal medicine, and pediatrics. Family practice subspecialties include geriatric medicine and sports medicine. Internal medicine subspecialties include diabetes, endocrinology and metabolism, hematology, hepatology, cardiac electrophysiology, infectious diseases, diagnostic laboratory immunology, geriatric medicine, sports medicine, nephrology, nutrition, medical oncology, and rheumatology. Pediatric subspecialties include adolescent medicine, critical care pediatrics, neonatal-perinatal medicine, pediatric allergy, pediatric cardiology, pediatric endocrinology, pediatric pulmonology, pediatric emergency medicine, pediatric gastroenterology, pediatric hematology/oncology, diagnostic laboratory immunology, pediatric nephrology, pediatric rheumatology, and sports medicine.

Specialist physicians practice in the primary care specialties, in addition to all other specialist fields not included in the generalist definition. Specialist fields include allergy and immunology, aerospace medicine, anesthesiology, cardiovascular diseases, child and adolescent psychiatry, colon and rectal surgery, dermatology, diagnostic radiology, forensic pathology, gastroenterology, general surgery, medical genetics, neurology, nuclear medicine, neurological surgery, obstetrics and gynecology, occupational medicine, ophthalmology, orthopedic surgery, otolaryngology, psychiatry, public health and general preventive medicine, physical medicine and rehabilitation, plastic

surgery, anatomic and clinical pathology, pulmonary diseases, radiation oncology, thoracic surgery, urology, addiction medicine, critical care medicine, legal medicine, and clinical pharmacology.

See related [Physician](#).

Point-of-service (POS) plan—A health plan that allows members to choose to receive services from a participating or non-participating network provider, usually with a financial disincentive for going outside the network. More of a product than an organization, POS plans can be offered by HMOs, PPOs, or self-insured employers. See related [Health maintenance organization](#); [Managed care](#); [Preferred provider organization](#).

Population—The U.S. Bureau of the Census collects and publishes data on populations in the United States according to several different definitions. Various statistical systems then use the appropriate population for calculating rates. See also [Appendix I, Population Census and Population Estimates](#).

Total population is the population of the United States, including all members of the Armed Forces living in foreign countries, Puerto Rico, Guam, and the U.S. Virgin Islands. Other Americans abroad (for example, civilian Federal employees and dependents of members of the Armed Forces or other Federal employees) are not included.

Resident population includes persons whose usual place of residence (that is, the place where one usually lives and sleeps) is in one of the 50 States or the District of Columbia. It includes members of the Armed Forces stationed in the United States and their families. It excludes international military, naval, and diplomatic personnel and their families located in this country and residing in embassies or similar quarters. Also excluded are international workers and international students in this country and Americans living abroad. The resident population is the denominator for calculating birth and death rates and incidence of disease.

Civilian population is the resident population excluding members of the Armed Forces. However, families of members of the Armed Forces are included. This population is the denominator in rates calculated for the National Hospital Discharge Survey, the National Home

and Hospice Care Survey, the National Nursing Home Survey, and the National Survey of Ambulatory Surgery.

Civilian noninstitutionalized population is the civilian population not residing in institutions such as correctional institutions, detention homes, and training schools for juvenile delinquents; homes for aged and dependent persons (for example, nursing homes and convalescent homes); homes for dependent and neglected children; homes and schools for mentally or physically handicapped persons; homes for unwed mothers; psychiatric, tuberculosis, and chronic disease hospitals; and residential treatment centers. Census Bureau estimates of the civilian noninstitutionalized population are used to calculate sample weights for the National Health Interview Survey, National Health and Nutrition Examination Survey, and National Survey of Family Growth, and as denominators in rates calculated for the National Ambulatory Medical Care Survey and the National Hospital Ambulatory Medical Care Survey.

Introduction of census 2000 population estimates—*Health United States, 2003* marks the transition to the use of year 2000 resident population estimates based on the 2000 census for calculation of rates. Previously 1991–2000 rates were based on post-1990 population estimates. Birth rates and death rates for 1991–99 were revised using intercensal population estimates based on the 2000 census. Rates for 2000 were revised using census 2000 counts. Data systems and surveys that use civilian and civilian noninstitutionalized population estimates as denominators for computation of rates for the period 1991–99 may be updated in future Health, U.S. reports, but have not been updated in the 2003 report. See [Appendix I, Population Census and Population Estimates](#).

Postneonatal mortality rate—See [Rate: Death and related rates](#).

Poverty level—Poverty statistics are based on definitions originally developed by the Social Security Administration. These include a set of money income thresholds that vary by family size and composition. Families or individuals with income below their appropriate thresholds are classified as below the poverty level. These thresholds are updated annually by the U.S. Bureau of the Census to reflect changes in the Consumer Price Index for all urban

consumers (CPI-U). For example, the average poverty threshold for a family of four was \$17,603 in 2000 and \$13,359 in 1990. For more information, see U.S. Bureau of the Census: *Consumer Income and Poverty 2001*. Series P-60. Washington, DC: U.S. Government Printing Office. Also see www.census.gov/hhes/www/poverty.html.

National Health Interview Survey—Poverty level, for years prior to 1997, was based on family income and family size using Bureau of the Census poverty thresholds. Beginning in 1997 poverty status is based on family income, family size, number of children in the family, and for families with two or fewer adults, the age of the adults in the family. See related [Consumer Price Index](#); [Family income](#); [Appendix I, Current Population Survey](#); [National Health Interview Survey](#).

Preferred provider organization (PPO)—A PPO is a type of medical plan where coverage is provided to participants through a network of selected health care providers (such as hospitals and physicians). The enrollees may go outside the network, but they would pay a greater percentage of the cost of coverage than within the network. See related [Health maintenance organization](#); [Managed care](#); [Point-of-service plan](#).

Prenatal Care—Information on when pregnancy care began is recorded on the birth certificate. Between 1970 and 1980 the reporting area for prenatal care expanded. In 1970, 39 States and the District of Columbia reported prenatal care on the birth certificate. Data were not available from Alabama, Alaska, Arkansas, Connecticut, Delaware, Georgia, Idaho, Massachusetts, New Mexico, Pennsylvania, and Virginia. In 1975 these data were available from three additional States, Connecticut, Delaware, and Georgia, increasing the number of States reporting prenatal care to 42 and the District of Columbia. Starting in 1980 prenatal care information was available for the entire United States.

Prevalence—Prevalence is the number of cases of a disease, infected persons, or persons with some other attribute present during a particular interval of time. It is often expressed as a rate (for example, the prevalence of diabetes per 1,000 persons during a year). See related [Incidence](#).

Primary admission diagnosis—In the National Home and Hospice Care Survey the primary admission diagnosis is the first-listed diagnosis at admission on the patient's medical

record as provided by the agency staff member most familiar with the care provided to the patient.

Primary care specialties—See [Physician specialty](#).

Private expenditures—See [Health expenditures, national](#).

Procedure—The National Hospital Discharge Survey (NHDS) and the National Survey of Ambulatory Surgery (NSAS) define a procedure as a surgical or nonsurgical operation, diagnostic procedure, or therapeutic procedure (such as respiratory therapy) recorded on the medical record of discharged patients. A maximum of four procedures per discharge is recorded in NHDS and up to six procedures per discharge in NSAS. Procedures are coded according to the *International Classification of Diseases, Ninth Revision, Clinical Modification* (see [table X](#)). In *Health, United States, 1998* and earlier editions, procedures were categorized as surgical operations and diagnostic and other nonsurgical procedures. The distinction between surgical and diagnostic procedures has become less meaningful due to development of noninvasive and minimally invasive surgery. Thus the practice of classifying procedures as surgical or diagnostic has been discontinued. See related [Ambulatory surgery](#); [Outpatient surgery](#).

Proprietary hospitals—See [Hospital](#).

Psychiatric hospitals—See [Hospital](#); [Mental health organization](#).

Public expenditures—See [Health expenditures, national](#).

Public health activities—Public health activities may include any of the following essential services of public health—surveillance, investigations, education, community mobilization, workforce training, research, and personal care services delivered or funded by governmental agencies.

Race—In 1977 the Office of Management and Budget (OMB) issued Race and Ethnicity Standards for Federal Statistics and Administrative Reporting in order to promote comparability of data among Federal data systems. The 1977 Standards called for the Federal Government's data systems to classify individuals into the following four racial groups: American Indian or Alaska Native, Asian or Pacific Islander, black, and white. Depending on the data source, the classification by race was based on self-classification or on

observation by an interviewer or other person filling out the questionnaire.

In 1997 new standards were announced for classification of individuals by race within the Federal Government's data systems (*Federal Register*, 62FR58781–58790). The 1997 Standards have five racial groups: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White. These five categories are the minimum set for data on race in Federal statistics. The 1997 Standards also offer an opportunity for respondents to select more than one of the five groups, leading to many possible multiple race categories. As with the single race groups, data for the multiple race groups are to be reported when estimates meet agency requirements for reliability and confidentiality. The 1997 Standards allow for observer or proxy identification of race but clearly state a preference for self-classification. The Federal Government considers race and Hispanic origin to be two separate and distinct concepts. Thus Hispanics may be of any race. Federal data systems are required to comply with the 1997 Standards by 2003.

National Health Interview Survey (NHIS)—Starting with *Health, United States, 2002* and data year 1999, race-specific estimates based on the NHIS are tabulated using the 1997 Standards and are not strictly comparable with estimates for earlier years. The 1997 Standards specify five single race categories plus multiple race categories. Estimates for specific race groups are shown when they meet requirements for statistical reliability and confidentiality. The race categories “White only,” “Black or African American only,” “American Indian and Alaska Native only,” “Asian only,” and “Native Hawaiian and Other Pacific Islander only” include persons who reported only one racial group; the category “2 or more races” includes persons who reported more than one of the five racial groups in the 1997 Standards or one of the five racial groups and “Some other race.” Prior to data year 1999, data were tabulated according to the 1977 Standards with four racial groups and the category “Asian only” included Native Hawaiian and Other Pacific Islander. Estimates for single race categories prior to 1999 included persons who reported one race or, if they reported more than one race, identified one race as best representing their race. Differences between estimates tabulated using the two Standards for data year 1999 are discussed in the footnotes for each NHIS table.

[Tables XI](#) and [XII](#) illustrate NHIS data tabulated by race and Hispanic origin according to the 1997 and 1977 Standards for two health statistics (cigarette smoking and private health insurance coverage). In these illustrations, three separate tabulations using the 1997 Standards are shown: (1) Race: mutually exclusive race groups, including several multiple race combinations; (2) Race, any mention: race groups that are not mutually exclusive because each race category includes all persons who mention that race; and (3) Hispanic origin and race: detailed race and Hispanic origin with a multiple race total category. Where applicable, comparison tabulations by race and Hispanic origin are shown based on the 1977 Standards. Because there are more race groups with the 1997 Standards, the sample size of each race group under the 1997 Standards is slightly smaller than the sample size under the 1977 Standards. Only those few multiple race groups with sufficient numbers of observations to meet standards of statistical reliability are shown. [Tables XI](#) and [XII](#) also illustrate changes in labels and group categories in the 1997 Standards. The race designation of Black was changed to Black or African American and the ethnicity designation of Hispanic was changed to Hispanic or Latino.

Data systems included in *Health, United States*, other than the National Health Interview Survey (NHIS), the National Health and Examination Survey (NHANES), and the National Household Survey of Drug Abuse (NHSDA), generally do not permit tabulation of estimates for the detailed race and ethnicity categories shown in [tables XI](#) and [XII](#), either because race data based on the 1997 standard categories are not yet available, or because there are insufficient numbers of observations to meet statistical reliability or confidentiality requirements.

National Health and Nutrition Examination Survey (NHANES)—Starting with *Health, United States, 2003* race-specific estimates based on NHANES are tabulated using the 1997 Standards for data years 1999 and beyond. Prior to data year 1999, the 1977 Standards were used. Because of the differences between the two Standards, the race-specific estimates shown in trend tables based on the NHANES for 1999–2000 are not strictly comparable with estimates for earlier years. Each trend table based on the NHANES includes a footnote that discusses differences between estimates tabulated using the two Standards for survey years 1999–2000.

Table XI. Current cigarette smoking by persons 18 years of age and over, according to race and Hispanic origin under the 1977 and 1997 Standards for Federal data on race and ethnicity: United States, average annual 1993–95

1997 Standards	Sample size	Percent	Standard error	1977 Standards	Sample size	Percent	Standard error
Race							
White only	46,228	25.2	0.26	White	46,664	25.3	0.26
Black or African American only	7,208	26.6	0.64	Black	7,334	26.5	0.63
American Indian and Alaska Native only	416	32.9	2.53	American Indian and Alaska Native	480	33.9	2.38
Asian only	1,370	15.0	1.19	Asian and Pacific Islander	1,411	15.5	1.22
2 or more races total	786	34.5	2.00				
Black or African American; White	83	*21.7	6.05				
American Indian and Alaska Native; White	461	40.0	2.58				
Race, any mention							
White, any mention	46,882	25.3	0.26				
Black or African American, any mention	7,382	26.6	0.63				
American Indian and Alaska Native, any mention	965	36.3	1.71				
Asian, any mention	1,458	15.7	1.20				
Native Hawaiian and Other Pacific Islander, any mention	53	*17.5	5.10				
Hispanic origin and race							
Not Hispanic or Latino:				Non-Hispanic:			
White only	42,421	25.8	0.27	White	42,976	25.9	0.27
Black or African American only	7,053	26.7	0.65	Black	7,203	26.7	0.64
American Indian and Alaska Native only	358	33.5	2.69	American Indian and Alaska Native	407	35.4	2.53
Asian only	1,320	14.8	1.21	Asian and Pacific Islander	1,397	15.3	1.24
2 or more races total	687	35.6	2.15				
Hispanic or Latino	5,175	17.8	0.65	Hispanic	5,175	17.8	0.65

*Relative standard error 20–30 percent.

NOTES: The 1997 Standards for Federal data on race and ethnicity set five single race groups (White, Black, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander) and allow respondents to report one or more race groups. Estimates for single race and multiple race groups not shown above do not meet standards for statistical reliability or confidentiality (relative standard error greater than 30 percent). Race groups under the 1997 Standards were based on the question, "What is the group or groups which represents ____ race?" For persons who selected multiple groups, race groups under the 1977 Standards were based on the additional question, "Which of those groups would you say best represents ____ race?" Race-specific estimates in this table were calculated after excluding respondents of other and unknown race. Other published race-specific estimates are based on files in which such responses have been edited. Percents are age adjusted to the year 2000 standard using three age groups: Under 18 years, 18–44 years, and 45–64 years of age. See Appendix II, Age adjustment.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics. National Health Interview Survey.

The NHANES sample was designed to provide estimates specifically for persons of Mexican origin and not for all Hispanic-origin persons in the United States. Persons of Hispanic-origin other than Mexicans were entered into the sample with different selection probabilities that are not nationally representative of the total U.S. Hispanic population. Estimates are shown for non-Hispanic white, non-Hispanic black, and Mexican. Although data were collected according to the 1997 Standards, there are insufficient numbers of observations to meet statistical reliability or confidentiality requirements for reporting estimates for additional race categories.

National Household Survey of Drug Abuse (NHSDA)—Race-specific estimates based on NHSDA are tabulated

using the 1997 Standards. Estimates in the NHSDA trend table begin with the data year 1999. Estimates for specific race groups are shown when they meet requirements for statistical reliability and confidentiality. The race categories "White only," "Black or African American only," "American Indian and Alaska Native only," "Asian only," and "Native Hawaiian and Other Pacific Islander only" include persons who reported only one racial group; and the category "2 or more races" includes persons who reported more than one of the five racial groups in the 1997 Standards or one of the five racial groups and "Some other race."

National Vital Statistics System—Most of the States in the Vital Statistics Cooperative Program are still revising

Table XII. Private health care coverage for persons under 65 years of age, according to race and Hispanic origin under the 1977 and 1997 Standards for Federal data on race and ethnicity: United States, average annual 1993–95

1997 Standards	Sample size	Percent	Standard error	1977 Standards	Sample size	Percent	Standard error
Race							
White only	168,256	76.1	0.28	White	170,472	75.9	0.28
Black or African American only	30,048	53.5	0.63	Black	30,690	53.6	0.63
American Indian and Alaska Native only	2,003	44.2	1.97	American Indian and Alaska Native	2,316	43.5	1.85
Asian only	6,896	68.0	1.39	Asian and Pacific Islander	7,146	68.2	1.34
Native Hawaiian and Other Pacific Islander only	173	75.0	7.43				
2 or more races total	4,203	60.9	1.17				
Black or African American; White	686	59.5	3.21				
American Indian and Alaska Native; White	2,022	60.0	1.71				
Asian; White	590	71.9	3.39				
Native Hawaiian and Other Pacific Islander; White	56	59.2	10.65				
Race, any mention							
White, any mention	171,817	75.8	0.28				
Black or African American, any mention	31,147	53.6	0.62				
American Indian and Alaska Native, any mention	4,365	52.4	1.40				
Asian, any mention	7,639	68.4	1.27				
Native Hawaiian and Other Pacific Islander, any mention	283	68.7	6.23				
Hispanic origin and race							
Not Hispanic or Latino:				Non-Hispanic:			
White only	146,109	78.9	0.27	White	149,057	78.6	0.27
Black or African American only	29,250	53.9	0.64	Black	29,877	54.0	0.63
American Indian and Alaska Native only	1,620	45.2	2.15	American Indian and Alaska Native	1,859	44.6	2.05
Asian only	6,623	68.2	1.43	Asian and Pacific Islander	6,999	68.4	1.40
Native Hawaiian and Other Pacific Islander only	145	76.4	7.79				
2 or more races total	3,365	62.6	1.18				
Hispanic or Latino	31,040	48.8	0.74	Hispanic	31,040	48.8	0.74

NOTES: The 1997 Standards for Federal data on race and ethnicity set five single race groups (White, Black, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander) and allow respondents to report one or more race groups. Estimates for single race and multiple race groups not shown above do not meet standards for statistical reliability or confidentiality (relative standard error greater than 30 percent). Race groups under the 1997 Standards were based on the question, "What is the group or groups which represents ____ race?" For persons who selected multiple groups, race groups under the 1977 Standards were based on the additional question, "Which of those groups would you say best represents ____ race?" Race-specific estimates in this table were calculated after excluding respondents of other and unknown race. Other published race-specific estimates are based on files in which such responses have been edited. Percents are age adjusted to the year 2000 standard using three age groups: Under 18 years, 18–44 years, and 45–64 years of age. See Appendix II, Age adjustment.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics. National Health Interview Survey.

their birth and death records to conform to the 1997 standards on race and ethnicity. During the transition to full implementation of the 1997 standards, vital statistics data will continue to be presented for the four major race groups, white, black or African American, American Indian or Alaska Native, and Asian or Pacific Islander, in accordance with 1977 standards.

Birth File—Information about the race and Hispanic ethnicity of the mother and father are provided by the mother at the time of birth and recorded on the birth certificate and fetal death record. Since 1980, birth rates,

birth characteristics, and fetal death rates for live born infants and fetal deaths are presented in this report according to race of mother. Before 1980 data were tabulated by race of newborn and fetus, taking into account the race of both parents. If the parents were of different races and one parent was white, the child was classified according to the race of the other parent. When neither parent was white, the child was classified according to father's race, with one exception: if either parent was Hawaiian, the child was classified Hawaiian. Before 1964, if race was unknown, the birth was classified as white. Beginning in 1964 unknown race was

classified according to information on the previous record.

Mortality File—Information about the race and Hispanic ethnicity of the decedent is reported by the funeral director as provided by an informant, often the surviving next of kin, or, in the absence of an informant, on the basis of observation. Death rates by race and Hispanic origin are based on information from death certificates (numerators of the rates) and on population estimates from the Census Bureau (denominators). Race and ethnicity information from the census is by self-report. To the extent that race and Hispanic origin are inconsistent between these two data sources, death rates will be biased. Studies have shown that persons self-reported as American Indian, Asian, or Hispanic on census and survey records may sometimes be reported as white or non-Hispanic on the death certificate, resulting in an underestimation of deaths and death rates for the American Indian, Asian, and Hispanic groups. Bias also results from undercounts of some population groups in the census, particularly young black and young white males and elderly persons, resulting in an overestimation of death rates. The net effects of misclassification and undercoverage result in overstated death rates for the white population and black population estimated to be 1 percent and 5 percent, respectively; and understated death rates for other population groups estimated as follows: American Indians, 21 percent; Asian or Pacific Islanders, 11 percent; and Hispanics, 2 percent. For more information, see Rosenberg HM, Maurer JD, Sorlie PD, Johnson NJ, et al. Quality of death rates by race and Hispanic origin: A summary of current research, 1999. National Center for Health Statistics. *Vital Health Stat* 2(128). 1999.

Denominators for infant and maternal mortality rates are based on number of live births rather than population estimates. Race information for the denominator is supplied from the birth certificate. Before 1980, child's race took into account the races of both parents. Starting in 1980, race was based solely on race of mother. Race information for the numerator is the race of the deceased child or mother, as recorded on the death certificate.

Vital event rates for the American Indian or Alaska Native population shown in this book are based on the total U.S. resident population of American Indians and

Alaska Natives, as enumerated by the U.S. Bureau of Census. In contrast the Indian Health Service calculates vital event rates for this population based on U.S. Bureau of Census county data for American Indians and Alaska Natives who reside on or near reservations. Interpretation of trends for the American Indian and Alaska Native population should take into account that population estimates for these groups increased by 45 percent between 1980 and 1990, partly due to better enumeration techniques in the 1990 decennial census and to the increased tendency for people to identify themselves as American Indian in 1990.

Interpretation of trends for the Asian population in the United States should take into account that this population more than doubled between 1980 and 1990, primarily due to immigration.

For more information on coding race using vital statistics, see: National Center for Health Statistics, Technical Appendix, *Vital Statistics of the United States*, Vol. I, Natality, and Vol. II, Mortality, Part A available on the NCHS home page at www.cdc.gov/nchs/nvss.htm. See related [Hispanic origin](#); [Appendix I, Population Census and Population Estimates](#).

Rate—A rate is a measure of some event, disease, or condition in relation to a unit of population, along with some specification of time. See related [Age adjustment](#); [Population](#).

■ *Birth and related rates*

Birth rate is calculated by dividing the number of live births in a population in a year by the midyear resident population. For census years, rates are based on unrounded census counts of the resident population, as of April 1. For the noncensus years 1981–89, rates were based on national estimates of the resident population, as of July 1, rounded to 1,000s. Rounded population estimates for 5-year age groups were calculated by summing unrounded population estimates before rounding to 1,000s. Starting in 1991 rates were based on unrounded national population estimates. Beginning in 1997 the birth rate for the maternal age group 45–49 years includes data for mother's age 50–54 years in the numerator and is based on the population of women 45–49 years in the denominator. Birth rates are expressed as the number of live births per 1,000 population. The rate may be restricted to births to

women of specific age, race, marital status, or geographic location (specific rate), or it may be related to the entire population (crude rate). See related [Cohort fertility](#); [Live birth](#).

Fertility rate is the total number of live births, regardless of age of mother, per 1,000 women of reproductive age, 15–44 years.

■ **Death and related rates**

Death rate is calculated by dividing the number of deaths in a population in a year by the midyear resident population. For census years, rates are based on unrounded census counts of the resident population, as of April 1. For the noncensus years 1981–89, rates were based on national estimates of the resident population, as of July 1, rounded to 1,000s. Rounded population estimates for 10-year age groups were calculated by summing unrounded population estimates before rounding to 1,000s. Starting in 1991 rates were based on unrounded national population estimates. Rates for the Hispanic and non-Hispanic white populations in each year are based on unrounded State population estimates for States in the Hispanic reporting area. Death rates are expressed as the number of deaths per 100,000 population. The rate may be restricted to deaths in specific age, race, sex, or geographic groups or from specific causes of death (specific rate) or it may be related to the entire population (crude rate).

Fetal death rate is the number of fetal deaths with stated or presumed gestation of 20 weeks or more divided by the sum of live births plus fetal deaths, per 1,000 live births plus fetal deaths. *Late fetal death rate* is the number of fetal deaths with stated or presumed gestation of 28 weeks or more divided by the sum of live births plus late fetal deaths, per 1,000 live births plus late fetal deaths. See related [Fetal death](#); [Gestation](#).

Infant mortality rate based on period files is calculated by dividing the number of infant deaths during a calendar year by the number of live births reported in the same year. It is expressed as the number of infant deaths per 1,000 live births. *Neonatal mortality rate* is the number of deaths of children under 28 days of age, per 1,000 live births. *Postneonatal mortality rate* is the number of deaths of children that occur between 28 days and 365

days after birth, per 1,000 live births. See related [Infant death](#).

Birth cohort infant mortality rates are based on linked birth and infant death files. In contrast to period rates in which the births and infant deaths occur in the same period or calendar year, infant deaths constituting the numerator of a birth cohort rate may have occurred in the same year as, or in the year following, the year of birth. The birth cohort infant mortality rate is expressed as the number of infant deaths per 1,000 live births. See related [Birth cohort](#).

Perinatal relates to the period surrounding the birth event. Rates and ratios are based on events reported in a calendar year. *Perinatal mortality rate* is the sum of late fetal deaths plus infant deaths within 7 days of birth divided by the sum of live births plus late fetal deaths, per 1,000 live births plus late fetal deaths. *Perinatal mortality ratio* is the sum of late fetal deaths plus infant deaths within 7 days of birth divided by the number of live births, per 1,000 live births.

Maternal mortality rate is defined as the number of maternal deaths per 100,000 live births. The maternal mortality rate is a measure of the likelihood that a pregnant woman will die from maternal causes. The number of live births used in the denominator is a proxy for the population of pregnant women who are at risk of a maternal death. See related [Maternal death](#).

Region—See [Geographic region and division](#).

Registered hospitals—See [Hospital](#).

Registered nursing education—Registered nursing data are shown by level of educational preparation. Baccalaureate education requires at least 4 years of college or university; associate degree programs are based in community colleges and are usually 2 years in length; and diploma programs are based in hospitals and are usually 3 years in length.

Registration area—The United States has separate registration areas for birth, death, marriage, and divorce statistics. In general, registration areas correspond to States and include two separate registration areas for the District of Columbia and New York City. All States have adopted laws that require registration of births and deaths and reporting of

fetal deaths. It is believed that more than 99 percent of births and deaths occurring in this country are registered.

The *death registration area* was established in 1900 with 10 States and the District of Columbia, and the *birth registration area* was established in 1915, also with 10 States and the District of Columbia. Beginning with 1933, all States were included in the birth and death registration areas. The specific States added year by year are shown in “History and Organization of the Vital Statistics System,” reprinted from *Vital Statistics of the United States Vol I, 1950*, chapter 1, National Center for Health Statistics, 1978. Currently, Puerto Rico, U.S. Virgin Islands, and Guam each constitutes a separate registration area, although their data are not included in statistical tabulations of U.S. resident data. See related [Reporting area](#).

Relative standard error—The relative standard error (RSE) is a measure of an estimate’s reliability. The RSE of an estimate is obtained by dividing the standard error of the estimate ($SE(r)$) by the estimate itself (r). This quantity is expressed as a percent of the estimate and is calculated as follows: $RSE=100 \times (SE(r)/r)$. Estimates with large RSEs are considered unreliable. In *Health, United States* most statistics with large RSEs are preceded by an asterisk or not presented.

Relative survival rate—The relative survival rate is the ratio of the observed survival rate for the patient group to the expected survival rate for persons in the general population similar to the patient group with respect to age, sex, race, and calendar year of observation. The 5-year relative survival rate is used to estimate the proportion of cancer patients potentially curable. Because over one-half of all cancers occur in persons 65 years of age and over, many of these individuals die of other causes with no evidence of recurrence of their cancer. Thus, because it is obtained by adjusting observed survival for the normal life expectancy of the general population of the same age, the relative survival rate is an estimate of the chance of surviving the effects of cancer.

Reporting area—In the National Vital Statistics System, the reporting area for such basic items on the birth and death certificates as age, race, and sex, is based on data from residents of all 50 States in the United States and the District of Columbia (DC). The reporting area for selected items such as Hispanic origin, educational attainment, and marital status,

is based on data from those States that require the item to be reported, whose data meet a minimum level of completeness (such as 80 or 90 percent), and are considered to be sufficiently comparable to be used for analysis. In 1993–96 the reporting area for Hispanic origin of decedent on the death certificate included 49 States and DC. Starting in 1997 the Hispanic reporting area includes all 50 States and DC. See related [Registration area](#); [Appendix I, National Vital Statistics System](#).

Resident—In the Online Survey Certification and Reporting database, all residents in certified facilities are counted on the day of certification inspection. In the National Nursing Home Survey, a resident is a person on the roster of the nursing home as of the night before the survey. Included are all residents for whom beds are maintained even though they may be on overnight leave or in a hospital. See related [Nursing home](#).

Resident population—See [Population](#).

Residential treatment care—See [Mental health service type](#).

Residential treatment centers for emotionally disturbed children—See [Mental health organization](#).

Rural—See [Urbanization](#).

Self-assessment of health—See [Health status, respondent-assessed](#).

Short-stay hospital—See [Hospital](#).

Skilled nursing facility—See [Nursing home](#).

Smoker—See [Cigarette smoking](#); [Tobacco use](#).

Specialty hospital—See [Hospital](#).

State health agency—The agency or department within State government headed by the State or territorial health official. Generally, the State health agency is responsible for setting statewide public health priorities, carrying out national and State mandates, responding to public health hazards, and assuring access to health care for underserved State residents.

State Children’s Health Insurance Program (SCHIP)—Title XXI of the Social Security Act, known as the State Children’s Health Insurance Program (SCHIP), is a program initiated by

the Balanced Budget Act of 1997 (BBA). In addition to allowing States to craft or expand an existing State insurance program, SCHIP provides more Federal funds for States to expand Medicaid eligibility to include a greater number of children who are currently uninsured. With certain exceptions, these are low-income children who would not qualify for Medicaid based on the plan that was in effect on April 15, 1997. Funds from SCHIP also may be used to provide medical assistance to children during a presumptive eligibility period for Medicaid. This is one of several options from which States may select to provide health care coverage for more children, as prescribed within the BBA's Title XXI program. See related [Health insurance coverage](#); [Medicaid](#).

Substance use—refers to the use of selected substances including alcohol, tobacco products, drugs, inhalants, and other substances that can be consumed, inhaled, injected, or otherwise absorbed into the body with possible detrimental effects.

The Monitoring the Future Study (MTF)—The MTF collects information on use of selected substances using self-completed questionnaires to a school-based survey of secondary school students. MTF has tracked 12th graders' illicit drug use and attitudes towards drugs since 1975. In 1991, 8th and 10th graders were added to the study. The survey includes questions on abuse of substances including (but not limited to) marijuana, inhalants, illegal drugs, alcohol, cigarettes, and other tobacco products. A standard set of three questions is used to assess use of the substances in the past month. "Past month" refers to an individual's use of a substance at least once during the month preceding their response to the survey. See related [Appendix I, Monitoring the Future Study](#).

National Household Survey of Drug Abuse (NHSDA)—The NHSDA conducts in-person interviews of a sample of individuals 12 years of age and older at their place of residence. For illicit drug use, alcohol use, and tobacco use, information is collected about use in past month. For information on illicit drug use, respondents in the NHSDA are asked about use of marijuana/hashish, cocaine (including crack), inhalants, hallucinogens, heroin, and prescription-type drugs used nonmedically (pain relievers, tranquilizers, stimulants, and sedatives). A series of questions is asked about each substance: "Have you ever, even once, used [e.g., Ecstasy, also

known as MDMA/substance]?" "Think specifically about the past 30 days, from [date] up to and including today. During the past 30 days, on how many days did you use [substance]?" Numerous probes and checks are included in the computer-assisted interview system.

Nonprescription medications and legitimate uses under a doctor's supervision are not included in the survey.

Summary measures such as "any illicit drug use" are produced. See related [Appendix I, National Household Survey of Drug Abuse](#).

See related [Alcohol consumption](#); [Cigarette smoking](#); [Illicit drug use](#).

Substance abuse treatment clients—In the Substance Abuse and Mental Health Services Administration's National Survey of Substance Abuse Treatment Services, substance abuse treatment clients have been admitted to treatment and have been seen on a scheduled appointment basis at least once in the month before the survey reference date or were inpatients on the survey reference date. Types of treatment include 24-hour detoxification, 24-hour rehabilitation or residential care, and outpatient care.

Suicidal ideation—Suicidal ideation is having thoughts of suicide or of taking action to end one's own life. Suicidal ideation includes all thoughts of suicide, both when the thoughts include a plan to commit suicide and when they do not include a plan. Suicidal ideation is measured in the Youth Risk Behavior Survey by the question "During the past 12 months, did you ever seriously consider attempting suicide?"

Surgical operation—See [Procedure](#).

Surgical specialty—See [Physician specialty](#).

Tobacco use—Information on tobacco use during pregnancy became available on birth certificates for the first time in 1989 with revision of the U.S. Standard Birth Certificate. In 1989, 43 States and the District of Columbia collected data on tobacco use. The following States did not require the reporting of tobacco use in the standard format on the birth certificate: California, Indiana, Louisiana, Nebraska, New York, Oklahoma, and South Dakota. In 1990 information on tobacco use became available from Louisiana and Nebraska, increasing the number of reporting States to 45 and the District of Columbia. In 1991–93, with the addition of Oklahoma to the reporting area, information on tobacco use

was available for 46 States and the District of Columbia; in 1994–98, 46 States, the District of Columbia, and New York City reported tobacco use; in 1999 information on tobacco use became available from Indiana and New York, increasing the number of reporting States to 48 and the District of Columbia; and in 2000–01, with the addition of South Dakota, the reporting area included 49 States and the District of Columbia. During 1989–2001 California did not require the reporting of tobacco use in the standard format on the birth certificate. The areas reporting tobacco use comprised 87 percent of the U.S. births in 1999–2001. See related [Cigarette smoking](#).

Uninsured—In the Current Population Survey (CPS) persons are considered uninsured if they do not have coverage through private health insurance, Medicare, Medicaid, State Children’s Health Insurance Program, military or Veterans coverage, another government program, a plan of someone outside the household, or other insurance. In addition, if the respondent has missing Medicaid information but has income from certain low income public programs, then Medicaid coverage is imputed. The questions on health insurance are administered in March and refer to the previous calendar year.

In the National Health Interview Survey (NHIS), the uninsured are persons who do not have coverage under private health insurance, Medicare, Medicaid, public assistance, a State-sponsored health plan, other government-sponsored programs, or a military health plan. Persons with only Indian Health Service coverage are considered uninsured. Estimates of the percent of persons who are uninsured based on the NHIS ([table 129](#)) may differ slightly from those based on the March CPS ([table 151](#)) due to differences in survey questions, recall period, and other aspects of survey methodology. In 2001 in the NHIS, 1.3 percent of persons age 65 years and over had no health insurance but the small sample size precludes the presentation of separate estimates for this population. Therefore the term “uninsured” refers only to the population under age 65.

See related [Health insurance coverage](#); [Appendix I, Current Population Survey](#).

Urbanization—In this report death rates are presented according to the urbanization level of the decedent’s county of residence. Counties and county equivalents were assigned to one of five urbanization levels based on their classification

in the Urban Influence code system (December 1996 Revision) developed by the Economic Research Service, U.S. Department of Agriculture. There are three levels for metropolitan counties and two levels for nonmetropolitan counties. The categorization of counties as metropolitan or nonmetropolitan in the Urban Influence code system is based on the June 1993 OMB definition of metropolitan areas (the application of the 1990 metropolitan area standards to the 1990 decennial census data). Metropolitan areas include metropolitan statistical areas (MSAs), consolidated metropolitan statistical areas (CMSAs), and primary metropolitan statistical areas (PMSAs). See [Metropolitan statistical area](#) for definitions of metropolitan and nonmetropolitan counties.

The Urban Influence code system classifies metropolitan counties as either large metro (counties in MSA/PMSAs of 1 million or more population) or small metro (counties in MSA/PMSAs of less than 1 million population). For this report, the large metro category of the Urban Influence code system was divided into two urbanization levels: large central metro and large fringe metro. Thus, metropolitan counties were assigned to one of three metropolitan urbanization levels: (a) *large central*—counties in large (1 million or more population) MSA/PMSAs that contain all or part of the largest central city of the MSA/PMSA; (b) *large fringe*—counties in large (1 million or more population) MSA/PMSAs that do not contain any part of the largest central city of the MSA/PMSA (counties in a few PMSAs with less than 1 million population were assigned to the large fringe urbanization level because the PMSA in which they are located is adjacent to a large central county of the CMSA); and (c) *small*—counties in small (less than 1 million population) MSA/PMSAs.

The Urban Influence code system divides nonmetropolitan counties into seven categories based on adjacency to a metropolitan area and size of the largest city. A county is considered to have a city with a specified size if it includes all or part of the city. The seven categories were collapsed into two categories: (d) *nonmetro counties with a city of 10,000 or more population* and (e) *nonmetro counties without a city of 10,000 or more population*.

Usual source of care—Usual source of care was measured in the National Health Interview Survey (NHIS) in 1993 and 1994 by asking the respondent “Is there a particular person or place that ___ usually goes to when ___ is sick or needs advice about ___ health?” In the 1995 and 1996 NHIS,

the respondent was asked “Is there one doctor, person, or place that ____ usually goes to when ____ is sick or needs advice about ____ health?” Starting in 1997 the respondent was asked “Is there a place that ____ usually goes when he/she is sick or you need advice about (his/her) health?” Persons who report the emergency department as their usual source of care are defined as having no usual source of care in this report.

Wages and salaries—See [Employer costs for employee compensation](#).

Years of potential life lost—Years of potential life lost (YPLL) is a measure of premature mortality. Starting with *Health, United States, 1996–97*, YPLL is presented for persons under 75 years of age because the average life expectancy in the United States is over 75 years. YPLL-75 is calculated using the following eight age groups: under 1 year, 1–14 years, 15–24 years, 25–34 years, 35–44 years, 45–54 years, 55–64 years, 65–74 years. The number of deaths for each age group is multiplied by years of life lost, calculated as the difference between age 75 years and the midpoint of the age group. For the eight age groups, the midpoints are 0.5, 7.5, 19.5, 29.5, 39.5, 49.5, 59.5, and 69.5. For example, the death of a person 15–24 years of age counts as 55.5 years of life lost. Years of potential life lost is derived by summing years of life lost over all age groups. In *Health, United States, 1995* and earlier editions, YPLL was presented for persons under 65 years of age. For more information, see Centers for Disease Control. *MMWR*. Vol 35 no 25S, suppl. 1986.