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Summary of Notifiable Diseases — United States, 2001

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
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Preface

The *MMWR Summary of Notifiable Diseases, United States, 2001* contains, in tabular and graphic form, the official statistics for the reported occurrence of nationally notifiable diseases in the United States for 2001. These statistics are collected and compiled from reports sent by state health departments to the National Notifiable Diseases Surveillance System (NNDSS), which is operated by CDC in collaboration with the Council of State and Territorial Epidemiologists (CSTE).

The *Summary* is located on the Internet at http://www2.cdc.gov/mmwr/summary.html. This site also includes publications from past years.

Because the dates of onset or diagnosis for notifiable diseases are not always reported, these surveillance data are presented by the year and week they were reported to CDC by public health officials in state and territorial health departments. The data are finalized and published each year in the *Summary* for use by state and local health departments; schools of medicine and public health; communications media; local, state, and federal agencies; and other agencies or persons interested in following the trends of reportable diseases in the United States. This publication also documents which diseases are considered national priorities for notification and the annual number of reported cases of such diseases.

The Highlights section presents information on selected nationally notifiable diseases to provide a context in which to interpret surveillance and disease-trend data and to provide further information on the epidemiology and prevention of selected diseases.

Part 1 contains tables showing incidence data for each of the diseases considered nationally notifiable during 2001.* The tables provide the number of cases of notifiable diseases reported to CDC for 2001, as well as the distribution of cases by month and geographic location and by patient's age, sex, race, and Hispanic ethnicity. The data are final totals reported as of June 21, 2002, unless otherwise noted. Nationally notifiable diseases that are reportable in <40 states also do not appear in these tables. Ehrlichiosis, human, other or unspecified agent, is not reported in any tables because data are incomplete. In all tables, leprosy is listed as Hansen disease, and tickborne typhus fever is listed as Rocky Mountain spotted fever (RMSF). In addition, syphilis (all stages) includes the following categories: latent; early latent; late latent; latent of unknown duration; neurosyphilis; late, with clinical manifestations other than neurosyphilis; syphilitic stillbirth, and congenital syphilis. Part 2 contains graphs and maps that depict summary data for many of the notifiable diseases described in tabular form in Part 1. Part 3 contains tables that list the number of cases of notifiable diseases reported to CDC since 1970. This section also includes a table enumerating deaths associated with specified notifiable diseases reported to the National Center for Health Statistics (NCHS), CDC, during 1996–1999.†

The Selected Reading section presents general and disease-specific references for notifiable infectious diseases. These references provide additional information on surveillance and epidemiologic issues, diagnostic issues, or disease control activities.

*Because no cases of paralytic poliomyelitis, western equine encephalitis, or yellow fever were reported in the United States during 2001, these diseases do not appear in the tables in Part 1.

† In 1999, mortality data began to be coded according to the *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision*. To bridge the mortality data for the period 1996–1998 (deaths coded using the *International Classification of Diseases, Ninth Revision*), and 1999, we use comparability ratios provided by the National Center for Health Statistics.

Background

The infectious diseases designated as notifiable at the national level during 2001 are listed in the following table. A notifiable disease is one for which regular, frequent, and timely information regarding individual cases is considered necessary for the prevention and control of the disease. This section briefly summarizes the history of the reporting of nationally notifiable diseases in the United States.

In 1878, Congress authorized the U.S. Marine Hospital Service (the forerunner of the Public Health Service [PHS]) to collect morbidity reports regarding cholera, smallpox, plague, and yellow fever from U.S. consuls overseas. The intention was to use this information to institute quarantine measures to prevent the introduction and spread of these diseases into the United States. In 1879, a specific Congressional appropriation was made for the collection and publication of reports of these notifiable diseases. Congress expanded the authority for weekly reporting and publication of these reports in 1893 to include data from states and municipal authorities. To increase the uniformity of the data, Congress enacted a law in 1902 directing the Surgeon General to provide forms for the collection and compilation of data and for the publication of reports at the national level. In 1912, state and territorial health authorities — in conjunction with PHS — recommended immediate telegraphic reporting of five infectious diseases and the monthly reporting, by letter, of 10 additional diseases. The first annual summary of *The Notifiable Diseases* in 1912 included reports of 10 diseases from 19 states, the District of Columbia, and Hawaii. By 1928, all states, the District of Columbia, Hawaii, and Puerto Rico were participating in national reporting of 29 specified diseases. At their annual meeting in 1950, state and territorial health officers authorized the Council of State and Territorial Epidemiologists (CSTE) to determine which diseases should be reported to PHS. In 1961, CDC assumed responsibility for the collection and publication of data concerning nationally notifiable diseases.

The list of nationally notifiable diseases is revised periodically. For example, a disease might be added to the list as a new pathogen emerges, or a disease might be deleted as its incidence declines. Public health officials at state health departments and CDC continue to collaborate in determining which diseases should be nationally notifiable. CSTE, with input from CDC, makes recommendations annually for additions and deletions. Although disease reporting is mandated by legislation or regulation at the state and local levels, state reporting to CDC is voluntary. Thus, the list of diseases considered notifiable varies slightly by state. All states generally report the internationally quarantinable diseases (i.e., cholera, plague, and yellow fever) in compliance with the World Health Organization's International Health Regulations.

Infectious Diseases Designated as Notifiable at the National Level During 2001

Acquired immunodeficiency syndrome (AIDS)	EHEC, not serogrouped	Q fever
Anthrax	Gonorrhea	Rabies, animal
Botulism	*Haemophilus influenzae*, invasive disease	Rabies, human
Brucellosis	Hansen disease (leprosy)	Rocky Mountain spotted fever
Chancroid	Hantavirus pulmonary syndrome	Rubella
Chlamydia trachomatis, genital infection	Hemolytic uremic syndrome, postdiarrheal	Rubella, congenital syndrome
Cholera	Hepatitis A, acute	Salmonellosis
Coccidioidomycosis	Hepatitis B, acute	Shigellosis
Cryptosporidiosis	Hepatitis B, perinatal	Streptococcal disease, invasive, group A
Cyclosporiasis	Hepatitis C; non-A, non-B	Streptococcal toxic-shock syndrome
Diphtheria	Human immunodeficiency virus (HIV) infection, adult	*Streptococcus pneumoniae*, invasive, drug-resistant
Ehrlichiosis, human granulocytic	HIV infection, pediatric (<13 yrs)	*Streptococcus pneumoniae*, invasive, <5 yrs
Ehrlichiosis, human monocytic	Legionellosis	Syphilis
Ehrlichiosis, human, other or unspecified agent	Listeriosis	Syphilis, congenital
Encephalitis, California serogroup viral	Lyme disease	Tetanus
Encephalitis, eastern equine	Malaria	Toxic-shock syndrome
Encephalitis, St. Louis	Measles	Trichinosis
Encephalitis, western equine	Meningococcal disease	Tuberculosis
Escherichia coli, enterohemorrhagic (EHEC), O157:H7	Mumps	Tularemia
EHEC, serogroup non-O157	Pertussis	Typhoid fever
	Plague	Varicella (chickenpox)*
	Poliomyelitis, paralytic	Varicella deaths
	Psittacosis	Yellow fever

* Although varicella (chickenpox) is not a nationally notifiable disease, the Council of State and Territorial Epidemiologists recommends reporting cases of this disease to CDC.

Data Sources

Provisional data concerning the reported occurrence of notifiable diseases are published weekly in the *MMWR*. After each reporting year, staff in state health departments finalize reports of cases for that year with local or county health departments and reconcile the data with reports previously sent to CDC throughout the year. These data are compiled in final form in the *Summary*.

Notifiable disease reports are the authoritative and archival counts of cases. They must be approved by the appropriate epidemiologist from each submitting state or territory before being published in the *Summary*. Although useful for detailed epidemiologic analyses, data published in *CDC Surveillance Summaries* or other surveillance reports produced by CDC programs might not agree exactly with data reported in the annual summary because of differences in the timing of reports, the source of the data, or the case definitions.

Data in the *Summary* were derived primarily from reports transmitted to the Division of Public Health Surveillance and Informatics, Epidemiology Program Office, CDC, from health departments in the 50 states, five territories, New York City, and the District of Columbia through the National Electronic Telecommunications System for Surveillance (NETSS). More information regarding NETSS and notifiable diseases, including case definitions for these conditions, is available on the Internet at http://www.cdc.gov/epo/dphsi/phs.htm. Policies for reporting notifiable disease cases can vary by disease or reporting jurisdiction, depending on case status classification (i.e., confirmed, probable, or suspected).

Final data for selected diseases (presented in Parts 1, 2, and 3) are from the surveillance records of the CDC programs listed below. Requests for further information regarding these data should be directed to the appropriate program.

National Center for Health Statistics (NCHS)

Office of Vital and Health Statistics Systems (deaths from selected notifiable diseases).

National Center for Infectious Diseases (NCID)

Division of Bacterial and Mycotic Diseases (toxic-shock syndrome; streptococcal disease, invasive, group A; streptococcal toxic-shock syndrome; laboratory data regarding botulism, *Escherichia coli,* enterohemorrhagic O157:H7, salmonellosis, and shigellosis).

Division of Vector-Borne Infectious Diseases (laboratory data regarding arboviral encephalitis).

Division of Viral and Rickettsial Diseases (animal rabies, hantavirus pulmonary syndrome).

National Center for HIV, STD, and TB Prevention (NCHSTP)

Division of HIV/AIDS Prevention — Surveillance and Epidemiology (acquired immunodeficiency syndrome [AIDS]).

Division of Sexually Transmitted Diseases Prevention (chancroid, chlamydia, gonorrhea, syphilis).

Division of Tuberculosis Elimination (tuberculosis).

National Immunization Program (NIP)
Epidemiology and Surveillance Division (poliomyelitis).

Disease totals for the United States, unless otherwise stated, do not include data for American Samoa, Guam, Puerto Rico, the U.S. Virgin Islands, or the Commonwealth of the Northern Mariana Islands.

Population estimates for the states are from the April 1, 2000, population estimates from the Population Division, U.S. Bureau of the Census. Population numbers for territories are 2000 estimates from the U.S. Bureau of the Census, International Data Base Data Access Display Mode. More information regarding census estimates is available at http://eire.census.gov/popest/data/states/tables/ST-EST2002-01.php and http://www.census.gov/ipc/www/idbprint.html. The choice of population denominators for incidence rates reported in the MMWR is based on 1) the consistency in the incidence rates reported by various CDC programs, and 2) the availability of census population data at the time of preparation for MMWR publications. Rates in the *Summary* are presented as incidence rates per 100,000 population, based on data for the U.S. total-resident population. However, population data from states in which diseases were not notifiable or disease data were not available were excluded from rate calculations.

Interpreting Data

Incidence data in the *Summary* are presented by the date of report to CDC as determined by the MMWR week and year assigned by the state or territorial health department. As a result, annual incidence data in the *Summary* represent cases with onset during the MMWR year assigned to the case, or during previous years. In addition, data in the *Summary* are reported by the state in which the patient resides at the time of diagnosis. For many of the nationally notifiable infectious diseases, surveillance data are independently reported to EPO and other CDC programs. Thus, surveillance data reported by other CDC programs may vary from data reported in the *Summary* because of differences in 1) the date used to aggregate data (e.g., date of report, date of disease occurrence), 2) the timing of reports, 3) the source of the data, 4) surveillance case definitions, and 5) policies regarding case jurisdiction (i.e., which state should report the case to CDC).

The data reported in the *Summary* are useful for analyzing disease trends and determining relative disease burdens. However, these data must be interpreted in light of reporting practices. Some diseases that cause severe clinical illness (e.g., plague and rabies) are most likely reported accurately if they were diagnosed by a clinician. However, persons who have diseases that are clinically mild and infrequently associated with serious consequences (e.g., salmonellosis) might not seek medical care from a health-care provider. Even if these less severe diseases are diagnosed, they are less likely to be reported.

The degree of completeness of data reporting also is influenced by the diagnostic facilities available; the control measures in effect; public awareness of a specific disease; and interests, resources, and priorities of state and local officials responsible for disease control and public health surveillance. Finally, factors such as changes in the case definitions for public health surveillance, introduction of new diagnostic tests, or discovery of new disease entities can cause changes in disease reporting that are independent of the true incidence of disease.

Public health surveillance data are published for selected racial and ethnic population groups because these variables can be risk markers for certain notifiable diseases. Race and ethnicity data can also be used to highlight populations for focused prevention efforts. However, caution must be used when drawing conclusions from reported race and ethnicity data. Certain racial/ethnic population groups have differential patterns of access to health care, potentially resulting in data that are not representative of disease incidence in these populations. Surveillance data reported to NNDSS are either in individual case-specific form or summary form (aggregated data for a group of cases). Summary data often lack demographic information (e.g., race); therefore, the demographic-specific incidence rates presented in the *Summary* may be underestimated.

In addition, not all race and ethnicity data are collected uniformly for all diseases. For example, in NCHSTP, the Division of HIV/AIDS Prevention — Surveillance and Epidemiology and the Division of Sexually Transmitted Diseases Prevention collect race/ethnicity data using a single variable. A person's race/ethnicity is reported as American Indian/Alaska Native, Asian/Pacific Islander, black non-Hispanic, white non-Hispanic, or Hispanic. Additionally, although the recommended standard for classifying a person's race or ethnicity is based on self-reporting, this procedure might not always be followed.

Highlights for 2001

This section presents information on the public health importance of selected nationally notifiable diseases reported from the states to CDC, including a) domestic and some international disease outbreaks, b) active surveillance findings, c) changes in data reporting practices, d) the impact of prevention programs, e) the emergence of antimicrobial resistance, and f) changes in immunization policies. This information is intended to provide a context in which to interpret surveillance and disease-trend data and to provide further information on the epidemiology and prevention of selected diseases.

AIDS

Since the use of highly active antiretroviral therapy (HAART) in the United States became widespread in 1996, the number of persons diagnosed with acquired immunodeficiency syndrome (AIDS) has declined. The number of deaths among persons with AIDS has also declined substantially; as a result, the number of persons living with AIDS has increased (*1*). By December 2001, a total of 807,075 adults and 9,074 children had been reported with AIDS.

In 1996, sharp declines in AIDS incidence occurred for the first time; during 1998–1999, declines in AIDS incidence began to level, and essentially no change occurred from 1999 through 2000. Through December 2001, 462,653 adult and 5,257 pediatric AIDS cases resulted in death. Since 1996, the number of deaths among persons with AIDS declined sharply and continued to decline each year through 2000. The number of persons living with AIDS, approximately 362,827, was the highest ever reported; of these persons, 78% were men and 61% were black or Hispanic. Of the 282,250 adult and adolescent men with AIDS, 57% were men who have sex with men, 24% were injecting drug users, 9% were exposed through heterosexual contact, and 8% were both men who have sex with men and injecting drug users. Of the 76,696 adult and adolescent women with AIDS, 59% were exposed through heterosexual contact and 38% through injecting drug use (*2*).

To provide better data for prevention of human immunodeficiency virus (HIV) infection (the virus that causes AIDS), CDC and CSTE recommend that national surveillance include the monitoring of both HIV infection and AIDS (*3,4*). CDC supports several supplemental surveillance projects that collect data on barriers to preventing AIDS cases and deaths of persons with AIDS, including access to HIV testing and treatment in accordance with current public health service guidelines.

1. CDC. Update: AIDS—United States, 2000. MMWR 2002;51;592–5.
2. CDC. HIV/AIDS Surveillance Report, 2002. Atlanta: Centers for Disease Control and Prevention. Vol. 13, No. 2. Available at http://www.cdc.gov/hiv/stats/hasrlink.htm.
3. CDC. Guidelines for national human immunodeficiency virus case surveillance, including monitoring for human immunodeficiency virus infection and acquired immunodeficiency syndrome. MMWR 1999;48(No. RR-13).
4. Council of State and Territorial Epidemiologists. CSTE position statement ID-4: National HIV surveillance—addition to the National Public Health Surveillance System. Atlanta: Council of State and Territorial Epidemiologists, 1997.

Anthrax

In September and October 2001, in an unprecedented biological terrorism event, letters containing *Bacillus anthracis* spores were sent through the U.S. Postal Service to various addresses in several states. Eleven inhalational and 11 cutaneous (four suspected and seven confirmed) anthrax cases resulted. Five of the 11 inhalational infections were fatal. These bioterrorism-associated cases occurred among residents of seven states along the East Coast of the United States: Connecticut, one case; Florida, two cases; Maryland, three cases; New Jersey, five cases; New York City, eight cases (includes a case in a New Jersey resident exposed in New York City); Pennsylvania, one case; and Virginia, two cases. In addition to the 22 bioterrorism-associated cases, one naturally occurring case of cutaneous anthrax (associated with direct exposure to livestock that had died of anthrax) was reported from Texas in the summer of 2001. *B. anthracis* remains a Category A bioterrorism threat agent.

Botulism

Thirty-nine cases of foodborne botulism were reported in 2001 through NNDSS. An outbreak of foodborne botulism in Texas involving nine culture-confirmed and seven clinically diagnosed cases was caused by commercially produced chili sauce and likely occurred because of time and temperature abuse of the food at a retail salvage store. The highest annual frequency of infant botulism, 97 cases, was reported in 2001. The number of wound botulism cases reported in 2001 was 19. Botulism surveillance conducted by the Foodborne and Diarrheal Diseases Branch, NCID, indicated 33 foodborne cases, 112 cases of infant botulism, and 23 cases of wound botulism. *Clostridium botulinum* toxin is a Category A bioterrorism threat agent.

Brucellosis

In 2001, the control program for brucellosis among cattle in the United States has nearly eliminated *Brucella abortus* infection from U.S. herds. Therefore, at present, the risk of contracting brucellosis either from occupational exposure to livestock in the United States or from domestically produced food products is minimal. However, a risk remains for infection with both *B. abortus* and *B. melitensis* from consumption of unpasteurized goat and cow milk products, in particular those produced outside the United States. Most cases in the United States are now seen in international travelers or recent immigrants. Hunters exposed to infected wildlife and laboratory personnel working with *Brucella* species also have an elevated risk for infection. *B. melitensis* and *B. suis* are considered Category B bioterrorism threat agents.

Chancroid

During 2001, a total of 38 cases of chancroid were reported (rate: 0.01 cases/100,000 population), representing a 51% decline from 2000 and a continuing decline since 1987 (*1*). However, chancroid is difficult to culture and could be substantially underdiagnosed. Several studies that used DNA amplification tests (which are not commercially available) have identified this infection in cities where it was previously undetected (*2*).

1. CDC. Sexually transmitted disease surveillance 2001. Atlanta: US Department of Health and Human Services, Public Health Service, CDC, 2002.
2. Mertz KJ, Trees D, Levine WC, et al. Etiology of genital ulcers and prevalence of human immunodeficiency virus coinfection in 10 US cities. The Genital Ulcer Disease Surveillance Group. J Infect Dis 1998;178:1795–8.

Chlamydia trachomatis, Genital Infection

During 2001, a total of 783,242 cases of genital chlamydial infection were reported (rate: 278.32/100,000). This rate was the highest since voluntary case reporting began in the mid-1980s and the highest since genital chlamydial infection became a nationally notifiable disease in 1995 (*1*). This increase could be caused in part by the continued expansion of chlamydia screening programs and increased use of more sensitive diagnostic tests for this condition.

1. CDC. Sexually transmitted disease surveillance 2001. Atlanta: US Department of Health and Human Services, Public Health Service, CDC, 2002.

Cholera

During 1995–2000, 61 laboratory-confirmed cases of cholera, all caused by *Vibrio cholerae* O1, were reported to CDC. Thirty-five (57%) patients were hospitalized, and one died. Thirty-seven (61%) infections were acquired outside the United States, whereas six (10%) were acquired through consumption of contaminated seafood harvested in Gulf Coast waters (1). Only three laboratory-confirmed cases of cholera were reported to CDC in 2001. All were caused by *V. cholerae* O1 and were acquired outside the United States. All three isolates were resistant to trimethoprim-sulfamethoxazole, sulfisoxazole, streptomycin, and furazolidone. Thus, foreign travel continues to account for most cholera cases in the United States, and antimicrobial resistance is common among *V. cholerae* O1 strains isolated from ill travelers. Production and sale of the only licensed cholera vaccine in the United States ceased in 2001.

1. Steinberg EB, Greene KD, Bopp CA, Cameron DN, Wells JG, Mintz ED. Cholera in the United States, 1995–2000: trends at the end of the millennium. J Infect Dis 2001;184:799–802.

Coccidioidomycosis

In recent years, Arizona has experienced a significant increase in the incidence rates of coccidioidomycosis, from 18/100,000 in 1997 to 42/100,000 in 2001. This increase is likely related to demographic and climactic changes. Physicians should maintain a high suspicion for acute coccidioidomycosis, especially for persons with a flu-like illness who live in or have visited endemic-disease areas.

Diphtheria

During 2001, two probable diphtheria cases were reported to CDC. Both patients had membranous pharyngitis. The first was a man aged 59 years from Montana. A specimen for culture was not obtained from this patient. The second patient was a woman aged 19 years from Michigan. Although a throat swab culture from this patient did not yield *Corynebacterium diphtheriae*, a weakly positive *Taq*man polymerase chain reaction test result was obtained from the membranous tissue. Neither patient had a history of recent travel or had contact with international or local visitors. Both patients survived.

Encephalitis, Arboviral

In 2001, epizootic and epidemic West Nile virus (WNV) activity continued in the United States, and geographic limits of reported viral activity extended to western Arkansas and southern Florida (*1*). WNV-infected birds, mosquitoes, or horses were detected in 27 states and the District of Columbia; 16 of these states had not previously reported WNV activity. In Florida, dead infected birds were collected as late as

December 26, suggesting the potential for winter transmission in southern regions. An unprecedented equine WNV epizootic occurred in Florida and Georgia and resulted in 511 reported equine cases. *Culex* (*Cx. pipiens, Cx. restuans, and Cx. salinarius*) mosquitoes were again the most commonly identified mosquito vectors of WNV. WNV was also detected in several human-feeding mosquito species (*Cx. nigripalpus, Ochlerotatus sollicitans, Oc. tainiorhynchus, and Coquillitidia perturbans*), raising concerns about increased human risk in areas where these species are common (*2,3*). A total of 66 human cases of WNV disease were reported from 39 counties in 10 states (64 patients with WNV meningoencephalitis and two persons with uncomplicated WNV fever).

In 2001, 79 human cases of St. Louis encephalitis (SLE) were reported from Arizona (n = 1), Arkansas (n = 2), Louisiana, (n = 71), and Texas (n = 5). Epidemic SLE activity in Louisiana was centered in the city of Monroe (*4*).

1. CDC. West Nile virus activity, United States—2001. MMWR 2002;51:497–501.
2. Sardelis MR, Turrell MJ, Dohm DJ, et al. Vector competence of selected North American *Culex* and *Coquillettidia* mosquitoes for West Nile virus. Emerg Infect Dis 2001;7:1018–22.
3. Turrell MJ, O'Guinn ML, Dohm JD, et al. Vector competence of North American mosquitoes (Diptera: Culicidae) for West Nile virus. J Med Entomol 2001;38:130–4.
4. Louisiana Office of Public Health. Four types of encephalitis found in Louisiana in 2001. Louisiana Morbidity Report 2001;12(5),2–3. Available at http://oph.dhh.state.la.us/infectiousdisease/docs/Lmr/sepoct01.pdf

Escherichia coli, enterohemorrhagic

In 2001, the National Notifiable Diseases Surveillance System expanded surveillance of *Escherichia coli* O157:H7 to include other serogroups of Shiga toxin-producing *E.* coli under the inclusive name enterohemorrhagic *E. coli* (EHEC). Surveillance categories for EHEC include 1) EHEC O157:H7; 2) EHEC, serogroup non-O157; and 3) EHEC, not serogrouped.

During 2001, 3,485 cases of EHEC infection were reported from 50 states, Guam and Puerto Rico. These cases included 3,294 due to EHEC O157:H7, 171 due to EHEC, serogroup non-O157, and 20 due to EHEC that were not serogrouped. Approximately 50% of stools are tested for *E. coli* O157, and few stool specimens are tested in a way that would identify other Shiga toxin-producing *E. coli* (*1*). The number of cases reported for EHEC should be interpreted as an underestimate in a maturing surveillance system.

Healthy cattle are the main animal reservoir for *E. coli* O157:H7 and other Shiga toxin-producing *E. coli*, and they harbor the organism as part of the bowel flora. Most reported outbreaks are caused by contaminated food or water. However, direct transmission from animals and their environment to humans in settings such as petting zoos, open farms, and animal exhibits represents a growing public health concern (*2*).

1. Van Gilder T, Christensen D, Wallace D, et al. Variations in stool handling and culturing practices among clinical microbiology laboratories within the Foodborne Diseases Active Surveillance network (FoodNet): Do we need practice guidelines? [Abstract]. Presented at the 99th General Meeting of the American Society for Microbiology. Chicago, 1999. Available at: http://www.cdc.gov/foodnet/pub/asm/1999/van_gilder.htm
2. Crump JA, Sulka AC, Langer AJ, et al. An outbreak of *Escherichia coli* O157:H7 infections among visitors to a dairy farm. N Engl J Med 2002;347:555–60.

Gonorrhea

During 2001, a total of 361,705 cases of gonorrhea were reported (rate: 128.53/100,000). The 2001 rate was similar to rates for 2000 (129.04/100,000), 1999 (132.32/100,000), and 1998 (131.89/100,000) (*1*) and has remained stable among men and women. Nevertheless, increases have been observed in some areas among men who have sex with men (*2*). Decreased susceptibility to the fluoroquinolone antibiotics and azithromycin has been reported from some regions (*3*). In 2001, the prevalence of fluoroquinolone-resistant *Neisseria gonorrhoeae* infections increased in California. As a result, fluoroquinolones are no longer advised for treatment of gonorrhea in Hawaii or California or for infections that may have been acquired in those states (*4*).

1. CDC. Sexually transmitted disease surveillance 2001. Atlanta: US Department of Health and Human Services, Public Health Service, CDC, 2002.
2. Fox KK, del Rio C, Holmes KK, et al. Gonorrhea in the HIV era: a reversal in trends among men who have sex with men. Am J Public Health 2001;91:1–5.
3. CDC. Fluoroquinolone-resistance in *Neisseria gonorrhoeae*, Hawaii, 1999, and decreased susceptibility to azithromycin in *N. gonorrhoeae*, Missouri, 1999. MMWR 2000;49:833–7.
4. CDC. Sexually transmitted diseases treatment guidelines 2002. MMWR 2002;51(No. RR-6).

Haemophilus influenzae, Invasive Disease

Since 1990, when *Haemophilus influenzae* type b (Hib) conjugate vaccines were licensed for use in infants beginning at age 2 months, Hib has become a rare cause of invasive disease (e.g., meningitis) among children aged <5 years in the United States (*1*). Surveillance information is used to monitor the effectiveness of immunization programs and vaccines and to assess progress toward disease elimination. To continue to assess progress toward the elimination of Hib invasive disease, accurate laboratory information is essential to correctly identify the serotype of the causative *H. influenzae* (Hi) isolate (*2*). Serotyping Hi by slide agglutination can sometimes be inaccurate, especially since it is not performed frequently in most laboratories. Recently, CDC reported discrepancies in Hi slide agglutination serotyping results obtained by state health department laboratories participating in active surveillance and those obtained by CDC. In this study, 28 (70%) of 40 Hi isolates that had been reported as Hib to CDC were actually identified at CDC as nontypeable Hi (*2*). Because of these discrepancies, CDC requests state health department laboratories to send all Hi invasive disease isolates from children aged <5 years to CDC for testing to reconfirm serotype.

1. CDC. Progress toward elimination of *Haemophilus influenzae* type b disease among infants and children—United States, 1998–2000. MMWR 2002;51:234–7.
2. CDC. Serotyping discrepancies in *Haemophilus influenzae* type b disease—United States, 1998–1999. MMWR 2002;51:706–7.

Hansen Disease

A total of 81 Hansen disease cases were reported to CDC through the NNDSS database from 20 states, Puerto Rico and American Samoa in 2001; three states (California, Hawaii and New York) accounted for 74% of the total number of cases reported. In contrast, 110 Hansen disease cases were reported to the National Hansen Disease Program from 27 states and Puerto Rico in 2001; six states (Texas, New York, Louisiana, Washington, Florida and California) accounted for 71% of the total number of cases reported. These data suggest that the annual number of cases in the United States may not be declining and underscore the need for coordination between the multiple surveillance systems as well as the need to continue to identify and treat patients with Hansen disease.

Hantavirus Pulmonary Syndrome

During 2001, a total of 11 cases of hantavirus pulmonary syndrome (HPS) were confirmed in eight states through the Hantavirus Pulmonary Syndrome National Surveillance System and Registry. Three (27%) cases were fatal. This is the lowest number of annual cases reported since the disease was recognized in 1993. Previously, the average number of cases per year was 34 (range: 22–48). As of December 31, 2001, a total of 313 cases have been confirmed in 31 states, including 32 cases that were retrospectively identified back to 1959. Hantaviruses are rodent borne, and human infection most commonly occurs through inhalation of virus particles from infectious rodent droppings, urine, or saliva. Preventing exposure to rodent hosts remains the most effective way of preventing morbidity and mortality from HPS because treatment for the disease is largely supportive (*1*).

1. CDC. Hantavirus pulmonary syndrome–United States: updated recommendations for risk reduction. MMWR 2002;51(No. RR-9):1-12.

Hemolytic Uremic Syndrome, Postdiarrheal

During 2001, the sixth year of national reporting, 28 states reported 202 cases of postdiarrheal hemolytic uremic syndrome (HUS). The median age of patients was 5 years (range: <1–79), and 66% were female. Illness was seasonal, with 43% of cases occurring from June through September. Although the number of reported cases in 2001 decreased compared with 2000 (249 cases), it was greater than in 1999 (181 cases); thus, a trend is not possible to determine. At least five states, the District of Columbia, and two territories did not list HUS as a notifiable disease in 2000, contributing to substantial underreporting.

Postdiarrheal HUS is a life-threatening illness characterized by hemolytic anemia, thrombocytopenia, and renal injury. In the United States, most cases are caused by infection with *Escherichia coli* O157:H7; some are caused by other Shiga toxin-producing *E. coli* (*1,2*).

1. Banatvala N, Griffin PM, Greene KD, et al. The United States prospective hemolytic uremic syndrome study: microbiologic, serologic, clinical, and epidemiologic findings. J Infect Dis 2001;183:1063–70.
2. CDC. *Escherichia coli* O111:H8 outbreak among teenage campers—Texas, 1999. MMWR 2000;49:321–4.

Hepatitis A

Hepatitis A vaccine is recommended for persons at increased risk of acquiring hepatitis A (e.g., illegal drug users, men who have sex with men [MSM]) and also for children in states and counties that have historically had consistently elevated rates of hepatitis A (*1*). After routine childhood vaccination was recommended, the overall hepatitis A rate has declined steadily, and in 2001 it was the lowest yet recorded (4.0/100,000). Because hepatitis A rates tend to vary from year to year and from region to region, continued monitoring of hepatitis A incidence is needed to determine whether this low rate is due to routine immunization or natural variability in infection rates. However, declines in rates have been greater among children and in the states where routine childhood vaccination is recommended, suggesting an impact of childhood vaccination. Despite declining overall rates, some states reported increasing rates in 2000–2001. In several states, these increases were related to outbreaks occurring among high-risk adults, including MSM, and cases among adults in high-risk groups represent an increasing proportion of reported cases nationwide. For example, cases among MSM increased from 4% (1990) to 8% (1995) to12% (2000).

1. CDC. Prevention of hepatitis A through active or passive immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1999;48(No. RR-12).

Hepatitis B

During 2001, a total of 7,843 acute hepatitis B cases were reported, representing a >60% decrease since 1990 (21,102 cases). Surveillance data are being used to monitor the impact of the national strategy for eliminating hepatitis B virus (HBV) infection. *Healthy People 2010* objectives call for a 75%–90% reduction in the national incidence of hepatitis B among adults (baseline: 15–24 cases/100,000), a 99% reduction among children aged 2–18 years (baseline: 945 cases/year), and a 75% reduction in the number of perinatal HBV infections (baseline: 1,682 infections/year) (*1*). The effect of routine infant and adolescent vaccination can already be seen in the declining rate of disease among persons aged <19 years. In contrast, the continued high incidence among persons in other risk groups for which vaccination is recommended, e.g., injection drug users and persons engaging in high-risk sexual behaviors, indicates that programs for reaching these populations need to be developed or strengthened.

1. US Department of Health and Human Services. Healthy People 2010. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health (2 vols.). Washington, DC: US Department of Health and Human Services, 2000.

Hepatitis C; Non-A, Non-B

Cases of hepatitis C reported to CDC are considered unreliable because 1) no serologic marker for acute infection exists, and 2) most health departments do not have the resources to determine if a positive laboratory report for hepatitis C virus (HCV) infection represents acute infection, chronic infection, repeated testing of a person previously reported, or a false-positive result (*1*). Historically, the most reliable national estimates of acute disease incidence have come from sentinel surveillance. After adjusting for underreporting and asymptomatic infections, the annual number of new infections has decreased >80% since 1989 to 25,000 cases in 2001 (CDC, unpublished data, 2002). Because surveillance for acute hepatitis C can be used to evaluate the effectiveness of prevention efforts and identify missed opportunities for prevention, efforts are under way to help states establish and improve surveillance.

1. CDC. Recommendations for prevention and control of hepatitis C virus (HCV) infection and HCV-related chronic disease. MMWR 1998;47(No. RR-19).

HIV Infection, Adult*

Persons with HIV infection are living longer without progressing to AIDS. As a result, AIDS incidence is decreasing and no longer provides the most accurate information on the HIV epidemic. Recommendations for implementing national HIV case surveillance were published in December 1999, and the revised surveillance case definition became effective January 1, 2000 (*1*).

By December 31, 2001, 37 areas had laws or regulations requiring confidential reporting by name of adults/adolescents with confirmed HIV infection. Nine areas (Washington, DC, Hawaii, Illinois, Kentucky, Maryland, Massachusetts, Puerto Rico, Rhode Island, and Vermont) had implemented a code-based system to conduct case surveillance for HIV infection. Other areas (Delaware, Maine, Montana, Oregon, and Washington) had implemented a name-to-code system to conduct HIV infection surveillance: names are collected initially and later are converted to codes. Data on cases of HIV infection from those areas conducting code-based or name-to code systems are not included in this report pending evaluations demonstrating acceptable performance under CDC guidelines and the development of methods to report such data to CDC (*2*).

*For information on AIDS, see page x.

Trend analysis is possible by examining data from the 25 states* that have continually conducted HIV surveillance since 1994. These 25 states represent 24% of all AIDS cases diagnosed in the United States. During 1994–2000, HIV infection was diagnosed in 128,813 persons from the 25 states. The number of persons newly diagnosed each year with HIV infection declined steadily during 1994–1997. From 1997 through 2000, case counts have been stable in all age, race/ethnicity and HIV exposure categories. The largest declines were observed in the following groups: persons aged 25–44 years, men who have sex with men, and injection-drug users. The majority (55%) of persons with newly diagnosed HIV in these 25 states were black non-Hispanic, and 36% were white non-Hispanic. Because persons with newly diagnosed HIV infections include those who may have had previously unrecognized infections for a long time, these data do not represent incident infections. However, the stability in the number of infections diagnosed each year during the latter part of the 1990s and the small declines in the proportion of persons presenting with AIDS indicate that improvements in the targeting of HIV counseling and testing are needed to facilitate earlier diagnoses. Early diagnosis is a critical factor in ensuring that infected persons are linked to effective treatment and prevention services to reduce further transmission and improve quality of life (*3*).

1. CDC. Guidelines for national human immunodeficiency virus case surveillance, including monitoring for human immunodeficiency virus infection and acquired immunodeficiency syndrome. MMWR, 1999;48(No. RR-13):1–31.
2. CDC. HIV/AIDS Surveillance Report, 2002. Vol. 13, No. 2. Atlanta: Centers for Disease Control and Prevention. Available at http://www.cdc.gov/hiv/stats/hasrlink.htm.
3. CDC. Diagnosis and reporting of HIV and AIDS in states with HIV/AIDS surveillance—United States, 1994–2000. MMWR 2002;51;595–8.

HIV Infection, Pediatric

As of December 2001, 39 areas conducted name-based surveillance for HIV infection among children aged <13 years. In 2001, 543 children whose infection had not progressed to AIDS and 175 children who had AIDS were reported (*1*). These states also received reports of perinatally exposed children who required follow-up with health-care providers to determine their HIV infection status.

In 2000, an estimated 6,075–6,422 infants were born to HIV-positive mothers in the United States. Of these infants, an estimated 280–370 were infected with HIV, representing a decline of >80% from the 1991 peak of 1,760 estimated HIV-positive U.S. births (*2*). Declines in perinatal HIV infections have been attributed to the use of zidovudine to reduce perinatal HIV transmission (*3*) and to nationwide efforts to implement routine, voluntary prenatal HIV testing for all pregnant women (*4*). Continued declines in perinatal HIV infections may be difficult to sustain unless new HIV infections in women of childbearing age are reduced.

1. CDC. HIV/AIDS Surveillance Report, 2002. Vol 13, No. 2. Atlanta: Centers for Disease Control and Prevention. Available at http://www.cdc.gov/hiv/stats/hasr1302.htm.
2. Fleming P, Lindegren ML, Byers R, et al. Estimated number of perinatal HIV infections, United States, 2000 [abstract Tu PeC4773]. Presented at the XIV International AIDS Conference. Barcelona, Spain. July 2002.

*Alabama, Arizona, Arkansas, Colorado, Idaho, Indiana, Louisiana, Michigan, Minnesota Mississippi, Missouri, Nevada, New Jersey, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota, Tennessee, Utah, Virginia, West Virginia, Wisconsin, and Wyoming.

3. CDC. Public Health Service Task Force recommendations for the use of antiretroviral drugs in pregnant women infected with HIV-1 for maternal health and for reducing perinatal HIV-1 transmission in the United States. MMWR 1998;47(RR-2).
4. CDC. Revised recommendations for HIV screening of pregnant women. MMWR 2001;50 (No. RR-19):59–86.

Lyme Disease

During 2001, 17,029 cases of Lyme disease were reported, most from the northeastern and north-central United States. During 1991–2000, the reported incidence of Lyme disease nearly doubled (*1*). LYMErix®, the Lyme disease vaccine produced by GlaxoSmithKline Pharmaceuticals, was removed from the market in February 2002 and is no longer available. CDC promotes community-based Lyme disease prevention using strategies aimed at reducing vector tick densities and preventing human infection and is currently funding such projects in Connecticut, Massachusetts, New Jersey, and New York.

1. CDC. Lyme Disease—United States, 2000. MMWR 2002;51:29–31.

Malaria

During 2001, 1,544 malaria cases were reported in the United States. Most cases were imported, with twice as many cases occurring among U.S. residents traveling to malarious areas as occurred among foreign residents immigrating to or visiting the United States (*1*). Although the number of reported cases was similar to 2000 (1,591) (*2*), the annual number of cases has increased during the past 15 years. This increase was likely caused by increases in both international travel (*3*) and immigration (*4*), as well as the spread and intensification of antimalarial drug resistance globally (*5*).

1. Causer LM, Newman RD, Barber AM, et al. Malaria surveillance—United States, 2000. In: CDC Surveillance Summaries, July 12, 2002. MMWR 2002;51(No SS-5):9–23.
2. CDC. Summary of notifiable diseases, United States, 2000. MMWR 2002;49:1–102.
3. International Trade Administration, Office of Travel and Tourism Industries. US resident travel to Canada, Mexico, and overseas countries historical visitation outbound, 1989–1999. Washington, DC: US Department of Commerce, International Trade Administration, Tourism Industries. Available at http://www.tinet.ita.doc.gov/view/f-1999-11-001/index.html.
4. US Census Bureau. Current population reports. Series P23-205. Population profile of the United States:1999. Washington, DC: US Government Printing Office, 2001. Available at http://www.census.gov/prod/2001pubs/p23-205.pdf.
5. Barat LM, Bloland PB. Drug resistance among malaria and other parasites. Infect Dis Clin North Am 1997;11:969–87.

Measles

A total of 116 confirmed measles cases were reported in 2001; cases occurred in 22 states. Fifty-four of the cases were internationally imported, and exposure to these cases resulted in 25 additional cases. Twelve other cases had virologic evidence of importation (i.e., genotypic analysis of measles viruses indicated an imported source). The remaining 25 cases were classified as unknown source cases because no link to importation was detected. The majority of confirmed measles cases (61 cases) occurred in persons aged ≥20 years; 29 cases occurred in persons 5–19 years, and 26 occurred in children aged <5 years. Ten outbreaks, ranging in size from 3 to 14 cases, accounted for 49% of cases (n = 57). All 10 outbreaks were linked to international importation; nine had an epidemiologic link to imported cases and one had virologic evidence of importation.

Meningococcal disease

Rates of meningococcal disease have been relatively stable in the United States. A total of 2,333 cases were reported in 2001, of which 1,931 were confirmed, 77 probable, seven suspected, and 318 of unknown case status. Serogroup information was reported for 33% of cases, and serogroup Y accounted for 33% of those reported. Most other cases were caused by serogroup B (32%) or serogroup C (27%). Although rates of meningococcal disease are usually highest among children aged <1 year, 55% of cases in 2001 occurred among persons aged ≥18 years.

Using the technology applied to the development of *Haemophilus influenzae* type b (Hib) conjugate vaccines, several companies are in the final stages of developing and testing meningococcal conjugate vaccines with various serogroup-specific formulas and in combination with other antigens for licensure in the United States (*1*). Three serogroup C meningococcal conjugate vaccines were licensed and integrated into routine childhood immunization in the United Kingdom in 2000; early results confirm 85%–95% efficacy in infants, toddlers and teenagers (*2*) and suggest herd immunity.

1. Rosenstein NE, Perkins BA, Stephens DA, Popovic T, Hughes JM. Meningococcal disease. N Engl J Med 2000;344:1378–88.
2. Miller E, Borrow R, Kaczmarski E, et al. Update on meningococcal C conjugate vaccination programme in England and Wales: coverage, herd immunity, vaccine efficacy, and validation of serological correlates. Presented at the Thirteenth International Pathogenic Neisseria Conference. Oslo, Norway, September 2002:60.

Mumps

Because of the recommendation of two doses of Measles/Mumps/Rubella vaccine and its high coverage rate in the United States, mumps is at record low levels. During the 1990s, mumps cases declined substantially, from 5,292 reported cases in 1990 to 266 reported cases in 2001, meeting the *Healthy People 2000* objective of <500 cases per year (*1*).

1. CDC. Mumps surveillance–United States, 1988–1993. In: CDC Surveillance Summaries, August 11, 1995. MMWR 1995;44(No. SS-3).

Pertussis

During 2001, a total of 7,580 cases of pertussis were reported. Of these, 22% occurred among infants aged <6 months, who were too young to have received the recommended three doses of diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine; 3% occurred among children aged 6–11 months; 13% among preschool-aged children (i.e., those aged 1–4 years); 10% among children aged 5–9 years; 30% among persons aged 10–19 years; and 22% among persons aged ≥20 years.

Since 1995, the coverage rate with ≥3 doses of a pertussis-containing vaccine has been >94% among U.S. children aged 19–35 months (*1*). Since 1980, the number of reported cases of pertussis in infants aged <7 months and in adolescents and adults has increased markedly in some states (*2*). The reasons for this rise are unknown but could include increased awareness of pertussis among health-care providers, increased use of more sensitive diagnostic tests, better reporting of cases to health departments, and possibly an increase in circulating pertussis. In contrast, the incidence of reported pertussis among children aged 7 months to 9 years has not increased markedly and suggests protection against pertussis. Adolescents and adults can become susceptible to disease because vaccine-induced immunity is believed to wane approximately 5–10 years after pertussis vaccination.

1. CDC. National, state, and urban area vaccination coverage levels among children aged 19–35 months—United States, 2001. MMWR 2001;50:637–41.
2. CDC. Pertussis—United States, 1997–2000. MMWR 2002;51:73–6.

Rubella

Because of the success of the U.S. rubella vaccination program, rubella is at a record low level, with 23 reported cases in 2001. Rubella now mostly occurs among adults born in countries that do not have routine rubella vaccination programs or that have only recently implemented such programs. In 2000 and 2001, 10 mothers of the 11 children with reported congenital rubella syndrome were foreign-born Hispanics.

Salmonellosis

A total of 40,495 salmonellosis cases were reported in 2001, an 11% decrease from 46,831 cases in 1995. *Salmonella* isolates are reported through the Public Health Laboratory Information System by serotype (*1*). Of >2,000 known *Salmonella* serotypes, the three most commonly reported in 2001 were *S*. Typhimurium, *S*. Enteritidis, and *S*. Newport; these accounted for 50% of isolates reported. During the 5-year period 1997–2001, the number of *S.* Newport isolates increased from 5% to 10% of all reported *Salmonella* isolates.

The increasing number of *S.* Newport infections in the United States is concurrent with the emergence and rapid dissemination of multidrug-resistant strains of *S.* Newport with resistance to at least nine antimicrobial drugs. Some strains are also resistant to third-generation cephalosporins such as ceftriaxone, which may be used to treat serious infections. Several outbreaks caused by multidrug-resistant *S*. Newport have been investigated, including one in which raw or undercooked ground beef was implicated (*2*).

1. CDC. PHLIS surveillance data. *Salmonella* annual summaries. Available at http://www.cdc.gov/ncidod/dbmd/phlisdata/salmonella.htm.
2. CDC. Outbreak of multidrug-resistant *Salmonella* Newport—United States, January–April 2002. MMWR 2002;51:545–8.

Shigellosis

Shigella sonnei infections continue to account for approximately 75% of shigellosis in the United States. Prolonged, communitywide outbreaks of *S. sonnei* infections that are transmitted in child care centers and other settings where maintenance of good hygienic conditions requires special care account for much of the problem (*1*). In 2001, one such outbreak in Ohio and Kentucky accounted for several hundred laboratory-confirmed infections. *S. sonnei* can also be transmitted through contaminated foods and through water used for drinking or recreational purposes (*2,3*). Recent evidence suggests that *S. sonnei* infections are increasing among men who have sex with men (*4*).

1. Mohle-Boetani JC, Stapleton M, Finger R, et al. Communitywide shigellosis: control of an outbreak and risk factors in child day-care centers. Am J Public Health 1995;85:812–6.
2. CDC. Outbreaks of *Shigella sonnei* infection associated with eating fresh parsley—United States and Canada, July–August 1998. MMWR 1999;48:285–9.
3. CDC. Shigellosis outbreak associated with an unchlorinated fill-and-drain wading pool, Iowa, 2001. MMWR 2001;50:797–800.
4. CDC. *Shigella sonnei* outbreak among men who have sex with men—San Francisco, California, 2000–2001. MMWR 2001;50:922–6.

Streptococcal Disease, Invasive, Group A (including streptococcal toxic-shock syndrome)

During 2001, 1,147 cases of invasive group A streptococcal (GAS) disease were reported from nine states (California, Colorado, Connecticut, Georgia, Maryland, Minnesota, New York, Oregon, and Tennessee) through the Active Bacterial Core Surveillance (ABCs) project under CDC's Emerging Infections Program (*1*). Based on these 1,147 cases, CDC estimates that approximately 9,930 cases of invasive GAS disease (rate: 3.5/100,000) and 1,350 deaths occurred nationally during 2001. Disease incidence was highest among children aged <1 year (5.5/100,000) and adults aged ≥65 years (9.9/100,000). Streptococcal toxic-shock syndrome and necrotizing fasciitis accounted for approximately 5.9% and 6.7% of invasive cases, respectively. The overall case-fatality rate among persons with invasive GAS disease was 13.2%.

In 2002, CDC published recommendations for the control of invasive group A streptococcal disease among household contacts of persons with invasive GAS infections and for responding to postpartum and postsurgical infections. These recommendations are based on routine surveillance data, studies of the epidemiology of subsequent invasive GAS infections among household contacts of case-patients and postpartum and postsurgical GAS clusters, and studies of the effectiveness of chemoprophylactic regimens for eradicating carriage (*2*).

1. CDC. Active Bacterial Core Surveillance (ABCs) report. Emerging Infections Program Network. Group A streptococcus, 2001. Available at http://www.cdc.gov/ncidod/dbmd/abcs/survreports/gas01_provis.pdf
2. The Prevention of Invasive Group A Streptococcal Infections Workshop Participants. Prevention of invasive group A streptococcal disease among household contacts of case patients and among postpartum and postsurgical patients: recommendations from the Centers for Disease Control and Prevention. Clin Infect Dis 2002;35:950–9.

Streptococcus pneumoniae, Invasive, Drug-Resistant

In 2001, the ABCs project of CDC's Emerging Infections Program(*1*) collected information on invasive pneumococcal disease, including drug-resistant *Streptococcus pneumoniae*, in nine states (California, Colorado, Connecticut, Georgia, Maryland, Minnesota, New York, Oregon, and Tennessee). For the first time, the proportion of pneumococcal isolates that were drug resistant was lower in the current year than reported in the previous year. Of the 3,418 *S. pneumoniae* isolates collected in 2001, 9.7% exhibited intermediate resistance to penicillin (minimum inhibitory concentration [MIC] 0.1–1 μg/mL), and 15.6% were fully resistant (MIC ≥2 μg/mL); in 2000, 9.8% were intermediate and 17.1% were fully resistant (*2*). For cefotaxime, 10.5% of all isolates had intermediate resistance and 5.7% were fully resistant in 2001, compared with 9.8% of all isolates with intermediate resistance and 7.5% fully resistant in 2000. For erythromycin, 19.4% were resistant in 2001 versus 21.3% in 2000. Approximately one in six (16.9%) isolates had reduced susceptibility to at least three classes of drugs commonly used to treat pneumococcal infections, a decline from approximately one fifth (18.9%) of isolates in 2000.

In February 2000, the Food and Drug Administration licensed a pneumococcal conjugate vaccine for use in infants and young children. In October 2000, the Advisory Committee on Immunization Practices issued recommendations for use of the vaccine in children aged <5 years (*3*). Among isolates from children aged <5 years reported to ABCs during 2001, 63.9% of all strains (n = 587) and 75.9% of strains not susceptible to penicillin (n = 199) were serotypes included in this 7-valent vaccine.

1. Schuchat A, Hilger T, Zell E, et al. Active Bacterial Core Surveillance of the Emerging Infections Program Network. Emerg Infect Dis 2001;7:1–8. Available at http://www.cdc.gov/ncidod/eid/vol7no1/schuchat.htm.
2. National Committee for Clinical Laboratory Standards. Performance standards for antimicrobial susceptibility testing: M100-S11. Wayne, PA: National Committee for Clinical Laboratory Standards, 2001.
3. CDC. Preventing pneumococcal disease among infants and young children: recommendations of the Advisory Committee on Immunization Practices. MMWR 2000;49(No. RR-9):1–38.

Streptococcus pneumoniae, Invasive, <5 Years

Invasive *Streptococcus pneumoniae* infection in children aged <5 years was reportable in 28 states and the District of Columbia in 2001. Of these 29 jurisdictions with mandated reporting, only 11 states and the District of Columbia reported cases. The incidence rate in these reporting areas was 13.3/100,000, which is lower than the rate of 39.7 cases/100,000 population estimated from data collected through the Active Bacterial Core Surveillance (CDC, unpublished data).

Syphilis, Congenital

During 2001, a total of 441 cases of congenital syphilis were reported (rate: 11.1/100,000 live births). Like primary and secondary syphilis, the rate of congenital syphilis has declined sharply in recent years, from a peak of 107.3/100,000 in 1991 (*1*). The continuing decrease in the rate of congenital syphilis likely reflects the substantial reduction in the rate of primary and secondary syphilis among women that has occurred in the last decade. Congenital syphilis persists in the United States because a substantial number of women do not receive syphilis serologic testing until late in their pregnancy or not at all. This lack of screening is often related to absent or late prenatal care (*2*).

1. CDC. Sexually transmitted disease surveillance 2000. Atlanta, GA: US Department of Health and Human Services, Public Health Service, CDC, 2001.
2. CDC. Congenital syphilis—United States, 2000. MMWR 2001;50:573–7.

Syphilis, Primary and Secondary

During 2001, a total of 6,103 primary and secondary syphilis cases were reported. From 1990 to 2000, the primary and secondary syphilis rate declined 90%, from 20.34/100,000 to 2.12/100,000. The overall 2001 rate (2.17/100,000) is a 2% increase from the 2000 rate, which was the lowest since reporting began in 1941 (*1*) and the first annual increase since 1990. The 2001 primary and secondary syphilis rate reflects a 15.4% increase among men but a 17.7% decrease among women. This disparity between men and women, observed across all racial and ethnic groups, along with reported outbreaks of syphilis among men who have sex with men (MSM) in large urban areas, suggests that increases in syphilis are occurring among MSM. Rates also remain disproportionately high in the South and among non-Hispanic blacks. (*2,3*).

1. CDC. Sexually transmitted disease surveillance 2000. Atlanta, GA: US Department of Health and Human Services, Public Health Service, CDC, 2001.
2. CDC. Outbreak of syphilis among men who have sex with men—Southern California, 2000. MMWR 2001;50:117–20.
3. CDC. Primary and secondary syphilis—United States, 1999. MMWR 2001;50:113–7.

Tetanus

In 2001, 37 cases of tetanus were reported from 15 states. Four (10.8%) cases were among persons aged <25 years, 19 (51.4%) cases were among persons aged 25–59 years, and 14 (37.8%) cases were among persons aged ≥60 years. The percentage of cases among persons aged 25–59 years has increased during the last decade; previously, most cases were among persons aged ≥60 years (*1*). One neonatal case with an atypical presentation of tetanus was reported from California. The mother of the infant was foreign born and had an unknown vaccination status. The infant recovered after 30 days of hospitalization. Six (16.7%) of the non-neonatal cases were fatal.

1. CDC. Tetanus Surveillance—United States, 1995–1997. In: CDC surveillance Summaries, July 3, 1998. MMWR 1998;47(No. SS-2):1–13.

Tuberculosis

During 2001, a total of 15,989 cases (rate: 5.6/100,000 population) of tuberculosis (TB) were reported to CDC from the 50 states and the District of Columbia, representing a 2% decrease from 2000 and a 40% decrease from 1992, when the number of cases and the case rate most recently peaked in the United States (*1*). In 1991, 73% of reported cases were among U.S.-born persons (rate: 8.2/100,000), and 27% were among foreign-born persons (33.9/100,000). In comparison in 2001, there was an equal distribution (50%) in the number of TB cases among these two groups (case rates: 3.1/100,000 for U.S.-born persons and 26.6/100,000 for foreign-born persons) (*1*).

Despite the decrease in case rate among foreign-born persons during the past decade, half of the TB cases in the United States in 2001 occurred in this population, and the case rate was eight times greater in this population than among U.S.-born persons. To address the high rate, CDC is collaborating with public health partners to implement TB control initiatives among recent international arrivals and residents along the border between the United States and Mexico and to strengthen TB programs in countries with a high incidence of TB disease (*2*). CDC has recently updated its comprehensive national action plan to reflect the alignment of its priorities with the Institute of Medicine report (*3*) and to ensure that priority prevention activities are undertaken with optimal collaboration and coordination among national and international public health partners (*4*).

1. CDC. Reported tuberculosis in the United States, 2001. Atlanta, GA: US Department of Health and Human Services, CDC, September 2002. Available at http://www.cdc.gov/tb.
2. CDC. Tuberculosis morbidity among U.S.-born and foreign-born populations—United States, 2000. MMWR 2002;51:101–4.
3. Institute of Medicine. Ending neglect: the elimination of tuberculosis in the United States. Washington, DC: National Academy Press, 2000.
4. CDC. CDC's response to ending neglect: the elimination of tuberculosis in the United States. Atlanta: US Department of Health and Human Services, CDC, 2002.

Typhoid Fever

In 2001, typhoid fever was diagnosed in 368 persons in the United States. Despite the availability of two effective vaccines, NNDSS reports 350–450 cases each year. Approximately 80% of these cases occur among persons who report international travel during the 6 weeks before illness. Persons visiting friends and relatives in their country

of origin appear to be at high risk (*1*). In many areas of the world, *Salmonella* Typhi strains have acquired resistance to multiple antimicrobial agents, including ampicillin, chloramphenicol, and trimethoprim-sulfamethoxazole (*1*). *S.* Typhi outbreaks in the United States are generally small in size, but they can cause significant morbidity and are often foodborne, warranting thorough investigation (*2*).

1. Ackers ML, Puhr ND, Tauxe RV, Mintz ED. Laboratory-based surveillance of *Salmonella* Serotype Typhi infections in the United States: antimicrobial resistance on the rise. JAMA 2000;283: 2668–73.
2. Olsen SJ, Bleasdale SC, Magnano AR, et al. Outbreaks of typhoid fever in the United States, 1960–1999. Epidemiol Infect 2002: In Press.

PART 1

Summaries of Notifiable Diseases in the United States, 2001

ABBREVIATIONS AND SYMBOLS USED IN TABLES

Data not available ..... NA

Report of disease is not required in that jurisdiction (not notifiable) ..... NN

No reported cases ..... —

American Samoa ..... AS

Commonwealth of Northern Mariana Islands ..... CNMI

Guam ..... GU

Puerto Rico ..... PR

U.S. Virgin Islands VI

Note: Rates <0.01 after rounding are listed as 0.00.

TABLE 1. Reported cases of notifiable diseases,* by month — United States, 2001

Disease	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
AIDS[†]	41,868	2,550	2,949	3,275	2,886	3,482	3,759	3,406	3,217	3,696	3,507	4,369	4,772
Anthrax	23	—	—	—	—	—	1	—	—	3	11	7	1
Botulism, foodborne	39	—	4	—	2	2	2	1	9	13	—	—	6
Infant	97	3	5	15	8	10	7	7	7	9	9	6	11
Other (includes wound)	19	—	—	2	2	—	2	1	5	1	—	2	4
Brucellosis	136	5	4	15	5	12	19	7	17	14	11	7	20
Chancroid[§]	38	—	—	9	—	—	12	—	—	7	—	—	10
Chlamydia[§¶]	783,242	—	—	187,864	—	—	190,115	—	—	197,521	—	—	207,742
Cholera	3	—	—	—	1	1	—	1	—	—	—	—	—
Coccidioidomycosis**	3,922	89	242	200	162	63	303	218	258	361	398	336	1,292
Cryptosporidiosis	3,785	116	134	189	146	145	232	289	860	827	302	274	271
Cyclosporiasis**	147	1	15	4	8	5	20	14	29	23	15	7	6
Diphtheria	2	—	—	—	—	1	—	—	—	1	—	—	—
Ehrlichiosis, human													
granulocytic	261	1	1	16	—	4	15	43	46	40	6	14	75
Human monocytic	142	3	1	3	2	6	21	24	16	15	8	7	36
Encephalitis, California													
serogroup viral	128	—	—	—	—	1	1	11	19	40	28	12	16
Eastern equine	9	—	—	—	—	—	—	—	4	2	2	—	1
St. Louis	79	—	—	—	—	—	—	—	40	33	3	—	3
Escherichia coli													
enterohemorrhagic (EHEC)													
O157:H7	3,287	56	89	103	115	170	354	362	487	627	339	240	345
EHEC, serogroup non-O157	171	5	2	8	6	8	10	13	33	20	18	20	28
EHEC, not serogrouped	20	1	—	2	—	1	—	1	2	4	4	2	3
Gonorrhea[§]	361,705	—	—	86,379	—	—	83,831	—	—	95,705	—	—	95,790
Haemophilus influenzae,													
invasive disease	1,597	110	125	169	133	121	178	87	96	100	80	108	290
Hansen disease (leprosy)	79	3	5	9	4	6	10	7	2	4	7	5	17
Hantavirus pulmonary													
syndrome	8	1	—	2	1	—	1	—	—	1	1	—	1
Hemolytic uremic syndrome,													
postdiarrheal	202	6	6	6	8	10	17	20	16	34	25	15	39
Hepatitis A	10,609	653	742	864	652	639	859	769	951	1,301	935	910	1,334
Hepatitis B	7,843	361	476	751	541	558	713	580	632	749	563	614	1,305
Hepatitis C; non-A, non-B	3,976	304	352	403	338	287	410	277	313	359	282	224	427
Legionellosis	1,168	42	61	77	71	56	114	111	94	152	110	99	181
Listeriosis	613	26	40	34	42	49	51	62	63	71	51	56	68
Lyme disease	17,029	174	430	379	284	549	1,965	2,870	2,882	2,165	1,280	935	3,116

TABLE 1. (*Continued*) Reported cases of notifiable diseases,* by month — United States, 2001

Disease	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Malaria	1,544	90	104	96	74	112	137	182	163	210	82	84	210
Measles	116	12	18	25	5	11	8	6	11	7	3	8	2
Meningococcal disease	2,333	225	292	302	249	170	209	118	102	139	130	124	273
Mumps	266	13	13	21	27	23	19	16	32	16	21	19	46
Pertussis	7,580	341	443	563	350	348	461	359	445	637	512	612	2,509
Plague	2	—	—	—	—	—	2	—	—	—	—	—	—
Psittacosis	25	1	—	2	1	—	3	1	1	1	3	7	5
Q fever**	26	—	—	2	—	2	3	7	1	5	1	1	4
Rabies, animal	7,150	423	431	733	624	548	691	508	676	853	547	475	641
Rabies, human	1	—	—	—	—	—	—	1	—	—	—	—	—
Rocky Mountain spotted fever	695	4	6	9	15	32	88	110	83	99	66	40	143
Rubella	23	—	—	5	1	2	6	1	1	3	2	—	2
Rubella, congenital syndrome	3	—	—	—	—	—	—	—	—	—	—	—	3
Salmonellosis	40,495	1,566	1,748	2,327	2,406	2,632	4,210	4,251	4,646	5,666	3,639	3,016	4,388
Shigellosis	20,221	891	913	1,216	986	1,206	2,008	1,959	2,405	2,384	1,905	1,608	2,740
Streptococcal disease, invasive, group A	3,750	269	324	466	433	294	366	291	190	236	216	212	453
Streptococcal toxic-shock syndrome	77	8	9	7	9	7	11	1	5	3	3	4	10
Streptococcus pneumoniae, invasive, drug-resistant**	2,896	224	338	396	303	218	212	127	116	128	87	134	613
Streptococcus pneumoniae, invasive, <5 years**	498	64	61	61	59	45	24	15	17	26	45	40	41
Syphilis, total (all stages)[§]	32,221	—	—	7,152	—	—	8,256	—	—	8,399	—	—	8,414
Congenital (age <1 yr)[§]	441	—	—	119	—	—	113	—	—	123	—	—	86
Primary and secondary[§]	6,103	—	—	1,335	—	—	1,488	—	—	1,609	—	—	1,671
Tetanus	37	4	1	1	5	3	8	1	3	—	—	2	9
Toxic-shock syndrome	127	5	13	25	6	9	6	11	6	9	7	10	20
Trichinosis	22	2	1	1	1	—	3	3	1	6	3	—	1
Tuberculosis[††]	15,989	563	881	1,233	1,200	1,336	1,461	1,228	1,398	1,290	1,384	1,304	2,711
Tularemia	129	1	1	3	6	5	28	22	23	18	10	6	6
Typhoid fever	368	9	22	29	19	38	34	30	39	48	32	21	47
Varicella (chickenpox)	22,536	1,385	1,689	2,472	2,505	1,811	1,475	283	1,345	683	1,623	1,843	5,422

* No cases of western equine encephalitis, paralytic poliomyelitis, or yellow fever were reported in 2001.
[†] Total number of acquired immunodeficiency syndrome (AIDS) cases reported to the Division of HIV/AIDS Prevention—Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), through December 31, 2001.
[§] Totals reported quarterly to the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of May 3, 2002.
[¶] Chlamydia refers to genital infections caused by *C. trachomatis*.
**Notifiable in <40 states.
[††] Totals reported to the Division of Tuberculosis Elimination, NCHSTP, as of March 29, 2002.

TABLE 2. Reported cases of notifiable diseases, by geographic division and area — United States, 2001

Area	Total resident population (in thousands)	AIDS*	Anthrax	Botulism Foodborne	Botulism Infant	Botulism Other†	Brucellosis	Chancroid§
United States	**281,418**	**41,868¶**	**23**	**39**	**97**	**19**	**136**	**38**
New England	**13,923**	**1,565**	**1**	**—**	**—**	**—**	**—**	**2**
Maine	1,275	48	—	—	—	—	—	—
N.H.	1,236	40	—	—	—	—	—	—
Vt.	609	25	—	—	—	—	—	—
Mass.	6,349	765	—	—	—	—	—	2
R.I.	1,048	103	—	—	—	—	—	—
Conn.	3,406	584	1	—	—	—	—	—
Mid. Atlantic	**39,671**	**11,072**	**14**	**1**	**23**	**—**	**4**	**7**
Upstate N.Y.	11,291	1,492	—	—	2	—	1	—
N.Y. City	7,685	5,984	7	—	4	—	1	3
N.J.	8,414	1,756	6	—	6	—	1	4
Pa.	12,281	1,840	1	1	11	—	1	—
E.N. Central	**45,154**	**3,023**	**—**	**—**	**3**	**—**	**7**	**—**
Ohio	11,353	581	—	—	3	—	—	—
Ind.	6,080	378	—	—	—	—	—	—
Ill.	12,419	1,323	—	—	—	—	4	—
Mich.	9,938	548	—	—	—	—	3	—
Wis.	5,364	193	—	—	—	—	—	—
W.N. Central	**19,236**	**892**	**—**	**—**	**2**	**—**	**7**	**—**
Minn.	4,919	157	—	—	2	—	2	—
Iowa	2,926	90	—	—	—	—	2	—
Mo.	5,595	445	—	—	—	—	1	—
N. Dak.	642	3	—	—	—	—	—	—
S. Dak.	755	25	—	—	—	—	—	—
Nebr.	1,711	74	—	—	—	—	1	—
Kans.	2,688	98	—	—	—	—	1	—
S. Atlantic	**51,768**	**12,583**	**7**	**—**	**12**	**—**	**9**	**20**
Del.	784	248	—	—	1	—	1	—
Md.	5,296	1,860	3	—	5	—	—	—
D.C.	572	870	—	—	—	—	—	—
Va.	7,079	951	2	—	4	—	1	—
W. Va.	1,808	100	—	—	1	—	—	—
N.C.	8,049	942	—	—	—	—	2	3
S.C.	4,012	729	—	—	—	—	—	15
Ga.	8,186	1,745	—	—	1	—	1	—
Fla.	15,982	5,138	2	—	—	—	4	2
E.S. Central	**17,023**	**1,791**	**—**	**—**	**9**	**—**	**3**	**—**
Ky.	4,042	333	—	—	5	—	1	—
Tenn.	5,689	602	—	—	4	—	1	—
Ala.	4,447	438	—	—	—	—	1	—
Miss.	2,845	418	—	—	—	—	—	—
W.S. Central	**31,445**	**4,195**	**1**	**17**	**5**	**—**	**52**	**6**
Ark.	2,673	199	—	1	—	—	9	—
La.	4,469	861	—	1	—	—	2	—
Okla.	3,451	243	—	—	1	—	—	—
Tex.	20,852	2,892	1	15	4	—	41	6
Mountain	**18,172**	**1,386**	**—**	**1**	**9**	**—**	**10**	**1**
Mont.	902	15	—	—	1	—	—	—
Idaho	1,294	19	—	—	—	—	—	—
Wyo.	494	5	—	—	—	—	—	—
Colo.	4,301	288	—	—	—	—	2	—
N. Mex.	1,819	143	—	—	1	—	1	—
Ariz.	5,131	540	—	1	2	—	6	—
Utah	2,233	124	—	—	4	—	1	1
Nev.	1,998	252	—	—	1	—	—	—
Pacific	**45,026**	**5,248**	**—**	**20**	**34**	**19**	**44**	**2**
Wash.	5,894	532	—	7	—	—	—	—
Oreg.	3,421	259	—	—	2	1	—	—
Calif.	33,872	4,315	—	3	30	18	41	2
Alaska	627	18	—	10	—	—	—	—
Hawaii	1,212	124	—	—	2	—	3	—
GU	158	12	—	—	—	—	1	—
PR	3,937	1,242	—	—	—	—	—	4
VI	122	35	NA	NA	NA	NA	NA	—
AS	67	1	—	—	—	—	—	—
CNMI	75	—	—	3	—	—	—	—

* Total number of acquired immunodeficiency syndrome (AIDS) cases reported to the Division of HIV/AIDS Prevention—Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), through December 31, 2001.
† Includes cases reported as wound and unspecified botulism.
§ Totals reported to the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of May 3, 2002.
¶ Total includes 113 cases in persons with unknown state of residence.

TABLE 2. (*Continued*) Reported cases of notifiable diseases, by geographic division and area — United States, 2001

Area	Chlamydia*	Cholera	Coccidioidomycosis	Cryptosporidiosis	Cyclosporiasis	Diphtheria
United States	**783,242**	**3**	**3,922**	**3,785**	**147**	**2**
New England	**24,391**	**1**	**3**	**152**	**20**	**—**
Maine	1,338	—	NN	19	—	—
N.H.	1,383	1	3	17	—	—
Vt.	638	—	NN	34	NN	—
Mass.	10,402	—	NN	55	16	—
R.I.	2,912	—	NN	10	N	—
Conn.	7,718	—	NN	17	4	—
Mid. Atlantic	**91,076**	**2**	**—**	**374**	**36**	**—**
Upstate N.Y.	16,744	1	NN	125	5	—
N.Y. City	29,649	1	NN	123	20	—
N.J.	16,312	—	NN	24	3	—
Pa.	28,371	—	NN	102	8	—
E.N. Central	**144,001**	**—**	**8**	**1,607**	**5**	**1**
Ohio	37,653	—	NN	183	—	—
Ind.	15,258	—	NN	90	—	—
Ill.	43,716	—	NN	483	2	—
Mich.	31,090	—	8	187	3	1
Wis.	16,284	—	NN	664	—	—
W.N. Central	**40,110**	**—**	**5**	**546**	**1**	**—**
Minn.	8,323	—	NN	197	—	—
Iowa	5,699	—	NN	82	1	—
Mo.	13,949	—	NN	55	—	—
N. Dak.	1,062	—	NN	15	NN	—
S. Dak.	1,821	—	NN	8	—	—
Nebr.	3,206	—	5	185	—	—
Kans.	6,050	—	NN	4	NN	—
S. Atlantic	**151,297**	**—**	**—**	**380**	**79**	**—**
Del.	2,793	—	NN	6	—	—
Md.	15,640	—	NN	40	NN	—
D.C.	3,286	—	—	14	1	—
Va.	18,337	—	NN	27	1	—
W. Va.	2,346	—	NN	2	—	—
N.C.	22,101	—	NN	31	—	—
S.C.	15,329	—	NN	7	—	—
Ga.	33,840	—	NN	162	29	—
Fla.	37,625	—	NN	91	48	—
E.S. Central	**50,758**	**—**	**—**	**62**	**—**	**—**
Ky.	8,881	—	NN	5	NN	—
Tenn.	15,560	—	—	24	—	—
Ala.	14,524	—	NN	18	NN	—
Miss.	11,793	—	NN	15	—	—
W.S. Central	**105,350**	**—**	**—**	**130**	**—**	**—**
Ark.	7,280	—	NN	10	NN	—
La.	17,840	—	NN	8	—	—
Okla.	10,478	—	NN	16	—	—
Tex.	69,752	—	NN	96	—	—
Mountain	**46,455**	**—**	**2,368**	**243**	**6**	**1**
Mont.	1,919	—	NN	37	—	1
Idaho	2,023	—	—	23	NN	—
Wyo.	839	—	4	7	—	—
Colo.	13,239	—	NN	44	5	—
N. Mex.	6,254	—	14	30	1	—
Ariz.	14,346	—	2,301	11	NN	—
Utah	3,004	—	11	84	—	—
Nev.	4,831	—	38	7	—	—
Pacific	**129,804**	**—**	**1,538**	**291**	**—**	**—**
Wash.	13,631	—	NN	—	—	—
Oreg.	7,454	—	NN	58	—	—
Calif.	101,944	—	1,538	229	NN	—
Alaska	2,744	—	NN	1	—	—
Hawaii	4,031	—	NN	3	—	—
GU	431	—	—	—	—	—
PR	2,748	—	NN	—	—	—
VI	131	NA	NA	NA	NA	NA
AS	NA	—	—	NA	—	—
CNMI	NA	1	—	NA	—	—

* Totals reported to the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of May 3, 2002. Chlamydia refers to genital infections caused by *C. trachomatis*.

TABLE 2. (*Continued*) Reported cases of notifiable diseases, by geographic division and area — United States, 2001

Area	Ehrlichiosis: Human granulocytic	Ehrlichiosis: Human monocytic	Encephalitis*: California serogroup viral	Encephalitis*: Eastern equine	Encephalitis*: St. Louis	*Escherichia coli*, enterohemorrhagic (EHEC): O157:H7: NETSS†	O157:H7: PHLIS§	Serogroup non-O157	Not serogrouped
United States	**261**	**142**	**128**	**9**	**79**	**3,287**	**2,580**	**171**	**20**
New England	**62**	**4**	**1**	**1**	**—**	**250**	**233**	**43**	**1**
Maine	1	—	—	—	—	29	27	2	—
N.H.	—	—	—	—	—	36	32	3	—
Vt.	—	—	—	—	—	15	10	1	1
Mass.	2	4	—	1	—	115	114	10	—
R.I.	17	—	—	—	—	17	12	1	—
Conn.	42	—	1	—	—	38	38	26	—
Mid. Atlantic	**85**	**27**	**—**	**—**	**—**	**251**	**219**	**—**	**3**
Upstate N.Y.	73	18	—	—	—	161	145	—	—
N.Y. City	6	4	—	—	—	16	11	—	—
N.J.	6	5	—	—	—	74	63	—	—
Pa.	—	—	—	—	—	NN	—	—	3
E.N. Central	**2**	**4**	**31**	**1**	**—**	**813**	**529**	**12**	**7**
Ohio	1	—	14	—	—	224	158	10	7
Ind.	—	1	5	—	—	90	49	—	—
Ill.	1	3	5	—	—	174	141	—	—
Mich.	—	—	—	1	—	102	88	2	—
Wis.	—	—	7	—	—	223	93	—	—
W.N. Central	**102**	**34**	**14**	**—**	**—**	**523**	**493**	**46**	**4**
Minn.	93	3	12	—	—	219	232	36	—
Iowa	—	—	2	—	—	79	69	—	—
Mo.	8	27	—	—	—	66	97	NN	NN
N. Dak.	NN	NN	—	—	—	27	36	3	4
S. Dak.	—	—	—	—	—	44	44	6	—
Nebr.	—	—	—	—	—	60	—	1	—
Kans.	1	4	—	—	—	28	15	—	—
S. Atlantic	**—**	**24**	**56**	**5**	**—**	**269**	**203**	**41**	**—**
Del.	—	—	—	—	—	4	8	1	—
Md.	NN	NN	1	—	—	29	1	—	—
D.C.	—	—	—	—	—	—	—	—	—
Va.	—	1	2	—	—	52	43	9	—
W. Va.	—	—	44	—	—	11	8	—	—
N.C.	—	11	9	—	—	59	75	—	—
S.C.	—	—	—	—	—	24	10	—	—
Ga.	—	4	—	2	—	45	29	10	—
Fla.	—	8	—	3	—	45	29	21	—
E.S. Central	**—**	**24**	**26**	**—**	**—**	**144**	**127**	**1**	**3**
Ky.	—	2	—	—	—	65	49	1	3
Tenn.	—	22	17	—	—	49	56	—	—
Ala.	—	—	1	—	—	18	13	—	—
Miss.	NN	NN	8	—	—	12	9	—	—
W.S. Central	**8**	**24**	**—**	**2**	**78**	**222**	**120**	**—**	**—**
Ark.	8	—	—	—	2	17	—	—	—
La.	NN	NN	—	1	71	8	27	—	—
Okla.	—	24	—	—	—	36	34	—	—
Tex.	—	—	—	1	5	161	59	—	—
Mountain	**—**	**1**	**—**	**—**	**1**	**301**	**202**	**22**	**2**
Mont.	NN	NN	—	—	—	23	—	—	—
Idaho	NN	NN	—	—	—	81	46	5	—
Wyo.	—	—	—	—	—	10	2	3	—
Colo.	NN	NN	—	—	—	87	50	8	2
N. Mex.	NN	NN	—	—	—	17	14	6	—
Ariz.	—	1	—	—	1	30	23	—	—
Utah	—	—	—	—	—	35	45	—	—
Nev.	—	—	—	—	—	18	22	—	—
Pacific	**2**	**—**	**—**	**—**	**—**	**514**	**454**	**6**	**—**
Wash.	—	—	NN	NN	—	150	136	—	—
Oreg.	1	—	—	—	—	86	76	6	—
Calif.	1	—	—	—	—	253	229	—	—
Alaska	NN	NN	—	—	—	4	1	—	—
Hawaii	—	—	—	—	—	21	12	—	—
GU	—	—	—	—	—	1	—	—	—
PR	—	—	—	—	—	2	—	—	—
VI	NA	NA	NA	NA	NA	NA	NA	NA	NA
AS	—	—	—	—	—	NA	—	NA	NA
CNMI	—	—	—	—	—	NA	—	NA	NA

* No cases of western equine encephalitis were reported in 2001.
† National Electronic Telecommunications System for Surveillance.
§ Public Health Laboratory Information System. Totals reported to the National Center for Infectious Diseases as of June 12, 2002.

TABLE 2. (*Continued*) Reported cases of notifiable diseases, by geographic division and area — United States, 2001

Area	Gonorrhea*	*Haemophilus influenzae,* invasive disease	Hansen disease (leprosy)	Hantavirus pulmonary syndrome	Hemolytic uremic syndrome, postdiarrheal	Hepatitis, acute		
						A	B	C; non-A, non-B
United States	**361,705**	**1,597**	**79**	**8**	**202**	**10,609**	**7,843**	**3,976**
New England	**6,983**	**121**	**1**	**—**	**18**	**736**	**149**	**34**
Maine	141	2	—	—	1	11	7	1
N.H.	176	7	—	—	—	18	16	—
Vt.	76	5	NN	—	—	16	5	7
Mass.	3,214	43	1	—	13	376	41	26
R.I.	830	10	—	—	1	75	33	—
Conn.	2,546	54	—	—	3	240	47	—
Mid. Atlantic	**45,464**	**248**	**17**	**—**	**27**	**1,370**	**1,426**	**1,397**
Upstate N.Y.	9,685	98	1	—	16	333	153	36
N.Y. City	12,614	59	15	—	2	447	660	—
N.J.	8,921	48	1	—	5	283	286	1,218
Pa.	14,244	43	—	—	4	307	327	143
E.N. Central	**75,291**	**285**	**3**	**—**	**23**	**1,214**	**1,049**	**161**
Ohio	21,163	74	1	—	12	258	92	9
Ind.	6,972	59	—	—	—	102	75	1
Ill.	24,025	103	1	—	3	441	218	12
Mich.	17,120	14	1	—	—	326	618	139
Wis.	6,011	35	—	—	8	87	46	—
W.N. Central	**17,045**	**89**	**2**	**—**	**12**	**395**	**250**	**1,170**
Minn.	2,701	56	1	—	9	47	44	33
Iowa	1,418	—	—	—	—	36	24	—
Mo.	8,723	20	1	—	2	88	130	1,119
N. Dak.	56	8	NN	—	1	3	2	—
S. Dak.	289	—	—	—	—	3	1	—
Nebr.	1,189	3	—	NN	NN	37	35	10
Kans.	2,669	2	—	—	—	181	14	8
S. Atlantic	**93,709**	**394**	**2**	**—**	**13**	**2,693**	**1,666**	**144**
Del.	1,733	—	—	—	—	16	29	11
Md.	9,427	92	—	NN	NN	296	141	9
D.C.	2,883	—	—	—	—	80	13	—
Va.	11,095	34	1	—	—	167	213	3
W. Va.	732	16	—	—	—	29	35	26
N.C.	16,583	50	NN	NN	2	242	221	22
S.C.	10,805	8	—	—	—	85	72	13
Ga.	18,920	109	NN	—	6	930	435	—
Fla.	21,531	85	1	—	5	848	507	60
E.S. Central	**32,674**	**84**	**2**	**—**	**10**	**453**	**520**	**198**
Ky.	3,588	2	—	—	NN	145	64	13
Tenn.	10,145	51	2	—	10	189	275	70
Ala.	11,182	29	—	NN	—	81	88	5
Miss.	7,759	2	—	NN	—	38	93	110
W.S. Central	**51,665**	**64**	**2**	**1**	**18**	**825**	**1,061**	**671**
Ark.	4,604	3	—	—	1	74	107	15
La.	12,253	10	1	—	—	87	124	151
Okla.	4,784	48	1	1	5	116	116	6
Tex.	30,024	3	—	—	12	548	714	499
Mountain	**10,382**	**175**	**4**	**6**	**27**	**753**	**497**	**58**
Mont.	104	1	—	—	—	16	3	1
Idaho	76	2	1	2	NN	57	11	2
Wyo.	77	1	—	—	—	7	3	8
Colo.	3,190	38	NN	—	11	88	103	11
N. Mex.	1,040	29	—	2	—	40	136	12
Ariz.	3,920	82	1	1	NN	409	164	9
Utah	219	10	1	1	13	66	25	3
Nev.	1,756	12	1	—	3	70	52	12
Pacific	**28,492**	**137**	**46**	**1**	**54**	**2,170**	**1,225**	**143**
Wash.	2,991	9	NN	1	—	184	171	31
Oreg.	1,144	39	—	—	11	105	168	15
Calif.	23,296	60	22	—	43	1,848	854	97
Alaska	457	6	—	—	—	16	10	—
Hawaii	604	23	24	—	—	17	22	—
GU	48	—	—	—	—	2	—	—
PR	589	2	1	NN	NN	258	297	1
VI	34	NA	NA	NA	NA	NA	NA	NA
AS	NA	NA	1	—	—	2	NA	NA
CNMI	—	NA	—	—	—	NA	38	NA

* Totals reported to the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of May 3, 2002.

TABLE 2. (*Continued*) Reported cases of notifiable diseases, by geographic division and area — United States, 2001

Area	Legionellosis	Listeriosis	Lyme disease	Malaria	Measles		Meningococcal disease
					Indigenous	Imported*	
United States	**1,168**	**613**	**17,029**	**1,544**	**62**	**54**	**2,333**
New England	**74**	**57**	**5,526**	**107**	**4**	**1**	**113**
Maine	8	2	108	5	—	—	8
N.H.	12	4	129	2	—	—	14
Vt.	5	3	18	1	1	—	7
Mass.	21	30	1,164	53	2	1	57
R.I.	13	3	510	16	—	—	7
Conn.	15	15	3,597	30	1	—	20
Mid. Atlantic	**285**	**119**	**8,909**	**440**	**7**	**13**	**257**
Upstate N.Y.	82	36	4,020	76	—	4	72
N.Y. City	43	26	63	250	3	4	42
N.J.	24	20	2,020	65	—	1	43
Pa.	136	37	2,806	49	4	4	100
E.N. Central	**316**	**88**	**720**	**177**	**—**	**10**	**361**
Ohio	143	17	44	27	—	3	91
Ind.	23	8	26	19	—	4	47
Ill.	24	24	32	71	—	3	88
Mich.	82	25	21	40	—	—	83
Wis.	44	14	597	20	—	—	52
W.N. Central	**55**	**22**	**540**	**77**	**2**	**4**	**174**
Minn.	15	4	461	45	2	2	29
Iowa	8	2	36	9	—	—	31
Mo.	22	10	37	15	—	2	58
N. Dak.	1	—	—	—	—	—	8
S. Dak.	3	—	—	—	—	—	5
Nebr.	5	1	4	2	—	—	28
Kans.	1	5	2	6	—	—	15
S. Atlantic	**223**	**77**	**1,039**	**317**	**3**	**2**	**383**
Del.	12	NN	152	2	—	—	6
Md.	32	16	608	112	2	1	42
D.C.	8	—	17	13	—	—	—
Va.	39	15	156	55	1	—	46
W. Va.	NN	6	16	1	—	—	15
N.C.	11	NA	41	19	—	—	63
S.C.	15	5	6	9	—	—	33
Ga.	12	16	—	45	—	1	57
Fla.	94	19	43	61	—	—	121
E.S. Central	**63**	**23**	**72**	**38**	**2**	**—**	**146**
Ky.	14	7	23	14	2	—	27
Tenn.	32	9	31	14	—	—	64
Ala.	13	7	10	6	—	—	35
Miss.	4	—	8	4	—	—	20
W.S.Central	**31**	**34**	**87**	**91**	**—**	**1**	**336**
Ark.	—	1	4	3	—	—	25
La.	7	—	8	6	—	—	78
Okla.	7	2	—	5	—	—	32
Tex.	17	31	75	77	—	1	201
Mountain	**57**	**39**	**15**	**68**	**1**	**1**	**103**
Mont.	—	—	—	3	—	—	4
Idaho	3	1	5	4	—	1	8
Wyo.	3	2	1	1	—	—	5
Colo.	16	10	—	25	—	—	38
N. Mex.	3	7	1	3	—	—	11
Ariz.	21	10	3	19	1	—	21
Utah	7	2	1	4	—	—	8
Nev.	4	7	4	9	—	—	8
Pacific	**64**	**154**	**121**	**229**	**43**	**22**	**460**
Wash.	10	14	9	19	13	2	71
Oreg.	NN	12	15	17	3	—	63
Calif.	48	122	95	179	25	15	310
Alaska	1	—	2	1	—	—	3
Hawaii	5	6	NN	13	2	5	13
GU	—	—	—	1	—	—	—
PR	2	—	—	6	1	—	9
VI	NA	NA	NA	NA	NA	NA	NA
AS	—	—	—	—	—	—	3
CNMI	—	—	—	—	—	—	—

* Imported cases include only those resulting from importation from other countries.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2001

Area	Mumps	Pertussis	Plague	Psittacosis	Q fever	Rabies Animal	Rabies Human	RMSF†	Rubella Rubella	Rubella Congenital syndrome
United States	**266**	**7,580**	**2**	**25**	**26**	**7,150**	**1**	**695**	**23**	**3**
New England	**2**	**736**	**—**	**—**	**—**	**760**	**—**	**3**	**—**	**—**
Maine	—	22	—	—	—	82	—	—	—	—
N.H.	—	31	—	—	—	21	—	1	—	—
Vt.	—	113	—	—	NN	62	—	—	—	—
Mass.	2	537	—	—	NN	279	—	2	—	—
R.I.	—	9	—	—	NN	72	—	—	—	—
Conn.	—	24	—	—	—	244	—	—	—	—
Mid. Atlantic	**35**	**455**	**—**	**9**	**—**	**1,371**	**—**	**33**	**9**	**—**
Upstate N.Y.	4	175	—	6	—	781	—	2	1	—
N.Y. City	13	59	—	—	—	38	—	2	6	—
N.J.	4	23	—	—	—	200	—	9	1	—
Pa.	14	198	—	3	NN	352	—	20	1	—
E.N. Central	**32**	**985**	**—**	**1**	**1**	**158**	**—**	**16**	**2**	**1**
Ohio	1	327	—	—	NN	52	—	2	—	1
Ind.	3	116	—	1	NN	15	—	1	—	—
Ill.	21	194	—	—	—	24	—	12	2	—
Mich.	5	149	—	—	1	47	—	1	—	—
Wis.	2	199	—	—	—	20	—	—	—	—
W.N. Central	**17**	**609**	**—**	**4**	**6**	**375**	**—**	**69**	**3**	**—**
Minn.	6	308	—	—	1	47	—	1	—	—
Iowa	1	139	—	3	NN	84	—	2	1	—
Mo.	4	107	—	1	1	40	—	62	1	—
N. Dak.	—	11	—	NN	1	42	—	1	—	—
S. Dak.	—	5	—	—	—	58	—	2	—	—
Nebr.	1	8	—	—	2	4	—	1	—	—
Kans.	5	31	—	—	—	100	—	—	1	—
S. Atlantic	**45**	**493**	**—**	**2**	**3**	**2,512**	**—**	**328**	**5**	**1**
Del.	—	—	—	—	NN	39	—	13	—	—
Md.	8	53	—	1	NN	504	—	39	1	—
D.C.	—	1	—	—	—	—	—	1	—	—
Va.	8	272	—	—	NN	502	—	40	—	1
W. Va.	—	6	—	—	—	141	—	1	—	—
N.C.	5	75	—	—	—	571	—	185	—	—
S.C.	7	34	—	—	—	144	—	31	2	—
Ga.	9	23	—	—	1	402	—	9	—	—
Fla.	8	29	—	1	1	209	—	9	2	—
E.S. Central	**9**	**208**	**—**	**—**	**3**	**204**	**—**	**121**	**—**	**—**
Ky.	3	96	—	—	1	30	—	2	—	—
Tenn.	1	70	—	—	2	106	—	85	—	—
Ala.	—	37	NN	—	—	64	—	18	—	—
Miss.	5	5	—	—	NN	4	—	16	—	—
W.S. Central	**16**	**1,528**	**—**	**—**	**1**	**1,144**	**—**	**113**	**2**	**—**
Ark.	—	858	—	—	NN	32	—	54	—	—
La.	2	12	—	—	1	9	—	2	—	—
Okla.	—	43	—	—	—	60	—	57	—	—
Tex.	14	615	—	—	NN	1,043	—	—	2	—
Mountain	**17**	**1,561**	**2**	**—**	**6**	**254**	**—**	**11**	**—**	**—**
Mont.	1	54	—	—	—	38	—	1	—	—
Idaho	2	171	—	—	—	28	—	1	—	—
Wyo.	2	1	—	—	1	28	—	2	—	—
Colo.	3	389	—	—	4	—	—	2	—	—
N. Mex.	2	137	1	—	—	15	—	1	—	—
Ariz.	2	690	—	—	—	129	—	—	—	—
Utah	1	78	1	—	—	15	—	3	—	—
Nev.	4	41	—	—	1	1	—	1	—	—
Pacific	**93**	**1,005**	**—**	**9**	**7**	**372**	**1**	**1**	**2**	**1**
Wash.	2	184	—	—	—	—	—	—	—	—
Oreg.	NN	57	—	—	—	4	—	1	—	—
Calif.	48	706	—	8	7	319	1	—	1	—
Alaska	1	16	—	1	—	49	—	NN	—	—
Hawaii	42	42	—	—	—	—	—	—	1	1
GU	—	—	—	—	—	—	—	—	—	—
PR	2	—	—	—	—	99	—	—	3	—
VI	—	—	—	—	—	—	—	—	—	—
AS	1	—	—	—	—	NA	—	NA	NA	NA
CNMI	NA	NA	—	—	—	NA	—	NA	NA	NA

* No cases of paralytic poliomyelitis were reported in 2001.
† Rocky Mountain spotted fever.

TABLE 2. (*Continued*) Reported cases of notifiable diseases, by geographic division and area — United States, 2001

Area	Salmonellosis NETSS*	Salmonellosis PHLIS†	Shigellosis NETSS*	Shigellosis PHLIS†	Streptococcal disease, invasive, group A	Streptococcal toxic-shock syndrome	*Streptococcus pneumoniae*, invasive, drug-resistant
United States	**40,495**	**31,675**	**20,221**	**10,598**	**3,750**	**77**	**2,896**
New England	**2,344**	**2,324**	**312**	**288**	**239**	**—**	**150**
Maine	168	151	6	3	12	—	—
N.H.	166	158	7	4	NN	—	NN
Vt.	82	79	7	6	16	—	9
Mass.	1,328	1,295	208	190	67	—	NN
R.I.	151	163	24	25	15	—	20
Conn.	449	478	60	60	129	NN	121
Mid. Atlantic	**5,424**	**5,153**	**1,508**	**967**	**687**	**10**	**188**
Upstate N.Y.	1,398	1,342	489	131	282	NN	178
N.Y. City	1,313	1,482	410	380	166	—	NA
N.J.	1,174	812	274	227	148	—	NN
Pa.	1,539	1,517	335	229	91	10	10
E.N. Central	**4,981**	**4,227**	**4,443**	**1,897**	**780**	**47**	**206**
Ohio	1,335	1,240	2,951	1,197	195	17	NN
Ind.	549	510	253	66	69	12	206
Ill.	1,383	1,151	630	374	254	18	—
Mich.	884	839	304	232	211	—	NN
Wis.	830	487	305	28	51	—	NN
W.N. Central	**2,380**	**2,429**	**2,112**	**1,332**	**409**	**6**	**160**
Minn.	689	728	496	500	200	—	108
Iowa	335	312	365	291	—	—	NN
Mo.	648	943	321	215	75	4	11
N. Dak.	73	88	27	41	22	—	7
S. Dak.	151	131	716	243	17	—	6
Nebr.	170	—	111	—	44	—	28
Kans.	314	227	76	42	51	2	NN
S. Atlantic	**9,681**	**6,587**	**3,439**	**1,331**	**640**	**5**	**1,582**
Del.	96	125	17	16	4	—	6
Md.	809	797	163	104	NN	NN	NN
D.C.	81	—	54	—	22	—	11
Va.	1,368	1,138	784	382	85	NN	NN
W. Va.	183	149	8	10	25	5	52
N.C.	1,386	1,283	356	186	147	NN	NN
S.C.	915	720	251	124	14	—	292
Ga.	1,721	1,696	752	465	187	—	434
Fla.	3,122	679	1,054	44	156	—	787
E.S. Central	**2,775**	**2,076**	**1,772**	**647**	**123**	**—**	**265**
Ky.	406	248	846	336	39	—	27
Tenn.	706	856	123	127	84	—	238
Ala.	748	652	211	152	NN	—	NN
Miss.	915	320	592	32	NN	NN	—
W.S. Central	**5,052**	**2,253**	**3,005**	**795**	**322**	**1**	**291**
Ark.	928	91	570	154	1	—	24
La.	832	842	255	238	1	NN	267
Okla.	500	434	147	75	49	1	NN
Tex.	2,792	886	2,033	328	271	—	NN
Mountain	**2,331**	**2,102**	**1,063**	**775**	**461**	**8**	**50**
Mont.	81	—	9	—	—	NN	—
Idaho	146	119	40	15	7	2	NN
Wyo.	61	54	8	5	12	—	11
Colo.	591	601	245	254	161	2	—
N. Mex.	280	242	122	87	91	2	37
Ariz.	741	658	505	302	187	—	NN
Utah	229	222	63	62	3	2	—
Nev.	202	206	71	50	—	—	2
Pacific	**5,527**	**4,524**	**2,567**	**2,566**	**89**	**—**	**4**
Wash.	681	747	236	236	—	—	NN
Oreg.	281	319	116	113	—	—	—
Calif.	4,159	3,040	2,149	2,149	NN	NN	NN
Alaska	50	45	7	7	—	—	NN
Hawaii	356	373	59	61	89	—	4
GU	24	—	50	—	1	—	—
PR	972	—	21	—	NN	—	NN
VI	NA	NA	NA	NA	NA	NA	NA
AS	—	—	18	—	—	—	—
CNMI	17	—	8	—	—	—	—

* National Electronic Telecommunications System for Surveillance.
† Public Health Laboratory Information System. Totals reported to the National Center for Infectious Diseases as of April 26, 2002.

TABLE 2. (*Continued*) Reported cases of notifiable diseases, by geographic division and area — United States, 2001

Area	*Streptococcus pneumoniae,* invasive <5 years	Syphilis* All stages	Syphilis* Congenital (age <1 yr)	Syphilis* Primary & secondary	Tetanus	Toxic-shock syndrome
United States	**498**	**32,221**	**441**	**6,103**	**37**	**127**
New England	**52**	**694**	**4**	**72**	**—**	**4**
Maine	1	16	—	1	—	—
N.H.	NN	20	—	1	—	1
Vt.	1	8	—	3	—	—
Mass.	NN	446	2	46	—	3
R.I.	6	39	—	9	—	—
Conn.	44	165	2	12	—	NN
Mid. Atlantic	**123**	**5,370**	**69**	**541**	**3**	**21**
Upstate N.Y.	123	304	5	22	1	7
N.Y. City	NN	3,300	28	282	1	4
N.J.	NN	1,040	32	137	—	—
Pa.	—	726	4	100	1	10
E.N. Central	**178**	**3,645**	**60**	**1,091**	**2**	**25**
Ohio	—	297	1	81	—	8
Ind.	107	529	13	151	—	1
Ill.	71	1,541	40	409	2	4
Mich.	NN	1,147	4	428	—	10
Wis.	—	131	2	22	—	2
W.N. Central	**70**	**457**	**7**	**100**	**2**	**22**
Minn.	58	132	—	33	—	9
Iowa	NN	44	—	5	—	1
Mo.	—	174	5	26	—	4
N. Dak.	12	2	—	—	—	—
S. Dak.	—	1	—	1	—	—
Nebr.	NN	16	—	10	—	6
Kans.	NN	88	2	25	2	2
S. Atlantic	**14**	**9,240**	**98**	**2,008**	**7**	**17**
Del.	NN	79	—	14	—	—
Md.	NN	937	4	266	1	NN
D.C.	4	459	2	43	—	1
Va.	NN	524	2	102	—	2
W. Va.	10	7	—	5	1	—
N.C.	NN	1,422	19	445	2	7
S.C.	NN	913	16	235	—	3
Ga.	NN	1,985	18	414	—	4
Fla.	NN	2,914	37	484	3	—
E.S. Central	**—**	**3,042**	**30**	**661**	**2**	**3**
Ky.	NN	191	1	48	—	2
Tenn.	NN	1,478	14	331	1	1
Ala.	NN	720	6	142	—	—
Miss.	—	653	9	140	1	NN
W.S. Central	**61**	**4,980**	**84**	**760**	**4**	**1**
Ark.	NN	239	6	49	—	—
La.	61	793	—	173	—	—
Okla.	—	288	5	60	1	1
Tex.	—	3,660	73	478	3	—
Mountain	**—**	**1,471**	**30**	**243**	**2**	**8**
Mont.	—	—	—	—	—	—
Idaho	NN	11	—	1	—	—
Wyo.	—	4	—	1	—	—
Colo.	—	149	1	23	1	7
N. Mex.	—	73	—	19	—	1
Ariz.	NN	1,147	29	180	1	—
Utah	—	25	—	11	—	—
Nev.	—	62	—	8	—	—
Pacific	**—**	**3,322**	**59**	**627**	**15**	**26**
Wash.	NN	174	—	57	—	NN
Oreg.	NN	48	—	13	—	—
Calif.	NN	3,050	59	545	15	26
Alaska	—	9	—	—	—	NN
Hawaii	—	41	—	12	—	—
GU	—	30	1	12	—	—
PR	—	1,267	21	244	—	—
VI	NA	9	1	—	NA	NA
AS	—	—	—	—	—	—
CNMI	—	—	—	—	—	—

*Totals reported to the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of May 3, 2002.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2001

Area	Trichinosis	Tuberculosis†	Tularemia	Typhoid fever	Varicella§ (chickenpox)
United States	**22**	**15,989**	**129**	**368**	**22,536**
New England	—	498	7	20	3,096
Maine	—	20	—	1	146
N.H.	—	20	1	2	NN
Vt.	—	7	—	—	149
Mass.	—	270	6	12	1,093
R.I.	—	60	—	—	9
Conn.	—	121	—	5	1,699
Mid. Atlantic	**3**	**2,556**	**2**	**113**	**—**
Upstate N.Y.	—	415	1	15	NN
N.Y .City	2	1,261	—	49	NN
N.J.	1	530	1	38	NN
Pa.	—	350	—	11	NN
E.N. Central	**2**	**1,544**	**17**	**34**	**10,474**
Ohio	—	306	1	5	1,653
Ind.	—	115	NN	2	NN
Ill.	1	707	14	18	—
Mich.	—	330	2	5	6,600
Wis.	1	86	—	4	2,221
W.N. Central	**2**	**561**	**47**	**16**	**18**
Minn.	—	239	—	7	NN
Iowa	2	43	NN	—	NN
Mo.	—	157	27	9	3
N. Dak.	—	6	1	—	15
S. Dak.	—	13	7	—	NN
Nebr.	—	40	5	—	NN
Kans.	—	63	7	—	NN
S. Atlantic	**—**	**3,088**	**4**	**52**	**2,100**
Del.	—	33	1	1	NN
Md.	—	262	1	10	NN
D.C.	—	74	—	—	73
Va.	—	306	NN	15	540
W. Va.	—	32	—	—	1,421
N.C.	—	398	1	3	NN
S.C.	—	263	—	—	66
Ga.	NN	575	1	12	NN
Fla.	—	1,145	—	11	NN
E.S. Central	**—**	**884**	**11**	**1**	**—**
Ky.	NN	152	4	—	NN
Tenn.	—	313	6	1	NN
Ala.	—	265	1	—	NN
Miss.	—	154	—	—	NN
W.S. Central	**—**	**2,293**	**16**	**20**	**5,800**
Ark.	NN	162	9	—	NN
La.	—	294	—	—	59
Okla.	—	194	7	1	—
Tex.	—	1,643	NN	19	5,741
Mountain	**1**	**644**	**17**	**11**	**1,048**
Mont.	—	20	2	2	NN
Idaho	—	9	—	—	3
Wyo.	1	3	7	—	NN
Colo.	—	138	2	1	NN
N. Mex.	—	54	1	—	NN
Ariz.	—	289	1	2	951
Utah	—	35	4	2	92
Nev.	—	96	—	4	2
Pacific	**14**	**3,921**	**8**	**101**	**—**
Wash.	—	261	5	7	NN
Oreg.	—	123	1	8	—
Calif.	13	3,332	1	82	NN
Alaska	1	54	1	1	NN
Hawaii	—	151	—	3	—
GU	22	63	—	3	60
PR	—	121	—	—	2,187
VI	NA	NA	NA	NA	NA
AS	—	—	—	—	173
CNMI	—	58	—	—	—

* No cases of yellow fever were reported in 2001.
† Totals reported to the Division of Tuberculosis Elimination, NCHSTP, as of March 29, 2002.
§ Although not nationally notifiable, reporting is recommended by the Council of State and Territorial Epidemiologists.

TABLE 3. Reported cases and incidence rates of notifiable diseases,* by age group — United States, 2001

Disease	Total	<1 yr		1–4 yrs		5–14 yrs		15–24 yrs		25–39 yrs		40–64 yrs		>65 yrs		Age not stated
		No.	(Rate)	No.	(Rate)	No.	(Rate)	No.	(Rate)	No.	(Rate)	No.	(Rate)	No.	(Rate)	
AIDS†	41,868	49	(1.29)	59	(0.38)	138	(0.34)	1,721	(4.39)	20,031	(32.00)	19,033	(22.55)	837	(2.39)	—
Anthrax	23	1	(0.03)	—	(0.00)	—	(0.00)	1	(0.00)	8	(0.01)	11	(0.01)	2	(0.01)	—
Botulism, foodborne	39	5	(0.13)	2	(0.01)	1	(0.00)	2	(0.01)	5	(0.01)	16	(0.02)	8	(0.02)	—
Infant	97	92	(2.42)	4	(0.03)	1	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—
Other (includes wound)	19	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	5	(0.01)	13	(0.02)	—	(0.00)	—
Brucellosis	136	—	(0.00)	8	(0.05)	20	(0.05)	20	(0.05)	31	(0.05)	30	(0.04)	25	(0.07)	2
Chlamydia§¶	783,242	NA	NA	NA	NA	NA	NA	569,254	(1452.78)	172,238	(275.15)	17,486	(20.72)	911	(2.60)	6,410
Cholera	3	—	(0.00)	1	(0.01)	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	1	(0.00)	—
Coccidioidomycosis**	3,922	10	(0.27)	18	(0.12)	167	(0.42)	433	(1.14)	964	(1.58)	1,563	(1.90)	712	(2.09)	55
Cryptosporidiosis	3,785	98	(2.58)	696	(4.53)	790	(1.92)	375	(0.96)	900	(1.44)	717	(0.85)	170	(0.49)	39
Cyclosporiasis**	147	1	(0.03)	1	(0.01)	1	(0.00)	23	(0.06)	35	(0.06)	50	(0.06)	33	(0.09)	3
Diphtheria	2	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	—	(0.00)	1	(0.00)	—	(0.00)	—
Ehrlichiosis,																
Human granulocytic	261	1	(0.03)	3	(0.02)	18	(0.04)	14	(0.04)	35	(0.06)	117	(0.14)	67	(0.19)	6
Human monocytic	142	1	(0.03)	—	(0.00)	7	(0.02)	8	(0.02)	22	(0.04)	65	(0.08)	35	(0.10)	4
Encephalitis, California																
serogroup viral	128	6	(0.16)	18	(0.12)	90	(0.22)	4	(0.01)	4	(0.01)	4	(0.00)	2	(0.01)	—
Eastern equine	9	1	(0.03)	1	(0.01)	2	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	4	(0.01)	—
St. Louis	79	—	(0.00)	—	(0.00)	3	(0.01)	6	(0.02)	11	(0.02)	45	(0.05)	14	(0.04)	—
Escherichia coli,																
enterohemorrhagic (EHEC)																
O157:H7	3,287	75	(1.97)	647	(4.21)	799	(1.95)	464	(1.18)	364	(0.58)	590	(0.70)	307	(0.88)	41
EHEC, serogroup non-O157	171	9	(0.77)	35	(0.74)	44	(0.34)	25	(0.20)	21	(0.11)	17	(0.06)	19	(0.16)	1
EHEC, not serogrouped	20	1	(0.24)	3	(0.18)	3	(0.06)	1	(0.02)	1	(0.01)	6	(0.06)	4	(0.09)	1
Gonorrhea¶	361,705	NA	NA	NA	NA	NA	NA	215,672	(550.41)	109,604	(175.09)	26,122	(30.95)	837	(2.39)	2,667
Haemophilus influenzae,																
invasive disease	1,597	196	(5.15)	129	(0.84)	69	(0.17)	61	(0.16)	135	(0.22)	361	(0.43)	621	(1.77)	25
Hansen disease (leprosy)	79	—	(0.00)	—	(0.00)	1	(0.00)	7	(0.02)	19	(0.03)	17	(0.02)	11	(0.03)	24
Hantavirus pulmonary																
syndrome	8	—	(0.00)	—	(0.00)	2	(0.00)	3	(0.01)	1	(0.00)	1	(0.00)	—	(0.00)	1
Hemolytic uremic syndrome,																
postddiarrheal	202	4	(0.11)	84	(0.55)	78	(0.19)	11	(0.03)	3	(0.00)	13	(0.02)	9	(0.03)	—
Hepatitis A, acute	10,609	35	(0.92)	368	(2.39)	1,531	(3.73)	1,491	(3.81)	3,337	(5.33)	2,850	(3.38)	834	(2.38)	163
Hepatitis B, acute	7,843	17	(0.45)	17	(0.11)	48	(0.12)	1,140	(2.91)	3,241	(5.18)	2,838	(3.36)	365	(1.04)	177
Hepatitis C; non-A, non-B	3,976	8	(0.21)	13	(0.08)	23	(0.06)	205	(0.52)	983	(1.57)	2,379	(2.82)	227	(0.65)	138
Legionellosis	1,168	3	(0.08)	2	(0.01)	8	(0.02)	7	(0.02)	128	(0.20)	590	(0.70)	421	(1.20)	9
Listeriosis	613	64	(1.68)	10	(0.07)	8	(0.02)	24	(0.06)	68	(0.11)	145	(0.17)	289	(0.83)	5
Lyme disease	17,029	42	(1.10)	993	(6.46)	3,496	(8.51)	1,550	(3.96)	2,457	(3.93)	6,054	(7.17)	2,183	(6.24)	254
Malaria	1,544	8	(0.21)	68	(0.44)	164	(0.40)	283	(0.72)	487	(0.78)	455	(0.54)	52	(0.15)	27
Measles	116	16	(0.42)	10	(0.07)	14	(0.03)	30	(0.08)	33	(0.05)	13	(0.02)	—	(0.00)	—

TABLE 3. (*Continued*) Reported cases and incidence rates of notifiable diseases,* by age group — United States, 2001

Disease	Total	<1 yr		1–4 yrs		5–14 yrs		15–24 yrs		25–39 yrs		40–64 yrs		≥65 yrs		Age not stated
		No.	(Rate)	No.	(Rate)	No.	(Rate)	No.	(Rate)	No.	(Rate)	No.	(Rate)	No.	(Rate)	
Meningococcal disease	2,333	265	(6.96)	332	(2.16)	272	(0.66)	523	(1.33)	223	(0.36)	405	(0.48)	304	(0.87)	9
Mumps	266	2	(0.05)	47	(0.31)	83	(0.20)	24	(0.06)	48	(0.08)	49	(0.06)	6	(0.02)	7
Pertussis	7,580	1,886	(49.56)	971	(6.32)	2,077	(5.06)	1,157	(2.95)	654	(1.04)	717	(0.85)	94	(0.27)	24
Plague	2	—	(0.00)	—	(0.00)	1	(0.00)	1	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—
Psittacosis	25	—	(0.00)	—	(0.00)	2	(0.00)	2	(0.01)	5	(0.01)	10	(0.01)	3	(0.01)	3
Q fever**	26	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	5	(0.01)	18	(0.02)	2	(0.01)	—
Rabies, human	1	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	—
Rocky Mountain spotted fever	695	—	(0.00)	19	(0.12)	82	(0.20)	85	(0.22)	152	(0.24)	246	(0.29)	102	(0.29)	9
Rubella	23	1	(0.03)	1	(0.01)	2	(0.00)	3	(0.01)	11	(0.02)	3	(0.00)	2	(0.01)	—
Salmonellosis	40,495	4,719	(124.00)	6,576	(42.78)	5,096	(12.41)	3,508	(8.95)	5,368	(8.58)	6,670	(7.90)	3,601	(10.29)	4,957
Shigellosis	20,221	406	(10.67)	6,172	(40.16)	5,318	(12.95)	1,299	(3.32)	2,628	(4.20)	1,562	(1.85)	358	(1.02)	2,478
Streptococcal disease, invasive, group A	3,750	106	(2.79)	189	(1.23)	288	(0.70)	165	(0.42)	553	(0.88)	1,252	(1.48)	1,174	(3.36)	23
Streptococcal toxic-shock syndrome	77	—	(0.00)	5	(0.03)	7	(0.02)	1	(0.00)	12	(0.02)	29	(0.03)	23	(0.07)	—
Streptococcus pneumoniae, invasive, drug-resistant**	2,896	208	(5.47)	482	(3.14)	128	(0.31)	78	(0.20)	243	(0.39)	745	(0.88)	951	(2.72)	61
Streptococcus pneumoniae, invasive, <5 yrs	498	125	(16.89)	373	(12.38)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—
Syphilis primary and secondary¶	6,103	NA	NA	NA	NA	NA	NA	1,223	(3.12)	2,986	(4.77)	1,806	(2.14)	64	(0.18)	—
Tetanus	37	1	(0.03)	—	(0.00)	—	(0.00)	3	(0.01)	8	(0.01)	15	(0.02)	10	(0.03)	—
Toxic-shock syndrome	127	—	(0.00)	6	(0.04)	22	(0.05)	27	(0.07)	30	(0.05)	37	(0.04)	5	(0.01)	—
Trichinosis	22	—	(0.00)	—	(0.00)	2	(0.00)	—	(0.00)	7	(0.01)	10	(0.01)	3	(0.01)	—
Tuberculosis††	15,989	97	(2.55)	447	(2.91)	387	(0.94)	1,595	(4.07)	4,129	(6.60)	6,035	(7.15)	3,295	(9.42)	4
Tularemia	129	1	(0.03)	6	(0.04)	24	(0.06)	15	(0.04)	22	(0.04)	42	(0.05)	15	(0.04)	4
Typhoid fever	368	5	(0.13)	48	(0.31)	68	(0.17)	64	(0.16)	105	(0.17)	63	(0.07)	10	(0.03)	5

* No cases of paralytic poliomyelitis, western equine encephalitis, or yellow fever were reported in 2001.

† Total number of acquired immunodeficiency syndrome (AIDS) cases reported to the Division of HIV/AIDS Prevention—Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), through December 31, 2001.

§ Chlamydia refers to genital infections caused by *C. trachomatis*.

¶ Age-related data are collected on aggregate forms different from those used for the number of reported cases. Thus, total cases reported here will differ slightly from other tables. Cases among persons aged <15 years are not shown because some might not be caused by sexual transmission; these cases are included in the totals. Totals reported to the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of May 3, 2002.

** Notifiable in <40 states.

†† Totals reported to the Division of Tuberculosis Elimination, NCHSTP, as of March 29, 2002.

TABLE 4. Reported cases and incidence rates of notifiable diseases,* by sex — United States, 2001

Disease	Total	Male No.	Male (Rate)	Female No.	Female (Rate)	Sex not stated
AIDS[†]	41,868	31,042	(22.49)	10,826	(7.55)	—
Anthrax	23	13	(0.01)	10	(0.01)	—
Botulism, foodborne	39	15	(0.01)	18	(0.01)	6
Infant	97	54	(0.04)	43	(0.03)	—
Other (includes wound)	19	11	(0.01)	8	(0.01)	—
Brucellosis	136	75	(0.05)	58	(0.04)	3
Chancroid[§]	38	24	(0.02)	14	(0.01)	—
Chlamydia[§¶]	783,242	NA	(NA)	623,926	(435.19)	2,095
Cholera	3	1	(0.00)	2	(0.00)	—
Coccidioidomycosis**	3,922	2,380	(1.77)	1,534	(1.10)	8
Cryptosporidiosis	3,785	2,002	(1.45)	1,743	(1.22)	40
Cyclosporiasis**	147	69	(0.05)	76	(0.05)	2
Diphtheria	2	1	(0.00)	1	(0.00)	—
Ehrlichiosis, human granulocytic**	261	153	(0.11)	107	(0.07)	1
Human monocytic**	142	86	(0.06)	52	(0.04)	4
Encephalitis, California serogroup viral	128	75	(0.05)	52	(0.04)	1
Eastern equine	9	6	(0.00)	3	(0.00)	—
St. Louis	79	39	(0.03)	38	(0.03)	2
Escherichia coli, enterohemorrhagic (EHEC) O157:H7	3,287	1,592	(1.15)	1,666	(1.16)	29
EHEC, serogroup non-O157	171	83	(0.19)	88	(0.19)	—
EHEC, not serogrouped	20	8	(0.05)	12	(0.07)	—
Gonorrhea[§]	361,705	177,213	(128.37)	183,897	(128.27)	595
Haemophilus influenzae, invasive disease	1,597	768	(0.56)	811	(0.57)	18
Hansen disease (leprosy)	79	34	(0.02)	21	(0.01)	24
Hantavirus pulmonary syndrome	8	5	(0.00)	2	(0.00)	1
Hemolytic uremic syndrome, postdiarrheal	202	69	(0.05)	133	(0.09)	—
Hepatitis A, acute	10,609	6,836	(4.95)	3,709	(2.59)	64
Hepatitis B, acute	7,843	4,879	(3.53)	2,903	(2.02)	61
Hepatitis C; non-A, non-B	3,976	2,403	(1.74)	1,518	(1.06)	55
Legionellosis	1,168	715	(0.52)	452	(0.32)	1
Listeriosis	613	280	(0.20)	323	(0.23)	10
Lyme disease	17,029	9,044	(6.55)	7,875	(5.49)	110
Malaria	1,544	1,023	(0.74)	498	(0.35)	23
Measles	116	52	(0.04)	63	(0.04)	1

TABLE 4. (*Continued*) Reported cases and incidence rates of notifiable diseases,* by sex — United States, 2001

Disease	Total	Male No.	Male (Rate)	Female No.	Female (Rate)	Sex not stated
Meningococcal disease	2,333	1,177	(0.85)	1,150	(0.80)	6
Mumps	266	132	(0.10)	126	(0.09)	8
Pertussis	7,580	3,499	(2.53)	4,072	(2.84)	9
Plague	2	2	(0.00)	0	(0.00)	—
Psittacosis	25	7	(0.01)	18	(0.01)	—
Q fever**	26	23	(0.02)	3	(0.00)	—
Rabies, human	1	1	(0.00)	0	(0.00)	—
Rocky Mountain spotted fever	695	411	(0.30)	279	(0.19)	5
Rubella	23	7	(0.01)	16	(0.01)	—
Salmonellosis	40,495	17,503	(12.68)	18,280	(12.75)	4,712
Shigellosis	20,221	8,454	(6.12)	9,250	(6.45)	2,517
Streptococcal disease, invasive, group A**	3,750	1,954	(1.42)	1,784	(1.24)	12
Streptococcal toxic-shock syndrome**	77	35	(0.03)	42	(0.03)	—
Streptococcus pneumoniae, invasive, drug-resistant**	2,896	1,466	(1.06)	1,412	(0.98)	18
Streptococcus pneumoniae, invasive , <5 yrs**	498	273	(1.00)	225	(0.78)	—
Syphilis, primary and secondary[§]	6,103	4,131	(2.99)	1,967	(1.37)	5
Tetanus	37	20	(0.01)	17	(0.01)	—
Toxic-shock syndrome	127	41	(0.03)	86	(0.06)	—
Trichinosis	22	17	(0.01)	5	(0.00)	—
Tuberculosis[††]	15,989	9,943	(7.20)	6,045	(4.22)	1
Tularemia	129	84	(0.06)	45	(0.03)	—
Typhoid fever	368	203	(0.15)	158	(0.11)	7

* No cases of western equine encephalitis, paralytic poliomyelitis, or yellow fever were reported in 2001.
† Total number of acquired immunodeficiency syndrome (AIDS) cases reported to the Division of HIV/AIDS Prevention—Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), through December 31, 2001.
§ Totals reported to the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of May 3, 2002.
¶ Chlamydia refers to genital infections caused by *C. trachomatis*.
** Notifiable in <40 states.
†† Totals reported to the Division of Tuberculosis Elimination, NCHSTP, as of March 29, 2002.

TABLE 5. Reported cases and incidence rates of notifiable diseases,* by race — United States, 2001

Disease	Total	American Indian or Alaska Native		Asian or Pacific Islander		Black		White		Other	Race not stated
		No.	(Rate)	No.	(Rate)	No.	(Rate)	No.	(Rate)	No.	No.
AIDS†	41,868	194	(9.10)	418	(3.80)	21,007	(60.45)	13,230	(6.67)	0	7,019§
Botulism, foodborne	39	10	(0.47)	0	(0.00)	15	(0.04)	10	(0.01)	0	4
Infant	97	3	(0.14)	7	(0.06)	6	(0.02)	43	(0.02)	0	38
Brucellosis	136	1	(0.05)	0	(0.00)	0	(0.00)	78	(0.04)	0	57
Chlamydia¶ **	783,242	9,705	(454.99)	10,417	(94.80)	258,930	(745.06)	161,671	(81.55)	0	342,519§
Coccidioidomycosis††	3,922	16	(0.76)	55	(0.50)	81	(0.24)	659	(0.34)	19	3,092
Cryptosporidiosis	3,785	18	(0.84)	30	(0.27)	301	(0.87)	2,026	(1.02)	29	1,381
Cyclosporiasis††	147	1	(0.05)	5	(0.05)	2	(0.01)	96	(0.05)	0	43
Ehrlichiosis, human granulocytic	261	3	(0.14)	1	(0.01)	0	(0.00)	162	(0.08)	0	95
Human monocytic	142	3	(0.14)	0	(0.00)	3	(0.01)	102	(0.05)	0	34
Encephalitis, California serogroup viral	128	3	(0.14)	0	(0.00)	6	(0.02)	97	(0.05)	0	22
St.Louis	79	0	(0.00)	0	(0.00)	33	(0.09)	45	(0.02)	0	1
Escherichia coli, enterohemorrhagic (EHEC) O157:H7	3,287	31	(1.45)	33	(0.30)	100	(0.29)	2,128	(1.07)	11	984
EHEC, serogroup non-O157	171	2	(0.32)	3	(0.16)	0	(0.00)	102	(0.14)	0	64
Gonorrhea**	361,705	1,817	(85.18)	2,210	(20.11)	205,956	(592.63)	43,605	(22.00)	0	108,117§
Haemophilus influenzae, invasive disease	1,597	45	(2.11)	26	(0.24)	188	(0.54)	962	(0.49)	4	372
Hansen disease (leprosy)	79	1	(0.05)	18	(0.16)	6	(0.02)	10	(0.01)	2	42
Hemolytic uremic syndrome, postdiarrheal	202	5	(0.23)	6	(0.05)	10	(0.03)	135	(0.07)	1	45
Hepatitis A, acute	10,609	129	(6.05)	234	(2.13)	898	(2.58)	5,557	(2.80)	139	3,652
Hepatitis B, acute	7,843	73	(3.42)	335	(3.05)	1,460	(4.20)	3,025	(1.53)	51	2,899
Hepatitis C; non-A, non-B	3,976	77	(3.61)	45	(0.41)	253	(0.73)	1,111	(0.56)	3	2,487
Legionellosis	1,168	18	(0.84)	14	(0.13)	154	(0.44)	780	(0.39)	4	198
Listeriosis	613	8	(0.38)	30	(0.27)	55	(0.16)	352	(0.18)	2	166
Lyme disease	17,029	663	(31.08)	91	(0.83)	170	(0.49)	11,450	(5.78)	47	4,608
Malaria	1,544	7	(0.33)	82	(0.75)	673	(1.94)	331	(0.17)	27	424
Measles	116	1	(0.05)	46	(0.42)	3	(0.01)	46	(0.02)	1	19
Meningococcal disease	2,333	21	(0.98)	40	(0.36)	333	(0.95)	1,474	(0.74)	9	456

TABLE 5. (*Continued*) Reported cases and incidence rates of notifiable diseases,* by race — United States, 2001

Disease	Total	American Indian or Alaska Native		Asian or Pacific Islander		Black		White		Other	Race not stated
		No.	(Rate)	No.	(Rate)	No.	(Rate)	No.	(Rate)	No.	No.
Mumps	266	4	(0.19)	48	(0.44)	14	(0.04)	133	(0.07)	4	63
Pertussis	7,580	101	(4.74)	93	(0.85)	515	(1.48)	5,564	(2.81)	18	1,289
Psittacosis	25	0	(0.00)	0	(0.00)	4	(0.01)	12	(0.01)	1	8
Q fever††	26	0	(0.00)	1	(0.01)	1	(0.00)	10	(0.01)	0	14
Rocky Mountain spotted fever	695	16	(0.75)	2	(0.02)	46	(0.13)	534	(0.27)	0	97
Salmonellosis	40,495	460	(21.57)	645	(5.87)	3,257	(9.37)	19,034	(9.60)	105	16,994
Shigellosis	20,221	649	(30.43)	144	(1.31)	4,140	(11.91)	7,438	(3.75)	120	7,730
Streptococcal disease, invasive, group A	3,750	112	(5.25)	57	(0.52)	493	(1.42)	2,202	(1.11)	10	876
Streptococcal toxic-shock syndrome	77	0	(0.00)	0	(0.00)	15	(0.04)	49	(0.02)	1	12
Streptococcus pneumoniae, invasive, drug-resistant††	2,896	6	(0.28)	14	(0.13)	626	(1.80)	1,753	(0.88)	8	489
Streptococcus pneumoniae, invasive, <5 yrs††	498	3	(1.36)	5	(0.26)	116	(1.50)	270	(0.66)	7	97
Syphilis, primary and secondary**	6,103	87	(4.08)	53	(0.48)	3,680	(10.59)	1,329	(0.67)	0	954§
Tetanus	37	1	(0.05)	2	(0.02)	1	(0.00)	22	(0.01)	0	11
Toxic-shock syndrome	127	0	(0.00)	5	(0.05)	9	(0.03)	85	(0.04)	0	28
Tuberculosis§§	15,989	247	(11.58)	3,587	(32.65)	4,891	(14.07)	7,209	(3.64)	0	55
Tularemia	129	8	(0.38)	2	(0.02)	2	(0.01)	80	(0.04)	0	37
Typhoid fever	368	4	(0.19)	97	(0.88)	30	(0.09)	53	(0.03)	18	166

* No cases of paralytic poliomyelitis, western equine encephalitis, or yellow fever were reported in 2001. Diseases with <25 reported cases are not included in this table.

† Total number of acquired immunodeficiency syndrome (AIDS) cases reported to the Division of HIV/AIDS Prevention—Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), through December 31, 2001.

§ Includes the following cases originally reported as Hispanic: 6,962 for AIDS; 107,470 for chlamydia; 19,780 for gonorrhea; and 724 for syphilis, primary and secondary.

¶ Chlamydia refers to genital infections caused by *C. trachomatis*.

** In addition to data collected through the National Electronic Telecommunications System for Surveillance (NETSS), some ethnicity data are collected on aggregate forms different from those used for reported cases. Thus, the total number of cases reported here can differ slightly from others. Totals reported to the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of May 3, 2002.

†† Notifiable in <40 states.

§§ Totals reported to the Division of Tuberculosis Elimination, NCHSTP, as of March 29, 2002.

TABLE 6. Reported cases and incidence rates of notifiable diseases,* by ethnicity — United States, 2001

Disease	Total	Hispanic No.	Hispanic (Rate)	Non-Hispanic No.	Non-Hispanic (Rate)	Ethnicity not stated
AIDS[†]	41,868	6,962	(9.72)	34,237	(13.91)	669
Botulism, foodborne	39	3	(0.01)	18	(0.01)	18
Infant	97	13	(0.04)	40	(0.02)	44
Brucellosis	136	93	(0.26)	19	(0.01)	24
Chlamydia[§¶]	783,242	107,470	(304.40)	440,723	(179.07)	235,049
Coccidioidomycosis**	3,922	635	(4.51)	682	(1.54)	2,602
Cryptosporidiosis	3,785	185	(0.52)	1,704	(0.69)	1,896
Cyclosporiasis**	147	6	(0.03)	75	(0.04)	66
Ehrlichiosis, human granulocytic	261	4	(0.01)	71	(0.03)	169
Human monocytic	142	1	(0.00)	90	(0.04)	51
Encephalitis, California serogroup viral	128	2	(0.01)	51	(0.02)	75
St.Louis	79	2	(0.01)	3	(0.00)	74
Escherichia coli, enterohemorrhagic (EHEC) O157:H7	3,287	129	(0.37)	1,689	(0.72)	1,469
EHEC, serogroup non-O157	171	0	(0.00)	0	(0.00)	171
Gonorrhea[¶]	361,705	19,780	(56.02)	253,588	(103.04)	88,337
Haemophilus influenzae, invasive disease	1,597	101	(0.29)	771	(0.31)	725
Hansen disease (leprosy)	79	22	(0.07)	27	(0.01)	30
Hemolytic uremic syndrome, postdiarrheal	202	19	(0.06)	107	(0.05)	73
Hepatitis A, acute	10,609	1,816	(5.14)	4,607	(1.87)	4,186
Hepatitis B, acute	7,843	657	(1.86)	3,698	(1.50)	3,488
Hepatitis C; non-A, non-B	3,940	123	(0.38)	1,324	(0.58)	2,464
Legionellosis	1,168	25	(0.07)	701	(0.29)	442
Listeriosis	613	49	(0.14)	312	(0.13)	252
Lyme disease	17,029	217	(0.61)	7,518	(3.05)	9,294
Malaria	1,544	154	(0.44)	815	(0.33)	575
Measles	116	9	(0.03)	88	(0.04)	19
Meningococcal disease	2,333	233	(0.66)	1,357	(0.55)	743
Mumps	266	49	(0.14)	146	(0.06)	71
Pertussis	7,580	1,059	(3.00)	5,075	(2.06)	1,446

TABLE 6. (*Continued*) Reported cases and incidence rates of notifiable diseases,* by ethnicity — United States, 2001

Disease	Total	Hispanic No.	Hispanic (Rate)	Non-Hispanic No.	Non-Hispanic (Rate)	Ethnicity not stated
Psittacosis	25	2	(0.01)	16	(0.01)	7
Q fever**	26	0	(0.00)	11	(0.01)	15
Rocky Mountain spotted fever	695	10	(0.03)	496	(0.20)	189
Salmonellosis	40,495	2,711	(7.68)	14,575	(5.92)	23,209
Shigellosis	20,221	2,467	(6.99)	6,014	(2.44)	11,740
Streptococcal disease, invasive group A	3,750	309	(1.29)	1,638	(0.78)	1,787
Streptococcal toxic-shock syndrome	77	4	(0.02)	39	(0.02)	34
Streptococcus pneumoniae, invasive, drug-resistant**	2,896	164	(1.36)	1,205	(0.96)	1,527
Streptococcus pneumoniae, invasive, <5 yrs**	498	28	(0.52)	199	(0.39)	271
Syphilis, primary and secondary¶	6,103	724	(2.05)	5,149	(2.09)	230
Tetanus	37	11	(0.03)	20	(0.01)	6
Toxic-shock syndrome	127	6	(0.02)	73	(0.03)	48
Tuberculosis††	15,989	4,001	(11.33)	11,952	(4.86)	36
Tularemia	129	1	(0.00)	79	(0.04)	49
Typhoid fever	368	48	(0.14)	147	(0.06)	173

* No cases of paralytic poliomyelitis, western equine encephalitis, or yellow fever were reported in 2001. Diseases with <25 reported cases are not included in this table.

† Total number of acquired immunodeficiency syndrome (AIDS) cases reported to the Division of HIV/AIDS Prevention—Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), through December 31, 2001.

§ Chlamydia refers to genital infections caused by *C. trachomatis*.

¶ In addition to data collected through the National Electronic Telecommunications System for Surveillance (NETSS), some ethnicity data are collected on aggregate forms different from those used for reported cases. Thus, the total number of cases reported here can differ slightly from others. Totals reported to the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of May 3, 2002.

** Notifiable in <40 states.

†† Totals reported to the Division of Tuberculosis Elimination, NCHSTP, as of March 29, 2002.

PART 2

Graphs and Maps for Selected Notifiable Diseases in the United States

ABBREVIATIONS AND SYMBOLS USED IN GRAPHS AND MAPS

Data not available ..... NA

Report of disease is not required in that jurisdiction (not notifiable) .... NN

American Samoa ..... AS

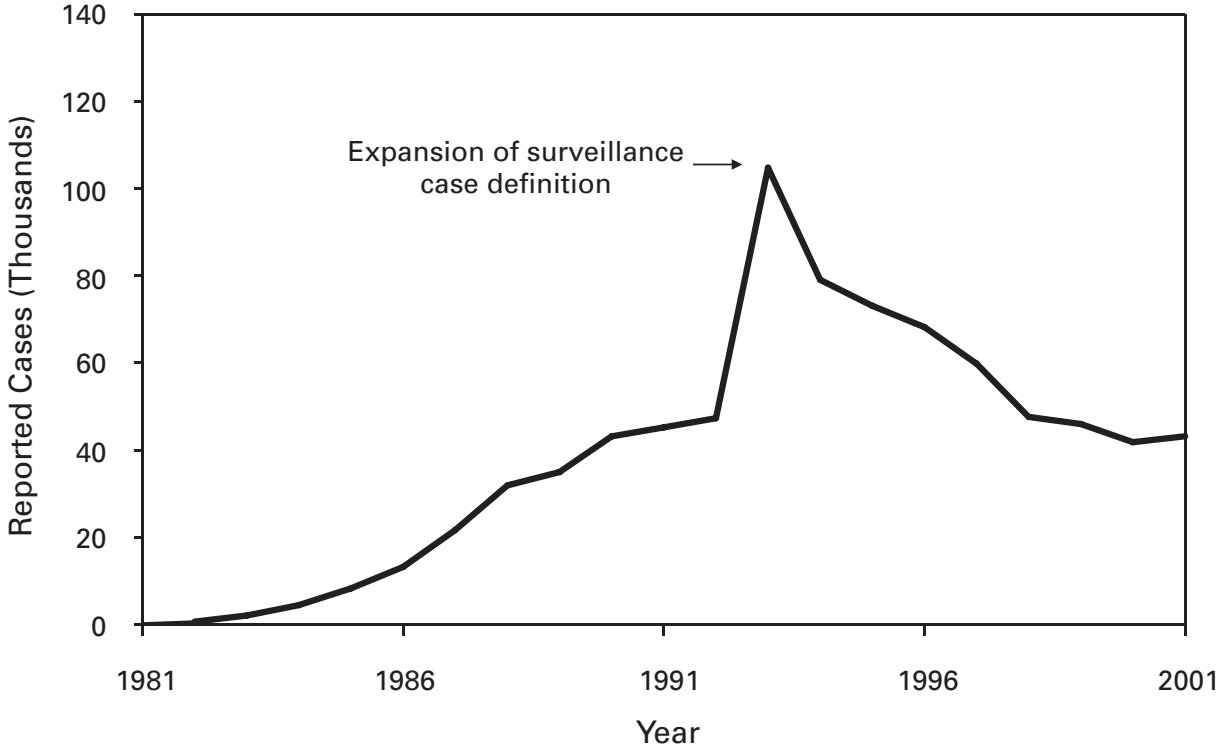
Commonwealth of Northern Mariana Islands ..... CNMI

Guam ..... GU

Puerto Rico ..... PR

U.S. Virgin Islands VI

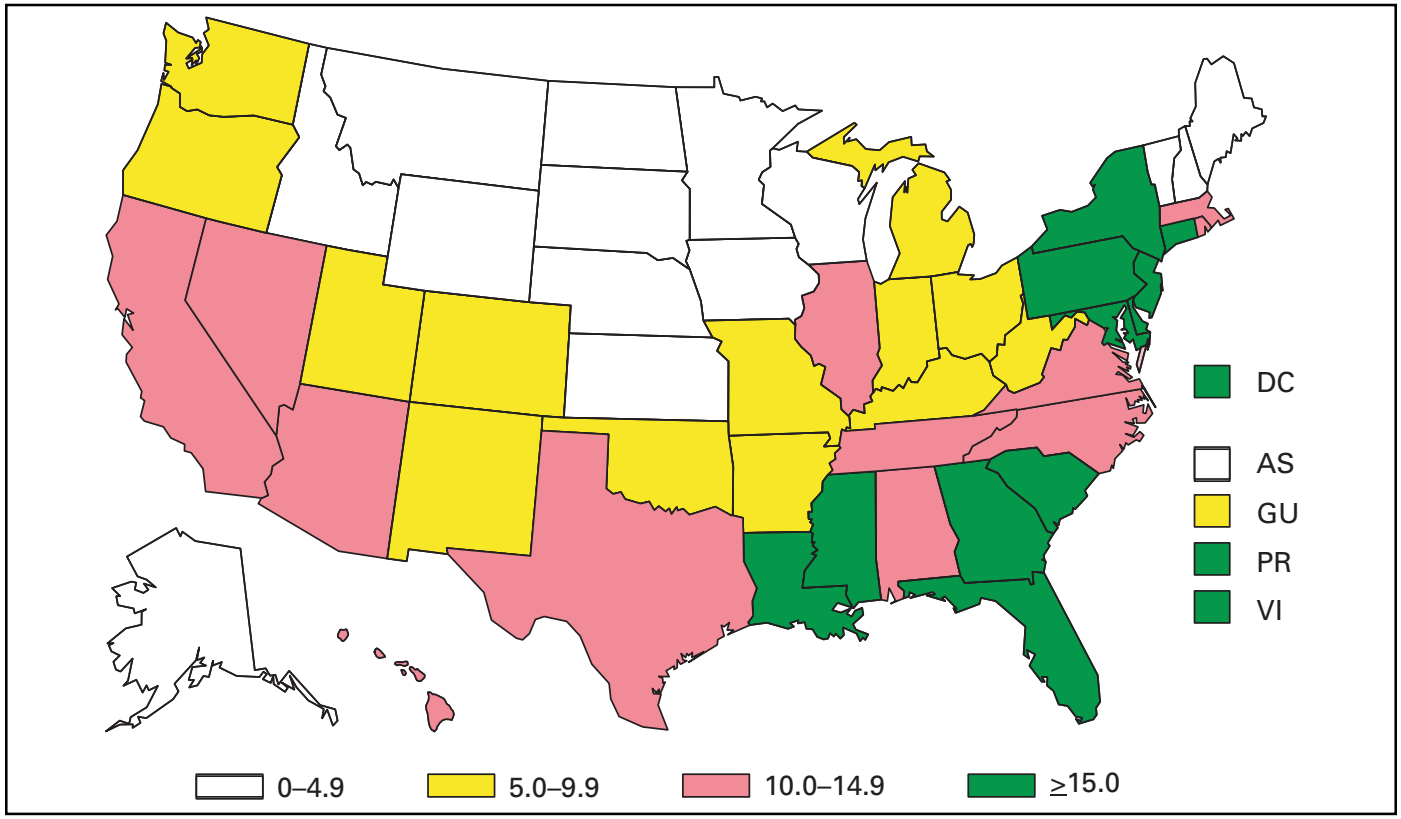
ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS). Reported cases, by year — United States* and U.S. territories, 1981–2001



*Total number of AIDS cases includes all cases reported to CDC as of December 31, 2001. Total includes cases among residents in U.S. territories and 113 cases among persons with unknown state of residence

AIDS incidence increased rapidly throughout the 1980s, peaked in the early 1990s, and then declined. The peak of new diagnoses in 1993 was associated with expansion of the AIDS surveillance case definition. In 1996, sharp declines in AIDS incidence were associated with implementation of highly active antiretroviral therapy in the United States. During 1998–1999, declines in AIDS incidence began to level, and essentially no change occurred during 1999–2001.

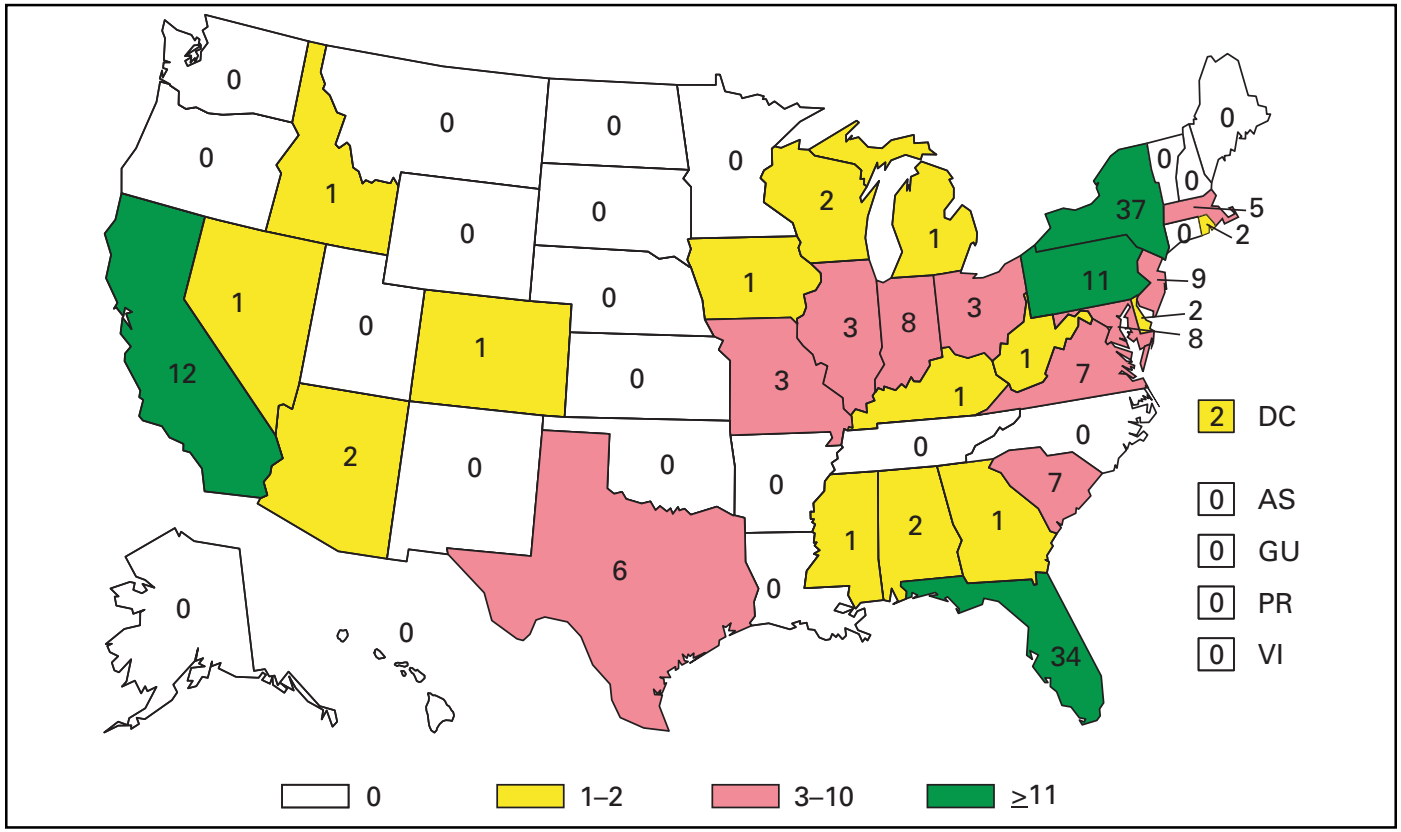
ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS). Reported cases per 100,000 population — United States* and U.S. territories, 2001



*113 cases with unknown state of residence.

AIDS case reports continue to reflect the concentration of the epidemic in populous states in the northeastern, southeastern, and western United States. By region, from 1996 through 2001, AIDS incidence declined in the West; declined and then leveled in the Northeast, Midwest, and U.S. territories; and declined and then increased in the South.

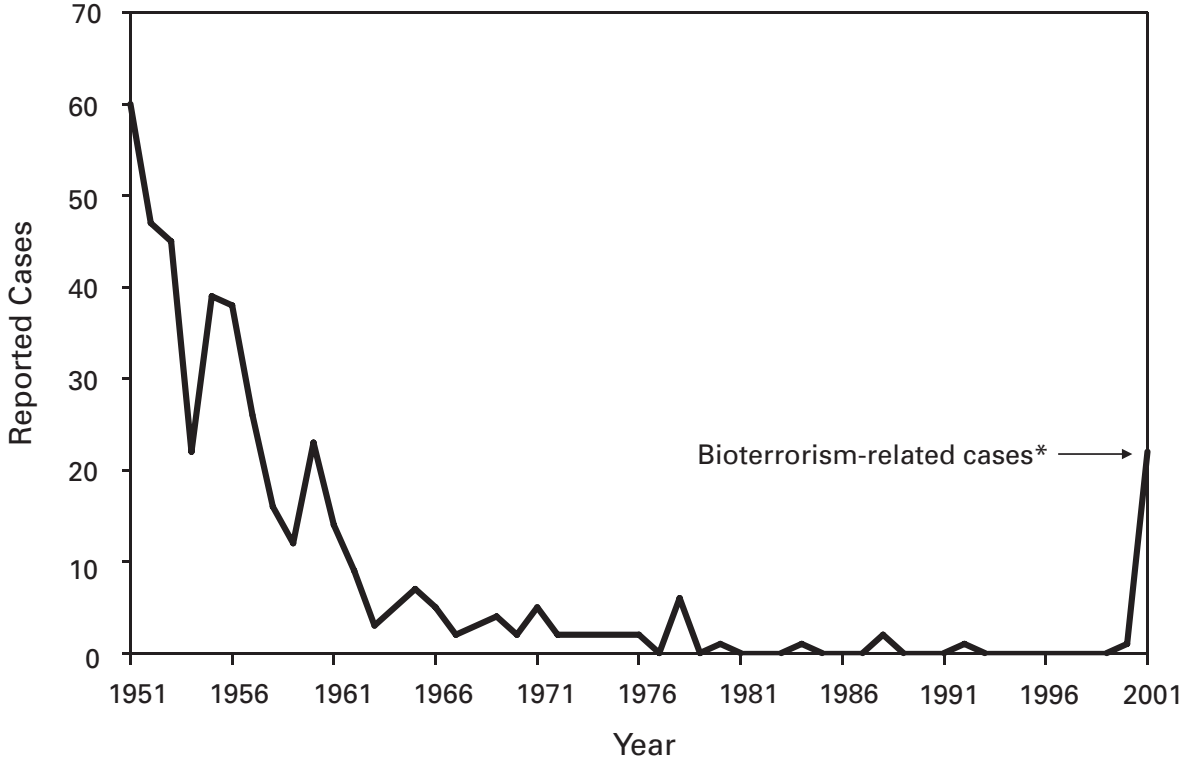
ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS). Reported pediatric cases* — United States† and U.S. territories, 2001



*Children and adolescents aged <13 years.
† Includes one case with unknown state of residence.

The number of reported pediatric AIDS cases reported has declined each year since 1992. During 2001, 175 new cases of AIDS among children were reported. Of these, 150 (86%) were attributed to perinatal exposure.

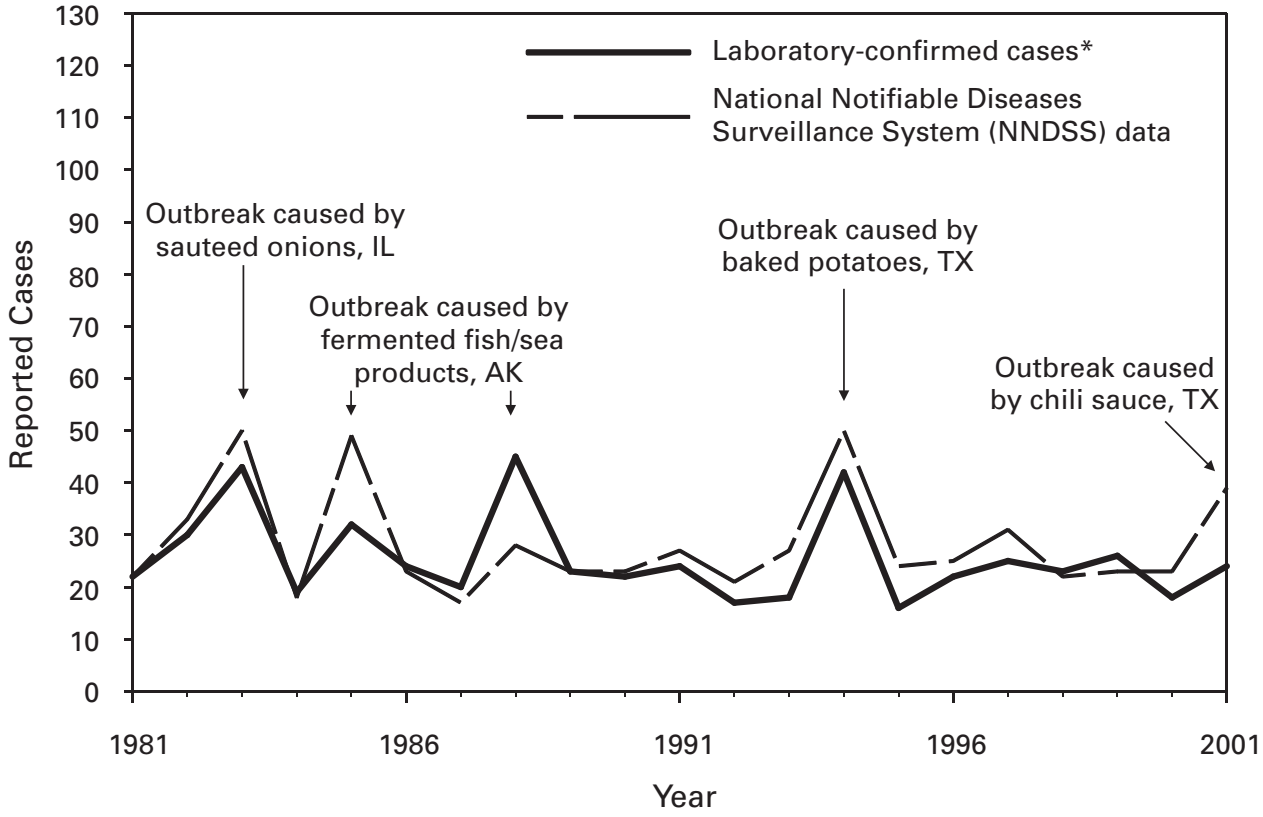
ANTHRAX. Reported cases, by year — United States, 1951–2001



*One epizootic-associated cutaneous case was reported in 2001 from Texas.

In 2001, 22 anthrax cases (11 inhalational and 11 cutaneous [four suspected, seven confirmed]) were associated with an unprecedented biological terrorism event. Five of the 11 inhalational cases were fatal. Cases occurred among residents of seven states. In addition, one naturally occurring case was reported from Texas. *Bacillus anthracis* remains a Class A bioterrorism threat agent.

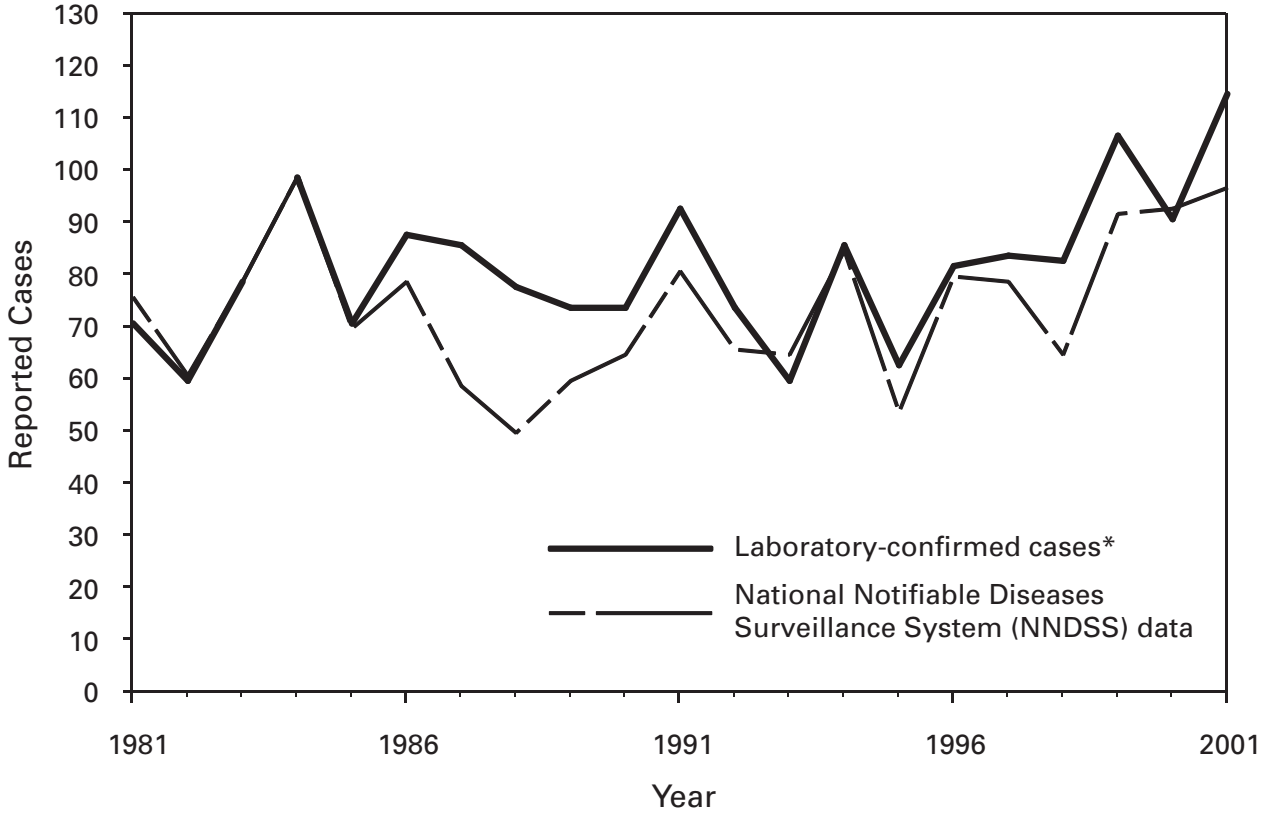
BOTULISM, FOODBORNE. Reported cases, by year — United States, 1981–2001



*Data from annual survey of state epidemiologists and directors of state public health laboratories.

Foodborne botulism is a rare but potentially fatal disease. Every case of botulism must be treated as a public health emergency, and the contaminated food vehicle and all exposed persons must be identified.

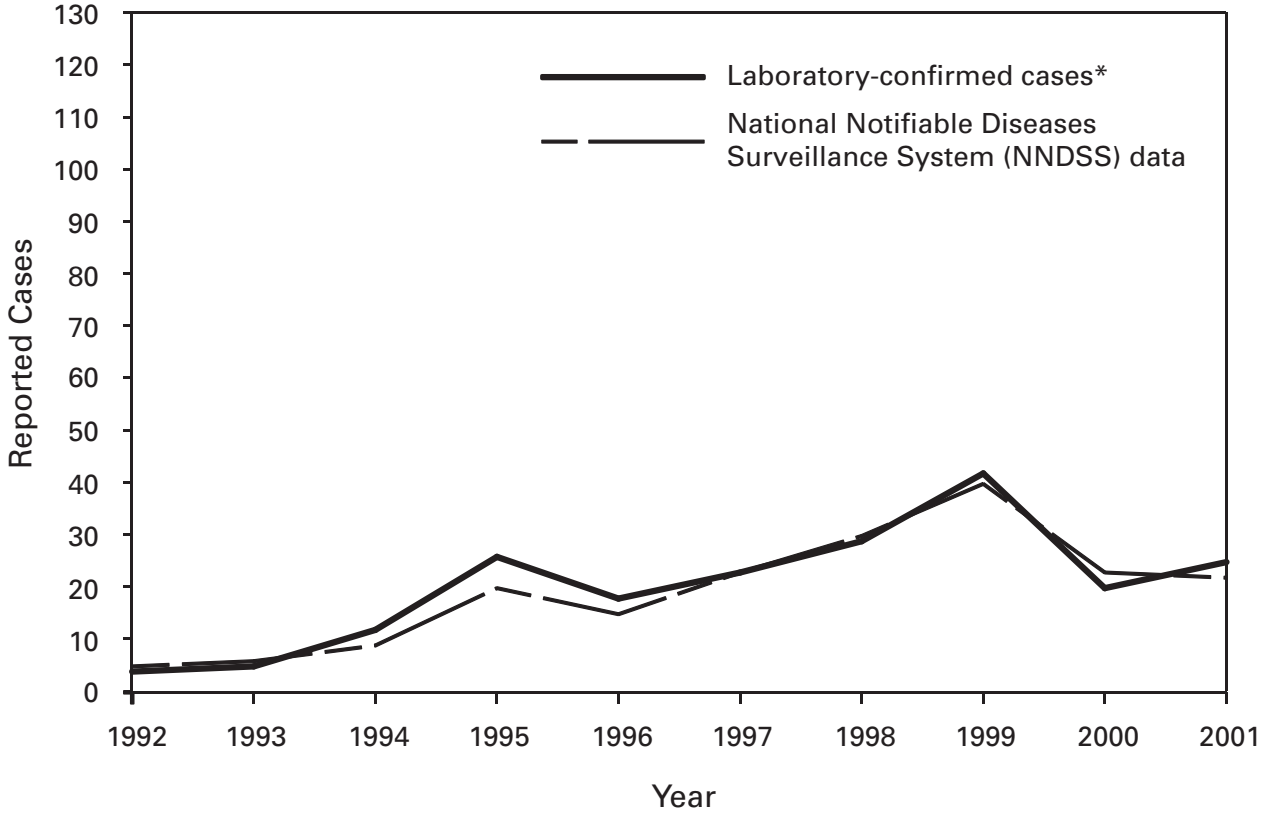
BOTULISM, INFANT. Reported cases, by year — United States, 1981–2001



*Data from annual survey of state epidemiologists and directors of state public health laboratories.

Infant botulism is the most common type of botulism in the United States. Cases are sporadic and risk factors remain largely unknown.

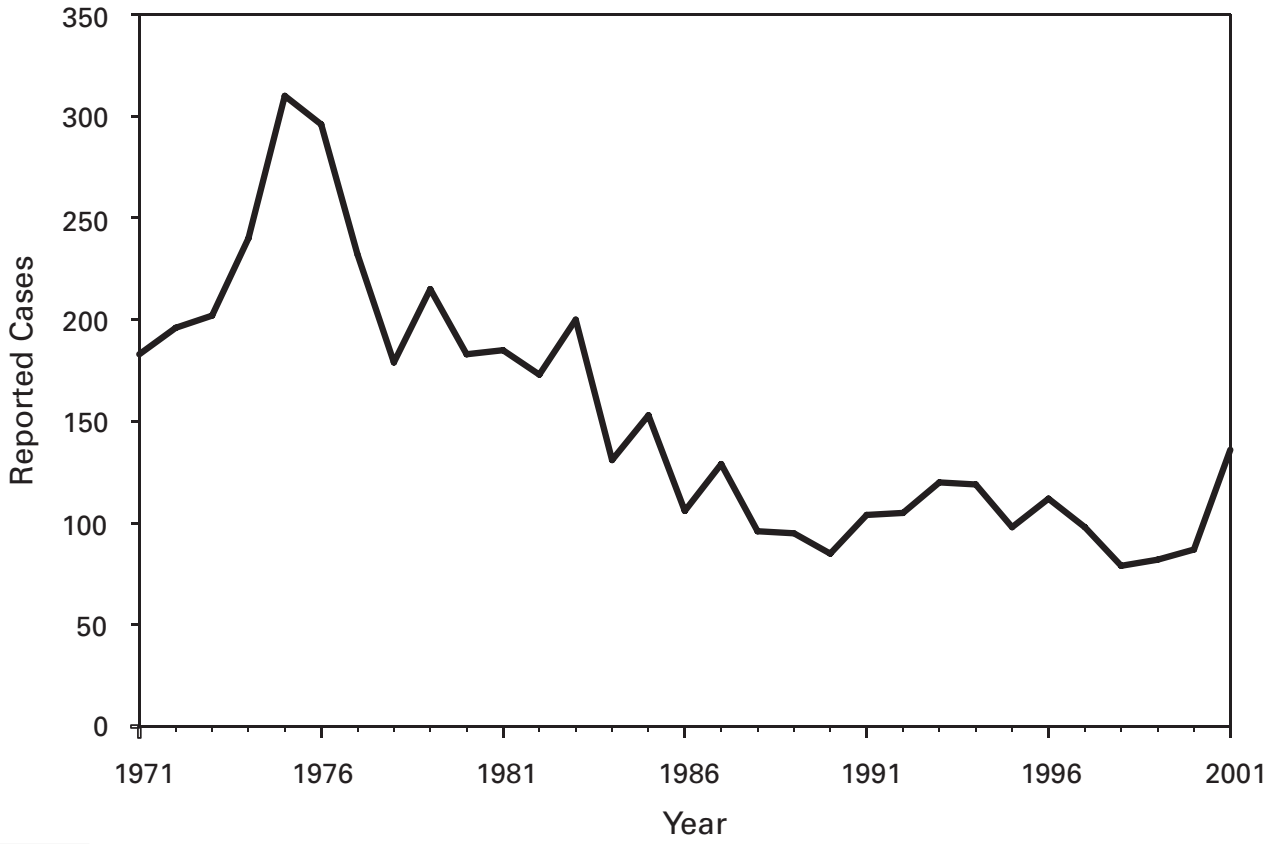
BOTULISM, OTHER (includes wound and unspecified). Reported cases, by year — United States, 1992–2001



*Data from annual survey of state epidemiologists and directors of state public health laboratories. Data for wound botulism only.

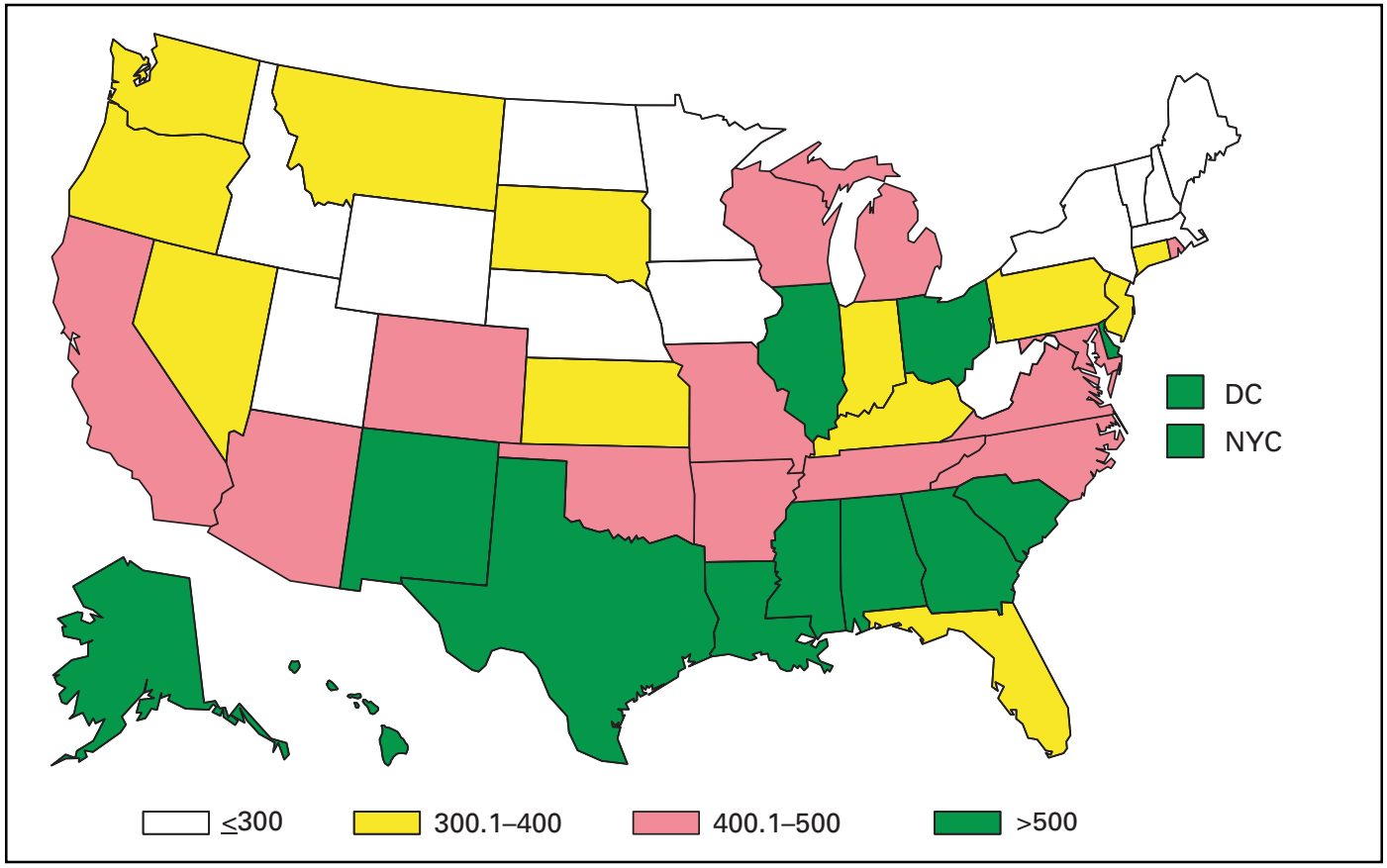
Wound botulism has increased sharply during the past decade. Most cases occur in injection-drug users in the western United States and appear to be associated with injection of a particular type of heroin.

BRUCELLOSIS. Reported cases, by year — United States, 1971–2001



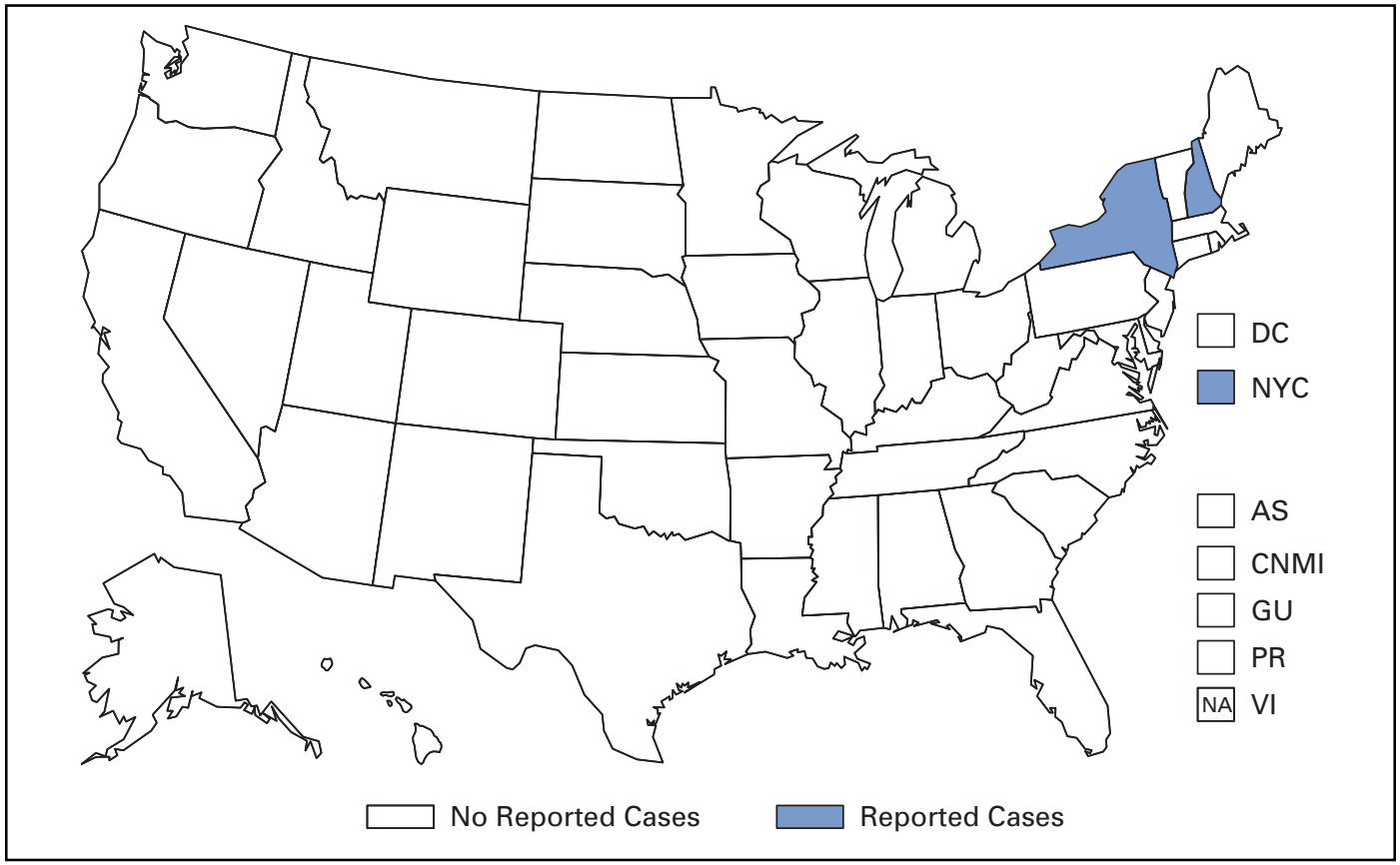
In 2001, because of the successful control program for brucellosis among cattle in the United States, the risk for brucellosis among U.S. residents is minimal. Most cases in the United States occur among international travelers or recent immigrants. Hunters exposed to infected wildlife and laboratory personnel working with *Brucella* species also have an elevated risk for infection. *B. melitensis* and *B. suis* are considered Class B bioterrorism threat agents.

CHLAMYDIA. Reported cases among women per 100,000 female population — United States, 2001



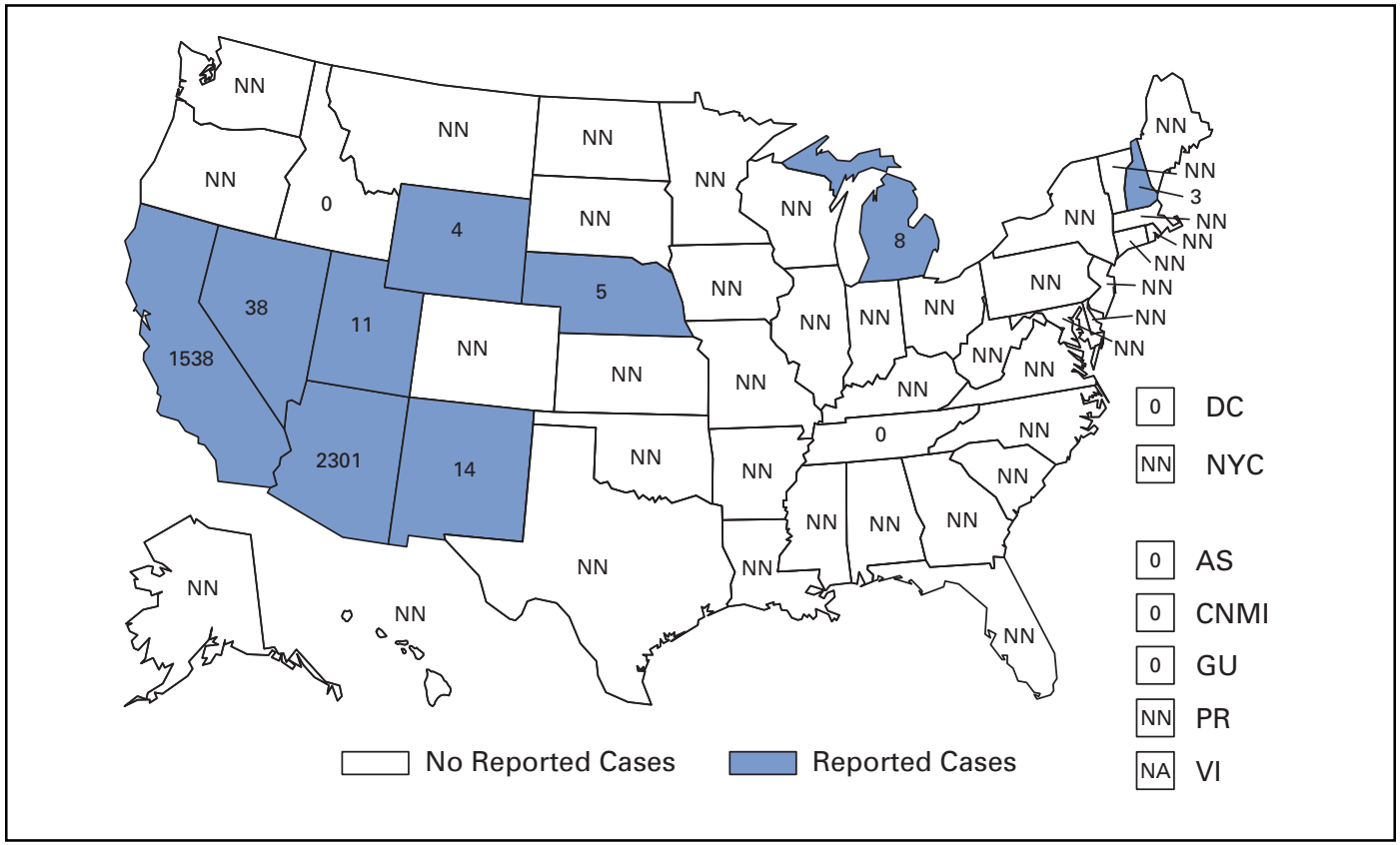
Chlamydia refers to genital infections caused by *Chlamydia trachomatis.* In 2001, the chlamydia rate among women was 435.2 cases/100,000 population. Rates for men are not given because reporting for men is limited.

CHOLERA. Reported cases — United States and U.S. territories, 2001



Most cholera infections in the United States are acquired in developing countries or through consumption of contaminated seafood. Cholera vaccine is not recommended for international travelers and is no longer available in the United States.

COCCIDIOIDOMYCOSIS. Reported cases — United States and U.S. territories, 2001


NN
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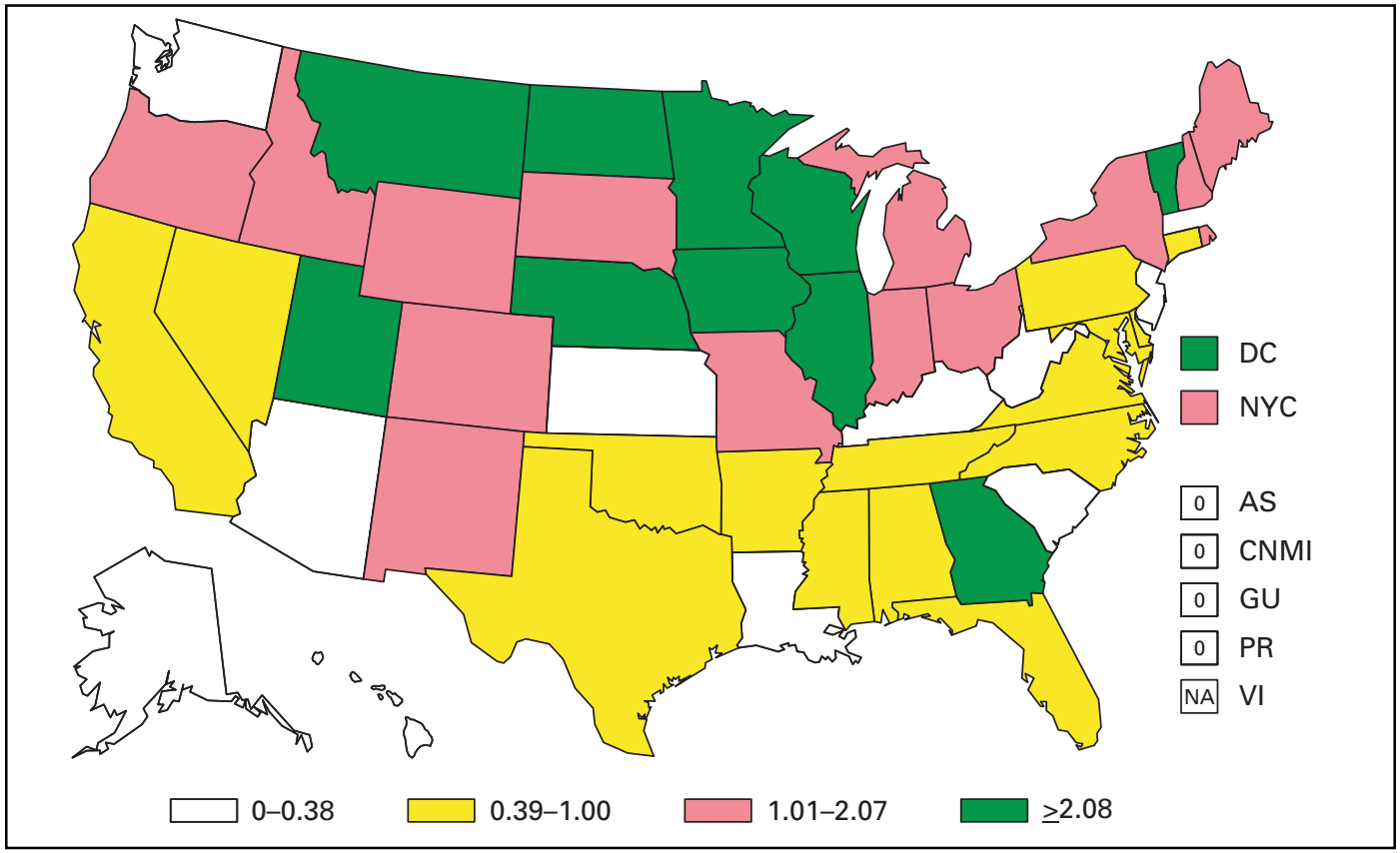
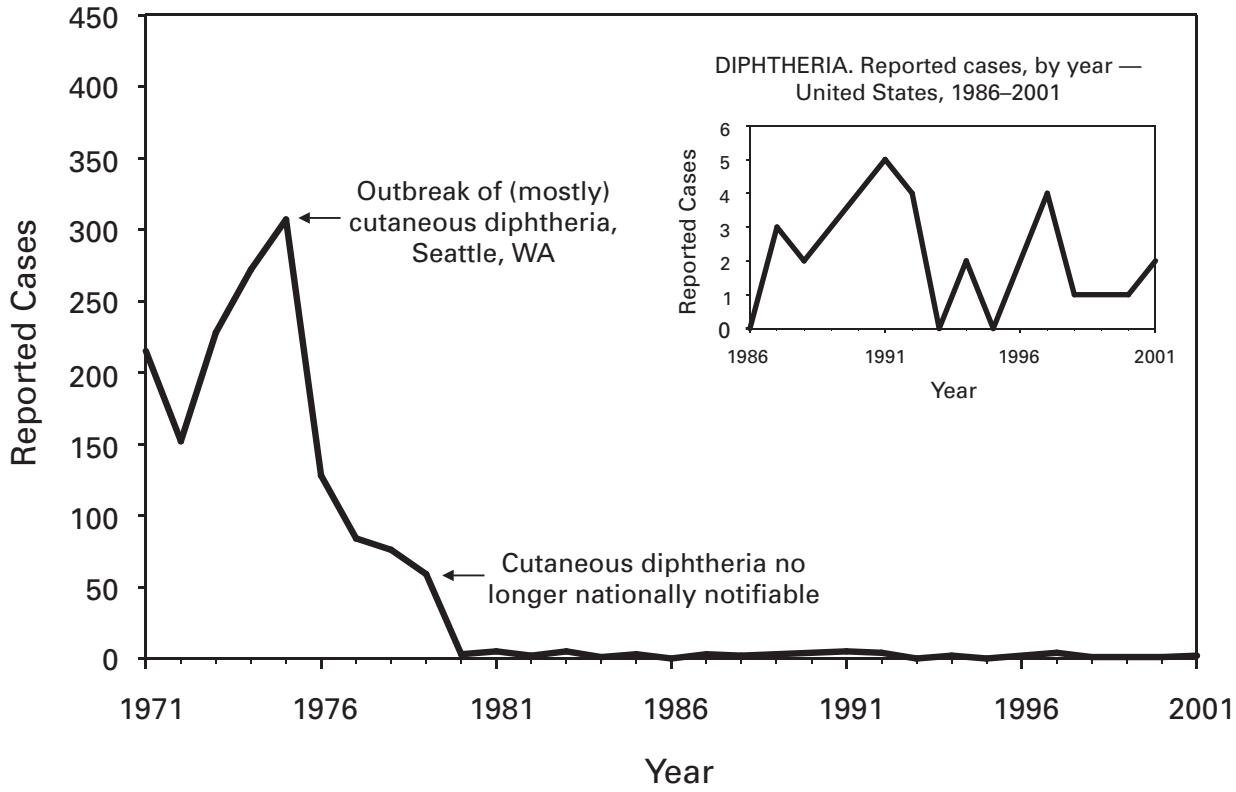
CRYPTOSPORIDIOSIS. Reported cases per 100,000 population — United States and U.S. territories, 2001



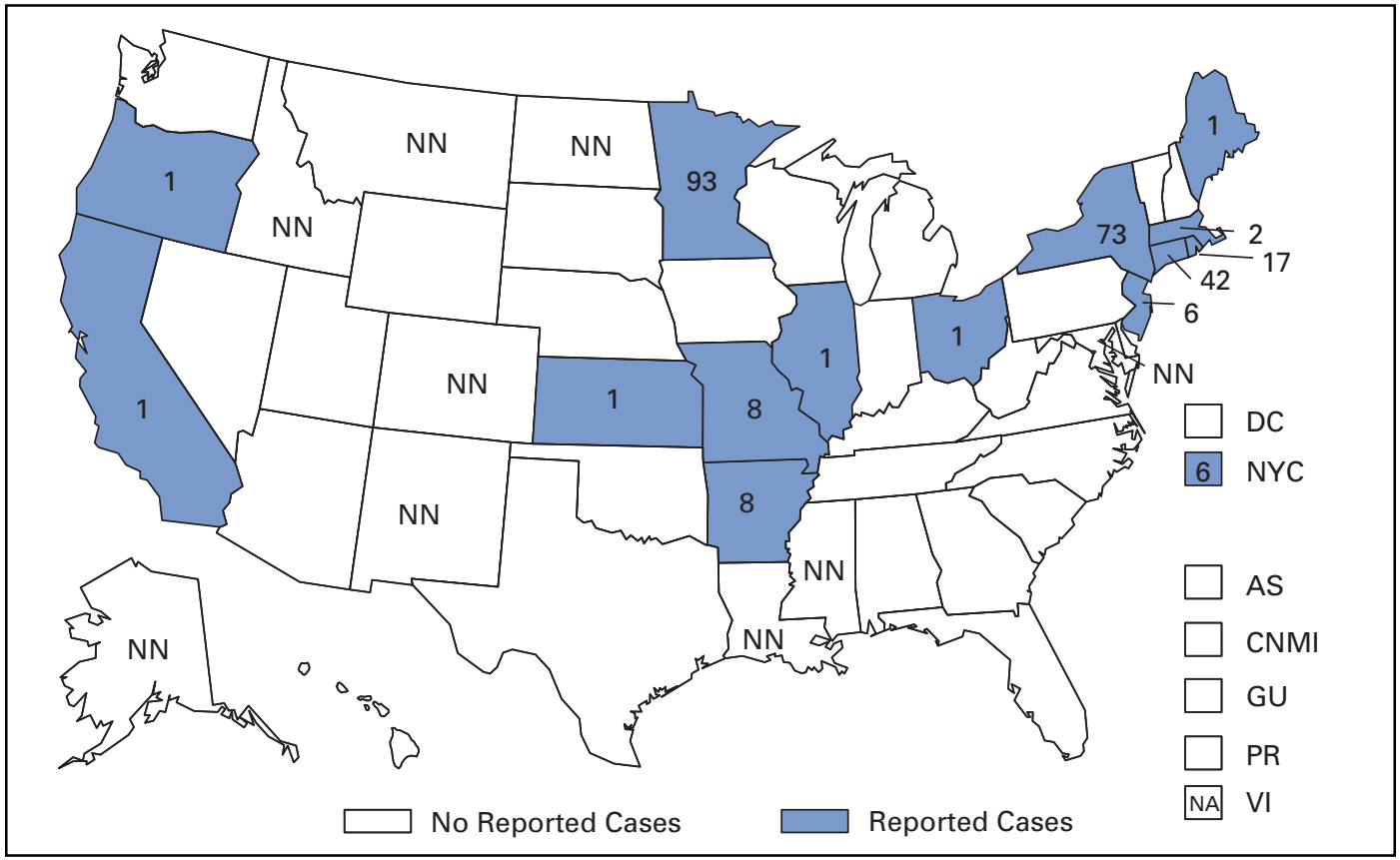
Surveillance data from 2001 suggest that infection with *Cryptosporidium* is geographically widespread. Reported illness onset dates exhibited a seasonal increase from May to September. Case-detection and reporting rates are higher in states that participate in CDC's FoodNet or Emerging Infectious Diseases Program and in states that report outbreaks. States conducting active surveillance included California, Colorado, Connecticut, Georgia, Maryland, Minnesota, New York, Tennessee, and Oregon. Outbreak-associated cases were reported from Hawaii, Illinois, Kentucky, Minnesota, New Hampshire, New York, Wisconsin, and Wyoming.

DIPHTHERIA. Reported cases, by year — United States, 1971–2001



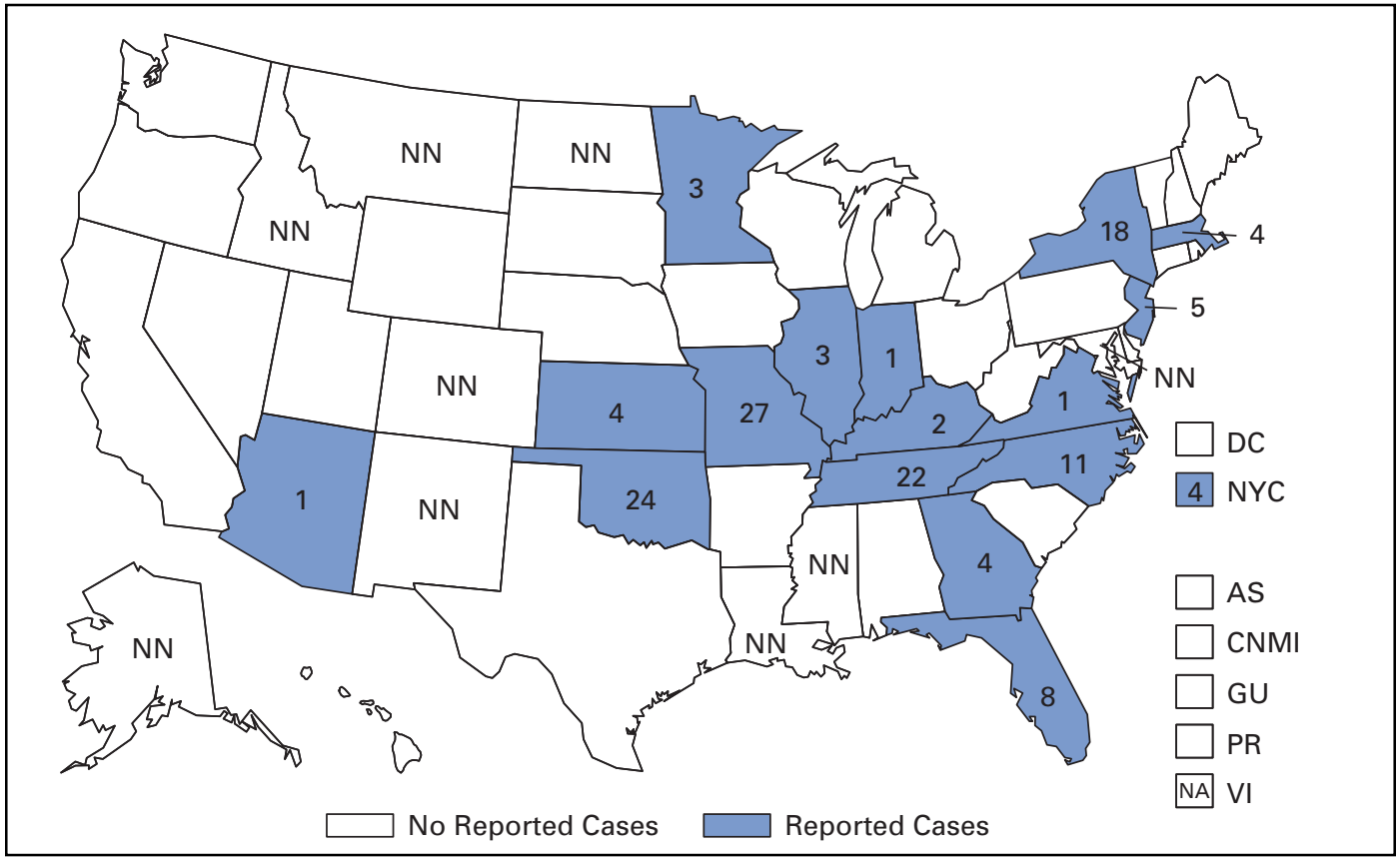
In 2001, two probable cases of diphtheria were reported. Both case-patients were inadequately immunized adults. Respiratory diphtheria may manifest as an acute membranous pharyngitis, particularly in persons who are unimmunized or inadequately immunized. The Advisory Committee on Immunization Practices recommends that after completing a 5-dose primary series of DTP and/or DTaP (diphtheria, tetanus, and pertussis) vaccine by age 6 years, a combined formulation of tetanus and diphtheria (Td) should be administered at age 11–18 years, and thereafter, a booster shot (Td) at 10-year intervals.

EHRLICHIOSIS, HUMAN GRANULOCYTIC. Reported cases — United States and U.S. territories, 2001



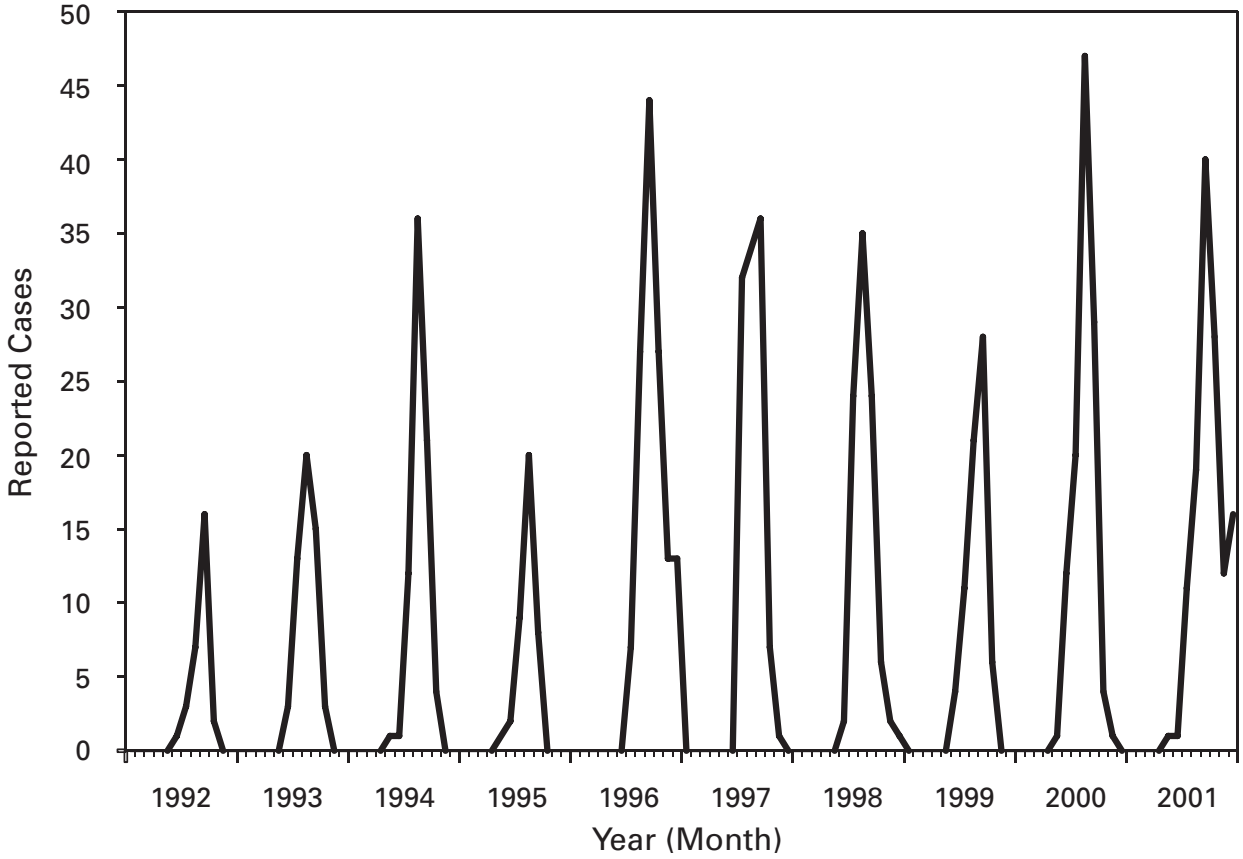
Human ehrlichiosis is an emerging tickborne disease that became nationally notifiable only in 1999 (in some states ehrlichiosis is not a notifiable disease). Identification and reporting of human ehrlichioses are incomplete, and numbers of cases reported here are not indicative of the overall distribution or the regional prevalence of disease. Six cases of ehrlichiosis, human, other, or unspecified, also were reported by Kentucky, Ohio, Illinois, and Virginia in 2001.

EHRLICHIOSIS, HUMAN MONOCYTIC. Reported cases — United States and U.S. territories, 2001



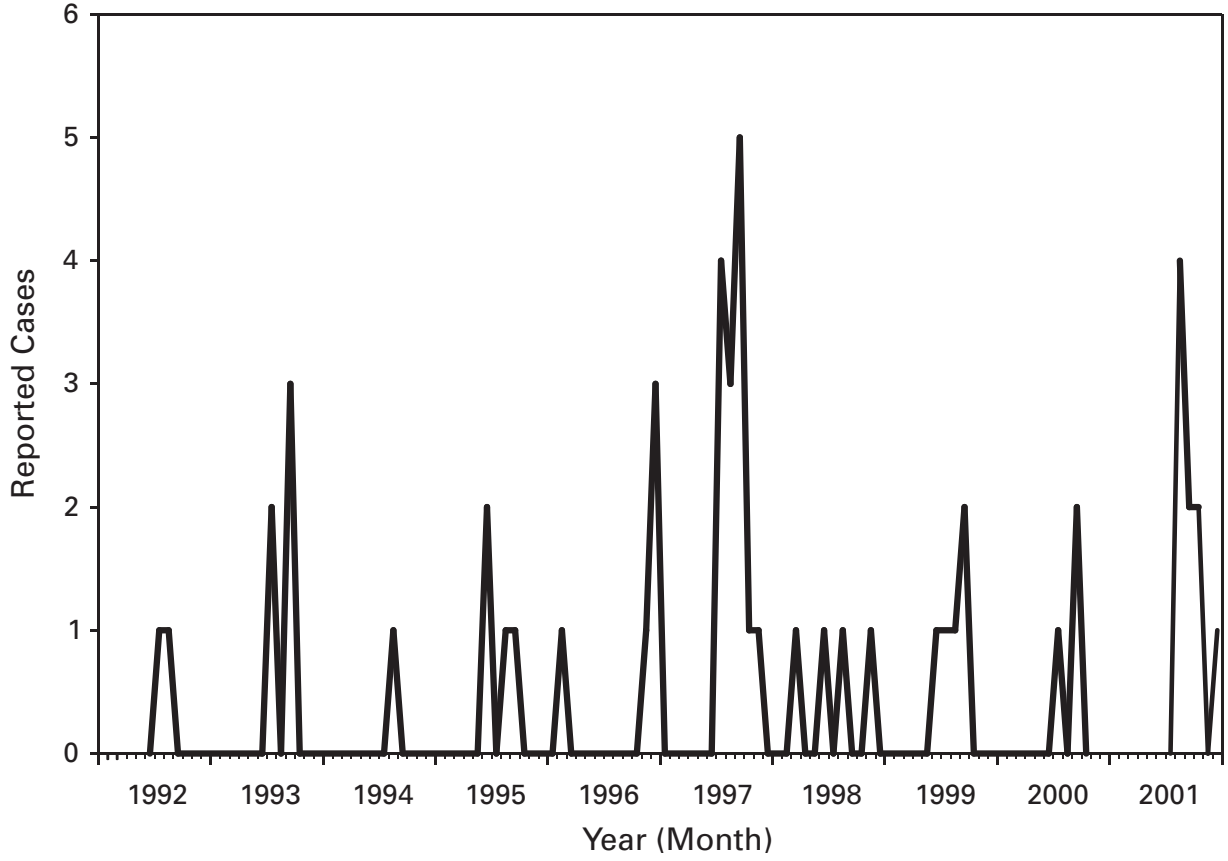
Human ehrlichiosis is an emerging tickborne disease that became nationally notifiable only in 1999 (in some states ehrlichiosis is not a notifiable disease). Identification and reporting of human ehrlichioses are incomplete, and numbers of cases reported here are not indicative of the overall distribution or the regional prevalence of disease. Six cases of ehrlichiosis, human, other, or unspecified, also were reported by Kentucky, Ohio, Illinois, and Virginia in 2001.

ENCEPHALITIS. Reported cases caused by California serogroup viruses, by month of onset — United States, 1992–2001



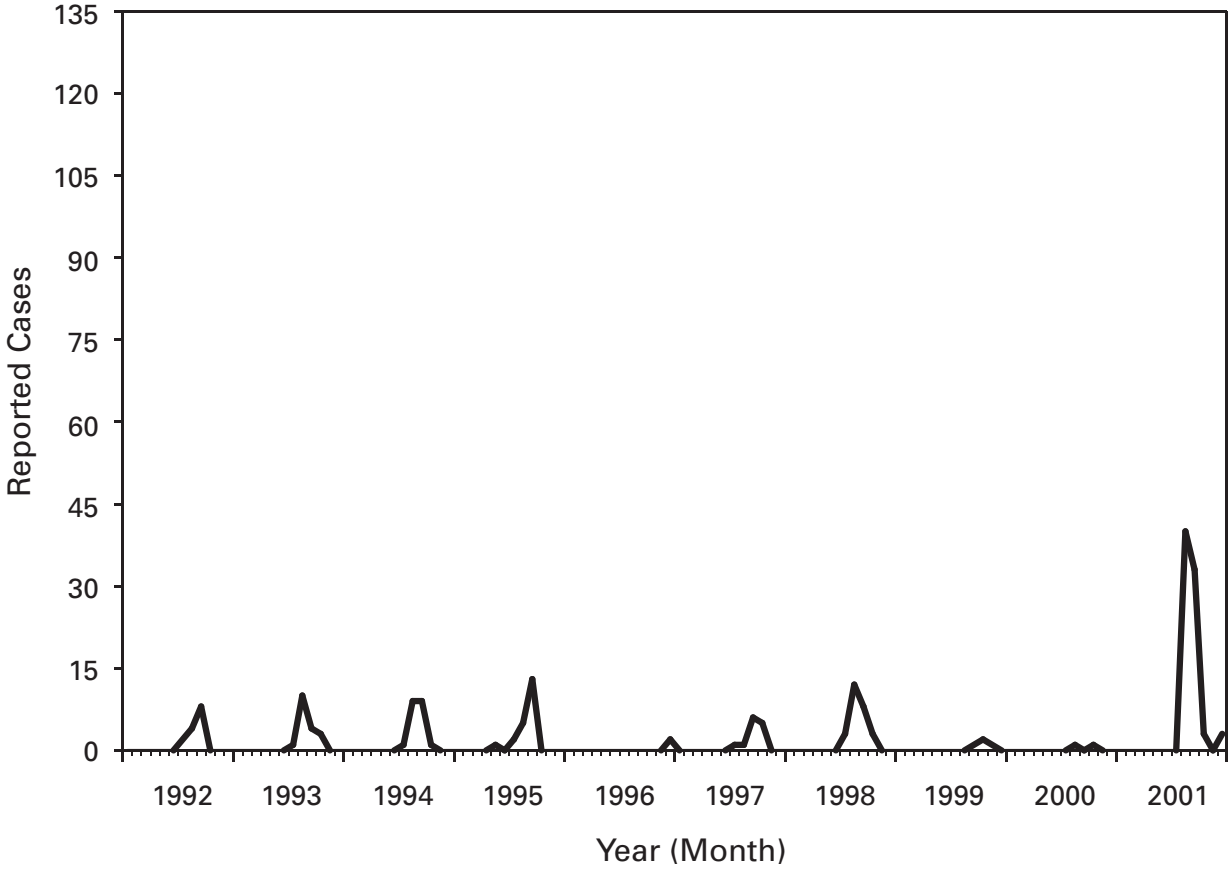
California serogroup viruses (mainly La Crosse virus in the eastern United States, where the eastern treehole mosquito, *Aedes triseriatus*, is the primary vector) are a cause of endemic encephalitis, especially in children. In 2001, 128 cases were reported from 14 states. During 1964–2001, a median of 66 (mean: 75) cases were reported per year in the United States.

ENCEPHALITIS. Reported cases caused by eastern equine encephalitis virus, by month of onset — United States, 1992–2001



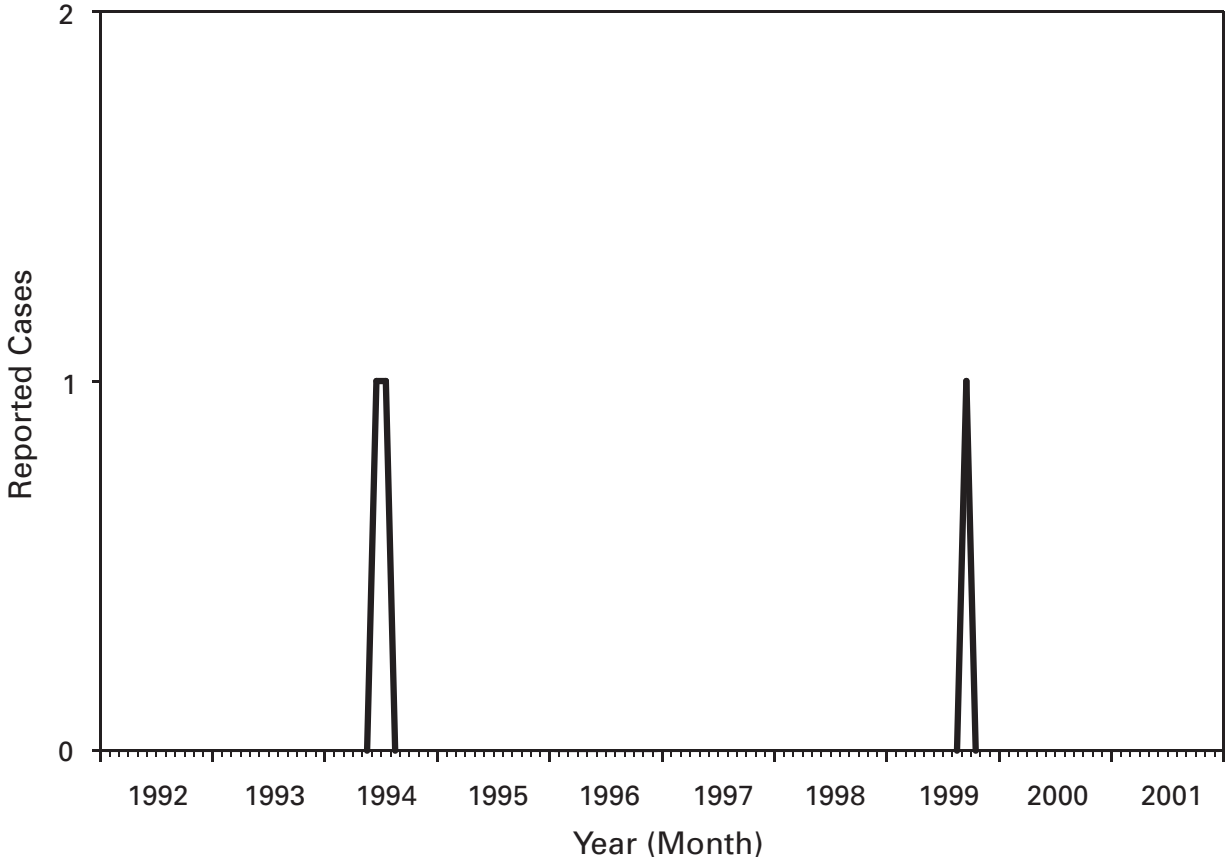
Cases of eastern equine encephalitis among humans, often associated with high mortality rates (>20%) and severe neurologic sequelae, occur sporadically in the eastern United States. In 2001, nine cases were reported from Florida (n = 1), Georgia (n = 2), Louisiana, (n = 3), Massachusetts (n = 1), Michigan (n = 1) and Texas (n = 1). During 1964–2001, a median of 4 (mean: 5) cases were reported per year in the United States.

ENCEPHALITIS. Reported cases caused by St. Louis encephalitis virus, by month of onset — United States, 1992–2001



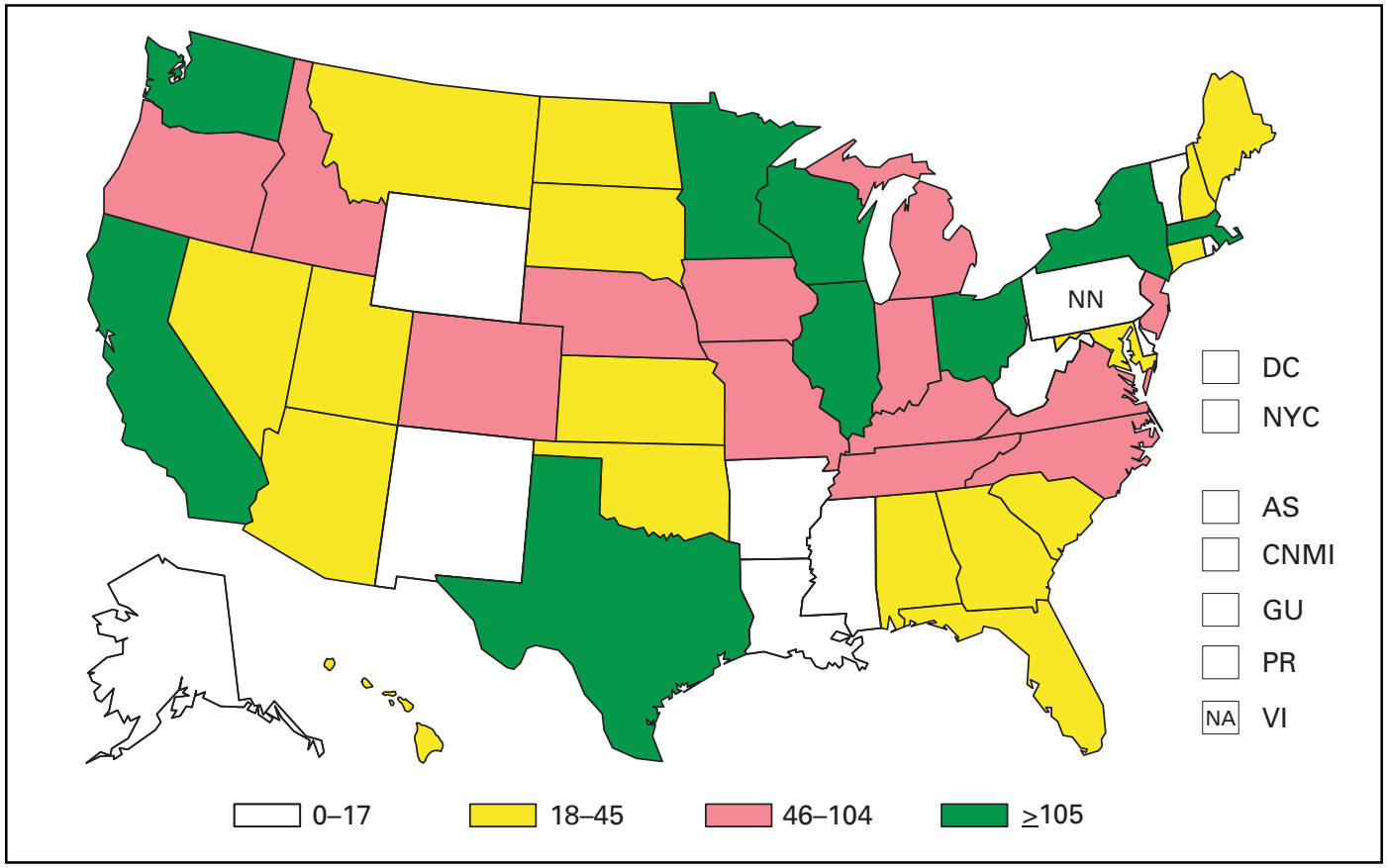
Historically, St. Louis encephalitis virus has been the most important cause of epidemic viral encephalitis in the United States. In 2001, 79 cases were reported from Arizona (n =1), Arkansas (n = 2), Louisiana (n = 71) and Texas (n = 5). During 1964–2001, a median of 26 (mean: 121) cases were reported per year in the United States.

ENCEPHALITIS. Reported cases caused by western equine encephalitis virus, by month of onset — United States, 1992–2001



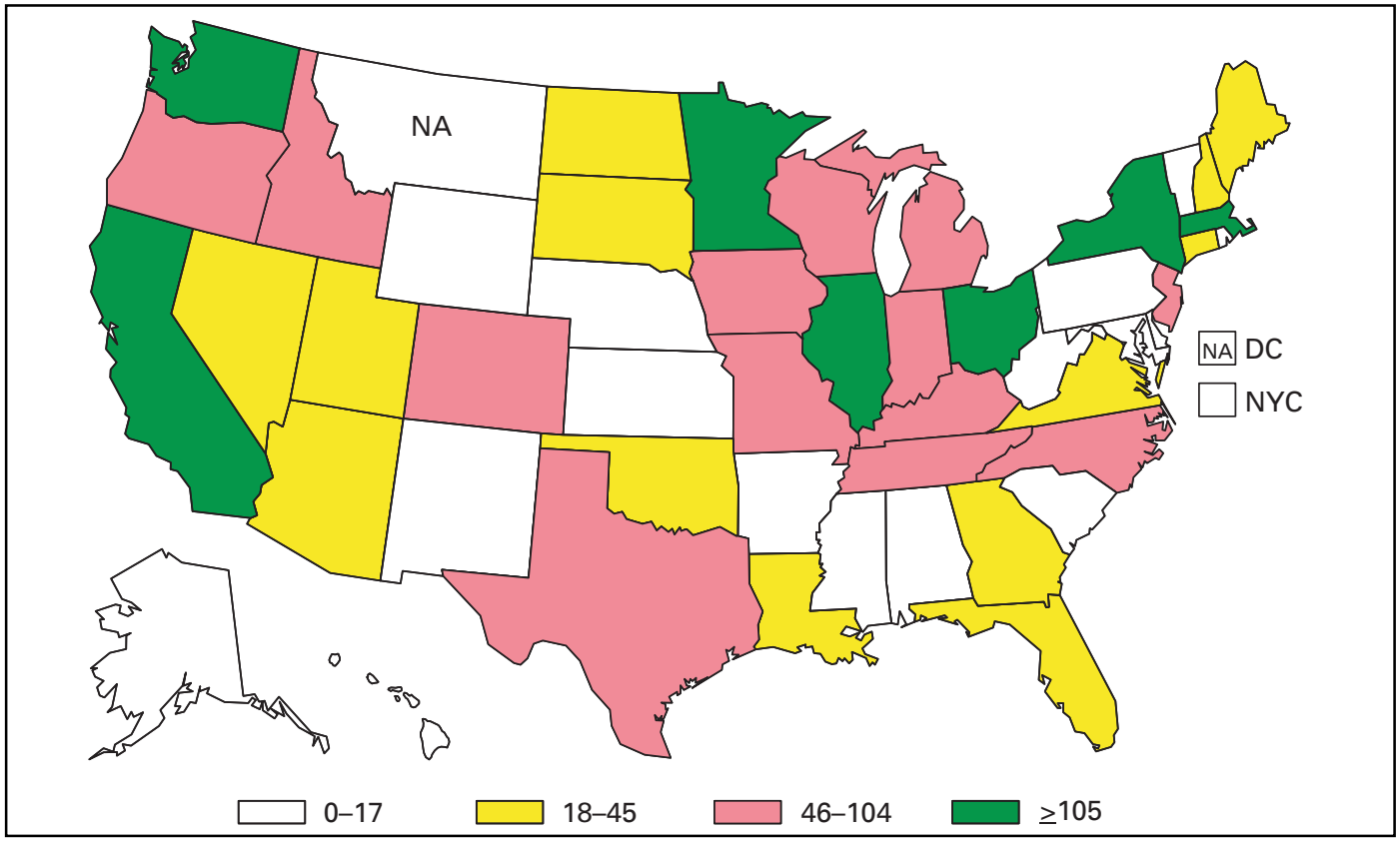
The most recent epidemic of western equine encephalitis occurred in Colorado in 1987. The reasons for the recent absence of epidemic transmission are poorly understood. No cases were reported nationally in 2001. During 1964–2001, a median of 3 (mean: 17) cases were reported per year in the United States.

***ESCHERICHIA COLI*, ENTEROHEMORRHAGIC O157:H7. Reported cases — United States and U.S. territories, 2001**



In 2001, the National Notifiable Diseases Surveillance System case definition for enterohemorrhagic *E. coli* included cases of illness due to all serotypes of enterohemorrhagic *E. coli*. Only cases due to serotype O157:H7 are included in this graph. Many infections from enterohemorrhagic *E. coli*, especially non-O157:H7 serotypes, are not recognized or reported, in part because laboratories do not routinely test for them.

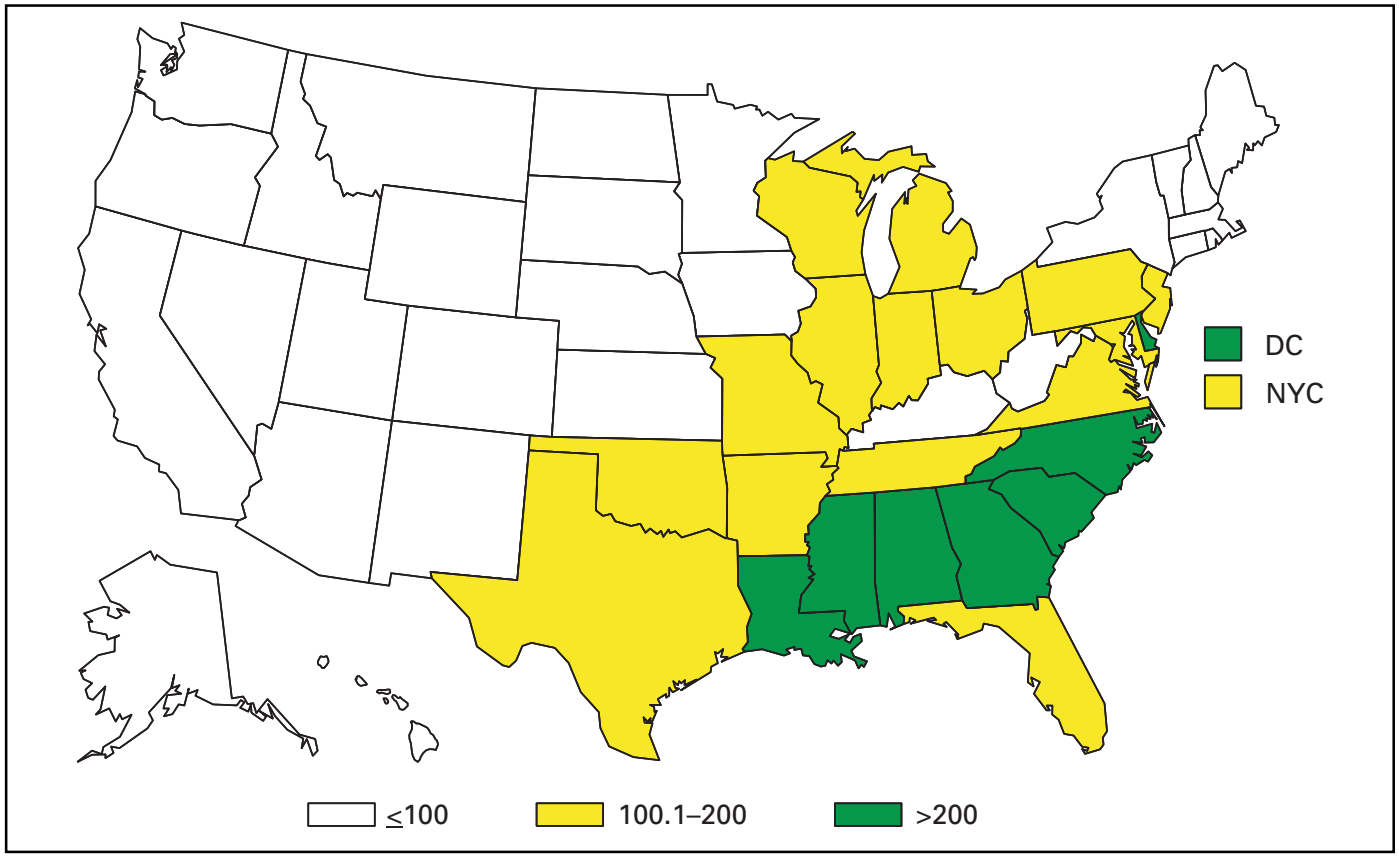
***ESCHERICHIA COLI*, ENTEROHEMORRHAGIC O157:H7. Reported isolates,* — United States, 2001**



*Data from the Public Health Laboratory Information System (PHLIS).

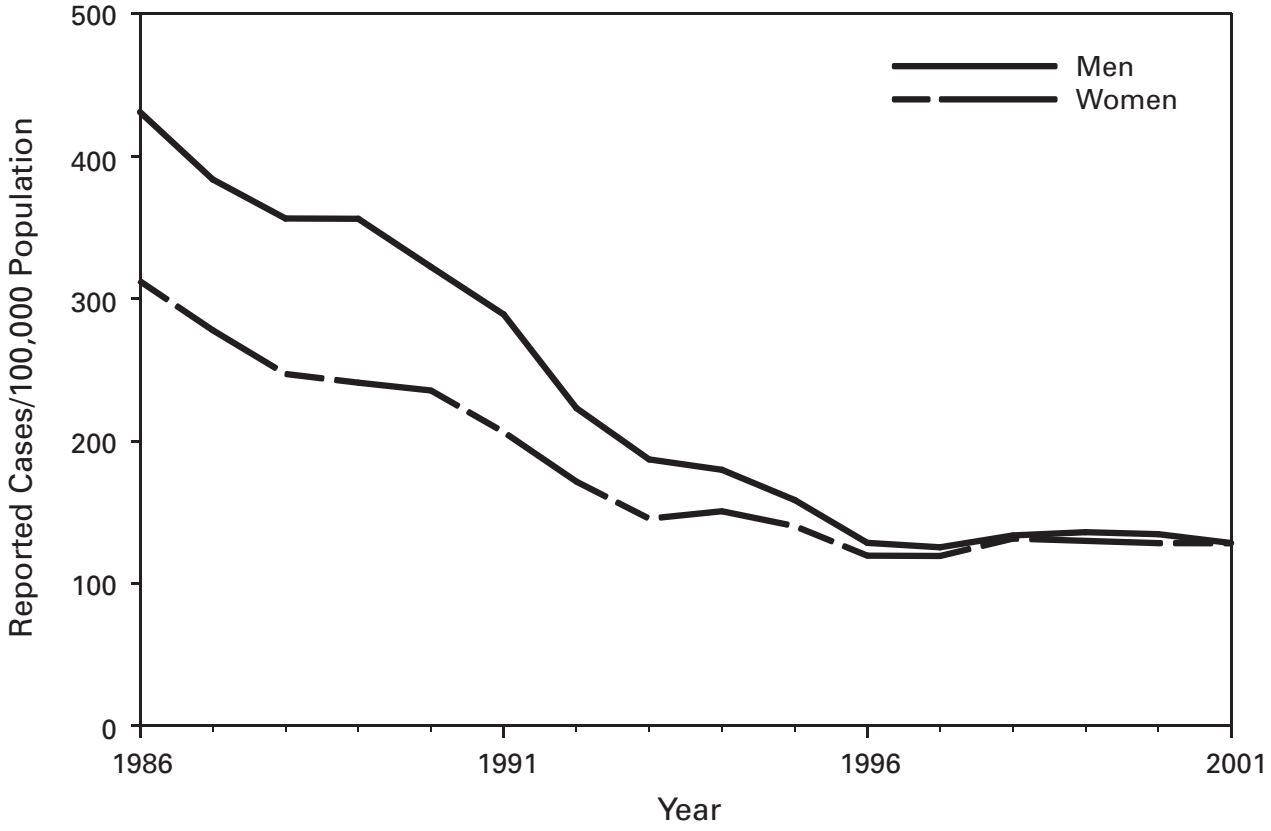
In 2001, the National Notifiable Diseases Surveillance System case definition for enterohemorrhagic *E. coli* included isolates of all serotypes of enterohemorrhagic *E. coli*. Only isolates confirmed by a state public health laboratory are reported to PHLIS. Isolates of serotype O157:H7 are included in this graph. Many public health laboratories can subtype isolates using pulsed-field gel electrophoresis and compare their findings electronically with other states through PulseNet, a national network of public health laboratories.

GONORRHEA. Reported cases per 100,000 population — United States, 2001



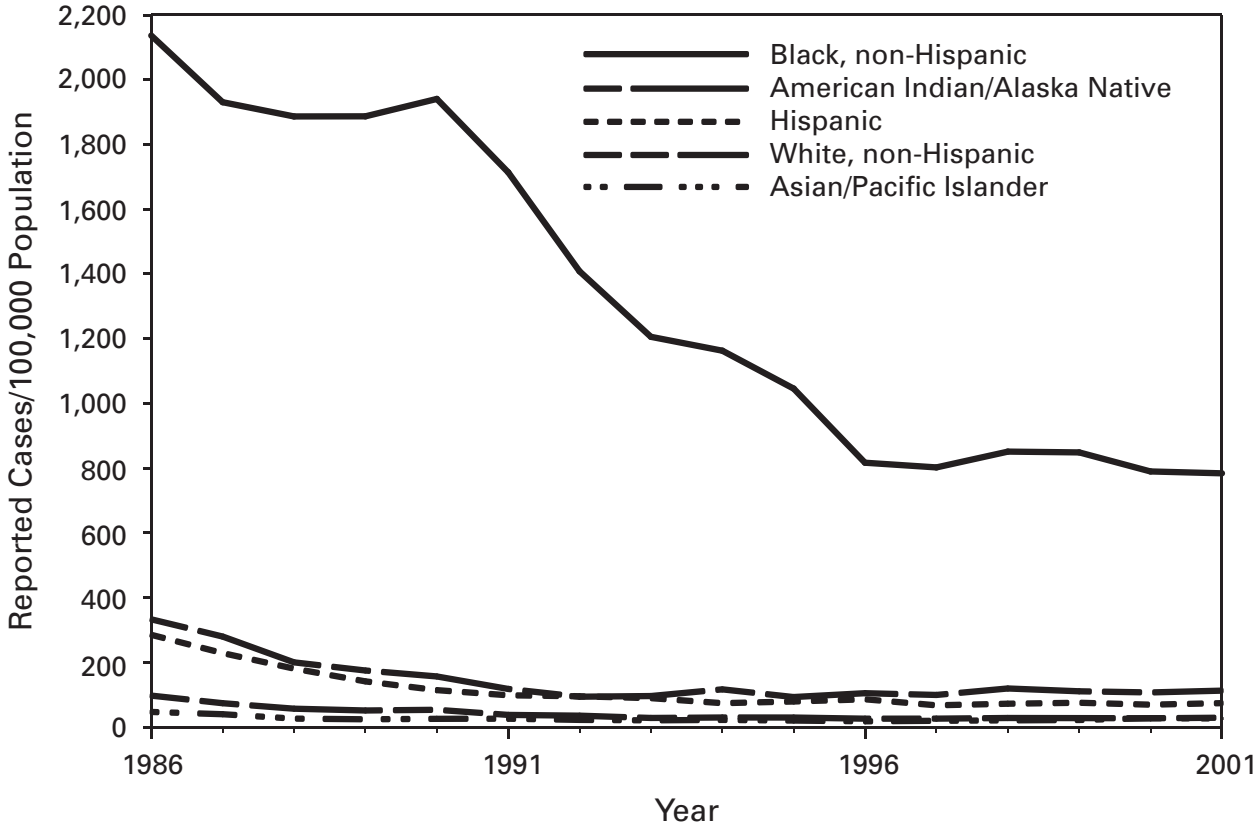
In 2001, the overall U.S. gonorrhea rate was 128.5 cases/100,000 population. The *Healthy People 2010* national objective is ≤19 cases/100,000 population. Eight states reported rates below the national objective.

GONORRHEA. Reported cases per 100,000 population, by sex — United States, 1986–2001



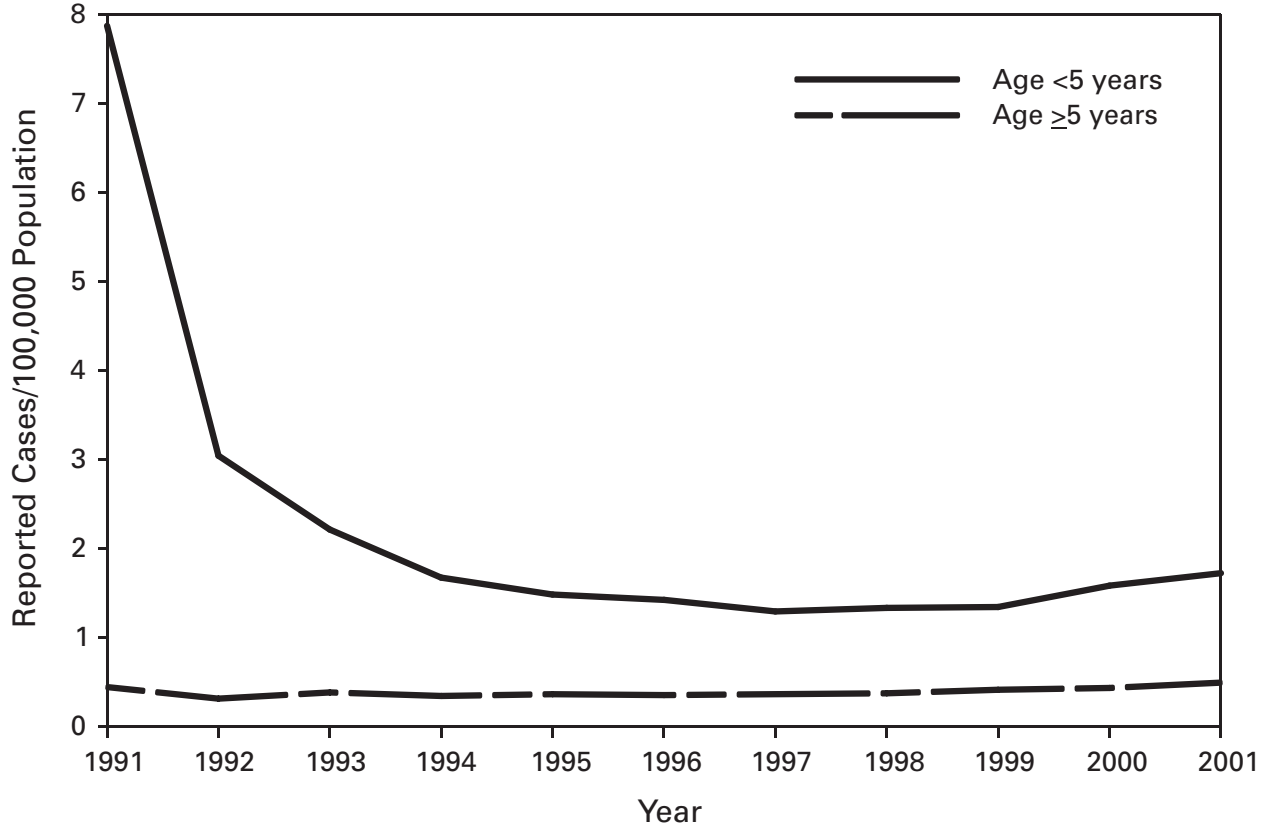
Rates of gonorrhea in the United States have been steady since 1998, at about 130 cases/100,000 population (128.5 in 2001, 129.0 in 2000, 132.3 in 1999, and 131.9 in 1998). In 2001, rates among men and women were nearly identical (128.4 cases/100,000 men and 128.2 cases/100,000 women).

GONORRHEA. Reported cases per 100,000 population, by race and ethnicity — United States, 1986–2001



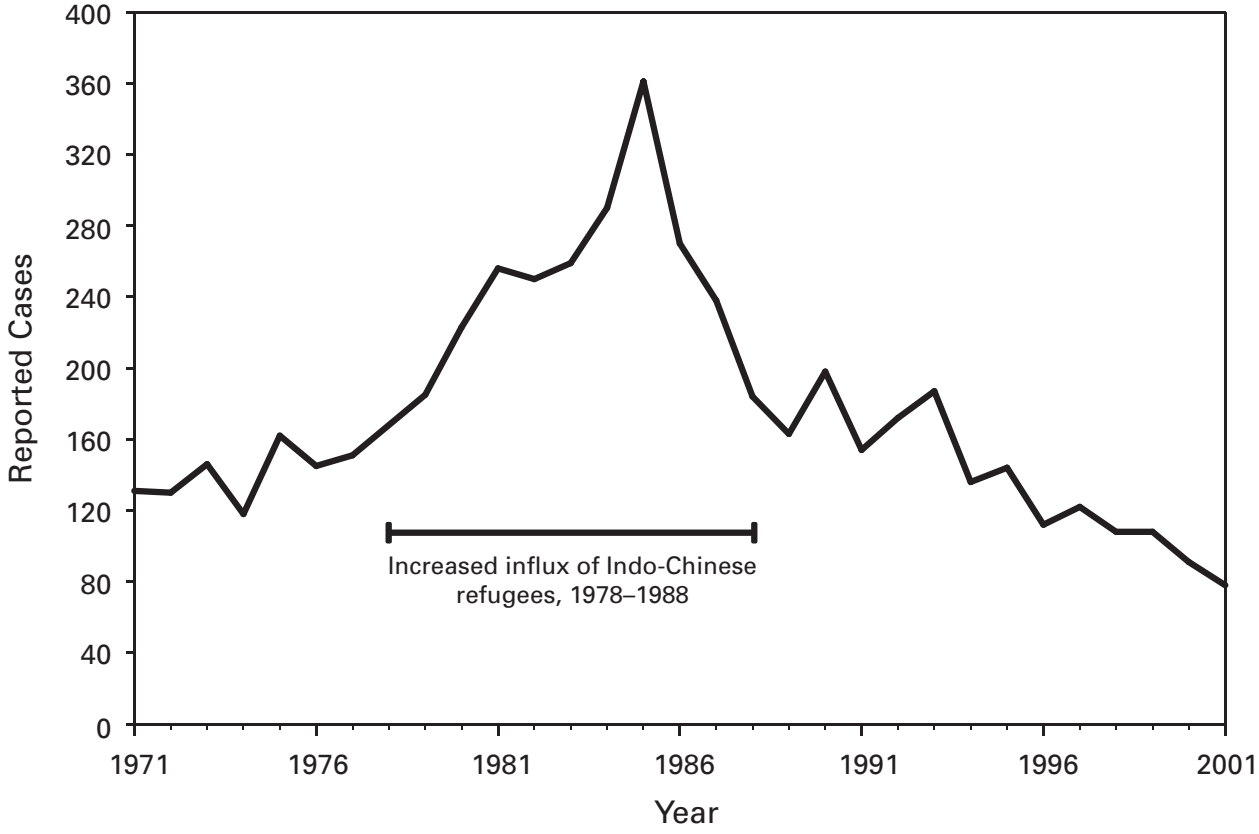
In 2001, the gonorrhea rate among non-Hispanic blacks was approximately 27 times greater than the rate for non-Hispanic whites.

***HAEMOPHILUS INFLUENZAE*, INVASIVE DISEASE. Reported cases per 100,000 population, by age group — United States 1991–2001**

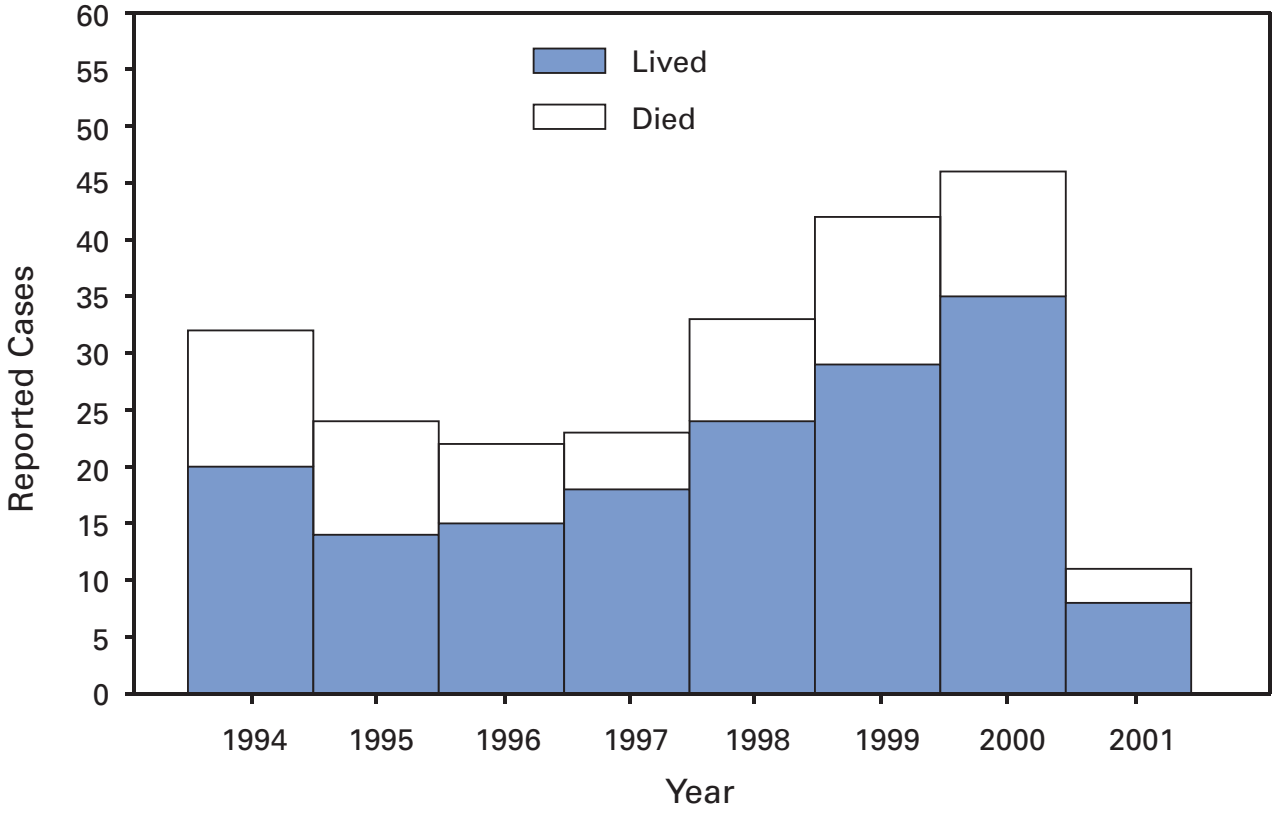


Before the introduction of conjugate *Haemophilus influenzae* type b (Hib) vaccines in December 1987, the incidence of Hib invasive disease among children aged <5 years was estimated to be 100/100,000 population. In 2001, the incidence of *H. influenzae* invasive disease (all types) was 1.7/100,000 in this age group (325 cases: 27 [8%] reported as due to Hib, 144 [44%] due to other serotypes or nontypeable isolates, and 154 [47%] for which serotype information was unknown or missing). Because accurate serotyping of *H. influenzae* isolates from children is essential for surveillance, all *H. influenzae* isolates causing invasive disease in children aged <5 years should be sent to CDC for serotype confirmation.

HANSEN DISEASE (leprosy). Reported cases, by year — United States, 1971–2001



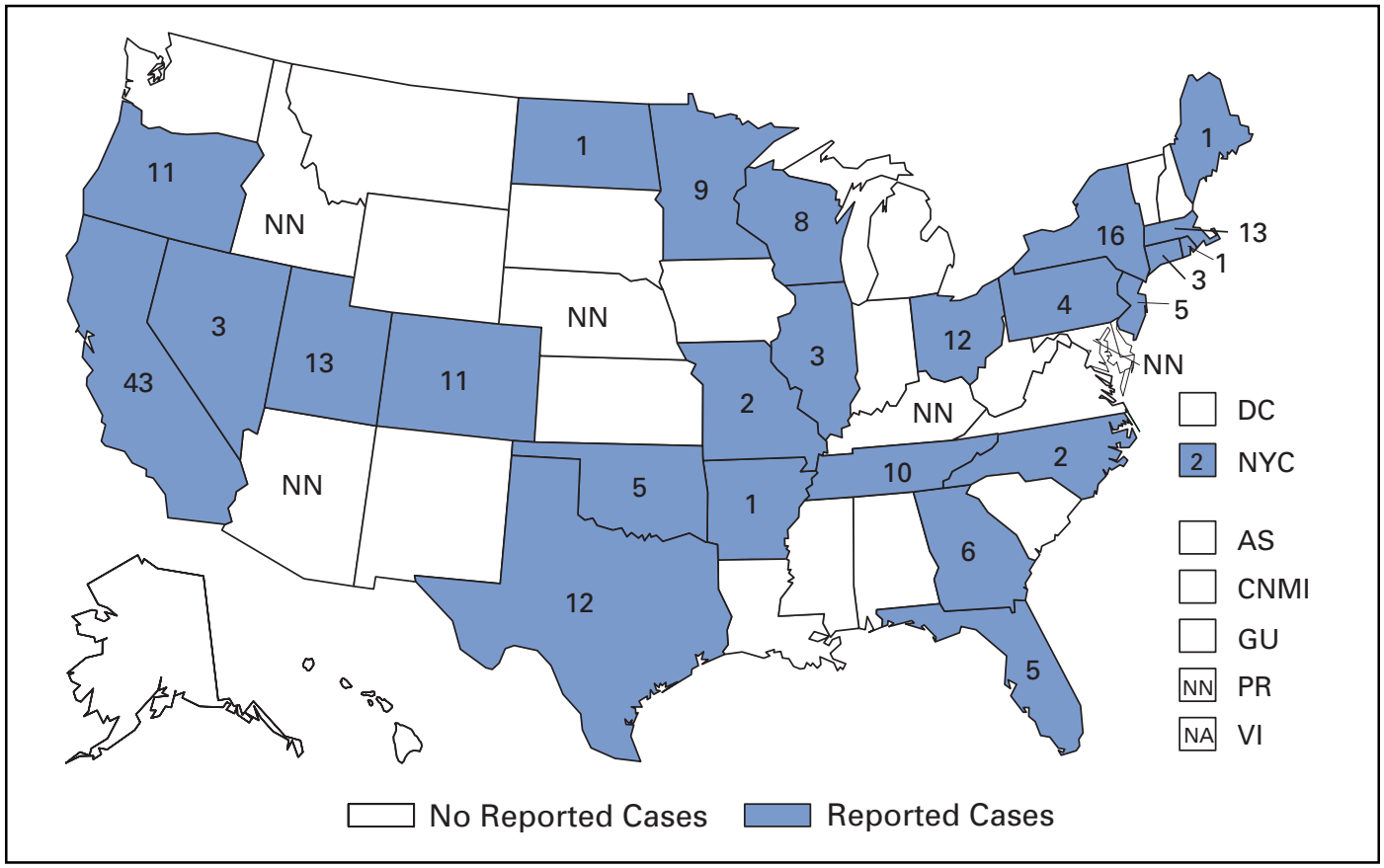
HANTAVIRUS PULMONARY SYNDROME. Reported cases by survival status,* by year — United States, 1994–2001



*Data from the National Center for Infectious Diseases.

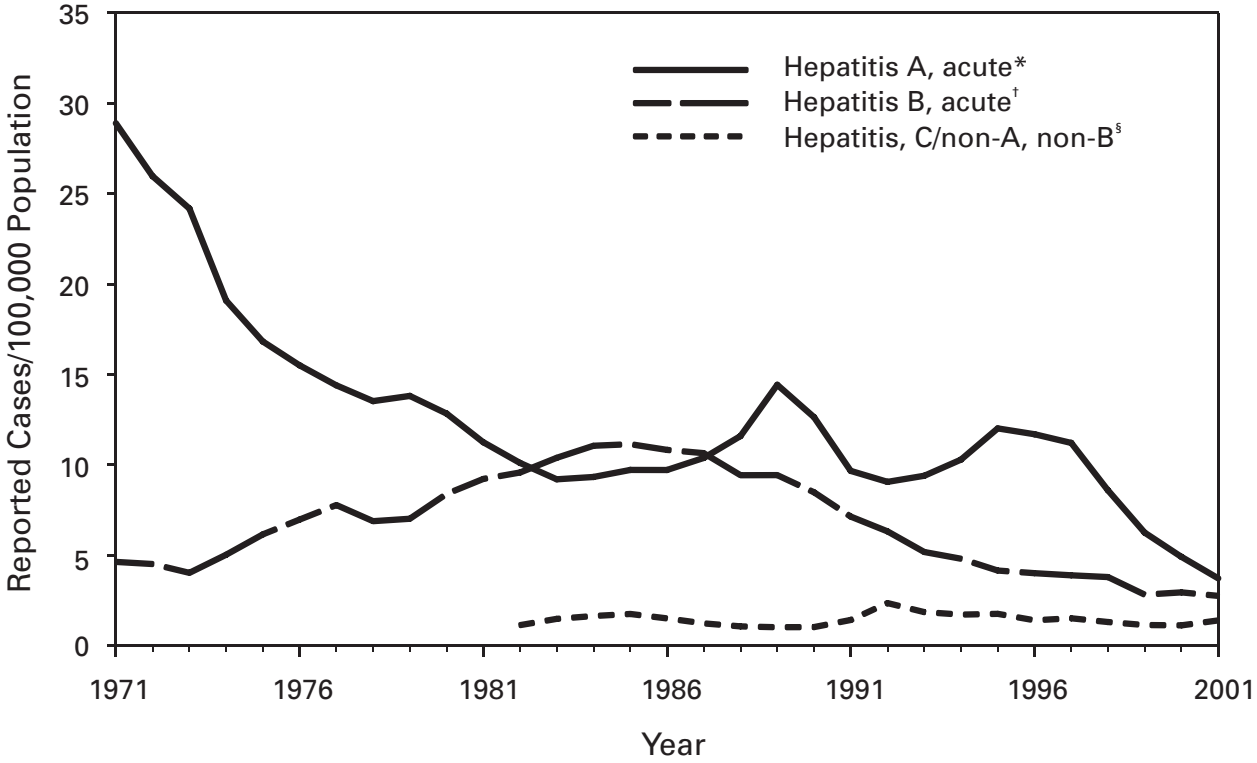
Between 2000 and 2001, the number of annual cases of hantavirus pulmonary syndrome declined from 46 to a record low of 11. The case-fatality ratio for the period 1994–2001 is 30%. The figure includes recently confirmed cases with onset in 1999 and 2000.

HEMOLYTIC UREMIC SYNDROME, POSTDIARRHEAL. Reported cases — United States and U.S. territories, 2001



In the United States, most cases of postdiarrheal hemolytic uremic syndrome are caused by infections with *Escherichia coli* O157:H7 or other *E. coli* bacteria that produce Shiga toxin.

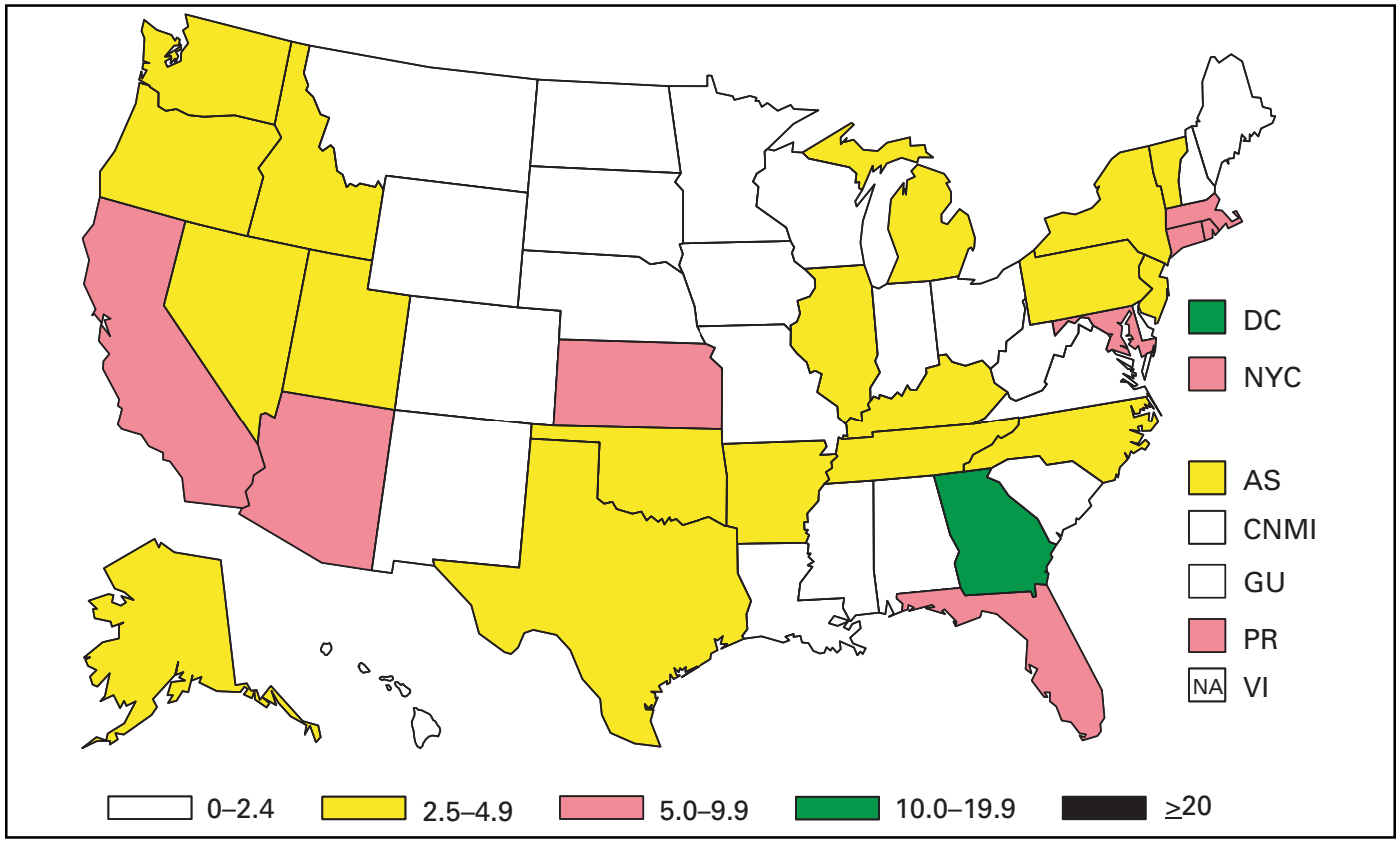
HEPATITIS. Reported cases per 100,000 population, by year — United States, 1971–2001



*Hepatitis A vaccine was first licensed in 1995.
† Hepatitis B vaccine was first licensed in June 1982.
§ An anti-HCV (hepatitis C virus) antibody test first became available in May 1990.

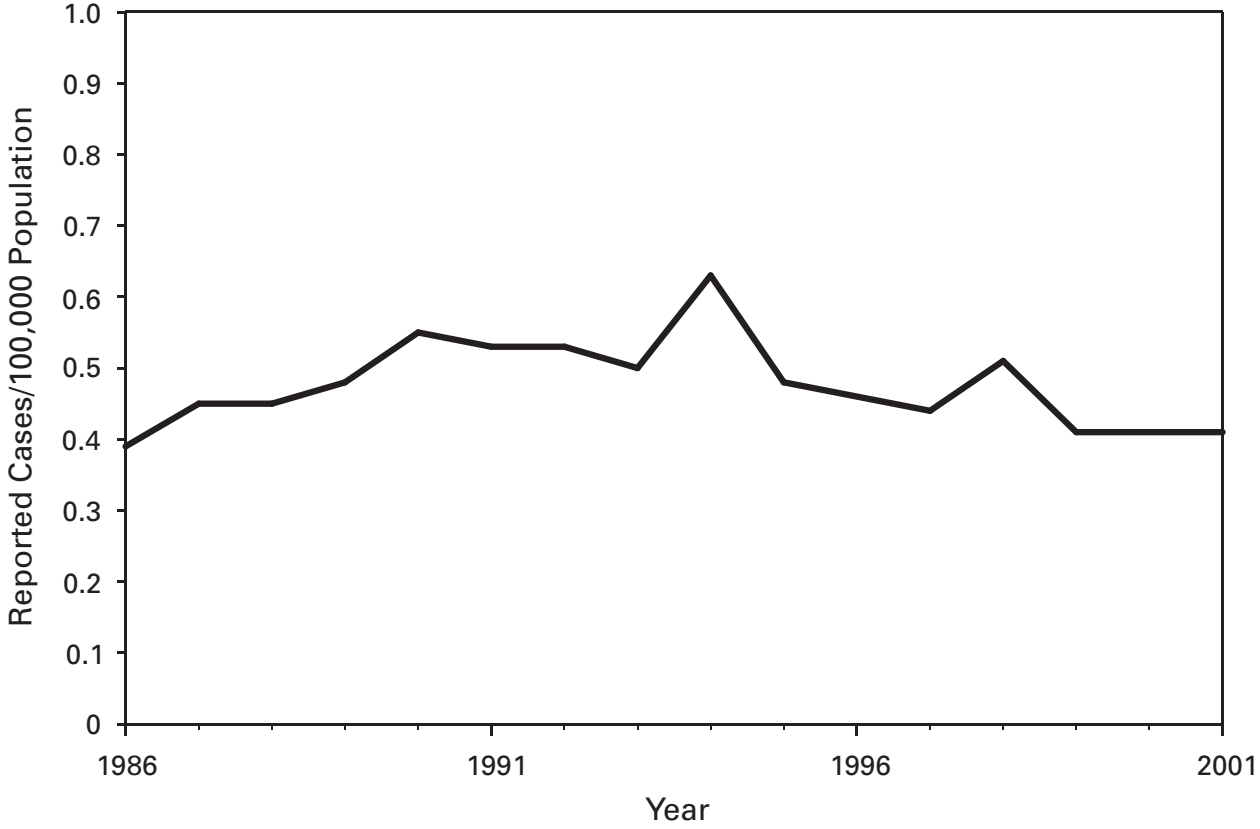
In 2001, the hepatitis A rate was the lowest ever recorded. However, cyclic increases in hepatitis A have been observed approximately every 10 years, and thus rates could increase again. The incidence of hepatitis B continues to decline, but because of asymptomatic infections and underreporting, reported cases represent only a fraction of actual infections occurring (approximately 78,000 new infections in 2001). The trend in reported hepatitis C; non-A, non-B after 1990 is misleading because reported cases have included those based only on a positive laboratory test for anti-HCV, and most of these cases represent chronic HCV infection.

HEPATITIS A. Reported cases per 100,000 population — United States and U.S. territories, 2001



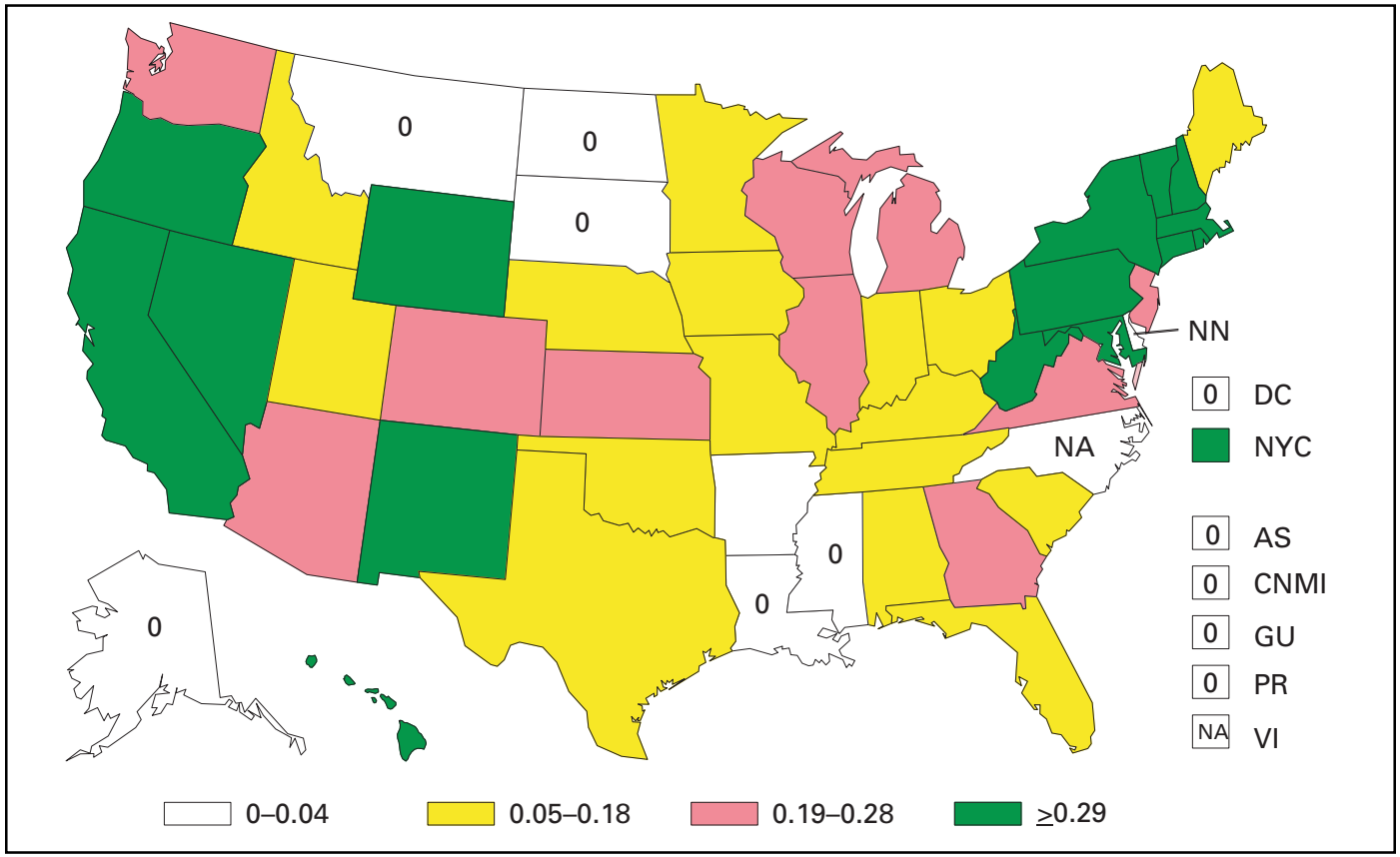
Hepatitis A rates have declined in all regions of the United States, including the western states where rates have historically been higher than elsewhere in the country. Because hepatitis A rates vary from year to year with nationwide increases approximately every 10 years, further monitoring is needed to determine whether these rates will remain low.

LEGIONELLOSIS. Reported cases per 100,000 population, by year — United States, 1986–2001



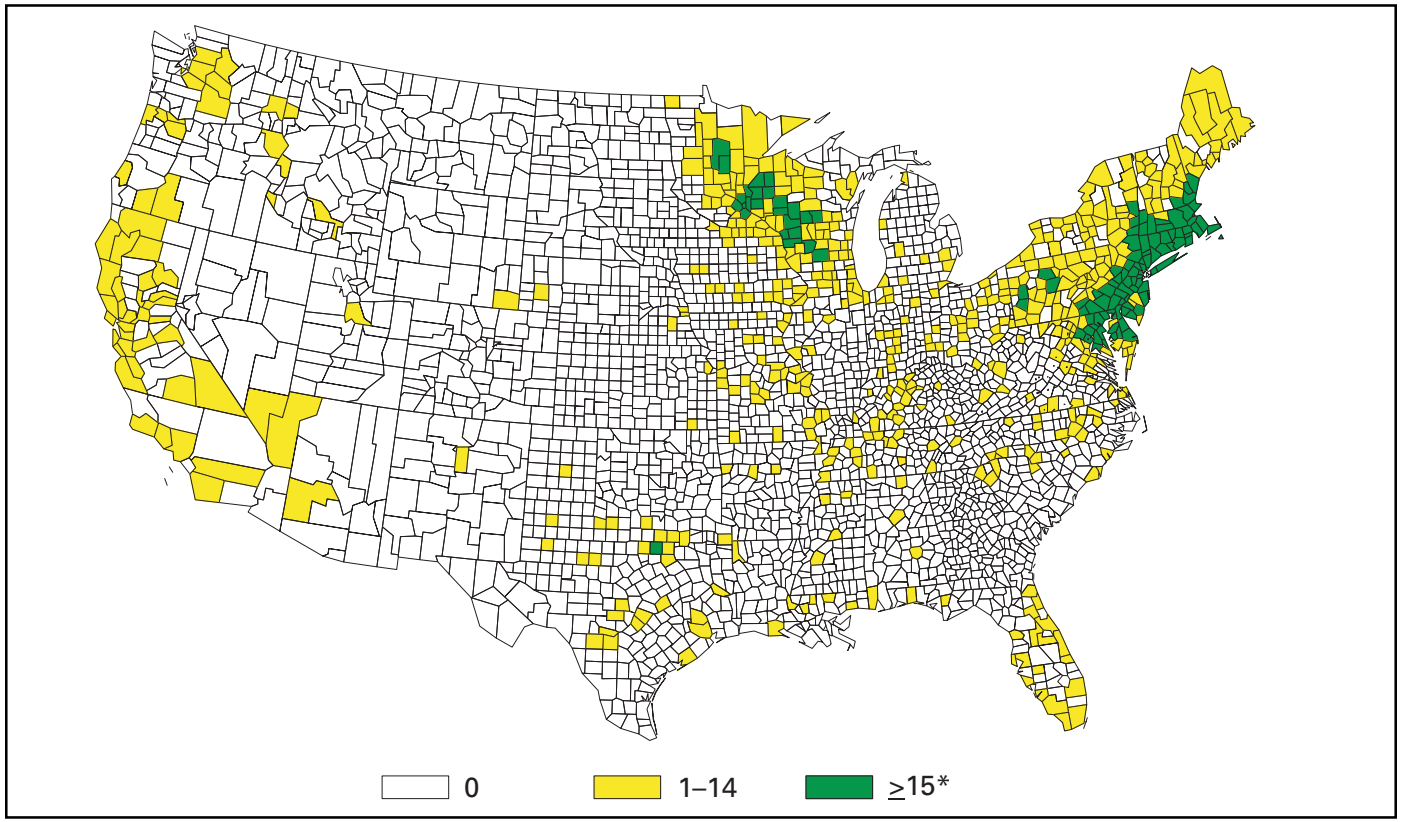
In 2001, the overall reported rate of legionellosis was 0.42 cases/100,000 population. However, data from population-based studies indicate that the actual rate is more than 10 times this number.

LISTERIOSIS. Reported cases per 100,000 population — United States and U.S. territories, 2001



Listeriosis was made a nationally notifiable disease in 2000. Although infection is relatively uncommon, listeriosis is a leading cause of death due to foodborne illness in the United States. Recent outbreaks have been linked to frankfurters, deli meats, and Mexican-style cheeses. Routine subtyping of isolates through PulseNet helps identify multistate outbreaks.

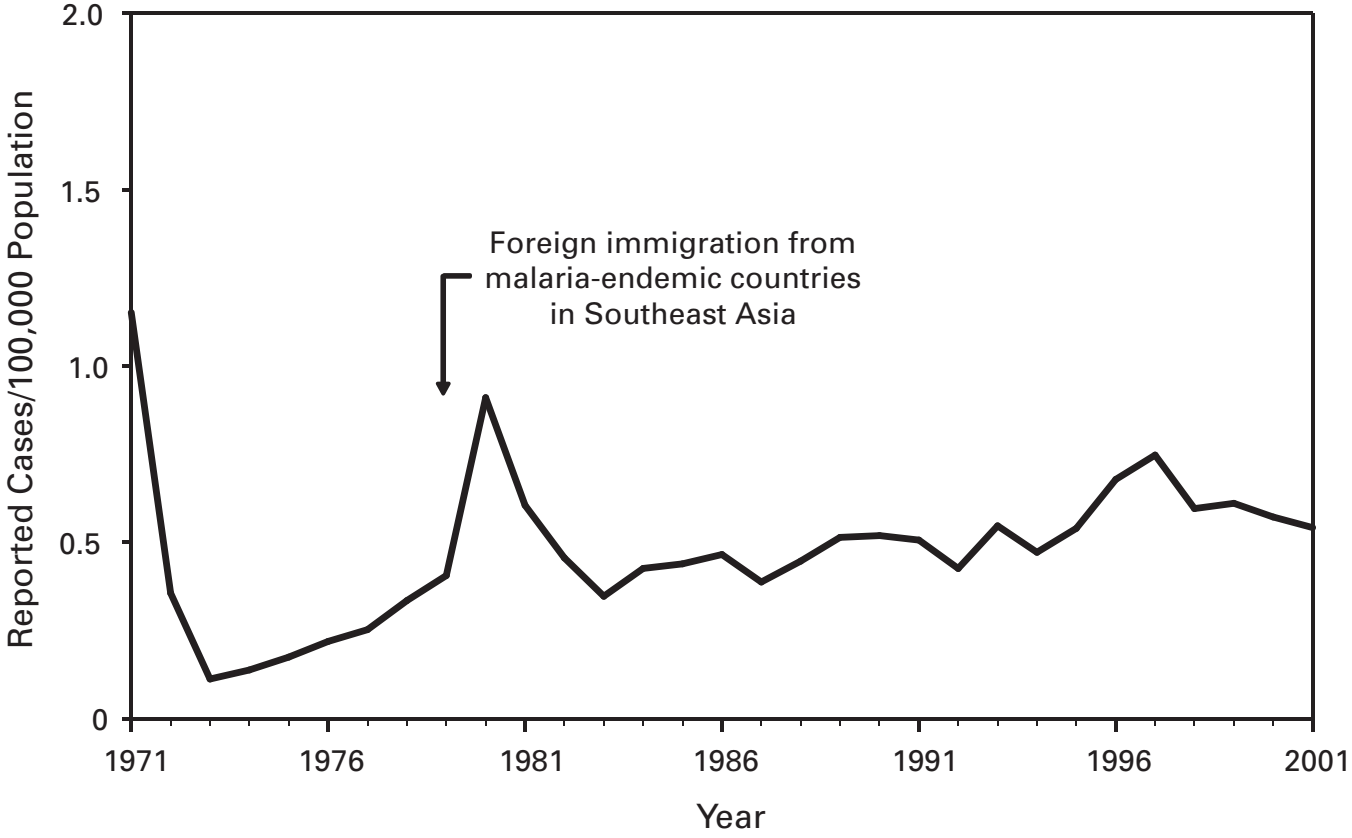
LYME DISEASE. Reported cases by county — United States, 2001



*The total number of cases from these counties represented 90% of all cases reported in 2001.

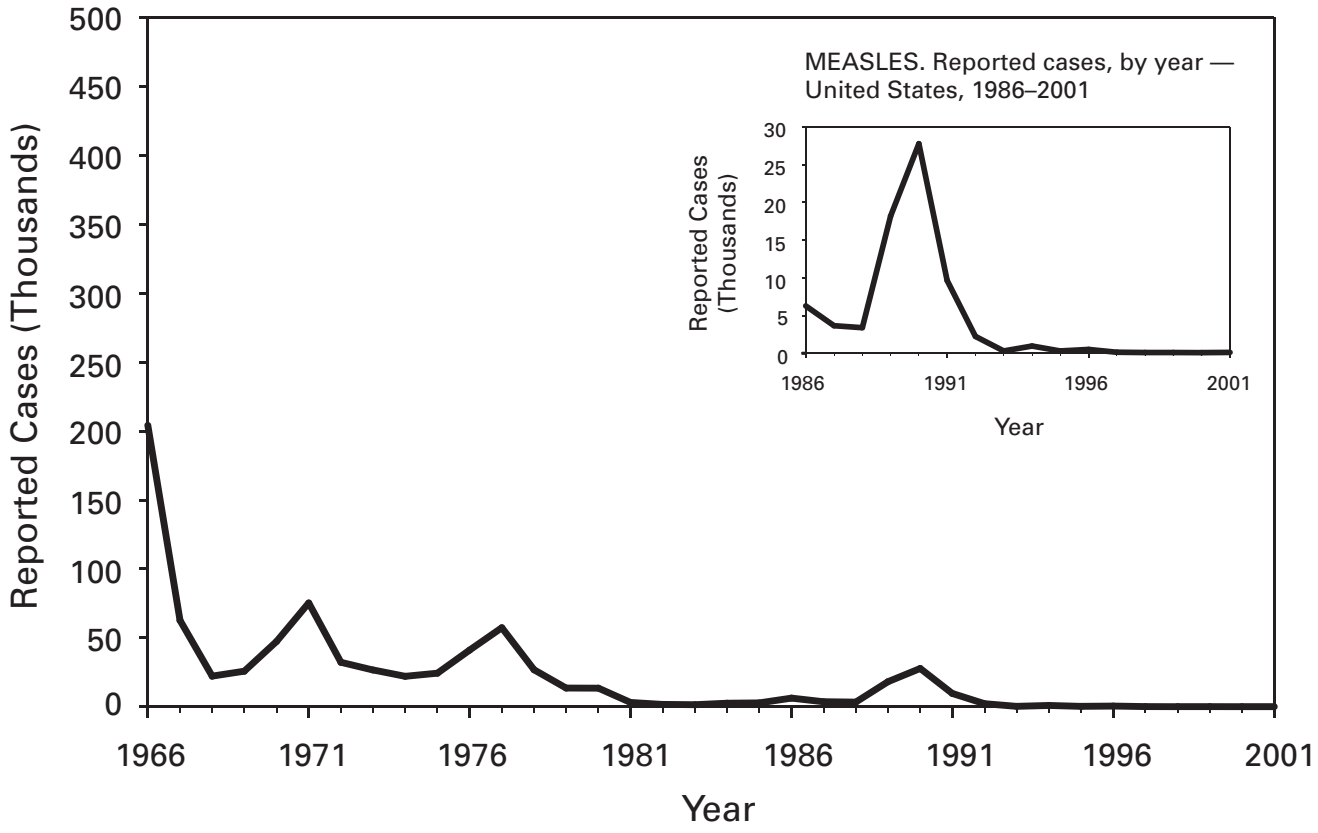
A total of 17,029 cases of Lyme disease were reported in 2001, 15,998 of these from 10 states with endemic disease (Connecticut, Delaware, Massachusetts, Maryland, Minnesota, New Jersey, New York, Pennsylvania, Rhode Island, Wisconsin). The incidence rate in these states was 23.9/100,000 population. By integrating prevention strategies into community-based programs, CDC and state health departments hope to achieve the *Healthy People 2010* goal of reducing the incidence of Lyme disease to 9.7 cases/100,000 population in states with endemic disease.

MALARIA. Reported cases per 100,000 population, by year — United States, 1971–2001



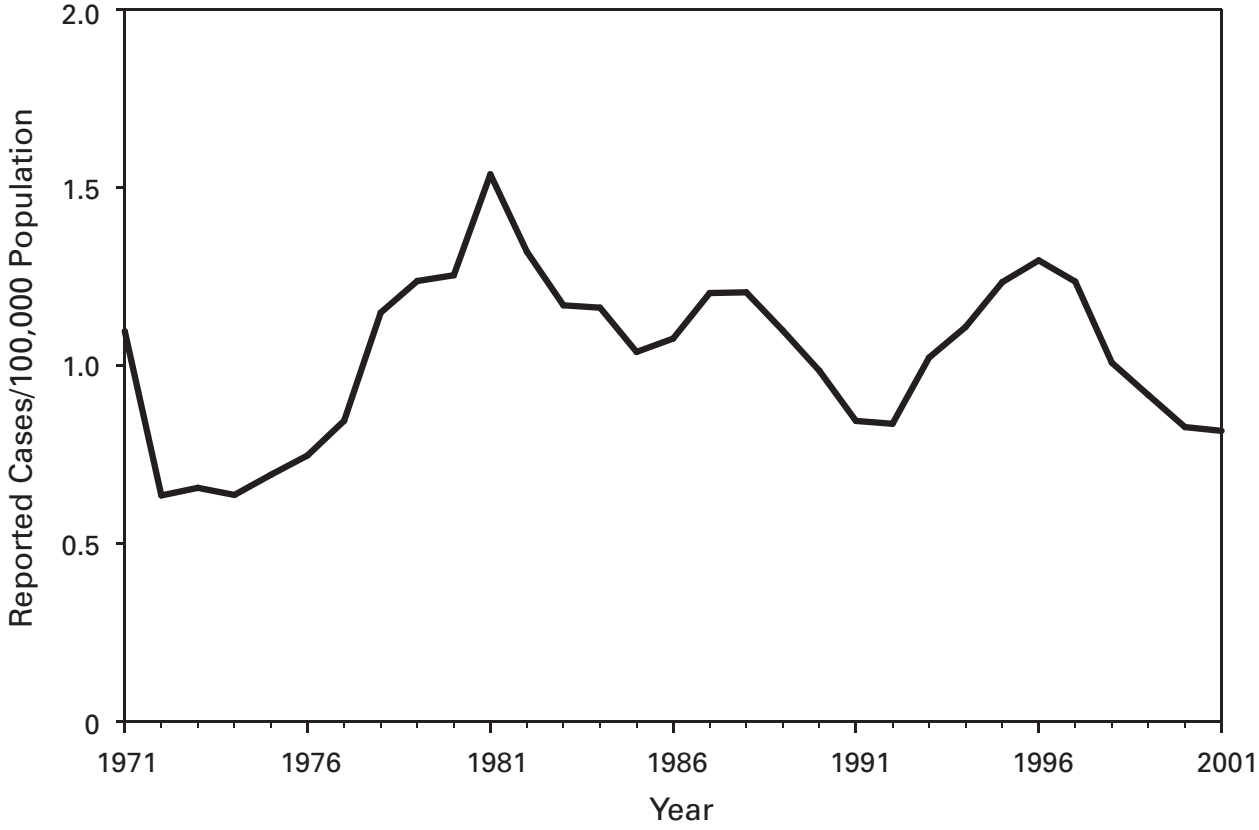
In the last 15 years, imported malaria cases have increased, most likely because of increasing international travel and immigration as well as increased antimalarial drug resistance.

MEASLES. Reported cases, by year — United States, 1966–2001



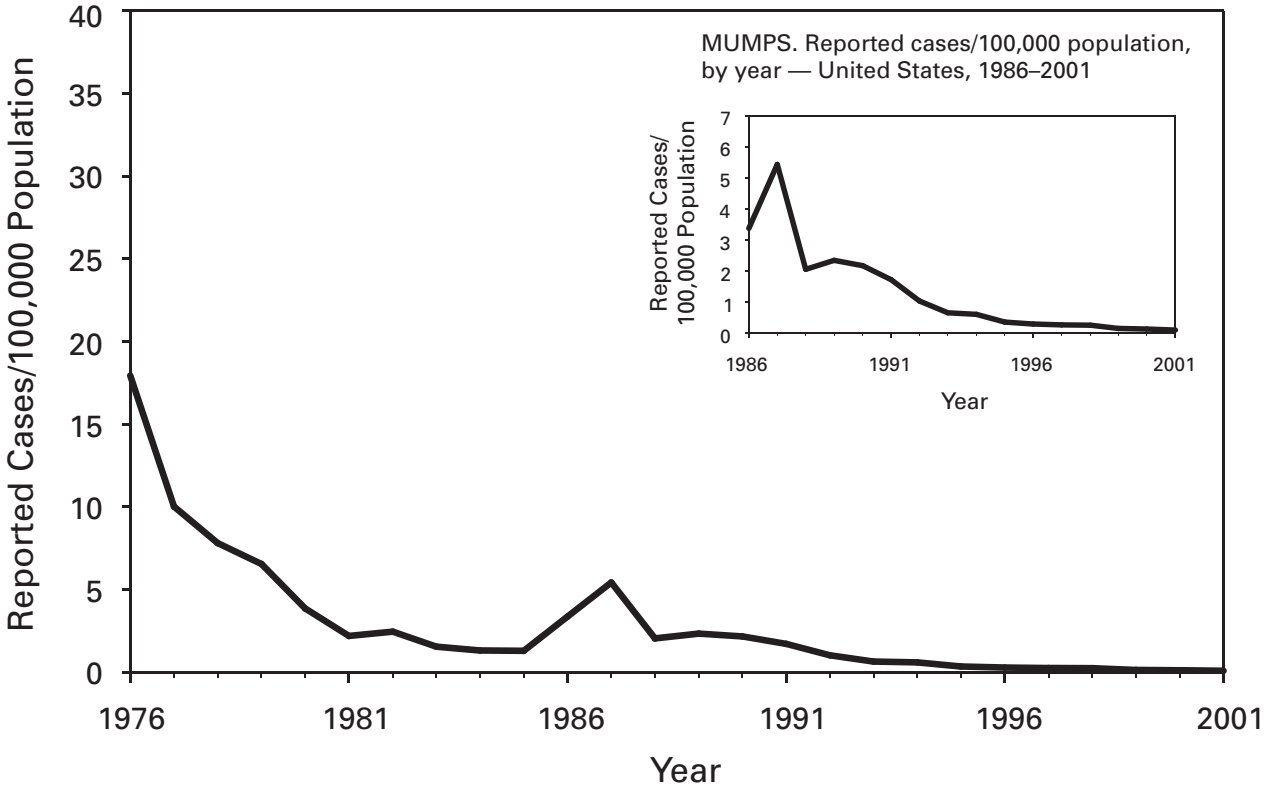
With a total of 116 measles cases reported in 2001, measles incidence remained at <1 case/1,000,000 population for the fifth consecutive year, and 78% of cases were associated with international importation.

MENINGOCOCCAL DISEASE. Reported cases per 100,000 population, by year — United States, 1971–2001



Rates of meningococcal disease have been relatively stable in the United States. A total of 2,333 cases were reported in 2001, of which 1,931 were confirmed, 77 probable, seven suspected, and 318 of unknown case status. Serogroup information was reported for 33% of cases; serogroup Y accounted for 33% of those reported. Most other cases were caused by serogroup B (32%) or serogroup C (27%). Although rates of meningococcal disease are usually highest among children aged <1 year, 55% of cases in 2001 occurred among persons aged ≥18 years.

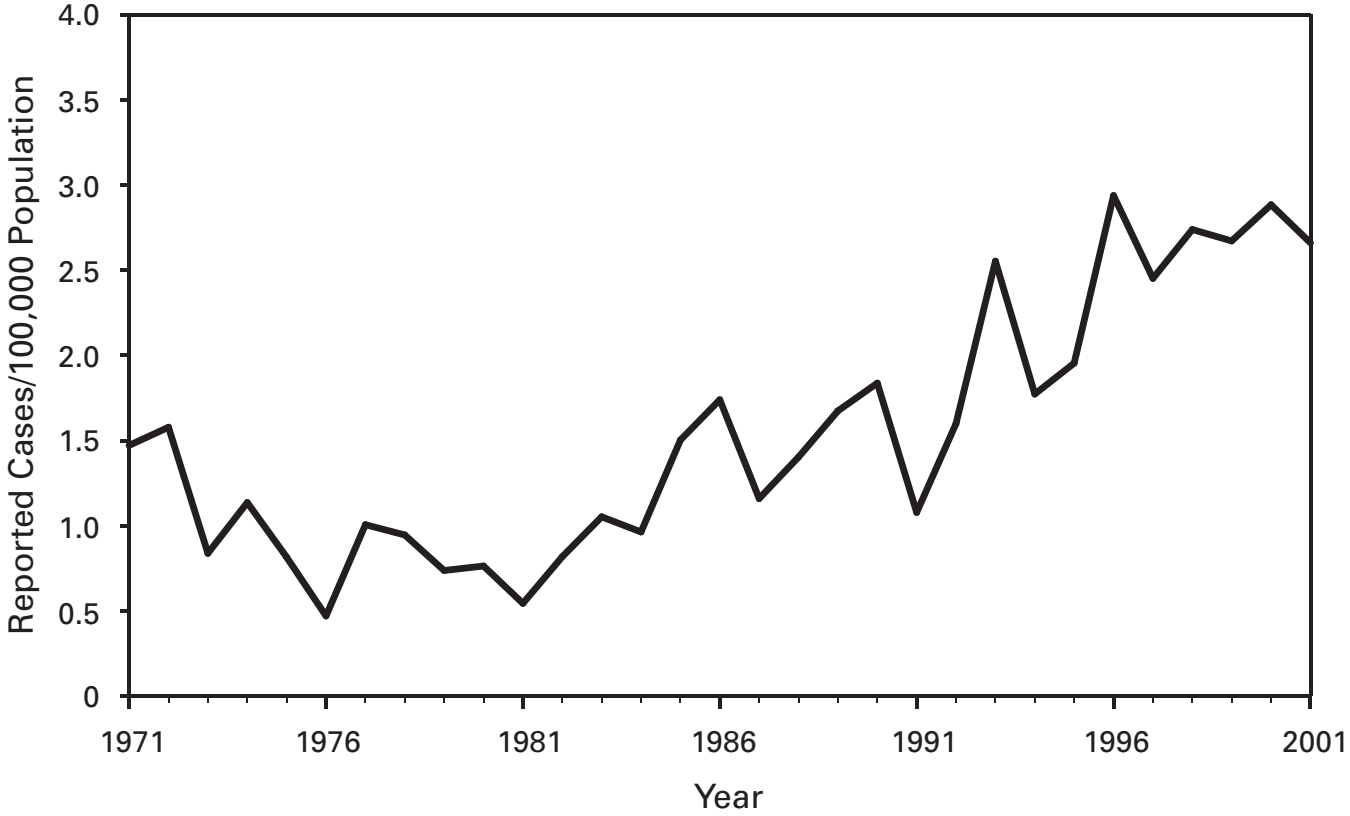
MUMPS. Reported cases per 100,000 population, by year — United States, 1976–2001



Because of the recommendation of two doses of measles-mumps-rubella (MMR) vaccine and the continued high coverage rate in the United States, mumps has reached an all-time record low of 266 reported cases for 2001, thus meeting the *Healthy People 2001* objective of <500 cases per year.

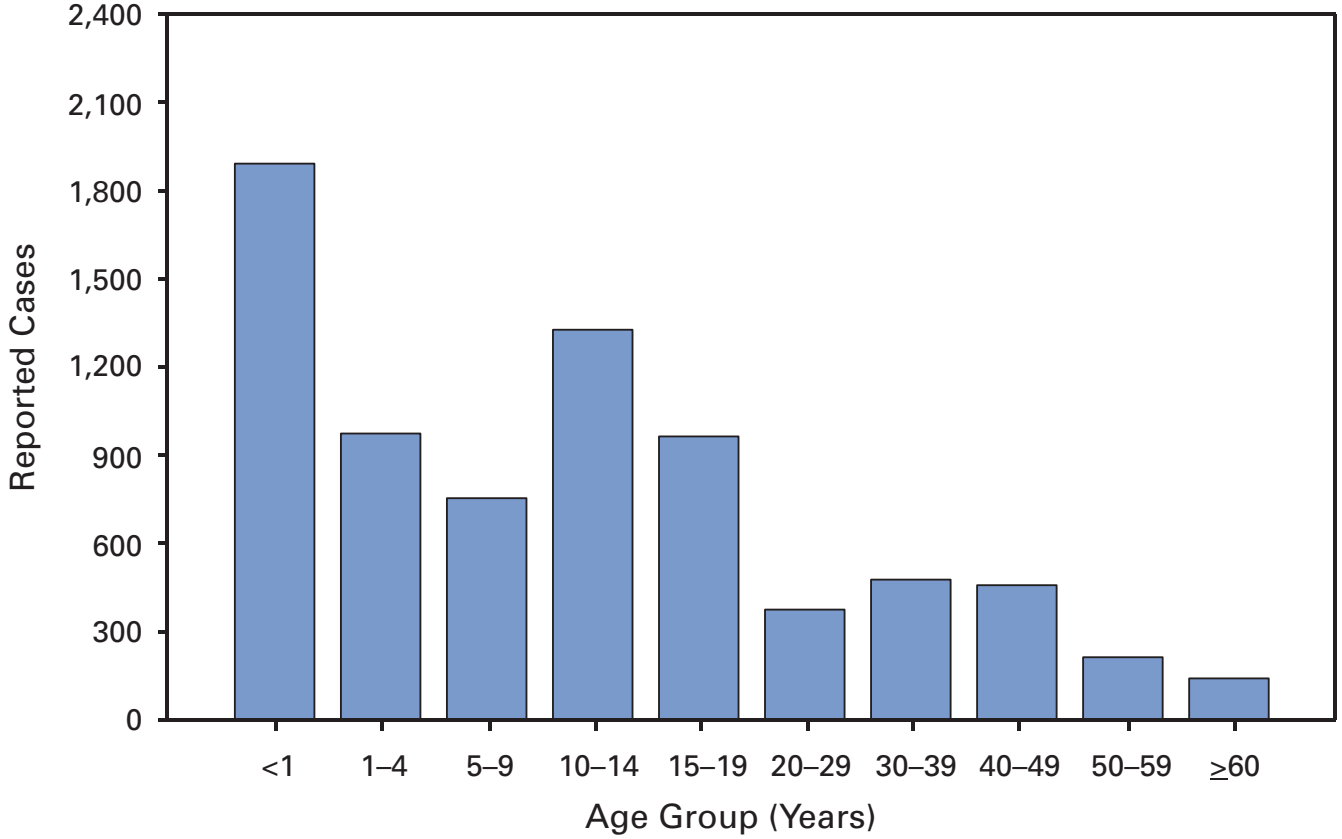
Note: A mumps vaccine was first licensed in December 1967.

PERTUSSIS. Reported cases per 100,000 population, by year — United States, 1971–2001



Pertussis epidemics occur every 3–4 years. During 2000, the highest number of pertussis cases (7,867) since 1967 was reported (incidence: 2.9 cases per 100,000 population).

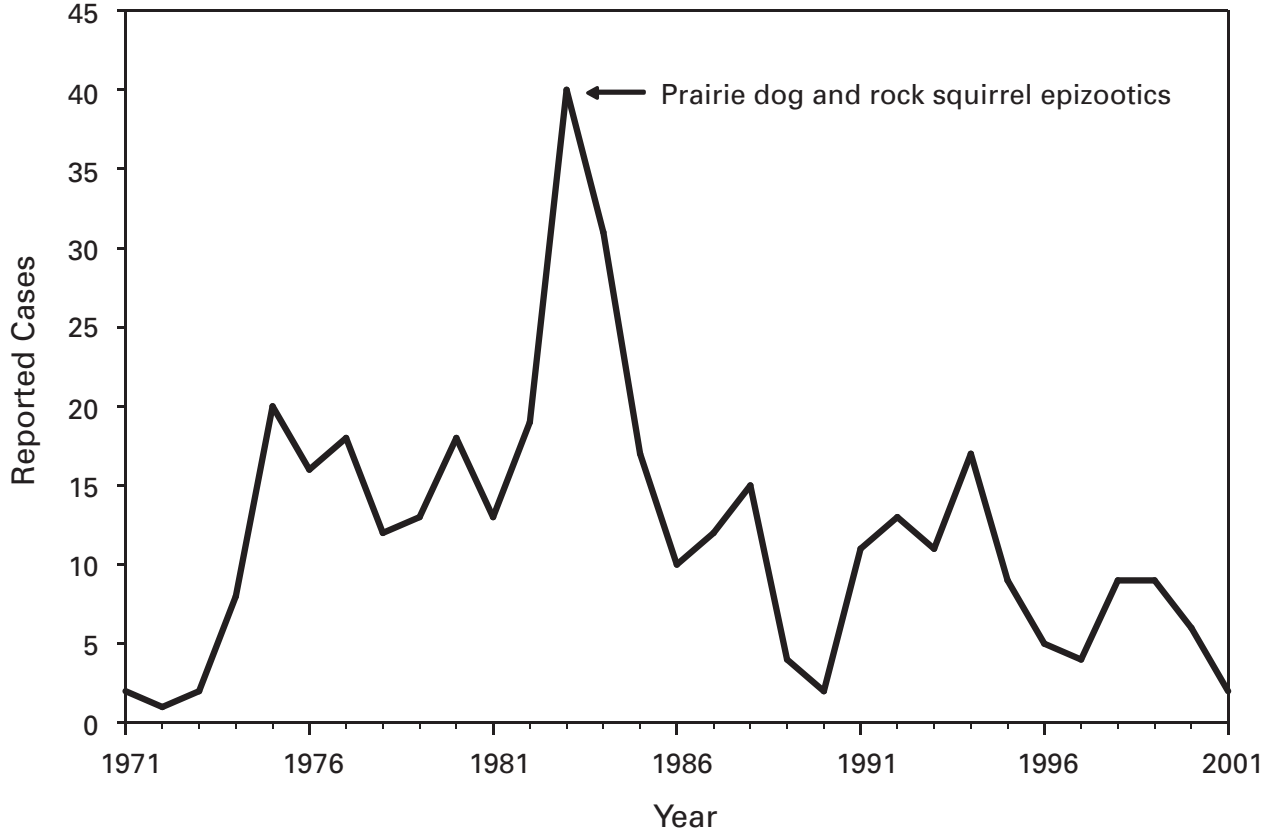
PERTUSSIS. Reported cases,* by age group — United States, 2001



*Of 7,580 cases, 25 were reported with unknown age.

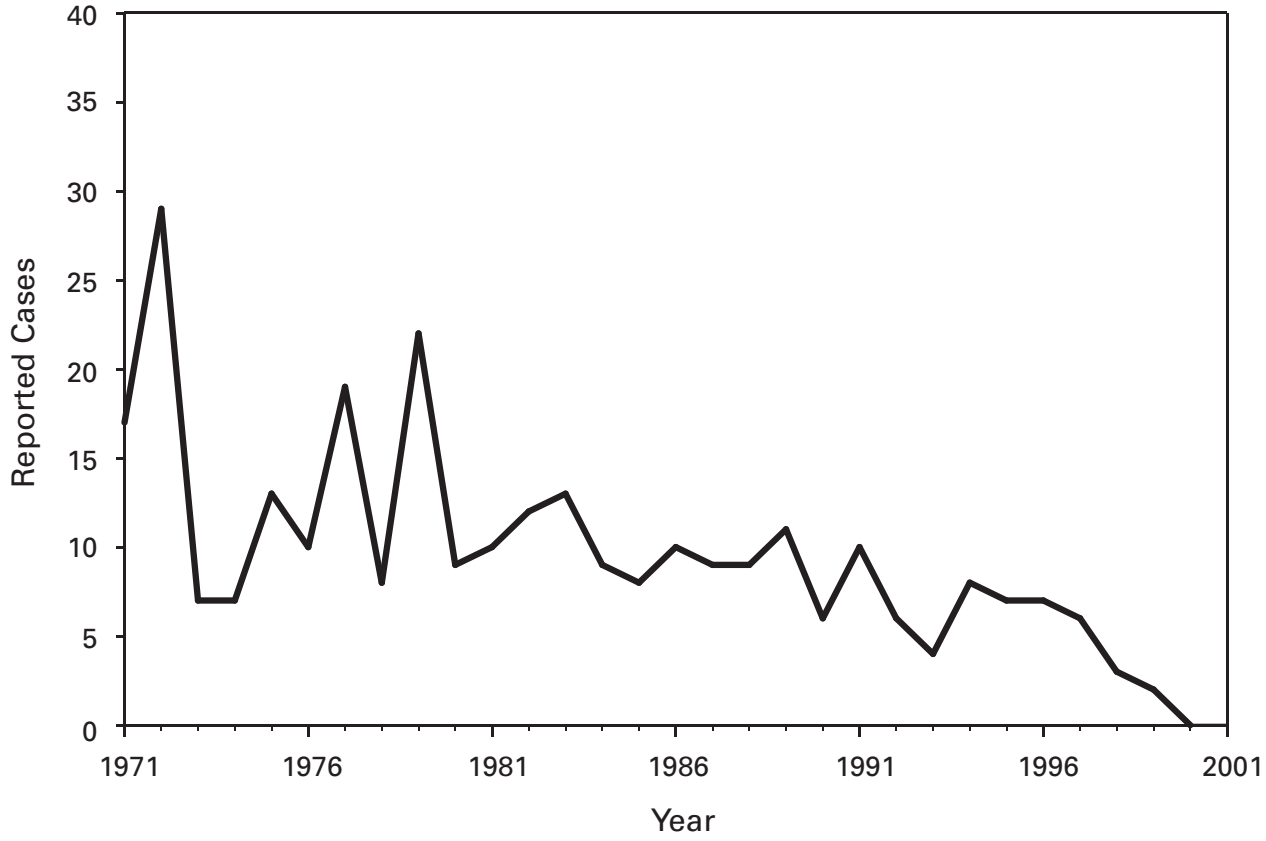
In 2001, 22% of reported cases were among infants aged <6 months (who were too young to receive 3 doses of DTaP vaccine), and 52% of cases were among persons aged ≥10 years (no pertussis vaccine was licensed for use in persons aged ≥7 years).

PLAGUE. Reported cases among humans, by year — United States, 1971–2001



Only two laboratory-confirmed cases of human plague were identified from the United States in 2001. Utah and New Mexico each reported a single case, both of which were of the primary bubonic form of the disease. Both cases were acquired from natural sources within known enzootic regions, and both patients recovered.

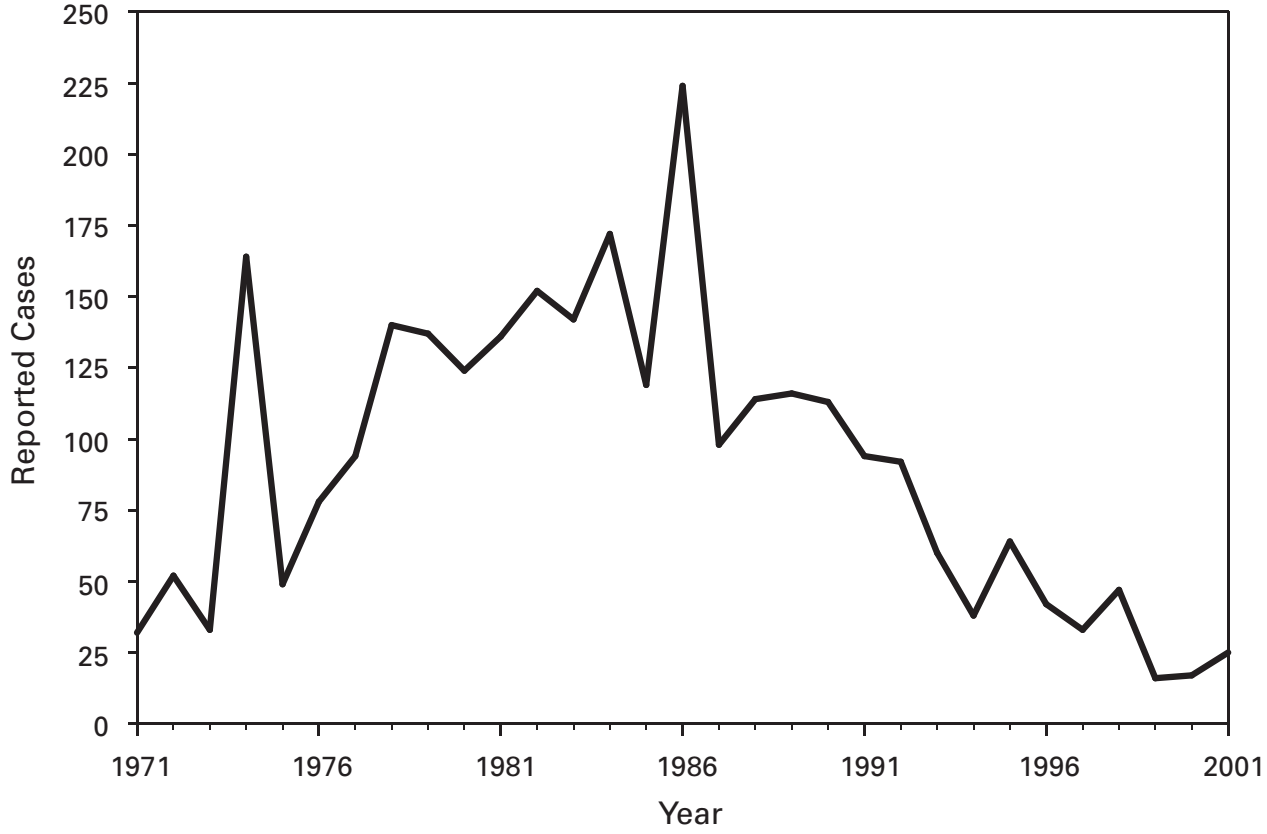
POLIOMYELITIS, PARALYTIC. Reported cases, by year — United States, 1971–2001



As of January 1, 2000, the Advisory Committee on Immunization Practices recommended the exclusive use of inactivated poliovirus vaccine for routine childhood polio vaccination in the United States.

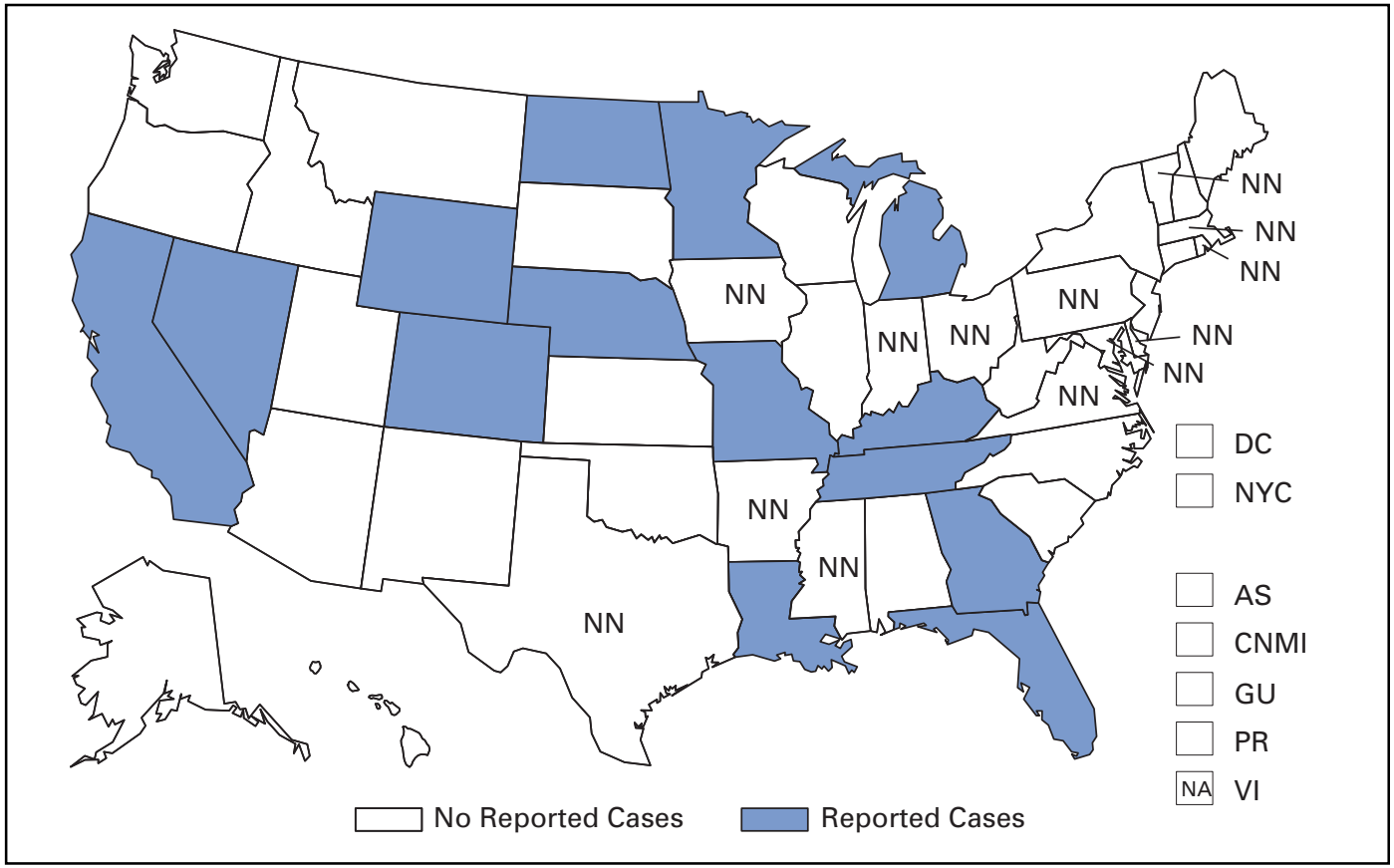
Note: An inactivated poliomyelitis vaccine was first licensed in 1955. An oral vaccine was licensed in 1961.

PSITTACOSIS. Reported cases, by year — United States, 1971–2001



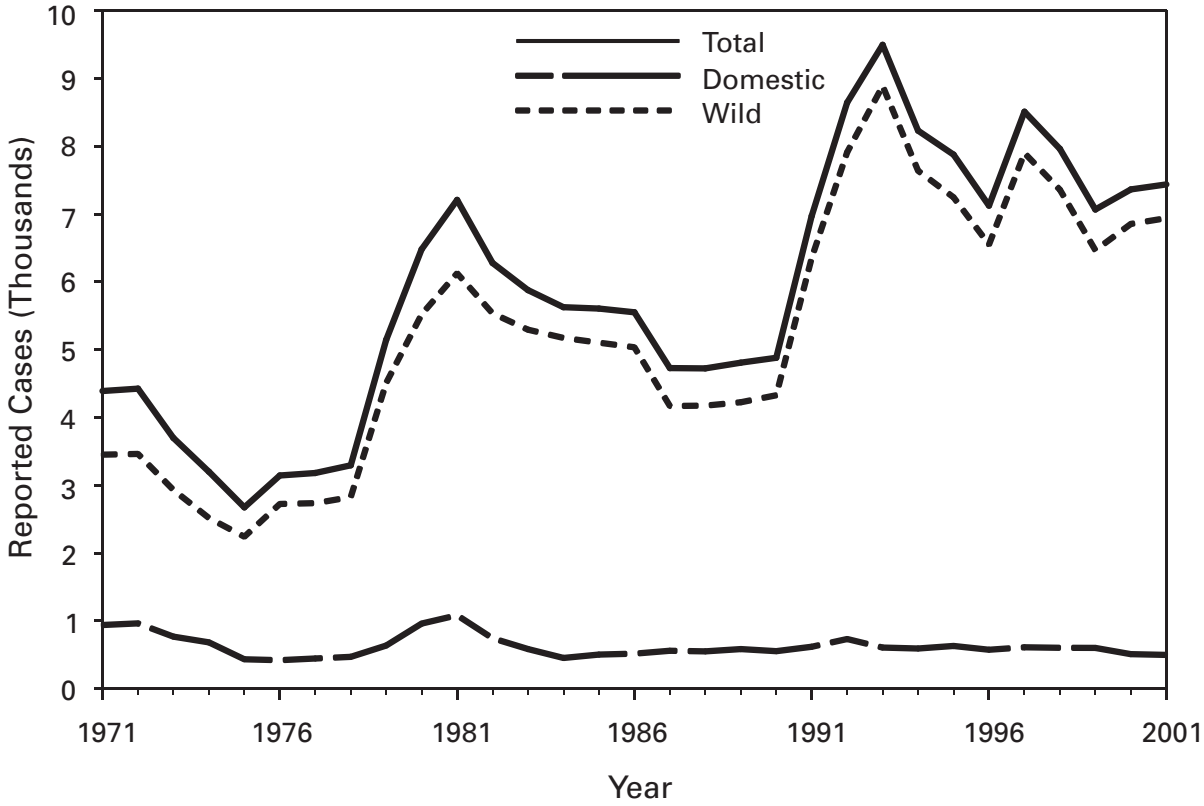
Throughout the 1990s, the number of reported cases of psittacosis steadily declined. This might reflect both improved diagnostic testing to distinguish *Chlamydophila psittaci* from *C. pneumoniae* infections and improved control measures for psittacosis among birds.

Q FEVER. Reported cases — United States and U.S. territories, 2001



Q fever became nationally notifiable in 1999. Identification and reporting of Q fever is incomplete, and the number of cases reported do not represent the overall distribution or regional prevalence of disease.

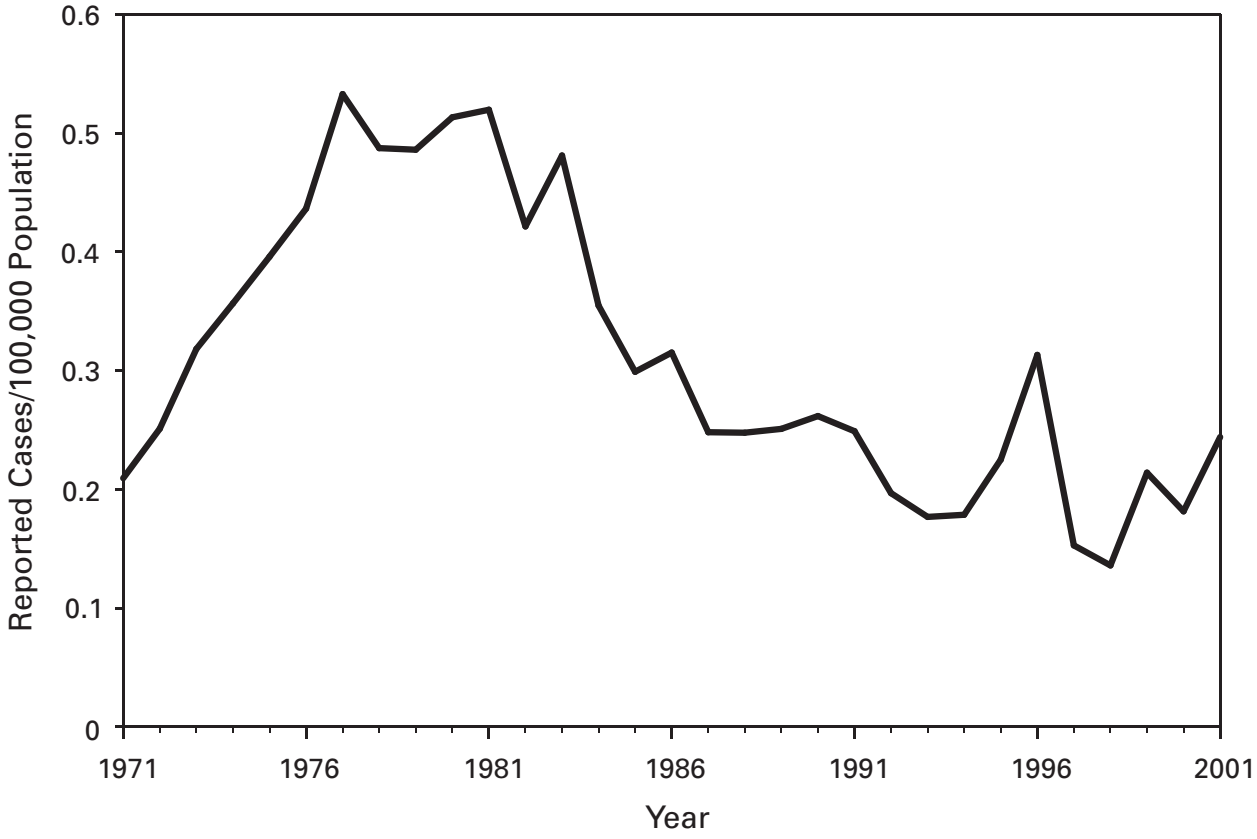
RABIES. Reported cases among wild and domestic animals, by year* — United States and Puerto Rico, 1971–2001



*Data from the National Center for Infectious Diseases.

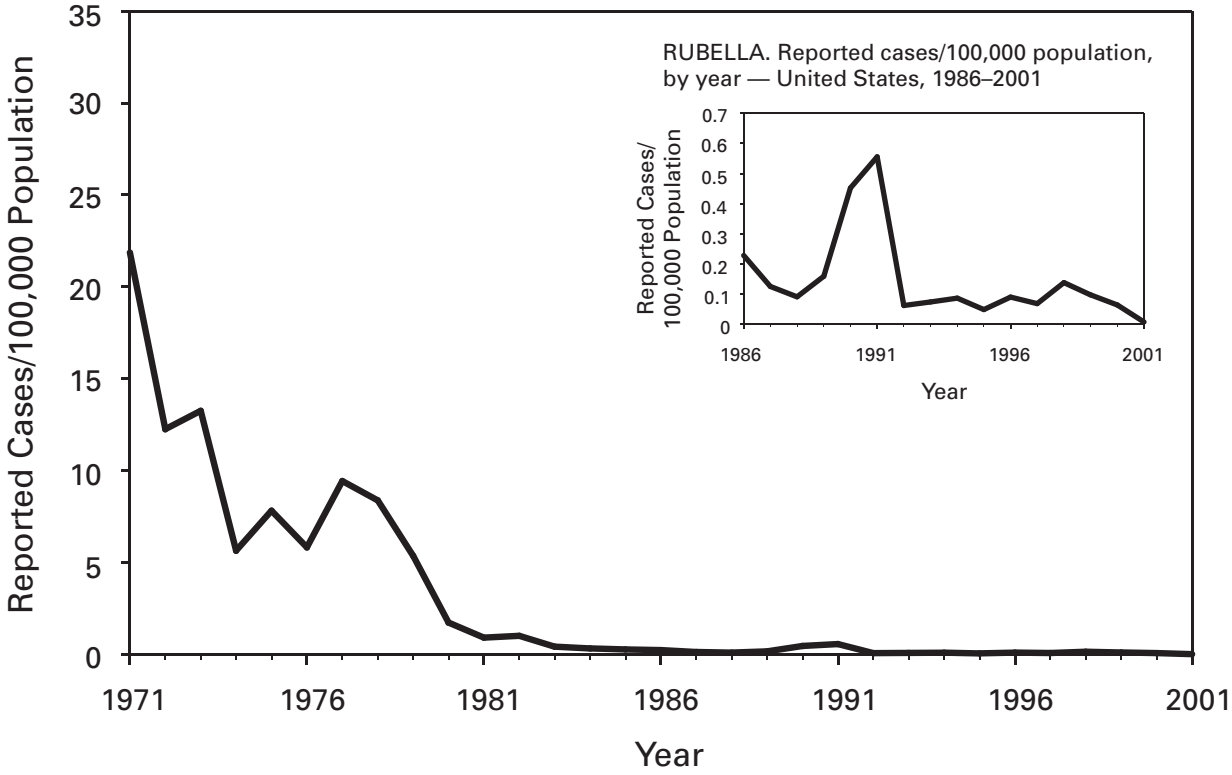
Periods of resurgence and decline of rabies incidence are primarily the result of cyclic reemergence, mainly among raccoons in the eastern United States. Wildlife populations increase and reach densities sufficient to support epizootic transmission of the disease, resulting in substantial increases in reported cases. As populations are decimated by these epizootics, numbers of reported cases decline until populations again reach levels to support epizootic transmission of the disease.

ROCKY MOUNTAIN SPOTTED FEVER. Reported cases per 100,000 population, by year — United States, 1971–2001



Changes in the number of reported cases of Rocky Mountain spotted fever might reflect changes in surveillance algorithms for this and other tickborne diseases. Biological factors (e.g., changes in tick populations resulting from fluctuating environmental conditions) also could be involved.

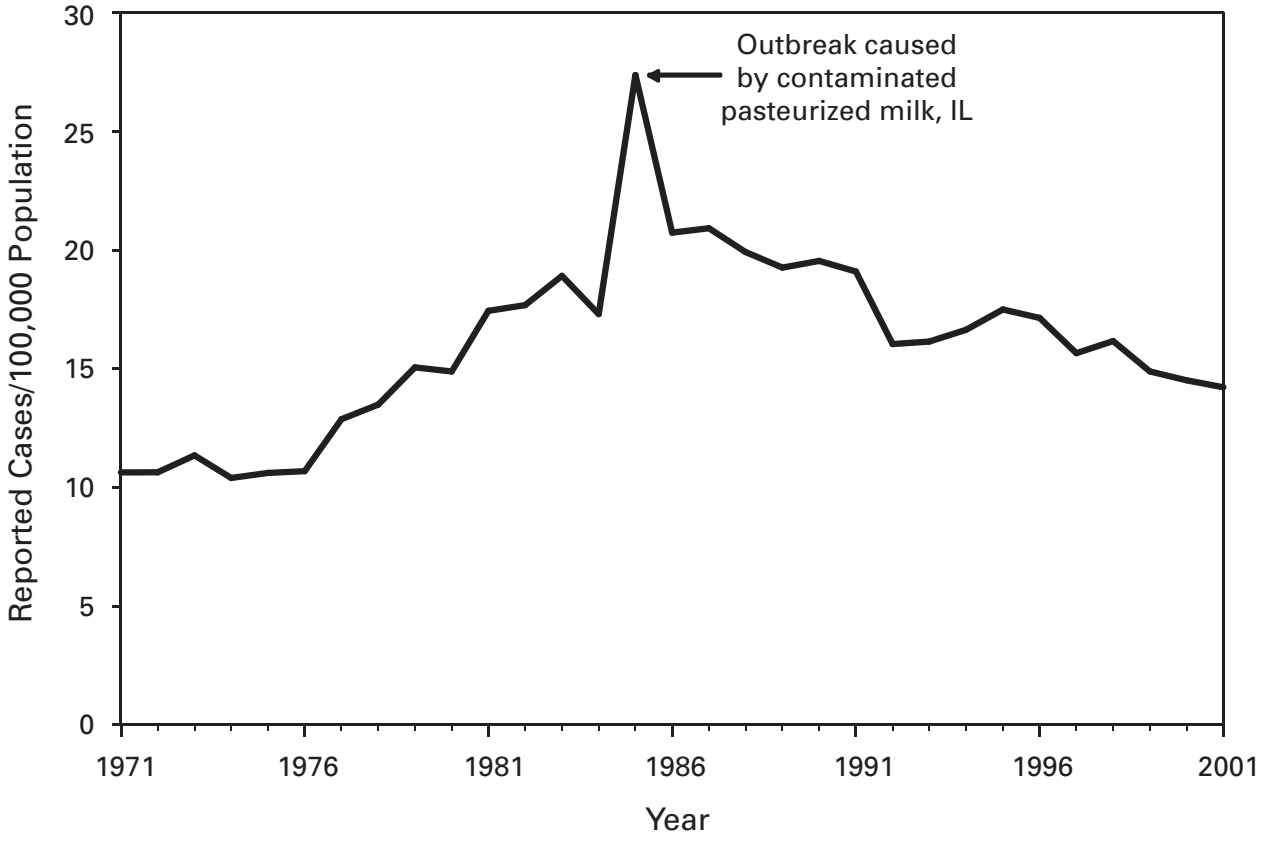
RUBELLA. Reported cases per 100,000 population, by year — United States, 1971–2001



In 2001, only 23 cases of rubella were reported, which is the lowest number ever reported and an 87% decrease from the previous year. The majority of reported cases continue to be among persons aged >20 years; however, in contrast to year 2000, most of the cases in 2001 were among non-Hispanics.

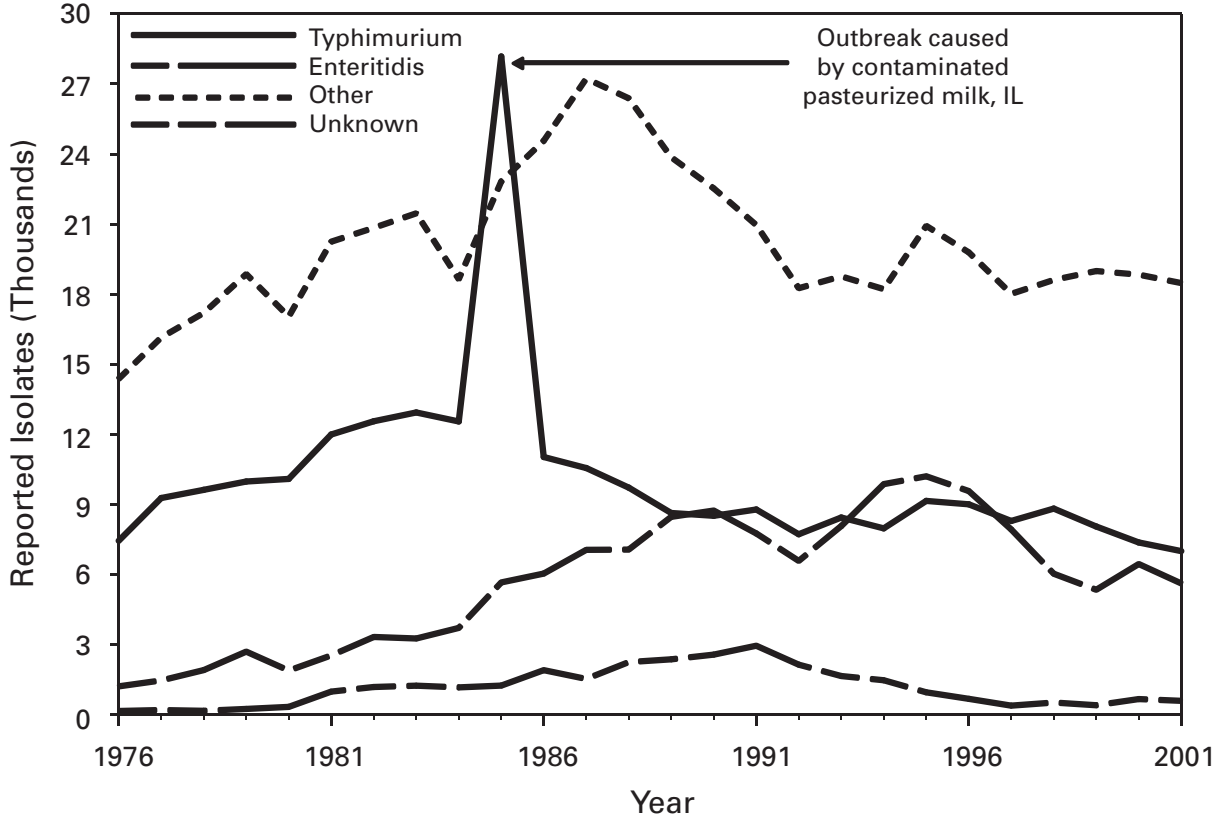
Note: A rubella vaccine was first licensed in 1969.

SALMONELLOSIS. Reported cases per 100,000 population, by year — United States, 1971–2001



Foodborne transmission accounts for approximately 95% of salmonellosis in the United States. In a population-based analysis, the estimated incidence of culture-confirmed salmonellosis declined 15% during 1996–2001.

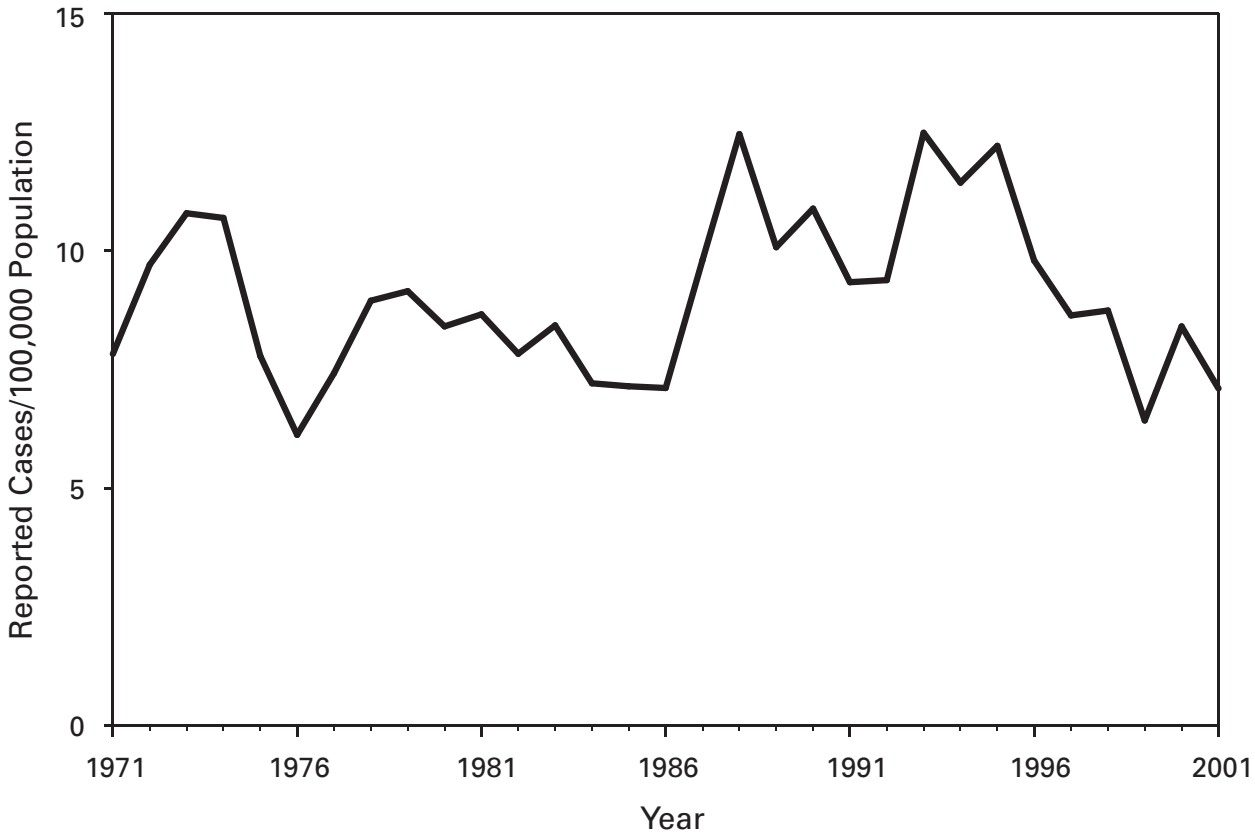
***SALMONELLA*. Reported isolates,* by serotype and year — United States, 1976–2001**



*Data from Public Health Laboratory Information System (PHLIS).

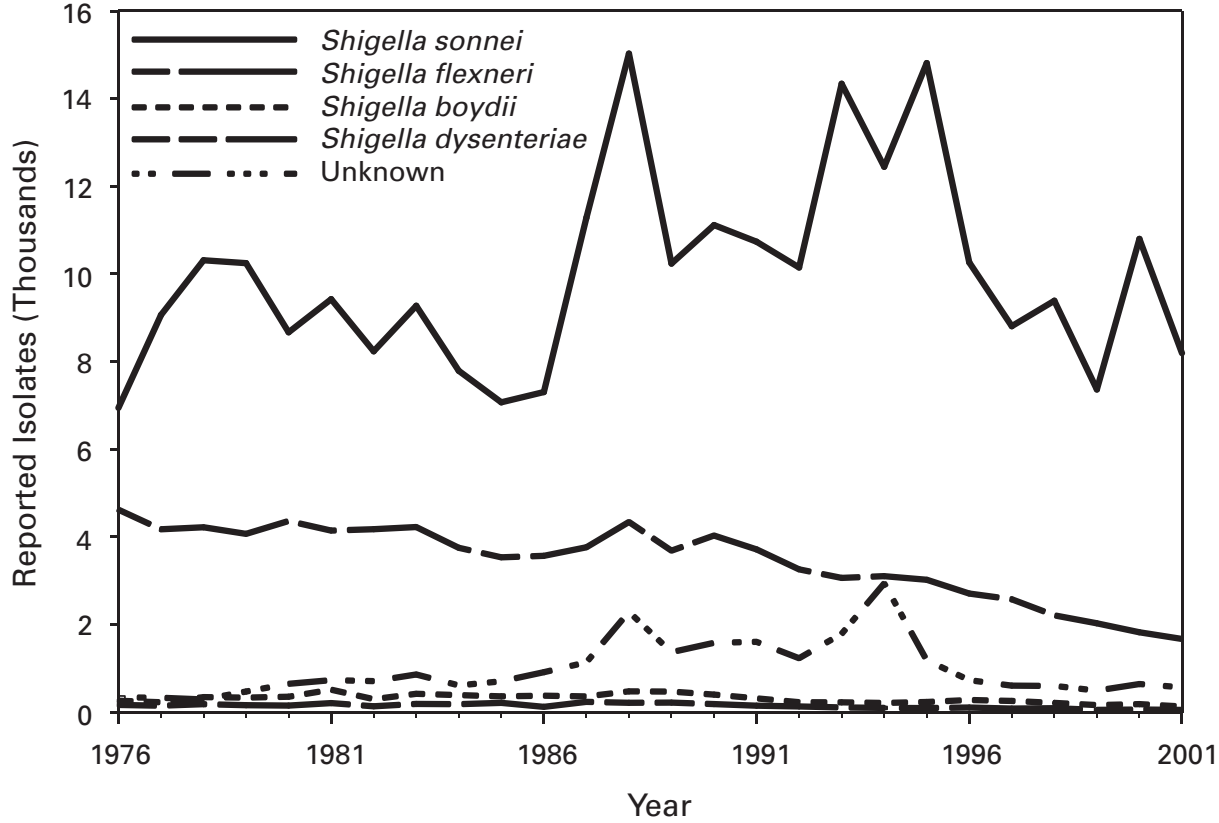
In 2001, *Salmonella* serotypes Typhimurium and Enteritidis accounted for 40% of all reported *Salmonella* isolates from humans. A multidrug-resistant strain of *S.* Typhimurium now accounts for approximately 47% of the *S.* Typhimurium infections in the country. During 2001, a new multidrug-resistant strain of *S.* Newport was identified.

SHIGELLOSIS. Reported cases per 100,000 population, by year — United States, 1971–2001



The incidence of shigellosis has remained relatively stable during the last several years.

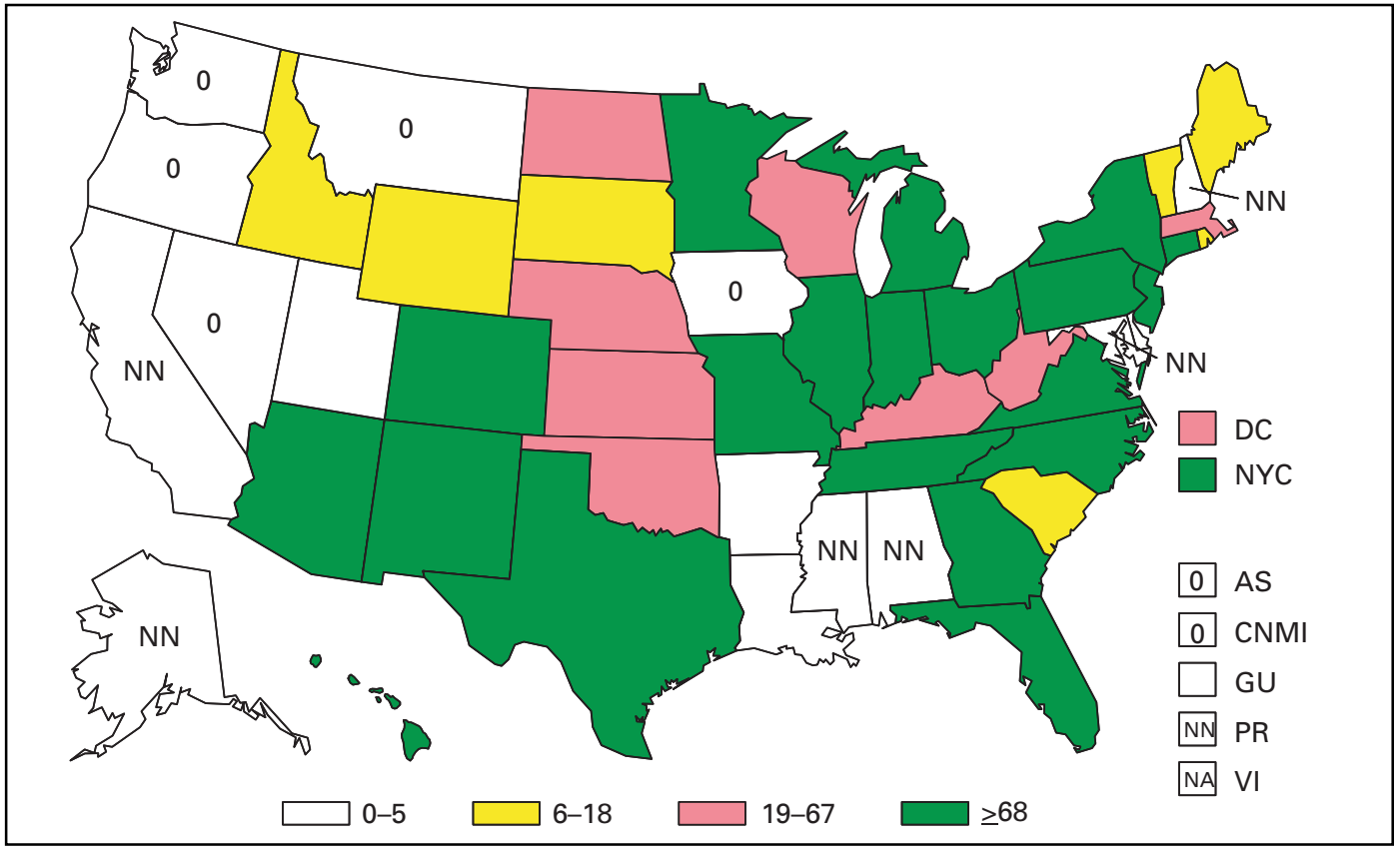
***SHIGELLA*. Reported isolates, by species and year* — United States, 1976–2001**



*Data from the Public Health Laboratory Information System (PHLIS).

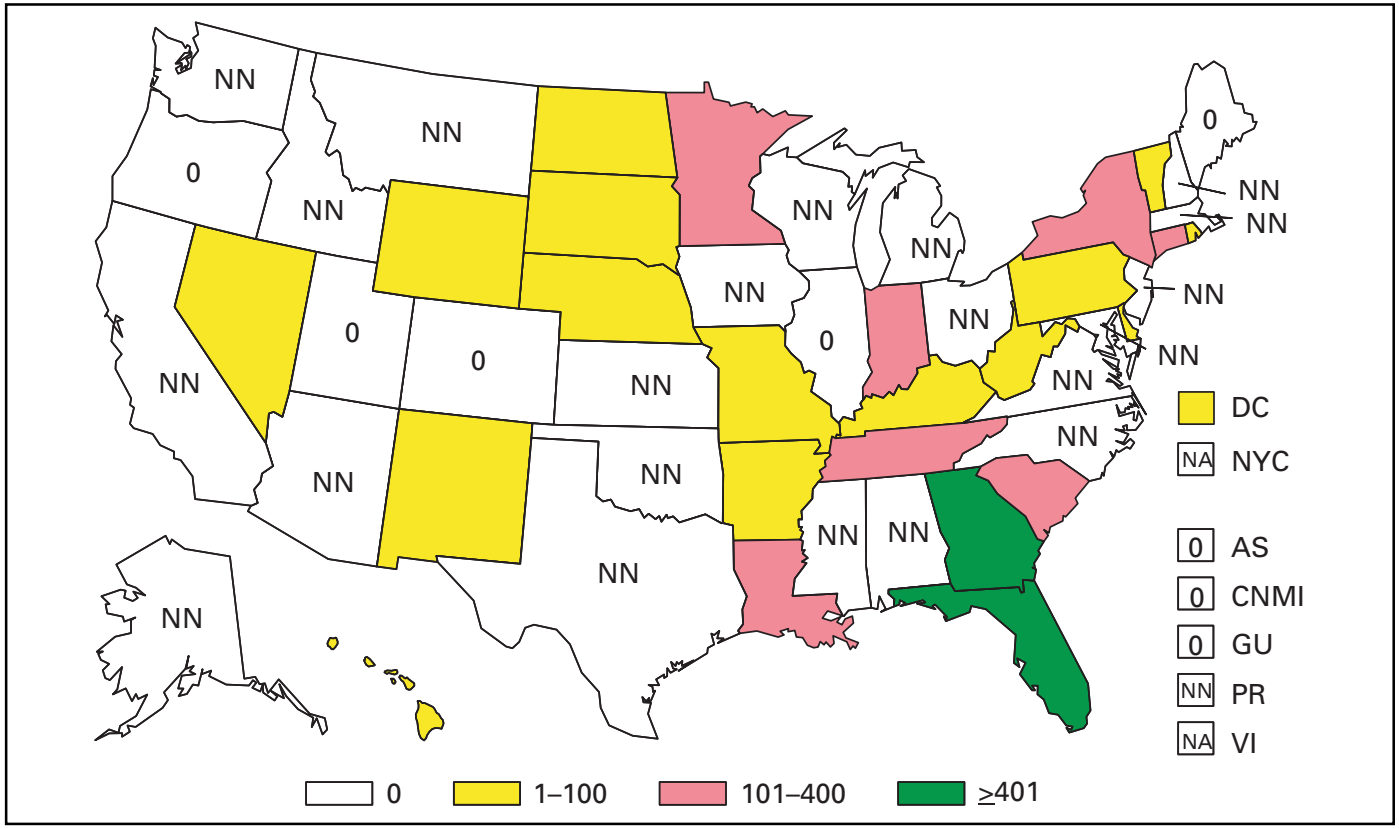
Prolonged and extensive outbreaks of *Shigella sonnei* infections continue to occur in child care settings. The reported incidence of *S. flexneri* infections continues to decrease. Both serogroups have become increasingly resistant to first-line antimicrobial agents, including trimethoprim-sulfamethoxazole and ampicillin.

STREPTOCOCCAL DISEASE, INVASIVE, GROUP A. Reported cases — United States and U.S. territories, 2001



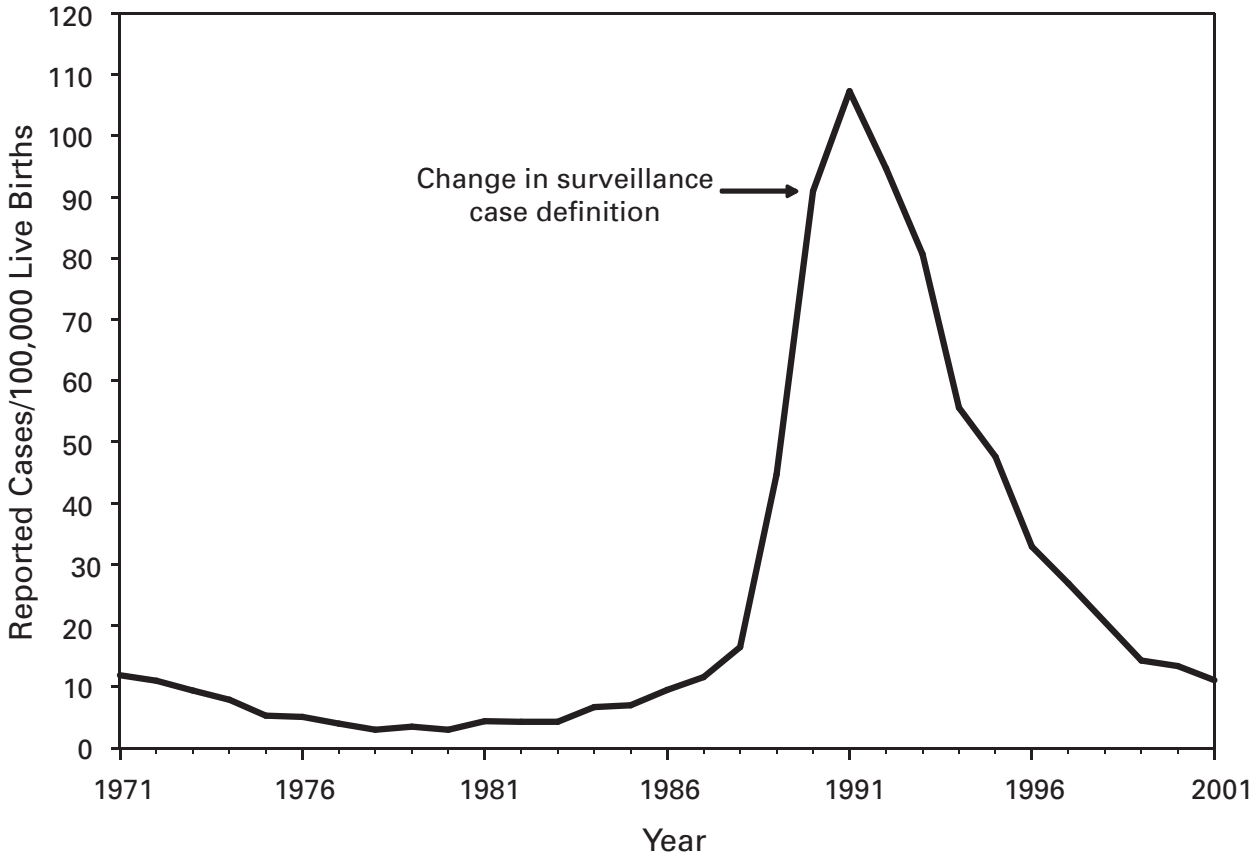
Passive reporting likely underestimates the numbers of invasive group A *Streptococcus* (GAS) infections in the United States. In 2001, 1,146 invasive GAS infections were reported by nine sites participating in CDC's Active Bacterial Core Surveillance (ABCs), corresponding to an incidence rate of 3.5 cases/100,000 population and a projected 9,950 cases nationwide.

***STREPTOCOCCUS PNEUMONIAE*, INVASIVE, DRUG-RESISTANT. Reported cases — United States and U.S. territories, 2001**



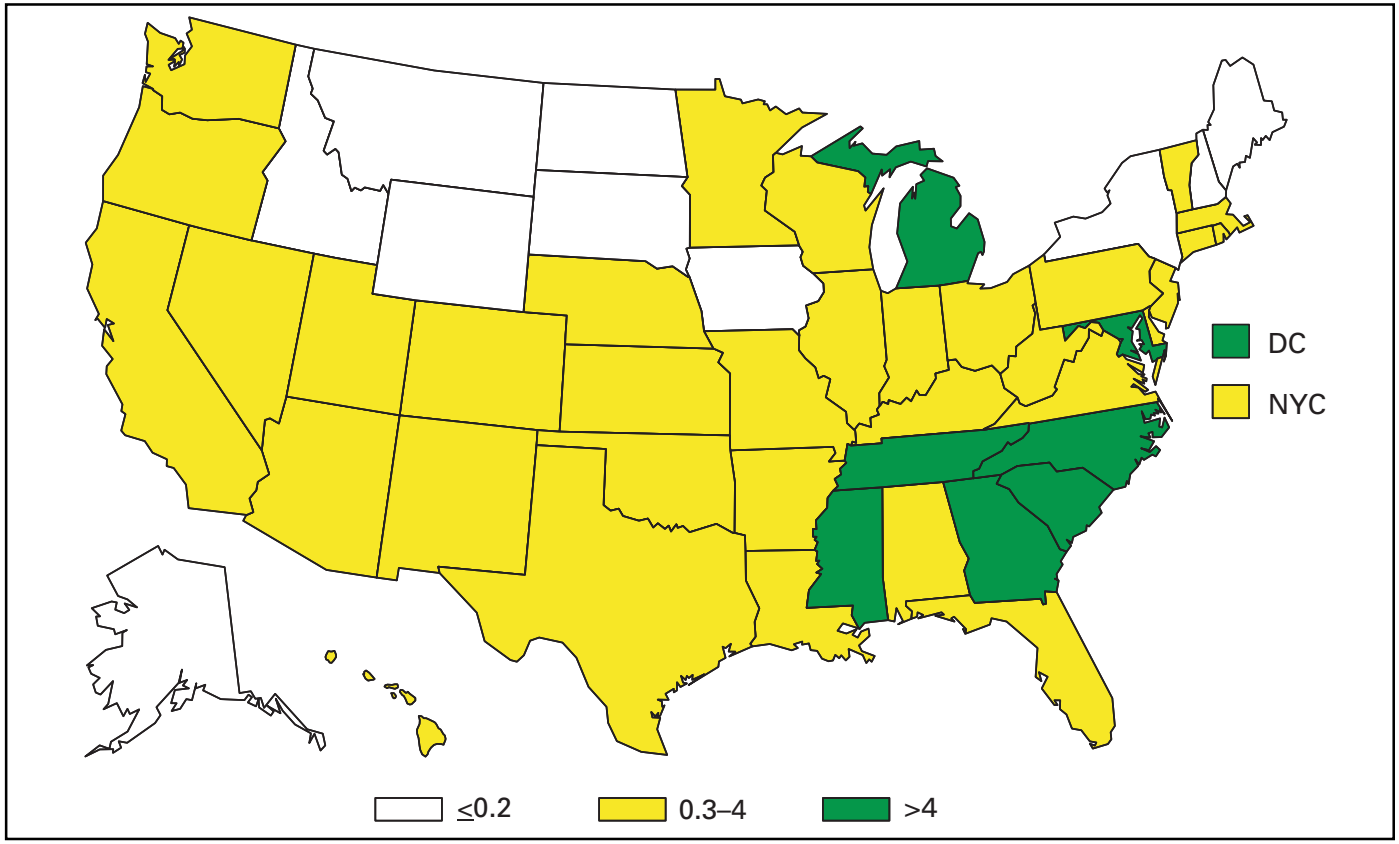
The burden of disease due to drug-resistant *Streptococcus pneumoniae* may be underrepresented because of passive reporting. According to data from CDC's Active Bacterial Core Surveillance (ABCs) for 2001, the rate of invasive pneumococcal disease in the United States was 17 cases/100,000 population; 23.6% of pneumococcal strains causing invasive pneumococcal disease had decreased susceptibility to penicillin. Disease rates were lower in 2001 after the introduction of pneumococcal conjugate vaccine in 2000.

SYPHILIS, CONGENITAL. Reported cases per 100,000 live births among infants aged <1 year — United States, 1971–2001



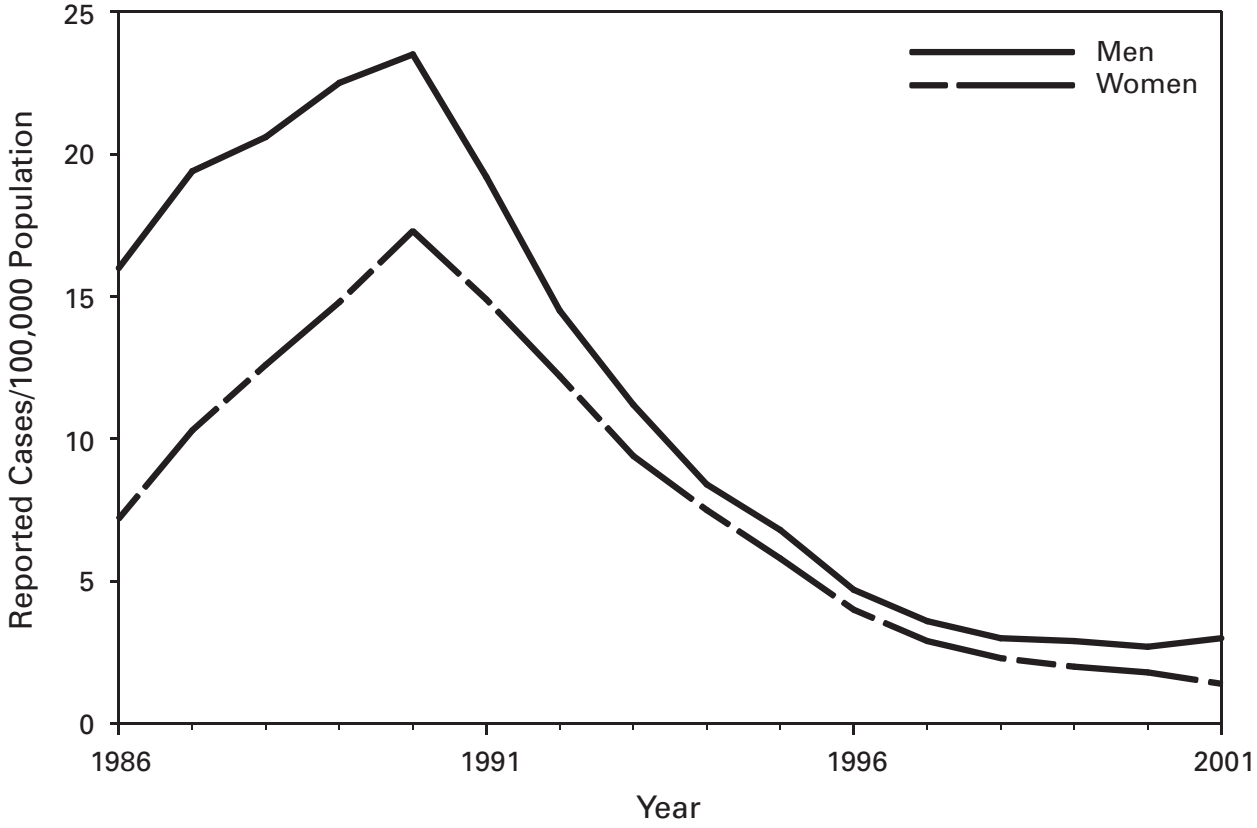
The rate of congenital syphilis decreased from 14.0 cases/100,000 live births in 2000 to 11.1 cases/100,000 in 2001.

SYPHILIS, PRIMARY AND SECONDARY. Reported cases per 100,000 population — United States, 2001



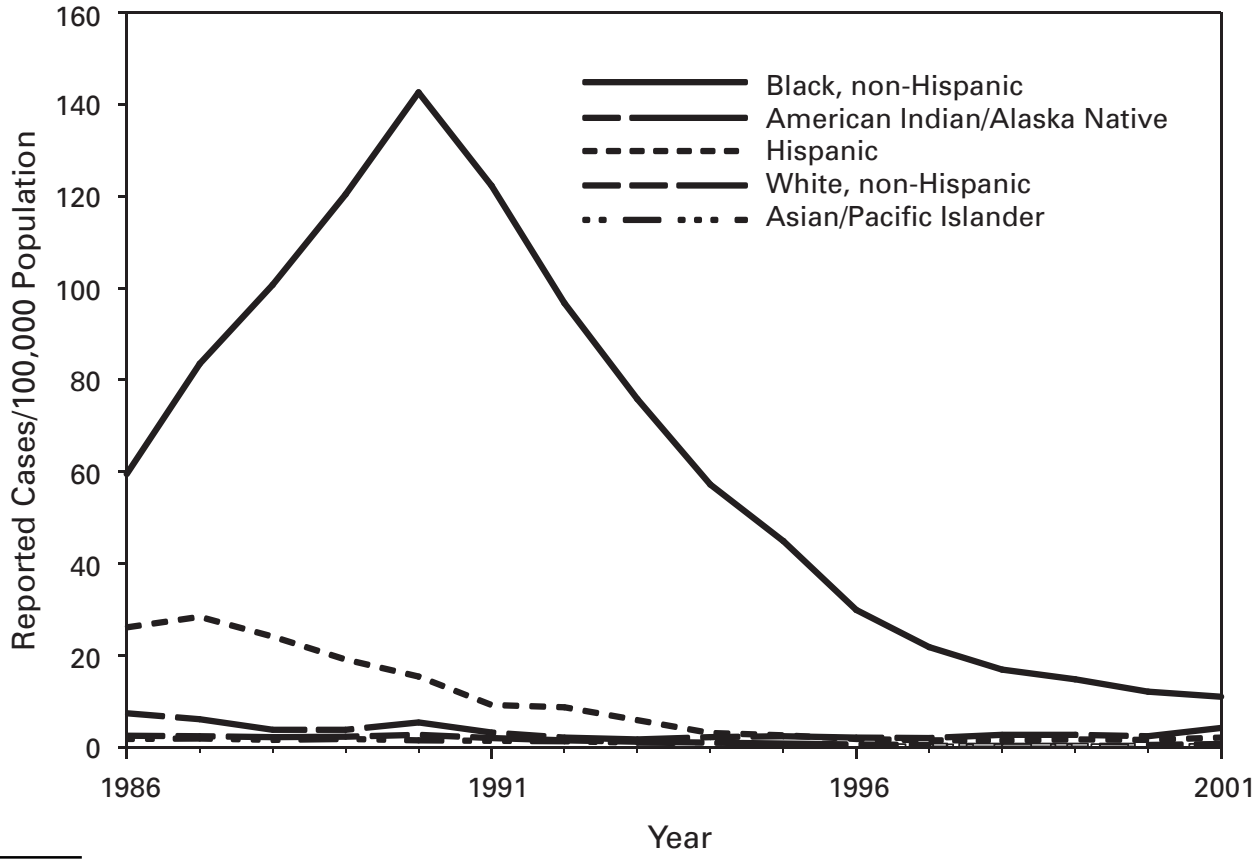
In 2001, the overall U.S. rate of primary and secondary syphilis was 2.2 cases/100,000 population, which is above the *Healthy People 2010* objective of 0.2 cases/100,000 population per year. Ten states reported rates at or below the national objective, and 11 states reported fewer than six cases.

SYPHILIS, PRIMARY AND SECONDARY. Reported cases per 100,000 population, by sex — United States, 1986–2001



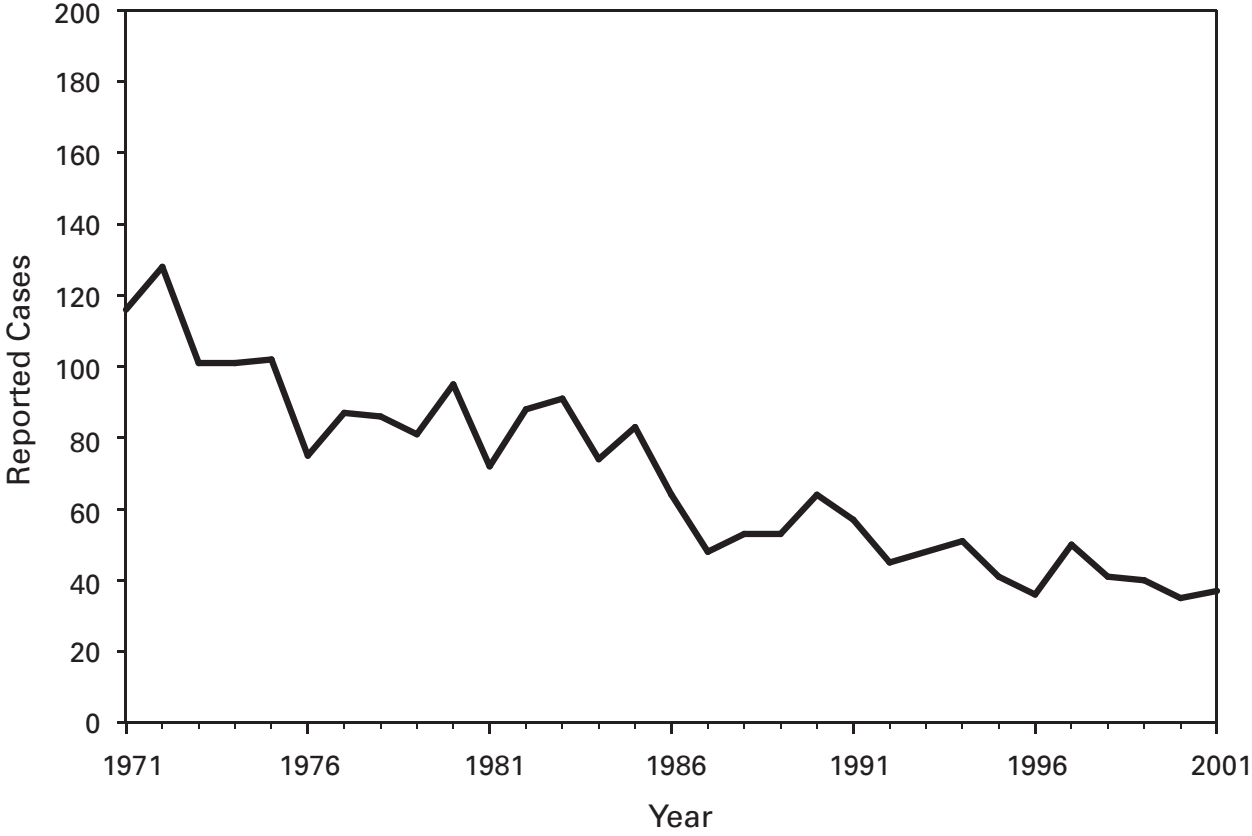
The reported rate of primary and secondary syphilis increased slightly in the United States from 2.1 cases/100,000 population in 2000 to 2.2/100,000 in 2001. Among women, rates continued to decline, from 1.7 cases/100,000 women in 2000 to 1.4 cases/100,000 women in 2001, the lowest rate for women since reporting began in 1941. Among men, rates increased from 2.6 cases/100,000 men in 2000 to 3.0/100,000 men in 2001, the first increase since 1990.

SYPHILIS, PRIMARY AND SECONDARY. Reported cases per 100,000 population, by race and ethnicity — United States, 1986–2001



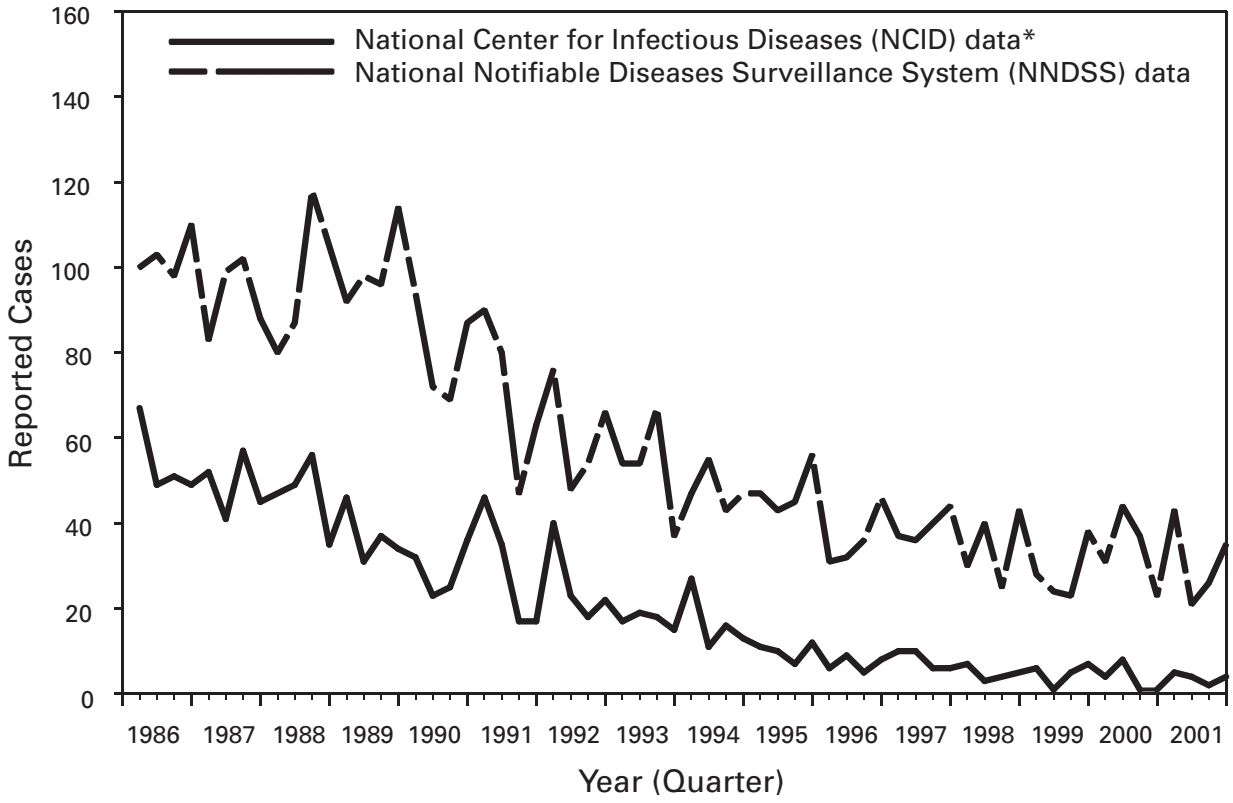
Rates of primary and secondary syphilis continued to decline among non-Hispanic blacks, from 12.2 cases/100,000 in 2000 to 11.0/100,000 in 2001, while rates among all other race/ethnic groups increased (non-Hispanic whites from 0.5/100,000 to 0.7/100,000, Hispanics from 1.6/100,000 to 2.1/100,000, American Indians/Alaska Natives from 2.4/100,000 to 4.2/100,000, and Asian/Pacific Islanders from 0.3/100,000 to 0.5/100,000). Although the rate for non-Hispanic blacks declined, the rate in 2001 was 16 times the rate for non-Hispanic whites.

TETANUS. Reported cases, by year — United States, 1971–2001



In 2001, 37 tetanus cases were reported: four (11%) among persons aged <25 years, 19 (51%) among those aged 25–59 years, and 14 (38%) among those ≥60 years. In 1997–2001, fewer than 10% of reported cases and no reported deaths occurred among persons known to have received at least 3 doses of tetanus toxoid and whose most recent dose was <10 years before disease onset.

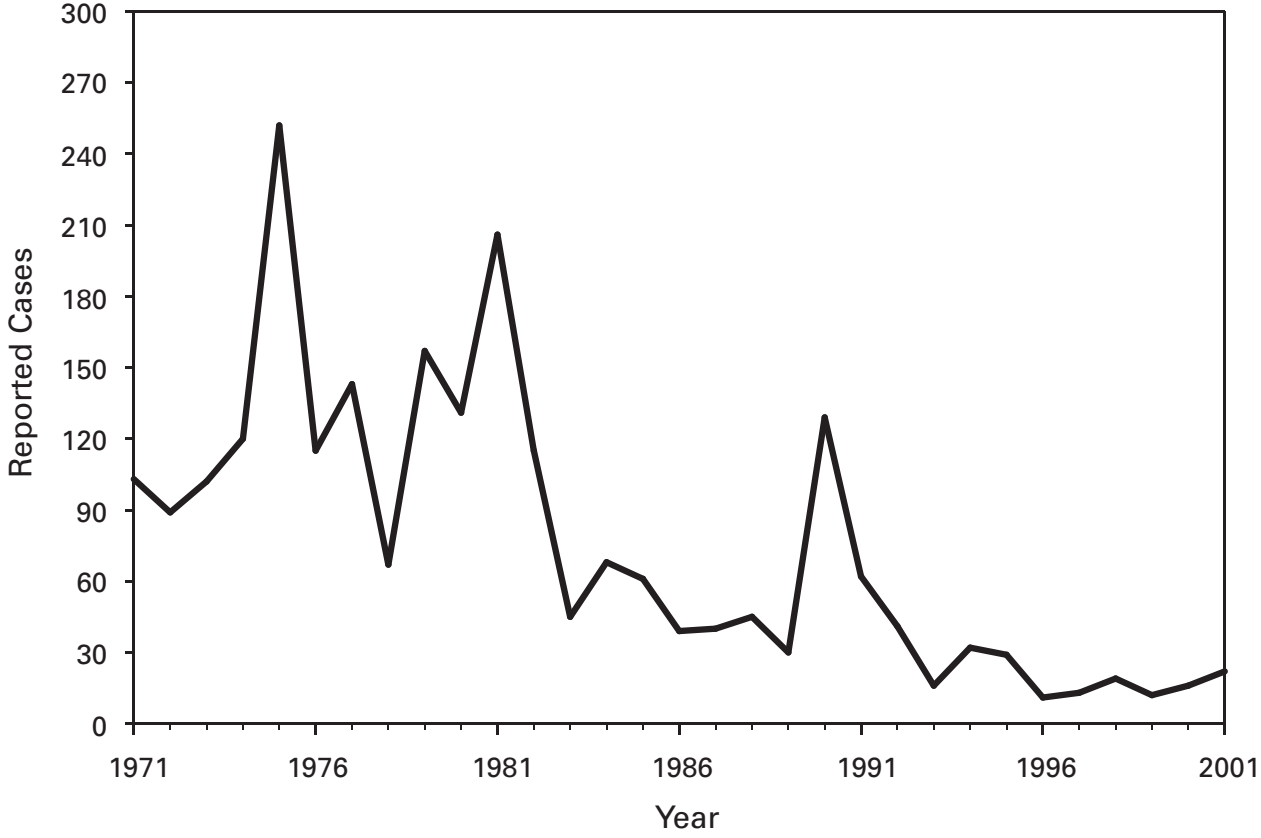
TOXIC-SHOCK SYNDROME (TSS). Reported cases, by quarter — United States, 1986–2001



*Includes cases meeting the CDC definition for confirmed and probable cases of staphylococcal TSS.

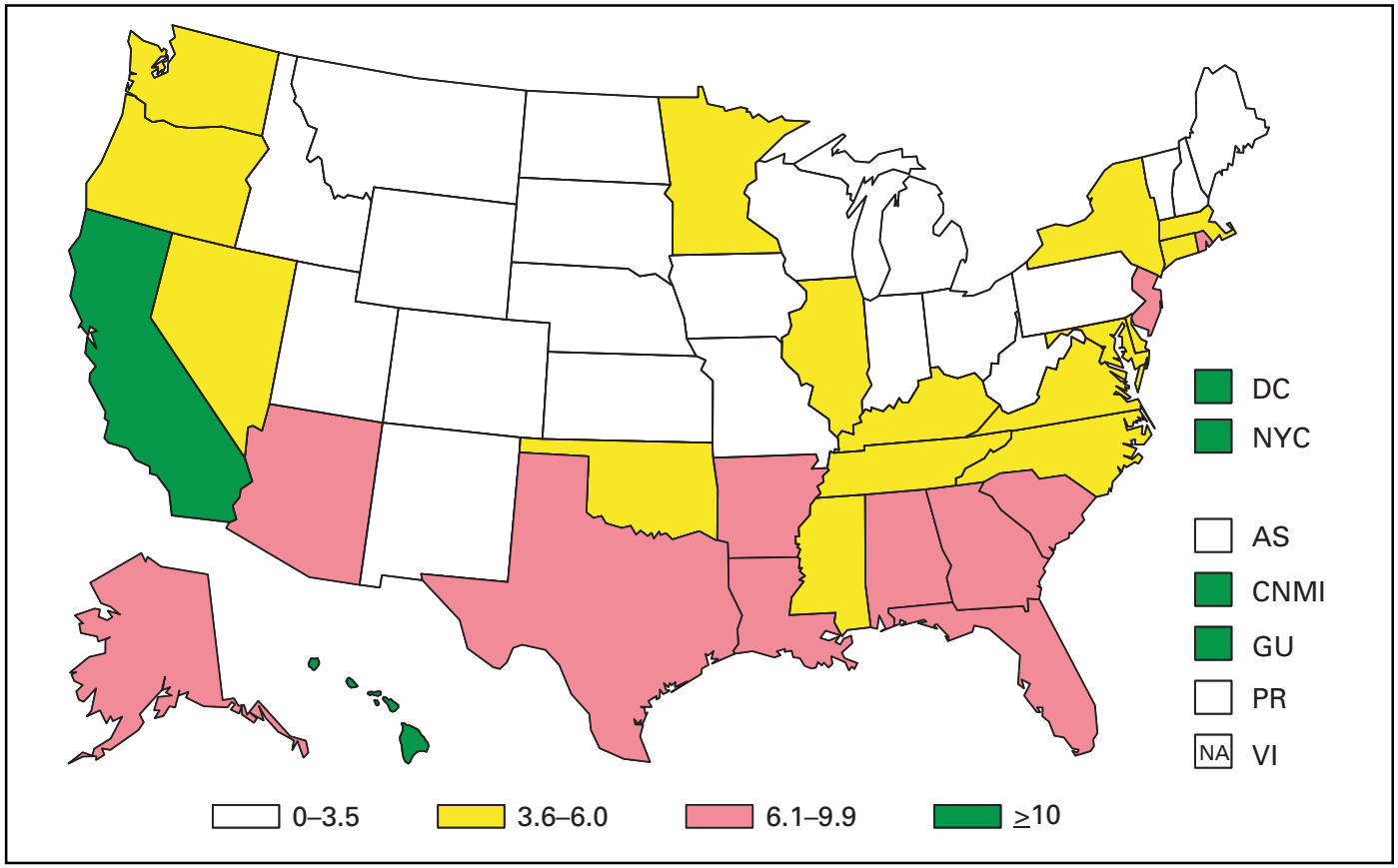
In 2001, a total of 20 cases of staphylococcal toxic shock syndrome (TSS) were reported to NCID. Of those cases, five (25%) were menstrual TSS.

TRICHINOSIS. Reported cases, by year — United States, 1971–2001



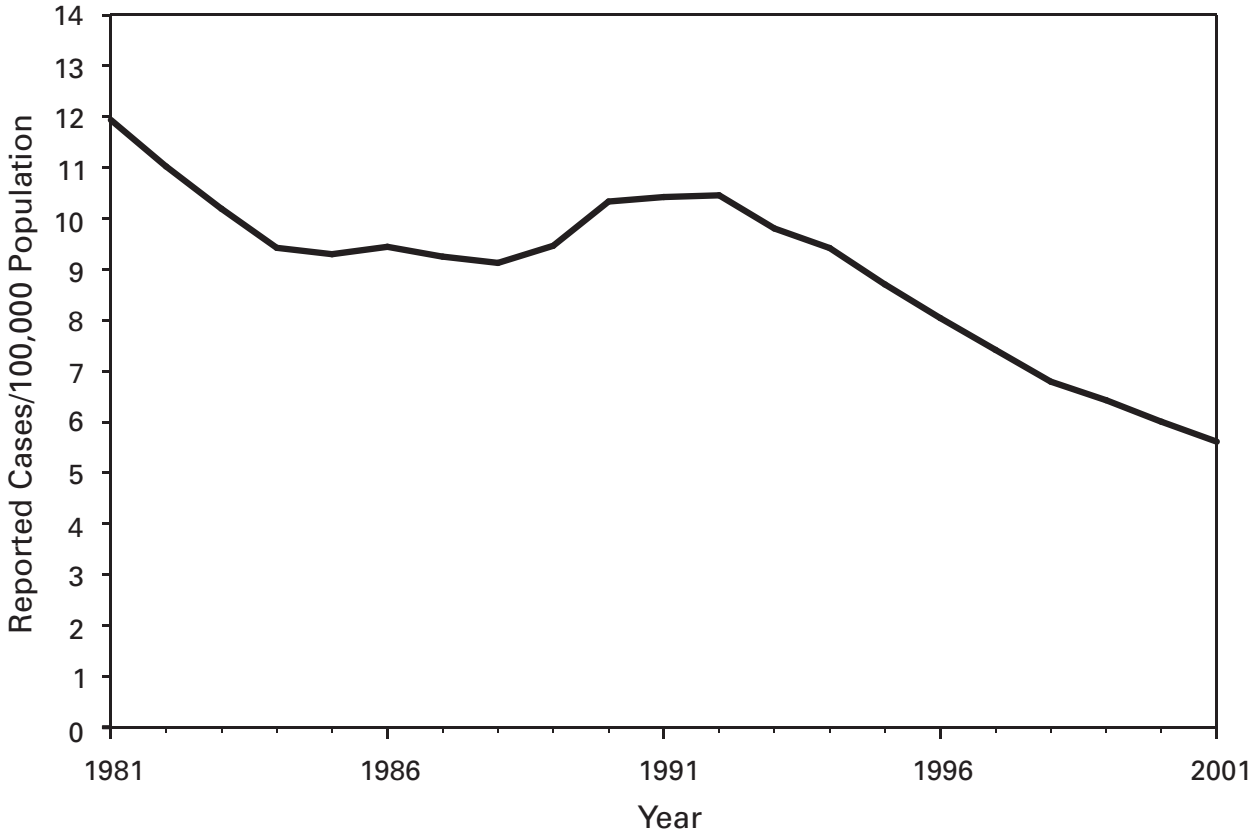
In 2001, 22 cases of trichinosis were reported from seven states (Alaska, California, Illinois, Iowa, New Jersey, Wisconsin, and Wyoming). The year 2001 was the sixth consecutive year in which <25 cases were reported.

TUBERCULOSIS. Reported cases per 100,000 population — United States and U.S. territories, 2001



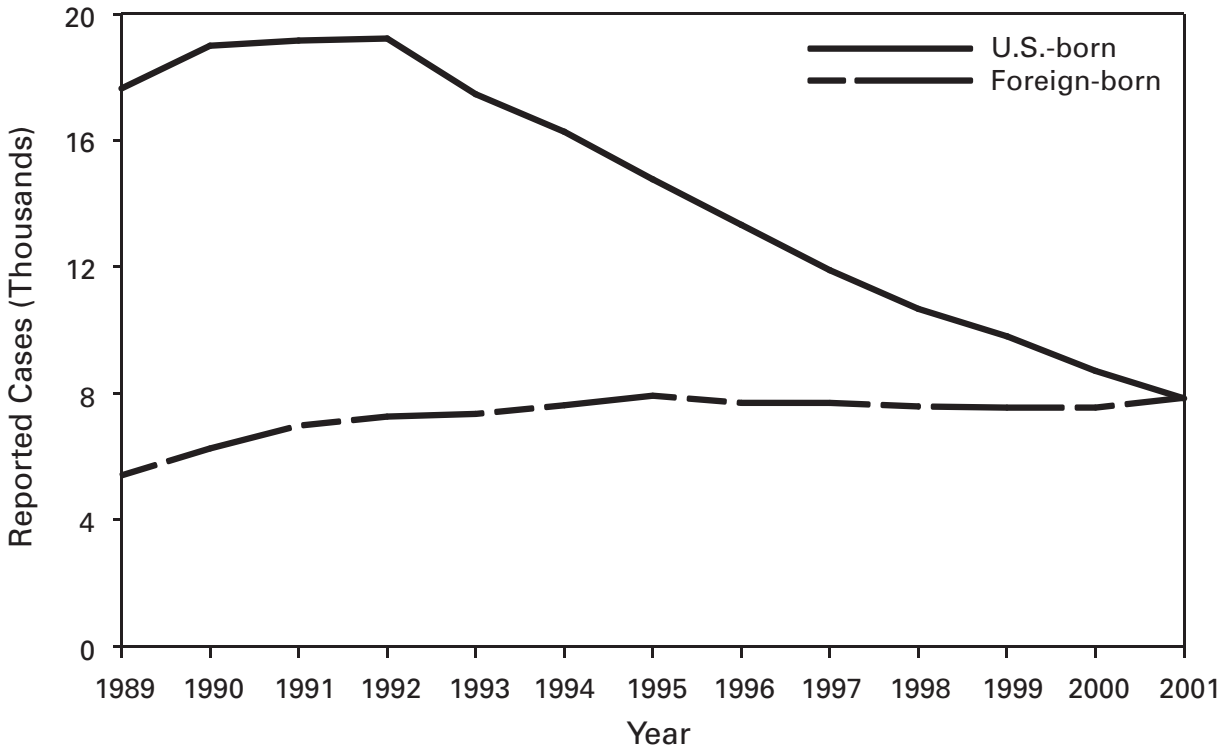
In 2001, a total of 21 states and Puerto Rico had tuberculosis rates ≤3.5 cases/100,000, which is the interim (i.e., year 2000) incidence target for the elimination of tuberculosis by the year 2010.

TUBERCULOSIS. Reported cases per 100,000 population, by year — United States, 1981–2001



In 2001, a total of 15,989 cases of tuberculosis were reported to CDC, representing a 2.4% decrease from 2000.

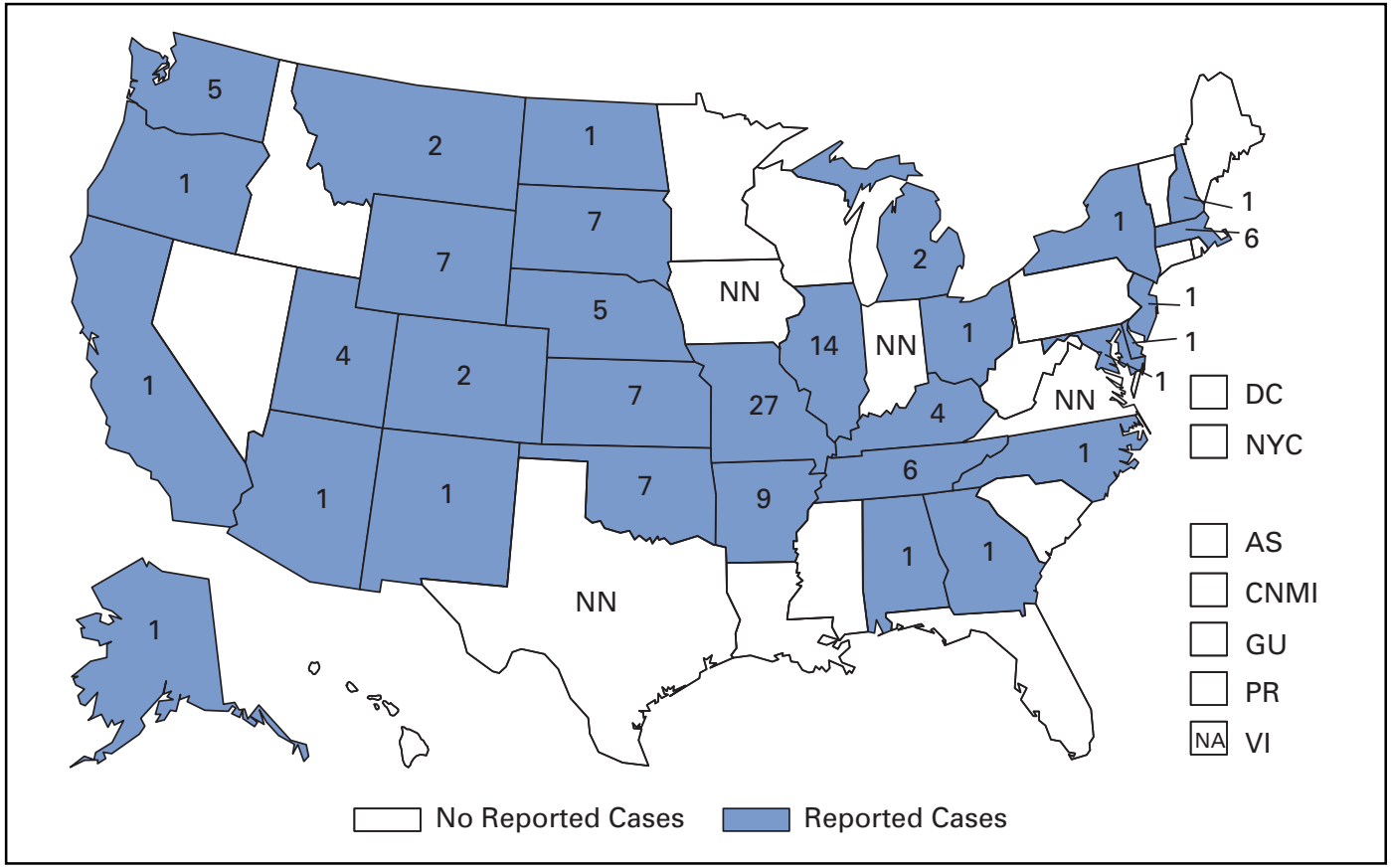
TUBERCULOSIS. Reported cases among U.S.-born and foreign-born persons,* by year — United States, 1989–2001



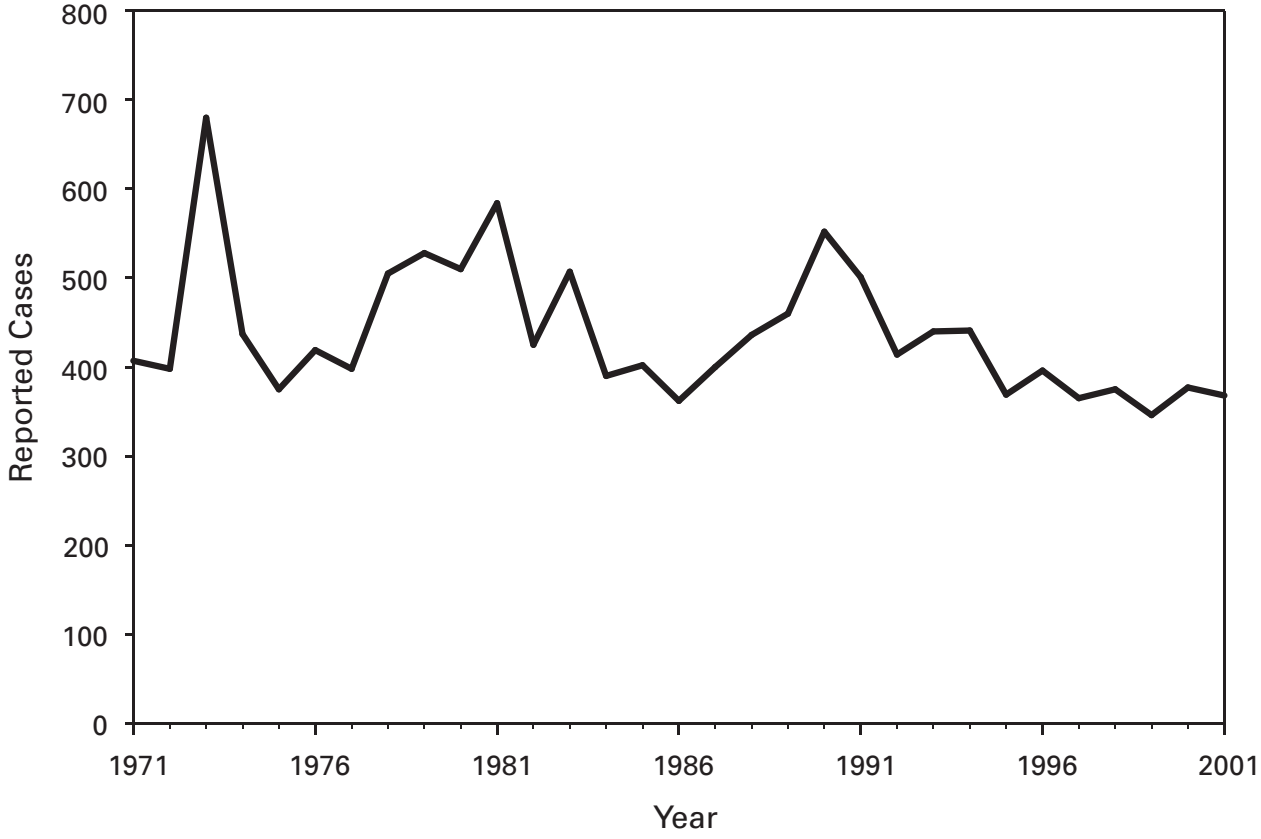
*In 2001, place of birth was unknown for 279 case-patients.

The number of tuberculosis cases among foreign-born persons in the United States increased from 5,411 (23% of the total number) in 1989 to 7,865 (50% of the total) in 2001.

TULAREMIA. Reported cases — United States and U.S. territories, 2001

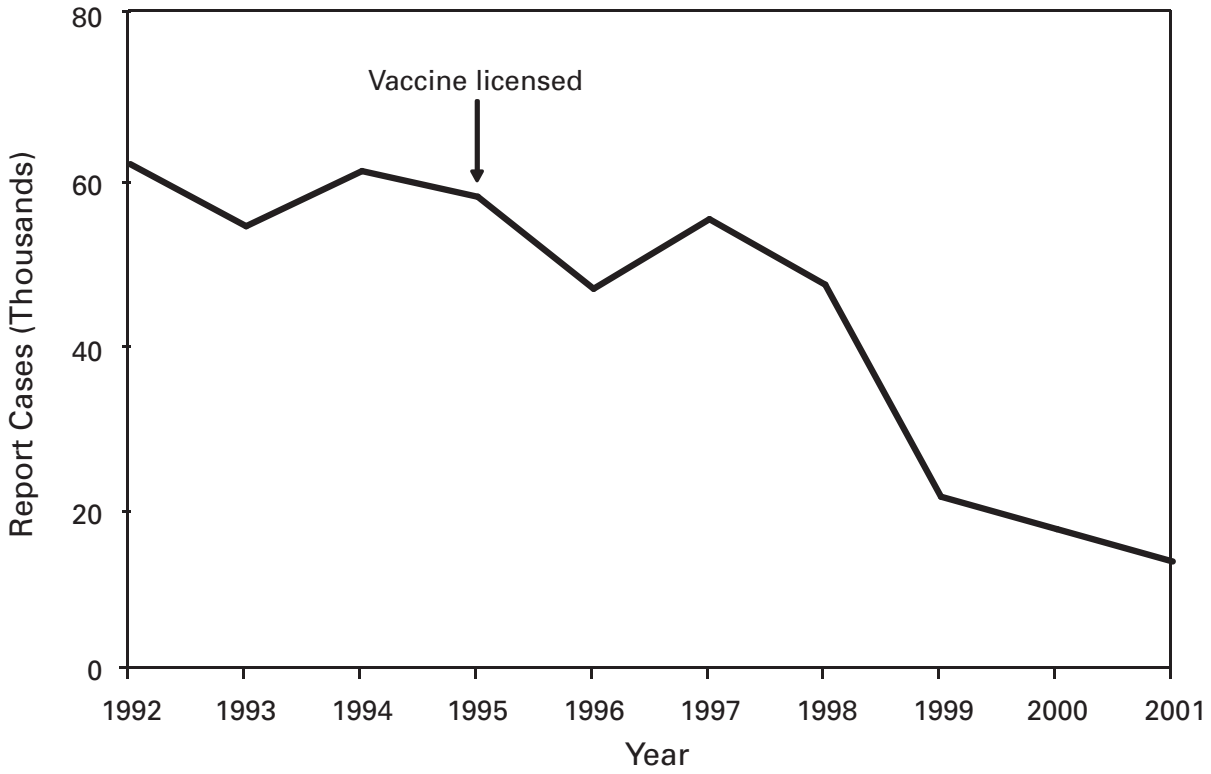


TYPHOID FEVER. Reported cases, by year — United States, 1971–2001



The majority of reported cases of typhoid fever are acquired by unvaccinated travelers to countries where the disease is endemic.

VARICELLA (Chickenpox). Reported cases from selected U.S. states* (n=4), 1992–2001



*Michigan, Rhode Island, Texas, and West Virginia maintained adequate reporting by reporting cases constituting ≥5% of their birth cohort during 1990–1995 (National Immunization Program).

The number of varicella cases in four states (Michigan, Rhode Island, Texas, and West Virginia) that reported in 2001 is the lowest ever reported, constituting a 22% decline compared with cases reported in 2000 and a 76% decline compared with cases reported in the prevaccine years of 1993–1995.

PART 3

Historical Summaries of Notifiable Diseases in the United States, 1970–2001

SYMBOLS USED IN TABLES

No reported cases ..... —

Data not available ..... NA

Rates <0.01 after rounding are listed as 0.00.

Note: Data in the *MMWR Summary of Notifiable Diseases, United States, 2001* might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and case definitions.

TABLE 7. Reported incidence rates of notifiable diseases per 100,000 population — United States, 1991–2001

Disease	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
AIDS*	17.32	17.83	40.20	30.07	27.20	25.21	21.85	17.21	16.66	14.95	14.88
Amebiasis	1.23	1.21	1.21	1.20	†	†	†	†	†	†	†
Anthrax	—	0.00	—	—	—	—	—	—	—	0.00	0.01
Aseptic meningitis	6.26	5.18	5.39	3.71	†	†	†	†	†	†	†
Botulism, total (including wound and unsp.)	0.05	0.04	0.04	0.06	0.04	0.05	0.05	0.04	0.06	0.05	0.06
Foodborne	0.01	0.00	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.01
Brucellosis	0.04	0.04	0.05	0.05	0.04	0.05	0.04	0.03	0.03	0.03	0.05
Chancroid	1.40	0.80	0.54	0.30	0.20	0.15	0.09	0.07	0.06	0.03	0.01
Chlamydia§	¶	¶	¶	¶	182.60	188.10	196.80	236.57	254.10	257.76	278.32
Cholera	0.01	0.04	0.00	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00
Coccidioidomycosis	¶	¶	¶	¶	NA	NA	NA	NA	NA	NA	6.71
Cryptosporidiosis	¶	¶	¶	¶	¶	¶	1.12	1.61	0.92	1.17	1.34
Cyclosporiasis	¶	¶	¶	¶	¶	¶	¶	¶	¶	0.03	0.07
Diphtheria	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00
Ehrlichiosis, human granulocytic	¶	¶	¶	¶	¶	¶	¶	¶	¶	0.15	0.10
Human monocytic	¶	¶	¶	¶	¶	¶	¶	¶	¶	0.09	0.05
Encephalitis, primary	0.40	0.30	0.36	0.28	†	†	†	†	†	†	†
Postinfectious	0.03	0.05	0.07	0.06	†	†	†	†	†	†	†
Encephalitis, California serogroup viral	¶	¶	¶	¶	¶	¶	¶	0.04	0.03	0.04	0.05
Encephalitis, eastern equine	¶	¶	¶	¶	¶	¶	¶	0.00	0.00	0.00	0.00
Encephalitis, St. Louis	¶	¶	¶	¶	¶	¶	¶	0.01	0.00	0.00	0.03
Encephalitis, western equine	¶	¶	¶	¶	¶	¶	¶	0.00	0.00	0.00	0.00
Escherichia coli, enterohemorrhagic (EHEC)											
O157:H7	¶	¶	¶	¶	1.01	1.18	1.04	1.28	1.77	1.74	1.22
EHEC, serogroup non-O157	¶	¶	¶	¶	¶	¶	¶	¶	¶	¶	0.19
EHEC, not serogrouped	¶	¶	¶	¶	¶	¶	¶	¶	¶	¶	0.06
Gonorrhea	249.48	201.60	172.40	168.40	149.50	122.80	121.40	132.88	133.20	131.65	128.53
Granuloma inguinale	0.01	0.00	0.00	0.00	†	†	†	†	†	†	†
Haemophilus influenzae, invasive	1.10	0.55	0.55	0.45	0.45	0.45	0.44	0.44	0.48	0.51	0.57
Hansen disease (leprosy)	0.06	0.07	0.07	0.05	0.06	0.05	0.05	0.05	0.04	0.04	0.03
Hantavirus pulmonary syndrome	¶	¶	¶	¶	NA	NA	NA	NA	NA	0.02	0.00
Hemolytic uremic syndrome, postdiarrheal	¶	¶	¶	¶	NA	NA	NA	NA	NA	0.10	0.08
Hepatitis A, acute	9.67	9.06	9.40	10.29	12.13	11.70	11.22	8.59	6.25	4.91	3.77
Hepatitis B, acute	7.14	6.32	5.18	4.81	4.19	4.01	3.90	3.80	2.82	2.95	2.79
Hepatitis, C/non-A, non-B**	1.42	2.36	1.86	1.78	1.78	1.41	1.43	1.30	1.14	1.17	1.41
Hepatitis, unspecified	0.50	0.35	0.24	0.17	†	†	†	†	†	†	†
Legionellosis	0.53	0.53	0.50	0.63	0.48	0.47	0.44	0.51	0.41	0.42	0.42
Leptospirosis	0.02	0.02	0.02	0.02	†	†	†	†	†	†	†
Listeriosis	¶	¶	¶	¶	¶	¶	¶	¶	¶	0.29	0.22
Lyme disease	3.80	3..93	3.20	5.01	4.49	6.21	4.79	6.39	5.99	6.53	6.05
Lymphogranuloma venereum	0.19	0.10	0.10	0.10	†	†	†	†	†	†	†
Malaria	0.51	0.43	0.55	0.47	0.55	0.68	0.75	0.60	0.61	0.57	0.55
Measles	3.82	0.88	0.12	0.37	0.12	0.20	0.06	0.04	0.04	0.03	0.04
Meningococcal disease	0.84	0.84	1.02	1.11	1.25	1.30	1.24	1.01	0.92	0.83	0.83
Mumps	1.72	1.03	0.66	0.60	0.35	0.29	0.27	0.25	0.14	0.13	0.10
Murine typhus fever	0.02	0.02	0.01	0.01	†	†	†	†	†	†	†

TABLE 7. (*Continued*) Reported incidence rates of notifiable diseases per 100,000 population — United States, 1991–2001

Disease	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Pertussis	1.08	1.60	2.55	1.77	1.97	2.94	2.46	2.74	2.67	2.88	2.69
Plague	0.00	0.01	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00
Poliomyelitis, paralytic	0.00	0.00	0.00	0.00	0.00	0.03	0.02	0.01	0.00	0.00	0.00
Psittacosis	0.04	0.04	0.02	0.02	0.03	0.02	0.02	0.02	0.01	0.01	0.01
Q fever	¶	¶	¶	¶	¶	¶	¶	¶	¶	0.01	0.01
Rabies, human	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00
Rheumatic fever, acute	0.12	0.06	0.08	0.09	†	†	†	†	†	†	†
Rocky Mountain spotted fever	0.25	0.20	0.18	0.18	0.23	0.32	0.16	0.14	0.21	0.18	0.25
Rubella	0.56	0.06	0.07	0.09	0.05	0.10	0.07	0.13	0.10	0.06	0.01
Rubella, congenital syndrome	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salmonellosis, excluding typhoid fever	19.10	16.04	16.15	16.64	17.66	17.15	15.66	16.17	14.89	14.51	14.39
Shigellosis	9.34	9.38	12.48	11.44	12.32	9.80	8.64	8.74	6.43	8.41	7.19
Streptococcal disease, invasive, group A	¶	¶	¶	¶	¶	¶	¶	¶	¶	1.45	1.60
Streptococcal, toxic-shock syndrome	¶	¶	¶	¶	¶	¶	¶	¶	¶	0.04	0.04
Streptococcus, pneumoniae, invasive, drug-resistant	¶	¶	¶	¶	¶	¶	¶	¶	¶	2.77	2.11
Streptococcus, pneumoniae, invasive, <5 yrs	¶	¶	¶	¶	¶	¶	¶	¶	¶	¶	1.03
Syphilis, primary and secondary	17.26	13.70	10.40	8.10	6.30	4.29	3.19	2.61	2.50	2.19	2.17
Total, all stages	51.69	45.30	39.70	32.00	26.20	19.97	17.39	14.19	13.07	11.58	11.45
Tetanus	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
Toxic-shock syndrome	0.11	0.10	0.08	0.10	0.07	0.06	0.06	0.06	0.05	0.06	0.05
Trichinosis	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01
Tuberculosis	10.42	10.46	9.82	9.36	8.70	8.04	7.42	6.79	6.43	6.01	5.68
Tularemia	0.08	0.06	0.05	0.04	†	†	†	†	†	0.06	0.05
Typhoid fever	0.20	0.16	0.17	0.17	0.14	0.15	0.14	0.14	0.13	0.14	0.13
Varicella (chickenpox)¶	135.82	176.54	118.54	135.76	118.11	44.13	93.55	70.28	44.56	26.18	19.51
Yellow fever	—	—	—	—	—	0.00	—	—	0.00	—	—

* Acquired Immunodeficiency syndrome.
† No longer nationally notifiable.
§ Chlamydia refers to genital infections caused by *C. trachomatis.*
¶ Not nationally notifiable.
** Anti-HCV antibody test became available May 1990.

Note: Rates <0.01 after rounding are listed as 0.00. Data in the *MMWR Summary of Notifiable Diseases, United States* might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and case definitions.

TABLE 8. Reported cases of notifiable diseases — United States, 1994–2001

Disease	1994	1995	1996	1997	1998	1999	2000	2001
AIDS	78,279	71,547	66,885	58,492	46,521	45,104	40,758	41,868*
Amebiasis	2,983	†	†	†	†	†	†	†
Anthrax	—	—	—	—	—	—	1	23
Aseptic meningitis	8,932	†	†	†	†	†	†	†
Botulism, total (including wound and unsp.)	143	97	119	132	116	154	138	155
Foodborne	50	24	25	31	22	23	23	39
Infant	85	54	80	79	65	92	93	97
Brucellosis	119	98	112	98	79	82	87	136
Chancroid	773	606	386	243	189	143	78	38§
Chlamydia¶	**	477,638	498,884	526,671	604,420	656,721	702,093	783,242§
Cholera	39	23	4	6	17	6	5	3
Coccidioidomycosis	**	1,212	1,696	1,749	2,275	2,827	2,867	3,922
Cryptosporidiosis	**	2,970	2,827	2,566	3,793	2,361	3,128	3,785
Cyclosporiasis	**	NA	NA	94	58	63	60	147
Diphtheria	2	—	2	4	1	1	1	2
Ehrlichiosis, human granulocytic	**	**	**	**	**	216	351	261
human monocytic	**	**	**	**	**	116	200	142
Encephalitis, primary	717	†	†	†	†	†	†	†
Postinfectious	143	†	†	†	†	†	†	†
Encephalitis, California serogroup viral	**	11	123	129	97	70	114	128
Eastern equine	**	1	5	14	4	5	3	9
St. Louis	**	3	2	13	24	4	2	79
Western equine	**	—	—	—	—	1	—	—
Escherichia coli, enterohemorrhagic (EHEC) O157:H7	1,420	2,139	2,741	2,555	3,161	4,513	4,528	3,287
EHEC, serogroup non-O157	**	**	**	**	**	**	**	171
EHEC, not serogrouped	**	**	**	**	**	**	**	20
Gonorrhea	418,068	392,848	325,883	324,907	355,642	360,076	358,995	361,705§
Granuloma inguinale	3	†	†	†	†	†	†	†
Haemophilus influenzae, invasive	1,174	1,180	1,170	1,162	1,194	1,309	1,398	1,597
Hansen disease (leprosy)	136	144	112	122	108	108	91	79
Hantavirus pulmonary syndrome	**	NA	NA	NA	NA	31	41	8
Hemolytic uremic syndrome, postdiarrheal	**	72	97	91	119	180	249	202
Hepatitis A, acute	26,796	31,582	31,032	30,021	23,229	17,047	13,397	10,609
Hepatitis B, acute	12,517	10,805	10,637	10,416	10,258	7,694	8,036	7,843
Hepatitis, C/non-A, non-B††	4,470	4,576	3,716	3,816	3,518	3,111	3,197	3,976
Hepatitis, unspecified	444	†	†	†	†	†	†	†
Legionellosis	1,615	1,241	1,198	1,163	1,355	1,108	1,127	1,168
Leptospirosis	38	†	†	†	†	†	†	†
Listeriosis	**	**	**	**	**	**	755	613
Lyme disease	13,043	11,700	16,455	12,801	16,801	16,273	17,730	17,029
Lymphogranuloma venereum	235	†	†	†	†	†	†	†

TABLE 8. (*Continued*) Reported cases of notifiable diseases — United States, 1994–2001

Disease	1994	1995	1996	1997	1998	1999	2000	2001
Malaria	1,229	1,419	1,800	2,001	1,611	1,666	1,560	1,544
Measles	963	309	508	138	100	100	86	116
Meningococcal disease	2,886	3,243	3,437	3,308	2,725	2,501	2,256	2,333
Mumps	1,537	906	751	683	666	387	338	266
Pertussis	4,617	5,137	7,796	6,564	7,405	7,288	7,867	7,580
Plague	17	9	5	4	9	9	6	2
Poliomyelitis, paralytic[§§]	8	7	7	6	3	2	—	—
Psittacosis	38	64	42	33	47	16	17	25
Q fever	**	**	**	**	**	**	21	26
Rabies, animal	8,147	7,811	6,982	8,105	7,259	6,730	6,934	7,150
Rabies, human	6	5	3	2	1	—	4	1
Rheumatic fever, acute	112	†	†	†	†	†	†	†
Rocky Mountain spotted fever	465	590	831	409	365	579	495	695
Rubella	227	128	238	181	364	267	176	23
Rubella, congenital syndrome	7	6	4	5	7	9	9	3
Salmonellosis, excluding typhoid fever	43,323	45,970	45,471	41,901	43,694	40,596	39,574	40,495
Shigellosis	29,769	32,080	25,978	23,117	23,626	17,521	22,922	20,221
Streptococcal disease, invasive, group A	**	613	1,445	1,973	2,260	2,667	3,144	3,750
Streptococcus pneumoniae, invasive, drug-resistant	**	309	1,514	1,799	2,823	4,625	4,533	2,896
Streptococcus pneumoniae, invasive, <5 years	**	**	**	**	**	**	**	498
Streptococcal toxic-shock syndrome	**	10	19	33	58	65	83	77
Syphilis, primary and secondary	20,627	16,500	11,387	8,550	6,993	6,657	5,979	6,103[§]
Total, all stages	81,696	68,953	52,976	46,540	37,977	35,628	31,575	32,221[§]
Tetanus	51	41	36	50	41	40	35	37
Toxic-shock syndrome	192	191	145	157	138	113	135	127
Trichinosis	32	29	11	13	19	12	16	22
Tuberculosis	24,361	22,860	21,337	19,851	18,361	17,531	16,377	15,989[¶¶]
Tularemia	96	†	†	†	†	†	142	129
Typhoid fever	441	369	396	365	375	346	377	368
Varicella (chickenpox)***	151,219	120,624	83,511	98,727	82,455	46,016	27,382	22,536
Yellow fever	†††	†††	1	—	—	1	—	—

* Total number of acquired immunodeficiency syndrome (AIDS) cases includes all cases reported to the Division of HIV/AIDS Prevention—Surveillance, and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP) through December 31, 2001.
† No longer nationally notifiable.
§ Cases were updated through the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of May 3, 2002.
¶ Chlamydia refers to genital infections caused by *C. trachomatis*.
** Not previously nationally notifiable.
†† Anti-HCV antibody test available May 1990.
§§ Numbers might not reflect changes based on retrospective case evaluations or late reports (See MMWR 1986;35:180–2).
¶¶ Cases were updated through the Division of Tuberculosis Elimination, NCHSTP, as of March 29, 2002.
*** Varicella was taken off the nationally notifiable disease list in 1991. Many states continue to report these cases to CDC.
††† The last indigenous case of yellow fever was reported in 1911; the last imported case was reported in 1999.

Note: Rates <0.01 after rounding are listed as 0.00. Data in the *MMWR Summary of Notifiable Diseases, United States* might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and case definitions.

TABLE 9. Reported cases of notifiable diseases* — United States, 1986–1993

Disease	1986	1987	1988	1989	1990	1991	1992	1993
AIDS†	12,932	21,070	31,001	33,722	41,595	43,672	45,472	103,691
Amebiasis	3,532	3,123	2,860	3,217	3,328	2,989	2,942	2,970
Anthrax	—	1	2	—	—	—	1	—
Aseptic meningitis	11,374	11,487	7,234	10,274	11,852	14,526	12,223	12,848
Botulism, total (including wound and unsp.)	109	82	84	89	92	114	91	97
Foodborne	23	17	28	23	23	27	21	27
Infant	79	59	50	60	65	81	66	65
Brucellosis	106	129	96	95	82	104	105	120
Chancroid	3,756	4,998	5,001	4,692	4,212	3,476	1,886	1,399
Cholera	23	6	8	—	6	26	103	18
Diphtheria	—	3	2	3	4	5	4	—
Encephalitis, primary§	1,302	1,418	882	981	1,341	1,021	774	919
Postinfectious	124	121	121	88	105	82	129	170
Gonorrhea	900,868	780,905	719,536	733,151	690,169	620,478	501,409	439,673
Granuloma inguinale	61	22	11	7	97	29	6	19
Haemophilus influenzae, invasive disease	¶	¶	¶	¶	¶	¶	1,412	1,419
Hansen disease (leprosy)	270	238	184	163	198	154	172	187
Hepatitis A, acute	23,430	25,280	28,507	35,821	31,441	24,378	23,112	24,238
Hepatitis B, acute	26,107	25,916	23,177	23,419	21,102	18,003	16,126	13,361
Hepatitis, C/non-A, non-B	3,634	2,999	2,619	2,529	2,553	3,582	6,010	4,786
Hepatitis, unspecified	3,940	3,102	2,470	2,306	1,671	1,260	884	627
Legionellosis	980	1,038	1,085	1,190	1,370	1,317	1,339	1,280
Leptospirosis	41	43	54	93	77	58	54	51
Lyme disease	¶	¶	¶	¶	¶	¶	9,895	8,257
Lymphogranuloma venereum	396	303	185	189	277	471	302	285
Malaria	1,123	944	1,099	1,277	1,292	1,278	1,087	1,411
Measles	6,282	3,655	3,396	18,193	27,786	9,643	2,237	312
Meningococcal disease	2,594	2,930	2,964	2,727	2,451	2,130	2,134	2,637
Mumps	7,790	12,848	4,866	5,712	5,292	4,264	2,572	1,692
Murine typhus fever	67	49	54	41	50	43	28	25
Pertussis	4,195	2,823	3,450	4,157	4,570	2,719	4,083	6,586

TABLE 9. (*Continued*) Reported cases of notifiable diseases — United States, 1986–1993

Disease	1986	1987	1988	1989	1990	1991	1992	1993
Plague	10	12	15	4	2	11	13	10
Poliomyelitis, paralytic	10	9	9	11	6	10	6	4
Psittacosis	224	98	114	116	113	94	92	60
Rabies, animal	5,504	4,658	4,651	4,724	4,826	6,910	8,589	9,377
Rabies, human	—	1	—	1	1	3	1	3
Rheumatic fever, acute	147	141	158	144	108	127	75	112
Rocky Mountain spotted fever	760	604	609	623	651	628	502	456
Rubella	551	306	225	396	1,125	1,401	160	192
Rubella, congenital syndrome	14	5	6	3	11	47	11	5
Salmonellosis, excluding typhoid fever	49,984	50,916	48,948	47,812	48,603	48,154	40,912	41,641
Shigellosis	17,138	23,860	30,617	25,010	27,077	23,548	23,931	32,198
Syphilis, primary and secondary	27,883	35,147	40,117	44,540	50,223	42,935	33,973	26,498
Total, all stages	68,215	86,545	103,437	110,797	134,255	128,569	112,581	101,259
Tetanus	64	48	53	53	64	57	45	48
Toxic-shock syndrome	412	372	390	400	322	280	244	212
Trichinosis	39	40	45	30	129	62	41	16
Tuberculosis	22,768	22,517	22,436	23,495	25,701	26,283	26,673	25,313
Tularemia	170	214	201	152	152	193	159	132
Typhoid fever	362	400	436	460	552	501	414	440
Varicella (chickenpox)	183,243	213,196	192,857	185,441	173,099	147,076	158,364	134,722

* No cases of yellow fever were reported during 1986–1993.
† Acquired immunodeficiency syndrome.
§ Beginning in 1984, data were recorded by date of record to state health departments. Before 1984, data were recorded by onset date.
¶ Not previously notifiable nationally.

Note: Rates <0.01 after rounding are listed as 0.00. Data in the *MMWR Summary of Notifiable Diseases, United States* might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and case definitions.

TABLE 10. Reported cases of notifiable diseases* — United States, 1978–1985

Disease	1978	1979	1980	1981	1982	1983	1984	1985
AIDS†	§	§	§	§	§	§	4,445	8,249
Amebiasis	3,937	4,107	5,271	6,632	7,304	6,658	5,252	4,433
Anthrax	6	—	1	—	—	—	1	—
Aseptic meningitis	6,573	8,754	8,028	9,547	9,680	12,696	8,326	10,619
Botulism, total (including wound and unsp.)	105	45	89	103	97	133	123	122
Foodborne	§	§	§	§	§	§	§	49
Infant	§	§	§	§	§	§	§	70
Brucellosis	179	215	183	185	173	200	131	153
Chancroid	521	840	788	850	1,392	847	666	2,067
Cholera	12	1	9	19	—	1	1	4
Diphtheria¶	76	59	3	5	2	5	1	3
Encephalitis, primary	1,351	1,504	1,362	1,492	1,464	1,761	1,257	1,376
Postinfectious**	78	84	40	43	36	34	108	161
Gonorrhea	1,013,436	1,004,058	1,004,029	990,864	960,633	900,435	878,556	911,419
Granuloma inguinale	72	76	51	66	17	24	30	44
Hansen disease (leprosy)	168	185	223	256	250	259	290	361
Hepatitis A, acute	29,500	30,407	29,087	25,802	23,403	21,532	22,040	23,210
Hepatitis B, acute	15,016	15,452	19,015	21,152	22,177	24,318	26,115	26,611
Hepatitis C; non-A, non-B	§	§	§	§	§	§	3,871	4,184
Hepatitis, unspecified	8,776	10,534	11,894	10,975	8,564	7,149	5,531	5,517
Legionellosis	761	593	475	408	654	852	750	830
Leptospirosis	110	94	85	82	100	61	40	57
Lymphogranuloma venereum	284	250	199	263	235	335	170	226
Malaria	731	894	2,062	1,388	1,056	813	1,007	1,049
Measles	26,871	13,597	13,506	3,124	1,714	1,497	2,587	2,822
Meningococcal disease	2,505	2,724	2,840	3,525	3,056	2,736	2,746	2,479
Mumps	16,817	14,225	8,576	4,941	5,270	3,355	3,021	2,982
Murine typhus fever	46	69	81	61	58	62	53	37
Pertussis	2,063	1,623	1,730	1,248	1,895	2,463	2,276	3,589
Plague	12	13	18	13	19	40	31	17
Poliomyelitis, total	8	22	9	10	12	13	9	8
Paralytic††	8	22	9	10	12	13	9	8
Psittacosis	140	137	124	136	152	142	172	119
Rabies, animal	3,254	5,119	6,421	7,118	6,212	5,878	5,567	5,565
Rabies, human	4	4	—	2	—	2	3	1
Rheumatic fever, acute	851	629	432	264	137	88	117	90
Rocky Mountain spotted fever	1,063	1,070	1,163	1,192	976	1,126	838	714
Rubella	18,269	11,795	3,904	2,077	2,325	970	752	630
Rubella, congenital syndrome	30	62	50	19	7	22	5	—
Salmonellosis, excluding typhoid fever	29,410	33,138	33,715	39,990	40,936	44,250	40,861	65,347
Shigellosis	19,511	20,135	19,041	19,859	18,129	19,719	17,371	17,057
Syphilis, primary and secondary	21,656	24,874	27,204	31,266	33,613	32,698	28,607	27,131
Total, all stages	64,875	67,049	68,832	72,799	75,579	74,637	69,888	67,563
Tetanus	86	81	95	72	88	91	74	83
Toxic-shock syndrome	§	§	§	§	§	§	482	384
Trichinosis	67	157	131	206	115	45	68	61
Tuberculosis	28,521	27,669	27,749	27,373	25,520	23,846	22,255	22,201
Tularemia	141	196	234	288	275	310	291	177
Typhoid fever	505	528	510	584	425	507	390	402
Varicella (chickenpox)	154,089	199,081	190,894	200,766	167,423	177,462	221,983	178,162

* No cases of yellow fever were reported during 1978–1985.
† Acquired immunodeficiency syndrome.
§ Not previously notifiable nationally.
¶ Cutaneous diphtheria was no longer notifiable nationally after 1979.
** Beginning in 1984, data were recorded by date of record to state health departments. Before 1984, data were recorded by onset date.
†† No cases of paralytic poliomyelitis caused by wild virus have been reported in the United States since 1979.

Note: Rates <0.01 after rounding are listed as 0.00. Data in the *MMWR Summary of Notifiable Diseases, United States* might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and case definitions.

TABLE 11. Reported cases of notifiable diseases* — United States, 1970–1977

Disease	1970	1971	1972	1973	1974	1975	1976	1977
Amebiasis	2,888	2,752	2,199	2,235	2,743	2,775	2,906	3,044
Anthrax	2	5	2	2	2	2	2	—
Aseptic meningitis	6,480	5,176	4,634	4,846	3,197	4,475	3,510	4,789
Botulism, total (includes wound and unspecified)	12	25	22	34	28	20	55	129
Brucellosis	213	183	196	202	240	310	296	232
Chancroid	1,416	1,320	1,414	1,165	945	700	628	455
Cholera	—	—	—	1	—	—	—	3
Diphtheria	435	215	152	228	272	307	128	84
Encephalitis, primary	1,580	1,524	1,059	1,613	1,164	4,064	1,651	1,414
Postinfectious	370	439	243	354	218	237	175	119
Gonorrhea	600,072	670,268	767,215	842,621	906,121	999,937	1,001,994	1,002,219
Granuloma inguinale	124	89	81	62	47	60	71	75
Hansen disease (leprosy)	129	131	130	146	118	162	145	151
Hepatitis A (infectious)	56,797	59,606	54,074	50,749	40,358	35,855	33,288	31,153
Hepatitis B (serum)	8,310	9,556	9,402	8,451	10,631	13,121	14,973	16,831
Hepatitis, unspecified	†	†	†	†	†	†	7,488	8,639
Legionellosis	†	†	†	†	†	†	235	359
Leptospirosis	47	62	41	57	8,351	93	73	71
Lymphogranuloma venereum	612	692	756	408	394	353	365	348
Malaria	3,051	2,375	742	237	293	373	471	547
Measles	47,351	75,290	32,275	26,690	22,094	24,374	41,126	57,345
Meningococcal disease	2,505	2,262	1,323	1,378	1,346	1,478	1,605	1,828
Mumps	104,953	124,939	74,215	69,612	59,128	59,647	38,492	21,436
Murine typhus fever	27	23	18	32	26	41	69	75
Pertussis	4,249	3,036	3,287	1,759	2,402	1,738	1,010	2,177
Plague	13	2	1	2	8	20	16	18
Poliomyelitis, total	33	21	31	8	7	13	10	19
Paralytic	31	17	29	7	7	13	10	19
Psittacosis	35	32	52	33	164	49	78	94
Rabies, animal	3,224	4,310	4,369	3,640	3,151	2,627	3,073	3,130
Rabies, human	3	2	2	1	—	2	2	1
Rheumatic fever, acute	3,227	2,793	2,614	2,560	2,431	2,854	1,865	1,738
Rocky Mountain spotted fever	380	432	523	668	754	844	937	1,153
Rubella	56,552	45,086	25,507	27,804	11,917	16,652	12,491	20,395
Rubella, congenital syndrome	77	68	42	35	45	30	30	23
Salmonellosis, excluding typhoid fever	22,096	21,928	22,151	23,818	21,980	22,612	22,937	27,850
Shigellosis	13,845	16,143	20,207	22,642	22,600	16,584	13,140	16,052
Streptococcal sore throat and scarlet fever	433,405	§	§	§	§	§	§	§
Syphilis, primary and secondary	21,982	23,783	24,429	24,825	25,385	25,561	23,731	20,399
Total, all stages	91,382	95,997	91,149	87,469	83,771	80,356	71,761	64,621
Tetanus	148	116	128	101	101	102	75	87
Trichinosis	109	103	89	102	120	252	115	143
Tuberculosis¶	37,137	35,217	32,882	30,998	30,122	33,989	32,105	30,145
Tularemia	172	187	152	171	144	129	157	165
Typhoid fever	346	407	398	680	437	375	419	398
Varicella (chickenpox)	†	†	164,114	182,927	141,495	154,248	183,990	188,396

* No cases of yellow fever were reported during 1970–1977.
† Not previously nationally notifiable.
§ No longer nationally notifiable.
¶ Case data after 1974 are not comparable with earlier years because of changes in reporting criteria that became effective in 1975.

Note: Rates <0.01 after rounding are listed as 0.00. Data in the *MMWR Summary of Notifiable Diseases, United States* might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and case definitions.

TABLE 12. Deaths from selected notifiable diseases — United States, 1996–1999

Cause of death	Cause of death codes ICD-10*	Cause of death codes ICD-9†	Estimated comparability ratio§	1996 No. of deaths allocated according to ICD-10¶	1996 No. of deaths allocated according to ICD-9**	1997 No. of deaths allocated according to ICD-10	1997 No. of deaths allocated according to ICD-9	1998 No. of deaths allocated according to ICD-10	1998 No. of deaths allocated according to ICD-9	1999 Number of deaths ICD-10
AIDS††	B20–B24	042–044	1.0824	33,695	31,130	17,877	16,516	14,532	13,426	14,802
Anthrax	A22	022	§§	§§	—	§§	—	§§	—	—
Botulism	A05.1	005.1	§§	§§	1	§§	2	§§	—	9
Brucellosis	A23	023	§§	§§	—	§§	1	§§	1	—
Chancroid	A57	099.0	§§	§§	—	§§	—	§§	—	—
Chlamydia trachomatis	A56	099.8	§§	§§	—	§§	—	§§	—	—
Cholera	A00	001	§§	§§	2	§§	—	§§	1	—
Cryptosporidiosis	A07.2	136.8	§§	§§	7	§§	4	§§	5	—
Cyclosporiasis	A07.8	136.8	§§	§§	—	§§	—	§§	—	—
Diphtheria	A36	032	§§	§§	—	§§	—	§§	1	1
Ehrlichiosis, human granulocytic	A79.8	083.8	§§	§§	—	§§	—	§§	—	1
Ehrlichiosis, human monocytic	A79.8	083.8	§§	§§	—	§§	—	§§	—	—
Encephalitis, California serogroup viral	A83.5	062.5	§§	§§	1	§§	1	§§	—	1
Eastern equine	A83.2	062.2	§§	§§	1	§§	2	§§	1	—
St. Louis	A83.3	062.3	§§	§§	—	§§	1	§§	—	2
Western equine	A83.1	062.1	§§	§§	—	§§	—	§§	1	—
Escherichia coli	A04.0–A04.4	005.8	§§	§§	—	§§	—	§§	—	7
Gonorrhea	A54	098	§§	§§	4	§§	3	§§	4	9
Haemophilus influenzae	A49.2	041.5	§§	§§	7	§§	7	§§	11	6
Hansen disease	A30	030	§§	§§	—	§§	2	§§	—	2
Hepatitis A	B15	070.0, 070.1	0.9328	107	115	115	123	98	105	134
Hepatitis B	B16, B18.0, B18.1	070.2, 070.3	0.6879	709	1,031	673	979	680	988	832
Hepatitis C	B17.1, B18.2	070.4–070.5	0.7114	1,586	2,230	1,840	2,586	2,289	3,218	3,763
Legionellosis	A48.1, A48.2	482.8	0.5273	88	166	110	208	94	178	78
Lyme disease	A69.2	104.8	§§	§§	—	§§	—	§§	—	7
Malaria	B50–B54	084	§§	§§	4	§§	7	§§	6	7
Measles	B05	055	§§	§§	1	§§	2	§§	—	2
Meningococcal disease	A39	036	0.9861	286	290	305	309	231	234	227
Mumps	B26	072	§§	§§	1	§§	—	§§	1	1
Pertussis	A37	033	§§	§§	4	§§	6	§§	5	7
Plague	A20	020	§§	§§	2	§§	—	§§	—	1
Poliomyelitis	A80	045	§§	§§	—	§§	—	§§	—	—
Psittacosis	A70	073	§§	§§	1	§§	—	§§	—	—
Q fever	A78	083.0	§§	§§	1	§§	—	§§	—	—
Rabies, human	A82	071	§§	§§	3	§§	4	§§	1	—
Rubella	B06	056	§§	§§	—	§§	—	§§	—	—
Rubella, congenital syndrome	P35.0	771.0	§§	§§	4	§§	4	§§	48	8
Salmonellosis	A02	003	0.8929	52	58	46	51	33	37	38
Shigellosis	A03	004	§§	§§	5	§§	5	§§	5	6
Rocky Mountain spotted fever	A77.0	082.0	§§	§§	6	§§	12	§§	3	5
Syphilis, all stages	A50–A53	090–097	0.7887	58	73	49	62	35	45	33
Tetanus	A35	037	§§	§§	1	§§	4	§§	7	7
Trichinosis	B75	124	§§	§§	—	§§	—	§§	—	—
Tuberculosis	A16–A19	010–018	0.8821	1,060	1,202	1,029	1,166	981	1,112	930
Typhoid fever	A01.0	002.0	§§	§§	1	§§	—	§§	—	–
Varicella (chickenpox)¶¶	B01	052	0.7848	64	81	78	99	64	81	48
Yellow fever	A95	060	§§	§§	1	§§	—	§§	—	1

* World Health Organization. *International Statistical Classification of Disease and Related Health Problems, Tenth Revision*, 1992.
† World Health Organization. *International Classification of Diseases, Ninth Revision*, 1975.
§ Unpublished estimates; see also Anderson RN, Minino AM, Hoyert DL, et al. Comparability of cause of death between ICD-9 and ICD-10: Preliminary estimates. CDC, National Center for Health Statistics. 2001; DHHS publication no. (PHS) 2001-1120. (National Vital Statistics Report Vol. 49, No. 2).
¶ Number of deaths modified with the comparability ratio for ICD-10 code.
** Number of deaths based on ICD-9 code; unmodified with the comparability ratio for ICD-10 code.
†† Acquired immunodeficiency syndrome. In 1987, the National Center for Health Statistics introduced ICD-9 categories 042–044 for classifying and coding human immunodeficiency virus (HIV) infection.
§§ Comparability ratio not calculated because it does not meet standards of reliability or precision.
¶¶ Varicella was removed from the nationally notifiable disease list in 1991. Many states continue to report these cases to CDC.

Source: National Center for Health Statistics. National Vital Statistics System, 1996–1999. Deaths are classified according to the *ICD-9* (1996-1998) and *ICD-10* (1999). Data for 2000 and 2001 currently are not available.

Selected Reading

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State and Territorial Epidemiologists and Laboratory Directors are acknowledged for their contributions to *CDC Surveillance Summaries*. The epidemiologists and laboratory directors listed below were in the positions shown as of April 2003.

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