

CDC
CENTERS FOR DISEASE CONTROL
AND PREVENTION

MMWRTM

MORBIDITY AND MORTALITY WEEKLY REPORT

Published November 20, 1998, for
1997 / Vol. 46 / No. 54

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in the United States, 1997
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Summary of Notifiable Diseases, United States

1997

DISTRIBUTION STATEMENT A
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Distribution Unlimited

19990714 045

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control
and Prevention (CDC)
Atlanta, Georgia 30333



The statistical summary of notifiable diseases in the United States is published to accompany each volume of the *Morbidity and Mortality Weekly Report* by the Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

SUGGESTED CITATION

Centers for Disease Control and Prevention. Summary of notifiable diseases, United States, 1997. MMWR 1997;46(54): [inclusive page numbers].

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Foreword

MMWR Summary of Notifiable Diseases, United States, 1997

This publication contains summary tables of the official statistics for the reported occurrence of nationally notifiable diseases in the United States for 1997. These statistics are collected and compiled from reports to the National Notifiable Diseases Surveillance System (NNDSS), which is operated by CDC in collaboration with the Council of State and Territorial Epidemiologists (CSTE). Because the dates of onset or diagnosis for notifiable diseases are not always reported, these surveillance data are presented by the week they were reported to CDC by public health officials in state and territorial health departments. These data are finalized and published in the *MMWR Summary of Notifiable Diseases, United States* 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. The annual publication of the *Summary* also documents which diseases are considered national priorities for notification and the annual number of cases of such diseases.

The Highlights section presents information on selected nationally notifiable and non-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 information regarding morbidity for each of the diseases considered nationally notifiable during 1997. The tables provide the number of cases of notifiable diseases reported to CDC for 1997, 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 as of July 25, 1998, unless otherwise noted. Because no cases of anthrax or yellow fever were reported in the United States during 1997, these nationally notifiable diseases do not appear in the tables in Part 1. Nationally notifiable diseases that are reportable in fewer than 40 states also do not appear in these tables. In all tables, leprosy is listed as Hansen disease, and tickborne typhus fever is listed as Rocky Mountain spotted fever (RMSF).

Part 2 contains graphs and maps. These graphs and maps 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 1966. It also includes a table enumerating deaths associated with specified notifiable diseases reported to the National Center for Health Statistics, CDC during 1987–1996.

Background

As of January 1, 1997, 52 infectious diseases were designated as notifiable at the national level. 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 (i.e., 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 Conference of State and Territorial Epidemiologists (CSTE), whose purpose was 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. However, reporting of nationally notifiable diseases to CDC by the states is voluntary. Reporting currently is mandated (i.e., by legislation or regulation) only at the state and local level. 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.

The list of 52 infectious diseases designated as notifiable at the national level during 1997 is as follows:

**The 52 Infectious Diseases Designated
as Notifiable at the National Level During 1997**

Acquired immunodeficiency syndrome	<i>Haemophilus influenzae</i> (Invasive Disease)	Rabies, animal
Anthrax	Hansen disease (leprosy)	Rabies, human
Botulism*	Hantavirus pulmonary syndrome	Rocky Mountain spotted fever
Brucellosis	Hemolytic uremic syndrome, post-diarrheal	Rubella
Chancroid*	Hepatitis A	Salmonellosis*
<i>Chlamydia trachomatis</i> , genital infection	Hepatitis B	Shigellosis*
Cholera	Hepatitis, C/non-A, non-B	Streptococcal disease, invasive, group A
Coccidioidomycosis*	HIV infection, pediatric	<i>Streptococcus pneumoniae</i> , drug-resistant*
Congenital rubella syndrome	Legionellosis	Streptococcal toxic-shock syndrome
Congenital syphilis	Lyme disease	Syphilis
Cryptosporidiosis	Malaria	Tetanus
Diphtheria	Measles (Rubeola)	Toxic-shock syndrome
Encephalitis, California	Meningococcal disease	Trichinosis
Encephalitis, eastern equine	Mumps	Tuberculosis
Encephalitis, St. Louis	Pertussis	Typhoid fever
Encephalitis, western equine	Plague	Yellow fever
<i>Escherichia coli</i> O157:H7	Poliomyelitis, paralytic	
Gonorrhea	Psittacosis	

NOTE: Although varicella is not a nationally notifiable disease, the Council of State and Territorial Epidemiologists recommends reporting of cases of this disease to CDC.

*Not currently published in the *MMWR* weekly tables.

Data Sources

Provisional data concerning the reported occurrence of notifiable diseases are published weekly in *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 this summary. Notifiable disease reports (which are published in the annual *MMWR Summary of Notifiable Diseases* only after approval by the appropriate epidemiologist from each submitting state or territory) are the authoritative and archival counts of cases. Data published in *MMWR Surveillance Summaries* or other surveillance reports produced by CDC programs, which are useful for detailed epidemiologic analyses, may not agree exactly with data reported in the annual *Summary of Notifiable Diseases* because of differences in the timing of reports, the source of the data, and the case definitions.

Data in this summary were derived primarily from reports transmitted to the Division of Public Health Surveillance and Informatics, Epidemiology Program Office, CDC, by the 50 state, two city, and five territorial health departments 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/phs.htm>.) Final data for other diseases are from the surveillance program records of the following CDC programs (requests for further information regarding these data should be directed to the source specified):

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 and laboratory data regarding botulism, *Escherichia coli* O157:H7, *Salmonella*, and *Shigella*)

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

Division of Viral and Rickettsial Diseases (animal rabies)

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, and 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 Virgin Islands, or the Commonwealth of the Northern Mariana Islands (CNMI). Disease totals from American Samoa were unavailable for 1997.

Population estimates for states are based on the July 1, 1997, post-censal estimates made by the U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census, Population Division, Population Branch, Press Release PLL91. Population estimates for territories are 1997 estimates from the Bureau of the Census, Press Releases CB98-54 and CB98-80.

Rates in this summary were 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

The data reported in this 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), if diagnosed by a clinician, are most likely reported accurately. 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 reporting also is influenced by the diagnostic facilities available; the control measures in effect; the public awareness of a specific disease; and the 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, the introduction of new diagnostic tests, or the 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. Risk markers can identify potential risk factors for investigation in future studies. Data regarding race and ethnicity also can be used to identify populations to target for prevention efforts. However, one also must use caution when drawing conclusions from reported data relating to race and ethnicity. Among certain races and ethnicities, there are likely to be differential patterns of access to health care, interest in seeking health care, and detection of disease that would lead to data not representative of disease incidence in these populations. In addition, not all data concerning race and ethnicity are collected uniformly for all diseases. For example, the Division of HIV/AIDS Prevention — Surveillance and Epidemiology and the Division of Sexually Transmitted Diseases Prevention in the National Center for HIV, STD, and TB Prevention (NCHSTP) collect information regarding race and ethnicity using a single variable. A person's racial and ethnic background is reported as either 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 1997

The Highlights section presents information on the public health importance of selected nationally notifiable and non-notifiable diseases, including a) domestic and 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.

Highlights for Selected Nationally Notifiable Diseases

Arboviral Encephalitis

The 1997 national total of 127 confirmed or probable California serogroup viral encephalitis cases (all of which were La Crosse encephalitis cases) is the fourth largest yearly total of such cases reported since 1964. The 73 case reports from West Virginia (57% of the national total) represent that state's largest total and an increase of 11% over its 1996 total. Much of the increase in reports from West Virginia may be attributable to this state's recent implementation of an active surveillance system for this disease. La Crosse encephalitis is endemic in the eastern United States, where it is associated with exposure to deciduous forests and *Aedes triseriatus* (the eastern tree-hole mosquito). A summertime/autumnal outbreak of St. Louis encephalitis in central Florida accounted for nine of the 13 cases reported nationally in 1997. The last major epidemic of St. Louis encephalitis in the United States (223 cases and 11 deaths) occurred in Florida in 1990. St. Louis encephalitis affects persons in portions of both the eastern and western United States. In Florida, the primary mosquito vector of St. Louis encephalitis virus is *Culex nigripalpus*. Fourteen cases of eastern equine encephalitis among humans were reported in 1997 from the South (12 cases), New England (one case), and the Upper Midwest (one case). Eastern equine encephalitis virus is typically transmitted to humans by various *Aedes* mosquito species. No cases of western equine encephalitis among humans have been reported nationally since 1994. The primary mosquito vector of western equine encephalitis virus in the western United States is *Culex tarsalis*.

Cryptosporidium

National reporting for cryptosporidiosis began in 1995 with 2,972 cases reported from 27 states. During 1996, as cryptosporidiosis became a reportable disease in an increased number of states, 2,426 cases were reported from 42 states. In 1997, a total of 2,566 cases were reported from 45 states. Because the diagnosis of cryptosporidiosis is often not considered, and because laboratories do not routinely test for *Cryptosporidium* infection, cryptosporidiosis continues to be underdiagnosed and underreported.

Diphtheria

Four cases of diphtheria were reported in the United States in 1997; two persons, both with localized mild illness, had culture-confirmed diphtheria. One confirmed case was caused by infection with a toxigenic strain of *Corynebacterium diphtheriae*, and was reported from a known endemic focus in South Dakota (*MMWR* 1997;46:506–10); one case caused by nontoxigenic *C. diphtheriae* was reported from Oregon. Two probable cases were reported from Nevada. Both case-patients had acute membranous pharyngitis; oropharyngeal specimens were positive for diphtheria toxin by polymerase chain reaction, but bacterial cultures of these specimens were negative.

In 1997, more than 7,000 cases of diphtheria were reported in an ongoing diphtheria epidemic in the New Independent States of the former Soviet Union. No importations were reported in the United States.

Haemophilus influenzae (Invasive Disease)

In 1997, a total of 260 cases of *Haemophilus influenzae* (Hi) invasive disease among children aged <5 years were reported. (Data were provided by the National Immunization Program and were based on date of onset, not *MMWR* week.) An estimated 20,000 cases of *Haemophilus influenzae* type b (Hib) invasive disease among children occurred annually prior to Hib vaccine licensure in 1987. (*JAMA* 1993;269:221–6) The dramatic decline is attributed to the widespread administration of the Hib vaccine to preschool-aged children. Of the 260 cases, 201 (77%) isolates were serotyped, and 82 (41%) of the isolates for which serotype was known were type b. Of the 82 cases of Hib invasive disease reported in children aged <5 years, 42 (51%) were aged <6 months, which is too young to have completed a three-dose primary Hib vaccination. However, 27 (68%) of the 40 children who were old enough (aged ≥6 months) to have completed a three-dose primary series before they developed Hib invasive disease were incompletely vaccinated or their vaccination status was unknown. These cases might have been prevented with age-appropriate vaccination.

Hantavirus Pulmonary Syndrome

In 1997, a total of 21 cases of Hantavirus pulmonary syndrome (HPS) were reported. HPS is a pan-American viral zoonosis caused by Sin Nombre virus and other New World hantaviruses, which in the United States, include Bayou virus, Black Creek Canal virus, and New York-1 virus. The identified rodent reservoirs for Sin Nombre, New York-1, Black Creek Canal, and Bayou viruses are, respectively, *Peromyscus maniculatus* (deer mouse), *Peromyscus leucopus* (white-footed mouse), *Sigmodon hispidus* (cotton rat), and *Oryzomys palustris* (rice rat). Cases of HPS have been found in the continental United States, Canada, Argentina, Brazil, Chile, Paraguay, and Uruguay. As of March 31, 1998, national surveillance for HPS has identified 179 confirmed cases in 29 states (case-fatality ratio = 44.7%).

Hemolytic Uremic Syndrome

Post-diarrheal hemolytic uremic syndrome (HUS) is a life-threatening illness characterized by hemolytic anemia, thrombocytopenia, and renal injury. Nearly all cases in the United States are caused by infection with *Shiga* toxin-producing *Escherichia coli*, with serotype O157:H7 being predominant. In 1997, the second year of national reporting, 20 states reported 93 cases of post-diarrheal HUS to CDC. By comparison, 18

states reported 104 cases in 1996. The median age of patients was 4 years (range: 1–89 years), with females accounting for 62% of patients overall. Illness was seasonal, with 50% of cases occurring during July through September.

Hepatitis A

In 1996, the Advisory Committee on Immunization Practices (ACIP) issued recommendations for the prevention of hepatitis A through active or passive immunization (*MMWR* 1996;45[No. RR-15]). The report provides recommendations for use of the hepatitis A vaccines (i.e., HAVRIX®, manufactured by SmithKline Beecham Biologicals, and VAQTA®, manufactured by Merck & Company, Inc.). For communities with high rates of hepatitis A and periodic outbreaks (peak rates: 700 reported cases per 100,000 population), routine vaccination of children aged 2 years and catch-up vaccination of older children is recommended. To control outbreaks in communities with intermediate rates of hepatitis A (i.e., 50–200 reported cases per 100,000 population), vaccination programs targeting subpopulations with the highest rates of disease may be considered. In these communities, ongoing routine vaccination of young children should be implemented to prevent future outbreaks.

Hepatitis C

Hepatitis C virus (HCV) infection is the most common bloodborne infection in the United States. Based on data from the CDC Sentinel Counties Study of Viral Hepatitis, it is estimated that as many as 180,000 new HCV infections occurred each year during the 1980s. Since 1989, the annual number of new infections has declined by 80%. However, in 1996, data from the third National Health and Nutrition Examination Survey, conducted from 1988 through 1994, indicated that approximately 4 million Americans (1.8%) are infected with HCV. Many of these chronically infected persons might not be aware of their infection or be clinically ill, because symptoms of hepatitis C-related chronic liver disease might not develop for 10–20 years after infection. However, such persons can infect others and are at risk for chronic liver disease or other HCV-related chronic diseases. Cirrhosis develops in 10%–20% of persons with HCV-related chronic hepatitis during the first two decades after infection, and 8,000–12,000 persons die from HCV-related chronic liver disease each year. CDC recently published new guidelines for HCV prevention and control (*MMWR* 1998;47[No. RR-19]).

HIV Infection in Children and Infants

In 1997, reports based on AIDS surveillance data indicated substantial declines in perinatally acquired AIDS, reflecting declining perinatal HIV transmission. HIV surveillance data indicated that the increasing use of zidovudine was temporally associated with this substantial decline in perinatally acquired AIDS (*MMWR* 1997;46:1086–92). These data demonstrate success in nationwide efforts to implement Public Health Service guidelines for use of zidovudine to reduce perinatal HIV transmission (*MMWR* 1994;43[No. RR-11]; *MMWR* 1998;47[No. RR-2]) and routine, voluntary prenatal HIV testing (*MMWR* 1995;44[No. RR-7]). States that conduct surveillance of perinatally exposed and infected children can evaluate the impact of the guidelines more completely and document resources needed to care for perinatally exposed infants. In 1997, a total of 30 states conducted surveillance of HIV infection in children, reporting 258 HIV-infected children who had not progressed to AIDS and 200 children who had

AIDS. These states also received 2,238 new reports of perinatally exposed children who required follow up with health-care providers to determine their HIV infection status.

Measles

A total of 138 laboratory-confirmed cases of measles were reported to CDC in 1997, which is the lowest number of measles cases reported in one year and is less than half the previous record low. Of the 138 cases reported, 57 (41%) were international importations, and exposure to these cases resulted in 17 (12%) additional cases. Thus, 74 (54%) cases were associated with importation. An additional seven cases had virologic evidence suggesting an imported measles virus. Fifty-four (41%) measles patients were aged <5 years, 39 (28%) were aged 5–19 years, and 42 (30%) were aged ≥20 years. Thirty-two patients (23%) reported having been vaccinated; seven (5%) received two doses. A total of 13 outbreaks were reported, with the largest involving eight cases. In 1997, no confirmed measles cases were reported from 21 states, and fewer than five cases were reported from 20 states and the District of Columbia.

Plague

In 1997, four plague cases among humans were reported in the United States (two cases in California, one in Arizona, and one in Colorado). One case was fatal and, like two fatal cases that occurred in 1996, septicemic plague was diagnosed postmortem. Each of these cases, which occurred in plague-endemic areas, illustrates the need for health-care providers to maintain a high level of awareness about the risks of human plague. Of the 350 cases reported in the United States from 1970 through 1997, approximately 80% were reported from the southwestern states of New Mexico, Arizona, and Colorado; 9% were reported from California; and nine other western states reported limited numbers of cases. Plague also occurs in animal populations in four other western states that have not reported cases among humans, including Kansas, where *Yersinia pestis*-infected prairie dog fleas were identified in 1997. This is the first report of plague in an animal in Kansas since 1950; however, a nearby county in Oklahoma experienced one case among a person in 1991, and other Great Plains states have reported epizootic activity in recent years (*MMWR* 1994;43:242–6). Internationally, outbreaks of rat-associated plague occurred in the port city of Mahajanga, Madagascar from 1995 through 1997. These are the first port-related outbreaks to be reported from that country in decades. Researchers reported the first case of multidrug-resistant *Y. pestis* in 1997. This isolate, which was obtained in 1995 from a case in Madagascar, contained a plasmid that conferred resistance to antibiotics commonly prescribed for plague treatment or prophylaxis (e.g., streptomycin, chloramphenicol, and tetracycline) (*N Engl J Med* 1997;337:677–80, 702–4).

Poliomyelitis

In 1997, the Advisory Committee on Immunization Practices (ACIP) recommended a change in routine childhood vaccination policy for polio in the United States. The previously recommended schedule of four doses of attenuated oral poliovirus vaccine (OPV) was changed to a sequential schedule of two doses of inactivated poliovirus vaccine (IPV) followed by two doses of OPV for routine vaccination of children. Since

1980, a total of 147 cases have been reported, of which 139 were associated with the use of OPV. The last imported case was reported in 1993.

Streptococcal Disease, Invasive, Group A

According to reports from active surveillance programs in five states (i.e., California, Connecticut, Georgia, Minnesota, and Oregon), the incidence of invasive group A streptococcal disease during 1997 was 4.1 cases/100,000 population; disease incidence ranged from 2.2 to 5.1 cases/100,000 population among the surveillance areas. Streptococcal toxic shock syndrome and necrotizing fasciitis accounted for approximately 6.9% and 7.7% of invasive cases, respectively. Overall case-fatality among patients with invasive group A streptococcal disease was 13%; case-fatality rates were higher among patients with streptococcal toxic shock syndrome and necrotizing fasciitis (43% and 21%, respectively). Risk factors for invasive group A streptococcal disease include elderly age, HIV infection, diabetes, cancer, alcohol abuse, and varicella infection.

***Streptococcus pneumoniae*, Drug-Resistant**

The proportion of drug-resistant *Streptococcus pneumoniae* isolates continues to increase, according to reports from active surveillance programs in seven states (i.e., California, Connecticut, Georgia, Maryland, Minnesota, Oregon, and Tennessee). During 1997, approximately 26% of pneumococcal isolates obtained from sterile sites were no longer susceptible to penicillin (mean inhibitory concentration [MIC] $\geq 0.1 \mu\text{g/mL}$). In 1997, the proportion of all isolates with high-level penicillin resistance (MIC $\geq 2 \mu\text{g/mL}$), increased from 12% in 1996 to 14.4%; a total of 7.2% of isolates had MICs $\geq 4 \mu\text{g/mL}$ compared with 5.4% in 1996. The resistant proportion varied widely by geographic region. To limit the contribution of unnecessary antimicrobial use to the spread of drug-resistant *S. pneumoniae*, CDC and the American Academy of Pediatrics issued recommendations for judicious use of antimicrobial agents for upper-respiratory-tract infections among children (*Pediatrics* 1998;101[suppl]). Educational materials concerning the principles of judicious antimicrobial use can be obtained by calling the National Center for Infectious Diseases at (404) 639-4702 for an order form.

Tetanus

Fifty cases of tetanus were reported in 1997. During 1995–1997, an average annual incidence of 41 cases were reported, the lowest ever reported since national tetanus surveillance began in 1947. The average annual incidence of 0.15 cases per million population represents a slight decline from the incidence of 0.2 cases per million population reported during 1991–1994.

Highlights for Selected Non-Notifiable Diseases

Cyclosporiasis

In 1997, several outbreaks of cyclosporiasis associated with various types of fresh produce (e.g., raspberries, mesclun lettuce, and basil) occurred in the United States. In the largest outbreak, which was associated with consumption of fresh raspberries, 41 clusters with a total of 762 cases (25% were laboratory confirmed) were reported by 13 states, the District of Columbia, and one province in Canada.

Dengue

Fifty-six laboratory-positive cases of dengue were imported into the United States in 1997 and diagnosed at the CDC Dengue Branch. This number represents a 30% increase from the number of laboratory-confirmed cases reported in 1996 (n=43). Similarly, the total number of dengue and dengue hemorrhagic fever (DHF) cases reported by Pan American Health Organization member countries in 1997 (n=364,945) was 46% higher than the 1996 total (n=250,707). Autochthonous dengue cases (n=3) were documented in south Texas again in 1997, underscoring the risk of dengue transmission in southern gulf coast states where mosquito vectors occur. After a 15-year absence, dengue cases were reported from Cuba in 1997. The municipality of Santiago de Cuba experienced an outbreak with 2,946 laboratory-diagnosed cases and 205 DHF cases, which resulted in 12 deaths.

HIV Infection in Adults

In June 1997, HIV-infection reporting for adults (i.e., persons aged ≥ 13 years) was added to the list of nationally notifiable diseases at a Council of State and Territorial Epidemiologists (CSTE) meeting. During 1997, reports based on acquired immunodeficiency syndrome (AIDS) surveillance data highlighted substantial declines in AIDS incidence and deaths. As a result of improvements in treatment and care of persons infected with the human immunodeficiency virus (HIV), surveillance of AIDS alone no longer accurately reflects the magnitude or direction of the epidemic. Data concerning persons in whom HIV infection is diagnosed before AIDS is diagnosed are needed to determine populations that could benefit from prevention and treatment services. CSTE recommends that all states and territories implement confidential HIV infection reporting based on methods that provide accurate and representative data for all persons confidentially diagnosed with HIV infection.

Influenza A (H5N1)

In May 1997, the first known case of disease among humans caused by influenza A (H5N1) virus occurred in a previously healthy 3-year-old child in Hong Kong; this child died from his illness. An additional 17 cases (including five deaths) were detected in November and December 1997. All cases occurred coincident with outbreaks of highly pathogenic avian influenza A (H5N1) virus among poultry. At the end of December, Hong Kong authorities initiated the slaughter of all chickens in Hong Kong and, since then, no additional cases of influenza A (H5N1) virus have been detected among humans despite enhanced surveillance. The pandemic potential of influenza A (H5N1) viruses remains unknown. No cases of H5N1 infection were reported in the United States.

Tularemia

Tularemia was removed from the nationally notifiable disease list in 1995. However, as of January 1998, a total of 36 states maintained tularemia as a notifiable condition. Based on a telephone survey of state departments of health conducted from 1995 through 1997, a total of 313 cases of tularemia were reported by 43 states (119 cases in 1995, 89 cases in 1996, and 105 cases in 1997). Of these, 155 (49%) were reported from Missouri, Oklahoma, Kansas, and Arkansas.

Vancomycin-Resistant Enterococci (VRE)

The magnitude and impact of vancomycin-resistant enterococci (VRE) in the United States are demonstrated by CDC's National Nosocomial Infections Surveillance (NNIS) system, which includes more than 275 U.S. hospitals. Additional data are available on the Internet at <http://www.cdc.gov/hcidod/hip/Surveill/surveill.htm>. During 1989–1997, the percentage of enterococci resistant to vancomycin isolated from patients in intensive care units with nosocomial infections increased from 0.4% to 23.2% (Table). The percentage of VRE isolated from patients in noncritical care units with nosocomial infections increased from 0.3% to 15.4%.

TABLE: Percentage of nosocomial enterococci reported as resistant to vancomycin, by health-care setting and year*

Year	Intensive care unit (ICU) [†]	Non-ICU [†]
1989	0.4	0.3
1990	1.5	0.8
1991	5.3	2.9
1992	7.1	2.9
1993	11.6	4.8
1994	13.6	9.0
1995	12.8	12.0
1996	16.6	11.6
1997	23.2	15.4

*N>2000 isolates for each year.

[†]P<0.0001, chi-square for linear trend.

Source: NNIS System, Hospital Infections Program, National Center for Infectious Diseases

PART 1:

Summaries of Notifiable Diseases in the United States

EXPLANATION OF SYMBOLS USED IN TABLES, GRAPHS, AND MAPS

Data not available.....	NA
Report of disease is not required in that jurisdiction (not notifiable)	NN
No reported cases	-

SUMMARY TABLES — 1997

NOTIFIABLE DISEASES — Summary of reported cases, by month, United States, 1997

Name	Total	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Unk.
AIDS*	58,492	4,682	5,066	5,364	4,586	5,072	5,234	4,281	4,803	4,964	4,636	4,016	5,788	-
Botulism, total	132	9	5	8	2	14	9	19	16	8	8	20	14	-
Brucellosis	98	20	1	6	4	7	6	10	13	8	3	9	11	-
Chancroid [†]	243	.....	65	.....	80	.....	58	.....	58	.....	40	.....	40	-
Chlamydia [‡]	526,671	19,217	.....	.....	130,697	.....	.....	135,403	.....	.....	141,354	.....	.....	-
Cholera	6	-	-	-	-	-	-	-	2	-	2	-	1	-
Cryptosporidiosis	2,566	146	94	154	121	152	117	211	358	311	293	310	299	-
Diphtheria	4	-	-	2	1	1	1	-	-	-	-	-	-	-
<i>Escherichia coli</i> O157:H7	2,555	82	73	107	71	173	190	400	432	335	281	196	215	-
Gonorrhea [†]	324,907	74,417	.....	.....	76,126	.....	.....	87,378	.....	.....	86,986	.....	.....	-
Haemophilus influenzae, invasive	1,182	71	86	123	98	116	103	69	82	76	58	103	177	-
Hansen disease (leprosy)	122	6	4	12	11	12	5	4	7	11	2	19	29	-
Hepatitis A	30,021	1,716	2,184	2,033	3,124	2,163	2,031	2,028	2,517	2,526	2,524	3,630	-	-
Hepatitis B	10,416	696	637	947	736	1,022	774	731	955	809	735	923	1,451	-
Hepatitis, C/Hn-A non-B	3,816	273	257	322	246	384	291	304	370	319	242	312	496	-
Legionellosis	1,163	61	84	72	63	83	69	75	116	112	127	152	149	-
Lyme disease	12,801	512	254	390	293	612	724	1,638	3,197	1,944	1,057	988	1,192	-
Malaria	100	124	98	111	100	168	181	188	279	160	147	181	264	-
Measles (rubella)	158	3	3	9	14	31	10	21	13	9	11	3	11	-
Meninopococcal disease	3,398	138	348	469	282	360	248	175	184	171	168	230	535	-
Mumps	683	32	63	72	63	101	57	25	37	61	45	72	72	-
Pertussis (whooping cough)	6,554	607	403	512	537	475	404	393	543	475	397	740	1,078	-
Plague	4	-	-	-	-	1	1	-	-	1	-	1	-	-
Poliomyelitis, paralytic	3	1	-	-	-	1	-	-	-	-	-	-	1	-
Pituitary	33	2	2	4	5	5	2	-	4	3	2	-	4	-
Rabies, animal	8,105	268	422	667	741	781	678	559	830	832	862	707	718	-
Rabies, human	2	-	1	-	-	-	-	-	-	-	-	-	1	-
Rocky Mountain spotted fever	409	20	7	14	11	24	58	54	87	48	45	25	16	-
German measles	18	10	4	7	10	30	34	36	7	10	17	1	15	-
Rubella, congenital syndrome	5	-	-	1	-	1	-	-	-	1	-	-	2	-
Salmonellosis	41,901	1,663	2,030	2,544	2,351	3,391	3,175	3,626	5,398	4,364	3,961	4,219	5,779	-
Shingellosis	23,117	1,572	1,200	1,301	1,064	1,615	1,522	1,694	2,717	2,166	2,100	2,792	3,374	-
Syphilis, total all stages [†]	46,540	11,872	2,264	.....	13,007	.....	.....	11,371	.....	.....	10,290	.....	.....	-
Primary and secondary [‡]	8,550	.....	331	.....	2,252	.....	.....	2,198	.....	.....	1,836	.....	.....	-
Congenital <1 year [‡]	1,049	5	3	5	2	8	5	4	243	2	2	7	4	-
Tetanus	157	15	9	13	14	13	9	12	16	12	10	12	22	-
Toxic-shock syndrome	13	5	-	-	-	-	-	-	4	-	-	-	4	-
Trichinosis	19,851	794	1,285	1,630	1,790	1,813	1,553	1,697	1,644	1,583	1,601	1,442	3,019	-
Tuberculosis [§]	385	9	20	28	17	33	25	23	43	44	35	36	52	-
Typhoid fever	365	10,792	15,484	11,394	17,909	6,744	2,665	1,370	2,159	3,069	6,748	14,930	-	-
Varicella (chickenpox)**	98,727	5,463	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	-

* The 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) as of December 31, 1997.

[‡]Cases were updated through the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of July 13, 1998.

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

[¶]Cases were updated through the Division of Tuberculosis Elimination, NCHSTP, as of April 15, 1998.

** Not nationally notifiable.

SUMMARY TABLES — 1997

NOTIFIABLE DISEASES — Reported cases, by geographic division and area, United States, 1997

Area	Total resident population (in thousands)	AIDS*	Botulism			<i>Chlamydia trachomatis</i> infection†	
			Foodborne	Infant	Brucellosis	Chancroid†	infection†
United States	267,637	58,492	31	79	98	243	526,671
New England	13,379	2,372	—	—	1	4	18,433
Maine	1,242	51	—	—	—	—	1,066
N.H.	1,173	55	—	—	—	—	816
Vt.	589	29	—	—	—	NN	434
Mass.	6,118	863	—	—	1	4	7,984
R.I.	987	152	—	—	—	—	2,069
Conn.	3,270	1,222	—	—	—	—	6,064
Mid. Atlantic	38,210	18,327	—	17	3	119	58,653
Upstate N.Y.	10,828	3,858	—	2	1	—	NN
N.Y. City	7,309	9,331	—	—	—	119	28,468
N.J.	8,053	3,226	—	3	—	—	10,347
Pa.	12,020	1,912	—	12	2	—	19,838
E.N. Central	43,890	4,350	1	6	12	8	86,404
Ohio	11,186	848	—	3	2	3	22,827
Ind.	5,864	523	—	—	—	—	9,600
Ill.	11,996	1,842	1	1	7	5	23,024
Mich.	9,774	882	—	—	3	—	21,399
Wis.	5,170	255	NA	2	NA	—	9,554
W.N. Central	18,571	1,166	—	—	7	—	32,968
Minn.	4,686	214	—	—	—	—	6,631
Iowa	2,852	101	—	NN	4	—	4,907
Mo.	5,402	577	—	—	2	—	12,308
N. Dak.	641	13	—	—	NN	NN	902
S. Dak.	738	11	—	—	—	—	1,450
Nebr.	1,657	91	—	—	1	—	2,767
Kans.	2,595	159	—	—	—	—	4,003
S. Atlantic	48,230	13,858	1	3	8	30	106,486
Del.	732	231	—	—	—	—	2,613
Md.	5,094	1,875	—	—	—	1	13,763
D.C.	529	998	—	—	1	—	3,069
Va.	6,734	1,175	—	—	1	1	11,615
W. Va.	1,816	130	—	2	—	—	3,108
N.C.	7,425	850	1	—	3	9	17,108
S.C.	3,760	779	—	—	—	15	12,511
Ga.	7,486	1,722	—	1	1	1	15,911
Fla.	14,654	6,098	—	—	2	3	26,788
E.S. Central	16,326	2,062	—	—	2	2	35,437
Ky.	3,908	361	—	—	1	—	6,332
Tenn.	5,368	784	—	—	1	1	12,502
Ala.	4,319	570	—	—	—	1	8,704
Miss.	2,731	347	—	—	—	—	7,899
W.S. Central	29,631	6,337	1	11	20	57	72,139
Ark.	2,523	242	—	1	1	1	2,503
La.	4,352	1,094	—	1	—	3	11,545
Okla.	3,317	283	—	—	—	—	7,416
Tex.	19,439	4,718	1	9	19	53	50,675
Mountain	16,483	1,850	1	8	8	1	29,216
Mont.	879	41	—	—	—	—	1,146
Idaho	1,210	52	—	2	—	—	1,709
Wyo.	480	16	—	—	2	1	635
Colo.	3,893	380	—	—	2	—	7,196
N. Mex.	1,730	169	—	1	1	—	4,021
Ariz.	4,555	448	1	2	3	—	10,783
Utah	2,059	152	—	2	—	—	1,774
Nev.	1,677	592	—	1	—	—	1,952
Pacific	42,917	8,121	27	34	37	22	86,935
Wash.	5,610	641	3	—	3	2	9,574
Oreg.	3,243	305	3	2	1	1	5,270
Calif.	32,268	7,029	2	29	30	19	68,647
Alaska	609	52	19	—	—	—	1,615
Hawaii	1,187	94	—	3	3	—	1,829
Guam	145	2	—	—	—	—	368
PR.	3,827	2,040	—	—	—	1	2,123
V.I.	114	99	NA	NA	NA	NA	14
American Samoa	60	—	NA	NA	NA	NA	NA
C.N.M.I.	63	1	—	—	—	NA	NA

*Totals reported to Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), as of December 31, 1997. Total includes 49 cases in persons with unknown state of residence.

†Cases were updated through the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of July 13, 1998.

SUMMARY TABLES — 1997

NOTIFIABLE DISEASES — Reported cases, by geographic division and area, United States, 1997 (continued)

Area	Cholera	Cryptosporidiosis	Diphtheria	<i>Escherichia coli</i> O157:H7		<i>Haemophilus influenzae</i> (Invasive Disease)	
				NETSS*	PHLIS†	Gonorrhea‡	
United States	6	2,566	4	2,555	1,658	324,907	1,162
New England	—	166	—	197	133	5,889	67
Maine	—	34	—	19	—	66	5
N.H.	—	6	—	15	16	96	13
Vt.	—	18	—	8	3	53	3
Mass.	—	62	—	99	95	2,225	40
R.I.	—	4	—	12	1	422	4
Conn.	—	42	—	44	18	3,027	2
Mid. Atlantic	—	528	—	167	56	39,947	184
Upstate N.Y.	—	328	—	111	—	6,801	69
N.Y. City	—	169	—	20	9	15,592	42
N.J.	—	31	—	36	27	7,587	53
Pa.	—	NN	—	NN	20	9,967	20
E.N. Central	1	523	—	574	302	59,591	172
Ohio	—	38	—	108	55	14,961	86
Ind.	—	46	—	82	49	6,155	24
Ill.	—	73	—	76	40	18,423	42
Mich.	1	46	—	152	108	15,736	19
Wis.	NN	320	—	156	50	4,316	1
W.N. Central	1	424	1	503	417	14,860	75
Minn.	1	242	—	199	210	2,417	57
Iowa	—	71	—	114	76	1,311	6
Mo.	—	38	—	58	69	7,941	8
N. Dak.	—	15	—	15	12	68	—
S. Dak.	—	23	1	29	37	173	3
Nebr.	—	21	—	58	—	1,210	1
Kans.	—	14	—	30	13	1,740	—
S. Atlantic	—	289	—	222	151	93,011	188
Del.	—	8	—	5	4	1,273	—
Md.	—	15	—	28	16	11,568	66
D.C.	—	—	—	2	—	4,557	—
Va.	—	NN	—	NN	46	8,731	15
W. Va.	—	1	—	NN	1	957	4
N.C.	—	NN	—	74	40	16,888	21
S.C.	—	—	—	13	9	11,487	5
Ga.	—	74	—	45	—	18,471	42
Fla.	—	191	—	55	35	19,079	35
E.S. Central	—	47	—	101	56	35,409	58
Ky.	—	20	—	30	—	4,027	8
Tenn.	—	17	—	50	40	11,023	32
Ala.	—	NN	—	14	13	12,032	15
Miss.	—	10	—	7	3	8,327	3
W.S. Central	1	88	—	83	33	46,532	60
Ark.	—	10	—	10	11	4,382	3
La.	—	23	—	18	12	10,782	19
Oklahoma	—	12	—	13	7	4,756	33
Tex.	1	43	—	42	3	26,612	5
Mountain	1	141	2	275	152	8,084	94
Mont.	—	5	—	21	9	66	1
Idaho	—	NN	—	38	25	158	1
Wyo.	—	4	—	15	13	54	4
Colo.	—	25	—	83	57	2,320	23
N. Mex.	—	67	—	7	6	857	9
Ariz.	1	20	—	42	31	3,802	35
Utah	—	—	—	57	—	278	3
Nev.	—	20	2	12	11	549	18
Pacific	2	360	1	433	358	21,584	264
Wash.	—	NN	—	150	147	1,968	7
Oreg.	—	32	1	87	98	773	38
Calif.	2	328	—	184	99	17,941	203
Alaska	—	—	—	12	5	392	8
Hawaii	—	NN	—	NN	9	510	8
Guam	—	—	—	NN	—	47	—
P.R.	—	—	—	5	—	526	—
V.I.	NA	NA	—	NA	—	40	—
American Samoa	NA	NA	NA	NA	NA	NA	NA
C.N.M.I.	—	—	—	NN	—	NA	6

*National Electronic Telecommunications System for Surveillance.

†Public Health Laboratory Information System. Cases were updated through the National Center for Infectious Diseases as of August 10, 1998.

‡Cases were updated through the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of July 13, 1998.

SUMMARY TABLES — 1997

NOTIFIABLE DISEASES — Reported cases, by geographic division and area, United States, 1997 (continued)

Area	Hansen disease (leprosy)	Hepatitis			Legionel- losis	Lyme disease	Malaria
		A	B	C/non-A, non-B			
United States	122	30,021	10,416	3,816	1,163	12,801	2,001
New England	—	650	190	58	93	3,111	101
Maine	NN	66	6	—	3	34	1
N.H.	—	35	18	—	7	39	10
Vt.	NN	15	11	4	13	8	2
Mass.	—	254	77	46	32	291	33
R.I.	—	131	22	8	18	442	13
Conn.	—	149	56	—	20	2,297	42
Mid. Atlantic	14	2,124	1,417	364	253	7,556	519
Upstate N.Y.	1	395	363	279	79	3,149	81
N.Y. City	10	907	460	—	27	178	310
N.J.	1	316	249	NA	30	2,041	88
Pa.	2	506	345	85	117	2,188	40
E.N. Central	2	3,089	1,501	536	347	593	169
Ohio	—	332	94	20	120	40	19
Ind.	—	330	99	12	57	33	18
Ill.	—	868	284	86	35	13	72
Mich.	2	1,372	458	392	91	27	44
Wis.	NN	187	566	26	44	480	16
W.N. Central	—	2,300	532	66	75	299	79
Minn.	—	243	62	7	9	256	42
Iowa	—	490	44	29	12	8	10
Mo.	—	1,151	360	10	26	28	16
N. Dak.	NN	14	7	4	2	—	3
S. Dak.	—	27	1	—	4	1	3
Nebr.	—	113	26	3	15	2	1
Kans.	—	262	32	13	7	4	4
S. Atlantic	7	2,413	1,603	297	146	792	383
Del.	—	31	7	—	13	109	5
Md.	1	187	172	12	23	494	85
D.C.	—	36	30	—	5	10	20
Va.	1	250	137	27	34	67	73
W. Va.	—	12	16	18	NN	10	1
N.C.	1	211	265	51	14	34	21
S.C.	1	110	99	40	8	3	19
Ga.	—	764	224	NA	6	9	57
Fla.	3	812	653	149	43	56	102
E.S. Central	2	679	759	383	58	103	40
Ky.	—	79	44	17	13	20	13
Tenn.	2	417	454	241	33	45	11
Ala.	—	87	80	13	4	11	10
Miss.	—	96	181	112	8	27	6
W.S. Central	27	6,445	1,627	680	47	145	146
Ark.	2	223	107	15	2	27	5
La.	1	266	208	276	9	13	21
Okla.	—	1,445	67	10	4	45	9
Tex.	24	4,511	1,245	379	32	60	111
Mountain	3	4,326	870	342	69	15	67
Mont.	—	71	12	24	1	—	2
Idaho	—	150	54	86	2	4	1
Wyo.	—	35	25	83	1	3	2
Colo.	—	402	147	38	19	—	30
N. Mex.	—	351	257	61	3	1	8
Ariz.	—	2,330	202	26	18	4	12
Utah	1	550	93	5	18	1	3
Nev.	2	437	80	19	7	2	9
Pacific	67	7,995	1,917	1,090	75	187	497
Wash.	1	1,015	115	42	12	11	49
Oreg.	—	376	119	4	—	20	25
Calif.	40	6,422	1,657	862	61	154	405
Alaska	—	34	15	—	—	2	5
Hawaii	26	148	11	182	2	—	13
Guam	—	—	3	—	—	—	—
PR.	—	273	843	—	—	—	6
V.I.	NA	8	25	1	5	NA	1
American Samoa	NA	NA	NA	NA	NA	NA	NA
C.N.M.I.	1	1	48	2	—	—	—

SUMMARY TABLES — 1997

NOTIFIABLE DISEASES — Reported cases, by geographic division and area, United States, 1997 (continued)

Area	Measles		Meningo-	Mumps	Pertussis	Plague	Polio-
	Indigenous	Imported*	coccal disease				myelitis, paralytic
United States	81	57	3,308	683	6,564	4	3
New England	11	8	209	14	1,096	—	—
Maine	—	1	19	—	26	—	—
N.H.	1	—	17	1	150	—	—
Vt.	—	—	4	—	283	—	—
Mass.	10	6	100	4	582	—	—
R.I.	—	—	24	8	19	—	—
Conn.	—	1	45	1	36	—	—
Mid. Atlantic	18	9	357	66	503	—	—
Upstate N.Y.	2	3	97	16	214	—	—
N.Y. City	8	3	57	4	78	—	—
N.J.	3	—	75	8	14	—	—
Pa.	5	3	128	38	197	—	—
E.N. Central	6	4	499	99	714	—	—
Ohio	—	—	164	35	165	—	—
Ind.	—	—	60	15	104	—	—
Ill.	6	1	156	17	155	—	—
Mich.	—	2	72	28	71	—	—
Wis.	—	1	47	4	219	NN	NN
W.N. Central	14	3	248	19	890	—	—
Minn.	5	3	41	7	547	—	—
Iowa	—	—	47	10	207	—	—
Mo.	1	—	106	—	80	—	—
N. Dak.	—	—	2	—	2	—	—
S. Dak.	8	—	6	—	5	—	—
Nebr.	—	—	20	1	16	—	—
Kans.	—	—	26	1	33	—	—
S. Atlantic	4	14	578	85	446	—	1
Del.	—	—	5	—	1	—	—
Md.	—	2	42	1	119	—	—
D.C.	—	2	12	—	3	—	—
Va.	—	1	60	21	59	—	—
W. Va.	1	—	19	—	6	—	—
N.C.	—	2	97	12	118	—	—
S.C.	—	1	64	11	32	—	—
Ga.	—	1	108	11	18	—	—
Fla.	3	5	171	29	90	—	1
E.S. Central	—	1	242	34	159	—	—
Ky.	—	—	50	3	74	—	—
Tenn.	—	—	77	8	40	—	—
Ala.	—	1	85	9	34	—	—
Miss.	—	—	30	14	11	—	—
W.S. Central	3	5	335	98	376	—	1
Ark.	—	—	38	3	62	—	—
La.	—	—	57	17	21	—	—
Okl.	—	1	45	3	60	—	—
Tex.	3	4	195	75	233	—	1
Mountain	6	2	189	61	1,333	2	—
Mont.	—	—	8	—	18	—	—
Idaho	—	—	15	6	570	—	—
Wyo.	—	—	3	1	7	—	—
Colo.	—	—	51	3	415	1	—
N. Mex.	—	—	31	NN	198	—	—
Ariz.	5	—	44	34	45	1	—
Utah	—	1	17	8	29	—	—
Nev.	1	1	20	9	51	—	—
Pacific	19	11	651	207	1,047	2	1
Wash.	1	1	115	21	481	—	—
Oreg.	—	—	124	NN	48	—	—
Calif.	16	8	402	151	483	2	1
Alaska	—	—	3	8	16	—	—
Hawaii	2	2	7	27	19	—	—
Guam	—	—	1	1	—	—	—
P.R.	—	—	8	7	—	—	—
V.I.	—	—	1	1	—	NA	—
American Samoa	NA	NA	NA	NA	NA	NA	NA
C.N.M.I.	1	—	—	4	—	—	—

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

SUMMARY TABLES — 1997

NOTIFIABLE DISEASES — Reported cases, by geographic division and area, United States, 1997 (continued)

Area	Psitta-cosis	Rabies			Rubella			Salmonel-llosis	Shigel-llosis
		Animal	Human	RMSF*	Rubella	Cong. syndrome			
United States	33	8,105	2	409	181	5	41,901	23,117	
New England	1	1,257	-	5	6	-	2,348	592	
Maine	1	227	-	-	-	-	137	15	
N.H.	-	49	-	-	-	-	151	54	
Vt.	-	113	-	-	-	-	88	11	
Mass.	-	282	-	1	1	-	1,259	316	
R.I.	-	42	-	1	-	-	167	95	
Conn.	-	544	-	3	5	-	546	101	
Mid. Atlantic	5	1,722	-	39	40	-	6,505	3,168	
Upstate N.Y.	3	1,264	-	8	11	-	1,649	801	
N.Y. City	-	NA	-	6	29	-	1,796	956	
N.J.	-	190	-	9	-	-	1,501	625	
Pa.	2	268	-	16	-	-	1,559	786	
E.N. Central	4	203	-	19	6	-	6,207	2,552	
Ohio	-	116	-	12	-	-	1,545	835	
Ind.	-	13	-	3	-	-	590	88	
Ill.	-	20	-	3	2	-	1,935	1,163	
Mich.	4	28	-	-	-	-	906	346	
Wis.	NA	26	NA	1	4	NN	1,231	120	
W.N. Central	2	537	-	35	2	-	2,287	908	
Minn.	1	70	-	1	-	-	632	138	
Iowa	-	160	-	1	-	-	297	90	
Mo.	1	31	-	24	2	-	568	222	
N. Dak.	NN	91	-	-	-	-	69	10	
S. Dak.	-	94	-	2	-	-	90	31	
Nebr.	-	2	-	-	-	-	185	284	
Kans.	-	89	-	7	-	-	446	133	
S. Atlantic	7	3,109	-	136	79	1	8,475	4,499	
Del.	1	67	-	-	-	-	101	35	
Md.	1	603	-	20	-	-	1,231	423	
D.C.	-	5	-	-	1	-	115	47	
Va.	-	678	-	23	1	-	1,120	416	
W. Va.	-	89	-	3	-	-	133	27	
N.C.	1	879	-	35	59	-	1,226	387	
S.C.	1	186	-	36	15	-	603	87	
Ga.	-	324	-	11	-	-	1,356	1,131	
Fla.	3	278	-	8	3	1	2,590	1,946	
E.S. Central	-	271	-	91	1	-	1,771	1,127	
Ky.	-	29	-	5	-	-	373	449	
Tenn.	-	149	-	40	-	-	443	291	
Ala.	-	88	-	9	1	-	470	272	
Miss.	-	5	-	37	NN	-	485	115	
W.S. Central	-	439	-	69	12	-	4,246	4,252	
Ark.	-	56	-	31	-	-	445	273	
La.	-	7	-	5	-	-	617	182	
Okla.	-	113	-	29	-	-	391	293	
Tex.	-	263	-	4	12	-	2,793	3,504	
Mountain	3	197	1	12	7	1	2,587	1,913	
Mont.	-	52	1	4	-	-	63	11	
Idaho	-	-	-	5	2	-	141	79	
Wyo.	-	31	-	1	-	-	49	5	
Colo.	3	34	-	-	-	-	608	258	
N. Mex.	-	13	-	-	-	-	311	331	
Ariz.	-	53	-	1	5	1	853	1,076	
Utah	-	6	-	1	-	-	271	101	
Nev.	-	8	-	-	-	-	291	52	
Pacific	11	370	1	3	28	3	7,475	4,106	
Wash.	1	-	1	-	5	-	680	318	
Oreg.	2	14	-	1	-	-	368	189	
Calif.	8	327	-	2	14	3	5,993	3,528	
Alaska	-	29	-	-	NN	-	50	6	
Hawaii	-	-	-	-	9	-	384	65	
Guam	-	-	-	-	-	-	24	35	
P.R.	-	71	-	-	-	-	838	70	
V.I.	NA	NA	NA	NA	-	-	10	2	
American Samoa	NA	NA	NA	NA	NA	NA	NA	NA	
C.N.M.I.	-	-	-	-	-	-	43	34	

*Rocky Mountain spotted fever.

SUMMARY TABLES — 1997

NOTIFIABLE DISEASES — Reported cases, by geographic division and area, United States, 1997 (continued)

Area	Syphilis*			Tetanus	Toxic-shock syndrome	Trich-inosis	Tuber-culosis†	Typhoid fever
	Cong. (<1 yr.)	Primary & secondary	All stages					
United States	1,049	8,550	46,540	50	157	13	19,851	365
New England	4	144	1,172	—	5	—	478	21
Maine	—	2	13	—	1	—	21	—
N.H.	—	—	23	—	3	—	17	—
Vt.	—	—	1	—	—	—	6	1
Mass.	2	78	731	—	1	—	268	19
R.I.	—	2	84	—	—	—	38	1
Conn.	2	62	320	—	—	—	128	—
Mid. Atlantic	220	412	7,950	6	20	2	3,511	101
Upstate N.Y.	21	41	684	3	10	—	535	21
N.Y. City	78	97	4,955	—	4	—	1,730	49
N.J.	84	151	1,129	2	—	2	718	29
Pa.	37	123	1,182	1	6	—	528	2
E.N. Central	118	1,046	4,336	2	46	4	1,932	53
Ohio	10	218	761	—	2	1	286	5
Ind.	3	151	522	—	4	1	168	3
Ill.	72	435	1,953	2	12	—	974	28
Mich.	26	153	785	—	20	1	374	7
Wis.	7	89	315	NA	8	1	130	10
W.N. Central	12	172	874	2	28	1	614	5
Minn.	—	16	124	1	10	—	161	1
Iowa	—	7	72	1	3	—	74	—
Mo.	10	114	494	—	8	1	248	1
N. Dak.	—	—	—	—	1	—	12	—
S. Dak.	—	1	7	—	1	—	19	—
Nebr.	—	5	32	—	4	—	22	1
Kans.	2	29	145	—	1	—	78	2
S. Atlantic	201	3,177	13,253	6	15	—	3,780	48
Del.	2	22	113	—	1	—	39	—
Md.	56	891	2,453	1	—	—	340	5
D.C.	12	117	645	1	1	—	110	—
Va.	6	236	1,103	—	1	—	350	5
W. Va.	—	1	19	1	—	—	54	2
N.C.	22	721	2,206	1	1	—	463	5
S.C.	15	378	1,135	1	3	—	328	3
Ga.	15	515	2,833	—	1	—	696	8
Fla.	73	296	2,746	1	7	—	1,400	20
E.S. Central	104	1,682	5,689	3	3	1	1,315	2
Ky.	5	135	403	—	—	—	198	—
Tenn.	30	747	2,366	2	2	1	467	1
Ala.	29	410	1,481	—	1	—	405	1
Miss.	40	390	1,439	1	NN	—	245	—
W.S. Central	213	1,330	8,159	11	1	—	2,810	25
Ark.	31	173	562	1	1	—	200	—
La.	22	364	1,808	2	—	—	406	2
Okla.	9	117	405	2	—	—	212	3
Tex.	151	676	5,384	6	—	—	1,992	20
Mountain	12	172	1,045	6	18	4	644	9
Mont.	—	—	5	1	—	4	18	1
Idaho	—	1	24	—	1	—	15	—
Wyo.	—	—	1	—	—	—	2	—
Colo.	—	15	154	2	9	—	94	4
N. Mex.	—	9	103	—	—	—	71	—
Ariz.	12	132	600	—	4	—	296	2
Utah	—	5	56	3	3	—	36	—
Nev.	—	10	102	—	1	—	112	2
Pacific	165	415	4,062	14	21	1	4,767	101
Wash.	1	17	132	1	5	—	305	7
Oreg.	1	10	48	2	—	—	161	3
Calif.	163	386	3,823	11	16	1	4,056	84
Alaska	—	1	12	—	—	—	78	—
Hawaii	—	1	47	—	—	—	167	7
Guam	—	—	1	—	—	—	—	1
P.R.	7	249	1,575	1	—	—	257	—
V.I.	—	2	10	—	NA	NA	1	NA
American Samoa	NA	NA	NA	NA	NA	NA	5	NA
C.N.M.I.	NA	NA	NA	—	—	—	88	—

*Cases were updated through the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of July 13, 1998.

†Cases were updated through the Division of Tuberculosis Elimination, NCHSTP, as of April 15, 1998.

NOTIFIABLE DISEASES — Summary of reported cases, by age group,* United States, 1997

SUMMARY TABLES — 1997

NAME	Total	<1		1-4		5-14		15-24		25-39		40-64		≥65		Age not stated
		No.	(Rate)	No.	(Rate)	No.	(Rate)	No.	(Rate)	No.	(Rate)	No.	(Rate)	No.	(Rate)	
AIDS†	58,492	125	(3.32)	181	(1.17)	203	(0.53)	2,099	(5.79)	32,234	(51.21)	22,836	(30.53)	814	(2.40)	-
Botulism, total	132	78	(2.06)	1	(0.01)	1	(0.01)	-	-	3	(0.02)	31	(0.03)	18	(0.02)	-
Brucellosis	98	-	-	6	(0.04)	14	(0.04)	22	(0.06)	29	(0.05)	24	(0.03)	3	(0.01)	-
Chlamydia§	520,164	-	-	-	-	12,301	(32.02)	374,295	(1,033.34)	105,410	(167.46)	9,910	(13.29)	1,358	(4.01)	14,923
Cholera	6	-	-	-	-	-	-	1	(0.00)	1	(0.00)	3	(0.00)	1	(0.00)	-
Cryptosporidiosis	2,566	58	(1.78)	525	(3.91)	410	(1.24)	193	(0.62)	725	(1.34)	477	(0.75)	132	(0.46)	46
Diphtheria	4	1	(0.93)	538	(3.74)	560	(1.58)	292	(0.01)	-	-	1	(0.00)	-	-	-
Escherichia coli O157:H7	2,555	67	(1.92)	-	(-)	5,707	(14.85)	185,933	(513.32)	97,423	(154.77)	20,890	(28.02)	1,254	(3.70)	11,272
Gonorrhoea§	323,307	-	(-)	-	(-)	-	-	-	-	-	-	-	-	-	-	-
<i>Haemophilus influenzae</i> (Invasive Disease)	1,162	159	(4.22)	90	(0.58)	47	(0.12)	42	(0.12)	92	(0.15)	269	(0.36)	442	(1.31)	21
Hansen disease (leprosy)	122	-	(-)	-	(-)	-	(-)	13	(0.04)	15	(0.02)	51	(0.07)	17	(0.05)	26
Hepatitis A	30,021	142	(3.77)	1,808	(11.65)	6,852	(17.83)	4,833	(13.62)	9,830	(15.62)	5,138	(6.89)	981	(2.90)	337
Hepatitis B	10,416	53	(1.41)	57	(0.37)	196	(0.51)	1,789	(4.94)	4,556	(7.24)	3,016	(4.05)	547	(1.62)	202
Hepatitis, Cirrhosis non-B	3,816	23	(0.65)	7	(0.05)	20	(0.06)	201	(0.59)	1,496	(2.54)	1,820	(2.05)	211	(0.66)	38
Legionellosis	1,163	4	(0.11)	1	(0.01)	5	(0.01)	24	(0.07)	144	(0.23)	51	(0.07)	454	(1.35)	14
Lyme disease	12,801	49	(1.30)	666	(4.29)	2,415	(6.29)	1,065	(2.94)	2,348	(3.73)	4,441	(5.96)	1,661	(4.91)	156
Malaria	2,001	14	(0.37)	86	(0.55)	269	(0.26)	370	(1.02)	592	(0.94)	539	(0.72)	80	(0.24)	51
Measles (rubella)	138	14	(0.37)	40	(0.26)	20	(0.05)	30	(0.08)	28	(0.04)	6	(0.01)	-	-	-
Meningococcal disease	3,308	480	(12.73)	522	(3.86)	457	(1.19)	600	(1.66)	316	(0.50)	454	(0.61)	434	(1.28)	45
Mumps	683	8	(0.22)	128	(0.84)	249	(0.66)	74	(0.21)	141	(0.23)	60	(0.08)	5	(0.02)	18
Pertussis (whooping cough)	6,564	1,978	(52.47)	786	(5.07)	1,860	(4.84)	774	(2.14)	564	(1.90)	511	(1.69)	76	(0.22)	15
Plague	4	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	2	(0.00)	2	(0.01)	-
Poliomyelitis, paralytic	3	2	(0.05)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	-	-
Pituitary	33	-	(-)	-	(-)	-	(-)	1	(0.00)	4	(0.01)	11	(0.02)	16	(0.02)	-
Rabies, human	2	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	1	(0.00)	1	(0.00)	-
Rocky Mountain spotted fever	409	1	(0.03)	29	(0.19)	59	(0.15)	31	(0.09)	77	(0.12)	147	(0.20)	58	(0.17)	7
Rubella (German measles)	181	10	(0.27)	6	(0.04)	6	(0.02)	72	(0.20)	68	(0.11)	19	(0.03)	-	-	-
Salmonellosis	41,901	4,531	(120.20)	6,380	(41.12)	4,562	(11.87)	3,393	(9.37)	5,890	(9.36)	6,026	(8.08)	3,636	(10.74)	7,483
Shigellosis	23,117	478	(12.68)	6,005	(38.70)	5,583	(14.53)	1,869	(4.61)	3,114	(4.95)	1,654	(2.22)	450	(1.33)	4,164
Syphilis, primary and secondary§	8,540	-	(-)	-	(-)	44	(0.11)	2,091	(5.77)	4,302	(6.83)	1,965	(2.64)	108	(0.32)	19
Tetanus	50	-	(-)	-	(-)	2	(0.01)	3	(0.01)	13	(0.02)	19	(0.03)	13	(0.04)	-
Toxic-shock syndrome	157	1	(0.03)	4	(0.03)	22	(0.06)	41	(0.11)	49	(0.08)	34	(0.05)	6	(0.02)	-
Trichinosis	13	-	(-)	-	(-)	1	(0.00)	1	(0.00)	4	(0.01)	1	(0.00)	1	(0.01)	4
Tuberculosis§	19,851	124	(3.29)	623	(4.02)	518	(1.35)	1,681	(4.61)	4,976	(7.91)	7,233	(9.70)	4,691	(13.85)	5
Typhoid fever	365	4	(0.11)	44	(0.28)	81	(0.21)	81	(0.16)	100	(0.22)	44	(0.06)	8	(0.02)	3

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

*July 1, 1997 postcensal population estimates were used to calculate incidence rates per 100,000 population.

†The 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), as of December 31, 1997.

‡ Age-related data are collected on aggregate forms different from those used for the number of reported cases. Therefore, the total cases reported on this table can differ slightly from other tables. Cases among persons aged <5 years are not shown because some of these might not be caused by sexual transmission; these cases are, however, included in the totals.

§Cases were updated through the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of July 13, 1998.

**Cases were updated through the Division of Tuberculosis Elimination, NCHSTP, as of April 15, 1998.

NOTIFIABLE DISEASES — Summary of reported cases, by sex,* United States, 1997

NAME	Total	Male No. (Rate)		Female No. (Rate)		Sex not stated
		No.	(Rate)	No.	(Rate)	
AIDS [†]	58,492	45,737	(35.23)	12,755	(9.42)	—
Botulism, total	132	55	(0.41)	73	(0.41)	4
Brucellosis	98	56	(0.04)	39	(0.03)	3
Canceroid [‡]	243	157	(0.12)	69	(0.05)	17
Chlamydia [§]	526,671	—	—	436,366	(322.10)	2,663
Cholera	6	1	(0.00)	4	(0.00)	1
Cryptosporidiosis	2,566	1,331	(1.20)	1,200	(1.04)	35
Diphtheria	4	1	(0.00)	3	(0.00)	—
<i>Escherichia coli</i> O157:H7	2,555	1,161	(0.97)	1,317	(1.06)	77
Gonorrhea [¶]	328,907	162,796	(15.41)	161,961	(19.33)	450
<i>Haemophilus influenzae</i> (Invasive Disease)	1,162	522	(0.40)	596	(0.44)	44
Hansen disease (leprosy)	122	64	(0.05)	32	(0.02)	26
Hepatitis A	30,021	16,599	(12.79)	10,969	(8.10)	2,453
Hepatitis B	10,416	6,115	(4.71)	4,045	(2.99)	256
Hepatitis C/non-A non-B	3,816	2,424	(1.99)	1,354	(1.06)	38
Legionellosis	1,163	682	(0.53)	457	(0.34)	24
Lyme disease	12,801	6,703	(5.16)	6,016	(4.44)	82
Malaria	2,001	1,258	(0.97)	690	(0.51)	53
Measles (rubella)	138	70	(0.05)	62	(0.05)	6
Meningococcal disease	3,308	1,662	(1.28)	1,583	(1.17)	63
Mumps	683	348	(0.27)	286	(0.22)	49
Pertussis (whooping cough)	6,564	3,036	(2.34)	3,468	(2.56)	60
Plague	4	1	(0.00)	2	(0.00)	1
Poliomyelitis, paralytic	3	1	(0.00)	2	(0.00)	—
Poitacosis	33	12	(0.01)	21	(0.02)	—
Rabies, human	2	2	(0.00)	—	(0.00)	—
Rocky Mountain spotted fever	409	248	(0.19)	157	(0.12)	4
Rubella (German measles)	181	109	(0.08)	67	(0.05)	5
Salmonellosis	41,901	16,716	(12.88)	17,477	(12.90)	7,708
Shigellosis	23,117	8,437	(6.50)	9,758	(7.20)	4,922
Syphilis, primary and secondary [¶]	8,550	4,656	(3.59)	3,891	(2.87)	3
Tetanus	50	29	(0.02)	21	(0.02)	—
Toxic-shock syndrome	157	38	(0.03)	115	(0.08)	4
Trichinosis	13	6	(0.00)	7	(0.01)	—
Tuberculosis**	19,851	12,371	(9.53)	7,474	(5.52)	6
Typhoid fever	355	192	(0.15)	168	(0.12)	5

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

* July 1, 1997, postcensal population estimates were used to calculate incidence rates per 100,000 population.

[†]The 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) as of July 13, 1998.

[‡]Cases were updated through the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of December 31, 1997.

[§] Chlamydia refers to genital infections caused by *C. trachomatis*. The rates for men are not presented because reporting for men is more limited than for women.

**Cases were updated through the Division of Tuberculosis Elimination, NCHSTP, as of April 15, 1998.

SUMMARY TABLES — 1997

NOTIFIABLE DISEASES — Summary of reported cases, by race, United States, 1997

SUMMARY TABLES — 1997

Name	Total	American Indian or Alaskan Native		Asian or Pacific Islander		Black		White		Other		Race No. %	Race No. %
		No.	%	No.	%	No.	%	No.	%	No.	%		
AIDS*	58,492	206	<1	446	(1)	27,018	(46)	20,188	(35)	—	(—)	10,634†	(18)
Botulism, total	132	19	(14)	6	(5)	7	(5)	71	(54)	—	(—)	29	(22)
Brucellosis	98	—	(—)	3	(3)	—	(—)	50	(51)	—	(—)	45	(46)
Chlamydia	520,164	6,915	(1)	5,034	(1)	164,232	(32)	107,527	(21)	—	(—)	236,456†	(45)
Cholera	6	—	(—)	—	(—)	—	(—)	3	(50)	—	(—)	3	(50)
Cryptosporidiosis	2,566	249	(10)	23	(1)	196	(8)	1,262	(49)	1	(<1)	835	(33)
Diphtheria	4	2	(50)	—	(—)	—	(—)	2	(50)	—	(—)	—	(—)
<i>Escherichia coli</i> O157:H7	2,555	127	(5)	—	(—)	68	(3)	1,504	(59)	3	(<1)	826	(32)
Gonorrhea§	323,307	1,532	(<1)	1,021	(<1)	190,948	(59)	35,958	(11)	—	(—)	93,848†	(29)
<i>Haemophilus influenzae</i> (Invasive Disease)	1,162	67	(6)	20	(2)	162	(14)	685	(59)	1	(<1)	227	(20)
Hansen disease (leprosy)	122	—	(—)	33	(27)	7	(6)	30	(25)	—	(—)	52	(43)
Hepatitis A	30,021	528	(2)	445	(1)	2,013	(7)	17,819	(59)	69	(<1)	9,147	(30)
Hepatitis B	10,416	72	(1)	752	(7)	2,201	(21)	4,096	(39)	53	(1)	3,242	(31)
Hepatitis, C/non-A non-B	3,816	60	(2)	46	(1)	460	(12)	2,156	(56)	16	(<1)	1,078	(28)
Legionellosis	1,163	1	(<1)	7	(1)	97	(8)	809	(70)	—	(—)	249	(21)
Lyme disease	12,801	23	(<1)	86	(1)	185	(1)	9,645	(75)	27	(<1)	2,835	(22)
Malaria	2,001	1	(<1)	286	(14)	554	(28)	475	(24)	51	(3)	634	(32)
Measles (rubeola)	138	9	(7)	18	(13)	10	(7)	9	(66)	1	(1)	9	(7)
Meningococcal disease	3,308	41	(1)	35	(1)	553	(17)	2,090	(63)	9	(<1)	580	(18)
Mumps	683	1	(<1)	58	(8)	46	(7)	336	(49)	—	(—)	242	(35)
Pertussis (whooping cough)	6,564	205	(3)	66	(1)	332	(5)	4,079	(62)	9	(<1)	1,873	(29)
Plague	4	2	(50)	—	(—)	—	(—)	2	(50)	—	(—)	—	(—)
Poliomyelitis, paralytic	3	—	(—)	—	(—)	—	(—)	3	(100)	—	(—)	—	(—)
Psittacosis	33	—	(—)	—	(—)	—	(—)	25	(76)	—	(—)	8	(24)
Rabies, human	2	1	(50)	—	(—)	—	(—)	—	(—)	—	(—)	1	(50)
Rocky Mountain spotted fever	409	10	(2)	2	(<1)	19	(5)	303	(74)	—	(—)	75	(18)
Rubella (German measles)	181	4	(2)	14	(8)	7	(4)	73	(40)	4	(2)	79	(44)
Rubella, congenital syndrome	5	—	(—)	1	(20)	—	(—)	1	(20)	—	(—)	3	(60)
Salmoneellosis	41,901	262	(1)	534	(1)	3,303	(8)	17,956	(43)	24	(<1)	19,762	(47)
Shigellosis	23,117	543	(2)	115	(<1)	3,055	(13)	8,739	(38)	23	(<1)	10,642	(46)
Syphilis, primary and secondary	8,540	40	(<1)	32	(<1)	6,864	(80)	951	(11)	—	(—)	653†	(8)
Tatanus	50	10	(20)	—	(—)	3	(6)	33	(66)	1	(2)	3	(6)
Toxic-shock syndrome	157	1	(1)	3	(2)	13	(8)	117	(75)	—	(—)	23	(15)
Trichinosis	13	—	(—)	—	(—)	—	(—)	4	(31)	—	(—)	9	(69)
Tuberculosis¶	19,951	276	(1)	3,873	(20)	6,806	(34)	8,862	(45)	—	(—)	34	(<1)
Typhoid fever	365	2	(1)	114	(31)	27	(7)	56	(15)	19	(5)	147	(40)

*The 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) as of December 31, 1997.

†Includes the following cases originally reported as Hispanic: 10,394 for AIDS; 62,716 for chlamydia; 13,990 for gonorrhea; and 450 for syphilis, primary and secondary.

‡In addition to data collected through the National Electronic Telecommunications System for Surveillance (NETSS), some data concerning race are collected on aggregate forms different from those used for numbers of reported cases. Thus, the total number of cases reported on this table can differ slightly from other tables. Cases were updated through the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of July 13, 1998. Data regarding race for 1997 are unavailable for chancroid.

§Cases were updated through the Division of Tuberculosis Elimination, NCHSTP as of April 15, 1998.

NOTIFIABLE DISEASES — Summary of reported cases, by ethnicity, United States, 1997

NAME	Total	Hispanic		Non-Hispanic		Ethnicity not stated No. (%)
		No.	(%)	No.	(%)	
AIDS*	58,492	10,394	(18)	47,206	(81)	892† (2)
Botulism, total	132	24	(62)	82	(26)	20
Brucellosis	98	59	(60)	15	(15)	24 (24)
Chlamydia§	520,164	62,716	(12)	271,759	(52)	185,689† (36)
Cholera	6	3	(50)	1	(17)	2 (33)
Cryptosporidiosis	2,566	178	(7)	1,366	(53)	1,022 (40)
Diphtheria	4	—	(—)	3	(75)	1 (25)
<i>Escherichia coli</i> O157:H7	2,555	88	(—)	1,464	(57)	1,003 (39)
Gonorrhea§	323,307	13,990	(4)	226,906	(70)	82,411† (25)
<i>Haemophilus influenzae</i> (Invasive Disease)	1,162	93	(8)	695	(60)	374 (32)
Hansen disease (leprosy)	122	35	(29)	51	(42)	36 (30)
Hepatitis A	30,021	6,828	(23)	13,341	(44)	9,852 (33)
Hepatitis B	10,416	940	(9)	5,264	(51)	4,212 (40)
Hepatitis, C/non-A, non-B	3,816	475	(12)	1,721	(45)	1,620 (42)
Legionellosis	1,163	32	(3)	610	(56)	461 (40)
Lyme disease	12,801	140	(1)	7,750	(61)	4,911 (38)
Malaria	2,001	176	(9)	1,041	(52)	784 (39)
Measles (rubella)	138	22	(16)	106	(77)	10 (7)
Meningococcal disease	3,308	311	(9)	2,023	(61)	974 (29)
Mumps	683	159	(23)	263	(39)	261 (38)
Pertussis (whooping cough)	6,564	594	(9)	3,444	(52)	2,526 (38)
Plague	4	—	(—)	4	(100)	— (—)
Poliomyelitis, paralytic	3	2	(67)	1	(33)	— (—)
Psittacosis	33	—	(—)	19	(58)	14 (42)
Rabies, human	2	—	(—)	—	(—)	2 (100)
Rocky Mountain spotted fever	409	4	(1)	253	(62)	152 (37)
Rubella (German measles)	181	109	(60)	46	(25)	26 (14)
Rubella, congenital syndrome	5	3	(60)	1	(20)	1 (20)
Salmonellosis	41,901	2,447	(6)	16,284	(39)	23,170 (55)
Shigellosis	23,117	3,427	(15)	8,051	(35)	11,639 (50)
Syphilis, primary and secondary§	8,540	450	(5)	7,815	(92)	275† (3)
Tetanus	50	14	(28)	27	(54)	9 (18)
Toxic-shock syndrome	157	3	(2)	104	(66)	50 (32)
Trichinosis	13	—	(—)	4	(31)	9 (69)
Tuberculosis¶	19,851	4,228	(21)	15,536	(79)	37 (35)
Typhoid fever	365	56	(15)	181	(50)	128 (35)

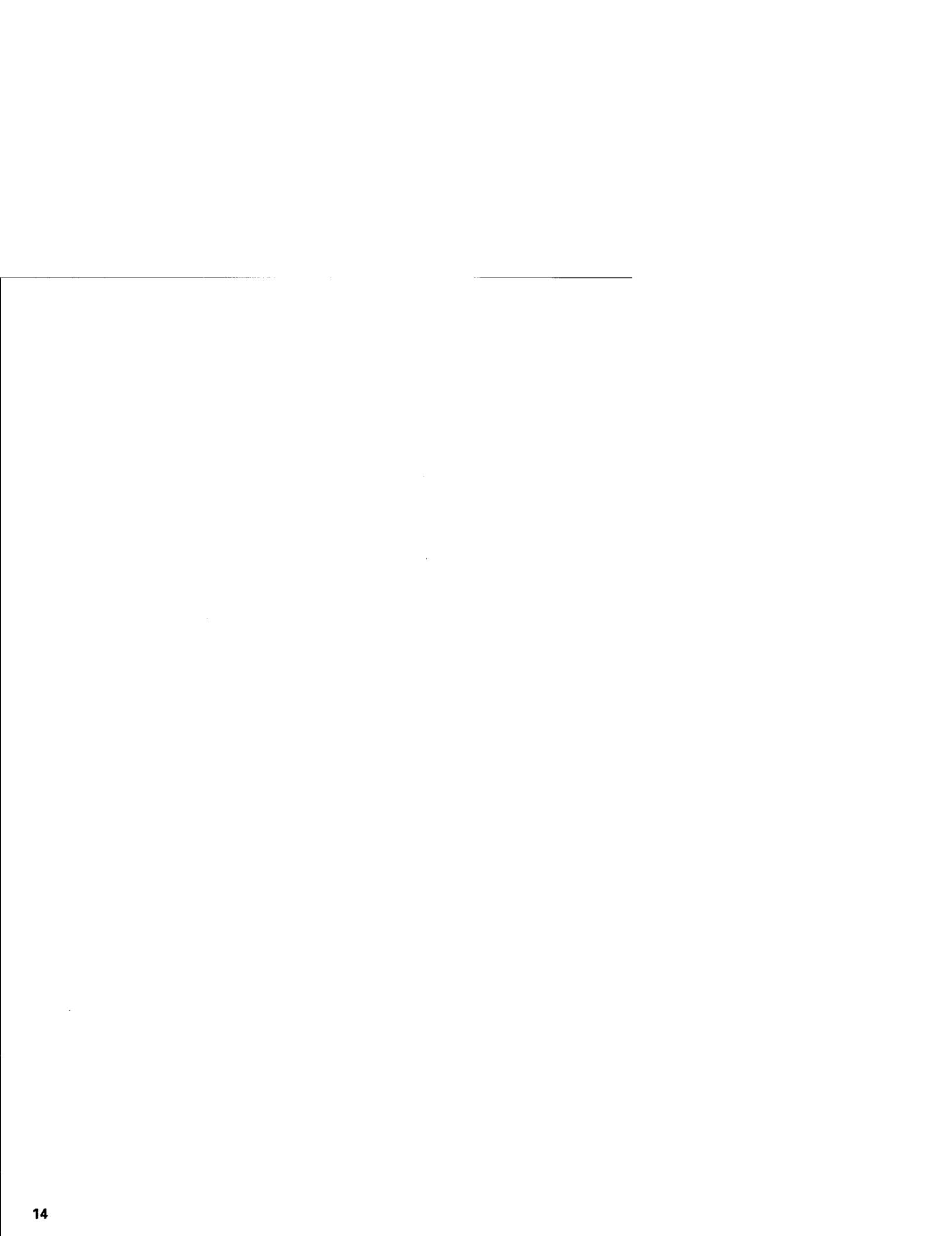
*The total number of acquired immunodeficiency syndrome (AIDS) cases includes all cases reported to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP) as of December 31, 1997.

†Ethnicity is not stated and includes cases originally reported as American Indian or Alaskan Native and Asian or Pacific Islander.

§In addition to data collected through the National Electronic Telecommunications System for Surveillance (NETSS), some data concerning ethnicity are collected on aggregate forms different from those used for numbers of reported cases. Thus, the total number of cases reported on this table can differ slightly from other tables. Cases were updated through the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of July 13, 1998. Data regarding ethnicity for 1997 are unavailable for chancroid.

¶Cases were updated through the Division of Tuberculosis Elimination, NCHSTP, as of April 15, 1998.

SUMMARY TABLES — 1997



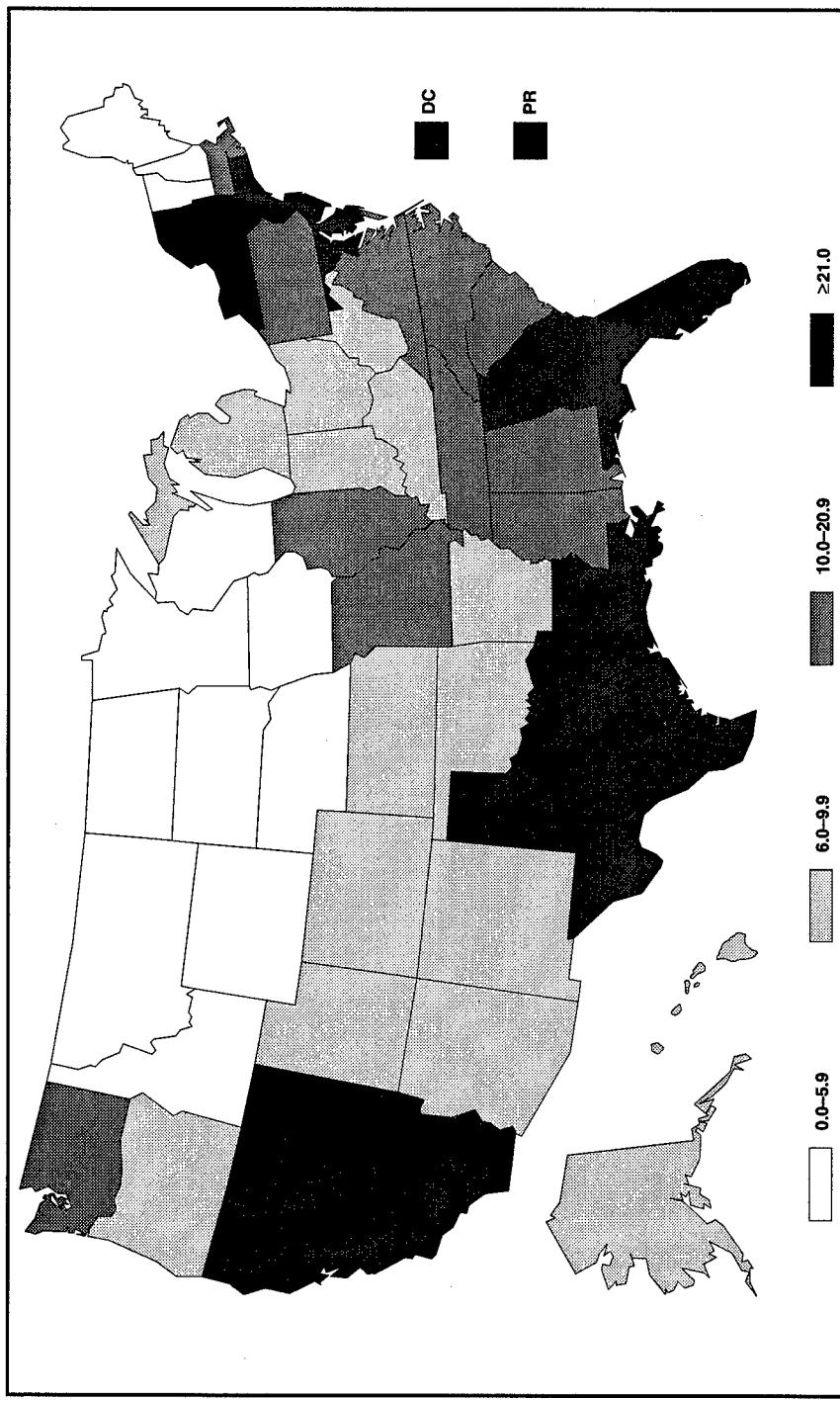
PART 2:

Graphs and Maps for Selected Notifiable Diseases in the United States

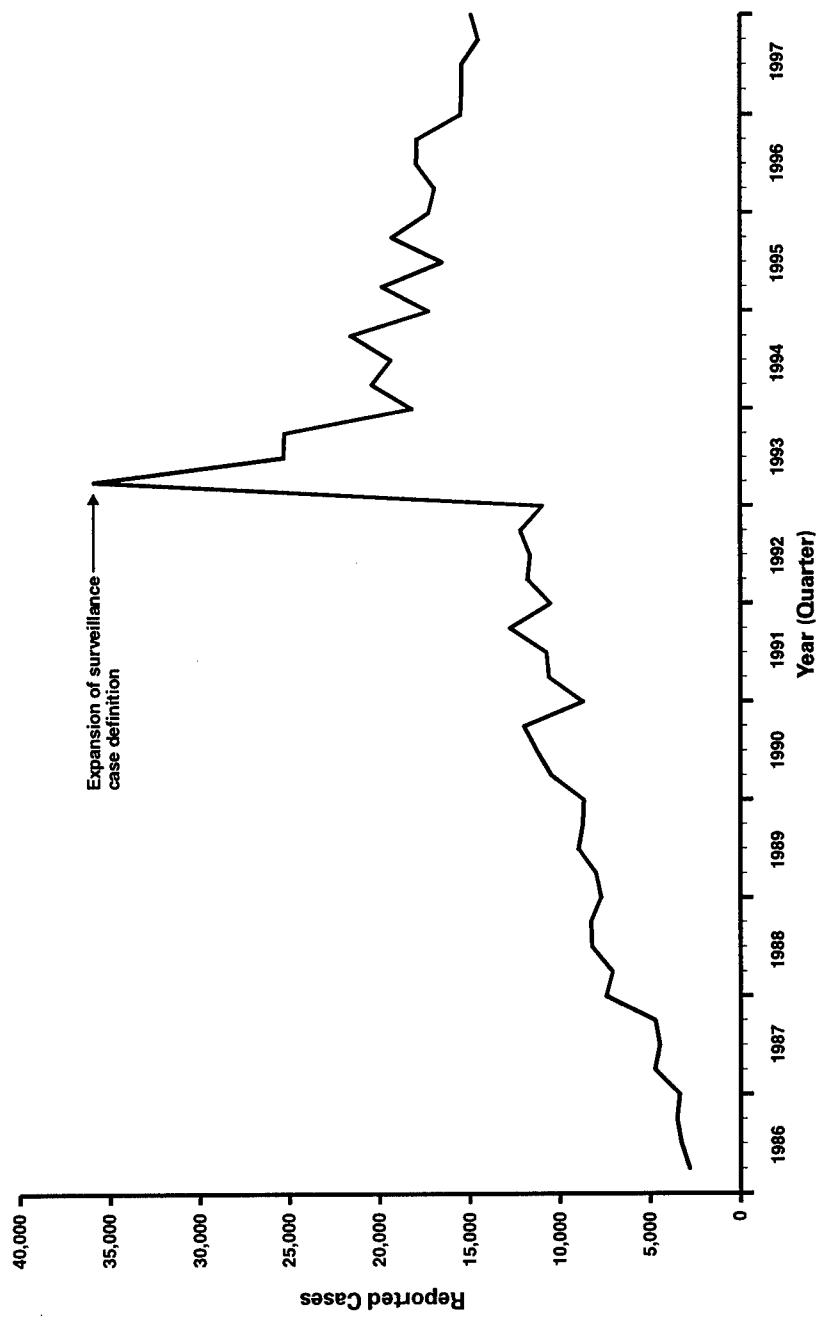
EXPLANATION OF SYMBOLS USED IN TABLES, GRAPHS, AND MAPS

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

GRAPHS AND MAPS



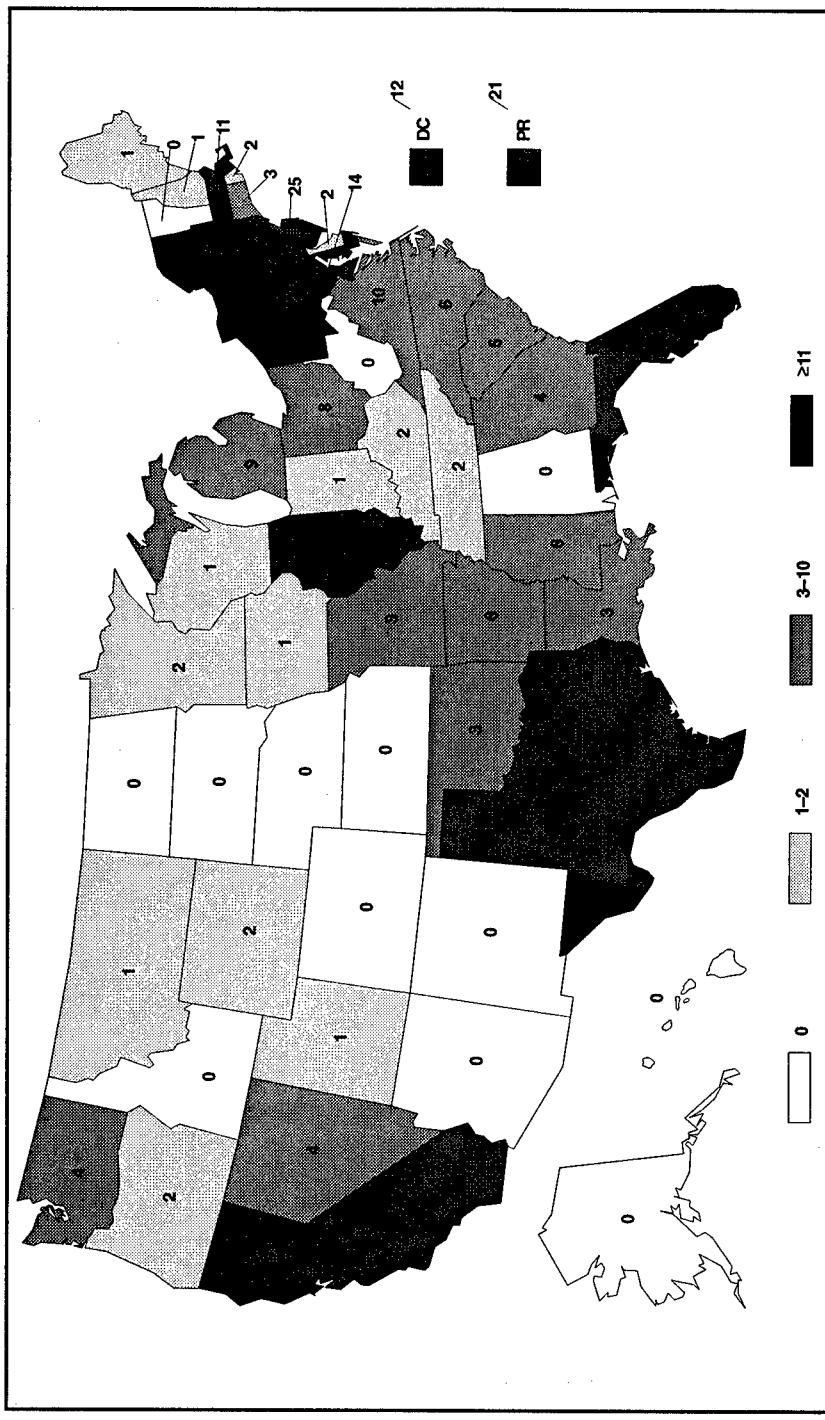
In 1997, the highest rates of reported AIDS cases per 100,000 population were in the northeastern, southeastern, and western states. Eighty-one percent (81%) of reported AIDS cases occurred among residents of large metropolitan areas (i.e., areas of $\geq 500,000$ persons).

ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS) — reported cases by quarter, United States,* 1986–1997**GRAPHS AND MAPS**

*Includes Guam, Puerto Rico, the U.S. Pacific Islands, and the U.S. Virgin Islands.

The expansion of the AIDS surveillance case definition in 1993 resulted in a substantial increase in reported cases during that year. Since 1996, new treatments have slowed the progression from human immunodeficiency virus (HIV) infection to AIDS and from AIDS to death. Consequently, the number of new AIDS cases is declining, and the number of persons living with HIV infection and AIDS is increasing.

GRAPHS AND MAPS

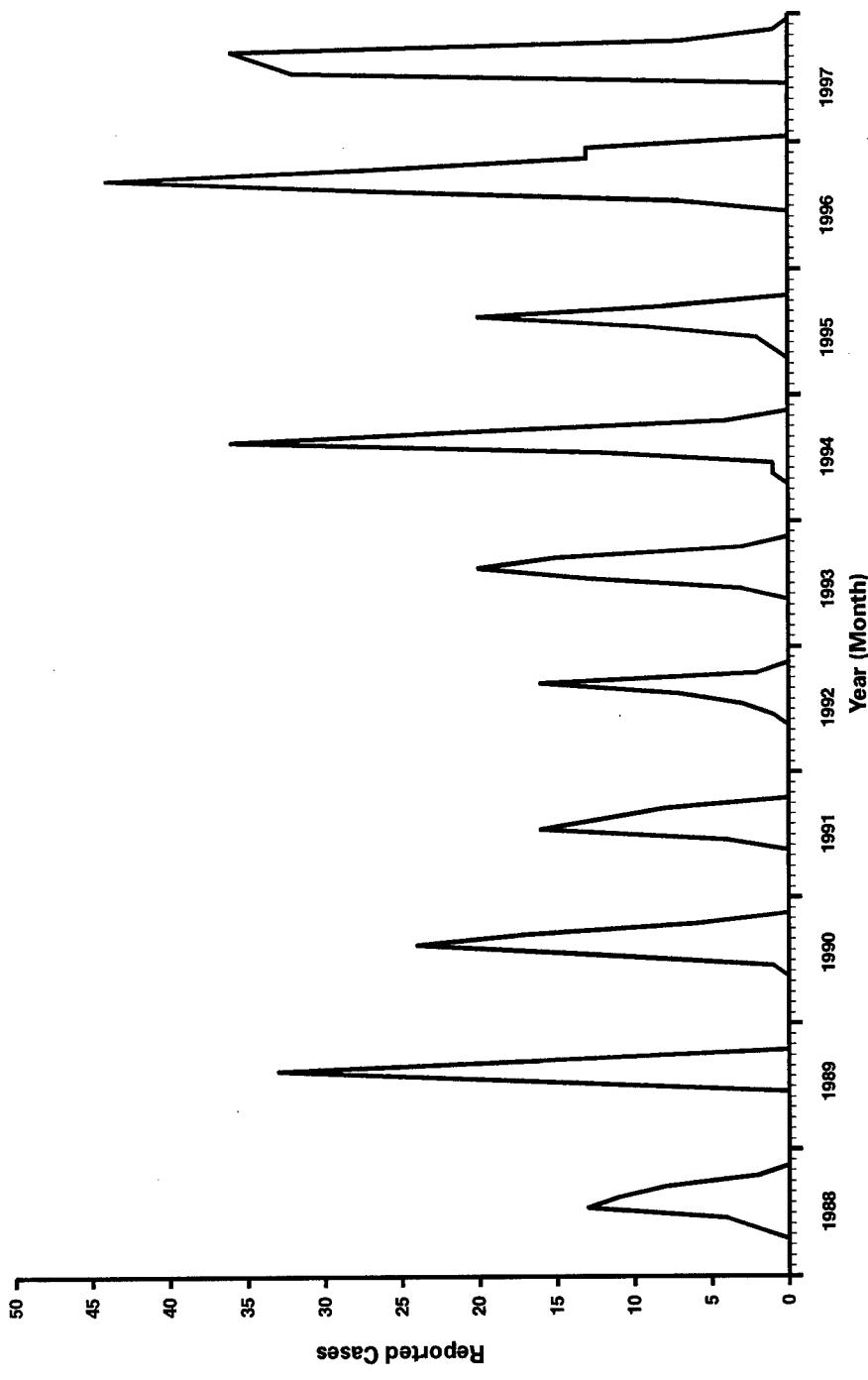


*Children and adolescents aged <13 years.

Trends in AIDS incidence among children continued to demonstrate the dramatic success of efforts to reduce perinatal (i.e., mother-to-child) human immunodeficiency virus (HIV) transmission. From 1992 through 1996, the number of perinatally acquired cases declined 43%. Despite these declines, new perinatally acquired AIDS cases continue to occur among very young children who are disproportionately from racial and ethnic minority populations. Intensified efforts are needed to prevent HIV infection among women and to provide early prenatal care and treatment to HIV-infected women.

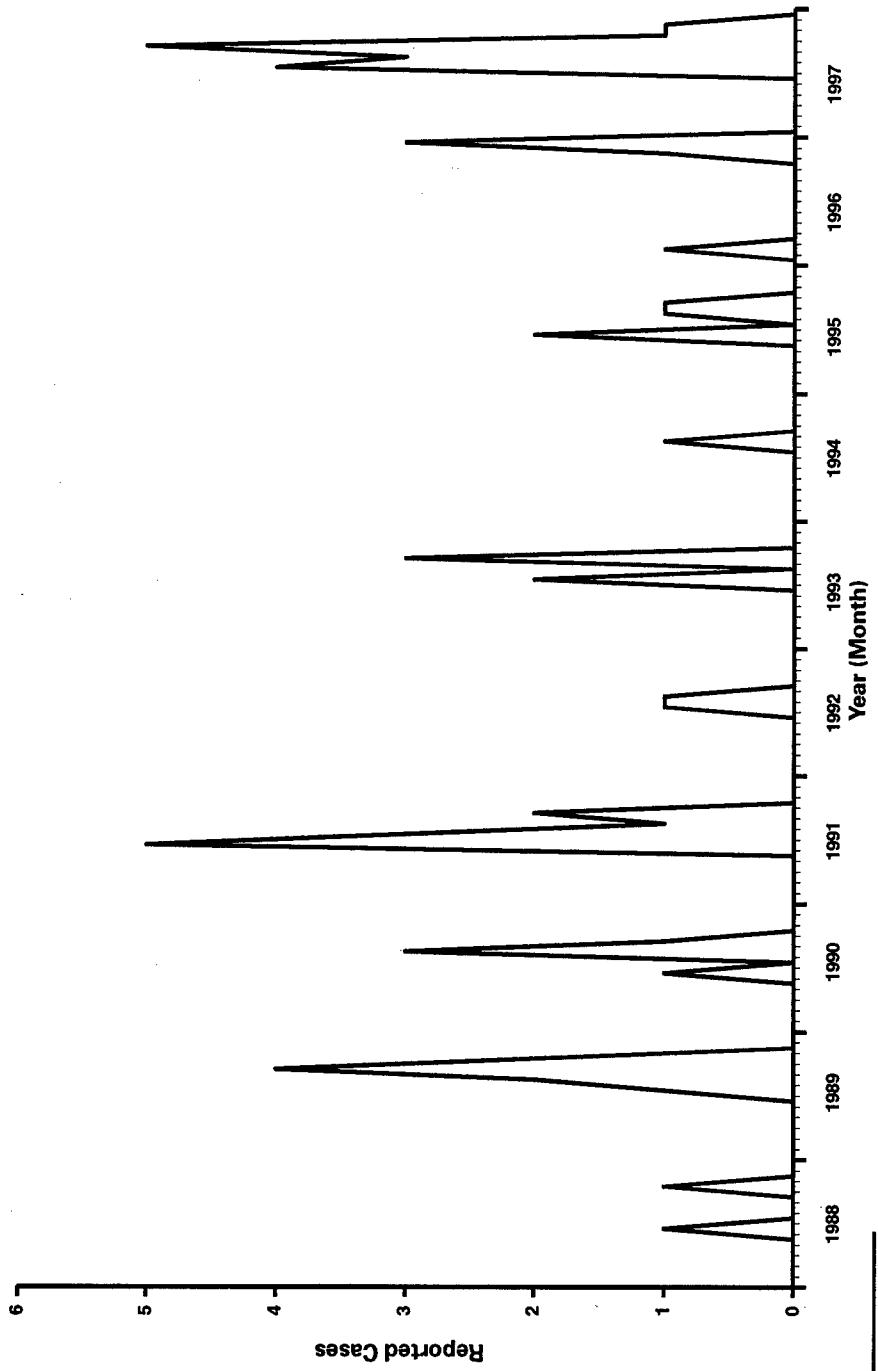
GRAPHS AND MAPS

ARBOVIRAL INFECTIONS (of the central nervous system) — reported laboratory-confirmed cases caused by California serogroup viruses, by month of onset, United States, 1988–1997



California serogroup viruses (mainly LaCrosse virus in the eastern United States) are an endemic cause of encephalitis, especially in children. The 1997 national total of 127 reported LaCrosse encephalitis cases is the fourth largest yearly total reported since 1964.

ARBOVIRAL INFECTIONS (of the central nervous system) — reported laboratory-confirmed cases caused by eastern equine encephalitis virus, by month of onset, United States, 1988–1997

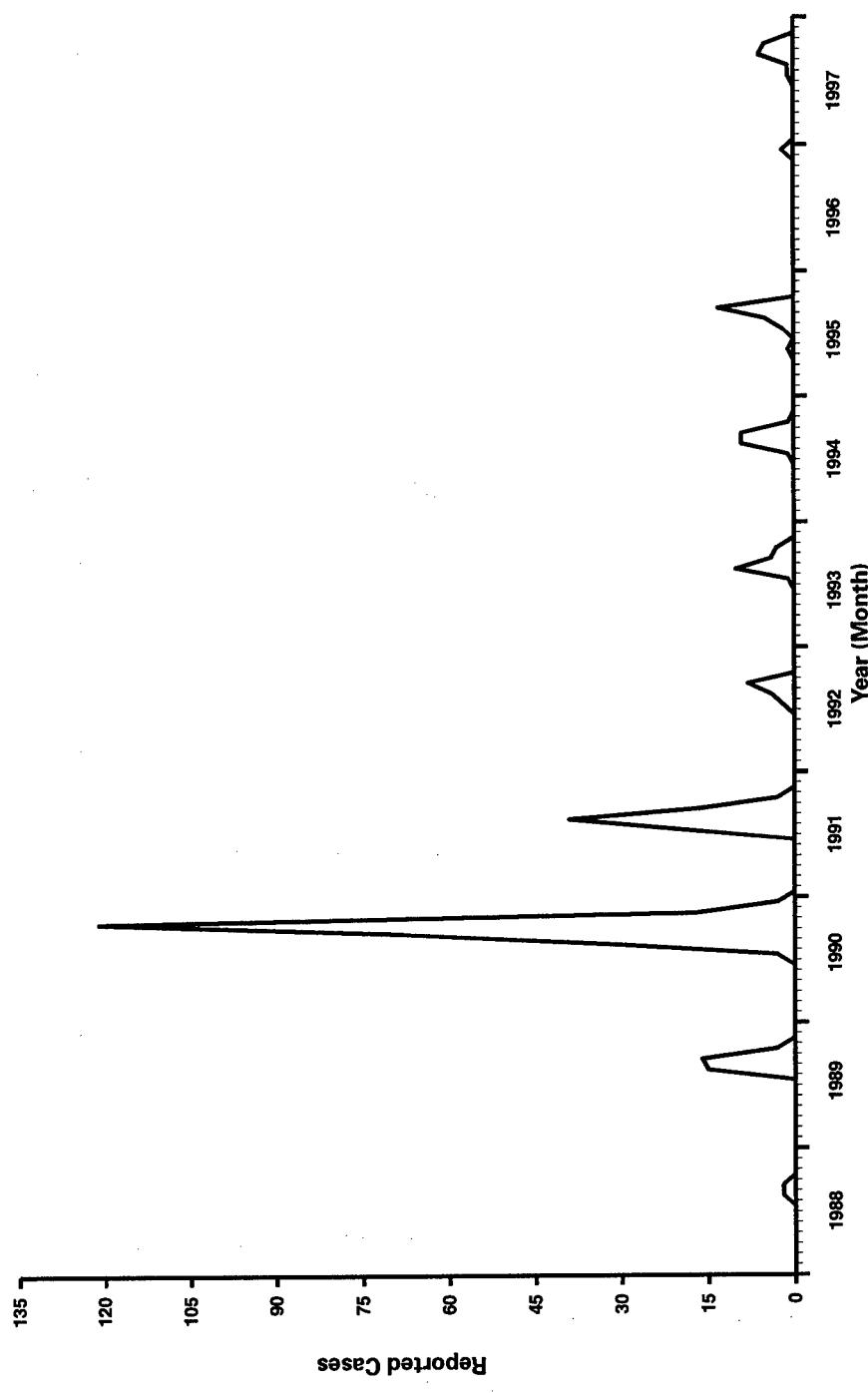


Cases of eastern equine encephalitis among humans, often associated with high mortality rates (i.e., >20%) and severe neurologic sequelae, occur sporadically in the eastern United States. The 1997 national total of 14 cases is the largest yearly total reported since 1983.

ARBOVIRAL INFECTIONS (of the central nervous system) — reported laboratory-confirmed cases caused by St. Louis encephalitis virus, by month of onset, United States, 1988–1997

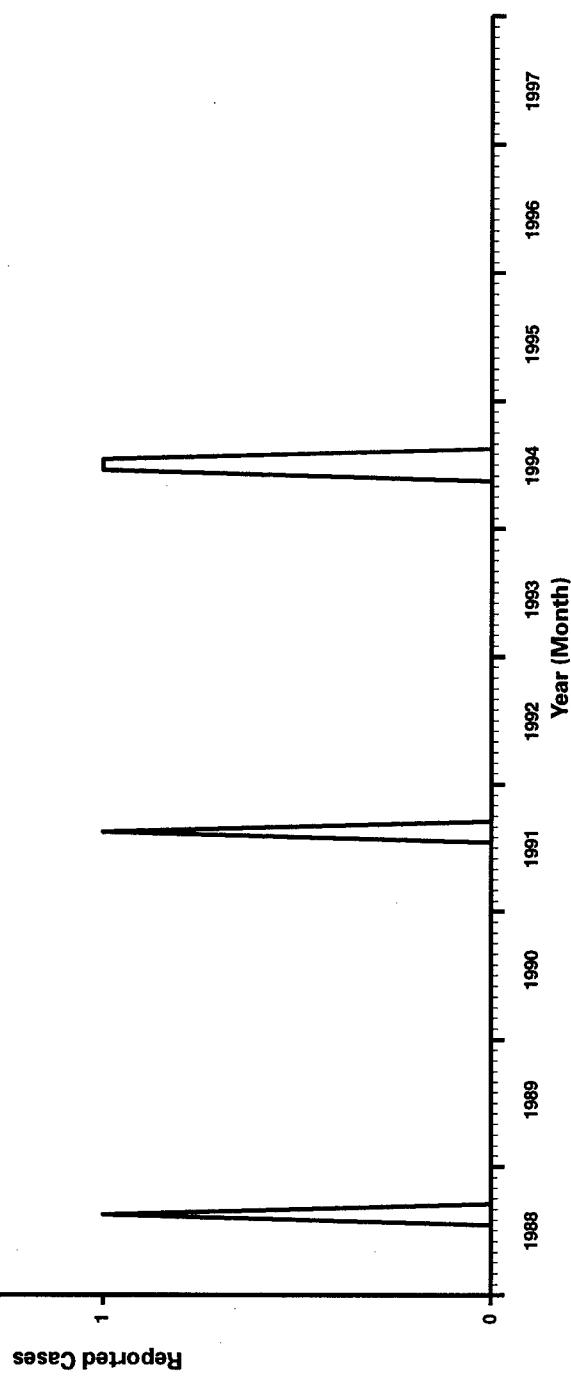
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GRAPHS AND MAPS



St. Louis encephalitis virus continues to be the primary cause of epidemic viral encephalitis in the United States. The most recent major epidemic occurred in Florida in 1990.

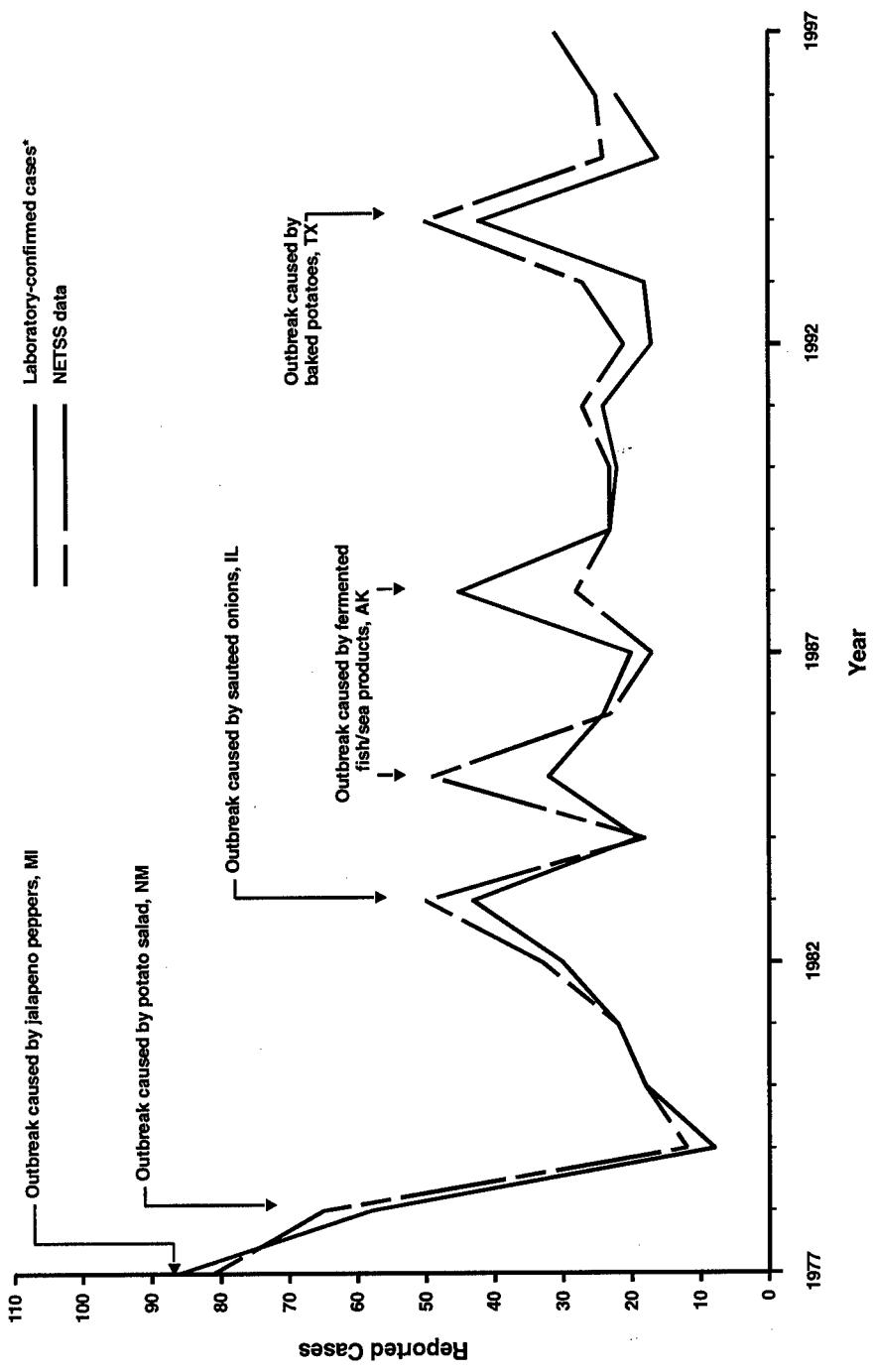
GRAPHS AND MAPS



The most recent epidemic of western equine encephalitis occurred in 1987 in Colorado, where 30 cases were reported.

BOTULISM (foodborne) — by year, United States, 1977–1997

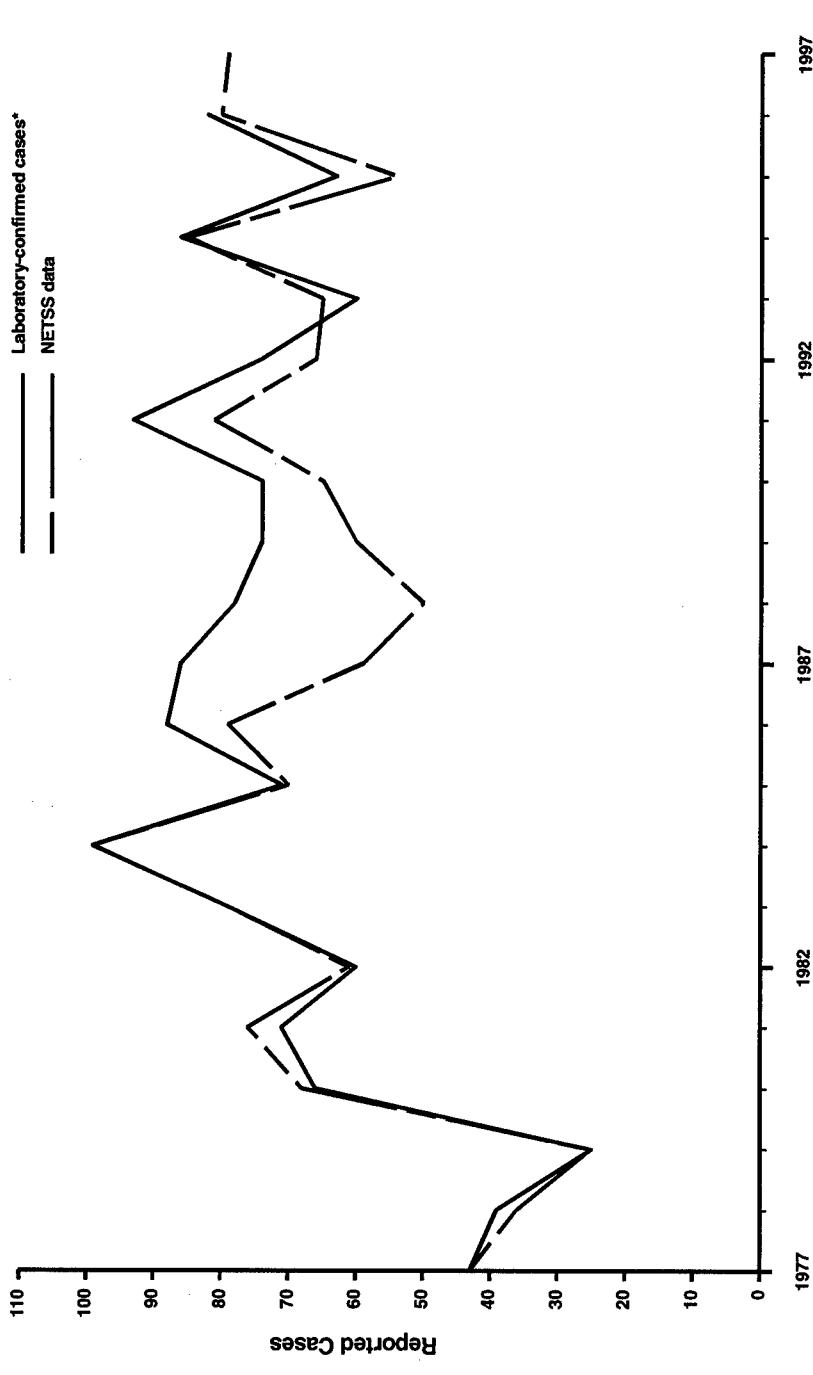
GRAPHS AND MAPS



* Data from annual survey of state epidemiologists and directors of state public health laboratories. Data are not yet available for 1997.

Although they occur infrequently, outbreaks of foodborne botulism can rapidly kill many affected persons. Such outbreaks require prompt and effective communication between clinicians and public health officials.

BOTULISM (infant) — by year, United States, 1977-1997

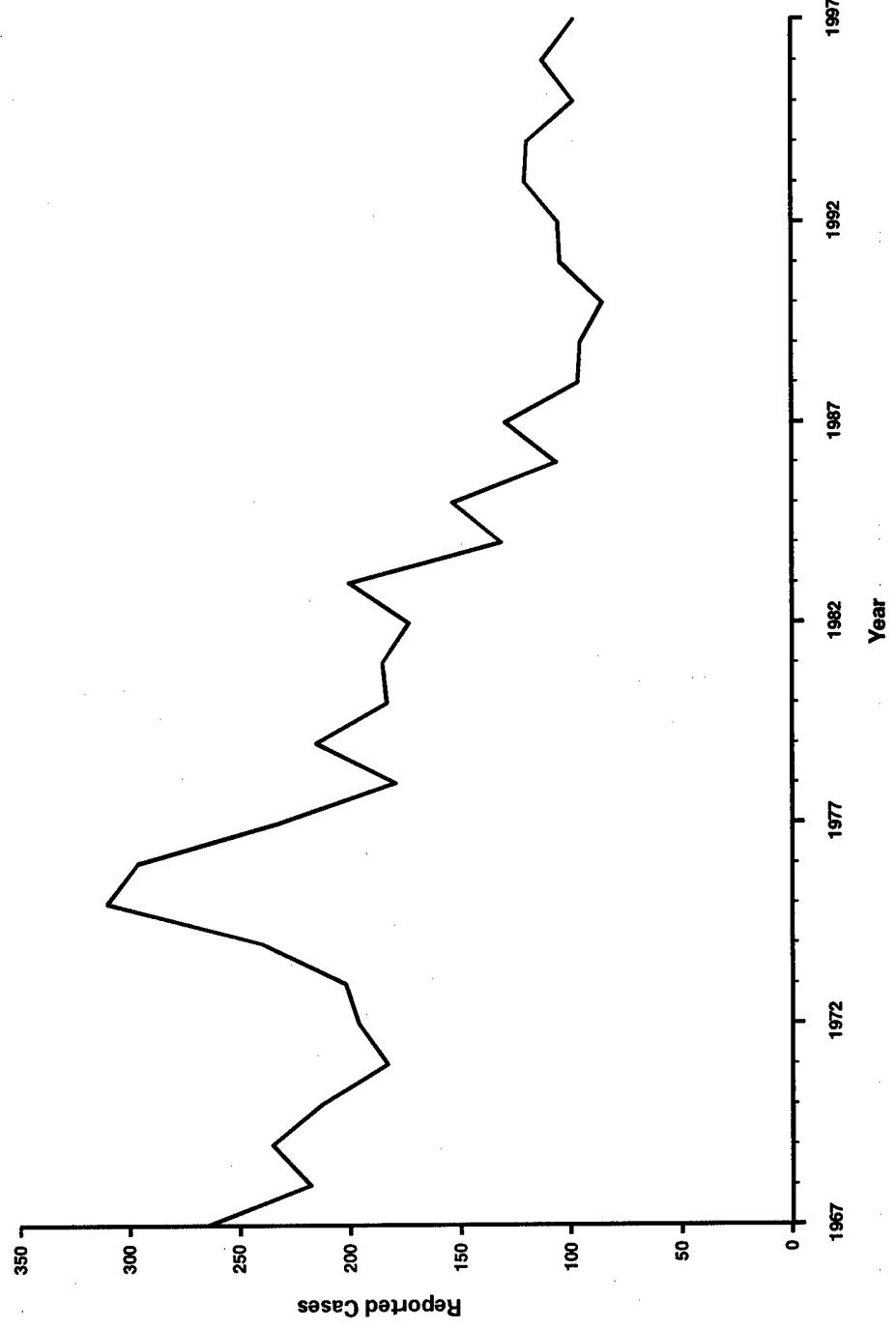


*Data from annual survey of state epidemiologists and directors of state public health laboratories. Data are not yet available for 1997.

In the United States, more than one third of the reported cases of infant botulism occur in California.

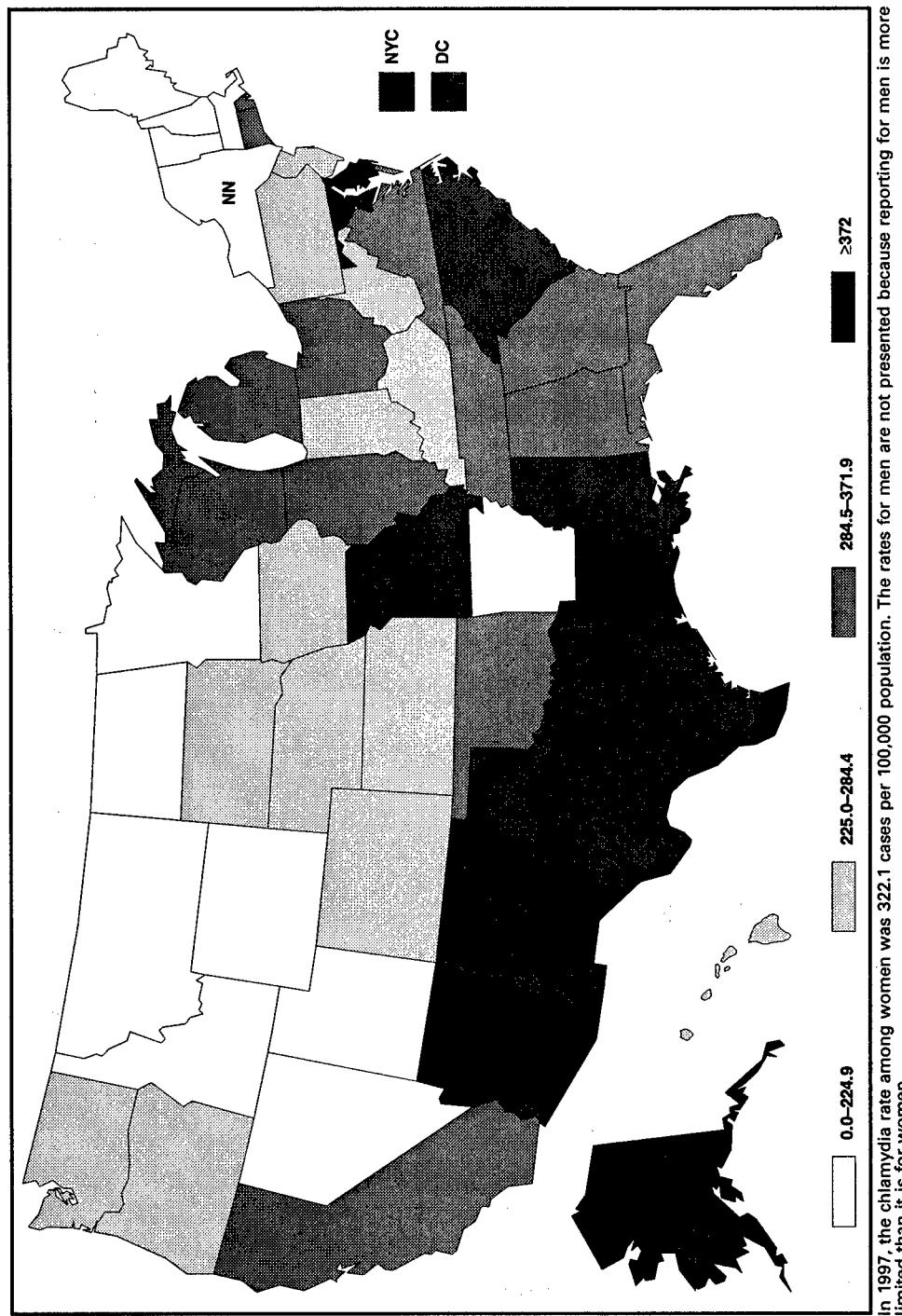
BRUCELLOSIS — by year, United States, 1967–1997

GRAPHS AND MAPS



After peaking at more than 300 cases in 1975, the number of brucellosis cases has declined and, for the last 10 years, has remained relatively stable at approximately 100 cases per year.

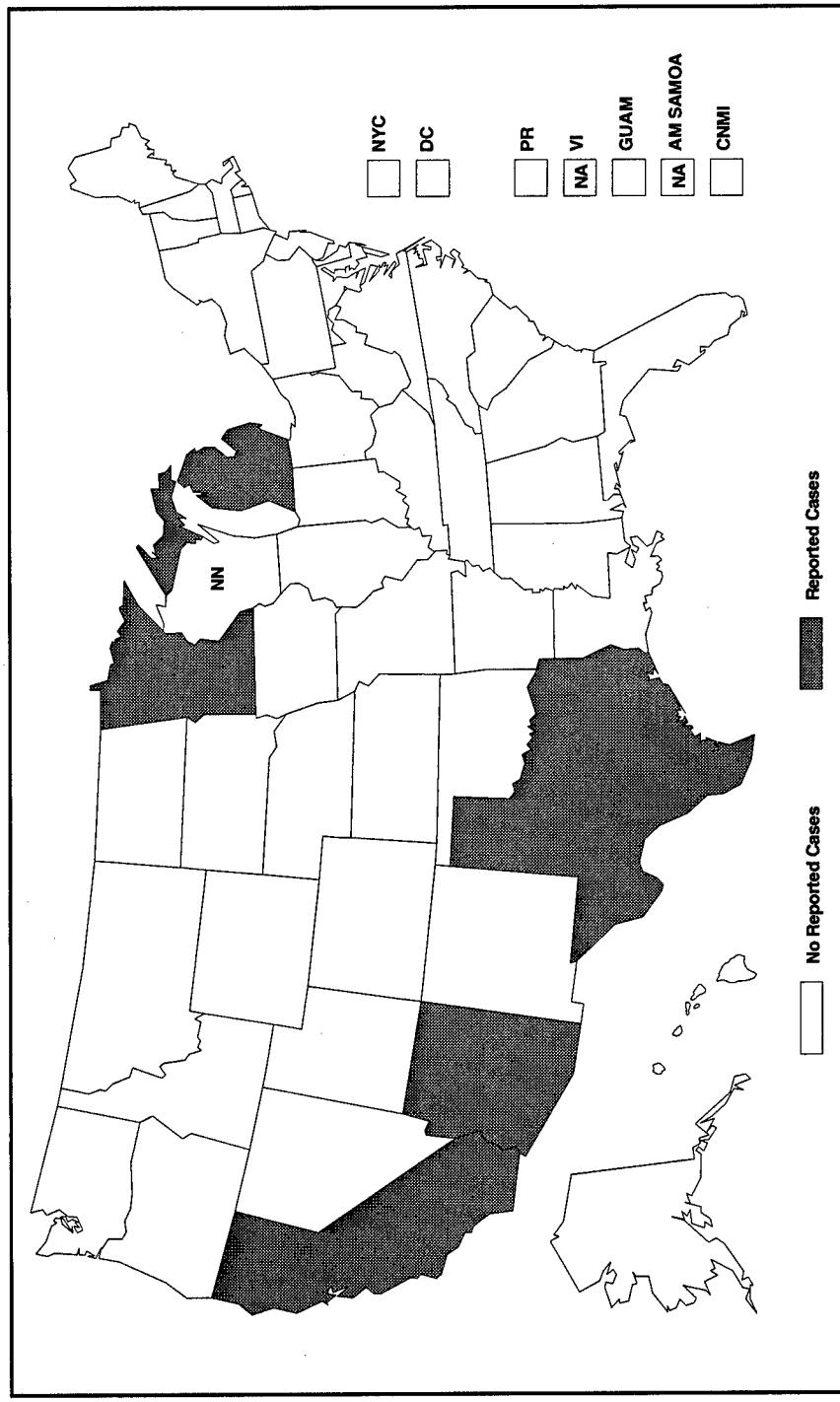
GRAPHS AND MAPS



In 1997, the chlamydia rate among women was 322.1 cases per 100,000 population. The rates for men are not presented because reporting for men is more limited than it is for women.

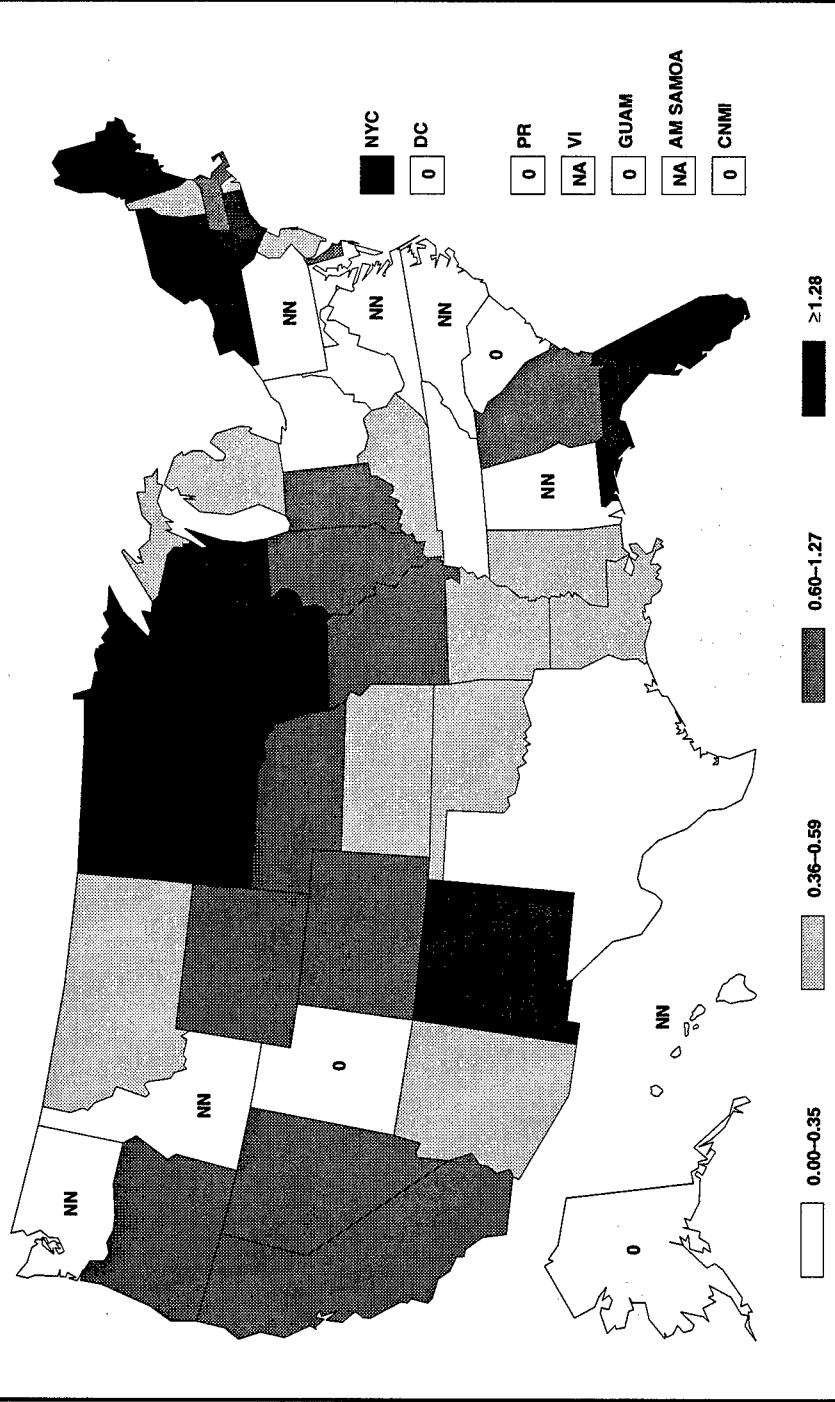
CHOLERA — reported cases, United States and territories, 1997

GRAPHS AND MAPS



In recent years, cholera has been primarily a disease of travelers to Latin America, Asia, and Africa, although cases are occasionally acquired from contaminated food in the United States.

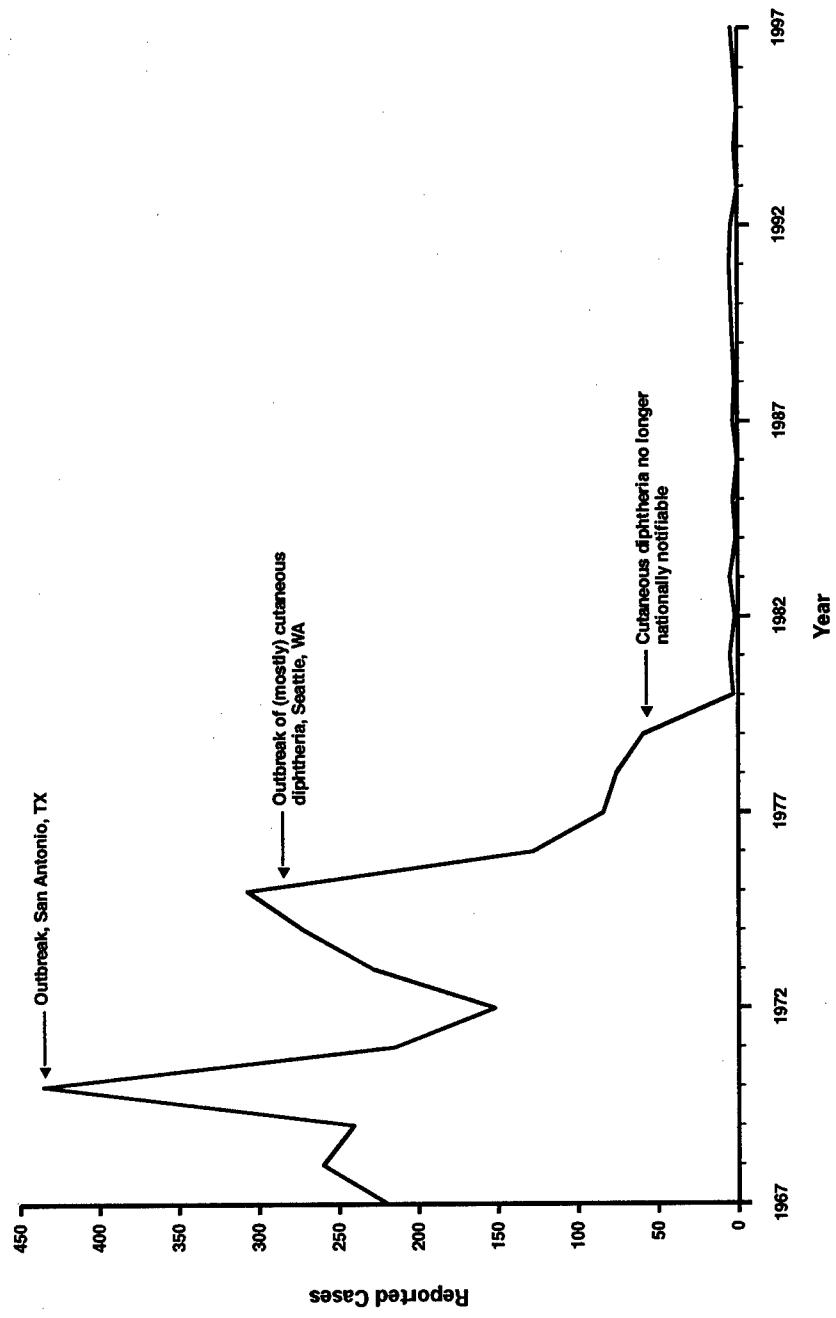
CRYPTOSPORIDIOSIS — reported cases per 100,000 population, United States and territories, 1997



Surveillance data from 1997 suggest that infection with cryptosporidium is geographically widespread. The highest reported rates were primarily in the north central and northeastern states. As in 1995 and 1996, cases primarily were reported in the late summer among children and adolescents aged <16 years.

DIPHTHERIA — by year, United States, 1967–1997

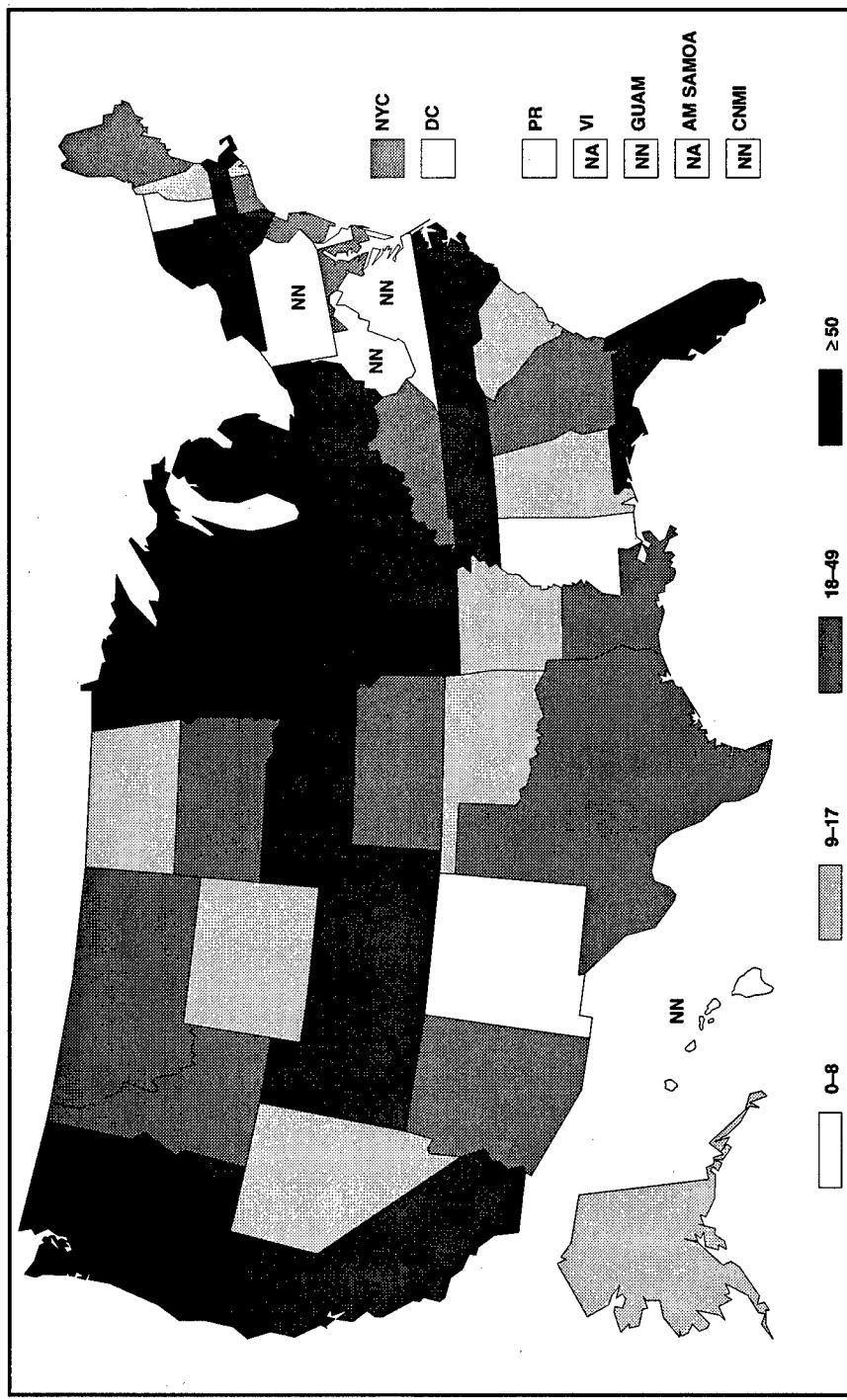
GRAPHS AND MAPS



NOTE: DTP vaccine was licensed in 1949.

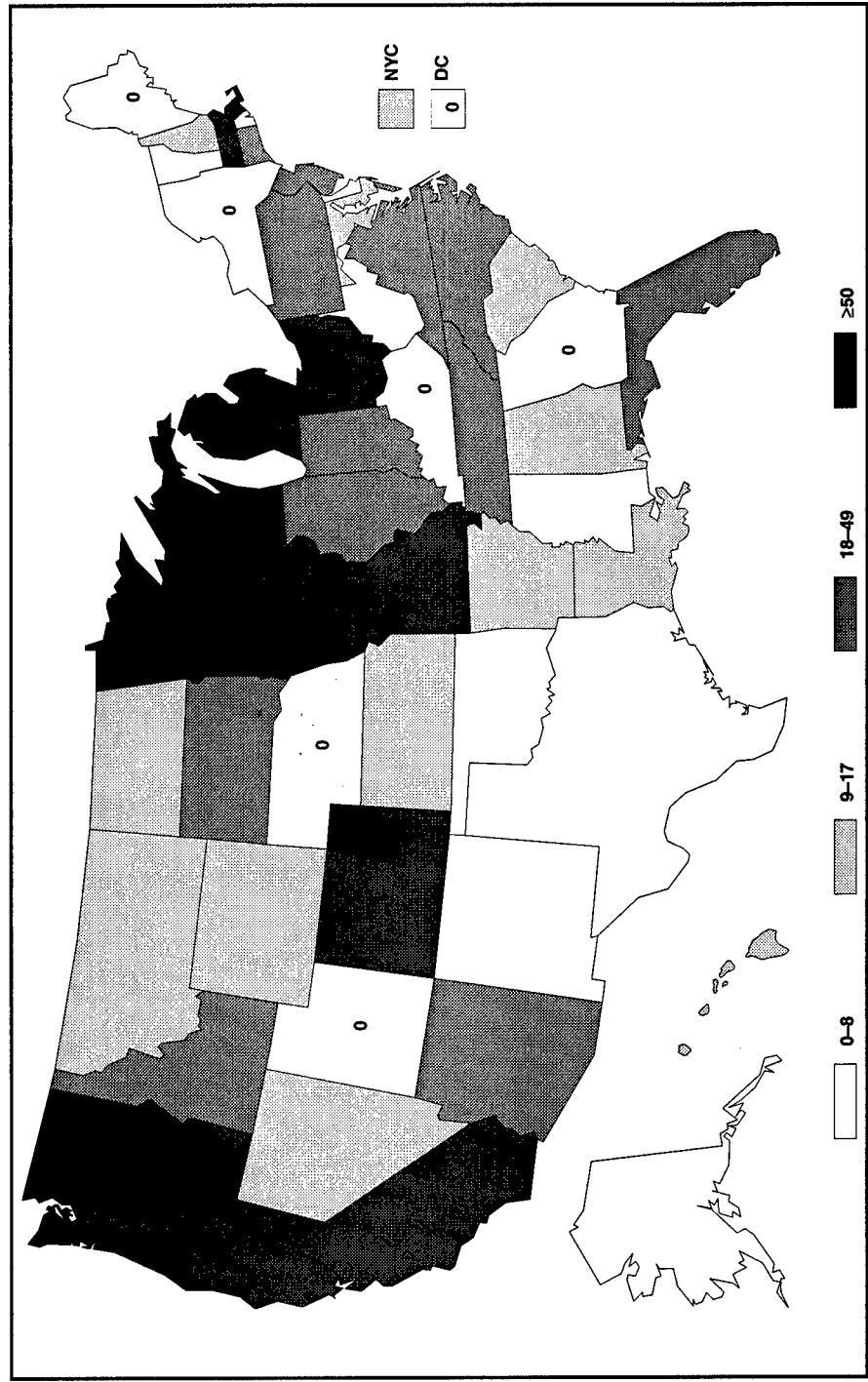
Respiratory diphtheria continues to be rare in the United States; only two confirmed and two probable cases were reported in 1997.

GRAPHS AND MAPS



The number of states in which *E. coli* O157:H7 infection is a notifiable disease increased from 44 in 1996 to 46 in 1997. However, because <60% of clinical laboratories routinely test all stools—or even all bloody stools—for *E. coli* O157:H7, many infections are not recognized or reported.

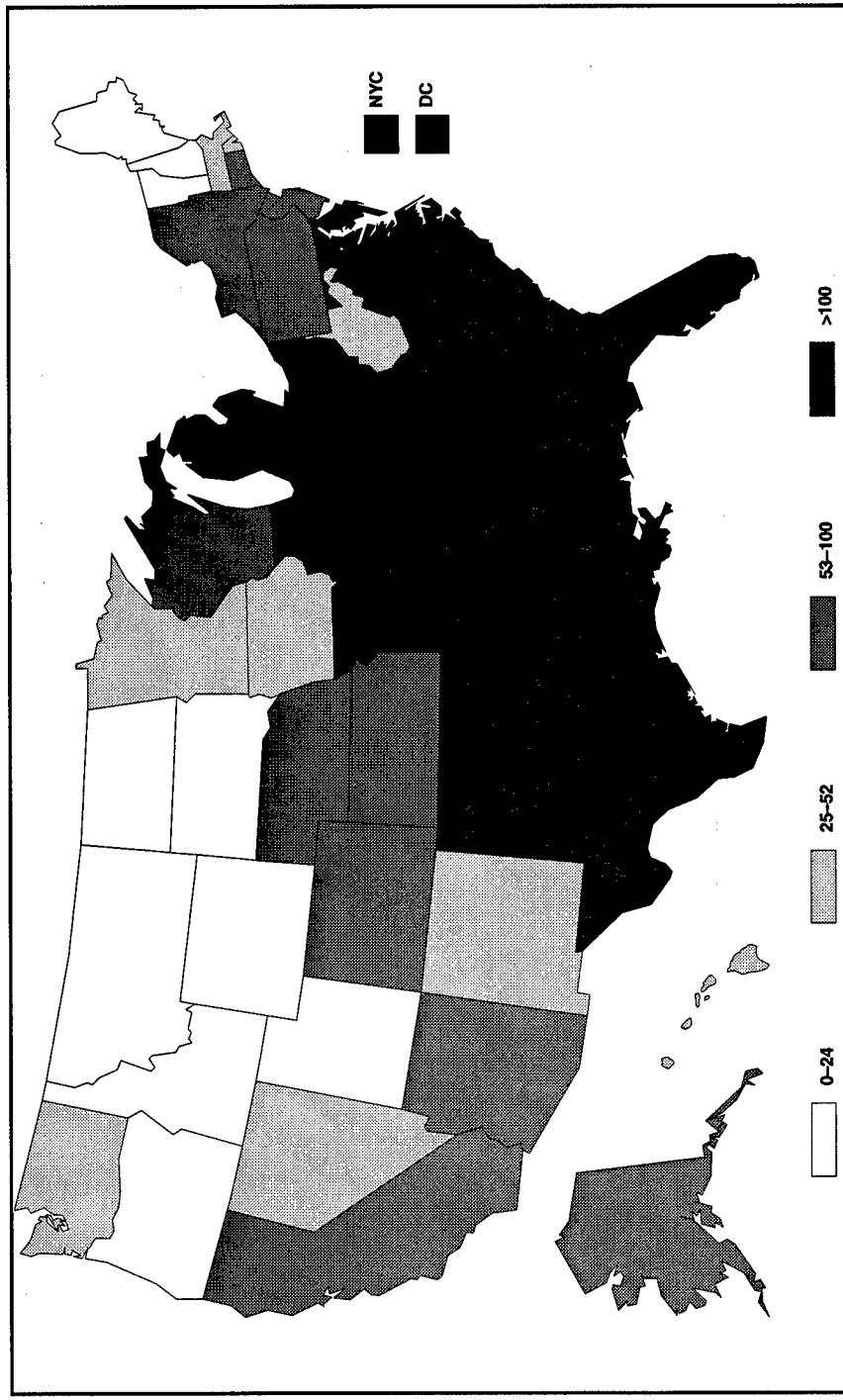
GRAPHS AND MAPS



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

Only *E. coli* O157:H7 isolates that are confirmed by a state public health laboratory are reported to PHLIS. Many public health laboratories are now able to subtype isolates using pulsed-field gel electrophoresis, a procedure that facilitates comparison of strains among states.

GONORRHEA — reported cases per 100,000 population, United States, 1997

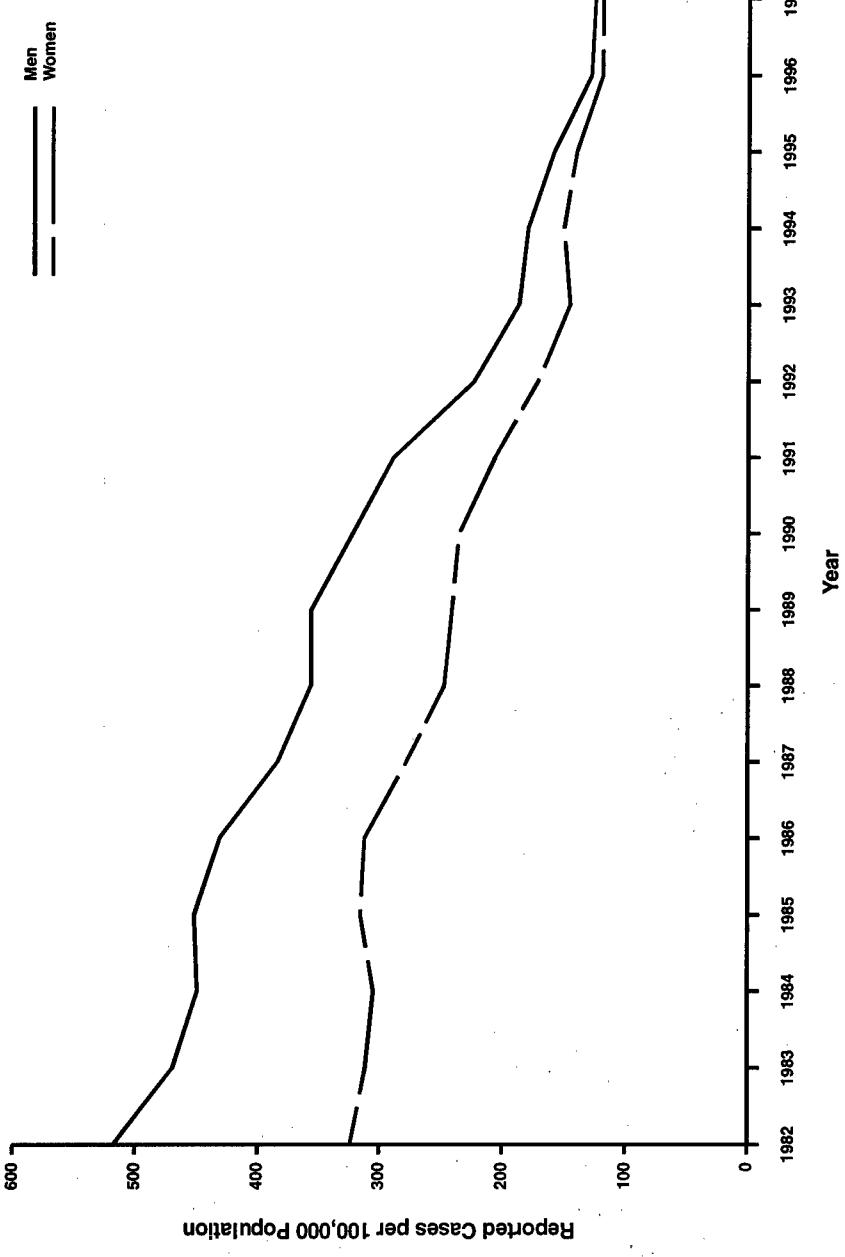


NOTE: The revised *Healthy People 2000* objective is ≤ 100 per 100,000 population.

The overall U.S. rate of gonorrhea in 1997 was 121.4 per 100,000 population; 30 states reported gonorrhea rates below the revised *Healthy People 2000* national objective.

GONORRHEA — by sex, United States, 1982–1997

GRAPHS AND MAPS



In 1997, the overall reported rate of gonorrhea in the United States was 121.4 per 100,000 population, similar to the rate of 122.8 in 1996. Among men, the rate decreased slightly from 128.5 per 100,000 population in 1996 to 125.4 in 1997. Among women, the rate increased slightly from 118.3 per 100,000 population in 1996 to 119.3 in 1997.*

*Data source: Division of Sexually Transmitted Diseases Prevention, National Center for HIV, STD, and TB Prevention.

GRAPHS AND MAPS

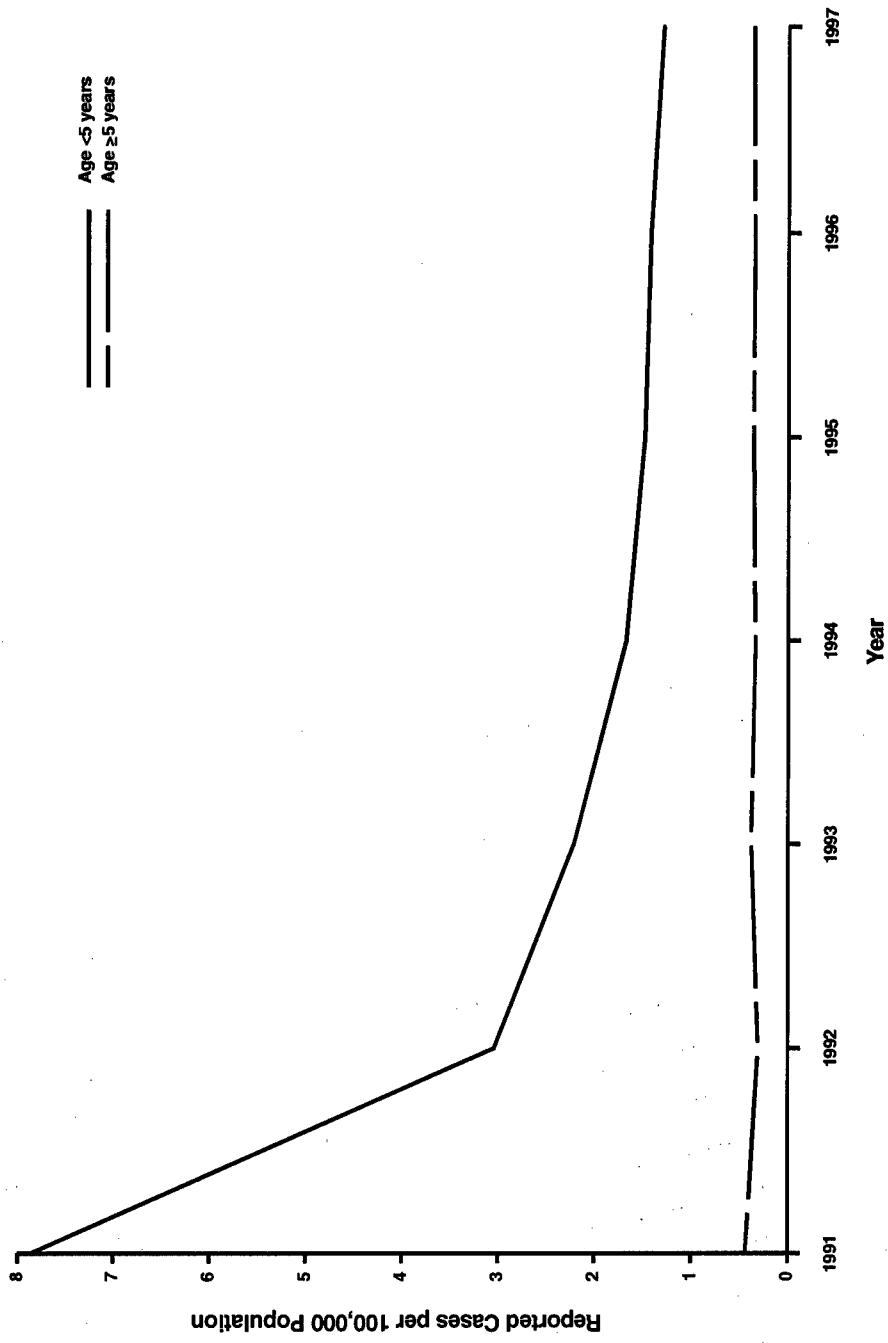
GONORRHEA — by race and ethnicity, United States, 1982–1997



In 1997, gonorrhea rates decreased or remained the same among all racial and ethnic groups. The only exception occurred among Asian/Pacific Islanders
(included in the "other" race and ethnicity category).

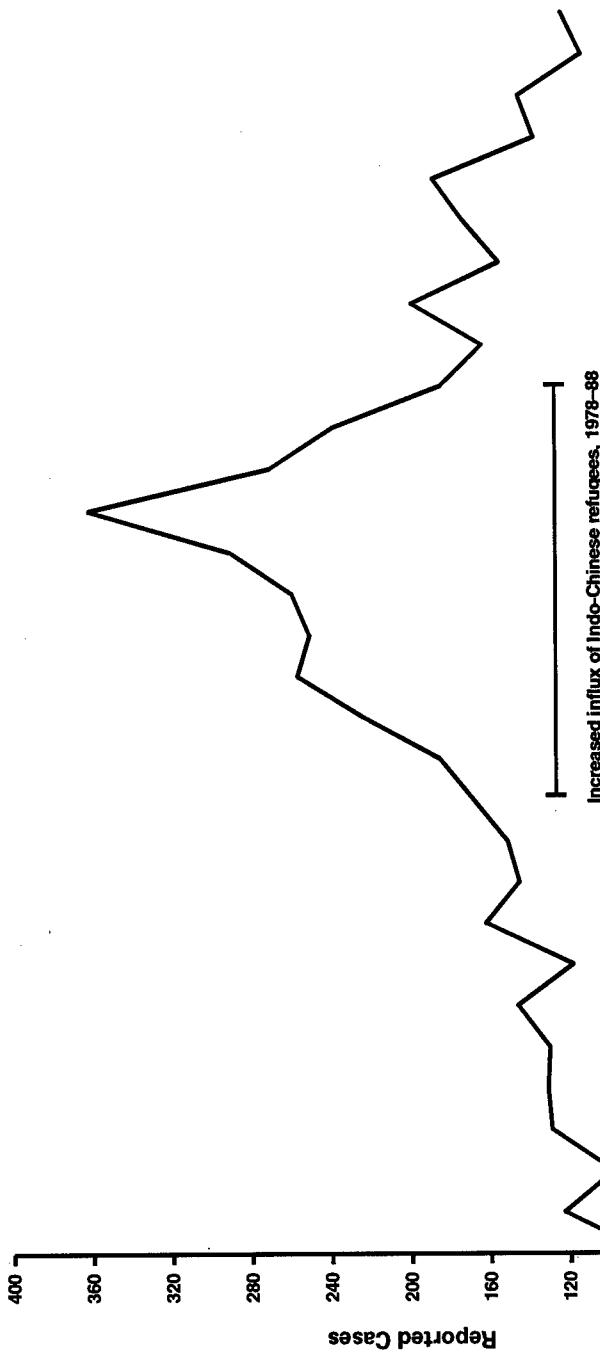
HAEMOPHILUS INFLUENZAE (Invasive Disease) — by age group, United States, 1991–1997

GRAPHS AND MAPS

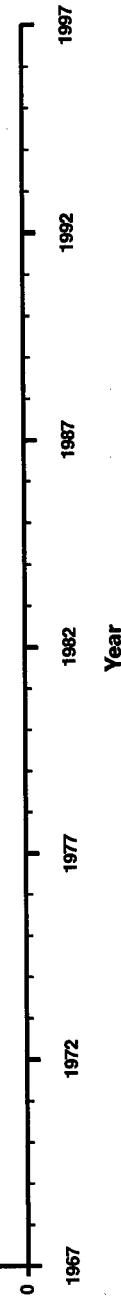


Before the introduction of the *Haemophilus influenzae* type b (Hib) vaccine in December 1987, the incidence of Hib invasive disease among children aged <5 years was estimated to be 60–110 per 100,000 population. In 1997, 260* cases of all serotypes of *H. influenzae* invasive disease among children aged <5 years were reported (incidence: 1.3 per 100,000 children); 82 (32%) cases were attributable to Hib (incidence: 0.4 per 100,000 children).

HANSEN DISEASE (Leprosy) — by year, United States, 1967–1997



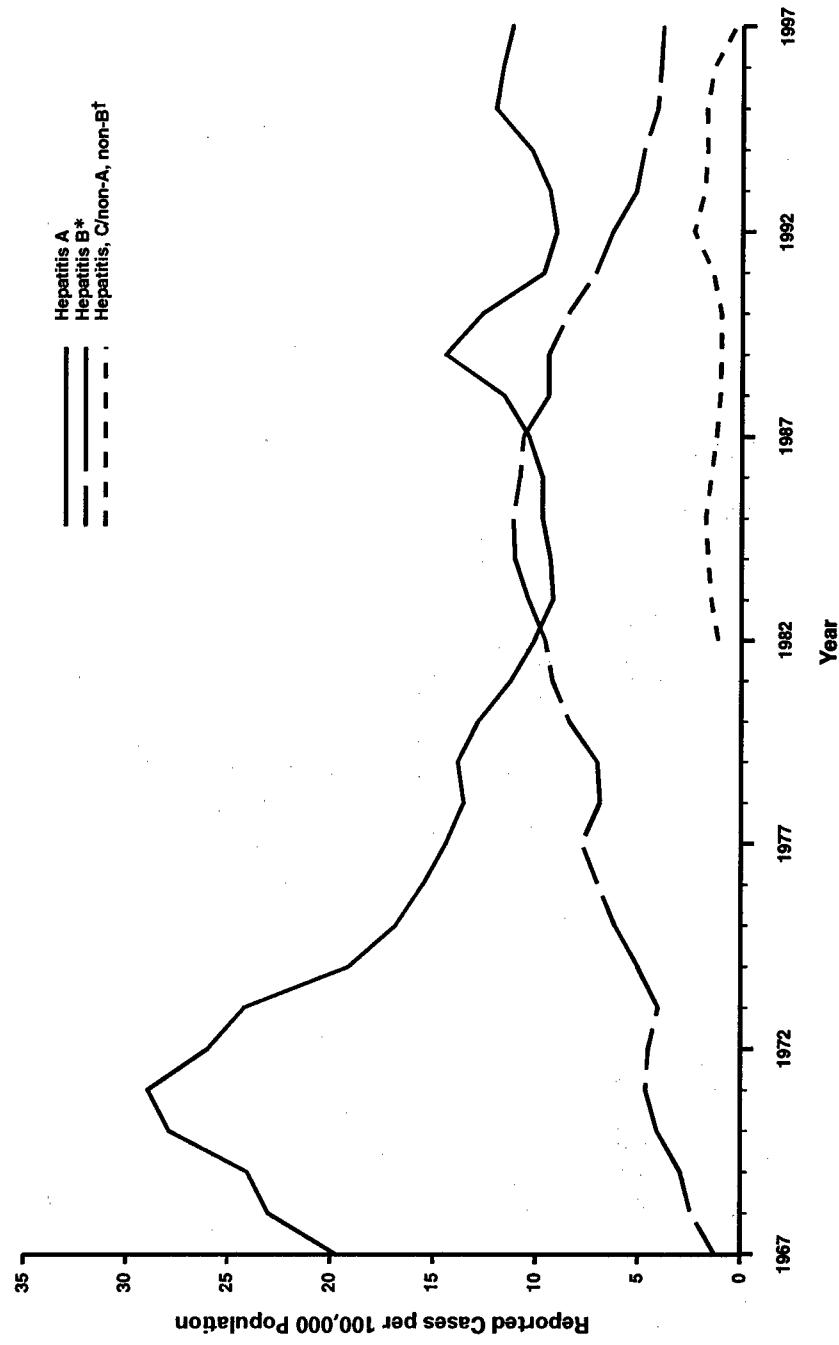
GRAPHS AND MAPS



In 1997, a total of 122 cases of Hansen disease were reported in the United States. The number of cases peaked at 361 in 1985; since 1988, the number has remained relatively stable.

HEPATITIS — by year, United States, 1967–1997

GRAPHS AND MAPS

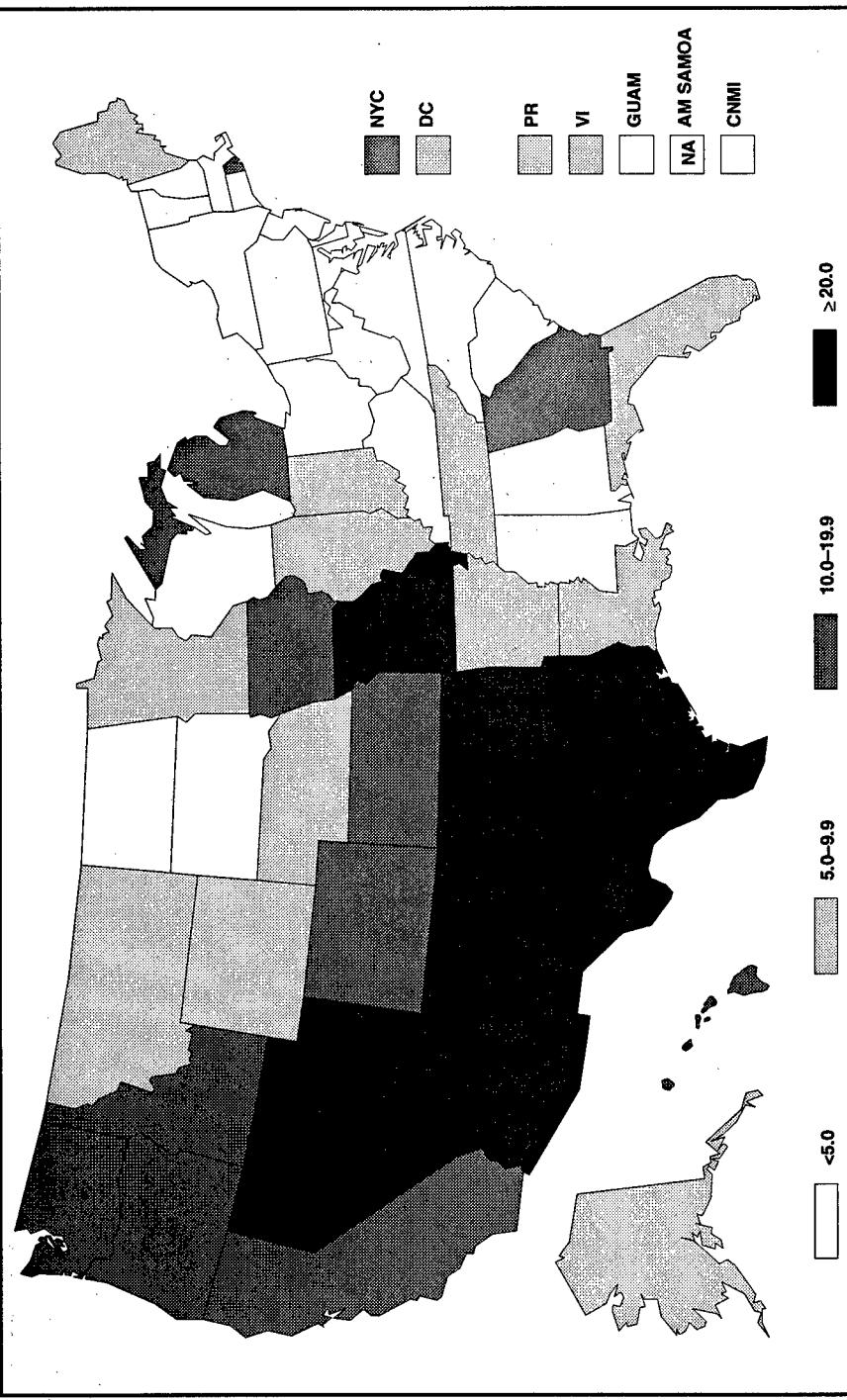


* The first hepatitis B vaccine was licensed in June 1982.

† Anti-HCV antibody test was available as of May 1990.

Hepatitis C/non-A, non-B is the most underreported type of viral hepatitis. Nonetheless, the increase observed in this type of hepatitis after 1990 is misleading because, in some states, reported cases have included those among persons identified in routine screening programs who were positive for antibody to hepatitis C virus but who did not have evidence of acute hepatitis.

HEPATITIS A — reported cases per 100,000 population, United States and territories, 1997

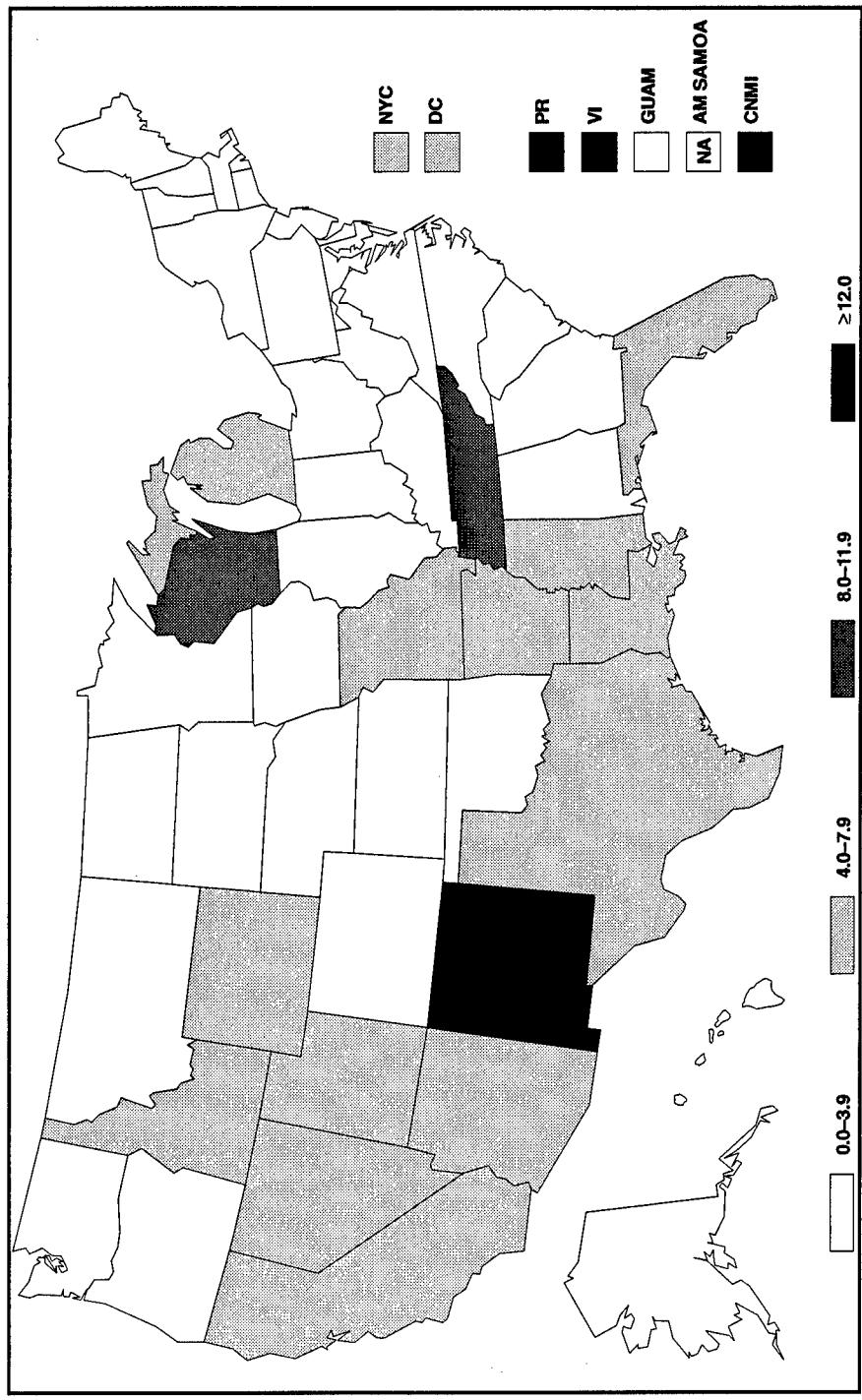


After reaching a rate of 12.1 cases per 100,000 population in 1995, the incidence of hepatitis A has declined slightly. In 1997, the rate of hepatitis A in the western United States was more than 2.5 times the average rate in other regions.

GRAPHS AND MAPS

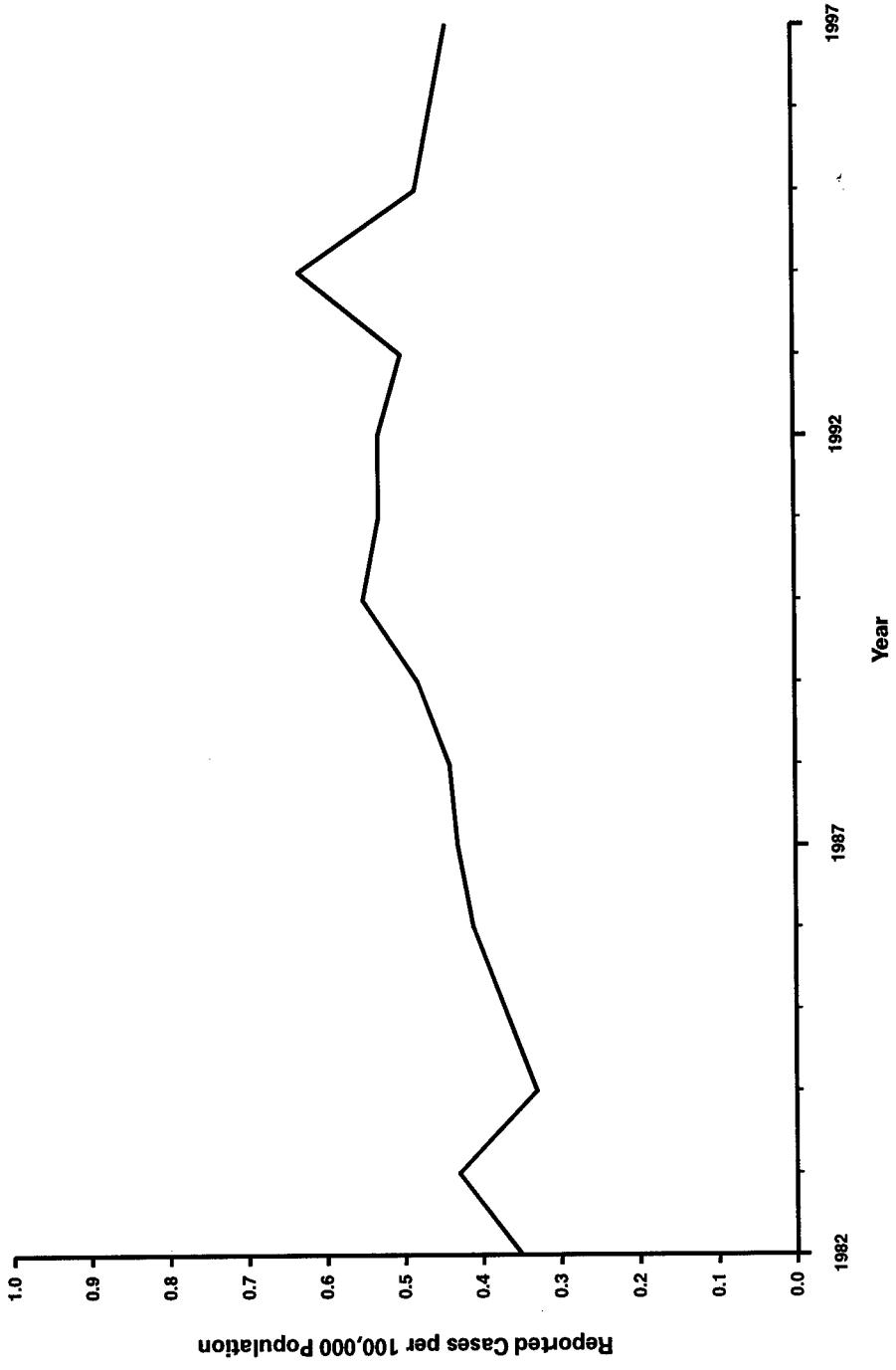
HEPATITIS B — reported cases per 100,000 population, United States and territories, 1997

GRAPHS AND MAPS



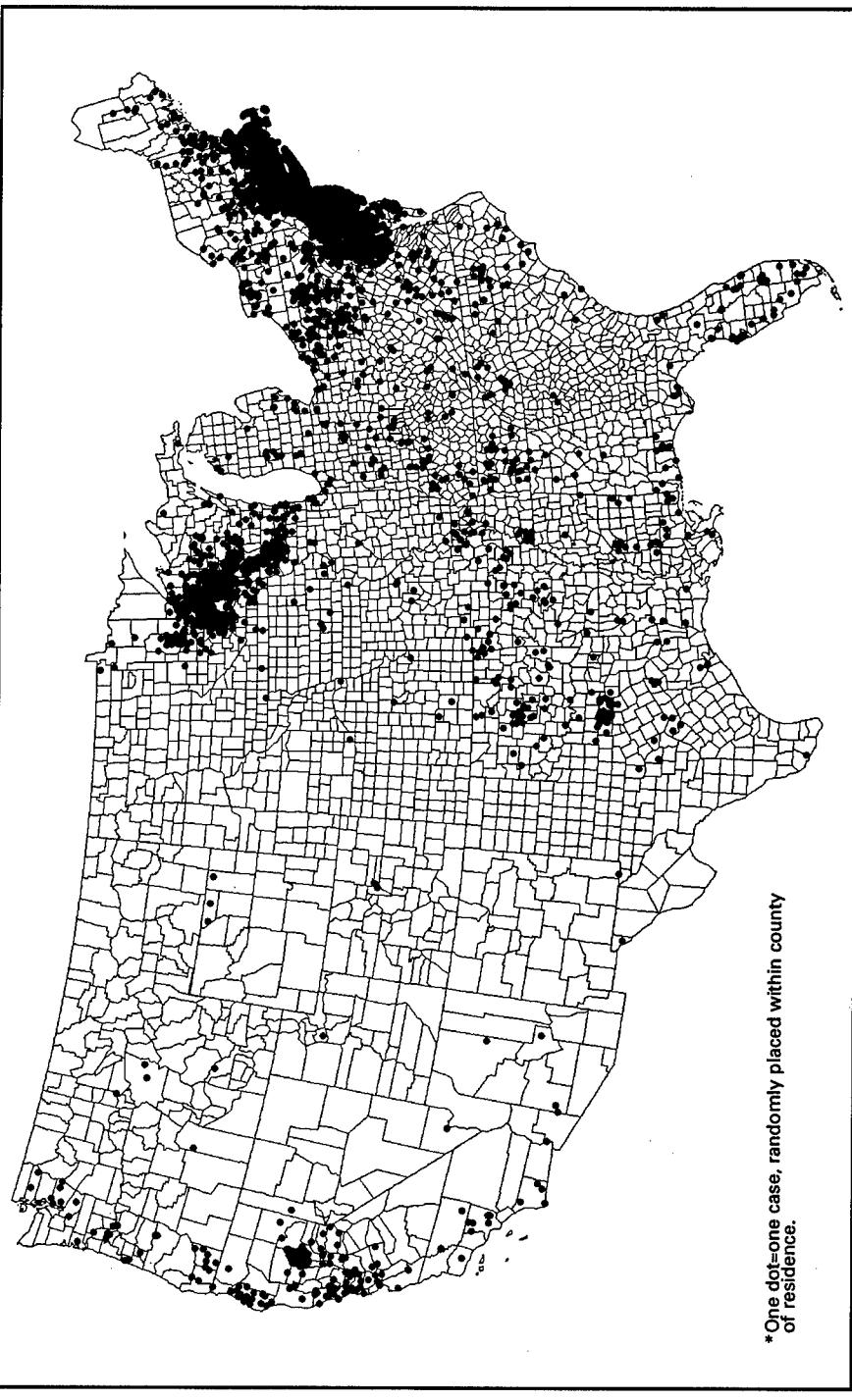
Hepatitis B continues to decline in most states primarily because of a decrease in the number of cases among injecting-drug users and, to a lesser extent, because of a decline in cases associated with both male homosexual practices and heterosexual practices.

LEGIONELLOSIS — by year, United States, 1982–1997



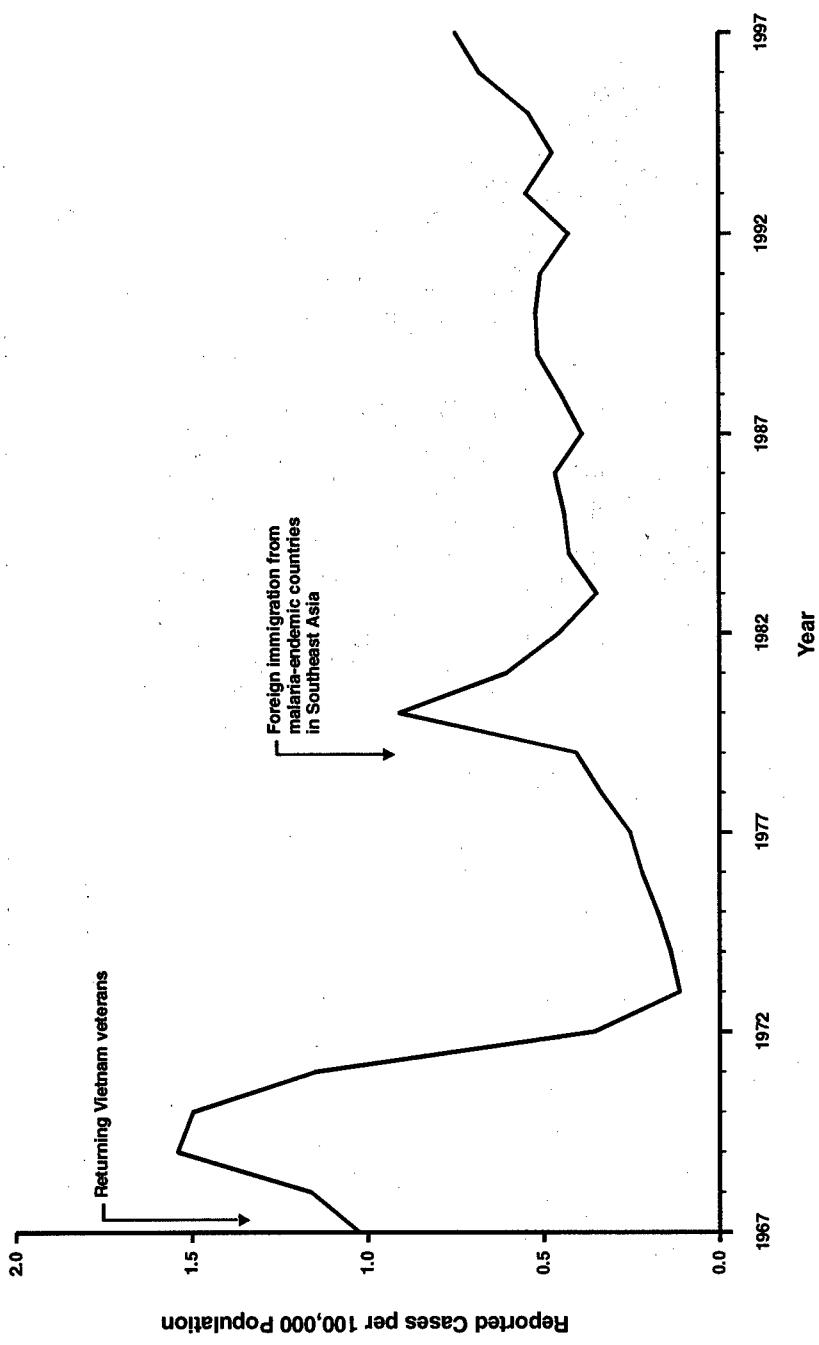
In 1997, the overall reported rate of legionellosis in the United States was 0.44 per 100,000 population. However, data from prospective, population-based studies of persons with pneumonia indicate that the actual rate of legionellosis is more than 10-fold this number.

GRAPHS AND MAPS



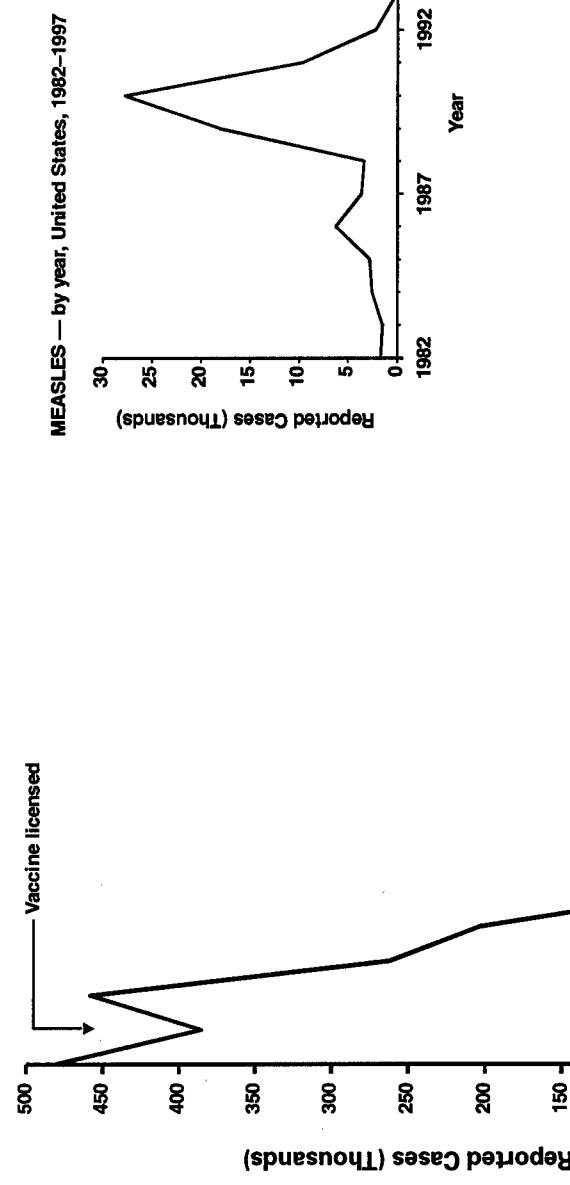
In 1997, a total of 12,801 cases of Lyme disease were reported by 46 states and the District of Columbia. The 10 states with the highest incidence of Lyme disease cases per 100,000 population were Connecticut, Rhode Island, New Jersey, New York, Pennsylvania, Delaware, Massachusetts, Wisconsin, Minnesota, and Maryland. These states accounted for 92% of the reported Lyme disease cases in 1997.

MALARIA — by year, United States, 1967–1997

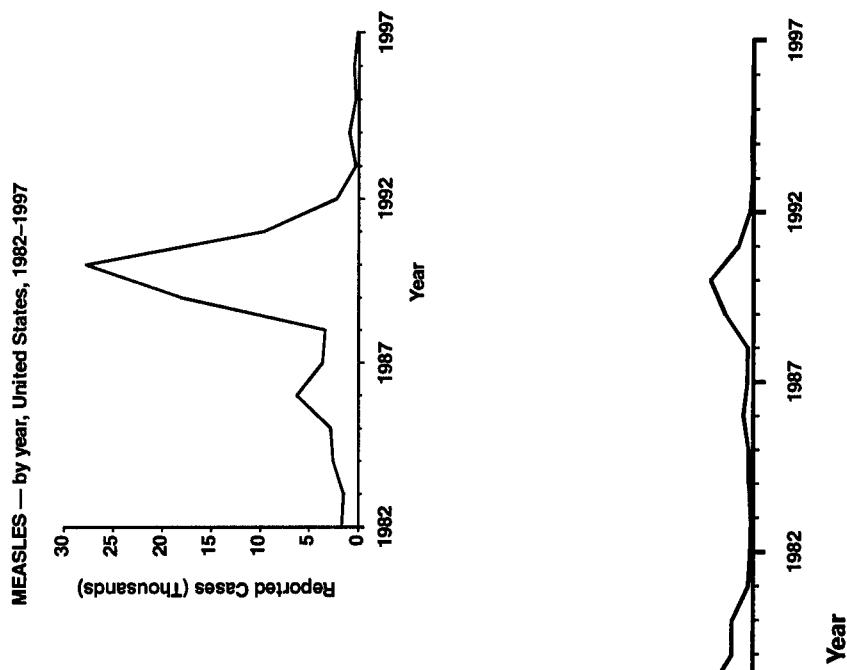


During the last 10 years, an increasing number of single cases or limited case clusters of locally acquired, mosquito-borne malaria have been reported in the United States, particularly near urban areas.

MEASLES (Rubeola) — by year, United States, 1962–1997

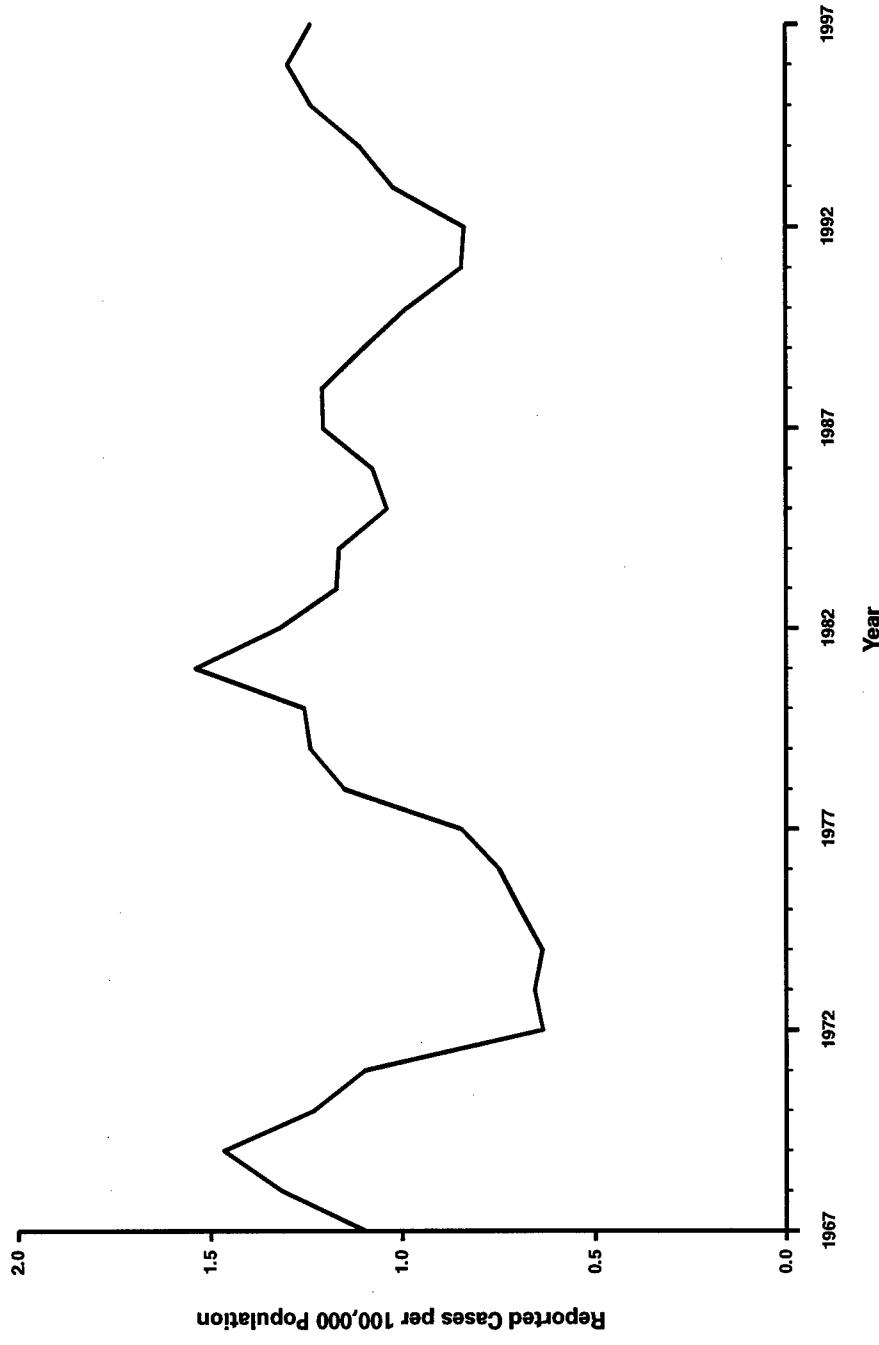


GRAPHS AND MAPS



In 1997, a total of 138 cases of measles were reported, which is the lowest number ever reported and a 55% decrease from the previous record low. Imported cases accounted for 41% of all cases, and an additional 18% of cases were epidemiologically or virologically linked to an international source.

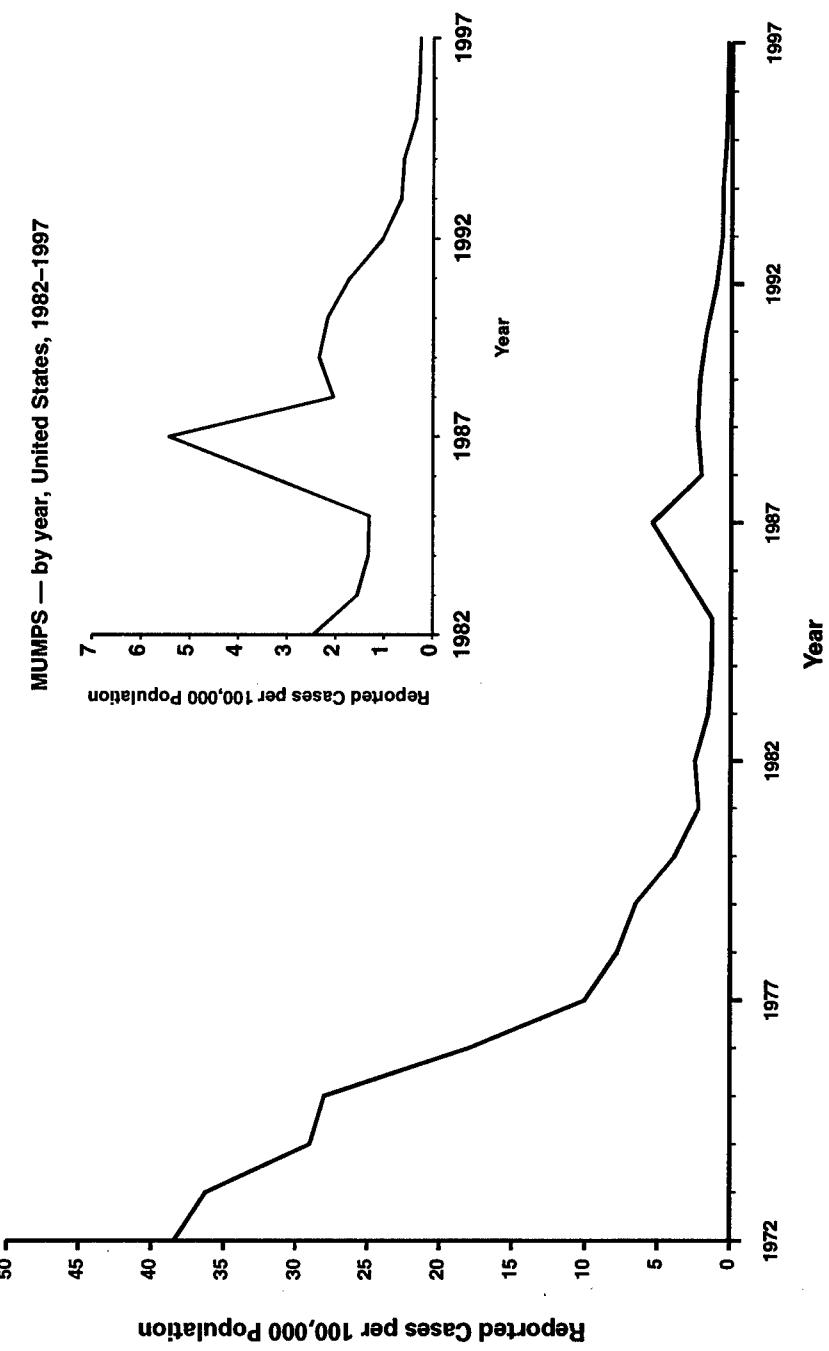
MENINGOCOCCAL DISEASE — by year, United States, 1967–1997



GRAPHS AND MAPS

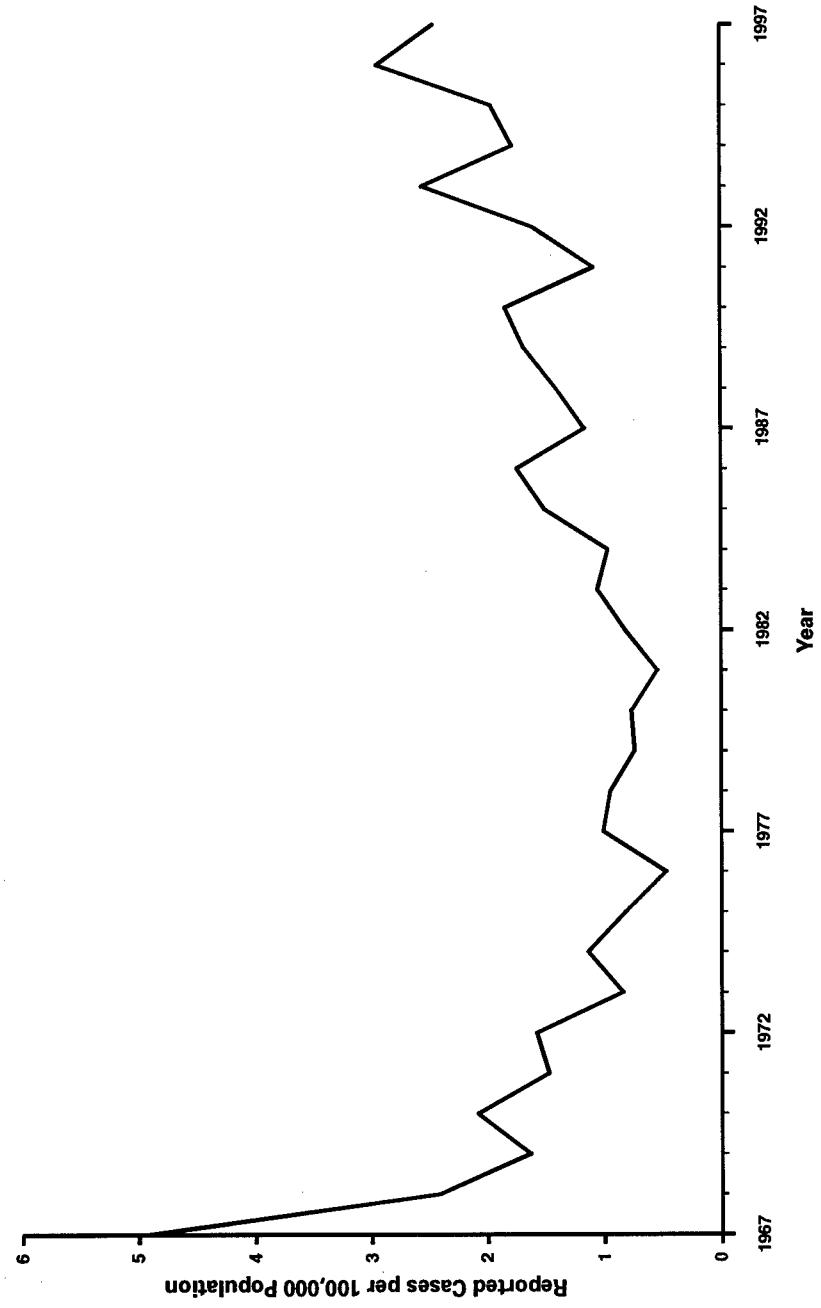
The overall rate of meningococcal disease remained constant over the past year. The proportion of cases in which the serogroup was reported increased from 19% in 1996 to 31% in 1997. Serogroup Y continues to cause disease in the United States. In 1997, serogroup Y accounted for 29% of cases in which the serogroup was reported. Most other cases were caused by serogroup B (32%) and serogroup C (31%).

GRAPHS AND MAPS



NOTE: Mumps vaccine was licensed in December 1987.
Since 1990, the incidence of mumps has decreased steadily.

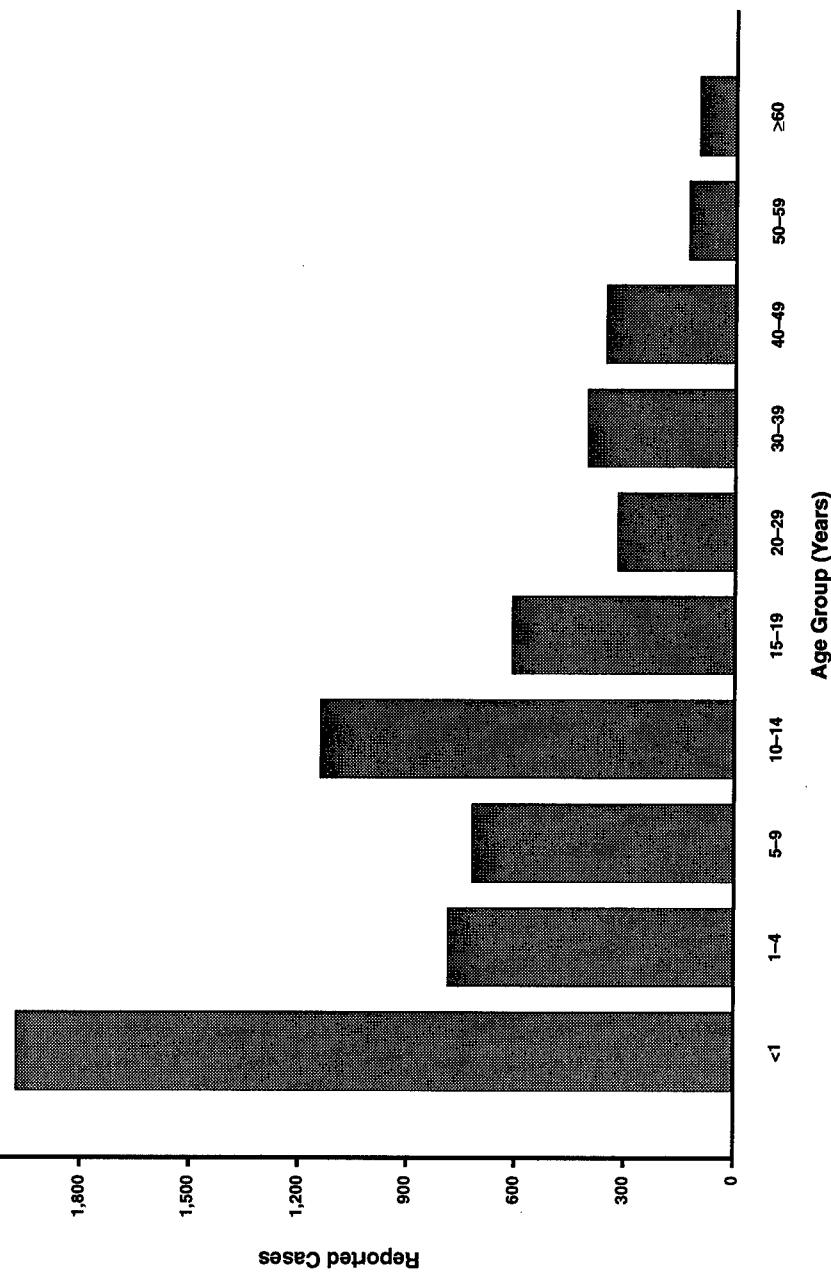
PERTUSSIS (Whooping Cough) — by year, United States, 1967–1997



NOTE: DTP vaccine was licensed in 1949.

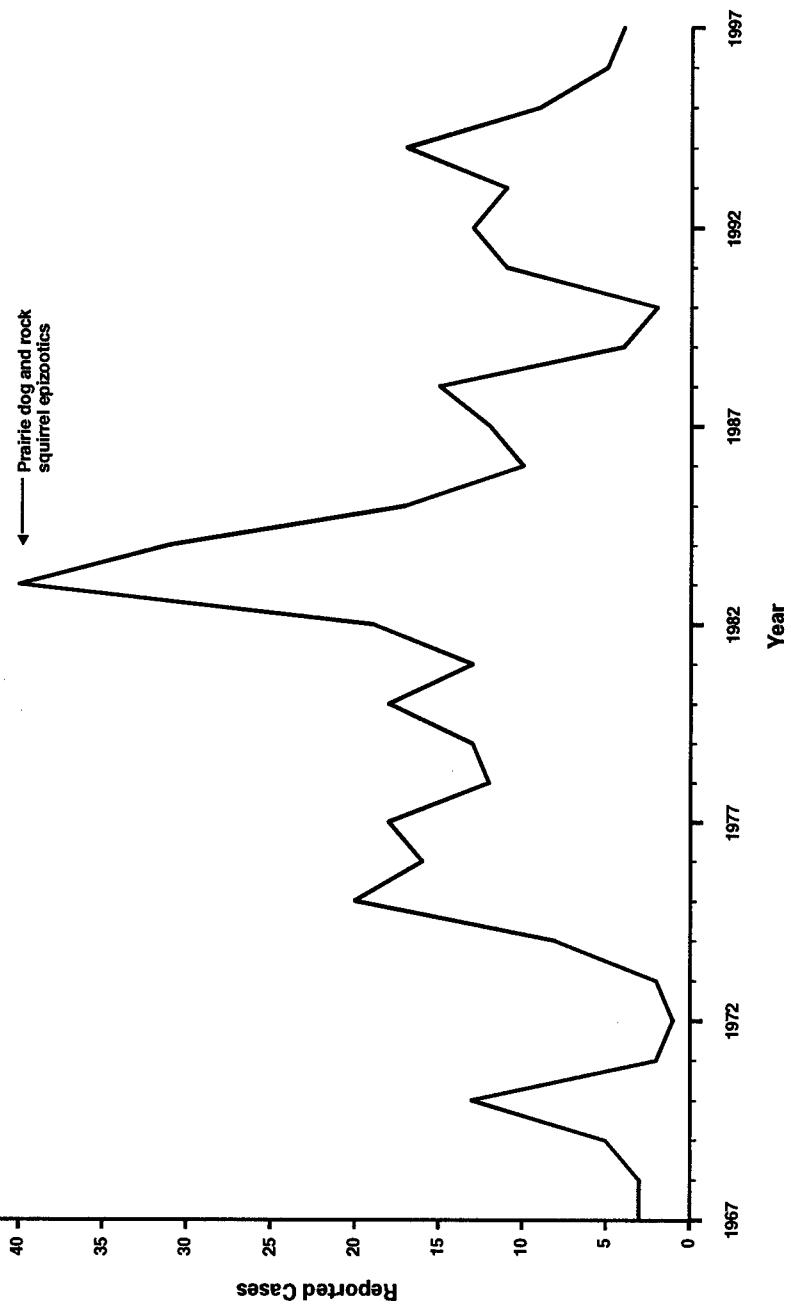
Pertussis epidemics occur every 3–4 years. During the last epidemic year (1996), the highest number of pertussis cases (7,796) since 1967 was reported with an incidence of 2.9 per 100,000 population. Since 1993, after each epidemic year, the number of reported cases has not returned to the baseline of the preepidemic year.

GRAPHS AND MAPS

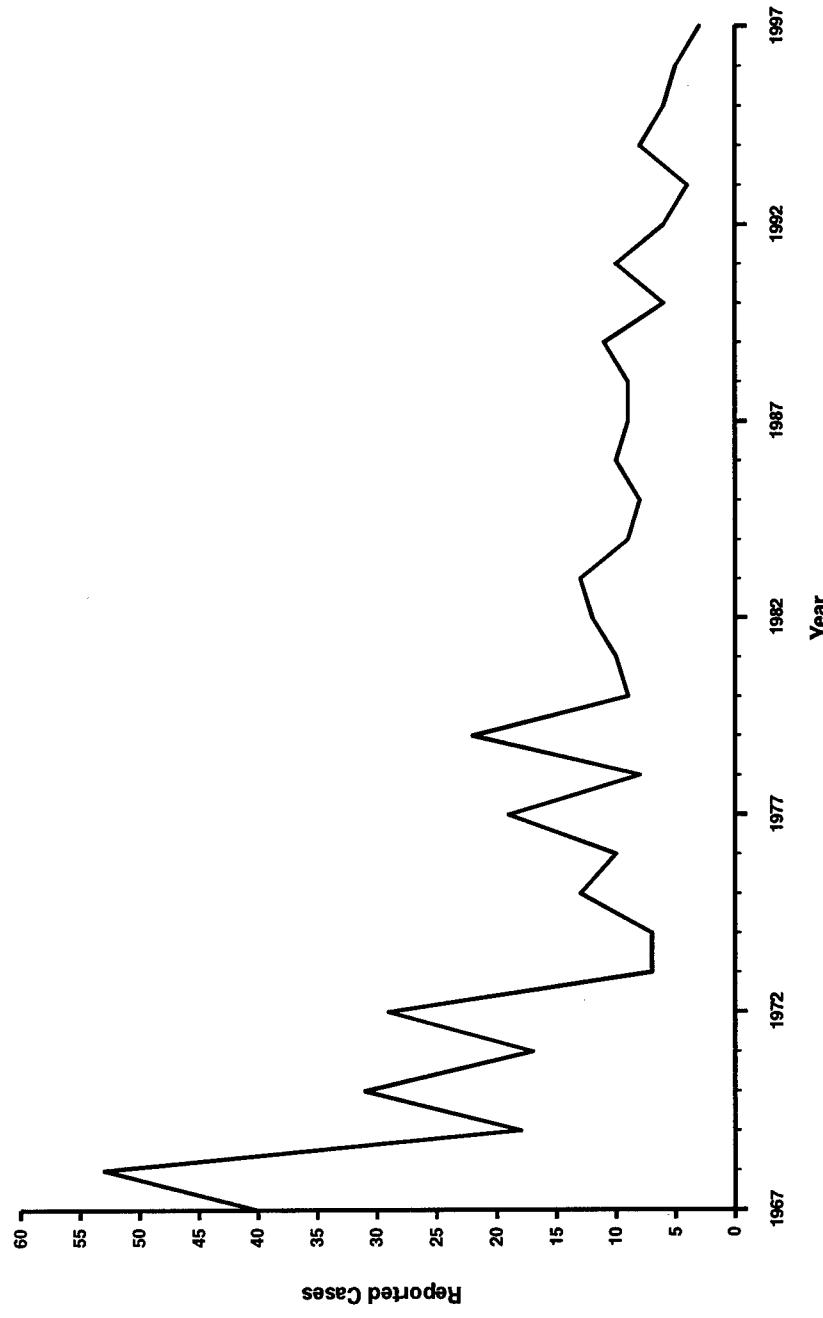


Although the highest number of reported cases continues to be among children aged <1 year, pertussis cases among adolescents and adults increasingly are being reported to CDC. In 1997, 46% of all reported pertussis cases occurred among persons aged ≥10 years. By comparison, during 1990–1992, 1993–1995, and 1996, the proportion of reported pertussis cases among persons aged ≥10 years was 24%, 29%, and 44%, respectively.

PLAQUE — among humans, by year, United States, 1967–1997



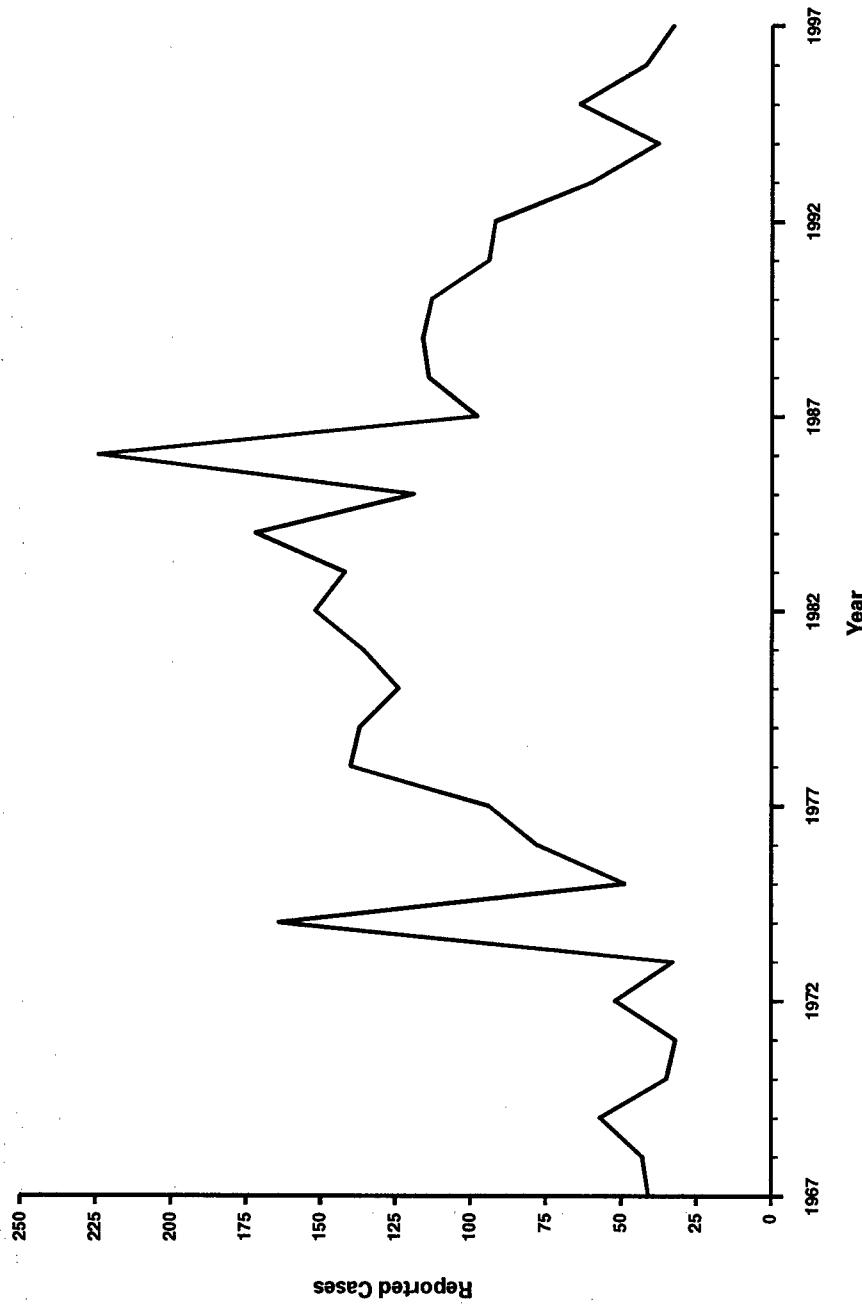
In 1997, four plague cases among humans were reported in the United States (two cases in California, one in Arizona, and one in Colorado). One case was fatal and diagnosed postmortem as septicemic plague.

GRAPHS AND MAPS

NOTE: Inactivated vaccine was licensed in 1955. Oral vaccine was licensed in 1961.

Of 142 cases of indigenously acquired paralytic poliomyelitis reported during 1980–1997, a total of 140 were associated with the administration of oral poliovirus vaccine (OPV). The remaining two cases were classified as indeterminate. To reduce the burden of poliomyelitis associated with the use of OPV, in January 1997, the Advisory Committee on Immunization Practices (ACIP) recommended a sequential schedule of two doses of inactivated poliovirus vaccine (IPV), followed by two doses of OPV.

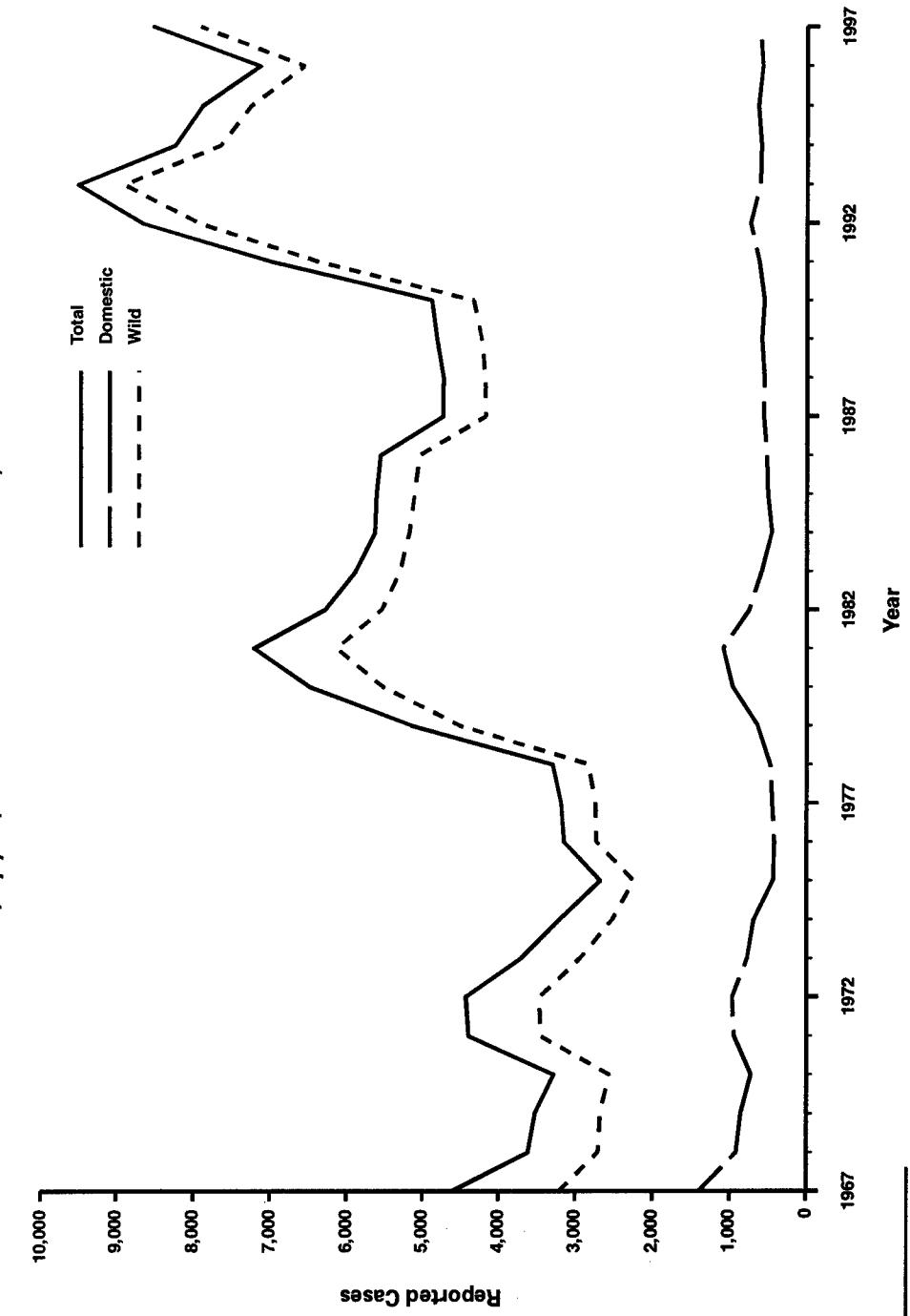
PSITTACOSIS — by year, United States, 1967–1997



The number of psittacosis cases can vary from year to year because of periodic outbreaks. The apparent increase in cases during the late 1970s to mid-1980s might reflect greater application of diagnostic tests for *Chlamydia* species in patients with respiratory illness. The lower number of cases in recent years might reflect both improved diagnostic testing for distinguishing *C. psittaci* from *C. pneumoniae* infections and improvement in control measures for *C. psittaci* infection in birds.

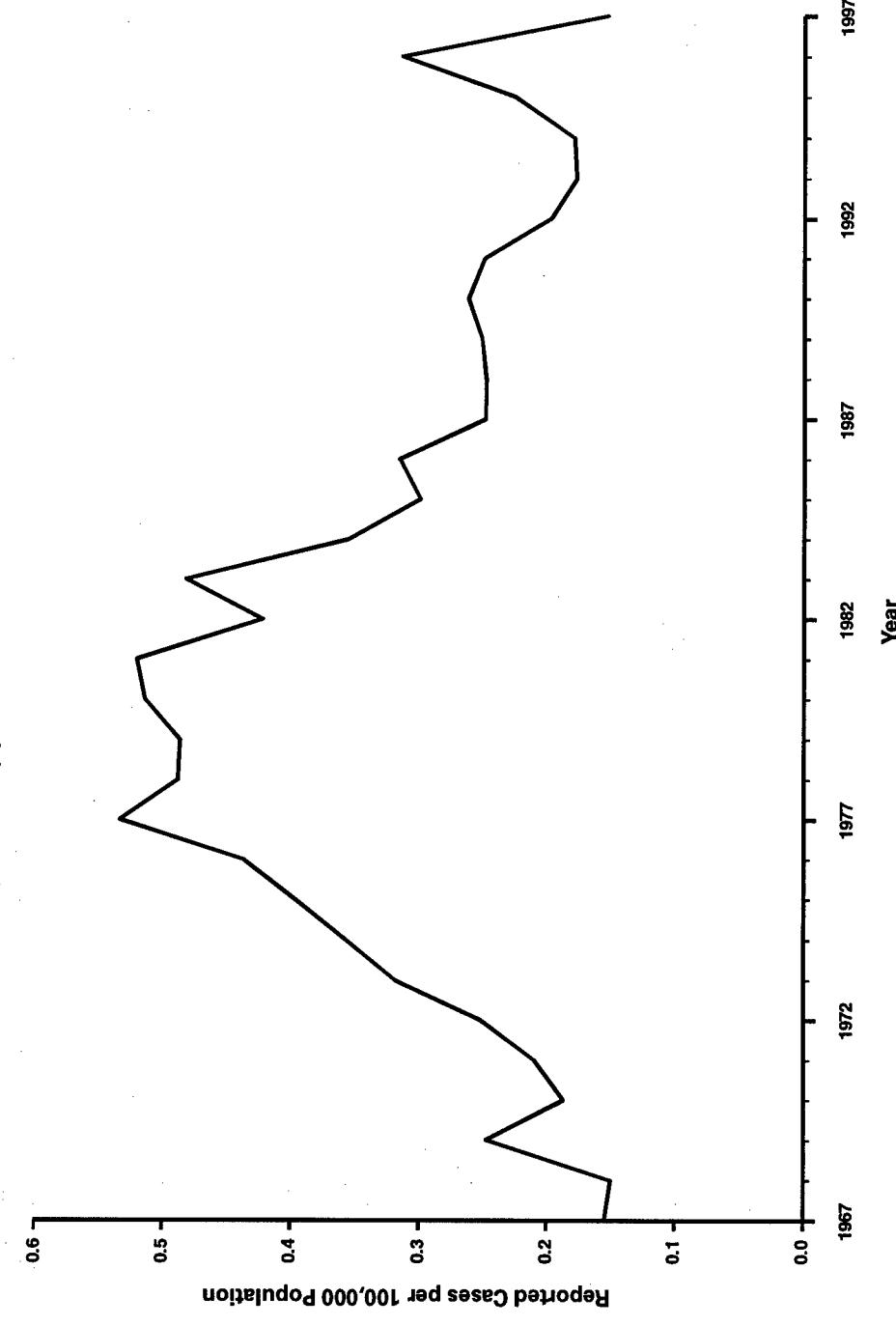
RABIES — wild and domestic animals, by year, United States and Puerto Rico, 1967–1997

GRAPHS AND MAPS



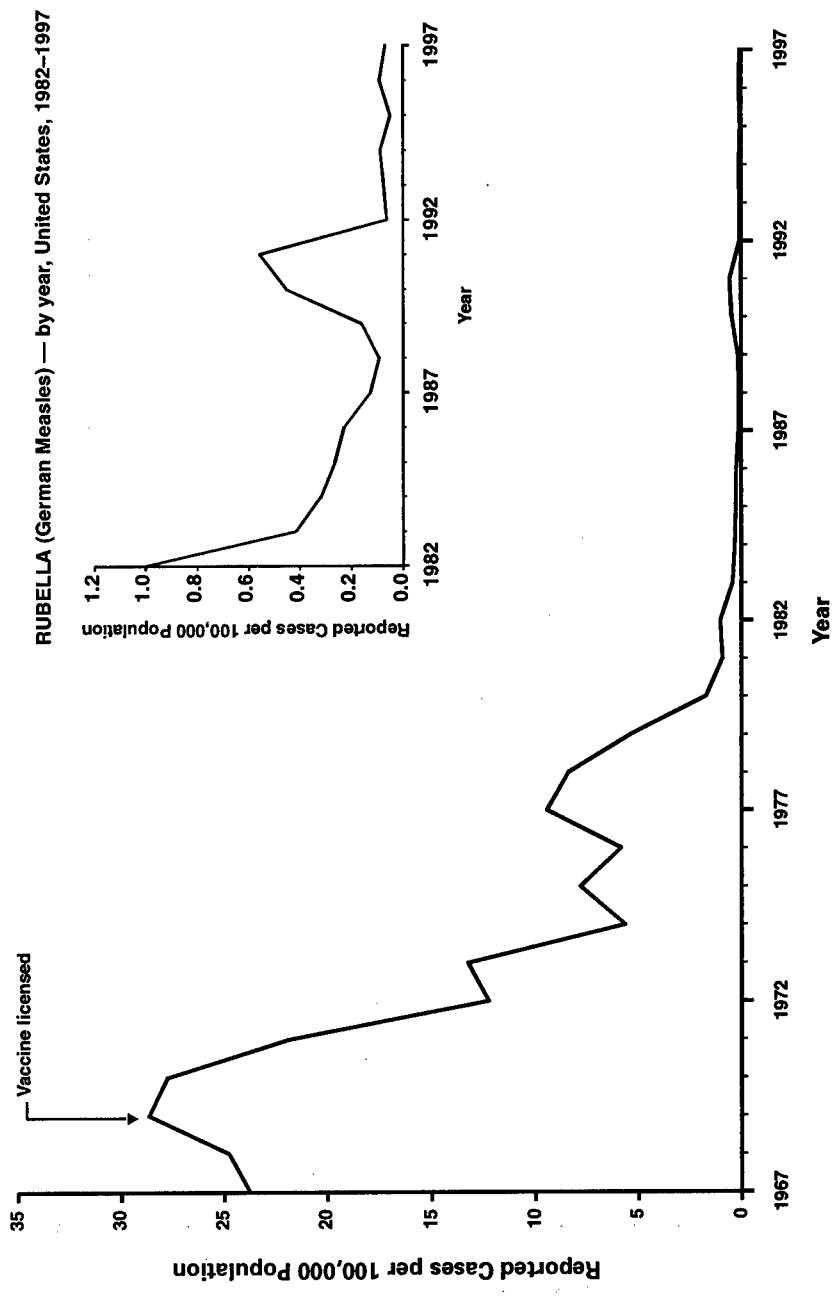
The resurgence of reported cases, following three consecutive years of decline, is primarily the result of cyclic or periodic reemergence of rabies, mainly among raccoons in the eastern United States. During 1997, populations variously decimated by previous epizootics again reached densities sufficient to support epizootic transmission of the disease.

ROCKY MOUNTAIN SPOTTED FEVER (RMSF) — by year, United States, 1967–1997



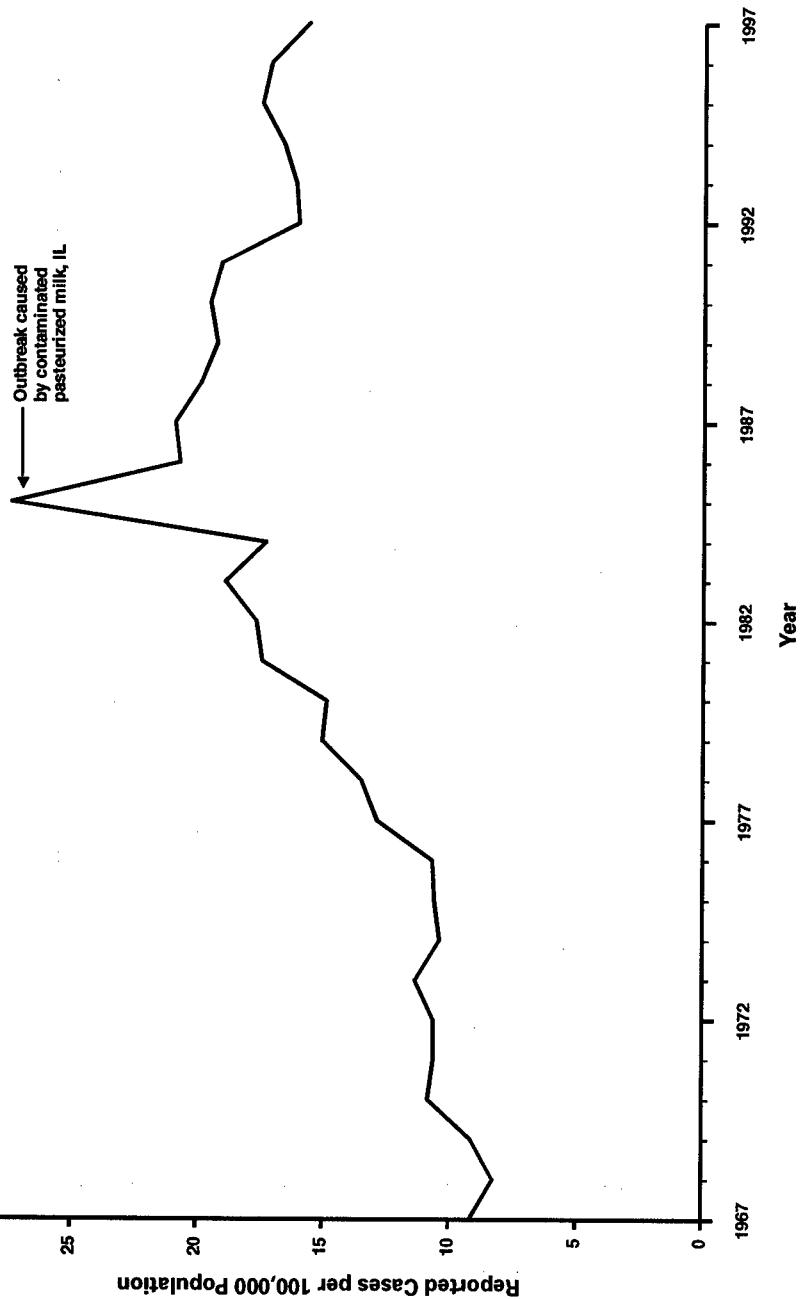
Changes in reported cases of Rocky Mountain spotted fever might reflect alterations to surveillance algorithms for this and other tickborne diseases. Biological factors (e.g., changes in tick populations resulting from fluctuating environmental conditions) also could be involved.

GRAPHS AND MAPS



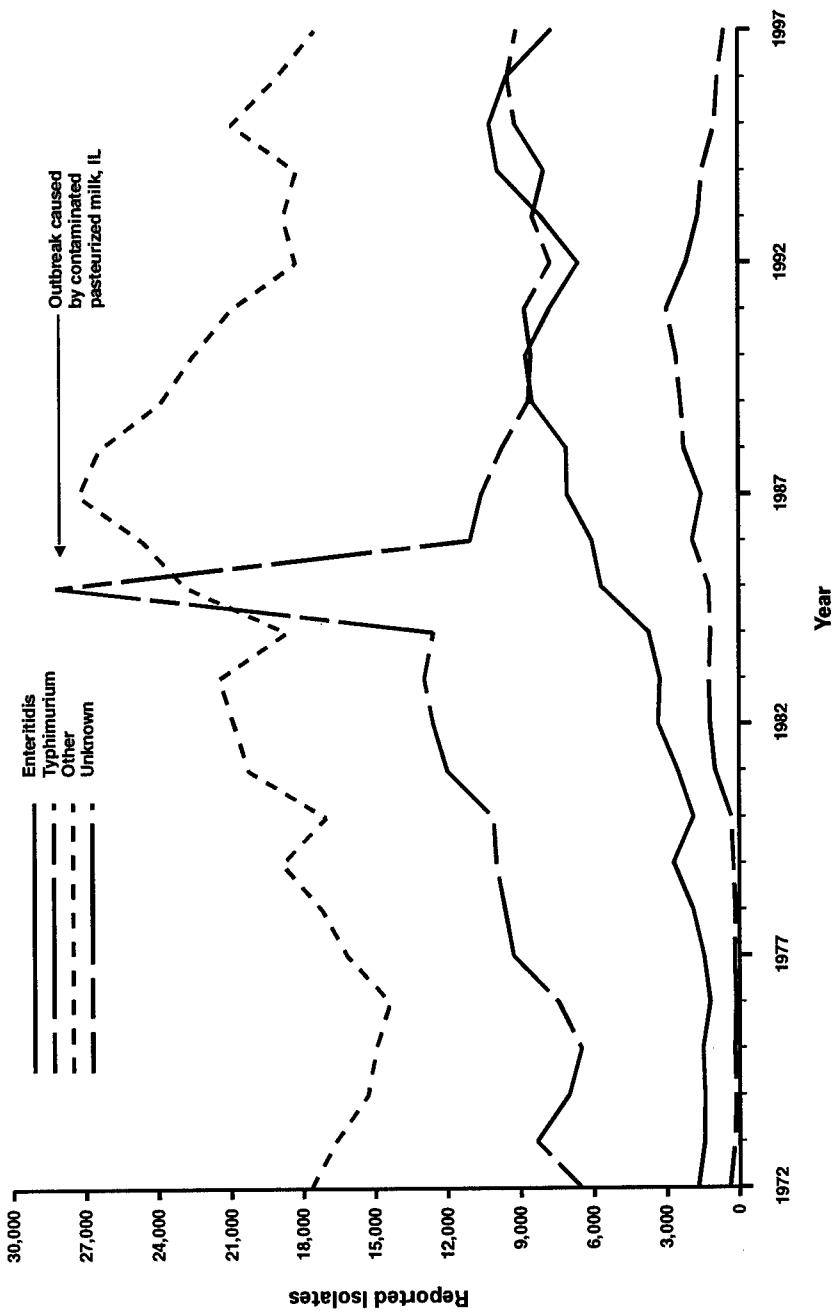
The incidence of reported rubella has decreased steadily. The highest proportion of cases is reported among persons aged >20 years.

SALMONELLOSIS (excluding Typhoid Fever) — by year, United States, 1967–1997



In 1997, *Salmonella* serotypes Typhimurium and Enteritidis together accounted for 46% of all salmonellosis reported in humans.

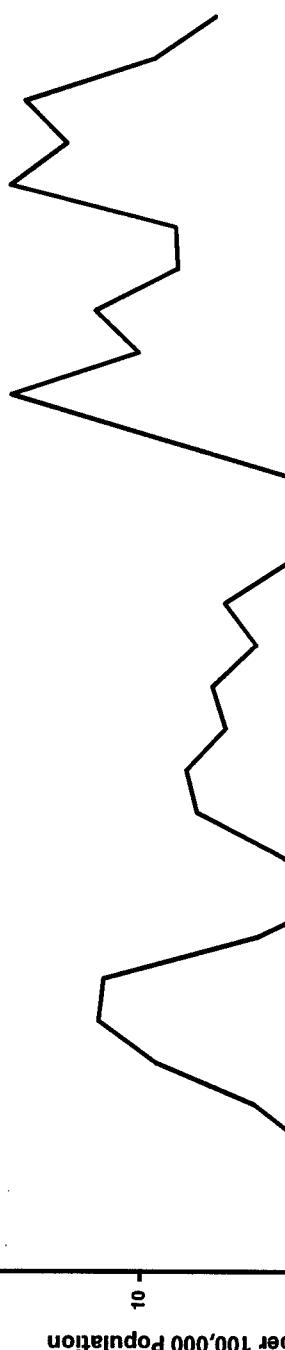
SALMONELLA — serotype of isolate by year,* United States, 1972–1997



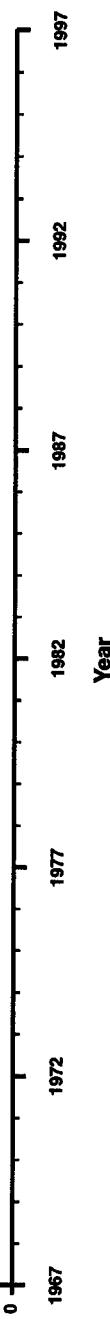
*Data from Public Health Laboratory Information System (PHLIS).

In 1997, Typhimurium was the most common *Salmonella* serotype isolated from humans; approximately 35% of all reported *S. Typhimurium* strains from humans are now resistant to five antimicrobial agents (i.e., ampicillin, chloramphenicol, sulfonamide, streptomycin, and tetracycline).

SHIGELLOSIS — by year, United States, 1967-1997

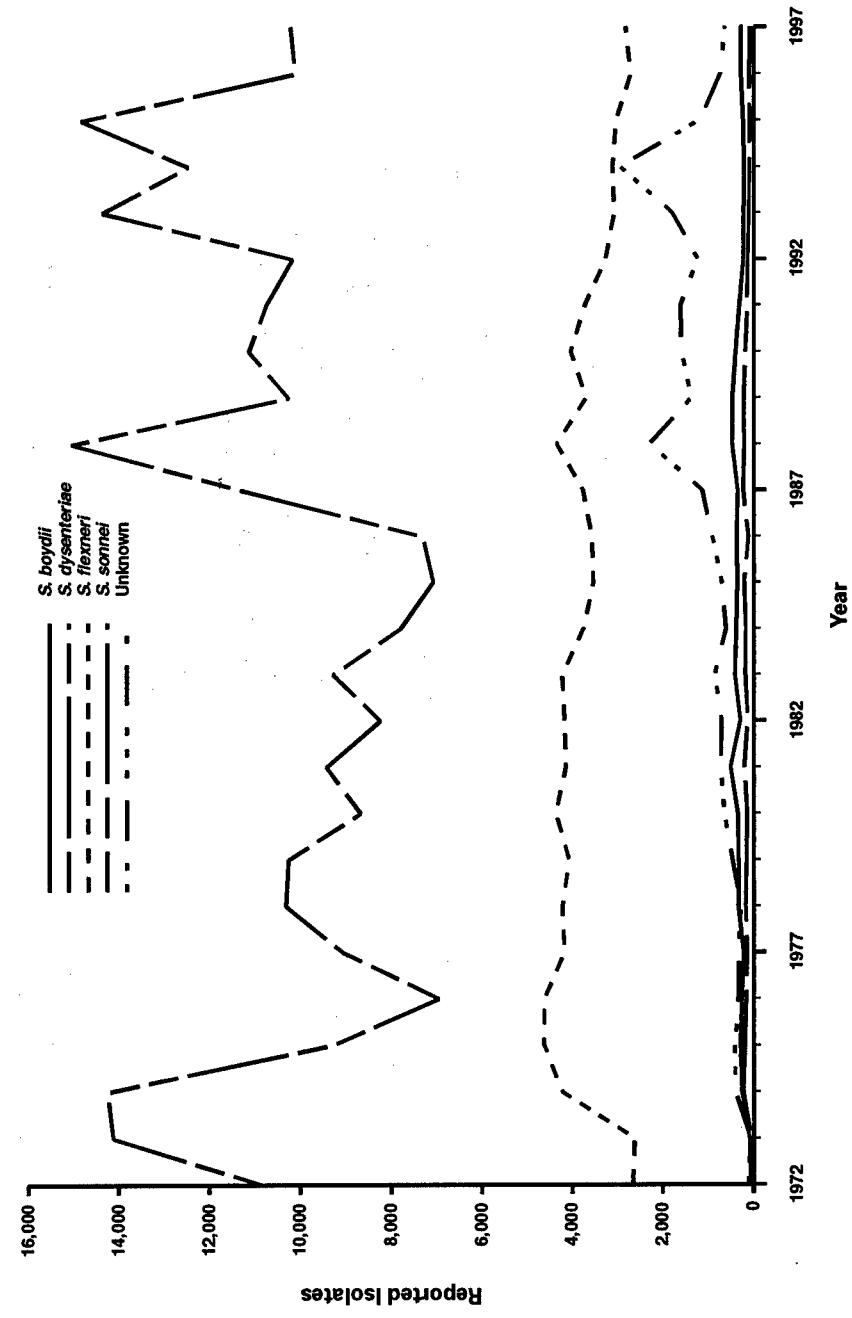


GRAPHS AND MAPS



GRAPHS AND MAPS

SHIGELLA — species of isolate by year,* United States, 1972–1997

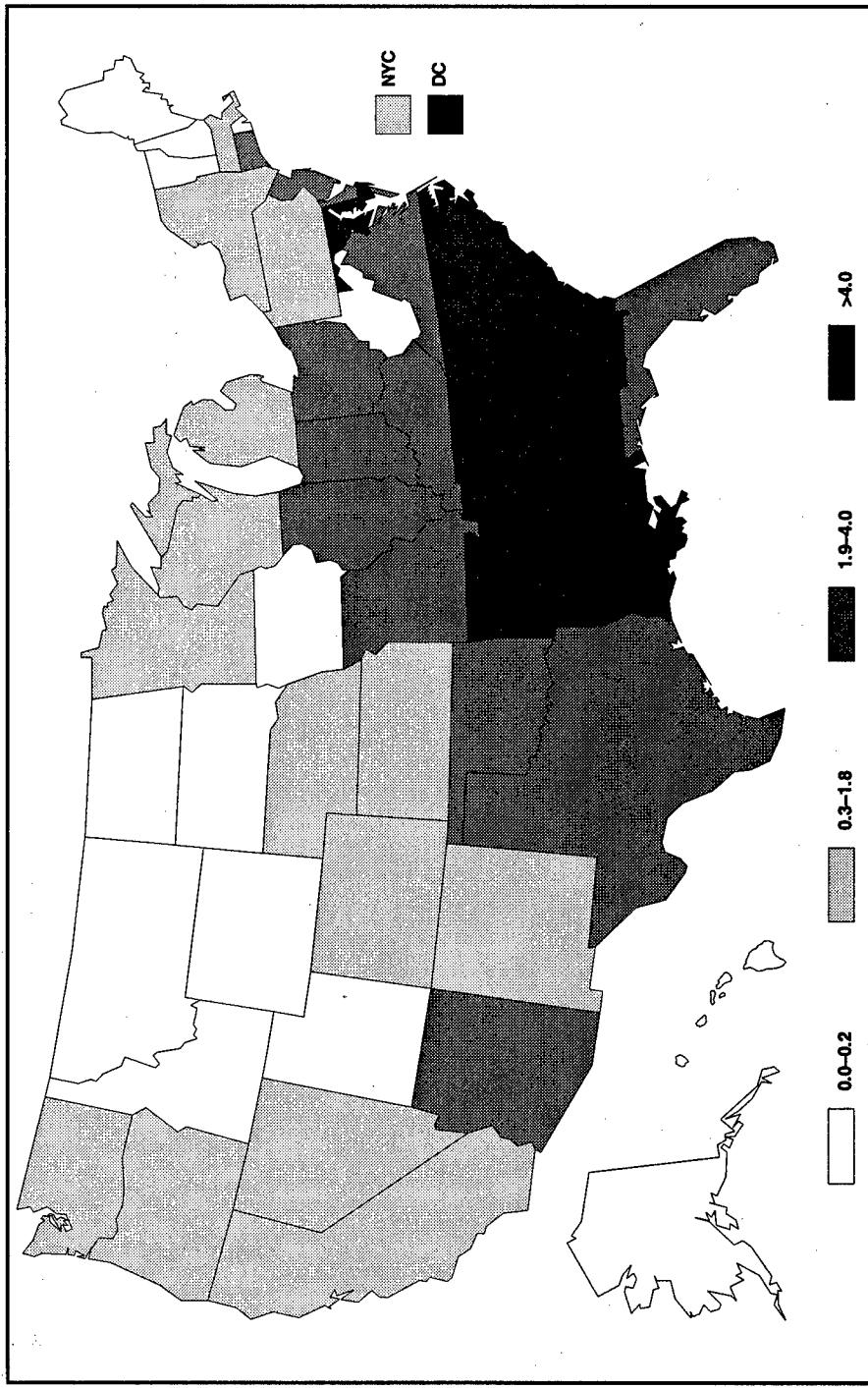


*Data from Public Health Laboratory Information System (PHLIS).

Antimicrobial resistance among *Shigella* isolates has continued to increase; nearly 20% of *Shigella* isolates in the United States are resistant to both ampicillin and trimethoprim-sulfamethoxazole.

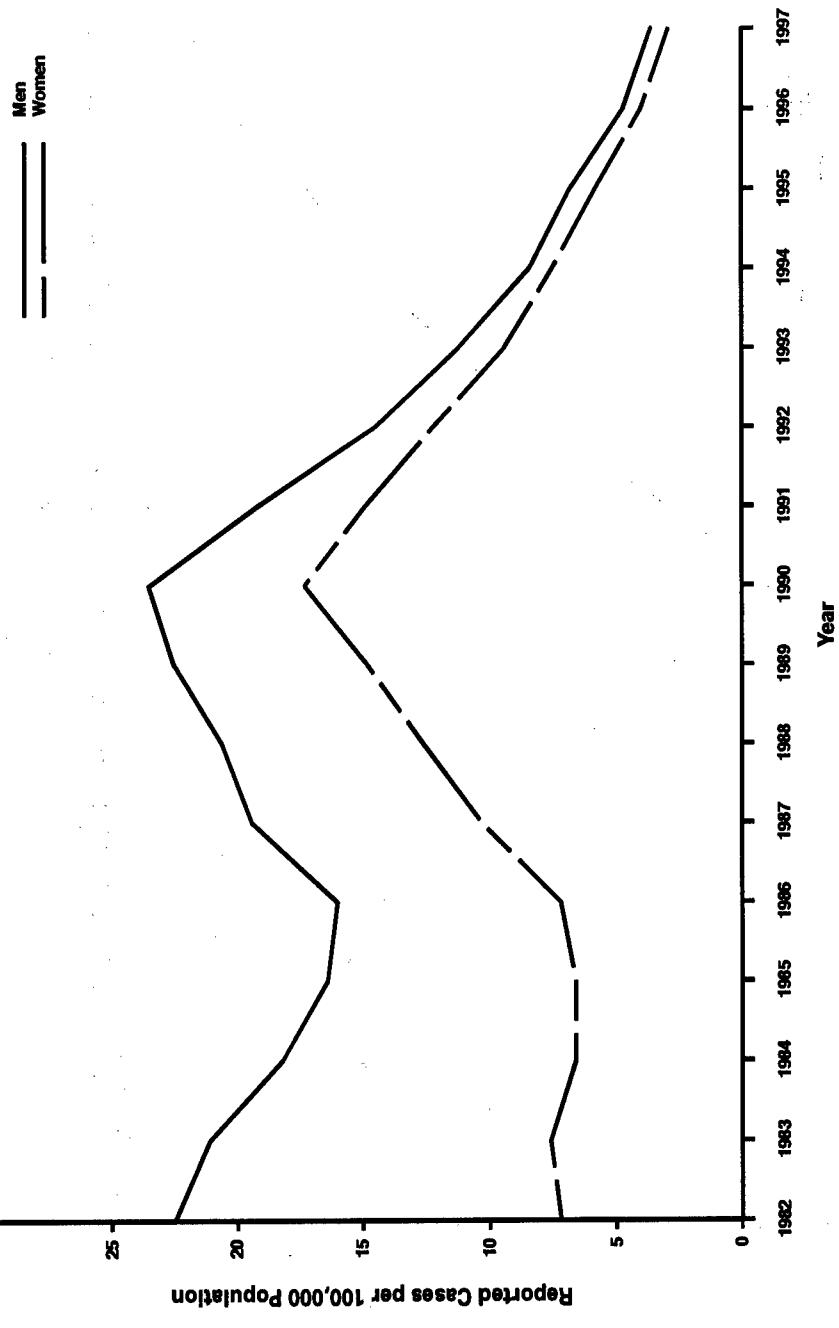
SYPHILIS (Primary and Secondary) — reported cases per 100,000 population, United States, 1997

GRAPHS AND MAPS



NOTE: The revised *Healthy People 2000* objective is 4.0 per 100,000 population.

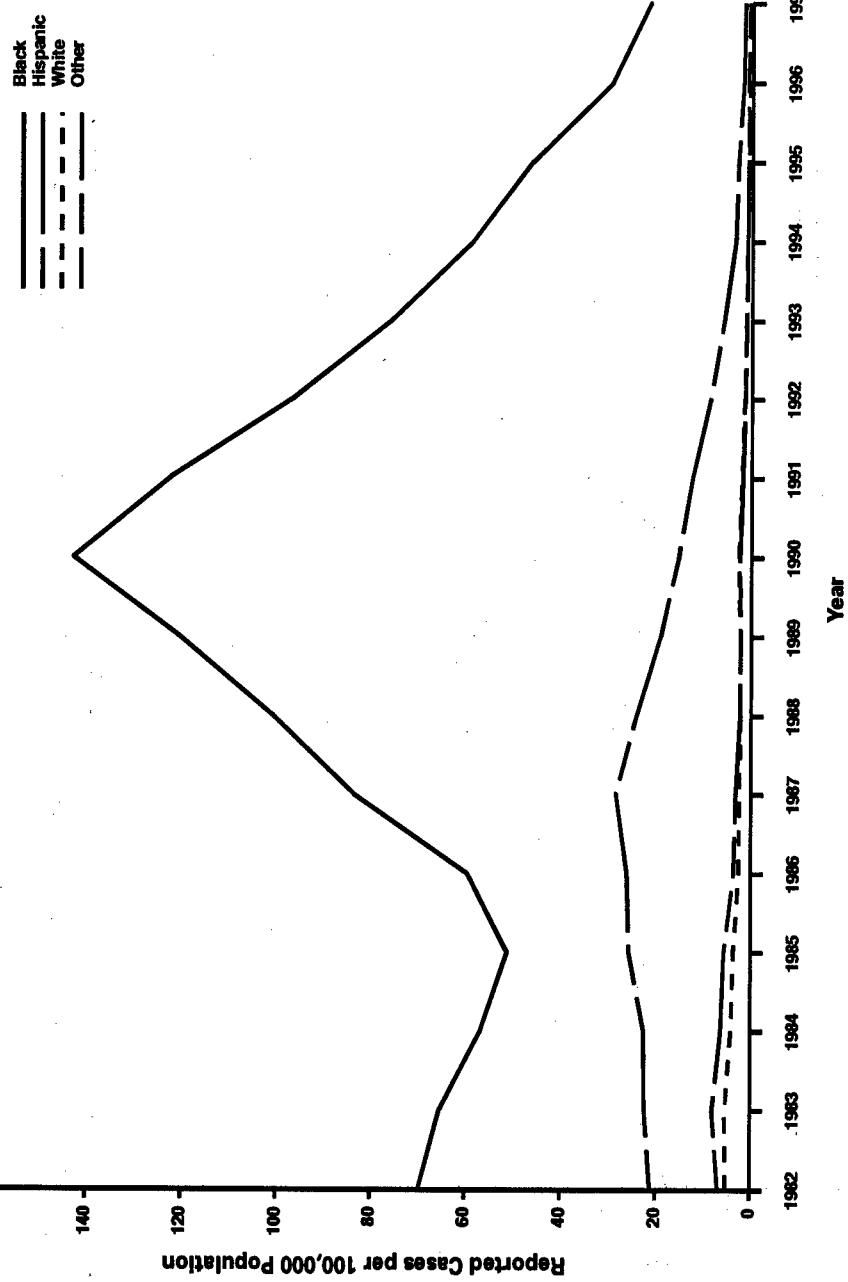
In 1997, the U.S. rate of primary and secondary syphilis of 3.2 per 100,000 population was below the revised national *Healthy People 2000* objective. Forty-one states reported rates below the national objective, and 12 states reported fewer than five cases.

SYPHILIS (Primary and Secondary) — by sex, United States, 1982–1997

In 1997, the reported rate of primary and secondary syphilis in the United States continued to decline, with rates among both males and females below the 'Healthy People 2000' objective of 4.0 per 100,000 population. Among men, the rate decreased from 4.7 per 100,000 population in 1996 to 3.6 in 1997. Among women, the rate decreased from 4.0 per 100,000 population in 1996 to 2.9 in 1997.

GRAPHS AND MAPS

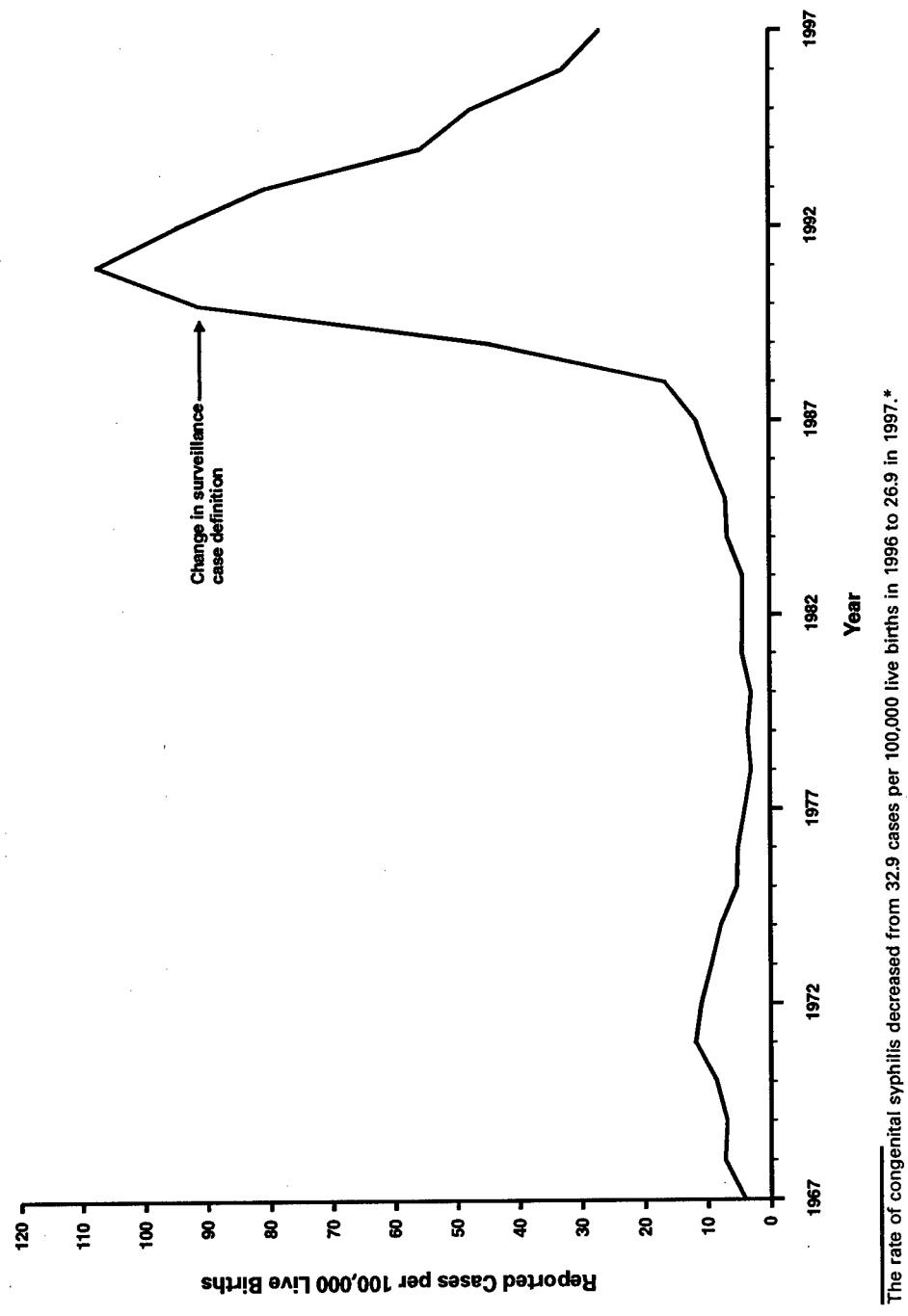
SYPHILIS (Primary and Secondary) — by race and ethnicity, United States, 1982–1997



In 1997, primary and secondary syphilis rates for all racial and ethnic groups declined. In 1997, however, the rate for non-Hispanic blacks (i.e., 22.0 cases per 100,000 population) was 44-fold greater than that for non-Hispanic whites.

CONGENITAL SYPHILIS — among infants aged <1 year, United States, 1967–1997

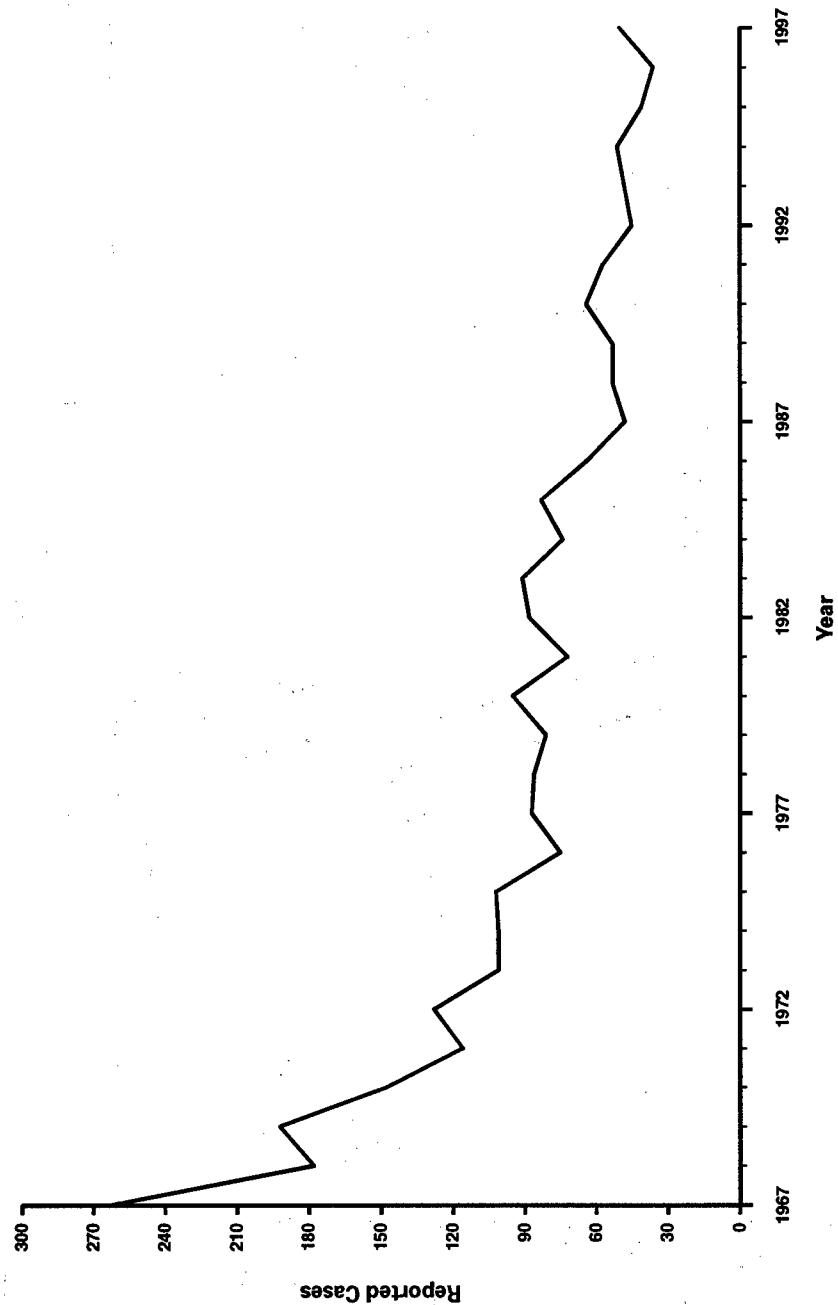
GRAPHS AND MAPS



The rate of congenital syphilis decreased from 32.9 cases per 100,000 live births in 1996 to 26.9 in 1997.*

*Data Source: Division of Sexually Transmitted Diseases Prevention, National Center for HIV, STD, and TB Prevention.

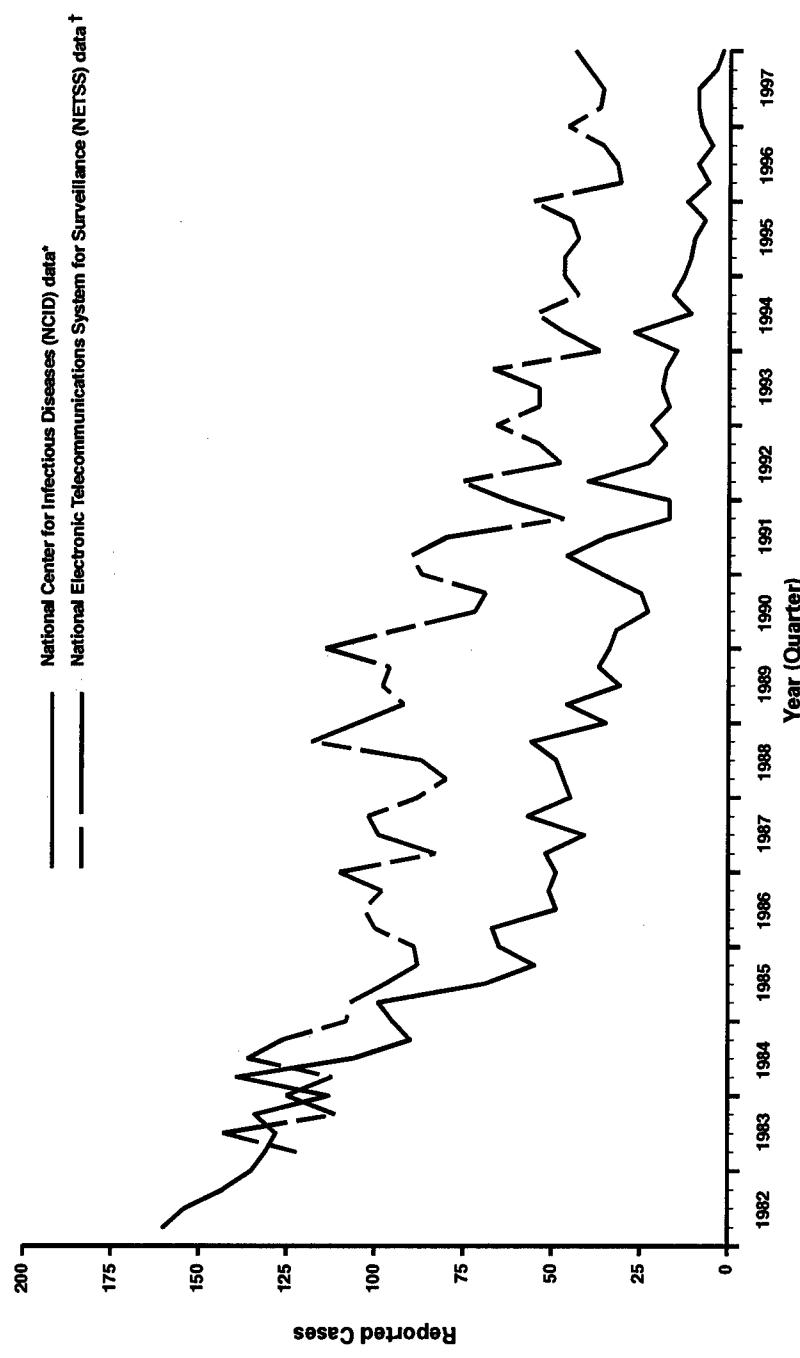
TETANUS — by year, United States, 1967–1997



NOTE: Tetanus toxoid was first available in 1933.

Tetanus among persons aged <25 years has been targeted for elimination within the United States by the year 2000. From 1995 through 1997, 12 (9.7%) of 124 reported cases were among persons aged >25 years, including one case in a neonate and three cases that occurred among persons with religious objections to vaccination.

GRAPHS AND MAPS

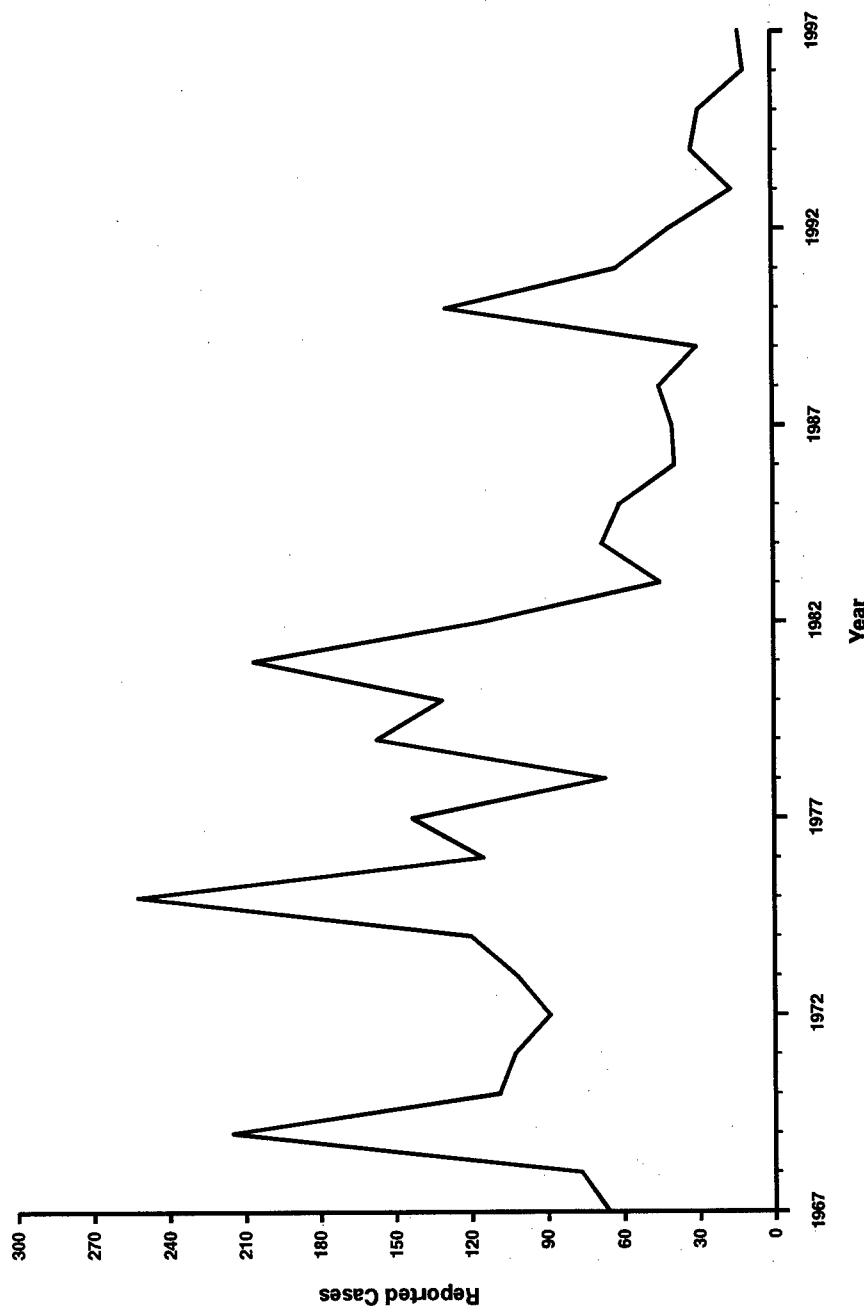


* Includes cases meeting the CDC definition for confirmed and probable cases for staphylococcal TSS ($n=5,087$).

† TSS data were first available through NETSS in 1983.

Although the number of cases of TSS reported through NETSS or NCID has not changed significantly over the last 5 years, trends of TSS should continue to be monitored, especially because new products (e.g., all-cotton tampons) and use patterns (e.g., using tampons overnight) have been introduced recently.

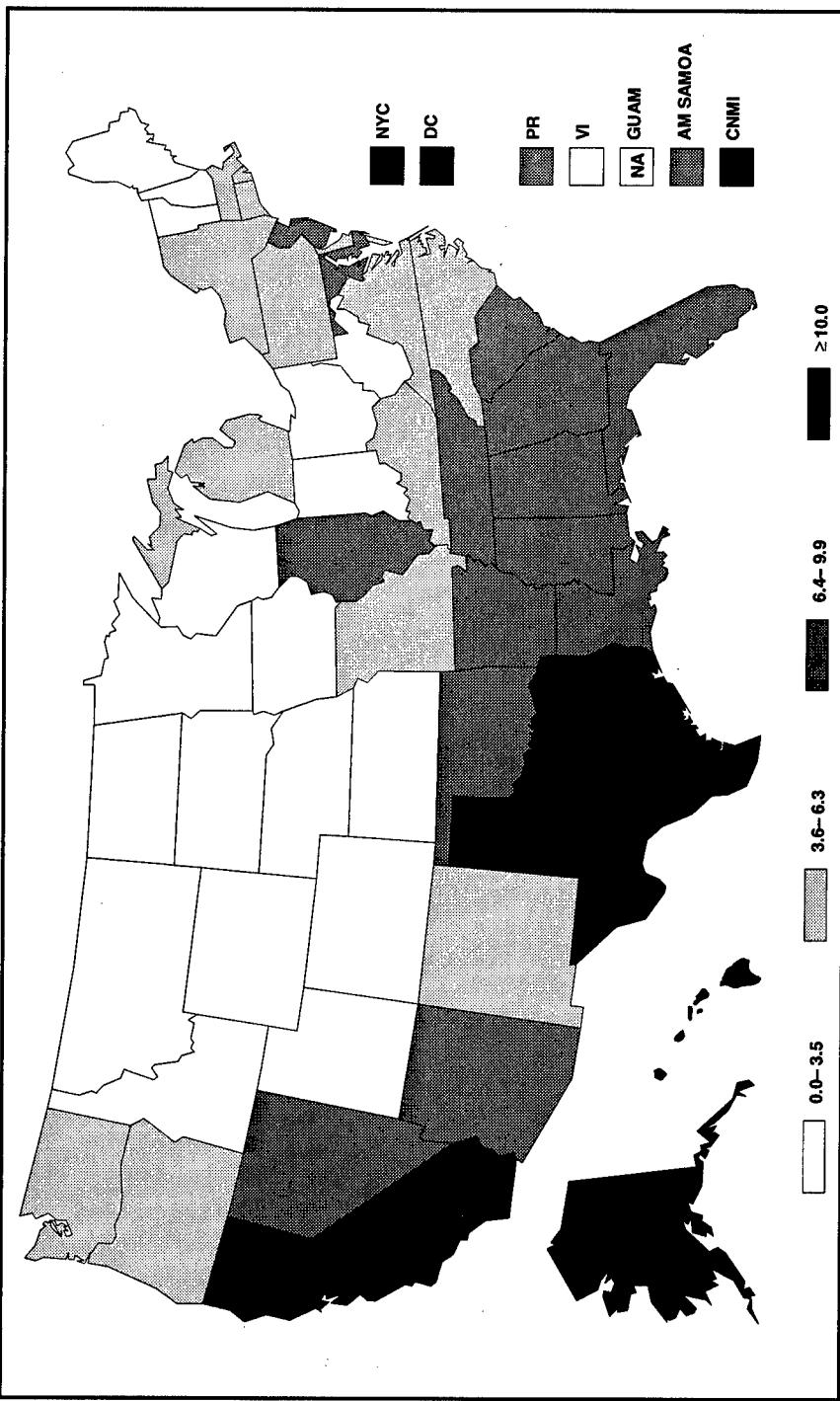
TRICHINOSIS — by year, United States, 1967–1997



In 1997, a total of 13 trichinosis (trichinosis) cases were reported, remaining at the lowest levels ever reported.

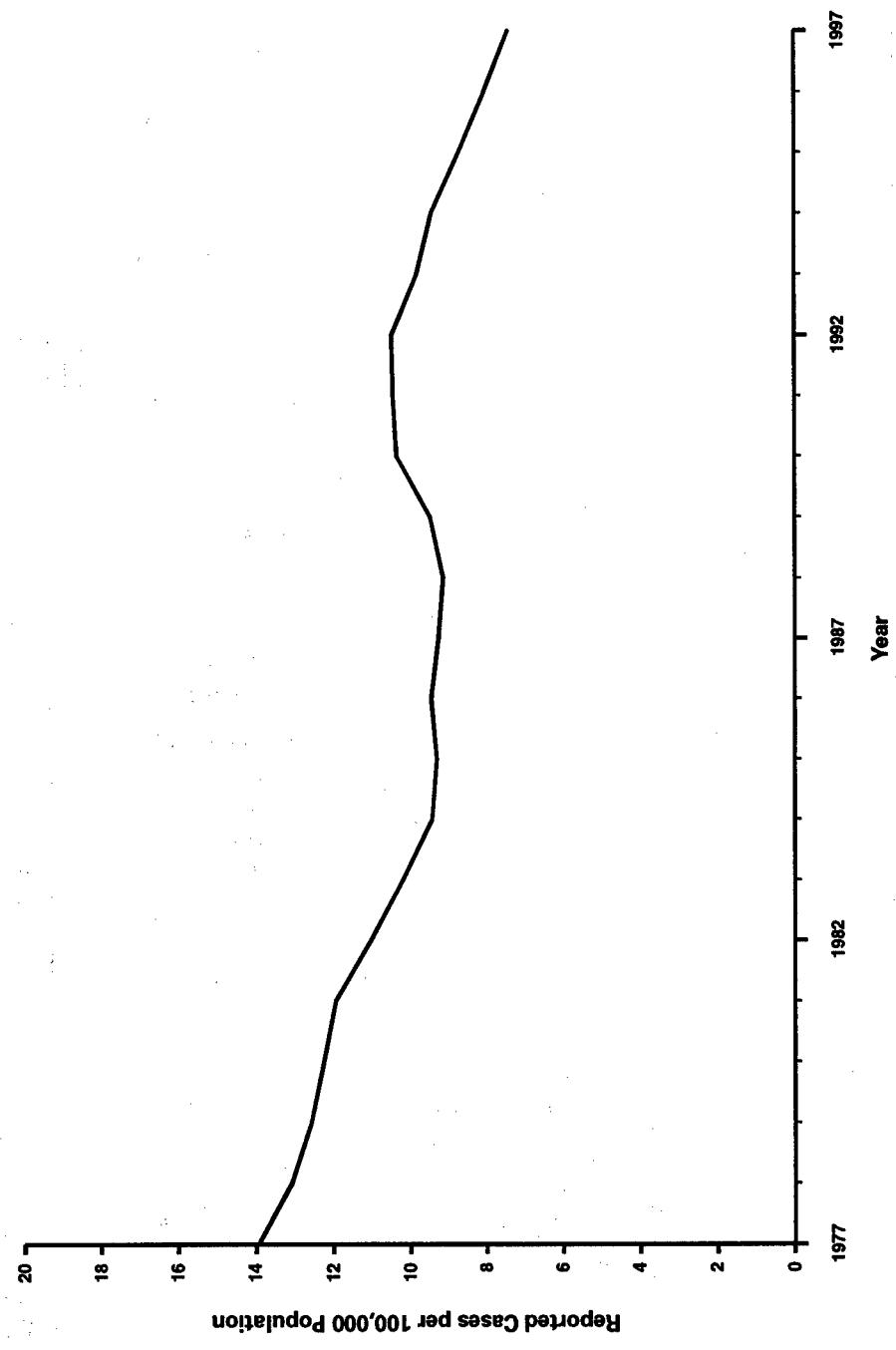
TUBERCULOSIS — reported cases per 100,000 population, United States and territories, 1997

GRAPHS AND MAPS



In 1997, a total of 18 states had tuberculosis rates of ≤3.5 cases per 100,000 population, which is the interim (i.e., Year 2000) tuberculosis incidence target for the elimination of tuberculosis by the year 2010.

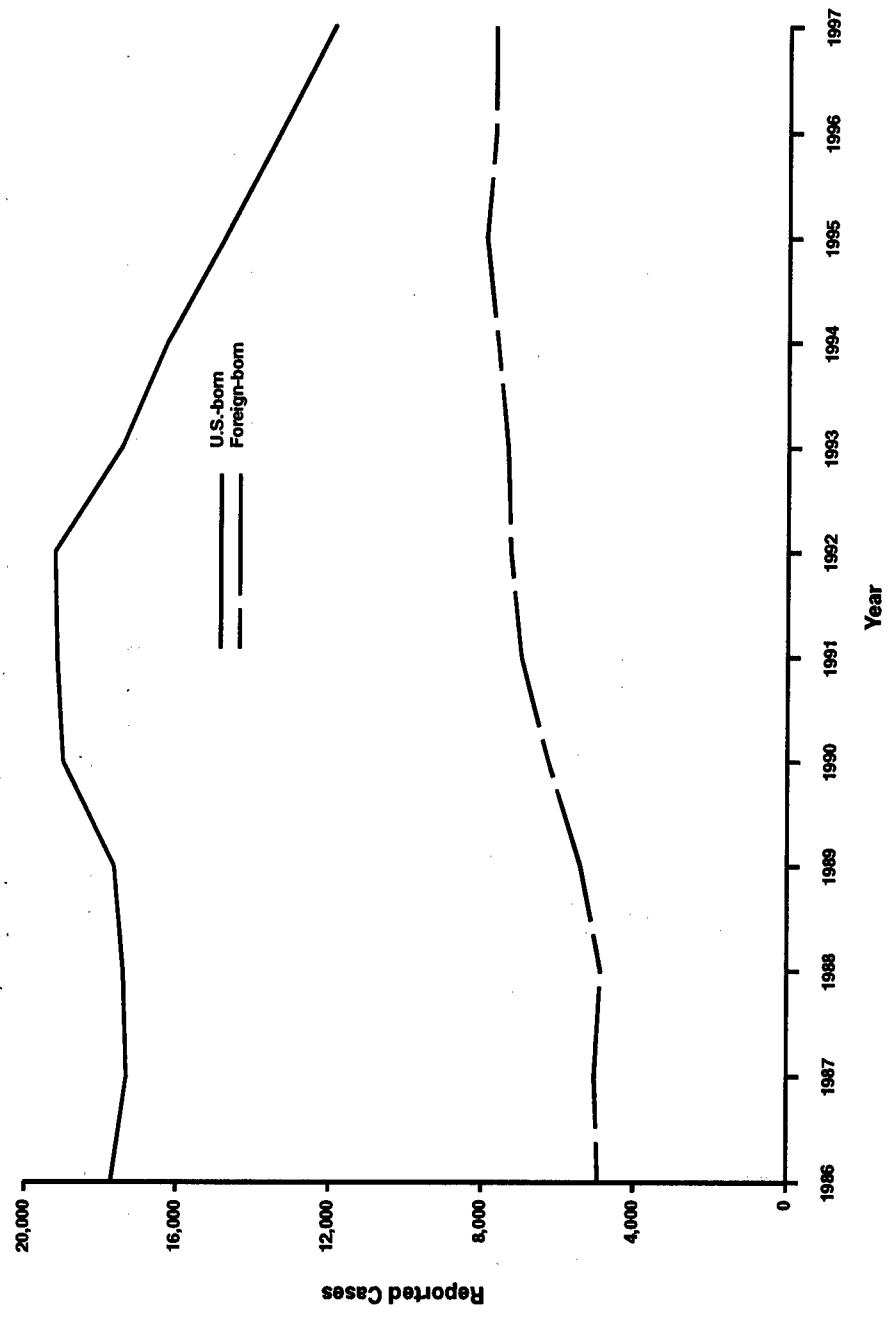
TUBERCULOSIS — by year, United States, 1977–1997



In 1997, a total of 19,851 cases of tuberculosis were reported to CDC, representing a 7% decrease from 1996.

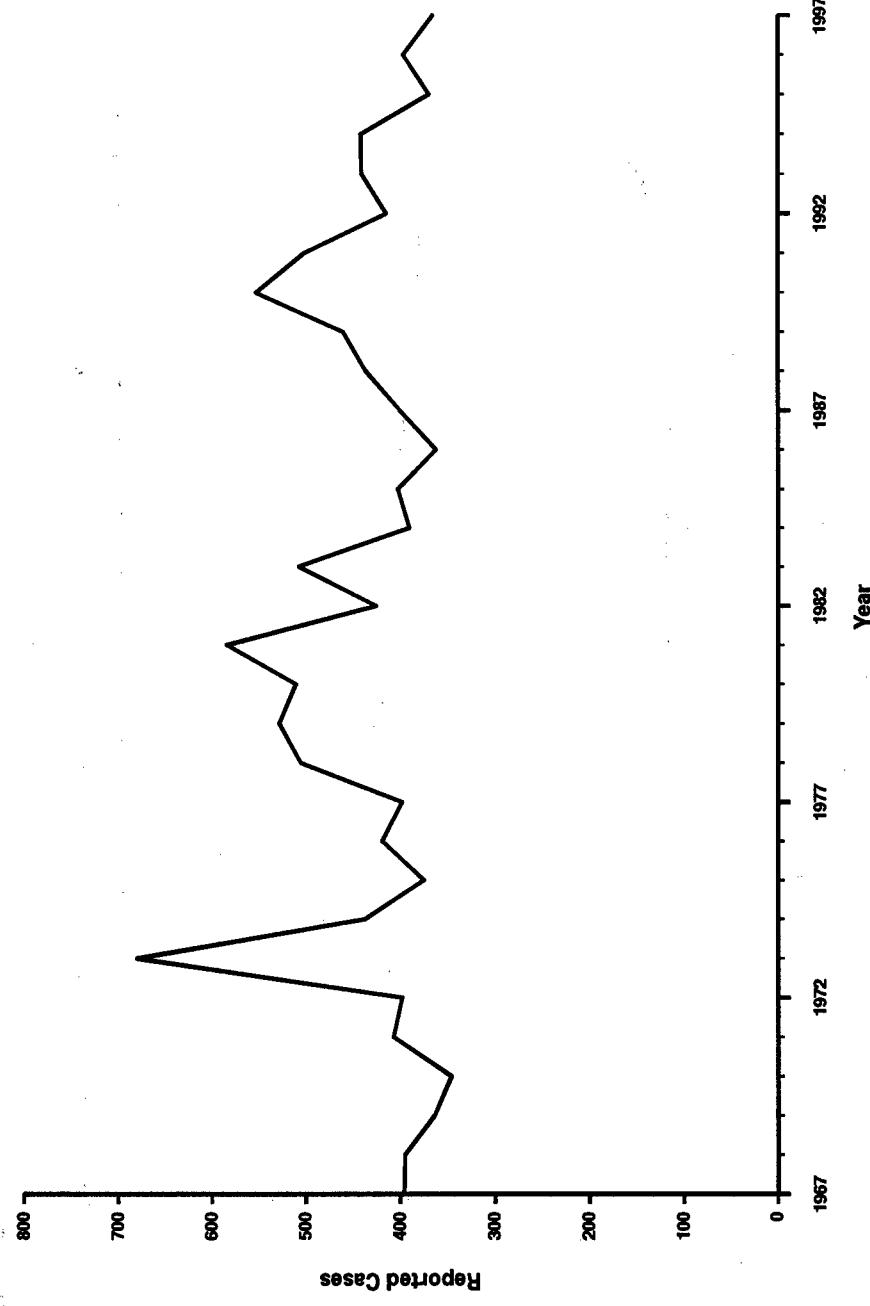
TUBERCULOSIS — by year, among U.S.- and foreign-born persons, United States, 1986–1997

GRAPHS AND MAPS



The number (and percentage) of tuberculosis cases among foreign-born persons in the United States has increased from 4,925 (21.6%) in 1986 to 7,702 (38.8%) in 1997.

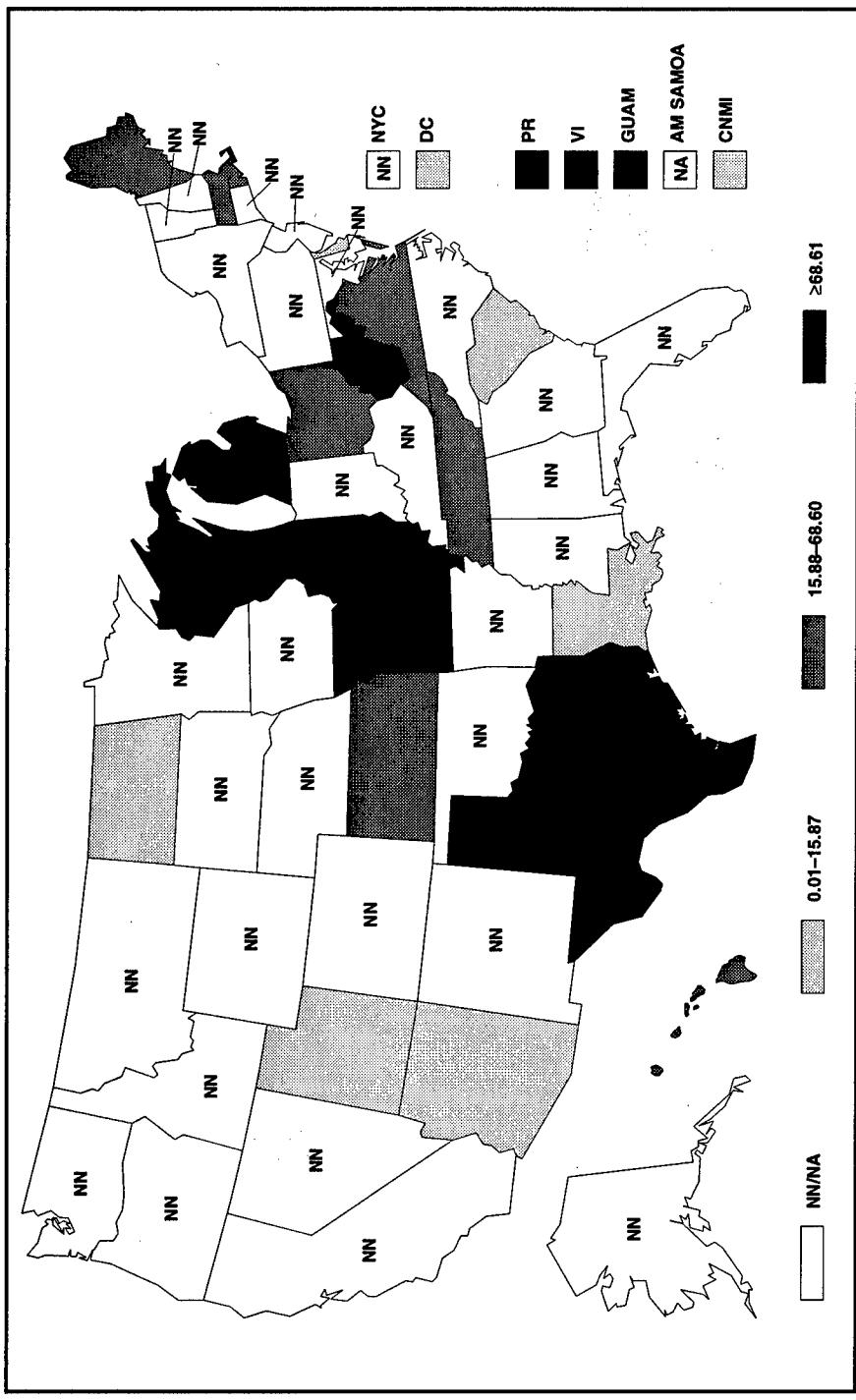
TYPHOID FEVER — by year, United States, 1967–1997



Antimicrobial resistance among *Salmonella* serotype Typhi isolates has continued to increase, as has the proportion of typhoid fever cases that are preventable through immunization of travelers.

VARICELLA (Chickenpox) — reported cases per 100,000 population, United States and territories, 1997

GRAPHS AND MAPS



Varicella is not a nationally notifiable disease; however, in 1997, 20 states, the District of Columbia, and four territories reported cases via the National Notifiable Diseases Surveillance System. This map reflects data from states where varicella is notifiable at the state level.

PART 3:

Historical Summary Tables

**EXPLANATION OF SYMBOLS USED IN
TABLES, GRAPHS, AND MAPS**

No reported cases -

HISTORICAL TABLES — 1988–1997

TABLE 1. NOTIFIABLE DISEASES — Summary of reported cases per 100,000 population, United States, 1988–1997

Disease	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
AIDS*	12.61	13.58	16.72	17.32	17.83	40.20	30.07	27.20	25.21	21.85
Amebiasis	1.20	1.34	1.38	1.23	1.21	1.21	1.21	1.20	—	—
Anthrax	0.90	—	—	—	0.00	—	—	—	—	—
Aseptic meningitis	2.94	4.14	4.77	6.26	5.18	5.39	3.71	—	—	—
Botulism, total (including wound and uns.p.)	0.03	0.04	0.04	0.05	0.04	0.04	0.06	0.04	0.05	0.05
Foodborne	0.01	0.01	0.01	0.01	0.00	0.01	0.02	0.01	0.01	0.02
Brucellosis	0.04	0.04	0.03	0.04	0.04	0.05	0.05	0.04	0.05	0.04
Chancroid	2.04	1.90	1.70	1.40	0.80	0.54	0.30	0.20	0.15	0.09
Chlamydia§	0.00	—	0.00	0.01	0.04	0.00	0.02	0.01	0.01	0.01
Cholera	0.00	0.00	0.00	0.00	0.00	—	—	—	—	—
Cryptosporidiosis	0.36	0.40	0.54	0.40	0.30	0.36	0.28	—	0.01	1.12
Diphtheria	0.36	0.40	0.04	1.00	0.05	0.07	0.06	—	—	0.01
Encephalitis, primary	0.05	0.04	0.04	1.00	0.05	0.07	0.06	—	—	—
Escherichia coli O157:H7	—	—	—	—	—	—	—	—	—	—
Gonorrhea	298.74	297.36	276.60	249.48	201.60	172.40	168.40	149.50	122.80	121.40
Granuloma inguinale	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Haemophilus influenzae, invasive	—	—	—	—	—	—	—	—	—	—
Hansen disease (leprosy)	0.07	0.07	0.08	0.06	0.07	0.05	0.05	0.05	0.06	0.05
Hepatitis A	11.60	14.43	12.64	9.67	9.06	9.40	10.29	12.13	11.70	11.22
Hepatitis B	9.43	9.43	8.48	7.14	5.18	4.81	4.19	4.01	3.90	—
Hepatitis, C (non-A, non-B)*	1.07	1.02	1.03	1.42	2.36	1.86	1.78	1.78	1.41	1.43
Hepatitis, unspecified	1.00	0.93	0.67	0.50	0.35	0.24	0.17	—	—	—
Legionellosis	0.44	0.48	0.55	0.53	0.53	0.50	0.63	0.48	0.47	0.44
Leptospirosis	0.02	0.04	0.03	0.02	0.02	0.02	0.02	0.02	—	—
Lyme disease	0.07	0.08	0.10	0.19	0.10	0.20	0.10	—	—	—
Lymphogranuloma venereum	0.45	0.51	0.52	0.51	0.43	0.55	0.47	—	—	—
Malaria	1.38	7.33	11.17	3.82	0.88	1.12	0.37	0.12	0.20	0.06
Measles (rubella)	1.21	1.10	0.99	0.84	1.02	1.11	1.25	1.30	1.24	—
Meningococcal disease	2.05	2.34	2.17	1.72	1.03	0.66	0.80	0.35	0.29	0.27
Mumps	0.02	0.02	0.02	0.02	0.02	0.01	—	—	—	—
Murine typhus fever	—	—	—	—	—	—	—	—	—	—
Pertussis (whooping cough)	1.40	1.67	1.84	1.08	1.60	2.55	1.77	1.97	2.94	2.46
Plague	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.01
Poliomyelitis, paralytic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
Psittacosis	0.05	0.05	0.05	0.04	0.04	0.02	0.02	0.03	0.02	0.02
Rabies, human	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
Rheumatic fever, acute	0.14	0.13	0.09	0.12	0.06	0.06	0.08	0.09	—	—
Rocky Mountain spotted fever	0.25	0.25	0.26	0.25	0.20	0.18	0.18	0.23	0.32	0.16
Rubella (German measles)	0.09	0.16	0.45	0.56	0.06	0.07	0.09	0.05	0.10	—
Salmonellosis, excluding typhoid fever	19.91	19.26	19.54	19.10	16.04	16.15	16.64	17.66	17.15	15.66
Shigellosis	12.46	10.07	10.89	9.34	9.38	12.48	11.44	12.32	9.80	8.64
Syphilis, primary and secondary	16.43	18.07	20.10	17.26	13.70	10.40	8.10	6.30	4.29	3.19
Total, all stages	42.37	44.94	53.80	51.69	45.30	39.70	32.00	26.20	19.97	17.39
Tetanus	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Toxic-shock syndrome	0.16	0.16	0.13	0.11	0.10	0.08	0.10	0.07	0.06	0.06
Trichinosis	0.02	0.01	0.05	0.02	0.02	0.01	0.01	0.01	0.01	0.01
Tuberculosis	9.13	9.46	10.33	10.42	10.46	9.82	9.05	8.70	8.04	7.42
Tularemia	0.08	0.06	0.06	0.08	0.06	0.06	0.05	—	—	—
Typhoid fever	0.18	0.19	0.22	0.20	0.16	0.17	0.17	0.14	0.15	0.14
Varicella (chickenpox)††	122.43	121.77	120.06	135.82	176.54	118.54	135.76	118.11	44.13	93.55
Yellow fever	—	—	—	—	—	—	—	0.01	—	—

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

* Acquired immunodeficiency syndrome.

† No longer nationally notifiable.

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

** Anti-HCV antibody test became available May 1990.

†† Not nationally notifiable.

HISTORICAL TABLES — 1990–1997

TABLE 2. NOTIFIABLE DISEASES — Summary of reported cases, United States, 1990–1997

Disease	1990	1991	1992	1993	1994	1995	1996	1997
AIDS*	41,595	43,672	45,472	103,691	78,279	71,547	66,885	58,492†
Amebiasis	3,328	2,989	2,942	2,970	2,983	.....	.....	.....
Anthrax	—	—	—	—	—	—	—	—
Aseptic meningitis	11,852	14,526	12,223	12,848	8,932	97	119	132
Botulism, total (including wound and uns.p.)	92	114	91	97	143	97	119	132
Foodborne	23	27	21	27	50	24	25	31
Infant	65	81	66	65	85	54	80	79
Brucellosis	85	104	105	120	119	98	112	98
Chancroid	4,212	3,476	1,886	1,399	773	477,638	498,884	526,671†
Chlamydia**	—	—	—	—	—	—	—	—
Cholera	—	—	—	—	—	—	—	—
Cryptosporidiosis	6	26	103	18	39	23	4	6
Diphtheria	4	5	4	—	—	—	—	—
Encephalitis, primary	1,341	1,021	774	919	717	2	—	—
Post-infectious	105	82	129	170	143	—	—	—
Escherichia coli O157:H7	690,169	620,478	501,409	439,673	418,068	1,420	2,139	2,741
Gonorhea	97	29	6	19	3	392,848	325,883	324,907†
Granuloma inguinale	—	—	—	—	—	—	—	—
Haemophilus influenzae, invasive	198	2,764	1,412	1,419	1,174	1,180	1,170	1,162
Hansen disease (leprosy)	31,441	154	172	187	136	144	112	122
Hepatitis A	21,102	24,378	23,112	24,238	26,796	31,382	31,032	30,021
Hepatitis B	18,003	18,003	16,126	13,361	12,517	10,805	10,637	10,416
Hepatitis, C (non-A, non-B)§	2,553	3,582	6,010	4,786	4,470	4,576	3,716	3,816
Hepatitis, unspecified	1,671	1,260	884	627	444	—	—	—
Legionellosis	1,370	1,317	1,339	1,280	1,615	1,241	1,198	1,163
Leprosis	77	58	54	51	38	—	—	—
Lyme disease	277	9,465	9,895	8,257	13,043	11,700	16,455	12,801
Lymphogranuloma venereum	277	471	302	285	235	—	—	—
Malaria	1,292	1,278	1,087	1,411	1,229	1,419	1,800	2,001
Measles (rubella)	27,786	9,643	2,237	312	963	309	568	138
Meningococcal disease	2,451	2,150	2,134	2,637	2,886	3,243	3,437	3,308
Mumps	5,292	4,294	2,572	1,692	1,537	906	751	683
Murine typhus fever	50	43	28	25	—	—	—	—

HISTORICAL TABLES — 1990–1997

Pertussis (whooping cough)	4,570	2,719	4,083	6,586	4,617	5,137	7,796	6,564
Plague	2	11	13	10	17	9	5	4
Poliomyelitis, paralytic ^{¶¶}	6	10	6	4	8	6	5	3
Poliomyelitis	113	94	92	60	38	64	42	33
Rabies, animal	4,826	6,910	8,589	9,377	8,147	7,811	6,982	8,105
Rabies, human	1	3	1	3	6	5	3	2
Rheumatic fever, acute	108	127	75	112	112	465	500	409
Rocky Mountain spotted fever	651	628	502	192	227	128	238	181
Rubella (German measles)	1,125	1,401	160	192	227	128	238	181
Rubella, congenital syndrome	11	47	11	5	7	6	4	5
Rubella, excluding typhoid fever	48,603	48,154	40,912	41,641	43,323	45,970	45,471	41,901
Salmonellosis	27,077	23,548	23,931	32,198	29,769	32,080	25,978	23,117
Syphilis, primary and secondary	50,223	42,935	33,973	26,498	20,627	16,500	11,387	8,550 [¶]
Total, all stages	134,256	128,569	112,581	101,259	81,896	68,953	52,976	46,540 [¶]
Tetanus	64	57	45	48	51	41	36	50
Toxic-shock syndrome	322	280	244	212	192	191	145	157
Trichinosis	129	62	41	16	32	29	11	13
Tuberculosis	25,701	26,283	26,673	25,313	24,361	22,880	21,337	19,851**
Tularemia	152	193	159	132	96	.....	.....	.....
Typhoid fever	532	501	414	440	441	389	396	365
Varicella (chickenpox) ^{†††}	173,039	147,076	158,364	134,722	151,219	120,624	83,511	98,727
Yellow fever	.....	.....	.....	.....	.....	.....	.....	.....

NOTE: Data in the annual *Summary of Notifiable Diseases* might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and the use of different case definitions.

*Acquired immunodeficiency syndrome.

[†]The total number of 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), as of December 31, 1997.

[‡]No longer nationally notifiable.

[§]Cases were updated through the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of July 13, 1998.
**Chlamydia refers to genital infections caused by *C. trachomatis*.

[¶]Not previously nationally notifiable.

^{¶¶}Anti-HCV antibody test was available as of May 1990.

^{††}Not previously nationally notifiable as of May 1990.

^{†††}Numbers might not reflect changes because of retrospective case evaluations or late reports (see *MMWR* 1986;35:180-2).

****Cases were updated through the Division of Tuberculosis Elimination, NCHSTP, as of April 15, 1998.

HISTORICAL TABLES — 1982-1989

TABLE 3. NOTIFIABLE DISEASES — Summary of reported cases, United States, 1982-1989

Disease	1982	1983	1984	1985	1986	1987	1988	1989
AIDS*	7,304	1 [†]	4,445	8,249	12,932	21,070	31,001	33,722
Amebiasis		6,658	5,252	4,433	3,532	3,123	2,860	3,217
Anthrax			1			1		
Aseptic meningitis	9,680	12,696	8,326	10,619	11,374	11,487	7,234	—
Botulism, total (including wound and unsp.)	97	133	123	122	109	82	84	10,274
Foodborne		5		49	23	17	28	89
Infant					70	79	59	23
Foodborne							50	60
Infant								
Brucellosis	173	200	131	153	106	129	96	95
Chancroid	1,392	847	665	2,067	3,756	4,98	5,001	4,692
Cholera		1	1	4	23	6	8	—
Diphtheria	2	5	1	3	—	3	2	3
Encephalitis, primary¶	1,464	1,761	1,257	1,376	1,302	1,418	882	981
Post-infectious¶	36	34	108	161	124	121	121	88
Gonorrhea	960,633	900,435	878,556	911,419	900,868	780,905	719,536	733,151
Granuloma inguinale	17	24	30	44	61	22	11	7
Hansen disease (leprosy)	250	259	290	361	270	238	184	163
Hepatitis A	23,403	21,532	22,040	23,210	23,430	25,280	28,507	35,821
Hepatitis B	22,177	24,318	26,115	26,611	26,107	26,916	23,177	23,419
Hepatitis, C/non-A, non-B								
Hepatitis, unspecified	8,564	7,149	3,871	4,184	3,634	2,999	2,619	2,529
Legionellosis**	654	852	750	5,531	5,517	3,940	3,102	2,470
Leptospirosis	100	61	40	57	41	43	54	93
Lymphogranuloma venereum	23	335	170	226	396	303	185	189
Malaria	1,056	813	1,007	1,049	1,123	944	1,039	1,277
Measles (rubella)	1,714	1,497	2,587	2,822	6,282	3,655	3,396	18,193
Meningococcal disease	3,056	2,736	2,746	2,479	2,594	2,930	2,964	2,727
Mumps	5,270	3,355	3,021	2,982	7,790	12,848	4,866	5,712
Murine typhus fever	58	62	53	37	67	54	54	41
Pertussis (whooping cough)	1,895	2,463	2,276	3,589	4,195	2,823	3,450	4,157

HISTORICAL TABLES — 1982-1989

	19	40	31	17	10	17	12	11	15	4
Plague	12	13	9	8	10	9	9	9	11	11
Poliomyelitis, total	12	13	9	8	10	9	9	11	11	11
Paralytic	12	13	9	8	10	9	9	11	11	11
Psittacosis	152	142	172	119	224	98	4,658	4,651	4,724	4,724
Rabies, animal	6,212	5,878	5,567	5,565	5,504	4,658	4,651	4,651	4,651	4,651
Rabies, human	—	2	3	1	—	—	—	—	—	—
Rheumatic fever, acute	137	88	117	90	147	141	141	158	144	144
Rocky Mountain spotted fever	976	1,126	838	714	760	604	609	623	623	623
Rubella (German measles)	2,325	970	752	630	551	306	225	396	396	396
Rubella, congenital syndrome	7	22	5	—	14	5	6	3	3	3
Salmonellosis, excluding typhoid fever	40,936	44,250	40,861	65,347	49,984	50,916	48,948	47,812	47,812	47,812
Shigellosis	18,129	19,719	17,371	17,057	17,138	23,860	30,617	25,010	25,010	25,010
Syphilis, primary and secondary	33,613	32,638	28,607	27,131	27,883	35,147	40,117	44,540	44,540	44,540
Total, all stages	75,579	74,637	69,888	67,563	68,215	86,545	103,437	110,797	110,797	110,797
Tetanus	88	91	74	83	64	48	53	53	53	53
Toxic-shock syndrome	—	—	502	482	384	412	372	390	400	400
Trichinosis	115	45	68	61	39	40	45	45	45	45
Tuberculosis	25,520	23,846	22,255	22,201	22,768	22,517	22,436	23,495	23,495	23,495
Tularemia	275	310	291	177	170	214	201	152	152	152
Typhoid fever	425	507	390	402	362	400	436	460	460	460
Varicella (chickenpox)	167,423	177,462	221,983	178,162	183,243	213,196	192,857	185,441	185,441	185,441
Yellow fever	—	—	—	—	—	—	—	—	—	—

NOTE: Data in the annual *Summary of Notifiable Diseases* might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and the use of different case definitions.

*Acquired immunodeficiency syndrome.

†Not previously nationally notifiable.

§Not reported as distinct categories during this period.

¶Beginning in 1984, data reflect change in categories for tabulating encephalitis reports that were recorded by date of record to state health departments. Data for previous years are from surveillance records reported by onset date.

**Beginning in 1982, data were recorded by date of report to the state health department. Data for 1976-1981 are from surveillance records reported by onset date.

††Categories other than paralytic are no longer reported.

TABLE 4. NOTIFIABLE DISEASES — Summary of reported cases, United States, 1974–1981

Disease	1974	1975	1976	1977	1978	1979	1980	1981
Amebiasis	2,743	2,775	2,906	3,044	3,937	4,107	5,271	6,632
Anthrax	2	2	2	—	6	1	1	—
Aseptic meningitis	3,197	4,475	3,510	4,789	6,573	8,754	8,028	9,547
Botulism, total (including wound and unspec.)	28	20	55	129	105	45	89	103
Brucellosis	240	310	296	232	179	215	183	185
Chancroid	945	700	628	455	521	840	788	850
Cholera	—	—	—	3	12	1	9	19
Diphtheria	272	307	128	84	76	59*	3	5
Encephalitis, primary	1,164	4,064	1,651	1,414	1,351	1,504	1,362	1,492
Post-infectious	218	237	175	119	78	84	40	43
Gonorrhea	906,121	99,937	1,001,994	1,002,219	1,013,436	1,004,058	1,004,029	990,864
Granuloma inguinale	47	60	71	75	72	76	51	66
Hansen disease (leprosy)	118	162	145	151	168	185	223	256
Hepatitis A	40,358	35,855	33,288	31,153	29,500	30,407	29,087	25,802
Hepatitis B	10,631	13,121	14,973	16,831	15,016	15,452	19,015	21,152
Hepatitis, unspecified	8,351	7,158	7,488	8,639	8,776	10,534	11,894	10,975
Legionellosis	.....†	.....	235	359	761	593	475	408
Leprosy	68	93	73	71	110	94	85	82
Lymphogranuloma venereum	394	353	365	348	284	250	199	263
Malaria	293	373	471	547	731	894	2,062	1,388
Measles (rubella)	22,094	24,374	41,126	57,345	26,871	13,597	13,506	3,124
Meningococcal disease	.....	.....	.....	.....	.....	.....	.....	.....
Mumps	59,128	59,647	38,492	21,436	16,817	14,225	8,576	3,525
Murine typhus fever	26	41	69	75	46	69	81	4,941
Pertussis (whooping cough)	2,402	1,758	1,010	2,177	2,063	1,623	1,730	1,248
Plague	8	20	16	18	12	13	18	13
Poliomyelitis, total	7	13	10	19	8	22	9	10
Paralytic ⁵	.....	.....	.....	.....	.....	.....	.....	.....
Pitักษ	164	49	78	94	140	137	124	136
Rabies, animal	3,151	2,627	3,073	3,130	3,254	5,119	6,421	7,118
Rabies, human	—	2	2	2	4	4	—	2
Rheumatic fever, acute	2,431	2,854	1,865	1,738	851	629	432	264
Rocky Mountain spotted fever	754	844	937	1,153	1,063	1,070	1,163	1,192
Rubella (German measles)	11,917	16,652	12,491	20,395	18,269	11,795	3,904	2,077
Rubella, congenital syndrome	45	30	30	23	30	62	50	19
Salmonellosis, excluding typhoid fever	21,980	22,612	22,937	27,850	29,410	33,138	33,715	39,990
Shigellosis	22,600	16,584	13,140	16,052	19,511	20,135	19,041	19,859
Syphilis, primary and secondary	25,385	25,561	23,731	20,399	21,656	24,874	27,204	31,266
Total, all stages	83,771	80,356	71,761	64,621	64,975	67,049	68,1832	72,799
Tetanus	101	102	75	87	86	81	95	72
Trichinosis	120	252	115	143	67	157	131	206
Tuberculosis ¹	30,122	33,989	32,105	30,145	28,521	27,669	27,749	27,373
Tularemia	144	129	157	165	141	196	234	288
Typhoid fever	437	375	419	398	505	528	510	584
Varicella (chickenpox)	141,495	154,248	183,990	188,396	154,089	199,081	190,894	200,766
Yellow fever	.....	.....	.....	.....	.....	.....	.....	.....

NOTE: Data in the annual *Summary of Notifiable Diseases* might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and the use of different case definitions.

* Cutaneous diphtheria is no longer nationally notifiable.

† Not previously nationally notifiable.

‡ No cases of paralytic poliomyelitis caused by wild virus have been reported in the United States since 1979.

§ Case data subsequent to 1974 are not comparable with earlier years because of changes in reporting criteria that became effective in 1975.

** Last indigenous case of yellow fever was reported in 1911; before 1936, the last imported case was reported in 1924.

TABLE 5. NOTIFIABLE DISEASES — Summary of reported cases, United States, 1966–1973

Disease	1966	1967	1968	1969	1970	1971	1972	1973
Amebiasis	2,921	3,157	3,005	2,915	2,888	2,752	2,199	2,235
Anthrax	5	2	3	4	2	5	2	2
Aseptic meningitis	3,058	3,082	4,494	3,672	6,480	5,176	4,634	4,846
Botulism	9	5	7	16	12	25	22	34
Brucellosis	262	265	218	235	213	183	196	202
Chancroid	838	784	845	1,104	1,416	1,320	1,414	1,165
Cholera	—	—	—	—	—	1	—	—
Diphtheria	209	219	260	241	435	215	152	228
Encephalitis, primary	2,121	1,478	1,781	1,613	1,580	1,524	1,059	1,613
Post-infectious	964	1,060	502	304	370	439	243	354
Gonorrhea	351,738	404,836	464,543	534,872	600,072	670,288	767,215	842,621
Granuloma inguinale	148	154	156	154	124	89	81	62
Hansen disease (leprosy)	109	123	98	129	131	130	146	146
Hepatitis A (infectious)	32,859	38,909	45,893	48,916	56,797	59,606	54,074	56,749
Hepatitis B (serum)	1,497	2,458	4,829	5,909	8,310	9,556	9,402	8,451
Leptospirosis	72	67	69	89	47	62	41	57
Lymphogranuloma venereum	308	371	485	520	612	692	756	408
Malaria	565	2,022	2,317	3,102	3,051	2,315	742	237
Measles (rubella)	204,136	62,705	22,231	25,826	47,351	75,290	32,275	26,690
Menigococcal disease	3,381	2,161	2,623	2,951	2,505	2,262	1,323	1,378
Mumps	.....*	.....	152,209	90,918	104,953	124,339	74,215	68,612
Murine typhus fever	33	52	36	36	27	23	18	32
Pertussis (whooping cough)	7,717	9,718	4,810	3,285	4,249	3,036	3,287	1,759
Plague	5	3	3	5	13	2	1	2
Poliomyelitis, total	113	41	53	20	33	21	31	8
Paralytic	106	40	53	18	31	17	29	7
Psittacosis	50	41	43	57	35	32	52	33
Rabies, animal	4,178	4,481	3,591	3,490	3,224	4,310	4,369	3,640
Rabies, human	1	2	1	1	3	2	2	1
Rheumatic fever, acute	4,472	3,985	3,470	3,229	3,227	2,793	2,614	2,560
Rocky Mountain spotted fever	268	305	298	498	380	432	523	668
Rubella (German measles)	46,975	46,888	49,371	57,686	56,552	45,086	25,507	27,804
Rubella, congenital syndrome	11	10	14	31	77	68	42	35
Salmonellosis, excluding typhoid fever	16,841	18,120	16,514	18,419	22,096	21,928	22,151	23,818
Shigellosis	11,888	13,474	12,180	11,946	13,845	16,143	20,207	22,642
Streptococcal sore throat and scarlet fever	427,752	453,351	435,013	450,008	433,405	.....	.....	.....
Syphilis, primary and secondary	21,414	21,053	19,019	19,130	21,982	23,783	24,429	24,825
Total, all stages	105,159	102,581	96,271	92,162	91,382	95,987	91,149	87,469
Tetanus	235	263	178	192	148	116	128	101
Trichinosis	115	66	77	215	109	103	89	102
Tuberculosis	47,767	45,647	42,623	39,120	37,137	35,217	32,882	30,998
Tularemia	208	184	186	149	172	187	152	171
Typhoid fever	378	396	395	364	346	407	398	680
Varicella (chickenpox)	.....	.....	*	.....	.....	164,114	182,927	.....
Yellow fever	.....	.....	.....	.....	.....	.....	.....	.....

NOTE: Data in the annual *Summary of Notifiable Diseases* might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and the use of different case definitions.

* Not previously nationally notifiable.

† No longer nationally notifiable.

§ Last indigenous case of yellow fever was reported in 1911; before 1996, the last imported case was reported in 1924.

TABLE 6. NOTIFIABLE DISEASES — Deaths from selected diseases, United States, 1987-1996

Cause of Death	ICD	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
AIDS*	*042-*044	13,468	16,602	22,082	25,188	29,555	33,566	37,267	42,114	43,115	31,130
Anhebrosis	006	9	7	4	5	5	6	6	2	4	4
Anthrax	022	-	-	-	-	-	-	-	-	-	-
Aseptic meningitis	047.9	28	37	36	50	47	37	33	30	22	25
Botulism, foodborne	005.1	-	1	2	4	2	1	-	-	2	1
Brucellosis	023	1	-	-	-	-	-	-	-	-	-
Chancroid	001	1	-	-	1	1	1	1	1	1	1
Cholera	032	1	-	-	-	-	-	-	-	-	-
Diphtheria	062.2	-	-	-	-	-	-	-	-	-	-
Encephalitis, Eastern equine	062.5	1	-	-	1	1	1	1	1	1	1
Encephalitis, St. Louis	062.3	2	-	-	13	9	2	1	3	6	-
Encephalitis, Western equine	062.1	1	-	-	-	-	-	-	-	-	-
Gonococcal infections	098.8	7	3	4	3	3	4	5	3	3	4
Granuloma inguinale	099.2	-	-	-	-	-	-	-	-	-	-
<i>Haemophilus influenzae</i> , invasive	041.5	25	25	16	16	17	16	7	5	12	7
Hansen disease (leprosy)	030	1	-	4	3	-	2	1	3	2	-
Hepatitis, viral, infectious (Hep A)	070.0, 070.1	77	70	88	76	71	82	95	97	142	121
Hepatitis, viral, serum (Hep B)	070.2, 070.3	595	621	711	816	912	903	1,041	1,120	1,027	1,082
Hepatitis, viral, other and unsp.	070.4-070.9	510	599	717	886	857	1,016	1,353	1,844	2,231	2,577
Leptospirosis	100	1	2	-	2	1	2	1	-	2	2
Lymphogranuloma venereum	099.1	-	-	2	2	-	2	-	-	-	-
Malaria	084	5	7	11	3	4	8	12	3	8	4
Measles (rubella)	055	2	3	32	64	27	4	-	-	2	1
Meningococcal disease	036	258	278	273	215	198	201	260	276	273	290
Mumps	072	2	2	3	1	1	-	-	-	-	1
Murine typhus fever	081.0	-	-	1	-	-	-	-	-	-	-
Pertussis (whooping cough)	033	1	4	12	12	-	-	-	-	-	-
Plague	020	1	-	-	-	-	-	-	-	-	-
Poliomyelitis, total	045.0-045.9	-	1	-	-	1	-	-	-	1	2
Pitักษ	073	2	1	1	2	-	4	-	-	-	-
Rabies, human	071	1	-	1	1	3	1	1	3	3	3
Rheumatic fever, acute	390-392	42	76	70	66	89	100	153	191	159	114
Rubella (German measles)	056	-	1	4	8	1	1	-	-	1	-
Salmonellosis, incl. paratyphoid fever	002.1-002.9, 003	105	66	99	80	53	47	52	49	66	58
Shigellosis	004	13	8	16	10	10	8	5	13	8	5
Spotted fevers	082.0	21	20	10	20	13	13	5	9	8	6
Syphilis	090-097	98	85	105	106	93	91	80	79	65	73
Tetanus	037	16	17	9	11	11	9	11	9	5	1
Trichinosis	124	-	-	-	-	-	-	-	-	-	-
Tuberculosis (all forms)	010-018	1,755	1,921	1,970	1,810	1,713	1,705	1,631	1,478	1,336	1,202
Tularemia	021	4	2	-	1	1	2	3	-	2	-
Typhoid fever	002.0	2	-	-	1	1	-	-	1	-	1
Varicella (chickenpox)†	052	89	83	89	120	81	100	100	124	115	81
Yellow fever	010-060	-	-	-	-	-	-	-	-	-	-

NOTE: Data in the annual *Summary of Notifiable Diseases* might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and the use of different case definitions.

* Numbers in ICD column refer to the category numbers listed in the *International Classification of Diseases, Ninth Revision, 1975*. (The asterisks in the ICD column pertain to the ICD code, not a footnote. They indicate that the numbers are not part of the ICD but were introduced for use in the United States.)

† Acquired immunodeficiency syndrome.

‡ Varicella was taken off the nationally notifiable disease list in 1991. Many states continue to report these cases to CDC.

Source: National Center for Health Statistics System, 1987-1996. Deaths are classified to the *ICD Ninth Revision*.

Bibliography

General

- Niskar AS, Koo D. Differences in notifiable infectious disease morbidity among adult women—United States, 1992–1994. *J Womens Health* 1998;7:451–8.
- CDC. Case definitions for infectious conditions under public health surveillance. MMWR 1997;46(No. RR-10). Available at <<http://www.cdc.gov/epo/dphsi/casedef/cover97.htm>>. Accessed November 19, 1998.
- CDC. Sexually transmitted disease surveillance, 1996. Atlanta: US Department of Health and Human Services, Public Health Service, CDC, 1997.
- CDC. Demographic differences in notifiable infectious disease morbidity—United States, 1992–1994. MMWR 1997;46:637–41.
- CDC. National electronic telecommunications system for surveillance. Informational brochure July 1996. Available at <<http://www.cdc.gov/epo/mmwr/other/netss/netss.html>>. Accessed November 19, 1998.
- CDC. Notifiable disease surveillance and notifiable disease statistics—United States, June 1946 and June 1996. MMWR 1996;45:530–7.
- Koo D, Wetterhall S. History and current status of the National Notifiable Diseases Surveillance System. *J Public Health Management and Practice* 1996;2:4–10.
- CDC. Ten leading nationally notifiable infectious diseases—United States, 1995. MMWR 1996;45:883–4.
- Benenson AS. Control of communicable diseases in man. 16th ed. Washington, DC: American Public Health Association, 1995.
- Martin SM, Bean NH. Data management issues for emerging diseases and new tools for managing surveillance and laboratory data. *Emerg Infect Dis* 1995;1:124–8.
- CDC. Manual of procedures for the reporting of nationally notifiable diseases to CDC. Atlanta: US Department of Health and Human Services, Public Health Service, CDC, 1995.
- Teutsch SM, Churchill RE, eds. Principles and practice of public health surveillance. New York: Oxford University Press, 1994.
- Thacker SB, Stroup DF. Future directions for comprehensive public health surveillance and health information systems in the United States. *Am J Epidemiol* 1994;140:383–97.
- CDC. Use of race and ethnicity in public health surveillance. MMWR 1993;42(No. RR-10).
- CDC. Mandatory reporting of infectious diseases by clinicians, and mandatory reporting of occupational diseases by clinicians. MMWR 1990;39(No. RR-9).
- Thacker SB, Choi K, Brachman PS. The surveillance of infectious diseases. *JAMA* 1983;249:1181–5.

AIDS

- CDC. Diagnosis and reporting of HIV and AIDS in states with integrated HIV and AIDS surveillance—United States, January 1994–June 1997. MMWR 1998;47:309–14.
- CDC. Update: perinatally acquired HIV/AIDS—United States, 1997. MMWR 1997;46:1086–92.
- CDC. Update: trends in AIDS incidence—United States, 1996. MMWR 1997;46:861–7.
- CDC. HIV/AIDS Surveillance report—year-end edition. 1997;9(2).

Arboviral Infections (California serogroup viruses, eastern equine encephalitis, St. Louis encephalitis, western equine encephalitis)

- CDC. Arboviral infections of the central nervous system—United States, 1996–1997. MMWR 1998;47:517–22.
- Szumlas DE, Apperson CS, Hartig PC, Francy DB, Karabatsos N. Seroepidemiology of La Crosse virus infection in humans in western North Carolina. *Am J Trop Med Hyg* 1996;54:332–7.
- Marfin AA, Bleed DM, Lofgren JP, et al. Epidemiologic aspects of a St. Louis encephalitis epidemic in Jefferson County, Arkansas, 1991. *Am J Trop Med Hyg* 1993;49:30–7.
- Tsai TF. Arboviral infections: general considerations for prevention, diagnosis, and treatment in travelers. *Seminars in Pediatric Infectious Diseases* 1992;3:62–9.

Botulism

- Angulo FJ, Getz J, Taylor JP, et al. A large outbreak of botulism: the hazardous baked potato. *J Infect Dis* 1998;178:172–7.
- Shapiro RL, Hatheway C, Becher J, Swerdlow DL. Botulism surveillance and emergency response: a public health strategy for a global challenge. *JAMA* 1997;278:433–5.

Townes JM, Cieslak PR, Hatheway CL, et al. An outbreak of type A botulism associated with a commercial cheese sauce. Ann Intern Med 1996;125:558-63.

Chancroid

CDC. Chancroid detected by polymerase chain reaction—Jackson, Mississippi, 1994–1995. MMWR 1995;44:567,573-4.

DiCarlo RP, Armentor BS, Martin DH. Chancroid epidemiology in New Orleans men. J Infect Dis 1995;172:446-52.

CDC. Chancroid in the United States, 1981–1990: evidence for underreporting of cases. MMWR 1992;41(No. SS-3):57-61.

***Chlamydia trachomatis* Infection**

CDC. *Chlamydia trachomatis* genital infections—United States, 1995. MMWR 1997;46:193-8.

Mertz KJ, Levine WC, Mosure DJ, Berman SM, Dorian KJ. Trends in the prevalence of chlamydial infections: the impact of community-wide testing. Sex Transm Dis 1997;24:169-75.

Mosure DJ, Berman S, Kleinbaum D, Halloran ME. Predictors of *Chlamydia trachomatis* infection among female adolescents: a longitudinal analysis. Am J Epidemiol 1996;144:997-1003.

CDC. Recommendations for the prevention and management of *Chlamydia trachomatis* infections, 1993. MMWR 1993;42(No. RR-12):1-39.

Cholera

Mahon BE, Mintz ED, Greene KD, Wells JG, Tauxe RV. Reported cholera in the United States, 1992–1994: a reflection of global changes in cholera epidemiology. JAMA 1996;276:307-12.

Wachsmuth IK, Blake PA, Olsvik O, eds. *Vibrio cholerae* and cholera: molecular to global perspectives. Washington, DC: American Society for Microbiology, 1994.

Blake PA. Epidemiology of cholera in the Americas. Gastroenterol Clin North Am 1993;22:639-60.

World Health Organization. Guidelines for cholera control. Geneva: World Health Organization, 1993.

Cryptosporidiosis

Kramer MH, Herwaldt BL, Craun GF, Calderon RL, Juranek DD. Surveillance for waterborne-disease outbreaks—United States, 1993–1994. MMWR 1996;45(No. SS-1).

Juranek DD. Cryptosporidiosis: sources of infection and guidelines for prevention. Clin Infect Dis 1995;21(suppl 1):S57-S61. Available at <<http://www.cdc.gov/ncidod/diseases/crypto/sources.htm>>. Accessed November 19, 1998.

CDC. Assessing the public health threat associated with waterborne cryptosporidiosis: report of a workshop. MMWR 1995;44(No. RR-6):1-19. Available at <<ftp://ftp.cdc.gov/pub/Publications/mmwr/rr/rr4406.pdf>>. Accessed November 19, 1998.

Cyclosporiasis

Soave R, Herwaldt BL, Relman DA. Cyclospora. Infect Dis Clin North Am 1998;12:1-12.

CDC. Update: outbreaks of cyclosporiasis—United States and Canada, 1997. MMWR 1997;46:521-3.

CDC. Outbreak of cyclosporiasis—northern Virginia–Washington, D.C.–Baltimore, Maryland, metropolitan area, 1997. MMWR 1997;46:689-91.

Herwaldt BL, Ackers ML, Cyclospora Working Group. An outbreak in 1996 of cyclosporiasis associated with imported raspberries. N Engl J Med 1997;336:1548-56.

Dengue

Rigau-Pérez JG, Gubler DJ, Vorndam AV, Clark GG. Dengue in travelers from the United States, 1986–1994. J Travel Med 1997;4:65-71.

Pinheiro FP, Corber SJ. Global situation of dengue and dengue haemorrhagic fever, and its emergence in the Americas. World Health Stat Q 1997;50:161-9.

Diphtheria

Bisgard K, Hardy I, Popovic T, et al. Respiratory diphtheria in the United States, 1980–1995. Am J Public Health 1998;88:787-91

Dittmann S. Epidemic diphtheria in the Newly Independent States of the former USSR—situation and lessons learned. Biologicals 1997;25:79-86.

CDC. Diphtheria acquired by U.S. citizens in the Russian Federation and Ukraine—1994. MMWR 1995;44:237,243-4

Drug-Resistant *Streptococcus pneumoniae*

- Dowell SF. Principles of judicious use of antimicrobial agents for pediatric upper respiratory tract infections. *Pediatrics* 1998;101(suppl):S163-S184.
- CDC. Prevention of pneumococcal disease: recommendations of the Advisory Committee on Immunization Practices. *MMWR* 1997;46(No. RR-8):1-24.
- CDC. Defining the public health impact of drug-resistant *Streptococcus pneumoniae*: report of a working group. *MMWR* 1996;45(No. RR-1):1-20.
- Butler JC, Hofmann J, Cetron MS, et al. The continued emergence of drug-resistant *Streptococcus pneumoniae* in the United States: an update from the Centers for Disease Control and Prevention's Pneumococcal Sentinel Surveillance System. *J Infect Dis* 1996;174:986-93.

***Escherichia coli* O157:H7, Hemolytic Uremic Syndrome**

- Bender JB, Hedberg CW, Besser JM, Boxrud DJ, MacDonald KL, Osterholm MT. Surveillance for *Escherichia coli* O157:H7 infections in Minnesota by molecular subtyping. *N Engl J Med* 1997;337:388-94.
- Mahon BE, Griffin PM, Mead PS, Tauxe RV. Hemolytic uremic syndrome surveillance to monitor trends in infection with *Escherichia coli* O157:H7 and other shiga toxin-producing *E. coli*. *Emerg Infect Dis* 1997;3:409-12.
- Slutsker L, Ries AA, Greene KD, Wells JG, Hutwagner L, Griffin PM. *Escherichia coli* O157:H7 diarrhea in the United States: clinical and epidemiologic features. *Ann Intern Med* 1997;126:505-13.
- Boyce TG, Pemberton AG, Wells JG, Griffin PM. Screening for *Escherichia coli* O157:H7—a nationwide survey of clinical laboratories. *J Clin Microbiol* 1995;33:3275-7.

Gonorrhea

- Fox KK, Knapp JS, Holmes KK, et al. Antimicrobial resistance in *Neisseria gonorrhoeae* in the United States, 1988-1994: the emergence of decreased susceptibility to the fluoroquinolones. *J Infect Dis* 1997;175:1396-403.
- Gershman KA, Barrow JC. A tale of two sexually transmitted diseases: prevalences and predictors of chlamydia and gonorrhea in women attending Colorado family planning clinics. *Sex Transm Dis* 1996;23:481-8.
- CDC. Surveillance for gonorrhea and primary and secondary syphilis among adolescents—United States, 1981-1991. *MMWR* 1993;42(No. SS-3):1-11.

Group A Streptococcal Disease

- The Working Group on Prevention of Invasive Group A Streptococcal Infections. Prevention of invasive group A streptococcal disease among household contacts of case-patients: is prophylaxis warranted? *JAMA* 1998;279:1206-10.
- CDC. Outbreak of invasive group A streptococcus associated with varicella in a childcare center—Boston, Mass. *MMWR* 1997;46:944-8.
- Davies HD, McGee A, Schwartz B, et al. A prospective, population-based study of invasive group A streptococcal infections, including toxic shock syndrome and the risk of secondary infections. *N Engl J Med* 1996;335:547-54.
- Working Group on Severe Streptococcal Infections. Defining the group A streptococcal toxic shock syndrome: rationale and consensus definition. *JAMA* 1993;269:390-1.

***Haemophilus influenzae* (Invasive Disease)**

- Bisgard KM, Kao A, Leake J, Strebler PM, Perkins BA, Wharton M. *Haemophilus influenzae* invasive disease in the United States, 1994-1995: near disappearance of a child vaccine preventable disease. *Emerg Infect Dis* 1998;4:229-37.
- Schuchat A, Robinson K, Wenger JD, et al. Bacterial meningitis in the United States in 1995. *New Engl J Med* 1997;33:970-6.
- Urwin G, Krohn JA, Deaver-Robinson K, et al. Invasive disease due to *Haemophilus influenzae* serogroup f: clinical and epidemiologic characteristics in the *H. influenzae* serotype b vaccine era. *Clin Infect Dis* 1996;22:1069-76.
- CDC. Recommendations for the use of *Haemophilus* b conjugate vaccines and a combined diphtheria, tetanus, pertussis, and *Haemophilus* b vaccine: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 1993;42(No. RR-13).

Hepatitis

CDC. Hepatitis surveillance report no. 56. Atlanta, GA: US Department of Health and Human Services, Public Health Service, CDC, 1996.

Alter MJ, Mares A, Hadler SC, Maynard JE. The effect of underreporting on the apparent incidence and epidemiology of acute viral hepatitis. *Am J Epidemiol* 1987;125:133-9.

Hepatitis A

Lemon SM, Shapiro CN. The value of immunization against hepatitis A. *Infectious Agents and Disease* 1994;1:38-49.

Shapiro CN, Coleman PJ, McQuillan GM, et al. Epidemiology of hepatitis A: seroepidemiology and risk groups in the U.S.A. *Vaccine* 1992;10(suppl 1):S59-S62.

Hepatitis B

Margolis HS, Alter MJ, Hadler SC. Hepatitis B: evolving epidemiology and implications for control. *Semin Liver Dis* 1991;11:84-92.

Hepatitis, C/Non-A, Non-B

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

Alter MJ, Mast EE, Moyer LA, Margolis HS. Hepatitis C. *Infect Dis Clin N Am* 1998;12:13-26.

Alter MJ, Margolis HS, Krawczynski K, et al. The natural history of community-acquired hepatitis C in the United States. *N Engl J Med* 1992;327:1899-905.

Influenza A (H5N1)

Subbarao K, Klimov A, Katz J, et al. Characterization of an avian influenza A (H5N1) virus isolated from a child with a fatal respiratory illness. *Science* 1998;279:393-6.

Yuen KY, Chan PK, Peiris M, et al. Clinical features and rapid viral diagnosis of human disease associated with avian influenza A H5N1 virus. *Lancet* 1998;351:467-71.

CDC. Update: isolation of avian influenza A(H5N1) viruses from humans—Hong Kong, 1997-1998. *MMWR* 1998;46:1245-7.

Legionellosis

Fiore AE, Nuorti PJ, Levine OS, et al. Epidemic Legionnaires' disease two decades later: old sources, new diagnostic methods. *Clin Infect Dis* 1998;26:426-33.

Jernigan DB, Hofmann J, Cetron MS, et al. Outbreak of Legionnaires' disease among cruise ship passengers exposed to a contaminated whirlpool spa. *Lancet* 1996;347:494-9.

Keller DW, Hajjeh R, DeMaria A Jr, et al. Community outbreak of Legionnaires' disease: an investigation confirming the potential for cooling towers to transmit legionella species. *Clin Infect Dis* 1996;22:257-61.

Marston BJ, Lipman HB, Breiman RF. Surveillance for Legionnaires' disease: risk factors for morbidity and mortality. *Arch Intern Med* 1994;154:2417-22.

Lyme Disease

Dennis DT. Epidemiology, ecology, and prevention of Lyme disease. In: Rahn DW, Evans J, eds. *Lyme disease*. Philadelphia: American College of Physicians, 1998:7-34.

CDC. Lyme disease—United States, 1996. *MMWR* 1997;46:531-5.

CDC. Recommendations for test performance and interpretation from the Second National Conference on Serologic Diagnosis of Lyme disease. *MMWR* 1995;44:590-1.

Malaria

Lobel HO, Kozarsky PE. Update on prevention of malaria for travelers. *JAMA* 1997;278:1767-71.

Zucker JR. Changing patterns of autochthonous malaria transmission in the United States: a review of recent outbreaks. *Emerg Infect Dis* 1996;2:37-43.

Zucker JR, Campbell CC. Malaria: principles of prevention and treatment. *Infect Dis Clin N Am* 1993;7:547-67.

Measles

CDC. Measles, mumps and rubella—vaccine use and strategies for elimination of measles, rubella and congenital rubella syndrome and control of mumps: recommendations of the Advisory Committee on Immunization Practices. *MMWR* 1998;47(No. RR-7)1-48.

CDC. Measles—United States, 1997. *MMWR* 1998;47:273-6.

CDC. Measles—United States, 1996. MMWR 1997;46:242–6.

Meningococcal Disease

- Rosenstein N, Levine O, Taylor JP, et al. Efficacy of meningococcal vaccine and barriers to vaccination. JAMA 1998;279:435–9.
Fischer M, Hedberg K, Cardosi P, et al. Tobacco smoke as a risk factor for meningococcal disease. Pediatr Infect Dis J 1997;16:979–83.
CDC. Control and prevention of meningococcal disease and control and prevention of serogroup C meningococcal disease: evaluation and management of suspected outbreaks: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1997;46(No. RR-5).
CDC. Laboratory-based surveillance for meningococcal disease in selected areas—United States, 1989–1991. MMWR 1993;42(No. SS-2):21–30.

Mumps

- CDC. Mumps surveillance—United States, 1988–1993. MMWR 1995;44(No. SS-3):1–14.
Briss PA, Fehrs LJ, Parker RA, et al. Sustained transmission of mumps in a highly vaccinated population: assessment of primary vaccine failure and waning vaccine-induced immunity. J Infect Dis 1994;169:77–82.
Hersch BS, Fine PEM, Kent WK, et al. Mumps outbreak in a highly vaccinated population. J Pediatr 1991;119:187–93.
CDC. Mumps prevention. MMWR 1989;38:388–92,397–400.

Pertussis

- Guris D, Bardenheier B, Brennan M, et al. Pertussis: a re-emerging disease among adolescents and adults in the U.S. [Abstract]. In: Proceedings of the International Conference on Emerging Infectious Diseases. Atlanta: CDC, CSTE, ASM and several others, 1998.
CDC. Manual for the surveillance of vaccine-preventable diseases. Atlanta: US Department of Health and Human Services, CDC, 1997. Available at <<http://www.cdc.gov/nip/manual/vpd/vpd.htm>>. Accessed November 19, 1998.
CDC. Pertussis vaccination: use of acellular pertussis vaccines among infants and young children: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1997;46(No. RR-7):1–25.

Plague

- Gage KL. Plague. In: Hausler WJ, Sussman M, ed. 9th ed. Topley and Wilson's microbiology and microbial infections, Vol. 3, bacterial infections. London: Arnold 1998:885–903.
CDC. Prevention of plague: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1996;45(No. RR-14).
Poland JD, Quan TJ, Barnes AM. Plague. In: Beran GW, ed. CRC handbook series in zoonoses: section A — bacterial, rickettsial and mycotic diseases. Boca Raton, Florida: CRC Press, Inc., 1994:93–112.

Poliomyelitis

- CDC. Paralytic poliomyelitis—United States, 1980–1994. MMWR 1997;46:79–83.
CDC. Poliomyelitis prevention in the United States: introduction of a sequential schedule of inactivated poliovirus vaccine followed by oral poliovirus vaccine—recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1997;46(No. RR-3):1–25.
Prevots DR, Strelbel PM. Poliomyelitis prevention in the United States: new recommendations for routine childhood poliovirus vaccination place greater reliance on inactivated poliovirus vaccine. Pediat Ann 1997;26:378–83.

Psittacosis

- Moroney JF, Guevara R, Iverson C, et al. Detection of chlamydiosis in a shipment of pet birds, leading to recognition of an outbreak of clinically mild psittacosis in humans. Clin Infect Dis 1998;26:1425–9.
Jorgensen DM. Gestational psittacosis in a Montana sheep rancher. Emerg Infect Dis 1997;3: 191–4
CDC. Compendium of psittacosis (chlamydiosis) control, 1997. MMWR 1997;46(No. RR-13):1–13.

Wong KH, Skelton SK, Daugherty H. Utility of complement fixation and microimmunofluorescence assays for detecting serologic responses in patients with clinically diagnosed psittacosis. *J Clin Microbiol* 1994;32:2417-21.

Rabies

CDC. Compendium of animal rabies control, 1998. *MMWR* 1998;47(No. RR-9).
Krebs JW, Smith JS, Rupprecht CE, Childs JE. Rabies surveillance in the United States during 1996. *JAVMA* 1997;211:1525-39.
CDC. Rabies prevention—United States, 1991: recommendations of the Immunization Practices Advisory Committee (ACIP). *MMWR* 1991;40(No. RR-3):1-19.

Rocky Mountain Spotted Fever

Dalton MJ, Clarke MJ, Holman RC, et al. National surveillance for Rocky Mountain spotted fever, 1981-1992: epidemiologic summary and evaluation of risk factors for fatal outcome. *Am J Trop Med Hyg* 1995;52:405-13.
Salgo MP, Telzak EE, Currie B, et al. A focus of Rocky Mountain spotted fever within New York City. *N Engl J Med* 1988;318:1345-8.
Woodward TE. Rocky Mountain spotted fever: epidemiological and early clinical signs are keys to treatment and reduced mortality. *J Infect Dis* 1984;150:465-8.

Rubella

CDC. Rubella and congenital rubella syndrome—United States, 1994-1997. *MMWR* 1997;46:350-4.
CDC. Rubella and congenital rubella syndrome—United States, January 1, 1991-May 7, 1994. *MMWR* 1994;43:391,397-401.
CDC. Rubella among crew members of commercial cruise ships. *MMWR* 1997;46:1247-50.

Salmonellosis

Mahon BE, Pönkä A, Hall WN, et al. An international outbreak of *Salmonella* infections caused by alfalfa sprouts grown from contaminated seeds. *J Infect Dis* 1997;175:876-82.
Mermin J, Hoar B, Angulo FJ. Iguanas and *Salmonella marina* infection in children: a reflection of the incidence of reptile-associated salmonellosis in the United States. *Pediatrics* 1997;99:399-402.
CDC. Multidrug-resistant *Salmonella* serotype Typhimurium—United States, 1996. *MMWR* 1997;46:308-10.
CDC. Outbreaks of *Salmonella* serotype Enteritidis infection associated with consumption of raw shell eggs—United States, 1994-1995. *MMWR* 1996;45:737-42.

Shigellosis

Sobel J, Cameron DN, Ismail J, et al. A prolonged outbreak of *Shigella sonnei* infections in traditionally observant Jewish communities in North America caused by a molecularly distinct bacterial subtype. *J Infect Dis* 1998;177:1405-8.
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.
Ries AA, Wells JG, Olivola D, et al. Epidemic *Shigella dysenteriae* type 1 in Burundi: panresistance and implications for prevention. *J Infect Dis* 1994;169:1035-41.
Lee LA, Shapiro CN, Hargrett-Bean N, Tauxe RV. Hyperendemic shigellosis in the United States: a review of surveillance data for 1967-1988. *J Infect Dis* 1991;164:894-900.

Syphilis

St. Louis ME, Farley TA, Aral SO. Untangling the persistence of syphilis in the south. *Sex Transm Dis* 1996;23:1-4.
Nakashima AK, Rolfs RT, Flock ML, Kilmarx P, Greenspan JR. Epidemiology of syphilis in the United States, 1941-1993. *Sex Transm Dis* 1996;23:16-23.
CDC. Outbreak of primary and secondary syphilis—Baltimore City, Maryland, 1995. *MMWR* 1996;45:166-9.

Syphilis, Congenital

Risser WL, Hwang LY. Problems in the current case definitions of congenital syphilis. *J Pediatr* 1996;129:499-505.

Coles BF, Hipp SS, Silberstein GS, Chen JH. Congenital syphilis surveillance in upstate New York, 1989–1992: implications for prevention and clinical management. *J Infect Dis.* 1995;171:732–5.

CDC. Surveillance for geographic and secular trends in congenital syphilis—United States, 1983–1991. *MMWR* 1993;42(No. SS-6):59–71.

CDC. Guidelines for the prevention and control of congenital syphilis. *MMWR* 1988;37(No. S-1):1–13.

Tetanus

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

Craig AS, Reed GW, Mohon RT, et al. Neonatal tetanus in the United States: a sentinel event in the foreign-born. *Pediatr Infect Dis J* 1997;16:955–9.

CDC. Tetanus surveillance—United States, 1991–1994. *MMWR* 1997;46(No. SS-2):15–25.

Gergen PJ, McQuillan GM, Keily M, Ezzati-Rice TM, Sutter RW, Virella G. A population-based serologic survey of immunity to tetanus in the United States. *N Engl J Med* 1995;332:761–6.

Toxic-Shock Syndrome

Schuchat A, Broome CV. Toxic shock syndrome and tampons. *Epidemiol Rev* 1991;13:99–112.

CDC. Reduced incidence of menstrual toxic shock syndrome—United States, 1980–1990. *MMWR* 1990;39:421–3.

Gaventa S, Reingold AL, Hightower AW, et al. Active surveillance for toxic shock syndrome in the United States, 1986. *Rev Infect Dis* 1989;11(suppl):S28–S34.

Trichinellosis (Trichinosis)

CDC. Outbreak of trichinellosis associated with eating cougar jerky—Idaho, 1995. *MMWR* 1996;45:205–6.

McAuley JB, Michelson MK, Hightower AW, Engeran S, Wintermeyer LA, Schantz PM. A trichinosis outbreak among Southeast Asian refugees. *Am J Epidemiol* 1992;135:1404–10.

CDC. Trichinosis surveillance—United States, 1987–1990. *MMWR* 1991;40(No. SS-3):35–42.

Bailey TM, Schantz PM. Trends in the incidence and transmission patterns of human trichinosis in the United States, 1982–1986. *Rev Infect Dis* 1990;12:5–11.

Tuberculosis

CDC. Reported tuberculosis in the United States, 1997. Washington, DC: US Department of Health and Human Services, CDC, 1998.

CDC. Tuberculosis morbidity—United States, 1997. *MMWR* 1998;47:253–7.

CDC. Recommendations for counting reported tuberculosis cases. In: Reported tuberculosis in the United States, 1996. July 1997:61–8.

American Thoracic Society, CDC. Treatment of tuberculosis and tuberculosis infection in adults and children. *Am J Respir Crit Care Med* 1994;149:1359–74.

Typhoid Fever

Mermin JH, Townes JM, Gerber M, Dolan N, Mintz ED, Tauxe RV. Typhoid fever in the United States, 1985–1994: changing risks of international travel and increasing antimicrobial resistance. *Arch Intern Med* 1998;158:633–8.

CDC. Typhoid immunization: recommendations of the Advisory Committee on Immunization Practices. *MMWR* 1994;43(No. RR-14).

Woodruff BA, Pavia AT, Blake PA. A new look at typhoid vaccination: information for the practicing physician. *JAMA* 1991;265:756–9.

Varicella

CDC. Varicella-related deaths among children—United States, 1997. *MMWR* 1998;47:365–8.

CDC. Outbreak of invasive Group A Streptococcus associated with varicella in a childcare center—Boston, Massachusetts, 1997. *MMWR* 1997;46:944–9.

Izurieta HS, Strebel PM, Blake PA. Postlicensure effectiveness of varicella vaccine during an outbreak in a child care center. *JAMA* 1997;278:1495–9.

CDC. Prevention of varicella: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 1996;45(No. RR-11).



State and Territorial Epidemiologists and Laboratory Directors

State and Territorial Epidemiologists and Laboratory Directors are acknowledged for their contributions to *CDC Surveillance Summaries*. The epidemiologists listed below were in the positions shown as of June 1998, and the laboratory directors listed below were in the positions shown as of June 1998.

State/Territory	Epidemiologist	Laboratory Director
Alabama	John P. Lofgren, MD	William J. Callan, PhD
Alaska	John P. Middaugh, MD	Gregory V. Hayes, DrPH
Arizona	Robert W. England, Jr, MD, MPH	Barbara J. Erickson, PhD
Arkansas	Thomas C. McChesney, DVM	Michael G. Foreman
California	Stephen H. Waterman, MD, MPH	Paul Kimsey, PhD
Colorado	Richard E. Hoffman, MD, MPH	Ronald L. Cada, DrPH
Connecticut	James L. Hadler, MD, MPH	Sanders F. Hawkins, PhD
Delaware	A. LeRoy Hathcock, PhD	Roy Almeida, DrPH
District of Columbia	Martin E. Levy, MD, MPH	James B. Thomas, ScD
Florida	Richard S. Hopkins, MD, MSPH	E. Charles Hartwig, ScD
Georgia	Kathleen E. Toomey, MD, MPH	Elizabeth A. Franko, DrPH
Hawaii	Paul Effler, MD, MPH	Vernon K. Miyamoto, PhD
Idaho	Christine G. Hahn, MD	Richard H. Hudson, PhD
Illinois	Byron J. Francis, MD, MPH	David F. Carpenter, PhD
Indiana	Gregory K. Steele, DrPH, MPH	David E. Nauth
Iowa	M. Patricia Quinlisk, MD, MPH	Mary J. R. Gilchrist, PhD
Kansas	Gianfranco Pezzino, MD, MPH	Roger H. Carlson, PhD
Kentucky	Glyn G. Caldwell, MD	Samuel Gregorio, DrPH, SM (AAM)
Louisiana	Louise McFarland, DrPH	Henry B. Bradford, Jr, PhD
Maine	Kathleen F. Gensheimer, MD, MPH	John A. Krueger
Maryland	Diane M. Dwyer, MD, MPH	J. Mehseri Joseph, PhD
Massachusetts	Alfred DeMaria, Jr, MD	Ralph J. Timperi, MPH
Michigan	David R. Johnson, MD, MPH	Robert Martin, DrPH
Minnesota	Michael T. Osterholm, PhD, MPH	Norman Crouch, PhD
Mississippi	Mary Currier, MD, MPH	Joe O. Graves, PhD
Missouri	H. Denny Donnell, Jr, MD, MPH	Eric C. Blank, DrPH
Montana	Todd A. Damrow, PhD, MPH	Mike Spence, MD
Nebraska	Thomas J. Safranek, MD	Steve Hinrichs, MD
Nevada	Randall L. Todd, DrPH	L. Dee Brown, MD, MPH
New Hampshire	Jesse Greenblatt, MD, MPH	Veronica C. Malmberg, MSN
New Jersey	Herman Ellis, MD	Thomas J. Domenico, PhD
New Mexico	C. Mack Sewell, DrPH, MS	David E. Mills, PhD
New York City	Benjamin A. Mojica, MD, MPH	Alex Ramon, MD, MPH
New York State	Perry F. Smith, MD	Ann Willey, PhD
North Carolina	J. Newton MacCormack, MD, MPH	Lou F. Turner, DrPH
North Dakota	Larry A. Shirley, MS, MPH	James D. Anders, MPH
Ohio	Thomas J. Halpin, MD, MPH	William Becker, DO
Oklahoma	J. Michael Crutcher, MD, MPH	Richard Baltaro, MD, PhD
Oregon	David W. Fleming, MD	Michael R. Skeels, PhD, MPH
Pennsylvania	James T. Rankin, Jr, DVM, PhD, MPH	Bruce Kleger, DrPH
Rhode Island	Utpala Bandy, MD, MPH	Walter S. Combs, Jr, PhD
South Carolina	James J. Gibson, MD, MPH	Harold Dowda, PhD
South Dakota	Susan E. Lance-Parker, DVM, PhD, MPH	Michael Smith
Tennessee	William L. Moore, Jr, MD	Michael W. Kimberly, DrPH
Texas	Diane M. Simpson, MD, PhD	David L. Maserang, PhD
Utah	Craig R. Nichols, MBA	Charles D. Brokopp, DrPH
Vermont	Peter D. Galbraith, DMD, MPH	Burton W. Wilcke, Jr, PhD
Virginia	Suzanne R. Jenkins, VMD, MPH	James L. Pearson, DrPH, BCLD
Washington	Paul A. Stehr-Green, DrPH, MPH	Jon M. Counts, DrPH
West Virginia	Loretta E. Haddy, MA, MS	Frank W. Lambert, Jr, DrPH
Wisconsin	Jeffrey P. Davis, MD	Ronald H. Laessig, PhD
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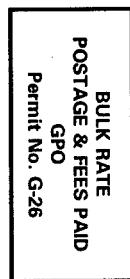
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