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Summary of Notifiable Diseases — United States, 2007

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Preface

The *Summary of Notifiable Diseases — United States, 2007* contains the official statistics, in tabular and graphic form, for the reported occurrence of nationally notifiable infectious diseases in the United States for 2007. Unless otherwise noted, the data are final totals for 2007 reported as of June 30, 2008. These statistics are collected and compiled from reports sent by state health departments and territories to the National Notifiable Diseases Surveillance System (NNDSS), which is operated by CDC in collaboration with the Council of State and Territorial Epidemiologists (CSTE). The *Summary* is available at http://www.cdc.gov/mmwr/summary.html. This site also includes publications from previous years.

The Highlights section presents noteworthy epidemiologic and prevention information for 2007 for selected diseases and additional information to aid in the interpretation of surveillance and disease-trend data. Part 1 contains tables showing incidence data for the nationally notifiable infectious diseases during 2007.* The tables provide the number of cases reported to CDC for 2007 and the distribution of cases by month, geographic location, and the patient's demographic characteristics (age, sex, race, and ethnicity). Part 2 contains graphs and maps that depict summary data for certain notifiable infectious 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 1976. This section also includes a table enumerating deaths associated with specified notifiable diseases reported to CDC's National Center for Health Statistics (NCHS) during 2002–2005. The Selected Reading section presents general and disease-specific references for notifiable infectious diseases. These references provide additional information on surveillance and epidemiologic concerns, diagnostic concerns, and disease-control activities.

Comments and suggestions from readers are welcome. To increase the usefulness of future editions, comments about the current report and descriptions of how information is or could be used are invited. Comments should be sent to Public Health Surveillance Team — NNDSS, Division of Integrated Surveillance Systems and Services, National Center for Public Health Informatics at soib@cdc.gov.

* No cases of diphtheria; neuroinvasive or nonneuroinvasive western equine encephalitis virus disease; poliomyelitis, paralytic; poliovirus infection, nonparalytic; rubella, congenital syndrome; severe acute respiratory syndrome–associated coronavirus syndrome, (SARS-CoV); smallpox; and yellow fever were reported in 2007; these conditions do not appear in the tables in Part 1. For certain other nationally notifiable diseases, incidence data were reported to CDC but are not included in the tables or graphs of this *Summary*. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are undergoing quality review. Data on human immunodeficiency virus (HIV) infections are not included because HIV reporting has been implemented on different dates and using different methods than for AIDS case reporting.

Background

The infectious diseases designated as notifiable at the national level during 2007 are listed in this section. 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. A brief history of the reporting of nationally notifiable infectious diseases in the United States is available at http://www.cdc.gov/ncphi/disss/nndss/nndsshis.htm. In 1961, CDC assumed responsibility for the collection and publication of data on nationally notifiable diseases. NNDSS is neither a single surveillance system nor a method of reporting. Certain NNDSS data are reported to CDC through separate surveillance information systems and through different reporting mechanisms; however, these data are aggregated and compiled for publication purposes.

Notifiable disease reporting at the local level protects the public's health by ensuring the proper identification and follow-up of cases. Public health workers ensure that persons who are already ill receive appropriate treatment; trace contacts who need vaccines, treatment, quarantine, or education; investigate and halt outbreaks; eliminate environmental hazards; and close premises where spread has occurred. Surveillance of notifiable conditions helps public health authorities to monitor the impact of notifiable conditions, measure disease trends, assess the effectiveness of control and prevention measures, identify populations or geographic areas at high risk, allocate resources appropriately, formulate prevention strategies, and develop public health policies. Monitoring surveillance data enables public health authorities to detect sudden changes in disease occurrence and distribution, identify changes in agents and host factors, and detect changes in health-care practices.

The list of nationally notifiable infectious diseases is revised periodically. 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 collaborate in determining which diseases should be nationally notifiable. CSTE, with input from CDC, makes recommendations annually for additions and deletions. Although disease reporting is mandated by legislation or regulation at the state and local levels, state reporting to CDC is voluntary. Reporting completeness of notifiable diseases is highly variable and related to the condition or disease being reported (*1*). The list of diseases considered notifiable varies by state and year. Current and historic national public health surveillance case definitions used for classifying and enumerating cases consistently across reporting jurisdictions are available at http://www.cdc.gov/ncphi/disss/nndss/nndsshis.htm.

Infectious Diseases Designated as Notifiable at the National Level During 2007*

Acquired immunodeficiency syndrome (AIDS)
Anthrax
Domestic arboviral diseases
  California serogroup virus disease
  Eastern equine encephalitis virus disease
  Powassan virus disease
  St. Louis encephalitis virus disease
  West Nile virus disease
  Western equine encephalitis virus disease
Botulism
  foodborne
  infant
  other (wound and unspecified)
Brucellosis
Chancroid
Chlamydia trachomatis, genital infection
Cholera
Coccidioidomycosis
Cryptosporidiosis
Cyclosporiasis
Diphtheria
Ehrlichiosis
  human granulocytic
  human monocytic
  human, other or unspecified agent
Giardiasis
Gonorrhea
Haemophilus influenzae, invasive disease
Hansen disease (leprosy)
Hantavirus pulmonary syndrome
Hemolytic uremic syndrome, postdiarrheal
Hepatitis A, acute
Hepatitis B, acute
Hepatitis B, chronic†
Hepatitis B virus, perinatal infection
Hepatitis C, acute†
Hepatitis C virus infection (past or present)
Human immunodeficiency virus (HIV) infection
  adult (age ≥13 yrs)
  pediatric (age <13 yrs)
Influenza-associated pediatric mortality
Legionellosis
Listeriosis
Lyme disease
Malaria
Measles§
Meningococcal disease
Mumps
Novel influenza A virus infections¶
Pertussis
Plague
Poliomyelitis, paralytic
Poliovirus infection, nonparalytic¶
Psittacosis
Q fever
Rabies
  animal
  human
Rocky Mountain spotted fever
Rubella§
Rubella, congenital syndrome§
Salmonellosis
Severe acute respiratory syndrome–associated coronavirus (SARS-CoV) disease
Shiga toxin-producing *Escherichia coli* (STEC)
Shigellosis
Smallpox
Streptococcal disease, invasive, group A
Streptococcal toxic-shock syndrome
Streptococcus pneumoniae, invasive disease**
  drug resistant, all ages
  age <5 years, nondrug resistant
Syphilis
Syphilis, congenital
Tetanus
Toxic-shock syndrome (other than streptococcal)
Trichinellosis
Tuberculosis
Tularemia
Typhoid fever
Vancomycin-intermediate *Staphylococcus aureus* infection (VISA)†
Vancomycin-resistant *Staphylococcus aureus* infection (VRSA)†
Varicella infection (morbidity)
Varicella (mortality)
Vibriosis (non-cholera *Vibrio* infections)¶
Yellow fever

* Position Statements the Council of State and Territorial Epidemiologists (CSTE) approved in 2006 for national surveillance were implemented beginning in January 2007.
† Revised national surveillance case definition.
§ Updated case classifications.
¶ Added to national notifiable disease list, 2007.
** New reporting guidelines.

Data Sources

Provisional data concerning the reported occurrence of nationally notifiable infectious 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 the *Summary*.

Notifiable disease reports are the authoritative and archival counts of cases. They are approved by the appropriate chief epidemiologist from each submitting state or territory before being published in the *Summary*. Data published in *MMWR Surveillance Summaries* or other surveillance reports produced by CDC programs might not agree exactly with data reported in the annual *Summary* because of differences in the timing of reports, the source of the data, or surveillance methodology.

Data in the *Summary* were derived primarily from reports transmitted to CDC from health departments in the 50 states, five territories, New York City, and the District of Columbia. Data were reported for *MMWR* weeks 1–52, which correspond to the period for the week ending January 6, 2007, through the week ending December 29, 2007. More information regarding infectious notifiable diseases, including case definitions, is available at http://www.cdc.gov/ncphi/disss/nndss/nndsshis.htm. Policies for reporting notifiable disease cases can vary by disease or reporting jurisdiction. The case-status categories used to determine which cases reported to NNDSS are published, by disease or condition, and are listed in the print criteria column of the 2007 NNDSS event code list (available at http://www.cdc.gov/ncphi/disss/nndss/phs/files/NNDSS_event_code_list_January_2008.pdf).

Final data for certain diseases are derived from the surveillance records of the CDC programs listed below. Requests for further information regarding these data should be directed to the appropriate program.

Coordinating Center for Health Information and Service
National Center for Health Statistics (NCHS)

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

Coordinating Center for Infectious Diseases
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP).

Division of HIV/AIDS Prevention (AIDS and HIV infection)

Division of STD Prevention (chancroid; C*hlamydia trachomatis*, genital infection; gonorrhea; and syphilis)

Division of Tuberculosis Elimination (tuberculosis)

National Center for Immunization and Respiratory Diseases

Influenza Division (influenza-associated pediatric mortality).

Division of Viral Diseases, (poliomyelitis, varicella [morbidity and deaths], and SARS-CoV).

National Center for Zoonotic, Vector-Borne, and Enteric Diseases

Division of Vector-Borne Infectious Diseases (arboviral diseases).

Division of Viral and Rickettsial Diseases (animal rabies).

Population estimates for the states are from the NCHS bridged-race estimates of the July 1, 2000–July 1, 2006 U.S. resident population from the vintage 2006 postcensal series by year, county, age, sex, race, and Hispanic origin, prepared under a collaborative arrangement with the U.S. Census Bureau. This data set was released on August 16, 2007, and is available at http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm. Populations for territories are 2006 estimates from the U.S. Census Bureau International Data Base, available at http://www.census.gov/ipc/www/idb/summaries.html. The choice of population denominators for incidence reported in the *MMWR* is based on 1) the availability of census population data at the time of preparation for publication and 2) the desire for consistent use of the same population data to compute incidence reported by different CDC programs. Incidence in the *Summary* is calculated as the number of reported cases for each disease or condition divided by either the U.S. resident population for the specified demographic population or the total U.S. residential population, multiplied by 100,000. When a nationally notifiable disease is associated with a specific age restriction, the same age restriction is applied to the population in the denominator of the incidence calculation. In addition, population data from states in which the disease or condition was not notifiable or was not available were excluded from incidence calculations. Unless otherwise stated, disease totals for the United States do not include data for American Samoa, Guam, Puerto Rico, the Commonwealth of the Northern Mariana Islands, or the U.S. Virgin Islands.

Interpreting Data

Incidence data in the *Summary* are presented by the date of report to CDC as determined by the *MMWR* week and year assigned by the state or territorial health department, except for the domestic arboviral diseases, which are presented by date of diagnosis. Data are reported by the state in which the patient resided at the time of diagnosis. For certain nationally notifiable infectious diseases, surveillance data are reported independently to different CDC programs. For this reason, surveillance data reported by other CDC programs might vary

from data reported in the *Summary* because of differences in 1) the date used to aggregate data (e.g., date of report or date of disease occurrence), 2) the timing of reports, 3) the source of the data, 4) surveillance case definitions, and 5) policies regarding case jurisdiction (i.e., which state should report the case to CDC).

The data reported in the *Summary* are useful for analyzing disease trends and determining relative disease burdens. However, reporting practices affect how these data should be interpreted. Disease reporting is likely incomplete, and completeness might vary depending on the disease and reporting state. The degree of completeness of data reporting might be influenced by the diagnostic facilities available; control measures in effect; 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 methods for public health surveillance, introduction of new diagnostic tests, or discovery of new disease entities can cause changes in disease reporting that are independent of the true incidence of disease.

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

In addition, not all race and ethnicity data are collected uniformly for all diseases. For example, certain disease programs collect data on race and ethnicity using one or two variables, based on the 1977 standards for collecting such data issued by the Office of Management and the Budget (OMB). However, beginning in 2003, certain CDC programs, such as the tuberculosis program, implemented OMB's 1997 revised standards for collecting such data; these programs collect data on multiple races per person using multiple race variables. In addition, although the recommended standard for classifying a person's race or ethnicity is based on self-reporting, this procedure might not always be followed.

Transition in NNDSS Data Collection and Reporting

Before 1990, data were reported to CDC as cumulative counts rather than individual case reports. In 1990, states began electronically capturing and reporting individual case reports (without personal identifiers) to CDC using the National Electronic Telecommunication System for Surveillance (NETSS). In 2001, CDC launched the National Electronic Disease Surveillance System (NEDSS), now a component of the Public Health Information Network, to promote the use of data and information system standards that advance the development of efficient, integrated, and interoperable surveillance information systems at the local, state, and federal levels. One of the objectives of NEDSS is to improve the accuracy, completeness, and timeliness of disease reporting at the local, state, and national level. CDC has developed the NEDSS Base System (NBS), a public health surveillance information system that can be used by states that do not have their own NEDSS-compatible based systems. A major feature of NBS is the ability to capture data already in electronic form (e.g., electronic laboratory results, which are needed for case confirmation) rather than enter these data manually as in NETSS. In 2007, 16 states used NBS to transmit nationally notifiable infectious diseases to CDC. Additional NBS information concerning NEDSS is available at http://www.cdc.gov/NEDSS.

Change in Methodology for Identifying Which Nationally Notifiable Infectious Diseases Were Not Reportable in National Notifiable Diseases Surveillance System (NNDSS) Reporting Jurisdictions in 2007

In 2007, the (NNDSS) program changed the methodology used to gather information regarding which nationally notifiable infectious diseases were reportable in U.S. states and territories. The NNDSS program provided technical assistance to the Council of State and Territorial Epidemiologists (CSTE) in implementing the CSTE State Reportable Conditions Assessment (SRCA). This assessment solicited information from each NNDSS reporting jurisdiction (all 50 U.S. states, the District of Columbia, New York City, and five U.S. territories) regarding which public health conditions were reportable by clinicians, laboratories, hospitals, or 'other" public health reporters, as mandated by law or regulation. A total

of 255 conditions, including infectious conditions and noninfectious conditions (e.g., injuries, cancer, and work-related conditions) were included in the assessment. Information concerning all nationally notifiable diseases was also captured by the assessment.

The 2007 assessment was the first collaborative project of such technical magnitude ever conducted by CSTE and CDC in which CDC and CSTE had previously gathered public health reporting requirements independently. The SRCA collected information regarding whether each reportable condition was explicitly reportable (i.e., listed as a specific disease or as a category of diseases on reportable disease lists) or whether it was implicitly reportable (i.e., included in a general category of the reportable disease list, such as "rare diseases of public health importance"), or not reportable. Only explicitly reportable conditions were considered reportable for the purpose of national public health surveillance, and thus NNDSS. Moreover, to determine whether a condition included in the SRCA was considered reportable across all public-health–reporter categories and for a specific NNID in a reporting jurisdiction, CDC developed and applied a condition algorithm and a results algorithm to run on the data collected in the 2007 SRCA. Analyzed results of the 2007 SRCA were used to determine whether a NNID was not reportable in a reporting jurisdiction in 2007 and thus noted with an "N" indicator (for "not notifiable") in the front tables of this report.

Unanalyzed results from the 2007 SRCA (and a subsequent 2008 SRCA) are available, using CSTE's web-query tool, at http://www.cste.org/dnn/programsandacttivities/publichealthinformatics/statereportableconditionsqueryresults/tabid/261/default.aspx.

Revised International Health Regulations

In May 2005, the World Health Assembly adopted revised International Health regulations (IHR) (2) that went into effect in the United States on July 18, 2007. This international legal instrument governs the role of the World Health Organization (WHO) and its member countries, including the United States, in identifying, responding to and sharing information about Public Health Emergencies of International Concern (PHEIC). A PHEIC is an extraordinary event that 1) constitutes a public health risk to other countries through international spread of disease, and 2) potentially requires a coordinated international response.

The IHR are designed to prevent and protect against the international spread of diseases while minimizing the effect on world travel and trade. Countries that have adopted these rules have a much broader responsibility to detect, respond to, and report public health emergencies that potentially require a coordinated international response in addition to taking preventive measures. The IHR will help countries work together to identify, respond to, and share information about PEHIC.

The revised IHR represent a conceptual shift from a predefined disease list to a framework of reporting and responding to events on the basis of an assessment of public health criteria, including seriousness, unexpectedness, and international travel and trade implications. PHEIC are events that fall within those criteria (further defined in a decision algorithm in Annex 2 of the revised IHR). Four conditions always constitute a PHEIC and do not require the use of the IHR decision instrument in Annex 2: Severe Acute Respiratory Syndrome (SARS), smallpox, poliomyelitis caused by wild-type poliovirus, and human influenza caused by a new subtype. Any other event requires the use of the decision algorithm in Annex 2 of the IHR to determine if it is a potential PHEIC. Examples of events that require the use of the decision instrument include, but are not limited to, cholera, pneumonic plague, yellow fever, West Nile fever, viral hemorrhagic fevers, and meningococcal disease. Other biologic, chemical, or radiologic events might fit the decision algorithm and also must be reportable to WHO. All WHO member states are required to notify WHO of a potential PHEIC. WHO makes the final determination about the existence of a PHEIC.

Health-care providers in the United States are required to report diseases, conditions, or outbreaks as determined by local, state, or territorial law and regulation, and as outlined in each state's list of reportable conditions. All health-care providers should work with their local, state, and territorial health agencies to identify and report events that might constitute a potential PHEIC occurring in their location. U.S. State and Territorial Departments of Health have agreed to report information about a potential PHEIC to the most relevant federal agency responsible for the event. In the case of human disease, the U.S. State or Territorial Departments of Health will notify CDC rapidly through existing formal and informal reporting mechanisms (3). CDC will further analyze the event based on the decision algorithm in Annex 2 of the IHR and notify the U.S. Department of Health and Human Services (DHHS) Secretary's Operations Center (SOC), as appropriate.

DHHS has the lead role in carrying out the IHR, in cooperation with multiple federal departments and agencies. The HHS SOC is the central body for the United States responsible for reporting potential events to the WHO. The United States has 48 hours to assess the risk of the reported event. If authorities determine that a potential PHEIC exists, the WHO member country has 24 hours to report the event to the WHO.

An IHR decision algorithm in Annex 2 has been developed to help countries determine whether an event should be reported. If any two of the following four questions can be answered in the affirmative, then a determination should be made that a potential PHEIC exists and WHO should be notified:

- Is the public health impact of the event serious?
- Is the event unusual or unexpected?
- Is there a significant risk of international spread?
- Is there a significant risk of international travel or trade restrictions?

Additional information concerning IHR is available at http://www.who.int/csr/ihr/en, http://www.globalhealth.gov/ihr/index.html, http://www.cdc.gov/cogh/ihregulations.htm, and http://www.cste.org/PS/2007ps/2007psfinal/ID/07-ID-06.pdf.

At its annual meeting in June 2007, the Council of State and Territorial Epidemiologists (CSTE) approved a position statement to support the implementation of the IHR in the United States (3). CSTE also approved a position statement in support of the 2005 IHR adding initial detections of novel influenza A virus infections to the list of nationally notifiable diseases reportable to NNDSS, beginning in January 2007 (4).

1. Doyle TJ, Glynn MK, Groseclose LS. Completeness of notifiable infectious disease reporting in the United States: an analytical literature review. Am J Epidemiol 2002;155:866–74.
2. World Health Organization. Third report of Committee A. Annex 2. Geneva, Switzerland: World Health Organization; 2005. Available at http://www.who.int/gb/ebwha/pdf_files/WHA58/A58_55-en.pdf.
3. Council of State and Territorial Epidemiologists. Events that may constitute a public health emergency of international concern. Position statement 07-ID-06. Available at http://www.cste.org/PS/2007ps/2007psfinal/ID/07-ID-06.pdf.
4. Council of State and Territorial Epidemiologists. National reporting for initial detections of novel influenza A viruses. Position statement 07-ID01. Available at: http://www.cste.org/PS/2007ps/2007psfinal/ID/07-ID-06.pdf.

Highlights for 2007

Below are summary highlights for certain national notifiable diseases. Highlights are intended to assist in the interpretation of major occurrences that affect disease incidence or surveillance trends (e.g., outbreaks, vaccine licensure, or policy changes).

AIDS

Since 1981, confidential name-based AIDS surveillance has been the cornerstone of national, state, and local efforts to monitor the scope and impact of the HIV epidemic. The data have multiple uses, including the development of policy to help prevent and control AIDS. However, because of the introduction of therapies that effectively slow the progression of human immunodeficiency virus (HIV) infection, AIDS data no longer adequately represent the populations affected by the epidemic. By helping public health practitioners understand the epidemic at an earlier stage, combined HIV and AIDS data better represent the overall impact of HIV. As of April 2008, all 50 states, the District of Columbia, and five U.S. territories had implemented confidential name-based HIV reporting. These areas have integrated name-based HIV surveillance into their AIDS surveillance systems; names or other personal indentifying information are not reported to CDC.

At the end of 2007, an estimated 455,636 persons in the United States were living with AIDS (*1*). During 2003–2007, the estimated number of new AIDS cases decreased 7.5%, from 38,893 cases in 2003 to 35,962 in 2007. More than 1 million persons in the United States were estimated to have received an AIDS diagnosis from the beginning of the epidemic through the end of 2007.

1. CDC. HIV/AIDS surveillance report, 2007. Atlanta, GA: US Department of Health and Human Services, CDC, Vol. 19; 2009. Available at http://www.cdc.gov/hiv/topics/surveillance/resources/reports.

Anthrax

In August 2007, two related cases of cutaneous anthrax, one confirmed and one probable, occurred in Connecticut. Exposure was determined to be the result of making traditional West African drums using untreated, *Bacillus anthracis*–contaminated goat hides that were imported from Guinea in the first case and cross-contamination of the residence by the drum maker in the second case. Both patients recovered with treatment (*1*). This event, and previous, unrelated cases of anthrax associated with contaminated animal skin drums (*2,3*), demonstrate the health risks that can be posed by drums made with hides imported from countries where anthrax is common. Persons who make, play or handle these drums, or who are exposed to environments cross-contaminated by the making of these drums, are potentially at risk.

Naturally occurring anthrax epizootics continue to be reported annually among U.S. wildlife and livestock populations, with epizootics reported by six states in 2007, including California, North and South Dakota, Minnesota, Montana, and Texas.

1. CDC. Cutaneous anthrax associated with drum making using goat hides from West Africa–Connecticut, 2007. MMWR 2008;57:628–31.
2. CDC. Inhalation anthrax associated with dried animal hides—Pennsylvania and New York City, 2006. MMWR 2006;55:280–2.
3. National Health Service Borders. Report on the management of an anthrax incident in the Scottish borders, July 2006 to May 2007. Melrose, UK: National Health Service Borders; 2007. Available at http://www.nhsborders.org.uk/uploads/18645/anthrax_report_131207.pdf.

Arboviral, Neuroninvasive and Nonneuroinvasive (West Nile virus)

During 2007, West Nile virus (WNV) activity was detected in 47 states and expanded into 19 counties that had not reported WNV activity previously. Human WNV disease cases were reported in 44 states (*1*). Nationally, the reported incidence of West Nile neuroinvasive disease (WNND) was 0.4 cases per 100,000 population, which is similar to that reported in 2004 (0.4), 2005 (0.4), and 2006 (0.5). The relative stability in the number of reported WNND cases during the past 4 years likely represents endemic WNV transmission in the continental United States. The highest incidence of WNND continued to occur in western and central states. In 2007, human WNV infection was identified for the first time in Puerto Rico among three asymptomatic blood donors.

1. CDC. West Nile virus activity—United States, 2007. MMWR 2008;57;720–3.

Brucellosis

Since 2003, incidence of brucellosis in the United States has increased yearly. During 2006–2007, the number of cases increased 12.1%. The overall characteristics of persons with brucellosis remain stable. For patients for whom ethnicity was identified, 63.5% were Hispanic. The majority of cases were reported in the Southwest. In the U.S. animal population, brucellosis eradication efforts continue. In 2007, the U.S. Department of Agriculture declared Idaho a brucellosis Class Free state. Texas remained a Class A state but reported no new infected cattle herds (*1*). In total, 49 states and three territories were classified as Brucellosis Class Free states at the end of 2007 (*1*).

Risk factors associated with brucellosis include the consumption of unpasteurized milk or soft cheeses. The risk for brucellosis from dairy produced in the United States is low. Unpasteurized dairy from countries with endemic brucellosis remains a source of brucellosis for immigrants and travelers. Hunters are at an elevated risk, as *Brucella abortus* remains enzootic in elk and bison in the greater Yellowstone National Park area, and *Brucella suis* is enzootic in feral swine in the Southeast. In addition, exposure to *Brucella* spp. can occur accidentally in diagnostic and research laboratories because of a high potential for aerosol transmission (*2*). For the same reason, biosafety level 3 practices, containment, and equipment are recommended for laboratory manipulation of isolates (*3*). In the event of an exposure, postexposure prophylaxis can effectively prevent seroconversion and subsequent illness (*4*). CDC provides recommendations for laboratory exposures and can assist with the serological monitoring of exposed laboratory workers.

1. Donch DA, Gertonson AA, Rhyan JH, Gilsdorf MJ. Status report—fiscal year 2007 cooperative state-federal Brucellosis Eradication Program. Washington, DC: US Department of Agriculture; 2008. Available at: http://www.aphis.usda.gov/animal_health/animal_diseases/brucellosis/downloads/yearly_rpt.pdf.
2. CDC. Bioterrorism agents/diseases, by category. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at: http://www.bt.cdc.gov/agent/agentlist-category.asp#adef.
3. CDC, National Institutes of Health. Biosafety in microbiological and biomedical laboratories (BMBL). 4th ed. Washington, DC: US Department of Health and Human Services, CDC, National Institutes of Health; 1999. Available at: http://www.cdc.gov/OD/OHS/biosfty/bmbl4/bmbl4toc.htm.
4. CDC. Laboratory-Acquired Brucellosis—Indiana and Minnesota, 2006. MMWR 2008;57:39–42.

Cholera

Cases of cholera continue to be rare in the United States. The number of cases reported in 2007 was higher than the average number of cases per year reported during 2002–2006 (5.8) (*1*). Foreign travel continues to be the primary source of illness for cholera in the United States. Cholera remains a global threat to health, particularly in areas with poor access to improved water and sanitation, such as sub-Saharan Africa (*2*). All patients with domestic exposure in 2007 had consumed seafood. Other serogroups of cholera-toxin–producing *Vibrio cholerae* (e.g., O141 and O75) also have caused severe diarrhea in patients with a history of consumption of seafood from the Gulf Coast (*3*).

1. Steinberg EB, Greene KD, Bopp CA, Cameron DN, Wells JG, Mintz ED. Cholera in the United States, 1995–2000: trends at the end of the twentieth century. J Infect Dis 2001;184:799–802.
2. Gaffga NH, Tauxe RV, Mintz ED. Cholera: a new homeland in Africa. Am J Trop Med Hyg 2007;77:705–13.
3. Tobin-D'Angelo M, Smith AR, Bulens SN, et al. Severe diarrhea caused by cholera toxin–producing *Vibrio cholerae* serogroup O75 infections acquired in the southeastern United States. Clin Infect Dis 2008;47:1035–40.

Coccidioidomycosis

During 2007, the number of reported coccidioidomycosis cases in the United States decreased slightly, primarily because of a decrease in the number of reports received from the disease-endemic states of Arizona and, to a lesser extent, California. Coccidioidomycosis is a common cause of community-acquired pneumonia in disease-endemic areas, despite infrequent testing.

In 2007, the Council of State and Territorial Epidemiologists adopted modifications to the previous surveillance case definitions (*1*). The revised case definition allows for a positive serologic test for IgG (any of several clinically accepted methods) without a confirmation of a rising IgG titer to be sufficient for case confirmation. As a result, case counts are expected to rise during 2008.

1. Council of State and Territorial Epidemiologists. Revision of the surveillance case definition for Coccidioidomycosis. Position statement 07-ID-13. Atlanta, GA: Council of State and Territorial Epidemiologists; 2007. Available at http://www.cste.org/position%20statements/searchbyyear-2007final.asp.

Cryptosporidiosis

In 2007, the number of cryptosporidiosis cases reported increased dramatically. This follows an increase in the number of cases in 2005 and 2006. The reasons for this continued increase are unclear but might reflect changes in jurisdictional reporting patterns, increased testing for *Cryptosporidium,* or a real increase in infection and disease caused by *Cryptosporidium*. Cryptosporidiosis is widespread geographically in the United States (*1*), and during 2004–2007, incidence increased in every state.

As in previous years, cryptosporidiosis case reports were influenced by outbreaks, particularly those associated with treated recreational water. Although cryptosporidiosis affects persons in all age groups, the number of reported cases was highest among children aged 1–9 years. A tenfold increase in transmission of cryptosporidiosis occurred during summer through early fall, coinciding with increased use of recreational water by younger children, which is a known risk factor for cryptosporidiosis. *Cryptosporidium* oocysts can be detected routinely in treated recreational water (*2*). Contamination of, and the subsequent transmission through, recreational water is facilitated by the substantial number of *Cryptosporidium* oocysts that can be shed by a single person; the extended periods of time that oocysts can be shed (*3*); the low infectious dose (*4*); the resistance of *Cryptosporidium* oocysts to chlorine (*5*); and the prevalence of improper pool maintenance (i.e., insufficient disinfection, filtration, and recirculation of water), particularly of children's wading pools (*6*).

1. CDC. Cryptosporidiosis surveillance—United States, 2003–2005. In: Surveillance Summaries, September 7, 2007. MMWR 2007;56(No. SS-7):1–10.
2. Shields JM, Gleim ER, Beach MJ. Prevalence of *Cryptosporidium* spp. and *Giardia intestinalis* in swimming pools, Atlanta, Georgia. Emerg Inf Dis 2008;14:948–50.
3. Chappell CL, Okhuysen PC, Sterling CR, DuPont HL. *Cryptosporidium parvum*: intensity of infection and oocyst excretion patterns in healthy volunteers. J Infect Dis 1996;173:232–6.
4. DuPont HL, Chappell CL, Sterling CR, Okhuysen PC, Rose JB, Jakubowski W. The infectivity of *Cryptosporidium parvum* in healthy volunteers. N Engl J Med 1995;332:855–9.
5. Korich DG, Mead JR, Madore MS, Sinclair NA, Sterling CR. Effects of ozone, chlorine dioxide, chlorine, and monochloramine on *Cryptosporidium parvum* occyst viability. Appl Environ Microbiol 1990;56:1423–8.
6. CDC. Surveillance data from swimming pool inspections—selected states and counties, United States, May–September 2002. MMWR 2003;52:513–6.

Ehrlichiosis and Anaplasmosis

Human monocytic ehrlichiosis (also called HME or ehrlichiosis, caused by E*hrlichia chaffeensis*) and human granulocytic ehrlichiosis (also called HGE or anaplasmosis, caused by *Anaplasma phagocytophilum*) have been reported since 1999. Cases reported for 2007 represent a 44% increase in HME and a 29% increase in HGE over those reported for 2006, and an overall 159% and 130% increase since 2003, respectively. Increases in the numbers of reported cases might be the result of several factors, including possible increases in vector tick populations, or increases in human/tick contact as a result of human encroachment into tick habitat through recreational activities and housing construction. In addition, artifactual increases in reported cases might relate to changes in surveillance techniques or perception/awareness of disease, as might occur through changes in case definitions (which occurred in 2000 and 2004), and the constant evolution of laboratory tests most commonly available for diagnosis.

Expected geographic areas of occurrence for ehrlichiosis and anaplasmosis are based on known distributions of primary tick vectors responsible for infection. HME (ehrlichiosis) cases are expected to be reported primarily in the lower Midwest and the Southeast, reflecting the range of the primary tick vector species (*Amblyomma americanum*). HGE (anaplasmosis) cases are expected to be reported primarily from the upper Midwest and coastal New England, reflecting both the range of the primary tick vector species (*Ixodes scapularis*) and preferred animal hosts for tick feeding. However, human antibody responses to both of these infections often exhibit strong immunologic cross-reactivity using available serologic laboratory tests. In certain areas in which the range of expected tick vectors is known to overlap (e.g., in the central eastern United States) and for which one species is not differentiated by serologic testing, cases might be reported most appropriately as "Ehrlichiosis, unspecified." However, the large number of cases of "Human Monocytic Ehrlichiosis" and "Ehrlichiosis, unspecified" reported from the northeastern and upper midwestern United States more likely reflects situations in which physicians, confused as to causative agent, ordered single, incorrect tests resulting in incomplete diagnostic testing and interpretation (e.g., physicians ordering only HME tests in a region where HGE would be expected to predominate). *Ehrlichia ewingii* cases reflected in the "Ehrlichiosis, unspecified" category are impossible to ascertain, because only molecular diagnostic tests can be used to diagnose ehrlichiosis resulting from this infection; however, numbers are expected to be low.

Since the 2007 reporting year, the case definitions for these diseases have been modified by a resolution adopted by the Council of State and Territorial Epidemiologists to include a separate designation for *E. ewingii* for better assessment and counting of cases; the new category names and the new case definitions became effective January 1, 2008 (*1*) and will be first reflected in the 2008 Notifiable Disease Summary epidemiology of gonorrhea.

1. Council of State and Territorial Epidemiologists. Revision of the surveillance case definitions for Ehrlichiosis. Position statement 07-ID-03. Atlanta, GA: Council of State and Territorial Epidemiologists; 2007. Available at http://www.cste.org/position%20statements/searchbyyear-2007final.asp.

Hansen Disease (Leprosy)

The number of cases of Hansen disease (HD) reported in the United States peaked at 361 in 1985 and decreased from 1988 until 2006. In 2007, the number of cases reported to CDC increased by 49% from the number reported in 2006; this increase might be attributable to CDC attempts made to improve reporting. Cases were reported from 25 states and two U.S. territories; 69% of cases were reported from Texas, Hawaii, Florida, California, New York City, and Guam. HD is not highly transmissible; cases appear to be related predominantly to immigration from areas in which the disease is endemic. More information on access to clinical care is available at http://www.hrsa.gov/hansens.

Hemolytic Uremic Syndrome, Postdiarrheal

Hemolytic uremic syndrome (HUS) is characterized by the triad of hemolytic anemia, thrombocytopenia, and renal insufficiency. The most common etiology of HUS in the United States is infection with Shiga toxin–producing *Escherichia coli*, principally *E. coli* O157:H7 (*1*). Approximately 8% of persons

infected with *E. coli* O157:H7 progress to HUS (*2*). During 2007, as usual, the majority of reported cases occurred among children aged 1–4 years.

1. Banatvala N, Griffin PM, Greene KD, et al. The United States prospective hemolytic uremic syndrome study: microbiologic, serologic, clinical, and epidemiologic findings. J Infect Dis 2001;183:1063–70.
2. Slutsker L, Ries AA, Maloney K, et al. A nationwide case-control study of *Escherichia coli* O157:H7 infection in the United States. J Infect Dis 1998;177:962–6.

Viral Hepatitis, Acute

Implementation of the 1999 recommendations for routine childhood hepatitis A vaccination in the United States has reduced rates of infection; universal vaccination of children against hepatitis B also has reduced disease incidence substantially among younger age groups (*1*). Higher rates of hepatitis B virus (HBV) infections continue among adults, particularly men aged 25 – 44 years, reflecting the need to vaccinate adults at risk for HBV infection (e.g., injection-drug users [IDUs] and men who have sex with men). Although screening of blood after 1992 for hepatitis C antibodies has been important, the decline in hepatitis C incidence that has occurred in the past decade is attributable primarily to a decrease in incidence among IDUs (*2*). The reasons for this decrease are unknown but likely reflect changes in behavior and practices among this population.

In 2006, the expansion of recommendations for routine hepatitis A vaccination to include all children in the United States aged 12– 23 months is expected to reduce hepatitis A rates further. Ongoing hepatitis B vaccination programs ultimately will eliminate domestic HBV transmission, and increased vaccination of adults with risk factors will accelerate progress toward elimination. Prevention of hepatitis C relies on identifying and counseling uninfected persons at risk for hepatitis C (e.g., IDUs) regarding ways to protect themselves from infection and on identifying and preventing transmission of HCV in health-care settings (*3*).

1. CDC. Surveillance for acute viral hepatitis—United States, 2006. In: Surveillance Summaries, March 21, 2008. MMWR 2008;57(No. SS-2).
2. Armstrong GL, Wasley A, Simard EP, McQuillan GM, Kuhnert WL, Alter MJ. The prevalence of hepatitis C virus infection in the United States, 1999 through 2002. Ann Intern Med 2006; 144:705–14.
3. Thompson NA, Perz JF, Moorman AC, Holmberg SD. Nonhospital health-care associated hepatitis B and C transmission—United States, 1998–2008. Ann Intern Med. 2009;150:33–9.

HIV Infection, Adult

Since 2004, a total of 39 areas (34 states and five dependent areas) have had laws or regulations requiring confidential name-based reporting for human immunodeficiency virus (HIV) infection, in addition to reporting of persons with AIDS. In 2002, CDC initiated a system to monitor HIV incidence; in 2003 this system was expanded. On the basis of extrapolations for the 22 states with HIV incidence surveillance, the estimated number of new HIV infections for the United States in 2006 was 56,3000 (*1*).

At the end of 2007, an estimated total of 261,741 adults and adolescents in the 39 areas were living with HIV infection (not AIDS) (*2*). The estimated prevalence rate of HIV infection (not AIDS) in this group was 154.2 per 100,000 population. In these areas, 2007 was the first year in which mature HIV surveillance data (i.e., data available since at least 2003) could be used to allow for stabilization of data collection and for adjustment of the data for reporting delays. Data from additional areas will be included in analyses when ≥4 years of HIV case reports have accrued.

1. Hall HI, Song R, Rhodes, P, et al. Estimation of HIV incidence in the United States. JAMA 2008;300:520–9.
2. CDC. HIV/AIDS surveillance report, 2007. Atlanta, GA: US Department of Health and Human Services, CDC; 2009. Available at http://www.cdc.gov/hiv/topics/surveillance/resources/reports.

HIV Infection, Pediatric

At the end of 2007, in the 39 areas (34 states and five dependent areas) that have had confidential name-based human immunodeficiency virus (HIV) surveillance since at least 2003 for children aged <13 years with confirmed HIV infection, an estimated 2,195 children were living with HIV infection (not AIDS) (*1*). Estimated prevalence of HIV infection (not AIDS) in this group was 6.0 per 100,000 population.

1. CDC. HIV/AIDS surveillance report, 2007. Atlanta, GA: US Department of Health and Human Services, CDC, Vol. 19; 2009. Available at http://www.cdc.gov/hiv/topics/surveillance/resources/reports.

Influenza-Associated Pediatric Mortality

An early and severe influenza season during 2003–2004 was associated with deaths in children in several states, prompting CDC to request that all state, territorial, and local health departments report laboratory-confirmed influenza-associated pediatric deaths in children aged <18 years (*1,2*). During the 2003–04 influenza season, 153 pediatric influenza-associated deaths were reported to CDC by 40 state health departments (*3*). In June 2004, the Council of State and Territorial

Epidemiologists added influenza-associated pediatric mortality to the list of conditions reportable to the National Notifiable Diseases Surveillance System (*4*). Cumulative year-to-date incidence is published each week in *MMWR* Table I for low-incidence nationally notifiable diseases.

The number of influenza associated pediatric deaths reported to CDC increased during 2007 compared with 2006 (77 and 43, respectively). The median age at death was 7.4 years (range: 9 days—17.8 years) and was higher than in 2006 (median age: 4 years). In 2007, a total of 13 children (17%) were aged <6 months; 10 (13%) were aged 6–23 months; 10 (13%) were aged 24–59 months; and 44 (57%) were aged >5 years. In 2007, of the 76 children for whom location at the time of death was reported, 42 (55%) died after being admitted to the hospital, whereas 34 (45%) died in the emergency room or outside the hospital. The percentage of children who died in the emergency room or outside the hospital was similar to that reported during 2006 (47%). Information on underlying or chronic medical conditions was reported for 72 children: 31 (43%) children had one or more underlying or chronic conditions, and 41 (57%) were previously healthy. The more common chronic conditions reported included moderate to severe developmental delay (n = 11), seizure disorder (n = nine), asthma (n = seven), cardiac disease (n = six), and a history of febrile seizures (n = four). Invasive bacterial coinfection was reported in 28 (36%) children. This represents an increase compared with 2006, when seven (16%) of 43 children had bacterial coinfections. *Staphylococcus aureus* was the most frequently reported bacterial pathogen in 2007 and was found in 19 (68%) of the 28 children with coinfections. Of the 19 *Staphylococcus* isolates, 13 were methicillin-resistant, four were methicillin-sensitive, and for two, sensitivity testing was not performed. Other bacterial pathogens identified included Group A *Streptococcus* (n = four), Group B *Streptococcus* (n = one), *Klebseilla pneumoniae* (n = one), *Haemophilus influenzae* (n = one), *Acinebactor* (n = one), *Enterobacter cloacae* (n = one), *Haemophilus influenzae* (n = one), and *Nocardia* (n = one). Two children had two bacterial pathogens identified. Data on influenza vaccination status were reported for 71 children: six children (8%) received at least 1 dose of influenza vaccine before the onset of illness during 2007, and only four (6%) were fully vaccinated. The current recommendations of CDC's Advisory Committee on Immunization Practices (ACIP) (*5*) include annual vaccination of all children aged 6 months–18 years. Annual vaccination of all children aged 5–18 years should begin in September or as soon as vaccine is available for the 2008–09 influenza season, if feasible, but annual vaccination of all children aged 5–18 years should begin no later than during the 2009–10 influenza season. Administration of 2 doses of influenza vaccine is necessary for previously unvaccinated children aged 6 months–<9 years. Continued surveillance of severe influenza-related mortality is important to monitor the effect of influenza and the possible effects of interventions in children.

1. CDC. Update: influenza-associated deaths reported among children aged <18 years—United States, 2003–04 influenza season. MMWR 2004;52:1254–5.
2. CDC. Update: influenza-associated deaths reported among children aged <18 years—United States, 2003–04 influenza season. MMWR 2004;52:1286-8.
3. Bhat N, Wright JG, Broder KR, et al. Influenza-associated deaths among children in the United States, 2003-2004. N Engl J Med 2005;352:2559–67.
4. CDC. Mid-year addition of influenza-associated pediatric mortality to the list of nationally notifiable diseases, 2004. MMWR 2004;53:951–2.
5. CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2007;57(No. RR-7).

Legionellosis

Total legionellosis case reports and incidence for the past 5 years have been consistently higher than earlier years. During 2007, a slight decline occurred in the number of reported legionellosis cases compared with 2006. Compared with 2006, the Mid-Atlantic region had the greatest decline in reported cases in 2007 (14%), whereas the West South Central region, specifically Texas, had the greatest increase in reported cases (63%).

Though approximately 40% of reported cases occur in persons aged ≥ 65 years, pediatric cases (aged ≤ 18 years) were reported and accounted for approximately 1% of cases. Although legionellosis is less common in the pediatric population than among adults, many cases are likely undiagnosed. As in previous years, the majority of reported cases were sporadic; of those with known outbreak status, less than 1% were reported to be associated with an outbreak.

Listeriosis

Listeriosis is a rare but severe infection caused by *Listeria monocytogenes*; it has been a nationally notifiable disease since 2000. Listeriosis is primarily foodborne and occurs most frequently among persons who are older, pregnant, or immunocompromised. During 2007, the majority of cases occurred among persons aged ≥65 years.

Molecular subtyping of *L. monocytogenes* isolates and sharing of that information through PulseNet has enhanced the ability of public health officials to detect and investigate outbreaks. Recent outbreaks have been linked to ready-to-eat deli meat (*1*) and unpasteurized cheese (*2*). During 2007, the incidence

of listeriosis in FoodNet active surveillance sites was 0.27 cases per 100,000 population, representing a decrease of 42% compared with 1996–1998; however, the incidence remained higher than at its lowest point in 2002 (*3*).

All clinical isolates should be submitted to state public health laboratories for pulsed-field gel electrophoresis (PFGE) pattern determination, and all persons with listeriosis should be interviewed by a public health official or health-care provider using a standard *Listeria* case form, available at http://www.cdc.gov/nationalsurveillance/PDFs/ListeriaCaseReportFormOMB0920-0004.pdf. Rapid analysis of surveillance data will allow identification of possible food sources of outbreaks.

1. Gottlieb SL, Newbern EC, Griffin PM, et al. Multistate outbreak of listeriosis linked to turkey deli meat and subsequent changes in US regulatory policy. Clin Infect Dis 2006;42:29–36.
2. MacDonald PDM, Whitwam RE, Boggs JD et al. Outbreak of listeriosis among Mexican immigrants caused by illicitly produced Mexican-style cheese. Clin Infect Dis 2005;40:677–82.
3. CDC. Preliminary FoodNet data on the incidence of infection with pathogens transmitted commonly through food – 10 states, 2007. MMWR 2008;57:366–70.

Lyme Disease

Lyme disease is caused in North America by *Borrelia burgdorferi sensu stricto*, a spirochete transmitted by infected *Ixodes* ticks. Manifestations of infection include erythema migrans, arthritis, carditis, and neurologic deficits. During 2006–2007, the number of reported cases increased 38%, reaching 15% higher than the previous maximum reported in 2002. Much of this increase can be attributed to enhanced surveillance although evidence of true emergence exists in certain areas. The risk for Lyme disease can be reduced by avoiding tick-infested areas, using insect repellent containing N, N-diethyl-m-toluamide (DEET), and checking daily for attached ticks. The abundance of ticks around the home can be reduced through landscape modification and the use of area-wide acaricides (*1,2*).

1. Stafford KC III. Tick management handbook: an integrated guide for homeowners, pest control operators, and public health officials for the prevention of tick-associated disease. New Haven, CT: Connecticut Agricultural Experiment Station; 2004. Available at http://www.cdc.gov/ncidod/dvbid/lyme/resources/handbook.pdf.
2. Hayes EB, Piesman J. How can we prevent Lyme disease? N Eng J Med 2003;348:2424–30.

Measles

As in recent years, 95% of confirmed measles cases in 2007 were import-associated. Of these, 29 cases were internationally imported and 12 resulted from exposure to persons with imported infections (*1*). The sources for the remaining two cases were classified as unknown because no link to importation was detected. More than half of all cases for 2007 occurred among adults aged >20 years; four persons were aged >50 years. Thirty-five percent of all cases occurred in U.S. residents who acquired infection while outside the United States, 80% of whom had either never been vaccinated with measles-containing vaccine or had unknown vaccination histories. Four outbreaks occurred during 2007 (range: 3–7 cases), all from imported sources. One outbreak associated with an international sporting event resulted in transmission to seven patients in three states, including one airline passenger and an airport worker (*2*). Although the elimination of endemic measles in the United States has been achieved, and population immunity remains high (*3*), outbreaks can occur when measles is introduced into susceptible groups, often at substantial cost to control (*4*). Measles can be prevented by adhering to recommendations for vaccination, including guidelines for travelers (*5,6*).

1. Council of State and Territorial Epidemiologists. Revision of measles, rubella, and congenital rubella syndrome case classifications as part of elimination goals in the United States. Position statement 2006-ID-16. Atlanta, GA: Council of State and Territorial Epidemiologists; 2006. Available at http://www.cste.org/position%20statements/searchbyyear2006.asp.
2. CDC. Multistate measles outbreak associated with an international youth sporting event—Pennsylvania, Michigan, and Texas, August–September 2007. MMWR 2008;57:169–73.
3. Hutchins SS, Bellini W, Coronado V, et al. Population immunity to measles in the United States. J Infect Dis 2004;189(Suppl 1):S91–97.
4. Parker AA, Staggs W, Dayan G, et al. Implications of a 2005 measles outbreak in Indiana for sustained elimination of measles in the United States. N Engl J Med 2006;355:447–55.
5. CDC. Preventable measles among U.S. residents, 2001–2004. MMWR 2005;54:817–20.
6. 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 (ACIP). MMWR 1998;47(No. RR-8).

Meningococcal Disease, Invasive

Neisseria meningitidis is a leading cause of bacterial meningitis and sepsis in the United States. Rates of meningococcal disease are highest among infants, with a second peak at age 18 years (*1*). Rates of meningococcal disease are the lowest they have been in the United States, but meningococcal disease continues to cause substantial morbidity and mortality in all ages.

A tetravalent (A,C,Y,W-135) meningococcal conjugate vaccine ([MCV4] Menactra® (Sanofi Pasteur, Swiftwater, Pennsylvania) is licensed for persons aged 2–55 years. In 2007, CDC's Advisory Committee on Immunization Practices revised recommendations for routine use of MCV4 to include children aged 11–12 years at the preadolescent vaccination visit and adolescents aged 13–18 years at the earliest opportunity

(*2*). MCV4 also is recommended for college freshmen living in dormitories and other populations aged 2–55 years at increased risk for meningococcal disease (*1*). Further reductions in meningococcal disease could be achieved with the development of an effective serogroup B vaccine.

1. CDC. Prevention and control of meningococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2005;54(No. RR-7).
2. CDC. Notice to readers: revised recommendations of the Advisory Committee on Immunization Practices to vaccinate all persons aged 11–18 years with meningococcal conjugate vaccine. MMWR 2007;56:794–5.
3. CDC. Use of quadrivalent meningococcal conjugate vaccine (MCV4) in children aged 2–10 years at increased risk for invasive meningococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR. MMWR 2007;56:1265.

Mumps

Since mumps vaccine licensure in 1967, the number of cases of mumps in the United States declined steadily until 2006, when the largest mumps outbreak in >20 years occurred, with >6,000 cases reported (*1–4*). In response to the 2006 outbreak, CDC's Advisory Committee on Immunization Practices (ACIP) updated criteria for mumps immunity and mumps vaccination recommendations (*5*). Acceptable presumptive evidence of immunity to mumps includes one of the following: 1) documentation of adequate vaccination, 2) laboratory evidence of immunity, 3) birth before 1957, or 4) documentation of physician-diagnosed mumps. Documentation of adequate vaccination now requires 2 doses of a live mumps virus vaccine for school-aged children (grades K–12) and adults at high risk (i.e., persons who work in health-care facilities, international travelers, and students at post–high school educational institutions). Health-care workers born before 1957 without other evidence of immunity should now consider 1 dose of live mumps vaccine. During an outbreak, a second dose of live mumps vaccine should be considered for children aged 1–4 years and adults at low risk if affected by the outbreak; health-care workers born before 1957 without other evidence of immunity should strongly consider 2 doses of live mumps vaccine. In 2007, the Council of State and Territorial Epidemiologists revised the mumps case definition for surveillance to be implemented January 1, 2008 (*6*).

1. CDC. Mumps epidemic—Iowa, 2006. MMWR 2006;55:366–8.
2. CDC. Update: multistate outbreak of mumps—United States, January 1–May 2, 2006. MMWR 2006;55:559–63.
3. CDC. Update: mumps activity—United States, January 1--October 7, 2006. MMWR 2006;55:1152–3.
4. Dayan G, Quinlisk P, et al. Recent resurgence of mumps in the United States. New Engl J Med 2008;358:1580–9.
5. CDC. Updated recommendations of the Advisory Committee on Immunization Practices (ACIP) for the control and elimination of mumps. MMWR 2006;55:629–30.
6. Council of State and Territorial Epidemiologists. Atlanta, GA: Council of State and Territorial Epidemiologists; 2007. Revision of the surveillance case definition for mumps 07-ID-02. Available at http://www.cste.org/PS/2007ps/2007psfinal/ID/07-ID-02.pdf.

Novel Influenza A Virus

In 2007, the Council of State and Territorial Epidemiologists adopted a position statement to include human infection with influenza A viruses that are different from currently circulating human influenza A(H1) and A(H3) as a reportable condition (*1*). Novel subtypes include, but are not limited to, completely different hemagglutinin glycoproteins such as H2, H5, H7, and H9, or influenza H1 and H3 subtypes originating from a nonhuman species or from genetic reassortment between animal and human viruses (*2*).

In 2007, human cases of novel influenza A infection were reported from three states (Ohio, Illinois, and Michigan). Ill patients were infected with swine influenza A viruses: (swine H1N1 and H1N2). Both the swine H1N1 and H1N2 viruses were triple reassortants containing genes from swine, avian, and human viruses; both have been detected in recent years during outbreaks of respiratory illness in swine herds. Transmission of swine influenza viruses to humans usually occurs among persons in direct contact with ill pigs or persons who have been in places where pigs might have been present (e.g. agricultural fairs, farms, or petting zoos). Infected persons had either direct exposure to sick pigs or indirect exposure to a setting in which sick pigs were present. These cases, as with the other sporadic cases identified in recent years, have not resulted in sustained human-to-human transmission or community outbreaks.

1. Council of State and Territorial Epidemiologists. National reporting of novel influenza A virus infections. Atlanta, GA: Council of State and Territorial Epidemiologists; 2007. Available at http://www.cste.org/ps/2007pdfs/novelfluanndssjan10final23.pdf.
2. CDC. Novel influenza virus A case definition 2007. Atlanta, GA: US Department of Health and Human Services, CDC; 2007. Available at http://www.cdc.gov/ncphi/disss/nndss/casedef/novel_influenzaA.htm.

Pertussis

In 2007, the incidence of reported cases of pertussis (3.62 cases per 100,000 population) continued to decline after peaking during 2004–2005 at 8.9 cases per 100,000 population. Infants aged <6 months, who are too young to be fully vaccinated, had the highest reported rate of pertussis (69.9 cases per 100,000 population), but adolescents aged 10–19 years and adults aged >20 years contributed the greatest number of reported cases. Adolescents and adults might be a source of transmission of pertussis to young infants, who are at higher risk for severe disease and death and are recommended to be

vaccinated with tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine (Tdap) (*1,2*). Although coverage with Tdap in adolescents aged 13–17 years increased during 2006–2007, from 10.8% to 30.4%, whether increased Tdap coverage has had an effect on disease rates is unknown (*3*).

1. CDC. Preventing tetanus, diphtheria, and pertussis among adolescents; use of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccines: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2006;55(No. RR-3).
2. CDC. Preventing tetanus, diphtheria, and pertussis among adults: use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccine: recommendations of the Advisory Committee on Immunization Practices (ACIP) and Recommendation of ACIP, supported by the Healthcare Infection Control Practices Advisory Committee (HICPAC), for use of Tdap among health-care personnel. MMWR 2006;55(No. RR-17).
3. CDC. National vaccination coverage among adolescents aged 13–17 years—United States, 2007. MMWR 2008;57:1100–3.

Poliomyelitis, Paralytic and Poliovirus Infections, Nonparalytic

Since January 2007, in addition to paralytic poliomyelitis, nonparalytic poliovirus infections have been included in the list of nationally notifiable diseases reported through the National Notifiable Diseases Surveillance System *(1,2)*. This addition resulted from the identification in 2005 of a type 1 vaccine-derived poliovirus (VDPV) infection among unvaccinated Minnesota children from a closed religious community who were not paralyzed (*3*). VDPV and wild polioviruses are still circulating worldwide and can be imported into the United States via U.S. or foreign-national travelers to these areas (*4*). Oral polio virus vaccine remains in widespread use globally and can be excreted in healthy and immunocompromised vaccinated persons. In 2005, a case of contact-acquired vaccine-associated paralytic poliomyelitis (VAPP) acquired overseas, occurred in an unvaccinated U.S. young adult (*5*). Public health officials should remain alert that paralytic poliomyelitis or poliovirus infections might occur in high-risk (i.e., unvaccinated or undervaccinated) populations and should report any detected poliovirus infections attributed to either wild or vaccine-derived polioviruses and any paralytic poliomyelitis cases.

1. Council of State and Territorial Epidemiologists. Inclusion of poliovirus infection reporting in the National Notifiable Diseases Surveillance System. Position statement 2006-ID-15. Atlanta, GA: Council of State and Territorial Epidemiologists; 2006. Available at: http://www.cste.org/position%20statements/searchbyyear2006.asp.
2. CDC. Poliovirus infections in four unvaccinated children—Minnesota, August–October 2005. MMWR 2005;54:1053–5.
3. CDC. U.S.-incurred costs of wild poliovirus infections in a camp with U.S.-bound refugees—Kenya, 2006. MMWR 2008;57:232–5.
4. CDC. Imported vaccine-associated paralytic poliomyelitis—United States, 2005. MMWR 2006;55:97–9.

Psittacosis

Human infection with *Chlamydophila psittaci* (psittacosis) is a potentially severe respiratory illness that occurs through exposure to infected birds. In 2007, the incidence of reported psittacosis cases continued to be low, decreasing slightly compared with 2006. The majority of cases occurred among women aged 25–49 years. Additional information regarding psittacosis, including case reporting tools, is available at http://www.nasphv.org/documentsCompendiaPsittacosis.html.

Q Fever

Q fever (caused by *Coxiella burnetii*) has been reported since 1999. Cases of Q fever reported for 2007 were similar to those reported for 2006, with a decrease of 9%. Despite this year's slight decrease, the overall number of cases reported in 2007 has increased 115% percent since 2003. In 2007, cases were distributed across the United States, in keeping with the consideration that Q fever is considered enzootic in ruminants (sheep, goats, and cattle) throughout the country. Although relatively few human cases are reported annually, the disease is believed to be substantially underreported because of its nonspecific presentation and the subsequent failure to suspect infection and request appropriate diagnostic tests. The 2007 reporting strategy does not differentiate acute Q fever infection from the more serious, life-threatening chronic form of infection, typically associated with endocarditis. The case definition for Q fever has been modified by a resolution adopted by the Council of State and Territorial Epidemiologists to include separate designations for acute and chronic forms of infection; the new category names and new case definitions became effective January 1, 2008 (*1,2*) and will be reflected in the 2008 Notifiable Disease Summary.

1. Council of State and Territorial Epidemiologists. Revision of the surveillance case definitions for Q fever. Position statement 07-ID-04. Atlanta, GA: Council of State and Territorial Epidemiologists; 2007. Available at http://www.cste.org/position%20statements/searchbyyear2007final.asp.
2. Council of State and Territorial Epidemiologists. Revision of the surveillance case definitions for Q fever. Position statement 08-ID-06. Atlanta, GA: Council of State and Territorial Epidemiologists; 2008. Available at http://www.cste.org/position%20statements/searchbyyear2008final.asp.

Rabies

One case of human rabies was reported during 2007 in a male aged 46 years from Minnesota. Epidemiologic investigation of this case implicated exposure to a bat as the most likely source of infection. As in previous years, the majority of animal rabies cases were reported in wild animal species. In the United States, five animal species are recognized as reservoir species for

various rabies virus variants over defined geographic regions: raccoons (eastern United States.), bats (various species, all U. S. states except Hawaii), skunks (north central United States, south central United States, and California), foxes (Alaska, Arizona, and Texas), and mongoose (Puerto Rico) (*1*).

Reported cases of rabies in domestic animals remain low, in part as a result of high vaccination rates and the elimination of dog-to-dog rabies transmission, which has not been reported in 3 years. One case of canine rabies imported in a dog from India was reported during 2007 (*2*). This case represents the continued challenge to the United States to remain canine-rabies–free. As in the past decade, cats were the most commonly reported domestic animal with rabies during 2007.

Vaccination programs to control rabies in wild carnivores are ongoing through the distribution of baits containing an oral rabies vaccine in the eastern United States and Texas. Oral rabies vaccination programs in Texas are being maintained as a barrier to prevent the reintroduction of canine rabies from Mexico and to eliminate rabies in gray foxes in west Texas. Oral rabies vaccination programs also are being conducted in the eastern United States in an attempt to stop the westward spread of the raccoon rabies virus variant. In addition to oral rabies vaccination programs and routine public health activities (e.g., companion animal vaccination), public health education should target health-care providers and the public regarding rabies exposure prevention and postexposure prophylaxis recommendations.

1. Blanton JD, Palmer D, Christian K, Rupprecht CE. Rabies surveillance in the United States during 2007. J Am Vet Med Assoc 2008;233:884–97.
2. Castrodale L, Walker V, Baldwin J, et al. Rabies in a puppy imported from India to the USA, March 2007. Zoonoses and Public Health 2008;55:427–30.

Rocky Mountain Spotted Fever

After several years in which case numbers were observed to have risen more than twofold, the 2007 reporting year for Rocky Mountain spotted fever (RMSF) caused by *Rickettsia rickettsii* appeared similar to 2006, decreasing only 3%. Cases in 2007 were distributed across the United States, reflecting the endemic status of RMSF and the widespread ranges of the primary tick vectors responsible for transmission (primarily *Dermacentor variabilis* and *Dermacentor andersonii*). RMSF cases associated with transmission by *Rhipicephalus sanguineus*, first reported in 2004, continued to be associated with cases reported from Arizona during 2007. (*1*). The overall 103% increase in the number of reported RMSF cases in the United States during the past 5 years might result from several factors, including possible increases in vector tick populations or increases in human/tick contact as a result of human encroachment into tick habitat through recreational activities and housing construction. In addition, artifactual increases in reported cases might reflect changes in surveillance techniques or perception/awareness of disease, as might occur through changes in case definitions (which occurred in 2004), increased recognition and reporting of illness that might be associated with genetically distinct rickettsial species incorrectly diagnosed as RMSF, and the constant evolution of laboratory tests most commonly available for diagnosis. The case definition for RMSF has been modified by a resolution adopted by the Council of State and Territorial Epidemiologists to include more specific information on interpretation of diagnostic laboratory criteria; the new case definitions became effective January 1, 2008 (*2*) and will be first reflected in the *2008 Summary of Notifiable Diseases*.

1. L Demma, Traeger M, Nicholson W, et al. Rocky Mountain spotted fever from an unexpected tick vector in Arizona. New Engl J Med 2005;353:587–94.
2. Council of State and Territorial Epidemiologists. Revision of the surveillance case definitions for Rocky Mountain spotted fever. Position statement 07-ID-05. Atlanta, GA: Council of State and Territorial Epidemiologists; 2007. Available at http://www.cste.org/position%20statements/searchbyyear2007final.asp.

Salmonellosis

During 2007, as in previous years, proportionately the majority of cases of salmonellosis occurred among persons aged <5 years. Since 1993, the most frequently reported isolates have been *Salmonella enterica* serotype Typhimurium and *S. enterica* serotype Enteritidis (*1*). The epidemiology of *Salmonella* has been changing during the past decade. *Salmonella* serotype Typhimurium has decreased in incidence, whereas the incidence of serotypes Newport, Mississippi, and Javiana have increased. Specific control programs might have led to the reduction of serotype Enteritidis infections, which have been associated with the consumption of internally contaminated eggs. Rates of antibiotic resistance among several serotypes have been increasing; a substantial proportion of serotypes Typhimurium and Newport isolates are resistant to multiple drugs (*2*). The epidemiology of *Salmonella* infections is based on serotype characterization, and in 2005, the Council of State and Territorial Epidemiologists adopted a position statement for serotype-specific reporting of laboratory-confirmed salmonellosis cases (*3*).

1. CDC. Salmonella Surveillance summary, 2006. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC; 2008. Available at http://www.cdc.gov/nationalsurveillance/salmonella_surveillance.html.
2. CDC. National Antimicrobial Resistance Monitoring System for Enteric Bacteria (NARMS): 2004 human isolates final report. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC; 2007.

3. Council of State and Territorial Epidemiologists. Position statement 05-ID-09. Serotype specific national reporting for salmonellosis. Atlanta, GA: Council of State and Territorial Epidemiologists; 2005. Available at http://www.cste.org/PS/2005pdf/final2005/05-ID-09final.pdf.

Shiga Toxin-Producing *Escherichia coli* (STEC)

Escherichia coli O157:H7 has been nationally notifiable since 1994 (*1*). National surveillance for all Shiga toxin-producing *E. coli* (STEC), under the name enterohemorrhagic *E. coli* (EHEC), began in 2001. In 2006, the nationally notifiable diseases case definition designation was changed from EHEC to STEC, and serotype-specific reporting was implemented (*2*). Diagnosis solely on the basis of detection of Shiga toxin does not protect public health sufficiently; characterizing STEC isolates by serotype and pulsed-field gel electrophoresis (PFGE) patterns is important to detect, investigate, and control outbreaks. Screening of stool specimens by clinical diagnostic laboratories for Shiga toxin by enzyme immunoassay with simultaneous bacterial culture using sorbitol-MacConkey agar (SMAC) is important for public health surveillance for STEC infections (*3*). All STEC isolates and enrichment broths from Shiga toxin-positive specimens that do not yield STEC O157 should be forwarded to state or local public health laboratories for further testing.

Healthy cattle, which harbor the organism as part of the bowel flora, are the main animal reservoir of STEC. The majority of reported outbreaks are caused by contaminated food or water. The substantial decline in STEC cases reported during 2002–2003 coincided with industry and regulatory control activities and with a decrease in the contamination of ground beef (*4*). However, during 2005–2007, incidence of human STEC infections increased. Reasons for the increases are not known.

1. Mead PS, Griffin PM. Escherichia coli O157:H7. Lancet 1998;352:1207–12.
2. Council of State and Territorial Epidemiologists. Revision of the Enterohemorrhagic *Escherichia coli* (EHEC) condition name to Shiga toxin-producing *Escherichia coli* (STEC) and adoption of serotype specific national reporting for STEC. Position statement 05-ID-07. Atlanta, GA: Council of State and Territorial Epidemiologists; 2005. Available at http://www.cste.org/position%20statements/searchbyyear2005.asp.
3. CDC. Importance of culture confirmation of Shiga toxin-producing *Escherichia coli* infection as illustrated by outbreaks of gastroenteritis—New York and North Carolina, 2005. MMWR 2006;55:1042–4.
4. Naugle AL, Holt KG, Levine P, Eckel R. 2005 Food Safety and Inspection Service regulatory testing program for *Escherichia coli* O157:H7 in raw ground beef. J Food Prot 2005;68:462–8.

Shigellosis

During 1978–2003, the number of shigellosis cases reported to CDC consistently exceeded 17,000. The approximately 14,000 cases of shigellosis reported to CDC in 2004 represented an all-time low. This number increased to approximately 16,000 in 2005, decreased slightly in 2006, and increased to almost 20,000 in 2007. *Shigella sonnei* infections continue to account for >75% of shigellosis in the United States (*1*). The majority of cases occur among young children, and large daycare-associated outbreaks are common and difficult to control (*2*). Certain cases are acquired during international travel (*3,4*). In addition to spread from one person to another, *Shigellae* can be transmitted through contaminated foods, sexual contact, and water used for drinking or recreational purposes (*1*). Resistance to ampicillin and trimethoprim-sulfamethoxazole among *S. sonnei* strains in the United States remains common (*5*).

1. Gupta A, Polyak CS, Bishop RD, Sobel J, Mintz ED. Laboratory-confirmed shigellosis in the United States, 1989–2002: epidemiologic trends and patterns. Clin Infect Dis 2004;38:1372–7.
2. CDC. Outbreaks of multidrug-resistant *Shigella sonnei* gastroenteritis associated with day care centers—Kansas, Kentucky, and Missouri, 2005. MMWR 2006;55:1068-71.
3. Ram PK, Crump JA, Gupta SK, Miller MA, Mintz, ED. Review article: part II. Analysis of data gaps pertaining to *Shigella* infections in low and medium human development index countries, 1984–2005. Epidemiol Infect 2008;136:577-603.
4. Gupta SK, Strockbine N, Omondi M, Hise K, Fair MA, Mintz ED. Short report: emergence of shiga toxin 1 genes within *Shigella dysenteriae* Type 4 isolates from travelers returning from the island of Hispañola. Am J Trop Med Hyg 2007;76:1163–5.
5. CDC. National Antimicrobial Resistance Monitoring System (NARMS): enteric bacteria. Atlanta, GA: US Department of Health and Human Services, CDC; 2005. Available at http://www.cdc.gov/narms.

Streptococcus pneumoniae

Cases of invasive pneumococcal disease among children aged <5 years (IPD <5) and invasive drug-resistant *Streptococcus pneumoniae* (DRSP) among all ages are reportable to the National Notifiable Diseases Surveillance System (NNDSS) (*1*). The Council of State and Territorial Epidemiologists recommends reporting to track the impact of pneumococcal vaccination and other prevention programs.

In 2007, several reporting areas did not require reporting of IPD <5 and/or DRSP. Among the 52 reporting areas, two states did not require reporting of IPD <5, three areas did not require reporting of DRSP, and seven areas did not require reporting of either type of case. Among those with a reporting

requirement, two (5%) of 43 areas reported no cases of IPD <5, and 11 (26%) of 42 areas reported no cases of DRSP.

Currently, data reported to the national level do not enable accurate assessment of pneumococcal disease burden or evaluation of immunization program impact. A new, 13-valent pneumococcal conjugate vaccine is expected to be licensed in 2009, and tracking cases of invasive pneumococcal disease will be important to monitor the effects of the vaccine on target populations (*2*). State-based surveillance systems and reporting should be enhanced now to provide baseline data and enable assessment of the impact of the new pneumococcal vaccine. A method for PCR-based serotyping is now available for use by state public health laboratories (*3*). Adopting this method provides an opportunity for state health departments to specifically track changes in serotypes targeted by the conjugate vaccines and would enhance their surveillance systems for vaccine-preventable IPD.

1. CDC. Nationally notifiable infectious diseases, United States 2007, revised. Atlanta, GA: US Department of Health and Human Services, CDC; 2008. Available from: http://www.cdc.gov/ncphi/disss/nndss/phs/infdis2007r.htm.
2. Wyeth. Wyeth receives FDA fast track designation for its 13-valent pneumococcal conjugate vaccine for infants and toddlers [Press release]. Collegeville, PA: Wyeth Pharmaceuticals; 2008. Available at http://www.wyeth.com/news?nav=display&navTo=/wyeth_html/home/news/pressreleases/2008/1212065664001.html.
3. CDC. PCR deduction of pneumococcal serotypes. Atlanta, GA: US Department of Health and Human Services, CDC; 2008. Available at http://www.cdc.gov/ncidod/biotech/strep/pcr.htm.

Syphilis, Primary and Secondary

In 2007, primary and secondary (P&S) syphilis cases reported to CDC increased for the seventh consecutive year (*1*). During 2006–2007, the number of P&S syphilis cases reported to CDC increased 17.5%. P&S syphilis increased in all race/ethnicities except Asian/Pacific Islanders, but particularly among non-Hispanic blacks and Hispanics. Overall, increases in rates during 2001–2007 were observed primarily among men. In 2007, nearly two thirds (65%) of all P&S syphilis cases in 44 states and Washington D. C. (for which demographic information was available) occurred among men who have sex with men (MSM); 41% of MSM with P&S syphilis were white non-Hispanic, 33% were black non-Hispanic, and 19% were Hispanic. After decreasing during 1990–2004, the rate of P&S syphilis in women increased from 0.8 cases per 100,000 population in 2004 to 1.1 cases per 100,000 population in 2007. These increases occurred primarily in the South.

1. CDC. Sexually transmitted disease surveillance, 2007. Atlanta, GA: US Department of Health and Human Services, CDC; 2008. Available at http://www.cdc.gov/std/stats/toc2007.htm.

Syphilis, Congenital

During 2006–2007, after 14 years of decline, the rate of congenital syphilis increased 15.4% (*1*). This increase might relate to the increase in P&S syphilis among women that has occurred in recent years. In 2007, a total of 29 states and the District of Columbia had rates of congenital syphilis that exceeded the HP 2010 target of one case per 100,000 live births. The South accounted for 52% of these cases. The rate of congenital syphilis among non-Hispanic backs was 14 times higher than the rate among non-Hispanic whites, and the rate of congenital syphilis among Hispanics was almost seven times higher than the rate among non-Hispanic whites.

1. CDC. Sexually transmitted disease surveillance, 2007. Atlanta, GA: US Department of Health and Human Services, CDC; 2008. Available at http://www.cdc.gov/std/stats.

Typhoid Fever

Despite recommendations that travelers to countries in which typhoid fever is endemic should be vaccinated with either of two effective vaccines available in the United States, approximately three fourths of all cases occur among persons who reported international travel during the preceding month and had not been vaccinated. Persons visiting friends and relatives in South Asia appear to be at particular risk, even during short visits (*1*). Recent illnesses have been attributed to ciprofloxacin-resistant isolates (CDC, unpublished data, 2007). *Salmonella* Typhi strains with decreased susceptibility to ciprofloxacin are increasingly frequent in that region and might require treatment with alternative antimicrobial agents (*2,3*). Although the number of *S.* Typhi infections is decreasing, the number of illnesses attributed to *Salmonella* Paratyphi A, which causes an illness indistinguishable from that caused by *S.* Typhi, is increasing. In a cross-sectional laboratory-based surveillance study conducted by CDC, 80% of patients with paratyphoid fever acquired their infections in South Asia, and 75% were infected with nalidixic acid-resistant strains, indicating decreased susceptibility to ciprofloxacin. A vaccine for paratyphoid fever is urgently needed (*4*).

1. Steinberg EB, Bishop RB, Dempsey AF, et al. Typhoid fever in travelers: who should be targeted for prevention? Clin Infect Dis 2004;39:186–91.
2. Crump JA, Ram PK, Gupta SK, Miller MA, Mintz ED. Review article: part I. analysis of data gaps pertaining to *Salmonella enterica* serotype Typhi infections in low and medium human development index countries, 1984–2005. Epidemiol Infect 2008;136:436-48.
3. Crump JA, Barrett TJ, Nelson JT, Angulo FJ. Reevaluating fluoroquinolones breakpoints for *Salmonella enterica* serotype Typhi and for non-Typhi *Salmonellae.* Clin Infect Dis 2003;37:75–81.
4. Gupta SK, Medalla F, Omondi MW, et al. Laboratory-based surveillance of paratyphoid fever in the United States: travel and antimicrobial resistance. Clin Infect Dis 2007;46:1656-63.

Varicella (Chickenpox) Deaths

The Council of State and Territorial Epidemiologists recommended that deaths related to varicella be reportable to CDC starting in 1999 (*1*) as a first step towards national varicella surveillance. Although the number of varicella-related deaths has declined substantially since vaccine licensure from an annual average of 100–150 deaths (*2*), varicella-related deaths still occur. Of the six varicella-related deaths that were reported in 2007, five occurred in adults aged 23–78 years. More deaths were reported in 2007 than in 2006 (no deaths) or 2005 (three deaths) (*3*). However, because of incompleteness in reporting, the annual number of deaths is likely to be underestimated.

Of the six deaths in 2007, one occurred in the context of an outbreak in a group mental health home. A male aged 35 years with unknown varicella vaccination and unknown disease history had severe sepsis after varicella infection and died 1 week after rash onset. Closed settings such as group homes are at risk for outbreaks of varicella-zoster virus (VZV) because such settings facilitate VZV transmission. This death highlights the importance of ensuring that both residents and employees of residential homes have evidence of immunity to VZV (*4*).

One death occurred in a previously healthy girl aged 13 months who, although eligible for varicella vaccination, had not yet received the vaccine. After contracting varicella from her father, she had severe VZV infection with septic shock and died from multiple organ failure.

The remaining four deaths occurred in adults with underlying medical conditions. One of these deaths occurred in an unvaccinated adult with no prior disease history. The varicella vaccination and disease history was unknown for the other three deaths.

1. Council of State and Territorial Epidemiologists. Position statement 1998-ID-10: inclusion of varicella-related deaths in the National Public Health Surveillance System (NPHSS). Atlanta, GA: Council of State and Territorial Epidemiologists; 1998. Available at http://www.cste.org/ps/1998/1998-id-10.htm.
2. Nguyen HQ, Jumaan AO, Seward JF. Decline in mortality due to varicella after implementation of varicella vaccination in the United States. N Engl J Med 2005;352:450–8.
3. CDC. Summary of notifiable diseases—United States, 2006. MMWR 2008;55(53).
4. CDC. Prevention of varicella: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2007;56(No. RR-4).

Vibriosis

Cholera, which is caused by infection with toxigenic *Vibrio cholerae* O1 and O139, has been nationally notifiable for many years. Infections attributable to other *Vibrio* species (vibriosis), especially *V. parahaemolyticus* and *V. vulnificus*, are a substantial public health burden. Infections are either foodborne or associated with wounds exposed to waters containing *Vibrio* species. In January 2007, vibriosis became a nationally notifiable disease reportable to the National Notifiable Diseases Surveillance System (NNDSS) (*1*). In addition to reporting through NNDSS, CDC requests that states collect information on the standard surveillance form for cholera and other *Vibrio* illness surveillance (available at http://www.cdc.gov/nationalsurveillance/cholera_vibrio_surveillance.html).

1. Council of State and Territorial Epidemiologists. National reporting for non-cholera *Vibrio* infections (vibriosis). Position statement 06-ID-05. Atlanta, GA: Council of State and Territorial Epidemiologists; 2006. Available at http://www.cste.org/position%20statements/searchby-year2006.asp.

PART 1

Summaries of Notifiable Diseases in the United States, 2007

Abbreviations and Symbols Used in Tables

U	Data not available.
N	Not notifiable (i.e., report of disease is not required in that jurisdiction).
—	No reported cases.
Notes:	Rates <0.01 after rounding are listed as 0.
	Data in the *MMWR Summary of Notifiable Diseases — United States, 2007* 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.

TABLE 1. Reported cases of notifiable diseases,* by month — United States, 2007

Disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
AIDS†	2,179	2,323	3,577	2,947	2,616	4,112	2,358	3,125	3,464	2,679	1,782	6,341	**37,503**
Anthrax	—	—	—	—	—	—	—	—	1	—	—	—	**1**
Botulism													
foodborne	—	—	2	1	3	1	4	12	—	1	1	7	**32**
infant	5	8	8	7	9	11	7	6	8	4	5	7	**85**
other (wound & unspecified)	—	2	1	—	3	3	2	5	3	2	2	4	**27**
Brucellosis	9	8	13	8	15	12	6	15	11	8	8	18	**131**
Chancroid§	—	1	1	3	2	1	2	2	2	2	2	5	**23**
Chlamydia§¶	69,148	81,289	110,160	85,292	91,968	99,883	83,002	86,902	109,130	88,688	81,391	121,521	**1,108,374**
Cholera	—	—	—	—	—	—	1	—	3	3	—	—	**7**
Coccidioidomycosis	644	547	733	556	552	862	503	582	591	597	651	1,303	**8,121**
Cryptosporidiosis	254	204	305	237	285	441	703	2,096	3,964	1,379	668	634	**11,170**
Cyclosporiasis	9	6	3	6	6	24	14	10	8	5	1	1	**93**
Domestic arboviral diseases**													
California serogroup virus disease													
neuroinvasive	—	—	—	—	1	5	7	18	12	6	1	—	**50**
nonneuroinvasive	—	—	—	—	—	1	1	1	—	1	1	—	**5**
Eastern equine encephalitis virus disease													
neuroinvasive	—	—	—	—	—	—	1	2	—	—	—	—	**3**
nonneuroinvasive	—	—	—	—	—	—	—	—	—	1	—	—	**1**
Powassan virus disease, neuroinvasive	—	—	—	—	1	2	1	1	—	—	2	—	**7**
St. Louis encephalitis virus disease													
neuoinvasive	—	—	—	—	1	—	1	1	3	1	1	—	**8**
nonneuroinvasive	—	—	—	—	—	—	—	1	—	—	—	—	**1**
West Nile virus disease													
neuroinvasive	—	—	4	1	3	36	175	555	356	85	7	5	**1,227**
nonneuroinvasive	1	—	—	1	11	73	539	1,168	509	84	15	2	**2,403**
Ehrlichiosis													
human granulocytic	6	3	3	4	36	92	135	72	95	78	52	258	**834**
human monocytic	6	4	14	11	51	130	138	120	85	64	37	168	**828**
human (other and unspecified)	2	1	4	12	35	86	66	28	39	24	18	22	**337**
Giardiasis	1,016	1,138	1,428	1,143	1,067	1,406	1,438	1,944	2,617	1,920	1,626	2,674	**19,417**
Gonorrhea§	23,795	25,854	34,829	26,752	28,384	32,427	27,070	28,758	35,921	28,179	26,125	37,897	**355,991**
Haemophilus influenzae, invasive disease													
all ages, serotypes	218	211	254	250	180	227	179	166	168	143	164	381	**2,541**
age <5 years													
serotype b	3	1	2	1	—	2	1	2	2	4	—	4	**22**
nonserotype b	14	15	19	22	13	20	16	12	14	9	13	32	**199**
unknown serotype	18	15	25	12	18	15	16	15	9	9	10	18	**180**
Hansen disease (Leprosy)	5	8	13	10	7	12	5	5	11	10	7	8	**101**
Hantavirus pulmonary syndrome	2	—	1	3	2	5	6	2	3	5	2	1	**32**
Hemolytic uremic syndrome, postdiarrheal	9	10	8	16	9	34	29	42	31	30	22	52	**292**
Hepatitis, viral, acute													
A	161	204	266	225	212	281	248	244	368	206	174	390	**2,979**
B	268	328	445	323	343	418	322	326	433	364	337	612	**4,519**
C	40	68	80	55	55	70	66	51	75	62	70	153	**845**
Influenza-associated pediatric mortality††	8	14	17	12	13	2	3	2	2	—	3	1	**77**
Legionellosis	118	117	145	103	122	277	260	325	425	244	234	346	**2,716**
Listeriosis	62	29	49	47	42	70	74	84	119	86	50	96	**808**
Lyme disease	559	516	786	736	1,383	4,901	6,000	3,787	2,972	1,822	1,550	2,432	**27,444**
Malaria	79	62	83	82	85	144	119	142	155	115	99	243	**1,408**
Measles, total	—	2	1	4	9	5	2	2	7	2	1	8	**43**
Meningococcal disease													
all serogroups	92	93	134	107	91	104	73	60	74	72	60	117	**1,077**
serogroup A, C, Y, & W-135	23	30	48	33	25	30	15	16	26	26	13	40	**325**
serogroup B	14	13	12	16	12	17	16	12	11	9	13	22	**167**
other serogroup	—	4	6	4	—	3	2	1	3	4	5	3	**35**
serogroup unknown	55	46	68	54	54	54	40	31	34	33	29	52	**550**
Mumps	61	78	136	85	67	57	40	42	49	39	51	95	**800**
Novel influenza A virus infections	—	—	—	—	—	—	—	2	2	—	—	—	**4**
Pertussis	653	743	853	697	690	890	899	929	911	810	720	1,659	**10,454**
Plague	—	—	—	1	1	2	—	—	2	—	1	—	**7**
Psittacosis	1	2	1	—	—	—	—	1	1	2	2	2	**12**
Q fever	9	9	16	14	18	23	15	15	14	8	14	16	**171**

See footnotes on next page.

TABLE 1. (*Continued*) Reported cases of notifiable diseases,* by month — United States, 2007

Disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Rabies													
animal	402	311	520	502	534	599	476	608	699	496	334	381	**5,862**
human	—	—	—	—	—	—	—	—	—	—	—	1	**1**
Rocky Mountain spotted fever	24	30	62	96	150	337	307	314	327	140	100	334	**2,221**
Rubella	4	—	3	1	—	1	3	—	—	—	—	—	**12**
Salmonellosis	2,621	2,189	2,798	2,468	3,128	4,562	4,733	5,040	6,299	5,093	3,578	5,486	**47,995**
Shiga toxin-producing E. coli (STEC)	200	125	212	260	256	444	655	693	739	534	326	403	**4,847**
Shigellosis	861	750	1,099	1,172	1,407	1,917	1,697	1,604	2,090	2,180	1,848	3,133	**19,758**
Streptococcal disease, invasive, group A	343	460	800	577	517	547	372	258	304	216	293	607	**5,294**
Streptococcal toxic-shock syndrome	7	4	19	7	14	10	9	5	4	9	6	38	**132**
Streptococcus pneumoniae, invasive disease, drug-resistant													
all ages	327	328	432	306	219	223	145	102	191	153	261	642	**3,329**
age <5 yrs	40	61	72	55	37	35	23	17	37	36	55	95	**563**
Streptococcus pneumoniae, invasive disease, nondrug-resistant <5	127	172	228	153	156	177	94	72	91	149	197	416	**2,032**
Syphilis§													
all stages§§	2,417	2,786	3,847	3,182	3,300	3,874	3,100	3,299	4,189	3,346	2,941	4,639	**40,920**
congenital (age <1 yr)	37	22	44	39	32	40	32	35	34	29	45	41	**430**
primary and secondary	665	729	1,010	840	849	1,091	813	961	1,216	1,007	888	1,397	**11,466**
Tetanus	—	1	2	—	2	3	1	3	4	4	3	5	**28**
Toxic-shock syndrome	5	4	6	7	9	11	8	6	12	9	2	13	**92**
Trichinellosis	—	1	—	—	—	2	1	—	—	1	—	—	**5**
Tuberculosis¶¶	620	784	984	974	1,148	1,166	1,107	1,143	1,153	1,111	1,126	1,983	**13,299**
Tularemia	—	—	1	4	8	33	36	17	11	4	4	19	**137**
Typhoid fever	28	28	30	34	29	29	32	35	79	30	24	56	**434**
Vancomycin-intermediate Staphylococcus aureus	—	—	3	1	1	4	—	1	11	7	4	5	**37**
Vancomycin-resistant Staphylococcus aureus	—	—	—	—	—	—	—	—	—	1	—	1	**2**
Varicella (morbidity)	3,346	3,982	5,720	4,514	4,746	3,142	965	876	2,139	2,824	2,848	5,044	**40,146**
Varicella (mortality)***	1	—	—	1	—	—	1	—	—	1	2	—	**6**
Vibriosis	26	10	17	25	37	49	57	80	82	88	41	37	**549**

* No cases of diphtheria; neuroinvasive or non-neuroinvasive western equine encephalitis virus disease; poliomyelitis, paralytic; poliovirus infection, nonparalytic; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus syndrome (SARS-CoV); smallpox; and yellow fever were reported in 2007. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. Data on human immunodeficiency virus (HIV) infections are not included because HIV infection reporting has been implemented on different dates and using different methods than for AIDS case reporting.

† Total number of AIDS cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) through December 31, 2007.

§ Totals reported to the Division of STD Prevention, NCHHSTP, as of May 9, 2008.

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

** Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) (ArboNET Surveillance), as of June 1, 2008.

†† Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2007.

§§ Includes the following categories: primary, secondary, latent (including early latent, late latent, and latent syphilis of unknown duration), neurosyphilis, late (including late syphilis with clinical manifestations other than neurosyphilis), and congenital syphilis.

¶¶ Totals reported to the Division of TB Elimination, NCHHSTP, as of May 16, 2008.

*** Death counts provided by the Division of Viral Diseases, NCIRD, as of March 31, 2008.

TABLE 2. Reported cases of notifiable diseases,* by geographic division and area — United States, 2007

Area	Total resident population (in thousands)	AIDS†	Anthrax	Botulism			Brucellosis
				Foodborne	Infant	Other§	
United States	299,398	37,503¶	1	32	85	27	131
New England	14,271	1,309	1	—	1	—	—
Connecticut	3,505	528	1	—	1	—	—
Maine	1,322	46	—	—	—	—	—
Massachusetts	6,437	612	—	—	—	—	—
New Hampshire	1,315	51	—	—	—	—	—
Rhode Island	1,068	66	—	—	—	—	—
Vermont	624	6	—	—	—	—	—
Mid. Atlantic	40,472	7,724	—	2	22	3	4
New Jersey	8,725	1,164	—	1	9	—	2
New York (Upstate)	11,092	1,548	—	—	2	1	—
New York City	8,214	3,262	—	—	—	2	1
Pennsylvania	12,441	1,750	—	1	11	—	1
E.N. Central	46,275	3,207	—	7	2	—	12
Illinois	12,832	1,348	—	—	1	—	6
Indiana	6,313	329	—	3	—	—	—
Michigan	10,096	628	—	—	—	—	5
Ohio	11,478	703	—	3	1	—	—
Wisconsin	5,556	199	—	1	—	—	1
W.N. Central	19,942	1,050	—	—	1	—	12
Iowa	2,982	76	—	—	1	—	—
Kansas	2,764	132	—	—	—	—	—
Minnesota	5,167	197	—	—	—	—	7
Missouri	5,843	542	—	—	—	—	2
Nebraska	1,768	80	—	—	—	—	2
North Dakota	636	8	—	—	—	—	1
South Dakota	782	15	—	—	—	—	—
S. Atlantic	57,142	10,750	—	1	8	2	25
Delaware	853	171	—	—	2	—	—
District of Columbia	581	871	—	—	—	—	—
Florida	18,090	3,961	—	—	1	—	10
Georgia	9,364	1,877	—	—	—	—	4
Maryland	5,616	1,394	—	—	2	—	2
North Carolina	8,856	1,024	—	—	1	2	6
South Carolina	4,321	742	—	—	1	—	3
Virginia	7,643	634	—	1	—	—	—
West Virginia	1,818	76	—	—	1	—	—
E.S. Central	17,755	1,693	—	1	2	—	4
Alabama	4,599	391	—	—	—	—	1
Kentucky	4,206	292	—	—	1	—	—
Mississippi	2,911	352	—	—	—	—	—
Tennessee	6,039	658	—	1	1	—	3
W.S. Central	34,186	4,303	—	3	6	—	27
Arkansas	2,811	196	—	—	2	—	1
Louisiana	4,288	879	—	—	—	—	—
Oklahoma	3,579	264	—	—	—	—	1
Texas	23,508	2,964	—	3	4	—	25
Mountain	20,845	1,517	—	5	7	—	10
Arizona	6,166	585	—	—	1	—	4
Colorado	4,753	355	—	4	2	—	2
Idaho	1,466	23	—	—	—	—	1
Montana	945	25	—	—	—	—	—
Nevada	2,495	335	—	—	—	N	2
New Mexico	1,955	113	—	1	2	—	1
Utah	2,550	68	—	—	2	—	—
Wyoming	515	13	—	—	—	—	—
Pacific	48,510	5,728	—	13	36	22	37
Alaska	670	32	—	10	—	—	—
California	36,458	4,952	—	1	35	20	33
Hawaii	1,285	78	—	—	—	—	1
Oregon	3,701	239	—	1	—	—	2
Washington	6,396	427	—	1	1	2	1
American Samoa	63	—	—	—	—	—	—
C.N.M.I.	82	—	—	—	—	—	—
Guam	171	—	—	—	—	—	—
Puerto Rico	3,928	847	—	—	—	—	N
U.S. Virgin Islands	109	34	—	—	—	—	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* No cases of diphtheria; neuroinvasive or non-neuroinvasive western equine encephalitis virus disease; poliomyelitis, paralytic; poliovirus infection, nonparalytic; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus syndrome (SARS-COV); smallpox; and yellow fever were reported in 2007. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. Data on human immunodeficiency virus (HIV) infections are not included because HIV infection reporting has been implemented on different dates and using different methods than for AIDS case reporting.

† Total number of acquired immunodeficiency syndrome (AIDS) cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), through December 31, 2007.

§ Includes cases reported as wound and unspecified botulism.

¶ Includes 222 cases of AIDS in persons with unknown state or area of residence that were reported in 2007.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2007

Area	Chancroid**	Chlamydia††	Cholera	Coccidioidomycosis	Cryptosporidiosis	Cyclosporiasis
United States	23	1,108,374	7	8,121	11,170	93
New England	1	36,429	—	2	335	3
Connecticut	—	11,454	—	N	42	3
Maine	—	2,541	—	N	56	—
Massachusetts	1	16,145	—	N	132	—
New Hampshire	—	2,055	—	2	47	—
Rhode Island	—	3,177	—	—	11	—
Vermont	—	1,057	—	N	47	N
Mid. Atlantic	5	144,722	1	—	1,365	30
New Jersey	—	21,536	—	N	67	9
New York (Upstate)	4	29,975	—	N	254	9
New York City	1	50,742	1	N	105	12
Pennsylvania	—	42,469	—	N	939	N
E.N. Central	2	180,524	2	36	1,921	7
Illinois	—	55,470	—	N	201	3
Indiana	—	20,712	—	N	149	2
Michigan	—	37,353	1	24	211	1
Ohio	—	47,434	1	12	570	—
Wisconsin	2	19,555	—	N	790	1
W.N. Central	—	63,085	—	86	1,659	1
Iowa	—	8,643	—	N	610	—
Kansas	—	8,180	N	N	144	1
Minnesota	—	13,413	—	77	302	—
Missouri	—	23,308	—	9	182	—
Nebraska	—	5,132	—	N	174	N
North Dakota	—	1,789	—	N	78	N
South Dakota	—	2,620	—	N	169	—
S. Atlantic	5	217,935	—	5	1,287	44
Delaware	—	3,479	—	—	20	—
District of Columbia	—	6,029	—	2	3	2
Florida	3	57,575	—	N	667	31
Georgia	—	42,913	—	N	239	3
Maryland	—	23,150	—	3	36	1
North Carolina	2	30,611	—	N	132	4
South Carolina	—	26,431	—	N	88	1
Virginia	—	24,579	—	N	90	2
West Virginia	—	3,168	—	N	12	—
E.S. Central	—	82,503	1	—	616	2
Alabama	—	25,153	—	N	125	N
Kentucky	—	8,798	1	N	249	N
Mississippi	—	21,686	—	N	102	N
Tennessee	—	26,866	—	N	140	2
W.S. Central	9	127,631	1	3	487	2
Arkansas	—	9,954	—	N	63	—
Louisiana	4	19,362	—	3	64	—
Oklahoma	—	12,529	—	N	127	—
Texas	5	85,786	1	N	233	2
Mountain	—	74,414	1	4,998	2,922	3
Arizona	—	24,866	1	4,832	53	—
Colorado	—	17,186	—	N	211	1
Idaho	—	3,722	—	N	464	N
Montana	—	2,748	—	N	75	N
Nevada	—	9,514	—	72	37	N
New Mexico	—	9,460	—	23	125	2
Utah	—	5,721	—	68	1,901	—
Wyoming	—	1,197	—	3	56	—
Pacific	1	181,131	1	2,991	578	1
Alaska	—	4,911	—	N	4	—
California	1	141,928	1	2,991	303	N
Hawaii	—	5,659	—	N	6	N
Oregon	—	9,849	—	N	126	—
Washington	—	18,784	—	N	139	1
American Samoa	—	—	—	N	N	N
C.N.M.I.	—	—	—	—	—	—
Guam	—	822	—	—	—	—
Puerto Rico	—	7,909	—	N	N	N
U.S. Virgin Islands	—	348	—	—	—	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
**Totals reported to the Division of STD Prevention, NCHHSTP, as of May 9, 2008.
††Totals reported to the Division of STD Prevention, NCHHSTP, as of May 9, 2008. Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2007

Area	Domestic arboviral diseases§§									
	California serogroup virus disease		Eastern equine encephalitis		Powassan virus disease		St. Louis encephalitis		West Nile virus disease	
	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive
United States	50	5	3	1	7	—	8	1	1,227	2,403
New England	—	—	2	1	—	—	—	—	5	6
Connecticut	—	—	—	—	—	—	—	—	2	2
Maine	—	—	—	—	—	—	—	—	—	—
Massachusetts	—	—	—	—	—	—	—	—	3	3
New Hampshire	—	—	2	1	—	—	—	—	—	—
Rhode Island	—	—	—	—	—	—	—	—	—	1
Vermont	—	—	—	—	—	—	—	—	—	—
Mid. Atlantic	2	—	—	—	6	—	—	—	22	11
New Jersey	—	—	—	—	—	—	—	—	1	—
New York (Upstate)	2	—	—	—	6	—	—	—	3	1
New York City	—	—	—	—	—	—	—	—	13	5
Pennsylvania	—	—	—	—	—	—	—	—	5	5
E.N. Central	12	2	—	—	1	—	—	—	113	65
Illinois	1	—	—	—	—	—	—	—	63	38
Indiana	—	—	—	—	—	—	—	—	14	10
Michigan	—	—	—	—	—	—	—	—	16	1
Ohio	9	—	—	—	—	—	—	—	13	10
Wisconsin	2	2	—	—	1	—	—	—	7	6
W.N. Central	2	—	—	—	—	—	—	1	249	739
Iowa	1	—	—	—	—	—	—	—	12	18
Kansas	—	—	—	—	—	—	—	—	14	26
Minnesota	1	—	—	—	—	—	—	—	44	57
Missouri	—	—	—	—	—	—	—	1	61	16
Nebraska	—	—	—	—	—	—	—	—	21	142
North Dakota	—	—	—	—	—	—	—	—	49	320
South Dakota	—	—	—	—	—	—	—	—	48	160
S. Atlantic	21	2	—	—	—	—	—	—	43	39
Delaware	—	—	—	—	—	—	—	—	1	—
District of Columbia	—	—	—	—	—	—	—	—	—	—
Florida	—	—	—	—	—	—	—	—	3	—
Georgia	1	1	—	—	—	—	—	—	23	27
Maryland	—	—	—	—	—	—	—	—	6	4
North Carolina	9	1	—	—	—	—	—	—	4	4
South Carolina	—	—	—	—	—	—	—	—	3	2
Virginia	—	—	—	—	—	—	—	—	3	2
West Virginia	11	—	—	—	—	—	—	—	—	—
E.S. Central	13	1	1	—	—	—	2	—	76	99
Alabama	—	—	1	—	—	—	—	—	17	7
Kentucky	—	—	—	—	—	—	—	—	4	—
Mississippi	—	—	—	—	—	—	2	—	50	86
Tennessee	13	1	—	—	—	—	—	—	5	6
W.S. Central	—	—	—	—	—	—	5	—	269	158
Arkansas	—	—	—	—	—	—	2	—	13	7
Louisiana	—	—	—	—	—	—	3	—	27	13
Oklahoma	—	—	—	—	—	—	—	—	59	48
Texas	—	—	—	—	—	—	—	—	170	90
Mountain	—	—	—	—	—	—	1	—	289	1,041
Arizona	—	—	—	—	—	—	—	—	50	47
Colorado	—	—	—	—	—	—	—	—	99	477
Idaho	—	—	—	—	—	—	—	—	11	121
Montana	—	—	—	—	—	—	—	—	37	165
Nevada	—	—	—	—	—	—	1	—	2	10
New Mexico	—	—	—	—	—	—	—	—	39	21
Utah	—	—	—	—	—	—	—	—	28	42
Wyoming	—	—	—	—	—	—	—	—	23	158
Pacific	—	—	—	—	—	—	—	—	161	245
Alaska	—	—	—	—	—	—	—	—	—	—
California	—	—	—	—	—	—	—	—	154	226
Hawaii	—	—	—	—	—	—	—	—	—	—
Oregon	—	—	—	—	—	—	—	—	7	19
Washington	—	—	—	—	—	—	—	—	—	—
American Samoa	—	—	—	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—	—	—	—
Puerto Rico	—	—	—	—	—	—	—	—	—	—
U.S. Virgin Islands	—	—	—	—	—	—	—	—	—	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

§§ Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) (ArboNET Surveillance), as of June 1, 2008.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2007

Area	Ehrlichiosis			Giardiasis	Gonorrhea¶¶
	Human granulocytic	Human monocytic	Human (other and unspecified)		
United States	834	828	337	19,417	355,991
New England	116	29	1	1,461	5,744
Connecticut	31	—	—	370	2,327
Maine	9	3	—	197	118
Massachusetts	64	15	1	605	2,695
New Hampshire	—	—	—	33	138
Rhode Island	11	11	—	85	402
Vermont	1	—	—	171	64
Mid. Atlantic	271	155	4	3,283	36,479
New Jersey	38	69	1	403	6,076
New York (Upstate)	205	67	—	1,275	7,389
New York City	27	17	—	847	10,308
Pennsylvania	1	2	3	758	12,706
E.N. Central	75	42	236	2,867	72,903
Illinois	6	37	7	866	20,813
Indiana	—	—	1	N	8,790
Michigan	—	—	—	620	15,482
Ohio	2	1	—	826	21,066
Wisconsin	67	4	228	555	6,752
W.N. Central	328	246	16	2,237	19,356
Iowa	N	N	N	301	1,928
Kansas	—	1	—	184	2,282
Minnesota	322	42	—	913	3,459
Missouri	5	201	16	515	9,876
Nebraska	1	2	N	160	1,434
North Dakota	N	N	N	60	116
South Dakota	—	—	—	104	261
S. Atlantic	22	145	26	3,088	85,787
Delaware	1	13	—	41	1,293
District of Columbia	N	N	N	74	2,373
Florida	3	18	—	1,268	23,327
Georgia	1	13	—	681	17,835
Maryland	7	21	11	269	6,768
North Carolina	4	53	3	N	16,666
South Carolina	—	3	2	121	10,326
Virginia	6	23	10	582	6,269
West Virginia	—	1	—	52	930
E.S. Central	10	37	10	576	32,212
Alabama	3	10	2	273	10,885
Kentucky	—	4	—	N	3,449
Mississippi	N	N	N	N	8,314
Tennessee	7	23	8	303	9,564
W.S. Central	9	170	41	469	52,205
Arkansas	3	70	9	158	4,168
Louisiana	—	—	—	139	11,137
Oklahoma	6	100	—	172	4,827
Texas	—	—	32	N	32,073
Mountain	—	—	—	1,887	13,884
Arizona	—	—	—	192	5,062
Colorado	N	N	N	580	3,376
Idaho	N	N	N	223	269
Montana	N	N	N	112	122
Nevada	N	N	N	146	2,357
New Mexico	N	N	N	119	1,796
Utah	—	—	—	466	821
Wyoming	—	—	—	49	81
Pacific	3	4	3	3,549	37,421
Alaska	N	N	N	79	579
California	2	4	3	2,336	31,294
Hawaii	N	N	N	77	659
Oregon	1	—	—	462	1,236
Washington	N	N	N	595	3,653
American Samoa	N	N	N	—	—
C.N.M.I.	—	—	—	—	—
Guam	N	N	N	2	141
Puerto Rico	N	N	N	371	323
U.S. Virgin Islands	—	—	—	—	69

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
¶¶ Totals reported to the Division of STD Prevention, NCHHSTP, as of May 9, 2008.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2007

Area	*Haemophilus influenzae*, invasive disease				Hansen disease (leprosy)	Hantavirus pulmonary syndrome	Hemolytic uremic syndrome, postdiarrheal
	All ages, serotypes	Age <5 years					
		Serotype b	Nonserotype b	Unknown serotype			
United States	2,541	22	199	180	101	32	292
New England	188	2	13	3	5	—	18
Connecticut	54	—	5	—	2	N	11
Maine	13	—	1	—	N	—	1
Massachusetts	89	2	6	1	2	—	2
New Hampshire	18	—	—	2	1	—	1
Rhode Island	10	—	—	—	—	—	—
Vermont	4	—	1	—	N	—	3
Mid. Atlantic	491	—	10	40	10	2	18
New Jersey	70	—	—	8	3	—	3
New York (Upstate)	153	—	8	4	N	—	13
New York City	103	—	—	13	7	—	2
Pennsylvania	165	—	2	15	—	2	N
E.N. Central	401	3	23	30	5	—	47
Illinois	124	—	—	12	1	—	5
Indiana	78	1	4	1	1	—	16
Michigan	31	1	5	6	2	—	6
Ohio	108	—	6	9	1	—	14
Wisconsin	60	1	8	2	—	—	6
W.N. Central	161	2	14	8	3	2	44
Iowa	1	—	—	—	—	—	10
Kansas	11	—	—	2	—	—	—
Minnesota	82	1	11	—	1	—	18
Missouri	42	—	—	5	2	—	9
Nebraska	19	1	3	—	—	1	4
North Dakota	6	—	—	1	N	—	2
South Dakota	—	—	—	—	—	1	1
S. Atlantic	620	1	53	40	12	—	34
Delaware	8	—	—	2	—	—	—
District of Columbia	3	—	—	—	—	—	—
Florida	168	—	18	8	10	—	6
Georgia	127	—	14	11	N	—	14
Maryland	88	—	11	—	—	—	—
North Carolina	59	—	7	1	—	—	12
South Carolina	57	1	2	6	1	—	1
Virginia	80	—	—	11	1	—	1
West Virginia	30	—	1	1	N	—	—
E.S. Central	140	—	2	17	4	—	29
Alabama	29	—	—	2	1	N	7
Kentucky	10	—	—	2	—	—	N
Mississippi	10	—	—	3	2	N	—
Tennessee	91	—	2	10	1	—	22
W.S. Central	131	3	11	4	28	5	22
Arkansas	12	—	2	1	5	—	1
Louisiana	14	—	1	3	—	2	1
Oklahoma	91	—	8	—	—	—	9
Texas	14	3	—	—	23	3	11
Mountain	261	6	47	18	5	18	24
Arizona	91	3	16	5	—	6	8
Colorado	58	1	9	—	1	6	4
Idaho	8	—	3	—	—	1	4
Montana	2	—	—	—	—	2	—
Nevada	12	—	2	3	3	—	N
New Mexico	43	1	6	8	1	3	—
Utah	41	1	11	1	—	—	8
Wyoming	6	—	—	1	—	—	—
Pacific	148	5	26	20	29	5	56
Alaska	15	—	—	4	1	N	N
California	48	2	24	3	13	3	44
Hawaii	12	—	—	1	15	—	—
Oregon	67	—	—	11	N	—	10
Washington	6	3	2	1	—	2	2
American Samoa	—	—	—	—	—	N	N
C.N.M.I.	—	—	—	—	—	—	—
Guam	1	—	—	—	7	N	—
Puerto Rico	2	—	—	1	—	N	N
U.S. Virgin Islands	N	—	—	—	—	—	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2007

Area	Hepatitis, viral, acute A	Hepatitis, viral, acute B	Hepatitis, viral, acute C	Influenza-associated pediatric mortality***	Legionellosis	Listeriosis	Lyme disease	Malaria
United States	2,979	4,519	845	77	2,716	808	27,444	1,408
New England	131	125	48	1	165	51	7,786	94
Connecticut	26	38	20	1	44	13	3,058	30
Maine	5	19	1	—	9	5	529	8
Massachusetts	66	42	10	—	50	25	2,988	34
New Hampshire	12	5	N	—	8	4	896	9
Rhode Island	14	16	8	—	45	3	177	8
Vermont	8	5	9	—	9	1	138	5
Mid. Atlantic	455	561	174	10	842	167	11,293	403
New Jersey	124	162	95	—	116	33	3,134	72
New York (Upstate)	79	89	45	5	234	34	3,748	78
New York City	156	122	—	5	184	39	417	209
Pennsylvania	96	188	34	—	308	61	3,994	44
E.N. Central	343	457	140	6	608	120	2,102	139
Illinois	118	129	16	2	111	34	149	63
Indiana	28	64	14	1	71	18	55	11
Michigan	97	120	89	—	172	23	51	20
Ohio	68	124	20	2	215	33	33	28
Wisconsin	32	20	1	1	39	12	1,814	17
W.N. Central	201	121	32	9	118	32	1,398	57
Iowa	48	26	—	—	11	8	123	3
Kansas	11	9	—	1	10	4	8	4
Minnesota	93	25	28	6	30	6	1,238	29
Missouri	22	39	3	—	46	6	10	8
Nebraska	19	13	1	1	15	6	9	7
North Dakota	2	2	—	—	2	—	12	5
South Dakota	6	7	—	1	4	2	—	1
S. Atlantic	485	1,039	92	12	464	148	4,575	273
Delaware	9	15	—	—	12	3	715	4
District of Columbia	U	U	U	—	17	3	116	3
Florida	152	337	16	2	153	34	30	56
Georgia	67	155	18	5	43	31	11	39
Maryland	73	113	15	—	89	15	2,576	76
North Carolina	66	128	17	1	51	33	53	22
South Carolina	18	65	—	—	17	10	31	7
Virginia	89	144	8	4	61	16	959	65
West Virginia	11	82	18	—	21	3	84	1
E.S. Central	109	385	89	3	102	29	51	39
Alabama	24	128	10	1	12	8	13	7
Kentucky	20	76	29	—	50	2	6	9
Mississippi	8	37	13	—	—	3	1	2
Tennessee	57	144	37	2	40	16	50	21
W.S. Central	319	1,065	120	18	153	76	98	156
Arkansas	14	72	—	—	17	4	8	2
Louisiana	28	100	4	3	6	6	2	14
Oklahoma	13	152	49	1	9	2	1	10
Texas	264	741	67	14	121	64	87	130
Mountain	231	214	44	8	112	41	45	65
Arizona	152	81	—	2	40	12	2	12
Colorado	26	35	20	1	21	11	—	23
Idaho	8	15	4	—	6	1	9	6
Montana	9	1	1	—	3	1	4	3
Nevada	12	49	9	1	9	8	15	3
New Mexico	12	13	5	2	10	4	5	5
Utah	9	15	5	2	20	3	7	13
Wyoming	3	5	—	—	3	1	4	—
Pacific	705	552	106	10	152	144	103	182
Alaska	5	9	—	2	—	2	10	2
California	603	402	72	5	112	102	75	130
Hawaii	7	17	—	—	2	7	N	2
Oregon	31	59	16	—	14	8	26	18
Washington	59	65	18	3	24	25	12	30
American Samoa	—	14	1	—	N	N	N	—
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	—	3	1	—	—	N	—	1
Puerto Rico	64	93	—	—	4	1	N	3
U.S. Virgin Islands	—	—	—	—	—	—	N	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
*** Totals reported to the Division of Influenza, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2007.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2007

Area	Measles		Meningococcal disease				
	Indigenous	Imported†††	All serogroups	Serogroup A, C, Y, & W-135	Serogroup B	Other serogroup	Serogroup unknown
United States	14	29	1,077	325	167	35	550
New England	—	1	45	24	11	3	7
Connecticut	—	—	6	4	—	2	—
Maine	—	—	8	4	3	1	—
Massachusetts	—	1	20	13	4	—	3
New Hampshire	—	—	3	1	1	—	1
Rhode Island	—	—	3	1	2	—	—
Vermont	—	—	5	1	1	—	3
Mid. Atlantic	—	11	128	32	8	1	87
New Jersey	—	1	18	—	—	—	18
New York (Upstate)	—	2	38	24	7	1	6
New York City	—	5	22	—	—	—	22
Pennsylvania	—	3	50	8	1	—	41
E.N. Central	3	1	167	53	32	3	79
Illinois	—	1	61	—	—	—	61
Indiana	—	—	31	18	13	—	—
Michigan	3	—	28	13	5	3	7
Ohio	—	—	35	19	6	—	10
Wisconsin	—	—	12	3	8	—	1
W.N. Central	—	1	73	35	14	5	19
Iowa	—	—	15	9	4	—	2
Kansas	—	—	5	—	—	—	5
Minnesota	—	1	26	20	5	1	—
Missouri	—	—	17	1	3	4	9
Nebraska	—	—	5	3	1	—	1
North Dakota	—	—	2	—	—	—	2
South Dakota	—	—	3	2	1	—	—
S. Atlantic	5	3	177	85	43	13	36
Delaware	—	—	1	—	—	—	1
District of Columbia	—	—	—	—	—	—	—
Florida	4	1	67	32	18	7	10
Georgia	—	—	24	13	5	—	6
Maryland	—	—	21	14	5	2	—
North Carolina	1	2	22	11	6	1	4
South Carolina	—	—	16	7	3	1	5
Virginia	—	—	23	7	5	2	9
West Virginia	—	—	3	1	1	—	1
E.S. Central	—	—	54	3	3	—	48
Alabama	—	—	9	2	1	—	6
Kentucky	—	—	13	—	—	—	13
Mississippi	—	—	12	—	—	—	12
Tennessee	—	—	20	1	2	—	17
W.S. Central	5	2	115	46	29	7	33
Arkansas	—	—	9	5	1	—	3
Louisiana	—	—	29	3	3	—	23
Oklahoma	—	—	22	7	10	5	—
Texas	5	2	55	31	15	2	7
Mountain	—	1	69	33	13	3	20
Arizona	—	—	13	2	1	1	9
Colorado	—	—	22	14	7	1	—
Idaho	—	—	8	1	—	—	7
Montana	—	—	3	1	—	—	2
Nevada	—	—	6	3	2	—	1
New Mexico	—	1	3	3	—	—	—
Utah	—	—	12	9	2	1	—
Wyoming	—	—	2	—	1	—	1
Pacific	1	9	249	14	14	—	221
Alaska	—	—	3	—	—	—	3
California	1	3	177	—	—	—	177
Hawaii	—	2	10	—	2	—	8
Oregon	—	1	31	—	—	—	31
Washington	—	3	28	14	12	—	2
American Samoa	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—
Puerto Rico	—	—	8	—	—	—	8
U.S. Virgin Islands	—	—	—	—	—	—	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
††† Imported cases include only those directly imported from other countries.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2007

Area	Mumps	Novel influenza A virus infections	Pertussis	Plague	Psittacosis	Q Fever	Rabies		Rocky Mountain spotted fever
							Animal	Human	
United States	800	4	10,454	7	12	171	5,862	1	2,221
New England	43	—	1,552	—	—	8	522	—	10
Connecticut	2	—	89	—	N	—	219	—	—
Maine	24	—	83	—	—	7	86	—	N
Massachusetts	14	—	1,178	—	—	1	N	—	9
New Hampshire	2	—	80	—	—	N	53	—	1
Rhode Island	1	—	59	—	—	—	N	—	—
Vermont	—	—	63	—	—	N	164	—	—
Mid. Atlantic	68	—	1,314	—	2	5	997	—	85
New Jersey	2	—	229	—	1	4	—	—	32
New York (Upstate)	26	—	549	—	1	—	514	—	7
New York City	17	—	150	—	—	—	44	—	28
Pennsylvania	23	—	386	—	—	1	439	—	18
E.N. Central	272	4	1,495	—	4	24	301	—	60
Illinois	170	1	199	—	—	14	—	—	39
Indiana	3	—	68	—	—	—	13	—	6
Michigan	28	1	292	—	2	4	202	—	4
Ohio	20	2	609	—	—	2	86	—	10
Wisconsin	51	—	327	—	2	4	N	—	1
W.N. Central	112	—	909	—	—	26	276	1	369
Iowa	27	—	150	—	—	N	31	—	17
Kansas	28	—	104	—	—	4	110	—	12
Minnesota	28	—	393	—	—	5	40	1	6
Missouri	12	—	118	—	—	12	38	—	315
Nebraska	8	—	70	—	—	4	—	—	14
North Dakota	3	—	14	—	—	—	30	—	—
South Dakota	6	—	60	—	—	1	27	—	5
S. Atlantic	102	—	978	—	—	19	2,184	—	1,020
Delaware	1	—	11	—	—	—	—	—	17
District of Columbia	1	—	9	—	—	—	—	—	3
Florida	21	—	211	—	—	2	128	—	19
Georgia	—	—	37	—	—	3	300	—	60
Maryland	19	—	118	—	—	4	431	—	63
North Carolina	28	—	330	—	—	4	472	—	665
South Carolina	2	—	102	—	—	1	46	—	64
Virginia	27	—	128	—	—	4	730	—	123
West Virginia	3	—	32	—	—	1	77	—	6
E.S. Central	20	—	463	—	2	10	156	—	276
Alabama	14	—	91	N	1	—	—	—	96
Kentucky	—	—	33	—	—	3	21	—	5
Mississippi	2	—	255	—	—	—	3	—	20
Tennessee	4	—	84	—	1	7	132	—	155
W.S. Central	34	—	1,303	—	—	16	1,086	—	361
Arkansas	4	—	173	—	—	1	33	—	122
Louisiana	1	—	21	—	—	4	6	—	4
Oklahoma	8	—	58	—	—	N	78	—	186
Texas	21	—	1,051	—	N	11	969	—	49
Mountain	49	—	1,137	7	2	41	97	—	37
Arizona	10	—	210	2	—	2	N	—	10
Colorado	17	—	307	—	2	19	—	—	3
Idaho	7	—	45	—	—	—	12	—	4
Montana	1	—	53	—	—	—	21	—	1
Nevada	12	—	37	—	—	8	13	—	—
New Mexico	—	—	74	5	—	12	15	—	6
Utah	1	—	387	—	—	—	16	—	—
Wyoming	1	—	24	—	—	—	20	—	13
Pacific	100	—	1,303	—	2	22	243	—	3
Alaska	2	—	89	—	—	—	45	—	N
California	42	—	590	—	1	20	186	—	1
Hawaii	2	—	19	—	—	—	—	—	N
Oregon	1	—	123	—	1	1	12	—	2
Washington	53	—	482	—	—	1	—	—	N
American Samoa	1	—	—	—	N	N	N	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—
Guam	6	—	—	—	N	N	—	—	N
Puerto Rico	6	—	—	—	N	N	48	—	N
U.S. Virgin Islands	—	—	—	—	—	—	N	—	N

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2007

Area	Rubella	Salmonellosis	Shiga toxin-producing *E. Coli* (STEC)§§§	Shigellosis	Streptococcal disease, invasive, group A	Streptococcal toxic-shock syndrome
United States	12	47,995	4,847	19,758	5,294	132
New England	1	2,239	315	250	409	38
Connecticut	—	431	71	44	132	36
Maine	—	138	41	14	28	N
Massachusetts	1	1,305	145	155	190	—
New Hampshire	—	171	35	7	27	—
Rhode Island	—	111	8	25	14	—
Vermont	—	83	15	5	18	2
Mid. Atlantic	5	5,946	531	939	946	4
New Jersey	4	1,226	118	184	173	1
New York (Upstate)	—	1,476	208	185	295	—
New York City	1	1,296	50	283	226	—
Pennsylvania	—	1,948	155	287	252	3
E.N. Central	4	5,923	746	3,186	987	56
Illinois	1	1,966	131	781	293	33
Indiana	—	675	105	296	128	10
Michigan	3	966	128	83	201	2
Ohio	—	1,322	155	1,257	239	11
Wisconsin	—	994	227	769	126	—
W.N. Central	—	2,877	780	1,819	351	5
Iowa	—	477	175	109	—	—
Kansas	—	405	52	26	32	—
Minnesota	—	701	232	237	173	3
Missouri	—	764	152	1,276	85	1
Nebraska	—	275	93	28	25	1
North Dakota	—	81	29	21	24	—
South Dakota	—	174	47	122	12	—
S. Atlantic	1	12,650	710	4,772	1,264	14
Delaware	—	140	16	11	10	1
District of Columbia	—	64	—	18	17	—
Florida	—	5,022	164	2,288	309	N
Georgia	—	2,031	94	1,641	259	—
Maryland	1	903	85	117	212	—
North Carolina	—	1,844	153	105	167	7
South Carolina	—	1,166	14	220	101	—
Virginia	—	1,249	165	200	162	1
West Virginia	—	231	19	172	27	5
E.S. Central	—	3,482	319	3,037	213	4
Alabama	—	980	67	741	N	N
Kentucky	—	574	123	504	41	4
Mississippi	—	1,048	8	1,420	N	N
Tennessee	—	880	121	372	172	—
W.S. Central	—	6,065	300	3,117	401	—
Arkansas	—	847	45	105	19	—
Louisiana	—	978	12	493	16	—
Oklahoma	—	706	33	161	85	N
Texas	—	3,534	210	2,358	281	N
Mountain	—	2,752	589	983	574	10
Arizona	—	1,001	106	557	208	—
Colorado	—	563	154	123	145	1
Idaho	—	155	133	14	18	—
Montana	—	121	—	27	N	N
Nevada	—	263	31	79	2	4
New Mexico	—	290	42	108	107	1
Utah	—	286	100	42	89	4
Wyoming	—	73	23	33	5	—
Pacific	1	6,061	557	1,655	149	1
Alaska	—	87	5	8	25	1
California	1	4,571	293	1,331	—	—
Hawaii	—	313	39	71	124	—
Oregon	—	330	79	86	N	N
Washington	—	760	141	159	N	N
American Samoa	—	—	—	5	4	N
C.N.M.I.	—	—	—	—	—	—
Guam	—	20	—	19	14	—
Puerto Rico	1	949	1	24	N	N
U.S. Virgin Islands	—	—	—	—	—	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
§§§ Includes *E-coli* O157:H7; shiga toxin-positive, serogroup non-O157; and shiga toxin-positive, not serogrouped.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2007

Area	*Streptococcus pneumoniae*, invasive disease, drug-resistant		*Streptococcus pneumoniae*, invasive disease, nondrug-resistant age <5 yrs	Syphilis¶¶¶			Tetanus	Toxic-shock syndrome	Trichinellosis
	All ages	Age <5 yrs		All stages****	Congenital (age <1 yr)	Primary and secondary			
United States	3,329	563	2,032	40,920	430	11,466	28	92	5
New England	156	21	141	707	2	279	1	1	—
Connecticut	99	11	24	148	2	39	—	N	—
Maine	13	3	4	21	—	9	—	N	—
Massachusetts	2	2	89	399	—	155	—	—	—
New Hampshire	—	—	13	52	—	30	1	1	—
Rhode Island	24	3	9	76	—	36	—	—	—
Vermont	18	2	2	11	—	10	—	—	—
Mid. Atlantic	168	31	350	6,769	35	1,558	3	18	4
New Jersey	—	—	75	926	11	227	—	5	1
New York (Upstate)	58	12	123	798	8	155	2	5	2
New York City	—	—	152	4,201	8	913	1	—	1
Pennsylvania	110	19	N	844	8	263	—	8	—
E.N. Central	847	139	334	2,628	29	901	2	23	—
Illinois	225	49	84	1,220	10	464	2	9	—
Indiana	203	36	37	217	3	54	—	2	—
Michigan	3	2	84	472	14	123	—	8	—
Ohio	416	52	69	549	1	194	—	2	—
Wisconsin	—	—	60	170	1	66	—	2	—
W.N. Central	360	53	116	876	2	359	5	17	—
Iowa	—	—	—	65	1	21	—	—	—
Kansas	90	10	3	97	—	28	1	—	—
Minnesota	186	35	66	186	—	59	1	9	—
Missouri	65	3	27	484	1	239	3	3	—
Nebraska	2	—	18	30	—	4	—	5	—
North Dakota	—	—	1	2	—	1	—	—	—
South Dakota	17	5	1	12	—	7	—	—	—
S. Atlantic	1,349	249	349	10,088	63	2,784	9	9	—
Delaware	11	2	—	63	—	18	—	—	—
District of Columbia	21	1	3	416	1	178	1	—	—
Florida	726	134	71	3,918	20	913	5	N	—
Georgia	510	103	85	2,254	9	680	2	1	N
Maryland	1	—	72	1,170	23	345	1	N	—
North Carolina	N	—	N	1,093	7	323	—	7	—
South Carolina	—	—	58	411	1	91	—	—	—
Virginia	N	—	52	736	1	230	—	1	—
West Virginia	80	9	8	27	1	6	—	—	—
E.S. Central	282	38	119	3,078	13	936	2	9	—
Alabama	N	—	N	1,006	9	380	1	3	—
Kentucky	28	3	N	153	—	56	—	6	N
Mississippi	61	—	13	707	—	133	—	N	—
Tennessee	193	35	106	1,212	4	367	1	—	—
W.S. Central	96	14	350	7,900	150	1,880	—	1	—
Arkansas	6	2	19	371	12	122	—	—	N
Louisiana	90	12	39	1,807	36	533	—	1	—
Oklahoma	N	—	65	216	3	65	—	N	—
Texas	—	—	227	5,506	99	1,160	—	N	—
Mountain	68	15	259	2,051	45	543	2	12	—
Arizona	—	—	128	1,245	30	296	—	5	—
Colorado	—	—	52	157	2	57	—	4	—
Idaho	N	—	2	14	—	1	—	1	—
Montana	—	—	1	8	—	8	1	N	—
Nevada	N	—	N	396	7	111	—	—	—
New Mexico	—	—	44	180	6	46	1	—	—
Utah	51	12	32	45	—	20	—	2	—
Wyoming	17	3	—	6	—	4	—	—	—
Pacific	3	3	14	6,823	91	2,226	4	2	1
Alaska	N	—	N	16	—	7	—	N	—
California	N	—	N	6,323	87	2,038	4	2	1
Hawaii	3	3	14	58	—	9	—	N	—
Oregon	N	—	N	59	2	18	—	N	—
Washington	N	—	N	367	2	154	—	N	—
American Samoa	N	N	N	—	—	—	—	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—
Guam	—	—	—	37	2	8	—	—	—
Puerto Rico	—	—	N	1,267	8	169	3	N	N
U.S. Virgin Islands	—	—	N	5	—	—	—	—	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

¶¶¶ Totals reported to the Division of STD Prevention, NCHHSTP, as of May 9, 2008.

**** Includes the following categories: primary, secondary, latent (including early latent, late latent, and latent syphilis of unknown duration), neurosyphilis, late (including late syphilis with clinical manifestations other than neurosyphilis), and congenital syphilis.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2007

Area	Tuberculosis††††	Tularemia	Typhoid fever	Vancomycin-intermediate *Staphylococcus aureus*	Vancomycin-resistant *Staphylococcus aureus*	Varicella (morbidity)	Varicella (mortality)§§§§	Vibriosis
United States	13,299	137	434	37	2	40,146	6	549
New England	410	8	26	2	—	2,551	2	38
Connecticut	108	—	8	1	—	1,440	2	16
Maine	19	—	—	N	—	357	—	—
Massachusetts	224	7	15	1	—	—	N	20
New Hampshire	11	1	1	N	—	374	—	1
Rhode Island	45	—	2	—	—	—	—	—
Vermont	3	—	—	—	—	380	—	1
Mid. Atlantic	1,918	2	131	17	—	4,680	1	20
New Jersey	467	1	35	N	N	N	N	17
New York (Upstate)	261	—	16	2	—	N	N	N
New York City	914	1	70	13	—	N	1	3
Pennsylvania	276	—	10	2	—	4,680	—	N
E.N. Central	1,197	2	47	4	2	11,309	—	9
Illinois	521	1	24	—	—	1,091	N	N
Indiana	128	1	2	N	—	444	—	3
Michigan	226	—	7	—	2	4,187	—	N
Ohio	252	—	11	4	—	4,536	—	6
Wisconsin	70	—	3	N	N	1,051	N	N
W.N. Central	504	57	13	3	—	1,733	—	—
Iowa	43	—	1	—	—	N	N	N
Kansas	59	4	1	N	N	586	N	N
Minnesota	238	1	8	—	—	—	—	—
Missouri	119	35	3	3	—	923	—	N
Nebraska	25	10	—	—	—	N	N	N
North Dakota	7	—	—	—	—	140	N	N
South Dakota	13	7	—	—	—	84	—	N
S. Atlantic	2,708	5	83	5	—	5,296	—	216
Delaware	19	—	2	—	—	49	N	7
District of Columbia	60	—	1	N	N	32	—	3
Florida	989	—	15	1	—	1,321	—	97
Georgia	474	—	17	1	—	N	N	23
Maryland	270	1	17	N	N	N	—	25
North Carolina	345	1	8	—	—	N	N	20
South Carolina	218	—	1	2	—	1,103	—	8
Virginia	309	3	21	1	—	1,582	—	33
West Virginia	24	—	1	—	—	1,209	—	N
E.S. Central	666	3	4	—	—	701	—	23
Alabama	175	—	3	N	N	699	N	10
Kentucky	120	1	—	N	N	N	N	—
Mississippi	137	—	—	N	N	2	N	9
Tennessee	234	2	1	—	—	N	—	4
W.S. Central	1,983	34	25	4	—	10,992	—	62
Arkansas	106	15	—	—	—	808	—	N
Louisiana	218	—	—	—	—	123	N	—
Oklahoma	149	18	3	1	—	N	N	2
Texas	1,510	1	22	3	—	10,061	N	60
Mountain	629	20	17	2	—	2,798	—	17
Arizona	304	3	7	1	—	—	—	11
Colorado	111	3	6	N	—	1,089	N	6
Idaho	9	—	—	N	N	N	N	N
Montana	11	—	—	N	N	424	—	N
Nevada	102	—	—	—	—	N	N	N
New Mexico	51	1	1	N	N	422	N	—
Utah	39	9	3	1	—	828	—	—
Wyoming	2	4	—	—	—	35	—	—
Pacific	3,284	6	88	—	—	86	3	164
Alaska	51	1	—	N	N	43	N	2
California	2,726	1	71	N	N	—	2	104
Hawaii	122	—	6	N	N	43	N	25
Oregon	94	3	4	N	N	N	N	8
Washington	291	1	7	N	N	N	1	25
American Samoa	3	—	—	N	N	N	N	N
C.N.M.I.	41	—	—	—	—	—	—	—
Guam	92	—	—	N	—	239	—	1
Puerto Rico	98	N	—	—	—	727	N	N
U.S. Virgin Islands	—	—	—	N	—	—	N	N

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
†††† Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of May 16, 2008.
§§§§ Death counts provided by the Division of Viral Diseases, National Center for Immunization and Respiratory Diseases, as of March 31, 2008.

TABLE 3. Reported cases and incidence* of notifiable diseases,† by age group — United States, 2007

Disease	<1 yr		1–4 yrs		5–14 yrs		15–24 yrs		25–39 yrs		40–64 yrs		≥65 yrs		Age not stated	Total
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate		
AIDS§	21	(0.51)	29	(0.18)	121	(0.30)	2,305	(5.43)	14,417	(23.40)	19,813	(20.35)	797	(2.14)	—	**37,503**
Anthrax	—	(0)	—	(0)	1	(0)	—	(0)	—	(0)	—	(0)	—	(0)	—	**1**
Botulism																
foodborne	—	(0)	—	(0)	2	(0)	2	(0)	6	(0.01)	15	(0.02)	7	(0.02)	—	**32**
infant	83	(2.01)	2	(0.01)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	—	**85**
other (wound & unspecified)	2	(0.05)	—	(0)	—	(0)	2	(0)	7	(0.01)	14	(0.01)	1	(0)	1	**27**
Brucellosis	—	(0)	6	(0.04)	8	(0.02)	14	(0.03)	33	(0.05)	48	(0.05)	19	(0.05)	3	**131**
Chlamydia¶**	1,047	(25.35)	105	(0.64)	13,848	(34.33)	779,280	(1836.39)	276,889	(449.48)	32,476	(33.36)	809	(2.17)	3,920	**1,108,374**
Cholera	—	(0)	—	(0)	1	(0)	2	(0)	—	(0)	3	(0)	1	(0)	—	**7**
Coccidioidomycosis††	12	(0.87)	35	(0.65)	237	(1.77)	760	(5.43)	1,836	(9.13)	3,355	(10.90)	1,809	(15.87)	77	**8,121**
Cryptosporidiosis	253	(6.13)	2,546	(15.63)	2,671	(6.62)	1,143	(2.69)	2,256	(3.66)	1,683	(1.73)	589	(1.58)	29	**11,170**
Cyclosporiasis	—	(0)	1	(0.01)	—	(0)	8	(0.02)	25	(0.05)	45	(0.06)	14	(0.05)	—	**93**
Domestic arboviral diseases§§																
California serogroup virus disease																
neuroinvasive	2	(0.05)	10	(0.06)	25	(0.06)	4	(0.01)	3	(0)	3	(0)	3	(0.01)	—	**50**
nonneuroinvasive	—	(0)	1	(0.01)	—	(0)	—	(0)	1	(0)	2	(0)	1	(0)	—	**5**
Eastern equine encephalitis virus disease																
neuroinvasive	1	(0.02)	—	(0)	1	(0)	—	(0)	—	(0)	—	(0)	1	(0)	—	**3**
nonneuroinvasive	—	(0)	—	(0)	—	(0)	—	(0)	1	(0)	—	(0)	—	(0)	—	**1**
Powassan virus disease, neuroinvasive	—	(0)	—	(0)	1	(0)	—	(0)	—	(0)	2	(0)	4	(0.01)	—	**7**
St. Louis encephalitis virus disease																
neuoinvasive	—	(0)	1	(0.01)	1	(0)	—	(0)	—	(0)	3	(0)	3	(0.01)	—	**8**
nonneuroinvasive	—	(0)	—	(0)	—	(0)	1	(0)	—	(0)	—	(0)	—	(0)	—	**1**
West Nile virus disease																
neuroinvasive	1	(0.02)	5	(0.03)	29	(0.07)	58	(0.14)	138	(0.22)	532	(0.55)	463	(1.24)	1	**1,227**
nonneuroinvasive	—	(0)	20	(0.12)	84	(0.21)	185	(0.44)	499	(0.81)	1,265	(1.30)	347	(0.93)	3	**2,403**
Ehrlichiosis																
human granulocytic	—	(0)	6	(0.04)	28	(0.08)	32	(0.08)	85	(0.15)	411	(0.46)	265	(0.78)	7	**834**
human monocytic	2	(0.05)	6	(0.04)	50	(0.14)	61	(0.16)	102	(0.18)	383	(0.43)	219	(0.64)	5	**828**
human (other and unspecified)	1	(0.03)	13	(0.09)	28	(0.08)	13	(0.03)	35	(0.06)	154	(0.18)	85	(0.25)	8	**337**
Giardiasis	233	(6.80)	3,532	(26.08)	3,246	(9.60)	1,830	(5.11)	3,606	(6.96)	5,443	(6.56)	1,268	(3.94)	259	**19,417**
Gonorrhea**	244	(5.91)	109	(0.67)	4,086	(10.13)	209,678	(494.11)	110,376	(179.18)	29,605	(30.41)	707	(1.90)	1,186	**355,991**
Haemophilus influenzae, invasive disease																
all ages, serotypes	248	(6.00)	153	(0.94)	80	(0.20)	96	(0.23)	168	(0.27)	627	(0.64)	1,158	(3.11)	11	**2,541**
age <5 years																
serotype b	14	(0.34)	8	(0.05)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	—	**22**
nonserotype b	127	(3.07)	72	(0.44)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	—	**199**
unknown serotype	107	(2.59)	73	(0.45)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	—	**180**
Hansen disease (Leprosy)	—	(0)	—	(0)	—	(0)	5	(0.01)	26	(0.05)	36	(0.04)	19	(0.06)	15	**101**
Hantavirus pulmonary syndrome	—	(0)	—	(0)	1	(0)	8	(0.02)	11	(0.02)	11	(0.01)	1	(0)	—	**32**
Hemolytic uremic syndrome, postdiarrheal	6	(0.15)	138	(0.90)	97	(0.26)	16	(0.04)	2	(0)	14	(0.02)	14	(0.04)	5	**292**
Hepatitis, viral, acute																
A	12	(0.29)	98	(0.60)	321	(0.80)	493	(1.16)	779	(1.27)	929	(0.96)	338	(0.91)	9	**2,979**
B	6	(0.15)	1	(0.01)	8	(0.02)	370	(0.87)	1,783	(2.90)	2,062	(2.12)	249	(0.67)	40	**4,519**
C	8	(0.19)	—	(0)	1	(0)	133	(0.32)	319	(0.52)	352	(0.36)	26	(0.07)	6	**845**
Influenza-associated pediatric mortality¶¶	18	(0.44)	16	(0.10)	35	(0.09)	8	(0.06)	—	(0)	—	(0)	—	(0)	—	**77**
Legionellosis	7	(0.17)	3	(0.02)	4	(0.01)	25	(0.06)	203	(0.33)	1,386	(1.42)	1,082	(2.90)	6	**2,716**
Listeriosis	86	(2.08)	7	(0.04)	6	(0.01)	38	(0.09)	77	(0.12)	170	(0.17)	419	(1.12)	5	**808**
Lyme disease	52	(1.26)	1,115	(6.88)	4,973	(12.38)	2,833	(6.70)	3,744	(6.10)	10,935	(11.28)	3,628	(9.78)	164	**27,444**
Malaria	6	(0.15)	62	(0.38)	137	(0.34)	255	(0.60)	396	(0.64)	490	(0.50)	53	(0.14)	9	**1,408**
Measles, total	7	(0.17)	4	(0.02)	3	(0.01)	13	(0.03)	7	(0.01)	7	(0.01)	1	(0)	1	**43**
Meningococcal disease																
all serogroup	139	(3.37)	134	(0.82)	85	(0.21)	227	(0.53)	120	(0.19)	210	(0.22)	154	(0.41)	8	**1,077**
serogroup A, C, Y, & W-135	28	(0.68)	31	(0.19)	27	(0.07)	87	(0.21)	35	(0.06)	60	(0.06)	56	(0.15)	1	**325**
serogroup b	40	(0.97)	35	(0.21)	10	(0.02)	36	(0.08)	12	(0.02)	24	(0.02)	8	(0.02)	2	**167**
other serogroup	7	(0.17)	3	(0.02)	3	(0.01)	6	(0.01)	5	(0.01)	7	(0.01)	4	(0.01)	—	**35**
serogroup unknown	64	(1.55)	65	(0.40)	45	(0.11)	98	(0.23)	68	(0.11)	119	(0.12)	86	(0.23)	5	**550**
Mumps	4	(0.10)	98	(0.60)	212	(0.53)	175	(0.41)	122	(0.20)	160	(0.16)	25	(0.07)	4	**800**
Novel influenza A virus infections	—	(0)	1	(0.01)	1	(0)	—	(0)	1	(0)	1	(0)	—	(0)	—	**4**
Pertussis	1,720	(41.64)	1,026	(6.30)	2,650	(6.57)	1,694	(3.99)	1,183	(1.92)	1,637	(1.68)	332	(0.89)	212	**10,454**
Plague	—	(0)	1	(0.01)	—	(0)	—	(0)	1	(0)	5	(0.01)	—	(0)	—	**7**

See footnotes on next page.

TABLE 3. (*Continued*) Reported cases and incidence* of notifiable diseases,† by age group — United States, 2007

Disease	<1 yr		1–4 yrs		5–14 yrs		15–24 yrs		25–39 yrs		40–64 yrs		≥65 yrs		Age not stated	Total
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate		
Psittacosis	—	(0)	—	(0)	1	(0)	1	(0)	5	(0.01)	4	(0)	1	(0)	—	**12**
Q fever	—	(0)	1	(0.01)	2	(0.01)	9	(0.02)	36	(0.06)	88	(0.09)	34	(0.09)	1	**171**
Rabies, human	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	1	(0)	—	(0)	—	**1**
Rocky Mountain spotted fever	2	(0.05)	41	(0.26)	178	(0.46)	221	(0.54)	452	(0.76)	1,022	(1.09)	299	(0.83)	6	**2,221**
Rubella	—	(0)	1	(0.01)	—	(0)	5	(0.01)	6	(0.01)	—	(0)	—	(0)	—	**12**
Salmonellosis	5,359	(129.75)	8,443	(51.84)	6,364	(15.78)	4,648	(10.95)	6,492	(10.54)	10,328	(10.61)	5,696	(15.29)	665	**47,995**
Shiga toxin-producing E. coli (STEC)	180	(4.36)	1,103	(6.77)	1,039	(2.58)	781	(1.84)	515	(0.84)	744	(0.76)	432	(1.16)	53	**4,847**
Shigellosis	435	(10.53)	6,214	(38.15)	6,798	(16.85)	1,284	(3.03)	2,556	(4.15)	1,875	(1.93)	467	(1.25)	129	**19,758**
Streptococcal disease, invasive group A	107	(2.75)	274	(1.79)	333	(0.88)	210	(0.53)	642	(1.11)	1,949	(2.14)	1,755	(5.02)	24	**5,294**
Streptococcal toxic-shock syndrome	—	(0)	6	(0.05)	1	(0)	9	(0.03)	20	(0.04)	54	(0.07)	42	(0.15)	—	**132**
Streptococcus pneumoniae, invasive disease, drug-resistant																
all ages	184	(6.06)	379	(3.15)	104	(0.35)	99	(0.31)	242	(0.53)	1,171	(1.60)	1,147	(4.02)	3	**3,329**
age <5	184	(4.46)	379	(2.33)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	—	**563**
Streptococcus pneumoniae, invasive disease, nondrug-resistant age <5	664	(22.03)	1,368	(11.46)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	—	**2,032**
Syphilis, primary and secondary**	1	(0.02)	1	(0.01)	13	(0.03)	2,481	(5.85)	5,059	(8.21)	3,816	(3.92)	91	(0.24)	4	**11,466**
Tetanus	—	(0)	—	(0)	2	(0)	2	(0)	4	(0.01)	5	(0.01)	10	(0.03)	5	**28**
Toxic-shock syndrome	—	(0)	6	(0.05)	21	(0.07)	22	(0.07)	12	(0.03)	30	(0.04)	1	(0)	—	**92**
Trichinellosis	—	(0)	—	(0)	—	(0)	—	(0)	1	(0)	3	(0)	1	(0)	—	**5**
Tuberculosis***	115	(2.78)	351	(2.16)	313	(0.78)	1,581	(3.73)	3,266	(5.30)	5,093	(5.23)	2,578	(6.92)	2	**13,299**
Tularemia	—	(0)	18	(0.11)	27	(0.07)	11	(0.03)	16	(0.03)	44	(0.05)	20	(0.05)	1	**137**
Typhoid fever	5	(0.12)	54	(0.33)	86	(0.21)	79	(0.19)	130	(0.21)	63	(0.06)	13	(0.03)	4	**434**
Vancomycin-intermediate Staphylococcus aureus	—	(0)	—	(0)	—	(0)	1	(0)	2	(0)	20	(0.03)	14	(0.06)	—	**37**
Vancomycin-resistant Staphylococcus aureus	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	2	(0)	—	(0)	—	**2**
Vibriosis	3	(0.10)	8	(0.06)	58	(0.19)	47	(0.15)	94	(0.20)	225	(0.31)	113	(0.42)	1	**549**

* Per 100,000 population.

† No cases of diphtheria; neuroinvasive or non-neuroinvasive western equine encephalitis virus disease; poliomyelitis, paralytic; poliovirus infection, nonparalytic; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus syndrome (SARS-CoV); smallpox; and yellow fever were reported in 2007. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. Data on human immunodeficiency virus (HIV) infections are not included because HIV infection reporting has been implemented on different dates and using different methods than for AIDS case reporting.

§ Total number of AIDS cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) through December 31, 2007.

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

** Age related data are collected on aggregate forms different from those used for the number of reported cases. Thus, the total number of cases reported here will differ slightly from other tables. Cases among persons aged <15 years are not shown because some might not be caused by sexual transmission; these cases are included in the totals. Totals reported to the Division of STD Prevention, NCHHSTP, as of May 9, 2008.

†† Notifiable in <40 states.

§§ Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED), (ArboNET Surveillance), as of June 1, 2008.

¶¶ Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2007.

*** Totals reported to the Division of TB Elimination, NCHHSTP, as of May 16, 2008.

TABLE 4. Reported cases and incidence* of notifiable diseases,† by sex — United States, 2007

Disease	Male		Female		Sex not stated	Total
	No.	Rate	No.	Rate	No.	
AIDS§	27,737	(18.80)	9,766	(6.43)	—	**37,503**
Anthrax	1	(0)	—	(0)	—	**1**
Botulism						
foodborne	14	(0.01)	18	(0.01)	—	**32**
infant	37	(1.75)	48	(2.38)	—	**85**
other (wound & unspecified)	20	(0.01)	7	(0)	—	**27**
Brucellosis	64	(0.04)	66	(0.04)	1	**131**
Chancroid¶	8	(0.01)	15	(0.01)	—	**23**
Chlamydia¶**	280,337	(190.04)	825,660	(543.60)	2,377	**1,108,374**
Cholera	3	(0)	4	(0)	—	**7**
Coccidioidomycosis††	4,833	(10.13)	3,218	(6.61)	70	**8,121**
Cryptosporidiosis	5,507	(3.73)	5,591	(3.68)	72	**11,170**
Cyclosporiasis	44	(0.04)	49	(0.04)	—	**93**
Domestic arboviral diseases§§						
California serogroup virus disease						
neuroinvasive	25	(0.02)	25	(0.02)	—	**50**
nonneuroinvasive	5	(0)	—	(0)	—	**5**
Eastern equine encephalitis virus disease						
neuroinvasive	3	(0)	—	(0)	—	**3**
nonneuroinvasive	1	(0)	—	(0)	—	**1**
Powassan virus disease, neuroinvasive	4	(0)	2	(0)	1	**7**
St. Louis encephalitis virus disease						
neuroinvasive	3	(0)	5	(0)	—	**8**
nonneuroinvasive	1	(0)	—	(0)	—	**1**
West Nile virus disease						
neuroinvasive	729	(0.49)	494	(0.33)	4	**1,227**
nonneuroinvasive	1,254	(0.85)	1,141	(0.75)	8	**2,403**
Ehrlichiosis						
human granulocytic	494	(0.37)	337	(0.24)	3	**834**
human monocytic	487	(0.36)	333	(0.24)	8	**828**
human (other and unspecified)	202	(0.15)	135	(0.10)	—	**337**
Giardiasis	10,880	(8.71)	8,330	(6.47)	207	**19,417**
Gonorrhea¶	167,685	(113.68)	187,594	(123.51)	712	**355,991**
Haemophilus influenzae, invasive disease						
all ages, serotypes	1,104	(0.75)	1,410	(0.93)	27	**2,541**
age <5 years						
serotype b	9	(0.09)	13	(0.13)	—	**22**
nonserotype b	97	(0.93)	101	(1.01)	1	**199**
unknown serotype	97	(0.93)	78	(0.78)	5	**180**
Hansen disease (Leprosy)	69	(0.05)	17	(0.01)	15	**101**
Hantavirus pulmonary syndrome	22	(0.02)	10	(0.01)	—	**32**
Hemolytic uremic syndrome, postdiarrheal	123	(0.09)	168	(0.12)	1	**292**
Hepatitis, viral, acute						
A	1,621	(1.10)	1,338	(0.88)	20	**2,979**
B	2,748	(1.87)	1,748	(1.15)	23	**4,519**
C	450	(0.31)	394	(0.26)	1	**845**
Influenza-associated pediatric mortality¶¶	41	(0.11)	36	(0.10)	—	**77**
Legionellosis	1,752	(1.19)	953	(0.63)	11	**2,716**
Listeriosis	346	(0.23)	457	(0.30)	5	**808**
Lyme disease	14,408	(9.81)	12,468	(8.24)	568	**27,444**
Malaria	896	(0.61)	499	(0.33)	13	**1,408**
Measles, total	21	(0.01)	22	(0.01)	—	**43**
Meningococcal disease						
all serogroup	583	(0.40)	485	(0.32)	9	**1,077**
serogroup A, C, Y, & W-135	167	(0.11)	154	(0.10)	4	**325**
serogroup b	90	(0.06)	77	(0.05)	—	**167**
other serogroup	22	(0.01)	13	(0.01)	—	**35**
serogroup unknown	304	(0.21)	241	(0.16)	5	**550**

See footnotes on next page.

TABLE 4. (*Continued*) Reported cases and incidence* of notifiable diseases,† by sex — United States, 2007

Disease	Male		Female		Sex not stated	Total
	No.	Rate	No.	Rate	No.	
Mumps	403	(0.27)	395	(0.26)	2	800
Novel influenza A virus infections	2	(0)	2	(0)	—	4
Pertussis	4,568	(3.10)	5,804	(3.82)	82	10,454
Plague	3	(0)	4	(0)	—	7
Psittacosis	2	(0)	10	(0.01)	—	12
Q fever	122	(0.09)	49	(0.03)	—	171
Rabies, human	1	(0)	—	(0)	—	1
Rocky Mountain spotted fever	1,279	(0.90)	929	(0.63)	13	2,221
Rubella	7	(0)	5	(0)	—	12
Salmonellosis	22,632	(15.34)	24,825	(16.34)	538	47,995
Shiga toxin-producing *E. coli* (STEC)	2,283	(1.55)	2,536	(1.67)	28	4,847
Shigellosis	9,130	(6.19)	10,362	(6.82)	266	19,758
Streptococcal disease, invasive group A	2,774	(2.00)	2,499	(1.75)	21	5,294
Streptococcal toxic-shock syndrome	67	(0.06)	65	(0.05)	—	132
Streptococcus pneumoniae, invasive disease, drug-resistant						
all ages	1,666	(1.52)	1,651	(1.45)	12	3,329
age <5	317	(4.11)	245	(3.32)	1	563
Streptococcus pneumoniae, invasive disease, nondrug-resistant age <5	1,158	(15.14)	865	(11.84)	9	2,032
Syphilis, primary and secondary¶	9,769	(6.62)	1,692	(1.11)	5	11,466
Tetanus	18	(0.01)	10	(0.01)	—	28
Toxic-shock syndrome	18	(0.02)	72	(0.06)	2	92
Trichinellosis	4	(0)	1	(0)	—	5
Tuberculosis***	8,111	(5.50)	5,186	(3.41)	2	13,299
Tularemia	99	(0.07)	35	(0.02)	3	137
Typhoid fever	210	(0.14)	218	(0.14)	6	434
Vancomycin-intermediate *Staphylococcus aureus*	19	(0.02)	18	(0.02)	—	37
Vancomycin-resistant *Staphylococcus aureus*	—	(0)	2	(0)	—	2
Vibriosis	398	(0.36)	146	(0.13)	5	549

* Per 100,000 population.

† No cases of diphtheria; neuroinvasive or non-neuroinvasive western equine encephalitis virus disease; poliomyelitis, paralytic; poliovirus infection, nonparalytic; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus syndrome (SARS-CoV); smallpox; and yellow fever were reported in 2007. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. Data on human immunodeficiency virus (HIV) infections are not included because HIV infection reporting has been implemented on different dates and using different methods than for AIDS case reporting.

§ Total number of AIDS cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) through December 31, 2007.

¶ Totals reported to the Division of STD Prevention, NCHHSTP, as of May 9, 2008.

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

†† Notifiable in <40 states.

§§ Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED), (ArboNET Surveillance), as of June 1, 2008.

¶¶ Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2007.

*** Totals reported to the Division of TB Elimination, NCHHSTP, as of May 16, 2008.

TABLE 5. Reported cases and incidence* of notifiable diseases,† by race — United States, 2007

Disease	American Indian or Alaska Native		Asian or Pacific Islander		Black		White		Other	Race not stated	Total
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	No.	
AIDS§	193	(6.03)	563	(3.87)	18,165	(45.92)	14,837	(6.13)	430	3,315	**37,503**
Botulism											
foodborne	10	(0.31)	1	(0.01)	1	(0)	19	(0.01)	0	1	**32**
infant	1	(2.23)	4	(1.90)	5	(0.74)	47	(1.47)	2	26	**85**
other (wound & unspecified)	0	(0)	1	(0.01)	2	(0.01)	13	(0.01)	0	11	**27**
Brucellosis	0	(0)	3	(0.02)	5	(0.01)	60	(0.02)	5	58	**131**
Chlamydia¶**	13,642	(426.13)	14,440	(99.30)	390,421	(986.95)	321,227	(132.68)	38,597	330,047	**1,108,374**
Cholera											
Coccidioidomycosis††	106	(7.82)	157	(2.40)	444	(4.21)	2,321	(2.98)	217	4,876	**8,121**
Cryptosporidiosis	61	(1.91)	83	(0.57)	596	(1.51)	6,602	(2.73)	346	3,482	**11,170**
Cyclosporiasis	0	(0)	2	(0.02)	2	(0.01)	60	(0.03)	0	29	**93**
Domestic arboviral diseases§§											
California serogroup virus disease	0	(0)	0	(0)	1	(0)	47	(0.02)	0	2	**50**
West Nile virus disease											
neuroinvasive	41	(1.28)	6	(0.04)	80	(0.20)	872	(0.36)	19	209	**1,227**
nonneuroinvasive	86	(2.69)	11	(0.08)	36	(0.09)	1,648	(0.68)	15	607	**2,403**
Ehrlichiosis											
human granulocytic	4	(0.16)	4	(0.03)	5	(0.01)	372	(0.17)	5	444	**834**
human monocytic	10	(0.40)	2	(0.02)	15	(0.04)	583	(0.27)	12	206	**828**
human (other and unspecified)	7	(0.28)	0	(0)	6	(0.02)	293	(0.13)	2	29	**337**
Giardiasis	79	(2.76)	878	(6.58)	1,517	(4.63)	8,088	(3.95)	684	8,171	**19,417**
Gonorrhea**	2,179	(68.07)	2,153	(14.81)	197,561	(499.42)	68,131	(28.14)	7,660	78,307	**355,991**
Haemophilus influenzae, invasive disease											
all ages, serotypes	36	(1.12)	29	(0.20)	324	(0.82)	1,557	(0.64)	82	513	**2,541**
age <5 years											
nonserotype b	3	(1.38)	1	(0.10)	42	(1.26)	89	(0.56)	14	50	**199**
unknown serotype	3	(1.38)	5	(0.49)	41	(1.23)	75	(0.47)	6	50	**180**
Hansen disease (Leprosy)	0	(0)	28	(0.21)	6	(0.02)	37	(0.02)	2	28	**101**
Hantavirus pulmonary syndrome	5	(0.16)	0	(0)	0	(0)	24	(0.01)	0	3	**32**
Hemolytic uremic syndrome, postdiarrheal	1	(0.03)	9	(0.06)	8	(0.02)	205	(0.09)	4	65	**292**
Hepatitis, viral, acute											
A	16	(0.50)	149	(1.03)	164	(0.42)	1,588	(0.66)	137	925	**2,979**
B	33	(1.03)	129	(0.89)	863	(2.20)	2,234	(0.92)	101	1,159	**4,519**
C	14	(0.44)	3	(0.02)	65	(0.17)	535	(0.22)	14	214	**845**
Influenza-associated pediatric mortality¶¶	1	(0.11)	3	(0.09)	16	(0.13)	49	(0.09)	0	8	**77**
Legionellosis	6	(0.19)	27	(0.19)	420	(1.06)	1,784	(0.74)	64	415	**2,716**
Listeriosis	3	(0.09)	26	(0.18)	72	(0.18)	499	(0.21)	19	189	**808**
Lyme disease	68	(2.13)	185	(1.35)	310	(0.78)	14,098	(5.83)	1,564	11,219	**27,444**
Malaria	0	(0)	126	(0.87)	633	(1.60)	266	(0.11)	52	331	**1,408**
Measles, total	0	(0)	17	(0.12)	1	(0)	23	(0.01)	0	2	**43**
Meningococcal disease											
all serogroup	10	(0.31)	27	(0.19)	166	(0.42)	650	(0.27)	24	200	**1,077**
serogroup A, C, Y, & W-135	5	(0.16)	3	(0.02)	67	(0.17)	199	(0.08)	5	46	**325**
serogroup b	2	(0.06)	3	(0.02)	10	(0.03)	118	(0.05)	3	31	**167**
other serogroup	0	(0)	1	(0.01)	9	(0.02)	21	(0.01)	1	3	**35**
serogroup unknown	3	(0.09)	20	(0.14)	80	(0.20)	312	(0.13)	15	120	**550**
Mumps	5	(0.16)	37	(0.25)	62	(0.16)	530	(0.22)	25	141	**800**
Pertussis	172	(5.37)	139	(0.96)	498	(1.26)	7,289	(3.01)	271	2,085	**10,454**
Q fever	1	(0.03)	3	(0.02)	10	(0.03)	112	(0.05)	4	41	**171**
Rocky Mountain spotted fever	69	(2.33)	12	(0.09)	136	(0.35)	1,599	(0.68)	27	378	**2,221**
Rubella											
Salmonellosis	343	(10.71)	1,205	(8.29)	4,016	(10.15)	26,210	(10.83)	1,508	14,713	**47,995**
Shiga toxin-producing *E. coli* (STEC)	37	(1.16)	90	(0.62)	168	(0.42)	3,063	(1.27)	117	1,372	**4,847**
Shigellosis	286	(8.93)	228	(1.57)	4,519	(11.42)	7,265	(3.00)	706	6,754	**19,758**
Streptococcal disease, invasive group A	79	(2.71)	121	(0.88)	749	(2.03)	3,036	(1.34)	145	1,164	**5,294**

See footnotes on next page.

TABLE 5. (*Continued*) Reported cases and incidence* of notifiable diseases,† by race — United States, 2007

Disease	American Indian or Alaska Native		Asian or Pacific Islander		Black		White		Other	Race not stated	Total
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.		
Streptococcal toxic-shock syndrome	1	(0.04)	5	(0.04)	14	(0.05)	99	(0.05)	2	11	**132**
Streptococcus pneumoniae, invasive disease, drug-resistant											
all ages	16	(0.86)	18	(0.22)	726	(2.32)	2,046	(1.12)	93	430	**3,329**
age <5	3	(2.30)	5	(0.84)	153	(5.76)	316	(2.70)	18	68	**563**
Streptococcus pneumoniae, invasive disease, nondrug-resistant age <5	48	(30.17)	56	(9.20)	374	(14.06)	978	(8.48)	55	521	**2,032**
Syphilis, primary and secondary**	87	(2.72)	168	(1.16)	5,069	(12.81)	5,175	(2.14)	411	556	**11,466**
Tetanus	0	(0)	1	(0.01)	4	(0.01)	19	(0.01)	0	4	**28**
Toxic-shock syndrome	2	(0.09)	1	(0.01)	7	(0.02)	67	(0.04)	1	14	**92**
Tuberculosis***	177	(5.53)	3,558	(24.47)	3,617	(9.14)	5,868	(2.42)	28	51	**13,299**
Tularemia	9	(0.28)	1	(0.01)	2	(0.01)	90	(0.04)	0	35	**137**
Typhoid fever	2	(0.06)	186	(1.28)	24	(0.06)	36	(0.01)	33	153	**434**
Vancomycin-intermediate *Staphylococcus aureus*	0	(0)	1	(0.02)	12	(0.04)	9	(0.01)	0	15	**37**
Vibriosis	3	(0.12)	27	(0.22)	40	(0.13)	309	(0.18)	8	162	**549**

* Per 100,000 population. Diseases for which <25 cases were reported are not included in this table.

† No cases of diphtheria; neuroinvasive or non-neuroinvasive western equine encephalitis virus disease; poliomyelitis, paralytic; poliovirus infection, nonparalytic; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus syndrome (SARS-CoV); smallpox; and yellow fever were reported in 2007. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. Data on human immunodeficiency virus (HIV) infections are not included because HIV infection reporting has been implemented on different dates and using different methods than for AIDS case reporting.

§ Total number of AIDS cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) through December 31, 2007.

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

** Cases with unknown race have not been redistributed. For this reason, the total number of cases reported here might differ slightly from totals reported in other surveillance summaries. Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention (NCHHSTP), as of May 9, 2008.

†† Notifiable in <40 states.

§§ Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) (ArboNET Surveillance), as of June 1, 2008.

¶¶ Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2007.

*** Totals reported to the Division of TB Elimination, NCHHSTP, as of May 16, 2008.

TABLE 6. Reported cases and incidence* of notifiable diseases,† by ethnicity — United States, 2007

Disease	Hispanic No.	Hispanic Rate	Non-Hispanic No.	Non-Hispanic Rate	Ethnicity not stated No.	Total
AIDS§	6,974	(15.74)	29,008	(11.34)	1,521	**37,503**
Botulism						
foodborne	7	(0.02)	20	(0.01)	5	**32**
infant	17	(1.75)	50	(1.58)	18	**85**
other (wound & unspecified)	11	(0.03)	15	(0.01)	1	**27**
Brucellosis	65	(0.15)	35	(0.01)	31	**131**
Chlamydia¶**	152,528	(344.14)	540,055	(211.72)	415,791	**1,108,374**
Coccidioidomycosis††	1,313	(7.13)	2,123	(2.72)	4,685	**8,121**
Cryptosporidiosis	601	(1.36)	5,651	(2.22)	4,918	**11,170**
Cyclosporiasis	8	(0.03)	55	(0.03)	30	**93**
Domestic arboviral diseases§§						
California serogroup virus disease						
neuroinvasive	1	(0)	43	(0.02)	6	**50**
West Nile virus disease						
neuroinvasive	145	(0.33)	764	(0.30)	318	**1,227**
nonneuroinvasive	118	(0.27)	1,493	(0.59)	792	**2,403**
Ehrlichiosis						
human granulocytic	12	(0.03)	225	(0.10)	597	**834**
human monocytic	11	(0.03)	514	(0.22)	303	**828**
human (other and unspecified)	29	(0.07)	260	(0.11)	48	**337**
Giardiasis	1,430	(4.10)	8,032	(3.67)	9,955	**19,417**
Gonorrhea**	24,071	(54.31)	205,222	(80.45)	126,698	**355,991**
Haemophilus influenzae, invasive disease						
all ages, serotypes	195	(0.44)	1,312	(0.51)	1,034	**2,541**
age <5 years						
nonserotype b	39	(0.83)	96	(0.61)	64	**199**
unknown serotype	32	(0.68)	71	(0.45)	77	**180**
Hansen disease (Leprosy)	29	(0.07)	45	(0.02)	27	**101**
Hantavirus pulmonary syndrome	8	(0.02)	15	(0.01)	9	**32**
Hemolytic uremic syndrome, postdiarrheal	34	(0.08)	173	(0.07)	85	**292**
Hepatitis, viral, acute						
A	636	(1.44)	1,437	(0.56)	906	**2,979**
B	435	(0.98)	2,463	(0.97)	1,621	**4,519**
C	66	(0.15)	439	(0.17)	340	**845**
Influenza-associated pediatric mortality¶¶	15	(0.10)	46	(0.08)	16	**77**
Legionellosis	143	(0.32)	1,541	(0.60)	1,032	**2,716**
Listeriosis	148	(0.33)	388	(0.15)	272	**808**
Lyme disease	299	(0.68)	9,682	(3.81)	17,463	**27,444**
Malaria	54	(0.12)	820	(0.32)	534	**1,408**
Measles, total	1	(0)	36	(0.01)	6	**43**
Meningococcal disease						
all serogroup	126	(0.28)	651	(0.26)	300	**1,077**
serogroup A, C, Y, & W-135	33	(0.07)	208	(0.08)	84	**325**
serogroup b	16	(0.04)	106	(0.04)	45	**167**
other serogroup	3	(0.01)	20	(0.01)	12	**35**
serogroup unknown	74	(0.17)	317	(0.12)	159	**550**
Mumps	102	(0.23)	510	(0.20)	188	**800**
Pertussis	1,224	(2.76)	6,549	(2.57)	2,681	**10,454**
Q fever	19	(0.04)	97	(0.04)	55	**171**
Rocky Mountain spotted fever	81	(0.19)	1,559	(0.63)	581	**2,221**
Salmonellosis	5,793	(13.07)	23,161	(9.08)	19,041	**47,995**
Shiga toxin-producing *E. coli* (STEC)	406	(0.92)	2,677	(1.05)	1,764	**4,847**
Shigellosis	2,899	(6.54)	8,278	(3.25)	8,581	**19,758**
Streptococcal disease, invasive group A	433	(1.00)	2,582	(1.09)	2,279	**5,294**
Streptococcal toxic-shock syndrome	8	(0.03)	65	(0.03)	59	**132**

See footnotes on next page.

TABLE 6. (*Continued*) Reported cases and incidence* of notifiable diseases,† by ethnicity — United States, 2007

Disease	Hispanic No.	Hispanic Rate	Non-Hispanic No.	Non-Hispanic Rate	Ethnicity not stated No.	Total
Streptococcus pneumoniae, invasive disease, drug-resistant						
all ages	168	(0.60)	1,851	(0.95)	1,310	**3,329**
age <5	52	(1.78)	337	(2.77)	174	**563**
Streptococcus pneumoniae, invasive disease, nondrug-resistant	288	(9.72)	922	(7.69)	822	**2,032**
Syphilis, primary and secondary**	1,791	(4.04)	8,281	(3.25)	1,394	**11,466**
Tetanus	3	(0.01)	17	(0.01)	8	**28**
Toxic-shock syndrome	2	(0.01)	61	(0.03)	29	**92**
Tuberculosis***	3,872	(8.74)	9,405	(3.69)	22	**13,299**
Tularemia	5	(0.01)	77	(0.03)	55	**137**
Typhoid fever	45	(0.10)	258	(0.10)	131	**434**
Vancomycin-intermediate *Staphylococcus aureus*	0	(0)	17	(0.01)	20	**37**
Vibriosis	64	(0.17)	317	(0.17)	168	**549**

* Per 100,000 population. Diseases for which <25 cases were reported are not included in this table.

† No cases of diphtheria; neuroinvasive or non-neuroinvasive western equine encephalitis virus disease; poliomyelitis, paralytic; poliovirus infection, nonparalytic; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus syndrome (SARS-CoV); smallpox; and yellow fever were reported in 2007. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. Data on human immunodeficiency virus (HIV) infections are not included because HIV infection reporting has been implemented on different dates and using different methods than for AIDS case reporting.

§ Total number of AIDS cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) through December 31, 2007.

¶ Chlamydia refers to genital infections caused by Chlamydia trachomatis.

** Cases with unknown race have not been redistributed. For this reason, the total number of cases reported here might differ slightly from totals reported in other surveillance summaries. Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention (NCHHSTP), as of May 9, 2008.

†† Notifiable in <40 states.

§§ Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) (ArboNET Surveillance), as of June 1, 2008.

¶¶ Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2007.

*** Totals reported to the Division of TB Elimination, NCHHSTP, as of May 16, 2008.

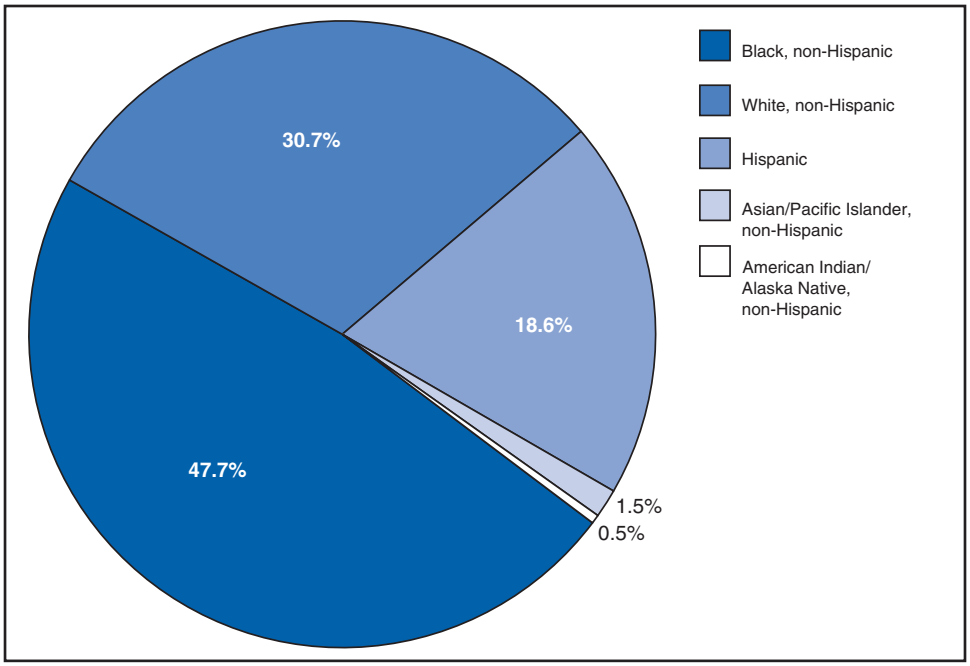
PART 2

Graphs and Maps for Selected Notifiable Diseases in the United States, 2007

Abbreviations and Symbols Used in Graphs and Maps

U	Data not available.
N	Not notifiable (i.e., report of disease not required in that jurisdiction).
AS	American Samoa
CNMI	Commonwealth of Northern Mariana Islands
GU	Guam
PR	Puerto Rico
VI	U.S. Virgin Islands

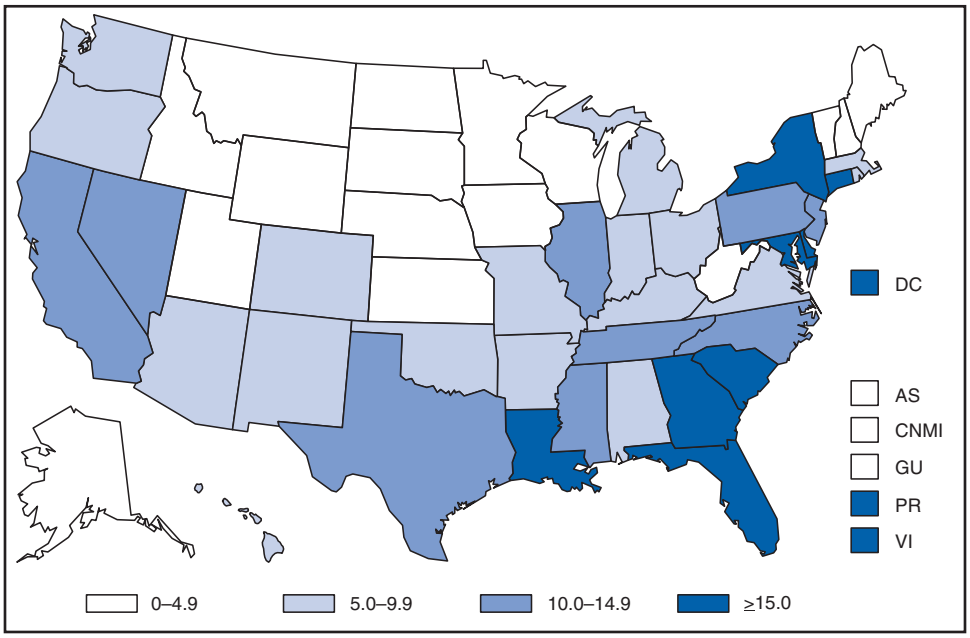
AQUIRED IMMUNODEFICIENCY SYNDROME (AIDS). Percentage of reported cases, by race/ethnicity* — United States, 2007



* For 1.0% of respondents, race was unknown.

Of persons reported with AIDS during 2007, the greatest percentage were non-Hispanic blacks, followed by non-Hispanic whites, Hispanics, Asians/Pacific Islanders, and American Indians/Alaska Natives.

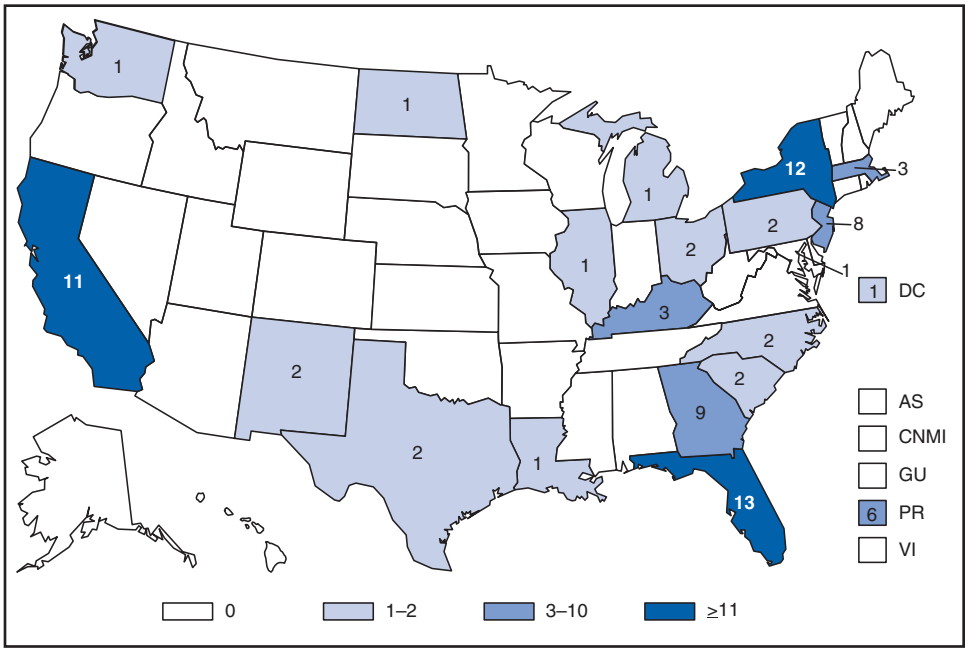
AQUIRED IMMUNODEFICIENCY SYNDROME (AIDS). Reported AIDS rates* — United States† and U.S. territories, 2007



* Per 100,000 population.
† Includes 222 persons with unknown state of residence.

The highest AIDS rates were observed in the northeastern part of the country. High rates (i.e., ≥15 cases per 100,000 population) also were reported in several southeastern states, the U.S. Virgin Islands, and Puerto Rico.

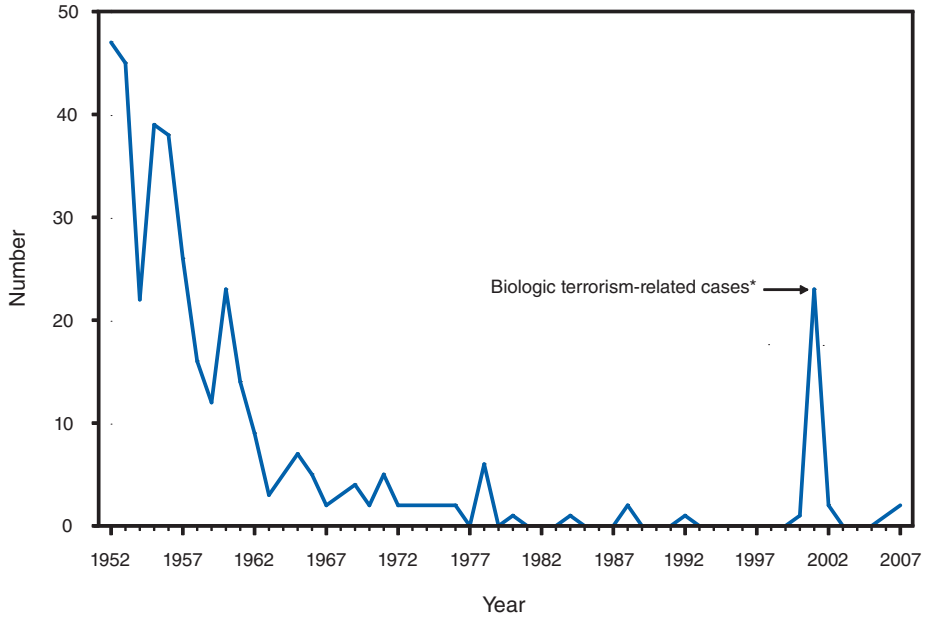
AQUIRED IMMUNODEFICIENCY SYNDROME (AIDS). Number of reported pediatric cases* – United States† and U.S. Territories, 2007



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

During 2007, a total of 87 new pediatric AIDS cases were reported in the United States and U.S. territories.

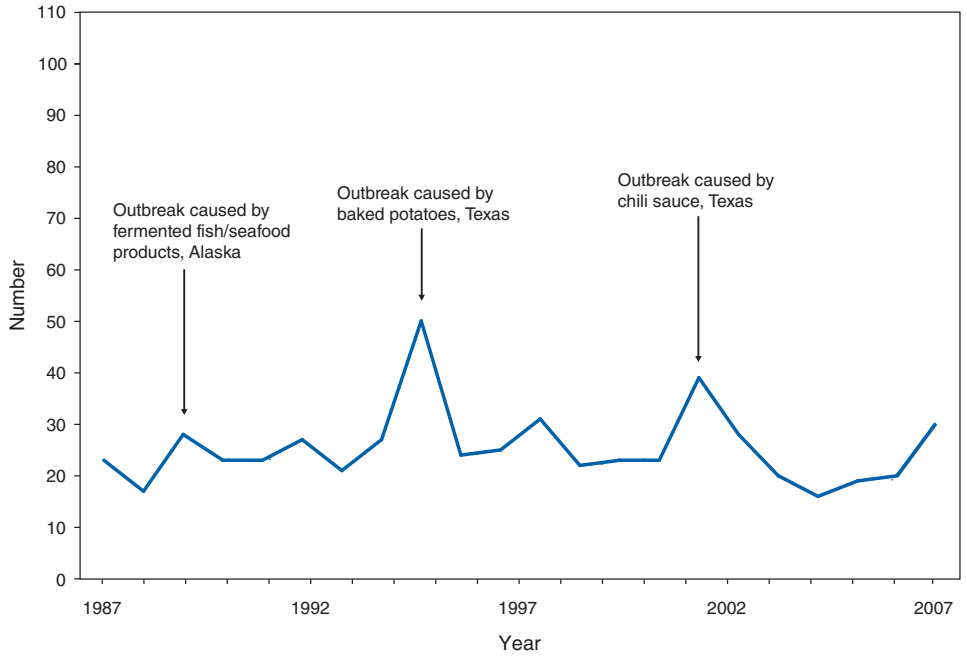
ANTHRAX. Number of reported cases, by year – United States, 1952–2007



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

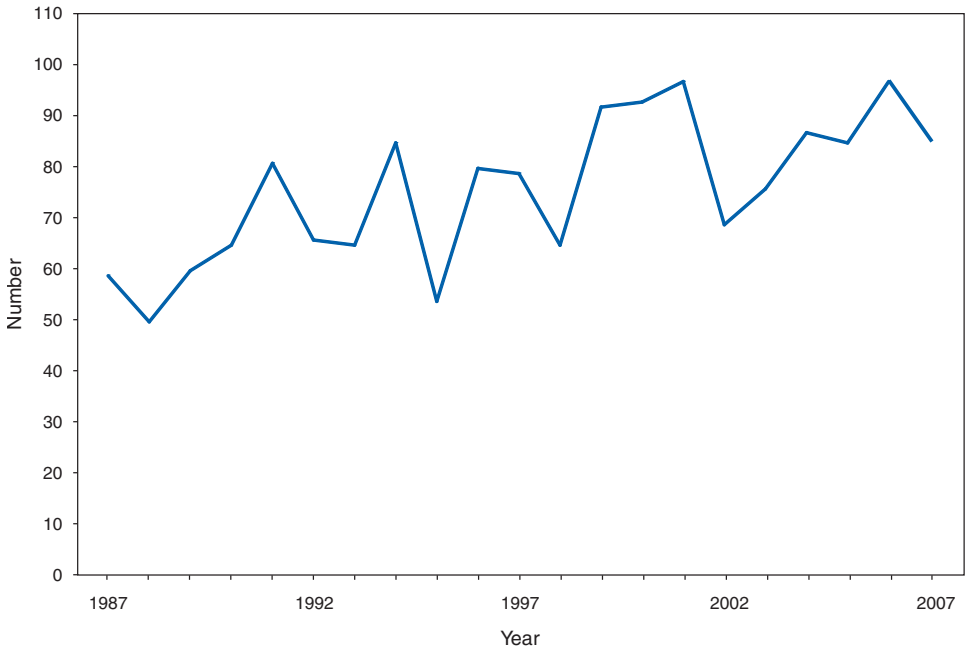
The two cases of cutaneous anthrax, one confirmed and one probable, that were reported in the United States during 2007 reflect the potential risk for anthrax among persons who make drums using untreated hides from countries where anthrax is common in animals and among persons who are exposed to environments that are cross-contaminated by these activities as a result of using untreated hides. This previously unrecognized source of risk for anthrax was first reported in 2006 as a result of two unrelated anthrax cases in the United States and United Kingdom, one of which was fatal, that occurred in persons exposed to making and playing animal-skin drums contaminated with *Bacillus anthracis*.

BOTULISM, FOODBORNE. Number of reported cases, by year — United States, 1987–2007



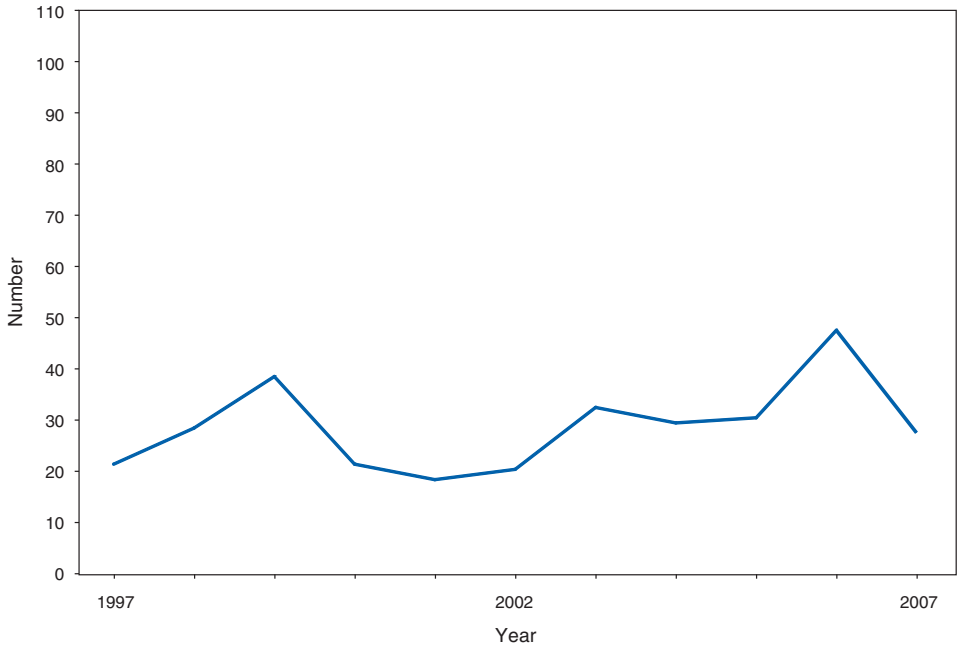
Home-canned foods as well as fermented foods commonly eaten by Alaska Native populations remain the principal sources of foodborne botulism in the United States. In 2007, a multistate outbreak of foodborne botulism was linked to commercially canned hotdog chili sauce.

BOTULISM, INFANT. Number of reported cases, by year — United States, 1987–2007



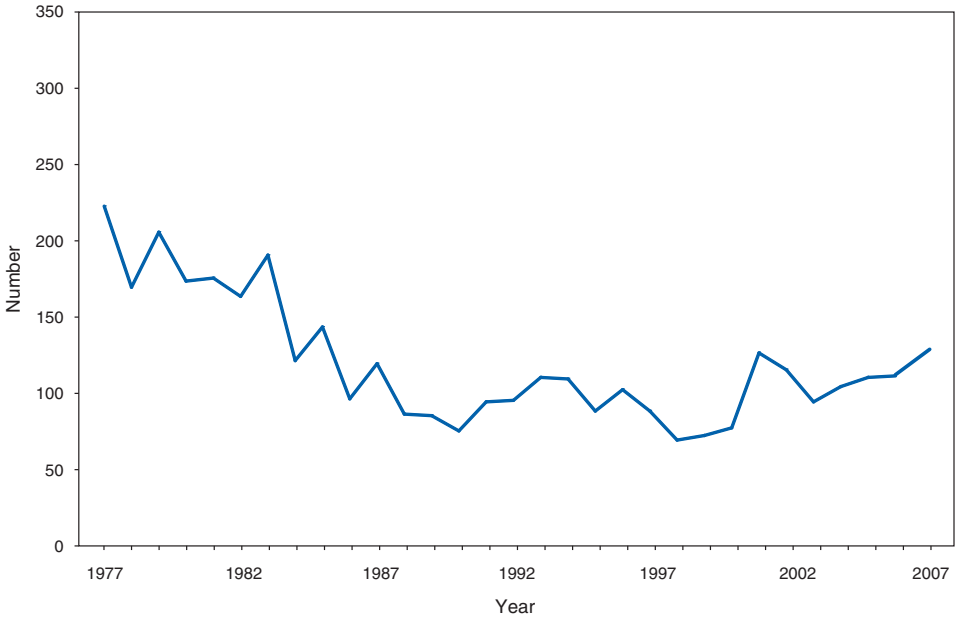
Infant botulism is the most common type of botulism in the United States. Cases are sporadic. Honey is the only known risk factor to date, though many cases have no known honey exposure.

BOTULISM, OTHER (includes wound and unspecified). Number of reported cases, by year — United States, 1997–2007



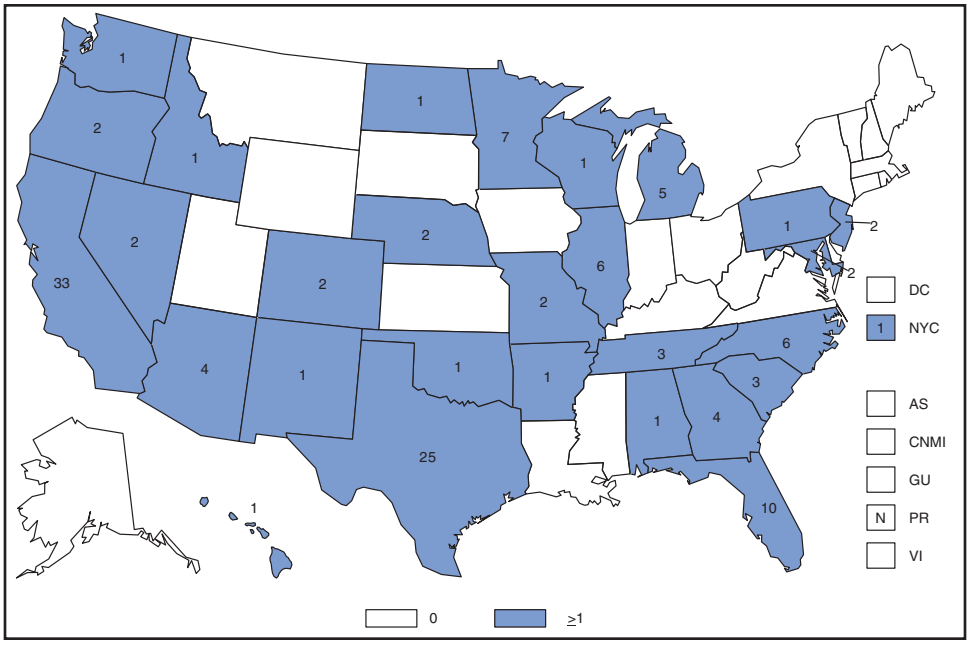
Wound botulism cases occur almost exclusively among injection-drug users in the western United States and are associated with a particular type of heroin known as black-tar heroin. The number of cases attributed to wound botulism was highest in 2006.

BRUCELLOSIS. Number of reported cases, by year — United States, 1977–2007



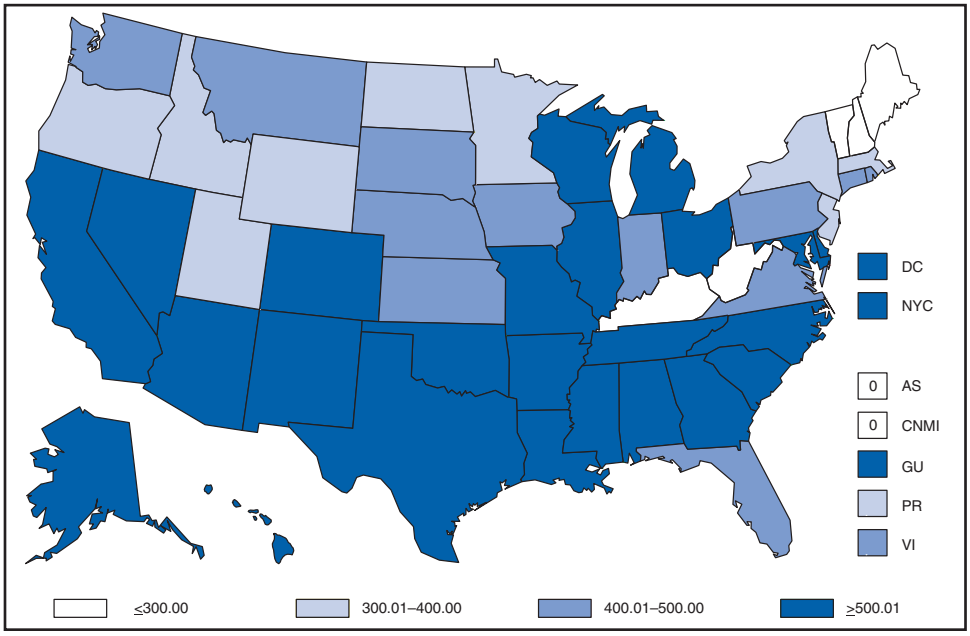
The incidence of brucellosis in the United States has been increasing slightly in recent years. Although brucellosis in U.S. cattle is in the final stages of eradication, the disease persists in feral swine, elk, and bison, increasing the risk of transmission to hunters while cleaning and dressing these animals. Outside of the United States, brucellosis remains endemic in a number of areas, including Mexico and the Mediterranean region, which poses a high risk of infection to travelers who consume unpasteurized milk products, including soft cheeses.

BRUCELLOSIS. Number of reported cases — United States and U.S. territories, 2007



Reports of brucellosis cases are more frequent along the southern U.S. border, as the disease remains endemic in Mexico. Consumption of unpasteurized milk products, including soft cheeses from regions where brucellosis is common in cattle, sheep, and goats, presents a significant risk. Brucellosis caused by contact with infected feral swine while hunting has been documented in Florida and California.

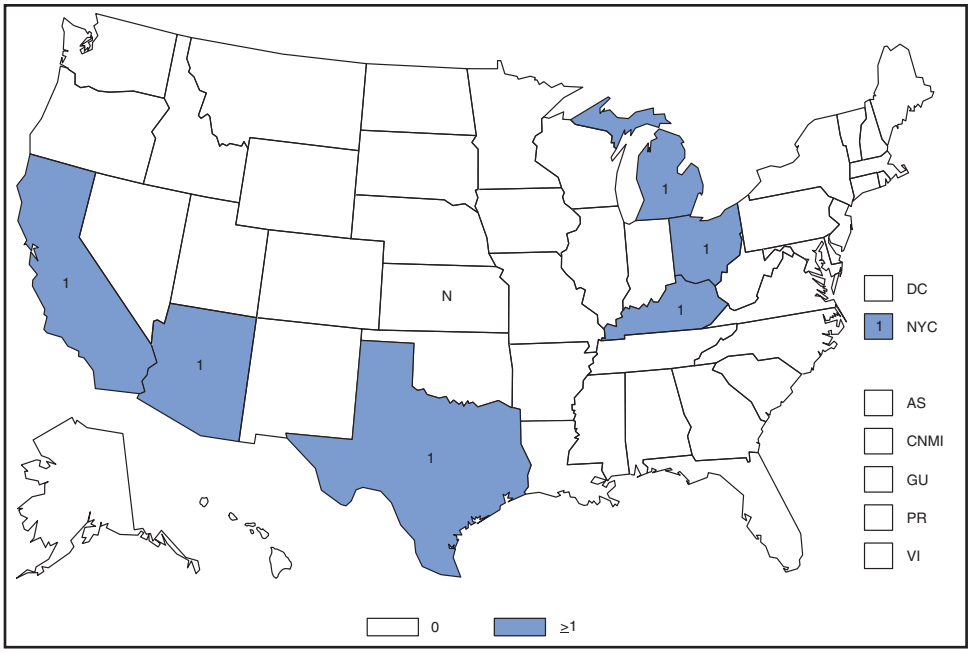
CHLAMYDIA. Incidence* among women — United States and U.S. territories, 2007



* Per 100,000 population.

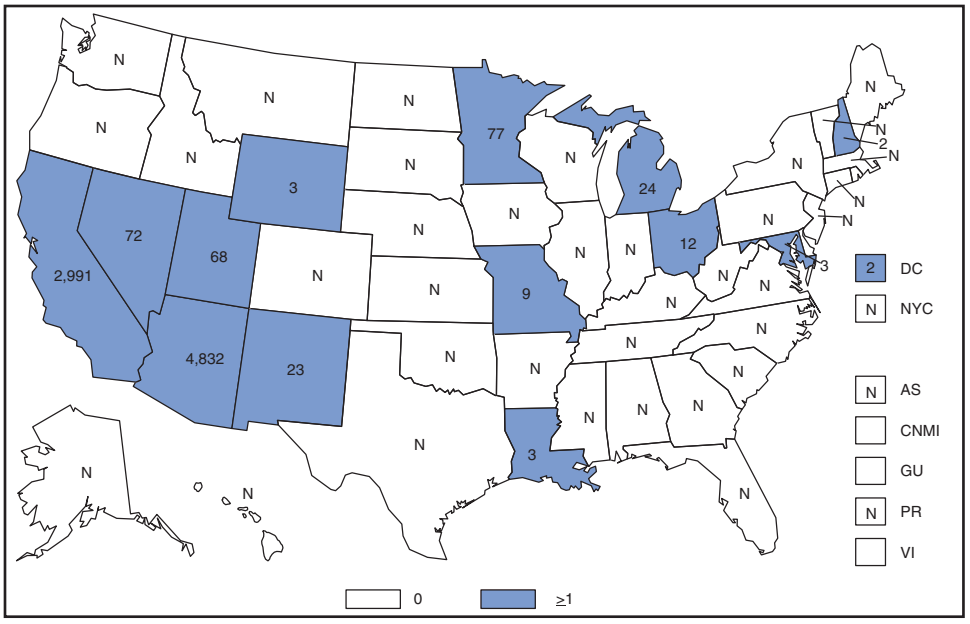
Chlamydia refers to genital infections caused by *Chlamydia trachomatis*. In 2007, the chlamydia rate among women in the U.S. and territories (Guam, Puerto Rico, and Virgin Islands) was 540.9 cases per 100,000 population.

CHOLERA. Number of reported cases — United States and U.S. territories, 2007



In 2007, approximately half of the infections of cholera were acquired during travel to Southeast Asia; the other half were acquired through the consumption of domestic seafood. Foreign travel and the consumption of contaminated domestic seafood remain important sources of cholera infection.

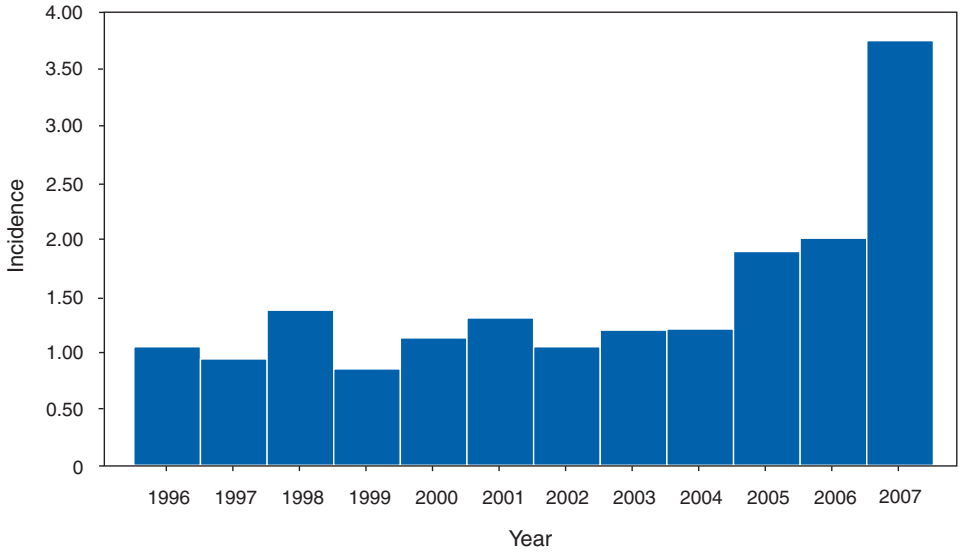
COCCIDIOIDOMYCOSIS. Number of reported cses — United States* and U.S. territories, 2007



*In the United States, coccidioidomycosis is endemic to the southwestern States. However, cases have been reported in other states, usually among travelers returning from areas in which the disease is endemic.

Reports of coccidioidomycosis cases decreased slightly nationwide in 2007, reflecting a decrease in the number of cases reported from California and Arizona. Cases reported from outside the disease-endemic states of Arizona, California, Nevada, New Mexico, Texas, and Utah likely represent exposure during travel to a disease-endemic area.

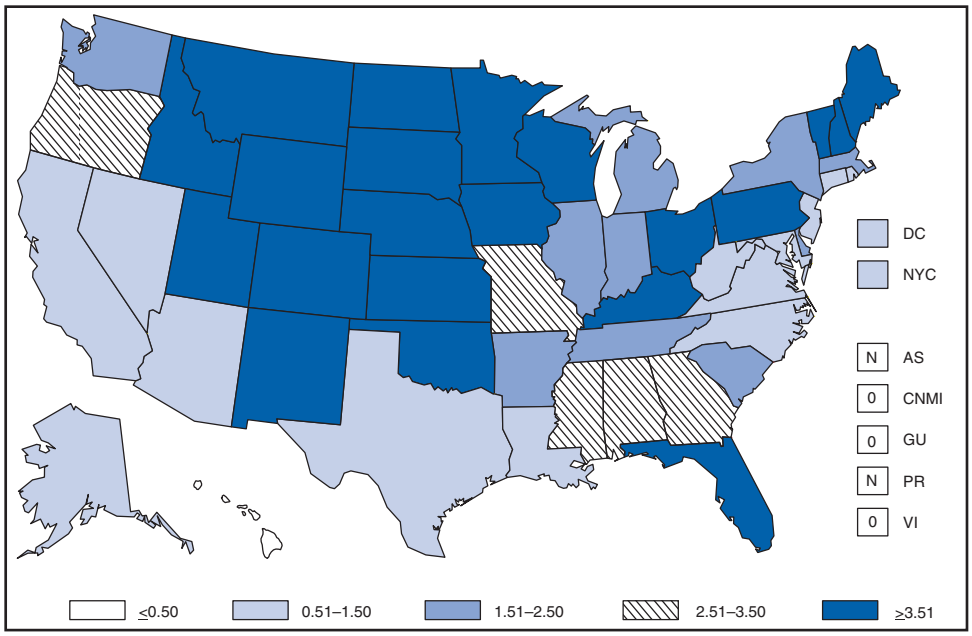
CRYPTOSPORIDIOSIS. Incidence,* by year — United States, 1996–2007



* Per 100,000 population.

The increase in the incidence of cryptosporidiosis that began in 2005 accelerated in 2007. Whether this increase reflects changing diagnostic testing and reporting patterns or a real increase in cryptosporidiosis is unclear.

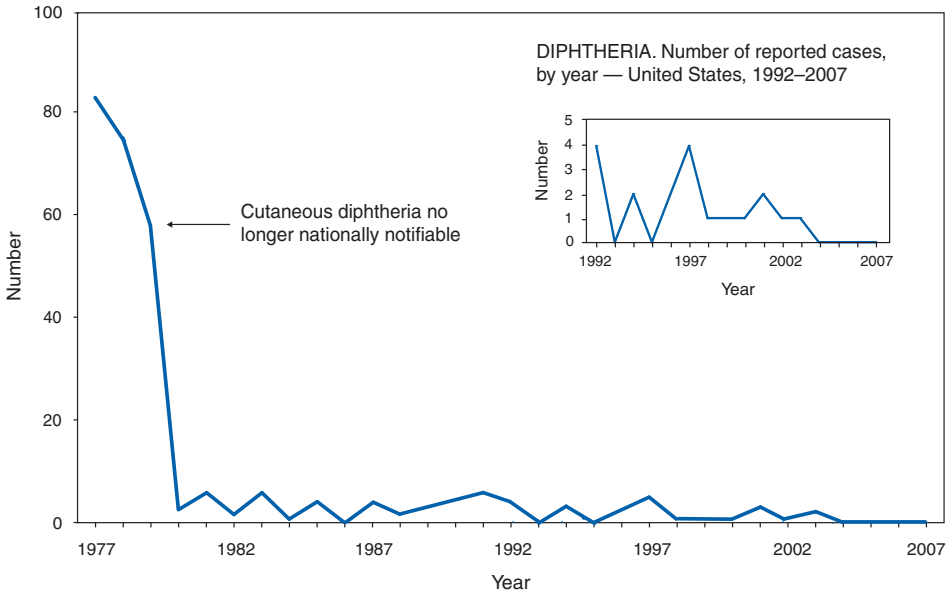
CRYPTOSPORIDIOSIS. Incidence* — United States and U.S. territories, 2007



* Per 100,000 population.

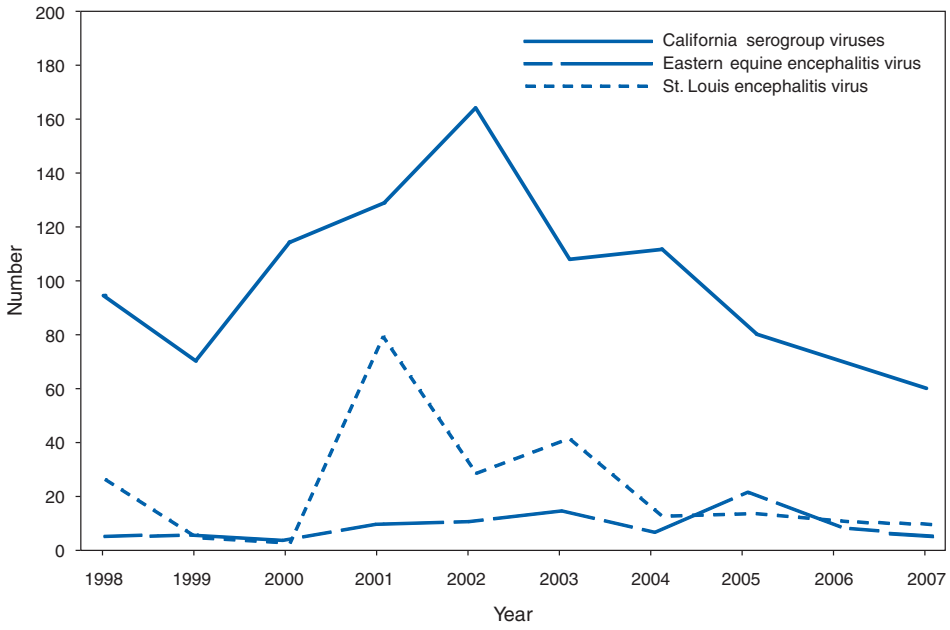
Cryptosporidiosis is widespread geographically in the United States, and differences in incidence between states might be affected by the capacity of states to detect and report cases. Although increased diagnosis and reporting has been noted previously in northern states, cryptosporidiosis has increased in nearly all states. Increased onset of illness occurs during summer, coinciding with increased use of recreational water.

DIPHTHERIA. Number of reported cases, by year — United States, 1977–2007



Since 2004, no case of respiratory diphtheria has been reported in the United States, and the national health objective for 2010 of zero cases has been maintained.

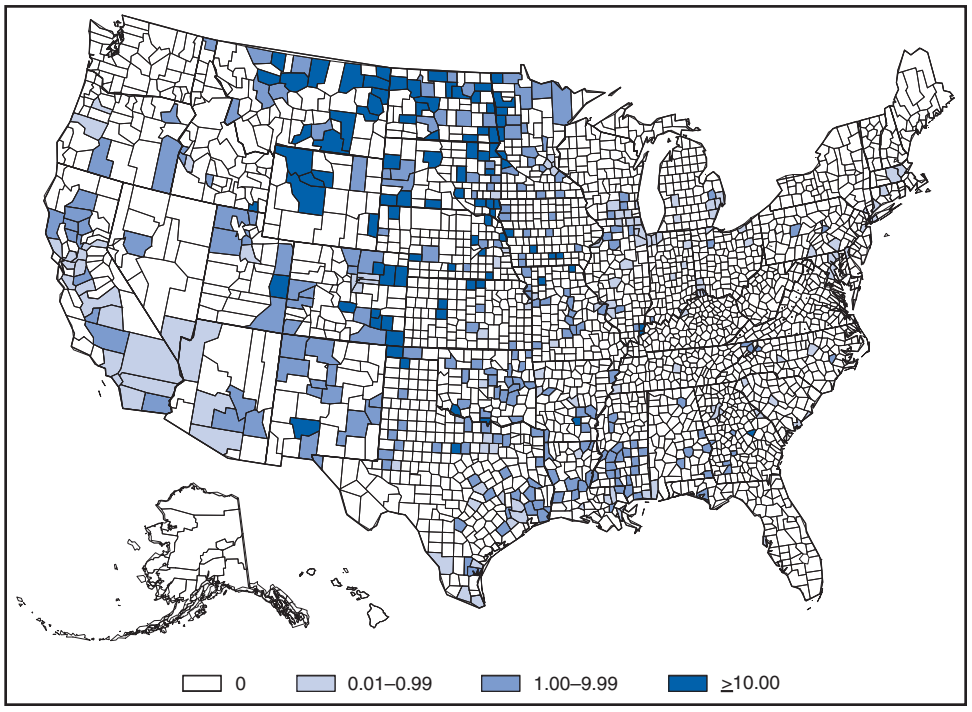
DOMESTIC ARBOVIRAL DISEASES. Number* of reported cases of neuroinvasive disease, by year — United States, 1998–2007



* Data from the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Only reported cases of neuroinvasive disease are shown.

Arthropod-borne viruses (arboviruses) are transmitted primarily during the summer and fall in the United States, with the incidence of human disease peaking in the late summer. The most common arboviruses affecting humans in the United States are West Nile virus (WNV), La Crosse virus (LACV), eastern equine encephalitis virus (EEEV), and St. Louis encephalitis virus (SLEV). LACV is the most common California (CAL) serogroup virus in the United States. LACV causes neuroinvasive disease primarily among children. In 2007, CAL serogroup virus disease cases were reported from 10 states (Georgia, Illinois, Iowa, Minnesota, New York, North Carolina, Ohio, Tennessee, West Virginia, and Wisconsin). During 1998–2007, a median of 105 (range: 55–167) cases per year were reported in the United States. EEEV disease in humans is associated with high mortality rates (>20%) and severe neurologic sequelae. In 2007, EEEV cases were reported from two states (Alabama and New Hampshire). During 1998–2007, a median of seven (range: 3–21) cases per year were reported in the United States. Before the introduction of WNV to the United States, SLEV was the nation's leading cause of epidemic viral encephalitis. In 2007, SLEV cases were reported from five states (Arkansas, Louisiana, Missouri, Mississippi, and Nevada). During 1998–2007, a median of 11 (range: 2–79) cases per year were reported in the United States.

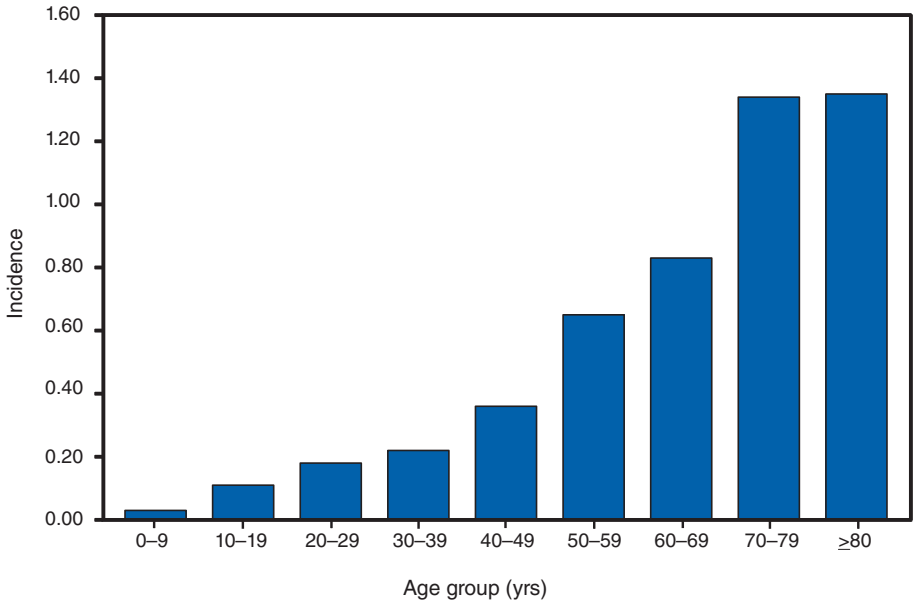
DOMESTIC ARBOVIRAL DISEASES, WEST NILE. Incidence* of reported cases of neuroinvasive disease, by county — United States, 2007



* Per 100,000 population.

In 2007, the reported incidence of West Nile virus neuroinvasive disease in the United States was 0.4 per 100,000 population. This incidence is similar to that reported in 2004 (0.4), 2005 (0.4), and 2006 (0.5) but substantially lower than the reported incidence for 2002 (1.0) and 2003 (1.0). The highest incidence occurred primarily in the west-central United States. The five states with highest incidence were North Dakota (7.7), South Dakota (6.2), Wyoming (4.6), Montana (4.0), and Colorado (2.2).

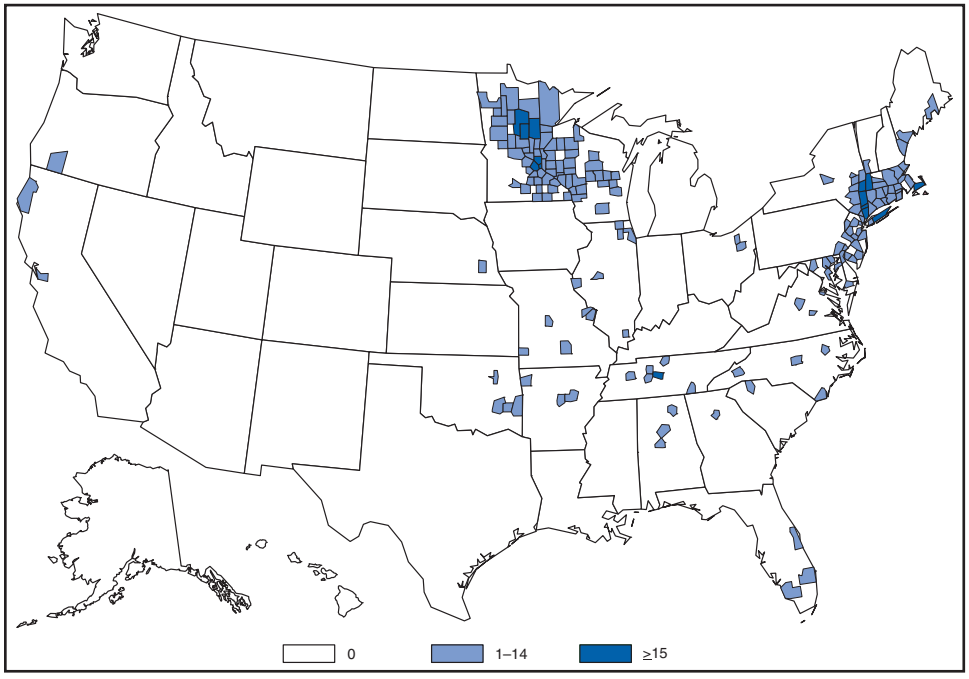
DOMESTIC ARBOVIRAL DISEASES, WEST NILE. Incidence* of reported cases of neuroinvasive disease, by age group — United States, 2007



* Per 100,000 population.

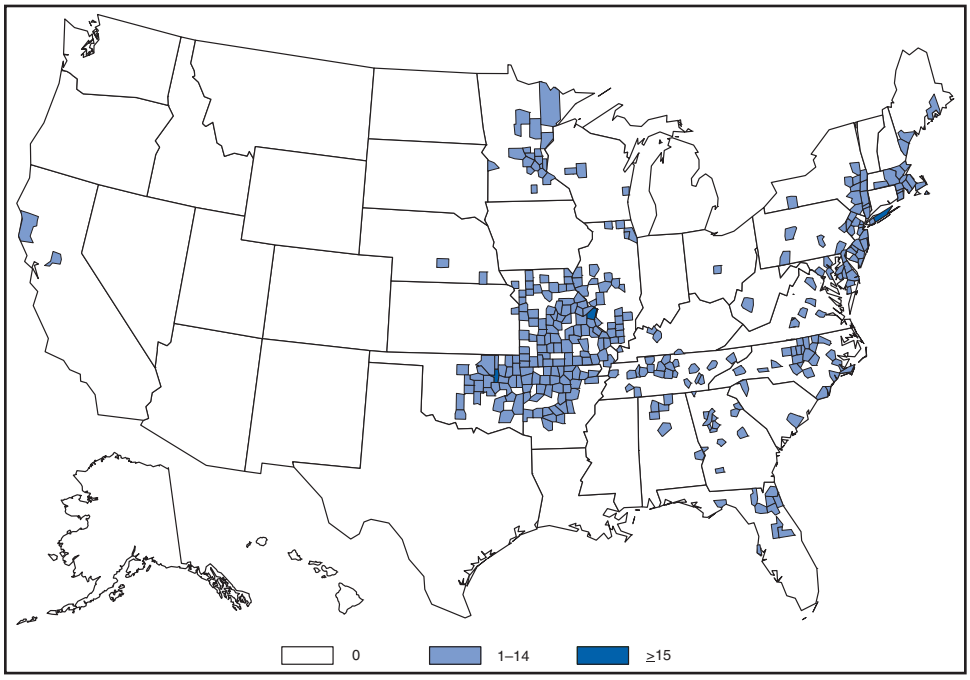
In 2007, the median age of patients with West Nile virus neuroinvasive disease was 57 years (range: 1 month – 97 years), with increasing incidence among older age groups.

EHRLICHIOSIS, HUMAN GRANULOCYTIC. Number of reported cases, by county — United States, 2007



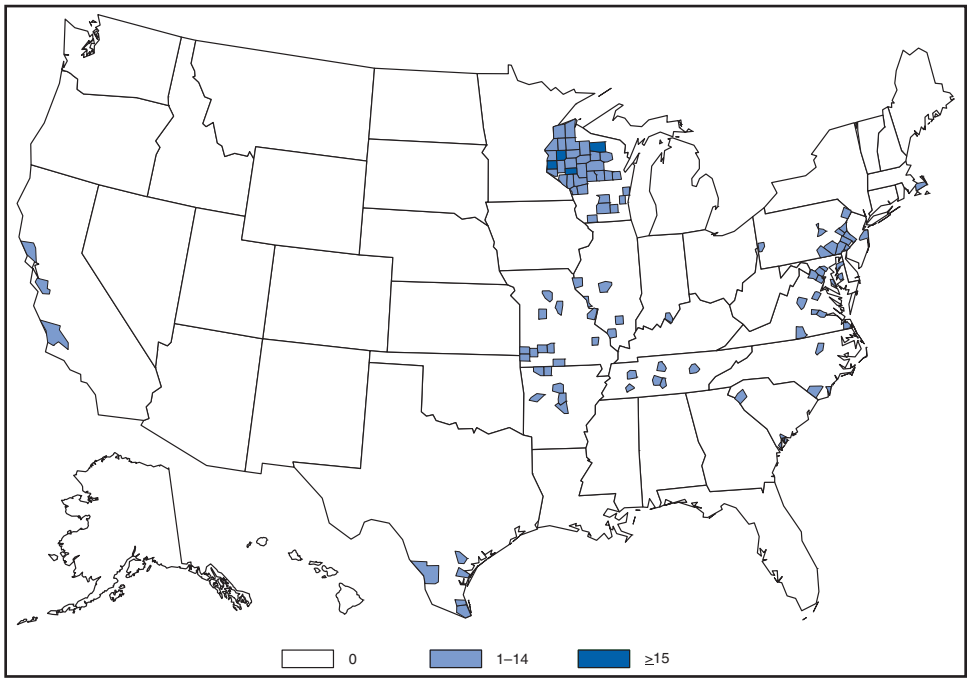
Human granulocytic ehrlichiosis (HGE), caused by *Anaplasma phagocytophilum*, is more correctly referred to as anaplasmosis as a result of recent taxonomic changes. Cases are reported primarily from the upper Midwest and coastal New England, reflecting both the range of the primary tick vector species (*Ixodes scapularis*) and the range of preferred animal hosts for tick feeding.

EHRLICHIOSIS, HUMAN MONOCYTIC. Number of reported cases, by county — United States, 2007



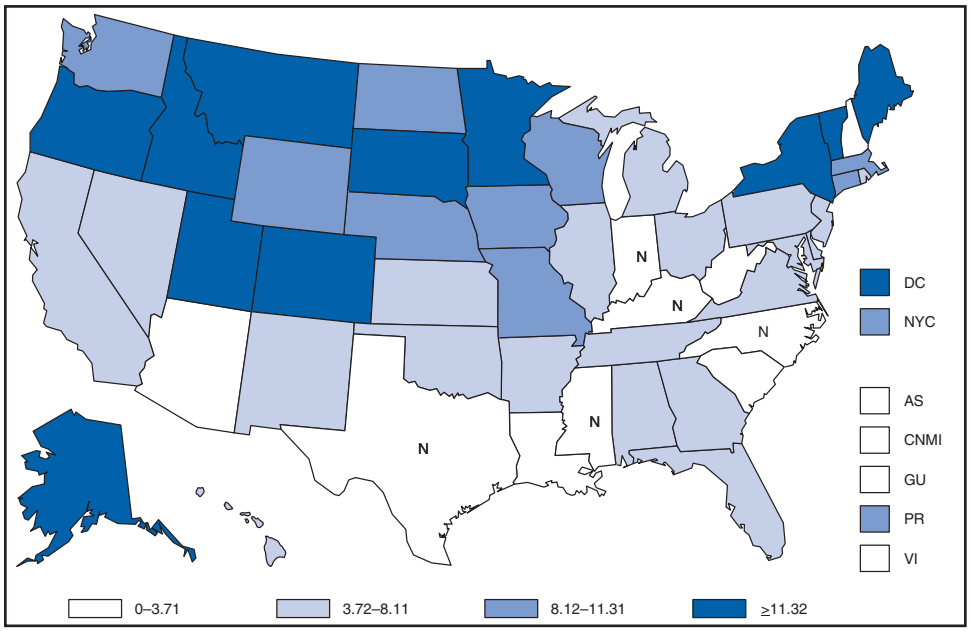
Human monocytic ehrlichiosis (HME), caused by *Ehrlichia chaffeensis*, is the most common type of ehrlichiosis. Cases are reported primarily in the lower Midwest and the Southeast, reflecting the range of the primary tick vector species (*Amblyomma americanum*).

EHRLICHIOSIS, HUMAN (other & unspecified). Number of reported cases, by county — United States, 2007



Cases of ehrlichiosis caused by other species (such as *E. ewingii*), or more commonly, cases for which the geographically expected species is not clearly differentiated by serologic testing, are reflected in this reporting category. Because *Ehrlichia* and *Anaplasma* infections might elicit cross-reactive antibody responses, some states might also use this category to report cases for which single, inappropriate diagnostic tests were run (e.g., physicians ordering only HME tests in a region where HGE would be expected to predominate).

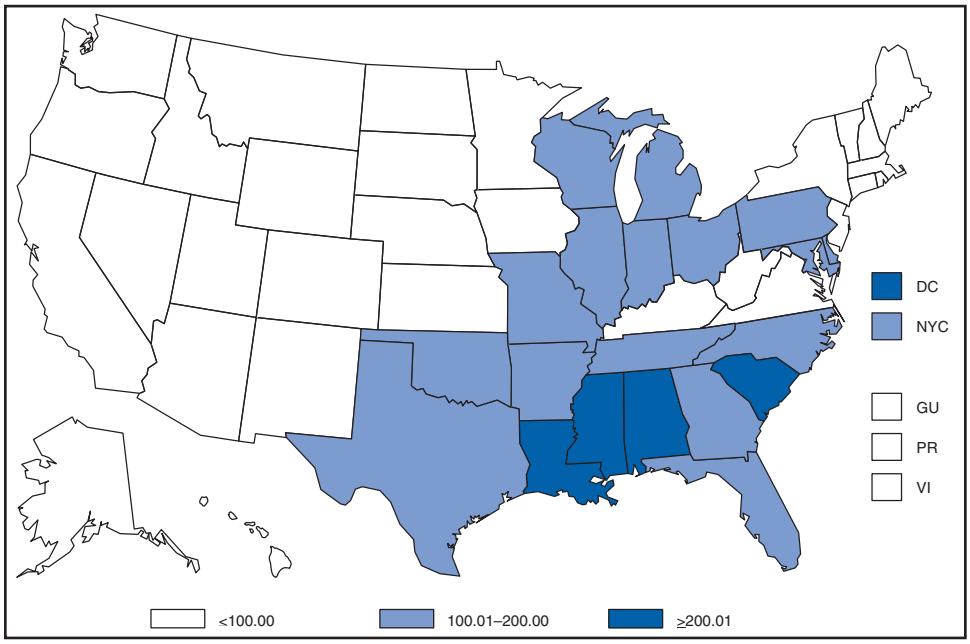
GIARDIASIS. Incidence* — United States and U.S. territories, 2007



* Per 100,000 population.

Giardiasis is widespread geographically in the United States, with increased reporting of giardiasis in northern states. However, because differences in giardiasis surveillance systems among states can affect the capability to detect cases, whether this finding is of true biologic significance or is the result of differences in case detection or reporting is difficult to determine.

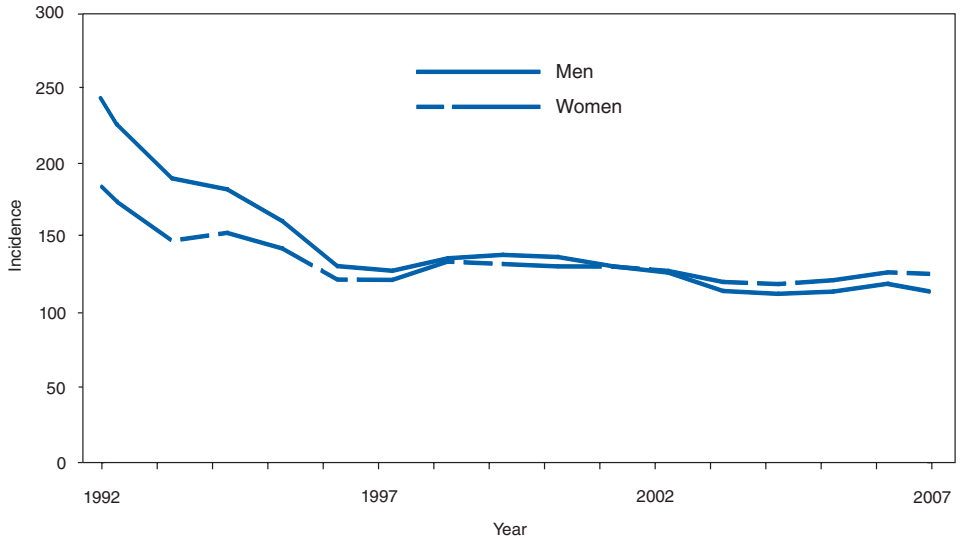
GONORRHEA. Incidence* — United States and U.S. territories, 2007



* Per 100,000 population.

In 2007, the gonorrhea rate in the United States and U.S. territories (Guam, Puerto Rico, and Virgin Islands) was 117.4 cases per 100,000 population, a decrease from the rate in 2006. The *Healthy People 2010* national objective is ≤19 cases per 100,000 population. Seven states (Idaho, Maine, Montana, New Hampshire, North Dakota, Vermont, and Wyoming) and Puerto Rico reported rates below the national objective.

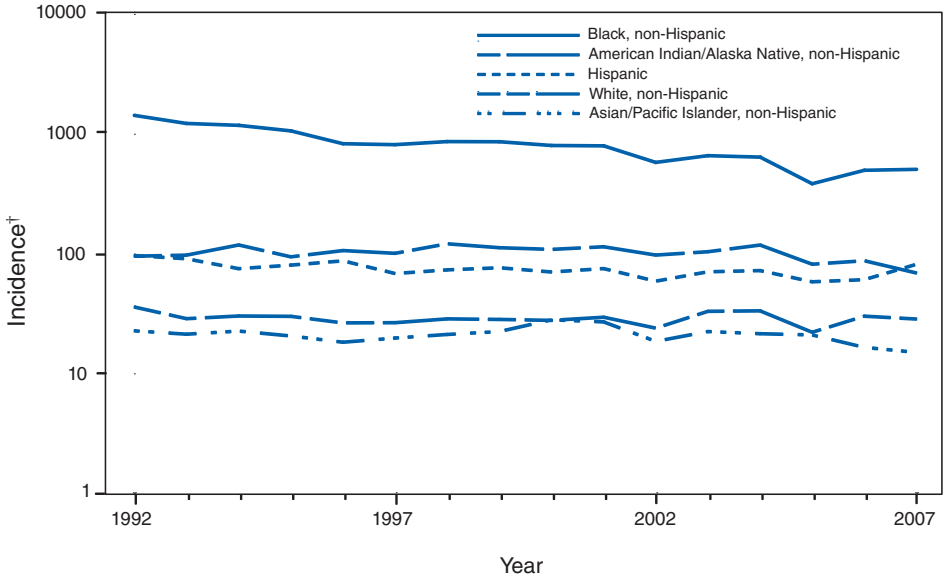
GONORRHEA. Incidence,* by sex — United States, 1992–2007



* Per 100,000 population.

After a 74% decline in the rate of reported gonorrhea during 1975–1997, overall gonorrhea rates remained stable. In 2007, for the seventh year in a row, the gonorrhea rate among women was slightly higher than the rate among men.

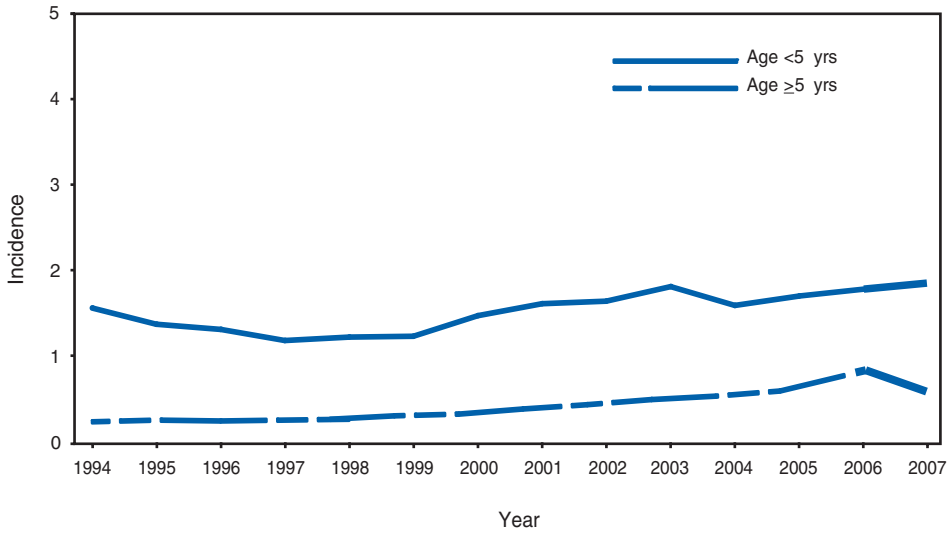
GONORRHEA. Incidence,* by race/ethnicity — United States, 1992–2007



* Per 100,000 population.
† Y-axis is log scale.

Gonorrhea incidence among blacks decreased considerably during the 1990s but continues to be the highest among all races/ethnicities. In 2007, incidence among non-Hispanic blacks was approximately 19 times greater than that for non-Hispanic whites.

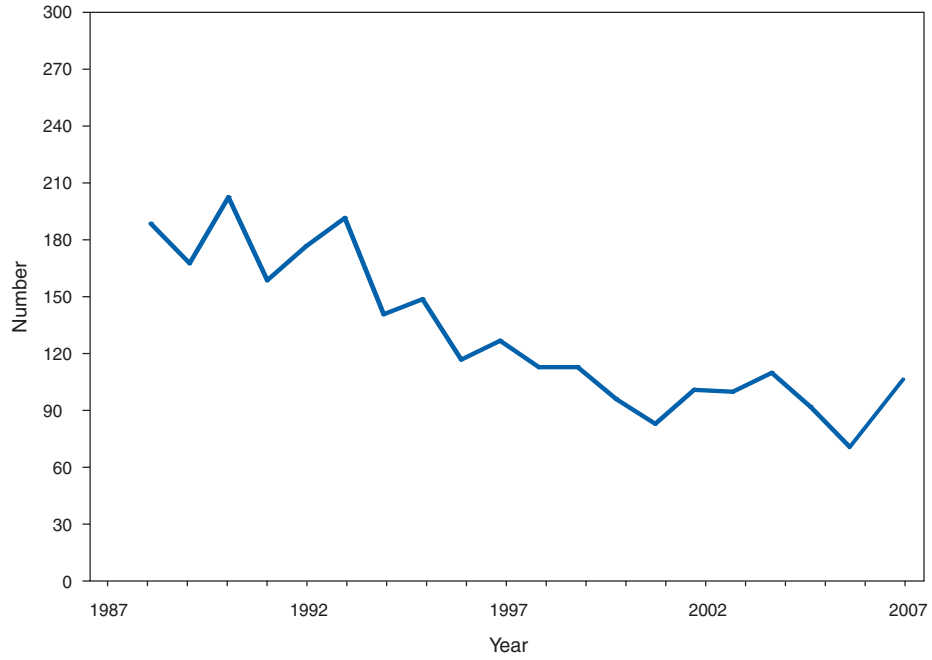
***HAEMOPHILUS INFLUENZAE*, INVASIVE DISEASE. Incidence, * by age group — United States, 1994–2007**



* Per 100,000 population.

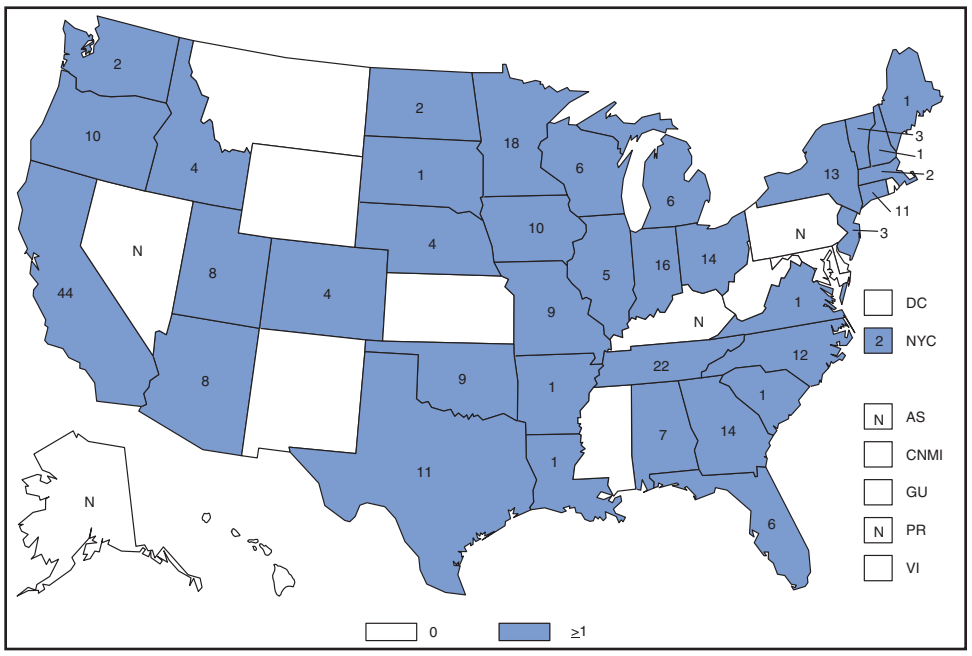
Substantial reductions in the incidence of *Haemophilus influenzae* serotype b (Hib) disease have been achieved through universal Hib vaccination. Before introduction of conjugate vaccines in 1987, the incidence of invasive Hib disease among children aged <5 years was estimated to be 100 cases per 100,000 population. To monitor the epidemiology of Hib invasive disease and to detect the emergence of invasive non-Hib, serotyping of all Hi isolates in children aged <5 years and thorough and timely investigation of all cases of Hib disease are essential.

HANSEN DISEASE (LEPROSY). Number of reported cases, by year — United States, 1988–2007



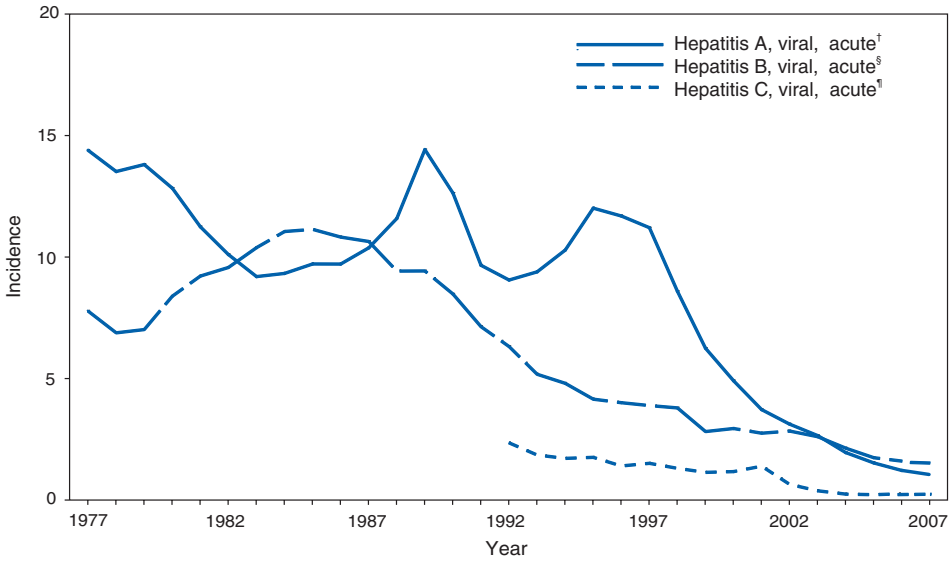
The number of cases of Hansen disease reported per year gradually declined during 1988–2006. Reported cases in 2007 increased 49% from 2006, which might reflect efforts CDC has made to improve reporting.

HEMOLYTIC UREMIC SYNDROME, POSTDIARRHEAL. Number of reported cases — United States and U.S. territories, 2007



In the United States, the majority of cases of postdiarrheal hemolytic uremic syndrome (HUS) are caused by infection with *Escherichia coli* O157:H7. Infection with other serotypes of Shiga toxin-producing *E. coli* can cause HUS. During 2007, as usual, the majority of reported cases occurred among children aged 1–4 years. HUS has been a nationally notifiable disease since 1995.

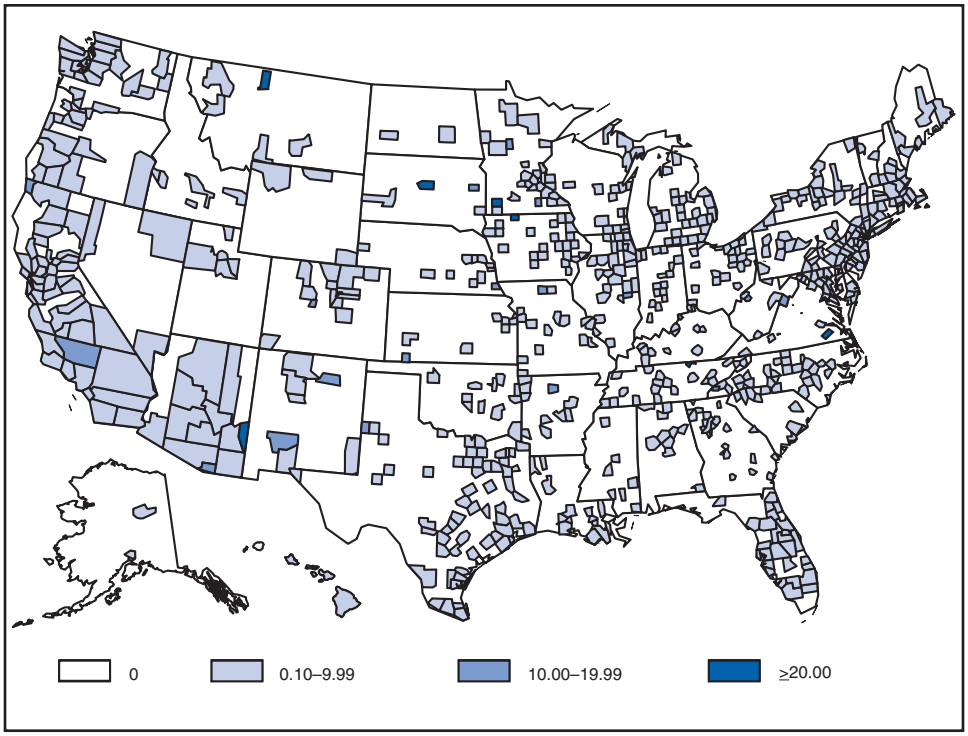
HEPATITIS, VIRAL. Incidence,* by year — United States, 1977–2007



* Per 100,000 population.
† Hepatitis A vaccine was first licensed in 1995.
§ Hepatitis B vaccine was first licensed in June 1982.
¶ An anti-hepatitis C virus (HCV) antibody test first became available in May 1990.

Hepatitis A incidence continues to decline and in 2007 was the lowest ever recorded. This reduction in incidence is attributable at least in part to routine vaccination of children. Hepatitis A incidence has declined 90% since the last nationwide outbreak in 1995. Routine hepatitis B vaccination of infants has reduced rates >95% in children. Rates have also declined among adults, but a substantial proportion of cases continue to occur among adults with high-risk behaviors. Incidence of acute hepatitis C has declined approximately 90% since 1992; however, a substantial burden of disease as a result of chronic HCV infection remains.

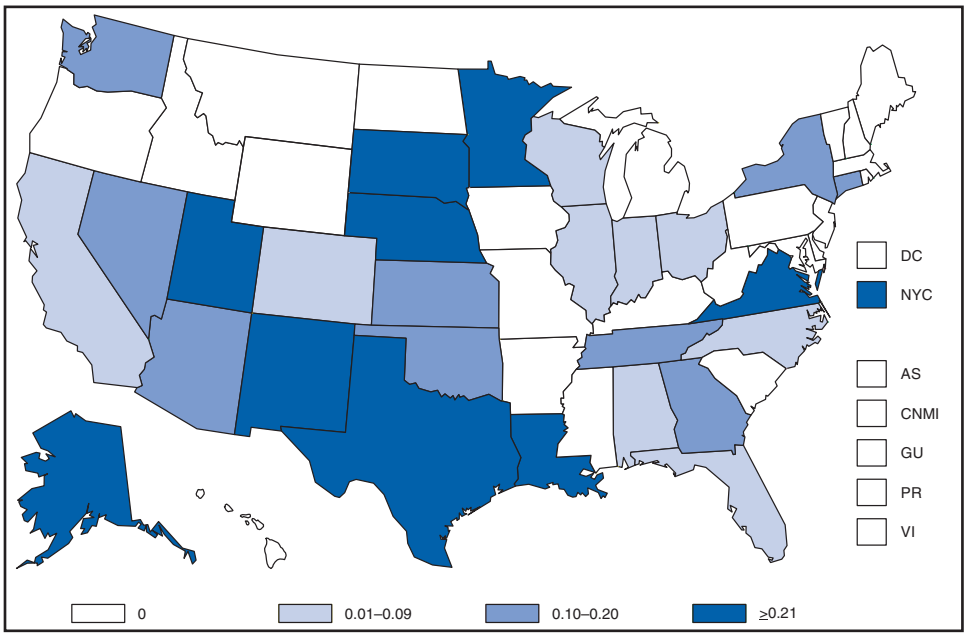
HEPATITIS A. Incidence* by county — United States, 2007



* Per 100,000 population.

In 1999, routine hepatitis A vaccination was recommended for children living in 11 states with consistently elevated rates of disease. Since then, rates of infection with hepatitis A virus (HAV) have declined in all regions, with the greatest decline occurring in western states. HAV infection rates are now the lowest ever reported and similar in all regions. As of 2005, hepatitis A vaccine is now recommended for children in all states.

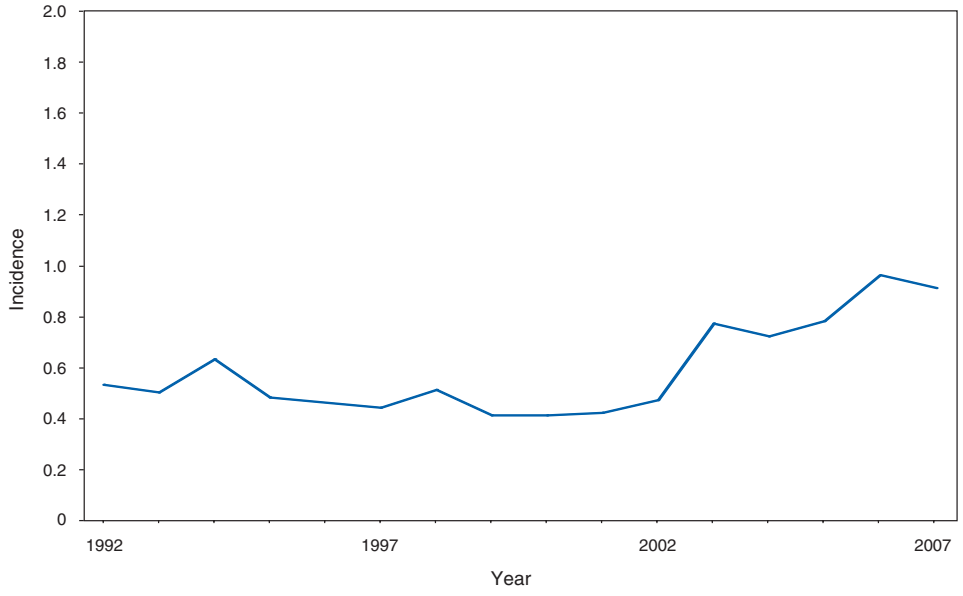
INFLUENZA-ASSOCIATED PEDIATRIC MORTALITY. Incidence* — United States and U.S. territories, 2007



* Per 100,000 population.

During 2007, a total of 77 influenza-associated pediatric deaths were reported to CDC by 27 states, New York City, and Chicago, for an overall incidence rate in the United States of 0.10 deaths per 100,000 children aged <18 years. This is similar to rates estimated through mathematical modeling. State-to-state variation in rates was small and likely reflected the rarity of the event and small population size rather than true differences in disease.

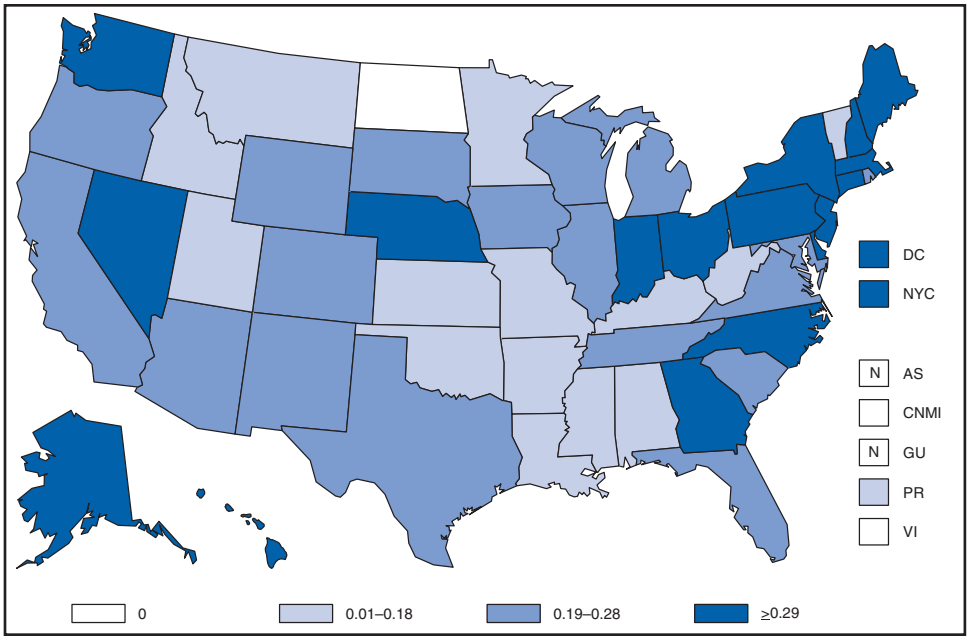
LEGIONELLOSIS. Incidence, * by year — United States, 1992–2007



* Per 100,000 population.

Legionellosis incidence declined slightly in 2007 compared with 2006. Factors contributing to an overall increase in recent years might include a true increase in disease transmission, greater use of diagnostic testing, and increased reporting.

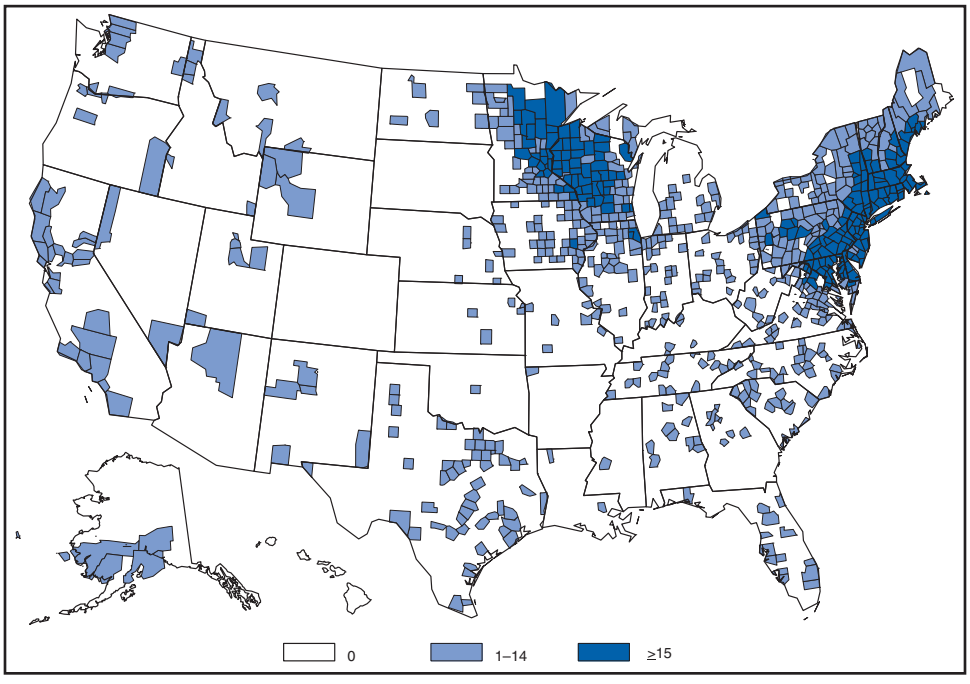
LISTERIOSIS. Incidence* — United States and U.S. territories, 2007



* Per 100,000 population.

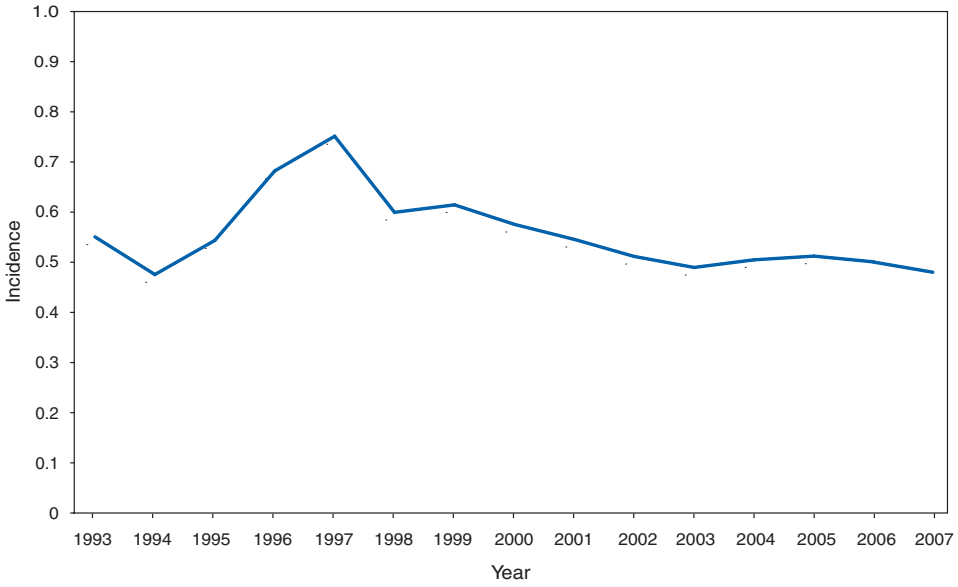
Listeriosis is primarily foodborne and occurs most frequently among persons who are older, pregnant, or immunocompromised. Recent outbreaks have been associated with deli meats and unpasteurized cheeses.

LYME DISEASE. Number of reported cases, by county — United States, 2007



Over 95% of Lyme disease cases are reported from states in the northeastern and upper midwestern United States. A rash that can be confused with early Lyme disease sometimes occurs following bites of the lone star tick (*Amblyomma americanum*). These ticks, which do not transmit the Lyme disease bacterium, are common human-biting ticks in southern and southeastern United States.

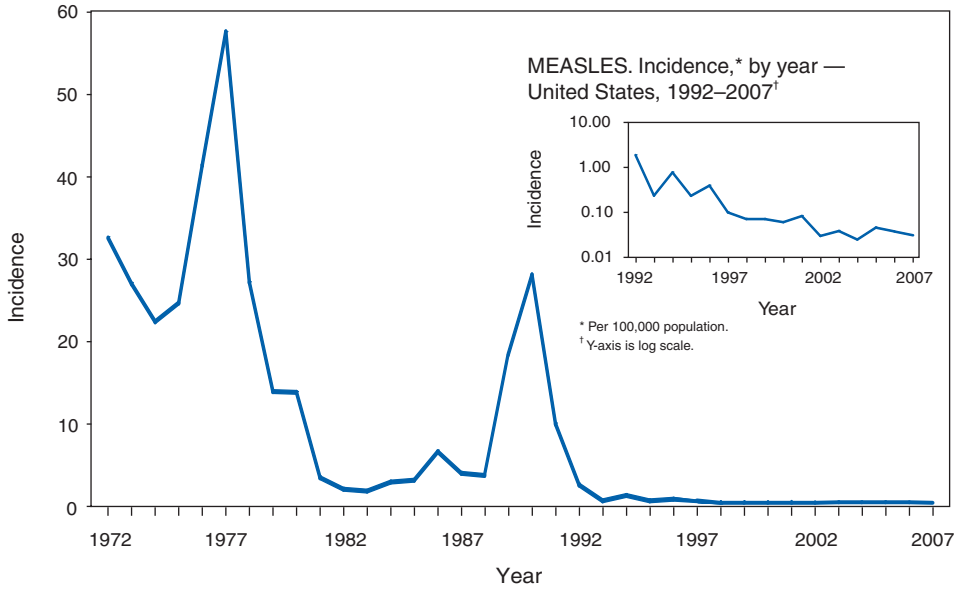
MALARIA. Incidence, * by year — United States, 1993–2007



* Per 100,000 population.

The number of reported cases of malaria in the United States has remained relatively stable for the preceding 5 years. Nearly all of these infections occur in persons who traveled recently to a malaria-endemic country.

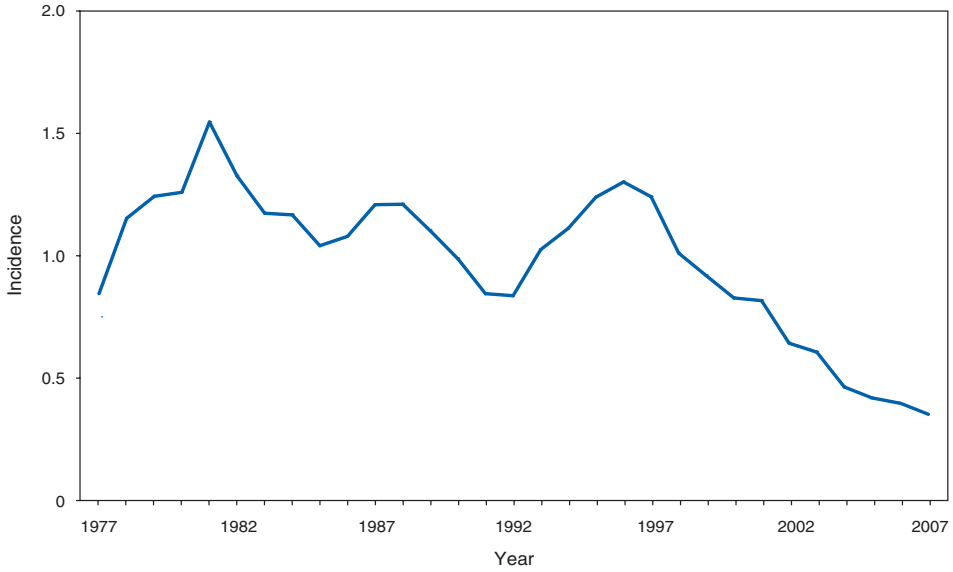
MEASLES. Incidence, * by year — United States, 1972–2007



* Per 100,000 population.

Measles vaccine was licensed in 1963. Evidence suggests that measles is no longer endemic in the United States.

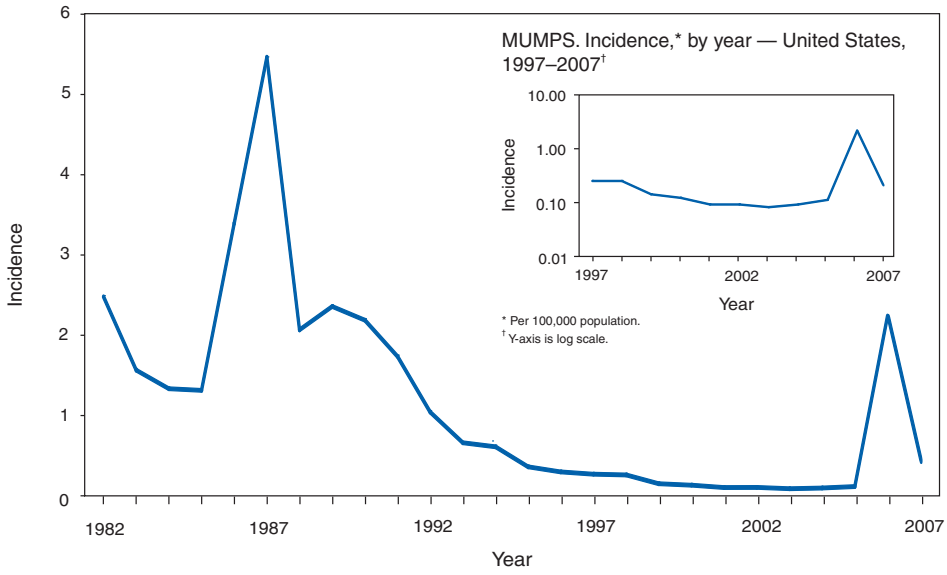
MENINGOCOCCAL DISEASE. Incidence, * by year — United States, 1977–2007



* Per 100,000 population.

Meningococcal disease incidence is currently at a historic low but continues to cause substantial morbidity and mortality in the United States. The highest incidence of meningococcal disease occurs among infants, with a second peak occurring during late adolescence. In 2005, a tetravalent (A, C, Y, W-135) meningococcal conjugate vaccine was licensed and recommended for adolescents and others at increased risk for disease. Over time, the new vaccine is expected to have a substantial impact on the burden of meningococcal disease in the United States.

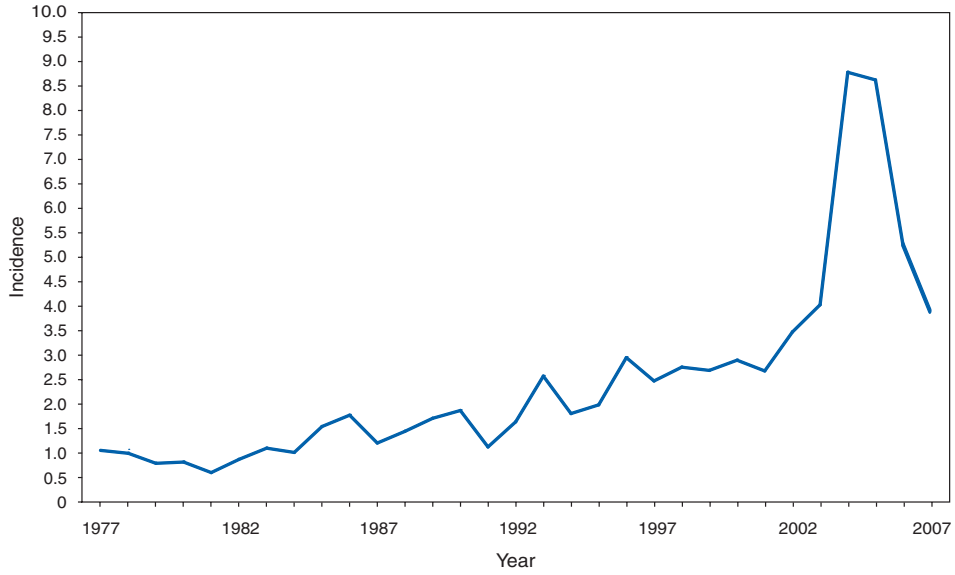
MUMPS. Incidence, * by year — United states, 1982–2007



* Per 100,000 population.

Mumps vaccine was licensed in 1967. The widespread use of a second dose of mumps vaccine in 1990 was followed by historically low morbidity until 2006, when the United States experienced the largest mumps outbreak in 2 decades. The 2006 outbreak of >6,000 cases affected primarily college students aged 18–24 years in the Midwest. As a result, the Advisory Committee on Immunization Practices (ACIP) updated its vaccination recommendations, and the Council of State and Territorial Epidemiologists (CSTE) updated its case definition.

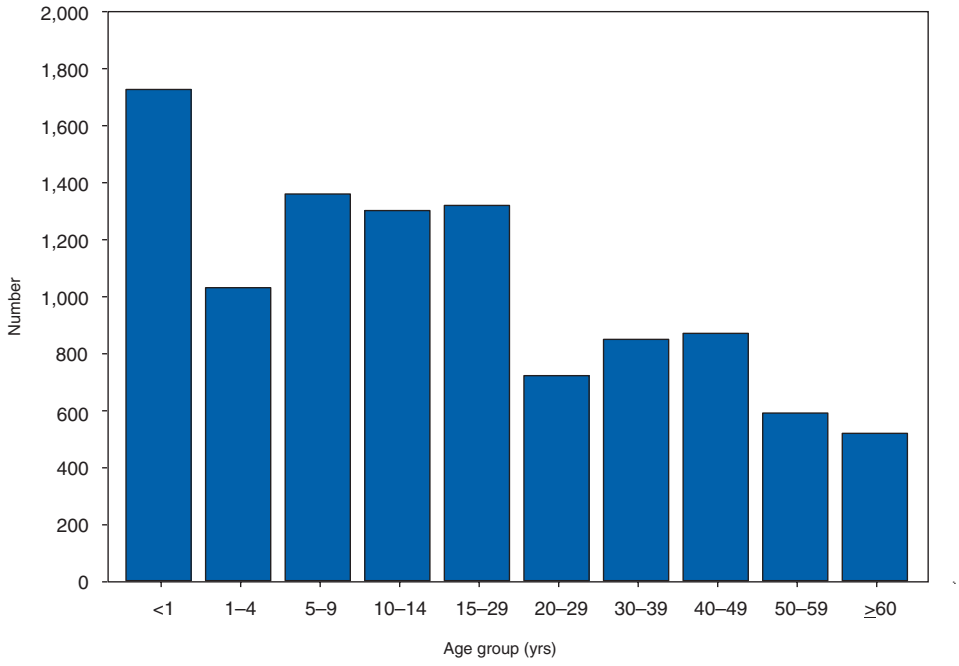
PERTUSSIS. Incidence,* by year — United States, 1977–2007



* Per 100,000 population.

In 2007, incidence of reported pertussis dropped sharply from the peak in 2004 but remains higher than in the 1990s.

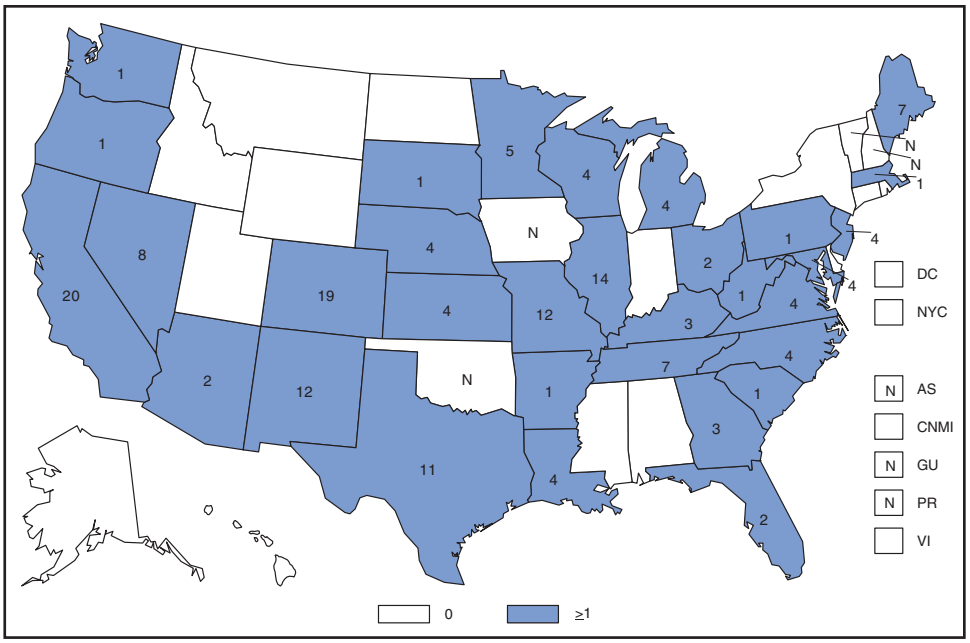
PERTUSSIS. Number of reported cases,* by age group — United States, 2007



* Of 10,454 cases, age was reported unknown for 212 persons.

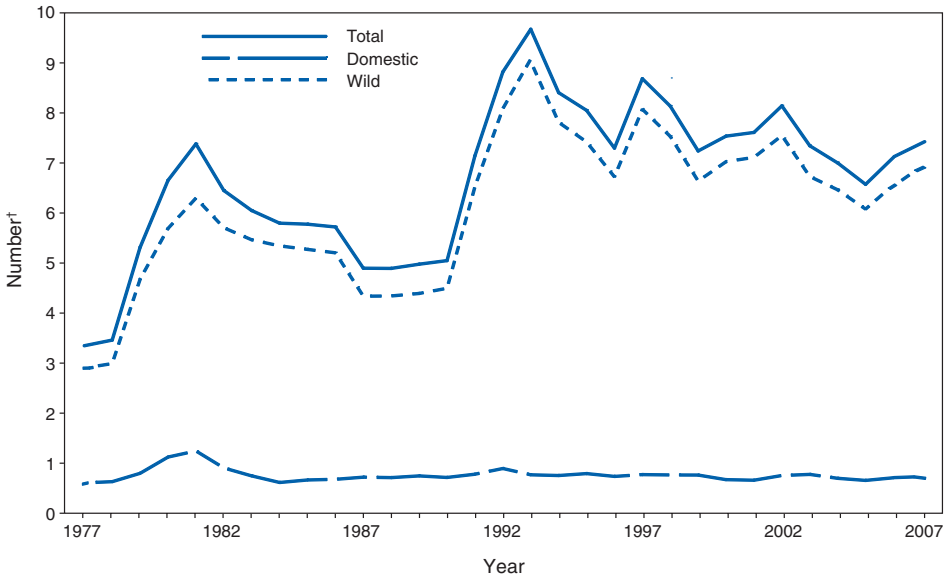
Infants, especially those who are undervaccinated, are at increased risk for complicated infections and death from pertussis. Immunity to pertussis wanes 5–10 years after completion of childhood vaccination. A second peak in the number of reported cases is observed in adolescents.

Q FEVER. Number of reported cases — United States and U.S. territories, 2007



Q fever, caused by *Coxiella burnetii*, is reported throughout the United States. Human cases occur as a result of human interaction with livestock, especially sheep, goats, and cattle. Although relatively few human cases are reported annually, the disease is believed to be substantially underreported because of its nonspecific presentation and the subsequent failure to suspect infection and request appropriate diagnostic tests.

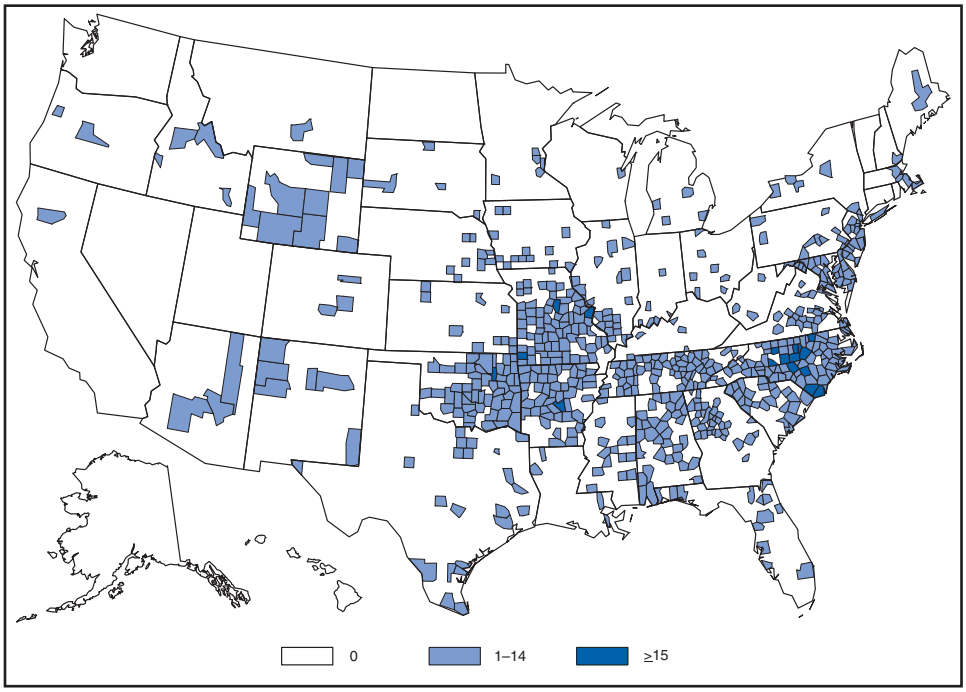
RABIES, ANIMAL. Number of reported cases among wild and domestic animals, * by year — United States and Puerto Rico, 1977–2007



* Data from the National Center for Zoonotic, Vector-Borne, and Enteric Diseases.
† In thousands.

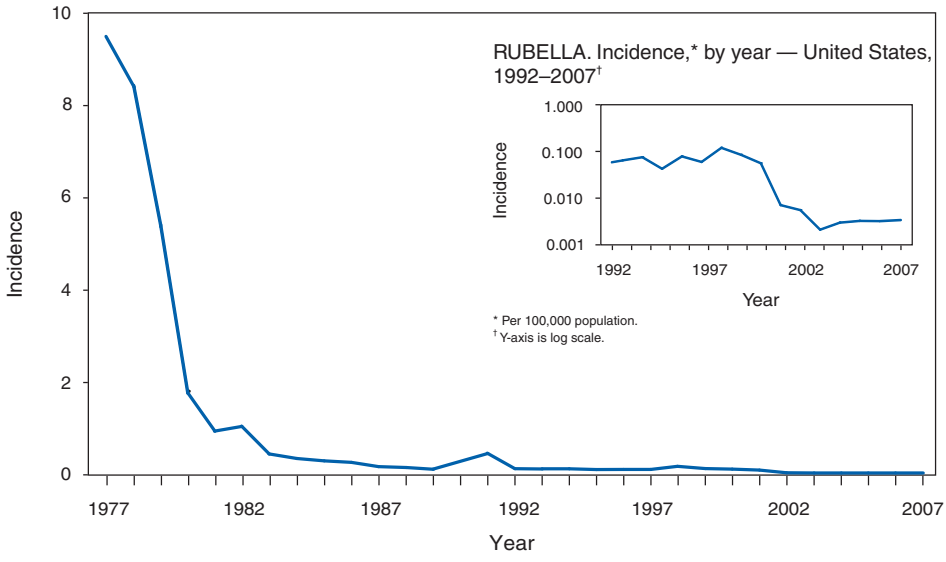
Periods of resurgence and decline of rabies incidence result primarily from cyclic reemergence. The recent increase of 1.7% in the number of reported cases from 2006 follows the current increasing trend. Although numeric increases are subject to surveillance bias, the proportion of positive cases among tested animals remained relatively stable during 2007. Recent increases in the number of reported cases of rabies in bats have led to this order of mammals becoming the second-most-reported group with rabies after raccoons.

ROCKY MOUNTAIN SPOTTED FEVER. Number of reported cases, by county — United States, 2007



Rocky Mountain spotted fever caused by *Rickettsia rickettsii*, is reported throughout much of the United States, reflecting the widespread ranges of the primary tick vectors responsible for transmission (primarily *Dermacentor variabilis* in the East and *Dermacentor andersonii* in the West, but also *Rhipicephalus sanguineus* in some newly recognized focal areas).

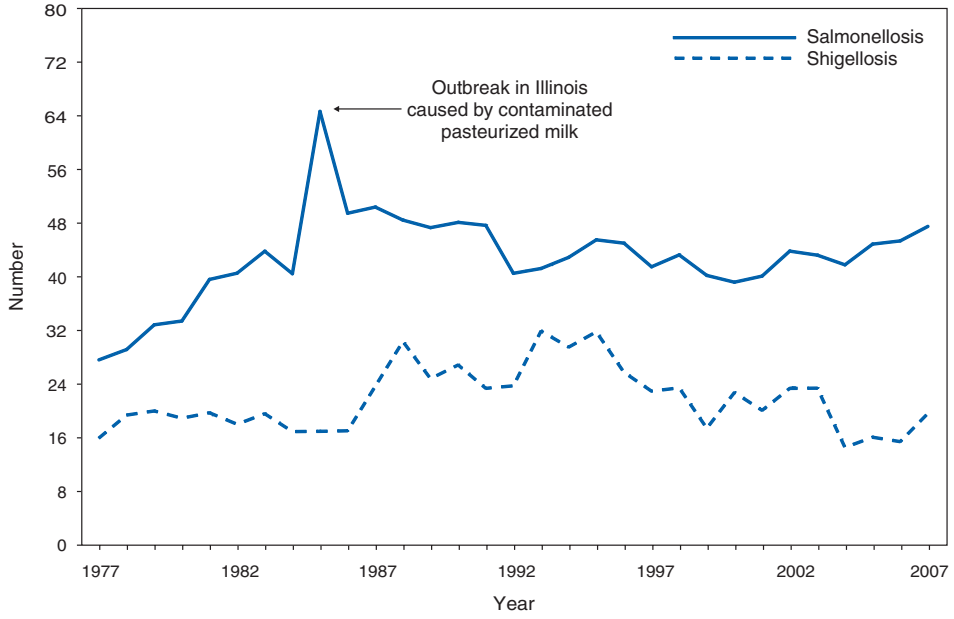
RUBELLA. Incidence, * by year — United States, 1977–2007



* Per 100,000 population.

Rubella vaccine was licensed in 1969. Evidence suggests that rubella is no longer endemic in the United States.

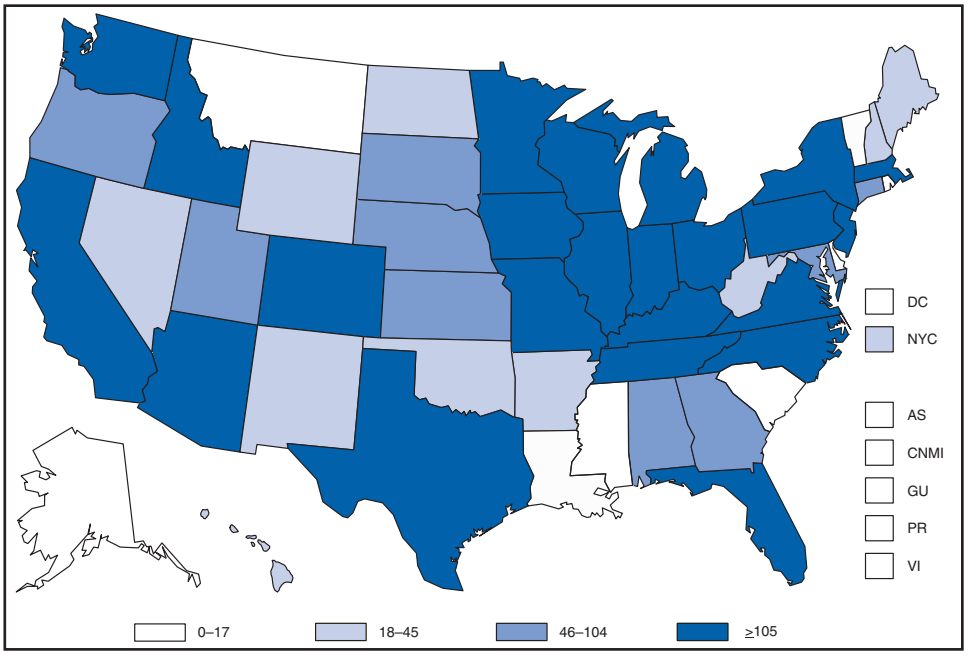
SALMONELLOSIS and SHIGELLOSIS. Number* of reported cases, by year — United States, 1977–2007



* In thousands.

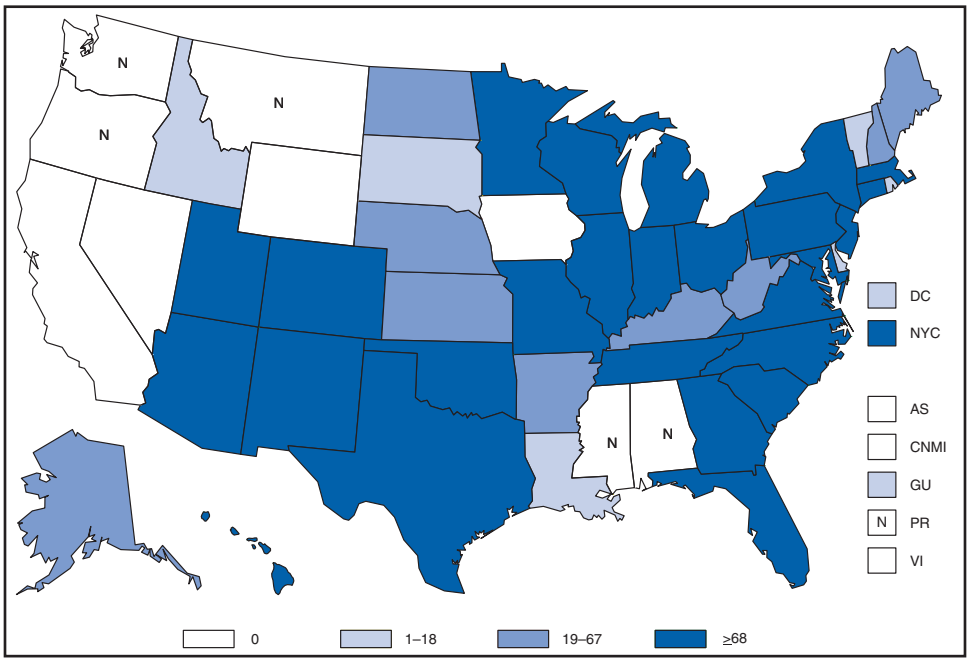
Rates of salmonellosis have remained relatively stable of the past decade. Serotypes Typhimurium, Enteritidis, and Newport are the most commonly reported *Salmonella* serotypes

SHIGA TOXIN-PRODUCING *ESCHERICHIA COLI* (STEC). Number of reported cases — United States and U.S. territories, 2007



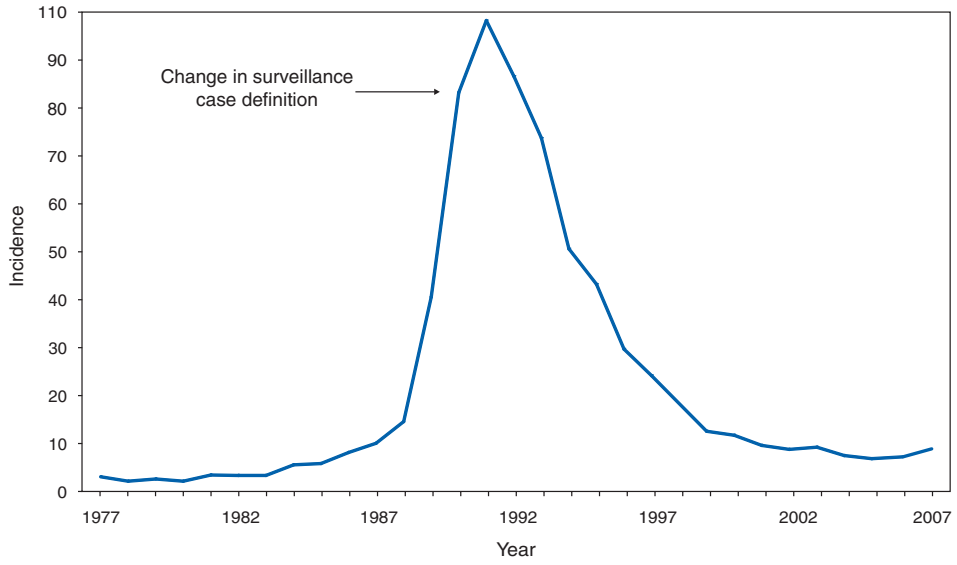
Escherichia coli O157:H7 is the serotype of Shiga toxin-producing *E. coli* (STEC) isolated most commonly from ill persons. Other serotypes of *E. coli* also produce Shiga toxin and can cause diarrhea and hemolytic uremic syndrome. *E. coli* O157:H7 has been nationally notifiable since 1994. STEC that cause human illness sometimes are called enterohemorrhagic *E. coli* (EHEC). In 2001, all serotypes of EHEC were made nationally notifiable. In 2006, the National Notifiable Diseases Surveillance System designation was changed by the Council of State and Territorial Epidemiologists from enterohemorrhagic *E. coli* (EHEC) to STEC, and reporting of serotypes to CDC was strongly encouraged.

STREPTOCOCCAL DISEASE, INVASIVE, GROUP A. Number of reported cases — United States and U.S. territories, 2007



Completeness of reporting of invasive group A streptococcal disease to the National Notifiable Diseases Surveillance System (NNDSS) is unknown. In 2007, the U.S. incidence rate of disease from NNDSS was 1.9 cases per 100,000. The NNDSS incidence rate excludes data from six states where this disease was not reportable (Alabama, Mississippi, Montana, California, Oregon, and Washington). In 2007, the estimated rate of disease from active, laboratory-based surveillance conducted in 10 U.S. sites was 3.8 cases per 100,000 population.

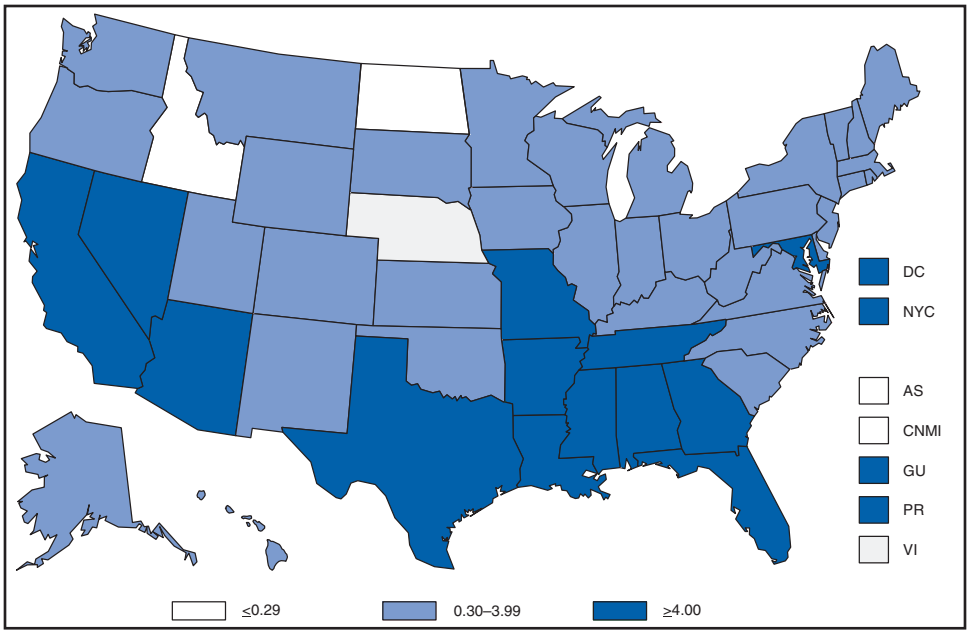
SYPHILIS, CONGENITAL. Incidence* among infants aged <1 year — United States, 1977–2007



* Per 100,000 live births.

Following a decline in the incidence of congenital syphilis since 1991, overall congenital syphilis rates increased slightly during 2006–2007, from 9.1 to 10.5 cases per 100,000 live births.

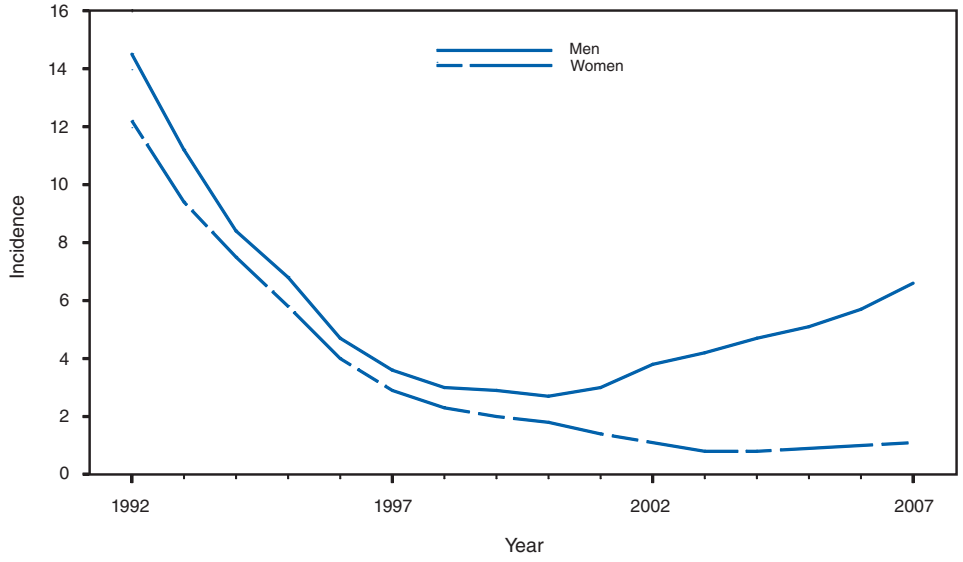
SYPHILIS, PRIMARY AND SECONDARY. Incidence* — United States and U.S. territories, 2007



* Per 100,000 population.

In 2007, the primary and secondary syphilis rate in the United States and territories (Guam, Puerto Rico, and Virgin Islands) was 3.8 cases per 100,000 population, which is above the *Healthy People 2010* objective of 0.2 cases per 100,000 population per year. Three states (Idaho, Nebraska, and North Dakota) and the Virgin Islands reported rates at or below the national objective.

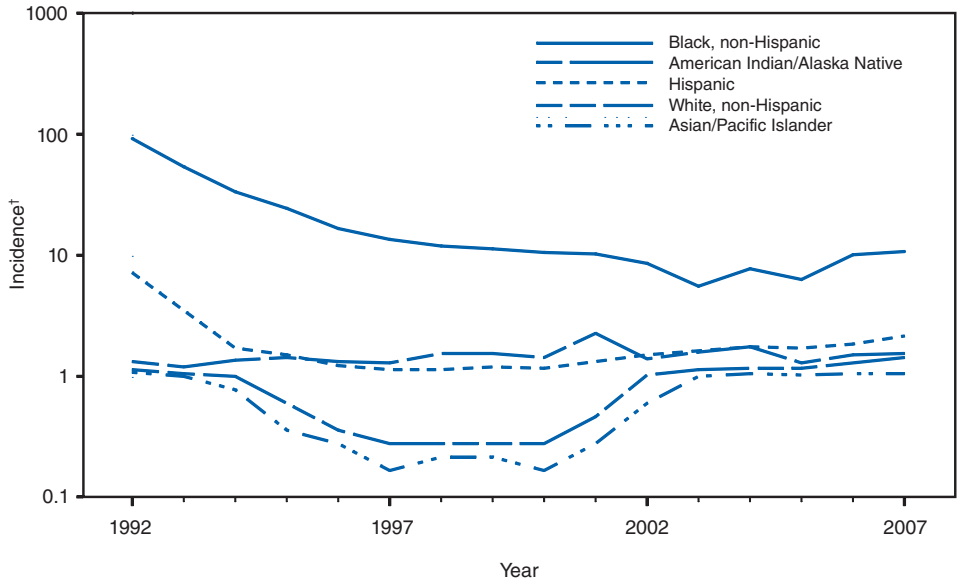
SYPHILIS, PRIMARY AND SECONDARY. Incidence*, by sex — United States, 1992–2007



* Per 100,000 population.

During 2006–2007, the incidence of primary and secondary syphilis in the United States increased from 3.3 to 3.8 cases (women: from 1.0 to 1.1; men: from 5.6 to 6.6) per 100,000 population.

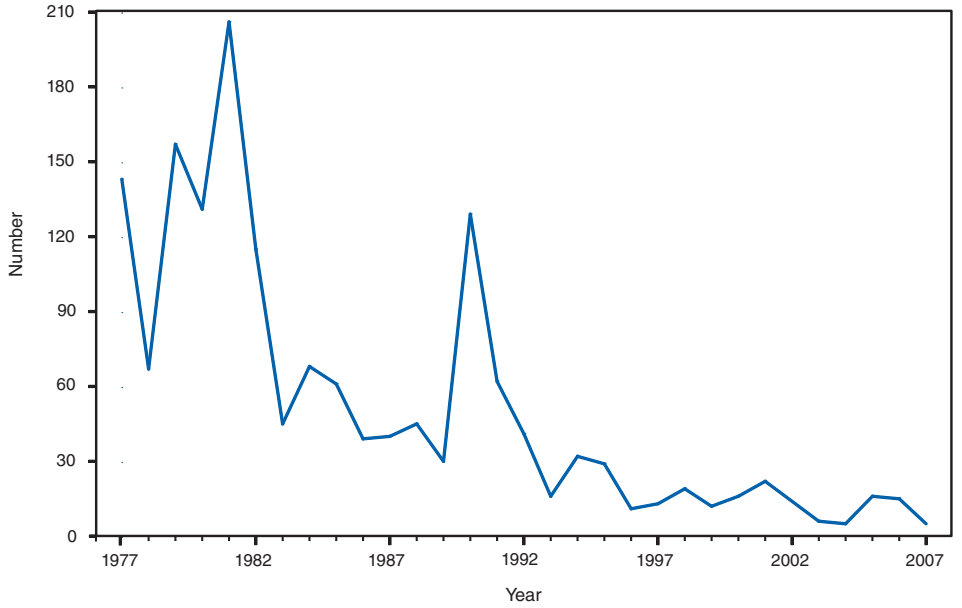
SYPHILIS, PRIMARY AND SECONDARY. Incidence,* by race/ethnicity — United States, 1992–2007



* Per 100,000 population.
† Y-axis is log scale

During 2006-2007, incidence of primary and secondary syphilis increased among all races/ethnicities except Asian/Pacific Islanders. Incidence per 100,000 population increased from 11.2 to 14.0 among non-Hispanic blacks, from 3.5 to 4.3 among Hispanics, from 3.2 to 3.4 among American Indian/Alaska Natives, and from 1.9 to 2.0 among non-Hispanic whites; incidence remained the same among Asian/Pacific Islanders at 1.2.

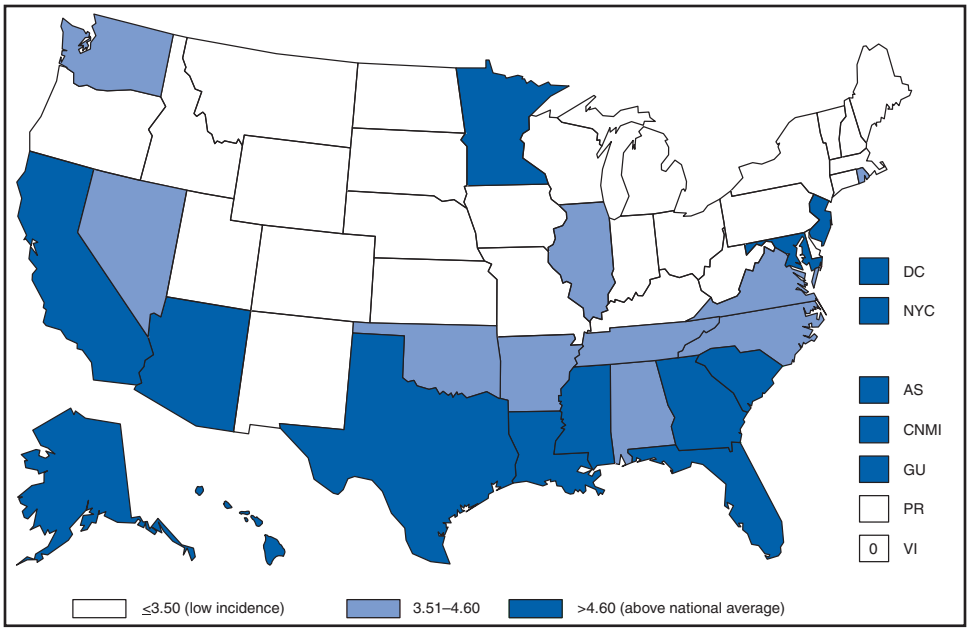
TRICHINELLOSIS. Number of reported cases, by year — United States, 1977–2007



In 2007, five cases of trichinellosis were reported to CDC. Consumption of raw/undercooked bear meat was implicated in three cases, and for two of these cases, a meal of undercooked store-bought pork and bear sausage was shared. The remaining two persons had a history of consuming only store-bought pork and beef, respectively.

Although improved methods of swine husbandry over the past several decades have made pork-associated cases of trichinellosis in the United States rare, consumption of wild game meat continues to be the most commonly identified risk factor for trichinellosis.

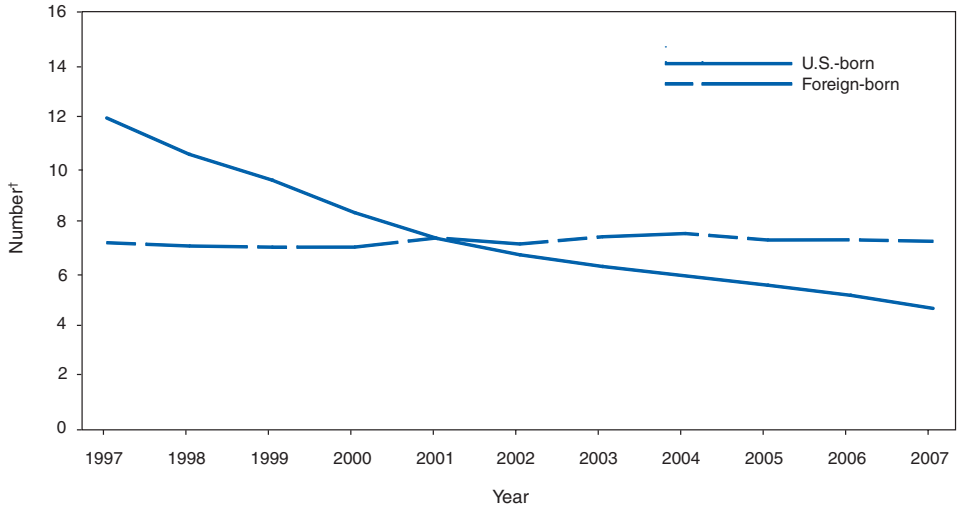
TUBERCULOSIS. Incidence* — United States and U.S. territories, 2007



* Per 100,000 population.

Fifteen states or reporting areas reported incidence rates above the national average in 2007. U.S.-affiliated areas are counted as separate nations and as such are not included in national totals.

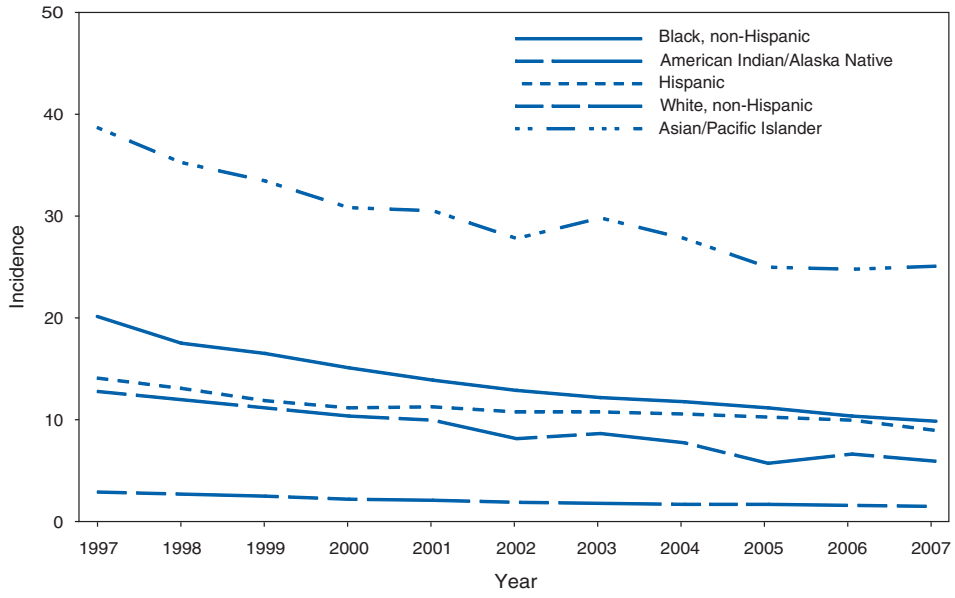
TUBERCULOSIS. Number of reported cases among U.S.-born and foreign-born persons,* by year — United States, 1997–2007



* For 56 cases, origin of patients was unknown
† In thousands

The proportion of total tuberculosis cases occurring in the foreign-born continues to rise.

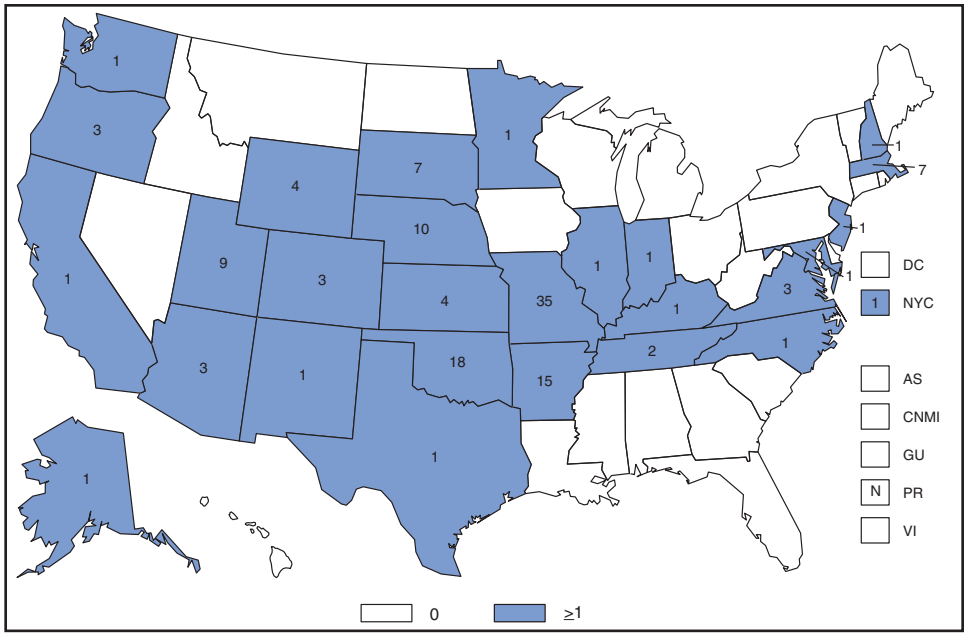
TUBERCULOSIS. Incidence,* by race/ethnicity — United States, 1997–2007



* Per 100,000 population.

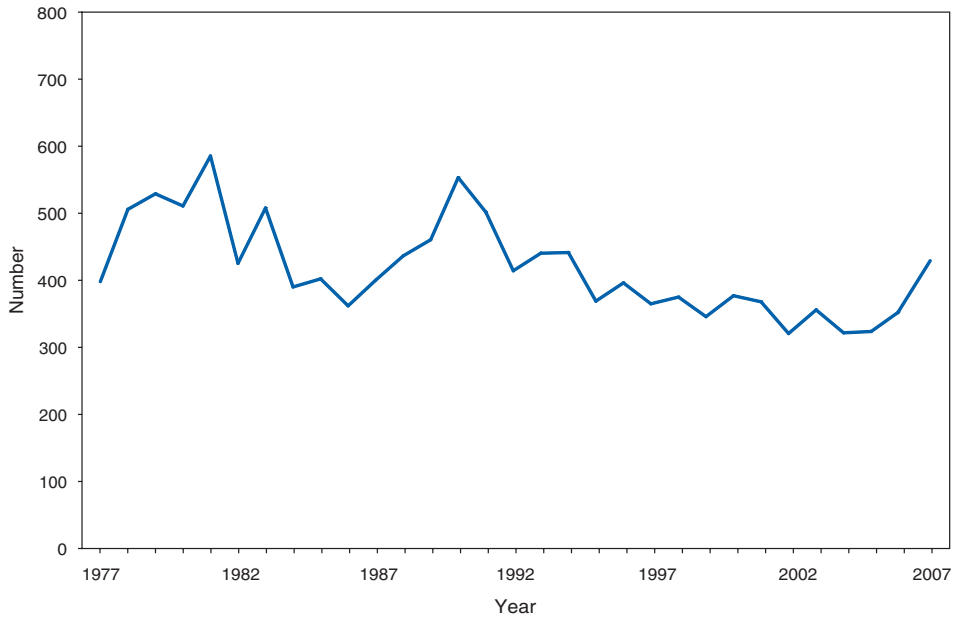
Rates for all race-ethnicities continued their downward trend in 2007 except among Asian/Pacific Islanders (APIs). Self-reported Native Hawaiians, a small portion of the API rate, experienced a 75% increase in 2007.

TULAREMIA. Number of reported cases — United States and U.S. territories, 2007



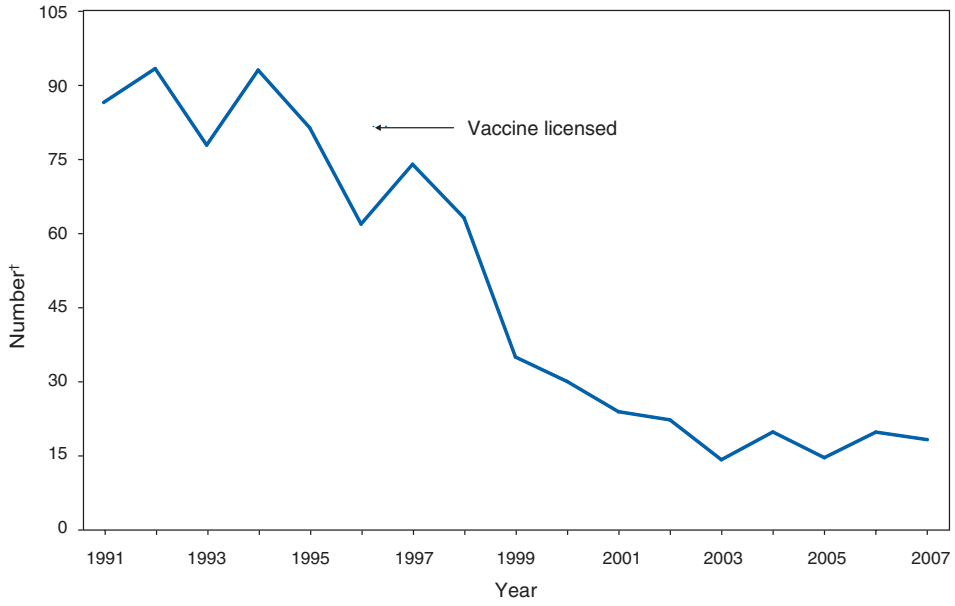
Historically, tularemia has been reported from all states except Hawaii. To define the geographic distribution of *Francisella tularensis* subspecies, CDC requests that isolates be forwarded to the CDC laboratory in Fort Collins, Colorado.

TYPHOID FEVER. Number of reported cases, by year — United States, 1977–2007



Typhoid fever in the United States is primarily a disease of travelers, for whom vaccination against typhoid fever is recommended. Emerging resistance to fluoroquinolone antimicrobial agents has complicated the clinical management of cases of typhoid and paratyphoid fever.

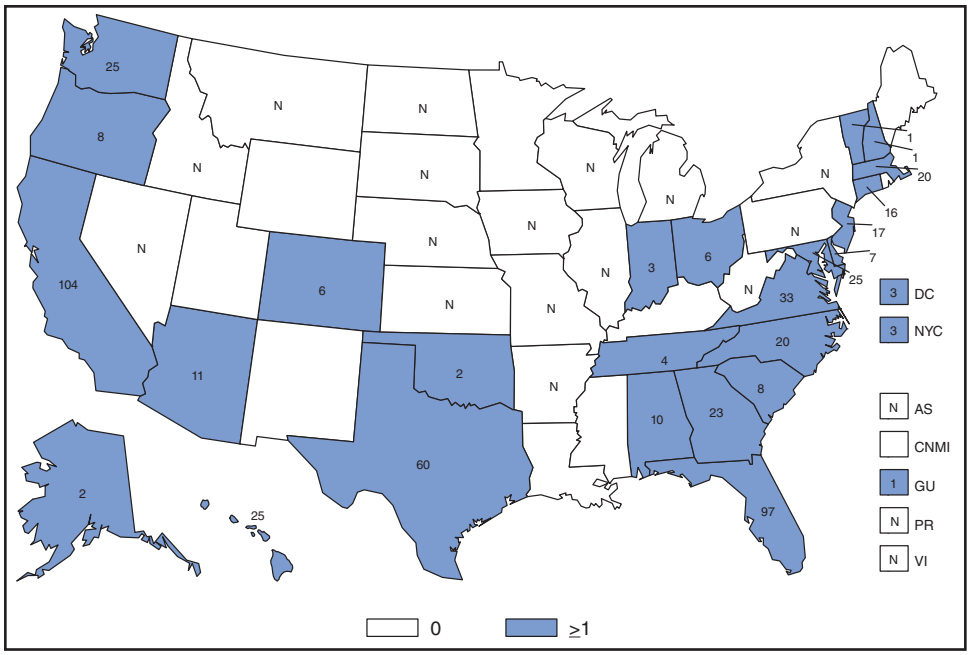
VARICELLA (CHICKENPOX). Number of reported cases — Illinois, Michigan, Texas, and West Virginia*, 1991–2007



* Source: CDC. National Center for Immunization and Respiratory Diseases.
† In thousands.

In four states (Michigan, Illinois, Texas, and West Virginia), the number of cases reported in 2007 was 20% lower than in 2006 and 81% less than the number reported during the prevaccine years 1993–1995.

VIBRIOSIS. Number of reported cases — United States and U.S. territories, 2007



Vibriosis infections caused by noncholera *Vibrio* organisms became nationally notifiable in January 2007. Infections are acquired through consumption of contaminated seafood, particularly oysters, or by contact of broken skin to salt water, containing *Vibrio* organisms.

PART 3

Historical Summaries of Notifiable Diseases in the United States, 1976–2007

Abbreviations and Symbols Used in Tables

NA Data not available.

— No reported cases.

Notes: Rates <0.01 after rounding are listed as 0.

Data in the *MMWR Summary of Notifiable Diseases — United States, 2007* 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.

TABLE 7. Reported incidence* of notifiable diseases — United States, 1997–2007

Disease	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
AIDS†	21.85	7.21	16.66	14.95	14.88	15.29	15.36	15.28	14.00	12.87	12.53
Anthrax	—	—	—	0	0.01	0	—	—	—	0	0
Botulism, total (includes wound & unspecified)	0.05	0.04	0.06	0.05	0.06	0.03	0.01	0.02	0.01	0.02	0.05
foodborne	0.02	0.01	0.01	0.01	0.01	0	0.01	0.01	0.01	0.01	0.01
Brucellosis	0.04	0.03	0.03	0.03	0.05	0.04	0.04	0.04	0.04	0.04	0.04
Chancroid	0.09	0.07	0.06	0.03	0.01	0.02	0.02	0	0.01	0.01	0.01
Chlamydia§	196.80	236.57	254.10	257.76	278.32	296.55	304.71	319.61	332.51	347.80	370.20
Cholera	0.01	0.01	0	0	0	0	0	0	0	0	0
Coccidioidomycosis	0.65	0.99	3.58	4.69	6.71	3.03	2.57	4.14	6.24	6.79	14.39
Cryptosporidiosis	1.12	1.61	0.92	1.17	1.34	1.07	1.22	1.23	1.93	2.05	3.73
Cyclosporiasis	¶	¶	0.07	0.03	0.07	0.06	0.03	0.14	0.24	0.06	0.04
Diphtheria	0.01	0	0	0	0	0	0	—	—	—	—
Domestic arboviral diseases											
California sergroup virus disease											
neuroinvasive	—	—	—	—	—	—	—	—	0.02	0.02	0.02
nonneuroinvasive	¶	¶	¶	¶	¶	¶	¶	¶	0	0	0
Eastern equine encephalitis virus disease											
neuroinvasive	—	—	—	—	—	—	—	—	0.01	0	0
nonneuroinvasive	¶	¶	¶	¶	¶	¶	¶	¶	0	0	0
Powassan virus disease											
neuroinvasive	—	—	—	—	—	—	—	—	0	0	0
nonneuroinvasive	¶	¶	¶	¶	¶	¶	¶	¶	0	0	0
St. Louis encephalitis virus disease											
neuroinvasive	—	—	—	—	—	—	—	—	0	0	0
nonneuroinvasive	¶	¶	¶	¶	¶	¶	¶	¶	0	0	0
West Nile virus disease											
neuroinvasive	—	—	—	—	—	—	—	—	0.45	0.50	0.41
nonneuroinvasive	¶	¶	¶	¶	¶	¶	¶	¶	0.58	0.94	0.80
Western equine encephalitis virus disease											
neuroinvasive	—	—	—	—	—	—	—	—	—	—	—
nonneuroinvasive	¶	¶	¶	¶	¶	¶	¶	¶	—	—	—
Ehrlichiosis											
human granulocytic (HGE)	¶	0.16	0.14	0.15	0.10	0.18	0.13	0.20	0.28	0.23	0.31
human monocytic (HME)	¶	0.03	0.06	0.09	0.05	0.08	0.11	0.12	0.18	0.20	0.30
human (other & unspecified) **	¶	—	—	—	—	—	—	—	0.04	0.08	0.12
Encephalitis/meningitis, arboviral††											
California serogroup	0.04	0.04	0.03	0.04	0.05	0.06	0.06	0	††	††	††
Eastern equine	0	0	0	0	0	0	0	0	††	††	††
Powassan	¶	¶	¶	¶	¶	0	0	0	††	††	††
St. Louis	0.01	0.01	0	0	0.03	0.01	0.01	0	††	††	††
West Nile	¶	¶	¶	¶	¶	1.01	1.00	0.43	††	††	††
Western equine	0	0	0	0	0	0	0	—	††	††	††
Enterohemorrhagic *Escherichia coli* O157:H7	1.04	1.28	1.77	1.74	1.22	1.36	0.93	0.87	0.89	¶	¶
non-O157	¶	¶	¶	¶	0.19	0.08	0.09	0.13	0.19	¶	¶
not serogrouped	¶	¶	¶	¶	0.06	0.02	0.05	0.13	0.16	¶	¶
Giardiasis	¶	¶	¶	¶	¶	8.06	6.84	8.35	7.82	7.28	7.66
Gonorrhea	121.40	132.88	133.20	131.65	128.53	125.03	116.37	113.52	115.64	120.90	118.90
Haemophilus influenzae, invasive disease											
all ages, serotypes	0.44	0.44	0.48	0.51	0.57	0.62	0.70	0.72	0.78	0.82	0.85
age <5 yrs											
serotype b	¶	¶	¶	¶	¶	0.18	0.16	0.03	0.04	0.14	0.11
nonserotype b	¶	¶	¶	¶	¶	0.75	0.59	0.04	0.67	0.86	0.97
unknown serotype	¶	¶	¶	¶	¶	0.80	1.15	0.97	1.08	0.88	0.88
Hansen disease (Leprosy)	0.05	0.05	0.04	0.04	0.03	0.04	0.03	0.04	0.03	0.03	0.04
Hantavirus pulmonary syndrome	NA	NA	NA	0.02	0	0.01	0.01	0.01	0.01	0.01	0.01
Hemolytic uremic syndrome postdiarrheal	NA	NA	NA	0.10	0.08	0.08	0.06	0.07	0.08	0.11	0.10
Hepatitis, viral, acute											
A	11.22	8.59	6.25	4.91	3.77	3.13	2.66	1.95	1.53	1.21	1.00
B	3.90	3.80	2.82	2.95	2.79	2.84	2.61	2.14	1.78	1.62	1.51
C	1.43	1.30	1.14	1.17	1.41	0.65	0.38	0.31	0.23	0.26	0.28

See footnotes on next page.

TABLE 7. (*Continued*) Reported incidence* of notifiable diseases — United States, 1997–2007

Disease	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Influenza-associated pediatric mortality	¶	¶	¶	¶	¶	¶	¶	¶	0.02	0.07	0.10
Legionellosis	0.44	0.51	0.41	0.42	0.42	0.47	0.78	0.71	0.78	0.96	0.91
Listeriosis	¶	¶	0.31	0.29	0.22	0.24	0.24	0.32	0.31	0.30	0.27
Lyme disease	4.79	6.39	5.99	6.53	6.05	8.44	7.39	6.84	7.94	6.75	9.21
Malaria	0.75	0.60	0.61	0.57	0.55	0.51	0.49	0.51	0.51	0.50	0.47
Measles	0.06	0.04	0.04	0.03	0.04	0.02	0.02	0.01	0.02	0.02	0.01
Meningococcal disease											
all serogroups	1.24	1.01	0.92	0.83	0.83	0.64	0.61	0.47	0.42	0.40	0.36
serogroup A,C,Y, & W-135	§§	§§	§§	§§	§§	§§	§§	§§	0.10	0.11	0.11
serogroup B	§§	§§	§§	§§	§§	§§	§§	§§	0.05	0.07	0.06
other serogroup	§§	§§	§§	§§	§§	§§	§§	§§	0.01	0.01	0.01
serogroup unknown	§§	§§	§§	§§	§§	§§	§§	§§	0.26	0.22	0.18
Mumps	0.27	0.25	0.14	0.13	0.10	0.10	0.08	0.09	0.11	2.22	0.27
Novel Influ. A Virus Infections	¶	¶	¶	¶	¶	¶	¶	¶	¶	¶	0
Pertussis	2.46	2.74	2.67	2.88	2.69	3.47	4.04	8.88	8.72	5.27	3.49
Plague	0.01	0	0	0	0	0	0	0	0	0.01	0
Poliomyelitis, paralytic	0.02	0.01	0	0	0	0	0	0	0	0	—
Poliovirus infection, nonparalytic	¶	¶	¶	¶	¶	¶	¶	¶	¶	¶	—
Psittacosis	0.02	0.02	0.01	0.01	0.01	0.01	0	0	0.01	0.01	0
Q Fever	¶	¶	0	0.01	0.01	0.02	0.02	0.03	0.05	0.06	0.06
Rabies, human	0.01	0	0	0	0	0	0	0	0	0	0
Rocky Mountain spotted fever	0.16	0.14	0.21	0.18	0.25	0.39	0.38	0.60	0.66	0.80	0.77
Rubella	0.07	0.13	0.21	0.06	0.01	0.01	0	0	0	0	0
Rubella, congenital syndrome	0	0	0	0	0	0	0	0	0	0	—
Salmonellosis	15.66	16.17	14.89	14.51	14.39	15.73	15.16	14.47	15.43	15.45	16.03
(SARS-CoV)¶¶	¶	¶	¶	¶	¶	¶	0	—	—	—	—
Shigellosis	8.64	8.74	6.43	8.41	7.19	8.37	8.19	4.99	5.51	5.23	6.60
Shiga toxin *E. coli* (STEC)	¶	¶	¶	¶	¶	¶	¶	¶	¶	1.71	1.62
Smallpox	¶	¶	¶	¶	¶	¶	¶	—	—	—	—
Streptococcal disease, invasive, group A	0.75	0.83	0.87	1.45	1.60	1.69	2.04	1.82	2.00	2.24	1.89
Streptococcal, toxic shock syndrome	0.01	0.02	0.02	0.04	0.04	0.05	0.06	0.06	0.07	0.06	0.06
Streptococcus, pneumoniae, invasive disease											
drug resistant, all ages	0.67	1.44	2.39	2.77	2.11	1.14	0.99	1.49	1.42	2.19	1.49
age <5 yrs	—	—	—	—	—	—	—	—	—	—	3.73
non-drug resistant, age <5 yrs	¶	¶	¶	¶	1.03	3.62	8.86	8.22	8.21	11.93	13.59
Syphilis, congenital (age <1 yr)	27.85	21.39	14.62	14.29	12.52	11.44	10.56	9.12	8.24	9.07	10.46
Syphilis, primary and secondary	3.19	2.61	2.50	2.19	2.17	2.44	2.49	2.71	2.97	3.29	3.83
Syphilis, total, all stages	17.39	14.19	13.07	11.58	11.45	11.68	11.90	11.94	11.33	12.46	13.67
Tetanus	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Toxic-shock syndrome	0.06	0.06	0.05	0.06	0.05	0.05	0.05	0.04	0.04	0.05	0.04
Trichinellosis	0.01	0.01	0	0.01	0.01	0.01	0	0	0.01	0.01	0
Tuberculosis	7.42	6.79	6.43	6.01	5.68	5.36	5.17	5.09	4.80	4.65	4.44
Tularemia	¶	¶	¶	0.06	0.05	0.03	0.04	0.05	0.05	0.03	0.05
Tyhoid fever	0.14	0.14	70.13	0.14	0.13	0.11	0.12	0.11	0.11	0.12	0.14
Vancomycin-intermediate *Staphylococcus aureus*	¶	¶	¶	¶	¶	¶	¶	—	0	0	0.02
Vancomycin-resistant *Staphylococcus aureus*	¶	¶	¶	¶	¶	¶	¶	0	0	0	0
Varicella (chickenpox) ***	93.55	70.28	44.56	26.18	19.51	10.27	7.27	18.41	19.64	28.65	18.68
Vibriosis	¶	¶	¶	¶	¶	¶	¶	¶	¶	¶	0.25
Yellow fever	—	—	0	—	0	0	—	—	—	—	—

* Per 100,000 population
† Acquired immunodeficiency syndrome (AIDS).
§ Chlamydia refers to genital infections caused by *C. trachomatis*.
¶ Not nationally notifiable.
** Data for ehrlichiosis attributable to other or unspecified agents were being withheld from publication pending the outcome of discussions about the reclassification of certain *Ehrlichia* species, which would probably affect how data in this category was reported.
†† See also "Domestic arboviral" disease incidence rates in this table for years 2005, 2006, and 2007. In 2005 and 2006, the domestic arboviral disease surveillance case definitions and categories were revised. The nationally notifiable arboviral encephalitis and meningitis conditions continued to be nationally notifiable in 2005 and 2006, but under the category of arboviral neuroinvasive disease. In addition, in 2005, non neuroinvasive domestic arboviral diseases for the six domestic arboviruses listed above were added to the list of nationally notifiable diseases.
§§ To help public health specialists monitor the impact of the new meningococcal conjugate vaccine (Menactra®, licensed in the U.S. in January 2005), the data display for meningococcal disease was modified to differentiate the fraction of the disease that is vaccine-preventable (serogroups A, C, Y, W-135) from the non preventable fraction of disease (serogroup B and others).
¶¶ Severe acute respiratory syndrome-associated coronavirus disease.
*** Varicella became a notifiable disease in 2003.

TABLE 8. Reported cases of notifiable diseases — United States, 2000–2007

Disease	2000	2001	2002	2003	2004	2005	2006	2007
AIDS*	40,758	41,868	42,745	44,232	44,108	41,120	38,162	37,503†
Anthrax	1	23	2	—	—	—	1	1
Botulism, total (including wound & unspecified)	138	155	118	129	133	135	165	144
foodborne	23	39	28	20	16	19	20	32
infant	93	97	69	76	87	85	97	85
Brucellosis	87	136	125	104	114	120	121	131
Chancroid§	78	38	67	54	30	17	33	23
Chlamydia§¶	702,093	783,242	834,555	877,478	929,462	976,445	1,030,911	1,108,374
Cholera	5	3	2	2	5	8	9	7
Coccidioidomycosis	2,867	3,922	4,968	4,870	6,449	6,542	8,917	8,121
Cryptosporidiosis	3,128	3,785	3,016	3,506	3,577	5,659	6,071	11,170
Cyclosporiasis	60	147	156	75	171	543	137	93
Diphtheria	1	2	1	1	—	—	—	—
Domestic arboviral diseases**								
California serogroup virus disease								
neuroinvasive	—	—	—	—	—	73	64	50
nonneuroinvasive	††	††	††	††	††	7	5	5
Eastern equine encephalitis virus disease								
neuroinvasive	—	—	—	—	—	21	8	3
nonneuroinvasive	††	††	††	††	††	—	—	1
Powassan virus disease								
neuroinvasive	—	—	—	—	—	1	1	7
nonneuroinvasive	††	††	††	††	††	—	—	—
St. Louis encephalitis virus disease								
neuroinvasive	—	—	—	—	—	7	7	8
nonneuroinvasive	††	††	††	††	††	6	3	1
Western equine encephalitis virus disease								
neuroinvasive	—	—	—	—	—	—	—	—
nonneuroinvasive	††	††	††	††	††	—	—	—
West Nile virus disease								
neuroinvasive	—	—	—	—	—	1,309	1,495	1,227
nonneuroinvasive	††	††	††	††	††	1,691	2,744	2,403
Ehrlichiosis								
human granulocytic	351	261	511	362	537	786	646	834
human monocytic	200	142	216	321	338	506	578	828
human (other & unspecified)	§§	§§	§§	§§	§§	112	231	337
Encephalitis/Meningitis, arboviral								
California serogroup	114	128	164	108	112	¶¶	¶¶	¶¶
Eastern equine	3	9	10	14	6	¶¶	¶¶	¶¶
Powassan	††	††	1	—	1	¶¶	¶¶	¶¶
St. Louis	2	79	28	41	12	¶¶	¶¶	¶¶
West Nile	††	††	2,840	2,866	1,142	¶¶	¶¶	¶¶
Western equine	—	—	—	—	—	¶¶	¶¶	¶¶
Enterohemorrhagic *Escherichia coli* infection Shiga toxin-positive								
O157:H7	4,528	3,287	3,840	2,671	2,544	2,621	††	††
non-O157	††	171	194	252	316	501	††	††
not serogrouped	††	20	60	156	308	407	††	††
Giardiasis	††	††	21,206	19,709	20,636	19,733	18,953	19,417
Gonorrhea §	358,995	361,705	351,852	335,104	330,132	339,593§	358,366	355,991
Haemophilus influenzae, invasive disease								
all ages, serotypes	1,398	1,597	1,743	2,013	2,085	2,304	2,496	2,541
age <5 yrs								
serotype b	††	††	34	32	19	9	29	22
nonserotype b	††	††	144	117	135	135	175	199
unknown serotype	††	††	153	227	177	217	179	180
Hansen disease (Leprosy)	91	79	96	95	105	87	66	101
Hantavirus pulmonary syndrome	41	8	19	26	24	26	40	32
Hemolytic uremic syndrome, postdiarrheal	249	202	216	178	200	221	288	292
Hepatitis, viral, acute***								
A	13,397	10,609	8,795	7,653	5,683	4,488	3,579	2,979
B	8,036	7,843	7,996	7,526	6,212	5,119	4,713	4,519
C	3,197	3,976	1,835	1,102	720	652	766	845
Influenza-associated pediatric mortality	††	††	††	††	††	45	43	77
Legionellosis	1,127	1,168	1,321	2,232	2,093	2,301	2,834	2,716
Listeriosis	755	613	665	696	753	896	884	808
Lyme disease	17,730	17,029	23,763	21,273	19,804	23,305	19,931	27,444
Malaria	1,560	1,544	1,430	1,402	1,458	1,494	1,474	1,408
Measles	86	116	44	56	37	66	55	43

See footnotes on next page.

TABLE 8. (*Continued*) Reported cases of notifiable diseases — United States, 2000–2007

Disease	2000	2001	2002	2003	2004	2005	2006	2007
Meningococcal disease, invasive†††								
all serogroups	2,256	2,333	1,814	1,756	1,361	1,245	1,194	1,077
serogroup A, C, Y, & W-135	—	—	—	—	—	297	318	325
serogroup B	—	—	—	—	—	156	193	167
other serogroup	—	—	—	—	—	27	32	35
serogroup unknown	—	—	—	—	—	765	651	550
Mumps	338	266	270	231	258	314	6,584	800
Novel influenza A virus infection	††	††	††	††	††	††	††	4
Pertussis	7,867	7,580	9,771	11,647	25,827	25,616	15,632	10,454
Plague	6	2	2	1	3	8	17	7
Poliomyelitis, paralytic§§§	—	—	—	—	—	1	—	—
Poliovirus infection, nonparalytic	—	—	—	—	—	—	—	—
Psittacosis	17	25	18	12	12	16	21	12
Q Fever	21	26	61	71	70	136	169	171
Rabies								
animal	6,934	7,150	7,609	6,846	6,345	5,915	5,534	5,862
human	4	1	3	2	7	2	3	1
Rocky Mountain spotted fever	495	695	1,104	1,091	1,713	1,936	2,288	2,221
Rubella	176	23	18	7	10	11	11	12
Rubella, congenital syndrome	9	3	1	1	—	1	1	—
Salmonellosis	39,574	40,495	44,264	43,657	42,197	45,322	45,808	47,995
SARS-CoV¶¶¶	††	††	††	8	—	—	—	—
Shiga toxin-producing *Escherichia coli* (STEC)	††	††	††	††	††	††	4,432	4,847
Shigellosis	22,922	20,221	23,541	23,581	14,627	16,168	15,503	19,758
Streptococcal disease, invasive, group A	3,144	3,750	4,720	5,872	4,395	4,715	5,407	5,294
Streptococcal toxic-shock syndrome	83	77	118	161	132	129	125	132
Streptococcus pneumoniae invasive disease,								
drug resistant, all ages	4,533	2,896	2,546	2,356	2,590	2,996	3,308	3,329
age < 5 yrs	—	—	—	—	—	—	—	563
Streptococcus pneumoniae invasive disease,								
nondrug resistant age <5 yrs	††	498	513	845	1,162	1,495	1,861	2,032
Syphilis, all stages§	31,575	32,221	32,871	34,270	33,401	33,278	36,935	40,920
congenital (age <1 yr)	580	504	460	432	375	339	382	430
primary & secondary	5,979	6,103	6,862	7,177	7,980	8,724§	9,756	11,466
Tetanus	35	37	25	20	34	27	41	28
Toxic-shock syndrome	135	127	109	133	95	90	101	92
Trichinellosis	16	22	14	6	5	16	15	5
Tuberculosis****	16,377	15,989	15,075	14,874	14,517	14,097	13,779	13,299
Tularemia	142	129	90	129	134	154	95	137
Typhoid fever	377	368	321	356	322	324	353	434
Vancomycin-intermediate *Staphylococcus aureus*	††	††	††	††	—	3	6	37
Vancomycin-resistant *Staphylococcus aureus*	††	††	††	††	1	2	1	2
Varicella (chickenpox) ††††	27,382	22,536	22,841	20,948	32,931	32,242	48,445	40,146
Varicella (deaths) §§§§	††	††	9	2	9	3	—	6
Vibriosis (noncholera *Vibrio* species infections)	††	††	††	††	††	††	††	549
Yellow fever¶¶¶¶	—	—	1	—	—	—	—	—

* Acquired Immunodeficiency syndrome (AIDS)

† The total number of AIDS cases includes all cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), through December 31, 2007.

§ Cases were updated through the Division of STD Prevention, NCHHSTP, as of May 9, 2008.

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

** Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) (ArboNET Surveillance), as of June 1, 2008.

†† Not nationally notifiable

§§ Data for ehrlichiosis attributable to other or unspecified agents were being withheld from publication pending the outcome of discussions about the reclassification of certain *Ehrlichia* species, which would probably affect how data in this category were reported.

¶¶ See also "Domestic arboviral" disease incidence rates in this table for years 2005, 2006, and 2007. In 2005 and 2006, the domestic arboviral disease surveillance case definitions and categories were revised. The nationally notifiable arboviral encephalitis and meningitis conditions continued to be nationally notifiable in 2005 and 2006, but under the category of arboviral neuroinvasive disease. In addition, in 2005, nonneuroinvasive domestic arboviral disesases for the six domestic arboviruses listed above were added to the list of nationally notifiable diseases.

*** The anti-hepatitis C virus antibody test became available May 1990. Data on chronic hepatitis B, perinatal hepatitis B virus infection, and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

††† To help public health specialists monitor the impact of the new meningococcal conjugate vaccine (Menactra®, licensed in the United States in January 2005), the data display for meningococcal disease was modified to differentiate the fraction of the disease that is potentially vaccine preventable (serogroups A, C, Y, W-135) from the nonvaccine-preventable fraction of disease (serogroup B and others).

§§§ Cases of vaccine-associated paralytic poliomyelitis (VAPP) caused by polio vaccine virus. Numbers might not reflect changes based on retrospective case evaluations or late reports (CDC. Poliomyelitis-United States, 1975-1984. MMWR 1986;35:180-2).

¶¶¶ Severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV). The total number of SARS-CoV cases includes all cases reported to the Division of Viral Diseases, Coordinating Center for Infectious Diseases (CCID).

**** Cases were updated through the Division of TB Elimination, NCHHSTP, as of May 16, 2008.

†††† Varicella was taken off the nationally notifiable disease list in 1981. Varicella again became nationally notifiable in 2003.

§§§§ Death counts provided by the Division of Viral Diseases, National Center for Immunization and Respiratory Diseases, as of December 30, 2007.

¶¶¶¶ The last indigenous case of yellow fever was reported in 1911; all other cases since 1911 have been imported.

TABLE 9. Reported cases of notifiable diseases — United States, 1992–1999

Disease	1992	1993	1994	1995	1996	1997	1998	1999
AIDS*	45,472	103,691	78,279	71,547	66,885	58,492	46,521	45,104
Amebiasis	2,942	2,970	2,983	†	†	†	†	†
Anthrax	1	—	—	—	—	—	—	—
Aseptic meningitis	12,223	12,848	8,932	†	†	†	†	†
Botulism, total (including wound & unspecified)	91	97	143	97	119	132	116	154
foodborne	21	27	50	24	25	31	22	23
infant	66	65	85	54	80	79	65	92
Brucellosis	105	120	119	98	112	98	79	82
Chancroid§	1,886	1,399	773	606	386	243	189	143
Chlamydia§¶	†	†	†	477,638	498,884	526,671	604,420	656,721
Cholera	103	18	39	23	4	6	17	6
Coccidioidomycosis	†	†	†	1,212	1,697	1,749	2,274	2,826
Cryptosporidiosis	†	†	†	2,970	2,827	2,566	3,793	2,361
Diphtheria	4	—	2	—	2	4	1	1
Encephalitis, primary	774	919	717	†	†	†	†	†
Postinfectious	129	170	143	†	†	†	†	†
Encephalitis/Meningitis								
California serogroup viral	†	†	†	11	123	129	97	70
eastern Equine	†	†	†	1	5	14	4	5
St. Louis	†	†	†	†	2	13	24	4
western Equine	†	†	†	—	2	—	—	1
Escherichia coli O157:H7	†	†	1,420	2,139	2,741	2,555	3,161	4,513
Gonorrhea§	501,409	439,673	418,068	392,848	325,883	324,907	355,642	360,076
Granuloma inguinale	6	19	3	†	†	†	†	†
Haemophilus influenzae, invasive disease all ages, serotypes	1,412	1,419	1,174	1,180	1,170	1,162	1,194	1,309
Hansen disease (Leprosy)	172	187	136	144	112	122	108	108
Hantavirus Pulmonary Syndrome	†	†	†	—	NA	NA	NA	33
Hemolytic uremic syndrome, postdiarrheal	†	†	†	72	97	91	119	181
Hepatitis, viral, acute								
A	23,112	24,238	26,796	31,582	31,032	30,021	23,229	17,047
B	16,126	13,361	12,517	10,805	10,637	10,416	10,258	7,694
C/non A, non B**	6,010	4,786	4,470	4,576	3,716	3,816	3,518	3,111
unspecified	884	627	444	†	†	†	†	†
Legionellosis	1,339	1,280	1,615	1,241	1,198	1,163	1,355	1,108
Leptospirosis	54	51	38	†	†	†	†	†
Lyme disease	9,895	8,257	13,043	11,700	16,455	12,801	16,801	16,273
Lymphogranuloma venereum	302	285	235	†	†	†	†	
Malaria	1,087	1,411	1,229	1,419	1,800	2,001	1,611	1,666
Measles	2,237	312	963	309	508	138	100	100
Meningococcal disease, invasive	2,134	2,637	2,886	3,243	3,437	3,308	2,725	2,501
Mumps	2,572	1,692	1,537	906	751	683	666	387
Murine typhus fever	28	25	†	†	†	†	†	†
Pertussis	4,083	6,586	4,617	5,137	7,796	6,564	7,405	7,288
Plague	13	10	17	9	5	4	9	9
Poliomyelitis, paralytic	6	4	8	7	7	6	3	2
Psittacosis	92	60	38	64	42	33	47	16
Rabies								
animal	8,589	9,377	8,147	7,811	6,982	8,105	7,259	6,730
human	1	3	6	5	3	2	1	—
Rheumatic fever, acute	75	112	112	†	†	†	†	†
Rocky Mountain spotted fever	502	456	465	590	831	409	365	579
Rubella	160	192	227	128	238	181	364	267
Rubella, congenital syndrome	11	5	7	6	4	5	7	9
Salmonellosis, excluding typhoid fever	40,912	41,641	43,323	45,970	45,471	41,901	43,694	40,596
Shigellosis	23,931	32,198	29,769	32,080	25,978	23,117	23,626	17,521
Streptococcal disease, invasive, Group A	†	†	†	613	1,445	1,973	2,260	2,667

See footnotes on next page.

TABLE 9. (*Continued*) Reported cases of notifiable diseases — United States, 1992–1999

Disease	1992	1993	1994	1995	1996	1997	1998	1999
Streptococcal toxic-shock syndrome	†	†	†	10	19	33	58	65
Streptococcus pneumoniae, invasive disease drug-resistant, all ages	†	†	†	309	1,514	1,799	2,823	4,625
Syphilis, primary & secondary	33,973	26,498	20,627	16,500	11,387	8,550	6,993	6,657
congenital (age <1 yr)	4,067	3,420	2,452	1,863	1,282	1,081	843	579
total, all stages	112,581	101,259	81,696	68,953	52,976	46,540	37,977	35,628
Tetanus	45	48	51	41	36	50	41	40
Toxic shock syndrome	244	212	192	191	145	157	138	113
Trichinellosis	41	16	32	29	11	13	19	12
Tuberculosis††	26,673	25,313	24,361	22,860	21,337	19,851	18,361	17,531
Tularemia	159	132	96	†	†	†	†	†
Typhoid fever	414	440	441	369	396	365	375	346
Varicella§§	158,364	134,722	151,219	120,624	83,511	98,727	82,455	46,016
Yellow Fever¶¶	—	—	—	—	1	—	—	—

* Acquired immunodeficiency syndrome.
† Not nationally notifiable.
§ Cases were updated through the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP).
¶ Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.
** The anti-hepatitis C virus antibody test became available in May 1990.
†† Cases were updated through the Division of TB Elimination, NCHHSTP.
§§ Varicella was taken off the nationally notifiable disease list in 1981. Certain states continued to report these cases to CDC.
¶¶ The last indigenous case of yellow fever was reported in 1911; all other cases since 1911 have been imported.

TABLE 10. Reported cases of notifiable diseases* — United States, 1984–1991

Disease	1984	1985	1986	1987	1988	1989	1990	1991
AIDS†	4,445	8,249	12,932	21,070	31,001	33,722	41,595	43,672
Amebiasis	5,252	4,433	3,532	3,123	2,860	3,217	3,328	2,989
Anthrax	1	—	—	1	2	—	—	—
Aseptic meningitis	8,326	10,619	11,374	11,487	7,234	10,274	11,852	14,526
Botulism, total (including wound and unsp.)	123	122	109	82	84	89	92	114
Foodborne	§	49	23	17	28	23	23	27
Infant	§	70	79	59	50	60	65	81
Brucellosis	131	153	106	129	96	95	82	104
Chancroid	666	2,067	3,756	4,998	5,001	4,692	4,212	3,476
Cholera	1	4	23	6	8	—	6	26
Diphtheria¶	1	3	–	3	2	3	4	5
Encephalitis, primary	1,257	1,376	1,302	1,418	882	981	1,341	1,021
Postinfectious**	108	161	124	121	121	88	105	82
Gonorrhea	878,556	911,419	900,868	780,905	719,536	733,151	690,169	620,478
Granuloma inguinale	30	44	61	22	11	7	97	29
Hansen disease (Leprosy)	290	361	270	238	184	163	198	154
Hepatitis, viral, acute								
A	22,040	23,210	23,430	25,280	28,507	35,821	31,441	24,378
B	26,115	26,611	26,107	25,916	23,177	23,419	21,102	18,003
C/ non-A, non-B††	3,871	4,184	3,634	2,999	2,619	2,529	2,553	3,582
unspecified	5,531	5,517	3,940	3,102	2,470	2,306	1,671	1,260
Legionellosis	750	830	980	1,038	1,085	1,190	1,370	1,317
Leptospirosis	40	57	41	43	54	93	77	58
Lymphogranuloma venereum	170	226	396	303	185	189	277	471
Malaria	1,007	1,049	1,123	944	1,099	1,277	1,292	1,278
Measles	2,587	2,822	6,282	3,655	3,396	18,193	27,786	9,643
Meningococcal disease, invasive	2,746	2,479	2,594	2,930	2,964	2,727	2,451	2,130
Mumps	3,021	2,982	7,790	12,848	4,866	5,712	5,292	4,264
Murine typhus fever	53	37	67	49	54	41	50	43
Pertussis	2,276	3,589	4,195	2,823	3,450	4,157	4,570	2,719
Plague	31	17	10	12	15	4	2	11
Poliomyelitis, total	9	8	10	§§	§§	§§	§§	§§
Paralytic§§	9	8	10	9	9	11	6	10
Psittacosis	172	119	224	98	114	116	113	94
Rabies								
animal	5,567	5,565	5,504	4,658	4,651	4,724	4,826	6,910
human	3	1	—	1	—	1	1	3
Rheumatic fever, acute	117	90	147	141	158	144	108	127
Rocky Mountain spotted fever	838	714	760	604	609	623	651	628
Rubella	752	630	551	306	225	396	1,125	1,401
Rubella, congenital syndrome	5	—	14	5	6	3	11	47
Salmonellosis	40,861	65,347	49,984	50,916	48,948	47,812	48,603	48,154
Shigellosis	17,371	17,057	17,138	23,860	30,617	25,010	27,077	23,548
Syphilis, primary & secondary	28,607	27,131	27,883	35,147	40,117	44,540	50,223	42,935
congenital (age <1 yr)	305	329	410	480	741	1,837	3,865	4,424
total, all stages	69,888	67,563	68,215	86,545	103,437	110,797	134,255	128,569
Tetanus	74	83	64	48	53	53	64	57
Toxic-shock syndrome	482	384	412	372	390	400	322	280
Trichinosis	68	61	39	40	45	30	129	62
Tuberculosis	22,255	22,201	22,768	22,517	22,436	23,495	25,701	26,283
Tularemia	291	177	170	214	201	152	152	193
Typhoid fever	390	402	362	400	436	460	552	501
Varicella	221,983	178,162	183,243	213,196	192,857	185,441	173,099	147,076

* No cases of yellow fever were reported during 1984 – 1991.
† Acquired immunodeficiency syndrome.
§ Not nationally notifiable.
¶ Cutaneous diphtheria ceased being notifiable nationally after 1979.
** Beginning in 1984, data were recorded by date of record to state health departments. Before 1984, data were recorded by onset date.
†† The anti-hepatitis C virus antibody test became available in May 1990.
§§ No cases of paralytic poliomyelitis caused by wild virus have been reported in the United States since 1993.

TABLE 11. Reported cases of notifiable diseases* — United States, 1976–1983

Disease	1976	1977	1978	1979	1980	1981	1982	1983
Amebiasis	2,906	3,044	3,937	4,107	5,271	6,632	7,304	6658
Anthrax	2	—	6	—	1	—	—	—
Aseptic meningitis	3,510	4,789	6,573	8,754	8,028	9,547	9,680	12,696
Botulism, total (including wounds and unsp.)	55	129	105	45	89	103	97	133
Brucellosis	296	232	179	215	183	185	173	200
Chancroid	628	455	521	840	788	850	1,392	847
Cholera	—	3	12	1	9	19	—	1
Diphtheria	128	84	76	59	3	5	2	5
Encephalitis								
primary	1,651	1,414	1,351	1,504	1,362	1,492	1,464	1,761
postinfectious	175	119	78	84	40	43	36	34
Gonorrhea	1,001,994	1,002,219	1,013,436	1,004,058	1,004,029	990,864	960,633	900,435
Granuloma inguinale	71	75	72	76	51	66	17	24
Hansen disease (Leprosy)	145	151	168	185	223	256	250	259
Hepatitis								
A (infectious)	33,288	31,153	29,500	30,407	29,087	25,802	23,403	21,532
B (serum)	14,973	16,831	15,016	15,452	19,015	21,152	22,177	24,318
unspecified	7,488	8,639	8,776	10,534	11,894	10,975	8,564	7,149
Legionellosis	235	359	761	593	475	408	654	852
Leptospirosis	73	71	110	94	85	82	100	61
Lymphogranuloma venereum	365	348	284	250	199	263	235	335
Malaria	471	547	731	894	2,062	1,388	1,056	813
Measles	41,126	57,345	26,871	13,597	13,506	3,124	1,714	1,497
Meningococcal disease	1,605	1,828	2,505	2,724	2,840	3,525	3,056	2,736
Mumps	38,492	21,436	16,817	14,225	8,576	4,941	5,270	3,355
Murine typhus fever	69	75	46	69	81	61	58	62
Pertussis	1,010	2,177	2,063	1,623	1,730	1,248	1,895	2,463
Plague	16	18	12	13	18	13	19	40
Poliomyelitis, total	10	19	8	22	9	10	12	13
paralytic	10	19	8	22	9	10	12	13
Psittacosis	78	94	140	137	124	136	152	142
Rabies								
animal	3,073	3,130	3,254	5,119	6,421	7,118	6,212	5,878
human	2	1	4	4	—	2	—	2
Rheumatic fever, acute	1,865	1,738	851	629	432	264	137	88
Rocky Mountain spotted fever	937	1,153	1,063	1,070	1,163	1,192	976	1,126
Rubella	12,491	20,395	18,269	11,795	3,904	2,077	2,325	970
Rubella, congenital syndrome	30	23	30	62	50	19	7	22
Salmonellosis	22,937	27,850	29,410	33,138	33,715	39,990	40,936	44,250
Shigellosis	13,140	16,052	19,511	20,135	19,041	9,859	18,129	19,719
Syphilis								
primary & secondary	23,731	20,399	21,656	24,874	27,204	31,266	33,613	32,698
congenital (age <1 yr)	626	463	434	332	277	287	259	239
total, all stages	71,761	64,621	64,875	67,049	68,832	72,799	75,579	74,637
Tetanus	75	87	86	81	95	72	88	91
Trichinosis	115	143	67	157	131	206	115	45
Tuberculosis	32,105	30,145	28,521	27,669	27,749	27,373	25,520	23,846
Tularemia	157	165	141	196	234	288	275	310
Typhoid fever	419	398	505	528	510	584	425	507
Varicella	183,990	188,396	154,089	199,081	190,894	200,766	167,423	177,462

* No cases of yellow fever were reported during 1976-1983.

TABLE 12. Deaths from selected nationally notifiable infectious diseases – United States, 2002–2005

Cause of death	ICD-10* Cause of death code	2002 no. of deaths	2003 no. of deaths	2004 no. of deaths	2005 no. of deaths
AIDS†	B20-B24	14,095	13,658	13,063	12,543
Anthrax	A22	0	0	0	0
Encephalitis/meningitis, arboviral					
California serogroup virus	A83.5	0	0	0	1
Eastern equine encephalitis virus	A83.2	1	1	2	2
Powassan virus	A84.8	0	0	0	0
St. Louis encephalitis virus	A83.3	3	2	2	1
Western equine encephalitis virus	A83.1	0	0	0	0
Botulism, foodborne	A05.1	2	6	0	5
Brucellosis	A23	1	0	0	2
Chancroid	A57	0	0	0	0
Chlamydia§	A56	0	0	0	0
Cholera	A00	0	0	0	0
Coccidioidomycosis	B38	84	73	100	76
Cryptosporidiosis	A07.2	1	0	1	2
Cyclosporiasis	A07.8	0	0	0	0
Diphtheria	A36	0	1	0	0
Ehrlichiosis	A79.8	0	1	0	0
Giardiasis	A07.1	1	0	1	0
Gonoccocal infections	A54	7	6	2	3
Haemophilus influenzae	A49.2	7	5	11	4
Hansen disease (Leprosy)	A30	2	2	5	1
Hantavirus pulmonary syndrome	A98.5	0	0	0	0
Hemolytic uremic syndrome, postdiarrheal	D59.3	35	29	27	30
Hepatitis A, viral, acute	B15	76	54	58	43
Influenza-associated pediatric mortality	J10, J11	25	146	51	61
Legionellosis	A48.1	62	98	72	78
Listeriosis	A32	32	33	37	31
Lyme disease	A69.2, L90.4	6	4	6	7
Malaria	B50-B54	12	4	8	6
Measles	B05	0	1	0	1
Meningococcal disease	A39	161	161	138	123
Mumps	B26	1	0	0	0
Pertussis	A37	18	11	16	31
Plague	A20	0	0	1	1
Poliomyelitis	A80	0	0	0	0
Psittacosis	A70	0	0	0	0
Q fever	A78	0	1	1	2
Rabies, human	A82	3	2	3	1
Rocky Mountain spotted fever	A77.0	8	9	5	6
Rubella	B06	0	0	1	0
Rubella congenital syndrome	P35.0	6	4	5	8
Salmonellosis	A02	21	43	30	30
Shiga toxin-producing *Escherichia coli* (STEC)	A04.0-A04.4	4	2	4	5
Shigellosis	A03	4	2	0	9
Smallpox	B03	0	0	0	0
Streptococcal disease, invasive, group A	A40.0, A49.1	109	115	121	118
Streptococcus pneumoniae, invasive disease (restricted to <5 years of age)	A40.3, B95.3, J13	13	15	13	12
Syphilis, total, all stages	A50-A53	41	34	43	47
Tetanus	A35	5	4	4	1
Toxic-shock syndrome (other than streptococcal)	A48.3	78	71	71	55
Trichinellosis	B75	0	0	0	0
Tuberculosis	A16-A19	784	711	657	648
Tularemia	A21	2	2	1	0
Typhoid fever	A01.0	0	0	0	0
Varicella	B01	32	16	19	13
Yellow fever¶	A95	1	0	0	0

Source: CDC. CDC WONDER Compressed Mortality files (http://wonder.cdc.gov/mortSQL.html) provided by the National Center for Health Statistics. National Vital Statistics System, 1999-2005. Underlying causes of death are classified according to ICD 10. Data for 2006-2007 are not available. Data are limited by the accuracy of the information regarding the underlying cause of death indicated on death certificates and reported to the National Vital Statistics System.

* World Health Organization. International Statistical Classification of Diseases and Related Health Problems. Tenth Revision, 1992.

† Acquired immunodeficiency syndrome.

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

¶ For one fatality, the cause of death was erroneously reported as yellow fever in the National Center for Health Statistics dataset for 2003. Subsequent investigation has determined that this death did not result from infection with wild-type yellow fever virus, and it is therefore not included in this table.

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