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**Summary of Notifiable Diseases —
United States, 2008**

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Summary of Notifiable Diseases – United States, 2008

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Preface

The *Summary of Notifiable Diseases—United States, 2008* contains the official statistics, in tabular and graphic form, for the reported occurrence of nationally notifiable infectious diseases in the United States for 2008. Unless otherwise noted, the data are final totals for 2008 reported as of June 30, 2009. 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 2008 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 2008.* The tables provide the number of cases reported to CDC for 2008 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 1977. This section also includes a table enumerating deaths associated with specified notifiable diseases reported to CDC's National Center for Health Statistics (NCHS) during 2002–2006. 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 Data Operations Team—NNDSS, Division of Notifiable Disease Surveillance (Proposed), Public Health Surveillance Program Office (Proposed) at soib@cdc.gov.

*No cases of anthrax; diphtheria; Eastern equine encephalitis virus disease, non-neuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus disease, nonneuroinvasive; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; vancomycin-resistant *Staphylococcus aureus* (VRSA) infection; Western equine encephalitis virus disease, neuroinvasive and nonneuroinvasive; and yellow fever were reported in 2008. 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.

Background

The infectious diseases designated as notifiable at the national level during 2008 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/diss/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/diss/nndss/nndsshis.htm>.

Infectious Diseases Designated as Notifiable at the National Level during 2008*

| | |
|---|---|
| Acquired immunodeficiency syndrome (AIDS) | Malaria |
| Anthrax | Measles |
| Domestic arboviral diseases, neuroinvasive and nonneuroinvasive | Meningococcal disease |
| California serogroup virus | Mumps [†] |
| Eastern equine encephalitis virus | Novel influenza A virus infections |
| Powassan virus | Pertussis |
| St. Louis encephalitis virus | Plague |
| West Nile virus | Poliomyelitis, paralytic |
| Western equine encephalitis virus | Poliovirus infection, nonparalytic |
| Botulism | Psittacosis |
| foodborne | Q fever [†] |
| infant | acute |
| other (wound and unspecified) | chronic |
| Brucellosis | Rabies |
| Chancroid | animal |
| <i>Chlamydia trachomatis</i> infections | human |
| Cholera | Rocky Mountain spotted fever [†] |
| Coccidioidomycosis [†] | Rubella |
| Cryptosporidiosis | Rubella, congenital syndrome |
| Cyclosporiasis | Salmonellosis |
| Diphtheria | Severe acute respiratory syndrome-associated coronavirus (SARS-CoV) disease |
| Ehrlichiosis/Anaplasmosis [†] | Shiga toxin-producing <i>Escherichia coli</i> (STEC) |
| <i>Ehrlichia chaffeensis</i> | Shigellosis |
| <i>Ehrlichia ewingii</i> | Smallpox |
| <i>Anaplasma phagocytophilum</i> | Streptococcal disease, invasive, Group A |
| Undetermined | Streptococcal toxic-shock syndrome |
| Giardiasis | <i>Streptococcus pneumoniae</i> , drug resistant, all ages, invasive disease |
| Gonorrhea | <i>Streptococcus pneumoniae</i> , invasive disease non-drug resistant, in children aged <5 years |
| <i>Haemophilus influenzae</i> , invasive disease | Syphilis |
| Hansen disease (Leprosy) | Syphilis, congenital |
| Hantavirus pulmonary syndrome | Tetanus |
| Hemolytic uremic syndrome, post-diarrheal | Toxic-shock syndrome (other than streptococcal) |
| Hepatitis, viral, acute | Trichinellosis |
| Hepatitis A, acute | Tuberculosis |
| Hepatitis B, acute | Tularemia |
| Hepatitis B virus, perinatal infection | Typhoid fever |
| Hepatitis C, acute | Vancomycin-intermediate <i>Staphylococcus aureus</i> infection (VISA) |
| Hepatitis, viral, chronic | Vancomycin-resistant <i>Staphylococcus aureus</i> infection (VRSA) |
| Chronic Hepatitis B | Varicella (morbidity) |
| Hepatitis C virus infection (past or present) | Varicella (mortality) |
| Human Immunodeficiency Virus infection | Vibriosis |
| Adult (age ≥13 yrs) | Yellow fever |
| Pediatric (age <13 yrs) | |
| Influenza-associated pediatric mortality | |
| Legionellosis | |
| Listeriosis | |
| Lyme disease [†] | |

* Position Statements the Council of State and Territorial Epidemiologists approved in 2007 for national surveillance were implemented beginning in January 2008.

No new conditions were added to the Notifiable disease list in 2008

[†] Revised national surveillance case definition.

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 1–53, which correspond to the period for the week ending January 5, 2008, through the week ending January 3, 2009. More information regarding infectious notifiable diseases, including case definitions, is available at <http://www.cdc.gov/ncphi/diss/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 2008 NNDSS event code list (available at http://www.cdc.gov/ncphi/diss/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.

Office of Surveillance, Epidemiology and Laboratory Services (Proposed)

National Center for Health Statistics (NCHS)

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

Office of Infectious Diseases (Proposed)

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; *Chlamydia 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 Emerging and Zoonotic Infectious Diseases (Proposed)

Division of Vector-Borne 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, 2007 U.S. resident population from the vintage 2007 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 2007 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 *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. resident 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 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 or reported uniformly for all diseases, the standards for race and ethnicity have changed over time, and the transition in implementation to the newest race and ethnicity standard has taken varying amounts of time for different CDC surveillance systems. For example, in 1990, the National Electronic Telecommunications System for Surveillance (NETSS) was established to facilitate data collection and submission of case-specific data to CDC's National Notifiable Diseases Surveillance System, except for selected diseases. In 1990, NETSS implemented the 1977 Office of Management and Budget (OMB) standard for race and ethnicity, in which race and ethnicity were collected in one variable. Other surveillance programs implemented two variables for collection of race and

ethnicity data. The 1997 OMB race and ethnicity standard, which requires collection of multiple races per person using multiple race variables, should have been implemented by federal programs beginning January 1, 2003. In 2003, the CDC Tuberculosis and HIV/AIDS programs were able to update their surveillance systems to implement 1997 OMB standards. In 2005 the STD*MIS system was also updated to implement the 1997 OMB standards. In 2003, the CDC's Division of Tuberculosis Elimination was able to update the Tuberculosis Information Management System (TIMS) to implement the 1997 OMB race/ethnicity standards. However, in 2003, other diseases that constitute NETSS were undergoing a major change in the manner in which data were collected and reported to CDC. This change is known as the transition from NETSS to the National Electronic Disease Surveillance System (NEDSS). NEDSS implemented the newer 1997 OMB standard for race and ethnicity. However, the transition from NETSS to NEDSS was slower than originally expected relative to reporting data to CDC using NEDSS and hence some data are currently reported to CDC using NETSS and NEDSS formats, even if the data in the reporting jurisdictions are collected using NEDSS. Until the transition to NEDSS is complete, race and ethnicity data collected or reported to NETSS using different race and ethnicity standards will need to be converted to one standard. The data are now converted to the 1977 OMB standard originally implemented in NETSS.

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 by using NETSS. In 2001, CDC launched 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 adopted by 16 states; 31 states have their own NEDSS-compatible based system, and three in the final stage of adoption. A major feature of all NEDSS compatible

solutions, which includes 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 2008, 16 states used NBS to transmit nationally notifiable infectious diseases to CDC, 24 states used a NEDSS-compatible based system, and the remaining states and territorial jurisdictions continued to use the NETSS or other applications. Additional information concerning NEDSS is available at <http://www.cdc.gov/phinf/activities/applications-services/nedss/index.html>.

Methodology for Identifying which Nationally Notifiable Infectious Diseases are Reportable

States and jurisdictions are sovereign entities. Reportable conditions are determined by laws and regulations of each state and jurisdiction. It is possible that some conditions deemed nationally notifiable might not be reportable in certain states or jurisdictions. Determining which nationally notifiable infectious diseases are reportable in National Notifiable Diseases Surveillance System (NNDSS) reporting jurisdictions was determined by analyzing results of the 2008 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 for more than 6 months in 2008 by clinicians, laboratories, hospitals, or “other” public health reporters, as mandated by law or regulation. In 2008, to assist in the implementation of the SRCA, the NNDSS program provided technical assistance to the Council of State and Territorial Epidemiologists (CSTE).

In 2007, SRCA became the first collaborative project of such technical magnitude ever conducted by CSTE and CDC. Previously, CDC and CSTE had gathered public health reporting requirements independently. The 2008 SRCA collected information regarding whether each reportable condition was 1) explicitly reportable (i.e., listed as a specific disease or as a category of diseases on reportable disease lists), 2) 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 3) not reportable. Only explicitly reportable conditions were considered reportable for the purpose of national public health surveillance and thus reflected in the NNDSS. Moreover, to determine whether a condition included in the SRCA was reportable across all public health reporter categories and for a specific nationally notifiable

infectious disease (NNID) in a reporting jurisdiction, CDC developed and applied a condition algorithm and a results algorithm to run on the data collected in the SRCA. Analyzed results of the 2008 SRCA were used to determine whether a NNID was not reportable in a reporting jurisdiction in 2008 and thus noted with an “N” indicator (for “not reportable”) in the front tables of this report.

Unanalyzed results from the 2007 and 2008 SRCA are available using CSTE’s web query tool, at <http://www.cste.org/dnn/programsandactivities/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 PHEIC.

The revised IHR represent a conceptual shift from a pre-defined 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 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 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/ihrregulations.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 2008

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 human immunodeficiency virus (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 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 surveillance into their AIDS surveillance systems; names or other personal identifying information are not reported to CDC.

Botulism

Botulism is a severe paralytic illness caused by toxins produced by *Clostridium botulinum*. Exposure to toxin can occur by ingestion (foodborne botulism) or by in situ production from *C. botulinum* colonization of a wound (wound botulism) or the gastrointestinal tract (infant botulism and adult intestinal colonization botulism) (1). CDC maintains intensive surveillance for cases of botulism in the United States with a 24 hour/7 day a week consultation service. Health-care providers should report suspected botulism cases immediately to their state health departments; all states maintain 24-hour telephone services for reporting of botulism and other public health emergencies. Additional emergency consultation is available from the CDC botulism duty officer via the CDC Emergency Operations Center, telephone 660-488-7100. In 2008, cases were attributed to foodborne botulism, wound botulism, infant botulism, and unknown forms of botulism.

1. Sobel J. Botulism. *Clin Infect Dis* 2005;41:1167–73.

Brucellosis

The incidence of brucellosis in the United States increased from 2003 until 2007. The number of reported cases in 2008 decreased 36.0% from the previous year. Overall, the demographic characteristics of persons with brucellosis remained stable. For patients for whom ethnicity was identified, 62.3% were Hispanic. The majority of cases were reported in the Southwest.

In the U.S. animal population, brucellosis eradication efforts continue. In 2008, the U.S. Department of Agriculture declared Texas a brucellosis Class Free state. Montana was reclassified as a Class A state following the report of a second brucellosis-affected herd within 2 years (1). In total, 49 states and three territories were classified as brucellosis Class Free states at the end of 2008 (1). *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.

Risk factors associated with brucellosis include the consumption of unpasteurized milk or soft cheeses. The risk for brucellosis from domestic dairy products is low. Unpasteurized dairy products from countries with endemic brucellosis remains a source of brucellosis for immigrants and travelers. Hunters are at an elevated risk for contracting brucellosis from the carcass or meat of infected animals. In addition, exposure to *Brucella* spp. can occur in diagnostic and research laboratories because of the 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 illness (4). CDC provides recommendations for laboratory exposures and can assist with the serologic monitoring of laboratory workers who are affected.

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). 5th ed. Washington, DC: US Department of Health and Human Services, CDC, National Institutes of Health; 2007. Available at http://www.cdc.gov/OD/OHS/biosfty/bmb15/bmb15th_edition.pdf.
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. Cases reported in 2008 were fewer than the average number of cases per year reported during 2003–2007 (mean: 6.8) (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 (2,3). The single

patient with domestic exposure in 2008 ate crab harvested from the U.S. Gulf Coast. Other serogroups of toxin-producing *Vibrio cholerae* (e.g., O141 and O75) also have caused severe diarrhea in patients who have a history of consumption of seafood from the Gulf Coast (4).

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. Mintz ED, Guerrant RL. A lion in our village – the unconscionable tragedy of cholera in Africa. *New Engl J Med* 2009;360:1061–3.
4. 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

Coccidioidomycosis is a common cause of community-acquired fungal pneumonia in disease-endemic areas of the southwest United States; however, clinical suspicion and laboratory testing occur infrequently (1). Fungal conidia survive in the soil and are propagated in an airborne manner, particularly when soil is disrupted. In the southwest United States, alkaline soil and climate support coccidioidomycosis growth and propagation. In recent years, strategies to model the effects of climate on disease incidence have begun, which include linking changes in incidence to climatic change, particularly in the region where the disease is endemic (2–4).

Case counts decreased for the first time in a decade during 2007. In 2008, reported coccidioidomycosis cases in the United States decreased again, primarily because of fewer reports received from the disease-endemic states of California and, to a lesser extent, Arizona. Case counts decreased even after the case definition revision implemented by the Council of State and Territorial Epidemiologists in 2007 included less stringent diagnostic criteria.

In 2009, certain laboratories in Arizona, where approximately 60% of coccidioidomycosis cases in the United States occur, modified their reporting criteria to include all cases with a positive enzyme immunoassay without confirmation by immunodiffusion assay. As a result, case counts in Arizona might increase during 2009; however, such an increase can be attributed to a less stringent case definition.

1. Valdivia L, Nix D, Wright M, et al. Coccidioidomycosis as a common cause of community-acquired pneumonia. *Emerg Infect Dis* 2006;12:958–62.
2. Park B, Sigel K, Vaz V, et al. An epidemic of coccidioidomycosis in Arizona associated with climatic changes, 1998–2001. *J Infect Dis* 2005;191:1981–7.
3. Comrie AC. Climate factors influencing coccidioidomycosis seasonality and outbreaks. *Environ Health Perspect* 2005;113:688–92.
4. Kolivras KN, Comrie AC. Modeling valley fever (coccidioidomycosis) incidence on the basis of climate condition. *Int J Biometeorol* 2003;47:87–101.

Cryptosporidiosis

The number of cryptosporidiosis cases reported to CDC increased during 2005–2007. Despite a decrease in the number of cases reported in 2008, cryptosporidiosis incidence was approximately threefold greater compared with 2004.

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 occurred more frequently 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 (1). 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 time that oocysts can be shed (2); the low infectious dose (3); the resistance of *Cryptosporidium* oocysts to chlorine (4); and the prevalence of improper pool maintenance (i.e., insufficient disinfection, filtration, and recirculation of water), particularly of children's wading pools (5). The application of molecular epidemiology (i.e., genotyping and subtyping *Cryptosporidium* specimens) to clinical and environmental samples has demonstrated potential to expand our knowledge of *Cryptosporidium* epidemiology (6). In 2008, CDC partnered with state and local health professionals to release Cryptosporidiosis Outbreak and Response Evaluation (CORE) guidelines (http://www.cdc.gov/crypto/resources/core_guidelines.pdf) that health departments, aquatic facilities, and child care programs can implement to reduce the risk of community-wide spread.

1. Shields JM, Gleim ER, Beach MJ. Prevalence of *Cryptosporidium* spp. and *Giardia intestinalis* in swimming pools, Atlanta, Georgia. *Emerg Infect Dis* 2008;14:948–50.
2. 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.
3. 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.
4. Shields JM, Hill VR, Arrowood MJ, Beach MJ. Inactivation of *Cryptosporidium parvum* under chlorinated recreational water conditions. *J Water Health*. 2008;6:513–20.
5. CDC. Surveillance data from swimming pool inspections—selected states and counties, United States, May–September 2002. *MMWR* 2003;52:513–6.
6. Xiao L. Molecular epidemiology of cryptosporidiosis: an update. *Exp Parasitol* 2009 April 7 [Epub ahead of print].

Domestic Arboviral, Neuroinvasive and Nonneuroinvasive (West Nile virus disease)

During 2008, West Nile virus (WNV) disease cases were reported from 45 states and the District of Columbia, including 27 counties that had not reported cases previously. Nationally, the reported incidence of West Nile neuroinvasive disease (WNND) was 0.2 cases per 100,000 population, which is lower than that reported in the previous 4 years during 2004–2007 (median: 0.4, range: 0.4–0.5). The highest incidence of WNND continued to occur in western and central states.

In 2008, CDC, the Food and Drug Administration (FDA), and state health departments investigated an increase in false-positive test results obtained with a commercially available WNV test kit (1). The investigation revealed that one particular kit lot was the source of the false-positive results, and that lot was recalled. Among specimens that tested positive using the implicated kit lot that were retested at CDC, 72% were determined to be false-positive results. A higher false-positive percentage was found among patients without evidence of neuroinvasive disease (77%) than patients with evidence of neuroinvasive disease (47%). Commercially available WNV test kits should be used to determine a presumptive diagnosis of WNV neuroinvasive disease. These kits should not be used to test specimens from persons without compatible illness, and any positive result should be confirmed by additional testing at a state health department or CDC. Considering the large proportion of false-positives, CDC recommended that state health departments not classify patients as having WNV disease if the only laboratory evidence was from the recalled kit lot. States have since reevaluated affected cases to arrive at the final WNV disease totals for 2008.

1. CDC. False-positive results with a commercially available West Nile Virus immunoglobulin M assay—United States, 2008. *MMWR* 2009;58:458–60.

Ehrlichiosis and Anaplasmosis

Case definitions for these diseases were modified beginning in 2008 (1) to include a separate designation for *Ehrlichia ewingii* for better assessment and enumeration of these cases. Four categories of ehrlichiosis and anaplasmosis were reportable during 2008: 1) *Ehrlichia chaffeensis*, 2) *Ehrlichia ewingii*, 3) *Anaplasma phagocytophilum*, and 4) Human ehrlichiosis/anaplasmosis - undetermined. Infection caused by *E. chaffeensis* was reported primarily from the lower Midwest and the Southeast, reflecting the range of the primary tick vector species (*Amblyomma americanum*). Infection caused by

A. phagocytophilum was 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. Four central U.S. states and Delaware reported nine confirmed cases of *E. ewingii* infection. The category “Human ehrlichiosis/anaplasmosis - undetermined” includes cases for which a specific etiologic agent could not be identified using available serologic tests. The high number of “Human ehrlichiosis/anaplasmosis - undetermined” cases reported from some northern states (2) reflects state-specific classifications based on indistinguishable antigenic cross-reactivity or situations in which physicians, confused regarding the likely causative agent, ordered single or inappropriate tests (e.g., ordering only ehrlichiosis tests in a region where anaplasmosis would be expected to predominate).

During 2008, cases attributed to *E. chaffeensis* and *A. phagocytophilum* increased by 16% and 21%, respectively. Reported ehrlichiosis and anaplasmosis cases have increased every year since this group of diseases became notifiable in 1999. Increases in reported cases might be the result of several factors, including ecological changes influencing disease transmission, changes in diagnostic approaches that alter detection rates, or changes in surveillance and reporting. Changes in the case definition that became effective in January 2008 (1) also might have altered how cases were classified.

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>.
2. CDC. Anaplasmosis and Ehrlichiosis—Maine, 2008. *MMWR* 2009; 58:1033–6.

Hansen Disease (Leprosy)

The number of cases of Hansen disease (HD) reported in the United States peaked in 1985 and decreased until 2006. The number of reported cases increased in 2007 and decreased 26.6% in 2008. Cases were reported from 19 states and one territory; 70% of cases were reported from California, Florida, Hawaii, Texas, and New York City. HD is not highly transmissible; cases appear to be related predominantly to immigration from areas in which the disease is endemic. 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 6.3% of all persons infected with *E. coli* O157:H7, but 15.3% of children aged < 5 years, progress to HUS (2). During 2008, as usual, most 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. Gould L, Demma L, Jones TF, et al. Hemolytic uremic syndrome and death in persons with *Escherichia coli* O157:H7 infection, Foodborne Diseases Active Surveillance Network Sites, 2000–2006. *Clin Infect Dis* 2009;49:1480–5.

HIV Infection

As of April 2008, all 50 states, the District of Columbia, and five U.S. dependent areas have laws or regulations requiring confidential name-based reporting for human immunodeficiency virus (HIV) infection, in addition to reporting persons with AIDS. In 2008, CDC published a revised surveillance case definition for HIV infection that includes AIDS and incorporates the HIV infection classification (1). Laboratory-confirmed evidence of HIV infection is now required to meet the surveillance case definition for HIV infection, including stage 3 HIV infection, i.e., 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 56,300 (2).

1. CDC. Revised surveillance case definitions for HIV infection among adults, adolescents and children aged <18 months and for HIV infection and AIDS among children aged 18 months to <13 years—United States, 2008. *MMWR* 2008;57(No. RR-10).
2. Hall HI, Song, R, Rhodes P, et al. Estimation of HIV incidence in the United States. *JAMA* 2008;300:520–9.

Influenza-Associated Pediatric Mortality

In June 2004, the Council of State and Territorial Epidemiologists added influenza-associated pediatric mortality (i.e., among persons aged <18 years) to the list of conditions reportable to the National Notifiable Diseases Surveillance System. Cumulative year-to-date incidence is published each week in *MMWR* Table I for low-incidence nationally notifiable diseases.

A total of 90 cases of influenza-associated pediatric deaths were reported to CDC during 2008. Pediatric deaths reported during 2008 occurred during the 2006–07, 2007–08, and 2008–09 influenza seasons. In 2008, the median age at death was 5.6 years (range: 29 days–17.9 years). A total of 10

children (11%) were aged <6 months; 14 (16%) were aged 6–23 months; 19 (21%) were aged 24–59 months; and 47 (52%) were aged >5 years. Among all pediatric deaths reported in 2008, 56 (62%) children died after being admitted to the hospital, whereas 34 (38%) died in the emergency room or outside the hospital. Information on underlying or chronic medical conditions was reported for 82 children: 47 (57%) children had one or more underlying or chronic medical conditions, placing them at increased risk for influenza-associated complications. Fifty-one of the 90 children had specimens collected for bacterial culture from normally sterile sites and 15 (29%) were positive. *Staphylococcus aureus* was the most frequently reported bacterial pathogen in 2008 and was found in 13 (87%) of the 15 children with co-infections. Nine of the *Staphylococcus* isolates were methicillin-resistant and the remaining four were sensitive to methicillin. Of the 65 children aged >6 months for whom the vaccination status was known, nine had been vaccinated against influenza according to the 2008 Advisory Committee on Immunization Practices recommendations (1). Continued surveillance of influenza-related mortality is important to monitor the effects of influenza and the possible effect of interventions in children.

1. CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2008; 57(No. RR-7):1–60.

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 2008, most cases occurred among persons aged ≥65 years.

Molecular subtyping of *L. monocytogenes* isolates and sharing 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 2008, the incidence of listeriosis in FoodNet/active surveillance sites was 0.29 cases per 100,000 population, representing a decrease of 36% 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 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/national/surveillance/listeria_surveillance.html. 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, 2008. *MMWR* 2009;58:333–7.
4. Outbreak of *Listeria monocytogenes* Infections associated with pasteurized milk from a local dairy—Massachusetts, 2007. *MMWR* 2008;57:1097–1100.

Lyme Disease

In January 2008, a CSTE-approved revised national surveillance case definition was implemented. The purpose of the revision was to permit states and territories to report confirmed and probable cases of Lyme disease to the National Notifiable Diseases Surveillance System in accordance with the 2007 CSTE position statement template, update the criteria for laboratory evidence of infection to reflect current testing practices, and provide measures to assess the public health surveillance burden. Because of the modifications to the classification of a confirmed case and criteria for laboratory evidence and addition of probable cases to the total case count, the total and confirmed case counts from 2008 are not directly comparable to total case counts reported in previous years. The revised surveillance case definition can be accessed at http://www.cdc.gov/ncphi/diss/nndss/casedef/lyme_disease_2008.htm.

Measles

As in recent years, the majority (125) of confirmed measles cases in 2008 were import-associated (1). Twenty-five cases were internationally imported, including 13 in U.S. residents who had acquired measles while traveling abroad and 12 in non-U.S. residents who had acquired the disease abroad before traveling to the United States. Importations came from 12 countries, many of which are within the WHO European Region. Other import-associated cases included 29 cases with a direct link to an imported case, 22 imported virus cases (i.e., cases that cannot be linked epidemiologically to an imported case, but for which imported virus has been isolated), and 49 cases with link to virus-only cases. The sources of infection for the remaining 15 cases were classified as unknown because no link to importation was found.

Of the 127 U.S. residents with measles in 2008, 7 were vaccinated, 21 had unknown vaccination histories, and 99 were not vaccinated. Of the 99 cases in unvaccinated U.S. residents: 67% were among persons unvaccinated because of their personal or religious beliefs. Fourteen cases occurred

among children unvaccinated because of missed opportunity, delayed vaccination, or unknown reasons. This group included mostly children aged 12–15 months, who had not been vaccinated, or older toddlers whose parents delayed vaccination but did not state any religious or personal objections to vaccination. Seventeen cases occurred in children too young to be vaccinated routinely, although two infants, aged 6 and 9 months, were traveling internationally and thus should have been vaccinated according to vaccination recommendations of the Advisory Committee for Immunization Practices (2). One case occurred in a person who was born before 1957, and therefore was considered to have evidence of immunity because of birth year (2).

Although still low, the number of measles cases reported during 2008 was the highest since 1996. The increase was not the result of a greater number of imported cases, but was the result of greater viral transmission after importation into the United States. The import-linked cases occurred largely among school-aged children who were eligible for vaccination but whose parents chose not to have them vaccinated (3). One study reported an increase in the number of vaccine exemptions among U.S. children who attend school in states that allow philosophical exemptions (4). In 2008, 41% of measles cases occurred among school-aged children and adolescents (aged 5–19 years). Seventeen children, including five aged <15 months, were hospitalized.

Nine outbreaks occurred in seven states, all with viral or epidemiologic evidence of an imported source. These outbreaks accounted for 74% of all cases. In four outbreaks, 50% of cases occurred among persons unvaccinated because of personal beliefs. Two such outbreaks involved home-schooled populations (3). In one 12-case outbreak among children with personal belief exemptions, 70 children exposed to a measles case were placed on voluntary home quarantine because parents declined vaccination or because they were too young to be vaccinated (5). In another outbreak, the majority of infections were acquired in hospitals or emergency rooms. This outbreak lasted over 2 months and 6 generations of spread. This outbreak included a case in an unvaccinated health-care worker who was infected in a hospital (6).

Although the elimination of endemic measles in the United States has been achieved, and population immunity remains high (7), outbreaks can occur when measles is introduced into susceptible groups, often at substantial cost to control (8). Measles can be prevented by adhering to recommendations for vaccinations, including guidelines for travelers (2, 9).

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. Available at <http://www.cste.org/position%20statements/search/byyear2006.asp>.

2. CDC. Measles, mumps, and rubella—vaccine use and strategies for elimination of measles, rubella, congenital rubella syndrome and control of mumps: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 1998;47(No. RR-8).
3. CDC. Measles—United States, January–July 2008. *MMWR* 2008;57:893–6.
4. Omer SB, Pan WKY, Halsey NA, et al. Nonmedical exemptions school immunization requirements: secular trends and association to state policies with pertussis incidence. *JAMA* 2006;296:1757–63.
5. CDC. Outbreak of measles—San Diego, California, January–February 2008. *MMWR* 2008;57:203–6.
6. Measles—United States, January 1–April 25, 2008. *MMWR* 2008;57:494–8.
7. Hutchins SS, Bellini W, Coronado V, et al. Population immunity to measles in the United States. *J Infect Dis* 2004;189(Suppl 1):S91–7.
8. 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.
9. CDC. Preventable measles among U.S. residents, 2001–2004. *MMWR* 2005;54:817–20.

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 reported cases (1–4). Following the resurgence of mumps in 2006, reported cases declined towards pre-resurgence levels with 800 cases in 2007 and 454 cases in 2008 (5). In response to the 2006 outbreak, the Advisory Committee on Immunization Practices (ACIP) updated criteria for mumps immunity and mumps vaccination recommendations (5). In 2007, the Council of State and Territorial Epidemiologists revised the mumps case definition by extending the case definition to include cases with mumps symptoms other than parotitis, by adding mumps virus nucleic acid detection to the laboratory criteria, and by making several changes to the case classification system (6). The revised case definition has been in effect since January 1, 2008.

In 2008, after a review of scientific evidence, ACIP, the Healthcare Infection Control Practices Advisory Committee, and the American Academy of Pediatrics recommended reducing, from 9 to 5 days, the period of isolation for persons with mumps in both health-care and community settings. All three groups now recommend a 5-day period of isolation after onset of parotitis, both for isolation of persons with mumps in either community or health-care settings and for use of standard precautions and droplet precautions. Among the rationale cited for these recommendations is the substantial reduction in viral secretion 5 days after onset of parotitis and the likelihood that much transmission in community settings occurs from persons with asymptomatic infection and, among persons with symptomatic disease, before the onset of parotitis. Postexposure recommendations remain unchanged. Health-care personnel with no evidence of mumps immunity

who are exposed to patients with mumps should be excluded from duty from the 12th day after first exposure through the 26th day after last exposure (7–8).

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, Parker A, et al. Recent resurgence of mumps in the United States. *N Engl J Med* 2008;358:1580–9.
5. Barskey AE, Glasser JW, LeBaron CW. Mumps resurgence in the United States: A historical perspective on unexpected elements. *Vaccine* 2009;27:6186–95.
6. CDC. Updated recommendations of the Advisory Committee on Immunization Practices (ACIP) for the control and elimination of mumps. *MMWR* 2006;55:629–30.
7. Council of State and Territorial Epidemiologists. 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>.
8. CDC. Updated recommendations for isolation of persons with mumps. *MMWR* 2008;57:1103–5.

Pertussis

Although the incidence of reported pertussis has declined in the United States following the 2004 peak (8.9 per 100,000), overall incidence increased slightly during 2007 and 2008 (3.62 and 4.18 cases per 100,000, respectively). Infants aged <6 months, who are at greatest risk for severe disease and death, continued to have the highest reported rate of pertussis (79.41 per 100,000). However, adolescents (aged 10–19 years) and adults (aged >20 years) accounted for nearly half of reported cases in 2008, and the contribution of cases in persons aged 5–9 years appears to be increasing in comparison with previous years (20% of cases in 2008, 13% of cases in 2007, 10% in 2006). Adolescents and adults are critical age groups as they are thought to be a source of transmission of pertussis to young infants who are too young to be completely vaccinated. In 2005, a combined tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine (Tdap) was recommended for use among adolescents and adults (1,2). Although Tdap coverage among adolescents aged 13–17 years has increased from 10.8% in 2006 to 40.8% in 2008, the direct impact of Tdap is still unknown (3,4). Continued monitoring of disease trends through national surveillance will be important to assess both the direct impact of Tdap among target vaccine age groups and the indirect effects of vaccination on infants.

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. Vaccination coverage among adolescents aged 13–17 years—United States, 2006. *MMWR* 2007;56:885–8.
4. CDC. Vaccination coverage among adolescents aged 13–17 years—United States, 2008. *MMWR* 2009;58:997–1001.

Psittacosis

Psittacosis is a respiratory infection caused by the bacterium *Chlamydophila psittaci*. Once referred to as “parrot fever”, psittacosis occurs through exposure to the feces, respiratory secretions, plumage, or tissues of infected birds and can lead to severe respiratory compromise in a minority of cases. In 2008, the incidence of reported cases of psittacosis continued to be low. Because of the recent development of improved molecular diagnostics for the detection of *C. psittaci* (1), a revised position statement by the Council of State and Territorial Epidemiologists and case definition for psittacosis is anticipated. Additional information about psittacosis and case reporting tools can be found at <http://www.nasphv.org/documents/Compendia/Psittacosis.html>.

1. Mitchell SL, Wolff BJ, Thacker WL, et al. Genotyping of *Chlamydophila psittaci* by real time PCR and high resolution melt analysis. *J Clin Microbiol* 2008;47:175–81.

Q Fever

The case definition for Q fever was modified beginning in 2008 (1) to include a separate designation for acute and chronic infection and to restrict designation of cases diagnosed by use of indirect immunofluorescent antibody assays to those minimally exhibiting IgG antibody titers $\geq 1:128$. Among cases reported in 2008, 88% were identified as acute infection, whereas 12% were the result of chronic Q fever infection. In 2008, cases remained 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.

During 2008, cases of Q fever reported decreased by 30% from those reported for 2007, the largest decrease since reporting of cases of Q fever was initiated in 2000. This decrease likely reflects the more stringent case classification criteria in effect during 2008 (1) compared with the previous year. Although few human cases are reported annually, Q fever is believed to be substantially underreported because of its nonspecific presentation and the failure of physicians to suspect infection and request appropriate diagnostic tests.

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>.

Rabies

During 2008, two cases of human rabies were reported in the United States: an imported case from Mexico and an indigenous case in a 55-year-old male from Missouri. Epidemiologic investigations of these cases implicated bat rabies virus variants in both cases. The case from Mexico marked the first imported case of rabies reported as a rabies virus variant not associated with dogs in the origin country (1). During 2008, the majority (93%) of 6,841 animal rabies cases in the United States were reported in wild animal species. Overall, a 3% decrease in rabies cases was reported in animals in 2008 compared with 2007. In the United States, five groups of animals are recognized as reservoirs 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) (2). A skunk rabies virus variant associated with spillover and adaptation of a big brown bat rabies virus was reported in Flagstaff, Arizona after nearly 2 years with no cases after wildlife vaccination campaigns were implemented in the area.

Reported cases of rabies in domestic animals remain low (7% of reported rabid animals) in part because of high vaccination rates and the elimination of dog-to-dog transmission, which was last reported in 2004. One case of canine rabies imported in a dog from Iraq was reported during 2008 (3). This case illustrates the continued challenge for the United States to remain canine rabies free. Public health education programs should target travelers and health-care providers regarding rabies prevention measures and the potential risk of rabies exposure in countries where the disease is endemic in domestic animals. In the United States, cats remained the most commonly reported domestic animal with rabies during 2008 (62% of reported rabid domestic animals).

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 the eastern United States are targeted at preventing the westward spread of the raccoon rabies virus variant whereas programs in Texas are being maintained as a barrier to prevent the reintroduction of canine rabies from Mexico and to eliminate gray fox rabies.

1. Velasco-Villa A, Messenger SL, Orciari LA, et al. New rabies virus variant in a Mexican immigrant. *Emerg Infect Dis* 2008;14:1906–8.
2. Blanton JD, Robertson K, Palmer D, Rupprecht CE. Rabies surveillance in the United States during 2008. *J Am Vet Med Assoc* 2009; 235:676–89.
3. CDC. Rabies in a dog imported from Iraq—New Jersey, June 2008. *MMWR* 2008;57:1076–8.

Rocky Mountain Spotted Fever

The case definition for Rocky Mountain Spotted Fever (RMSF) was modified beginning in 2008 (1) to include more detailed classification criteria for serologic assays, including enzyme-linked immunosorbent assays and use of IgM antibody tests. During 2008, RMSF cases increased 15% over those reported in 2007. Cases reported in 2008 were distributed across the United States, reflecting the endemic status of RMSF and the widespread ranges of the primary tick vectors (primarily *Dermacentor variabilis* and *Dermacentor andersoni*) responsible for transmission. RMSF cases associated with transmission by *Rhipicephalus sanguineus*, first reported in 2004 (2), continued to be reported from Arizona during 2008.

The reporting years 2005–2008 reflect a trend toward stabilized numbers of reported RMSF cases. However, RMSF case reports have increased more than 300% during the past decade. This increase might be the result of several factors, including ecological changes influencing disease transmission, changes in diagnostic approaches that alter detection rates, or changes in surveillance and reporting. Changes in the case definition in 2004 and a further revision of the case definition beginning in 2008 (1) also might have altered how cases were classified.

1. 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>.
2. 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.

Salmonellosis

During 2008, as in previous years, the age group with the highest incidence of salmonellosis was children aged <5 years. *Salmonella enterica* serotype Typhimurium and *S. enterica* serotype Enteritidis have been the most frequently isolated serotypes since 1996 (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 antimicrobial 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; therefore, in 2005, the Council of State and Territorial Epidemiologists adopted a position statement for serotype-specific reporting of laboratory-confirmed

salmonellosis cases (3). Increasing evidence indicates that infections with certain serotypes of *Salmonella* are more likely to be invasive and lead to poor outcomes than infections with other serotypes. Such findings have implications for better understanding the public health importance and pathogenicity of salmonellosis (4).

1. CDC. Salmonella Surveillance summary, 2006. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC; 2008. Available at http://www.cdc.gov/national-surveillance/salmonella_surveillance.html.
2. CDC. National Antimicrobial Resistance Monitoring System for Enteric Bacteria (NARMS): 2006 human isolates final report. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC; 2009.
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>.
4. Jones TF, Ingram LA, Cieslak PR, et al. Salmonellosis outcomes differ substantially by serotype. *J Infect Dis* 2008;198:109–14.

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 serogroup and, for *E. coli* O157, also by pulsed-field gel electrophoresis pattern is important to detect, investigate, and control outbreaks. Stool specimens from patients with community-acquired diarrhea should be submitted to clinical laboratories for routine testing, should be cultured for O157 STEC, and tested with an assay that detects Shiga toxins (3). This simultaneous approach has several advantages. First, it enables rapid detection of Shiga toxin-related illness, including that caused by non-O157 STEC, which are not readily identified in culture. Second, it permits rapid identification of O157 STEC, the serogroup most strongly associated with the development of hemolytic uremic syndrome (HUS); quickly identifying O157 STEC infections might facilitate measures to prevent HUS and speed the identification of outbreaks. Third, culturing enables isolation of STEC, which can then be characterized by serogroup and pulsed-field gel electrophoresis pattern to facilitate outbreak detection and investigation. 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. Most reported outbreaks are caused by contaminated food or water.

During 2004, a substantial decline in reported O157:H7 STEC cases led to an incidence measured in the Foodborne Diseases Active Surveillance System (FoodNet) that met the Healthy People 2010 goal of <1.0 cases/100,000 population; since then, the incidence has increased (4).

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. Recommendations for diagnosis of shiga toxin-producing *Escherichia coli* infections by clinical laboratories, 2009. *MMWR* 2009;58(RR12):1–14.
4. CDC. Preliminary FoodNet data on the incidence of infection with pathogens transmitted commonly through food, 10 sites—United States, 2004. *MMWR* 2005; 54:352–6.

Shigellosis

During 1978–2003, shigellosis cases reported to CDC exceeded 17,000 in nearly every year. 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, increased to approximately 20,000 in 2007, and to approximately 22,000 in 2008. *Shigella sonnei* infections continue to account for >75% of shigellosis in the United States (1). Most cases occur among young children, and large day care-associated outbreaks are common and difficult to control (2). Some cases of shigellosis are acquired during international travel (3,4). In addition to spreading 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. Arvelo W, Hinkle J, Nguyen TA, et al. Transmission risk factors and treatment of pediatric shigellosis during a large daycare center-associated outbreak of multidrug resistant *Shigella sonnei*. *Pediatr Infect Dis J* 2009;11:976–80.
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 Hispanola. *Am J Trop Med Hyg* 2007;76:1163–5.
5. CDC. National Antimicrobial Resistance Monitoring System for enteric bacteria (NARMS): Human isolates final report, 2006. Atlanta, GA: US Department of Health and Human Services, CDC; 2009. Available at <http://www.cdc.gov/narms>.

Syphilis, Primary and Secondary

The rate of primary and secondary (P&S) syphilis in the United States declined 90% during 1990–2000. However, the rate of P&S syphilis has increased each year since 2001, mostly in men, but also in women for the past 4 years. In 2008, a total of 13,500 cases of P&S syphilis were reported to CDC. (1) This is the highest number of reported cases since 1995 and corresponds to a rate of 4.5 cases per 100,000 population, an 18% increase from 2007. Since 2001, the rate of P&S syphilis has increased 114%. On the basis of information from 44 states and Washington, D.C. in 2008, 63% of reported P&S syphilis cases in the United States occurred among men who have sex with men (MSM). Although the majority of U.S. syphilis cases have occurred among MSM, syphilis among heterosexuals is an emerging problem as reflected in a 88% increase in women since 2004 (1).

1. CDC. Sexually Transmitted Disease Surveillance, 2008. Atlanta, GA: U.S. Department of Health and Human Services; November 2009.

Trichinellosis

In November 2008, an outbreak of trichinellosis occurred in Humboldt County, California, among several families who participated in a cultural ceremony. At least 34 persons attended the event, at which they shared a meal of bear meat that was hunted by one of the family members. Case-patients recalled eating both raw and undercooked bear meat; 30 confirmed cases were reported to CDC.

This is the eighth outbreak and the largest attributed to bear meat reported to CDC in the past 10 years (1,2); it highlights the continued need for public health prevention messages aimed at consumers of wild game meat in general and for targeted prevention messages for certain cultural groups whose customs put them at risk for *Trichinella* infection in particular.

Proper cooking of meat dishes, especially dishes prepared with some types of game meats, will prevent trichinellosis. Meat products, including sausages or other prepared dishes, should be cooked to internal temperatures of at least 170° F or until juices run clear. Some species of *Trichinella* are resistant to freezing, so freezing might not be an effective prevention measure (3).

1. Kennedy ED, Hall RL, Montgomery SP, Pyburn DG, Jones JL. Trichinellosis surveillance—United States, 2002–2007. In: Surveillance Summaries, December 4, 2009. *MMWR* 2009;58 (No. SS-9).
2. Roy SL, Lopez AS, Schantz PM. Trichinellosis surveillance—United States, 1997–2001. In: Surveillance Summaries, July 25, 2003. *MMWR* 2003;52(No. SS-6).
3. Hill DE, Gamble HR, Zarlenga DS, Coss C, Finnigan J. *Trichinella native* in a black bear from Plymouth, New Hampshire. *Vet Parasitol* 2005;132:143–6.

Typhoid Fever

Recommendations indicate that travelers to countries in which typhoid fever is endemic should be vaccinated with either of two effective vaccines available in the United States. Despite these recommendations, approximately 75% of all cases of typhoid fever reported in the United States from 1999 through 2006 occurred among persons who reported international travel during the preceding month and who had not been vaccinated (1). Persons visiting friends and relatives in South Asia appear to be at particular risk, even during short visits (1,2). Certain recent illnesses have been caused by ciprofloxacin-resistant isolates (1). *Salmonella* serotype Typhi strains with decreased susceptibility to ciprofloxacin are isolated with increasing frequency, and infected persons might require treatment with alternative antimicrobial agents (3). Although the number of *S. Typhi* infections in the United States has been decreasing slowly, the number of infections attributed to *Salmonella* serotype Paratyphi A, which causes an illness indistinguishable from that caused by *S. Typhi*, has been 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 needed (4).

1. Lynch MF, Blanton EM, Bulens S, et al. Typhoid fever in the United States, 1999–2006. *JAMA* 2009;302:898–9.
2. 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.
3. 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.
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

Varicella-related deaths have declined dramatically since the prevaccine era; during 2003–2005 the national annual average of varicella-related deaths was 16 (1) compared with 100–150 deaths during 1990–1994 (2,3). In 1999, varicella-related deaths became reportable to CDC (4) and an average of five deaths (range: 0–9 deaths) has been reported annually to CDC since then (1). The two varicella-related deaths reported in 2008 highlight important aspects of continued progress towards varicella disease control and prevention.

Both varicella-related deaths occurred in adult females aged 41 and 72 years; both were born outside of the United States,

had underlying chronic conditions that were not contraindications for vaccination, and had no history of varicella disease or vaccination. Assessing evidence of immunity to varicella is important in determining who should be vaccinated. One of the criteria for evidence of immunity is birth in the United States before 1980 (5). Both of the reported deaths that occurred in adults in 2008 were in persons born outside of the United States. Both women had been assessed as susceptible to varicella during previous health-care visits. Vaccination was recommended to both women at the time of assessment but one refused it and vaccine was not available for the second woman at a follow-up visit. These deaths highlight the importance of assessing immune status among foreign-born persons and emphasize the need for vaccination if they are determined to be susceptible.

1. CDC. Summary of Notifiable Diseases—United States, 2007. *MMWR* 2007;56(No. 53).
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. Preblud SR. Age-specific risk of varicella complications. *Pediatrics* 1981;68:14–7.
4. Council of State and Territorial Epidemiologists. CSTE position statement 1998-ID-10: inclusion of varicella-related deaths in the National Public Health Surveillance System (NPHSS). Available at <http://www.cste.org/ps/1998/1998-id-10.htm>.
5. CDC. Prevention of varicella: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2007;56 (No. RR-4).

Vibriosis

Vibriosis became a nationally notifiable disease in January 2007 (1). Cholera, which is caused by infection with toxigenic *Vibrio cholerae* O1 and O139, has been nationally notifiable for several 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. During 2008, the majority of cases occurred in persons aged 40–64 years. In addition to reporting through the National Notifiable Diseases Surveillance System, 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/searchbyyear2006>.

PART 1

Summaries of Notifiable Diseases in the United States, 2008

Abbreviations and Symbols Used in Tables

- U** Data not available.
- N** Not reportable (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, 2008* 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, 2008

| Disease | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|--|--------|--------|---------|--------|---------|--------|--------|---------|--------|--------|---------|---------|-----------|
| AIDS† | 1,557 | 1,675 | 4,757 | 1,999 | 1,723 | 6,378 | 1,782 | 1,728 | 6,332 | 1,891 | 1,800 | 7,580 | 39,202 |
| Botulism, total | 9 | 6 | 9 | 14 | 13 | 10 | 13 | 15 | 9 | 17 | 18 | 12 | 145 |
| foodborne | — | — | — | 2 | 4 | 1 | — | 2 | — | 4 | 3 | 1 | 17 |
| infant | 9 | 6 | 8 | 10 | 8 | 7 | 12 | 12 | 8 | 11 | 10 | 8 | 109 |
| other (wound and unspecified) | — | — | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 5 | 3 | 19 |
| Brucellosis | 4 | 5 | 2 | 7 | 10 | 7 | 6 | 9 | 8 | 6 | 8 | 8 | 80 |
| Chancroid§ | 1 | 6 | 4 | 3 | 2 | 1 | 3 | 1 | — | 1 | 1 | 2 | 25 |
| <i>Chlamydia trachomatis</i> infections§ | 76,143 | 89,998 | 113,581 | 97,620 | 114,978 | 92,058 | 88,902 | 118,288 | 94,455 | 95,523 | 114,776 | 114,201 | 1,210,523 |
| Cholera | — | — | — | — | — | — | 1 | 2 | 1 | — | — | — | 5 |
| Coccidioidomycosis | 702 | 443 | 552 | 474 | 665 | 516 | 464 | 533 | 432 | 486 | 997 | 1,259 | 7,523 |
| Cryptosporidiosis | 269 | 260 | 394 | 385 | 418 | 411 | 657 | 2,015 | 1,532 | 1,166 | 778 | 828 | 9,113 |
| Cyclosporiasis | 10 | 9 | 6 | 2 | 8 | 23 | 27 | 22 | 6 | 6 | 6 | 14 | 139 |
| Domestic arboviral diseases¶ | | | | | | | | | | | | | |
| California serogroup virus | | | | | | | | | | | | | |
| neuroinvasive | — | 1 | — | 1 | 1 | 6 | 11 | 18 | 14 | 3 | — | — | 55 |
| nonneuroinvasive | — | — | — | — | 1 | 1 | 2 | 2 | 1 | — | — | — | 7 |
| Eastern equine encephalitis virus, neuroinvasive | — | — | — | — | — | 1 | — | 1 | 1 | 1 | — | — | 4 |
| Powassan virus, neuroinvasive | — | — | — | — | — | 1 | 1 | — | — | — | — | — | 2 |
| St. Louis encephalitis virus | | | | | | | | | | | | | |
| neuroinvasive | — | — | 1 | — | 1 | 2 | 3 | 1 | — | — | — | — | 8 |
| nonneuroinvasive | — | — | — | — | — | — | 1 | 2 | 1 | 1 | — | — | 5 |
| West Nile virus | | | | | | | | | | | | | |
| neuroinvasive | — | 1 | 1 | — | 2 | 10 | 78 | 265 | 236 | 84 | 10 | 2 | 689 |
| nonneuroinvasive | 1 | — | 1 | 3 | 9 | 22 | 67 | 325 | 181 | 55 | 3 | — | 667 |
| Ehrlichiosis/Anaplasmosis | | | | | | | | | | | | | |
| <i>Ehrlichia chaffeensis</i> | 5 | 8 | 17 | 8 | 62 | 126 | 180 | 185 | 85 | 73 | 71 | 137 | 957 |
| <i>Ehrlichia ewingii</i> | — | — | — | — | — | 1 | 3 | 3 | 1 | 1 | — | — | 9 |
| <i>Anaplasma phagocytophilum</i> | 2 | 3 | 25 | 12 | 59 | 125 | 169 | 154 | 87 | 91 | 133 | 149 | 1,009 |
| Undetermined | — | — | 1 | 1 | 6 | 6 | 35 | 30 | 9 | 10 | 13 | 21 | 132 |
| Giardiasis | 959 | 1,148 | 1,451 | 1,173 | 1,518 | 1,276 | 1,557 | 2,405 | 2,067 | 1,809 | 1,821 | 1,724 | 18,908 |
| Gonorrhea§ | 23,231 | 25,311 | 31,347 | 26,579 | 31,286 | 25,720 | 26,435 | 33,882 | 26,847 | 26,345 | 29,468 | 30,291 | 336,742 |
| <i>Haemophilus influenzae</i> , invasive disease | | | | | | | | | | | | | |
| all ages, serotypes | 260 | 267 | 324 | 222 | 284 | 232 | 191 | 198 | 132 | 167 | 240 | 369 | 2,886 |
| age<5 yrs | | | | | | | | | | | | | |
| serotype b | 2 | 6 | 3 | 1 | 2 | — | 1 | 2 | 1 | 2 | 3 | 7 | 30 |
| nonserotype b | 29 | 22 | 27 | 18 | 31 | 15 | 15 | 15 | 11 | 13 | 18 | 30 | 244 |
| unknown serotype | 12 | 22 | 18 | 13 | 19 | 14 | 15 | 5 | 7 | 6 | 13 | 19 | 163 |
| Hansen disease (Leprosy) | 7 | 10 | 9 | 8 | 4 | 1 | 7 | 8 | 8 | 6 | 5 | 7 | 80 |
| Hantavirus pulmonary syndrome | — | 2 | 1 | 1 | 4 | 2 | — | 2 | 3 | — | 1 | 2 | 18 |
| Hemolytic uremic syndrome, post-diarrheal | 4 | 8 | 14 | 13 | 23 | 38 | 29 | 38 | 29 | 27 | 28 | 79 | 330 |
| Hepatitis, viral, acute | | | | | | | | | | | | | |
| A | 186 | 218 | 237 | 222 | 295 | 167 | 233 | 243 | 215 | 183 | 162 | 224 | 2,585 |
| B | 245 | 308 | 345 | 296 | 397 | 249 | 321 | 378 | 312 | 299 | 337 | 546 | 4,033 |
| C | 45 | 69 | 58 | 57 | 102 | 69 | 88 | 85 | 49 | 66 | 83 | 106 | 877 |
| Influenza-associated pediatric mortality** | — | 23 | 35 | 8 | 12 | 8 | 1 | 1 | — | 1 | 1 | — | 90 |
| Legionellosis | 142 | 141 | 185 | 117 | 205 | 257 | 439 | 455 | 380 | 309 | 235 | 316 | 3,181 |
| Listeriosis | 61 | 34 | 48 | 48 | 47 | 53 | 58 | 93 | 70 | 82 | 70 | 95 | 759 |
| Lyme disease, total | 498 | 646 | 832 | 913 | 2,099 | 4,788 | 7,426 | 5,864 | 3,079 | 2,783 | 2,528 | 3,742 | 35,198 |
| confirmed | 420 | 524 | 672 | 701 | 1,717 | 4,169 | 6,463 | 4,958 | 2,481 | 2,217 | 2,004 | 2,595 | 28,921 |
| probable | 78 | 122 | 160 | 212 | 382 | 619 | 963 | 906 | 598 | 566 | 524 | 1,147 | 6,277 |
| Malaria | 68 | 72 | 35 | 71 | 110 | 111 | 137 | 174 | 145 | 107 | 94 | 131 | 1,255 |
| Measles, total | 1 | 5 | 24 | 39 | 21 | 36 | 5 | 2 | 1 | — | 1 | 5 | 140 |
| indigenous | — | 3 | 21 | 34 | 14 | 34 | 5 | 1 | 1 | — | — | 2 | 115 |
| imported | 1 | 2 | 3 | 5 | 7 | 2 | — | 1 | — | — | 1 | 3 | 25 |
| Meningococcal disease | | | | | | | | | | | | | |
| all serogroups | 70 | 137 | 197 | 100 | 114 | 96 | 81 | 68 | 54 | 65 | 81 | 109 | 1,172 |
| serogroup A,C,Y, & W-135 | 16 | 40 | 62 | 28 | 31 | 26 | 26 | 21 | 13 | 17 | 19 | 31 | 330 |
| serogroup B | 14 | 25 | 30 | 10 | 15 | 14 | 17 | 11 | 8 | 9 | 16 | 19 | 188 |
| other serogroup | 4 | 3 | 9 | 1 | 6 | 6 | 1 | 3 | — | 1 | 3 | 1 | 38 |
| serogroup unknown | 36 | 69 | 96 | 61 | 62 | 50 | 37 | 33 | 33 | 38 | 43 | 58 | 616 |
| Mumps | 38 | 76 | 63 | 37 | 33 | 22 | 28 | 29 | 23 | 25 | 25 | 55 | 454 |
| Novel influenza A virus infections | — | — | — | — | — | — | — | — | — | — | 1 | 1 | 2 |
| Pertussis | 557 | 723 | 620 | 576 | 659 | 692 | 877 | 1,318 | 1,122 | 1,046 | 1,683 | 3,405 | 13,278 |
| Plague | 1 | — | — | — | — | — | — | — | — | 1 | — | 1 | 3 |
| Psittacosis | 1 | 1 | 1 | — | 2 | — | — | — | 1 | — | 1 | 1 | 8 |

See footnotes on next page.

TABLE 1. (Continued) Reported cases of notifiable diseases,* by month — United States, 2008

| Disease | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Q Fever, total | 4 | 5 | 8 | 7 | 15 | 15 | 8 | 12 | 12 | 8 | 8 | 18 | 120 |
| acute | 4 | 5 | 7 | 7 | 12 | 14 | 7 | 11 | 11 | 5 | 7 | 16 | 106 |
| chronic | — | — | 1 | — | 3 | 1 | 1 | 1 | 1 | 3 | 1 | 2 | 14 |
| Rabies | | | | | | | | | | | | | |
| animal | 320 | 188 | 345 | 322 | 435 | 364 | 368 | 567 | 407 | 328 | 309 | 243 | 4,196 |
| human | — | — | 1 | — | — | — | — | — | — | — | 1 | — | 2 |
| Rocky Mountain spotted fever, total | 16 | 16 | 23 | 48 | 140 | 308 | 456 | 585 | 257 | 194 | 201 | 319 | 2,563 |
| confirmed | 3 | 2 | 4 | 6 | 16 | 31 | 28 | 50 | 21 | 11 | 7 | 11 | 190 |
| probable | 13 | 14 | 19 | 42 | 124 | 277 | 427 | 532 | 235 | 183 | 193 | 308 | 2,367 |
| Rubella | — | — | 2 | 3 | 2 | 1 | 1 | — | 3 | 1 | 3 | — | 16 |
| Salmonellosis | 2,467 | 1,955 | 2,516 | 2,303 | 3,758 | 4,825 | 5,379 | 6,908 | 5,443 | 4,600 | 4,655 | 6,231 | 51,040 |
| Shiga toxin-producing <i>E. coli</i> (STEC) | 188 | 147 | 256 | 233 | 359 | 520 | 668 | 843 | 581 | 551 | 408 | 555 | 5,309 |
| Shigellosis | 1,034 | 985 | 1,311 | 1,311 | 2,093 | 1,837 | 1,989 | 2,394 | 1,839 | 1,960 | 2,634 | 3,238 | 22,625 |
| Streptococcal disease, invasive, group A | 422 | 569 | 817 | 538 | 603 | 453 | 313 | 372 | 253 | 244 | 393 | 697 | 5,674 |
| Streptococcal, toxic-shock syndrome | 10 | 11 | 23 | 17 | 20 | 11 | 7 | 8 | 4 | 5 | 11 | 30 | 157 |
| <i>Streptococcus pneumoniae</i> , invasive disease | | | | | | | | | | | | | |
| drug resistant, all ages | 347 | 330 | 465 | 319 | 308 | 186 | 119 | 129 | 125 | 177 | 347 | 596 | 3,448 |
| age <5 yrs | 34 | 43 | 68 | 54 | 53 | 33 | 24 | 27 | 28 | 46 | 57 | 65 | 532 |
| non-drug resistant, age <5 yrs | 164 | 177 | 228 | 157 | 203 | 115 | 83 | 94 | 112 | 135 | 218 | 312 | 1,998 |
| Syphilis, total, all stages ^{§††} | 2,813 | 3,181 | 4,296 | 3,544 | 4,378 | 3,411 | 3,417 | 4,744 | 3,638 | 3,780 | 4,343 | 4,732 | 46,277 |
| congenital (age <1 yr) [§] | 36 | 31 | 34 | 32 | 38 | 29 | 42 | 51 | 42 | 42 | 18 | 36 | 431 |
| primary and secondary [§] | 858 | 931 | 1,201 | 973 | 1,165 | 970 | 1,061 | 1,330 | 1,092 | 1,141 | 1,305 | 1,473 | 13,500 |
| Tetanus | — | — | 1 | 1 | 1 | 2 | 1 | 4 | 2 | 5 | — | 2 | 19 |
| Toxic-shock syndrome | 2 | 5 | 10 | 1 | 5 | 5 | 6 | 7 | 3 | 7 | 8 | 12 | 71 |
| Trichinellosis | — | 1 | 1 | — | — | 1 | 2 | 2 | — | — | 1 | 31 | 39 |
| Tuberculosis ^{§§} | 605 | 790 | 996 | 1,068 | 1,134 | 1,024 | 1,175 | 1,090 | 1,015 | 1,173 | 961 | 1,873 | 12,904 |
| Tularemia | 1 | — | 1 | 4 | 14 | 25 | 22 | 24 | 9 | 4 | 5 | 14 | 123 |
| Typhoid fever | 22 | 35 | 41 | 39 | 50 | 24 | 31 | 46 | 61 | 39 | 19 | 42 | 449 |
| Vancomycin-intermediate <i>Staphylococcus aureus</i> (VISA) | 3 | 7 | 6 | 2 | 3 | 3 | 3 | 2 | 12 | 5 | 7 | 10 | 63 |
| Varicella (chickenpox) morbidity ^{¶¶} | 2,042 | 2,867 | 3,896 | 3,546 | 4,345 | 2,068 | 919 | 884 | 1,732 | 2,059 | 2,560 | 3,468 | 30,386 |
| Vibriosis | 23 | 10 | 19 | 12 | 25 | 47 | 74 | 119 | 96 | 49 | 58 | 56 | 588 |

* No cases of anthrax; diphtheria; eastern equine encephalitis virus, non-neuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus, non-neuroinvasive; rubella; congenital syndrome; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; vancomycin-resistant *Staphylococcus aureus* (VRSA) infection; western equine encephalitis virus, neuroinvasive and non-neuroinvasive; and yellow fever were reported in 2008. 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, 2008.

§ Totals reported to the Division of STD Prevention, NCHHSTP, as of May 8, 2009.

¶ Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases, (ArboNET Surveillance), as of May 1, 2009.

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

§§ Totals reported to the Division of TB Elimination, NCHHSTP, as of May 15, 2009.

¶¶ Totals reported to the Division of Viral Diseases, NCIRD, as of June 30, 2009.

TABLE 2. Reported cases of notifiable diseases,* by geographic division and area — United States, 2008

| Area | Total resident population (in thousands) | AIDS† | Botulism | | | | Brucellosis |
|----------------------|--|---------|----------|-----------|--------|--------|-------------|
| | | | Total | Foodborne | Infant | Other‡ | |
| United States | 301,621 | 39,202¶ | 145 | 17 | 109 | 19 | 80 |
| New England | 14,264 | 1,188 | 4 | — | 4 | — | — |
| Connecticut | 3,502 | 408 | 2 | — | 2 | — | — |
| Maine | 1,317 | 30 | — | — | — | — | — |
| Massachusetts | 6,450 | 622 | 1 | — | 1 | — | — |
| New Hampshire | 1,316 | 30 | — | — | — | — | — |
| Rhode Island | 1,058 | 88 | 1 | — | 1 | — | — |
| Vermont | 621 | 10 | — | — | — | — | — |
| Mid. Atlantic | 40,417 | 7,042 | 23 | — | 23 | — | 7 |
| New Jersey | 8,686 | 1,627 | 3 | — | 3 | — | 2 |
| New York (Upstate) | 11,023 | 1,522 | 1 | — | 1 | — | 1 |
| New York City | 8,275 | 2,649 | 1 | — | 1 | — | 2 |
| Pennsylvania | 12,433 | 1,244 | 18 | — | 18 | — | 2 |
| E.N. Central | 46,339 | 3,310 | 6 | 4 | 2 | — | 6 |
| Illinois | 12,853 | 1,360 | 1 | — | 1 | — | 1 |
| Indiana | 6,345 | 424 | 1 | 1 | — | — | 1 |
| Michigan | 10,072 | 651 | — | — | — | — | 1 |
| Ohio | 11,467 | 701 | 4 | 3 | 1 | — | — |
| Wisconsin | 5,602 | 174 | — | — | — | — | 3 |
| W.N. Central | 20,051 | 913 | 5 | 1 | 4 | — | 4 |
| Iowa | 2,988 | 71 | 1 | — | 1 | — | 2 |
| Kansas | 2,776 | 122 | — | — | — | — | — |
| Minnesota | 5,198 | 207 | 1 | — | 1 | — | 1 |
| Missouri | 5,878 | 417 | 2 | — | 2 | — | — |
| Nebraska | 1,775 | 73 | 1 | 1 | — | — | 1 |
| North Dakota | 640 | 12 | — | — | — | — | — |
| South Dakota | 796 | 11 | — | — | — | — | — |
| S. Atlantic | 57,860 | 13,411 | 13 | 1 | 12 | — | 14 |
| Delaware | 865 | 166 | — | — | — | — | — |
| District of Columbia | 588 | 767 | — | — | — | — | 1 |
| Florida | 18,251 | 5,064 | 1 | — | 1 | — | 10 |
| Georgia | 9,545 | 2,153 | — | — | — | — | 1 |
| Maryland | 5,618 | 2,389 | 5 | — | 5 | — | — |
| North Carolina | 9,061 | 1,384 | 1 | — | 1 | — | 1 |
| South Carolina | 4,408 | 723 | 1 | — | 1 | — | 1 |
| Virginia | 7,712 | 698 | 3 | — | 3 | — | — |
| West Virginia | 1,812 | 67 | 2 | 1 | 1 | — | — |
| E.S. Central | 17,945 | 1,640 | — | — | — | — | 1 |
| Alabama | 4,628 | 402 | — | — | — | — | — |
| Kentucky | 4,241 | 293 | — | — | — | — | — |
| Mississippi | 2,919 | 356 | — | — | — | — | — |
| Tennessee | 6,157 | 589 | — | — | — | — | 1 |
| W.S. Central | 34,649 | 4,001 | 8 | — | 8 | — | 10 |
| Arkansas | 2,835 | 100 | — | — | — | — | — |
| Louisiana | 4,293 | 903 | — | — | — | — | 1 |
| Oklahoma | 3,617 | 137 | — | — | — | — | — |
| Texas | 23,904 | 2,861 | 8 | — | 8 | N | 9 |
| Mountain | 21,361 | 1,486 | 19 | 1 | 17 | 1 | 9 |
| Arizona | 6,339 | 570 | 4 | 1 | 2 | 1 | 3 |
| Colorado | 4,862 | 343 | 3 | — | 3 | — | 2 |
| Idaho | 1,499 | 31 | 1 | — | 1 | — | — |
| Montana | 958 | 48 | 3 | — | 3 | — | — |
| Nevada | 2,565 | 307 | — | — | — | N | 1 |
| New Mexico | 1,970 | 109 | 2 | — | 2 | — | 1 |
| Utah | 2,645 | 65 | 5 | — | 5 | — | 1 |
| Wyoming | 523 | 13 | 1 | — | 1 | — | 1 |
| Pacific | 48,735 | 5,539 | 67 | 10 | 39 | 18 | 29 |
| Alaska | 684 | 27 | 7 | 7 | — | — | — |
| California | 36,553 | 4,818 | 55 | 3 | 36 | 16 | 23 |
| Hawaii | 1,283 | 97 | — | — | — | — | 4 |
| Oregon | 3,747 | 207 | 2 | — | 2 | — | 1 |
| Washington | 6,468 | 390 | 3 | — | 1 | 2 | 1 |
| American Samoa | 64 | — | — | — | — | — | — |
| C.N.M.I. | 59 | 1 | — | — | — | — | — |
| Guam | 174 | 7 | U | U | U | U | U |
| Puerto Rico | 3,942 | 704 | — | — | — | — | — |
| U.S. Virgin Islands | 110 | 12 | — | — | — | — | — |

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

* No cases of anthrax; diphtheria; eastern equine encephalitis virus disease, non-neuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus disease, non-neuroinvasive; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; vancomycin-resistant *Staphylococcus aureus* (VRSA) infection; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; and yellow fever were reported in 2008. 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, 2008.

‡ Includes cases reported as wound and unspecified botulism.

¶ Includes 672 cases of AIDS in persons with unknown state or area of residence that were reported in 2008.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2008

| Area | Chancroid** | Chlamydia** | Cholera | Coccidioidomycosis | Cryptosporidiosis | Cyclosporiasis |
|----------------------|-------------|-------------|---------|--------------------|-------------------|----------------|
| United States | 25 | 1,210,523 | 5 | 7,523 | 9,113 | 139 |
| New England | 4 | 39,246 | — | 1 | 393 | 10 |
| Connecticut | — | 12,519 | — | N | 41 | 4 |
| Maine | — | 2,608 | — | N | 46 | N |
| Massachusetts | 4 | 17,503 | — | N | 172 | 5 |
| New Hampshire | — | 2,109 | — | 1 | 60 | 1 |
| Rhode Island | — | 3,317 | — | — | 10 | — |
| Vermont | — | 1,190 | — | N | 64 | N |
| Mid. Atlantic | 2 | 152,997 | 1 | — | 742 | 33 |
| New Jersey | — | 22,405 | 1 | N | 40 | 9 |
| New York (Upstate) | 2 | 31,881 | — | N | 269 | 6 |
| New York City | — | 56,478 | — | N | 107 | 18 |
| Pennsylvania | — | 42,233 | — | N | 326 | N |
| E.N. Central | 1 | 194,359 | 1 | 44 | 2,163 | 9 |
| Illinois | — | 59,169 | 1 | N | 205 | 4 |
| Indiana | — | 22,154 | — | N | 203 | 2 |
| Michigan | — | 44,923 | — | 31 | 280 | 1 |
| Ohio | 1 | 47,117 | — | 13 | 689 | 1 |
| Wisconsin | — | 20,996 | — | N | 786 | 1 |
| W.N. Central | — | 68,198 | — | 3 | 1,002 | 4 |
| Iowa | — | 9,372 | — | N | 284 | — |
| Kansas | — | 9,208 | — | N | 84 | — |
| Minnesota | — | 14,351 | — | — | 236 | 3 |
| Missouri | — | 24,817 | — | 3 | 181 | — |
| Nebraska | — | 5,573 | — | N | 113 | N |
| North Dakota | — | 1,921 | — | N | 16 | N |
| South Dakota | — | 2,956 | — | N | 88 | 1 |
| S. Atlantic | 5 | 247,480 | — | 5 | 1,071 | 70 |
| Delaware | — | 3,868 | — | 2 | 12 | — |
| District of Columbia | — | 6,924 | — | — | 15 | 3 |
| Florida | — | 71,017 | — | N | 486 | 58 |
| Georgia | — | 42,629 | — | N | 263 | 2 |
| Maryland | — | 24,669 | — | 3 | 54 | 3 |
| North Carolina | 4 | 37,516 | — | N | 78 | 1 |
| South Carolina | 1 | 26,323 | — | N | 57 | 1 |
| Virginia | — | 31,218 | — | N | 81 | 2 |
| West Virginia | — | 3,316 | — | N | 25 | — |
| E.S. Central | — | 86,214 | — | — | 174 | 3 |
| Alabama | — | 24,760 | — | N | 74 | N |
| Kentucky | — | 12,163 | — | N | 36 | N |
| Mississippi | — | 21,253 | — | N | 17 | N |
| Tennessee | — | 28,038 | — | N | 47 | 3 |
| W.S. Central | 8 | 152,468 | 2 | 3 | 2,545 | 6 |
| Arkansas | — | 14,136 | — | N | 95 | — |
| Louisiana | — | 22,659 | 1 | 3 | 67 | — |
| Oklahoma | — | 14,803 | — | N | 143 | — |
| Texas | 8 | 100,870 | 1 | N | 2,240 | 6 |
| Mountain | 2 | 77,774 | — | 4,870 | 580 | 3 |
| Arizona | — | 24,769 | — | 4,768 | 89 | — |
| Colorado | 2 | 19,180 | — | N | 112 | 1 |
| Idaho | — | 4,194 | — | N | 72 | N |
| Montana | — | 3,101 | — | N | 44 | N |
| Nevada | — | 9,670 | — | 52 | 17 | N |
| New Mexico | — | 9,262 | — | 35 | 175 | 2 |
| Utah | — | 6,021 | — | 12 | 48 | — |
| Wyoming | — | 1,577 | — | 3 | 23 | — |
| Pacific | 3 | 191,787 | 1 | 2,597 | 443 | 1 |
| Alaska | — | 4,861 | — | N | 3 | — |
| California | 2 | 148,798 | — | 2,597 | 275 | — |
| Hawaii | — | 5,982 | — | N | 2 | — |
| Oregon | — | 10,744 | 1 | N | 64 | — |
| Washington | 1 | 21,402 | — | N | 99 | 1 |
| American Samoa | — | — | — | N | N | N |
| C.N.M.I. | — | — | — | — | — | — |
| Guam | — | 687 | U | U | U | U |
| Puerto Rico | — | 6,874 | — | N | N | N |
| U.S. Virgin Islands | — | 587 | — | — | — | — |

N: Not reportable. 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 8, 2009.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2008

| Area | Domestic arboviral diseases†† | | | | | | | |
|----------------------|-------------------------------|-------------------|-----------------------------------|----------------|------------------------------|-------------------|-----------------|-------------------|
| | California serogroup virus | | Eastern equine encephalitis virus | Powassan virus | St. Louis encephalitis virus | | West Nile virus | |
| | Neuro-invasive | Nonneuro-invasive | Neuro-invasive | Neuro-invasive | Neuro-invasive | Nonneuro-invasive | Neuro-invasive | Nonneuro-invasive |
| United States | 55 | 7 | 4 | 2 | 8 | 5 | 689 | 667 |
| New England | — | — | 1 | — | — | — | 7 | 3 |
| Connecticut | — | — | — | — | — | — | 5 | 3 |
| Maine | — | — | — | — | — | — | — | — |
| Massachusetts | — | — | 1 | — | — | — | 1 | — |
| New Hampshire | — | — | — | — | — | — | — | — |
| Rhode Island | — | — | — | — | — | — | 1 | — |
| Vermont | — | — | — | — | — | — | — | — |
| Mid. Atlantic | 5 | 1 | — | 1 | — | 1 | 50 | 20 |
| New Jersey | — | — | — | — | — | — | 6 | 4 |
| New York (Upstate) | 5 | 1 | — | 1 | — | — | 24 | 7 |
| New York City | — | — | — | — | — | — | 8 | 7 |
| Pennsylvania | — | — | — | — | — | 1 | 12 | 2 |
| E.N. Central | 13 | 2 | — | — | — | — | 44 | 20 |
| Illinois | — | — | — | — | — | — | 12 | 8 |
| Indiana | — | — | — | — | — | — | 3 | 1 |
| Michigan | — | — | — | — | — | — | 11 | 6 |
| Ohio | 9 | — | — | — | — | — | 14 | 1 |
| Wisconsin | 4 | 2 | — | — | — | — | 4 | 4 |
| W.N. Central | 1 | — | — | 1 | — | 1 | 51 | 134 |
| Iowa | — | — | — | — | — | — | 3 | 3 |
| Kansas | — | — | — | — | — | — | 14 | 17 |
| Minnesota | 1 | — | — | 1 | — | — | 2 | 8 |
| Missouri | — | — | — | — | — | 1 | 12 | 3 |
| Nebraska | — | — | — | — | — | — | 7 | 40 |
| North Dakota | — | — | — | — | — | — | 2 | 35 |
| South Dakota | — | — | — | — | — | — | 11 | 28 |
| S. Atlantic | 27 | 1 | 2 | — | 3 | — | 20 | 20 |
| Delaware | — | — | — | — | — | — | — | 1 |
| District of Columbia | — | — | — | — | — | — | 4 | 4 |
| Florida | — | 1 | 1 | — | — | — | 3 | — |
| Georgia | 2 | — | — | — | — | — | 4 | 4 |
| Maryland | — | — | — | — | — | — | 6 | 8 |
| North Carolina | 9 | — | 1 | — | 3 | — | 2 | 1 |
| South Carolina | — | — | — | — | — | — | — | 1 |
| Virginia | 2 | — | — | — | — | — | — | 1 |
| West Virginia | 14 | — | — | — | — | — | 1 | — |
| E.S. Central | 8 | 3 | 1 | — | — | — | 48 | 57 |
| Alabama | — | — | 1 | — | — | — | 11 | 7 |
| Kentucky | 1 | — | — | — | — | — | 3 | — |
| Mississippi | 1 | 3 | — | — | — | — | 22 | 43 |
| Tennessee | 6 | — | — | — | — | — | 12 | 7 |
| W.S. Central | 1 | — | — | — | 5 | 2 | 69 | 62 |
| Arkansas | — | — | — | — | 4 | — | 7 | 2 |
| Louisiana | 1 | — | — | — | 1 | 2 | 18 | 31 |
| Oklahoma | — | — | — | — | — | — | 4 | 5 |
| Texas | — | — | — | — | — | — | 40 | 24 |
| Mountain | — | — | — | — | — | — | 103 | 184 |
| Arizona | — | — | — | — | — | — | 62 | 52 |
| Colorado | — | — | — | — | — | — | 17 | 54 |
| Idaho | — | — | — | — | — | — | 4 | 35 |
| Montana | — | — | — | — | — | — | — | 5 |
| Nevada | — | — | — | — | — | — | 9 | 7 |
| New Mexico | — | — | — | — | — | — | 5 | 3 |
| Utah | — | — | — | — | — | — | 6 | 20 |
| Wyoming | — | — | — | — | — | — | — | 8 |
| Pacific | — | — | — | — | — | 1 | 297 | 167 |
| Alaska | — | — | — | — | — | — | — | — |
| California | — | — | — | — | — | — | 292 | 153 |
| Hawaii | — | — | — | — | — | — | — | — |
| Oregon | — | — | — | — | — | 1 | 3 | 13 |
| Washington | — | — | — | — | — | — | 2 | 1 |
| American Samoa | — | — | — | — | — | — | — | — |
| C.N.M.I. | — | — | — | — | — | — | — | — |
| Guam | — | — | — | — | — | — | — | — |
| Puerto Rico | — | — | — | — | — | — | — | — |
| U.S. Virgin Islands | — | — | — | — | — | — | — | — |

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

†† Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) (ArboNET Surveillance), as of May 1, 2009.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2008

| Area | Ehrlichiosis/Anaplasmosis | | | | Giardiasis | Gonorrhea** |
|----------------------|------------------------------|--------------------------|----------------------------------|--------------|------------|-------------|
| | <i>Ehrlichia chaffeensis</i> | <i>Ehrlichia ewingii</i> | <i>Anaplasma phagocytophilum</i> | Undetermined | | |
| United States | 957 | 9 | 1,009 | 132 | 18,908 | 336,742 |
| New England | 42 | — | 197 | 1 | 1,660 | 5,470 |
| Connecticut | 2 | — | 45 | — | 334 | 2,801 |
| Maine | 1 | — | 17 | — | 188 | 96 |
| Massachusetts | 21 | — | 85 | — | 678 | 2,129 |
| New Hampshire | 7 | — | 14 | — | 160 | 100 |
| Rhode Island | 11 | — | 36 | 1 | 90 | 307 |
| Vermont | — | — | — | — | 210 | 37 |
| Mid. Atlantic | 123 | 1 | 303 | 10 | 3,532 | 33,477 |
| New Jersey | 54 | — | 45 | 3 | 520 | 5,298 |
| New York (Upstate) | 61 | — | 239 | 3 | 1,282 | 6,615 |
| New York City | 5 | 1 | 17 | — | 851 | 10,493 |
| Pennsylvania | 3 | — | 2 | 4 | 879 | 11,071 |
| E.N. Central | 58 | — | 205 | 31 | 2,743 | 69,397 |
| Illinois | 28 | — | 3 | 3 | 705 | 20,674 |
| Indiana | 4 | — | — | — | N | 8,769 |
| Michigan | 3 | — | — | — | 611 | 17,064 |
| Ohio | 11 | — | 1 | — | 904 | 16,803 |
| Wisconsin | 12 | — | 201 | 28 | 523 | 6,087 |
| W.N. Central | 212 | 6 | 281 | 69 | 2,106 | 17,003 |
| Iowa | N | N | N | N | 326 | 1,700 |
| Kansas | — | — | — | — | 162 | 2,274 |
| Minnesota | 14 | 1 | 278 | 43 | 769 | 3,037 |
| Missouri | 195 | 5 | 1 | 26 | 468 | 8,014 |
| Nebraska | 3 | N | 1 | N | 209 | 1,460 |
| North Dakota | N | N | N | N | 36 | 143 |
| South Dakota | — | — | 1 | — | 136 | 375 |
| S. Atlantic | 207 | 1 | 15 | 5 | 3,119 | 86,462 |
| Delaware | 19 | 1 | 4 | — | 42 | 1,045 |
| District of Columbia | N | N | N | N | 72 | 2,656 |
| Florida | 10 | — | 2 | — | 1,391 | 23,326 |
| Georgia | 19 | — | 1 | — | 691 | 16,272 |
| Maryland | 61 | — | 4 | 1 | 284 | 6,666 |
| North Carolina | 34 | — | 2 | 4 | N | 15,972 |
| South Carolina | 1 | — | — | — | 136 | 9,442 |
| Virginia | 63 | — | 2 | — | 432 | 10,337 |
| West Virginia | — | — | — | — | 71 | 746 |
| E.S. Central | 86 | — | — | 14 | 506 | 30,562 |
| Alabama | 9 | — | N | N | 281 | 9,740 |
| Kentucky | 13 | — | — | — | N | 4,548 |
| Mississippi | — | — | — | — | N | 7,494 |
| Tennessee | 64 | — | — | 14 | 225 | 8,780 |
| W.S. Central | 229 | 1 | 8 | — | 473 | 51,353 |
| Arkansas | 87 | — | N | N | 143 | 4,514 |
| Louisiana | — | 1 | — | — | 150 | 9,455 |
| Oklahoma | 114 | — | 7 | — | 180 | 5,185 |
| Texas | 28 | — | 1 | — | N | 32,199 |
| Mountain | — | — | — | 2 | 1,661 | 11,691 |
| Arizona | — | — | — | 2 | 142 | 3,449 |
| Colorado | N | N | N | N | 564 | 3,757 |
| Idaho | N | N | N | N | 211 | 187 |
| Montana | N | N | N | N | 93 | 122 |
| Nevada | N | N | N | N | 121 | 2,172 |
| New Mexico | N | N | N | N | 107 | 1,403 |
| Utah | — | — | — | — | 374 | 477 |
| Wyoming | — | — | — | — | 49 | 124 |
| Pacific | — | — | — | — | 3,108 | 31,327 |
| Alaska | N | N | N | N | 108 | 578 |
| California | — | — | N | N | 2,017 | 25,787 |
| Hawaii | N | N | N | N | 42 | 610 |
| Oregon | — | — | — | — | 455 | 1,225 |
| Washington | N | N | N | N | 486 | 3,127 |
| American Samoa | N | N | N | N | — | — |
| C.N.M.I. | — | — | — | — | — | — |
| Guam | U | U | U | U | U | 109 |
| Puerto Rico | N | N | N | N | 227 | 273 |
| U.S. Virgin Islands | N | N | N | N | — | 120 |

N: Not reportable. 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, 2008

| Area | <i>Haemophilus influenzae</i> , invasive disease | | | | Hansen disease (leprosy) | Hantavirus pulmonary syndrome | Hemolytic uremic syndrome, postdiarrheal |
|----------------------|--|------------|---------------|------------------|-----------------------------|-------------------------------------|---|
| | All ages, serotypes | Age <5 yrs | | | | | |
| | | Serotype b | Nonserotype b | Unknown serotype | | | |
| United States | 2,886 | 30 | 244 | 163 | 80 | 18 | 330 |
| New England | 196 | 1 | 10 | 2 | 8 | — | 15 |
| Connecticut | 54 | — | 4 | — | 3 | N | 5 |
| Maine | 21 | — | 2 | — | N | — | 1 |
| Massachusetts | 83 | 1 | 3 | 1 | 5 | — | 6 |
| New Hampshire | 12 | — | — | 1 | — | — | 1 |
| Rhode Island | 17 | — | 1 | — | — | — | — |
| Vermont | 9 | — | — | — | N | — | 2 |
| Mid. Atlantic | 554 | 2 | 16 | 38 | 9 | — | 15 |
| New Jersey | 98 | — | — | 10 | 1 | — | 3 |
| New York (Upstate) | 171 | 2 | 15 | 2 | N | — | 7 |
| New York City | 90 | — | — | 9 | 8 | — | 5 |
| Pennsylvania | 195 | — | 1 | 17 | — | — | N |
| E.N. Central | 483 | 8 | 35 | 30 | 3 | — | 28 |
| Illinois | 157 | — | — | 16 | 1 | — | 3 |
| Indiana | 93 | 2 | 6 | 5 | — | — | 1 |
| Michigan | 31 | 2 | 6 | — | — | — | 6 |
| Ohio | 135 | 2 | 11 | 9 | 2 | — | 7 |
| Wisconsin | 67 | 2 | 12 | — | — | — | 11 |
| W.N. Central | 211 | 5 | 5 | 21 | 4 | 2 | 48 |
| Iowa | 2 | — | — | — | 1 | 1 | 16 |
| Kansas | 20 | — | — | 2 | — | — | 3 |
| Minnesota | 71 | 5 | 5 | 2 | 1 | — | 11 |
| Missouri | 72 | — | — | 15 | 1 | — | 13 |
| Nebraska | 30 | — | — | 2 | — | — | 1 |
| North Dakota | 16 | — | — | — | N | 1 | 1 |
| South Dakota | — | — | — | — | 1 | — | 3 |
| S. Atlantic | 714 | 4 | 77 | 22 | 11 | — | 36 |
| Delaware | 8 | — | — | 2 | — | — | — |
| District of Columbia | 8 | — | — | — | — | — | — |
| Florida | 191 | 1 | 22 | 2 | 10 | — | 5 |
| Georgia | 149 | — | 14 | 10 | N | — | 19 |
| Maryland | 97 | 1 | 12 | — | — | — | 1 |
| North Carolina | 81 | 1 | 11 | 2 | — | — | 7 |
| South Carolina | 62 | — | 8 | 3 | 1 | — | 2 |
| Virginia | 92 | 1 | 8 | 3 | — | — | 2 |
| West Virginia | 26 | — | 2 | — | N | — | — |
| E.S. Central | 151 | 2 | 7 | 11 | — | — | 25 |
| Alabama | 25 | 1 | 2 | — | — | N | 5 |
| Kentucky | 10 | — | — | 1 | — | — | N |
| Mississippi | 14 | 1 | 1 | — | — | — | — |
| Tennessee | 102 | — | 4 | 10 | — | — | 20 |
| W.S. Central | 132 | 2 | 11 | 4 | 3 | 2 | 69 |
| Arkansas | 15 | — | 3 | 1 | — | — | 5 |
| Louisiana | 13 | — | 1 | 3 | 2 | 2 | 1 |
| Oklahoma | 93 | — | 7 | — | 1 | — | 51 |
| Texas | 11 | 2 | — | — | — | — | 12 |
| Mountain | 297 | 5 | 49 | 16 | 4 | 12 | 32 |
| Arizona | 107 | 3 | 23 | 3 | — | 1 | 6 |
| Colorado | 60 | — | 6 | 2 | 1 | 6 | 6 |
| Idaho | 12 | — | 3 | 3 | — | — | 4 |
| Montana | 5 | — | 1 | 2 | — | 2 | — |
| Nevada | 16 | — | 1 | — | — | — | N |
| New Mexico | 50 | 1 | 3 | 6 | 1 | 2 | 6 |
| Utah | 43 | 1 | 12 | — | 2 | 1 | 10 |
| Wyoming | 4 | — | — | — | — | — | — |
| Pacific | 148 | 1 | 34 | 19 | 38 | 2 | 62 |
| Alaska | 21 | — | — | 8 | — | N | N |
| California | 46 | 1 | 32 | 6 | 20 | — | 46 |
| Hawaii | 22 | — | — | 1 | 18 | — | 1 |
| Oregon | 57 | — | — | 4 | N | — | 13 |
| Washington | 2 | — | 2 | — | N | 2 | 2 |
| American Samoa | — | — | — | — | 1 | N | N |
| C.N.M.I. | — | — | — | — | — | — | — |
| Guam | U | U | U | U | U | U | U |
| Puerto Rico | 1 | — | — | — | — | N | N |
| U.S. Virgin Islands | N | — | — | — | — | — | — |

N: Not reportable. 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, 2008

| Area | Hepatitis, viral, acute | | | Influenza-associated pediatric mortality ^{§§} | Legionellosis | Listeriosis | Lyme disease ^{¶¶} | | | Malaria |
|----------------------|-------------------------|-------|-----|--|---------------|-------------|----------------------------|-----------|----------|---------|
| | A | B | C | | | | Total | Confirmed | Probable | |
| United States | 2,585 | 4,033 | 877 | 90 | 3,181 | 759 | 35,198 | 28,921 | 6,277 | 1,255 |
| New England | 128 | 81 | 37 | 9 | 231 | 63 | 11,601 | 9,205 | 2,396 | 61 |
| Connecticut | 26 | 30 | 19 | 2 | 47 | 16 | 3,896 | 2,738 | 1,158 | 14 |
| Maine | 18 | 15 | 3 | 1 | 11 | 5 | 908 | 780 | 128 | 1 |
| Massachusetts | 58 | 21 | 13 | 4 | 91 | 30 | 4,582 | 3,960 | 622 | 33 |
| New Hampshire | 12 | 8 | N | 1 | 30 | 6 | 1,601 | 1,211 | 390 | 5 |
| Rhode Island | 12 | 4 | 1 | — | 47 | 5 | 210 | 186 | 24 | 3 |
| Vermont | 2 | 3 | 1 | 1 | 5 | 1 | 404 | 330 | 74 | 5 |
| Mid. Atlantic | 333 | 448 | 131 | 13 | 1,061 | 168 | 15,097 | 12,773 | 2,324 | 337 |
| New Jersey | 86 | 118 | 61 | 1 | 150 | 34 | 3,485 | 3,214 | 271 | 65 |
| New York (Upstate) | 66 | 73 | 43 | 3 | 360 | 48 | 6,986 | 5,203 | 1,783 | 42 |
| New York City | 113 | 100 | — | 5 | 143 | 30 | 808 | 538 | 270 | 188 |
| Pennsylvania | 68 | 157 | 27 | 4 | 408 | 56 | 3,818 | 3,818 | — | 42 |
| E.N. Central | 335 | 536 | 195 | 12 | 667 | 104 | 2,321 | 1,759 | 562 | 152 |
| Illinois | 112 | 184 | 10 | 6 | 121 | 28 | 108 | 108 | — | 77 |
| Indiana | 20 | 67 | 13 | 1 | 60 | 10 | 42 | 42 | — | 5 |
| Michigan | 119 | 149 | 129 | 1 | 179 | 20 | 92 | 76 | 16 | 18 |
| Ohio | 51 | 118 | 40 | 1 | 268 | 29 | 45 | 40 | 5 | 31 |
| Wisconsin | 33 | 18 | 3 | 3 | 39 | 17 | 2,034 | 1,493 | 541 | 21 |
| W.N. Central | 255 | 107 | 27 | 5 | 145 | 31 | 1,438 | 1,172 | 266 | 72 |
| Iowa | 109 | 24 | — | 2 | 21 | 1 | 109 | 85 | 24 | 12 |
| Kansas | 15 | 9 | 1 | — | 2 | 6 | 16 | 16 | — | 9 |
| Minnesota | 49 | 25 | 22 | 3 | 25 | 8 | 1,282 | 1,046 | 236 | 29 |
| Missouri | 35 | 38 | 2 | — | 70 | 11 | 6 | 6 | — | 14 |
| Nebraska | 41 | 9 | 2 | — | 21 | 4 | 12 | 8 | 4 | 8 |
| North Dakota | 2 | 2 | — | — | 3 | — | 10 | 8 | 2 | — |
| South Dakota | 4 | — | — | — | 3 | 1 | 3 | 3 | — | — |
| S. Atlantic | 393 | 981 | 150 | 13 | 508 | 147 | 4,331 | 3,732 | 599 | 303 |
| Delaware | 7 | U | U | — | 13 | 2 | 772 | 772 | — | 3 |
| District of Columbia | U | U | U | — | 16 | — | 74 | 71 | 3 | 7 |
| Florida | 146 | 344 | 32 | 4 | 148 | 50 | 88 | 72 | 16 | 65 |
| Georgia | 57 | 187 | 16 | 4 | 43 | 26 | 35 | 35 | — | 57 |
| Maryland | 44 | 85 | 22 | 1 | 143 | 17 | 2,218 | 1,746 | 472 | 80 |
| North Carolina | 63 | 81 | 46 | 1 | 37 | 25 | 47 | 16 | 31 | 31 |
| South Carolina | 19 | 71 | 4 | — | 12 | 7 | 29 | 14 | 15 | 9 |
| Virginia | 51 | 130 | 8 | 3 | 66 | 17 | 933 | 886 | 47 | 49 |
| West Virginia | 6 | 83 | 22 | — | 30 | 3 | 135 | 120 | 15 | 2 |
| E.S. Central | 81 | 409 | 109 | 7 | 119 | 29 | 46 | 19 | 27 | 27 |
| Alabama | 12 | 109 | 13 | — | 18 | 4 | 9 | 6 | 3 | 5 |
| Kentucky | 30 | 101 | 68 | 1 | 58 | 7 | 5 | 5 | — | 6 |
| Mississippi | 7 | 50 | — | 4 | 1 | 4 | 1 | 1 | — | 1 |
| Tennessee | 32 | 149 | 28 | 2 | 42 | 14 | 31 | 7 | 24 | 15 |
| W.S. Central | 294 | 852 | 89 | 12 | 117 | 60 | 158 | 109 | 49 | 97 |
| Arkansas | 10 | 67 | 1 | 1 | 14 | 5 | — | — | — | 1 |
| Louisiana | 12 | 94 | 9 | — | 11 | 11 | 3 | 3 | — | 4 |
| Oklahoma | 13 | 129 | 20 | 2 | 11 | 7 | 2 | 1 | 1 | 5 |
| Texas | 259 | 562 | 59 | 9 | 81 | 37 | 153 | 105 | 48 | 87 |
| Mountain | 219 | 202 | 62 | 9 | 100 | 28 | 65 | 32 | 33 | 36 |
| Arizona | 118 | 80 | — | 2 | 26 | 8 | 8 | 2 | 6 | 15 |
| Colorado | 36 | 33 | 14 | 2 | 14 | 8 | 3 | 2 | 1 | 5 |
| Idaho | 17 | 12 | 3 | — | 3 | 1 | 9 | 5 | 4 | 3 |
| Montana | 1 | 2 | 6 | — | 4 | 1 | 17 | 6 | 11 | — |
| Nevada | 13 | 43 | 22 | 2 | 13 | 1 | 12 | 9 | 3 | 5 |
| New Mexico | 18 | 12 | 5 | 1 | 11 | 5 | 8 | 4 | 4 | 3 |
| Utah | 13 | 14 | 12 | 2 | 29 | 2 | 5 | 3 | 2 | 5 |
| Wyoming | 3 | 6 | — | — | — | 2 | 3 | 1 | 2 | — |
| Pacific | 547 | 417 | 77 | 10 | 233 | 129 | 141 | 120 | 21 | 170 |
| Alaska | 5 | 10 | — | 1 | 3 | 3 | 6 | 6 | — | 6 |
| California | 446 | 303 | 29 | 6 | 185 | 88 | 74 | 74 | — | 125 |
| Hawaii | 20 | 7 | — | — | 8 | 3 | N | — | — | 3 |
| Oregon | 25 | 41 | 23 | 1 | 18 | 6 | 38 | 18 | 20 | 4 |
| Washington | 51 | 56 | 25 | 2 | 19 | 29 | 23 | 22 | 1 | 32 |
| American Samoa | — | — | — | — | N | N | N | — | — | — |
| C.N.M.I. | — | — | — | — | — | — | — | — | — | — |
| Guam | U | U | U | — | U | U | U | U | U | U |
| Puerto Rico | 27 | 50 | — | — | — | — | N | — | — | 2 |
| U.S. Virgin Islands | — | — | — | — | — | — | N | — | — | — |

N: Not reportable. 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, 2008.

^{¶¶} National Surveillance Case Definition revised in 2008; probable cases not previously reported.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2008

| Area | Measles | | | Meningococcal disease | | | | |
|----------------------|---------|------------|-------------|-----------------------|------------------------------|-------------|-----------------|-------------------|
| | Total | Indigenous | Imported*** | All serogroups | Serogroup A, C, Y, and W-135 | Serogroup B | Other serogroup | Serogroup unknown |
| United States | 140 | 115 | 25 | 1,172 | 330 | 188 | 38 | 616 |
| New England | 2 | 1 | 1 | 38 | 15 | 20 | — | 3 |
| Connecticut | — | — | — | 1 | 1 | — | — | — |
| Maine | — | — | — | 6 | 3 | 3 | — | — |
| Massachusetts | 2 | 1 | 1 | 24 | 8 | 14 | — | 2 |
| New Hampshire | — | — | — | 5 | 1 | 3 | — | 1 |
| Rhode Island | — | — | — | 2 | 2 | — | — | — |
| Vermont | — | — | — | — | — | — | — | — |
| Mid. Atlantic | 32 | 23 | 9 | 128 | 27 | 12 | — | 89 |
| New Jersey | 1 | — | 1 | 17 | — | — | — | 17 |
| New York (Upstate) | 2 | — | 2 | 33 | 21 | 11 | — | 1 |
| New York City | 28 | 22 | 6 | 28 | — | — | — | 28 |
| Pennsylvania | 1 | 1 | — | 50 | 6 | 1 | — | 43 |
| E.N. Central | 42 | 40 | 2 | 211 | 64 | 32 | 3 | 112 |
| Illinois | 32 | 32 | — | 88 | — | — | — | 88 |
| Indiana | — | — | — | 27 | 18 | 8 | — | 1 |
| Michigan | 4 | 4 | — | 35 | 15 | 4 | 1 | 15 |
| Ohio | — | — | — | 40 | 23 | 11 | 1 | 5 |
| Wisconsin | 6 | 4 | 2 | 21 | 8 | 9 | 1 | 3 |
| W.N. Central | 1 | 1 | — | 105 | 39 | 23 | 2 | 41 |
| Iowa | — | — | — | 19 | 12 | 6 | — | 1 |
| Kansas | — | — | — | 8 | 1 | — | — | 7 |
| Minnesota | — | — | — | 30 | 13 | 13 | 1 | 3 |
| Missouri | 1 | 1 | — | 26 | 8 | — | — | 18 |
| Nebraska | — | — | — | 13 | 4 | 3 | 1 | 5 |
| North Dakota | — | — | — | 6 | — | — | — | 6 |
| South Dakota | — | — | — | 3 | 1 | 1 | — | 1 |
| S. Atlantic | 4 | 1 | 3 | 157 | 64 | 43 | 10 | 40 |
| Delaware | — | — | — | 2 | — | — | — | 2 |
| District of Columbia | 1 | 1 | — | — | — | — | — | — |
| Florida | 1 | — | 1 | 51 | 24 | 16 | 2 | 9 |
| Georgia | 1 | — | 1 | 18 | 6 | 10 | — | 2 |
| Maryland | — | — | — | 19 | 8 | 3 | 3 | 5 |
| North Carolina | — | — | — | 16 | 6 | 2 | 2 | 6 |
| South Carolina | — | — | — | 22 | 6 | 10 | 3 | 3 |
| Virginia | 1 | — | 1 | 24 | 9 | 2 | — | 13 |
| West Virginia | — | — | — | 5 | 5 | — | — | — |
| E.S. Central | — | — | — | 55 | 11 | 7 | 10 | 27 |
| Alabama | — | — | — | 10 | 2 | 2 | 4 | 2 |
| Kentucky | — | — | — | 10 | — | — | — | 10 |
| Mississippi | — | — | — | 12 | 7 | 1 | 4 | — |
| Tennessee | — | — | — | 23 | 2 | 4 | 2 | 15 |
| W.S. Central | 3 | 2 | 1 | 131 | 58 | 28 | 9 | 36 |
| Arkansas | 2 | 2 | — | 16 | 6 | 2 | 1 | 7 |
| Louisiana | 1 | — | 1 | 26 | 9 | 4 | 1 | 12 |
| Oklahoma | — | — | — | 19 | 9 | 4 | 6 | — |
| Texas | — | — | — | 70 | 34 | 18 | 1 | 17 |
| Mountain | 15 | 14 | 1 | 60 | 36 | 10 | 3 | 11 |
| Arizona | 14 | 13 | 1 | 9 | 6 | 2 | — | 1 |
| Colorado | — | — | — | 16 | 12 | 4 | — | — |
| Idaho | — | — | — | 6 | 1 | 1 | — | 4 |
| Montana | — | — | — | 4 | 1 | — | — | 3 |
| Nevada | — | — | — | 7 | 3 | 1 | 1 | 2 |
| New Mexico | 1 | 1 | — | 8 | 7 | — | 1 | — |
| Utah | — | — | — | 8 | 6 | 1 | 1 | — |
| Wyoming | — | — | — | 2 | — | 1 | — | 1 |
| Pacific | 41 | 33 | 8 | 287 | 16 | 13 | 1 | 257 |
| Alaska | — | — | — | 8 | — | — | — | 8 |
| California | 17 | 13 | 4 | 204 | — | — | — | 204 |
| Hawaii | 4 | 1 | 3 | 5 | — | 2 | — | 3 |
| Oregon | 1 | — | 1 | 39 | — | — | — | 39 |
| Washington | 19 | 19 | — | 31 | 16 | 11 | 1 | 3 |
| American Samoa | — | — | — | — | — | — | — | — |
| C.N.M.I. | — | — | — | — | — | — | — | — |
| Guam | U | U | U | U | U | U | U | U |
| Puerto Rico | — | — | — | 3 | — | — | — | 3 |
| U.S. Virgin Islands | — | — | — | — | — | — | — | — |

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

*** Imported cases include only those directly related to importation from other countries.

TABLE 2. (Continued) Reported cases of notifiable diseases,* by geographic division and area — United States, 2008

| Area | Mumps | Novel influenza A virus infections | Pertussis | Plague | Psittacosis | Q Fever | | | Rabies | |
|----------------------|-------|------------------------------------|-----------|--------|-------------|---------|-------|---------|--------|-------|
| | | | | | | Total | Acute | Chronic | Animal | Human |
| United States | 454 | 2 | 13,278 | 3 | 8 | 120 | 106 | 14 | 4,196 | 2 |
| New England | 18 | — | 1,052 | 1 | 2 | — | — | — | 433 | — |
| Connecticut | — | — | 55 | 1 | N | — | — | — | 202 | — |
| Maine | 5 | — | 49 | — | — | — | — | — | 64 | — |
| Massachusetts | 7 | — | 800 | — | 1 | — | — | — | — | — |
| New Hampshire | 5 | — | 49 | — | — | — | N | N | 58 | — |
| Rhode Island | — | — | 87 | — | 1 | — | — | — | 34 | — |
| Vermont | 1 | — | 12 | — | — | — | N | N | 75 | — |
| Mid. Atlantic | 71 | — | 1,311 | — | 1 | 17 | 15 | 2 | 944 | — |
| New Jersey | 13 | — | 246 | — | 1 | 2 | 2 | — | — | — |
| New York (Upstate) | 19 | — | 456 | — | — | 9 | 7 | 2 | 500 | — |
| New York City | 18 | — | 114 | — | — | 6 | 6 | — | 19 | — |
| Pennsylvania | 21 | — | 495 | — | — | — | — | — | 425 | — |
| E.N. Central | 151 | — | 2,252 | — | — | 7 | 6 | 1 | 256 | — |
| Illinois | 91 | — | 628 | — | — | — | — | — | 104 | — |
| Indiana | 2 | — | 270 | — | — | 1 | — | 1 | 10 | — |
| Michigan | 22 | — | 317 | — | — | 2 | 2 | — | 78 | — |
| Ohio | 23 | — | 845 | — | — | 1 | 1 | — | 64 | — |
| Wisconsin | 13 | — | 192 | — | — | 3 | 3 | — | N | — |
| W.N. Central | 50 | 1 | 2,327 | — | — | 15 | 15 | — | 323 | 1 |
| Iowa | 24 | — | 257 | — | — | — | N | N | 29 | — |
| Kansas | 2 | — | 106 | — | — | 2 | 2 | — | 68 | — |
| Minnesota | 9 | — | 1,034 | — | — | 5 | 5 | — | 70 | — |
| Missouri | 8 | — | 561 | — | — | 5 | 5 | — | 64 | 1 |
| Nebraska | 4 | — | 277 | — | — | 2 | 2 | — | 34 | — |
| North Dakota | 2 | — | 25 | — | — | — | — | — | 34 | — |
| South Dakota | 1 | 1 | 67 | — | — | 1 | 1 | — | 24 | — |
| S. Atlantic | 49 | — | 1,068 | — | 3 | 9 | 7 | 2 | 1,650 | — |
| Delaware | 1 | — | 18 | — | — | — | — | — | — | — |
| District of Columbia | 2 | — | 7 | — | — | 1 | 1 | — | — | — |
| Florida | 16 | — | 314 | — | 2 | 1 | 1 | — | 138 | — |
| Georgia | 3 | — | 115 | — | — | 2 | 2 | — | 386 | — |
| Maryland | 11 | — | 164 | — | — | 1 | 1 | — | 420 | — |
| North Carolina | 6 | — | 94 | — | — | 2 | 2 | — | N | — |
| South Carolina | — | — | 147 | — | 1 | — | — | — | — | — |
| Virginia | 9 | — | 198 | — | — | 2 | — | 2 | 620 | — |
| West Virginia | 1 | — | 11 | — | — | — | — | — | 86 | — |
| E.S. Central | 7 | — | 473 | — | — | 3 | 3 | — | 181 | — |
| Alabama | 5 | — | 69 | N | — | 2 | 2 | — | — | — |
| Kentucky | — | — | 183 | — | — | 1 | 1 | — | 45 | — |
| Mississippi | — | — | 105 | — | — | — | — | — | 7 | — |
| Tennessee | 2 | — | 116 | — | — | — | — | — | 129 | — |
| W.S. Central | 27 | 1 | 2,438 | — | — | 26 | 22 | 4 | 94 | — |
| Arkansas | 5 | — | 197 | — | — | 2 | 2 | — | 49 | — |
| Louisiana | 1 | — | 95 | — | — | — | — | — | — | — |
| Oklahoma | 1 | — | 100 | — | — | — | N | N | 43 | — |
| Texas | 20 | 1 | 2,046 | — | N | 24 | 20 | 4 | 2 | — |
| Mountain | 26 | — | 885 | 2 | — | 19 | 16 | 3 | 108 | — |
| Arizona | 5 | — | 218 | 1 | — | 4 | 3 | 1 | N | — |
| Colorado | 8 | — | 161 | — | — | 5 | 5 | — | — | — |
| Idaho | 2 | — | 40 | — | — | 1 | 1 | — | 11 | — |
| Montana | 1 | — | 84 | — | — | 1 | 1 | — | 13 | — |
| Nevada | 6 | — | 28 | — | — | 2 | 2 | — | 12 | — |
| New Mexico | — | — | 94 | 1 | — | 3 | 3 | — | 30 | — |
| Utah | 4 | — | 242 | — | — | 3 | 1 | 2 | 14 | — |
| Wyoming | — | — | 18 | — | — | — | — | — | 28 | — |
| Pacific | 55 | — | 1,472 | — | 2 | 24 | 22 | 2 | 207 | 1 |
| Alaska | 5 | — | 277 | — | — | — | — | — | 15 | — |
| California | 31 | — | 534 | — | 1 | 20 | 18 | 2 | 179 | 1 |
| Hawaii | 4 | — | 20 | — | — | 3 | 3 | — | — | — |
| Oregon | 1 | — | 181 | — | 1 | 1 | 1 | — | 13 | — |
| Washington | 14 | — | 460 | — | — | — | — | — | — | — |
| American Samoa | 25 | — | — | — | N | — | — | N | N | N |
| C.N.M.I. | — | — | — | — | — | — | — | — | — | — |
| Guam | U | U | U | U | U | U | U | U | U | U |
| Puerto Rico | 3 | — | — | — | N | — | — | — | 59 | — |
| U.S. Virgin Islands | — | — | — | — | — | — | — | — | N | — |

N: Not reportable. 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, 2008

| Area | Rocky Mountain spotted fever††† | | | Rubella | Salmonellosis | Shiga toxin-producing <i>E. Coli</i> (STEC)§§§ | Shigellosis | Streptococcal disease, invasive, group A | Streptococcal toxic-shock syndrome |
|----------------------|---------------------------------|-----------|----------|---------|---------------|--|-------------|--|------------------------------------|
| | Total | Confirmed | Probable | | | | | | |
| United States | 2,563 | 190 | 2,367 | 16 | 51,040 | 5,309 | 22,625 | 5,674 | 157 |
| New England | 7 | — | 7 | 2 | 2,244 | 264 | 243 | 397 | 23 |
| Connecticut | — | — | — | 1 | 491 | 47 | 40 | 118 | 21 |
| Maine | 1 | — | 1 | — | 159 | 26 | 20 | 28 | N |
| Massachusetts | 2 | — | 2 | 1 | 1,227 | 117 | 160 | 176 | 1 |
| New Hampshire | 1 | — | 1 | — | 155 | 34 | 6 | 30 | — |
| Rhode Island | 3 | — | 3 | — | 115 | 10 | 12 | 29 | — |
| Vermont | — | — | — | — | 97 | 30 | 5 | 16 | 1 |
| Mid. Atlantic | 154 | 5 | 149 | 4 | 5,827 | 476 | 2,572 | 1,097 | 23 |
| New Jersey | 85 | 3 | 82 | — | 1,297 | 138 | 925 | 191 | 4 |
| New York (Upstate) | 43 | 1 | 42 | — | 1,491 | 187 | 596 | 347 | 18 |
| New York City | 11 | 1 | 10 | 1 | 1,276 | 58 | 738 | 207 | — |
| Pennsylvania | 15 | — | 15 | 3 | 1,763 | 93 | 313 | 352 | 1 |
| E.N. Central | 150 | 9 | 141 | 2 | 5,252 | 876 | 4,339 | 1,018 | 61 |
| Illinois | 110 | 3 | 107 | — | 1,522 | 135 | 990 | 279 | 36 |
| Indiana | 6 | 6 | — | — | 652 | 96 | 607 | 150 | 10 |
| Michigan | 3 | — | 3 | — | 960 | 219 | 257 | 186 | 1 |
| Ohio | 31 | — | 31 | — | 1,366 | 204 | 1,923 | 262 | 13 |
| Wisconsin | — | — | — | 2 | 752 | 222 | 562 | 141 | 1 |
| W.N. Central | 439 | 22 | 417 | 1 | 2,878 | 837 | 953 | 401 | 10 |
| Iowa | 8 | 1 | 7 | — | 425 | 208 | 214 | — | — |
| Kansas | — | — | — | — | 467 | 52 | 67 | 41 | — |
| Minnesota | — | — | — | — | 748 | 191 | 311 | 185 | 6 |
| Missouri | 407 | 12 | 395 | — | 764 | 153 | 227 | 96 | 2 |
| Nebraska | 20 | 7 | 13 | — | 243 | 150 | 16 | 44 | 2 |
| North Dakota | 1 | 1 | — | 1 | 79 | 30 | 42 | 12 | — |
| South Dakota | 3 | 1 | 2 | — | 152 | 53 | 76 | 23 | — |
| S. Atlantic | 961 | 109 | 852 | 3 | 12,837 | 844 | 3,248 | 1,177 | 19 |
| Delaware | 33 | 1 | 32 | — | 148 | 15 | 12 | 11 | 2 |
| District of Columbia | 6 | 3 | 3 | — | 62 | 6 | 21 | 15 | — |
| Florida | 19 | 1 | 18 | 3 | 5,312 | 146 | 801 | 275 | N |
| Georgia | 78 | 78 | — | — | 2,302 | 88 | 1,103 | 273 | — |
| Maryland | 92 | 8 | 84 | — | 884 | 128 | 138 | 198 | N |
| North Carolina | 511 | 10 | 501 | — | 1,570 | 142 | 275 | 136 | 6 |
| South Carolina | 57 | 7 | 50 | — | 1,185 | 46 | 554 | 78 | — |
| Virginia | 155 | 1 | 154 | — | 1,165 | 241 | 310 | 150 | — |
| West Virginia | 10 | — | 10 | — | 209 | 32 | 34 | 41 | 11 |
| E.S. Central | 338 | 13 | 321 | — | 3,533 | 286 | 1,959 | 197 | 4 |
| Alabama | 93 | 2 | 91 | — | 1,013 | 65 | 427 | N | N |
| Kentucky | 1 | 1 | — | — | 485 | 100 | 264 | 46 | 4 |
| Mississippi | 11 | — | 11 | — | 1,087 | 5 | 296 | N | N |
| Tennessee | 233 | 10 | 219 | — | 948 | 116 | 972 | 151 | — |
| W.S. Central | 465 | 17 | 448 | — | 8,401 | 535 | 6,127 | 598 | — |
| Arkansas | 129 | 2 | 127 | — | 797 | 59 | 585 | 11 | — |
| Louisiana | 6 | 2 | 4 | — | 1,115 | 9 | 640 | 19 | — |
| Oklahoma | 268 | 10 | 258 | — | 906 | 135 | 237 | 142 | N |
| Texas | 62 | 3 | 59 | — | 5,583 | 332 | 4,665 | 426 | — |
| Mountain | 46 | 12 | 32 | — | 3,425 | 635 | 1,261 | 606 | 17 |
| Arizona | 17 | 11 | 6 | — | 1,154 | 69 | 650 | 204 | — |
| Colorado | 1 | — | 1 | — | 718 | 204 | 150 | 150 | 1 |
| Idaho | 1 | — | 1 | — | 200 | 149 | 14 | 16 | — |
| Montana | 3 | — | 3 | — | 130 | 38 | 8 | N | N |
| Nevada | 3 | 1 | 2 | — | 241 | 19 | 228 | 13 | 3 |
| New Mexico | 4 | — | 4 | — | 521 | 52 | 161 | 148 | — |
| Utah | 7 | — | 6 | — | 377 | 91 | 42 | 66 | 13 |
| Wyoming | 10 | — | 9 | — | 84 | 13 | 8 | 9 | — |
| Pacific | 3 | 3 | — | 4 | 6,643 | 556 | 1,923 | 183 | — |
| Alaska | N | — | — | 1 | 58 | 6 | 1 | 41 | — |
| California | — | — | — | 3 | 5,034 | 280 | 1,665 | N | N |
| Hawaii | N | — | — | — | 269 | 13 | 46 | 142 | — |
| Oregon | 3 | 3 | — | — | 436 | 68 | 95 | N | N |
| Washington | — | — | — | — | 846 | 189 | 116 | N | N |
| American Samoa | N | — | — | 1 | 3 | — | 1 | 30 | N |
| C.N.M.I. | — | — | — | — | — | — | — | — | — |
| Guam | U | U | U | U | U | U | U | U | U |
| Puerto Rico | N | — | — | — | 847 | — | 31 | N | N |
| U.S. Virgin Islands | N | — | — | — | — | — | — | — | — |

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

††† Revision of National Surveillance Case Definition distinguishing between confirmed and probable cases. Total count includes six unknown case status reports.

§§§ 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, 2008

| Area | <i>Streptococcus pneumoniae</i> , invasive disease, drug-resistant | | <i>Streptococcus pneumoniae</i> , 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 | 3,448 | 532 | 1,998 | 46,277 | 431 | 13,500 | 19 | 71 | 39 |
| New England | 135 | 19 | 105 | 793 | 2 | 309 | — | 3 | — |
| Connecticut | 70 | 7 | 15 | 173 | 2 | 34 | — | N | — |
| Maine | 18 | 2 | 3 | 27 | — | 10 | — | N | — |
| Massachusetts | — | — | 66 | 479 | — | 216 | — | 1 | — |
| New Hampshire | — | — | 11 | 41 | — | 20 | — | 2 | — |
| Rhode Island | 31 | 8 | 10 | 55 | — | 18 | — | — | — |
| Vermont | 16 | 2 | — | 18 | — | 11 | — | — | — |
| Mid. Atlantic | 315 | 33 | 277 | 7,426 | 35 | 1,715 | 4 | 8 | 3 |
| New Jersey | — | — | 70 | 1,009 | 4 | 226 | — | — | 1 |
| New York (Upstate) | 78 | 10 | 116 | 778 | 5 | 146 | — | 3 | 1 |
| New York City | 127 | 6 | 91 | 4,737 | 18 | 1,071 | — | — | 1 |
| Pennsylvania | 110 | 17 | N | 902 | 8 | 272 | 4 | 5 | — |
| E.N. Central | 660 | 85 | 354 | 3,412 | 34 | 1,320 | 1 | 20 | 1 |
| Illinois | N | N | 98 | 1,565 | 20 | 554 | — | 4 | 1 |
| Indiana | 242 | 29 | 44 | 351 | — | 140 | — | 2 | — |
| Michigan | 23 | 2 | 90 | 546 | 10 | 210 | 1 | 10 | — |
| Ohio | 395 | 54 | 67 | 763 | 3 | 351 | — | 4 | — |
| Wisconsin | — | — | 55 | 187 | 1 | 65 | — | — | — |
| W.N. Central | 368 | 44 | 124 | 1,053 | 2 | 402 | 2 | 10 | 2 |
| Iowa | — | — | — | 75 | — | 16 | — | 1 | — |
| Kansas | 79 | 6 | N | 125 | — | 30 | — | 1 | — |
| Minnesota | 185 | 32 | 51 | 265 | — | 116 | 1 | 4 | 1 |
| Missouri | 93 | 3 | 39 | 542 | 2 | 224 | — | 2 | — |
| Nebraska | — | — | 9 | 36 | — | 15 | 1 | 1 | — |
| North Dakota | 2 | — | 12 | 4 | — | — | — | — | 1 |
| South Dakota | 9 | 3 | 13 | 6 | — | 1 | — | 1 | — |
| S. Atlantic | 1,378 | 254 | 375 | 11,178 | 68 | 3,162 | 2 | 1 | 3 |
| Delaware | 3 | — | — | 59 | — | 16 | — | — | — |
| District of Columbia | N | N | N | 370 | — | 146 | — | — | — |
| Florida | 792 | 161 | 70 | 4,585 | 17 | 1,044 | 2 | N | 1 |
| Georgia | 462 | 79 | 106 | 2,833 | 11 | 914 | — | 1 | N |
| Maryland | 7 | 1 | 62 | 1,088 | 23 | 378 | — | N | 1 |
| North Carolina | N | N | N | 998 | 10 | 287 | — | — | — |
| South Carolina | — | — | 72 | 412 | 2 | 98 | — | — | — |
| Virginia | N | N | 52 | 789 | 4 | 266 | — | — | 1 |
| West Virginia | 114 | 13 | 13 | 44 | 1 | 13 | — | — | — |
| E.S. Central | 350 | 61 | 96 | 3,424 | 23 | 1,139 | — | 9 | — |
| Alabama | N | N | N | 1,187 | 12 | 449 | — | 1 | — |
| Kentucky | 80 | 11 | N | 218 | 1 | 93 | — | 2 | N |
| Mississippi | 44 | 14 | 12 | 736 | — | 184 | — | N | — |
| Tennessee | 226 | 36 | 84 | 1,283 | 10 | 413 | — | 6 | — |
| W.S. Central | 108 | 16 | 348 | 9,125 | 162 | 2,404 | 4 | 1 | — |
| Arkansas | 23 | 5 | 17 | 508 | 9 | 206 | — | 1 | N |
| Louisiana | 85 | 11 | 17 | 2,024 | 23 | 707 | 1 | — | — |
| Oklahoma | N | N | 76 | 257 | 3 | 86 | — | N | — |
| Texas | — | — | 238 | 6,336 | 127 | 1,405 | 3 | N | — |
| Mountain | 132 | 18 | 270 | 2,345 | 43 | 608 | 2 | 9 | — |
| Arizona | — | — | 117 | 1,394 | 30 | 317 | — | 1 | — |
| Colorado | — | — | 62 | 352 | — | 128 | — | 4 | — |
| Idaho | N | N | 6 | 26 | — | 7 | 1 | 2 | — |
| Montana | 1 | — | N | 10 | — | 7 | 1 | N | — |
| Nevada | 55 | 6 | 6 | 325 | 9 | 77 | — | 2 | — |
| New Mexico | — | — | 40 | 189 | 4 | 44 | — | — | — |
| Utah | 73 | 12 | 37 | 40 | — | 25 | — | — | — |
| Wyoming | 3 | — | 2 | 9 | — | 3 | — | — | — |
| Pacific | 2 | 2 | 49 | 7,521 | 62 | 2,441 | 4 | 10 | 30 |
| Alaska | — | — | 29 | 9 | — | 1 | — | N | — |
| California | N | N | N | 6,909 | 62 | 2,204 | 4 | 10 | 30 |
| Hawaii | 2 | 2 | 20 | 68 | — | 29 | — | N | — |
| Oregon | N | N | N | 97 | — | 26 | — | N | — |
| Washington | N | N | N | 438 | — | 181 | — | N | — |
| American Samoa | N | N | N | — | — | — | — | N | N |
| C.N.M.I. | — | — | — | — | — | — | — | — | — |
| Guam | U | U | U | 45 | — | 6 | U | U | U |
| Puerto Rico | — | — | N | 797 | 8 | 167 | 3 | N | N |
| U.S. Virgin Islands | — | — | N | 1 | — | — | — | — | — |

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

††† 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, 2008

| Area | Tuberculosis**** | Tularemia | Typhoid fever | Vancomycin-intermediate <i>Staphylococcus aureus</i> | Varicella | | Vibriosis |
|----------------------|------------------|-----------|---------------|--|-----------|---------------|-----------|
| | | | | | Morbidity | Mortality†††† | |
| United States | 12,904 | 123 | 449 | 63 | 30,386 | 2 | 588 |
| New England | 429 | 19 | 23 | 9 | 1,729 | — | 19 |
| Connecticut | 98 | — | 3 | 2 | 857 | — | 14 |
| Maine | 9 | — | — | — | 269 | — | 3 |
| Massachusetts | 261 | 19 | 16 | 7 | — | — | — |
| New Hampshire | 19 | — | 2 | N | 280 | — | 2 |
| Rhode Island | 36 | — | 1 | — | — | — | — |
| Vermont | 6 | — | 1 | — | 323 | — | — |
| Mid. Atlantic | 2,009 | 3 | 124 | 22 | 2,409 | 2 | 22 |
| New Jersey | 422 | 2 | 31 | N | N | N | 17 |
| New York (Upstate) | 305 | — | 12 | 6 | N | 1 | N |
| New York City | 895 | 1 | 57 | 16 | — | 1 | 5 |
| Pennsylvania | 387 | — | 24 | — | 2,409 | — | N |
| E.N. Central | 1,056 | 2 | 44 | 11 | 7,805 | — | 30 |
| Illinois | 469 | 1 | 18 | 2 | 1,489 | — | 11 |
| Indiana | 118 | — | 1 | N | — | — | 5 |
| Michigan | 188 | — | 9 | 6 | 3,053 | — | N |
| Ohio | 213 | — | 8 | 3 | 2,403 | — | 9 |
| Wisconsin | 68 | 1 | 8 | — | 860 | — | 5 |
| W.N. Central | 476 | 45 | 25 | 4 | 1,418 | — | 8 |
| Iowa | 49 | — | 6 | — | N | N | N |
| Kansas | 57 | 2 | 2 | N | 481 | — | N |
| Minnesota | 211 | 2 | 7 | 3 | — | — | 8 |
| Missouri | 107 | 21 | 2 | 1 | 774 | — | N |
| Nebraska | 33 | 7 | 3 | — | N | N | N |
| North Dakota | 3 | 3 | 3 | — | 108 | — | N |
| South Dakota | 16 | 10 | 2 | — | 55 | — | N |
| S. Atlantic | 2,630 | 5 | 78 | 7 | 4,863 | — | 205 |
| Delaware | 23 | — | 4 | — | 47 | — | 4 |
| District of Columbia | 54 | — | — | N | 24 | — | 2 |
| Florida | 954 | — | 18 | 3 | 1,735 | — | 94 |
| Georgia | 478 | — | 9 | 1 | N | N | 18 |
| Maryland | 278 | 1 | 17 | N | N | — | 33 |
| North Carolina | 335 | 3 | 6 | 3 | N | N | 13 |
| South Carolina | 188 | — | 4 | — | 886 | — | 12 |
| Virginia | 292 | 1 | 19 | — | 1,489 | — | 29 |
| West Virginia | 28 | — | 1 | — | 682 | — | N |
| E.S. Central | 677 | 4 | 7 | 2 | 1,127 | — | 42 |
| Alabama | 176 | — | 4 | N | 1,113 | — | 23 |
| Kentucky | 101 | 2 | — | N | N | N | 2 |
| Mississippi | 118 | — | — | 2 | 14 | N | 7 |
| Tennessee | 282 | 2 | 3 | — | N | — | 10 |
| W.S. Central | 1,911 | 18 | 39 | 2 | 8,688 | — | 63 |
| Arkansas | 83 | 11 | 4 | — | 777 | — | N |
| Louisiana | 227 | — | — | — | 72 | — | — |
| Oklahoma | 100 | 7 | 3 | — | N | N | 6 |
| Texas | 1,501 | — | 32 | 2 | 7,839 | — | 57 |
| Mountain | 544 | 17 | 10 | 3 | 2,203 | — | 24 |
| Arizona | 227 | — | 3 | 2 | — | — | 14 |
| Colorado | 103 | 2 | 4 | N | 874 | — | 8 |
| Idaho | 11 | 2 | — | N | N | N | N |
| Montana | 9 | — | 1 | N | 336 | — | N |
| Nevada | 102 | 2 | — | — | N | N | N |
| New Mexico | 60 | 1 | 1 | N | 219 | — | 2 |
| Utah | 27 | 8 | 1 | 1 | 763 | — | — |
| Wyoming | 5 | 2 | — | — | 11 | — | — |
| Pacific | 3,172 | 10 | 99 | 3 | 144 | — | 175 |
| Alaska | 50 | — | 1 | N | 76 | N | 1 |
| California | 2,695 | 2 | 75 | N | — | — | 104 |
| Hawaii | 124 | — | 7 | 3 | 68 | — | 30 |
| Oregon | 75 | 4 | 1 | N | N | N | 11 |
| Washington | 228 | 4 | 15 | N | N | N | 29 |
| American Samoa | 3 | — | 6 | N | N | N | N |
| C.N.M.I. | 34 | — | — | — | — | — | — |
| Guam | 90 | U | U | U | U | — | U |
| Puerto Rico | 95 | — | — | — | 600 | N | N |
| U.S. Virgin Islands | 4 | — | — | N | — | — | N |

N: Not reportable. 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 15, 2009.

†††† Totals reported to the Division of Viral Diseases, National Center for Immunization and Respiratory Diseases (NCIRD), as of June 30, 2009.

TABLE 3. Reported cases and incidence* of notifiable diseases,† by age group — United States, 2008

| 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§ | 31 | (0.73) | 588 | (14.06) | 5,616 | (68.31) | 11,321 | (47.34) | 17,411 | (27.72) | 4,151 | (3.89) | 62 | (0.07) | 22 | 39,202 |
| Botulism, total | 106 | (2.49) | 3 | (0.07) | — | (0) | 3 | (0.01) | 4 | (0.01) | 20 | (0.02) | 8 | (0.01) | 1 | 145 |
| foodborne | — | (0) | 1 | (0.02) | — | (0) | 2 | (0.01) | 1 | (0) | 6 | (0.01) | 7 | (0.01) | — | 17 |
| infant | 106 | (2.49) | 2 | (0.05) | — | (0) | — | (0) | — | (0) | — | (0) | — | (0) | 1 | 109 |
| other (wound and unspecified) | — | (0) | — | (0) | — | (0) | 1 | (0) | 3 | (0.01) | 14 | (0.01) | 1 | (0) | — | 19 |
| Brucellosis | — | (0) | 3 | (0.07) | 8 | (0.10) | 8 | (0.03) | 19 | (0.03) | 24 | (0.02) | 18 | (0.02) | — | 80 |
| Chancroid¶ | — | (0) | — | (0) | — | (0) | 14 | (0.06) | 10 | (0.02) | 1 | (0) | — | (0) | — | 25 |
| <i>Chlamydia trachomatis</i> infections¶ | — | (0) | — | (0) | — | (0) | 856,189 | (3580.47) | 299,307 | (476.45) | 35,326 | (33.13) | 887 | (0.97) | 3,168 | 1,210,523 |
| Cholera | — | (0) | — | (0) | — | (0) | — | (0) | 2 | (0) | 1 | (0) | 2 | (0) | — | 5 |
| Coccidioidomycosis** | 8 | (0.19) | 36 | (0.86) | 225 | (2.74) | 726 | (3.04) | 1,632 | (2.60) | 3,169 | (2.97) | 1,689 | (1.84) | 38 | 7,523 |
| Cryptosporidiosis | 157 | (3.69) | 1,845 | (44.12) | 2,050 | (24.93) | 1,023 | (4.28) | 1,769 | (2.82) | 1,567 | (1.47) | 618 | (0.67) | 84 | 9,113 |
| Cyclosporiasis | — | (0) | 3 | (0.08) | 3 | (0.04) | 7 | (0.03) | 30 | (0.05) | 63 | (0.07) | 27 | (0.03) | 6 | 139 |
| Domestic arboviral diseases†† | | | | | | | | | | | | | | | | |
| California serogroup virus | | | | | | | | | | | | | | | | |
| neuroinvasive | 1 | (0.02) | 10 | (0.24) | 34 | (0.41) | — | (0) | 2 | (0) | 4 | (0) | 4 | (0) | — | 55 |
| nonneuroinvasive | — | (0) | 1 | (0.02) | 3 | (0.04) | — | (0) | 1 | (0) | 2 | (0) | — | (0) | — | 7 |
| Eastern equine encephalitis virus, neuroinvasive | 2 | (0.05) | — | (0) | — | (0) | — | (0) | — | (0) | — | (0) | 2 | (0) | — | 4 |
| Powassan virus, neuroinvasive | — | (0) | — | (0) | 2 | (0.02) | — | (0) | — | (0) | — | (0) | — | (0) | — | 2 |
| St. Louis encephalitis virus | | | | | | | | | | | | | | | | |
| neuroinvasive | — | (0) | — | (0) | — | (0) | — | (0) | 3 | (0) | 5 | (0) | — | (0) | — | 8 |
| nonneuroinvasive | — | (0) | 1 | (0.02) | 2 | (0.02) | — | (0) | — | (0) | 2 | (0) | — | (0) | — | 5 |
| West Nile virus | | | | | | | | | | | | | | | | |
| neuroinvasive | — | (0) | 7 | (0.17) | 14 | (0.17) | 42 | (0.18) | 79 | (0.13) | 280 | (0.26) | 267 | (0.29) | — | 689 |
| nonneuroinvasive | — | (0) | 2 | (0.05) | 22 | (0.27) | 39 | (0.16) | 133 | (0.21) | 361 | (0.34) | 110 | (0.12) | — | 667 |
| Ehrlichiosis/Anaplasmosis | | | | | | | | | | | | | | | | |
| <i>Ehrlichia chaffeensis</i> | 1 | (0.03) | 22 | (0.57) | 76 | (1.01) | 62 | (0.28) | 102 | (0.18) | 429 | (0.44) | 256 | (0.30) | 9 | 957 |
| <i>Ehrlichia ewingii</i> | — | (0) | — | (0) | — | (0) | 1 | (0) | 2 | (0) | 2 | (0) | 4 | (0) | — | 9 |
| <i>Anaplasma phagocytophilum</i> | — | (0) | 6 | (0.19) | 54 | (0.86) | 39 | (0.21) | 95 | (0.20) | 477 | (0.58) | 313 | (0.44) | 25 | 1,009 |
| Undetermined | — | (0) | 4 | (0.13) | 14 | (0.22) | 8 | (0.04) | 21 | (0.04) | 56 | (0.07) | 28 | (0.04) | 1 | 132 |
| Giardiasis | 226 | (6.41) | 3,427 | (98.99) | 3,104 | (45.60) | 1,861 | (9.37) | 3,416 | (6.45) | 5,103 | (5.67) | 1,360 | (1.73) | 411 | 18,908 |
| Gonorrhea¶ | — | (0) | — | (0) | — | (0) | 205,816 | (860.70) | 100,593 | (160.13) | 24,765 | (23.23) | 655 | (0.71) | 801 | 336,742 |
| <i>Haemophilus influenzae</i> , invasive disease | | | | | | | | | | | | | | | | |
| all ages, all serotypes | 261 | (6.13) | 176 | (4.21) | 91 | (1.11) | 95 | (0.40) | 176 | (0.28) | 720 | (0.68) | 1,336 | (1.46) | 31 | 2,886 |
| age <5 years | | | | | | | | | | | | | | | | |
| serotype bt | 18 | (0.42) | 12 | (0.29) | — | (0) | — | (0) | — | (0) | — | (0) | — | (0) | — | 30 |
| nons serotype b | 146 | (3.43) | 98 | (2.34) | — | (0) | — | (0) | — | (0) | — | (0) | — | (0) | — | 244 |
| unknown serotype | 97 | (2.28) | 66 | (1.58) | — | (0) | — | (0) | — | (0) | — | (0) | — | (0) | — | 163 |
| Hansen disease (Leprosy) | — | (0) | — | (0) | — | (0) | 8 | (0.04) | 22 | (0.04) | 22 | (0.02) | 9 | (0.01) | 19 | 80 |
| Hantavirus pulmonary syndrome | — | (0) | — | (0) | — | (0) | 3 | (0.01) | 10 | (0.02) | 5 | (0) | — | (0) | — | 18 |
| Hemolytic uremic syndrome, post-diarrheal | 14 | (0.35) | 164 | (4.17) | 74 | (0.96) | 17 | (0.08) | 8 | (0.01) | 26 | (0.03) | 24 | (0.03) | 3 | 330 |
| Hepatitis, viral, acute | | | | | | | | | | | | | | | | |
| A | 6 | (0.14) | 60 | (0.36) | 287 | (0.72) | 377 | (0.89) | 620 | (1.01) | 852 | (0.87) | 368 | (0.97) | 15 | 2,585 |
| B | — | (0) | 3 | (0.02) | 9 | (0.02) | 307 | (0.73) | 1,586 | (2.58) | 1,898 | (1.93) | 204 | (0.54) | 26 | 4,033 |
| C | 1 | (0.02) | — | (0) | 4 | (0.01) | 160 | (0.38) | 318 | (0.52) | 360 | (0.37) | 27 | (0.07) | 7 | 877 |
| Influenza-associated pediatric mortality§§ | 14 | (0.33) | 29 | (0.18) | 43 | (0.11) | 4 | (0.03) | — | (0) | — | (0) | — | (0) | — | 90 |
| Legionellosis | 3 | (0.07) | 2 | (0.05) | 9 | (0.11) | 40 | (0.17) | 220 | (0.35) | 1,649 | (1.55) | 1,241 | (1.35) | 17 | 3,181 |
| Listeriosis | 93 | (2.18) | 6 | (0.14) | 6 | (0.07) | 34 | (0.14) | 55 | (0.09) | 191 | (0.18) | 361 | (0.39) | 13 | 759 |
| Lyme disease, total | 51 | (1.20) | 1,139 | (27.23) | 5,261 | (63.99) | 3,182 | (13.31) | 4,218 | (6.71) | 12,327 | (11.56) | 4,532 | (4.95) | 4,488 | 35,198 |
| confirmed | 47 | (1.10) | 1,030 | (24.63) | 4,401 | (53.53) | 2,516 | (10.52) | 3,356 | (5.34) | 10,094 | (9.47) | 3,555 | (3.88) | 3,922 | 28,921 |
| probable | 4 | (0.09) | 109 | (2.61) | 860 | (10.46) | 666 | (2.79) | 862 | (1.37) | 2,233 | (2.09) | 977 | (1.07) | 566 | 6,277 |
| Malaria | 3 | (0.07) | 45 | (1.08) | 132 | (1.61) | 199 | (0.83) | 367 | (0.58) | 449 | (0.42) | 44 | (0.05) | 16 | 1,255 |
| Measles, total | 17 | (0.40) | 31 | (0.74) | 47 | (0.57) | 16 | (0.07) | 17 | (0.03) | 11 | (0.01) | — | (0) | 1 | 140 |
| indigenous | 13 | (0.31) | 29 | (0.69) | 44 | (0.54) | 12 | (0.05) | 9 | (0.01) | 8 | (0.01) | — | (0) | — | 115 |
| imported | 4 | (0.09) | 2 | (0.05) | 3 | (0.04) | 4 | (0.02) | 8 | (0.01) | 3 | (0) | — | (0) | 1 | 25 |
| Meningococcal disease, all serogroups | 160 | (3.76) | 124 | (2.96) | 84 | (1.02) | 208 | (0.87) | 135 | (0.21) | 240 | (0.23) | 214 | (0.23) | 7 | 1,172 |
| serogroup A,C,Y, and W-135 | 31 | (0.73) | 25 | (0.60) | 29 | (0.35) | 53 | (0.22) | 36 | (0.06) | 68 | (0.06) | 87 | (0.09) | 1 | 330 |
| serogroup B | 46 | (1.08) | 30 | (0.72) | 12 | (0.15) | 40 | (0.17) | 16 | (0.03) | 26 | (0.02) | 15 | (0.02) | 3 | 188 |
| other serogroup | 5 | (0.12) | 6 | (0.14) | 4 | (0.05) | 8 | (0.03) | 4 | (0.01) | 6 | (0.01) | 5 | (0.01) | — | 38 |
| serogroup unknown | 78 | (1.83) | 63 | (1.51) | 39 | (0.47) | 107 | (0.45) | 79 | (0.13) | 140 | (0.13) | 107 | (0.12) | 3 | 616 |
| Mumps | 3 | (0.07) | 57 | (1.36) | 121 | (1.47) | 83 | (0.35) | 73 | (0.12) | 93 | (0.09) | 18 | (0.02) | 6 | 454 |
| Novel influenza A virus infections | — | (0) | — | (0) | 1 | (0.01) | 1 | (0) | — | (0) | — | (0) | — | (0) | — | 2 |
| Pertussis | 2,180 | (51.21) | 1,288 | (30.80) | 4,994 | (60.74) | 1,385 | (5.79) | 1,069 | (1.70) | 1,433 | (1.34) | 258 | (0.28) | 671 | 13,278 |
| Plague | — | (0) | — | (0) | — | (0) | 1 | (0) | 1 | (0) | 1 | (0) | — | (0) | — | 3 |
| Psittacosis | — | (0) | — | (0) | 1 | (0.01) | — | (0) | — | (0) | 6 | (0.01) | 1 | (0) | — | 8 |

See footnotes on next page.

TABLE 3. (Continued) Reported cases and incidence* of notifiable diseases,† by age group — United States, 2008

| 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 | | |
| Q Fever, total | — | (0) | 1 | (0.02) | — | (0) | 7 | (0.03) | 26 | (0.04) | 60 | (0.06) | 25 | (0.03) | 1 | 120 |
| acute | — | (0) | 1 | (0.02) | — | (0) | 7 | (0.03) | 23 | (0.04) | 54 | (0.05) | 20 | (0.02) | 1 | 106 |
| chronic | — | (0) | — | (0) | — | (0) | — | (0) | 3 | (0) | 6 | (0.01) | 5 | (0.01) | — | 14 |
| Rabies | | | | | | | | | | | | | | | | |
| animal | 22 | (0.56) | 4 | (0.10) | 2 | (0.03) | 4 | (0.02) | 11 | (0.02) | 12 | (0.01) | 9 | (0.01) | 4,132 | 4,196 |
| human | — | (0) | — | (0) | — | (0) | 1 | (0) | — | (0) | 1 | (0) | — | (0) | — | 2 |
| Rocky Mountain spotted fever, total | 2 | (0.05) | 45 | (1.08) | 223 | (2.71) | 268 | (1.12) | 479 | (0.76) | 1,123 | (1.05) | 417 | (0.46) | 6 | 2,563 |
| confirmed | 2 | (0.05) | 4 | (0.10) | 11 | (0.13) | 19 | (0.08) | 34 | (0.05) | 86 | (0.08) | 33 | (0.04) | 1 | 190 |
| probable | — | (0) | 41 | (0.98) | 212 | (2.58) | 249 | (1.04) | 443 | (0.71) | 1,034 | (0.97) | 383 | (0.42) | 5 | 2,367 |
| Rubella | 3 | (0.07) | 2 | (0.05) | 1 | (0.01) | — | (0) | 4 | (0.01) | 6 | (0.01) | — | (0) | — | 16 |
| Salmonellosis | 5,624 | (132.11) | 9,095 | (217.47) | 6,504 | (79.11) | 4,880 | (20.41) | 7,024 | (11.18) | 11,002 | (10.32) | 5,983 | (6.53) | 928 | 51,040 |
| Shiga toxin-producing <i>E. coli</i> (STEC) | 192 | (4.51) | 1,239 | (29.63) | 1,140 | (13.87) | 805 | (3.37) | 526 | (0.84) | 787 | (0.74) | 497 | (0.54) | 123 | 5,309 |
| Shigellosis | 492 | (11.56) | 7,320 | (175.03) | 7,781 | (94.64) | 1,491 | (6.24) | 2,873 | (4.57) | 1,952 | (1.83) | 533 | (0.58) | 183 | 22,625 |
| Streptococcal disease, invasive, group A | 150 | (4.36) | 300 | (8.86) | 318 | (4.76) | 226 | (1.16) | 643 | (1.26) | 2,101 | (2.42) | 1,869 | (2.47) | 67 | 5,674 |
| Streptococcal, toxic-shock syndrome | 1 | (0.03) | 1 | (0.03) | 8 | (0.13) | 6 | (0.03) | 27 | (0.06) | 66 | (0.09) | 47 | (0.07) | 1 | 157 |
| <i>Streptococcus pneumoniae</i> , invasive disease | | | | | | | | | | | | | | | | |
| all ages | 177 | (4.16) | 355 | (8.49) | 96 | (1.17) | 74 | (0.31) | 260 | (0.41) | 1,234 | (1.16) | 1,251 | (1.37) | 1 | 3,448 |
| age <5 years | | | | | | | | | | | | | | | | |
| drug resistant | 177 | (5.92) | — | (0) | — | (0) | — | (0) | — | (0) | — | (0) | — | (0) | 355 | 532 |
| non-drug resistant | 696 | (22.40) | 1,302 | (42.67) | — | (0) | — | (0) | — | (0) | — | (0) | — | (0) | — | 1,998 |
| Syphilis, total, all stages [§] | — | (0) | — | (0) | — | (0) | 9,013 | (37.69) | 18,427 | (29.33) | 16,763 | (15.72) | 1,535 | (1.68) | 38 | 46,277 |
| congenital (age <1 yr) | 431 | (10.12) | — | (0) | — | (0) | — | (0) | — | (0) | — | (0) | — | (0) | — | 431 |
| primary and secondary [¶] | — | (0) | — | (0) | — | (0) | 3,300 | (13.80) | 5,798 | (9.23) | 4,261 | (4.00) | 105 | (0.11) | 6 | 13,500 |
| Tetanus | — | (0) | — | (0) | 1 | (0.01) | 1 | (0) | 3 | (0) | 6 | (0.01) | 2 | (0) | 6 | 19 |
| Toxic-shock syndrome (other than streptococcal) | 1 | (0.03) | 3 | (0.10) | 13 | (0.21) | 26 | (0.14) | 15 | (0.03) | 9 | (0.01) | 4 | (0.01) | — | 71 |
| Trichinellosis | — | (0) | 1 | (0.03) | 2 | (0.03) | 3 | (0.01) | 16 | (0.03) | 16 | (0.02) | 1 | (0) | — | 39 |
| Tuberculosis ^{¶¶} | 114 | (2.68) | 382 | (2.32) | 290 | (0.72) | 1,440 | (3.39) | 3,266 | (5.29) | 4,911 | (4.98) | 2,500 | (6.60) | 1 | 12,904 |
| Tularemia | — | (0) | 7 | (0.17) | 18 | (0.22) | 10 | (0.04) | 10 | (0.02) | 49 | (0.05) | 19 | (0.02) | 10 | 123 |
| Typhoid fever | 2 | (0.05) | 59 | (1.41) | 94 | (1.14) | 83 | (0.35) | 129 | (0.21) | 59 | (0.06) | 14 | (0.02) | 9 | 449 |
| Vancomycin-intermediate <i>Staphylococcus aureus</i> (VISA) | — | (0) | — | (0) | — | (0) | 1 | (0.01) | 3 | (0.01) | 26 | (0.04) | 27 | (0.04) | 6 | 63 |
| Vibriosis | 2 | (0.06) | 11 | (0.32) | 39 | (0.58) | 44 | (0.23) | 103 | (0.20) | 263 | (0.30) | 121 | (0.17) | 5 | 588 |

* Per 100,000 population.

† No cases of anthrax; diphtheria; Eastern equine encephalitis virus, non-neuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus, non-neuroinvasive; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; vancomycin-resistant *Staphylococcus aureus* (VRSA) infection; western equine encephalitis virus, neuroinvasive and non-neuroinvasive; and yellow fever were reported in 2008. 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, 2008.

¶ 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 8, 2009. 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.

¶¶ Notifiable in <40 states.

†† Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases, (ArboNET Surveillance), as of May 1, 2009.

§§ Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases, as of December 31, 2008.

¶¶¶ Totals reported to the Division of TB Elimination, NCHHSTP, as of May 15, 2009.

TABLE 4. Reported cases and incidence* of notifiable diseases,† by sex — United States, 2008

| Disease | Sex | | | | Sex not stated | Total |
|---|---------|----------|---------|----------|----------------|-----------|
| | Male | | Female | | | |
| | No. | Rate | No. | Rate | | |
| AIDS§ | 29,015 | (19.52) | 10,186 | (6.66) | 1 | 39,202 |
| Botulism, total | 75 | (0.05) | 67 | (0.04) | 3 | 145 |
| foodborne | 8 | (0.01) | 9 | (0.01) | — | 17 |
| infant | 56 | (2.57) | 53 | (2.55) | — | 109 |
| other (wound and unspecified) | 11 | (0.01) | 5 | (0) | 3 | 19 |
| Brucellosis | 51 | (0.03) | 29 | (0.02) | — | 80 |
| Chancroid¶ | 11 | (0.01) | 14 | (0.01) | 0 | 25 |
| <i>Chlamydia trachomatis</i> infections¶ | 313,779 | (211.07) | 893,004 | (583.81) | 3,740 | 1,210,523 |
| Cholera | 3 | (0) | 2 | (0) | — | 5 |
| Coccidioidomycosis** | 4,167 | (8.68) | 3,308 | (6.76) | 48 | 7,523 |
| Cryptosporidiosis | 4,525 | (3.04) | 4,520 | (2.95) | 68 | 9,113 |
| Cyclosporiosis | 67 | (0.05) | 71 | (0.05) | 1 | 139 |
| Domestic arboviral diseases†† | | | | | | |
| California serogroup virus | | | | | | |
| neuroinvasive | 38 | (0.03) | 17 | (0.01) | — | 55 |
| nonneuroinvasive | 4 | (0) | 3 | (0) | — | 7 |
| Eastern equine encephalitis virus, neuroinvasive | 3 | (0) | 1 | (0) | — | 4 |
| Powassan virus, neuroinvasive | 1 | (0) | 1 | (0) | — | 2 |
| St. Louis encephalitis virus | | | | | | |
| neuroinvasive | 4 | (0) | 4 | (0) | — | 8 |
| nonneuroinvasive | 1 | (0) | 4 | (0) | — | 5 |
| West Nile virus | | | | | | |
| neuroinvasive | 428 | (0.29) | 261 | (0.17) | — | 689 |
| nonneuroinvasive | 376 | (0.25) | 290 | (0.19) | 1 | 667 |
| Ehrlichiosis/Anaplasmosis | | | | | | |
| <i>Ehrlichia chaffeensis</i> | 556 | (0.41) | 396 | (0.28) | 5 | 957 |
| <i>Ehrlichia ewingii</i> | 5 | (0) | 4 | (0) | — | 9 |
| <i>Anaplasma phagocytophilum</i> | 594 | (0.52) | 407 | (0.34) | 8 | 1,009 |
| Undetermined | 79 | (0.07) | 53 | (0.05) | — | 132 |
| Giardiasis | 10,664 | (8.48) | 8,123 | (6.27) | 121 | 18,908 |
| Gonorrhea¶ | 153,103 | (102.99) | 182,577 | (119.36) | 1,062 | 336,742 |
| <i>Haemophilus influenzae</i> , invasive disease, all ages, all serotypes | 1,294 | (0.87) | 1,578 | (1.03) | 14 | 2,886 |
| age <5 yrs | | | | | | |
| serotype b | 19 | (0.18) | 11 | (0.11) | — | 30 |
| nonsertotype b | 136 | (1.28) | 107 | (1.06) | 1 | 244 |
| unknown serotype | 100 | (0.94) | 61 | (0.60) | 2 | 163 |
| Hansen disease (Leprosy) | 45 | (0.03) | 16 | (0.01) | 19 | 80 |
| Hantavirus pulmonary syndrome | 13 | (0.01) | 5 | (0) | — | 18 |
| Hemolytic uremic syndrome, post-diarrheal | 154 | (0.11) | 174 | (0.12) | 2 | 330 |
| Hepatitis, viral, acute | | | | | | |
| A | 1,326 | (0.89) | 1,241 | (0.81) | 18 | 2,585 |
| B | 2,533 | (1.71) | 1,491 | (0.98) | 9 | 4,033 |
| C | 437 | (0.30) | 423 | (0.28) | 17 | 877 |
| Influenza-associated pediatric mortality§§ | 48 | (0.13) | 42 | (0.12) | — | 90 |
| Legionellosis | 2,030 | (1.37) | 1,140 | (0.75) | 11 | 3,181 |
| Listeriosis | 362 | (0.24) | 396 | (0.26) | 1 | 759 |
| Lyme disease, total | 18,911 | (12.72) | 15,550 | (10.17) | 737 | 35,198 |
| confirmed | 15,586 | (10.48) | 12,622 | (8.25) | 713 | 28,921 |
| probable | 3,325 | (2.24) | 2,928 | (1.91) | 24 | 6,277 |
| Malaria | 816 | (0.55) | 427 | (0.28) | 12 | 1,255 |
| Measles, total | 69 | (0.05) | 71 | (0.05) | — | 140 |
| indigenous | 57 | (0.04) | 58 | (0.04) | — | 115 |
| imported | 12 | (0.01) | 13 | (0.01) | — | 25 |
| Meningococcal disease, invasive, all serogroups | 544 | (0.39) | 620 | (0.32) | 8 | 1,172 |
| serogroup A,C,Y, and W-135 | 132 | (0.09) | 195 | (0.13) | 3 | 330 |
| serogroup B | 90 | (0.06) | 97 | (0.06) | 1 | 188 |
| other serogroup | 27 | (0.02) | 10 | (0.01) | 1 | 38 |
| serogroup unknown | 295 | (0.20) | 318 | (0.21) | 3 | 616 |

See footnotes on next page.

TABLE 4. (Continued) Reported cases and incidence* of notifiable diseases,† by sex — United States, 2008

| Disease | Sex | | | | Sex not stated | Total |
|--|--------|---------|--------|---------|----------------|--------|
| | Male | | Female | | | |
| | No. | Rate | No. | Rate | | |
| Mumps | 258 | (0.17) | 193 | (0.13) | 3 | 454 |
| Novel influenza A virus infections | 2 | (0) | — | (0) | — | 2 |
| Pertussis | 6,058 | (4.08) | 7,155 | (4.68) | 65 | 13,278 |
| Plague | 3 | (0) | — | (0) | — | 3 |
| Psittacosis | 5 | (0) | 3 | (0) | — | 8 |
| Q Fever, total | 97 | (0.07) | 22 | (0.01) | 1 | 120 |
| acute | 88 | (0.06) | 17 | (0.01) | 1 | 106 |
| chronic | 9 | (0.01) | 5 | (0) | — | 14 |
| Rabies | | | | | | |
| animal | 39 | (0.03) | 43 | (0.03) | 4,114 | 4,196 |
| human | 2 | (0) | — | (0) | — | 2 |
| Rocky Mountain spotted fever, total | 1,481 | (1.00) | 1,044 | (0.68) | 38 | 2,563 |
| confirmed | 103 | (0.07) | 85 | (0.06) | 2 | 190 |
| probable | 1,373 | (0.92) | 958 | (0.63) | 36 | 2,367 |
| Rubella | 6 | (0) | 10 | (0.01) | — | 16 |
| Salmonellosis | 24,313 | (16.35) | 26,339 | (17.22) | 388 | 51,040 |
| Shiga toxin-producing <i>E. coli</i> (STEC) | 2,506 | (1.69) | 2,760 | (1.80) | 43 | 5,309 |
| Shigellosis | 10,511 | (7.07) | 11,950 | (7.81) | 164 | 22,625 |
| Streptococcal disease, invasive, group A | 2,973 | (2.45) | 2,679 | (2.14) | 22 | 5,674 |
| Streptococcal, toxic-shock syndrome | 70 | (0.07) | 87 | (0.08) | — | 157 |
| <i>Streptococcus pneumoniae</i> , invasive disease, all ages | 1,677 | (1.59) | 1,766 | (1.62) | 5 | 3,448 |
| age <5 years | | | | | | |
| drug resistant | 286 | (3.69) | 244 | (3.30) | 2 | 532 |
| non-drug resistant | 1,156 | (14.90) | 835 | (11.28) | 7 | 1,998 |
| Syphilis, total, all stages¶ | 33,298 | (22.40) | 12,924 | (8.45) | 55 | 46,277 |
| congenital (age <1 yr)¶¶ | 225 | (10.33) | 181 | (8.71) | 25 | 431 |
| primary and secondary¶¶ | 11,255 | (7.57) | 2,242 | (1.47) | 3 | 13,500 |
| Tetanus | 12 | (0.01) | 7 | (0) | — | 19 |
| Toxic-shock syndrome | 11 | (0.01) | 60 | (0.05) | — | 71 |
| Trichinellosis | 25 | (0.02) | 14 | (0.01) | — | 39 |
| Tuberculosis¶¶¶ | 7,942 | (5.34) | 4,961 | (3.24) | 1 | 12,904 |
| Tularemia | 86 | (0.06) | 35 | (0.02) | 2 | 123 |
| Typhoid fever | 235 | (0.16) | 208 | (0.14) | 6 | 449 |
| Vancomycin-intermediate <i>Staphylococcus aureus</i> (VISA) | 36 | (0.03) | 27 | (0.03) | — | 63 |
| Vibriosis | 348 | (0.29) | 138 | (0.11) | 102 | 588 |

* Per 100,000 population.

† No cases of anthrax; diphtheria; eastern equine encephalitis virus, non-neuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus, non-neuroinvasive; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; vancomycin-resistant *Staphylococcus aureus* (VRSA) infection; western equine encephalitis virus, neuroinvasive and non-neuroinvasive; and yellow fever were reported in 2008. 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, 2008.

¶ Totals reported to the Division of STD Prevention, NCHHSTP, as of May 8, 2009.

** Notifiable in <40 states.

†† Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases, (ArboNET Surveillance), as of May 1, 2009.

§§ Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases, as of December 31, 2008.

¶¶ Totals reported to the Division of TB Elimination, NCHHSTP, as of May 15, 2009.

TABLE 5. Reported cases and incidence* of notifiable diseases,† by race — United States, 2008

| 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 | | | |
| AIDS§ | 225 | (6.95) | 621 | (4.20) | 19,448 | (48.58) | 15,423 | (6.33) | 431 | 3,054 | 39,202 |
| Botulism, total | 8 | (0.25) | 5 | (0.03) | 6 | (0.01) | 75 | (0.03) | 2 | 49 | 145 |
| infant | 1 | (2.13) | 5 | (2.31) | 3 | (0.42) | 63 | (1.92) | 1 | 36 | 109 |
| Brucellosis | 0 | (0) | 2 | (0.01) | 3 | (0.01) | 33 | (0.01) | 5 | 37 | 80 |
| Chancroid¶ | 0 | (0) | 1 | (0.01) | 10 | (0.02) | 12 | (0) | 0 | 2 | 25 |
| <i>Chlamydia trachomatis</i> infections¶ | 15,052 | (465.18) | 16,795 | (113.68) | 426,416 | (1065.3) | 343,574 | (141.05) | 39,239 | 369,447 | 1,210,523 |
| Coccidioidomycosis** | 78 | (5.73) | 139 | (2.10) | 310 | (2.87) | 1,998 | (2.56) | 169 | 4,829 | 7,523 |
| Cryptosporidiosis | 39 | (1.21) | 83 | (0.56) | 717 | (1.79) | 5,494 | (2.26) | 185 | 2,595 | 9,113 |
| Cyclosporiasis | 0 | (0) | 0 | (0) | 4 | (0.01) | 90 | (0.04) | 1 | 44 | 139 |
| Domestic arboviral diseases†† | | | | | | | | | | | |
| California serogroup virus, neuroinvasive | 0 | (0) | 0 | (0) | 0 | (0) | 48 | (0.02) | 1 | 6 | 55 |
| West Nile virus | | | | | | | | | | | |
| neuroinvasive | 12 | (0.37) | 7 | (0.05) | 63 | (0.16) | 487 | (0.20) | 11 | 109 | 689 |
| nonneuroinvasive | 8 | (0.25) | 4 | (0.03) | 19 | (0.05) | 458 | (0.19) | 11 | 167 | 667 |
| Ehrlichiosis/Anaplasmosis | | | | | | | | | | | |
| <i>Ehrlichia chaffeensis</i> | 21 | (0.82) | 2 | (0.02) | 19 | (0.05) | 672 | (0.30) | 16 | 227 | 957 |
| <i>Anaplasma phagocytophilum</i> | 12 | (0.59) | 3 | (0.04) | 7 | (0.02) | 534 | (0.28) | 8 | 445 | 1,009 |
| Undetermined | 0 | (0) | 0 | (0) | 1 | (0) | 82 | (0.04) | 2 | 47 | 132 |
| Giardiasis | 70 | (2.42) | 1,203 | (8.89) | 1,333 | (4.03) | 7,892 | (3.84) | 752 | 7,658 | 18,908 |
| Gonorrhea¶ | 2,264 | (69.97) | 2,300 | (15.57) | 189,160 | (472.56) | 62,631 | (25.71) | 6,987 | 73,400 | 336,742 |
| <i>Haemophilus influenzae</i> , invasive disease, all ages, all serotypes | 47 | (1.45) | 36 | (0.24) | 341 | (0.85) | 1,759 | (0.72) | 84 | 619 | 2,886 |
| age <5 years | | | | | | | | | | | |
| serotype b | 1 | (0.45) | — | (0) | 4 | (0.12) | 16 | (0.10) | 3 | 6 | 30 |
| nonserotype b | 9 | (4.03) | 3 | (0.28) | 43 | (1.26) | 123 | (0.77) | 14 | 52 | 244 |
| unknown serotype | 10 | (4.47) | 2 | (0.19) | 24 | (0.70) | 66 | (0.41) | 8 | 53 | 163 |
| Hansen disease (Leprosy) | 0 | (0) | 16 | (0.12) | 5 | (0.01) | 21 | (0.01) | 1 | 37 | 80 |
| Hemolytic uremic syndrome, post-diarrheal | 8 | (0.26) | 6 | (0.04) | 13 | (0.03) | 224 | (0.10) | 10 | 69 | 330 |
| Hepatitis, viral, acute | | | | | | | | | | | |
| A | 19 | (0.59) | 180 | (1.22) | 147 | (0.37) | 1,388 | (0.57) | 111 | 740 | 2,585 |
| B | 42 | (1.30) | 102 | (0.69) | 815 | (2.06) | 2,003 | (0.83) | 103 | 968 | 4,033 |
| C | 15 | (0.47) | 4 | (0.03) | 56 | (0.14) | 585 | (0.24) | 25 | 192 | 877 |
| Influenza-associated pediatric mortality§§ | 1 | (0.11) | 2 | (0.06) | 15 | (0.12) | 59 | (0.10) | 0 | 13 | 90 |
| Legionellosis | 7 | (0.22) | 44 | (0.30) | 522 | (1.30) | 2,023 | (0.83) | 63 | 522 | 3,181 |
| Listeriosis | 6 | (0.19) | 32 | (0.22) | 69 | (0.17) | 457 | (0.19) | 20 | 175 | 759 |
| Lyme disease, total | 104 | (3.21) | 249 | (1.69) | 298 | (0.74) | 19,799 | (8.13) | 1,405 | 13,343 | 35,198 |
| confirmed | 88 | (2.72) | 198 | (1.34) | 232 | (0.58) | 16,024 | (6.58) | 1,366 | 11,013 | 28,921 |
| probable | 16 | (0.49) | 51 | (0.35) | 66 | (0.16) | 3,775 | (1.55) | 39 | 2,330 | 6,277 |
| Malaria | 4 | (0.12) | 134 | (0.91) | 627 | (1.57) | 171 | (0.07) | 45 | 274 | 1,255 |
| Measles, total | 0 | (0) | 7 | (0.05) | 3 | (0.01) | 113 | (0.05) | 0 | 17 | 140 |
| indigenous | 0 | (0) | 2 | (0.01) | 3 | (0.01) | 94 | (0.04) | 0 | 16 | 115 |
| imported | 0 | (0) | 5 | (0.03) | 0 | (0) | 19 | (0.01) | 0 | 1 | 25 |
| Meningococcal disease, invasive, all serogroups | 12 | (0.37) | 29 | (0.20) | 172 | (0.43) | 655 | (0.27) | 28 | 276 | 1,172 |
| serogroup A,C,Y, and W-135 | 4 | (0.12) | 2 | (0.01) | 53 | (0.13) | 200 | (0.08) | 9 | 62 | 330 |
| serogroup B | 1 | (0.03) | 5 | (0.03) | 12 | (0.03) | 128 | (0.05) | 3 | 39 | 188 |
| other serogroup | 0 | (0) | 0 | (0) | 0 | (0) | 31 | (0.01) | 1 | 6 | 38 |
| serogroup unknown | 7 | (0.22) | 22 | (0.15) | 107 | (0.27) | 296 | (0.12) | 15 | 169 | 616 |
| Mumps | 6 | (0.19) | 25 | (0.17) | 26 | (0.06) | 263 | (0.11) | 22 | 112 | 454 |
| Pertussis | 109 | (3.37) | 145 | (0.98) | 571 | (1.43) | 9,104 | (3.74) | 321 | 3,028 | 13,278 |
| Q Fever, total | 1 | (0.03) | 0 | (0) | 4 | (0.01) | 82 | (0.03) | 3 | 30 | 120 |
| acute | 1 | (0.03) | 0 | (0) | 4 | (0.01) | 72 | (0.03) | 2 | 27 | 106 |
| Rabies, animal | 0 | (0) | 0 | (0) | 0 | (0) | 23 | (0.01) | 2 | 4,171 | 4,196 |
| Rocky Mountain spotted fever, total | 104 | (3.21) | 9 | (0.06) | 85 | (0.21) | 1,703 | (0.70) | 37 | 625 | 2,563 |
| confirmed | 11 | (0.34) | 3 | (0.02) | 4 | (0.01) | 134 | (0.06) | 1 | 37 | 190 |
| probable | 93 | (2.87) | 6 | (0.04) | 81 | (0.20) | 1,568 | (0.64) | 36 | 583 | 2,367 |
| Salmonellosis | 428 | (13.23) | 1,202 | (8.14) | 4,183 | (10.45) | 28,167 | (11.56) | 1,439 | 15,621 | 51,040 |
| Shiga toxin-producing <i>E. coli</i> (STEC) | 36 | (1.11) | 79 | (0.53) | 208 | (0.52) | 3,391 | (1.39) | 103 | 1,492 | 5,309 |
| Shigellosis | 259 | (8.00) | 238 | (1.61) | 4,246 | (10.61) | 10,219 | (4.20) | 797 | 6,866 | 22,625 |
| Streptococcal disease, invasive, group A | 113 | (4.59) | 107 | (1.17) | 792 | (2.28) | 3,221 | (1.61) | 157 | 1,284 | 5,674 |
| Streptococcal, toxic-shock syndrome | 0 | (0) | 2 | (0.02) | 19 | (0.06) | 114 | (0.06) | 2 | 20 | 157 |

See footnotes on next page.

TABLE 5. (Continued) Reported cases and incidence* of notifiable diseases,† by race — United States, 2008

| 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 | | | |
| <i>Streptococcus pneumoniae</i> , invasive disease, all ages | 10 | (0.50) | 21 | (0.27) | 710 | (2.40) | 2,136 | (1.22) | 87 | 484 | 3,448 |
| drug resistant (age <5 yrs) | 4 | (2.38) | 7 | (1.09) | 127 | (4.67) | 300 | (2.58) | 17 | 77 | 532 |
| non-drug resistant (age <5 yrs) | 63 | (37.47) | 41 | (6.41) | 356 | (13.09) | 945 | (8.13) | 67 | 526 | 1,998 |
| Syphilis, total, all stages [¶] | 290 | (8.96) | 952 | (6.44) | 21,228 | (53.03) | 17,994 | (7.39) | 2,386 | 3,427 | 46,277 |
| congenital (age <1 yr) ^{¶¶} | 6 | (12.80) | 7 | (3.24) | 216 | (30.19) | 180 | (5.49) | 7 | 15 | 431 |
| primary and secondary ^{¶¶} | 62 | (1.92) | 217 | (1.47) | 6,434 | (16.07) | 5,728 | (2.35) | 514 | 545 | 13,500 |
| Toxic-shock syndrome (other than streptococcal) | 0 | (0) | 4 | (0.04) | 4 | (0.01) | 44 | (0.02) | 4 | 15 | 71 |
| Trichinellosis | 0 | (0) | 28 | (0.19) | 0 | (0) | 7 | (0) | 0 | 4 | 39 |
| Tuberculosis ^{¶¶¶} | 166 | (5.13) | 3,414 | (23.11) | 3,405 | (8.51) | 5,730 | (2.35) | 125 | 64 | 12,904 |
| Tularemia | 6 | (0.19) | 0 | (0) | 7 | (0.02) | 88 | (0.04) | 1 | 21 | 123 |
| Typhoid fever | 1 | (0.03) | 194 | (1.31) | 40 | (0.10) | 39 | (0.02) | 32 | 143 | 449 |
| Vancomycin-intermediate <i>Staphylococcus aureus</i> (VISA) | 0 | (0) | 3 | (0.04) | 10 | (0.03) | 19 | (0.01) | 1 | 30 | 63 |
| Vibriosis | 2 | (0.07) | 23 | (0.17) | 35 | (0.10) | 278 | (0.14) | 9 | 241 | 588 |

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

† No cases of anthrax; diphtheria; eastern equine encephalitis virus, non-neuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus, non-neuroinvasive; rubella; congenital syndrome; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox, vancomycin-resistant *Staphylococcus aureus* (VRSA) infection; western equine encephalitis virus, neuroinvasive and non-neuroinvasive; and yellow fever were reported in 2008. 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, 2008.

[¶] 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 Prevention, NCHHSTP, as of May 8, 2009.

** Notifiable in <40 states.

†† Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of May 1, 2009.

§§ Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases, as of December 31, 2008.

¶¶¶ Totals reported to the Division of TB Elimination, NCHHSTP, as of May 15, 2009.

TABLE 6. Reported cases and incidence* of notifiable diseases,† by ethnicity — United States, 2008

| Disease | Hispanic | | Non—Hispanic | | Ethnicity not stated | Total |
|---|----------|----------|--------------|----------|----------------------|-----------|
| | No. | Rate | No. | Rate | | |
| AIDS§ | 7,108 | (15.62) | 30,192 | (11.79) | 1,902 | 39,202 |
| Botulism, total | 29 | (0.06) | 73 | (0.03) | 43 | 145 |
| infant | 21 | (2.16) | 56 | (1.77) | 32 | 109 |
| Brucellosis | 43 | (0.09) | 23 | (0.01) | 14 | 80 |
| Chancroid¶ | 5 | (0.01) | 17 | (0.01) | 3 | 25 |
| <i>Chlamydia trachomatis</i> infections¶ | 167,306 | (367.67) | 570,526 | (222.76) | 472,691 | 1,210,523 |
| Coccidioidomycosis** | 1,020 | (5.43) | 1,759 | (2.25) | 4,744 | 7,523 |
| Cryptosporidiosis | 755 | (1.66) | 4,602 | (1.80) | 3,756 | 9,113 |
| Cyclosporiasis | 14 | (0.03) | 91 | (0.04) | 34 | 139 |
| Domestic arboviral diseases†† | | | | | | |
| California serogroup virus, neuroinvasive | 0 | (0) | 34 | (0.01) | 21 | 55 |
| West Nile virus | | | | | | |
| neuroinvasive | 137 | (0.30) | 412 | (0.16) | 140 | 689 |
| nonneuroinvasive | 72 | (0.16) | 379 | (0.15) | 216 | 667 |
| Ehrlichiosis/Anaplasmosis | | | | | | |
| <i>Ehrlichia chaffeensis</i> | 31 | (0.07) | 592 | (0.25) | 334 | 957 |
| <i>Anaplasma phagocytophilum</i> | 16 | (0.06) | 380 | (0.19) | 613 | 1,009 |
| Undetermined | 1 | (0) | 61 | (0.03) | 70 | 132 |
| Giardiasis | 1,436 | (4.01) | 8,275 | (3.77) | 9,197 | 18,908 |
| Gonorrhea¶ | 23,888 | (52.50) | 192,110 | (75.01) | 120,744 | 336,742 |
| <i>Haemophilus influenzae</i> , invasive disease, all ages, all serotypes | 190 | (0.42) | 1,463 | (0.57) | 1,233 | 2,886 |
| age <5 years | | | | | | |
| serotype b | 6 | (0.12) | 12 | (0.08) | 12 | 30 |
| nonserotype b | 51 | (1.04) | 126 | (0.80) | 67 | 244 |
| unknown serotype | 14 | (0.28) | 69 | (0.44) | 80 | 163 |
| Hansen disease (Leprosy) | 25 | (0.06) | 27 | (0.01) | 28 | 80 |
| Hemolytic uremic syndrome, post-diarrheal | 47 | (0.11) | 202 | (0.09) | 81 | 330 |
| Hepatitis, viral, acute | | | | | | |
| A | 470 | (1.03) | 1,357 | (0.53) | 758 | 2,585 |
| B | 373 | (0.82) | 2,257 | (0.89) | 1,403 | 4,033 |
| C | 57 | (0.13) | 461 | (0.18) | 359 | 877 |
| Influenza-associated pediatric mortality§§ | 20 | (0.13) | 58 | (0.10) | 12 | 90 |
| Legionellosis | 131 | (0.29) | 1,803 | (0.70) | 1,247 | 3,181 |
| Listeriosis | 132 | (0.29) | 389 | (0.15) | 238 | 759 |
| Lyme disease, total | 469 | (1.03) | 13,347 | (5.21) | 21,382 | 35,198 |
| confirmed | 365 | (0.80) | 10,933 | (4.27) | 17,623 | 28,921 |
| probable | 104 | (0.23) | 2,414 | (0.94) | 3,759 | 6,277 |
| Malaria | 40 | (0.09) | 824 | (0.32) | 391 | 1,255 |
| Measles, total | 11 | (0.02) | 92 | (0.04) | 37 | 140 |
| indigenous | 11 | (0.02) | 71 | (0.03) | 33 | 115 |
| imported | 0 | (0) | 21 | (0.01) | 4 | 25 |
| Meningococcal disease, invasive, all serogroups | 147 | (0.32) | 659 | (0.26) | 366 | 1,172 |
| serogroup A,C,Y, and W-135 | 40 | (0.09) | 178 | (0.07) | 112 | 330 |
| serogroup B | 22 | (0.05) | 106 | (0.04) | 60 | 188 |
| other serogroup | 4 | (0.01) | 21 | (0.01) | 13 | 38 |
| serogroup unknown | 81 | (0.18) | 354 | (0.14) | 181 | 616 |
| Mumps | 74 | (0.16) | 249 | (0.10) | 131 | 454 |
| Pertussis | 1,462 | (3.21) | 7,901 | (3.08) | 3,915 | 13,278 |
| Q Fever, total | 17 | (0.04) | 68 | (0.03) | 35 | 120 |
| acute | 17 | (0.04) | 57 | (0.02) | 32 | 106 |
| Rabies, animal | 0 | (0) | 0 | (0) | — | 4,196 |
| Rocky Mountain spotted fever, total | 82 | (0.18) | 1,631 | (0.64) | 850 | 2,563 |
| confirmed | 5 | (0.01) | 125 | (0.05) | 60 | 190 |
| probable | 76 | (0.17) | 1,505 | (0.59) | 786 | 2,367 |
| Salmonellosis | 6,888 | (15.14) | 25,028 | (9.77) | 19,124 | 51,040 |
| Shiga toxin-producing <i>E. coli</i> (STEC) | 460 | (1.01) | 2,926 | (1.14) | 1,923 | 5,309 |
| Shigellosis | 5,295 | (11.64) | 9,446 | (3.69) | 7,884 | 22,625 |

See footnotes on next page.

TABLE 6. (Continued) Reported cases and incidence* of notifiable diseases,† by ethnicity — United States, 2008

| Disease | Hispanic | | Non—Hispanic | | Ethnicity not stated | Total |
|--|----------|---------|--------------|---------|----------------------|--------|
| | No. | Rate | No. | Rate | | |
| Streptococcal disease, invasive, group A | 432 | (1.39) | 2,712 | (1.26) | 2,530 | 5,674 |
| Streptococcal, toxic-shock syndrome | 7 | (0.03) | 82 | (0.04) | 68 | 157 |
| <i>Streptococcus pneumoniae</i> , invasive disease, all ages | 210 | (0.79) | 1,987 | (1.18) | 1,251 | 3,448 |
| age <5 years | | | | | | |
| drug resistant | 56 | (1.76) | 296 | (2.47) | 180 | 532 |
| non-drug resistant | 295 | (9.27) | 916 | (7.65) | 787 | 1,998 |
| Syphilis, total, all stages¶ | 9,778 | (21.49) | 29,766 | (11.62) | 6,733 | 46,277 |
| congenital (age <1 yr)¶ | 133 | (13.70) | 285 | (9.02) | 13 | 431 |
| primary and secondary¶ | 2,053 | (4.51) | 9,621 | (3.76) | 1,826 | 13,500 |
| Toxic-shock syndrome | 2 | (0.01) | 38 | (0.02) | 31 | 71 |
| Trichinellosis | 3 | (0.01) | 33 | (0.01) | 3 | 39 |
| Tuberculosis¶¶ | 3,798 | (8.35) | 9,075 | (3.54) | 31 | 12,904 |
| Tularemia | 3 | (0.01) | 81 | (0.03) | 39 | 123 |
| Typhoid fever | 34 | (0.07) | 282 | (0.11) | 133 | 449 |
| Vancomycin-intermediate <i>Staphylococcus aureus</i> (VISA) | 2 | (0.01) | 26 | (0.01) | 35 | 63 |
| Vibriosis | 44 | (0.11) | 289 | (0.14) | 255 | 588 |

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

† No cases of anthrax; diphtheria; eastern equine encephalitis virus, non-neuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus, non-neuroinvasive; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; vancomycin-resistant *Staphylococcus aureus* (VRSA) infection; western equine encephalitis virus, neuroinvasive and non-neuroinvasive; and yellow fever were reported in 2008. 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, 2008.

¶ 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, NCHHSTP, as of May 8, 2009.

** Notifiable in <40 states.

†† Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of May 1, 2009.

§§ Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases, as of December 31, 2008.

¶¶ Totals reported to the Division of TB Elimination, NCHHSTP, as of May 15, 2009.

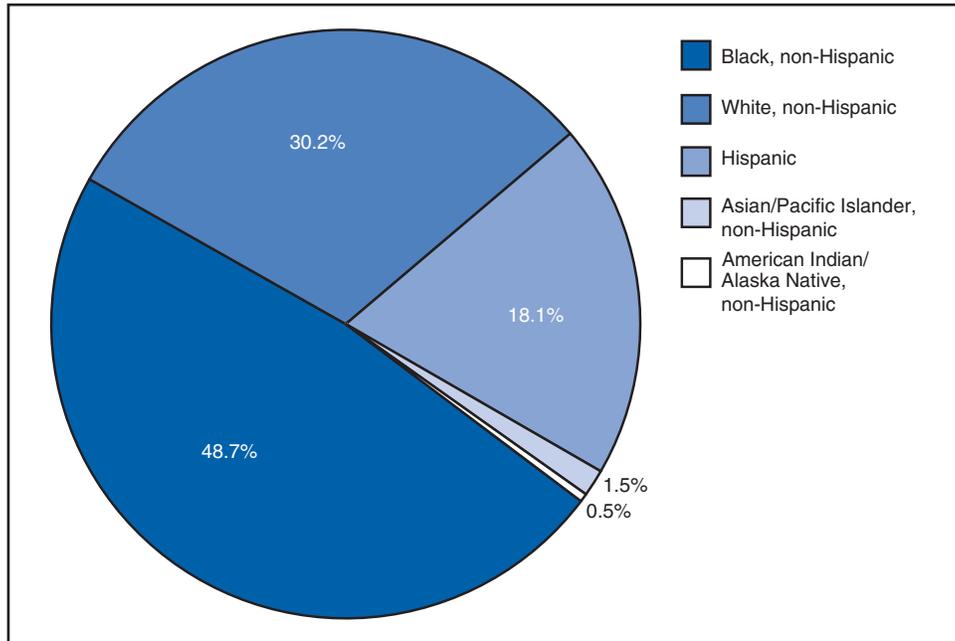
PART 2

Graphs and Maps for Selected Notifiable Diseases in the United States, 2008

Abbreviations and Symbols Used in Graphs and Maps

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

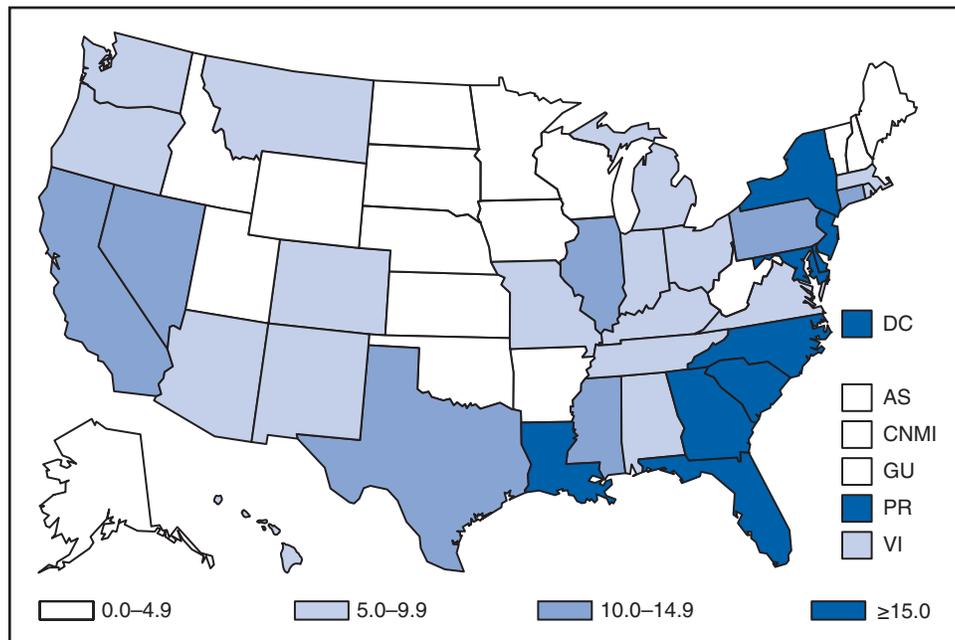
ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS). Percentage of reported cases, by race/ethnicity* — United States, 2008



* For 0.9% of respondents, race/ethnicity was unknown.

Of persons reported with AIDS in 2008, the greatest percentage was among non-Hispanic blacks, followed by non-Hispanic whites, Hispanics, Asians/Pacific Islanders, and American Indians/Alaska Natives.

ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS). Reported AIDS rates* — United States† and U.S. territories, 2008

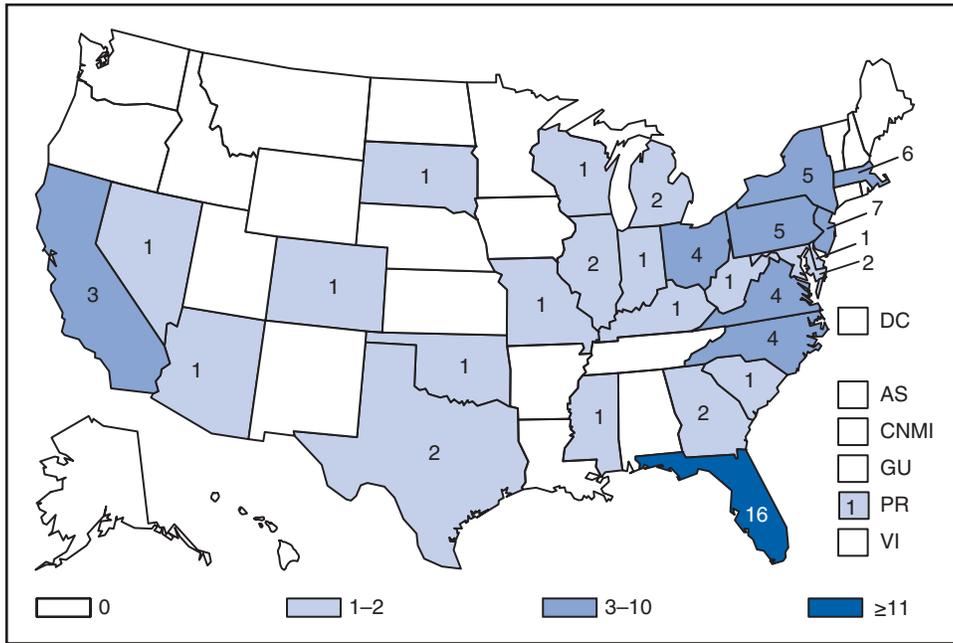


* Per 100,000 population.

† Includes 672 persons with unknown state of residence.

High rates (i.e., ≥ 15 cases per 100,000 population) of reported AIDS cases were observed in certain states in the Southeast and Northeast. Rates ≥ 15 cases per 100,000 population also were observed in Washington DC, and Puerto Rico.

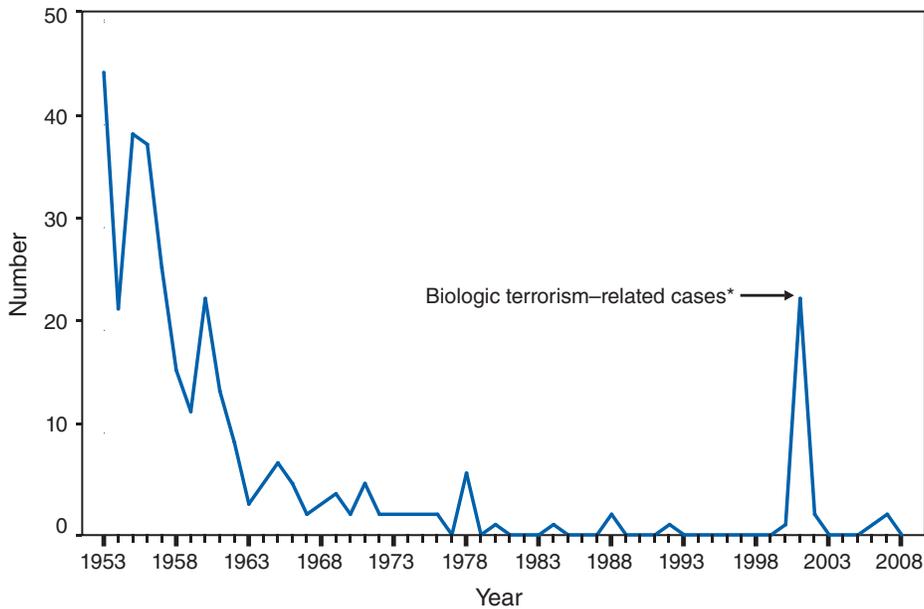
ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS). Number of reported pediatric cases* — United States† and U.S. Territories, 2008



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

During 2008, a total of 80 pediatric AIDS cases were reported in the United States and U.S. territories.

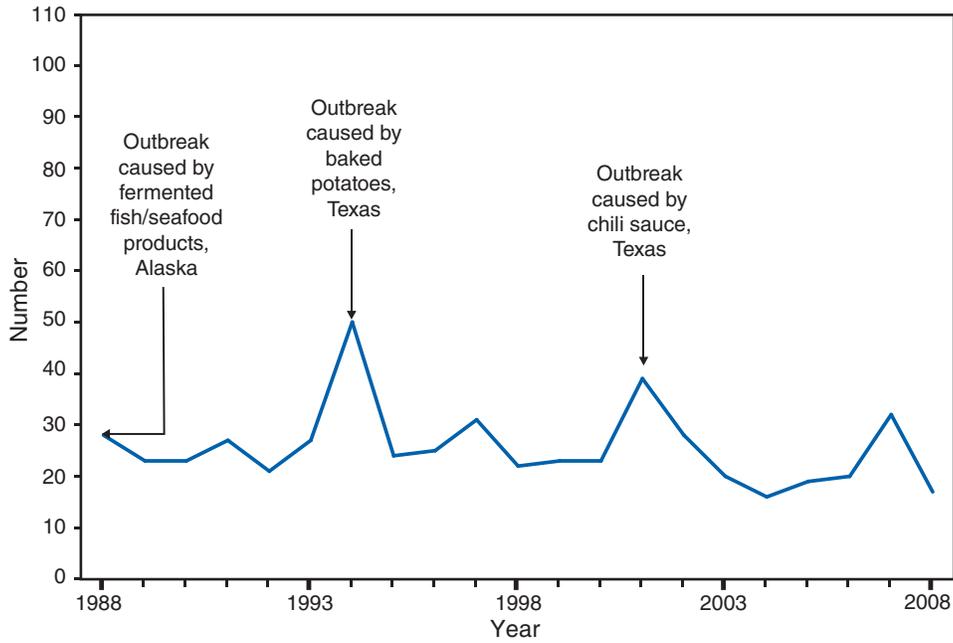
ANTHRAX. Number of reported cases, by year — United States, 1953–2008



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

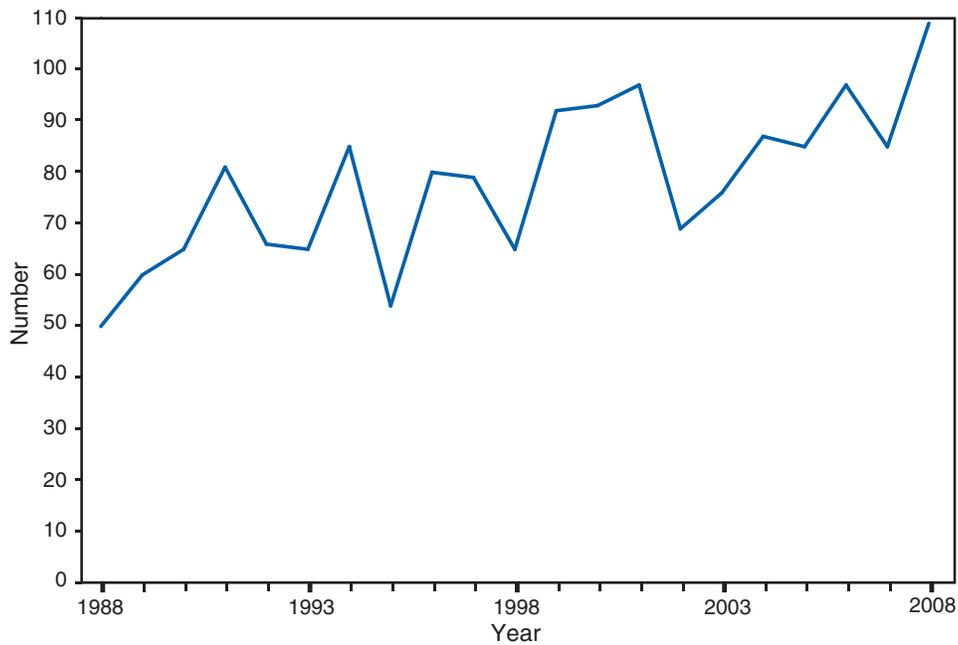
No cases of anthrax were reported to CDC in 2008, and the number of naturally occurring cases reported in the United States and U.S. territories has remained two or fewer per year for the past 30 years. In 2006 and 2007, anthrax cases resulting from a previously unrecognized source of risk for serious illness from anthrax were reported, occurring among persons who make drums using untreated animal hides from countries where anthrax is common in animals and in persons exposed to environments cross-contaminated by these activities. Such cases constitute half of the naturally occurring cases reported to CDC during the past 10 years.

BOTULISM, FOODBORNE. Number of reported cases, by year — United States, 1988–2008



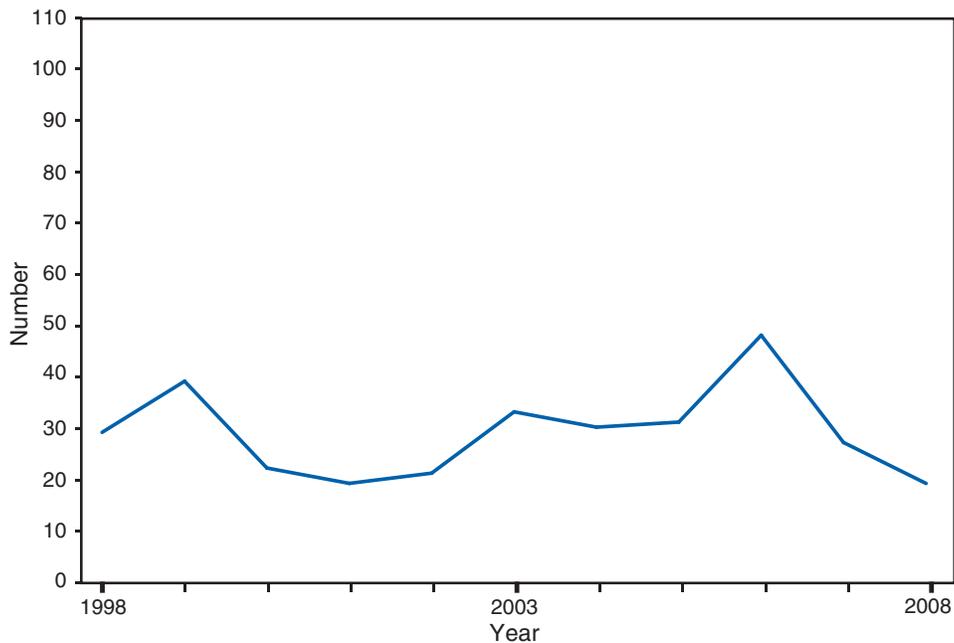
Rates of foodborne botulism have remained relatively stable during the past two decades. In 2008, all cases were caused by home-canned or other home-prepared foods.

BOTULISM, INFANT. Number of reported cases, by year — United States, 1988–2008



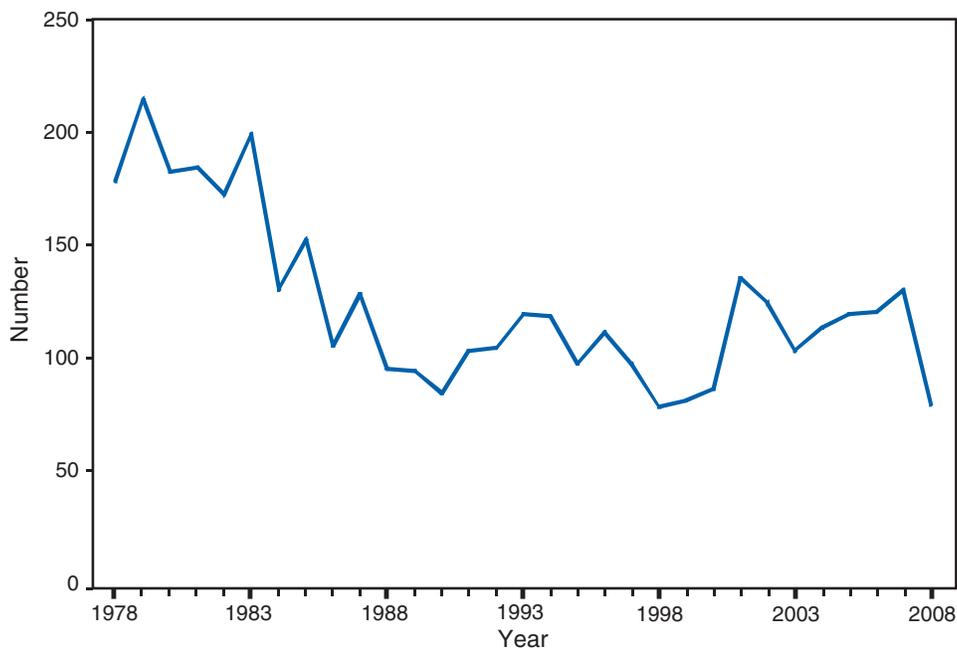
Infant botulism remains the most common cause of botulism in the United States and accounted for 73% of U.S. botulism cases in 2008.

BOTULISM, OTHER (includes wound and unspecified). Number of reported cases, by year — United States, 1998–2008



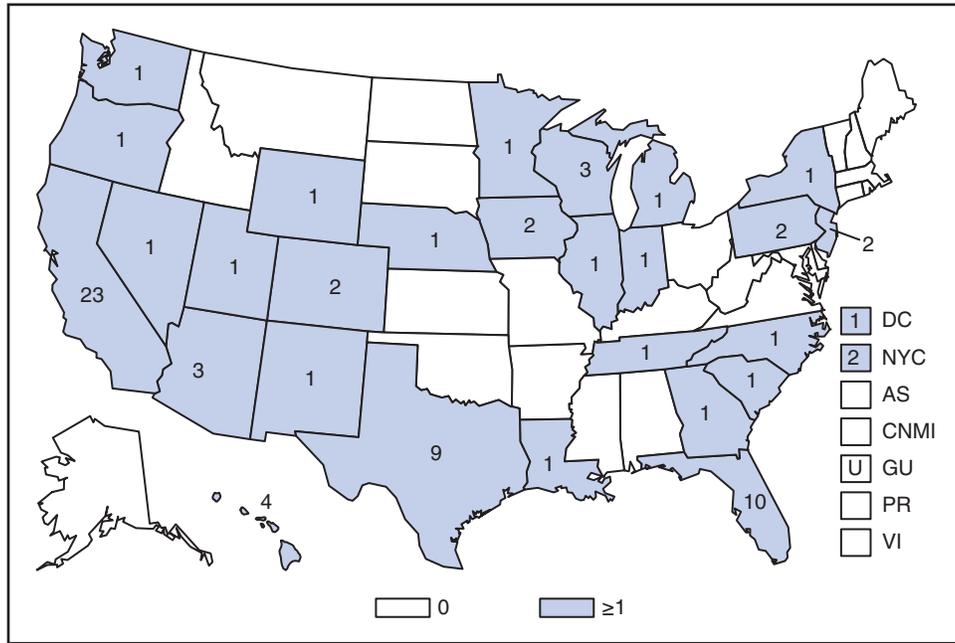
Annual numbers of wound and unspecified forms of botulism have remained stable during the past decade. In 2008, a majority (96%) of cases occurred among injection-drug users in California, Washington, and Texas.

BRUCELLOSIS. Number of reported cases, by year — United States, 1978–2008



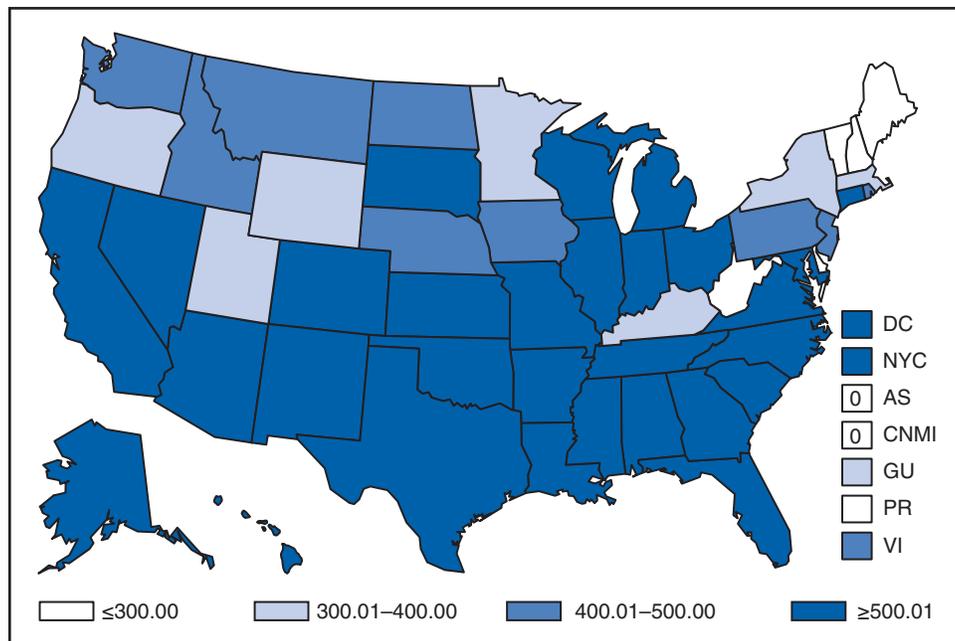
The incidence of brucellosis in the United States increased slightly during 2003–2007. In 2008, the number of cases reported to CDC decreased. Although brucellosis in cattle is in the final stages of eradication, the disease persists in feral swine, elk, and bison, increasing the risk of transmission to hunters while they clean and dress these animals. Outside of the United States, brucellosis remains endemic in several areas, including Mexico and the Mediterranean region, which poses a greater risk of infection to travelers who consume unpasteurized milk products, including soft cheeses.

BRUCELLOSIS. Number of reported cases — United States and U.S. territories, 2008



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 substantial risk. Brucellosis caused by contact with infected feral swine while hunting has been documented in several southern and western states.

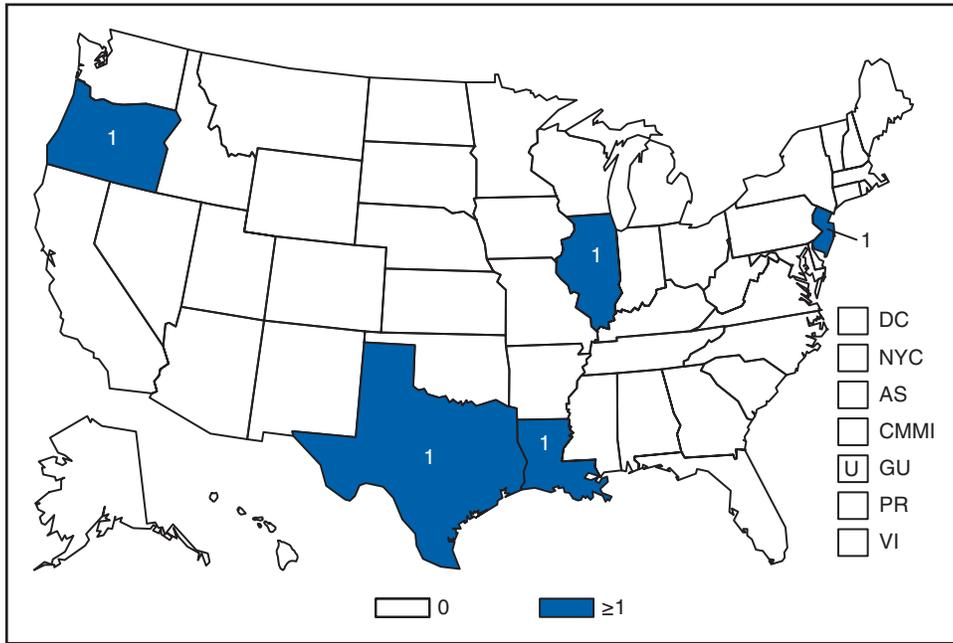
CHLAMYDIA. Incidence* among women — United States and U.S. territories, 2008



* Per 100,000 population.

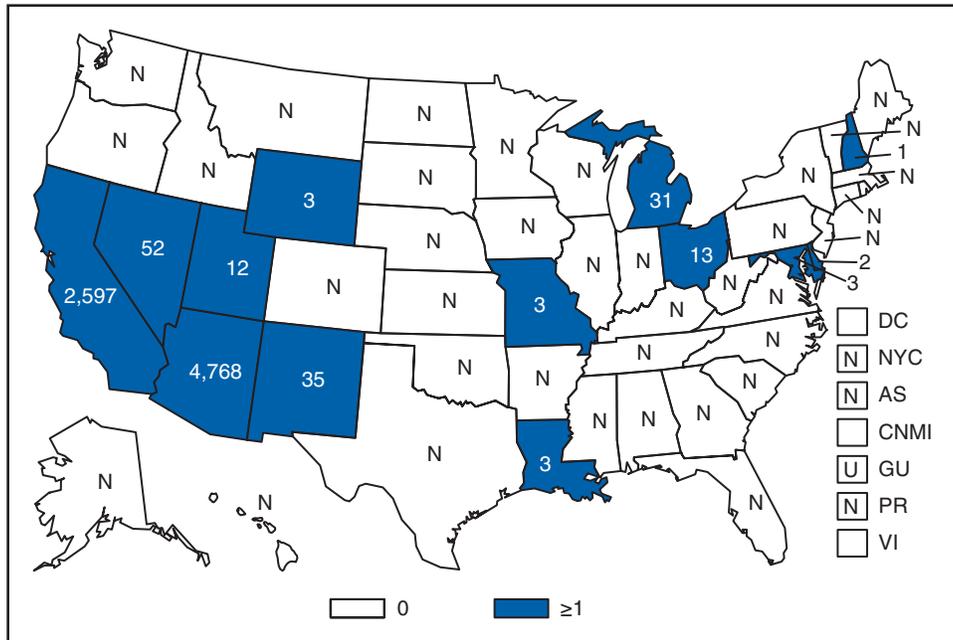
In 2008, the chlamydia rate among women in the United States and territories (Guam, Puerto Rico, and Virgin Islands) was 580.0 cases per 100,000 population.

CHOLERA. Number of reported cases — United States and U.S. territories, 2008



In 2008, a majority (80%) of cholera infections in the United States were acquired during travel abroad. Foreign travel and the consumption of contaminated domestic seafood remain important sources of cholera infection.

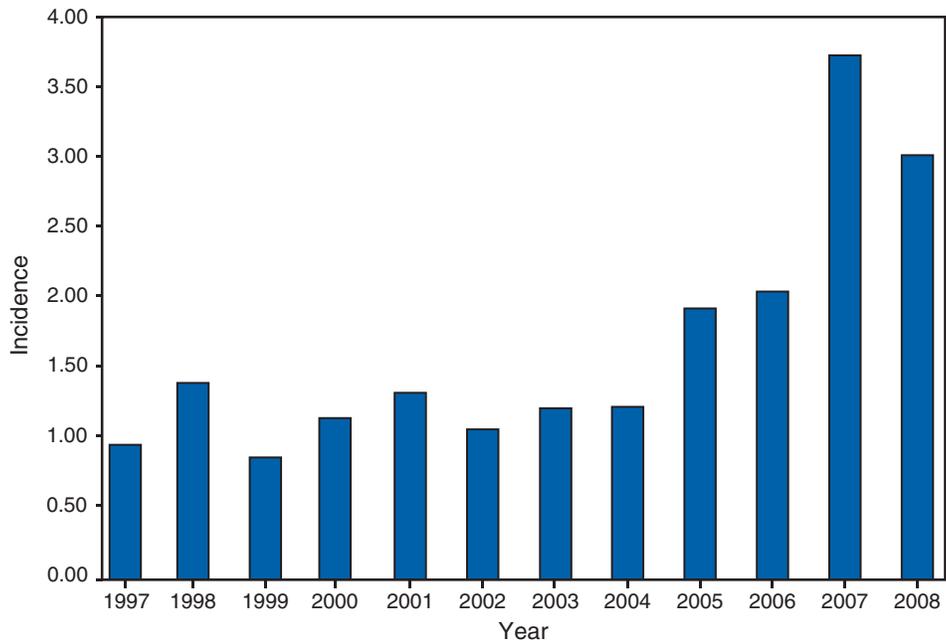
COCCIDIOIDOMYCOSIS. Number of reported cases — United States* and U.S. territories, 2008



* 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.

In 2008, the number of reported coccidioidomycosis cases in the United States decreased slightly, primarily because of fewer reports received from the disease-endemic states of California and, to a lesser extent, Arizona. Case counts decreased even after the case definition revision implemented by the Council of State and Territorial Epidemiologists in 2007 included less stringent diagnostic criteria.

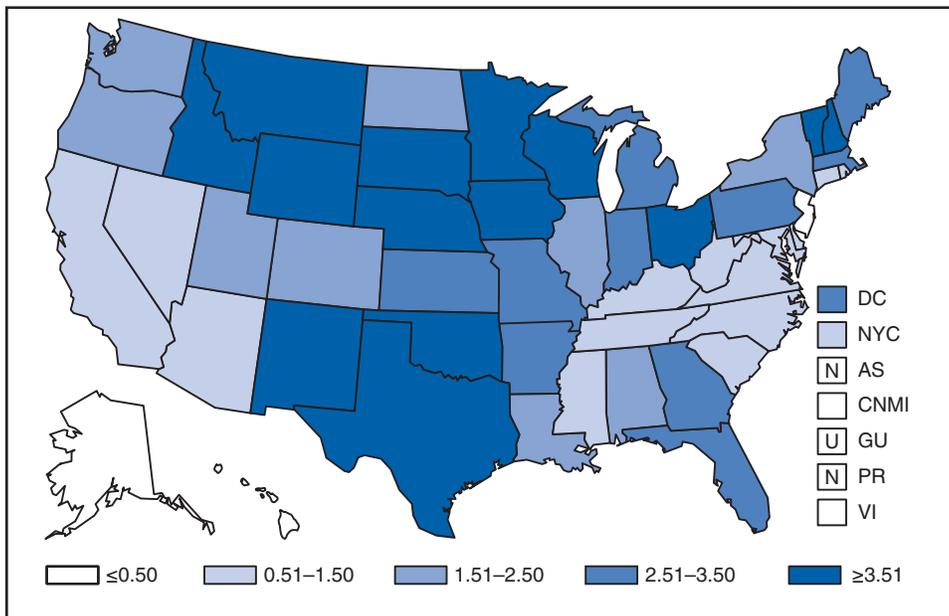
CRYPTOSPORIDIOSIS. Incidence,* by year — United States, 1997–2008



* Per 100,000 population.

Cryptosporidiosis incidence decreased slightly in 2008 after a >3 fold increase during 2004–2007. Whether the changes in cryptosporidiosis reporting reflect a real change in cryptosporidiosis incidence or reflect changing diagnosis, testing, and reporting patterns is unclear.

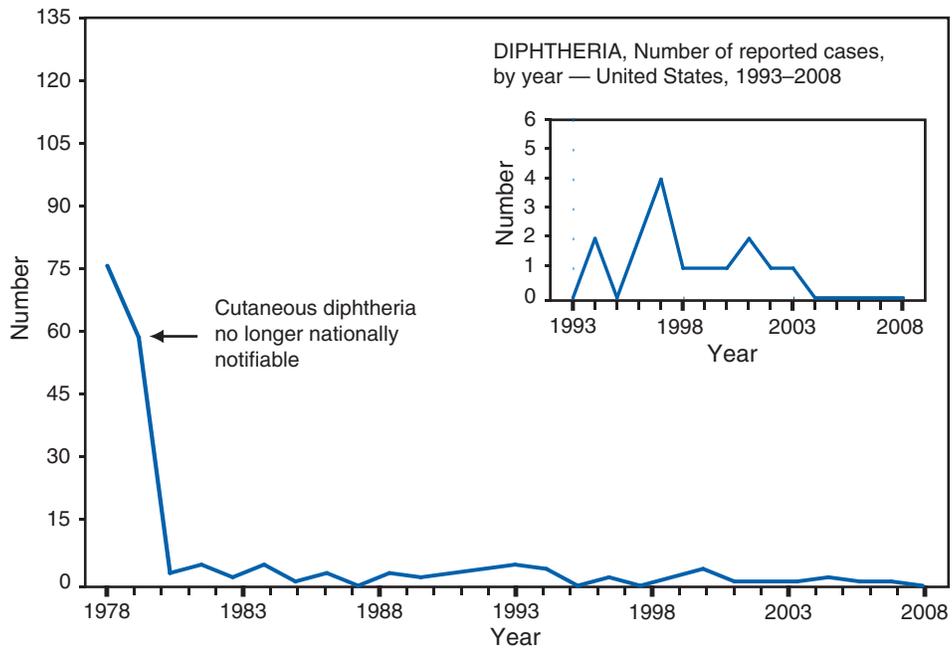
CRYPTOSPORIDIOSIS. Incidence* — United States and U.S. territories, 2008



* Per 100,000 population.

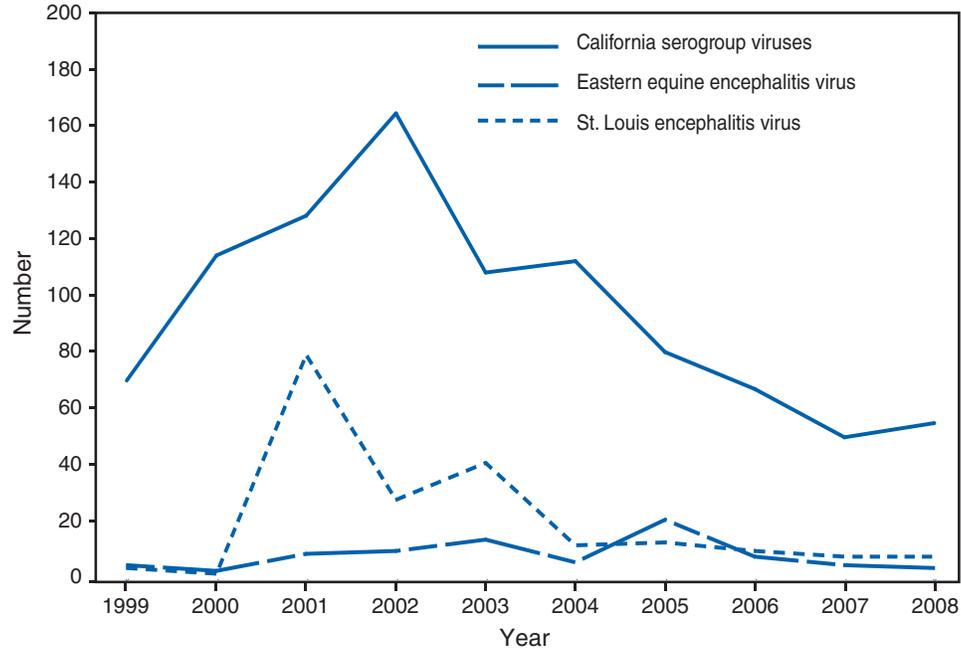
Cryptosporidiosis is widespread geographically in the United States. Differences in reported incidence among states might reflect differences in risk factors, increased cases associated with outbreaks, or difference in the capacity to detect and report cases. Cryptosporidiosis cases increase during summer, coinciding with increased use of recreational water.

DIPHTHERIA. Number of reported cases, by year — United States, 1978–2008



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

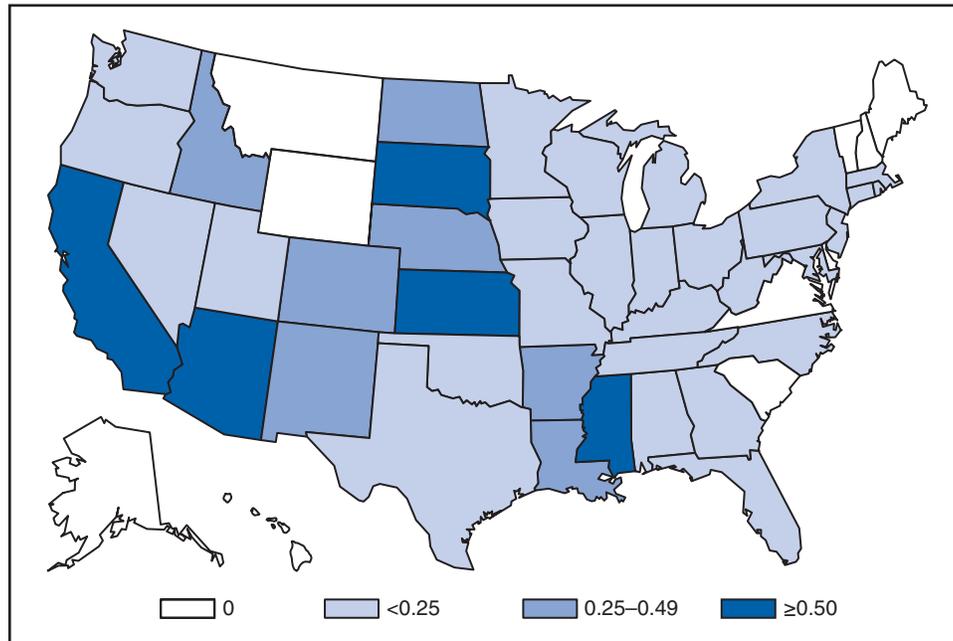
DOMESTIC ARBOVIRAL DISEASES. Number* of reported cases of neuroinvasive disease, by year — United States, 1999–2008



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

Arthropod-borne viruses (arboviruses) are primarily transmitted 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 2008, CAL serogroup virus neuroinvasive disease cases were reported from 12 states (Georgia, Kentucky, Louisiana, Minnesota, Mississippi, New York, North Carolina, Ohio, Tennessee, Virginia, West Virginia, and Wisconsin). During 1999–2008, a median of 93 (range: 50–167) 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 2008, EEEV neuroinvasive disease cases were reported from four states (Alabama, Florida, Massachusetts, and North Carolina). During 1999–2008, 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 2008, SLEV neuroinvasive disease cases were reported from three states (Arkansas, Louisiana, and North Carolina). During 1999–2008, a median of eight (range: 2–79) cases per year were reported in the United States.

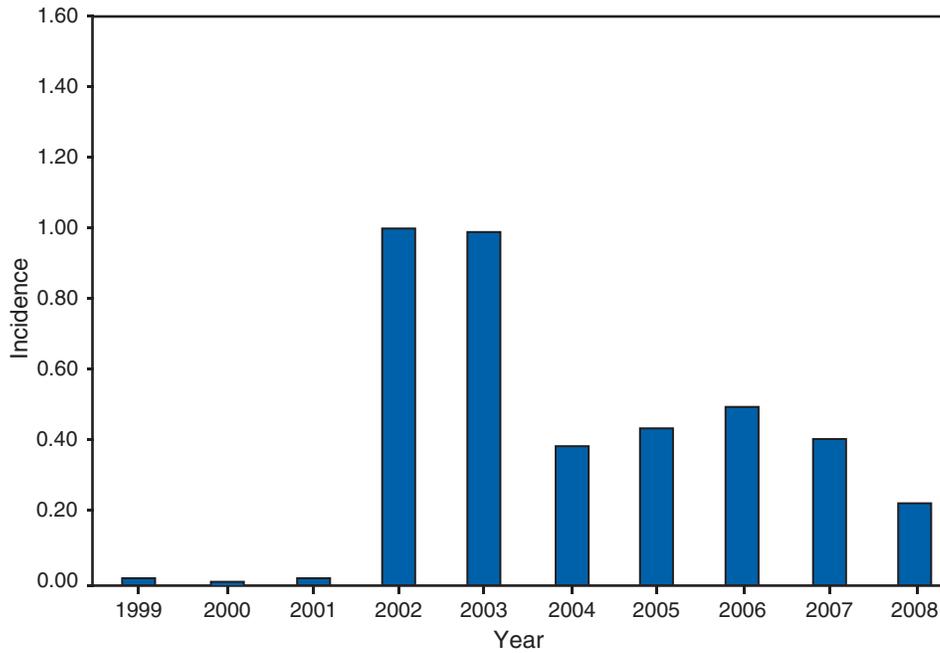
DOMESTIC ARBOVIRAL DISEASES, WEST NILE. Incidence* of reported cases of neuroinvasive disease, by state — United States, 2008



* Per 100,000 population. Data from the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance).

In 2008, the states with the greatest reported incidence of West Nile virus neuroinvasive disease (WNND) were South Dakota (1.4 per 100,000 population), Arizona (1.0), California (0.8), Mississippi (0.8), and Kansas (0.5). The five states with the greatest number of reported cases were California (292), Arizona (62), Texas (40), New York (32), and Mississippi (22). California reported 42% of all WNND cases in 2008.

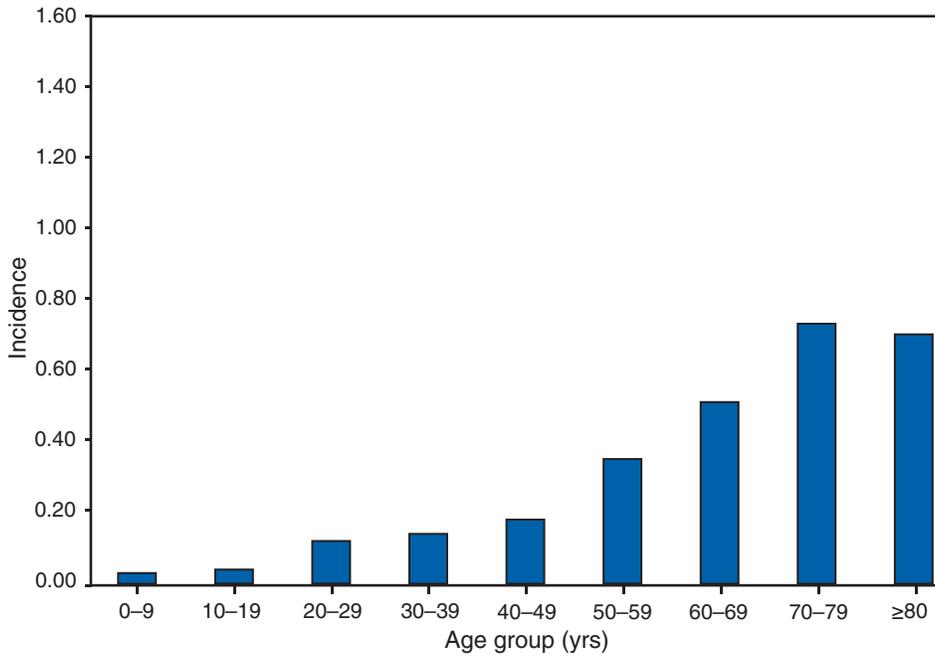
DOMESTIC ARBOVIRAL DISEASES, WEST NILE. Incidence* of reported cases of neuroinvasive disease, by year — United States, 1999–2008



* Per 100,000 population.

West Nile virus (WNV) was first detected in the United States in 1999. Despite substantial geographic spread of the virus from 1999 through 2001, WNV neuroinvasive disease (WNND) incidence remained low until 2002, when large outbreaks occurred in the Midwest and Great Plains. The national incidence of WNND peaked in 2002 and 2003 and was relatively stable from 2004 through 2007. In 2008, the reported incidence of WNND in the United States was 0.23 per 100,000 population. Although WNND did not become nationally notifiable until 2002, WNND cases have been consistently reported to ArboNET since 2000.

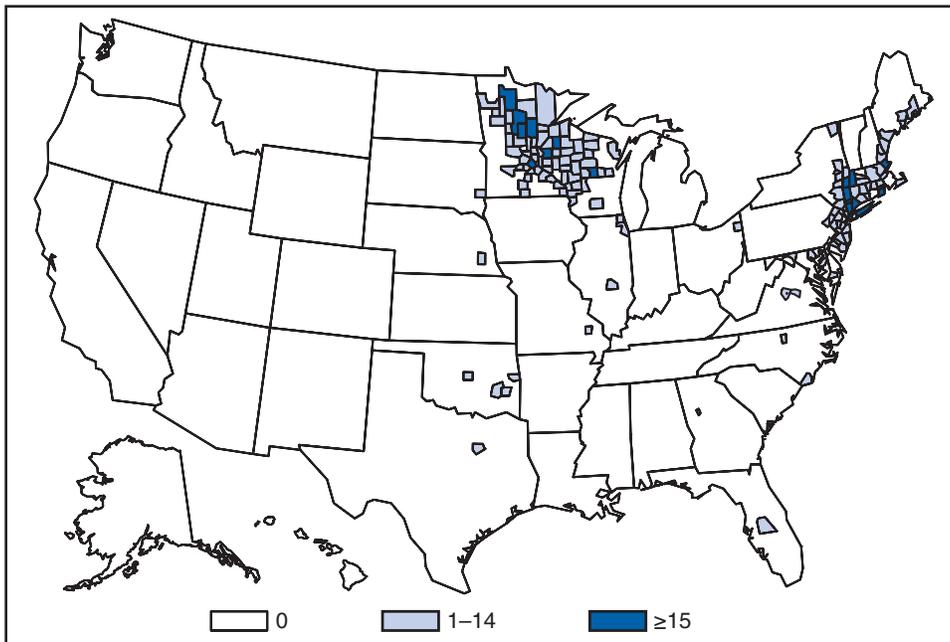
DOMESTIC ARBOVIRAL DISEASES, WEST NILE. Incidence* of reported cases of neuroinvasive disease, by age group — United States, 2008



* Per 100,000 population.

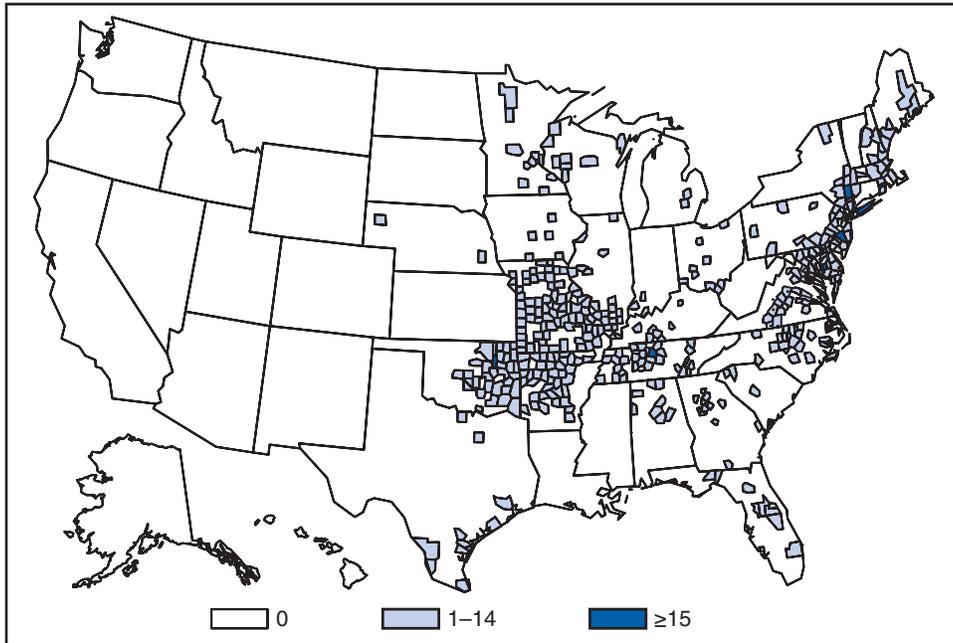
In 2008, the median age of patients with West Nile virus neuroinvasive disease was 58 years (range: 1–92 years), with increasing incidence among older age groups.

EHRlichiosis, ANAPLASMA PHAGOCYTOPHILUM. Number of reported cases, by county — United States, 2008



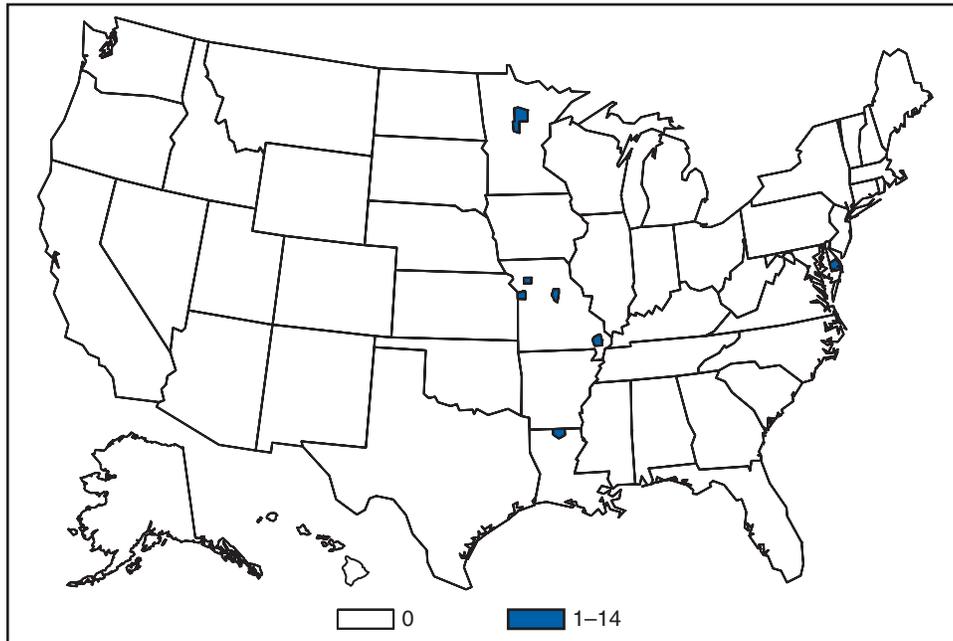
Anaplasmosis is caused by infection with *Anaplasma phagocytophilum*. Cases are reported primarily from the upper Midwest and coastal New England, reflecting both the range of the primary tick vector species (*Ixodes scapularis*) and the range of preferred animal hosts for tick feeding.

EHRlichiosis, *EHRlichia CHAFFEENSIS* Number of reported cases, by county — United States, 2008



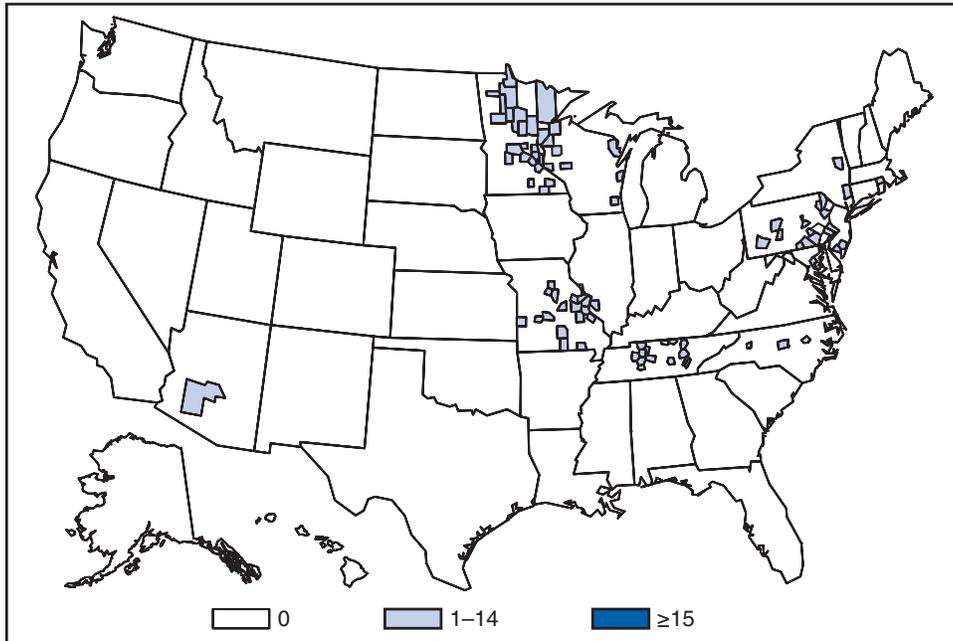
The most common type of Ehrlichiosis results from infection with *Ehrlichia chaffeensis*. Cases are reported primarily in the lower Midwest, Southeast, and East Coast, reflecting the range of the primary tick vector species (*Amblyomma americanum*).

EHRlichiosis, *EHRlichia EWINGII*. Number of reported cases, by county — United States, 2008



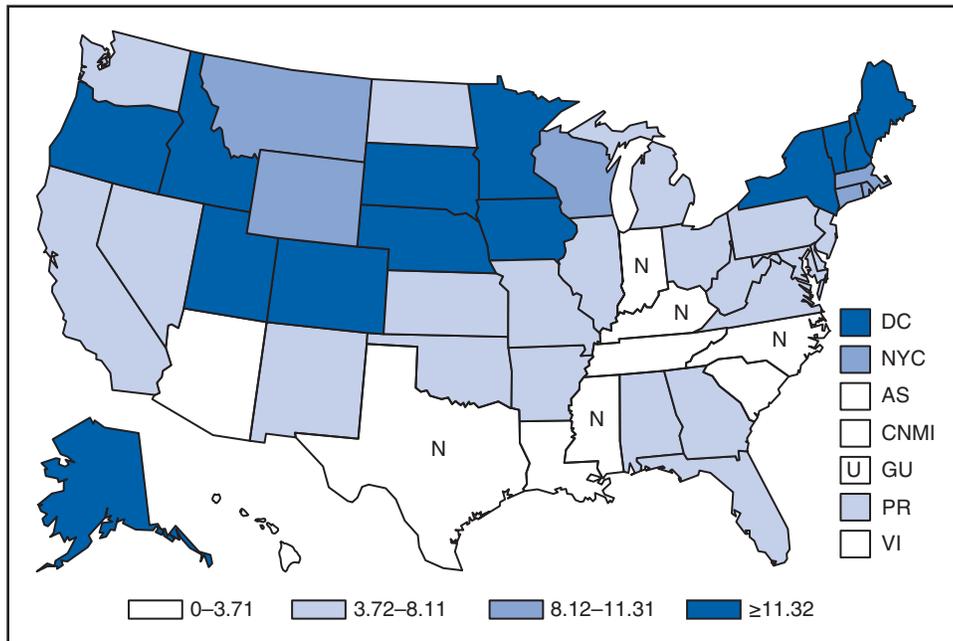
Cases of ehrlichiosis caused by *Ehrlichia ewingii* remain rare and are reported primarily from the central United States.

EHRlichiosis, UNDETERMINED. Number of reported cases, by county — United States, 2008



Cases of ehrlichiosis and anaplasmosis caused by undetermined species, 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 also might use this category to report cases for which single, inappropriate diagnostic tests were run (e.g., physicians ordering only ehrlichiosis tests in a region where anaplasmosis is expected to predominate).

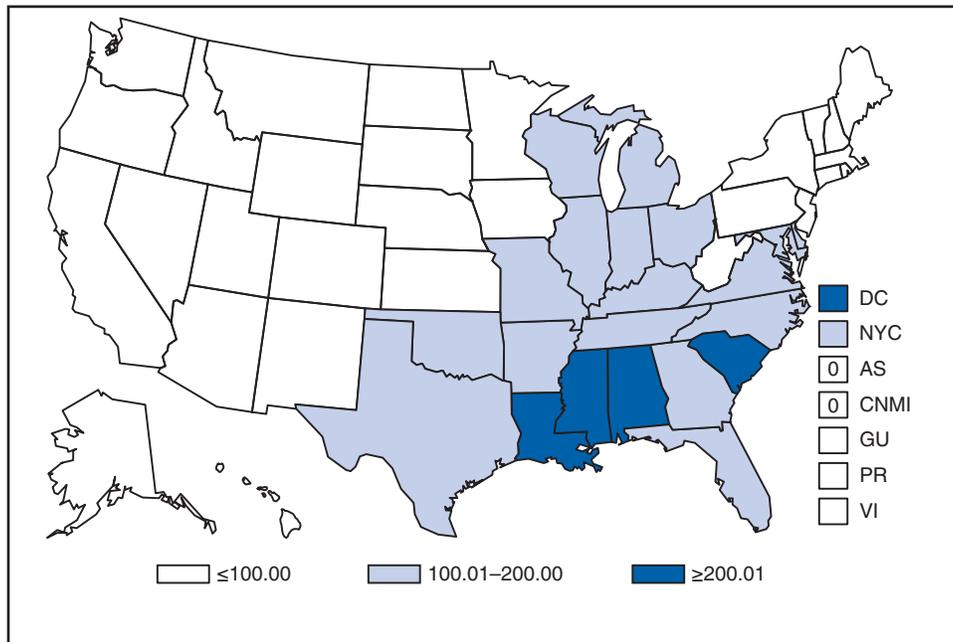
GIARDIASIS. Incidence* — United States and U.S. territories, 2008



* Per 100,000 population.

Giardiasis is widespread geographically in the United States, with consistent increased reporting in certain states and regions. Whether this difference is of true biologic significance or reflects differences in giardiasis case detection and reporting among states is uncertain.

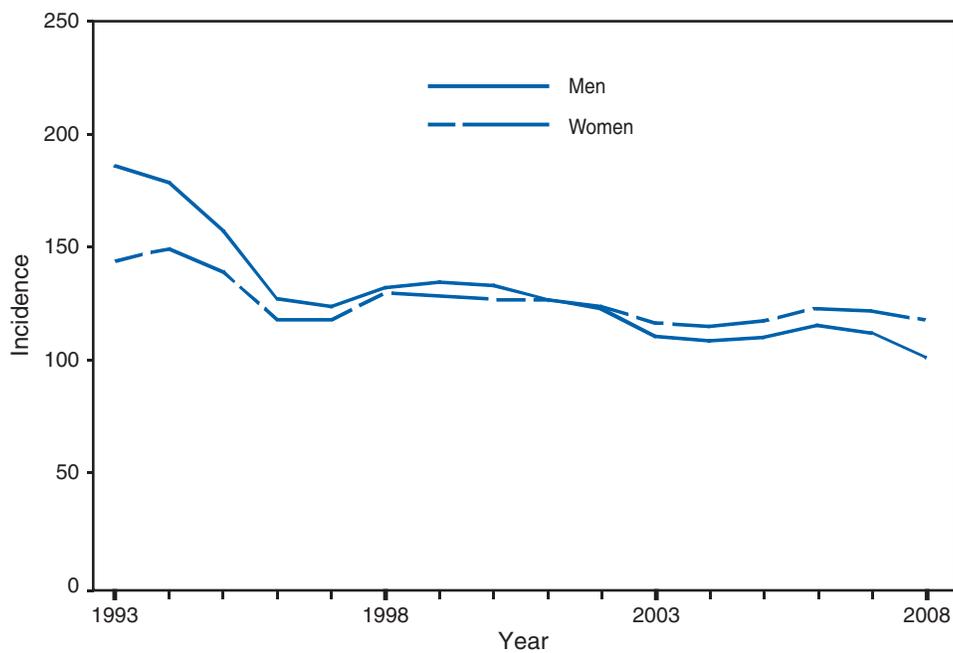
GONORRHEA. Incidence* — United States and U.S. territories, 2008



* Per 100,000 population.

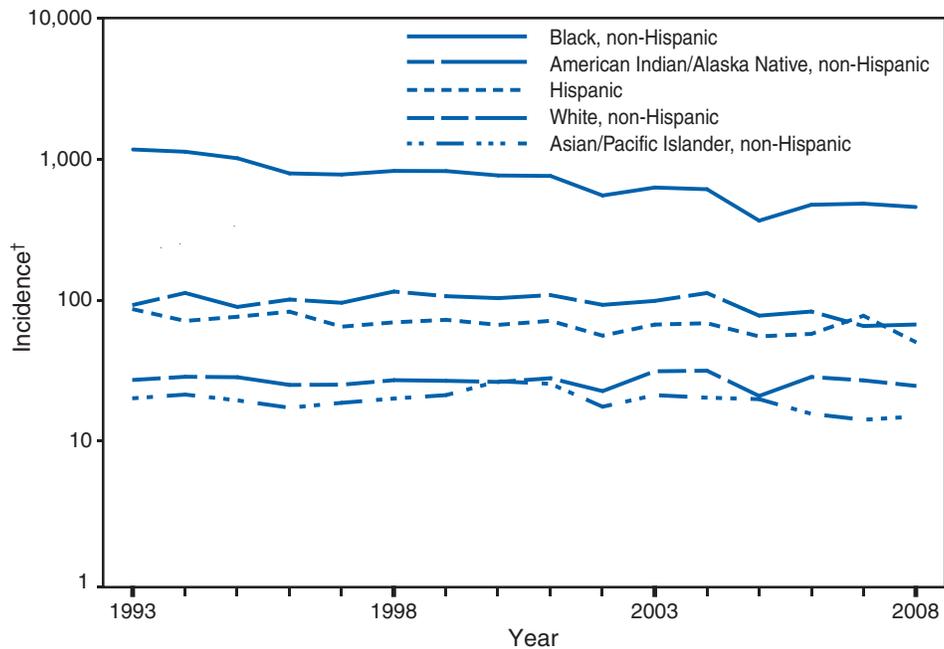
In 2008, the gonorrhea rate in the United States and territories (Guam, Puerto Rico, and Virgin Islands) was 110.3 cases per 100,000 population, a decrease from the rate in 2007.

GONORRHEA. Incidence,* by sex — United States, 1993–2008



* Per 100,000 population.

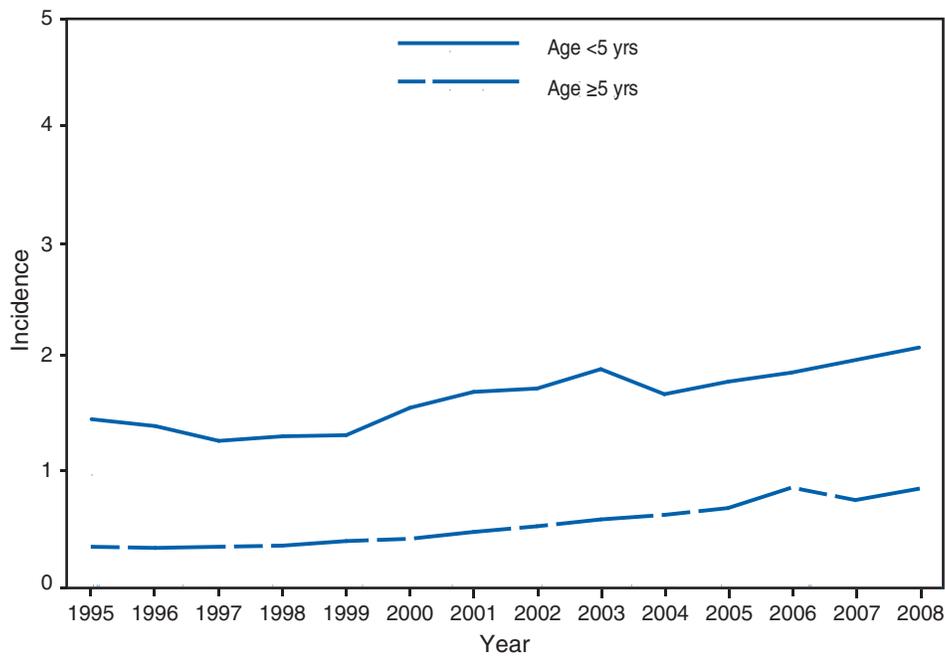
After a 74% decline in the rate of reported gonorrhea from 1975 through 1997, overall gonorrhea rates plateaued. For the eighth year in a row, the gonorrhea rate among women in 2008 was slightly higher than the rate among men.

GONORRHEA. Incidence,* by race/ethnicity — United States, 1993–2008

* Per 100,000 population.

† Y-axis is log scale.

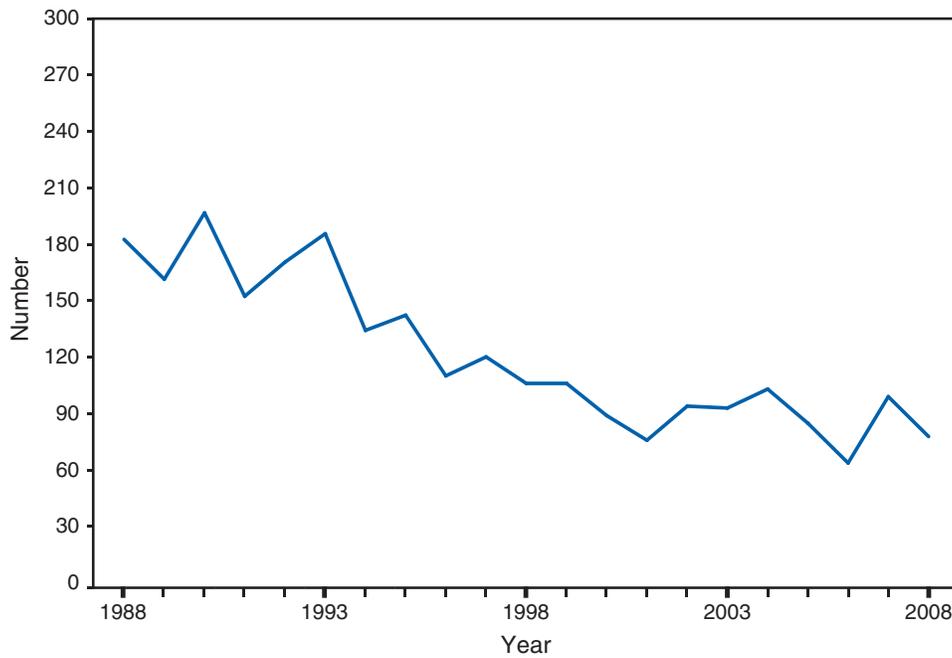
Gonorrhea incidence among blacks decreased considerably during the 1990s but continues to be the highest among all races/ethnicities. In 2008, incidence among non-Hispanic blacks was approximately 20 times greater than that for non-Hispanic whites.

HAEMOPHILUS INFLUENZAE, INVASIVE DISEASE. Incidence,* by age group — United States, 1995–2008

* Per 100,000 population.

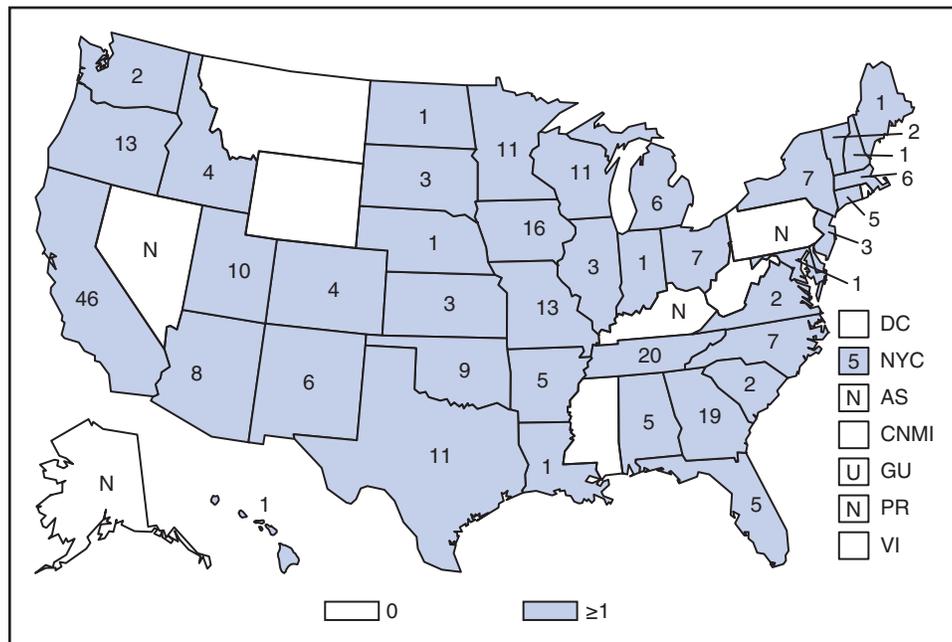
Substantial reductions in the incidence of *Haemophilus influenzae* serotype b (Hib) disease have been achieved through universal Hib vaccination. Before the introduction of conjugate vaccines in 1987, the incidence of invasive Hib disease among children aged <5 years was estimated to be 100 cases per 100,000 population. To monitor the epidemiology of Hib invasive disease and to detect the emergence of invasive non-Hib, serotyping of all *Haemophilus influenzae* 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, 1988–2008



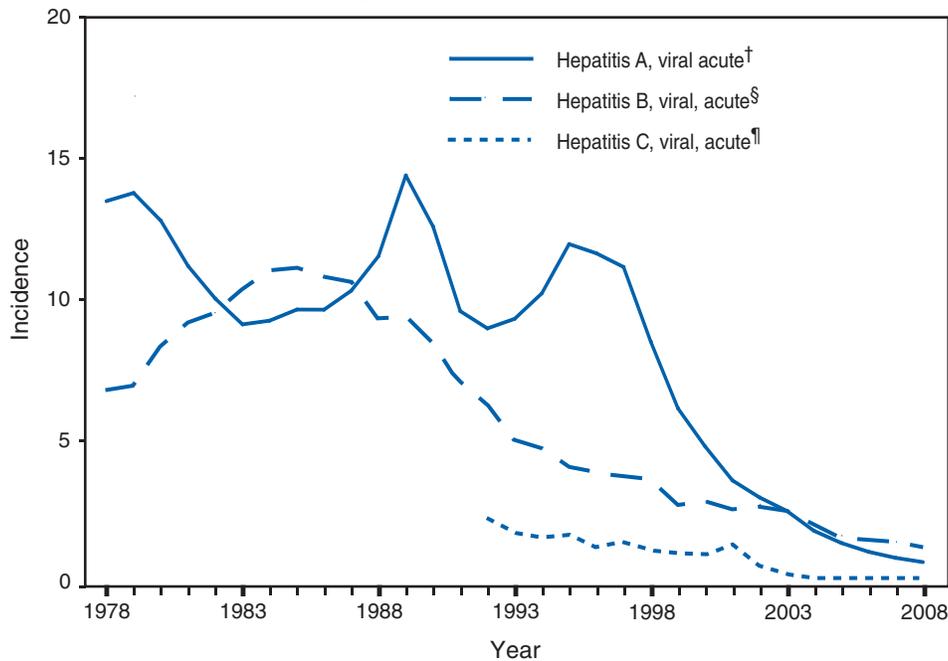
The number of cases of Hansen disease reported to CDC gradually declined during 1988–2008. This decline is primarily the result of decreasing numbers of imported cases.

HEMOLYTIC UREMIC SYNDROME, POSTDIARRHEAL. Number of reported cases — United States and U.S. territories, 2008



During 2008, as usual, most reported cases occurred among children aged 1–4 years. Hemolytic uremic syndrome has been a nationally notifiable disease since 1995. In 2008, cases continued to be reported from all regions of the country. Reporting is likely not complete; this is corroborated by data from Foodborne Disease Active Surveillance Network (FoodNet) sites indicating that additional cases can be detected by review of hospital discharge data.

HEPATITIS, VIRAL. Incidence,* by year — United States, 1978–2008



* Per 100,000 population.

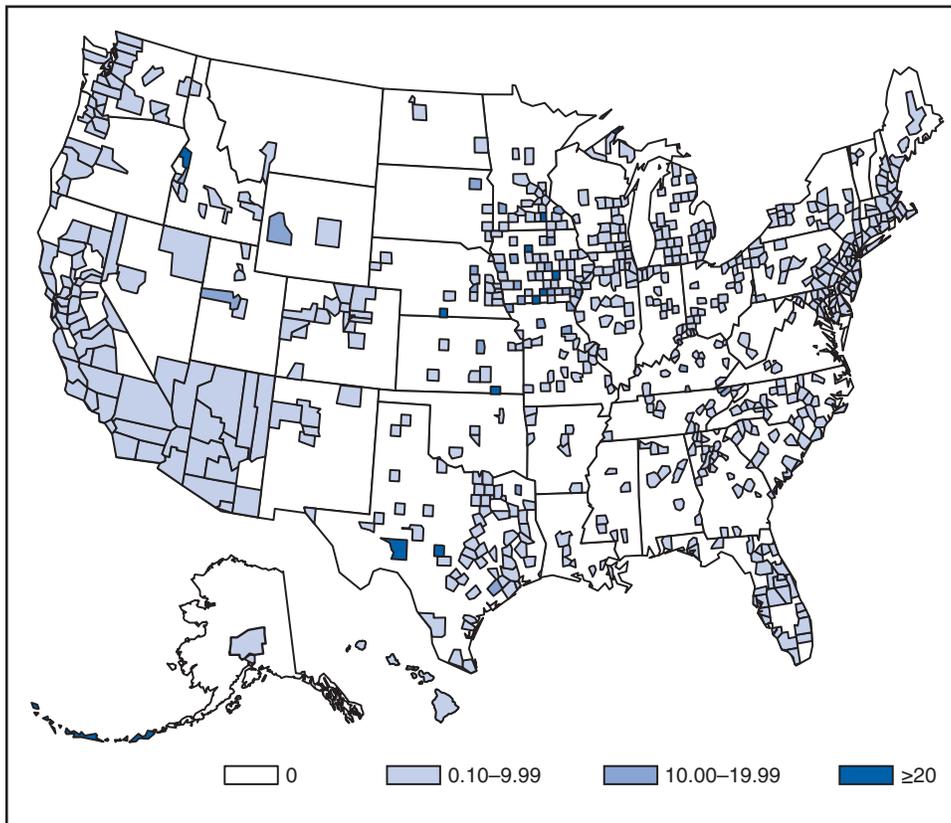
† Hepatitis A vaccine was first licensed in 1995.

§ 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 2008 was the lowest ever recorded. This reduction in incidence is attributable, 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 also have 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.

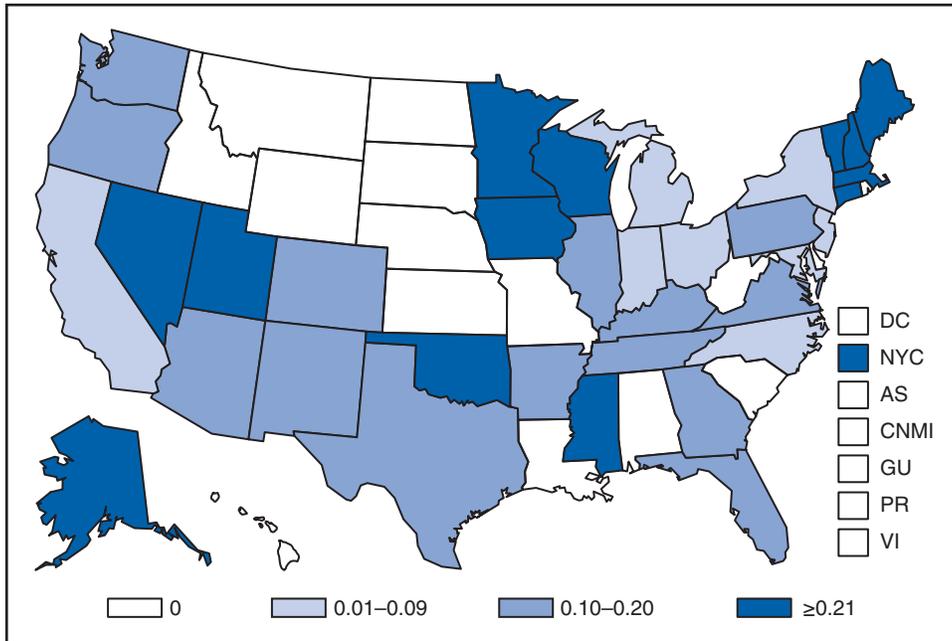
HEPATITIS A. Incidence,* by county — United States, 2008



* 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 2006, hepatitis A vaccine is now recommended for children in all states.

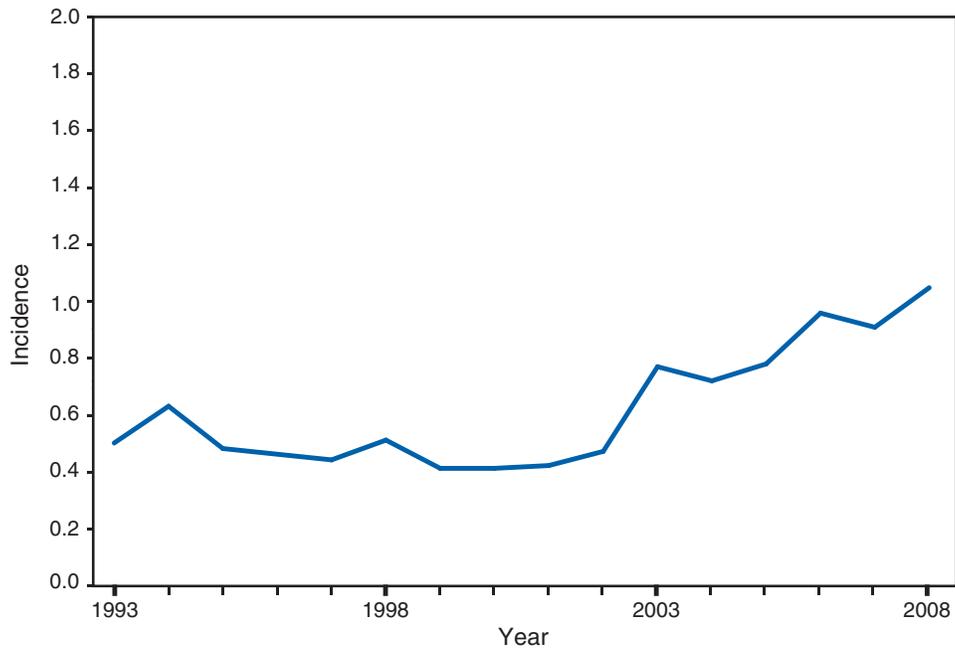
INFLUENZA-ASSOCIATED PEDIATRIC MORTALITY. Incidence* — United States and U.S. territories, 2008



* Per 100,000 population.

During 2008, 34 states and New York City reported a total of 90 influenza-associated pediatric deaths to CDC for an overall incidence rate in the United States of 0.12 deaths per 100,000 children aged <18 years. This is similar to rates estimated through mathematical modeling. State-to-state variation in rates likely reflected the rarity of the event and small population size rather than true differences in disease burden.

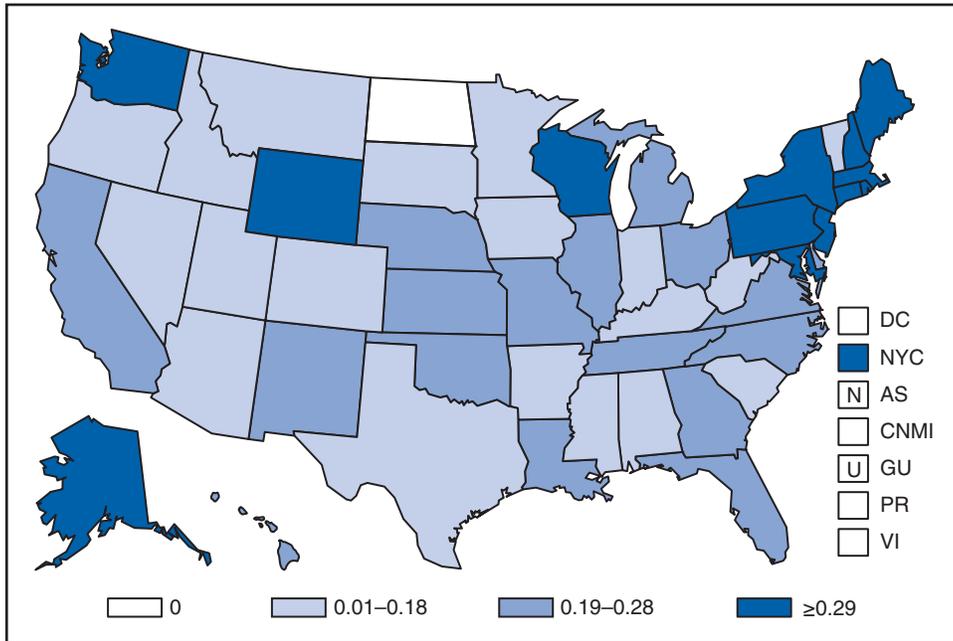
LEGIONELLOSIS. Incidence,* by year — United States, 1993-2008



* Per 100,000 population.

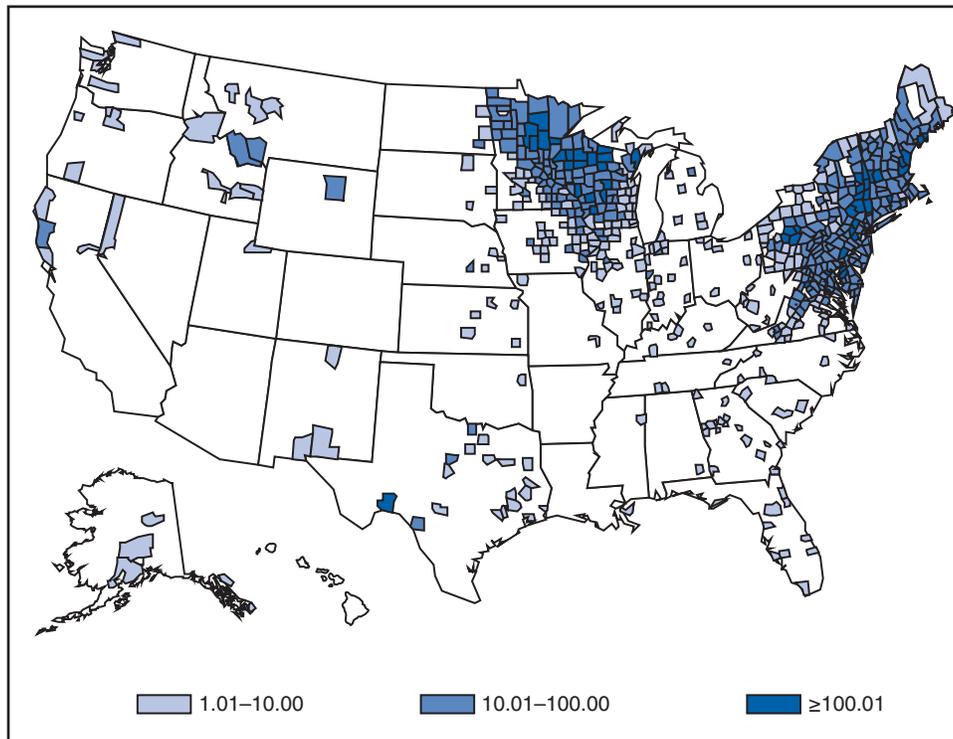
Legionellosis incidence increased again in 2008, a trend that has been observed since 2003. Factors contributing to this increase might include a true increase in disease transmission, greater use of diagnostic testing, and increased reporting.

LISTERIOSIS. Incidence* — United States and U.S. territories, 2008



* Per 100,000 population.

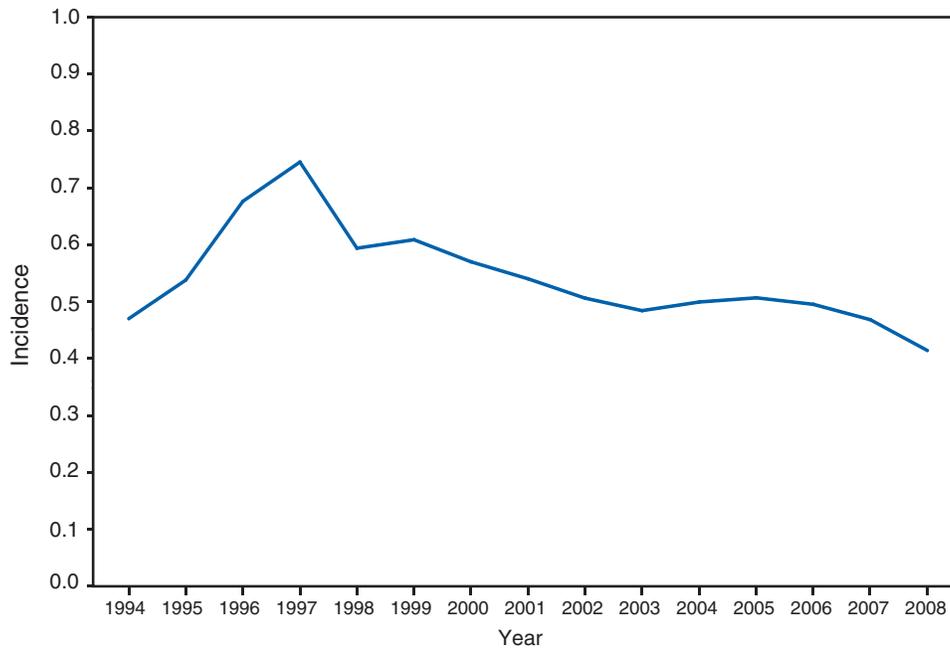
Listeriosis is primarily foodborne and occurs most frequently among persons who are older, pregnant, or immunocompromised. Although the infection is relatively uncommon, listeriosis is a leading cause of death attributable to foodborne illness in the United States. Recent outbreaks have been linked to sprouts and Mexican-style cheese.

LYME DISEASE. Incidence* of reported cases, by county — United States, 2008

* Per 100,000 population.

Approximately 90% of Lyme disease cases are reported from 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.

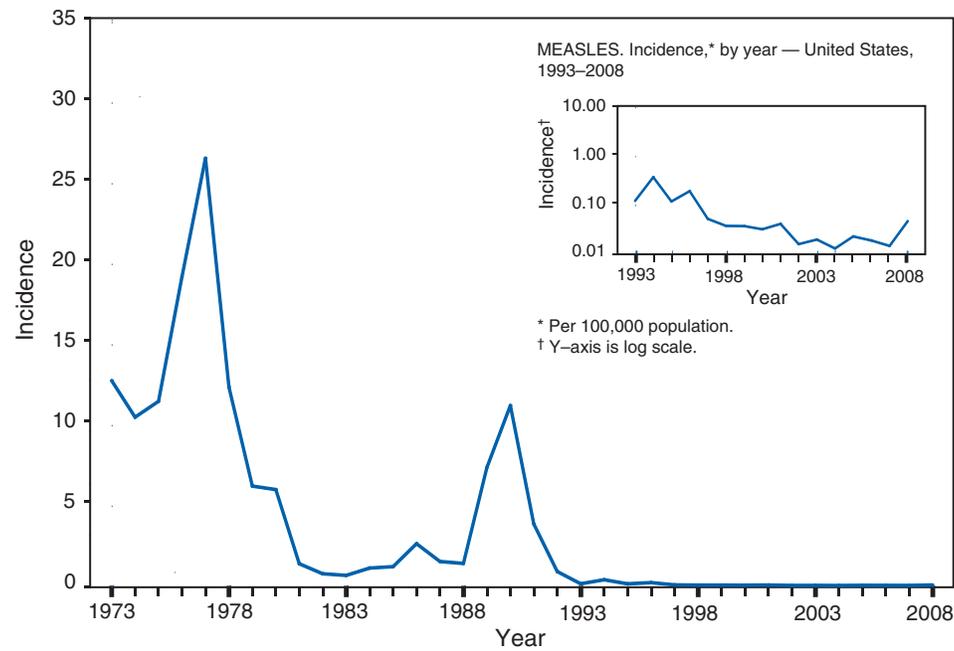
MALARIA. Incidence,* by year — United States, 1994–2008



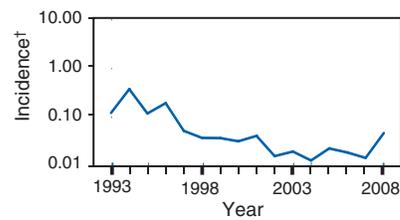
* Per 100,000 population.

Following a steady rate from 2005 to 2007, the number of reported malaria cases decreased by almost 11% from 2007 to 2008, which is reflected in the decreasing incidence.

MEASLES. Incidence,* by year — United States, 1973–2008



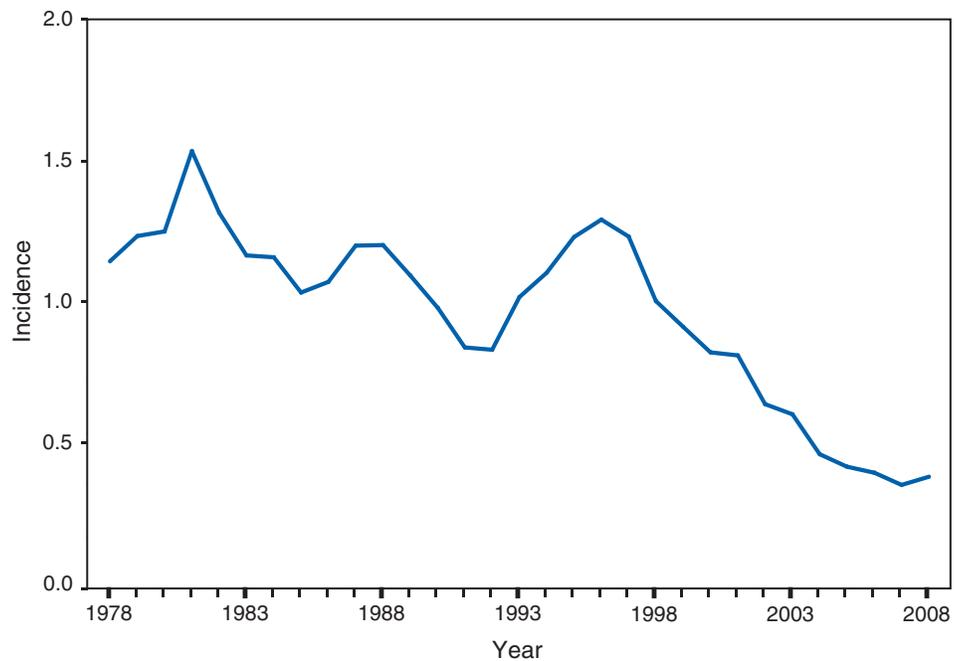
MEASLES. Incidence,* by year — United States, 1993–2008



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

* Per 100,000 population.

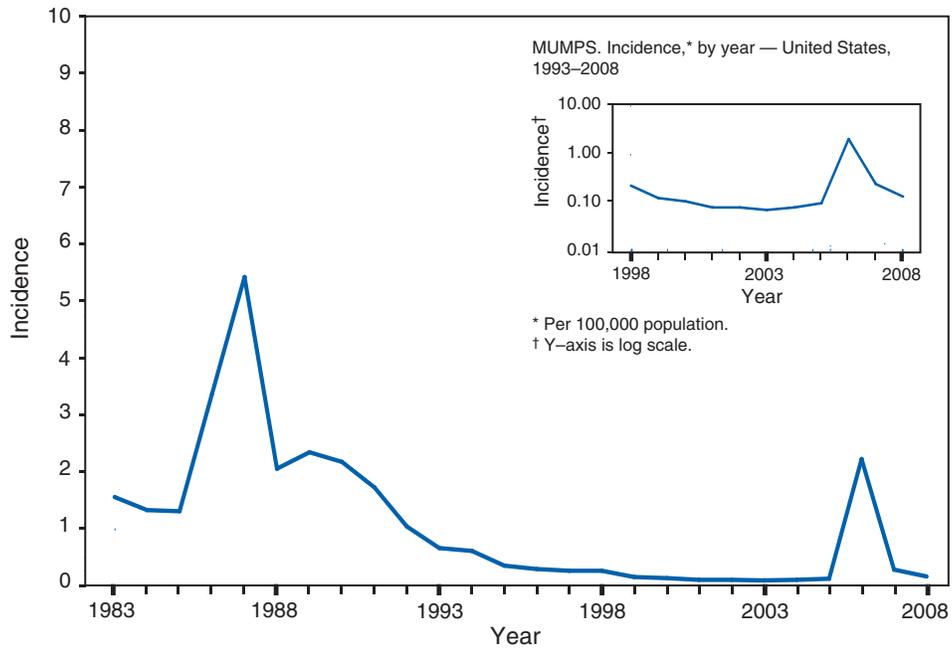
Measles vaccine was licensed in 1963. Evidence suggests that measles is no longer endemic in the United States.

MENINGOCOCCAL DISEASE. Incidence,* by year — United States, 1978–2008

* Per 100,000 population.

Meningococcal disease incidence is 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 in late adolescence. In 2005, a quadrivalent (A, C, Y, W-135) meningococcal conjugate vaccine was licensed and recommended for adolescents and others at increased risk for disease. In 2008, coverage with meningococcal conjugate vaccine was 41.8% among adolescents aged 13–17 years in the United States.

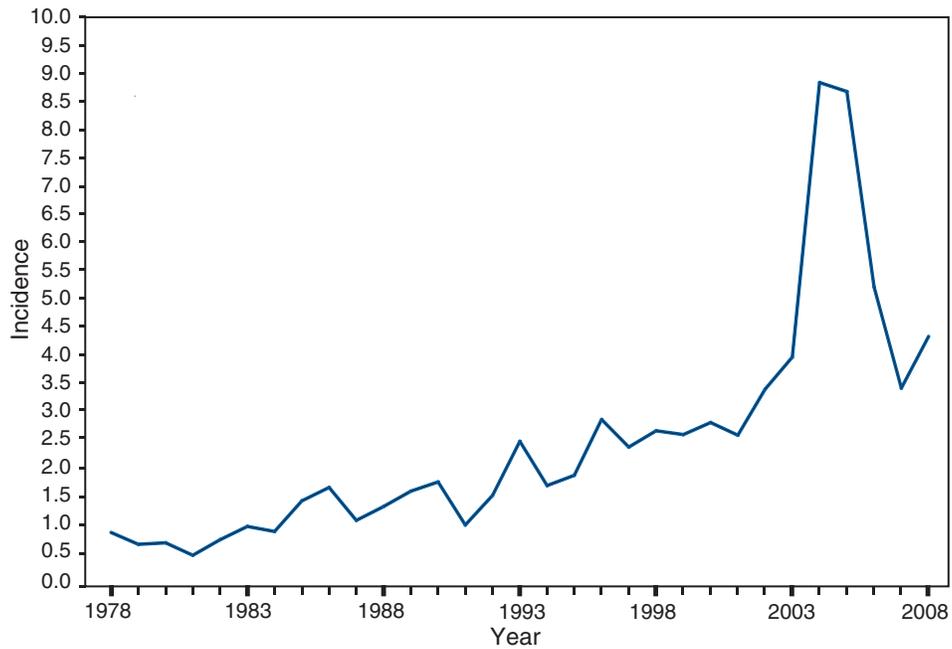
MUMPS. Incidence,* by year — United states, 1983–2008



* 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 two decades. The 2006 outbreak of more than 6,000 cases affected primarily college students aged 18–24 years in the Midwest. As a result, the Advisory Committee on Immunization Practices updated its vaccination recommendations, and the Council of State and Territorial Epidemiologists updated its case definition.

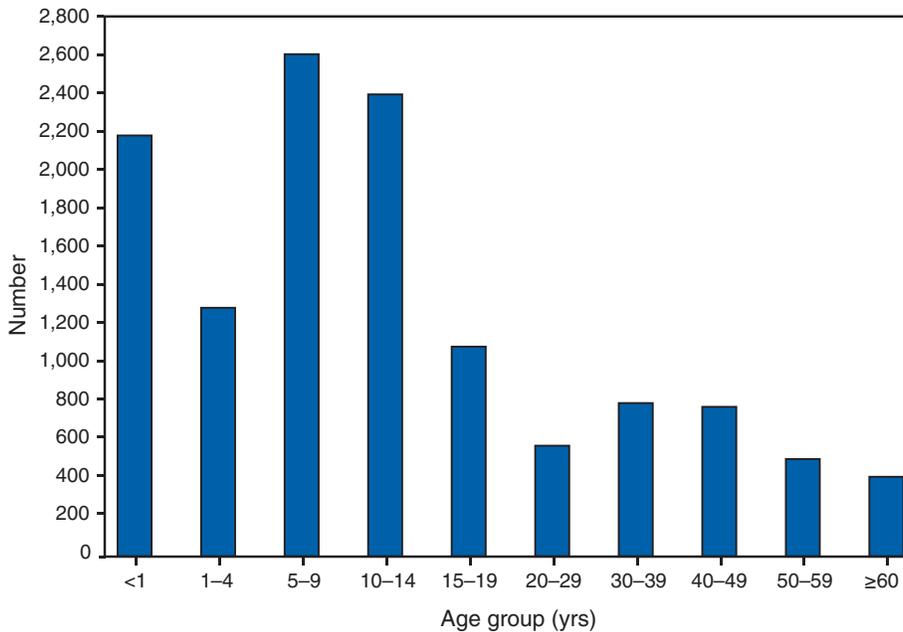
PERTUSSIS. Incidence,* by year — United States, 1978–2008



* Per 100,000 population.

Although the incidence of reported pertussis is substantially lower than the peak in 2004, incidence increased slightly during 2007–2008, and continues to remain higher than in the 1990s.

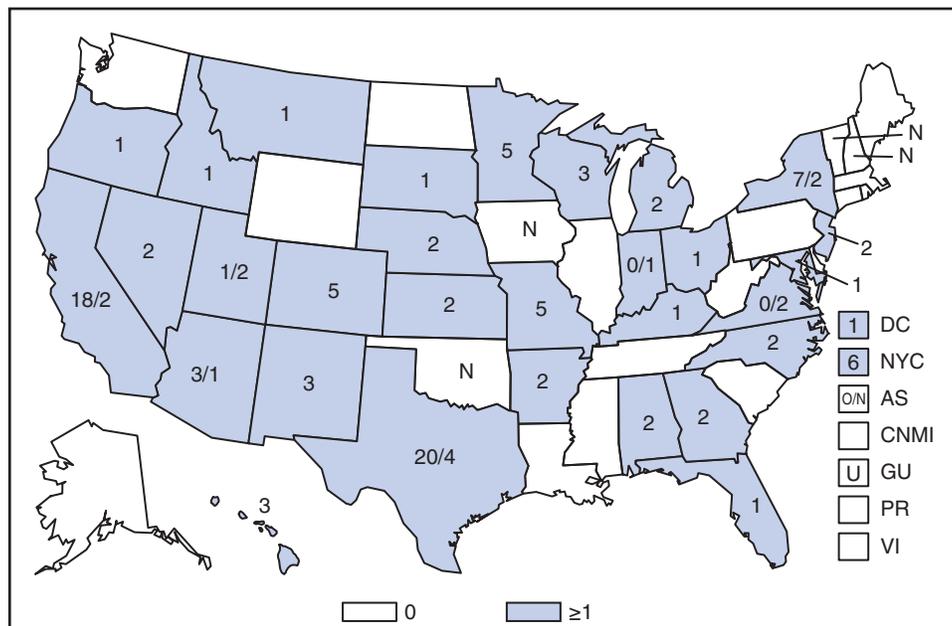
PERTUSSIS. Number of reported cases,* by age group — United States, 2008



* Of 13,278 cases, age was reported unknown for 671 persons.

Infants, especially those who are undervaccinated, are at increased risk for complicated infections and death from pertussis. Immunity to pertussis is thought to wane approximately 5–10 years after completion of childhood vaccination. A second peak in the number of reported cases is observed among school-aged children and adolescents. The contribution of cases in children aged 5–9 years appears to be increasing compared with previous years.

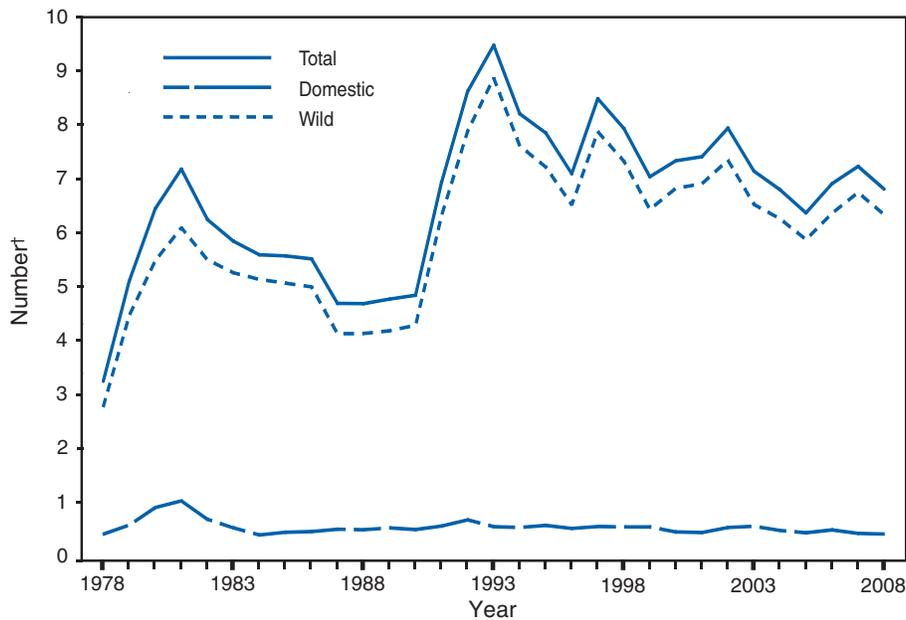
Q FEVER, ACUTE AND CHRONIC. Number of reported cases — United States and U.S. territories, 2008



* Number of Q fever acute cases/Q fever chronic cases. Numbers displayed with no forward slash are Q fever acute cases.

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.

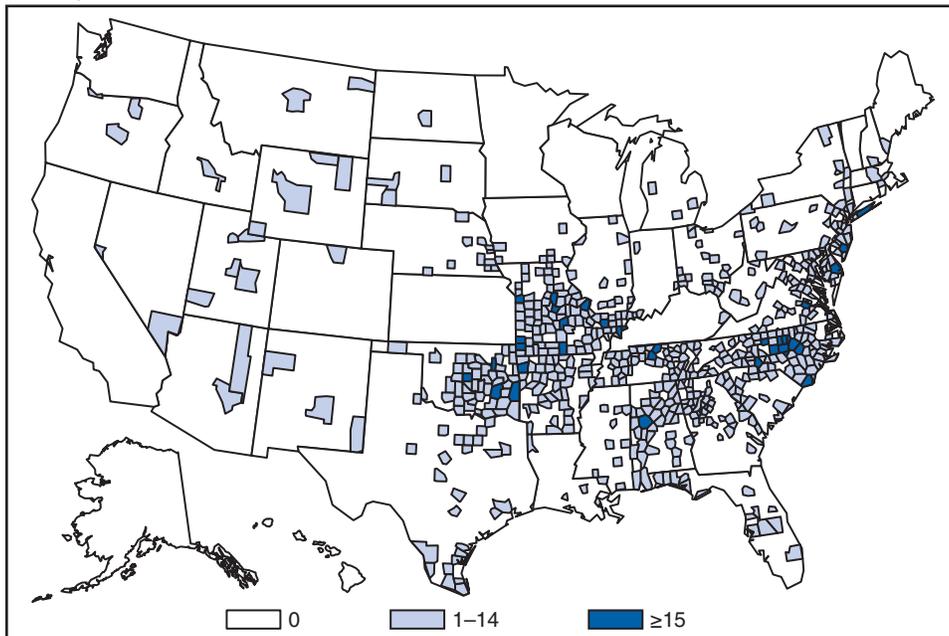
RABIES, ANIMAL. Number of reported cases among wild and domestic animals,* by year — United States and Puerto Rico, 1978–2008



* Data from the National Center for Emerging and Zoonotic Infectious Diseases.
 † In thousands.

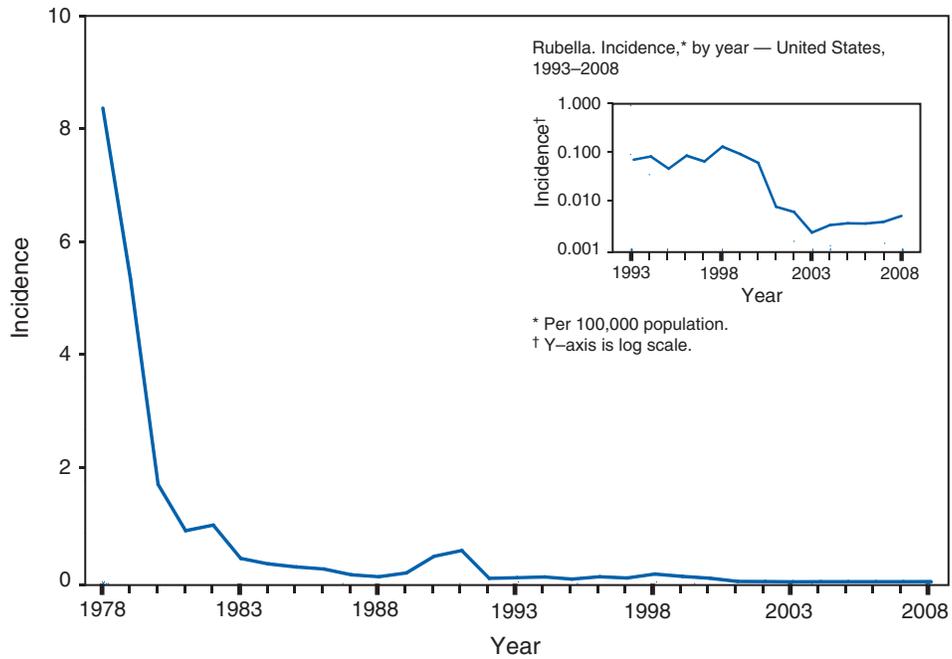
Reported periods of resurgence and decline of rabies cases result primarily from cyclic reemergence. However, the proportion of rabid animals among those tested has demonstrated an overall negative trend from 6.1% rabid in 2006 to 5.6% rabid in 2008. Despite increases in diagnostic testing and the subsequent increase in reported number of rabid bats, the raccoon rabies virus variant continues to be responsible for more than 75% of all terrestrial rabies cases reported in the United States.

ROCKY MOUNTAIN SPOTTED FEVER. Number of reported cases, by county — United States, 2008



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).

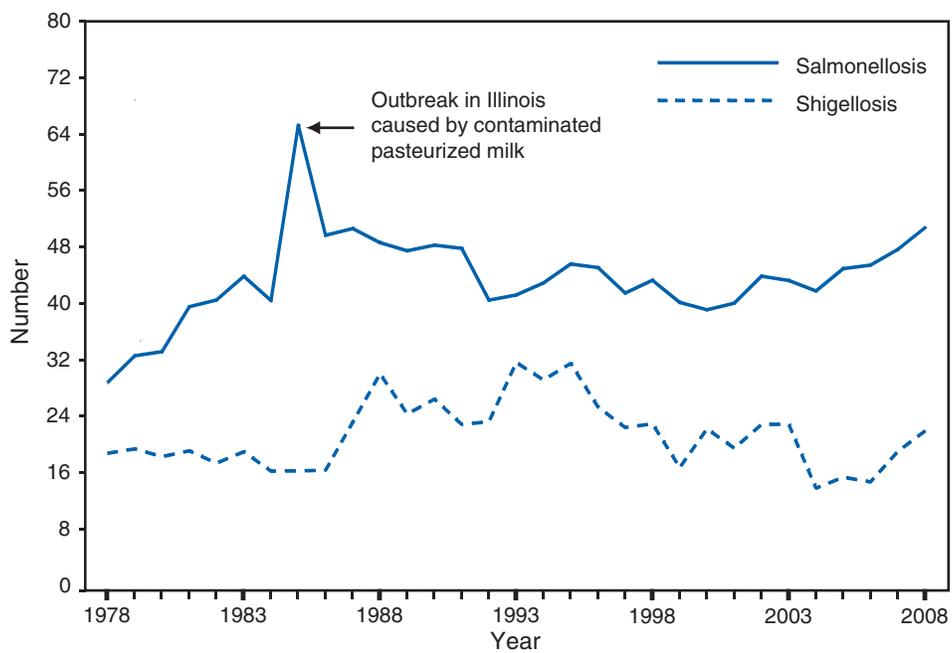
RUBELLA. Incidence,* by year — United States, 1978–2008



* Per 100,000 population.

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

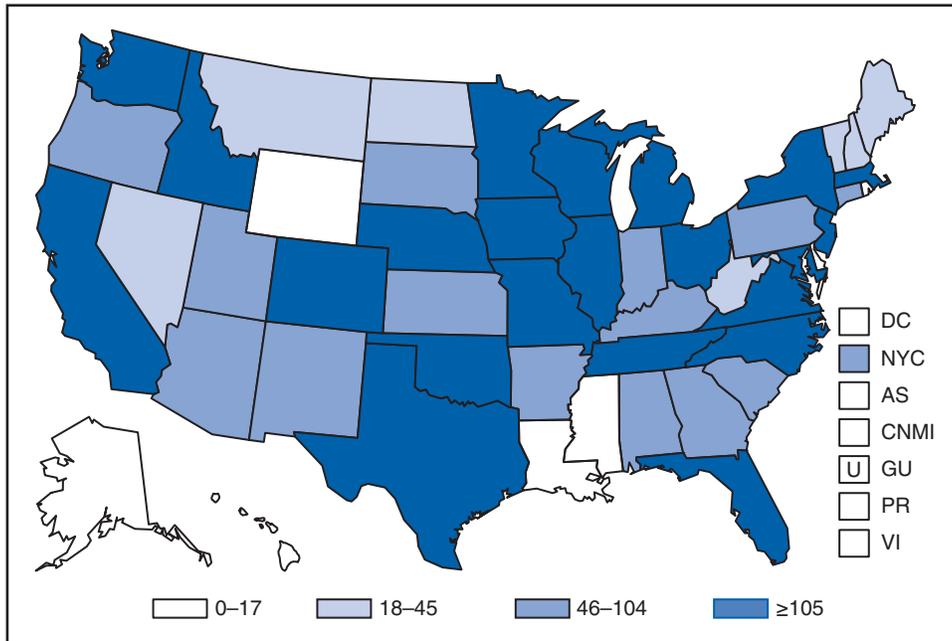
SALMONELLOSIS AND SHIGELLOSIS. Number* of reported cases, by year — United States, 1978–2008



* In thousands.

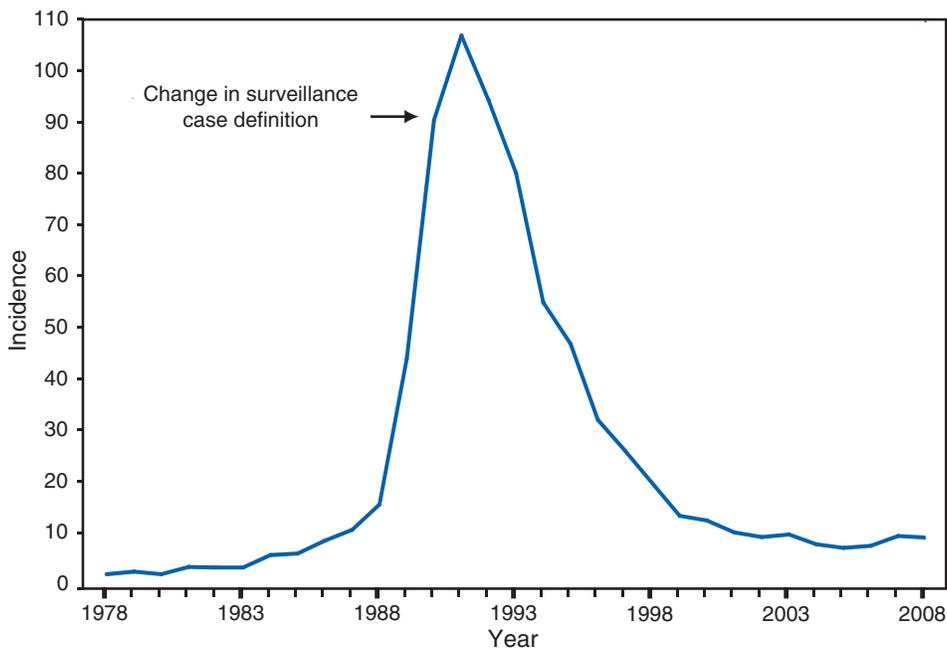
Rates of salmonellosis have remained relatively stable during the past two decades. Typhimurium, Enteritidis, and Newport are the most commonly reported *Salmonella* serotypes.

SHIGA TOXIN-PRODUCING *ESCHERICHIA COLI* (STEC). Number of reported cases — United States and U.S. territories, 2008



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. National surveillance for all STEC, under the name enterohemorrhagic *E. coli* (EHEC), began in 2001. In 2008, cases continued to be reported from all regions of the country.

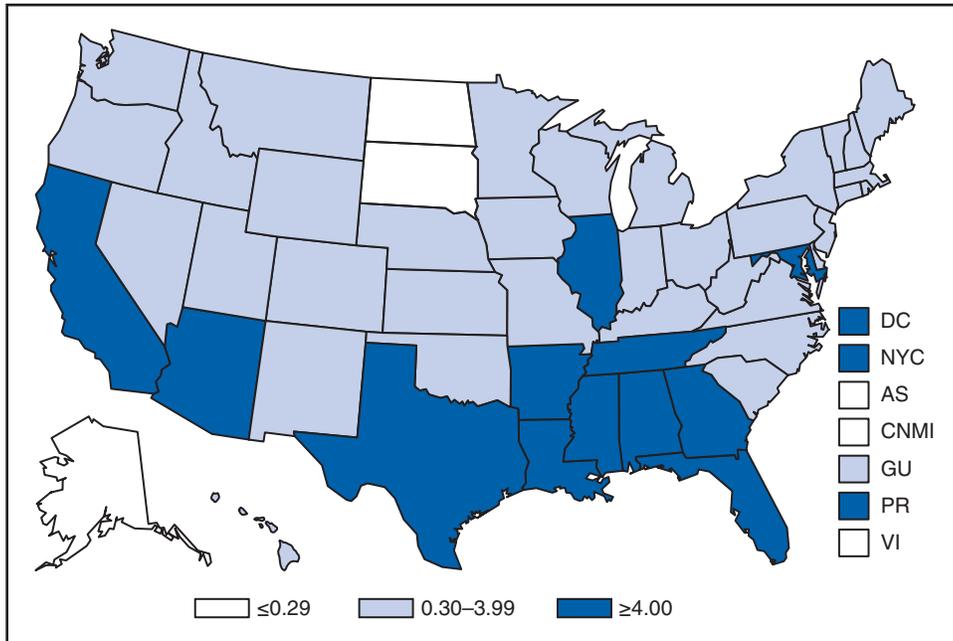
SYPHILIS, CONGENITAL. Incidence* among infants aged <1 year — United States, 1978–2008



* Per 100,000 live births.

Following a decline in the incidence of congenital syphilis since 1991, overall congenital syphilis rates remained the same from 2007 to 2008, 10.1 cases per 100,000 live births.

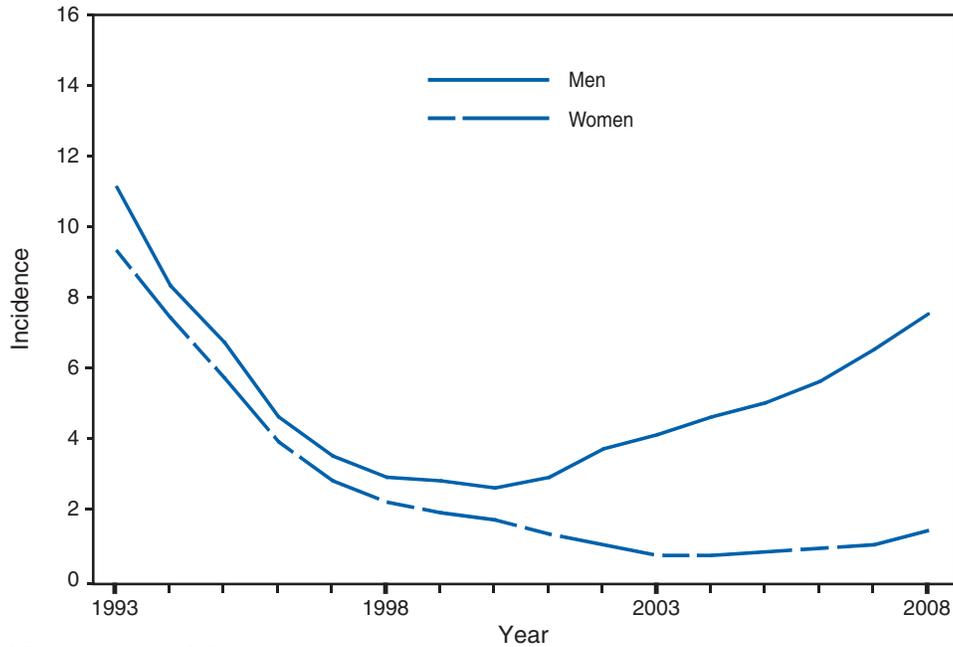
SYPHILIS, PRIMARY AND SECONDARY. Incidence* — United States and U.S. territories, 2008



* Per 100,000 population.

In 2008, the primary and secondary syphilis rate in the United States and territories (Guam, Puerto Rico, and Virgin Islands) was 4.5 cases per 100,000 population.

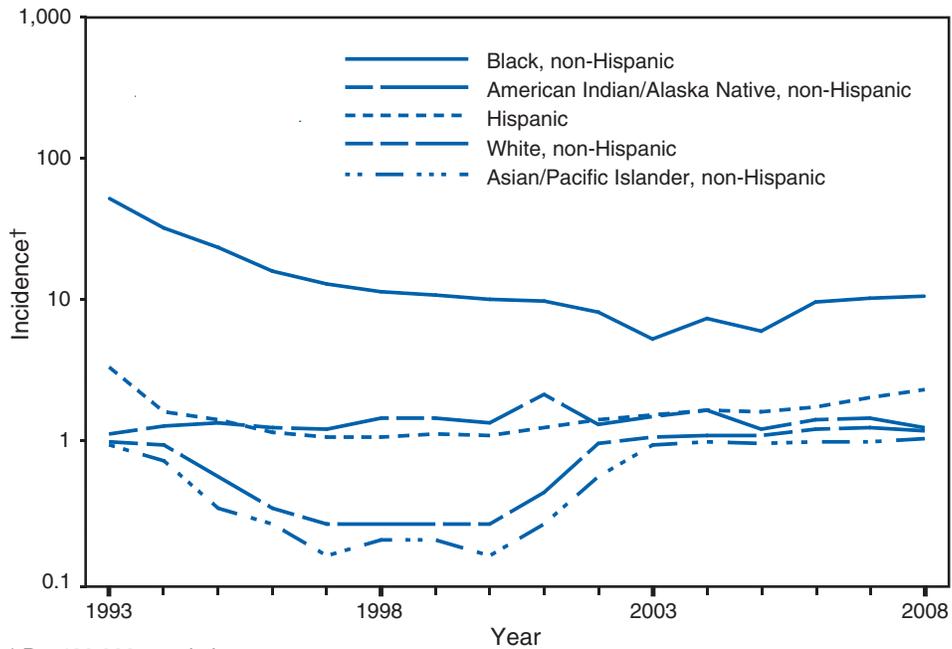
SYPHILIS, PRIMARY AND SECONDARY. Incidence*, by sex — United States, 1993–2008



* Per 100,000 population.

During 2007–2008, the incidence of primary and secondary syphilis in the United States increased from 3.8 to 4.5 cases (women: from 1.1 to 1.5; men: from 6.6 to 7.6) per 100,000 population.

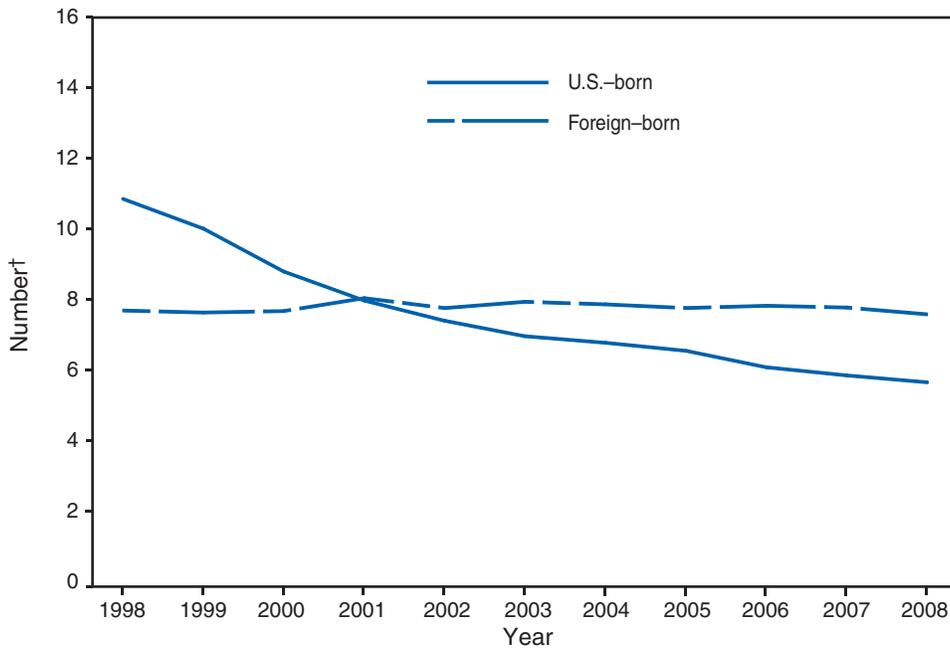
SYPHILIS, PRIMARY AND SECONDARY. Incidence,* by race/ethnicity — United States, 1993–2008



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

During 2007–2008, incidence of primary and secondary syphilis increased among all races/ethnicities except American Indian/Alaska Natives. Incidence per 100,000 population increased from 13.8 to 17.3 among non-Hispanic blacks; from 4.2 to 4.7 among Hispanics; from 1.2 to 1.5 among Asian/Pacific Islanders; from 2.0 to 2.2 among non-Hispanic whites; and decreased from 3.4 to 2.3 among American Indian/Alaska Natives.

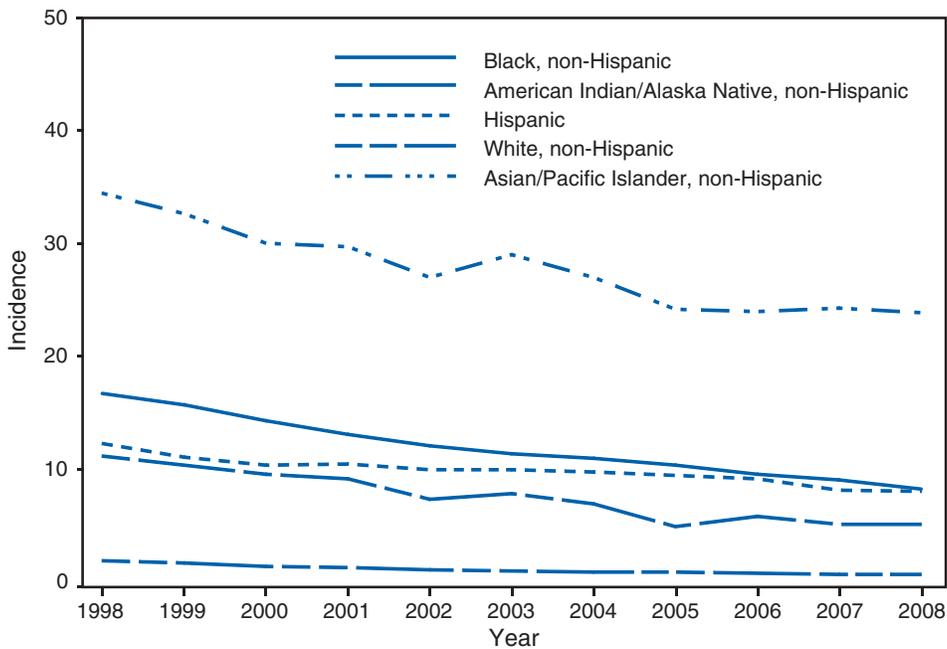
TUBERCULOSIS. Number of reported cases among U.S.-born and foreign-born persons,* by year — United States, 1998–2008



* For 91 cases, origin of patients was unknown
 † In thousands

The number of TB cases occurring among the foreign-born has remained fairly constant during 1998–2008. The percentage of U.S. TB cases among the foreign-born has increased from 42% in 1998 to 59% in 2008.

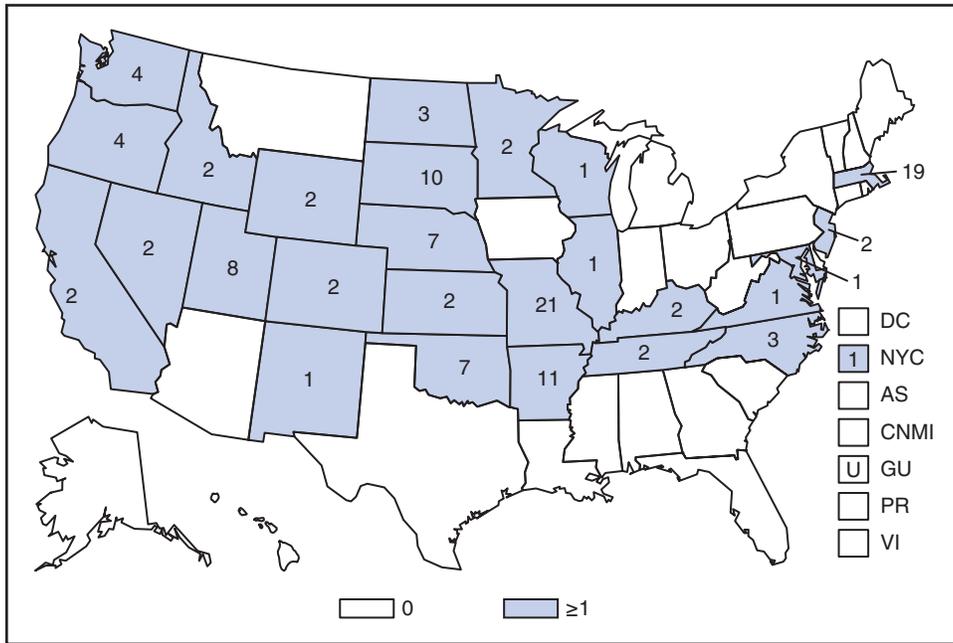
TUBERCULOSIS. Incidence,* by race/ethnicity — United States, 1998–2008



* Per 100,000 population.

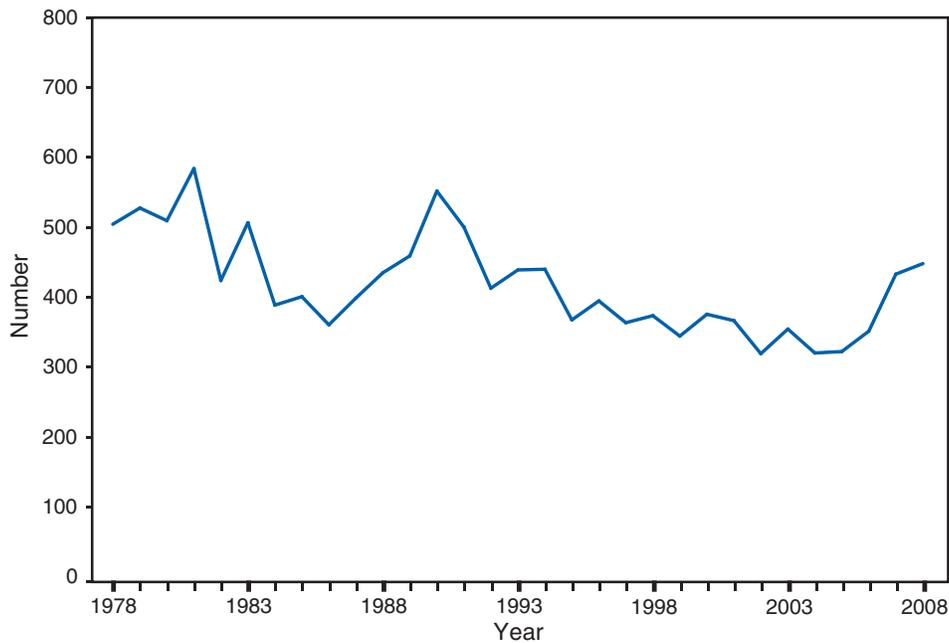
From 1998 to 2008, case rates in Asian / Pacific Islanders declined by 25%. All other racial and ethnic groups declined by at least 35% during this period. Since 2003, Asian only and Native Hawaiian and other Pacific Islander have been reported separately but were merged for this graph for continuity in reporting trends.

TULAREMIA. Number of reported cases — United States and U.S. territories, 2008



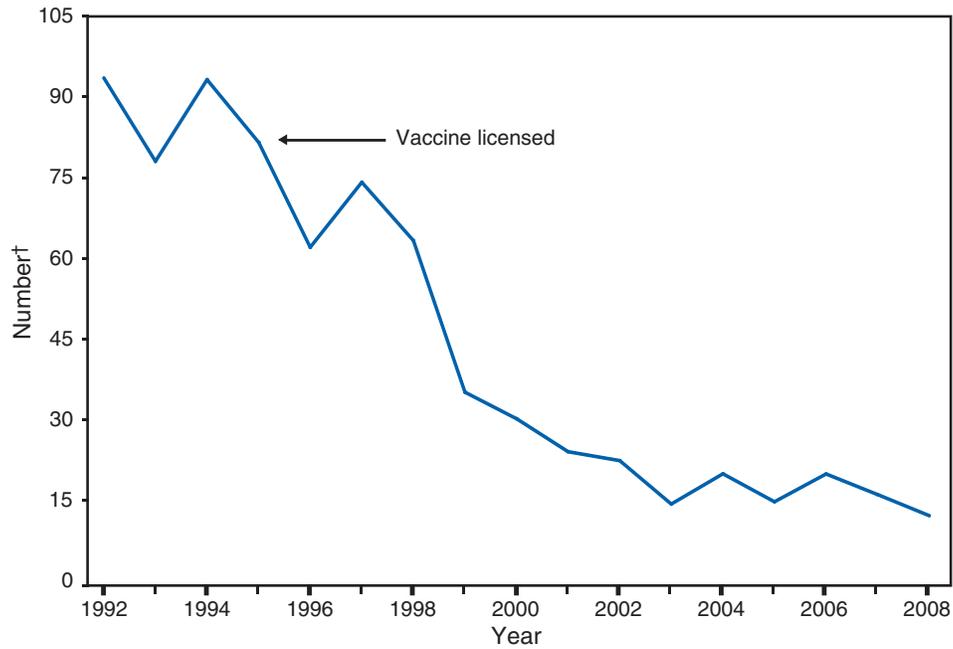
Historically, tularemia has been reported from all states except Hawaii. To define the geographic distribution of *Francisella tularensis* subspecies, CDC requests that state public health laboratories forward isolates to the CDC laboratory in Fort Collins, Colorado.

TYPHOID FEVER. Number of reported cases, by year — United States, 1978–2008



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*, 1992–2008

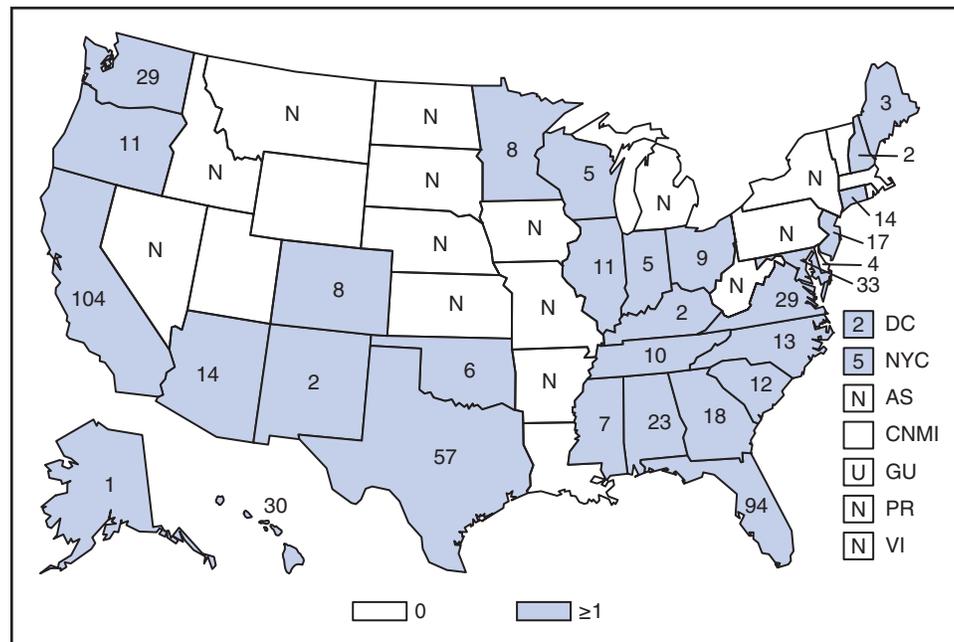


* Source: CDC. National Center for Immunization and Respiratory Diseases.

† In thousands.

In four states (Michigan, Illinois, Texas, and West Virginia), the number of cases reported in 2008 was 24% lower than 2007 and 85% less than the number reported during the prevaccine years 1993–1995.

VIBRIOSIS. Number of reported cases — United States and U.S. territories, 2008



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 with salt water containing *Vibrio* organisms.

PART 3

Historical Summaries of Notifiable Diseases in the United States, 1977–2008

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, 2008* 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, 1998–2008

| Disease | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| AIDS† | 7.21 | 16.66 | 14.95 | 14.88 | 15.29 | 15.36 | 15.28 | 14.00 | 12.87 | 12.53 | 13.00 |
| Anthrax | — | — | 0 | 0.01 | 0 | — | — | — | 0 | 0 | 0 |
| Botulism, total (includes wound and unspecified) | 0.04 | 0.06 | 0.05 | 0.06 | 0.03 | 0.01 | 0.02 | 0.01 | 0.02 | 0.05 | 0.05 |
| foodborne | 0.01 | 0.01 | 0.01 | 0.01 | 0 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Brucellosis | 0.03 | 0.03 | 0.03 | 0.05 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.03 |
| Chancroid | 0.07 | 0.06 | 0.03 | 0.01 | 0.02 | 0.02 | 0 | 0.01 | 0.01 | 0.01 | 0.01 |
| <i>Chlamydia trachomatis</i> infections | 236.57 | 254.10 | 257.76 | 278.32 | 296.55 | 304.71 | 319.61 | 332.51 | 347.80 | 370.20 | 401.34 |
| Cholera | 0.01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Coccidioidomycosis | 0.99 | 3.58 | 4.69 | 6.71 | 3.03 | 2.57 | 4.14 | 6.24 | 6.79 | 14.39 | 7.76 |
| Cryptosporidiosis | 1.61 | 0.92 | 1.17 | 1.34 | 1.07 | 1.22 | 1.23 | 1.93 | 2.05 | 3.73 | 3.02 |
| Cyclosporiasis | § | 0.07 | 0.03 | 0.07 | 0.06 | 0.03 | 0.14 | 0.24 | 0.06 | 0.04 | 0.05 |
| Diphtheria | 0 | 0 | 0 | 0 | 0 | 0 | — | — | — | — | — |
| Domestic arboviral | | | | | | | | | | | |
| California serogroup virus | | | | | | | | | | | |
| neuroinvasive | — | — | — | — | — | — | — | 0.02 | 0.02 | 0.02 | 0.02 |
| nonneuroinvasive | § | § | § | § | § | § | § | 0 | 0 | 0 | 0 |
| Eastern equine encephalitis virus | | | | | | | | | | | |
| neuroinvasive | — | — | — | — | — | — | — | 0 | 0 | 0 | 0 |
| nonneuroinvasive | § | § | § | § | § | § | § | 0 | 0 | 0 | 0 |
| Powassan virus | | | | | | | | | | | |
| neuroinvasive | — | — | — | — | — | — | — | 0 | 0 | 0 | 0 |
| nonneuroinvasive | § | § | § | § | § | § | § | 0 | 0 | 0 | 0 |
| St. Louis encephalitis virus | | | | | | | | | | | |
| neuroinvasive | — | — | — | — | — | — | — | 0 | 0 | 0 | 0 |
| nonneuroinvasive | § | § | § | § | § | § | § | 0 | 0 | 0 | 0 |
| West Nile virus | | | | | | | | | | | |
| neuroinvasive | — | — | — | — | — | — | — | 0.45 | 0.50 | 0.41 | 0.23 |
| nonneuroinvasive | § | § | § | § | § | § | § | 0.58 | 0.94 | 0.80 | 0.22 |
| Western equine encephalitis virus | | | | | | | | | | | |
| 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 and unspecified)** | — | — | — | — | — | — | — | 0.04 | 0.08 | 0.12 | ¶ |
| Ehrlichiosis/Anaplasmosis | | | | | | | | | | | |
| <i>Ehrlichia chaffeensis</i> | § | § | § | § | § | § | § | § | § | § | 0.35 |
| <i>Ehrlichia ewingii</i> | § | § | § | § | § | § | § | § | § | § | 0 |
| <i>Anaplasma phagocytophilum</i> | § | § | § | § | § | § | § | § | § | § | 0.43 |
| Undetermined | § | § | § | § | § | § | § | § | § | § | 0.06 |
| Encephalitis/meningitis, arboviral†† | | | | | | | | | | | |
| California serogroup virus | 0.04 | 0.03 | 0.04 | 0.05 | 0.06 | 0.06 | 0 | †† | †† | †† | †† |
| Eastern equine virus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | †† | †† | †† | †† |
| Powassan virus | § | § | § | § | 0 | 0 | 0 | †† | †† | †† | †† |
| St. Louis virus | 0.01 | 0 | 0 | 0.03 | 0.01 | 0.01 | 0 | †† | †† | †† | †† |
| West Nile virus | § | § | § | § | 1.01 | 1.00 | 0.43 | †† | †† | †† | †† |
| Western equine | 0 | 0 | 0 | 0 | 0 | 0 | — | †† | †† | †† | †† |
| Enterohemorrhagic <i>Escherichia coli</i> | | | | | | | | | | | |
| O157:H7 | 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 | 7.41 |
| Gonorrhea | 132.88 | 133.20 | 131.65 | 128.53 | 125.03 | 116.37 | 113.52 | 115.64 | 120.90 | 118.90 | 111.64 |
| <i>Haemophilus influenzae</i> , invasive disease | | | | | | | | | | | |
| all ages, serotypes | 0.44 | 0.48 | 0.51 | 0.57 | 0.62 | 0.70 | 0.72 | 0.78 | 0.82 | 0.85 | 0.96 |
| age <5 yrs | | | | | | | | | | | |
| serotype b | § | § | § | § | 0.18 | 0.16 | 0.03 | 0.04 | 0.14 | 0.11 | 0.14 |
| nonsertotype b | § | § | § | § | 0.75 | 0.59 | 0.04 | 0.67 | 0.86 | 0.97 | 1.18 |
| unknown serotype | § | § | § | § | 0.80 | 1.15 | 0.97 | 1.08 | 0.88 | 0.88 | 0.79 |
| Hansen disease (Leprosy) | 0.05 | 0.04 | 0.04 | 0.03 | 0.04 | 0.03 | 0.04 | 0.03 | 0.03 | 0.04 | 0.03 |
| Hantavirus pulmonary syndrome | § | § | 0.02 | 0 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Hemolytic uremic syndrome postdiarrheal | § | § | 0.10 | 0.08 | 0.08 | 0.06 | 0.07 | 0.08 | 0.11 | 0.10 | 0.12 |
| Hepatitis, viral, acute | | | | | | | | | | | |
| A | 8.59 | 6.25 | 4.91 | 3.77 | 3.13 | 2.66 | 1.95 | 1.53 | 1.21 | 1.00 | 0.86 |
| B | 3.80 | 2.82 | 2.95 | 2.79 | 2.84 | 2.61 | 2.14 | 1.78 | 1.62 | 1.51 | 1.34 |
| C | 1.30 | 1.14 | 1.17 | 1.41 | 0.65 | 0.38 | 0.31 | 0.23 | 0.26 | 0.28 | 0.29 |
| Influenza-associated pediatric mortality | § | § | § | § | § | § | § | 0.02 | 0.07 | 0.10 | 0.12 |
| Legionellosis | 0.51 | 0.41 | 0.42 | 0.42 | 0.47 | 0.78 | 0.71 | 0.78 | 0.96 | 0.91 | 1.05 |

See footnotes on next page.

TABLE 7. (Continued) Reported incidence* of notifiable diseases — United States, 1998–2008

| Disease | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Listeriosis | § | 0.31 | 0.29 | 0.22 | 0.24 | 0.24 | 0.32 | 0.31 | 0.30 | 0.27 | 0.25 |
| Lyme disease, total ^{§§} | 6.39 | 5.99 | 6.53 | 6.05 | 8.44 | 7.39 | 6.84 | 7.94 | 6.75 | 9.21 | 11.67 |
| confirmed | §§ | §§ | §§ | §§ | §§ | §§ | §§ | §§ | §§ | §§ | 9.59 |
| probable | §§ | §§ | §§ | §§ | §§ | §§ | §§ | §§ | §§ | §§ | 2.08 |
| Malaria | 0.60 | 0.61 | 0.57 | 0.55 | 0.51 | 0.49 | 0.51 | 0.51 | 0.50 | 0.47 | 0.42 |
| Measles | 0.04 | 0.04 | 0.03 | 0.04 | 0.02 | 0.02 | 0.01 | 0.02 | 0.02 | 0.01 | 0.05 |
| Meningococcal disease, invasive | | | | | | | | | | | |
| all serogroups | 1.01 | 0.92 | 0.83 | 0.83 | 0.64 | 0.61 | 0.47 | 0.42 | 0.40 | 0.36 | 0.39 |
| serogroup A,C,Y, and W-135 | ¶¶ | ¶¶ | ¶¶ | ¶¶ | ¶¶ | ¶¶ | ¶¶ | 0.10 | 0.11 | 0.11 | 0.11 |
| serogroup B | ¶¶ | ¶¶ | ¶¶ | ¶¶ | ¶¶ | ¶¶ | ¶¶ | 0.05 | 0.07 | 0.06 | 0.06 |
| other serogroup | ¶¶ | ¶¶ | ¶¶ | ¶¶ | ¶¶ | ¶¶ | ¶¶ | 0.01 | 0.01 | 0.01 | 0.01 |
| serogroup unknown | ¶¶ | ¶¶ | ¶¶ | ¶¶ | ¶¶ | ¶¶ | ¶¶ | 0.26 | 0.22 | 0.18 | 0.20 |
| Mumps | 0.25 | 0.14 | 0.13 | 0.10 | 0.10 | 0.08 | 0.09 | 0.11 | 2.22 | 0.27 | 0.15 |
| Novel influenza A virus infections | § | § | § | § | § | § | § | § | § | 0 | 0 |
| Pertussis | 2.74 | 2.67 | 2.88 | 2.69 | 3.47 | 4.04 | 8.88 | 8.72 | 5.27 | 3.49 | 4.40 |
| Plague | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.01 | 0 | 0 |
| Poliomyelitis, paralytic | 0.01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | — | — |
| Poliovirus infection, nonparalytic | § | § | § | § | § | § | § | § | § | — | — |
| Psittacosis | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0 | 0 | 0.01 | 0.01 | 0 | 0 |
| Q Fever ^{***} | § | 0 | 0.01 | 0.01 | 0.02 | 0.02 | 0.03 | 0.05 | 0.06 | 0.06 | 0.04 |
| acute | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | 0.04 |
| chronic | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | 0 |
| Rabies, human | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rocky Mountain spotted fever, total ^{†††} | 0.14 | 0.21 | 0.18 | 0.25 | 0.39 | 0.38 | 0.60 | 0.66 | 0.80 | 0.77 | 0.85 |
| confirmed | ††† | ††† | ††† | ††† | ††† | ††† | ††† | ††† | ††† | ††† | 0.06 |
| probable | ††† | ††† | ††† | ††† | ††† | ††† | ††† | ††† | ††† | ††† | 0.78 |
| Rubella | 0.13 | 0.21 | 0.06 | 0.01 | 0.01 | 0 | 0 | 0 | 0 | 0 | 0.01 |
| Rubella, congenital syndrome | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | — | — |
| Salmonellosis | 16.17 | 14.89 | 14.51 | 14.39 | 15.73 | 15.16 | 14.47 | 15.43 | 15.45 | 16.03 | 16.92 |
| SARS-CoV ^{§§§} | § | § | § | § | § | 0 | — | — | — | — | — |
| Shigellosis | 8.74 | 6.43 | 8.41 | 7.19 | 8.37 | 8.19 | 4.99 | 5.51 | 5.23 | 6.60 | 7.50 |
| Shiga toxin-producing <i>E. coli</i> (STEC) | § | § | § | § | § | § | § | § | 1.71 | 1.62 | 1.76 |
| Smallpox | § | § | § | § | § | § | — | — | — | — | — |
| Streptococcal disease, invasive, group A | 0.83 | 0.87 | 1.45 | 1.60 | 1.69 | 2.04 | 1.82 | 2.00 | 2.24 | 1.89 | 2.30 |
| Streptococcal, toxic-shock syndrome | 0.02 | 0.02 | 0.04 | 0.04 | 0.05 | 0.06 | 0.06 | 0.07 | 0.06 | 0.06 | 0.07 |
| <i>Streptococcus pneumoniae</i> , invasive disease | | | | | | | | | | | |
| drug resistant, all ages | 1.44 | 2.39 | 2.77 | 2.11 | 1.14 | 0.99 | 1.49 | 1.42 | 2.19 | 1.49 | 1.60 |
| age <5 yrs | — | — | — | — | — | — | — | — | — | 3.73 | 3.51 |
| non-drug resistant, age <5 yrs | § | § | § | 1.03 | 3.62 | 8.86 | 8.22 | 8.21 | 11.93 | 13.59 | 13.36 |
| Syphilis, total, all stages | 14.19 | 13.07 | 11.58 | 11.45 | 11.68 | 11.90 | 11.94 | 11.33 | 12.46 | 13.67 | 15.34 |
| congenital (age <1 yr) | 21.39 | 14.62 | 14.29 | 12.52 | 11.44 | 10.56 | 9.12 | 8.24 | 9.07 | 10.46 | 10.12 |
| primary and secondary | 2.61 | 2.50 | 2.19 | 2.17 | 2.44 | 2.49 | 2.71 | 2.97 | 3.29 | 3.83 | 4.48 |
| Tetanus | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Toxic-shock syndrome | 0.06 | 0.05 | 0.06 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.05 | 0.04 | 0.03 |
| Trichinellosis | 0.01 | 0 | 0.01 | 0.01 | 0.01 | 0 | 0 | 0.01 | 0.01 | 0 | 0.01 |
| Tuberculosis | 6.79 | 6.43 | 6.01 | 5.68 | 5.36 | 5.17 | 5.09 | 4.80 | 4.65 | 4.44 | 4.28 |
| Tularemia | § | § | 0.06 | 0.05 | 0.03 | 0.04 | 0.05 | 0.05 | 0.03 | 0.05 | 0.04 |
| Typhoid fever | 0.14 | 0.13 | 0.14 | 0.13 | 0.11 | 0.12 | 0.11 | 0.11 | 0.12 | 0.14 | 0.15 |
| Vancomycin-intermediate <i>Staphylococcus aureus</i> | § | § | § | § | § | § | — | 0 | 0 | 0.02 | 0.03 |
| Vancomycin-resistant <i>Staphylococcus aureus</i> | § | § | § | § | § | § | 0 | 0 | 0 | 0 | 0 |
| Varicella (chickenpox) ^{¶¶¶} | 70.28 | 44.56 | 26.18 | 19.51 | 10.27 | 7.27 | 18.41 | 19.64 | 28.65 | 18.68 | 13.56 |
| Vibriosis | § | § | § | § | § | § | § | § | § | 0.25 | 0.24 |
| Yellow fever | — | 0 | — | 0 | 0 | — | — | — | — | — | — |

* Per 100,000 population.

† Acquired immunodeficiency syndrome.

§ Not nationally notifiable.

¶ As of January 1, 2008, these categories were replaced with codes for *Anaplasma phagocytophilum*. Refer to Ehrlichiosis/Anaplasmosis.** Data for ehrlichiosis attributable to other or unspecified agents were being withheld from publication pending the outcome of discussions concerning 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 2005, 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 were included under the category of arboviral neuroinvasive disease. In addition, in 2005, nonneuroinvasive domestic arboviral diseases for the six domestic arboviruses listed above were included to the list of nationally notifiable diseases.

§§ National surveillance case definition revised in 2008; probable cases not previously reported.

¶¶ 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 vaccine preventable (serogroups A,C,Y, and W-135) from the non-preventable fraction of disease (serogroup B and others).

*** In 2008, Q fever acute and chronic reporting categories were recognized as a result of revision to the Q fever case definition. Before that time, case counts were not differentiated relative to acute and chronic Q fever cases.

††† Revision of national surveillance case definition distinguishing between confirmed and probable cases; total counts include six case reports with unknown case status.

§§§ Severe acute respiratory syndrome-associated coronavirus disease.

¶¶¶ Varicella became a nationally notifiable disease in 2003.

TABLE 8. Reported cases of notifiable diseases — United States, 2001–2008

| Disease | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---------|---------|---------|---------|---------|-----------|-----------|-----------|
| AIDS*† | 41,868 | 42,745 | 44,232 | 44,108 | 41,120 | 38,423 | 37,503 | 39,202† |
| Anthrax | 23 | 2 | — | — | — | 1 | 1 | — |
| Botulism, total (includes wound and unspecified) | 155 | 118 | 129 | 133 | 135 | 165 | 144 | 145 |
| foodborne | 39 | 28 | 20 | 16 | 19 | 20 | 32 | 17 |
| infant | 97 | 69 | 76 | 87 | 85 | 97 | 85 | 109 |
| Bruceellosis | 136 | 125 | 104 | 114 | 120 | 121 | 131 | 80 |
| Chancroid§ | 38 | 67 | 54 | 30 | 17 | 33 | 23 | 25 |
| <i>Chlamydia trachomatis</i> infections§ | 783,242 | 834,555 | 877,478 | 929,462 | 976,445 | 1,030,911 | 1,108,374 | 1,210,523 |
| Cholera | 3 | 2 | 2 | 5 | 8 | 9 | 7 | 5 |
| Coccidioidomycosis | 3,922 | 4,968 | 4,870 | 6,449 | 6,542 | 8,917 | 8,121 | 7,523 |
| Cryptosporidiosis | 3,785 | 3,016 | 3,506 | 3,577 | 5,659 | 6,071 | 11,170 | 9,113 |
| Cyclosporiasis | 147 | 156 | 75 | 171 | 543 | 137 | 93 | 139 |
| Diphtheria | 2 | 1 | 1 | — | — | — | — | — |
| Domestic arboviral diseases¶ | | | | | | | | |
| California serogroup virus | | | | | | | | |
| neuroinvasive | — | — | — | — | 73 | 64 | 50 | 55 |
| nonneuroinvasive | ** | ** | ** | ** | 7 | 5 | 5 | 7 |
| Eastern equine encephalitis virus | | | | | | | | |
| neuroinvasive | — | — | — | — | 21 | 8 | 3 | 4 |
| nonneuroinvasive | ** | ** | ** | ** | — | — | 1 | — |
| Powassan virus | | | | | | | | |
| neuroinvasive | — | — | — | — | 1 | 1 | 7 | 2 |
| nonneuroinvasive | ** | ** | ** | ** | — | — | — | — |
| St. Louis encephalitis virus | | | | | | | | |
| neuroinvasive | — | — | — | — | 7 | 7 | 8 | 8 |
| nonneuroinvasive | ** | ** | ** | ** | 6 | 3 | 1 | 5 |
| West Nile virus | | | | | | | | |
| neuroinvasive | — | — | — | — | 1,309 | 1,495 | 1,227 | 689 |
| nonneuroinvasive | ** | ** | ** | ** | 1,691 | 2,744 | 2,403 | 667 |
| Western equine encephalitis virus | | | | | | | | |
| neuroinvasive | — | — | — | — | — | — | — | — |
| nonneuroinvasive | ** | ** | ** | ** | — | — | — | — |
| Ehrlichiosis | | | | | | | | |
| human granulocytic (HGE) | 261 | 511 | 362 | 537 | 786 | 646 | 834 | †† |
| human monocytic (HME) | 142 | 216 | 321 | 338 | 506 | 578 | 828 | †† |
| human (other and unspecified) | §§ | §§ | §§ | §§ | 112 | 231 | 337 | †† |
| Ehrlichiosis/Anaplasmosis | | | | | | | | |
| <i>Ehrlichia chaffeensis</i> | ** | ** | ** | ** | ** | ** | ** | 957 |
| <i>Ehrlichia ewingii</i> | ** | ** | ** | ** | ** | ** | ** | 9 |
| <i>Anaplasma phagocytophilum</i> | ** | ** | ** | ** | ** | ** | ** | 1,009 |
| Undetermined | ** | ** | ** | ** | ** | ** | ** | 132 |
| Encephalitis/Meningitis, arboviral | | | | | | | | |
| California serogroup virus | 128 | 164 | 108 | 112 | ¶¶ | ¶¶ | ¶¶ | ¶¶ |
| Eastern equine virus | 9 | 10 | 14 | 6 | ¶¶ | ¶¶ | ¶¶ | ¶¶ |
| Powassan virus | ** | 1 | — | 1 | ¶¶ | ¶¶ | ¶¶ | ¶¶ |
| St. Louis virus | 79 | 28 | 41 | 12 | ¶¶ | ¶¶ | ¶¶ | ¶¶ |
| West Nile virus | ** | 2,840 | 2,866 | 1,142 | ¶¶ | ¶¶ | ¶¶ | ¶¶ |
| Western equine virus | — | — | — | — | ¶¶ | ¶¶ | ¶¶ | ¶¶ |
| Enterohemorrhagic <i>Escherichia coli</i> infection | | | | | | | | |
| Shiga toxin-positive | | | | | | | | |
| O157:H7 | 3,287 | 3,840 | 2,671 | 2,544 | 2,621 | ** | ** | ** |
| non-O157 | 171 | 194 | 252 | 316 | 501 | ** | ** | ** |
| not serogrouped | 20 | 60 | 156 | 308 | 407 | ** | ** | ** |

See footnote on page 83.

TABLE 8. (Continued) Reported cases of notifiable diseases — United States, 2001–2008

| Disease | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--|---------|---------|---------|---------|---------|---------|---------|---------|
| Giardiasis | ** | 21,206 | 19,709 | 20,636 | 19,733 | 18,953 | 19,417 | 18,908 |
| Gonorrhea [§] | 361,705 | 351,852 | 335,104 | 330,132 | 339,593 | 358,366 | 355,991 | 336,742 |
| <i>Haemophilus influenzae</i> , invasive disease | | | | | | | | |
| all ages, serotypes | 1,597 | 1,743 | 2,013 | 2,085 | 2,304 | 2,496 | 2,541 | 2,886 |
| age <5 yrs | | | | | | | | |
| serotype b | ** | 34 | 32 | 19 | 9 | 29 | 22 | 30 |
| nonsertotype b | ** | 144 | 117 | 135 | 135 | 175 | 199 | 244 |
| unknown serotype | ** | 153 | 227 | 177 | 217 | 179 | 180 | 163 |
| Hansen disease (Leprosy) | 79 | 96 | 95 | 105 | 87 | 66 | 101 | 80 |
| Hantavirus pulmonary syndrome | 8 | 19 | 26 | 24 | 26 | 40 | 32 | 18 |
| Hemolytic uremic syndrome postdiarrheal | 202 | 216 | 178 | 200 | 221 | 288 | 292 | 330 |
| Hepatitis, viral, acute*** | | | | | | | | |
| A | 10,609 | 8,795 | 7,653 | 5,683 | 4,488 | 3,579 | 2,979 | 2,585 |
| B | 7,843 | 7,996 | 7,526 | 6,212 | 5,119 | 4,713 | 4,519 | 4,033 |
| C | 3,976 | 1,835 | 1,102 | 720 | 652 | 766 | 845 | 877 |
| Influenza-associated pediatric mortality | ** | ** | ** | ** | 45 | 43 | 77 | 90 |
| Legionellosis | 1,168 | 1,321 | 2,232 | 2,093 | 2,301 | 2,834 | 2,716 | 3,181 |
| Listeriosis | 613 | 665 | 696 | 753 | 896 | 884 | 808 | 759 |
| Lyme disease, total††† | 17,029 | 23,763 | 21,273 | 19,804 | 23,305 | 19,931 | 27,444 | 35,198 |
| confirmed | ††† | ††† | ††† | ††† | ††† | ††† | ††† | 28,921 |
| probable | ††† | ††† | ††† | ††† | ††† | ††† | ††† | 6,277 |
| Malaria | 1,544 | 1,430 | 1,402 | 1,458 | 1,494 | 1,474 | 1,408 | 1,255 |
| Measles | 116 | 44 | 56 | 37 | 66 | 55 | 43 | 140 |
| Meningococcal disease, invasive ^{§§§} | | | | | | | | |
| all serogroups | 2,333 | 1,814 | 1,756 | 1,361 | 1,245 | 1,194 | 1,077 | 1,172 |
| serogroup A,C,Y, and W-135 | — | — | — | — | 297 | 318 | 325 | 330 |
| serogroup B | — | — | — | — | 156 | 193 | 167 | 188 |
| other serogroup | — | — | — | — | 27 | 32 | 35 | 38 |
| serogroup unknown | — | — | — | — | 765 | 651 | 550 | 616 |
| Mumps | 266 | 270 | 231 | 258 | 314 | 6,584 | 800 | 454 |
| Novel influenza A virus infections | ** | ** | ** | ** | ** | ** | 4 | 2 |
| Pertussis | 7,580 | 9,771 | 11,647 | 25,827 | 25,616 | 15,632 | 10,454 | 13,278 |
| Plague | 2 | 2 | 1 | 3 | 8 | 17 | 7 | 3 |
| Poliomyelitis, paralytic ^{¶¶¶} | — | — | — | — | 1 | — | — | — |
| Poliovirus infection, nonparalytic | — | — | — | — | — | — | — | — |
| Psittacosis | 25 | 18 | 12 | 12 | 16 | 21 | 12 | 8 |
| Q Fever**** | 26 | 61 | 71 | 70 | 136 | 169 | 171 | 120 |
| acute | **** | **** | **** | **** | **** | **** | **** | 106 |
| chronic | **** | **** | **** | **** | **** | **** | **** | 14 |
| Rabies | | | | | | | | |
| animal | 7,150 | 7,609 | 6,846 | 6,345 | 5,915 | 5,534 | 5,862 | 4,196 |
| human | 1 | 3 | 2 | 7 | 2 | 3 | 1 | 2 |
| Rocky Mountain spotted fever, total†††† | 695 | 1,104 | 1,091 | 1,713 | 1,936 | 2,288 | 2,221 | 2,563 |
| confirmed | †††† | †††† | †††† | †††† | †††† | †††† | †††† | 190 |
| probable | †††† | †††† | †††† | †††† | †††† | †††† | †††† | 2,367 |
| Rubella | 23 | 18 | 7 | 10 | 11 | 11 | 12 | 16 |
| Rubella, congenital syndrome | 3 | 1 | 1 | — | 1 | 1 | — | — |
| Salmonellosis | 40,495 | 44,264 | 43,657 | 42,197 | 45,322 | 45,808 | 47,995 | 51,040 |
| SARS-CoV ^{§§§§} | ** | ** | 8 | — | — | — | — | — |
| Shiga toxin-producing <i>Escherichia coli</i> (STEC) | ** | ** | ** | ** | ** | 4,432 | 4,847 | 5,309 |
| Shigellosis | 20,221 | 23,541 | 23,581 | 14,627 | 16,168 | 15,503 | 19,758 | 22,625 |

See footnote on page 83.

TABLE 8. (Continued) Reported cases of notifiable diseases — United States, 2001–2008

| Disease | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|
| Streptococcal disease, invasive, group A | 3,750 | 4,720 | 5,872 | 4,395 | 4,715 | 5,407 | 5,294 | 5,674 |
| Streptococcal, toxic-shock syndrome | 77 | 118 | 161 | 132 | 129 | 125 | 132 | 157 |
| <i>Streptococcus pneumoniae</i> , invasive disease | | | | | | | | |
| drug resistant, all ages | 2,896 | 2,546 | 2,356 | 2,590 | 2,996 | 3,308 | 3,329 | 3,448 |
| age <5 yrs | — | — | — | — | — | — | 563 | 532 |
| non-drug resistant, age <5 yrs | 498 | 513 | 845 | 1,162 | 1,495 | 1,861 | 2,032 | 1,998 |
| Syphilis, all stages [§] | 32,221 | 32,871 | 34,270 | 33,401 | 33,278 | 36,935 | 40,920 | 46,277 |
| congenital (age <1 yr) | 504 | 460 | 432 | 375 | 339 | 382 | 430 | 431 |
| primary and secondary | 6,103 | 6,862 | 7,177 | 7,980 | 8,724 | 9,756 | 11,466 | 13,500 |
| Tetanus | 37 | 25 | 20 | 34 | 27 | 41 | 28 | 19 |
| Toxic-shock syndrome | 127 | 109 | 133 | 95 | 90 | 101 | 92 | 71 |
| Trichinellosis | 22 | 14 | 6 | 5 | 16 | 15 | 5 | 39 |
| Tuberculosis ^{¶¶¶¶} | 15,989 | 15,075 | 14,874 | 14,517 | 14,097 | 13,779 | 13,299 | 12,904 |
| Tularemia | 129 | 90 | 129 | 134 | 154 | 95 | 137 | 123 |
| Typhoid fever | 368 | 321 | 356 | 322 | 324 | 353 | 434 | 449 |
| Vancomycin-intermediate <i>Staphylococcus aureus</i> | ** | ** | ** | — | 3 | 6 | 37 | 63 |
| Vancomycin-resistant <i>Staphylococcus aureus</i> | ** | ** | ** | 1 | 2 | 1 | 2 | — |
| Varicella (chickenpox) ^{*****} | 22,536 | 22,841 | 20,948 | 32,931 | 32,242 | 48,445 | 40,146 | 30,386 |
| Varicella (deaths) ^{†††††} | ** | 9 | 2 | 9 | 3 | — | 6 | 2 |
| Vibriosis (noncholera <i>Vibrio</i> species infections) | ** | ** | ** | ** | ** | ** | 549 | 588 |
| 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, 2008.

§ Cases were reported to the Division of STD Prevention, NCHHSTP, as of May 8, 2009.

¶ Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of May 1, 2009.

** Not nationally notifiable.

†† As of January 1, 2008, these categories were replaced with codes for *Anaplasma phagocytophilum*. Refer to Ehrlichiosis/Anaplasmosis.

§§ Data for ehrlichiosis attributable to other or unspecified agents were being withheld from publication pending the outcome of discussions concerning 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 2005, 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 were included under the category of arboviral neuroinvasive disease. In addition, in 2005, nonneuroinvasive domestic arboviral diseases 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 hepatitis B chronic, hepatitis B, perinatal infection, and hepatitis C, virus infection (past or present) are not included because they are undergoing data quality review.

††† National surveillance case definition revised in 2008; probable cases not previously reported.

§§§ 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, and W-135) from the nonvaccine-preventable fraction of disease (serogroup B and others).

¶¶¶ Cases of vaccine-associated paralytic poliomyelitis 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).

***** In 2008, Q fever acute and chronic reporting categories were recognized as a result of revision to the Q fever case definition. Before that time, case counts were not differentiated relative to acute and chronic Q fever cases.

†††† Revision of national surveillance case definition distinguishing between confirmed and probable cases; total counts include six case reports with unknown case status.

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

¶¶¶¶ Cases were reported to the Division of TB Elimination, NCHHSTP, as of May 15, 2009.

***** 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 June 30, 2009.

§§§§§ 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, 1993–2000

| Disease | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| AIDS* | 103,691 | 78,279 | 71,547 | 66,885 | 58,492 | 46,521 | 45,104 | 40,758 |
| Amebiasis | 2,970 | 2,983 | † | † | † | † | † | † |
| Anthrax | — | — | — | — | — | — | — | 1 |
| Aseptic meningitis | 12,848 | 8,932 | † | † | † | † | † | † |
| Botulism, total (including wound and unspecified) | 97 | 143 | 97 | 119 | 132 | 116 | 154 | 138 |
| foodborne | 27 | 50 | 24 | 25 | 31 | 22 | 23 | 23 |
| infant | 65 | 85 | 54 | 80 | 79 | 65 | 92 | 93 |
| Brucellosis | 120 | 119 | 98 | 112 | 98 | 79 | 82 | 87 |
| Chancroid§ | 1,399 | 773 | 606 | 386 | 243 | 189 | 143 | 78 |
| <i>Chlamydia trachomatis</i> infections§ | † | † | 477,638 | 498,884 | 526,671 | 604,420 | 656,721 | 702,093 |
| Cholera | 18 | 39 | 23 | 4 | 6 | 17 | 6 | 5 |
| Coccidioidomycosis | † | † | 1,212 | 1,697 | 1,749 | 2,274 | 2,826 | 2,867 |
| Cryptosporidiosis | † | † | 2,970 | 2,827 | 2,566 | 3,793 | 2,361 | 3,128 |
| Diphtheria | — | 2 | — | 2 | 4 | 1 | 1 | 1 |
| Encephalitis, primary | 919 | 717 | † | † | † | † | † | † |
| Postinfectious | 170 | 143 | † | † | † | † | † | † |
| Encephalitis/Meningitis | | | | | | | | |
| California serogroup virus | † | † | 11 | 123 | 129 | 97 | 70 | 114 |
| Eastern equine virus | † | † | 1 | 5 | 14 | 4 | 5 | 3 |
| St. Louis virus | † | † | † | 2 | 13 | 24 | 4 | 2 |
| Western equine virus | † | † | — | 2 | — | — | 1 | — |
| <i>Escherichia coli</i> O157:H7 | † | 1,420 | 2,139 | 2,741 | 2,555 | 3,161 | 4,513 | 4,528 |
| Gonorrhea§ | 439,673 | 418,068 | 392,848 | 325,883 | 324,907 | 355,642 | 360,076 | 358,995 |
| <i>Granuloma inguinale</i> | 19 | 3 | † | † | † | † | † | † |
| <i>Haemophilus influenzae</i> , invasive disease all ages, serotypes | 1,419 | 1,174 | 1,180 | 1,170 | 1,162 | 1,194 | 1,309 | 1,398 |
| Hansen disease (Leprosy) | 187 | 136 | 144 | 112 | 122 | 108 | 108 | 91 |
| Hantavirus pulmonary syndrome | † | † | — | NA | NA | NA | 33 | 41 |
| Hemolytic uremic syndrome, postdiarrheal | † | † | 72 | 97 | 91 | 119 | 181 | 249 |
| Hepatitis, viral, acute | | | | | | | | |
| A | 24,238 | 26,796 | 31,582 | 31,032 | 30,021 | 23,229 | 17,047 | 13,397 |
| B | 13,361 | 12,517 | 10,805 | 10,637 | 10,416 | 10,258 | 7,694 | 8,036 |
| C/non-A, non-B¶ | 4,786 | 4,470 | 4,576 | 3,716 | 3,816 | 3,518 | 3,111 | 3,197 |
| unspecified | 627 | 444 | † | † | † | † | † | † |
| Legionellosis | 1,280 | 1,615 | 1,241 | 1,198 | 1,163 | 1,355 | 1,108 | 1,127 |
| Leptospirosis | 51 | 38 | † | † | † | † | † | † |
| Listeriosis | † | † | † | † | † | † | † | 755 |
| Lyme disease | 8,257 | 13,043 | 11,700 | 16,455 | 12,801 | 16,801 | 16,273 | 17,730 |
| <i>Lymphogranuloma venereum</i> | 285 | 235 | † | † | † | † | † | † |
| Malaria | 1,411 | 1,229 | 1,419 | 1,800 | 2,001 | 1,611 | 1,666 | 1,560 |
| Measles | 312 | 963 | 309 | 508 | 138 | 100 | 100 | 86 |

See footnote on next page.

TABLE 9. (Continued) Reported cases of notifiable diseases — United States, 1993–2000

| Disease | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---------|---------|---------|--------|--------|--------|--------|--------|
| Meningococcal disease, invasive | 2,637 | 2,886 | 3,243 | 3,437 | 3,308 | 2,725 | 2,501 | 2,256 |
| Mumps | 1,692 | 1,537 | 906 | 751 | 683 | 666 | 387 | 338 |
| Murine typhus fever | 25 | † | † | † | † | † | † | † |
| Pertussis | 6,586 | 4,617 | 5,137 | 7,796 | 6,564 | 7,405 | 7,288 | 7,867 |
| Plague | 10 | 17 | 9 | 5 | 4 | 9 | 9 | 6 |
| Poliomyelitis, paralytic | 4 | 8 | 7 | 7 | 6 | 3 | 2 | — |
| Psittacosis | 60 | 38 | 64 | 42 | 33 | 47 | 16 | 17 |
| Q Fever | † | † | † | † | † | † | † | 21 |
| Rabies | | | | | | | | |
| animal | 9,377 | 8,147 | 7,811 | 6,982 | 8,105 | 7,259 | 6,730 | 6,934 |
| human | 3 | 6 | 5 | 3 | 2 | 1 | — | 4 |
| Rheumatic fever, acute | 112 | 112 | † | † | † | † | † | † |
| Rocky Mountain spotted fever | 456 | 465 | 590 | 831 | 409 | 365 | 579 | 495 |
| Rubella | 192 | 227 | 128 | 238 | 181 | 364 | 267 | 176 |
| Rubella, congenital syndrome | 5 | 7 | 6 | 4 | 5 | 7 | 9 | 9 |
| Salmonellosis, excluding typhoid fever | 41,641 | 43,323 | 45,970 | 45,471 | 41,901 | 43,694 | 40,596 | 39,574 |
| Shigellosis | 32,198 | 29,769 | 32,080 | 25,978 | 23,117 | 23,626 | 17,521 | 22,922 |
| Streptococcal disease, invasive, Group A | † | † | 613 | 1,445 | 1,973 | 2,260 | 2,667 | 3,144 |
| Streptococcal toxic-shock syndrome | † | † | 10 | 19 | 33 | 58 | 65 | 83 |
| <i>Streptococcus pneumoniae</i> , invasive disease drug-resistant, all ages | † | † | 309 | 1,514 | 1,799 | 2,823 | 4,625 | 4,533 |
| Syphilis, total, all stages [§] | 101,259 | 81,696 | 68,953 | 52,976 | 46,540 | 37,977 | 35,628 | 31,575 |
| congenital (age <1 yr) | 3,420 | 2,452 | 1,863 | 1,282 | 1,081 | 843 | 579 | 580 |
| primary and secondary | 26,498 | 20,627 | 16,500 | 11,387 | 8,550 | 6,993 | 6,657 | 5,979 |
| Tetanus | 48 | 51 | 41 | 36 | 50 | 41 | 40 | 35 |
| Toxic-shock syndrome | 212 | 192 | 191 | 145 | 157 | 138 | 113 | 135 |
| Trichinellosis | 16 | 32 | 29 | 11 | 13 | 19 | 12 | 16 |
| Tuberculosis** | 25,313 | 24,361 | 22,860 | 21,337 | 19,851 | 18,361 | 17,531 | 16,377 |
| Tularemia | 132 | 96 | † | † | † | † | † | 142 |
| Typhoid fever | 440 | 441 | 369 | 396 | 365 | 375 | 346 | 377 |
| Varicella†† | 134,722 | 151,219 | 120,624 | 83,511 | 98,727 | 82,455 | 46,016 | 27,382 |
| Yellow fever ^{§§} | — | — | — | 1 | — | — | — | — |

* Acquired immunodeficiency syndrome.

† Not nationally notifiable.

§ Cases were reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP).

¶ The ant-hepatitis C virus antibody test became available in May 1990.

* Cases were reported to 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, 1985–1992

| Disease | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| AIDS† | 8,249 | 12,932 | 21,070 | 31,001 | 33,722 | 41,595 | 43,672 | 45,472 |
| Amebiasis | 4,433 | 3,532 | 3,123 | 2,860 | 3,217 | 3,328 | 2,989 | 2,942 |
| Anthrax | — | — | 1 | 2 | — | — | — | 1 |
| Aseptic meningitis | 10,619 | 11,374 | 11,487 | 7,234 | 10,274 | 11,852 | 14,526 | 12,223 |
| Botulism, total (including wound and unspecified) | 122 | 109 | 82 | 84 | 89 | 92 | 114 | 91 |
| foodborne | 49 | 23 | 17 | 28 | 23 | 23 | 27 | 21 |
| infant | 70 | 79 | 59 | 50 | 60 | 65 | 81 | 66 |
| Bruceellosis | 153 | 106 | 129 | 96 | 95 | 82 | 104 | 105 |
| Chancroid | 2,067 | 3,756 | 4,998 | 5,001 | 4,692 | 4,212 | 3,476 | 1,886 |
| Cholera | 4 | 23 | 6 | 8 | — | 6 | 26 | 103 |
| Diphtheria‡ | 3 | — | 3 | 2 | 3 | 4 | 5 | 4 |
| Encephalitis, primary | 1,376 | 1,302 | 1,418 | 882 | 981 | 1,341 | 1,021 | 774 |
| Postinfectious¶ | 161 | 124 | 121 | 121 | 88 | 105 | 82 | 129 |
| Gonorrhea | 911,419 | 900,868 | 780,905 | 719,536 | 733,151 | 690,169 | 620,478 | 501,409 |
| <i>Granuloma inguinale</i> | 44 | 61 | 22 | 11 | 7 | 97 | 29 | 6 |
| Hansen disease (Leprosy) | 361 | 270 | 238 | 184 | 163 | 198 | 154 | 172 |
| Hepatitis, viral, acute | | | | | | | | |
| A | 23,210 | 23,430 | 25,280 | 28,507 | 35,821 | 31,441 | 24,378 | 23,112 |
| B | 26,611 | 26,107 | 25,916 | 23,177 | 23,419 | 21,102 | 18,003 | 16,126 |
| C/non-A, non-B** | 4,184 | 3,634 | 2,999 | 2,619 | 2,529 | 2,553 | 3,582 | 6,010 |
| unspecified | 5,517 | 3,940 | 3,102 | 2,470 | 2,306 | 1,671 | 1,260 | 884 |
| Legionellosis | 830 | 980 | 1,038 | 1,085 | 1,190 | 1,370 | 1,317 | 1,339 |
| Leptospirosis | 57 | 41 | 43 | 54 | 93 | 77 | 58 | 54 |
| Lyme disease | †† | †† | †† | †† | †† | †† | †† | 9,895 |
| <i>Lymphogranuloma venereum</i> | 226 | 396 | 303 | 185 | 189 | 277 | 471 | 302 |
| Malaria | 1,049 | 1,123 | 944 | 1,099 | 1,277 | 1,292 | 1,278 | 1,087 |
| Measles | 2,822 | 6,282 | 3,655 | 3,396 | 18,193 | 27,786 | 9,643 | 2,237 |
| Meningococcal disease, invasive | 2,479 | 2,594 | 2,930 | 2,964 | 2,727 | 2,451 | 2,130 | 2,134 |
| Mumps | 2,982 | 7,790 | 12,848 | 4,866 | 5,712 | 5,292 | 4,264 | 2,572 |
| Murine typhus fever | 37 | 67 | 49 | 54 | 41 | 50 | 43 | 28 |
| Pertussis | 3,589 | 4,195 | 2,823 | 3,450 | 4,157 | 4,570 | 2,719 | 4,083 |
| Plague | 17 | 10 | 12 | 15 | 4 | 2 | 11 | 13 |
| Poliomyelitis, total | 8 | 10 | §§ | §§ | §§ | §§ | §§ | §§ |
| paralytic§§ | 8 | 10 | 9 | 9 | 11 | 6 | 10 | 6 |
| Psittacosis | 119 | 224 | 98 | 114 | 116 | 113 | 94 | 92 |
| Rabies | | | | | | | | |
| animal | 5,565 | 5,504 | 4,658 | 4,651 | 4,724 | 4,826 | 6,910 | 8,589 |
| human | 1 | — | 1 | — | 1 | 1 | 3 | 1 |
| Rheumatic fever, acute | 90 | 147 | 141 | 158 | 144 | 108 | 127 | 75 |
| Rocky Mountain spotted fever | 714 | 760 | 604 | 609 | 623 | 651 | 628 | 502 |
| Rubella | 630 | 551 | 306 | 225 | 396 | 1,125 | 1,401 | 160 |
| Rubella, congenital syndrome | — | 14 | 5 | 6 | 3 | 11 | 47 | 11 |
| Salmonellosis | 65,347 | 49,984 | 50,916 | 48,948 | 47,812 | 48,603 | 48,154 | 40,912 |
| Shigellosis | 17,057 | 17,138 | 23,860 | 30,617 | 25,010 | 27,077 | 23,548 | 23,931 |
| Syphilis, primary and secondary | 27,131 | 27,883 | 35,147 | 40,117 | 44,540 | 50,223 | 42,935 | 33,973 |
| congenital (age <1 yr) | 329 | 410 | 480 | 741 | 1,837 | 3,865 | 4,424 | 4,067 |
| total, all stages | 67,563 | 68,215 | 86,545 | 103,437 | 110,797 | 134,255 | 128,569 | 112,581 |
| Tetanus | 83 | 64 | 48 | 53 | 53 | 64 | 57 | 45 |
| Toxic-shock syndrome | 384 | 412 | 372 | 390 | 400 | 322 | 280 | 244 |
| Trichinosis | 61 | 39 | 40 | 45 | 30 | 129 | 62 | 41 |
| Tuberculosis | 22,201 | 22,768 | 22,517 | 22,436 | 23,495 | 25,701 | 26,283 | 26,673 |
| Tularemia | 177 | 170 | 214 | 201 | 152 | 152 | 193 | 159 |
| Typhoid fever | 402 | 362 | 400 | 436 | 460 | 552 | 501 | 414 |
| Varicella | 178,162 | 183,243 | 213,196 | 192,857 | 185,441 | 173,099 | 147,076 | 158,364 |

* No cases of yellow fever were reported during 1985–1992.

† Acquired immunodeficiency syndrome.

‡ Cutaneous diphtheria ceased being notifiable nationally after 1979.

¶ Beginning in 1984, data were recorded by date of report to state health departments. Before 1984, data were recorded by onset date.

** The anti-hepatitis C virus antibody test became available in May 1990.

†† Not nationally notifiable.

§§ 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, 1977–1984

| Disease | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 |
|---|-----------|-----------|-----------|-----------|---------|---------|---------|---------|
| AIDS† | § | § | § | § | § | § | § | 4,445 |
| Amebiasis | 3,044 | 3,937 | 4,107 | 5,271 | 6,632 | 7,304 | 6,658 | 5,252 |
| Anthrax | — | 6 | — | 1 | — | — | — | 1 |
| Aseptic meningitis | 4,789 | 6,573 | 8,754 | 8,028 | 9,547 | 9,680 | 12,696 | 8,326 |
| Botulism, total (including wound and unspecified) | 129 | 105 | 45 | 89 | 103 | 97 | 133 | 123 |
| Brucellosis | 232 | 179 | 215 | 183 | 185 | 173 | 200 | 131 |
| Chancroid | 455 | 521 | 840 | 788 | 850 | 1,392 | 847 | 666 |
| Cholera | 3 | 12 | 1 | 9 | 19 | — | 1 | 1 |
| Diphtheria | 84 | 76 | 59 | 3 | 5 | 2 | 5 | 1 |
| Encephalitis | | | | | | | | |
| primary | 1,414 | 1,351 | 1,504 | 1,362 | 1,492 | 1,464 | 1,761 | 1,257 |
| postinfectious | 119 | 78 | 84 | 40 | 43 | 36 | 34 | 108 |
| Gonorrhea | 1,002,219 | 1,013,436 | 1,004,058 | 1,004,029 | 990,864 | 960,633 | 900,435 | 878,556 |
| <i>Granuloma inguinale</i> | 75 | 72 | 76 | 51 | 66 | 17 | 24 | 30 |
| Hansen disease (Leprosy) | 151 | 168 | 185 | 223 | 256 | 250 | 259 | 290 |
| Hepatitis | | | | | | | | |
| A (infectious) | 31,153 | 29,500 | 30,407 | 29,087 | 25,802 | 23,403 | 21,532 | 22,040 |
| B (serum) | 16,831 | 15,016 | 15,452 | 19,015 | 21,152 | 22,177 | 24,318 | 26,115 |
| C/non-A, non-B¶ | § | § | § | § | § | § | § | 3,871 |
| unspecified | 8,639 | 8,776 | 10,534 | 11,894 | 10,975 | 8,564 | 7,149 | 5,531 |
| Legionellosis | 359 | 761 | 593 | 475 | 408 | 654 | 852 | 750 |
| Leptospirosis | 71 | 110 | 94 | 85 | 82 | 100 | 61 | 40 |
| <i>Lymphogranuloma venereum</i> | 348 | 284 | 250 | 199 | 263 | 235 | 335 | 170 |
| Malaria | 547 | 731 | 894 | 2,062 | 1,388 | 1,056 | 813 | 1,007 |
| Measles | 57,345 | 26,871 | 13,597 | 13,506 | 3,124 | 1,714 | 1,497 | 2,587 |
| Meningococcal disease, invasive | 1,828 | 2,505 | 2,724 | 2,840 | 3,525 | 3,056 | 2,736 | 2,746 |
| Mumps | 21,436 | 16,817 | 14,225 | 8,576 | 4,941 | 5,270 | 3,355 | 3,021 |
| Murine typhus fever | 75 | 46 | 69 | 81 | 61 | 58 | 62 | 53 |
| Pertussis | 2,177 | 2,063 | 1,623 | 1,730 | 1,248 | 1,895 | 2,463 | 2,276 |
| Plague | 18 | 12 | 13 | 18 | 13 | 19 | 40 | 31 |
| Poliomyelitis, total | 19 | 8 | 22 | 9 | 10 | 12 | 13 | 9 |
| paralytic | 19 | 8 | 22 | 9 | 10 | 12 | 13 | 9 |
| Psittacosis | 94 | 140 | 137 | 124 | 136 | 152 | 142 | 172 |
| Rabies | | | | | | | | |
| animal | 3,130 | 3,254 | 5,119 | 6,421 | 7,118 | 6,212 | 5,878 | 5,567 |
| human | 1 | 4 | 4 | — | 2 | — | 2 | 3 |
| Rheumatic fever, acute | 1,738 | 851 | 629 | 432 | 264 | 137 | 88 | 117 |
| Rocky Mountain spotted fever | 1,153 | 1,063 | 1,070 | 1,163 | 1,192 | 976 | 1,126 | 838 |
| Rubella | 20,395 | 18,269 | 11,795 | 3,904 | 2,077 | 2,325 | 970 | 752 |
| Rubella, congenital syndrome | 23 | 30 | 62 | 50 | 19 | 7 | 22 | 5 |
| Salmonellosis | 27,850 | 29,410 | 33,138 | 33,715 | 39,990 | 40,936 | 44,250 | 40,861 |
| Shigellosis | 16,052 | 19,511 | 20,135 | 19,041 | 9,859 | 18,129 | 19,719 | 17,371 |
| Syphilis, total, all stages | 64,621 | 64,875 | 67,049 | 68,832 | 72,799 | 75,579 | 74,637 | 69,888 |
| primary and secondary | 20,399 | 21,656 | 24,874 | 27,204 | 31,266 | 33,613 | 32,698 | 28,607 |
| congenital (age <1 yr) | 463 | 434 | 332 | 277 | 287 | 259 | 239 | 305 |
| Tetanus | 87 | 86 | 81 | 95 | 72 | 88 | 91 | 74 |
| Toxic-shock syndrome | § | § | § | § | § | § | § | 482 |
| Trichinosis | 143 | 67 | 157 | 131 | 206 | 115 | 45 | 68 |
| Tuberculosis | 30,145 | 28,521 | 27,669 | 27,749 | 27,373 | 25,520 | 23,846 | 22,255 |
| Tularemia | 165 | 141 | 196 | 234 | 288 | 275 | 310 | 291 |
| Typhoid fever | 398 | 505 | 528 | 510 | 584 | 425 | 507 | 390 |
| Varicella | 188,396 | 154,089 | 199,081 | 190,894 | 200,766 | 167,423 | 177,462 | 221,983 |

* No cases of yellow fever were reported during 1977–1984.

† Acquired immunodeficiency syndrome.

§ Not nationally notifiable.

¶ The anti-hepatitis C virus antibody test became available in May 1990.

TABLE 12. Number of deaths from selected nationally notifiable infectious diseases — United States, 2002–2006

| Cause of death | ICD-10* cause of death code | No. of deaths | | | | |
|--|-----------------------------|---------------|--------|--------|--------|--------|
| | | 2002 | 2003 | 2004 | 2005 | 2006 |
| AIDS† | B20-B24 | 14,095 | 13,658 | 13,063 | 12,543 | 12,133 |
| Anthrax | A22 | 0 | 0 | 0 | 0 | 0 |
| Encephalitis, arboviral | | | | | | |
| California serogroup virus | A83.5 | 0 | 0 | 0 | 1 | 1 |
| Eastern equine encephalitis virus | A83.2 | 1 | 1 | 2 | 2 | 2 |
| Powassan virus | A84.8 | 0 | 0 | 0 | 0 | 0 |
| St. Louis encephalitis virus | A83.3 | 3 | 2 | 2 | 1 | 2 |
| Western equine encephalitis virus | A83.1 | 0 | 0 | 0 | 0 | 0 |
| Botulism, foodborne | A05.1 | 2 | 6 | 0 | 5 | 3 |
| Brucellosis | A23 | 1 | 0 | 0 | 2 | 2 |
| Chancroid | A57 | 0 | 0 | 0 | 0 | 0 |
| <i>Chlamydia trachomatis</i> infections | A56 | 0 | 0 | 0 | 0 | 0 |
| Cholera | A00 | 0 | 0 | 0 | 0 | 0 |
| Coccidioidomycosis | B38 | 84 | 73 | 100 | 76 | 110 |
| Cryptosporidiosis | A07.2 | 1 | 0 | 1 | 2 | 2 |
| Cyclosporiasis | A07.8 | 0 | 0 | 0 | 0 | 0 |
| Diphtheria | A36 | 0 | 1 | 0 | 0 | 0 |
| Ehrlichiosis | A79.8 | 0 | 1 | 0 | 0 | 0 |
| Giardiasis | A07.1 | 1 | 0 | 1 | 0 | 1 |
| Gonococcal infections | A54 | 7 | 6 | 2 | 3 | 3 |
| <i>Haemophilus influenzae</i> | A49.2 | 7 | 5 | 11 | 4 | 4 |
| Hansen disease (Leprosy) | A30 | 2 | 2 | 5 | 1 | 1 |
| Hantavirus pulmonary syndrome | A98.5 | 0 | 0 | 0 | 0 | 8 |
| Hemolytic uremic syndrome, postdiarrheal | D59.3 | 35 | 29 | 27 | 30 | 29 |
| Hepatitis A, viral, acute | B15 | 76 | 54 | 58 | 43 | 34 |
| Influenza-associated pediatric mortality | J10, J11 | 25 | 146 | 51 | 61 | 62 |
| Legionellosis | A48.1 | 62 | 98 | 72 | 78 | 91 |
| Listeriosis | A32 | 32 | 33 | 37 | 31 | 30 |
| Lyme disease | A69.2, L90.4 | 6 | 4 | 6 | 7 | 5 |
| Malaria | B50-B54 | 12 | 4 | 8 | 6 | 9 |
| Measles | B05 | 0 | 1 | 0 | 1 | 0 |
| Meningococcal disease | A39 | 161 | 161 | 138 | 123 | 105 |
| Mumps | B26 | 1 | 0 | 0 | 0 | 1 |
| Pertussis | A37 | 18 | 11 | 16 | 31 | 9 |
| Plague | A20 | 0 | 0 | 1 | 1 | 3 |
| Poliomyelitis | A80 | 0 | 0 | 0 | 0 | 0 |
| Psittacosis | A70 | 0 | 0 | 0 | 0 | 0 |
| Q fever | A78 | 0 | 1 | 1 | 2 | 2 |
| Rabies, human | A82 | 3 | 2 | 3 | 1 | 2 |
| Rocky Mountain spotted fever | A77.0 | 8 | 9 | 5 | 6 | 4 |
| Rubella | B06 | 0 | 0 | 1 | 0 | 0 |
| Rubella congenital syndrome | P35.0 | 6 | 4 | 5 | 8 | 2 |
| Salmonellosis | A02 | 21 | 43 | 30 | 30 | 34 |
| Shiga toxin-producing <i>Escherichia coli</i> (STEC) | A04.0-A04.4 | 4 | 2 | 4 | 5 | 3 |
| Shigellosis | A03 | 4 | 2 | 0 | 9 | 3 |
| Smallpox | B03 | 0 | 0 | 0 | 0 | 0 |
| Streptococcal disease, invasive, group A | A40.0, A49.1 | 109 | 115 | 121 | 118 | 117 |
| <i>Streptococcus pneumoniae</i> , invasive disease (restricted to <5 years of age) | A40.3, B95.3, J13 | 13 | 15 | 13 | 12 | 22 |
| Syphilis, total, all stages | A50-A53 | 41 | 34 | 43 | 47 | 38 |
| Tetanus | A35 | 5 | 4 | 4 | 1 | 4 |
| Toxic-shock syndrome (other than streptococcal) | A48.3 | 78 | 71 | 71 | 55 | 57 |
| Trichinellosis | B75 | 0 | 0 | 0 | 0 | 1 |
| Tuberculosis | A16-A19 | 784 | 711 | 657 | 648 | 652 |
| Tularemia | A21 | 2 | 2 | 1 | 0 | 0 |
| Typhoid fever | A01.0 | 0 | 0 | 0 | 0 | 0 |
| Varicella | B01 | 32 | 16 | 19 | 13 | 18 |
| Yellow fever§ | A95 | 1 | 0 | 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, 1999–2006. Underlying causes of death are classified according to ICD-10. Data for 2007–2008 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.

§ 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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