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Summary of Notifiable Diseases — United States, 2009

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

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Preface

The *Summary of Notifiable Diseases— United States, 2009* contains the official statistics, in tabular and graphic form, for the reported occurrence of nationally notifiable infectious diseases in the United States for 2009. Unless otherwise noted, the data are final totals for 2009 reported as of June 30, 2010. 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 *Summary* publications from previous years.

The Highlights section presents noteworthy epidemiologic and prevention information for 2009 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 reported during 2009.* The tables provide the number of cases reported to CDC for 2009 and the distribution of cases by month, geographic location, and the patients' 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 1978. This section also includes a table enumerating deaths associated with specified notifiable diseases reported to CDC's National Center for Health Statistics (NCHS) during 2002–2007. 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 regarding 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 Diseases and Healthcare Information (proposed), Public Health Surveillance Program Office at soib@cdc.gov.

*No cases of diphtheria; poliovirus infection, nonparalytic; Powassan virus disease, non-neuroinvasive; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; and yellow fever were reported in 2009. 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 2009 are listed in this section. A notifiable disease is one for which regular, frequent, and timely information regarding individual cases is considered necessary for the prevention and control of the disease. A brief history of the reporting of nationally notifiable infectious diseases in the United States is available at http://www.cdc.gov/ncphi/disss/nndss/nndsshis.htm. In 1961, CDC assumed responsibility for the collection and publication of data on nationally notifiable diseases. NNDSS is neither a single surveillance system nor a method of reporting. Certain NNDSS data are reported to CDC through separate surveillance information systems and through different reporting mechanisms; however, these data are aggregated and compiled for publication purposes.

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

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

Infectious Diseases Designated as Notifiable at the National Level during 2009*

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

* Position Statements the Council of State and Territorial Epidemiologists approved in 2008 for national surveillance were implemented beginning in January 2009. No new conditions were added to the notifiable disease list in 2009.
† In a 2009 position statement the Council of State & Territorial Epidemiologists approved the modified national TB surveillance case definition.
§ AIDS has been reclassified as HIV stage III.

Data Sources

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

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

Data in the *Summary* were derived primarily from reports transmitted to CDC from health departments in the 50 states, five territories, New York City, and the District of Columbia. Data were reported for *MMWR* weeks 1–52, which correspond to the period for the week ending January 10, 2009, through the week ending January 2, 2010. More information regarding infectious notifiable diseases, including case definitions, is available at http://www.cdc.gov/ncphi/disss/nndss/nndsshis.htm. Policies for reporting notifiable disease cases can vary by disease or reporting jurisdiction. The case-status categories used to determine which cases reported to NNDSS are published by disease or condition and are listed in the print criteria column of the 2009 NNDSS event code list (Exhibit).

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

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

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

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

Division of Tuberculosis Elimination (tuberculosis)

National Center for Immunization and Respiratory Diseases

Influenza Division (influenza-associated pediatric mortality)

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

National Center for Emerging and Zoonotic Infectious Diseases

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, 2008 U.S. resident population from the vintage 2008 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 September 2, 2009, and is available at http://www.cdc.gov/nchs/nvss/bridged_race.htm.

Populations for territories are 2008 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).

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 programs. 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 information systems to implement 1997 OMB standards. In 2005 the Sexually Transmitted Diseases*Management Information System also was updated to implement the 1997 OMB standards. However other diseases reported to the NNDSS using 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; thus, some data are currently reported to CDC using NETSS 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, using NETSS, states began electronically capturing and reporting individual case reports to CDC without personal identifiers. 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 levels. 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 are in the final stage of adopting their NEDSS-compatible system. 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 2009, 16 states used NBS to transmit nationally notifiable infectious diseases to CDC, 27 states used a NEDSS-compatible based system, and the remaining states and territorial jurisdictions continued to use NETSS or other applications. Additional information concerning NEDSS is available at http://www.cdc.gov/phin/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 NNDSS reporting jurisdictions was determined by analyzing results of the 2009 CSTE State Reportable Conditions Assessment (SRCA). This assessment solicited information from each NNDSS reporting jurisdiction (all 50 U.S. states, the District of Columbia, New York City, and five U.S. territories) regarding which public health conditions were reportable for more than 6 months in 2009 by clinicians, laboratories, hospitals, or "other" public health reporters, as mandated by law or regulation. To assist in the implementation of SRCA, the NNDSS program provided technical assistance to the CSTE for the 2009 SRCA.

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 2009 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 NNDSS. Moreover, to determine whether a condition included in 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 SRCA. Analyzed results of the 2009 SRCA were used to determine whether a NNID was not reportable in a reporting jurisdiction in 2009 and thus noted with an "N" indicator (for "not reportable") in the front tables of this report.

Unanalyzed results from the 2007, 2008, and 2009 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 PEHIC.

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

potential PHEIC. WHO makes the final determination about the existence of a PHEIC.

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

DHHS has the lead role in carrying out the IHR, in cooperation with multiple federal departments and agencies. The DHHS 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/globalhealth/ihregulations.htm, and http://www.cste.org/PS/2007ps/2007psfinal/ID/07-ID-06.pdf. At its annual meeting in June 2007, CSTE approved a position statement to support the implementation of 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. Available at http://www.cste.org/PS/2007ps/2007psfinal/ID/07-ID-01.pdf.

EXHIBIT. Print criteria for conditions reported to the National Notifiable Diseases Surveillance System, January 2009

Event*	Print Criteria†,§
Anaplasma phagocytophilum	Confirmed and probable; unknown from California (CA)
Anthrax	Confirmed; unknown reported from CA
Botulism, foodborne	Confirmed and probable; unknown from CA
Botulism, infant	Confirmed; unknown from CA
Botulism, other (includes wound)	Confirmed; unknown from CA
Botulism, other unspecified	Confirmed; unknown from CA
Botulism, wound	Confirmed; unknown from CA
Brucellosis	Confirmed and probable; unknown from CA
California serogroup virus, neuroinvasive disease	Cases with confirmed and probable case status are printed, per request of CCID/NCZVED. Only cases reported with a disease onset date are published. Data are published according to the week and year of disease onset.
California serogroup virus, non-neuroinvasive disease	Cases with confirmed and probable case status are printed, per request of CCID/NCZVED. Only cases reported with a disease onset date are published. Data are published according to the week and year of disease onset.
Chancroid	All reports are printed.
Chlamydia trachomatis genital infection	All reports are printed.
Cholera (toxigenic *Vibrio cholerae* O1 or O139)	Confirmed; unknown from CA
Coccidioidomycosis	Confirmed; unknown from CA
Cryptosporidiosis	Confirmed; unknown from CA
Cyclosporiasis	Confirmed; unknown from CA
Diphtheria	CSTE VPD print criteria are used. Cases with confirmed, probable, and unknown case status are printed.
Eastern equine encephalitis virus, neuroinvasive disease	Cases with confirmed and probable case status are printed, per request of CCID/NCZVED. Only cases reported with a disease onset date are published. Data are aggregated and published according to the week and year of disease onset.
Eastern equine encephalitis virus, non-neuroinvasive disease	Cases with confirmed and probable case status are printed, per request of CCID/NCZVED. Only cases reported with a disease onset date are published. Data are aggregated and published according to the week and year of disease onset.
Ehrlichia chaffeensis	Confirmed and probable; unknown from CA
Ehrlichia ewingii	Confirmed and probable; unknown from CA
Ehrlichiosis/Anaplasmosis, undetermined	Confirmed and probable; unknown from CA
Giardiasis	Confirmed and probable; unknown from CA
Gonorrhea	All reports are printed.
Haemophilus influenzae, invasive disease	CSTE VPD print criteria are used. Cases with confirmed, probable, and unknown case status are printed.
Hansen disease (Leprosy)	Confirmed; unknown from CA
Hantavirus pulmonary syndrome	Confirmed and unknown
Hemolytic uremic syndrome, postdiarrheal	Confirmed, probable, and unknown
Hepatitis A, acute	Confirmed; unknown from CA
Hepatitis B, acute	Confirmed; unknown from CA
Hepatitis C, acute	Confirmed; unknown from CA
HIV diagnoses	Print criteria are determined by NCCHSTP/DHAP.
Influenza-associated mortality	Confirmed
Legionellosis	Confirmed; unknown from CA
Listeriosis	Confirmed; unknown from CA
Lyme disease	Confirmed and probable; unknown from CA
Malaria	Confirmed; unknown from CA
Measles (rubeola), total	CSTE VPD print criteria are used. Cases with confirmed and unknown case status are printed.
Meningococcal disease (*Neisseria meningitidis*)	Confirmed and probable; unknown from CA

See footnotes page 10.

EXHIBIT. (*Continued*) Print criteria for conditions reported to the National Notifiable Diseases Surveillance System, January 2009

Event*	Print Criteria†,§
Mumps	CSTE VPD print criteria are used. Cases with confirmed, probable, and unknown case status are printed.
Neurosyphilis	All reports are printed.
Novel influenza A virus infections	Cases with confirmed case status are printed.
Pertussis	CSTE VPD print criteria are used. Cases with confirmed, probable, and unknown case status are printed.
Plague	All reports are printed.
Poliomyelitis, paralytic	Confirmed; unknown from CA that are verified as confirmed
Poliovirus infection, nonparalytic	Confirmed; unknown from CA that are verified as confirmed
Powassan virus, neuroinvasive disease	Cases with confirmed and probable case status are printed, per request of CCID/ NCZVED. Only cases reported with a disease onset date are published. Data are published according to the week and year of disease onset.
Powassan virus, non-neuroinvasive disease	Cases with confirmed and probable case status are printed, per request of CCID/ NCZVED. Only cases reported with a disease onset date are published. Data are published according to the week and year of disease onset.
Psittacosis (Ornithosis)	Confirmed and probable; unknown from CA
Q fever, acute	Confirmed and probable; unknown from CA
Q fever, chronic	Confirmed and probable; unknown from CA
Rabies, animal	Confirmed and unknown
Rabies, human	Confirmed; unknown from CA
Rocky Mountain spotted fever	Confirmed, probable, unknown
Rubella	CSTE VPD print criteria are used. Cases with confirmed and unknown case status are printed.
Rubella, congenital syndrome	CSTE VPD print criteria are used. Cases with confirmed, probable, and unknown case status are printed.
Salmonellosis	Confirmed and probable; unknown from CA
Severe Acute Respiratory Syndrome (SARS)-associated Coronavirus disease (SARS-CoV)	Confirmed
Shiga toxin-producing *Escherichia coli* (STEC)	All reports printed except unknown from NJ.
Shigellosis	Confirmed and probable; unknown from CA
Smallpox	Confirmed
St. Louis encephalitis virus, neuroinvasive disease	Cases with confirmed and probable case status are printed, per request of CCID/ NCZVED. Only cases reported with a disease onset date are published. Data are published according to the week and year of disease onset.
St. Louis encephalitis virus, non-neuroinvasive disease	Cases with confirmed and probable case status are printed, per request of CCID/ NCZVED. Only cases reported with a disease onset date are published. Data are published according to the week and year of disease onset.
Streptococcal disease, invasive, Group A	Confirmed; unknown from CA
Streptococcal toxic-shock syndrome	Confirmed and probable; unknown from CA
Streptococcus pneumoniae invasive, drug-resistant (DRSP)	Confirmed, probable and unknown
Streptococcus pneumoniae, invasive disease	Confirmed; unknown from CA
Syphilis, congenital	All reports are printed.
Syphilis, early latent	All reports are printed.
Syphilis, late latent	All reports are printed.
Syphilis, late with clinical manifestations other than neurosyphilis	All reports are printed.
Syphilis, primary	All reports are printed.
Syphilis, secondary	All reports are printed.
Syphilis, total primary and secondary	All reports are printed.
Syphilis, unknown latent	All reports are printed.
Tetanus	CSTE VPD criteria are used. Cases with confirmed and unknown case status are printed.
Toxic-shock syndrome (staphylococcal)	Confirmed and probable; unknown from CA

See footnotes page 10.

EXHIBIT. (*Continued*) Print criteria for conditions reported to the National Notifiable Diseases Surveillance System, January 2009

Event*	Print Criteria†,§
Trichinellosis	Confirmed; unknown from CA
Tuberculosis	Print criteria are determined by the CDC Tuberculosis program.
Tularemia	All reports are printed.
Typhoid fever (caused by *Salmonella typhi*)	Confirmed and probable; unknown from CA
Vancomycin-intermediate *Staphylococcus aureus* (VISA)	Confirmed; unknown from CA
Vancomycin-resistant *Staphylococcus aureus* (VRSA)	Confirmed; unknown from CA
Varicella (Chickenpox)	VPD print criteria are used. Cases with confirmed, probable, and unknown case status are printed.
Vibriosis (non-cholera *Vibrio* species infections)	Confirmed, probable, and unknown from CA
West Nile virus, neuroinvasive disease	Cases with confirmed and probable case status are printed, per request of CCID/NCZVED. Only cases reported with a disease onset date are published. Data are published according to the week and year of disease onset.
West Nile virus, non-neuroinvasive disease	Cases with confirmed and probable case status are printed, per request of CCID/NCZVED. Only cases reported with a disease onset date are published. Data are published according to the week and year of disease onset.
Western equine encephalitis virus, neuroinvasive disease	Cases with confirmed and probable case status are printed, per request of CCID/NCZVED. Only cases reported with a disease onset date are published. Data are published according to the week and year of disease onset.
Western equine encephalitis virus, non-neuroinvasive disease	Cases with confirmed and probable case status are printed, per request of CCID/NCZVED. Only cases reported with a disease onset date are published. Data are published according to the week and year of disease onset.
Yellow fever	Confirmed and probable; unknown from CA

* Designated by CSTE as nationally notifiable and should be reported to CDC on a regular basis.

† An unknown case classification status is used when a reporting jurisdiction sends aggregate counts of cases or when the surveillance information system of a reporting jurisdiction does not capture case classification data. However, in both situations, cases are verified to meet the case classification (e.g., confirmed, probable, suspected) specified in the print criteria.

§ Print criteria for the National Notifiable Diseases Surveillance System: For a case report of a nationally notifiable disease to print in the *Morbidity and Mortality Weekly Report* (*MMWR*), reporting states or territories must have designated the disease reportable in their state or territory for the year corresponding to the data year of report to CDC. After this criterion is met, the disease-specific criteria listed in the exhibit are applied. When the above list indicates that "all reports" will be earmarked for printing, this means that cases designated with "unknown" or "suspect" case confirmation status will print just as "probable" and "confirmed" cases will print. Print criteria for Vaccine Preventable Diseases (VPD) reflect the case-confirmation status print criteria described by the Council of State and Territorial Epidemiologists (CSTE) 1999 Position Statement #ID-08 entitled Vaccine Preventable Diseases Surveillance Data, and subsequent CSTE position statements.

Abbreviations:

CCID	Coordinating Center for Infectious Disease
CDC	Centers for Disease Control and Prevention
CSTE	Council of State and Territorial Epidemiologists
MMWR	*Morbidity and Mortality Weekly Report*
NCIRD	National Center for Immunization and Respiratory Diseases, CDC
NCPDCID	National Center for Preparedness, Detection, and Control of Infectious Disease
NCZVED	National Center for Zoonotic, Vector-Borne, and Enteric Diseases
NEDSS	National Electronic Disease Surveillance System
NETSS	National Electronic Telecommunications System for Surveillance
NNDL	National Notifiable Disease List (infectious diseases reportable to CDC)
NNDSS	National Notifiable Diseases Surveillance System
STD*MIS	Sexually Transmitted Diseases Management Information System–software for STD surveillance and case management
TIMS	Tuberculosis Information Management System–software for TB surveillance and case management
VPD	Vaccine Preventable Diseases

Highlights for 2009

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).

Anthrax

In 2009, one confirmed case of gastrointestinal anthrax occurred in New Hampshire. The exposure was determined to be the result of participation in a drumming event where animal-hide drums were played. Although several drums were played at the event, two were found to be contaminated with the same *Bacillus anthracis* strain as infected the patient. The patient recovered with treatment; the case is the first related to animal-hide drum exposures that involved the gastrointestinal form of the disease *(1)*. This event and previous unrelated cases of anthrax associated with contaminated animal-hide drums reported in 2006, 2007, and 2008 in the United States and the United Kingdom (*2-5*) reflect the low but potential risk for anthrax among persons who 1) make or use drums made of untreated animal hides from countries where anthrax is common in animals, and among persons who 2) are exposed to environments that are cross-contaminated by these activities.

Naturally occurring anthrax epizootics occur annually among U.S. wildlife and livestock populations; in 2009 such events were reported among wildlife and livestock in Texas, North and South Dakota, and Nevada.

1. CDC. Gastrointestinal anthrax after an animal-hide drumming event—New Hampshire and Massachusetts, 2009. MMWR 2010;59:872–7.
2. CDC. Cutaneous anthrax associated with drum making using goat hides from West Africa—Connecticut, 2007. MMWR 2008;57:628–31.
3. CDC. Inhalation anthrax associated with dried animal hides—Pennsylvania and New York City, 2006. MMWR 2006;55:280–2.
4. National Health Service Borders. Report on the management of an anthrax incident in the Scottish borders, July 2006 to May 2007. Melrose, UK: National Health Service Borders; 2007. Available at http://www.nhsborders.org.uk/uploads/18645/anthrax_report_131207.pdf.
5. Anaraki S, Addiman S, Nixon G, et al. Investigations and control measures following a case of inhalation anthrax in East London in a drum maker and drummer, October 2008. Euro Surveill 2008;13:19076.

Brucellosis

The number of reported brucellosis cases in the United States increased 46.3% in 2009 from the previous year; however, the 2009 case total remains consistent with reports from 2004 through 2007. The reason for the decline in 2008 is unknown. Overall, in 2009, the demographic characteristics of persons with brucellosis remained stable. For patients for whom ethnicity was identified, 61.5% were Hispanic. A majority of cases (55.6%) were reported from California, Florida, Georgia, Michigan, and Texas.

Substantial progress has been made to eradicate brucellosis from the U.S. domestic livestock population through the Cooperative State-Federal Brucellosis Eradication Program *(1)*. By the end of July 2009, all 50 States, Puerto Rico, and the Virgin Islands were officially classified as Class Free for bovine brucellosis (*Brucella abortus*) *(2)*. All States except Texas are classified as Stage III (Free) for swine brucellosis; Texas remains classified at Stage II. *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 where brucellosis is endemic remain a source of the illness 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 accidentally in diagnostic and research laboratories because of their high potential for aerosol transmission *(3)*. For the same reason, biosafety level 3 practices, containment, and equipment are recommended for laboratory manipulation of isolates *(4)*. In the event of an exposure, post-exposure prophylaxis can effectively prevent illness *(5)*. CDC provides recommendations for laboratory exposures and assistance with serologic monitoring of exposed laboratory workers at telephone 404-639-1711.

1. USDA APHIS. 2003. Brucellosis eradication: Uniform methods and rules, Effective October 1, 2003. APHIS 91-45-013. Available at http://www.aphis.usda.gov/animal_health/animal_diseases/brucellosis/downloads/umr_bovine_bruc.pdf.
2. Donch DA, Gertonson AA, Rhyan JH, Gilsdorf MJ. Status report—fiscal year 2009 cooperative state-federal Brucellosis Eradication Program. Washington, DC: US Department of Agriculture; 2010.
3. 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.
4. 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/biosafety/publications/bmbl5/index.htm.
5. CDC. Laboratory-acquired brucellosis—Indiana and Minnesota, 2006. MMWR 2008;57:39–42.

Coccidioidomycosis

The incidence of coccidioiodomycosis increased in 2009, although this increase might be partially artifactual. In 2009, one of the major commercial laboratories in Arizona changed reporting practices to conform to the CSTE laboratory case definition, which was revised in 2007 to include cases with a single positive enzyme immunoassay result (*1*). As a result, the increase in 2009 case counts in Arizona might be attributed, at least in part, to an artifactual increase.

Approximately 60% of coccidioidomycosis cases in the United States occur in Arizona. The public health burden of this disease on Arizona is considerable, as described in a recent report, which explained the use of enhanced surveillance (*2*). Among this representative group of coccidioidomycosis case-patients, self-reported median duration of illness was 42 days, and 41% of case-patients were hospitalized for coccidioidomycosis; 74% of those employed and 59% of students were unable to attend school or work.

Physicians, particularly in areas where the disease is endemic, should continue to maintain a high suspicion for acute coccidioidomycosis, especially among patients with an influenza-like illness or pneumonia who live in or have visited disease-endemic areas.

1. Council of State and Territorial Epidemiologists. Revision of the surveillance case definition for Coccidioidomycosis. Position statement 07-ID-13. Atlanta, GA: Council of State and Territorial Epidemiologists; 2007. Available at http://www.cste.org/position%20statements/searchbyyear-2007final.asp.
2. Tsang CA, Anderson SM, Imholte SB, Erhart LM, Chen S, Park BJ. Enhanced surveillance of coccidioidomycosis, Arizona, USA, 2007–2008. Emerg Infect Dis 2010;11:1738–44.

Cryptosporidiosis

In 2009, cryptosporidiosis incidence decreased for the second consecutive year. The decreases in incidence in 2008 and 2009 follow a >3-fold rise during 2005–2007. Whether the changes in cryptosporidiosis reporting reflect a true change in cryptosporidiosis incidence or reflect changing diagnosis, testing, and reporting patterns is unclear.

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, cases were most frequently reported in children aged 1–9 years. An almost tenfold increase in transmission of *Cryptosporidium* in these young children occurred during summer through early fall, coinciding with increased use of recreational water, which is a known risk factor for cryptosporidiosis. Good hygiene practices are essential to prevention, especially in high-risk settings. Persons should also avoid food and water that might be contaminated. *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*); and the chlorine tolerance of *Cryptosporidium* oocysts (*4*). 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 (*5*).

1. Shields JM, Gleim ER, Beach MJ. Prevalence of *Cryptosporidium* spp. and *Giardia intestinalis* in swimming pools, Atlanta, Georgia. Emerg Inf Dis 2008;14:948–50.
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. Xiao L. Molecular epidemiology of cryptosporidiosis: an update. Exp Parasitol 2010;124:80–89

Ehrlichiosis and Anaplasmosis

Four categories of ehrlichiosis and anaplasmosis were reportable during 2009: 1) *Ehrlichia chaffeensis*, 2) *Ehrlichia ewingii*, 3) *Anaplasma phagocytophilum*, and 4) Human ehrlichiosis/anaplasmosis - undetermined.

During 2009, infections caused by *E. chaffeensis* were reported primarily from the lower Midwest and the Southeast, reflecting the historically known 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. Missouri, Ohio, and South Carolina reported seven 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 number of "Human ehrlichiosis/anaplasmosis - undetermined" cases reported from some northern states (*1*) 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 is expected to predominate).

During 2009, cases attributed to *E. chaffeensis* remained similar to numbers reported the previous year, whereas those

attributed to *A. phagocytophilum* cases increased by 15% (1,009 to 1,161). The numbers of reported ehrlichiosis and anaplasmosis cases have increased more than twofold during the last decade. Increases in the numbers of reported cases might be the result of several factors, including ecological changes influencing vector tick populations and 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 (*2*) also might have altered how cases were classified.

1. CDC. Anaplasmosis and ehrlichiosis— Maine, 2008. MMWR 2009: 58(37):1033–6.
2. 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.

Gonorrhea

In 2009, the rate of gonorrhea was the lowest ever reported. During 2006–2009, decreases in gonorrhea rates were reported in all racial/ethnic groups and in all age groups. Although the gonorrhea rate among women has remained slightly higher than that among men, rates have decreased in both groups. Despite overall rate decreases, the rate for blacks in 2009 was 20.5 times higher than that for whites whereas the rates among American Indians/Alaska Natives and Hispanics were 4.2 and 2.2 times higher, respectively, than rates in whites (*1*).

1. CDC. Sexually transmitted disease surveillance, 2009. Atlanta, GA: U.S. Department of Health and Human Services.

Hansen Disease (Leprosy)

The number of cases of Hansen's disease (HD) reported in the United States peaked in 1985 and decreased until 2006. Since 2006 the annual number of reported cases has fluctuated between 73 and 109. Cases were reported from 20 states and one territory; 64.4% of cases were reported from California, Hawaii, and Texas. 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 www.hrsa.gov/hansens.

Hantavirus Pulmonary Syndrome

Less than 7% of hantavirus pulmonary syndrome (HPS) cases in the United States have been in pediatric populations. Each year, 20–40 cases of HPS occur in the United States; cases in persons aged <17 years make up fewer than 7% of those cases, and cases in children aged <10 years are exceptionally rare. However, in 2009, six pediatric cases of HPS were identified (one case resulted in a fatality), including four cases in persons aged <10 years (*1*).

1. CDC. Hantavirus pulmonary syndrome in five pediatric patients—four states, 2009. MMWR 2009;58:1409–12.

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.

The majority of pediatric deaths that occurred during the 2008–09 and 2009–10 influenza seasons, including those associated with the 2009 pandemic influenza A (H1N1) virus (2009 H1N1), were reported in 2009. The 2009 H1N1 virus was first detected in the United States in mid-April 2009 and became the predominant circulating influenza virus worldwide. From April 15 through the end of 2009, 96% of all subtyped influenza A viruses from the United States were 2009 H1N1. For this report, pediatric deaths associated with seasonal influenza viruses are analyzed separately from those associated with 2009 H1N1 infection. Influenza A viruses that were not subtyped are classified as seasonal influenza A viruses for deaths that occurred during January 1 – April 14, 2009 and as 2009 H1N1 for deaths that occurred during April 15 – December 31, 2009. Of the 358 influenza-associated pediatric deaths reported to CDC during 2009, a total of 290 (81%) were associated with the 2009 H1N1 virus and 68 (19%) were associated with seasonal influenza viruses. Of the 37 seasonal influenza A viruses, 11 (30%) were subtyped; 9 were seasonal A(H1N1) viruses and 2 were influenza A (H3N2) viruses. Twenty-six (70%) were influenza A viruses that were not subtyped and the remaining 31 were influenza B viruses.

The median age at the time of death in 2009 was higher for children presumed infected with 2009 H1N1 virus (9.3 years) than for those infected with seasonal influenza viruses (7.5 years). Both groups had a higher median age than was observed in the previous 3 years when the median age at death ranged from 4 years in 2006 to 7.4 years in 2007. The distributions of race, ethnicity, and sex were similar for children infected with the seasonal influenza viruses and children infected with the 2009 H1N1 virus. The proportion of children infected with seasonal influenza virus admitted to the hospital before death (73%) was similar to that among those infected with 2009

H1N1 virus (69%) but higher than that seen in the previous 3 years (range: 51%– 62%). Children who died following infection with 2009 H1N1 virus were more likely to have at least one chronic condition placing them at increased risk for influenza-associated complications (67%) compared with children with seasonal influenza infection in 2009 (42%). During the previous 3 years, the percent of children with at least one chronic medical condition has ranged from 43% to 57%. Among children who had specimens collected for bacterial culture from sterile sites, no substantial difference was present in the proportion with bacterial coinfection for children with 2009 H1N1 (57%) and seasonal influenza infection (58%). For children with a bacterial coinfection, *Staphylococcus aureus* was identified in 12 of 18 (67%) children with seasonal influenza and 17 of 44 (39%) children with 2009 H1N1 infection. Of the *S. aureus* isolates identified among all deaths, 18 were methicillin-resistant, nine were methicillin-sensitive, and two did not have sensitivity testing performed. Coinfection with *Streptococcus pneumoniae* occurred in 2 of 18 (11%) children with seasonal influenza and 12 of 44 (27%) children with 2009 H1N1 infection.

Of 45 children aged ≥6 months who died with the seasonal influenza virus and for whom seasonal vaccination status was known, only seven (16%) were vaccinated against influenza as recommended by the Advisory Committee on Immunization Practices (ACIP) for 2009 (*1*). Of the 158 children aged ≥6 months who died with the 2009 A (H1N1) virus and for whom the vaccination status was known, 27 (17%) were vaccinated against seasonal influenza but only one (0.8%) received 2009 A(H1N1) vaccine according to ACIP recommendations.

Children who died with 2009 H1N1 were older and more likely to have an underlying condition that placed them at high risk for influenza complications than children who died with seasonal influenza. The proportion of children with bacterial co-infection was similar among those with seasonal influenza and 2009 H1N1. Continued surveillance of influenza-related mortality is important to monitor both the effects of seasonal and novel influenza and the effect of interventions in children.

1. CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2009: July 31, 2009 / 58(RR08);1-52.

Lyme disease

Lyme disease is caused in North America by *Borrelia burgdorferi sensu stricto*, a spirochete transmitted by certain species of *Ixodes* ticks. Manifestations of infection include erythema migrans, arthritis, carditis, and neurologic deficits. Effective January 2008, the national surveillance case definition was revised to include reporting of probable cases and to update laboratory criteria to reflect current testing practices. Between 2008 and 2009 there was a 3.6% increase in confirmed cases and 35.6% increase in probable cases. Much of the increase can be attributed to variability in surveillance practices, although evidence of true emergence exists in certain areas. Because of the burden on endemic states posed by Lyme disease surveillance, some states have modified surveillance protocols to better manage limited resources. States using modified methods, including case estimation, might report decreased case counts.

Measles

Measles was declared eliminated from the United States in 2000. Since then, elimination has been maintained through high population immunity (*1*)**.** Nonetheless, because measles remains endemic in much of the world; importations continue to result in sporadic cases and outbreaks in the United States, which can be costly to control (*2*). In recent years, the majority of measles cases in 2009 (80%) were import associated (*3*). Measles was classified as internationally imported in 21 cases, 14 of which were in U.S. residents exposed while traveling abroad, and 7 of which were among international visitors. Source countries for imported measles cases in 2009 included: United Kingdom (8), India (6), China (2), Philippines (2), Vietnam (1), Italy (1), and Cape Verde (1).

Thirty-three states reported no measles cases in 2009; 11 states and the District of Columbia reported fewer than 3 cases, and 6 states reported a total of 8 outbreaks (defined as 3 or more epidemiologically linked cases). Outbreaks ranged from 3 to 15 cases (median: 4). Seven outbreaks (87%) had viral and/or epidemiologic evidence of imported source. Six outbreaks (75%) included case-patients who reported personal belief exemptions. Of the 45 unvaccinated U.S. residents with measles in 2009, 20 (44%) held personal or religious beliefs opposing vaccination, and 10 (22%) were among children aged 15 months to 5 years whose parents had chosen to delay their MMR vaccination.

1. Hutchins SS, Bellini W, Coronado V, et al. Population immunity to measles in the United States. J Infect Dis 2004:189(Suppl 1):S91–97.1.
2. 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.
3. Council of State and Territorial Epidemiologists. Revision of measles, rubella, and congenital syndrome case classification as part of elimination goals in the United States. Position statement 2006-ID-16. Available at http://www.cste.org/position%20statements/searchbyyear2006.asap.

Mumps

The majority (90%) of mumps cases reported in the United States during 2009 were associated with a large outbreak focused in the Northeastern states (primarily New York and New Jersey) that began in New York in June 2009 (*1*). A total of 1,776 cases occurred through December 31, 2009. The outbreak primarily affected adolescent boys in the Orthodox Jewish communities. Fewer than 3% of the cases associated with this outbreak occurred among persons outside this community. Most cases (77%) were among males and 36% were among adolescents aged 13 to 17 years. Among the patients for whom vaccination status was reported, 88% had received at least 1 dose of mumps-containing vaccine, and 76% had received 2 doses. This was the largest mumps outbreak to occur in the United States since 2006 (*2*).

1. CDC. Mumps outbreak---New York, New Jersey, Quebec, 2009. MMWR 2009;58:1270–4.
2. Dayan G, Quinlisk P, et al. Recent resurgence of mumps in the United States. New Engl J Med 2008;358:1580–9.

Novel Influenza A

In 2007, the Council of State and Territorial Epidemiologists added novel influenza A virus infection to the list of conditions reportable to the National Notifiable Diseases Surveillance System. Novel influenza A virus infections are human infections with influenza A viruses that are different from currently circulating human influenza A (H1) and A (H3) viruses. These viruses include those that are subtyped as non-human in origin and those that cannot be subtyped with standard methods and reagents.

After recognition of the first cases of infection with 2009 pandemic influenza A (H1N1) virus in April 2009, CDC and state health departments initiated enhanced surveillance to identify additional cases of 2009 pandemic influenza A (H1N1) virus infection. From April 15 to July 24, 2009, state and territorial health departments were asked to submit a daily line list of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections to the Influenza Division at CDC. A total of 43,771 cases were reported from all 50 states, Washington DC, and four territories during that 14-week period.

In addition, four cases of human infection with novel influenza A viruses, unrelated to the 2009 pandemic influenza A (H1N1) virus strain, were reported from three states (two from Iowa, one from Kansas, and one from Minnesota). These four cases represented sporadic cases of human infection; two patients were infected with swine influenza A (H1N1) viruses, and the remaining two were infected with swine influenza A (H3N2) viruses. Transmission of swine influenza A viruses to humans usually occurs among persons in direct contact with pigs or in those who have visited places where pigs have been present (e.g. agricultural fairs, farms, and petting zoos). Three of the four patients had direct contact with pigs. No definite exposure to swine was identified in one case. These cases did not result in sustained human-to-human transmission or community outbreaks.

Surveillance for human infections with all novel influenza A viruses remains essential even with the sustained community transmission of the 2009 pandemic influenza A (H1N1) virus. The early identification and investigation of these cases is critical to evaluate the extent of outbreaks and possible human-to-human transmission.

Pertussis

Although the incidence of reported pertussis declined in the United States following the 2004 peak (8.9 per 100,000), overall incidence is increasing again (5.54 in 2009, 4.18 in 2008, and 3.53 in 2007). Infants aged <6 months, who are at greatest risk for severe disease and death, continued to have the highest reported rate of pertussis (126.9 per 100,000). However, adolescents (aged 10–19 years) and adults (aged >20 years) accounted for approximately half of reported cases in 2009, and the contribution of cases in persons aged 7-10 years has been increasing in recent years (13% in 2007, 23.5% of cases in 2008, 23% of cases in 2009). In 2005, a combined tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine (Tdap) was recommended for use among adolescents and adults (*1,2*). Tdap coverage continues to increase among persons aged 13–17 years (10.8% in 2006 to 55.6% in 2009) (*3,4*), and early data suggests a decline in reported pertussis incidence among adolescents following the introduction of Tdap (*5*). Continued monitoring of disease trends through national surveillance will be important to assess the direct effect 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, 2009. MMWR 2010;59:1018–1023.
5. Available at http://cdc.confex.com/cdc/nic2009/webprogram/Paper18157.html.

Poliomyelitis, Paralytic and Poliovirus Infections

Vaccine-Associated Paralytic Poliomyelitis (VAPP) is a rare adverse event that can occur following vaccination with live-attenuated oral poliovirus vaccine (OPV) (*1*). Inactivated poliovirus vaccine (IPV) does not cause VAPP. To reduce the risk of VAPP, the United States changed from an all OPV schedule to a sequential IPV/OPV schedule in 1997, and then to an all IPV schedule in 2000(*2*). Before the use of OPV was discontinued in 2000, approximately 8 cases of VAPP occurred in the United States each year (*3*). Since 2000, only two cases of VAPP have been reported in the United States, one in 2005 in a traveler to countries using OPV and a second, described below, who had common-variable immunodeficiency (CVID) (*4*).

In 2009, the Minnesota Department of Health reported VAPP in a U.S.-born resident with longstanding CVID. The case-patient, aged 44 years, had abrupt onset of limb and respiratory paralysis beginning in December 2008 and died in March 2009. A stool culture for enterovirus obtained in March 2009 tested positive for an enterovirus, which was later identified as type 2 vaccine-derived poliovirus. The number of genetic mutations in this virus suggested that it had been acquired by the case-patient in the mid 1990s, around the time that a household member was vaccinated with OPV (*5*).

1. CDC. Poliomyelitis prevention in the United States: introduction of a sequential vaccination schedule of inactivated poliovirus vaccine followed by oral poliovirus vaccine; recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1997;46(RR-3).
2. CDC. Poliomyelitis prevention in the United States: updated recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2000;49(RR-5).
3. Alexander LN, Seward JF, Santibanez TA, et al. Vaccine policy changes and epidemiology of poliomyelitis United States. JAMA 2004;292:1696–1701.
4. CDC. Imported vaccine-associated paralytic poliomyelitis United States, 2005. MMWR 2006:55:97–9.
5. DeVries, A, Harper, J, Murray, A. Neuroinvasive immunodeficiency-associated vaccine-derived polio Minnesota, 2008. Abstract #652 presented at the 47th Annual Meeting of IDSA, Philadelphia, PA, October 29-November 1, 2009.

Q Fever

During 2009, both acute and chronic Q fever infections were notifiable. Among the 113 cases reported in 2009, 93 were acute infection, and 20 were chronic Q fever. 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 2009, the number of cases of Q fever reported remained similar to those reported during the previous year. Although relatively few human cases are reported annually, Q fever is believed to be substantially underreported because of its nonspecific presentation and the subsequent failure of clinicians to suspect infection and request appropriate diagnostic tests.

Rabies

During 2009, four cases of human rabies were reported in the United States: an abortive infection in Texas, an imported case from India in Virginia, and two indigenous cases attributed to bat rabies virus variants in Indiana and Michigan. The Texas abortive rabies case marks the first documented human rabies case in which clinical and serologic findings were indicative of rabies and no alternate etiology for the illness was determined despite an extensive investigation. The patient experienced a shorter clinical course, less severe neurologic abnormalities, less stimulation of the immune system, and recovered without extensive medical intervention (*1*).

During June 2009, evidence on the number of doses of rabies vaccine required for postexposure prophylaxis (PEP) was presented to the Advisory Committee on Immunization Practices, and a change in the PEP guidelines was approved.

The new guidelines recommended that immunocompetent persons not previously vaccinated against rabies should receive human rabies immune globulin (20 IU/kg; day 0) and 4 doses of rabies vaccine (1mL IM; days 0, 3, 7, and 14). Persons who are immunocompromised should continue to receive the 5-dose PEP protocol with serologic testing to confirm adequate response to the vaccine (*2*).

During 2009, the majority (92%) of 6,694 rabid animals reported in the United States were wildlife. Overall, a 2% decrease was reported compared with 2008. Cats remain the most commonly reported rabid domestic animal (59% of rabid domestic animals). Reports of rabid domestic animals remain low in part because of increased vaccination rates and the continued elimination of dog-to-dog rabies transmission. Canine rabies remains a serious concern in many developing countries and public health education should target travelers and health-care providers with messages regarding rabies prevention measures and the potential risk of rabies exposure in countries where the disease is endemic in domestic animals (*3*).

1. CDC. Presumptive abortive human rabies—Texas, 2009. MMWR. 2010; 59: 185–190.
2. CDC. Use of a reduced (4-dose) vaccine schedule for postexposure prophylaxis to prevent human rabies: recommendations of the Advisory Committee on Immunization Practices. MMWR 2010; 59(No.R:R-2)
3. Blanton JD, Palmer D, Rupprecht CE. Rabies surveillance in the United States during 2009. J Am Vet Med Assoc. 2010; 237: (in press).

Rocky Mountain Spotted Fever

During 2009, RMSF cases decreased 29% from those reported in 2008. Cases reported in 2009 were distributed across the United States, reflecting the endemic status of Rocky Mountain spotted fever (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 (*1*), continued to be reported from Arizona during 2009.

Although RMSF case reports increased more than 400% from 2000 through 2008 (495 to 2,563), case reporting in 2009 represented a decline of nearly 750 cases. This decrease might be the result of several factors, including ecological changes influencing vector tick populations and disease transmission, changes in diagnostic approaches that alter detection rates, or changes in surveillance and reporting. Because serologic tests commonly used to diagnose RMSF exhibit cross-reactivity between spotted fever rickettsial pathogens, some cases reported as RMSF during 2009 might actually have been caused by other spotted fever rickettsial infections.

1. L Demma, Traeger M, Nicholson W, et al. Rocky Mountain spotted fever from an unexpected tick vector in Arizona. New Engl J Med 2005;353:587–94.

Rubella, Congenital Rubella Syndrome

Rubella virus infection usually results in mild disease, but if contracted during pregnancy can result in vertical transmission to the fetus, leading to a constellation of congenital birth defects known as congenital rubella syndrome (CRS). Although rubella is no longer endemic in the United States, it remains common in many parts of the world. The U.S. strategy for ensuring maintenance of rubella and CRS elimination includes (1) maintaining high vaccination rates among children; (2) ensuring vaccination among all women of childbearing age; (3) continuing surveillance of both rubella and CRS; and (4) responding rapidly to any outbreaks of rubella (*1*).

The CRS case definition requires the presence of compatible congenital anomalies and laboratory evidence of rubella infection in the first year of infancy. Birth defects most often associated with CRS include cataracts, heart defects, and deafness. For a CRS case to be classified as an international importation, the mother must have acquired rubella virus infection outside the United States, or, in the absence of documented rubella virus infection, the mother must have been out of the United States for a period covering 21 days before and 24 weeks after conception. Laboratory confirmation of CRS in infants requires either rubella virus isolation, rubella virus detection by real-time polymerase chain reaction (RT-PCR), detection of serum rubella IgM, or serum IgG levels that persist longer than expected from passive transfer of maternal IgG (i.e., rubella titer that does not drop at the expected rate of a twofold dilution per month) (*1*).

Two CRS cases were reported in the United States in 2009. Both infants were born during 2008 and officially reported to CDC after investigations of the cases were completed in 2009. The first case was in an infant born to a U.S. resident with a travel history to India and China during time of conception and early in her first trimester of pregnancy. The infant, with a syndrome clinically compatible with CRS, tested positive at birth for infection with rubella genotype 2B virus. The source of infection for the second CRS case reported in 2009 is unknown. This infant was born to a U.S. resident who reported no international travel during her pregnancy. The case was diagnosed by PCR testing at a commercial laboratory; however, specimens were not available for confirmation and genotyping at CDC. Neither an epidemiologic nor virologic link to an importation could be established (CDC, unpublished data).

1. Reef SE, Cochi SL. The evidence for the elimination of rubella and congenital rubella syndrome in the United States: a public health achievement. Clin Infect Dis 2006;43 (Suppl 3):S123–5.

Syphilis, Primary and Secondary

In 2009, rates of primary and secondary syphilis increased for the eighth consecutive year, reaching the highest rate reported since 1995. Although increases have occurred mostly among men, in 2009 62% of cases from 44 states and the District of Columbia occurred in men who have sex with men. Increases also were observed among women during 2004–2008, mostly in the south. The overall rate in women declined slightly in 2009. In 2009, the primary and secondary syphilis rate among blacks was 9 times the rate among whites. During 2005–2009, syphilis rates increased 167% among black men aged 15-19 years and 212% among black men aged 20–24 years, the greatest increase observed in any age, sex, or racial/ethnic group. Among black women aged 15–24 years, rates more than doubled during 2005–2009 (*1*).

1. CDC. Sexually transmitted disease surveillance, 2009. Atlanta, GA: U.S. Department of Health and Human Services.

Trichinellosis

Of the 13 trichinellosis cases reported in 2009, five were associated with a shared meal that included a dish prepared with *Trichinella*-infected raw bear meat. One case-patient reported

travelling to Southeast Asia and consuming raw pig's blood before the onset of illness. The implicated meat sources of five cases were pork (2), wild boar (2), and bear (1). Two cases of another disease were mistakenly reported as trichinellosis.

At least one outbreak associated with raw bear meat has been reported during 8 of the past 10 years (*1*-*3*). These results highlight the continued need for public health prevention messages aimed at persons who eat wild game meat, particularly bear, and for prevention messages targeted to cultural groups whose food choices might put them at a higher risk for *Trichinella* infection.

Proper cooking of meat dishes will prevent trichinellosis. Meat products, including sausages, ground meat, and other cuts of meat, should be cooked to internal temperatures of at least 160ºF (*4*). Some species of *Trichinella* are resistant to freezing, so freezing might not be an effective prevention method.

1. CDC. Summary of Notifiable Diseases — United States, 2008. MMWR 2010;57(No. 54).
2. 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).
3. Roy SL, Lopez AS, Schantz PM. Trichinellosis surveillance—United States, 1997–2001. In: Surveillance Summaries, July 25, 2003. MMWR 2003;52(No. SS-6).
4. Available at http://www.fsis.usda.gov/factsheets/meat_preparation_fact_sheets/index.asp.

Varicella

In 1981, varicella was removed from the National Notifiable Diseases list. Because of high disease burden and lack of established national surveillance for varicella when the one-dose varicella vaccination program was implemented in 1995, active surveillance sites were created to monitor the effect of the varicella vaccination program. Data from the active surveillance sites have indicated a greater than 90% decline in cases during 1995–2005 (*1*).

In 2002, the Council of State and Territorial Epidemiologists recommended that states move to case-based reporting for varicella by 2005. In 2003, varicella was added back to the national notifiable diseases list. As of 2009, 36 states were conducting case-based reporting for varicella. National data on varicella incidence reported through the National Notifiable Diseases Surveillance Sytem (NNDSS) are consistent with data reported through the active surveillance sites and document a decline in cases even as the number of states reporting has increased. During 2006–2009, the number of varicella cases reported through NNDSS decreased by 58% whereas the number of states and territories reporting increased from 31 to 36.

As varicella incidence has decreased, monitoring of cases has become more feasible nationwide and thus, NNDSS will be able to replace the active surveillance sites as the primary national source of surveillance data for varicella. Further declines in varicella disease burden are expected with implementation in 2006 of the universal recommendation for two doses of varicella vaccine for children (*2*). Therefore, all states should be advised of the importance of conducting varicella case-based reporting.

1. Guris D, Jumaan AO, Mascola L, et al. Changing varicella epidemiology in active surveillance sites—United States, 1995–2005. J Infect Dis 2008;197 Suppl 2:S71–5.
2. CDC. Prevention of varicella: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2007;56(RR-4). Available at: http://www.cdc.gov/mmwr/PDF/rr/rr5604.pdf.

PART 1

Summaries of Notifiable Diseases in the United States, 2009

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, 2009* 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, 2009

Disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Month not stated	Total
Anthrax	—	—	—	—	—	—	—	—	—	—	—	1	—	**1**
Arboviral diseases†														
California serogroup virus														
neuroinvasive	—	—	—	—	1	3	12	21	6	3	—	—	—	**46**
nonneuroinvasive	—	2	—	—	—	—	1	3	2	—	1	—	—	**9**
Eastern equine encephalitis virus														
neuroinvasive	—	—	—	—	—	—	2	—	1	—	—	—	—	**3**
nonneuroinvasive	—	—	—	—	—	—	—	—	1	—	—	—	—	**1**
Powassan virus, neuroinvasive	1	—	—	1	—	2	—	1	—	—	1	—	—	**6**
St. Louis encephalitis virus														
neuroinvasive	—	—	—	1	—	3	4	1	1	1	—	—	—	**11**
nonneuroinvasive	—	—	—	—	—	—	—	—	—	—	—	1	—	**1**
West Nile virus														
neuroinvasive	—	—	—	—	3	11	59	182	111	18	—	1	1	**386**
nonneuroinvasive	—	—	—	1	4	8	57	174	74	16	—	—	—	**334**
Botulism, total	5	13	10	13	7	7	7	9	8	7	14	18	—	**118**
foodborne	1	3	—	1	2	—	1	1	—	—	—	1	—	**10**
infant	2	8	8	8	5	6	5	5	7	6	10	13	—	**83**
other (wound and unspecified)	2	2	2	4	—	1	1	3	1	1	4	4	—	**25**
Brucellosis	1	4	9	12	12	10	7	13	11	8	7	21	—	**115**
Chancroid§	—	2	6	4	—	2	—	1	—	1	4	8	—	**28**
Chlamydia trachomatis genital infection§	93,356	100,303	98,845	98,846	114,944	98,941	94,182	125,258	94,924	120,816	85,399	118,366	—	**1,244,180**
Cholera	1	—	—	1	—	1	4	—	1	1	—	1	—	**10**
Coccidioidomycosis	654	496	628	527	726	1,448	1,204	1,571	1,174	1,476	1,304	1,718	—	**12,926**
Cryptosporidiosis, total	328	311	353	442	602	551	791	1,320	982	883	484	607	—	**7,654**
confirmed	325	306	349	429	594	541	759	1,245	942	849	468	586	—	**7,393**
probable	3	5	4	13	8	10	32	75	40	34	16	21	—	**261**
Cyclosporiasis	31	9	1	5	9	23	18	20	9	3	8	5	—	**141**
Ehrlichiosis/Anaplasmosis														
Ehrlichia chaffeensis	7	6	8	20	65	136	181	144	83	66	24	204	—	**944**
Ehrlichia ewingii	—	—	—	—	—	—	3	3	1	—	—	—	—	**7**
Anaplasma phagocytophilum	—	2	7	14	102	160	177	127	52	101	44	375	—	**1,161**
Undetermined	1	1	5	2	17	22	23	23	9	6	4	42	—	**155**
Giardiasis	1,078	1,215	1,256	1,328	1,468	1,273	1,754	2,294	1,970	2,117	1,505	2,141	—	**19,399**
Gonorrhea§	23,914	23,822	23,003	23,218	27,248	24,251	23,411	31,147	24,368	29,252	20,053	27,487	—	**301,174**
Haemophilus influenzae, invasive disease, all ages, serotypes	238	247	259	244	309	259	227	223	166	189	190	471	—	**3,022**
age <5 yrs														
serotype b	3	3	9	2	2	2	3	2	4	4	—	4	—	**38**
nonserotype b	21	29	26	20	26	19	24	11	14	8	17	30	—	**245**
unknown serotype	15	14	15	7	22	12	7	10	5	11	11	37	—	**166**
Hansen disease (Leprosy)	5	12	9	6	8	12	7	12	3	11	14	4	—	**103**
Hantavirus pulmonary syndrome	—	—	2	—	4	2	3	1	2	1	—	5	—	**20**
Hemolytic uremic syndrome, post-diarrheal	6	6	15	12	24	24	22	25	23	28	17	40	—	**242**
Hepatitis, viral, acute														
A	135	165	139	161	174	143	187	205	179	176	123	200	—	**1,987**
B	260	271	283	259	297	246	252	312	261	292	197	475	—	**3,405**
C	54	50	61	63	61	76	61	67	53	72	60	104	—	**782**
HIV diagnoses¶	3,746	3,810	4,136	3,996	3,354	3,764	3,543	3,191	2,969	2,583	1,493	279	6	**36,870**
Influenza-associated pediatric mortality**	3	18	22	13	11	17	13	14	17	80	108	42	—	**358**
Legionellosis	135	118	132	115	192	352	439	583	426	445	264	321	—	**3,522**
Listeriosis	67	40	41	41	61	47	93	113	93	90	58	107	—	**851**
Lyme disease, total	686	756	914	1,118	2,407	5,826	8,818	7,038	2,980	2,637	1,591	3,697	—	**38,468**
confirmed	488	555	650	744	1,772	4,917	7,421	5,579	2,194	1,985	1,104	2,550	—	**29,959**
probable	198	201	264	374	635	909	1,397	1,459	786	652	487	1,147	—	**8,509**
Malaria	89	80	72	77	124	101	147	228	126	131	87	189	—	**1,451**
Measles, total	2	2	7	11	16	12	9	5	1	3	—	3	—	**71**
indigenous	—	1	3	8	11	11	8	4	1	3	—	1	—	**51**
imported	2	1	4	3	5	1	1	1	—	—	—	2	—	**20**
Meningococcal disease, all serogroups	59	102	118	87	103	59	66	59	49	76	81	121	—	**980**
serogroup A,C,Y, and W-135	15	34	34	32	30	16	18	14	12	21	32	43	—	**301**
serogroup B	9	18	28	11	21	12	12	8	7	13	11	24	—	**174**
other serogroup	1	4	2	2	4	1	3	2	2	2	—	—	—	**23**
serogroup unknown	34	46	54	42	48	30	33	35	28	40	38	54	—	**482**
Mumps	27	24	37	40	42	24	32	45	75	137	282	1,226	—	**1,991**
Pertussis	956	856	912	1,177	1,425	1,342	1,627	1,981	1,333	1,316	1,021	2,912	—	**16,858**
Plague	—	—	—	—	2	2	2	1	1	—	—	—	—	**8**
Poliomyelitis, paralytic	—	—	—	—	—	—	—	—	—	—	—	1	—	**1**

See table footnotes on next page.

TABLE 1. (*Continued*) Reported cases of notifiable diseases,* by month — United States, 2009

Disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Month not stated	Total
Psittacosis	—	1	3	—	1	—	1	1	1	—	—	1	—	**9**
Q Fever, total	6	5	9	10	14	8	10	8	9	12	4	18	—	**113**
acute	5	3	7	10	13	6	9	8	6	11	3	12	—	**93**
chronic	1	2	2	—	1	2	1	—	3	1	1	6	—	**20**
Rabies, animal	210	416	406	501	634	442	416	644	546	526	285	317	—	**5,343**
human	—	—	—	—	—	1	—	—	—	1	1	1	—	**4**
Rocky Mountain spotted fever, total	39	34	34	72	190	259	278	233	122	70	26	458	—	**1,815**
confirmed	2	1	5	6	17	33	23	29	7	15	3	10	—	**151**
probable	37	33	29	65	173	226	254	204	115	55	23	448	—	**1,662**
Rubella	—	—	—	1	1	—	1	—	—	—	—	—	—	**3**
Rubella, congenital syndrome	—	1	—	—	—	1	—	—	—	—	—	—	—	**2**
Salmonellosis	2,798	2,194	2,356	2,658	3,855	4,068	4,976	7,030	5,301	5,567	3,624	4,765	—	**49,192**
Shiga toxin-producing *E. coli* (STEC)	253	201	168	258	429	426	506	705	475	505	303	414	—	**4,643**
Shigellosis	1,219	1,161	1,132	1,036	1,808	1,366	1,392	1,723	1,105	1,224	968	1,797	—	**15,931**
Streptococcal disease, invasive, group A	462	565	658	647	588	422	328	337	201	263	258	550	—	**5,279**
Streptococcal, toxic-shock syndrome	8	21	24	20	17	7	6	10	8	8	6	26	—	**161**
Streptococcus pneumoniae, invasive disease														
drug resistant														
all ages	291	394	360	326	308	160	117	104	138	241	218	713	—	**3,370**
age <5 yrs	36	69	63	55	57	31	19	24	28	53	53	95	—	**583**
non-drug resistant, age <5 yrs	143	204	183	208	192	118	81	86	104	178	171	320	—	**1,988**
Syphilis, total, all stages §,††	3,263	3,590	3,672	3,569	4,315	3,499	3,351	4,503	3,546	4,254	2,988	4,278	—	**44,828**
congenital (age <1 yr)§	45	39	42	33	34	23	38	40	35	32	25	41	—	**427**
primary and secondary§	1,070	1,032	1,099	1,080	1,323	1,029	1,101	1,556	1,123	1,271	985	1,328	—	**13,997**
Tetanus	1	2	2	—	—	1	—	—	3	4	1	4	—	**18**
Toxic-shock syndrome	5	7	5	10	6	7	9	5	5	6	4	5	—	**74**
Trichinellosis	2	4	1	2	1	—	1	1	1	—	—	—	—	**13**
Tuberculosis§§	531	710	850	942	947	1,114	1,001	949	931	988	891	1,691	—	**11,545**
Tularemia	2	1	3	3	4	14	14	17	9	12	5	9	—	**93**
Typhoid fever	33	35	32	23	33	28	17	62	53	30	16	35	—	**397**
Vancomycin-intermediate *Staphylococcus aureus* (VISA)	5	4	3	11	12	9	7	6	6	5	4	6	—	**78**
Vancomycin-resistant *Staphylococcus aureus* (VRSA)	—	—	—	—	—	—	—	—	—	—	—	1	—	**1**
Varicella (Chickenpox)														
morbidity	1,961	2,304	2,275	2,277	3,062	1,255	787	777	1,205	1,730	1,240	1,607	—	**20,480**
mortality¶¶	—	—	—	1	—	—	—	—	—	—	1	—	—	**2**
Vibriosis	42	11	27	20	51	61	81	171	114	101	55	55	—	**789**

* No cases of diphtheria; poliovirus infection, nonparalytic; Powassan virus disease, non-neuroinvasive; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; and yellow fever were reported in 2009. 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.

† Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance), as of May 28, 2010.

§ Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of May 7, 2010.

¶ Total number of HIV cases reported to the Division of HIV/AIDS Prevention, NCHHSTP through December 31, 2009.

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

§§ Totals reported to the Division of TB Elimination, NCHHSTP, as of May 14, 2010.

¶¶ Totals reported to the Division of Viral Diseases, NCIRD, as of June 30, 2010.

TABLE 2. Reported cases of notifiable diseases,* by geographic division and area — United States, 2009

Area	Total resident population (in thousands)	Anthrax
United States	304,057	1
New England	14,303	1
Connecticut	3,501	—
Maine	1,316	—
Massachusetts	6,498	—
New Hampshire	1,316	1
Rhode Island	1,051	—
Vermont	621	—
Mid. Atlantic	40,622	—
New Jersey	8,683	—
New York (Upstate)	11,127	—
New York City	8,364	—
Pennsylvania	12,448	—
E.N. Central	46,396	—
Illinois	12,902	—
Indiana	6,377	—
Michigan	10,003	—
Ohio	11,486	—
Wisconsin	5,628	—
W.N. Central	20,165	—
Iowa	3,003	—
Kansas	2,802	—
Minnesota	5,220	—
Missouri	5,912	—
Nebraska	1,783	—
North Dakota	641	—
South Dakota	804	—
S. Atlantic	58,398	—
Delaware	873	—
District of Columbia	592	—
Florida	18,328	—
Georgia	9,686	—
Maryland	5,634	—
North Carolina	9,222	—
South Carolina	4,480	—
Virginia	7,769	—
West Virginia	1,814	—
E.S. Central	18,085	—
Alabama	4,662	—
Kentucky	4,269	—
Mississippi	2,939	—
Tennessee	6,215	—
W.S. Central	35,235	—
Arkansas	2,855	—
Louisiana	4,411	—
Oklahoma	3,642	—
Texas	24,327	—
Mountain	21,783	—
Arizona	6,500	—
Colorado	4,939	—
Idaho	1,524	—
Montana	967	—
Nevada	2,600	—
New Mexico	1,984	—
Utah	2,736	—
Wyoming	533	—
Pacific	49,070	—
Alaska	686	—
California	36,757	—
Hawaii	1,288	—
Oregon	3,790	—
Washington	6,549	—
Territories		
American Samoa	65	—
C.N.M.I.	55	—
Guam	176	—
Puerto Rico	3,955	—
U.S. Virgin Islands	110	—

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

* No cases of diphtheria; poliovirus infection, nonparalytic; Powassan virus disease, non-neuroinvasive; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; and yellow fever were reported in 2009. 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.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2009

Area	Arboviral diseases†								
	California serogroup virus		Eastern equine encephalitis virus		Powassan virus	St. Louis encephalitis virus		West Nile virus	
	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive
United States	46	9	3	1	6	11	1	386	334
New England	—	—	—	1	—	—	—	—	—
Connecticut	—	—	—	—	—	—	—	—	—
Maine	—	—	—	—	—	—	—	—	—
Massachusetts	—	—	—	—	—	—	—	—	—
New Hampshire	—	—	—	1	—	—	—	—	—
Rhode Island	—	—	—	—	—	—	—	—	—
Vermont	—	—	—	—	—	—	—	—	—
Mid. Atlantic	—	3	1	—	3	—	—	9	1
New Jersey	—	—	—	—	—	—	—	3	—
New York (Upstate)	—	3	1	—	3	—	—	3	1
New York City	—	—	—	—	—	—	—	3	—
Pennsylvania	—	—	—	—	—	—	—	—	—
E.N. Central	7	1	—	—	—	1	—	9	4
Illinois	—	1	—	—	—	—	—	5	—
Indiana	1	—	—	—	—	1	—	2	2
Michigan	—	—	—	—	—	—	—	1	—
Ohio	5	—	—	—	—	—	—	—	2
Wisconsin	1	—	—	—	—	—	—	1	—
W.N. Central	1	—	—	—	2	—	—	26	75
Iowa	—	—	—	—	—	—	—	—	5
Kansas	—	—	—	—	—	—	—	4	9
Minnesota	—	—	—	—	2	—	—	1	3
Missouri	1	—	—	—	—	—	—	4	1
Nebraska	—	—	—	—	—	—	—	11	41
North Dakota	—	—	—	—	—	—	—	—	1
South Dakota	—	—	—	—	—	—	—	6	15
S. Atlantic	28	5	1	—	1	—	—	16	2
Delaware	—	—	—	—	—	—	—	—	—
District of Columbia	—	—	—	—	—	—	—	2	—
Florida	—	—	—	—	—	—	—	2	1
Georgia	2	—	—	—	—	—	—	4	—
Maryland	—	—	—	—	—	—	—	—	1
North Carolina	16	—	1	—	—	—	—	—	—
South Carolina	—	—	—	—	—	—	—	3	—
Virginia	—	1	—	—	1	—	—	5	—
West Virginia	10	4	—	—	—	—	—	—	—
E.S. Central	9	—	—	—	—	2	—	38	27
Alabama	1	—	—	—	—	—	—	—	—
Kentucky	—	—	—	—	—	—	—	3	—
Mississippi	—	—	—	—	—	2	—	31	22
Tennessee	8	—	—	—	—	—	—	4	5
W.S. Central	—	—	1	—	—	7	1	117	35
Arkansas	—	—	—	—	—	4	—	6	—
Louisiana	—	—	1	—	—	—	—	10	11
Oklahoma	—	—	—	—	—	—	—	8	2
Texas	—	—	—	—	—	3	1	93	22
Mountain	1	—	—	—	—	—	—	77	123
Arizona	—	—	—	—	—	—	—	12	8
Colorado	—	—	—	—	—	—	—	36	67
Idaho	—	—	—	—	—	—	—	9	29
Montana	1	—	—	—	—	—	—	2	3
Nevada	—	—	—	—	—	—	—	7	5
New Mexico	—	—	—	—	—	—	—	6	2
Utah	—	—	—	—	—	—	—	1	1
Wyoming	—	—	—	—	—	—	—	4	8
Pacific	—	—	—	—	—	1	—	94	67
Alaska	—	—	—	—	—	—	—	—	—
California	—	—	—	—	—	—	—	67	45
Hawaii	—	—	—	—	—	—	—	—	—
Oregon	—	—	—	—	—	—	—	1	10
Washington	—	—	—	—	—	1	—	26	12
Territories									
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 Infectious Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of May 28, 2010.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2009

Area	Botulism				Brucellosis	Chancroid[¶]	*Chlamydia*[¶]
	Total	Foodborne	Infant	Other[§]			
United States	118	10	83	25	115	28	1,244,180
New England	—	—	—	—	1	3	40,776
Connecticut	—	—	—	—	—	—	12,127
Maine	—	—	—	—	—	—	2,431
Massachusetts	—	—	—	—	1	3	19,315
New Hampshire	—	—	—	—	—	—	2,102
Rhode Island	—	—	—	—	—	—	3,615
Vermont	—	—	—	—	—	—	1,186
Mid. Atlantic	22	—	22	—	4	—	159,111
New Jersey	11	—	11	—	1	—	23,974
New York (Upstate)	1	—	1	—	1	—	33,722
New York City	1	—	1	—	—	—	58,347
Pennsylvania	9	—	9	—	2	—	43,068
E.N. Central	7	1	5	1	23	7	197,133
Illinois	—	—	—	—	4	—	60,542
Indiana	—	—	—	—	4	1	21,732
Michigan	1	—	—	1	10	—	45,714
Ohio	5	1	4	—	4	—	48,239
Wisconsin	1	—	1	—	1	6	20,906
W.N. Central	4	1	3	—	5	—	70,396
Iowa	—	—	—	—	2	—	9,406
Kansas	1	—	1	—	—	—	10,510
Minnesota	—	—	—	—	—	—	14,197
Missouri	2	—	2	—	1	—	25,868
Nebraska	1	1	—	—	1	—	5,443
North Dakota	—	—	—	—	1	—	1,957
South Dakota	—	—	—	—	—	—	3,015
S. Atlantic	10	—	10	—	30	9	249,979
Delaware	2	—	2	—	—	—	4,718
District of Columbia	—	—	—	—	1	—	6,549
Florida	1	—	1	—	9	1	72,931
Georgia	—	—	—	—	10	—	39,828
Maryland	3	—	3	—	—	—	23,747
North Carolina	—	—	—	—	1	6	41,045
South Carolina	—	—	—	—	4	1	26,654
Virginia	4	—	4	—	5	1	30,903
West Virginia	—	—	—	—	—	—	3,604
E.S. Central	2	—	2	—	3	—	92,522
Alabama	1	—	1	—	3	—	25,929
Kentucky	—	—	—	—	—	—	13,293
Mississippi	—	—	—	—	—	—	23,589
Tennessee	1	—	1	—	—	—	29,711
W.S. Central	8	—	8	—	15	8	162,915
Arkansas	3	—	3	—	—	—	14,354
Louisiana	1	—	1	—	1	—	27,628
Oklahoma	—	—	—	—	2	—	15,023
Texas	4	—	4	—	12	8	105,910
Mountain	7	1	6	—	5	—	80,476
Arizona	3	—	3	—	3	—	26,002
Colorado	1	—	1	—	—	—	19,998
Idaho	—	—	—	—	—	—	3,842
Montana	—	—	—	—	—	—	2,988
Nevada	1	—	1	N	—	—	10,045
New Mexico	1	1	—	—	2	—	9,493
Utah	1	—	1	—	—	—	6,145
Wyoming	—	—	—	—	—	—	1,963
Pacific	58	7	27	24	29	1	190,872
Alaska	1	—	1	—	—	—	5,166
California	43	3	20	20	24	1	146,796
Hawaii	4	—	4	—	1	—	6,026
Oregon	—	—	—	—	3	—	11,497
Washington	10	4	2	4	1	—	21,387
Territories							
American Samoa	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—
Guam	—	—	—	—	1	—	620
Puerto Rico	—	—	—	—	—	—	7,302
U.S. Virgin Islands	—	—	—	—	—	—	488

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

§ Includes cases reported as wound and unspecified botulism.

¶ Totals reported to the Division of STD Prevention, NCHHSTP, as of May 7, 2010.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2009

Area	Cholera	Coccidioidomycosis	Cryptosporidiosis**			Cyclosporiasis
			Total	Confirmed	Probable	
United States	10	12,926	7,654	7,393	261	141
New England	1	1	470	458	12	26
Connecticut	—	N	38	38	—	18
Maine	—	N	67	55	12	N
Massachusetts	1	N	181	181	—	7
New Hampshire	—	1	83	83	—	1
Rhode Island	—	—	22	22	—	—
Vermont	—	N	79	79	—	N
Mid. Atlantic	3	—	821	820	1	39
New Jersey	—	N	53	53	—	8
New York (Upstate)	—	N	222	222	—	12
New York City	2	N	80	80	—	19
Pennsylvania	1	N	466	465	1	N
E.N. Central	1	38	1,727	1,716	11	9
Illinois	—	N	154	154	—	5
Indiana	1	N	288	284	4	1
Michigan	—	22	285	282	3	2
Ohio	—	16	388	384	4	—
Wisconsin	—	N	612	612	—	1
W.N. Central	—	11	1,162	1,124	38	2
Iowa	—	N	232	211	21	1
Kansas	—	N	104	104	—	—
Minnesota	—	—	347	347	—	1
Missouri	—	11	193	183	10	—
Nebraska	—	N	117	116	1	N
North Dakota	—	N	31	31	—	N
South Dakota	—	N	138	132	6	—
S. Atlantic	—	5	1,226	1,138	88	52
Delaware	—	1	12	12	—	—
District of Columbia	—	—	8	8	—	2
Florida	—	N	497	456	41	38
Georgia	—	N	336	336	—	6
Maryland	—	4	43	43	—	2
North Carolina	—	N	159	116	43	2
South Carolina	—	N	62	61	1	1
Virginia	—	N	86	86	—	1
West Virginia	—	N	23	20	3	—
E.S. Central	1	—	235	231	4	2
Alabama	—	N	68	68	—	N
Kentucky	—	N	67	67	—	N
Mississippi	—	N	19	19	—	N
Tennessee	1	N	81	77	4	2
W.S. Central	2	2	677	596	81	11
Arkansas	—	N	60	60	—	—
Louisiana	—	2	56	56	—	1
Oklahoma	—	N	142	128	14	—
Texas	2	N	419	352	67	10
Mountain	—	10,381	567	560	7	—
Arizona	—	10,233	34	34	—	—
Colorado	—	N	138	137	1	—
Idaho	—	N	98	97	1	N
Montana	—	N	57	57	—	N
Nevada	—	61	25	25	—	N
New Mexico	—	47	149	146	3	—
Utah	—	39	39	39	—	—
Wyoming	—	1	27	25	2	—
Pacific	2	2,488	769	750	19	—
Alaska	—	N	8	8	—	—
California	2	2,488	459	459	—	—
Hawaii	—	N	1	1	—	—
Oregon	—	N	199	185	14	—
Washington	—	N	102	97	5	—
Territories						
American Samoa	—	N	N	—	—	N
C.N.M.I.	—	—	—	—	—	—
Guam	—	—	—	—	—	—
Puerto Rico	—	N	N	—	—	N
U.S. Virgin Islands	—	—	—	—	—	—

N: Not reportable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
** Revision of National Surveillance Case Definition and data display to distinguish between confirmed and probable cases.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2009

Area	Ehrlichiosis/Anaplasmosis				Giardiasis	Gonorrhea¶
	Ehrlichia chaffeensis	*Ehrlichia ewingii*	*Anaplasma phagocytophilum*	Undetermined		
United States	944	7	1,161	155	19,399	301,174
New England	23	—	189	2	1,757	5,162
Connecticut	—	—	22	—	290	2,558
Maine	1	—	15	—	223	143
Massachusetts	9	—	99	—	751	1,976
New Hampshire	4	—	18	2	197	113
Rhode Island	8	—	35	—	75	322
Vermont	1	—	N	—	221	50
Mid. Atlantic	196	—	322	27	3,520	31,904
New Jersey	102	—	70	—	430	4,762
New York (Upstate)	70	—	241	8	1,419	6,111
New York City	10	—	9	1	832	10,893
Pennsylvania	14	—	2	18	839	10,138
E.N. Central	84	1	283	55	2,917	62,690
Illinois	33	—	6	3	613	19,962
Indiana	—	—	—	21	312	6,835
Michigan	6	—	—	—	672	14,704
Ohio	12	1	1	—	806	15,988
Wisconsin	33	—	276	31	514	5,201
W.N. Central	160	5	323	51	1,971	14,825
Iowa	N	N	N	N	291	1,658
Kansas	6	—	1	—	161	2,505
Minnesota	8	—	317	38	674	2,303
Missouri	144	5	5	13	524	6,488
Nebraska	2	N	—	—	177	1,376
North Dakota	N	N	N	N	32	151
South Dakota	—	—	—	—	112	344
S. Atlantic	208	1	14	1	3,774	74,944
Delaware	22	—	2	—	29	971
District of Columbia	N	N	N	N	73	2,561
Florida	11	—	3	—	1,981	20,878
Georgia	18	—	1	—	747	13,687
Maryland	33	—	1	—	277	6,395
North Carolina	53	—	3	—	N	13,870
South Carolina	2	1	—	—	106	8,318
Virginia	68	—	4	—	503	7,789
West Virginia	1	—	—	1	58	475
E.S. Central	99	—	3	16	434	26,492
Alabama	8	—	2	N	204	7,498
Kentucky	12	—	—	N	N	3,827
Mississippi	6	—	—	—	N	7,241
Tennessee	73	—	1	16	230	7,926
W.S. Central	171	—	25	1	529	47,424
Arkansas	38	—	6	—	155	4,460
Louisiana	—	—	—	—	203	8,996
Oklahoma	129	—	17	—	171	4,673
Texas	4	—	2	1	N	29,295
Mountain	—	—	—	1	1,645	9,486
Arizona	—	—	—	1	198	3,250
Colorado	N	N	N	N	499	2,823
Idaho	N	N	N	N	208	110
Montana	N	N	N	N	133	80
Nevada	N	—	N	N	109	1,726
New Mexico	N	N	N	N	113	1,082
Utah	—	—	—	—	312	341
Wyoming	—	—	—	—	73	74
Pacific	3	—	2	1	2,852	28,247
Alaska	N	N	N	N	111	990
California	3	—	2	1	1,832	23,228
Hawaii	N	N	N	N	21	631
Oregon	—	—	—	—	421	1,113
Washington	N	N	N	N	467	2,285
Territories						
American Samoa	N	N	N	N	—	—
C.N.M.I.	—	—	—	—	—	—
Guam	N	N	N	N	3	59
Puerto Rico	N	N	N	N	156	230
U.S. Virgin Islands	—	—	—	—	—	115

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, 2009

Area	*Haemophilus influenzae*, 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	3,022	38	245	166	103	20	242
New England	216	3	10	3	9	—	17
Connecticut	64	—	3	—	1	N	10
Maine	21	2	2	1	N	—	2
Massachusetts	100	—	3	—	6	—	2
New Hampshire	14	—	—	—	—	—	1
Rhode Island	12	—	—	—	2	—	1
Vermont	5	1	2	2	N	—	1
Mid. Atlantic	601	13	22	34	5	—	20
New Jersey	132	—	—	11	1	—	3
New York (Upstate)	172	3	9	4	N	—	11
New York City	78	—	—	15	3	—	6
Pennsylvania	219	10	13	4	1	—	N
E.N. Central	468	3	31	27	4	—	31
Illinois	182	—	—	20	1	—	1
Indiana	84	2	7	1	—	—	—
Michigan	24	1	6	—	1	—	7
Ohio	101	—	18	2	2	—	14
Wisconsin	77	—	—	4	—	—	9
W.N. Central	192	1	10	16	—	2	42
Iowa	1	1	—	—	—	—	9
Kansas	14	—	—	—	—	—	2
Minnesota	79	—	10	2	—	1	17
Missouri	63	—	—	9	—	—	7
Nebraska	25	—	—	3	—	—	4
North Dakota	10	—	—	2	N	1	—
South Dakota	—	—	—	—	—	—	3
S. Atlantic	795	2	68	24	7	—	24
Delaware	5	—	—	1	—	—	—
District of Columbia	6	—	—	—	—	—	—
Florida	222	1	24	4	7	—	5
Georgia	162	1	18	5	—	—	5
Maryland	94	—	7	—	—	—	4
North Carolina	105	—	—	12	—	—	4
South Carolina	79	—	8	1	—	—	2
Virginia	88	—	8	1	—	—	2
West Virginia	34	—	3	—	N	—	2
E.S. Central	183	1	10	12	3	—	23
Alabama	43	—	1	—	—	N	6
Kentucky	21	—	—	6	—	—	N
Mississippi	8	—	—	2	2	—	—
Tennessee	111	1	9	4	1	—	17
W.S. Central	148	5	13	7	28	1	32
Arkansas	24	—	3	1	4	1	7
Louisiana	24	—	—	5	—	—	2
Oklahoma	93	2	10	1	N	—	17
Texas	7	3	—	—	24	—	6
Mountain	260	8	47	16	4	9	25
Arizona	84	1	17	1	—	1	2
Colorado	74	2	9	—	2	2	9
Idaho	5	—	—	2	—	—	3
Montana	2	1	—	—	—	—	2
Nevada	19	2	2	4	1	—	N
New Mexico	36	—	4	9	—	5	3
Utah	37	2	14	—	1	1	6
Wyoming	3	—	1	—	—	—	—
Pacific	159	2	34	27	43	8	28
Alaska	21	—	—	5	—	N	N
California	41	—	28	8	19	3	24
Hawaii	32	1	1	4	24	—	—
Oregon	56	—	—	7	N	2	4
Washington	9	1	5	3	N	3	—
Territories							
American Samoa	—	—	—	—	—	N	N
C.N.M.I.	—	—	—	—	—	—	—
Guam	—	—	—	—	6	N	—
Puerto Rico	4	—	—	3	—	—	N
U.S. Virgin Islands	—	—	—	—	—	—	—

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, 2009

Area	Hepatitis, viral, acute			HIV†† diagnoses	Influenza-associated pediatric mortality§§	Legionellosis	Listeriosis	Lyme disease			Malaria
	A	B	C					Total	Confirmed	Probable	
United States	1,987	3,405	782	36,870	358	3,522	851	38,468	29,959	8,509	1,451
New England	108	54	66	805	10	203	77	12,440	9,030	3,410	62
Connecticut	18	16	53	308	1	55	26	4,156	2,751	1,405	7
Maine	1	15	2	48	—	10	4	970	791	179	2
Massachusetts	71	17	10	307	5	95	35	5,256	4,019	1,237	40
New Hampshire	7	6	N	38	1	15	2	1,415	996	419	4
Rhode Island	9	U	U	100	3	21	6	235	150	85	5
Vermont	2	—	1	4	—	7	4	408	323	85	4
Mid. Atlantic	275	328	99	6,339	34	1,196	205	16,346	13,682	2,664	413
New Jersey	71	93	7	908	6	218	45	4,973	4,598	375	103
New York (Upstate)	48	57	48	1,411	15	368	74	4,600	3,493	1,107	53
New York City	88	72	5	2,551	8	227	38	1,051	641	410	204
Pennsylvania	68	106	39	1,469	5	383	48	5,722	4,950	772	53
E.N. Central	284	436	92	3,564	40	723	119	2,969	2,281	688	173
Illinois	126	118	6	1,202	8	135	38	136	136	—	70
Indiana	17	74	22	425	5	62	9	83	61	22	25
Michigan	72	132	35	731	6	169	26	103	81	22	31
Ohio	36	88	26	914	15	282	30	58	51	7	37
Wisconsin	33	24	3	292	6	75	16	2,589	1,952	637	10
W.N. Central	126	154	33	1,230	20	135	25	1,693	1,176	517	84
Iowa	38	37	11	123	3	24	4	108	77	31	10
Kansas	12	6	1	136	2	7	1	18	18	—	8
Minnesota	29	38	15	358	9	28	3	1,543	1,063	480	43
Missouri	21	47	—	504	4	59	14	3	3	—	13
Nebraska	21	22	3	77	—	13	—	5	4	1	8
North Dakota	2	—	2	12	—	2	2	15	10	5	1
South Dakota	3	4	1	20	2	2	1	1	1	—	1
S. Atlantic	429	913	174	11,953	54	605	142	4,466	3,507	959	367
Delaware	4	34	U	144	2	19	7	984	984	—	5
District of Columbia	1	10	1	556	—	24	1	61	53	8	17
Florida	171	299	53	5,401	12	193	25	110	77	33	93
Georgia	54	144	31	1,606	8	60	30	40	40	—	68
Maryland	47	72	23	1,057	5	157	14	2,024	1,466	558	80
North Carolina	41	104	24	1,521	10	62	27	96	21	75	32
South Carolina	63	56	1	727	6	13	12	42	25	17	7
Virginia	42	110	10	869	8	67	16	908	698	210	61
West Virginia	6	84	31	72	3	10	10	201	143	58	4
E.S. Central	46	348	107	2,334	25	142	40	41	14	27	35
Alabama	12	89	10	594	2	20	14	3	3	—	9
Kentucky	12	90	64	289	5	52	7	1	1	—	13
Mississippi	9	33	U	549	4	4	5	—	—	—	4
Tennessee	13	136	33	902	14	66	14	37	10	27	9
W.S. Central	209	680	74	4,594	71	151	59	278	90	188	102
Arkansas	12	65	2	133	4	8	8	—	—	—	5
Louisiana	6	73	9	1,223	7	18	16	—	—	—	8
Oklahoma	7	122	27	123	10	10	8	2	2	—	2
Texas	184	420	36	3,115	50	115	27	276	88	188	87
Mountain	163	132	53	1,553	56	151	31	57	28	29	48
Arizona	68	42	U	540	24	49	8	7	3	4	10
Colorado	52	27	28	348	14	31	9	1	—	1	26
Idaho	5	11	7	32	1	8	3	16	4	12	3
Montana	6	1	1	27	1	8	—	3	3	—	5
Nevada	15	34	5	333	2	14	3	13	10	3	—
New Mexico	8	8	6	148	9	9	3	5	1	4	—
Utah	7	5	6	107	5	28	2	9	6	3	4
Wyoming	2	4	—	18	—	4	3	3	1	2	—
Pacific	347	360	84	4,498	48	216	153	178	151	27	167
Alaska	2	4	U	18	1	1	—	7	7	—	2
California	273	258	43	3,776	36	167	106	117	117	—	126
Hawaii	11	6	U	34	1	1	4	N	N	N	1
Oregon	19	44	19	203	4	18	19	38	12	26	12
Washington	42	48	22	467	6	29	24	16	15	1	26
Territories											
American Samoa	—	—	—	—	—	—	—	N	N	N	—
C.N.M.I.	—	—	—	1	—	—	—	—	—	—	—
Guam	7	57	49	3	1	—	—	—	—	—	—
Puerto Rico	21	34	—	474	—	3	2	N	N	N	5
U.S. Virgin Islands	—	—	—	18	—	—	—	—	—	—	—

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

†† Total number of HIV diagnoses reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) through December 31, 2009.

§§ Totals reported to the Division of Influenza, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2009.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2009

Area	Measles			Meningococcal disease					Mumps
	Total	Indigenous	Imported¶¶	All serogroups	Serogroup A, C, Y, and W-135	Serogroup B	Other serogroup	Unknown serogroup	
United States	71	51	20	980	301	174	23	482	1,991
New England	2	1	1	35	19	6	4	6	27
Connecticut	—	—	—	7	4	1	—	2	1
Maine	—	—	—	4	2	—	2	—	6
Massachusetts	2	1	1	16	9	5	—	2	15
New Hampshire	—	—	—	3	1	—	—	2	—
Rhode Island	—	—	—	4	3	—	1	—	3
Vermont	—	—	—	1	—	—	1	—	2
Mid. Atlantic	34	29	5	110	25	32	—	53	1,668
New Jersey	2	2	—	19	—	—	—	19	200
New York (Upstate)	—	—	—	27	12	9	—	6	647
New York City	18	15	3	17	—	—	—	17	806
Pennsylvania	14	12	2	47	13	23	—	11	15
E.N. Central	1	1	—	169	54	43	2	70	75
Illinois	—	—	—	47	—	—	—	47	47
Indiana	—	—	—	34	17	15	2	—	2
Michigan	—	—	—	21	11	5	—	5	11
Ohio	1	1	—	43	14	13	—	16	6
Wisconsin	—	—	—	24	12	10	—	2	9
W.N. Central	8	8	—	90	19	11	2	58	53
Iowa	1	1	—	15	9	4	2	—	15
Kansas	—	—	—	14	—	—	—	14	7
Minnesota	1	1	—	16	7	6	—	3	7
Missouri	6	6	—	27	—	—	—	27	15
Nebraska	—	—	—	11	1	1	—	9	7
North Dakota	—	—	—	2	2	—	—	—	—
South Dakota	—	—	—	5	—	—	—	5	2
S. Atlantic	14	6	8	165	76	38	5	46	45
Delaware	—	—	—	2	—	—	—	2	1
District of Columbia	2	—	2	—	—	—	—	—	2
Florida	5	—	5	52	33	12	—	7	18
Georgia	1	1	—	31	19	6	2	4	—
Maryland	4	3	1	12	6	6	—	—	8
North Carolina	—	—	—	31	7	1	2	21	4
South Carolina	—	—	—	11	4	7	—	—	2
Virginia	1	1	—	18	4	2	—	12	9
West Virginia	1	1	—	8	3	4	1	—	1
E.S. Central	1	—	1	37	9	4	1	23	13
Alabama	—	—	—	12	4	4	1	3	6
Kentucky	—	—	—	6	—	—	—	6	1
Mississippi	—	—	—	4	1	—	—	3	1
Tennessee	1	—	1	15	4	—	—	11	5
W.S. Central	1	—	1	96	41	19	2	34	48
Arkansas	—	—	—	9	6	1	—	2	4
Louisiana	—	—	—	18	—	—	—	18	1
Oklahoma	—	—	—	16	6	7	2	1	3
Texas	1	—	1	53	29	11	—	13	40
Mountain	—	—	—	68	47	8	6	7	27
Arizona	—	—	—	15	9	1	4	1	10
Colorado	—	—	—	24	19	4	1	—	6
Idaho	—	—	—	7	4	—	—	3	3
Montana	—	—	—	5	4	1	—	—	—
Nevada	—	—	—	6	5	—	—	1	3
New Mexico	—	—	—	3	3	—	—	—	1
Utah	—	—	—	3	2	1	—	—	4
Wyoming	—	—	—	5	1	1	1	2	—
Pacific	10	6	4	210	11	13	1	185	35
Alaska	—	—	—	6	—	—	—	6	6
California	9	6	3	131	—	—	—	131	16
Hawaii	—	—	—	5	1	—	1	3	5
Oregon	—	—	—	43	—	—	—	43	2
Washington	1	—	1	25	10	13	—	2	6
Territories									
American Samoa	—	—	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—	—	—
Puerto Rico	—	—	—	1	—	—	—	1	6
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, 2009

Area	Novel influenza A virus infections***, †††	Pertussis	Plague	Poliomyelitis, paralytic	Psittacosis	Q Fever			Rabies	
						Total	Acute	Chronic	Animal	Human
United States	43,696	16,858	8	1	9	113	93	20	5,343	4
New England	3,726	626	—	—	—	1	1	—	354	—
Connecticut	1,713	56	—	—	N	—	—	—	153	—
Maine	145	80	—	—	—	—	—	—	56	—
Massachusetts	1,370	358	—	—	—	1	1	—	—	—
New Hampshire	247	76	—	—	—	N	N	N	34	—
Rhode Island	192	45	—	—	—	—	—	—	45	—
Vermont	59	11	—	—	—	N	N	N	66	—
Mid. Atlantic	6,112	1,222	—	—	5	15	12	3	852	—
New Jersey	1,414	244	—	—	2	2	1	1	287	—
New York (Upstate)	1,424	265	—	—	—	2	—	2	436	—
New York City	1,314	98	—	—	—	1	1	—	29	—
Pennsylvania	1,960	615	—	—	3	10	10	—	100	—
E.N. Central	10,620	3,206	1	—	—	9	9	—	220	2
Illinois	3,404	648	1	—	—	—	—	—	82	—
Indiana	291	392	—	—	—	1	1	—	25	1
Michigan	515	900	—	—	—	1	1	—	66	1
Ohio	188	1,096	—	—	—	—	—	—	47	—
Wisconsin	6,222	170	—	—	—	7	7	—	N	—
W.N. Central	1,539	2,840	—	1	—	20	16	4	391	—
Iowa	167	235	—	—	—	N	N	N	35	—
Kansas	205	240	—	—	—	2	2	—	76	—
Minnesota	670	1,121	—	1	—	2	2	—	69	—
Missouri	76	1,015	—	—	—	3	3	—	65	—
Nebraska	313	141	—	—	—	4	2	2	77	—
North Dakota	63	30	—	—	—	—	—	—	16	—
South Dakota	45	58	—	—	—	9	7	2	53	—
S. Atlantic	5,626	1,632	—	—	1	7	6	1	2,103	1
Delaware	381	13	—	—	—	1	1	—	—	—
District of Columbia	45	7	—	—	—	1	1	—	—	—
Florida	2,915	497	—	—	—	1	1	—	161	—
Georgia	222	223	—	—	—	1	1	—	405	—
Maryland	766	148	—	—	—	—	—	—	384	—
North Carolina	483	220	—	—	—	1	1	—	468	—
South Carolina	244	262	—	—	1	—	—	—	—	—
Virginia	327	222	—	—	—	1	1	—	566	1
West Virginia	243	40	—	—	—	1	—	1	119	—
E.S. Central	1,155	803	—	—	—	3	1	2	138	—
Alabama	477	305	N	—	—	1	1	—	—	—
Kentucky	143	226	—	—	—	2	—	2	46	—
Mississippi	252	75	—	—	—	—	—	—	4	—
Tennessee	283	197	—	—	—	—	—	—	88	—
W.S. Central	5,703	3,993	—	—	—	17	10	7	925	1
Arkansas	131	369	—	—	—	2	2	—	47	—
Louisiana	232	149	—	—	—	—	—	—	—	—
Oklahoma	189	117	—	—	—	2	—	2	48	—
Texas	5,151	3,358	—	—	N	13	8	5	830	1
Mountain	3,176	1,019	7	—	—	18	15	3	108	—
Arizona	947	277	—	—	—	4	4	—	N	—
Colorado	171	231	—	—	—	9	7	2	—	—
Idaho	166	99	—	—	—	—	—	—	8	—
Montana	94	61	—	—	—	—	—	—	25	—
Nevada	467	24	—	—	—	1	1	—	6	—
New Mexico	232	85	6	—	—	4	3	1	26	—
Utah	988	220	1	—	—	—	—	—	13	—
Wyoming	111	22	—	—	—	—	—	—	30	—
Pacific	6,039	1,517	—	—	3	23	23	—	252	—
Alaska	272	59	—	—	—	1	1	—	15	—
California	3,161	869	—	—	3	20	20	—	226	—
Hawaii	1,424	46	—	—	—	1	1	—	—	—
Oregon	524	252	—	—	—	—	—	—	11	—
Washington	658	291	—	—	—	1	1	—	—	—
Territories										
American Samoa	8	—	—	—	N	N	—	N	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	1	2	—	—	—	N	—	N	—	—
Puerto Rico	20	1	—	—	N	—	—	—	41	—
U.S. Virgin Islands	49	—	—	—	—	—	—	—	—	—

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). After recognition of the first cases of infection with 2009 pandemic influenza A (H1N1) virus in April 2009, the Centers for Disease Control and Prevention (CDC) and state health departments initiated enhanced surveillance to identify additional cases. From April 15 to July 24, 2009, state and territorial health departments were requested to submit a daily line list of individual confirmed cases of 2009 pandemic influenza A (H1N1) virus infections directly to the Influenza Division at CDC. As of July 24, 2009, a total of 43,771 cases were reported from all 50 states, Washington DC, and four territories. This table reflects cases reported by this method.

††† In addition, three cases of human infection with novel influenza A viruses, different from the 2009 pandemic influenza A (H1N1) strain, were identified by state health departments and reported to CDC during 2009. These three cases, identified in Iowa [2] and Kansas, were isolated cases of human infections and one virus was identified as a swine influenza A (H1N1) virus, and the remaining two cases were swine-lineage influenza A (H3N2) viruses." This total case count includes both confirmed and probable case reports.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2009

Area	Rocky Mountain spotted fever§§§			Rubella	Rubella, congenital syndrome	Salmonellosis	Shiga toxin-producing *E. Coli* (STEC)¶¶¶	Shigellosis
	Total	Confirmed	Probable					
United States	1,815	151	1,662	3	2	49,192	4,643	15,931
New England	14	2	12	1	—	2,174	292	346
Connecticut	—	—	—	—	—	430	67	43
Maine	5	—	5	—	—	121	19	5
Massachusetts	7	1	6	1	—	1,155	106	245
New Hampshire	1	—	1	—	—	261	37	21
Rhode Island	—	—	—	—	—	144	38	27
Vermont	1	1	—	—	—	63	25	5
Mid. Atlantic	110	13	97	—	1	5,514	435	2,800
New Jersey	63	2	61	—	1	1,132	106	587
New York (Upstate)	16	1	15	—	—	1,370	158	241
New York City	8	1	7	—	—	1,253	57	447
Pennsylvania	23	9	14	—	—	1,759	114	1,525
E.N. Central	90	9	81	—	—	5,169	717	2,514
Illinois	49	1	48	—	—	1,484	166	620
Indiana	13	3	10	—	—	629	96	80
Michigan	5	4	1	—	—	960	140	219
Ohio	18	—	18	—	—	1,407	133	1,096
Wisconsin	5	1	4	—	—	689	182	499
W.N. Central	276	20	256	1	—	2,679	751	1,439
Iowa	5	1	4	—	—	408	163	53
Kansas	1	1	—	—	—	398	54	214
Minnesota	5	3	2	1	—	575	219	79
Missouri	253	7	246	—	—	656	143	1,046
Nebraska	12	8	4	—	—	341	86	34
North Dakota	—	—	—	—	—	103	15	9
South Dakota	—	—	—	—	—	198	71	4
S. Atlantic	451	68	383	—	—	14,478	691	2,365
Delaware	19	—	19	—	—	142	13	151
District of Columbia	1	—	1	—	—	100	3	28
Florida	10	2	8	—	—	6,741	177	461
Georgia	52	52	—	—	—	2,362	71	661
Maryland	40	3	37	—	—	803	91	370
North Carolina	255	7	248	—	—	1,810	112	359
South Carolina	19	3	16	—	—	1,195	33	126
Virginia	53	1	52	—	—	1,095	156	198
West Virginia	2	—	2	—	—	230	35	11
E.S. Central	268	9	257	—	—	3,077	215	813
Alabama	68	3	65	—	—	932	47	156
Kentucky	1	1	—	—	—	453	73	226
Mississippi	9	—	9	—	—	899	6	52
Tennessee	190	5	183	—	—	793	89	379
W.S. Central	564	12	552	—	—	6,411	378	3,188
Arkansas	184	1	183	—	—	615	44	318
Louisiana	2	—	2	—	—	1,180	23	177
Oklahoma	342	9	333	—	—	652	64	398
Texas	36	2	34	—	—	3,964	247	2,295
Mountain	41	17	24	—	—	3,028	561	1,138
Arizona	23	11	12	—	—	1,086	68	806
Colorado	1	1	—	—	—	619	168	102
Idaho	1	—	1	—	—	174	92	8
Montana	10	4	6	—	—	110	35	11
Nevada	1	—	1	—	—	252	35	79
New Mexico	1	—	1	—	—	369	38	104
Utah	1	—	1	—	—	321	110	24
Wyoming	3	1	2	—	—	97	15	4
Pacific	1	1	—	1	1	6,662	603	1,328
Alaska	N	—	—	—	N	68	1	4
California	1	1	—	1	1	5,003	301	1,066
Hawaii	N	—	—	—	—	338	11	49
Oregon	—	—	—	—	—	433	84	56
Washington	—	—	—	—	—	820	206	153
Territories								
American Samoa	N	—	—	—	—	—	—	3
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	N	—	—	—	—	11	—	13
Puerto Rico	N	—	—	1	N	596	—	15
U.S. Virgin Islands	—	—	—	—	—	—	—	—

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

§§§ Total case count includes 2 unknown case status reports.

¶¶¶ Includes *E. coli* O157; Shiga toxin-positive, non-O157 STEC; and Shiga toxin positive, not serogrouped.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2009

Area	Streptococcal disease, invasive, group A	Streptococcal toxic-shock syndrome	*Streptococcus pneumoniae*, invasive disease			Syphilis[¶]		
			Drug-resistant		Nondrug-resistant			
			All ages	Age <5 yrs	Age <5 yrs	All stages****	Congenital (age <1 yr)	Primary and secondary
United States	5,279	161	3,370	583	1,988	44,828	427	13,997
New England	316	29	158	22	96	769	3	341
Connecticut	89	22	100	18	20	179	2	65
Maine	21	N	23	2	7	15	—	4
Massachusetts	135	2	4	2	50	473	—	238
New Hampshire	38	2	—	—	11	37	—	14
Rhode Island	14	1	18	—	4	64	1	20
Vermont	19	2	13	—	4	1	—	—
Mid. Atlantic	1,026	32	207	42	306	6,540	26	1,735
New Jersey	163	3	—	—	70	890	7	212
New York (Upstate)	337	24	97	18	139	702	5	128
New York City	193	—	16	9	97	3,921	10	1,054
Pennsylvania	333	5	94	15	N	1,027	4	341
E.N. Central	942	57	690	101	324	3,834	28	1,542
Illinois	282	23	N	N	74	1,915	16	750
Indiana	167	23	251	33	49	324	1	158
Michigan	158	—	27	4	79	635	4	230
Ohio	209	11	412	64	78	794	7	360
Wisconsin	126	—	—	—	44	166	—	44
W.N. Central	414	9	366	79	115	1,010	11	308
Iowa	—	—	—	—	—	65	—	23
Kansas	39	—	52	18	N	151	3	32
Minnesota	189	7	227	53	45	217	1	71
Missouri	93	2	74	6	39	514	6	173
Nebraska	46	—	2	—	17	45	—	5
North Dakota	18	—	7	—	5	8	1	4
South Dakota	29	N	4	2	9	10	—	—
S. Atlantic	1,132	18	1,419	245	371	10,909	79	3,507
Delaware	11	—	18	3	—	87	1	27
District of Columbia	14	—	27	3	4	431	—	163
Florida	279	N	779	143	66	3,863	21	1,041
Georgia	238	—	460	87	98	2,717	14	953
Maryland	188	1	4	—	87	993	31	314
North Carolina	107	4	N	N	N	1,524	10	579
South Carolina	81	—	—	—	53	507	—	123
Virginia	173	1	N	N	47	755	2	299
West Virginia	41	12	131	9	16	32	—	8
E.S. Central	204	1	278	40	113	3,439	36	1,149
Alabama	N	N	N	N	N	1,138	13	417
Kentucky	40	1	78	8	N	239	2	92
Mississippi	N	N	55	12	16	745	8	237
Tennessee	164	—	145	20	97	1,317	13	403
W.S. Central	530	—	131	27	354	9,785	149	2,757
Arkansas	22	—	60	13	29	552	10	275
Louisiana	27	—	71	14	19	1,964	11	741
Oklahoma	155	N	N	N	61	296	2	97
Texas	326	N	N	N	245	6,973	126	1,644
Mountain	512	15	118	25	281	1,965	32	529
Arizona	161	—	—	—	128	1,084	28	231
Colorado	127	—	—	—	53	269	—	105
Idaho	10	—	N	N	9	31	1	3
Montana	N	N	—	—	N	5	—	4
Nevada	6	2	43	7	—	306	3	91
New Mexico	122	1	—	—	38	208	—	61
Utah	85	12	63	16	52	55	—	31
Wyoming	1	—	12	2	1	7	—	3
Pacific	203	—	3	2	28	6,577	63	2,129
Alaska	38	—	—	—	20	4	—	—
California	N	N	N	N	N	6,031	61	1,900
Hawaii	165	—	3	2	8	88	1	33
Oregon	N	N	N	N	N	132	—	57
Washington	N	N	N	N	N	322	1	139
Territories								
American Samoa	—	N	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	—	—	—	—	—	12	—	2
Puerto Rico	N	N	—	—	N	724	5	227
U.S. Virgin Islands	—	—	—	—	—	2	—	—

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, 2009

Area	Tetanus	Toxic-shock syndrome	Trichinellosis	Tuberculosis††††	Tularemia	Typhoid fever
United States	18	74	13	11,545	93	397
New England	—	1	—	394	6	17
Connecticut	—	N	—	95	1	5
Maine	—	N	—	9	—	—
Massachusetts	—	—	—	243	4	10
New Hampshire	—	—	—	16	—	1
Rhode Island	—	1	—	24	—	1
Vermont	—	—	—	7	1	—
Mid. Atlantic	2	12	1	1,647	4	110
New Jersey	—	3	—	405	2	35
New York (Upstate)	—	2	—	246	—	10
New York City	—	3	1	760	1	53
Pennsylvania	2	4	—	236	1	12
E.N. Central	4	11	1	928	5	47
Illinois	—	1	—	418	3	15
Indiana	2	1	—	119	1	1
Michigan	—	6	1	144	—	11
Ohio	2	2	—	180	1	12
Wisconsin	—	1	—	67	—	8
W.N. Central	3	11	—	402	29	14
Iowa	—	2	—	42	1	—
Kansas	—	1	—	64	4	—
Minnesota	—	1	—	161	1	5
Missouri	2	4	—	80	13	7
Nebraska	1	3	—	32	5	—
North Dakota	—	—	—	5	—	—
South Dakota	—	—	—	18	5	2
S. Atlantic	—	6	—	2,221	3	67
Delaware	—	—	—	19	—	2
District of Columbia	—	—	—	41	—	2
Florida	—	N	—	821	1	19
Georgia	—	6	N	415	—	11
Maryland	—	N	—	218	1	16
North Carolina	—	—	—	251	1	5
South Carolina	—	—	—	164	—	—
Virginia	—	—	—	273	—	12
West Virginia	—	—	—	19	—	—
E.S. Central	1	6	—	569	5	4
Alabama	1	—	—	168	—	—
Kentucky	—	1	N	77	1	—
Mississippi	—	N	—	122	—	1
Tennessee	—	5	—	202	4	3
W.S. Central	1	3	—	1,879	24	25
Arkansas	—	3	N	82	17	—
Louisiana	—	—	—	194	—	—
Oklahoma	—	N	—	102	7	2
Texas	1	N	—	1,501	—	23
Mountain	2	3	2	536	8	12
Arizona	—	1	—	232	—	2
Colorado	—	1	2	85	3	6
Idaho	—	—	—	18	—	1
Montana	—	N	—	8	2	—
Nevada	1	1	—	106	—	3
New Mexico	—	—	—	48	1	—
Utah	1	—	—	37	—	—
Wyoming	—	—	—	2	2	—
Pacific	5	21	9	2,969	9	101
Alaska	—	N	1	37	2	1
California	5	21	8	2,470	1	90
Hawaii	—	N	—	117	—	5
Oregon	—	N	—	89	1	1
Washington	—	N	—	256	5	4
Territories						
American Samoa	—	N	N	4	—	1
C.N.M.I.	—	—	—	32	—	—
Guam	—	—	—	102	—	—
Puerto Rico	2	N	N	63	—	—
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 Tuberculosis Elimination, NCHHSTP, as of May 14, 2010.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2009

Area	Vancomycin-intermediate *Staphylococcus aureus*	Vancomycin-resistant *Staphylococcus aureus*	Varicella		Vibriosis
			Morbidity	Mortality§§§§	
United States	78	1	20,480	2	789
New England	8	—	1,096	—	41
Connecticut	2	—	486	—	27
Maine	—	—	235	—	4
Massachusetts	6	—	4	—	—
New Hampshire	N	—	202	—	6
Rhode Island	—	—	57	—	2
Vermont	—	—	112	—	2
Mid. Atlantic	30	—	2,052	—	52
New Jersey	1	—	470	—	32
New York (Upstate)	11	—	N	N	N
New York City	16	—	—	—	20
Pennsylvania	2	—	1,582	—	N
E.N. Central	12	1	6,415	1	30
Illinois	—	—	1,582	—	13
Indiana	N	—	457	1	3
Michigan	4	1	1,888	—	2
Ohio	5	—	1,911	N	6
Wisconsin	3	—	577	—	6
W.N. Central	11	—	1,272	—	9
Iowa	—	—	N	N	N
Kansas	N	N	554	—	N
Minnesota	3	—	—	—	9
Missouri	8	—	573	—	—
Nebraska	—	—	N	N	N
North Dakota	—	—	92	—	N
South Dakota	—	—	53	—	N
S. Atlantic	9	—	2,567	1	238
Delaware	—	—	12	—	5
District of Columbia	N	N	30	—	1
Florida	6	—	1,125	1	112
Georgia	1	—	N	N	26
Maryland	—	—	N	—	34
North Carolina	2	—	N	N	15
South Carolina	—	—	134	—	16
Virginia	—	—	773	—	29
West Virginia	—	—	493	—	N
E.S. Central	—	—	554	—	39
Alabama	N	N	549	—	18
Kentucky	N	N	N	N	1
Mississippi	—	—	5	N	12
Tennessee	—	—	N	—	8
W.S. Central	6	—	5,086	—	111
Arkansas	—	—	501	—	N
Louisiana	2	—	140	—	41
Oklahoma	—	—	N	N	2
Texas	4	—	4,445	—	68
Mountain	1	—	1,342	—	33
Arizona	—	—	—	—	19
Colorado	N	—	515	—	12
Idaho	N	N	N	N	N
Montana	N	N	164	—	N
Nevada	1	—	N	N	N
New Mexico	N	N	119	—	1
Utah	—	—	544	—	1
Wyoming	—	—	—	—	—
Pacific	1	—	96	—	236
Alaska	N	N	57	—	—
California	N	N	—	—	139
Hawaii	1	—	39	—	30
Oregon	N	N	N	N	19
Washington	N	N	N	N	48
Territories					
American Samoa	—	—	N	N	N
C.N.M.I.	—	—	—	—	—
Guam	—	—	32	—	2
Puerto Rico	—	—	530	—	N
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 Viral Diseases, National Center for Immunization and Respiratory Diseases (NCIRD), as of June 30, 2010.

TABLE 3. Reported cases and incidence* of notifiable diseases,† by age group — United States, 2009

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		
Anthrax	—	(0)	—	(0)	—	(0)	1	(0)	—	(0)	—	(0)	—	(0)	—	1
Arboviral diseases§																
California serogroup virus																
neuroinvasive	—	(0)	10	(0.06)	29	(0.07)	2	(0)	1	(0)	3	(0)	1	(0)	—	46
nonneuroinvasive	—	(0)	—	(0)	6	(0.01)	—	(0)	1	(0)	1	(0)	1	(0)	—	9
Eastern equine encephalitis virus																
neuroinvasive	—	(0)	—	(0)	1	(0)	1	(0)	—	(0)	—	(0)	1	(0)	—	3
nonneuroinvasive	—	(0)	1	(0.01)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	—	1
Powassan virus, neuroinvasive	—	(0)	—	(0)	1	(0)	—	(0)	—	(0)	2	(0)	3	(0.01)	—	6
St. Louis encephalitis virus																
neuroinvasive	—	(0)	1	(0.01)	1	(0)	—	(0)	1	(0)	2	(0)	6	(0.02)	—	11
nonneuroinvasive	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	1	(0)	—	1
West Nile virus																
neuroinvasive	—	(0)	1	(0.01)	7	(0.02)	16	(0.04)	42	(0.07)	159	(0.16)	161	(0.41)	—	386
nonneuroinvasive	1	(0.02)	2	(0.01)	8	(0.02)	34	(0.08)	46	(0.07)	178	(0.18)	65	(0.17)	—	334
Botulism, total	75	(1.74)	6	(0.04)	2	(0)	1	(0)	4	(0.01)	22	(0.02)	5	(0.01)	3	118
foodborne	—	(0)	—	(0)	2	(0)	—	(0)	1	(0)	2	(0)	5	(0.01)	—	10
infant	75	(1.74)	6	(0.04)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	2	83
other (wound and unspecified)	—	(0)	—	(0)	—	(0)	1	(0)	3	(0)	20	(0.02)	—	(0)	1	25
Brucellosis	—	(0)	5	(0.03)	14	(0.03)	12	(0.03)	28	(0.05)	33	(0.03)	22	(0.06)	1	115
Chancroid¶	—	(0)	—	(0)	—	(0)	12	(0.03)	9	(0.01)	5	(0.01)	—	(0)	2	28
Chlamydia trachomatis genital infection¶	—	(0)	—	(0)	—	(0)	883,933	(2,076.26)	304,373	(491.52)	36,661	(36.82)	946	(2.43)	3,159	1,244,180
Cholera	—	(0)	4	(0.02)	1	(0)	—	(0)	1	(0)	3	(0)	1	(0)	—	10
Coccidioidomycosis**	13	(0.91)	42	(0.77)	477	(3.63)	1,365	(9.73)	2,869	(14.26)	5,524	(17.54)	2,581	(21.68)	55	12,926
Cryptosporidiosis, total	138	(3.20)	933	(5.59)	1,017	(2.53)	1,008	(2.37)	1,480	(2.39)	1,902	(1.91)	1,056	(2.72)	120	7,654
confirmed	132	(3.06)	895	(5.36)	955	(2.38)	967	(2.27)	1,418	(2.29)	1,862	(1.87)	1,053	(2.71)	111	7,393
probable	6	(0.14)	38	(0.23)	62	(0.15)	41	(0.10)	62	(0.10)	40	(0.04)	3	(0.01)	9	261
Cyclosporiasis	—	(0)	2	(0.01)	8	(0.02)	15	(0.04)	24	(0.04)	67	(0.08)	23	(0.07)	2	141
Ehrlichiosis/Anaplasmosis																
Ehrlichia chaffeensis	2	(0.05)	18	(0.12)	55	(0.15)	85	(0.22)	122	(0.22)	419	(0.46)	235	(0.66)	8	944
Ehrlichia ewingii	—	(0)	—	(0)	—	(0)	—	(0)	1	(0)	4	(0)	2	(0.01)	—	7
Anaplasma phagocytophilum	—	(0)	4	(0.03)	40	(0.11)	54	(0.14)	106	(0.19)	550	(0.60)	363	(1.02)	44	1,161
Undetermined	—	(0)	5	(0.03)	9	(0.03)	14	(0.04)	22	(0.04)	58	(0.07)	47	(0.14)	—	155
Giardiasis	246	(6.72)	3,071	(21.69)	3,163	(9.22)	2,020	(5.49)	3,528	(6.63)	5,239	(6.03)	1,548	(4.51)	584	19,399
Gonorrhea¶	—	(0)	—	(0)	—	(0)	187,641	(440.75)	88,433	(142.81)	20,481	(20.57)	554	(1.43)	766	301,174
Haemophilus influenzae, invasive disease, all ages, serotypes	270	(6.26)	179	(1.07)	109	(0.27)	81	(0.19)	187	(0.30)	772	(0.78)	1,369	(3.52)	55	3,022
age <5 yrs																
serotype b	24	(0.56)	14	(0.08)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	—	38
nonserotype b	158	(3.66)	87	(0.52)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	—	245
unknown serotype	88	(2.04)	78	(0.47)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	—	166
Hansen disease (Leprosy)	—	(0)	—	(0)	—	(0)	9	(0.02)	26	(0.05)	27	(0.03)	16	(0.05)	25	103
Hantavirus pulmonary syndrome	—	(0)	—	(0)	6	(0.02)	2	(0)	6	(0.01)	4	(0)	2	(0.01)	—	20
Hemolytic uremic syndrome, post-diarrheal	6	(0.15)	110	(0.70)	80	(0.21)	21	(0.05)	8	(0.01)	8	(0.01)	9	(0.02)	—	242
Hepatitis, viral, acute																
A	16	(0.37)	45	(0.27)	159	(0.40)	371	(0.87)	499	(0.81)	571	(0.57)	300	(0.77)	26	1,987
B	1	(0.02)	4	(0.02)	5	(0.01)	209	(0.49)	1,268	(2.05)	1,670	(1.68)	227	(0.59)	21	3,405
C	1	(0.02)	4	(0.03)	—	(0)	169	(0.42)	319	(0.54)	274	(0.29)	12	(0.03)	3	782
HIV diagnoses††	58	(1.34)	25	(0.15)	80	(0.20)	6,875	(16.15)	14,453	(23.34)	14,765	(14.83)	614	(1.58)	—	36,870
Influenza-associated pediatric mortality§§	51	(1.20)	59	(0.36)	195	(0.49)	53	(0.41)	—	(0)	—	(0)	—	(0)	—	358
Legionellosis	2	(0.05)	4	(0.02)	4	(0.01)	34	(0.08)	242	(0.39)	1,825	(1.83)	1,386	(3.57)	25	3,522
Listeriosis	83	(1.92)	10	(0.06)	7	(0.02)	36	(0.08)	63	(0.10)	192	(0.19)	442	(1.14)	18	851
Lyme disease, total	30	(0.70)	1,159	(6.97)	5,420	(13.56)	3,476	(8.20)	4,869	(7.90)	13,237	(13.35)	4,775	(12.34)	5,502	38,468
confirmed	27	(0.63)	1,034	(6.19)	4,442	(11.07)	2,599	(6.10)	3,667	(5.92)	10,326	(10.37)	3,583	(9.22)	4,281	29,959
probable	3	(0.07)	125	(0.75)	978	(2.44)	877	(2.06)	1,202	(1.94)	2,911	(2.92)	1,192	(3.07)	1,221	8,509
Malaria	5	(0.12)	56	(0.34)	131	(0.33)	251	(0.59)	399	(0.64)	509	(0.51)	71	(0.18)	29	1,451
Measles, total	7	(0.16)	22	(0.13)	15	(0.04)	9	(0.02)	11	(0.02)	5	(0.01)	—	(0)	2	71
indigenous	5	(0.12)	18	(0.11)	12	(0.03)	7	(0.02)	5	(0.01)	3	(0)	—	(0)	1	51
imported	2	(0.05)	4	(0.02)	3	(0.01)	2	(0)	6	(0.01)	2	(0)	—	(0)	1	20
Meningococcal disease, all serogroups	116	(2.69)	90	(0.54)	75	(0.19)	194	(0.46)	107	(0.17)	220	(0.22)	172	(0.44)	6	980
serogroup A,C,Y, and W-135	19	(0.44)	13	(0.08)	19	(0.05)	65	(0.15)	27	(0.04)	79	(0.08)	78	(0.20)	1	301
serogroup B	32	(0.74)	28	(0.17)	13	(0.03)	49	(0.12)	18	(0.03)	24	(0.02)	8	(0.02)	2	174
other serogroup	2	(0.05)	3	(0.02)	3	(0.01)	5	(0.01)	1	(0)	3	(0)	6	(0.02)	—	23
serogroup unknown	63	(1.46)	46	(0.28)	40	(0.10)	75	(0.18)	61	(0.10)	114	(0.11)	80	(0.21)	3	482
Mumps	24	(0.56)	117	(0.70)	666	(1.66)	719	(1.69)	280	(0.45)	147	(0.15)	32	(0.08)	6	1,991

See table footnotes on next page.

TABLE 3. (*Continued*) Reported cases and incidence* of notifiable diseases,† by age group — United States, 2009

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		
Pertussis	3,089	(71.62)	2,100	(12.58)	6,545	(16.31)	1,437	(3.38)	1,407	(2.27)	1,753	(1.76)	340	(0.87)	187	16,858
Plague	—	(0)	1	(0.01)	3	(0.01)	—	(0)	—	(0)	2	(0)	2	(0.01)	—	8
Poliomyelitis, paralytic	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	1	(0)	—	(0)	—	1
Psittacosis	—	(0)	—	(0)	—	(0)	—	(0)	2	(0)	7	(0.01)	—	(0)	—	9
Q Fever, total	—	(0)	1	(0.01)	1	(0)	6	(0.01)	15	(0.02)	71	(0.07)	19	(0.05)	—	113
acute	—	(0)	1	(0.01)	1	(0)	6	(0.01)	13	(0.02)	60	(0.06)	12	(0.03)	—	93
chronic	—	(0)	—	(0)	—	(0)	—	(0)	2	(0)	11	(0.01)	7	(0.02)	—	20
Rabies, animal	14	(0.34)	6	(0.04)	12	(0.03)	7	(0.02)	11	(0.02)	16	(0.02)	8	(0.02)	5,269	5,343
human	—	(0)	—	(0)	—	(0)	1	(0)	—	(0)	3	(0)	—	(0)	—	4
Rocky Mountain spotted fever, total	4	(0.09)	49	(0.30)	153	(0.38)	193	(0.46)	324	(0.53)	755	(0.76)	331	(0.86)	6	1,815
confirmed	1	(0.02)	7	(0.04)	13	(0.03)	9	(0.02)	20	(0.03)	74	(0.07)	26	(0.07)	1	151
probable	3	(0.07)	42	(0.25)	140	(0.35)	184	(0.43)	304	(0.49)	679	(0.68)	305	(0.78)	5	1,662
Rubella	—	(0)	—	(0)	—	(0)	—	(0)	2	(0)	—	(0)	—	(0)	1	3
Rubella, congenital syndrome	1	(0.02)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	1	2
Salmonellosis	5,545	(128.56)	8,888	(53.24)	6,405	(15.96)	4,619	(10.85)	6,312	(10.19)	10,720	(10.77)	5,871	(15.10)	832	49,192
Shiga toxin-producing *E. coli* (STEC)	179	(4.15)	1,105	(6.62)	939	(2.34)	822	(1.93)	506	(0.82)	613	(0.62)	409	(1.05)	70	4,643
Shigellosis	325	(7.54)	4,814	(28.84)	4,973	(12.40)	1,285	(3.02)	2,217	(3.58)	1,725	(1.73)	434	(1.12)	158	15,931
Streptococcal disease, invasive, group A	137	(3.92)	314	(2.32)	393	(1.20)	229	(0.66)	588	(1.17)	1,846	(2.26)	1,704	(5.27)	68	5,279
Streptococcal, toxic-shock syndrome	2	(0.07)	2	(0.02)	8	(0.03)	7	(0.03)	21	(0.05)	84	(0.13)	35	(0.14)	2	161
Streptococcus pneumoniae, invasive disease																
drug resistant																
all ages	177	(6.74)	406	(3.98)	95	(0.38)	87	(0.33)	236	(0.62)	1,170	(1.82)	1,192	(4.58)	7	3,370
age <5 yrs	177	(6.74)	406	(3.98)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	—	583
non-drug resistant, age <5 yrs	651	(20.64)	1,337	(10.94)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	—	1,988
Syphilis, total, all stages¶	—	(0)	—	(0)	—	(0)	10,026	(23.55)	17,716	(28.61)	15,395	(15.46)	1,191	(3.06)	19	44,828
congenital (age <1 yr)¶	427	(9.90)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	—	427
primary and secondary ¶	—	(0)	—	(0)	—	(0)	3,817	(8.97)	5,874	(9.49)	4,193	(4.21)	90	(0.23)	2	13,997
Tetanus	—	(0)	—	(0)	—	(0)	3	(0.01)	3	(0)	6	(0.01)	2	(0.01)	4	18
Toxic-shock syndrome	—	(0)	2	(0.02)	15	(0.05)	27	(0.08)	12	(0.03)	17	(0.02)	1	(0)	—	74
Trichinellosis	—	(0)	—	(0)	—	(0)	4	(0.01)	3	(0.01)	5	(0.01)	1	(0)	—	13
Tuberculosis¶¶	94	(2.18)	307	(1.84)	245	(0.61)	1,274	(2.99)	3,004	(4.85)	4,323	(4.34)	2,292	(5.90)	6	11,545
Tularemia	—	(0)	4	(0.02)	21	(0.05)	6	(0.01)	10	(0.02)	29	(0.03)	18	(0.05)	5	93
Typhoid fever	6	(0.14)	46	(0.28)	89	(0.22)	66	(0.16)	118	(0.19)	54	(0.05)	7	(0.02)	11	397
Vancomycin-intermediate *Staphylococcus aureus* (VISA)	—	(0)	3	(0.02)	—	(0)	2	(0.01)	4	(0.01)	31	(0.04)	32	(0.11)	6	78
Vancomycin-resistant *Staphylococcus aureus* (VERSA)	—	(0)	—	(0)	—	(0)	—	(0)	—	(0)	1	(0)	—	(0)	—	1
Vibriosis	5	(0.13)	31	(0.21)	60	(0.17)	50	(0.14)	152	(0.28)	325	(0.38)	160	(0.49)	6	789

* Per 100,000 population.

† No cases of diphtheria; poliovirus infection, nonparalytic; Powassan virus disease, non-neuroinvasive; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; and yellow fever were reported in 2009. 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.

§ Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of May 28, 2010.

¶ 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, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of May 7, 2010.

†† Total number of HIV cases reported to the Division of HIV/AIDS Prevention, NCHHSTP through December 31, 2009.

** Notifiable in <40 states.

§§ Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases, as of December 31, 2009.

¶¶ Totals reported to the Division of TB Elimination, NCHHSTP, as of May 14, 2010.

TABLE 4. Reported cases and incidence* of notifiable diseases,† by sex — United States, 2009

Disease	Male		Female		Sex not stated	Total
	No.	Rate	No.	Rate		
Anthrax	—	(0)	1	(0)	—	1
Arboviral diseases§						
California serogroup virus						
neuroinvasive	33	(0.02)	13	(0.01)	—	46
nonneuroinvasive	4	(0)	5	(0)	—	9
Eastern equine encephalitis virus						
neuroinvasive	3	(0)	—	(0)	—	3
nonneuroinvasive		(0)	1	(0)	—	1
Powassan virus, neuroinvasive	6	(0)	—	(0)	—	6
St. Louis encephalitis virus						
neuroinvasive	6	(0)	5	(0)	—	11
nonneuroinvasive	1	(0)	—	(0)	—	1
West Nile virus						
neuroinvasive	226	(0.15)	160	(0.10)	—	386
nonneuroinvasive	178	(0.12)	155	(0.10)	1	334
Botulism, total	68	(0.05)	50	(0.03)	—	118
foodborne	4	(0)	6	(0)	—	10
infant	46	(2.08)	37	(1.76)	—	83
other (wound and unspecified)	14	(0.01)	7	(0)	4	25
Brucellosis	69	(0.05)	45	(0.03)	1	115
Chancroid¶	10	(0.01)	17	(0.01)	1	28
Chlamydia trachomatis genital infection¶	328,783	(219.30)	912,718	(592.15)	2,679	1,244,180
Cholera	5	(0)	5	(0)	—	10
Coccidioidomycosis**	6,438	(13.32)	6,365	(12.92)	123	12,926
Cryptosporidiosis, total	3,464	(2.31)	3,996	(2.59)	194	7,654
confirmed	3,359	(2.24)	3,854	(2.50)	180	7,393
probable	105	(0.07)	142	(0.09)	14	261
Cyclosporiasis	63	(0.05)	76	(0.06)	2	141
Ehrlichiosis/Anaplasmosis						
Ehrlichia chaffeensis	470	(0.34)	370	(0.26)	104	944
Ehrlichia ewingii	3	(0)	2	(0)	2	7
Anaplasma phagocytophilum	691	(0.50)	447	(0.32)	23	1,161
Undetermined	83	(0.06)	66	(0.05)	6	155
Giardiasis	10,635	(8.20)	8,272	(6.19)	492	19,399
Gonorrhea¶	137,819	(91.93)	162,568	(105.47)	787	301,174
Haemophilus influenzae, invasive disease, all ages, serotypes	1,351	(0.90)	1,608	(1.04)	63	3,022
age <5 yrs						
serotype b	17	(0.16)	21	(0.20)	—	38
nonserotype b	138	(1.28)	107	(1.04)	—	245
unknown serotype	80	(0.74)	77	(0.75)	9	166
Hansen disease (Leprosy)	53	(0.04)	26	(0.02)	24	103
Hantavirus pulmonary syndrome	14	(0.01)	6	(0)	—	20
Hemolytic uremic syndrome, post-diarrheal	101	(0.07)	138	(0.10)	3	242
Hepatitis, viral, acute						
A	1,039	(0.69)	923	(0.60)	25	1,987
B	2,048	(1.37)	1,304	(0.85)	53	3,405
C	395	(0.28)	386	(0.26)	1	782
HIV diagnoses††	28,307	(18.88)	8,563	(5.56)	—	36,870
Influenza-associated pediatric mortality§§	183	(0.48)	175	(0.48)	—	358
Legionellosis	2,169	(1.45)	1,295	(0.84)	58	3,522
Listeriosis	365	(0.24)	475	(0.31)	11	851
Lyme disease, total	20,628	(13.82)	16,580	(10.80)	1,260	38,468
confirmed	16,154	(10.77)	12,670	(8.22)	1,135	29,959
probable	4,474	(2.98)	3,910	(2.54)	125	8,509
Malaria	918	(0.61)	505	(0.33)	28	1,451
Measles, total	46	(0.03)	25	(0.02)	—	71
indigenous	34	(0.02)	17	(0.01)	—	51
imported	12	(0.01)	8	(0.01)	—	20
Meningococcal disease, all serogroups	469	(0.31)	485	(0.31)	26	980
serogroup A,C,Y, and W-135	133	(0.09)	167	(0.11)	1	301
serogroup B	95	(0.06)	79	(0.05)	—	174
other serogroup	11	(0.01)	12	(0.01)	—	23
serogroup unknown	230	(0.15)	227	(0.15)	25	482

See table footnotes on next page.

TABLE 4. (*Continued*) Reported cases and incidence* of notifiable diseases,† by sex — United States, 2009

Disease	Male		Female		Sex not stated	Total
	No.	Rate	No.	Rate		
Mumps	1,436	(0.96)	542	(0.35)	13	1,991
Pertussis	7,248	(4.83)	8,870	(5.75)	740	16,858
Plague	5	(0)	3	(0)	—	8
Poliomyelitis, paralytic	—	(0)	1	(0)	—	1
Psittacosis	6	(0)	3	(0)	—	9
Q Fever, total	79	(0.05)	29	(0.02)	5	113
acute	62	(0.04)	26	(0.02)	5	93
chronic	17	(0.01)	3	(0)	—	20
Rabies, animal	42	(0.03)	49	(0.03)	5,252	5,343
human	3	(0)	1	(0)	—	4
Rocky Mountain spotted fever, total	1,012	(0.68)	628	(0.41)	175	1,815
confirmed	93	(0.06)	55	(0.04)	3	151
probable	917	(0.61)	573	(0.37)	172	1,662
Rubella	—	(0)	3	(0)	—	3
Rubella, congenital syndrome	1	(0)	1	(0)	—	2
Salmonellosis	22,949	(15.31)	25,501	(16.54)	742	49,192
Shiga toxin-producing *E. coli* (STEC)	2,138	(1.43)	2,393	(1.55)	112	4,643
Shigellosis	7,241	(4.83)	7,978	(5.18)	712	15,931
Streptococcal disease, invasive, group A	2,614	(2.14)	2,563	(2.03)	102	5,279
Streptococcal, toxic-shock syndrome	85	(0.09)	74	(0.07)	2	161
Streptococcus pneumoniae, invasive disease						
drug resistant						
all ages	1,632	(1.72)	1,661	(1.69)	77	3,370
age <5 yrs	342	(5.21)	232	(3.70)	9	583
non-drug resistant, age <5 yrs	1,115	(14.17)	825	(10.99)	48	1,988
Syphilis, total, all stages¶	33,183	(22.13)	11,606	(7.53)	39	44,828
congenital (age <1 yr)¶	200	(9.06)	200	(9.50)	27	427
primary and secondary¶	11,764	(7.85)	2,232	(1.45)	1	13,997
Tetanus	12	(0.01)	4	(0)	2	18
Toxic-shock syndrome	17	(0.01)	52	(0.04)	5	74
Trichinellosis	8	(0.01)	5	(0)	—	13
Tuberculosis¶¶	6,990	(4.66)	4,544	(2.95)	11	11,545
Tularemia	54	(0.04)	32	(0.02)	7	93
Typhoid fever	207	(0.14)	181	(0.12)	9	397
Vancomycin-intermediate *Staphylococcus aureus* (VISA)	36	(0.03)	31	(0.03)	11	78
Vancomycin-resistant *Staphylococcus aureus*	—	(0)	1	(0)	—	1
Vibriosis	540	(0.42)	247	(0.19)	2	789

* Per 100,000 population.

† No cases of diphtheria; poliovirus infection, nonparalytic; Powassan virus disease, non-neuroinvasive; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; and yellow fever were reported in 2009. 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.

§ Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of May 28, 2010.

¶ Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of May 7, 2010.

** Notifiable in <40 states.

†† Total number of HIV cases reported to the Division of HIV/AIDS Prevention, NCHHSTP through December 31, 2009.

§§ Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases, as of December 31, 2009.

¶¶ Totals reported to the Division of TB Elimination, NCHHSTP, as of May 14, 2010.

TABLE 5. Reported cases and incidence* of notifiable diseases,† by race — United States, 2009

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			
Arboviral diseases§											
California serogroup virus, neuroinvasive	3	(0.09)	0	(0)	0	(0)	40	(0.02)	0	3	46
West Nile virus											
neuroinvasive	7	(0.20)	1	(0.01)	20	(0.05)	298	(0.12)	4	56	386
nonneuroinvasive	2	(0.06)	1	(0.01)	9	(0.02)	228	(0.09)	2	92	334
Botulism, total	2	(0.06)	5	(0.03)	8	(0.02)	55	(0.02)	3	45	118
infant	1	(1.44)	5	(2.22)	5	(0.70)	38	(1.15)	3	31	83
other (wound and unspecified)	0	(0)	0	(0)	2	(0)	9	(0)	0	14	25
Brucellosis	0	(0)	3	(0.02)	7	(0.02)	52	(0.02)	6	47	115
Chancroid¶	1	(0.03)	0	(0)	9	(0.02)	9	(0)	3	6	28
Chlamydia trachomatis genital infection¶	14,906	(435.61)	16,826	(111.94)	439,489	(1088.80)	356,924	(145.54)	42,656	373,379	1,244,180
Coccidioidomycosis**	136	(9.44)	142	(2.12)	415	(3.82)	2,431	(3.09)	197	9,605	12,926
Cryptosporidiosis, total	32	(0.94)	60	(0.40)	544	(1.35)	4,890	(1.99)	197	1,931	7,654
confirmed	29	(0.85)	56	(0.37)	532	(1.32)	4,713	(1.92)	182	1,881	7,393
probable	3	(0.09)	4	(0.03)	12	(0.03)	177	(0.07)	15	50	261
Cyclosporiasis	0	(0)	4	(0.03)	8	(0.02)	84	(0.04)	2	43	141
Ehrlichiosis/Anaplasmosis											
Ehrlichia chaffeensis	27	(0.99)	4	(0.03)	31	(0.08)	511	(0.23)	52	319	944
Anaplasma phagocytophilum	11	(0.41)	5	(0.04)	8	(0.02)	676	(0.30)	6	455	1,161
Undetermined	0	(0)	1	(0.01)	1	(0)	117	(0.05)	8	28	155
Giardiasis	88	(2.86)	1,041	(7.52)	1,407	(4.15)	7,924	(3.73)	810	8,129	19,399
Gonorrhea¶	2,361	(69.00)	2,118	(14.09)	168,462	(417.33)	56,250	(22.94)	7,361	64,622	301,174
Haemophilus influenzae, invasive disease, all ages, serotypes	34	(0.99)	51	(0.34)	365	(0.90)	1,829	(0.75)	49	694	3,022
age <5 yrs											
serotype b	1	(0.31)	1	(0.09)	5	(0.15)	22	(0.14)	1	8	38
nonserotype b	6	(1.84)	7	(0.63)	45	(1.32)	96	(0.59)	8	83	245
unknown serotype	9	(2.76)	5	(0.45)	29	(0.85)	64	(0.40)	3	56	166
Hansen disease (Leprosy)	0	(0)	12	(0.09)	5	(0.01)	40	(0.02)	2	44	103
Hemolytic uremic syndrome, post-diarrheal	4	(0.12)	2	(0.01)	6	(0.02)	174	(0.08)	3	53	242
Hepatitis, viral, acute											
A	9	(0.26)	150	(1.00)	158	(0.39)	990	(0.40)	94	586	1,987
B	26	(0.76)	98	(0.65)	634	(1.57)	1,700	(0.70)	107	840	3,405
C	12	(0.41)	5	(0.04)	44	(0.11)	535	(0.23)	12	174	782
HIV diagnoses††	164	(4.79)	538	(3.58)	17,871	(44.27)	10,944	(4.46)	7,353	—	36,870
Influenza-associated pediatric mortality§§	11	(1.04)	18	(0.50)	64	(0.53)	224	(0.39)	0	41	358
Legionellosis	13	(0.38)	42	(0.28)	649	(1.61)	2,129	(0.87)	71	618	3,522
Listeriosis	3	(0.09)	36	(0.24)	81	(0.20)	490	(0.20)	30	211	851
Lyme disease, total	116	(3.40)	304	(2.14)	384	(0.95)	18,007	(7.36)	5,128	14,529	38,468
confirmed	86	(2.51)	226	(1.50)	260	(0.64)	14,170	(5.78)	3,755	11,462	29,959
probable	30	(0.88)	78	(0.52)	124	(0.31)	3,837	(1.56)	1,373	3,067	8,509
Malaria	2	(0.06)	120	(0.80)	737	(1.83)	212	(0.09)	47	333	1,451
Measles, total	0	(0)	8	(0.05)	0	(0)	46	(0.02)	3	14	71
indigenous	0	(0)	3	(0.02)	0	(0)	35	(0.01)	0	13	51
Meningococcal disease, all serogroups	10	(0.29)	20	(0.13)	145	(0.36)	582	(0.24)	14	209	980
serogroup A,C,Y, and W-135	3	(0.09)	4	(0.03)	64	(0.16)	187	(0.08)	2	41	301
serogroup B	1	(0.03)	3	(0.02)	12	(0.03)	126	(0.05)	4	28	174
serogroup unknown	5	(0.15)	11	(0.07)	66	(0.16)	256	(0.10)	8	136	482
Mumps	4	(0.12)	36	(0.24)	30	(0.07)	1,756	(0.72)	14	151	1,991
Pertussis	117	(3.42)	204	(1.36)	746	(1.85)	11,378	(4.64)	726	3,687	16,858
Q Fever, total	2	(0.06)	3	(0.02)	2	(0)	64	(0.03)	6	36	113
acute	1	(0.03)	3	(0.02)	2	(0)	51	(0.02)	5	31	93
Rabies, animal	1	(0.03)	0	(0)	0	(0)	29	(0.01)	32	5,281	5,343
Rocky Mountain spotted fever, total	121	(3.67)	9	(0.06)	49	(0.12)	1,086	(0.44)	77	473	1,815
confirmed	13	(0.38)	1	(0.01)	3	(0.01)	88	(0.04)	8	38	151
probable	108	(3.16)	8	(0.05)	46	(0.11)	998	(0.41)	69	433	1,662
Salmonellosis	334	(9.76)	1,118	(7.44)	4,197	(10.40)	26,614	(10.85)	1,400	15,529	49,192
Shiga toxin-producing *E. coli* (STEC)	28	(0.82)	87	(0.58)	153	(0.38)	2,925	(1.19)	123	1,327	4,643
Shigellosis	216	(6.31)	199	(1.32)	3,115	(7.72)	6,301	(2.57)	1,000	5,100	15,931
Streptococcal disease, invasive, group A	106	(4.07)	131	(1.41)	716	(2.05)	2,981	(1.48)	155	1,190	5,279
Streptococcal, toxic-shock syndrome	1	(0.05)	5	(0.06)	19	(0.07)	110	(0.07)	3	23	161
Streptococcus pneumoniae, invasive disease											
drug resistant											
all ages	13	(0.68)	30	(0.42)	646	(2.37)	2,071	(1.32)	52	558	3,370
age <5 yrs	2	(1.04)	12	(2.18)	123	(5.28)	302	(3.10)	15	129	583
non-drug resistant, age <5 yrs	53	(22.42)	44	(6.52)	384	(14.05)	938	(8.00)	60	509	1,988

See table footnotes on next page.

TABLE 5. (*Continued*) Reported cases and incidence* of notifiable diseases,† by race — United States, 2009

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			
Syphilis, total, all stages¶	261	(7.63)	898	(5.97)	21,653	(53.64)	17,223	(7.02)	2,304	2,489	44,828
congenital (age <1 yr)¶	5	(7.19)	12	(5.33)	219	(30.63)	176	(5.33)	10	5	427
primary and secondary¶	67	(1.96)	223	(1.48)	7,200	(17.84)	5,590	(2.28)	578	339	13,997
Toxic-shock syndrome	0	(0)	3	(0.03)	2	(0.01)	40	(0.02)	1	28	74
Tuberculosis¶¶	133	(3.89)	3,219	(21.42)	2,941	(7.29)	5,028	(2.05)	123	101	11,545
Tularemia	7	(0.20)	0	(0)	2	(0)	49	(0.02)	6	29	93
Typhoid fever	3	(0.09)	176	(1.17)	31	(0.08)	28	(0.01)	27	132	397
Vancomycin-intermediate *Staphylococcus aureus* (VISA)	0	(0)	0	(0)	18	(0.05)	25	(0.01)	2	33	78
Vibriosis	5	(0.17)	31	(0.22)	46	(0.13)	489	(0.24)	13	205	789

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

† No cases of diphtheria; poliovirus infection, nonparalytic; Powassan virus disease, non-neuroinvasive; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox, western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; and yellow fever were reported in 2009. 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.

§ Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of May 28, 2010.

¶ Cases with unknown race have not been redistributed. For this reason, the total number of cases reported here might differ slightly from totals reported in other surveillance summaries. Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of May 7, 2010.

** Notifiable in <40 states.

†† Total number of HIV cases reported to the Division of HIV/AIDS Prevention, NCHHSTP through December 31, 2009.

§§ Totals reported to the Influenza Division, National Center for Immunization and Respiratory Disease, as of December 31, 2009.

¶¶ Totals reported to the Division of TB Elimination, NCHHSTP, as of May 14, 2010.

TABLE 6. Reported cases and incidence* of notifiable diseases,† by ethnicity — United States, 2009

Disease	Hispanic		Non-Hispanic		Ethnicity not stated	Total
	No.	Rate	No.	Rate		
Arboviral diseases§						
California serogroup virus, neuroinvasive	1	(0)	39	(0.02)	6	46
West Nile virus						
neuroinvasive	62	(0.13)	237	(0.09)	87	386
nonneuroinvasive	20	(0.04)	193	(0.08)	121	334
Botulism, total	12	(0.03)	66	(0.03)	40	118
infant	8	(0.72)	47	(1.47)	28	83
other (wound and unspecified)	4	(0.01)	10	(0)	11	25
Brucellosis	56	(0.12)	35	(0.01)	24	115
Chancroid¶	5	(0.01)	14	(0.01)	9	28
Chlamydia trachomatis genital infection¶	171,337	(364.98)	586,838	(228.24)	486,005	1,244,180
Coccidioidomycosis**	1,176	(6.11)	2,270	(2.90)	9,480	12,926
Cryptosporidiosis, total	512	(1.09)	4,298	(1.67)	2,844	7,654
confirmed	475	(1.01)	4,163	(1.62)	2,755	7,393
probable	37	(0.08)	135	(0.05)	89	261
Cyclosporiasis	13	(0.03)	87	(0.04)	41	141
Ehrlichiosis/Anaplasmosis						
Ehrlichia chaffeensis	14	(0.03)	491	(0.21)	439	944
Anaplasma phagocytophilum	13	(0.03)	512	(0.22)	636	1,161
Undetermined	1	(0)	79	(0.03)	75	155
Giardiasis	1,867	(5.02)	8,042	(3.56)	9,490	19,399
Gonorrhea¶	21,599	(46.01)	172,928	(67.26)	106,647	301,174
Haemophilus influenzae, invasive disease, all ages, serotypes	175	(0.37)	1,638	(0.64)	1,209	3,022
age <5 yrs						
serotype b	5	(0.10)	21	(0.13)	12	38
nonserotype b	41	(0.78)	116	(0.73)	88	245
unknown serotype	21	(0.40)	77	(0.49)	68	166
Hansen disease (Leprosy)	29	(0.07)	36	(0.02)	38	103
Hemolytic uremic syndrome, post-diarrheal	19	(0.04)	160	(0.07)	63	242
Hepatitis, viral, acute						
A	393	(0.84)	980	(0.38)	614	1,987
B	316	(0.67)	1,979	(0.77)	1,110	3,405
C	58	(0.13)	460	(0.19)	264	782
HIV diagnoses††	6,931	(14.76)	29,939	(11.64)	—	36,870
Influenza-associated pediatric mortality§§	97	(0.60)	215	(0.37)	46	358
Legionellosis	191	(0.41)	2,059	(0.80)	1,272	3,522
Listeriosis	120	(0.26)	479	(0.19)	252	851
Lyme disease, total	692	(1.48)	13,590	(5.31)	24,186	38,468
confirmed	513	(1.09)	10,681	(4.15)	18,765	29,959
probable	179	(0.38)	2,909	(1.13)	5,421	8,509
Malaria	42	(0.09)	925	(0.36)	484	1,451
Measles, total	6	(0.01)	46	(0.02)	19	71
indigenous	5	(0.01)	28	(0.01)	18	51
Meningococcal disease, all serogroups	113	(0.24)	610	(0.24)	257	980
serogroup A,C,Y, and W-135	32	(0.07)	201	(0.08)	68	301
serogroup B	12	(0.03)	111	(0.04)	51	174
serogroup unknown	66	(0.14)	285	(0.11)	131	482
Mumps	73	(0.16)	1,770	(0.69)	148	1,991
Pertussis	2,212	(4.71)	9,976	(3.88)	4,670	16,858
Q Fever, total	18	(0.04)	55	(0.02)	40	113
acute	15	(0.03)	45	(0.02)	33	93
Rabies, animal	0	(0)	38	(0.02)	5,305	5,343
Rocky Mountain spotted fever, total	60	(0.13)	1,111	(0.44)	644	1,815
confirmed	8	(0.02)	82	(0.03)	61	151
probable	52	(0.11)	1,027	(0.40)	583	1,662
Salmonellosis	6,558	(13.97)	25,336	(9.85)	17,298	49,192
Shiga toxin-producing *E. coli* (STEC)	460	(0.98)	2,657	(1.03)	1,526	4,643
Shigellosis	3,389	(7.22)	6,670	(2.59)	5,872	15,931
Streptococcal disease, invasive, group A	428	(1.33)	2,593	(1.20)	2,258	5,279
Streptococcal, toxic-shock syndrome	11	(0.06)	88	(0.05)	62	161

See table footnotes on next page.

TABLE 6. (*Continued*) Reported cases and incidence* of notifiable diseases,† by ethnicity — United States, 2009

Disease	Hispanic		Non-Hispanic		Ethnicity not stated	Total
	No.	Rate	No.	Rate		
Streptococcus pneumoniae, invasive disease						
drug resistant						
all ages	208	(1.05)	1,961	(1.13)	1,201	3,370
age <5 yrs	60	(2.72)	318	(2.99)	205	583
non-drug resistant, age <5 yrs	278	(8.06)	938	(7.83)	772	1,988
Syphilis, total, all stages¶	9,364	(19.95)	30,372	(11.81)	5,092	44,828
congenital (age <1 yr)¶	125	(11.28)	295	(9.20)	7	427
primary and secondary¶	2,048	(4.36)	10,641	(4.14)	1,308	13,997
Toxic-shock syndrome	4	(0.01)	40	(0.02)	30	74
Tuberculosis¶¶	3,380	(7.20)	8,137	(3.16)	28	11,545
Tularemia	2	(0)	54	(0.02)	37	93
Typhoid fever	43	(0.09)	235	(0.09)	119	397
Vancomycin-intermediate *Staphylococcus aureus* (VISA)	1	(0)	28	(0)	49	78
Vibriosis	73	(0.17)	498	(0.23)	218	789

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

† No cases of diphtheria; poliovirus infection, nonparalytic; Powassan virus disease, non-neuroinvasive; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; and yellow fever were reported in 2009. 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.

§ Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of May 28, 2010.

¶ Cases with unknown race have not been redistributed. For this reason, the total number of cases reported here might differ slightly from totals reported in other surveillance summaries. Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of May 7, 2010.

** Notifiable in <40 states.

†† Total number of HIV cases reported to the Division of HIV/AIDS Prevention, NCHHSTP through December 31, 2009.

§§ Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases, as of December 31, 2009.

¶¶ Totals reported to the Division of TB Elimination, NCHHSTP, as of May 14, 2010.

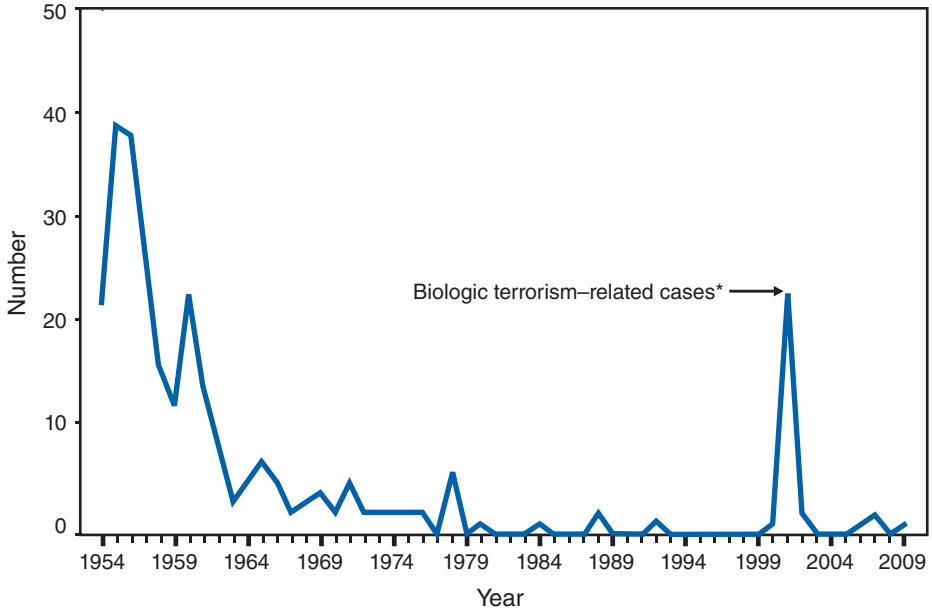
PART 2

Graphs and Maps for Selected Notifiable Diseases in the United States, 2009

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

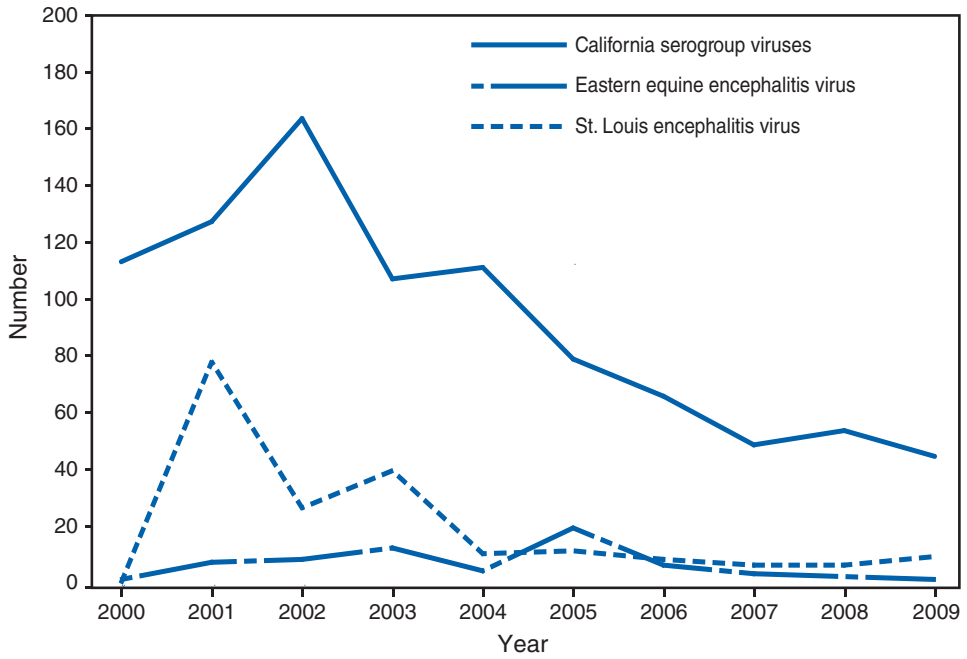
ANTHRAX. Number of reported cases, by year — United States, 1954–2009



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

The confirmed case of gastrointestinal anthrax that was reported in the United States in 2009, and previous unrelated cases reported in 2006, 2007, and 2008 in both the United States and the United Kingdom, reflect the potential risk for anthrax among persons who make or use drums made of untreated animal hides contaminated with *Bacillus anthracis* from countries where anthrax is common in animals and among persons who are exposed to environments that are cross-contaminated by these activities.

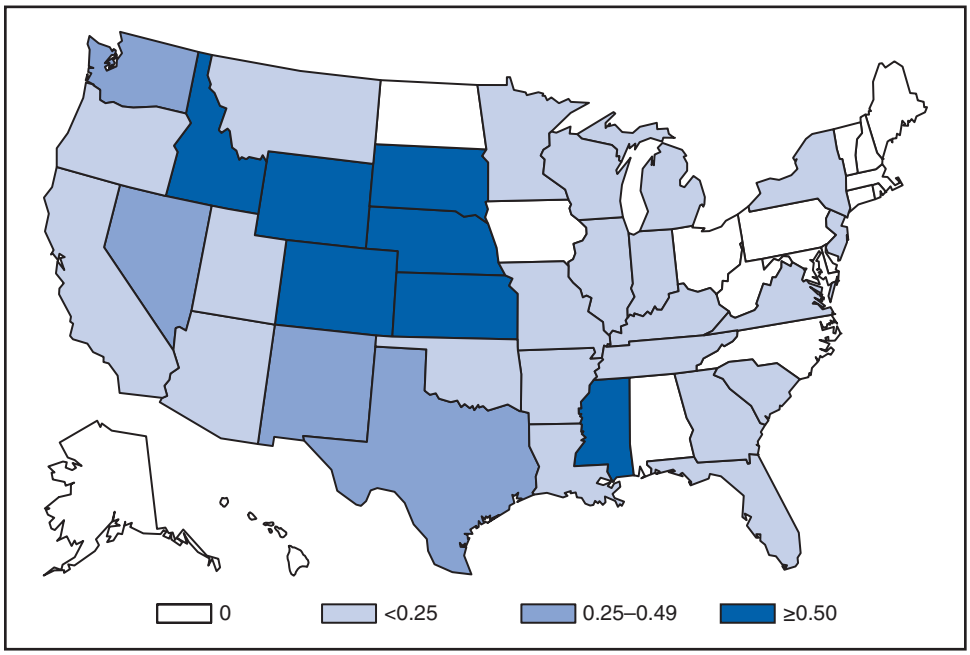
ARBOVIRAL DISEASES. Number* of reported cases of neuroinvasive disease, by year — United States, 2000–2009



* 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.

The most common arthropod-borne viruses (arboviruses) affecting humans in the United States are West Nile virus (WNV), La Crosse virus (LACV), St. Louis encephalitis virus (SLEV), and Eastern equine encephalitis virus (EEEV). LACV is the most common California (CAL) serogroup virus in the United States. LACV causes neuroinvasive disease primarily among children. In 2009, 46 cases of CAL serogroup virus neuroinvasive disease, including 44 cases caused by LACV, were reported from 10 states (Alabama, Georgia, Indiana, Missouri, Montana, North Carolina, Ohio, Tennessee, West Virginia, and Wisconsin). During 2000–2009, a median of 93 (range: 46–167) cases per year were reported in the United States. The number of reported CAL serogroup disease cases peaked in 2002 and has declined since then. Before the introduction of WNV, SLEV was the leading cause of arboviral encephalitis in the United States, with periodic large outbreaks comprising hundreds to thousands of cases. In 2009, 11 cases of SLEV neuroinvasive disease were reported from five states (Arkansas, Indiana, Mississippi, Texas, and Washington). During 2000–2009, a median of 10 (range: 2–79) cases per year were reported in the United States. Whether the recent decline in the number of reported SLEV disease cases is related to normal periodicity in viral activity, surveillance artifact, or possible competitive displacement of SLEV by WNV is unknown. EEEV disease in humans is associated with high mortality rates (>20%) and severe neurologic sequelae. In 2009, three cases of EEEV neuroinvasive disease cases were reported, including one case each in Louisiana, New York, and North Carolina. During 2000–2009, a median of seven (range: 3–21) cases per year were reported in the United States.

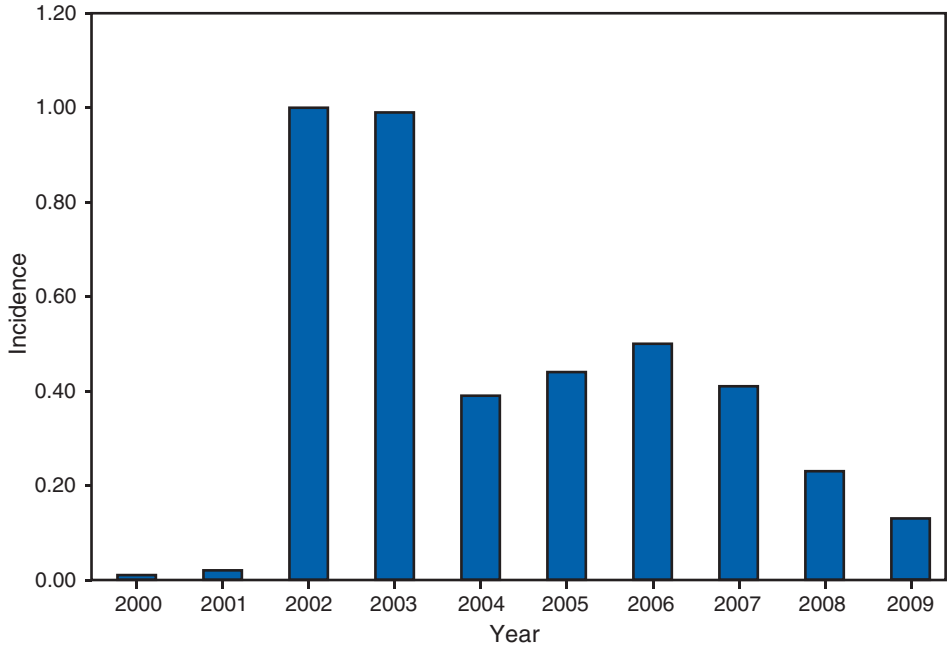
ARBOVIRAL DISEASES, WEST NILE VIRUS. Incidence* of reported cases of neuroinvasive disease, by state — United States, 2009



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

In 2009, the states with the greatest reported incidence of West Nile virus (WNV) neuroinvasive disease were Mississippi (1.05 per 100,000), South Dakota (0.74), Wyoming (0.73), Colorado (0.72), and Nebraska (0.61). The five states with the greatest number of reported cases were Texas (93), California (67), Colorado (36), Mississippi (31), and Washington (26). Texas reported 24% of all WNV neuroinvasive disease cases in 2009.

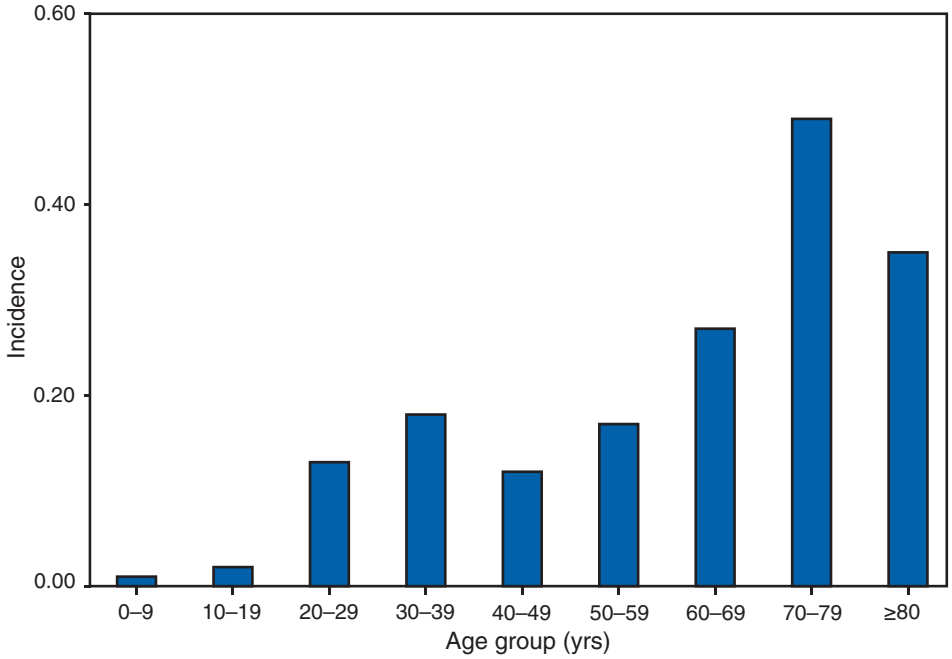
ARBOVIRAL DISEASES, WEST NILE VIRUS. Incidence* of reported cases of neuroinvasive disease, by year — United States, 2000–2009



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

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 incidence remained low until 2002, when large outbreaks occurred in the Midwest and Great Plains. The national incidence of WNV neuroinvasive disease peaked in 2002 and 2003 and was relatively stable from 2004 through 2007. WNV had appeared to reach a stable incidence but incidence decreased in 2008 and continued to decline in 2009. The reported incidence of WNV neuroinvasive disease in the United States for 2009 was 0.13 per 100,000 population, the lowest recorded since 2001.

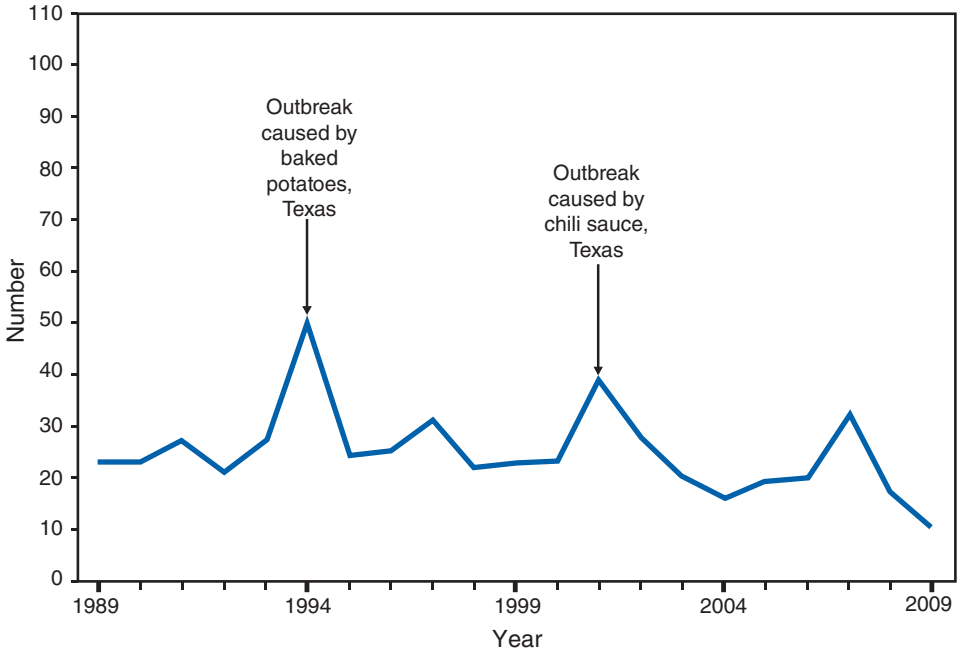
ARBOVIRAL DISEASES, WEST NILE VIRUS. Incidence* of reported cases of neuroinvasive disease, by age group — United States, 2009



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

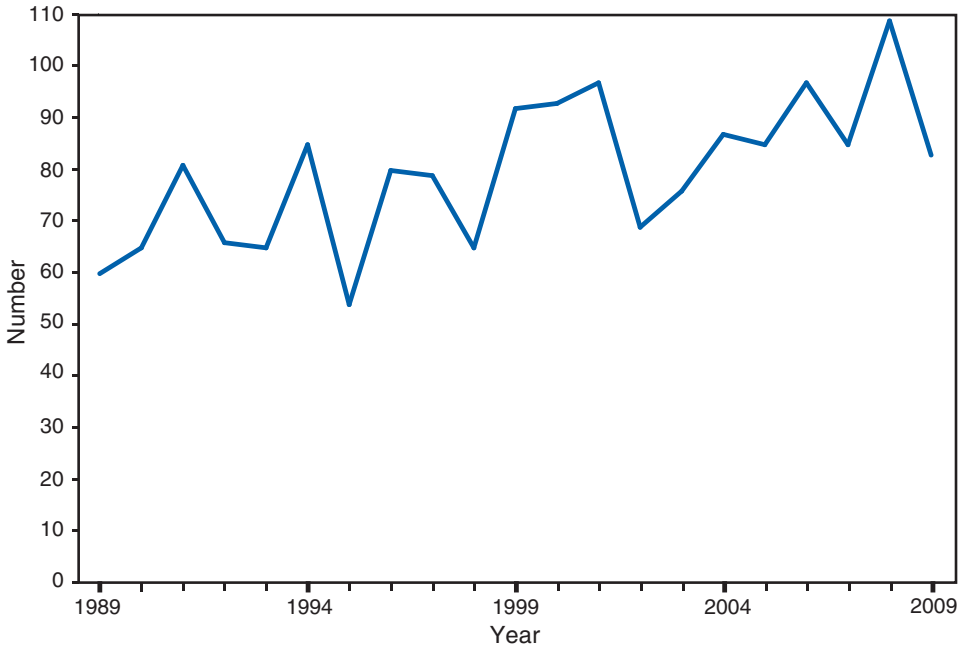
In 2009, the median age of patients with West Nile virus neuroinvasive disease was 60 years (range: 2–91 years), with increasing incidence among older age groups.

BOTULISM, FOODBORNE. Number of reported cases, by year — United States, 1989–2009



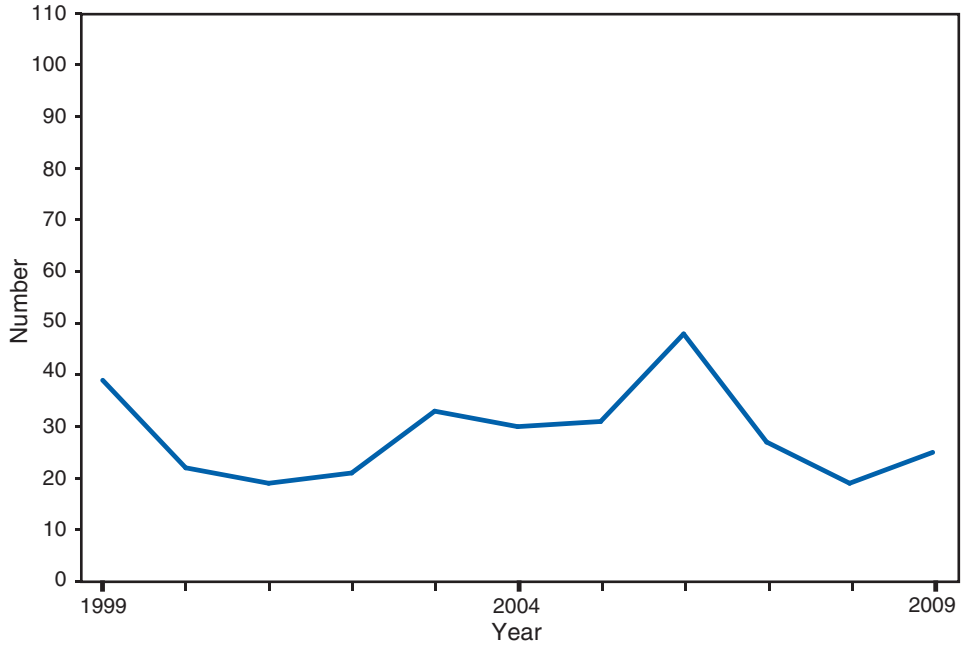
Rates of foodborne botulism have remained stable during the past 2 decades. In 2009, all cases were caused by consumption of home-canned foods.

BOTULISM, INFANT. Number of reported cases, by year — United States, 1989–2009



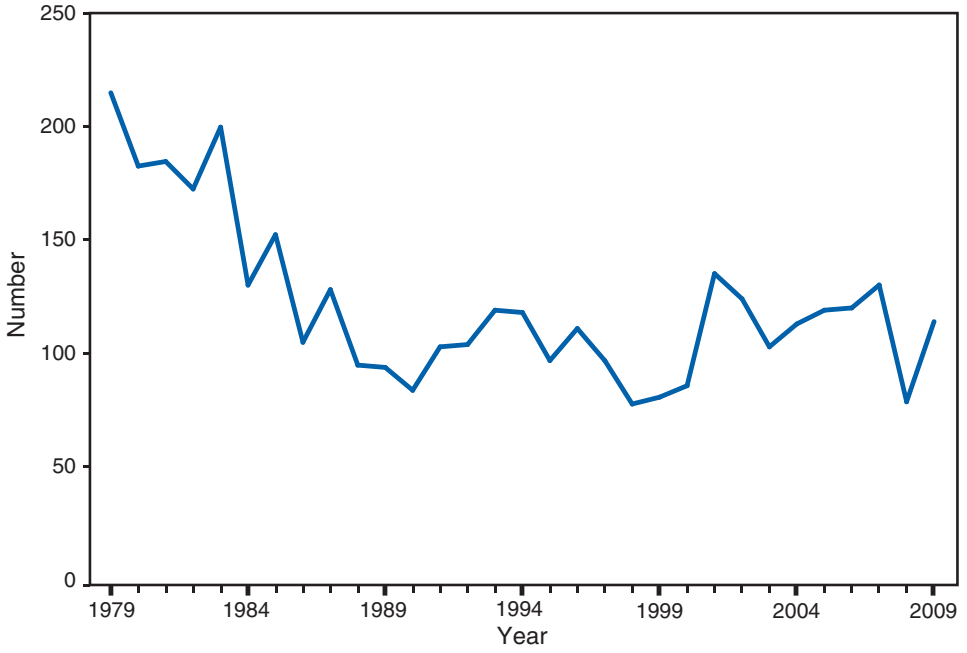
Infant botulism remains the most common cause of botulism in the United States and accounted for 69% of U.S. botulism cases in 2009.

BOTULISM, OTHER. (Includes wound and unspecified). Number of reported cases, by year — United States, 1999–2009



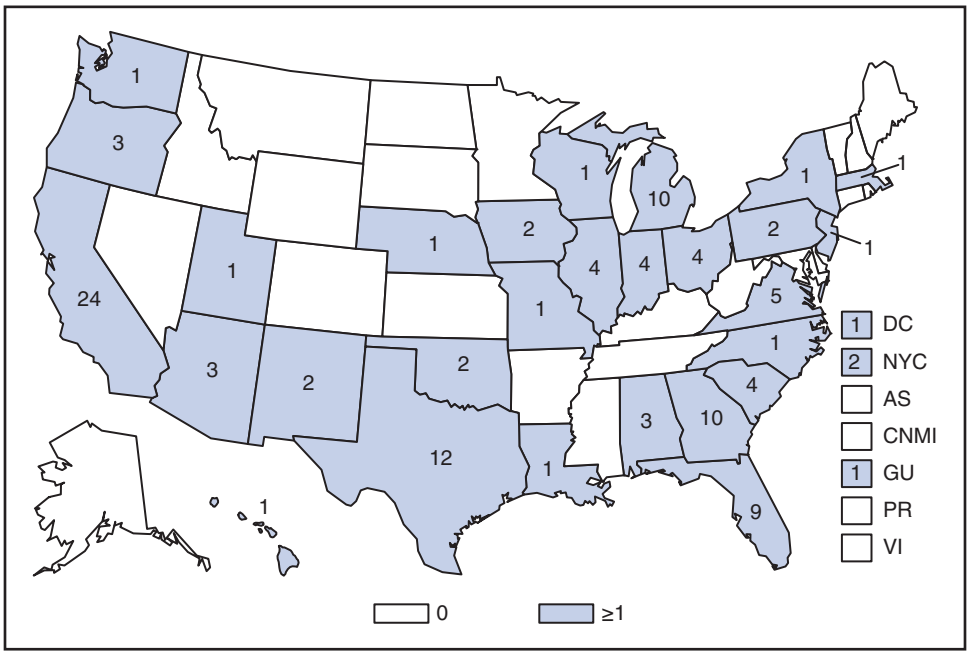
Annual numbers of wound and unspecified forms of botulism have remained stable during the past decade. In 2009, the majority (80%) of cases occurred among injection-drug users in California and Washington.

BRUCELLOSIS. Number of reported cases, by year — United States, 1979–2009



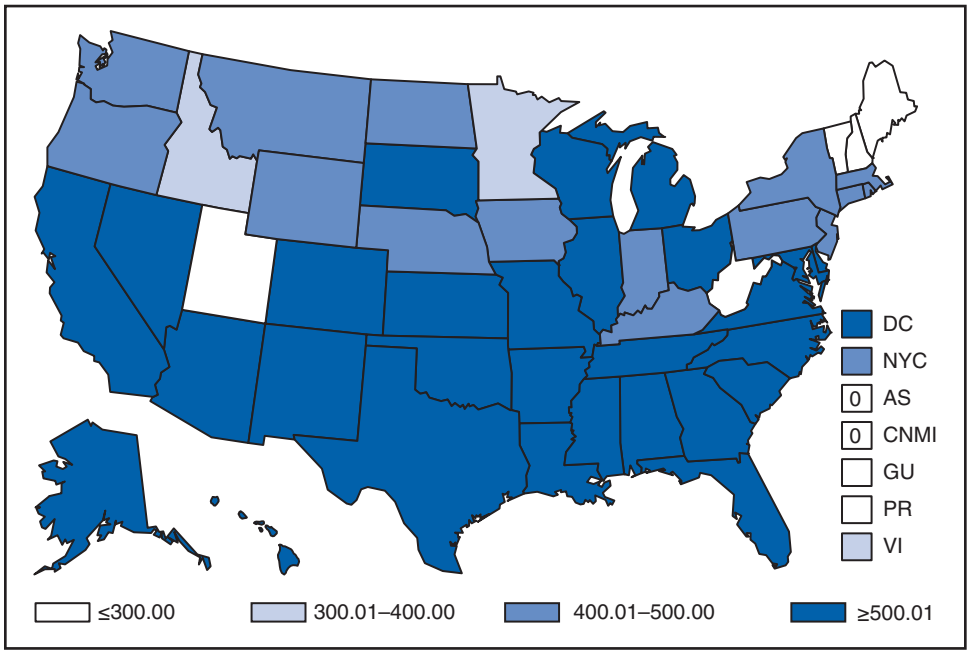
The incidence of brucellosis in the United States increased in 2009, following a decrease of reported cases from the previous year. The reason for the decline in 2008 is unknown, though the 2009 incidence remains consistent with reports from 2004 through 2007.

BRUCELLOSIS. Number of reported cases — United States and U.S. territories, 2009



California reported the greatest number of cases, followed by Texas, Georgia, Michigan, and Florida. 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 cleaning and dressing these animals. Outside of the United States, brucellosis remains endemic in several areas, including the Mediterranean basin, South and Central America, Eastern Europe, Asia, Africa, and the Middle East. Consumption of unpasteurized milk products, including soft cheeses from regions where brucellosis is common in cattle, sheep, and goats, presents a substantial risk.

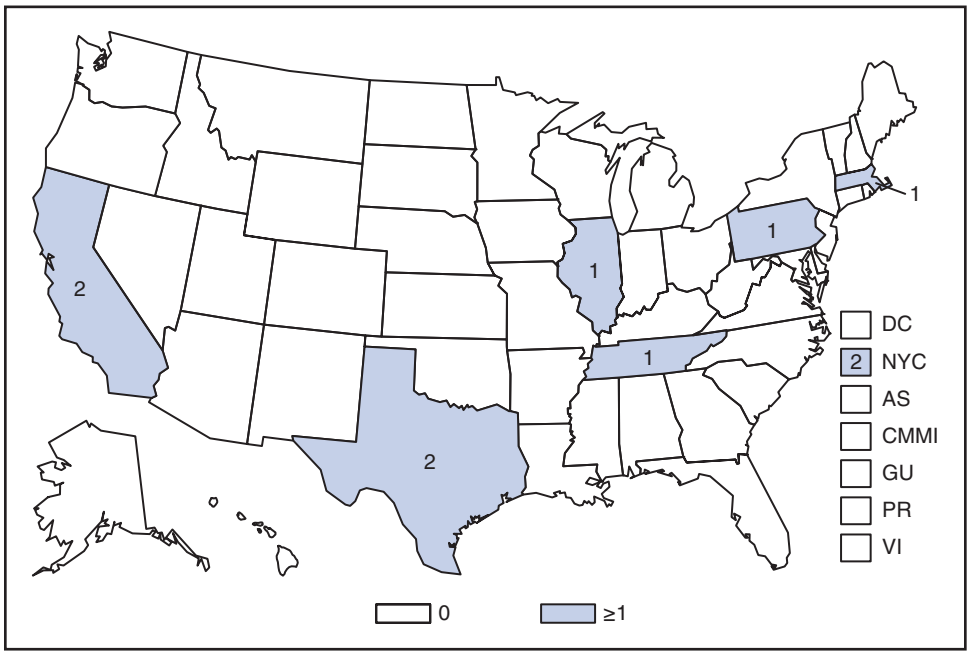
CHLAMYDIA. Incidence* among women — United States and U.S. territories, 2009



* Per 100,000 population.

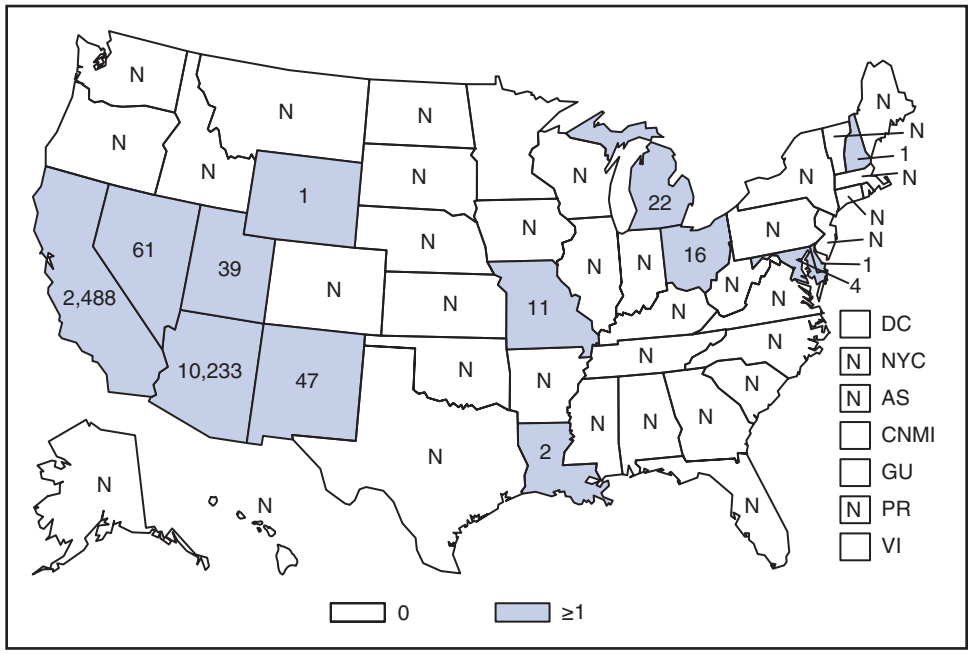
In 2009, the chlamydia rate among women in the United States and territories (Guam, Puerto Rico, and Virgin Islands) was 588.5 cases per 100,000 population.

CHOLERA. Number of reported cases — United States and U.S. territories, 2009



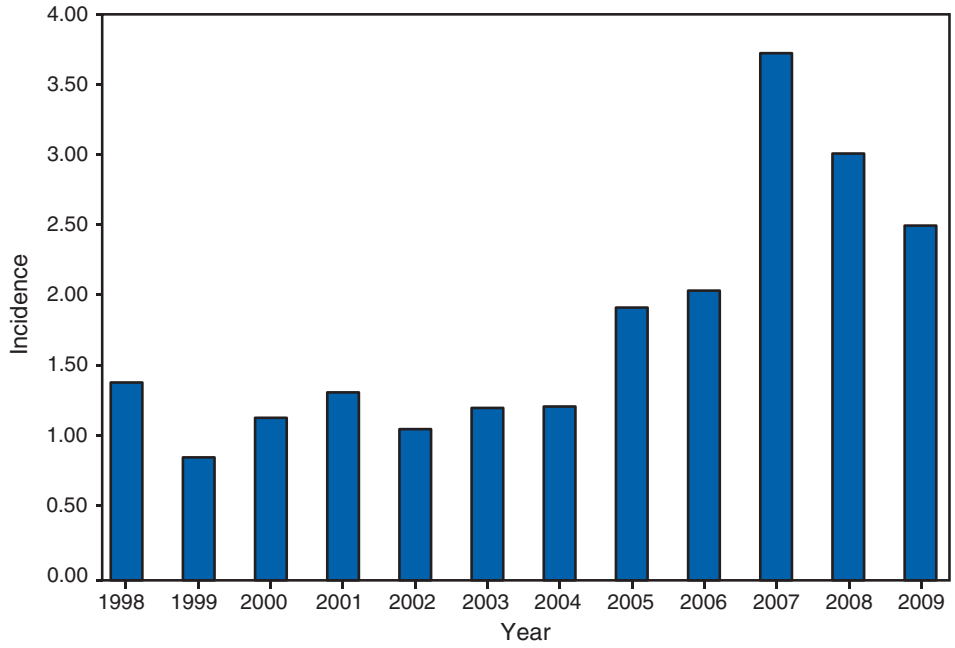
In 2009, the majority (80%) of cholera infections in the United States were acquired during travel abroad; of the remaining cases, one case occurred in a person who reported consuming domestic seafood, and the other resulted from an unknown domestic exposure. Foreign travel and consumption of contaminated domestic seafood remain the major sources of cholera infections in the United States. The above figure presents the number of reported cases of cholera in the United States and U.S. territories in 2009.

COCCIDIOIDOMYCOSIS. Number of reported cases — United States and U.S. territories, 2009



During 2009, coccidioidomycosis cases reported from Arizona increased. In June 2009, one of the major commercial laboratories in Arizona changed reporting practices to conform with the accepted laboratory case definition from the Council of State and Territorial Epidemiologists; this change might have resulted in an artifactual increase.

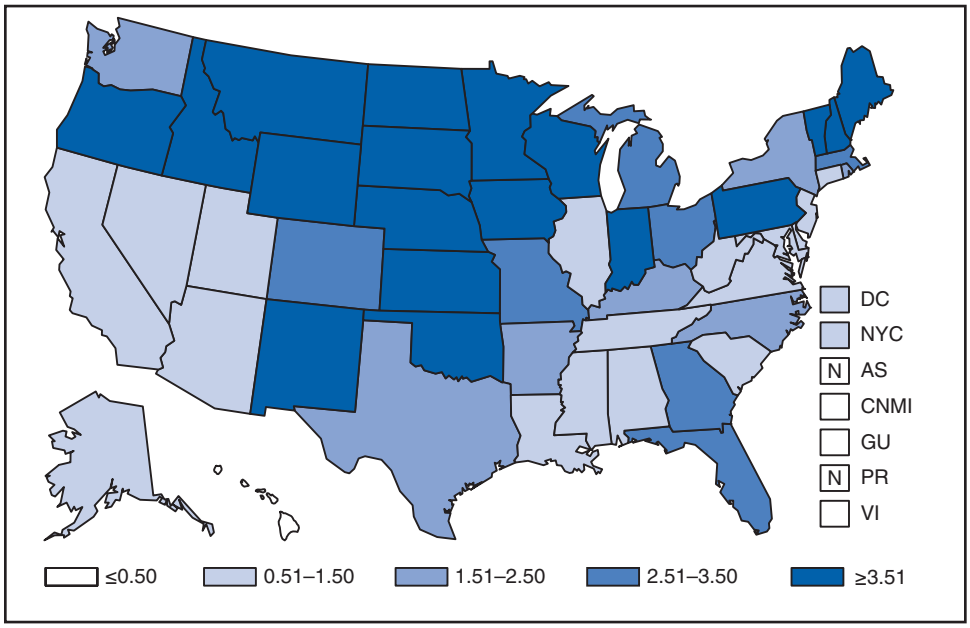
CRYPTOSPORIDIOSIS. Incidence,* by year — United States, 1998–2009



* Per 100,000 population.

Cryptosporidiosis incidence decreased for the second consecutive year, from 3.02 in 2008 to 2.52 in 2009. The decreases in incidence in 2008 and 2009 follow 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.

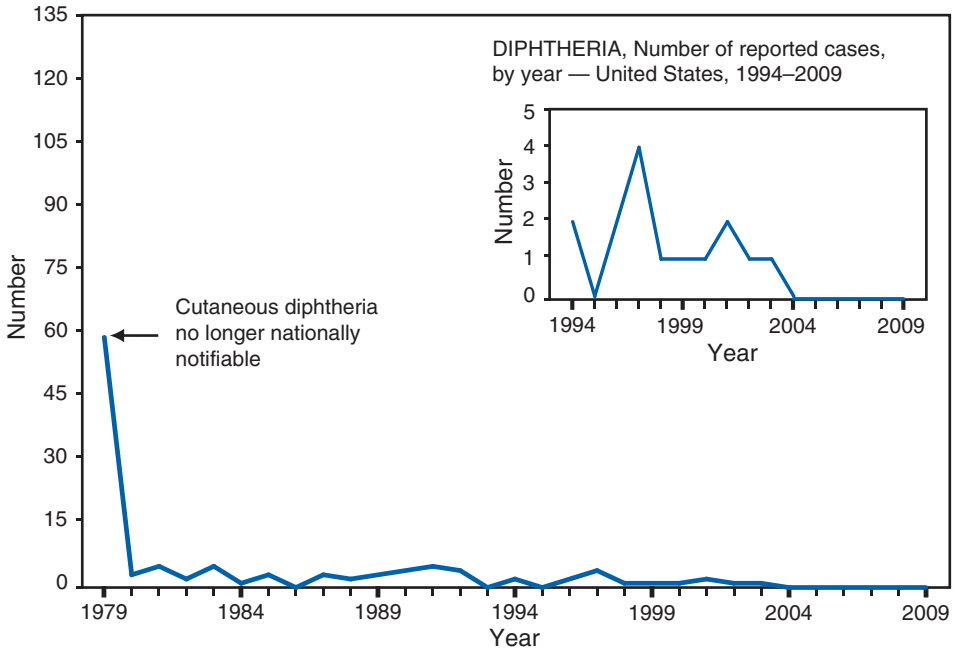
CRYPTOSPORIDIOSIS. Incidence* — United States and U.S. territories, 2009



* Per 100,000 population.

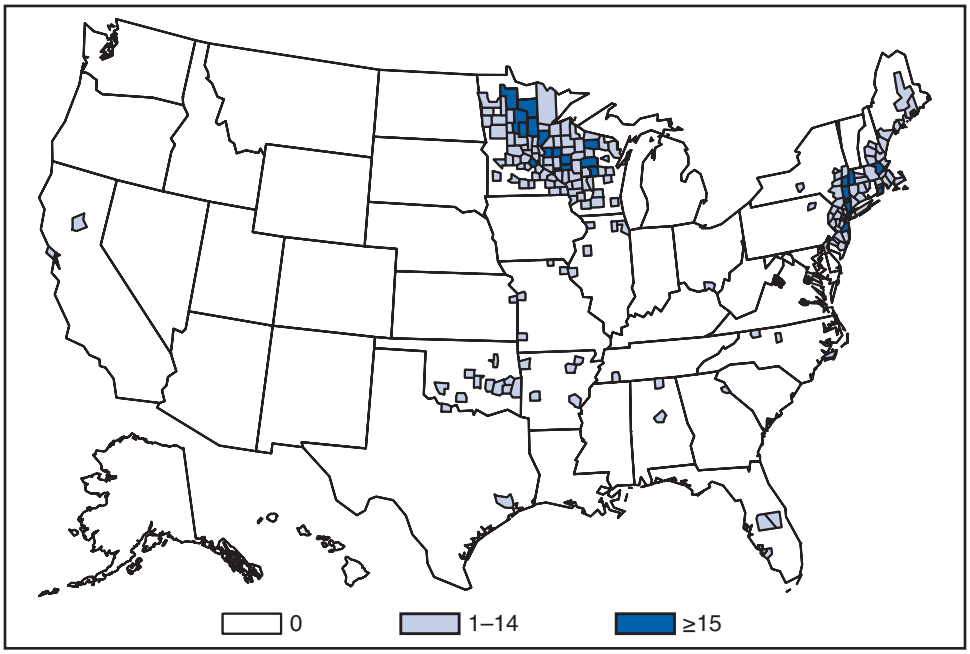
Cryptosporidiosis is widespread geographically in the United States. Differences in reported incidence among states might reflect differences in risk factors, increased cases associated with outbreaks, or difference in the capacity to detect and report cases. Cryptosporidiosis incidence increases during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

DIPHTHERIA. Number of reported cases, by year — United States, 1979–2009



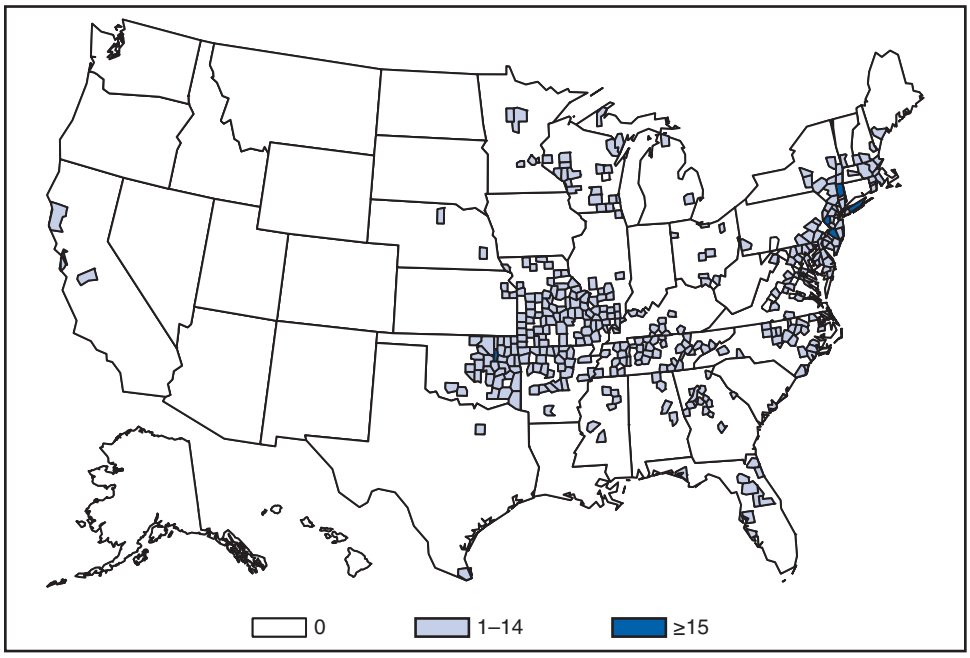
Since 2004, no case of respiratory diphtheria has been reported in the United States and the national health objective of zero cases for 2010 has been maintained.

EHRLICHIOSIS, *ANAPLASMA PHAGOCYTOPHILUM*. Number of reported cases, by county — United States, 2009.



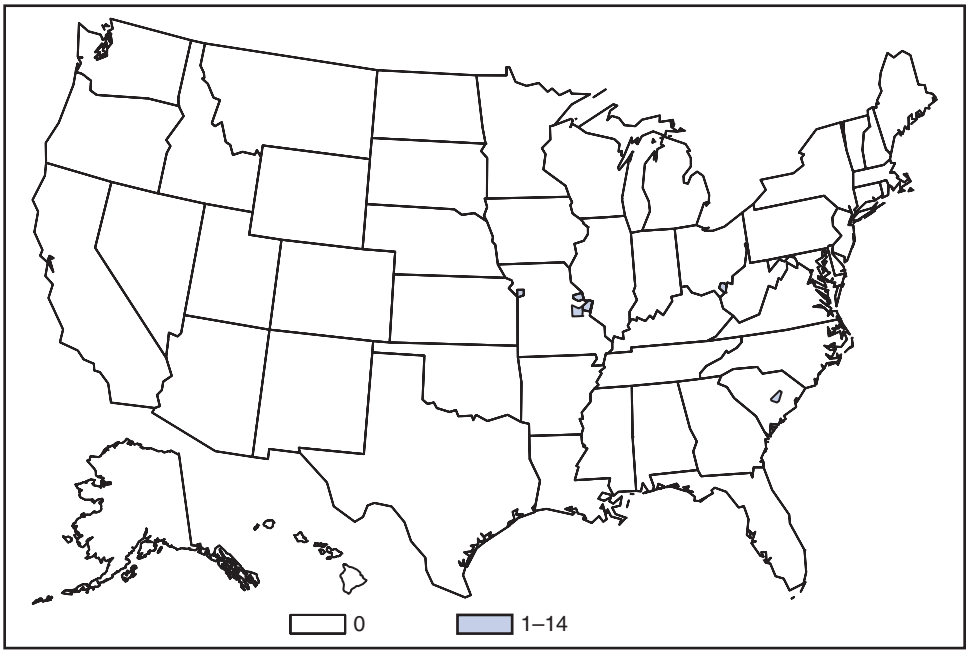
Anaplasmosis is caused by infection with *Anaplasma phagocytophilum*. Cases are reported primarily from the upper Midwest and coastal New England, reflecting both the range of the primary tick vector species (*Ixodes scapularis*) and the range of preferred animal hosts for tick feeding.

EHRLICHIOSIS, *EHRLICHIA CHAFFEENSIS*. Number of reported cases, by county — United States, 2009.



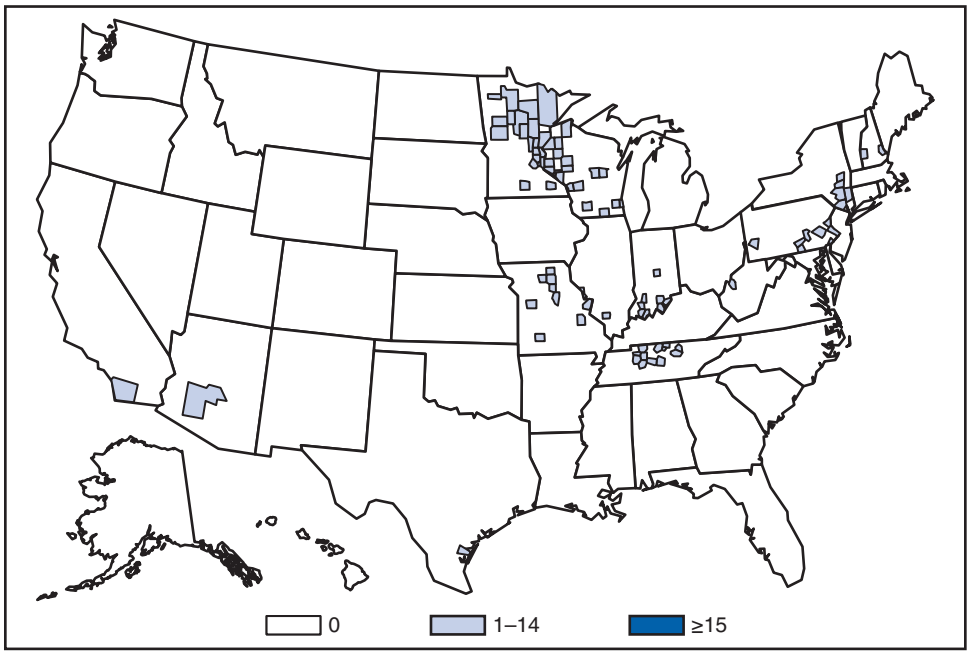
The most common type of ehrlichiosis results from infection with *Ehrlichia chaffeensis*. Cases are reported primarily in the lower Midwest, Southeast, and East Coast, reflecting the range of the primary tick vector species (*Amblyomma americanum*).

EHRLICHIOSIS, *EHRLICHIA EWINGII.* Number of reported cases, by county — United States, 2009.



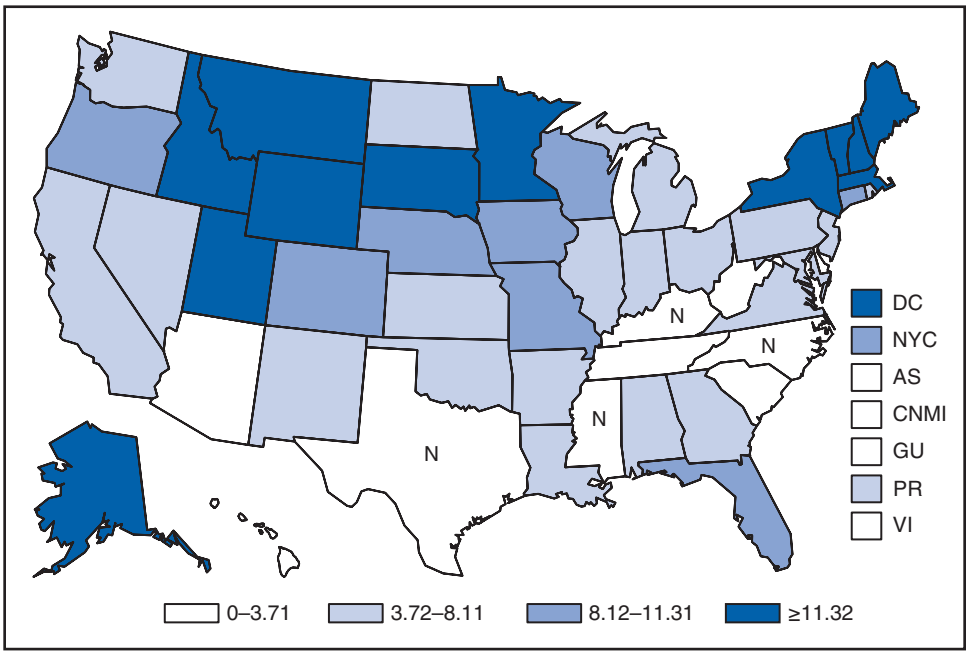
Cases of ehrlichiosis caused by *Erhlichia ewingii* remain rare and are reported primarily from the central United States.

EHRLICHIOSIS, UNDETERMINED. Number of reported cases, by county — United States, 2009.



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).

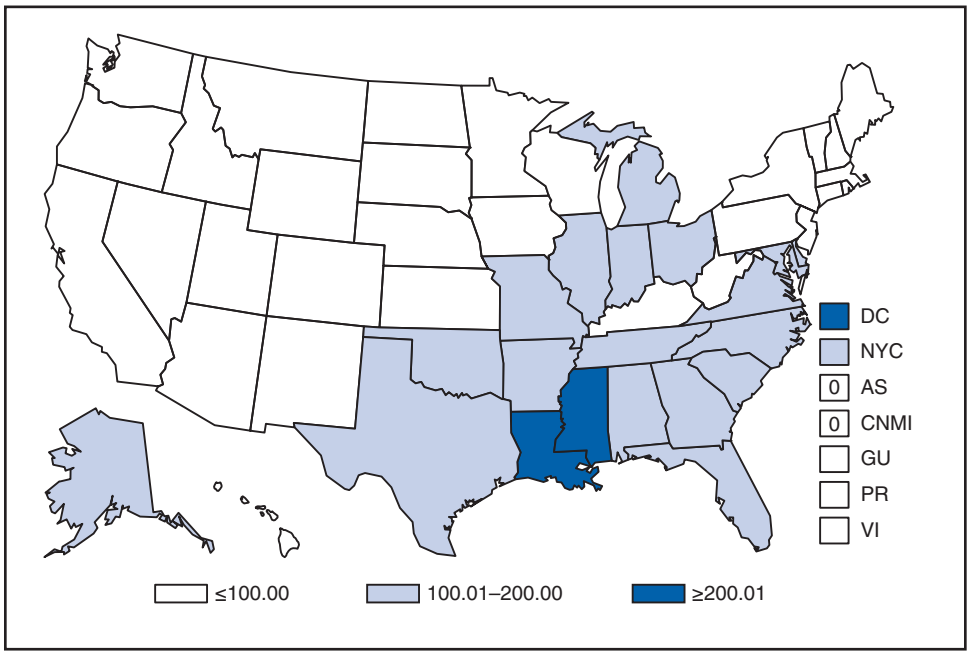
GIARDIASIS. Incidence* — United States and U.S. territories, 2009



* Per 100,000 population.

Giardiasis is widespread geographically in the United States, with 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 unclear. Giardiasis was not a reportable disease in Indiana before 2009.

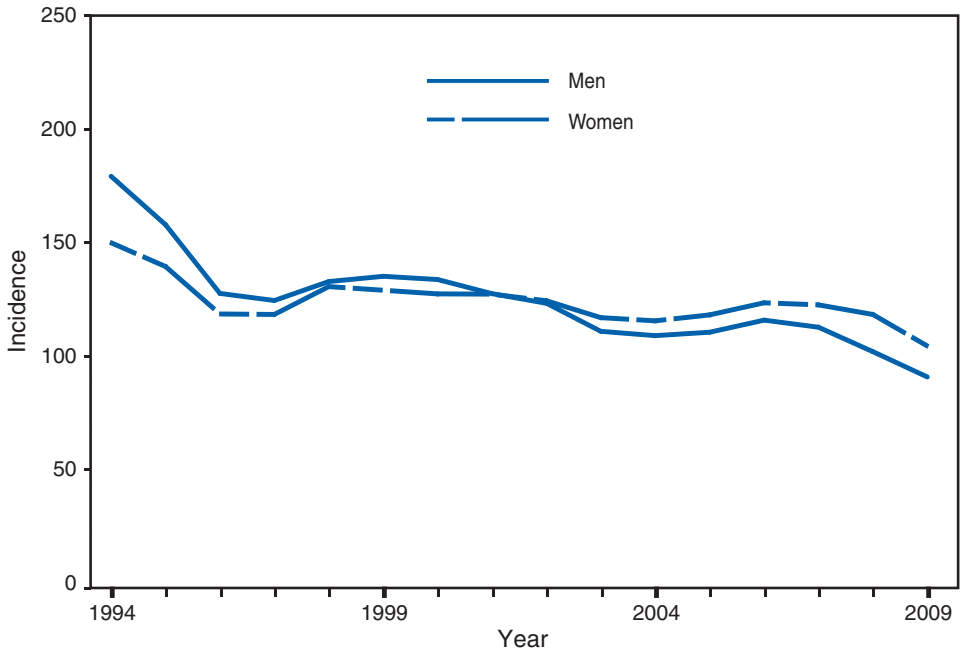
GONORRHEA. Incidence* — United States and U.S. territories, 2009



* Per 100,000 population.

In 2009, the gonorrhea rate in the United States and territories (Guam, Puerto Rico, and Virgin Islands) was 97.8 cases per 100,000 population, a decrease from the rate in 2008.

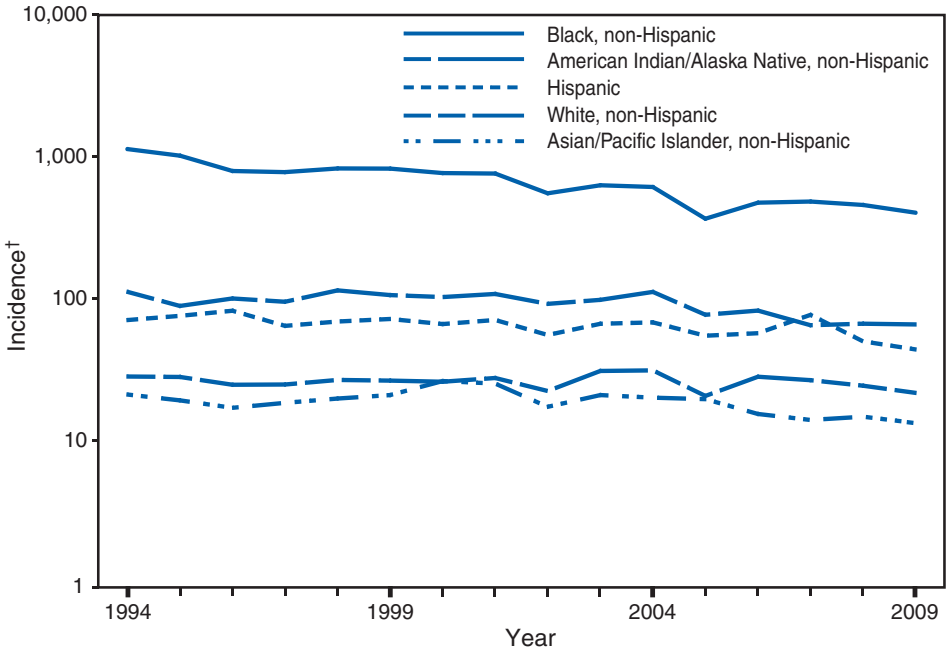
GONORRHEA. Incidence,* by sex — United States, 1994–2009



* Per 100,000 population.

After a 74% decline in the rate of reported gonorrhea from 1975 through 1997, overall gonorrhea rates plateaued. For the ninth year in a row, the gonorrhea rate among women in 2009 was slightly higher than the rate among men.

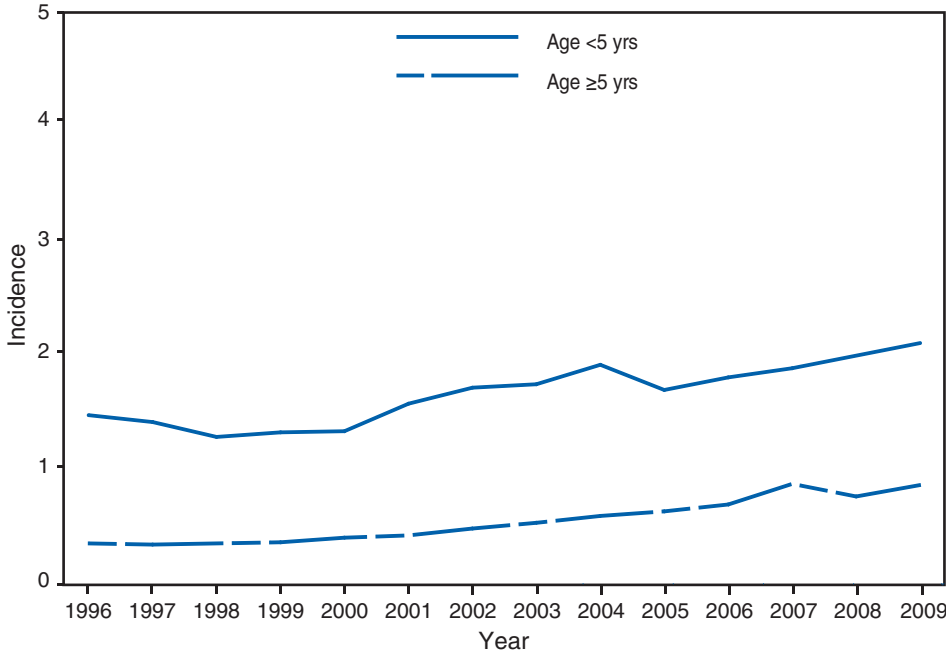
GONORRHEA. Incidence,* by race/ethnicity — United States, 1994–2009



* 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 2009, incidence among non-Hispanic blacks was approximately 20 times greater than that for non-Hispanic whites.

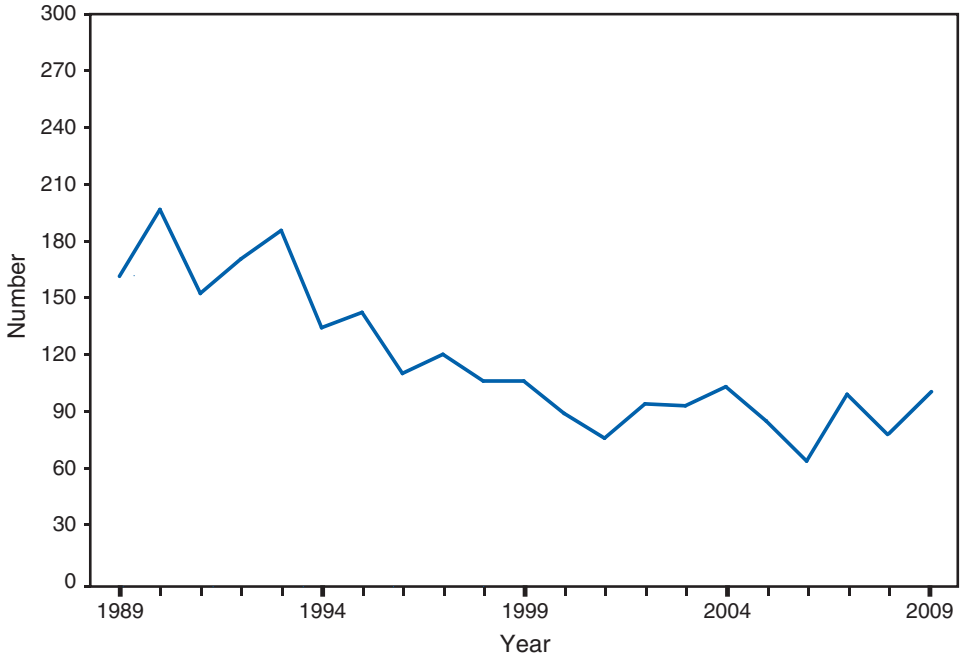
***HAEMOPHILUS INFLUENZAE*, INVASIVE DISEASE. Incidence,* by age group — United States, 1996–2009**



* Per 100,000 population.

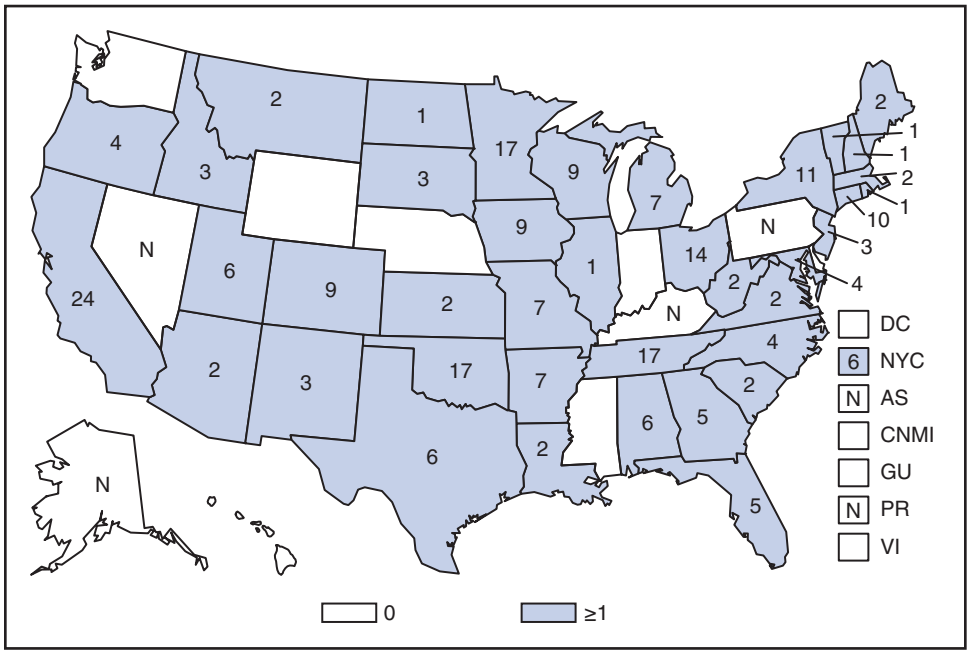
Substantial reductions in the incidence of *Haemophilus influenzae* serotype b (Hib) disease have been achieved through universal Hib vaccination. Before the introduction of conjugate vaccines in 1987, the incidence of invasive Hib disease among children aged <5 years was estimated to be 100 cases per 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, 1989–2009



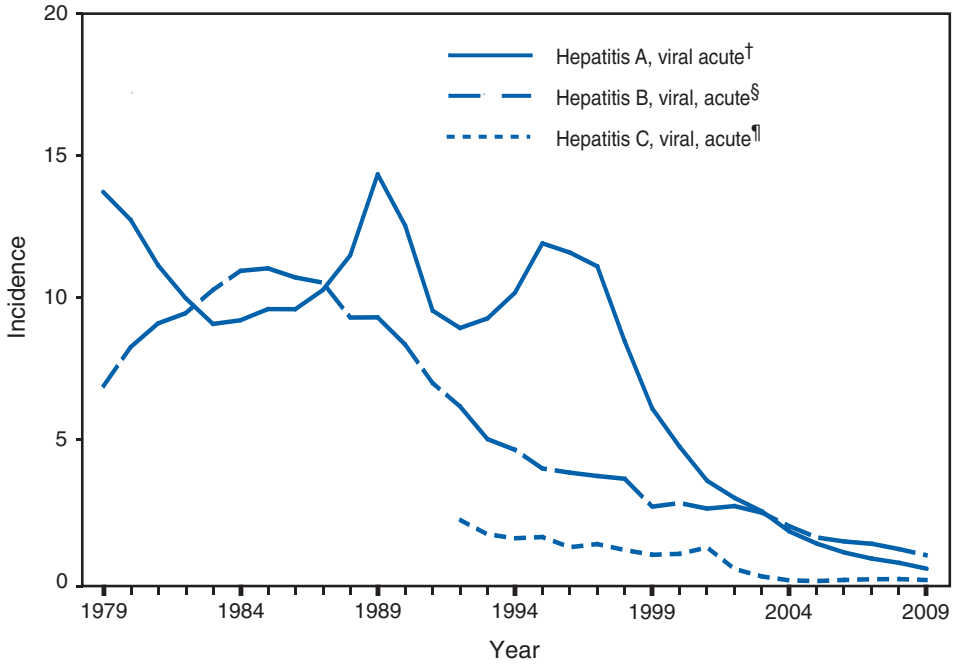
The number of cases of Hansen disease reported to CDC gradually declined during 1989–2006 and since has fluctuated from 73 to 109 cases per year.

HEMOLYTIC UREMIC SYNDROME, POSTDIARRHEAL. Number of reported cases — United States and U.S. territories, 2009



During 2009, most reported cases occurred among children aged 1–4 years. From 2008 to 2009, the number of reported cases decreased substantially, from 330 to 242. The majority of postdiarrheal hemolytic uremic syndrome (HUS) cases are caused by Shiga toxin-producing *E. coli* infections (STEC). The decrease in HUS cases is most likely caused by observed decreases in reported STEC infections.

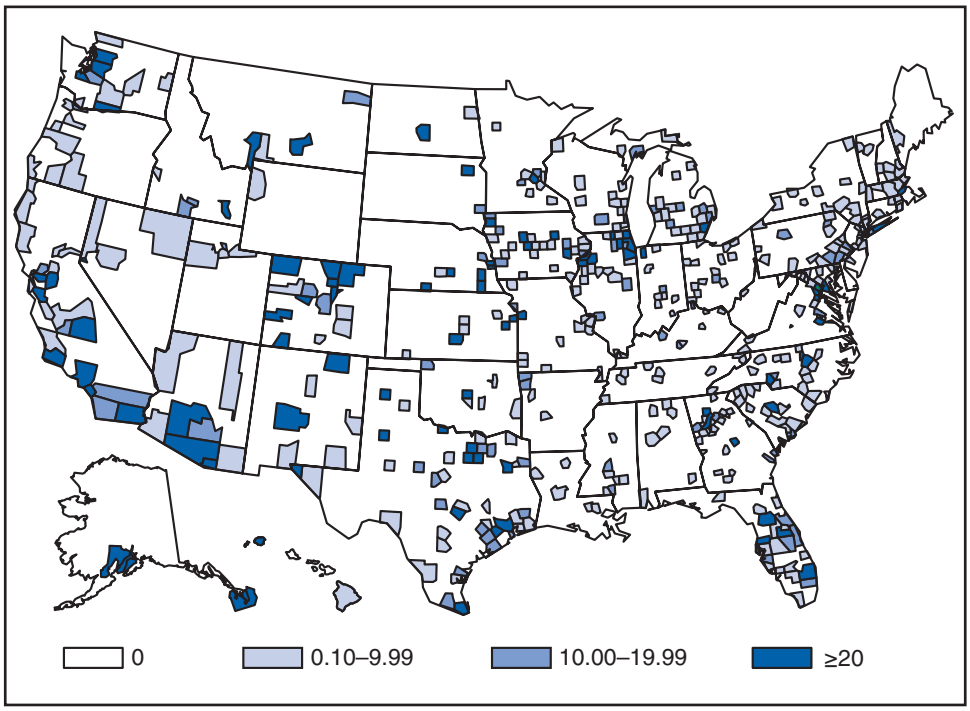
HEPATITIS, VIRAL. Incidence,* by year — United States, 1979–2009



* 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 2009 was the lowest ever recorded. This reduction in incidence is attributable, at least in part, to routine vaccination of children. Hepatitis A incidence has declined >90% since 1995. Routine hepatitis B vaccination of infants has reduced rates of hepatitis B infection by >95% in children. Rates also have declined among adults, but cases continue to occur among adults with high-risk behaviors. Outbreaks in health-care settings such as long-term–care facilities and nursing homes caused by failure to adhere to infection-control practices account for a substantial number of new cases among the elderly population. Incidence of acute hepatitis C has declined approximately 90% since 1992; however, a substantial burden of disease remains as a result of the estimated 3.2 million U.S. residents with chronic hepatitis C virus infection.

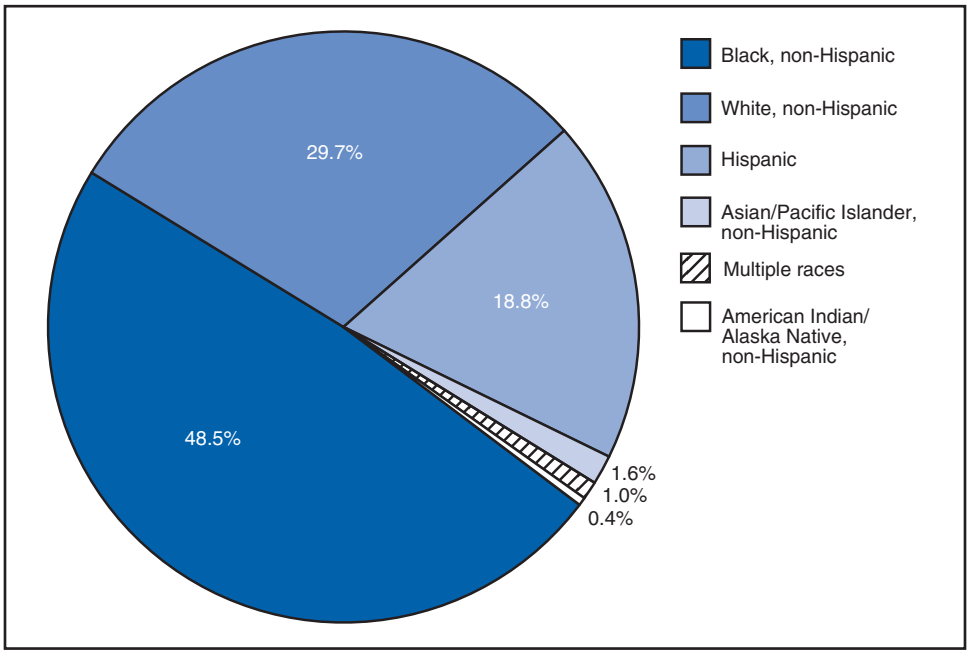
HEPATITIS A. Incidence,* by county — United States, 2009



* Per 100,000 population.

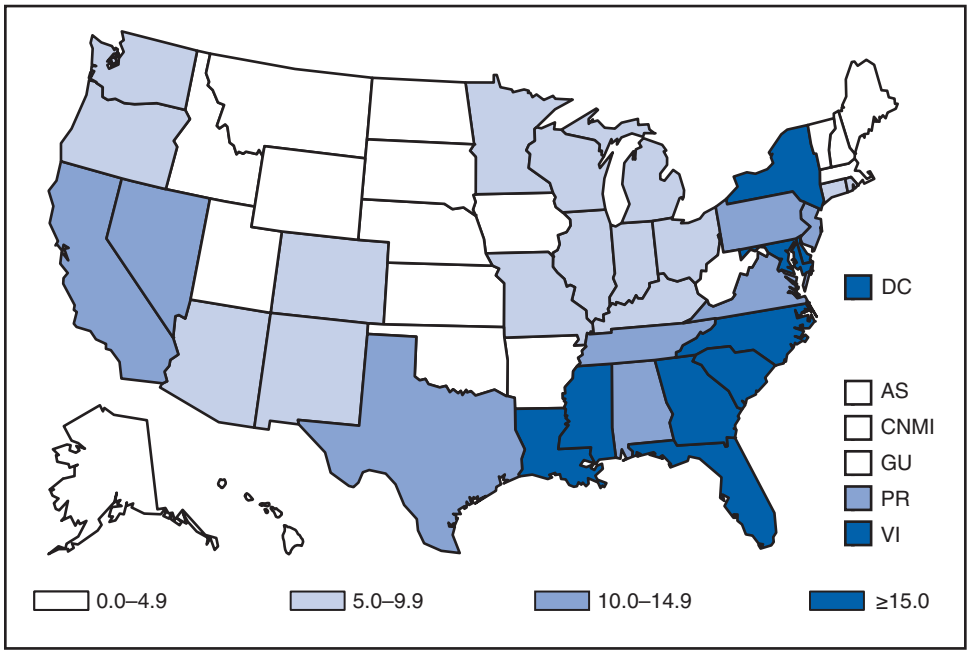
In 1999, routine hepatitis A vaccination was recommended for children living in 11 states with consistently elevated rates of disease. Since then, rates of infection with hepatitis A virus (HAV) have declined in all regions, with the greatest decline occurring in western states. HAV infection rates are now the lowest ever reported and similar in all regions. As of 2006, hepatitis A vaccine is now recommended for children in all states.

HUMAN IMMUNODEFICIENCY VIRUS DIAGNOSES. Percentage of diagnosed cases, by race/ethnicity—United States, 2009



Of persons diagnosed with HIV in 2009, the greatest percentage was among non-Hispanic blacks, followed by non-Hispanic whites, Hispanics, Asians/Pacific Islanders, and American Indians/Alaska Natives.

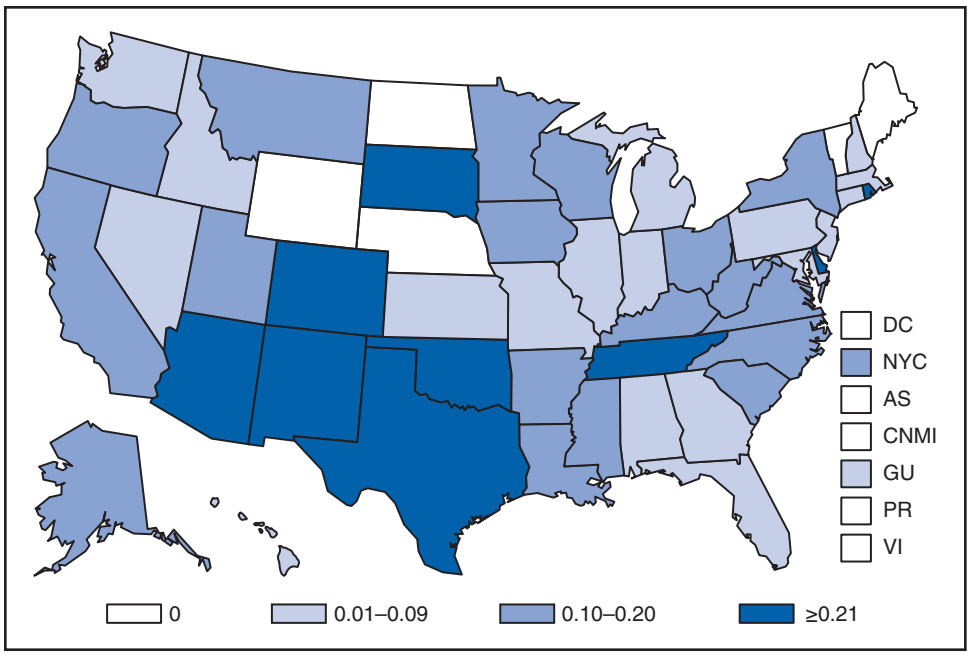
HUMAN IMMUNODEFICIENCY VIRUS DIAGNOSES. Diagnosis rates*—United States and U.S. territories, 2009



* Per 100,000 population.

High rates (i.e. ≥15 cases per 100,000 population) of HIV diagnosis were observed in certain states in the Southeast and Northeast. Rates ≥15 cases per 100,000 population also were observed in Washington DC, and the U.S. Virgin Islands.

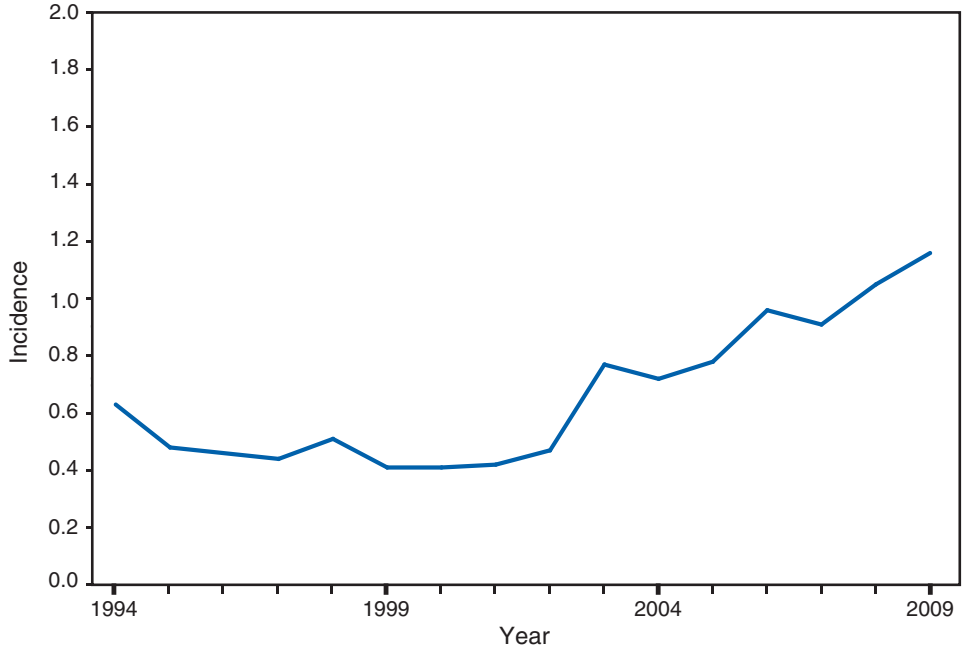
INFLUENZA-ASSOCIATED PEDIATRIC MORTALITY. Incidence* — United States and U.S. territories, 2009



* Per 100,000 population.

During 2009, 45 states and New York City reported a total of 358 influenza-associated pediatric deaths to CDC for an overall incidence rate in the United States of 0.48 deaths per 100,000 children aged <18 years. The increase in rates, when compared with last year, and the state-to-state variation in rates were likely related to the incidence of 2009 A (H1N1) and small population size rather than true differences in disease burden.

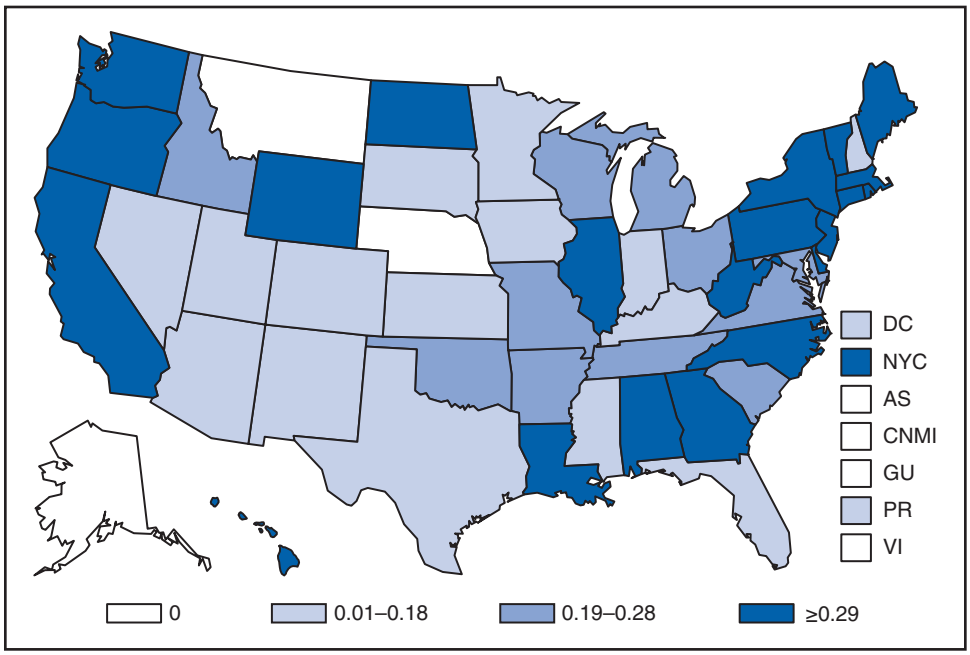
LEGIONELLOSIS. Incidence,* by year — United States, 1994–2009



* Per 100,000 population.

The incidence of legionellosis increased again in 2009, continuing a general increase that began in 2003. Factors contributing to this increase might include a true increase in disease transmission, greater use of diagnostic testing, and increased reporting.

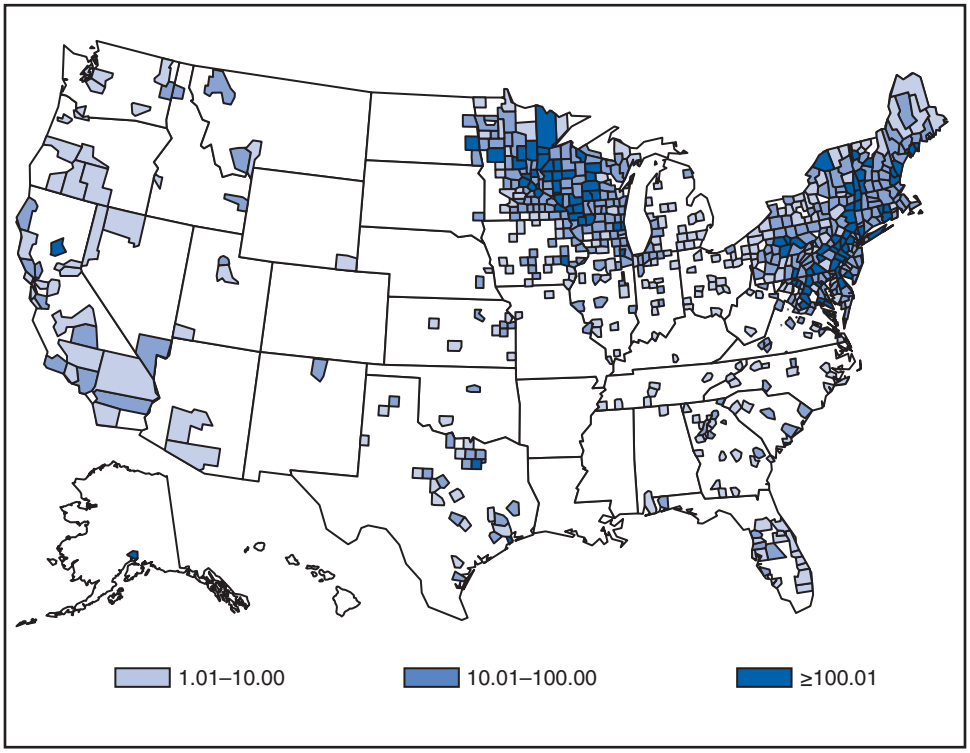
LISTERIOSIS. Incidence* — United States and U.S. territories, 2009



* Per 100,000 population.

Listeriosis is primarily foodborne and occurs most frequently among older adults or persons who are 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 Mexican-style cheese.

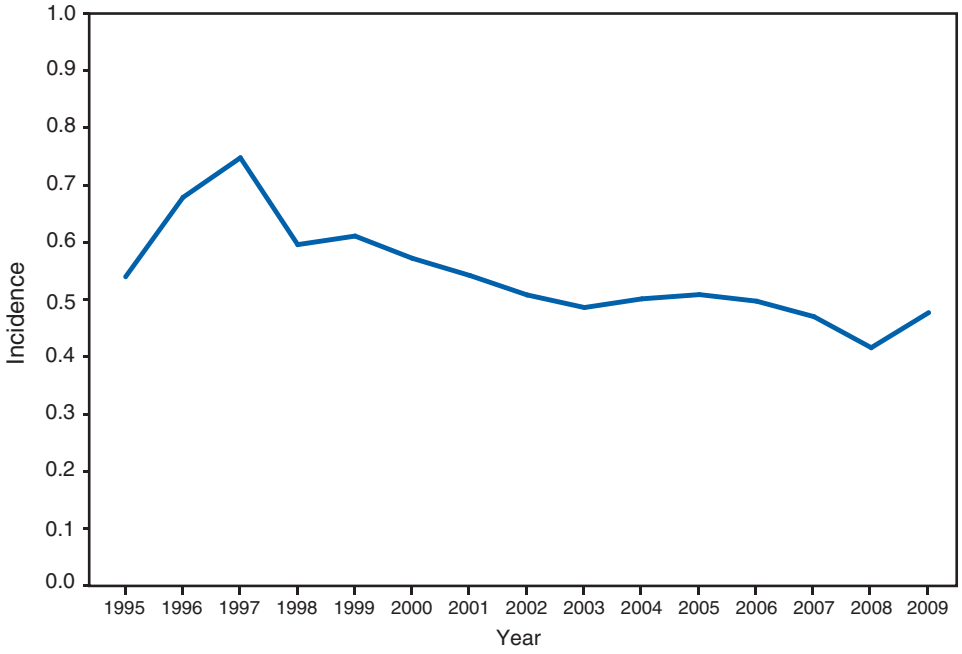
LYME DISEASE. Incidence* of reported confirmed cases, by county — United States, 2009



* Per 100,000 population.

Approximately 90% of confirmed Lyme disease cases are reported from states in the northeastern and upper midwestern United States. A rash that can be confused with early Lyme disease sometimes occurs following bites of the lone star tick (*Amblyomma americanum*). These ticks, which do not transmit the Lyme disease bacterium, are common human-biting ticks in southern and southeastern United States.

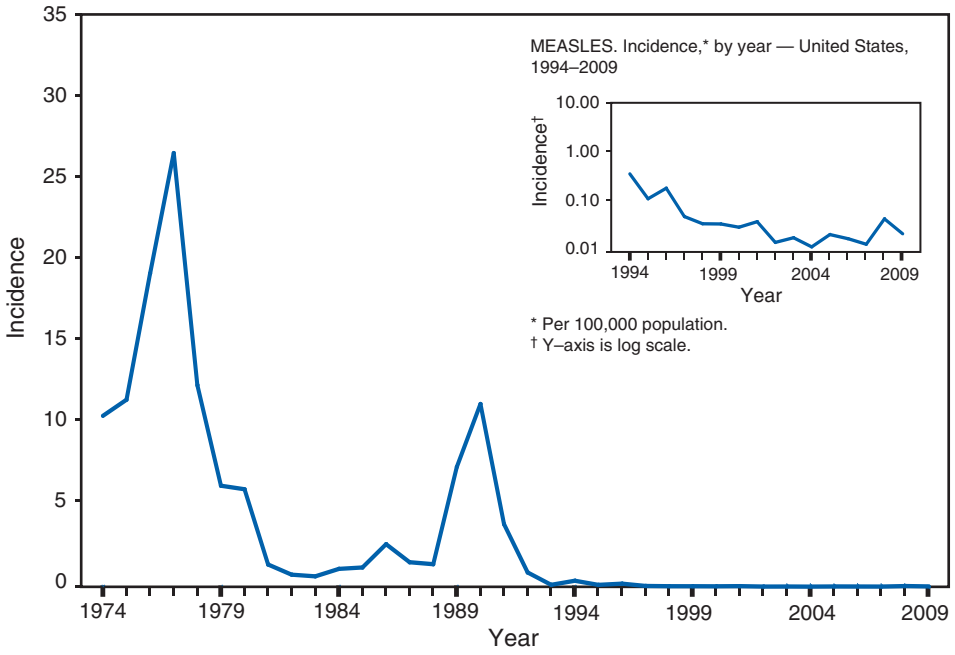
MALARIA. Incidence,* by year — United States, 1995–2009



* Per 100,000 population.

Malaria incidence has remained relatively stable.

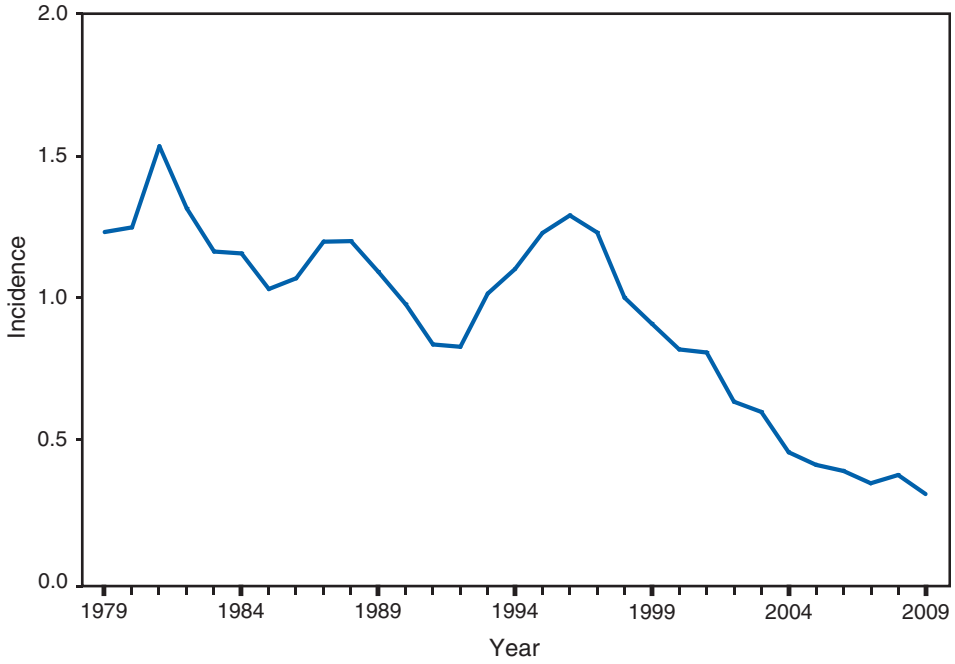
MEASLES. Incidence,* by year — United States, 1974–2009



* Per 100,000 population.

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

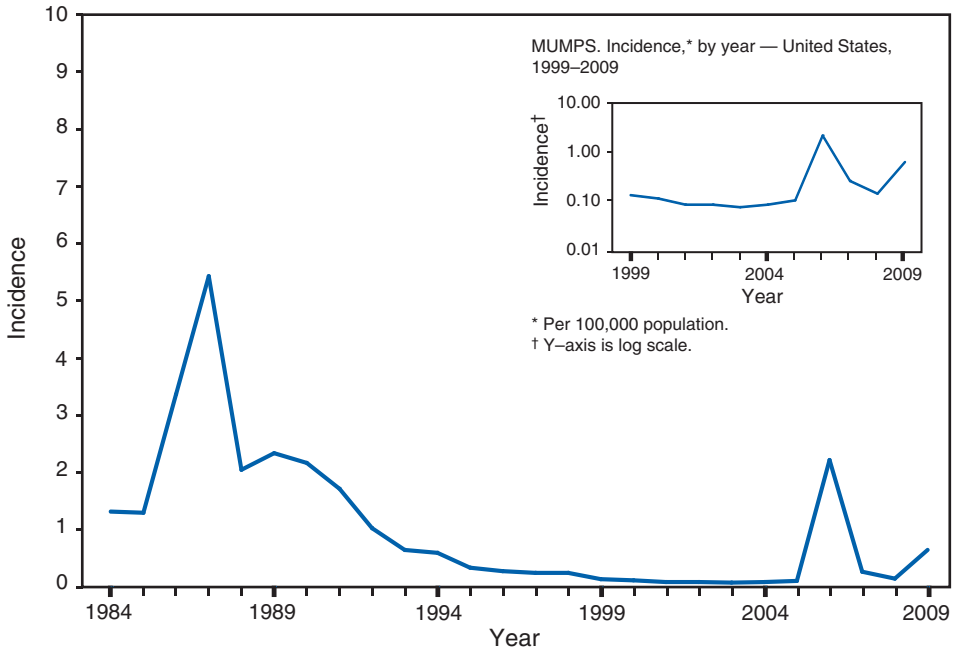
MENINGOCOCCAL DISEASE. Incidence,* by year — United States, 1979–2009



* Per 100,000 population.

Meningococcal disease incidence remained low in 2009, but it 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 2009, coverage with meningococcal conjugate vaccine was 53.6% among adolescents aged 13–17 years in the United States.

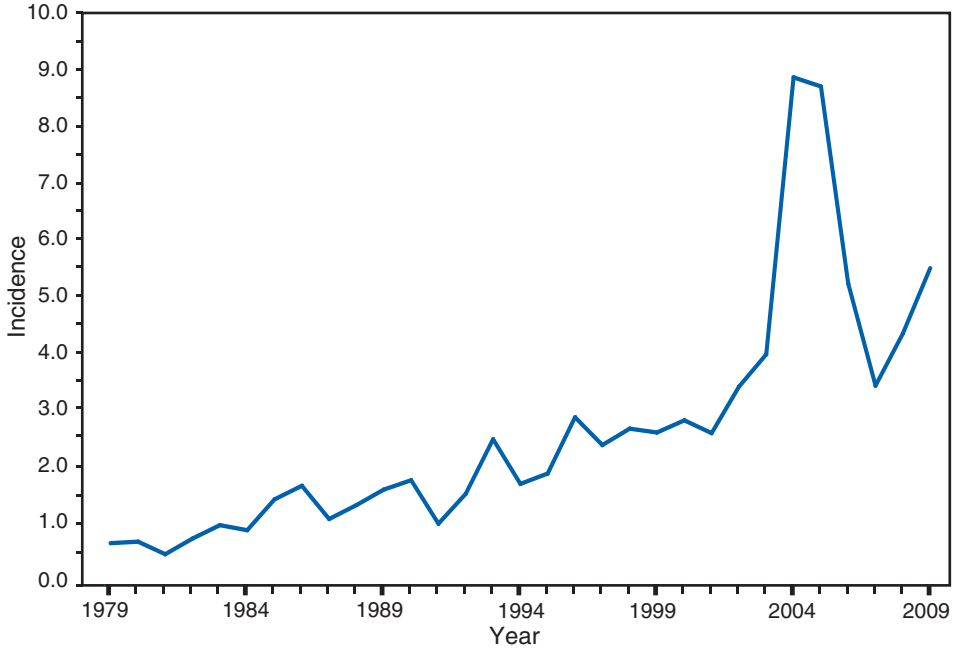
MUMPS. Incidence,* by year — United states, 1984–2009



* Per 100,000 population.

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 in the Midwest affected primarily college students aged 18–24 years. A second large outbreak began in 2009 and affected Orthodox Jewish communities in the Northeast.

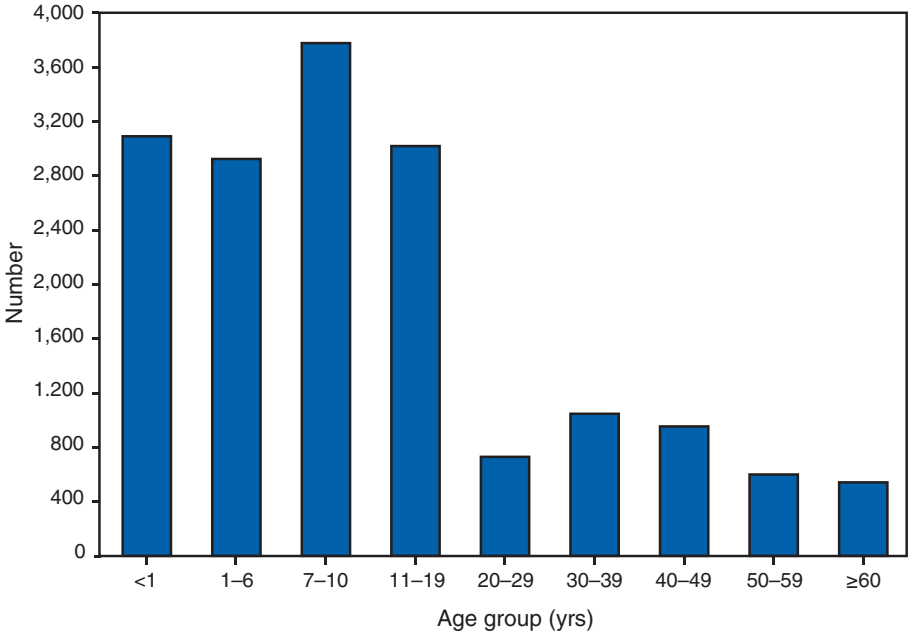
PERTUSSIS. Incidence,* by year — United States, 1979–2009



* Per 100,000 population.

Although the incidence of reported pertussis has decreased since the peak in 2004, incidence increased during 2008–2009 and continues to remain higher than in the 1990s.

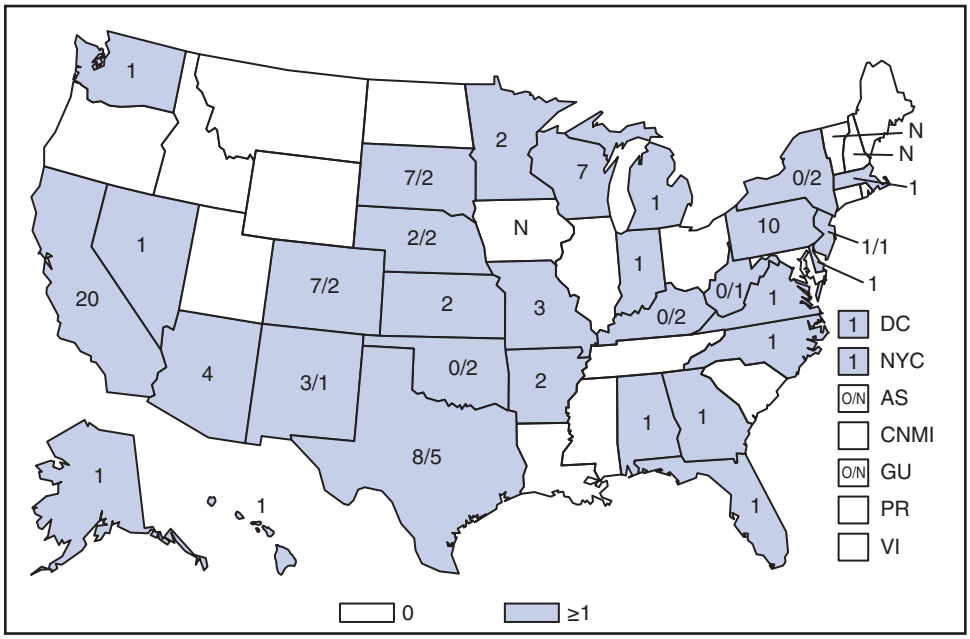
PERTUSSIS. Number of reported cases,* by age group — United States, 2009



* Of 16,858 cases, age was reported unknown for 187 persons.

Infants, especially those who are too young to be fully vaccinated, are at increased risk for severe disease and death from pertussis. A large proportion of reported cases is also observed among school-aged children and adolescents, and the contribution of cases in children aged 7–10 years appears to be increasing compared with previous years.

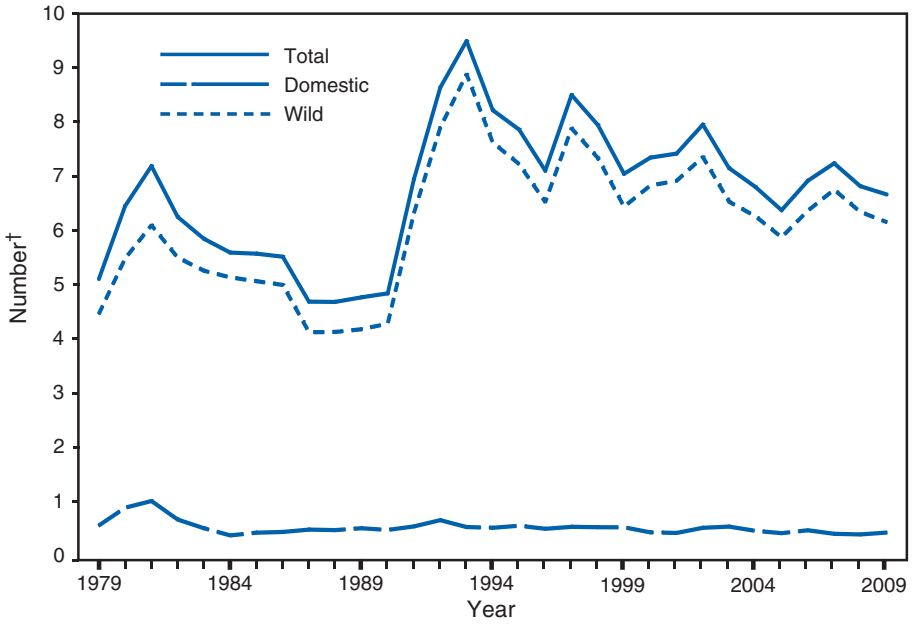
Q FEVER, ACUTE AND CHRONIC. Number of reported cases* — United States and U.S. territories, 2009



* 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.

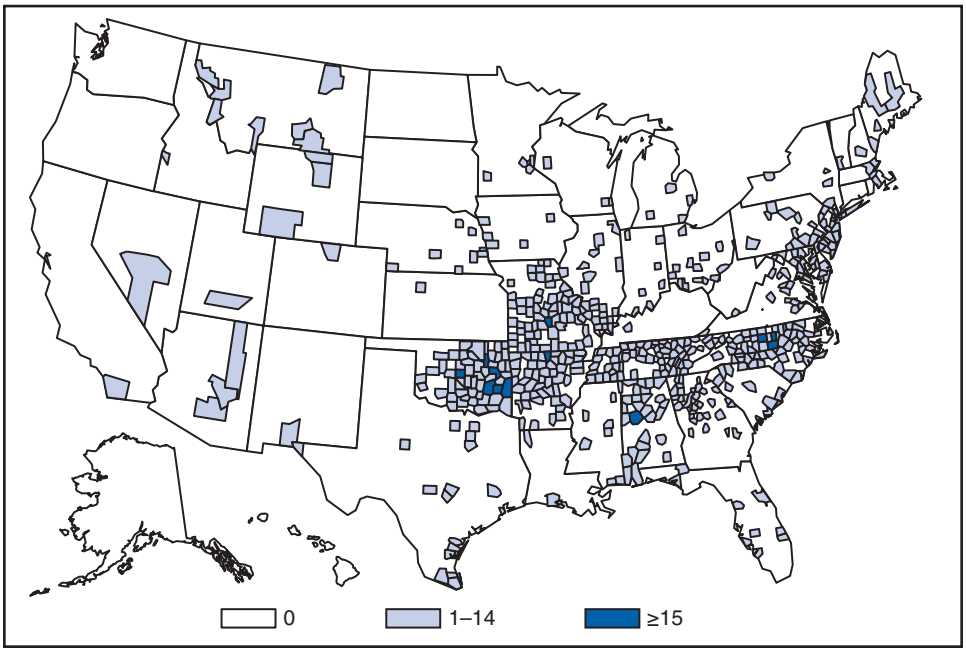
RABIES, ANIMAL. Number of reported cases among wild and domestic animals,* by year — United States and Puerto Rico, 1979–2009



* Data from the Division of Vector-Borne Infectious Diseases, National Center for Emerging and Zoonotic Infectious Diseases (NCZVED).
† In thousands.

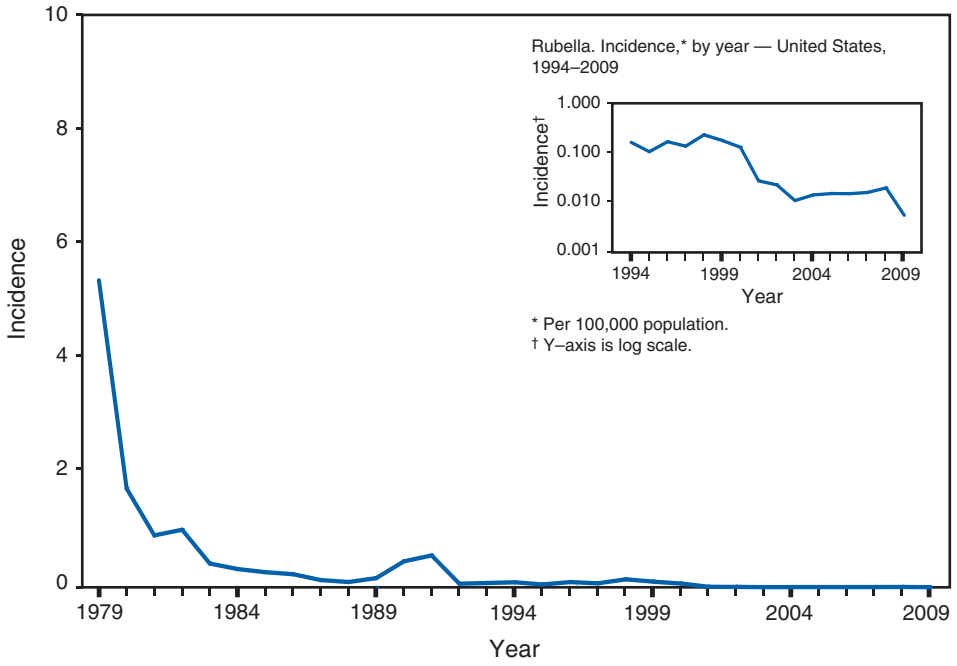
The proportion of rabid animals among those tested has demonstrated a downward trend from 6.1% in 2006 to 5.6% in 2009. Despite an overall decrease in the number of rabid animals submitted for testing during 2009, bats remained the second most submitted animals for rabies testing and behind only raccoons in total reported rabid animals. The raccoon rabies virus variant remains responsible for the majority of reported rabid animals, but increases in rabid animals attributable to skunk rabies virus variants were reported during 2009.

ROCKY MOUNTAIN SPOTTED FEVER. Number of reported cases, by county — United States, 2009



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).

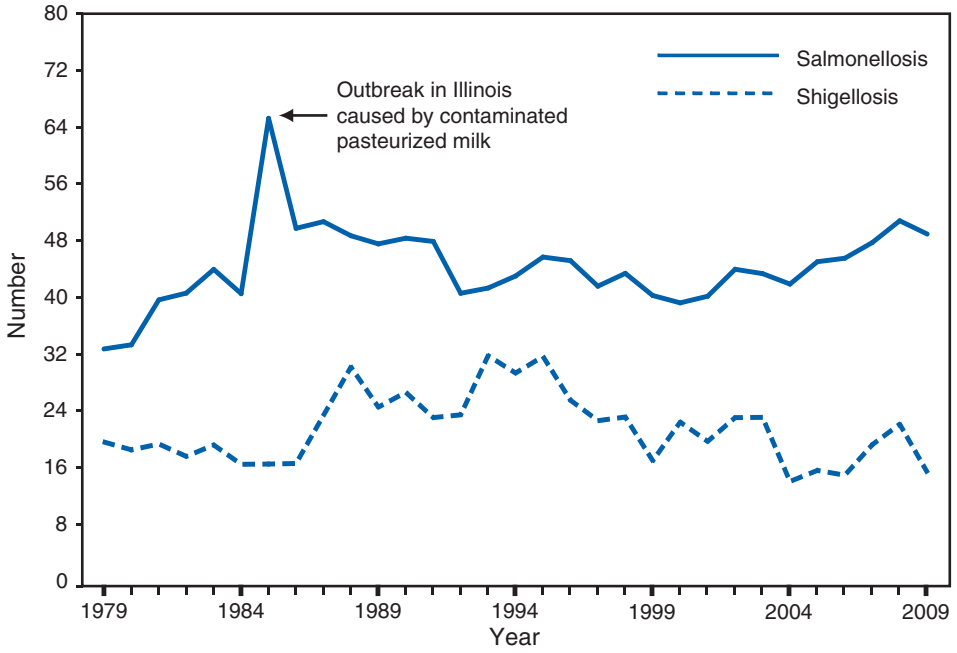
RUBELLA. Incidence,* by year — United States, 1979–2009



* Per 100,000 population.

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

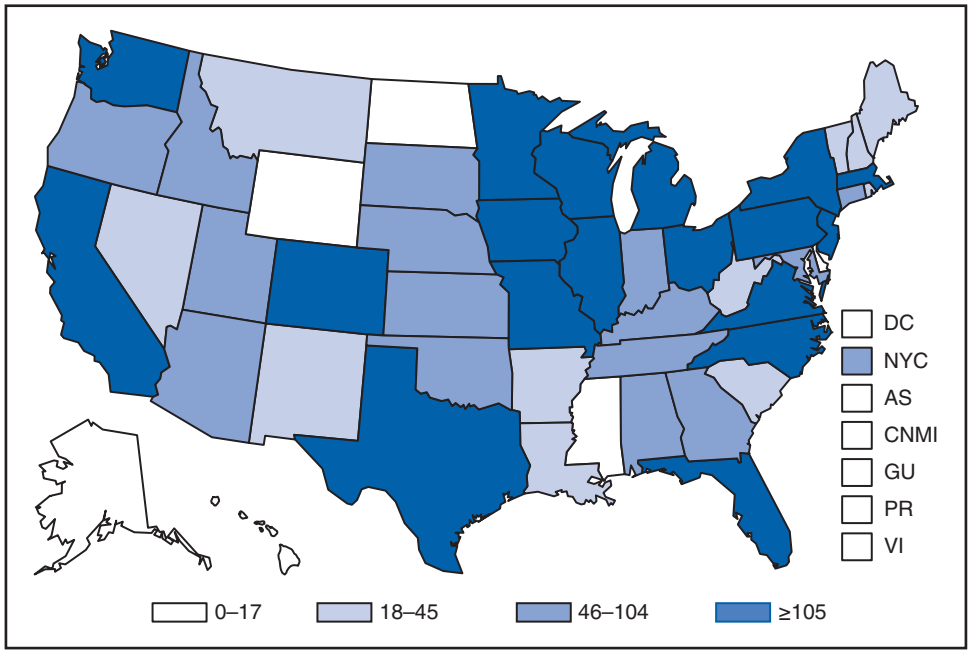
SALMONELLOSIS AND SHIGELLOSIS. Number* of reported cases, by year — United States, 1979–2009



* In thousands.

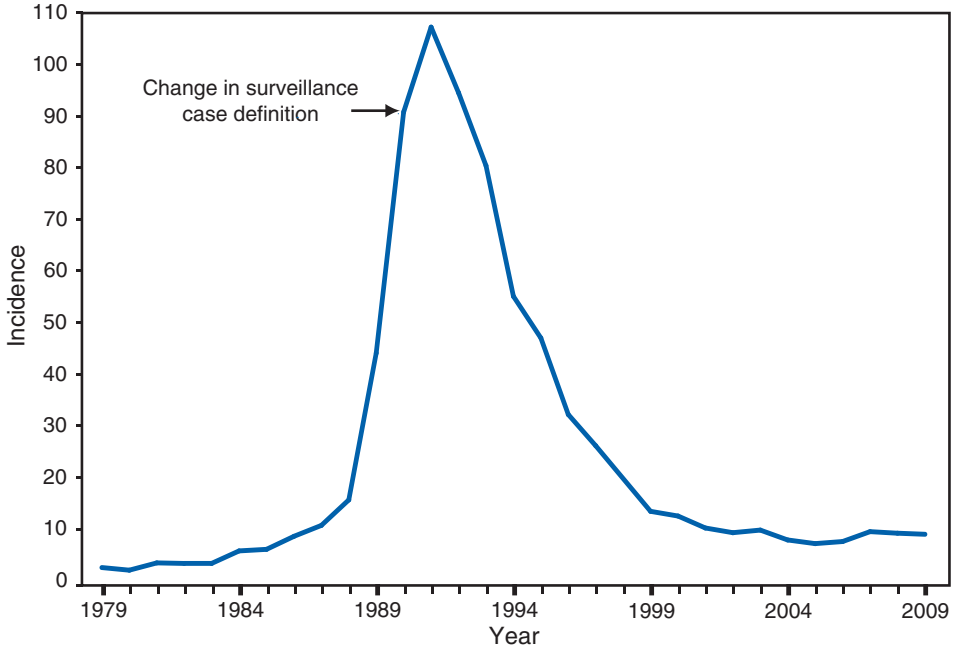
The reported number of cases of salmonellosis and shigellosis has remained relatively stable during the past 2 decades. During 2009, multistate outbreaks of *Salmonella* were linked to aquatic frogs and the consumption of alfalfa sprouts, pistachios, and peanut butter.

SHIGA TOXIN-PRODUCING *ESCHERICHIA COLI* (STEC). Number of reported cases — United States and U.S. territories, 2009



Escherichia coli O157:H7 is the serotype of Shiga toxin-producing *E. coli* (STEC) isolated most commonly identified in outbreaks and is the most common cause of hemolytic uremic syndrome (HUS), a condition associated with kidney failure. Other STEC serotypes also cause diarrhea and HUS. From 2008 to 2009 the number of reported STEC cases decreased from 5,309 to 4,643.

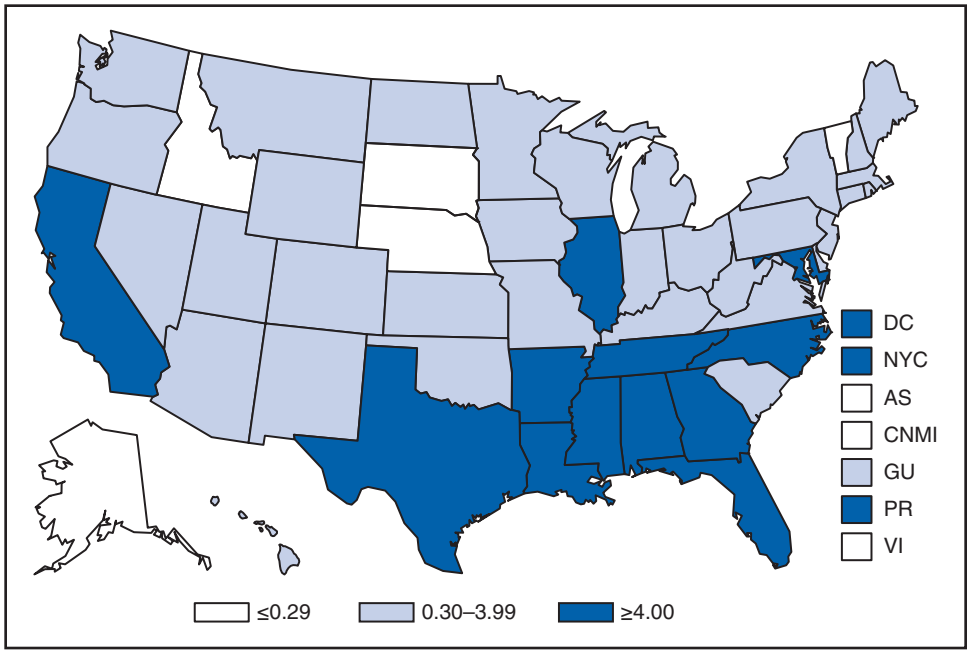
SYPHILIS, CONGENITAL. Incidence* among infants aged <1 year — United States, 1979–2009



* Per 100,000 live births.

Following a decline in the incidence of congenital syphilis since 1991, overall congenital syphilis rates decreased slightly from 2008 to 2009, from 10.4 to 10.0 cases per 100,000 live births.

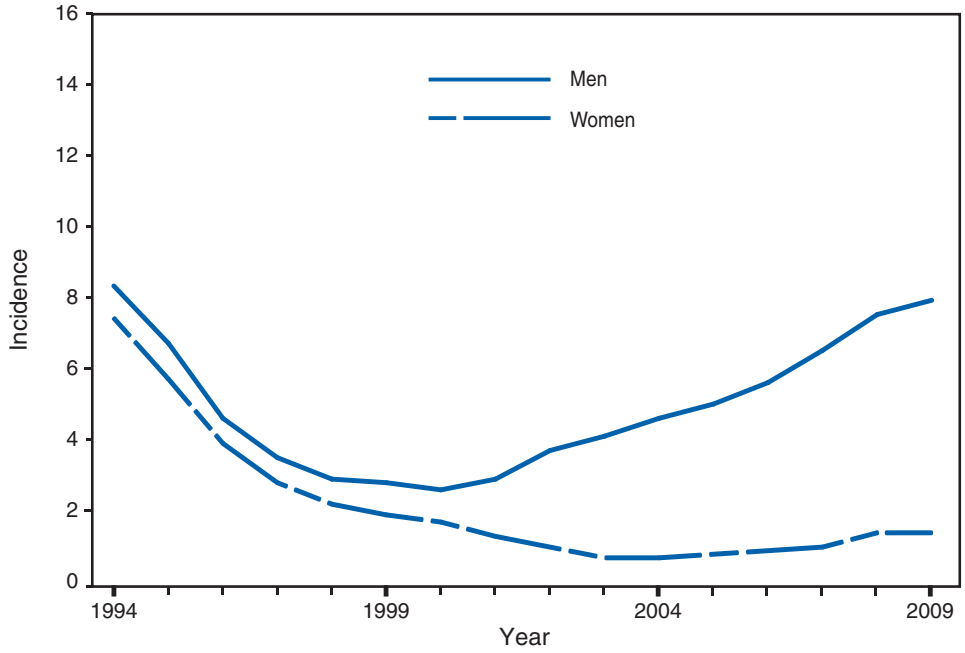
SYPHILIS, PRIMARY AND SECONDARY. Incidence* — United States and U.S. territories, 2009



* Per 100,000 population.

In 2009, the primary and secondary syphilis rate in the United States and territories (Guam, Puerto Rico, and Virgin Islands) was 4.6 cases per 100,000 population.

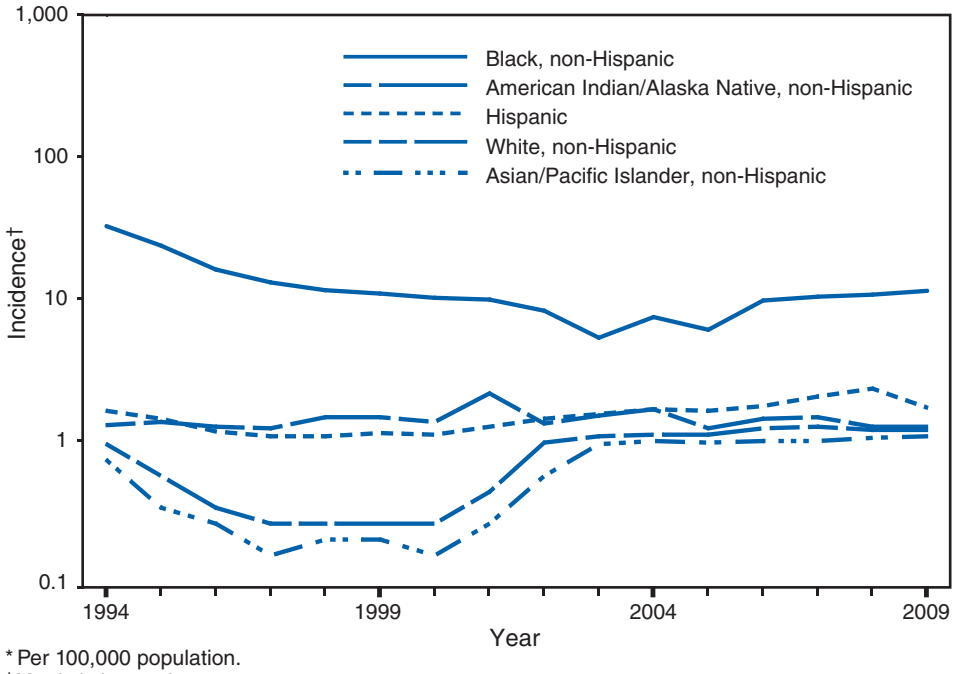
SYPHILIS, PRIMARY AND SECONDARY. Incidence*, by sex — United States, 1994–2009



* Per 100,000 population.

During 2008–2009, the incidence of primary and secondary syphilis in the United States increased from 4.4 to 4.6 cases (women: decreased from 1.5 to 1.4; men: increased from 7.5 to 7.8) per 100,000 population.

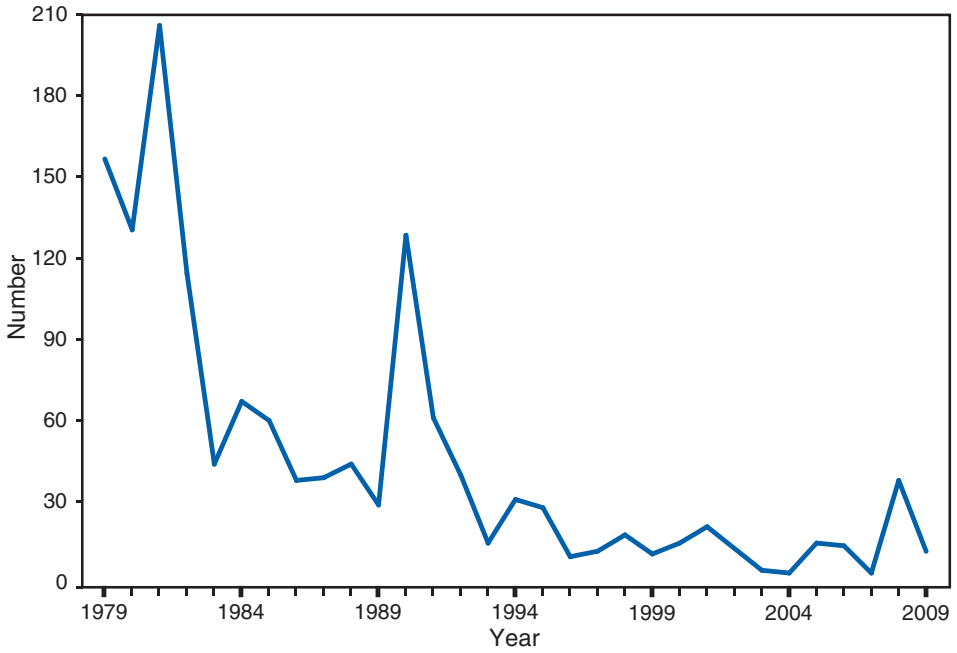
SYPHILIS, PRIMARY AND SECONDARY. Incidence,* by race/ethnicity — United States, 1994–2009



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

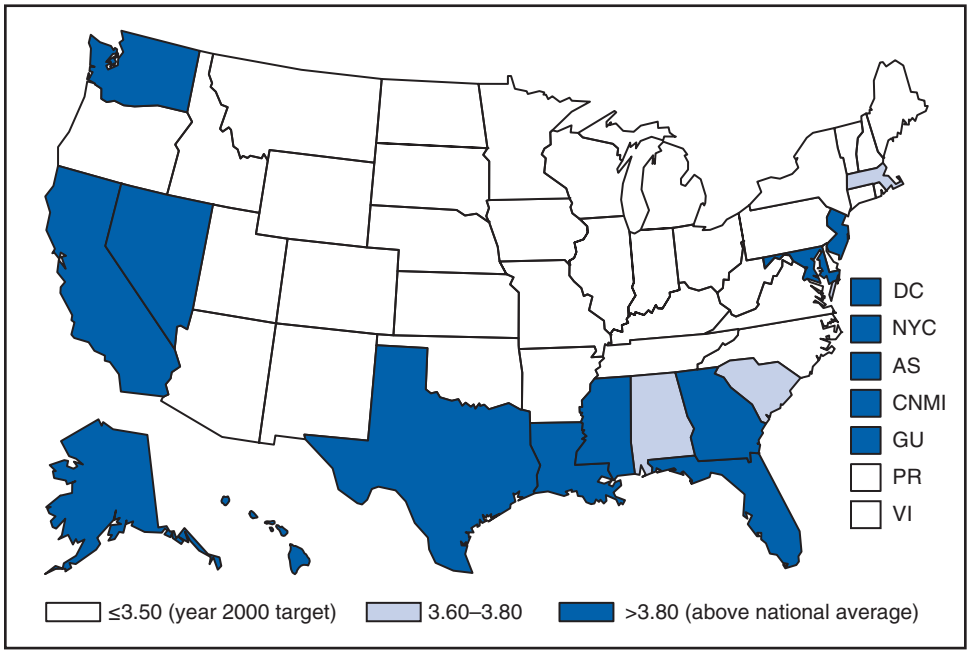
During 2008–2009, incidence of primary and secondary syphilis increased among all races/ethnicities except non-Hispanic whites and Hispanics. Incidence per 100,000 population increased from 17.2 to 19.2 among non-Hispanic blacks; from 1.5 to 1.6 among Asians/Pacific Islanders; from 2.3 to 2.4 among American Indians/Alaska Natives; and decreased from 2.2 to 2.1 among non-Hispanic whites and 4.6 to 4.5 among Hispanics.

TRICHINELLOSIS. Number of reported cases, by year — United States, 1979–2009



Five of the cases reported in 2009 were associated with a shared meal containing raw bear meat. The outbreak occurred among persons of the same ethnic background as the raw bear meat-associated outbreak in 2008 that sickened approximately 30 persons. This highlights the continued need for public health prevention messages aimed at consumers of wild game meat, particularly bear, and for prevention messages targeted to cultural groups whose food choices might put them at a higher risk for *Trichinella* infection.

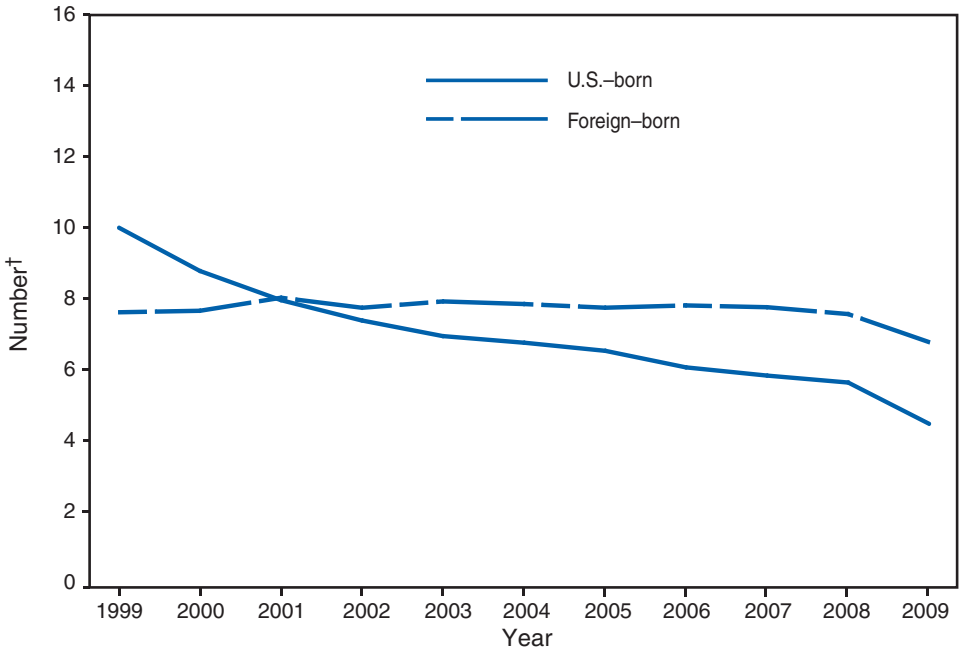
TUBERCULOSIS. Incidence* — United States and U.S. territories, 2009



* Per 100,000 population.

Thirteen states and the District of Columbia had an incidence rate above the national average at 3.8 cases per 100,000.

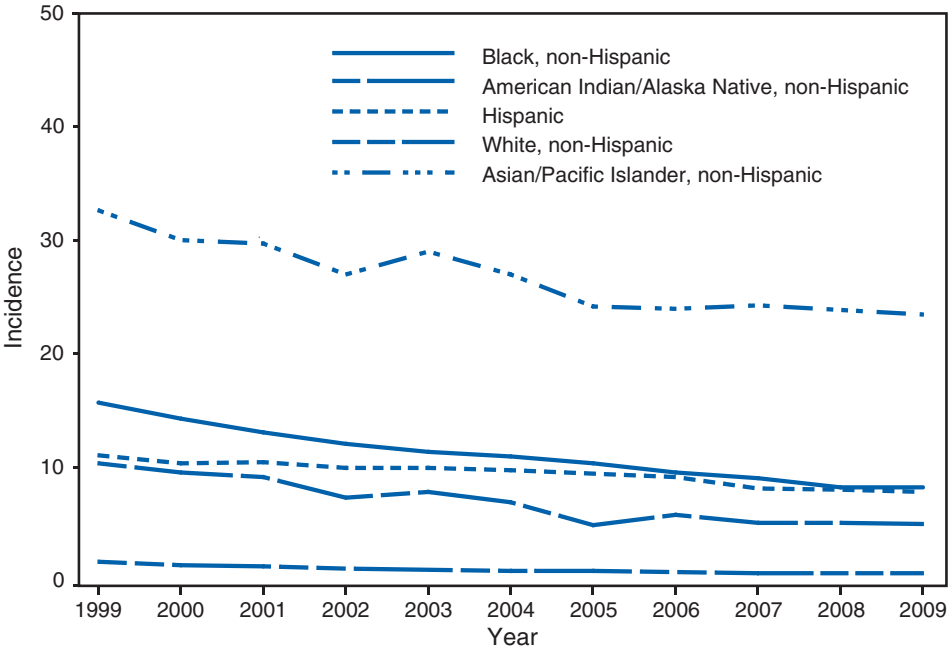
TUBERCULOSIS. Number of reported cases among U.S.-born and foreign-born persons,* by year — United States, 1999–2009



* For 120 cases, origin of patients was unknown.
† In thousands

Fifty-nine percent (N=6,854) of all TB cases in 2009 occurred in persons who were foreign-born. The number of cases in foreign-born persons has remained stable since 1999. The number of U.S.-born cases continues to decline.

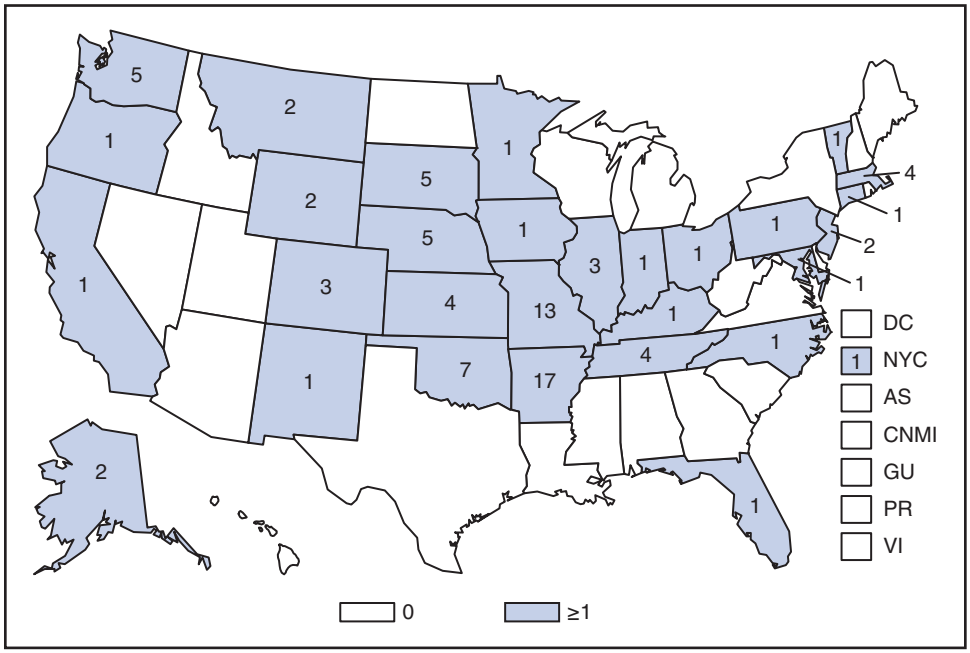
TUBERCULOSIS. Incidence,* by race/ethnicity — United States, 1999–2009



* Per 100,000 population.

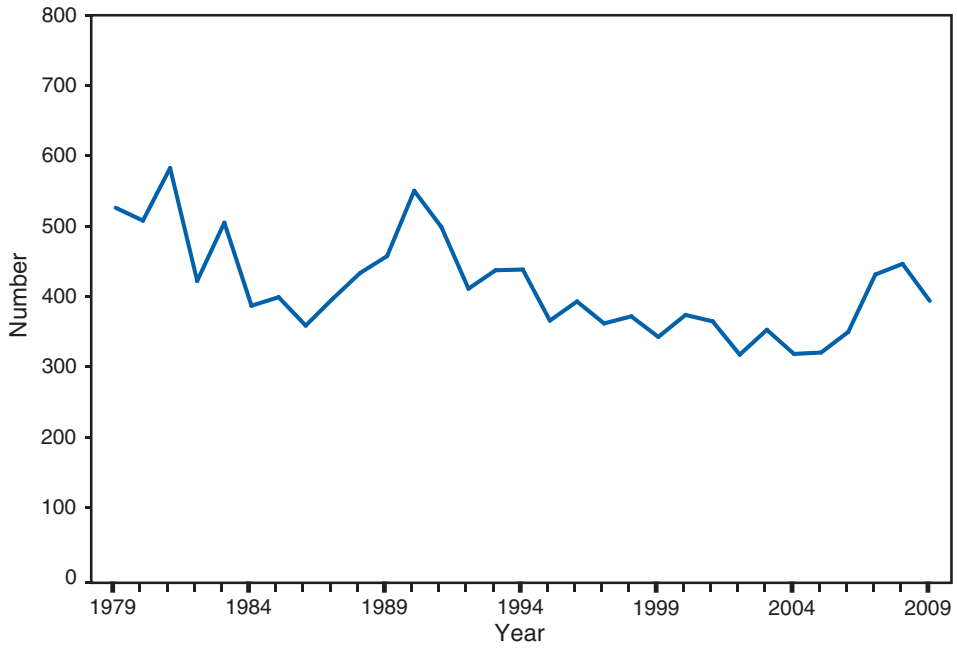
Although 2009 TB cases reached all-time lows in the United States, disproportionately high rates of TB continue among racial/ethnic minorities, especially among U.S.-born blacks. To achieve TB elimination, programs are needed to address the persistent disparities that exist between whites and minorities in the United States.

TULAREMIA. Number of reported cases — United States and U.S. territories, 2009



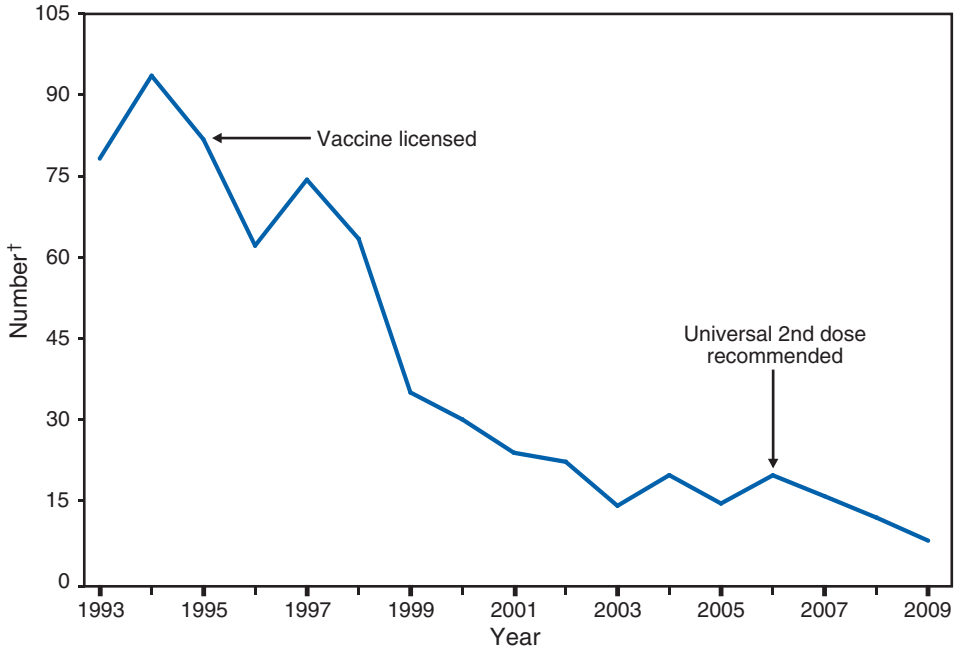
To better define the geographic distribution of *Francisella tularensis* subspecies, CDC requests that isolates be forwarded to the CDC laboratory in Fort Collins, Colorado.

TYPHOID FEVER. Number of reported cases, by year — United States, 1979–2009



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.

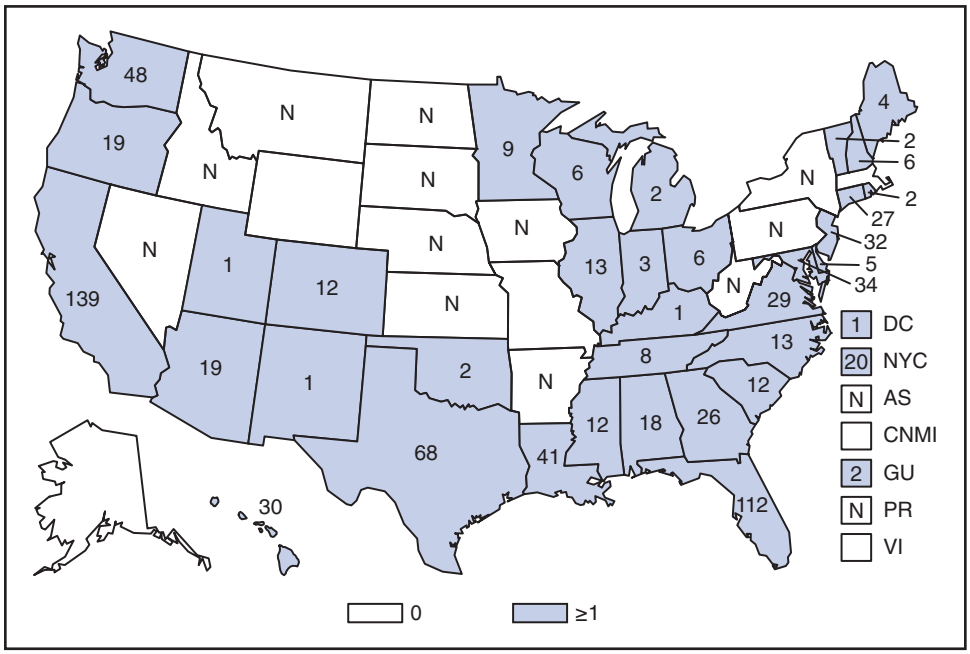
VARICELLA (CHICKENPOX). Number of reported cases — Illinois, Michigan, Texas, and West Virginia*, 1993–2009



* 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 2009 was 36% lower than 2008 and 88% less than the number reported during the prevaccine years 1993–1995.

VIBRIOSIS. Number of reported cases — United States and U.S. territories, 2009



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, 1978–2009

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, 2009* 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, 1999–2009

Disease	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
AIDS	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	0
Arboviral diseases											
California serogroup virus disease											
neuroinvasive	—	—	—	—	—	—	0.02	0.02	0.02	0.02	0.02
nonneuroinvasive	§	§	§	§	§	§	0	0	0	0	0
Eastern equine encephalitis virus disease											
neuroinvasive	—	—	—	—	—	—	0	0	0	0	0
nonneuroinvasive	§	§	§	§	§	§	0	0	0	0	0
Powassan virus disease											
neuroinvasive	—	—	—	—	—	—	0	0	0	0	0
nonneuroinvasive	§	§	§	§	§	§	0	0	0	0	—
St. Louis encephalitis virus disease											
neuroinvasive	—	—	—	—	—	—	0	0	0	0	0
nonneuroinvasive	§	§	§	§	§	§	0	0	0	0	0
West Nile virus disease											
neuroinvasive	—	—	—	—	—	—	0.45	0.50	0.41	0.23	0.13
nonneuroinvasive	§	§	§	§	§	§	0.58	0.94	0.80	0.22	0.11
Western equine encephalitis virus disease											
neuroinvasive	—	—	—	—	—	—	—	—	—	—	—
nonneuroinvasive	§	§	§	§	§	§	—	—	—	—	—
Botulism, total (includes wound and unspecified)	0.06	0.05	0.06	0.03	0.01	0.02	0.01	0.02	0.05	0.05	0.04
foodborne	0.01	0.01	0.01	0	0.01	0.01	0.01	0.01	0.01	0.01	0
infant	2.43	2.44	2.55	1.79	1.87	2.12	2.09	2.35	2.05	2.56	1.92
Brucellosis	0.03	0.03	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.04
Chancroid	0.06	0.03	0.01	0.02	0.02	0	0.01	0.01	0.01	0.01	0.01
Chlamydia trachomatis genital infection	254.10	257.76	278.32	296.55	304.71	319.61	332.51	347.80	370.20	401.34	409.19
Cholera	0	0	0	0	0	0	0	0	0	0	0
Coccidioidomycosis	3.58	4.69	6.71	3.03	2.57	4.14	6.24	6.79	14.39	7.76	13.24
Cryptosporidiosis¶	0.92	1.17	1.34	1.07	1.22	1.23	1.93	2.05	3.73	3.02	2.52
confirmed	¶	¶	¶	¶	¶	¶	¶	¶	¶	¶	2.43
probable	¶	¶	¶	¶	¶	¶	¶	¶	¶	¶	0.09
Cyclosporiasis	0.07	0.03	0.07	0.06	0.03	0.14	0.24	0.06	0.04	0.05	0.05
Diphtheria	0	0	0	0	0	—	—	—	—	—	—
Ehrlichiosis											
human granulocytic (HGE)	0.14	0.15	0.10	0.18	0.13	0.20	0.28	0.23	0.31	**	**
human monocytic (HME)	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											
Ehrlichia chaffeensis	§	§	§	§	§	§	§	§	§	0.35	0.34
Ehrlichia ewingii	§	§	§	§	§	§	§	§	§	0	0
Anaplasma phagocytophilum	§	§	§	§	§	§	§	§	§	0.43	0.42
Undetermined	§	§	§	§	§	§	§	§	§	0.06	0.06
Encephalitis/meningitis, arboviral§§											
California serogroup virus	0.03	0.04	0.05	0.06	0.06	0	§§	§§	§§	§§	§§
Eastern equine virus	0	0	0	0	0	0	§§	§§	§§	§§	§§
Powassan virus	§	§	§	0	0	0	§§	§§	§§	§§	§§
St. Louis virus	0	0	0.03	0.01	0.01	0	§§	§§	§§	§§	§§
West Nile virus	§	§	§	1.01	1.00	0.43	§§	§§	§§	§§	§§
Western equine virus	0	0	0	0	0	—	§§	§§	§§	§§	§§
Enterohemorrhagic *Escherichia coli*											
O157:H7	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	7.37
Gonorrhea	133.20	131.65	128.53	125.03	116.37	113.52	115.64	120.90	118.90	111.64	99.05
Haemophilus influenzae, invasive disease											
all ages, serotypes	0.48	0.51	0.57	0.62	0.70	0.72	0.78	0.82	0.85	0.96	0.99
age<5 yrs											
serotype b	§	§	§	0.18	0.16	0.03	0.04	0.14	0.11	0.14	0.18
nonserotype b	§	§	§	0.75	0.59	0.04	0.67	0.86	0.97	1.18	1.17
unknown serotype	§	§	§	0.80	1.15	0.97	1.08	0.88	0.88	0.79	0.79
Hansen disease (Leprosy)	0.04	0.04	0.03	0.04	0.03	0.04	0.03	0.03	0.04	0.03	0.04
Hantavirus pulmonary syndrome	§	0.02	0	0.01	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	0.09

See table footnotes last page of table.

TABLE 7. (*Continued*) Reported incidence* of notifiable diseases — United States, 1999–2009

Disease	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Hepatitis, viral, acute											
A	6.25	4.91	3.77	3.13	2.66	1.95	1.53	1.21	1.00	0.86	0.65
B	2.82	2.95	2.79	2.84	2.61	2.14	1.78	1.62	1.51	1.34	1.12
C	1.14	1.17	1.41	0.65	0.38	0.31	0.23	0.26	0.28	0.29	0.27
HIV diagnoses†	—	—	—	—	—	—	—	—	—	—	12.13
Influenza-associated pediatric mortality	§	§	§	§	§	§	0.02	0.07	0.10	0.12	0.48
Legionellosis	0.41	0.42	0.42	0.47	0.78	0.71	0.78	0.96	0.91	1.05	1.16
Listeriosis	0.31	0.29	0.22	0.24	0.24	0.32	0.31	0.30	0.27	0.25	0.28
Lyme disease¶¶	5.99	6.53	6.05	8.44	7.39	6.84	7.94	6.75	9.21	11.67	12.71
confirmed	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	9.59	9.85
probable	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	2.08	2.80
Malaria	0.61	0.57	0.55	0.51	0.49	0.51	0.51	0.50	0.47	0.42	0.48
Measles	0.04	0.03	0.04	0.02	0.02	0.01	0.02	0.02	0.01	0.05	0.02
Meningococcal disease, invasive											
all serogroups	0.92	0.83	0.83	0.64	0.61	0.47	0.42	0.40	0.36	0.39	0.32
serogroup A,C,Y, and W-135	***	***	***	***	***	***	0.10	0.11	0.11	0.11	0.10
serogroup B	***	***	***	***	***	***	0.05	0.07	0.06	0.06	0.06
other serogroup	***	***	***	***	***	***	0.01	0.01	0.01	0.01	0.01
serogroup unknown	***	***	***	***	***	***	0.26	0.22	0.18	0.20	0.16
Mumps	0.14	0.13	0.10	0.10	0.08	0.09	0.11	2.22	0.27	0.15	0.65
Novel influenza A virus infections	§	§	§	§	§	§	§	§	0	0	14.37
Pertussis	2.67	2.88	2.69	3.47	4.04	8.88	8.72	5.27	3.49	4.40	5.54
Plague	0	0	0	0	0	0	0	0.01	0	0	0
Poliomyelitis, paralytic	0	0	0	0	0	0	0	0	—	—	0
Poliovirus infection, nonparalytic	§	§	§	§	§	§	§	§	—	—	—
Psittacosis	0.01	0.01	0.01	0.01	0	0	0.01	0.01	0	0	0
Q Fever†††	0	0.01	0.01	0.02	0.02	0.03	0.05	0.06	0.06	0.04	0.04
acute	†††	†††	†††	†††	†††	†††	†††	†††	†††	0.04	0.03
chronic	†††	†††	†††	†††	†††	†††	†††	†††	†††	0	0.01
Rabies, human	0	0	0	0	0	0	0	0	0	0	0
Rocky Mountain spotted fever§§§	0.21	0.18	0.25	0.39	0.38	0.60	0.66	0.80	0.77	0.85	0.60
confirmed	§§§	§§§	§§§	§§§	§§§	§§§	§§§	§§§	§§§	0.06	0.05
probable	§§§	§§§	§§§	§§§	§§§	§§§	§§§	§§§	§§§	0.78	0.55
Rubella	0.21	0.06	0.01	0.01	0	0	0	0	0	0.01	0
Rubella, congenital syndrome	0	0	0	0	0	0	0	0	—	—	0
Salmonellosis	14.89	14.51	14.39	15.73	15.16	14.47	15.43	15.45	16.03	16.92	16.18
(SARS-CoV)¶¶¶	§	§	§	§	0	—	—	—	—	—	—
Shigellosis	6.43	8.41	7.19	8.37	8.19	4.99	5.51	5.23	6.60	7.50	5.24
Shiga toxin-producing *E. coli* (STEC)	§	§	§	§	§	§	§	1.71	1.62	1.76	1.53
Smallpox	§	§	§	§	§	—	—	—	—	—	—
Streptococcal disease, invasive, group A	0.87	1.45	1.60	1.69	2.04	1.82	2.00	2.24	1.89	2.30	2.13
Streptococcal, toxic shock syndrome	0.02	0.04	0.04	0.05	0.06	0.06	0.07	0.06	0.06	0.07	0.08
Streptococcus pneumoniae, Invasive disease											
drug resistant, all ages	2.39	2.77	2.11	1.14	0.99	1.49	1.42	2.19	1.49	1.60	1.75
age <5 yrs	—	—	—	—	—	—	—	—	3.73	3.51	4.54
non-drug resistant, age <5 yrs	§	§	1.03	3.62	8.86	8.22	8.21	11.93	13.59	13.36	12.93
Syphilis, congenital (age <1 yr)	14.62	14.29	12.52	11.44	10.56	9.12	8.24	9.07	10.46	10.12	9.90
Syphilis, primary and secondary	2.50	2.19	2.17	2.44	2.49	2.71	2.97	3.29	3.83	4.48	4.60
Syphilis, total, all stages	13.07	11.58	11.45	11.68	11.90	11.94	11.33	12.46	13.67	15.34	14.74
Tetanus	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Toxic-shock syndrome	0.05	0.06	0.05	0.05	0.05	0.04	0.04	0.05	0.04	0.03	0.03
Trichinellosis	0	0.01	0.01	0.01	0	0	0.01	0.01	0	0.01	0
Tuberculosis	6.43	6.01	5.68	5.36	5.17	5.09	4.80	4.65	4.44	4.28	3.80
Tularemia	§	0.06	0.05	0.03	0.04	0.05	0.05	0.03	0.05	0.04	0.03
Tyhoid fever	0.13	0.14	0.13	0.11	0.12	0.11	0.11	0.12	0.14	0.15	0.13
Vancomycin-intermediate *Staphylococcus aureus*	§	§	§	§	§	—	0	0	0.02	0.03	0.03
Vancomycin-resistant *Staphylococcus aureus*	§	§	§	§	§	0	0	0	0	0	0
Varicella (Chickenpox)****	44.56	26.18	19.51	10.27	7.27	18.41	19.64	28.65	18.68	13.56	8.71
Vibriosis	§	§	§	§	§	§	§	§	0.25	0.24	0.30
Yellow fever	0	—	0	0	—	—	—	—	—	—	—

See table footnotes on the next page.

* Per 100,000 population.
† In 2008 CDC published a revised HIV case definition. This combined separate surveillance case definitions for HIV infection and AIDS into a single case definition for HIV infection that includes AIDS (and incorporates the HIV infection classification system). The revised HIV case definition provides a more complete presentation of the HIV epidemic on a population level. Please see the Centers for Disease Control and Prevention 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):1–12. These case counts can be found under "HIV Diagnoses" in this table. The total number of HIV Diagnoses 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, 2009. AIDS: Acquired Immunodeficiency Syndrome. HIV: Human Immunodeficiency Virus.
§ Not nationally notifiable.
¶ Revision of National Surveillance Case Definition distinguishing between confirmed and probable cases.
** In January 2008, human granulocytic ehrlichiosis (HGE) was replaced by *Anaplasma phagocytophilum* infection, human monocytic ehrlichiosis was replaced by *Ehrlicia chaffeensis* infection, and human ehrlichiosis (other and unspecified) was replaced by *Ehrlicia ewingii* infection. 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 will probably affect how data in this category were reported.
§§ See also "Arboviral Diseases" incidence rates. In 2005, the arboviral disease surveillance case definitions and categories were revised. The nationally notifiable arboviral encephalitis and meningitis conditions continued to be nationally notifiable in 2005 and 2006, but under the category of arboviral neuroinvasive disease. In addition, in 2005, nonneuroinvasive domestic arboviral disesases for the six domestic arboviruses listed above were added to the list of nationally notifiable diseases.
¶¶ 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, 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 case count includes two 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, 2002–2009

Disease	2002	2003	2004	2005	2006	2007	2008	2009
AIDS*	42,745	44,232	44,108	41,120	38,423	37,503	39,202	†
Anthrax	2	—	—	—	1	1	—	1
Arboviral diseases§								
California serogroup virus disease								
neuroinvasive	—	—	—	73	64	50	55	46
nonneuroinvasive	¶	¶	¶	7	5	5	7	9
Eastern equine encephalitis virus disease								
neuroinvasive	—	—	—	21	8	3	4	3
nonneuroinvasive	¶	¶	¶	—	—	1	—	1
Powassan virus disease								
neuroinvasive	—	—	—	1	1	7	2	6
nonneuroinvasive	¶	¶	¶	—	—	—	—	—
St. Louis encephalitis virus disease								
neuroinvasive	—	—	—	7	7	8	8	11
nonneuroinvasive	¶	¶	¶	6	3	1	5	1
Western equine encephalitis virus disease								
neuroinvasive	—	—	—	—	—	—	—	—
nonneuroinvasive	¶	¶	¶	—	—	—	—	—
West Nile virus disease								
neuroinvasive	—	—	—	1,309	1,495	1,227	689	386
nonneuroinvasive	¶	¶	¶	1,691	2,744	2,403	667	334
Botulism, total (including wound and unspecified)	118	129	133	135	165	144	145	118
foodborne	28	20	16	19	20	32	17	10
infant	69	76	87	85	97	85	109	83
Brucellosis	125	104	114	120	121	131	80	115
Chancroid**	67	54	30	17	33	23	25	28
Chlamydia trachomatis genital infection**	834,555	877,478	929,462	976,445	1,030,911	1,108,374	1,210,523	1,244,180
Cholera	2	2	5	8	9	7	5	10
Coccidioidomycosis	4,968	4,870	6,449	6,542	8,917	8,121	7,523	12,926
Cryptosporidiosis††	3,016	3,506	3,577	5,659	6,071	11,170	9,113	7,654
confirmed	††	††	††	††	††	††	††	7,393
probable	††	††	††	††	††	††	††	261
Cyclosporiasis	156	75	171	543	137	93	139	141
Diphtheria	1	1	—	—	—	—	—	—
Ehrlichiosis								
human granulocytic (HGE)	511	362	537	786	646	834	§§	§§
human monocytic (HME)	216	321	338	506	578	828	§§	§§
human (other and unspecified)	¶¶	¶¶	¶¶	112	231	337	§§	§§
Ehrlichiosis/Anaplasmosis								
Ehrlichia chaffeensis	¶	¶	¶	¶	¶	¶	957	944
Ehrlichia ewingii	¶	¶	¶	¶	¶	¶	9	7
Anaplasma phagocytophilum	¶	¶	¶	¶	¶	¶	1,009	1,161
Undetermined	¶	¶	¶	¶	¶	¶	132	155
Encephalitis/Meningitis, arboviral								
California serogroup virus	164	108	112	***	***	***	***	***
Eastern equine virus	10	14	6	***	***	***	***	***
Powassan virus	1	—	1	***	***	***	***	***
St. Louis virus	28	41	12	***	***	***	***	***
West Nile virus	2,840	2,866	1,142	***	***	***	***	***
Western equine virus	—	—	—	***	***	***	***	***
Enterohemorrhagic *Escherichia coli* infection								
Shiga toxin-positive								
O157:H7	3,840	2,671	2,544	2,621	¶	¶	¶	¶
non-O157	194	252	316	501	¶	¶	¶	¶
not serogrouped	60	156	308	407	¶	¶	¶	¶

See footnotes on last page of table..

TABLE 8. (*Continued*) Reported cases of notifiable diseases — United States, 2002–2009

Disease	2002	2003	2004	2005	2006	2007	2008	2009
Giardiasis	21,206	19,709	20,636	19,733	18,953	19,417	18,908	19,399
Gonorrhea**	351,852	335,104	330,132	339,593	358,366	355,991	336,742	301,174
Haemophilus influenzae, invasive disease								
all ages, serotypes	1,743	2,013	2,085	2,304	2,496	2,541	2,886	3,022
age <5 yrs								
serotype b	34	32	19	9	29	22	30	38
nonserotype b	144	117	135	135	175	199	244	245
unknown serotype	153	227	177	217	179	180	163	166
Hansen disease (Leprosy)	96	95	105	87	66	101	80	103
Hantavirus pulmonary syndrome	19	26	24	26	40	32	18	20
Hemolytic uremic syndrome, postdiarrheal	216	178	200	221	288	292	330	242
Hepatitis, viral, acute†††								
A	8,795	7,653	5,683	4,488	3,579	2,979	2,585	1,987
B	7,996	7,526	6,212	5,119	4,713	4,519	4,033	3,405
C	1,835	1,102	720	652	766	845	877	782
HIV diagnoses†	—	—	—	—	—	—	—	36,870
Influenza-associated pediatric mortality§§§	¶	¶	¶	45	43	77	90	358
Legionellosis	1,321	2,232	2,093	2,301	2,834	2,716	3,181	3,522
Listeriosis	665	696	753	896	884	808	759	851
Lyme disease, total¶¶¶	23,763	21,273	19,804	23,305	19,931	27,444	35,198	38,468
confirmed	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	28,921	29,959
probable	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	6,277	8,509
Malaria	1,430	1,402	1,458	1,494	1,474	1,408	1,255	1,451
Measles	44	56	37	66	55	43	140	71
Meningococcal disease, invasive****								
all serogroups	1,814	1,756	1,361	1,245	1,194	1,077	1,172	980
serogroup A, C, Y, and W-135	—	—	—	297	318	325	330	301
serogroup B	—	—	—	156	193	167	188	174
other serogroup	—	—	—	27	32	35	38	23
serogroup unknown	—	—	—	765	651	550	616	482
Mumps	270	231	258	314	6,584	800	454	1,991
Novel influenza A virus infection	¶	¶	¶	¶	¶	4	2	43,696
Pertussis	9,771	11,647	25,827	25,616	15,632	10,454	13,278	16,858
Plague	2	1	3	8	17	7	3	8
Poliomyelitis, paralytic ††††	—	—	—	1	—	—	—	1
Poliovirus infection, nonparalytic	—	—	—	—	—	—	—	—
Psittacosis	18	12	12	16	21	12	8	9
Q Fever §§§§	61	71	70	136	169	171	120	113
acute	§§§§	§§§§	§§§§	§§§§	§§§§	§§§§	106	93
chronic	§§§§	§§§§	§§§§	§§§§	§§§§	§§§§	14	20
Rabies								
animal	7,609	6,846	6,345	5,915	5,534	5,862	4,196	5,343
human	3	2	7	2	3	1	2	4
Rocky Mountain spotted fever, total¶¶¶¶	1,104	1,091	1,713	1,936	2,288	2,221	2,563	1,815
confirmed	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	190	151
probable	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	2,367	1,662
Rubella	18	7	10	11	11	12	16	3
Rubella, congenital syndrome	1	1	—	1	1	—	—	2
Salmonellosis	44,264	43,657	42,197	45,322	45,808	47,995	51,040	49,192
SARS-CoV*****	¶	8	—	—	—	—	—	—
Shiga toxin–producing *Escherichia coli* (STEC)	¶	¶	¶	4,432	4,847	5,309	4,643	
Shigellosis	23,541	23,581	14,627	16,168	15,503	19,758	22,625	15,931
Streptococcal disease, invasive, group A	4,720	5,872	4,395	4,715	5,407	5,294	5,674	5,279
Streptococcal toxic-shock syndrome	118	161	132	129	125	132	157	161

See footnotes on next page.

TABLE 8. (*Continued*) Reported cases of notifiable diseases — United States, 2002–2009

Disease	2002	2003	2004	2005	2006	2007	2008	2009
Streptococcus pneumoniae invasive disease,								
drug resistant, all ages	2,546	2,356	2,590	2,996	3,308	3,329	3,448	3,370
age < 5 yrs	—	—	—	—	—	563	532	583
nondrug resistant age <5 yrs	513	845	1,162	1,495	1,861	2,032	1,998	1988
Syphilis, all stages**	32,871	34,270	33,401	33,278	36,935	40,920	46,277	44,828
congenital (age <1 yr)	460	432	375	339	382	430	431	427
primary and secondary	6,862	7,177	7,980	8,724	9,756	11,466	13,500	13,997
Tetanus	25	20	34	27	41	28	19	18
Toxic-shock syndrome	109	133	95	90	101	92	71	74
Trichinellosis	14	6	5	16	15	5	39	13
Tuberculosis†††††	15,075	14,874	14,517	14,097	13,779	13,299	12,904	11,545
Tularemia	90	129	134	154	95	137	123	93
Typhoid fever	321	356	322	324	353	434	449	397
Vancomycin-intermediate *Staphylococcus aureus*	¶	¶	—	3	6	37	63	78
Vancomycin-resistant *Staphylococcus aureus*	¶	¶	1	2	1	2	—	1
Varicella (Chickenpox) §§§§§	22,841	20,948	32,931	32,242	48,445	40,146	30,386	20,480
Varicella (deaths) ¶¶¶¶¶	9	2	9	3	—	6	2	2
Vibriosis (noncholera *Vibrio* species infections)	¶	¶	¶	¶	¶	549	588	789
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).

† In 2008 CDC published a revised HIV case definition. This combined separate surveillance case definitions for HIV infection and AIDS into a single case definition for HIV infection that includes AIDS (and incorporates the HIV infection classification system). The revised HIV case definition provides a more complete presentation of the HIV epidemic on a population level. Please see the Centers for Disease Control and Prevention 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):1-12. These case counts can be found under "HIV Diagnoses" in this table. The total number of HIV Diagnoses 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, 2009. HIV: Human Immunodeficiency Virus.

§ Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Emerging and Zoonotic Infectious Diseases (NCZVED) (ArboNET Surveillance), as of May 28, 2010.

¶ Not nationally notifiable

** Totals reported to the Division of STD Prevention, NCHHSTP, as of May 7, 2010.

†† Revision of national nurveillance case definition distinguishing between confirmed and probable cases.

§§ 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 will probably affect how data in this category were reported.

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

††† The anti–hepatitis C virus antibody test became available May 1990. Data on 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.

§§§ Totals reported to the Division of Influenza, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2009.

¶¶¶ 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, W-135) from the non-vaccine 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 case count includes two 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.

††††† Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of May 14, 2010.

§§§§§ Varicella was removed from the nationally notifiable disease list in 1981. Varicella became nationally notifiable again in 2003.

¶¶¶¶¶ Totals reported to the Division of Viral Diseases, NCIRD, as of June 30, 2010.

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

TABLE 9. Reported cases of notifiable diseases — United States, 1994–2001

Disease	1994	1995	1996	1997	1998	1999	2000	2001
AIDS*	78,279	71,547	66,885	58,492	46,521	45,104	40,758	41,868
Amebiasis	2,983	†	†	†	†	†	†	†
Anthrax	—	—	—	—	—	—	1	23
Aseptic meningitis	8,932	†	†	†	†	†	†	†
Botulism, total (including wound and unspecified)	143	97	119	132	116	154	138	155
foodborne	50	24	25	31	22	23	23	39
infant	85	54	80	79	65	92	93	97
Brucellosis	119	98	112	98	79	82	87	136
Chancroid§	773	606	386	243	189	143	78	38
Chlamydia trachomatis genital infection§	†	477,638	498,884	526,671	604,420	656,721	702,093	783,242
Cholera	39	23	4	6	17	6	5	3
Coccidioidomycosis	†	1,212	1,697	1,749	2,274	2,826	2,867	3,922
Cryptosporidiosis	†	2,970	2,827	2,566	3,793	2,361	3,128	3,785
Diphtheria	2	—	2	4	1	1	1	2
Encephalitis, primary	717	†	†	†	†	†	†	†
Postinfectious	143	†	†	†	†	†	†	†
Encephalitis/Meningitis								
California serogroup virus	†	11	123	129	97	70	114	128
Eastern equine virus	†	1	5	14	4	5	3	9
St. Louis virus	†	†	2	13	24	4	2	79
Western equine virus	†	—	2	—	—	1	—	—
Ehrlichiosis								
human granulocytic	†	†	†	†	†	203	351	261
human monocytic	†	†	†	†	†	99	200	142
human (other and unspecified)	†	†	†	†	†	¶	¶	¶
Enterohemorrhagic *Escherichia coli* infection Shiga toxin-positive								
O157:H7	1,420	2,139	2,741	2,555	3,161	4,513	4,528	3,284
non-O157	†	†	†	†	†	†	†	171
not serogrouped	†	†	†	†	†	†	†	20
Gonorrhea§	418,068	392,848	325,883	324,907	355,642	360,076	358,995	361,705
Granuloma inguinale	3	†	†	†	†	†	†	†
Haemophilus influenzae, invasive disease all ages, serotypes	1,174	1,180	1,170	1,162	1,194	1,309	1,398	1,597
Hansen disease (Leprosy)	136	144	112	122	108	108	91	79
Hantavirus pulmonary syndrome	†	—	NA	NA	NA	33	41	8
Hemolytic uremic syndrome, postdiarrheal	†	72	97	91	119	181	249	202
Hepatitis, viral, acute								
A	26,796	31,582	31,032	30,021	23,229	17,047	13,397	10,609
B	12,517	10,805	10,637	10,416	10,258	7,694	8,036	7,843
C/non-A, non-B**	4,470	4,576	3,716	3,816	3,518	3,111	3,197	3,976
unspecified	444	†	†	†	†	†	†	†
Legionellosis	1,615	1,241	1,198	1,163	1,355	1,108	1,127	1,168
Leptospirosis	38	†	†	†	†	†	†	†
Listeriosis	†	†	†	†	†	†	755	613
Lyme disease	13,043	11,700	16,455	12,801	16,801	16,273	17,730	17,029
Lymphogranuloma venereum	235	†	†	†	†	†	†	†

See footnotes on next page.

TABLE 9. (*Continued*) Reported cases of notifiable diseases — United States, 1994–2001

Disease	1994	1995	1996	1997	1998	1999	2000	2001
Malaria	1,229	1,419	1,800	2,001	1,611	1,666	1,560	1,544
Measles	963	309	508	138	100	100	86	116
Meningococcal disease, invasive	2,886	3,243	3,437	3,308	2,725	2,501	2,256	2,333
Mumps	1,537	906	751	683	666	387	338	266
Pertussis	4,617	5,137	7,796	6,564	7,405	7,288	7,867	7,580
Plague	17	9	5	4	9	9	6	2
Poliomyelitis, paralytic	8	7	7	6	3	2	—	—
Psittacosis	38	64	42	33	47	16	17	25
Q Fever	†	†	†	†	†	†	21	26
Rabies								
animal	8,147	7,811	6,982	8,105	7,259	6,730	6,934	7,150
human	6	5	3	2	1	—	4	1
Rheumatic fever, acute	112	†	†	†	†	†	†	†
Rocky Mountain spotted fever	465	590	831	409	365	579	495	695
Rubella	227	128	238	181	364	267	176	23
Rubella, congenital syndrome	7	6	4	5	7	9	9	3
Salmonellosis, excluding typhoid fever	43,323	45,970	45,471	41,901	43,694	40,596	39,574	40,495
Shigellosis	29,769	32,080	25,978	23,117	23,626	17,521	22,922	20,221
Streptococcal disease, invasive, Group A	†	613	1,445	1,973	2,260	2,667	3,144	3,750
Streptococcal toxic-shock syndrome	†	10	19	33	58	65	83	77
Streptococcus pneumoniae, invasive disease								
drug-resistant, all ages	†	309	1,514	1,799	2,823	4,625	4,533	2,896
nondrug resistant, age <5 yrs	†	†	†	†	†	†	†	498
Syphilis								
total, all stages[§]	81,696	68,953	52,976	46,540	37,977	35,628	31,575	32,221
congenital (age <1 yr)[§]	2,452	1,863	1,282	1,081	843	579	580	504
primary and secondary[§]	20,627	16,500	11,387	8,550	6,993	6,657	5,979	6,103
Tetanus	51	41	36	50	41	40	35	37
Toxic-shock syndrome	192	191	145	157	138	113	135	127
Trichinellosis	32	29	11	13	19	12	16	22
Tuberculosis[††]	24,361	22,860	21,337	19,851	18,361	17,531	16,377	15,989
Tularemia	96	†	†	†	†	†	142	129
Typhoid fever	441	369	396	365	375	346	377	368
Varicella[§§]	151,219	120,624	83,511	98,727	82,455	46,016	27,382	22,536
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).
¶ 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 will probably affect how data in this category were reported
** The anti-hepatitis C virus antibody test became available in May 1990.
†† Cases were updated through the Division of TB Elimination, NCHHSTP.
§§ Varicella was removed from 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 case reports since 1911 have been imported.

TABLE 10. Reported cases of notifiable diseases* — United States, 1986–1993

Disease	1986	1987	1988	1989	1990	1991	1992	1993
AIDS†	12,932	21,070	31,001	33,722	41,595	43,672	45,472	103,691
Amebiasis	3,532	3,123	2,860	3,217	3,328	2,989	2,942	2,970
Anthrax	—	1	2	—	—	—	1	—
Aseptic meningitis	11,374	11,487	7,234	10,274	11,852	14,526	12,223	12,848
Botulism, total (including wound and unspecified)	109	82	84	89	92	114	91	97
foodborne	23	17	28	23	23	27	21	27
infant	79	59	50	60	65	81	66	65
Brucellosis	106	129	96	95	82	104	105	120
Chancroid	3,756	4,998	5,001	4,692	4,212	3,476	1,886	1,399
Cholera	23	6	8	—	6	26	103	18
Diphtheria§	—	3	2	3	4	5	4	—
Encephalitis, primary	1,302	1,418	882	981	1,341	1,021	774	919
Postinfectious¶	124	121	121	88	105	82	129	170
Gonorrhea	900,868	780,905	719,536	733,151	690,169	620,478	501,409	439,673
Granuloma inguinale	61	22	11	7	97	29	6	19
Haemophilus influenzae, invasive disease all ages, serotypes	**	**	**	**	**	**	1,412	1,419
Hansen disease (Leprosy)	270	238	184	163	198	154	172	187
Hepatitis, viral, acute								
A	23,430	25,280	28,507	35,821	31,441	24,378	23,112	24,238
B	26,107	25,916	23,177	23,419	21,102	18,003	16,126	13,361
C/ non-A, non-B††	3,634	2,999	2,619	2,529	2,553	3,582	6,010	4,786
unspecified	3,940	3,102	2,470	2,306	1,671	1,260	884	627
Legionellosis	980	1,038	1,085	1,190	1,370	1,317	1,339	1,280
Leptospirosis	41	43	54	93	77	58	54	51
Lyme disease	**	**	**	**	**	**	9,895	8,257
Lymphogranuloma venereum	396	303	185	189	277	471	302	285
Malaria	1,123	944	1,099	1,277	1,292	1,278	1,087	1,411
Measles	6,282	3,655	3,396	18,193	27,786	9,643	2,237	312
Meningococcal disease, invasive	2,594	2,930	2,964	2,727	2,451	2,130	2,134	2,637
Mumps	7,790	12,848	4,866	5,712	5,292	4,264	2,572	1,692
Murine typhus fever	67	49	54	41	50	43	28	25
Pertussis	4,195	2,823	3,450	4,157	4,570	2,719	4,083	6,586
Plague	10	12	15	4	2	11	13	10
Poliomyelitis, total	10	§§	§§	§§	§§	§§	§§	§§
paralytic§§	10	9	9	11	6	10	6	4
Psittacosis	224	98	114	116	113	94	92	60
Rabies								
animal	5,504	4,658	4,651	4,724	4,826	6,910	8,589	9,337
human	—	1	—	1	1	3	1	3
Rheumatic fever, acute	147	141	158	144	108	127	75	112
Rocky Mountain spotted fever	760	604	609	623	651	628	502	456
Rubella	551	306	225	396	1,125	1,401	160	192
Rubella, congenital syndrome	14	5	6	3	11	47	11	5
Salmonellosis	49,984	50,916	48,948	47,812	48,603	48,154	40,912	41,641
Shigellosis	17,138	23,860	30,617	25,010	27,077	23,548	23,931	32,198
Syphilis, primary and secondary	27,883	35,147	40,117	44,540	50,223	42,935	33,973	26,498
congenital (age <1 yr)	410	480	741	1,837	3,865	4,424	4,067	3,420
total, all stages	68,215	86,545	103,437	110,797	134,255	128,569	112,581	101,259
Tetanus	64	48	53	53	64	57	45	48
Toxic-shock syndrome	412	372	390	400	322	280	244	212
Trichinosis	39	40	45	30	129	62	41	16
Tuberculosis	22,768	22,517	22,436	23,495	25,701	26,283	26,673	25,313
Tularemia	170	214	201	152	152	193	159	132
Typhoid fever	362	400	436	460	552	501	414	440
Varicella	183,243	213,196	192,857	185,441	173,099	147,076	158,364	134,722

* No cases of yellow fever were reported during 1986–1993.
† Acquired immunodeficiency syndrome.
§ 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, 1978–1985

Disease	1978	1979	1980	1981	1982	1983	1984	1985
AIDS†	§	§	§	§	§	§	4,445	8,249
Amebiasis	3,937	4,107	5,271	6,632	7,304	6,658	5,252	4,433
Anthrax	6	—	1	—	—	—	1	—
Aseptic meningitis	6,573	8,754	8,028	9,547	9,680	12,696	8,326	10,619
Botulism, total (including wound and unspecified)	105	45	89	103	97	133	123	122
foodborne	§	§	§	§	§	§	§	49
infant	§	§	§	§	§	§	§	70
Brucellosis	179	215	183	185	173	200	131	153
Chancroid	521	840	788	850	1,392	847	666	2,067
Cholera	12	1	9	19	—	1	1	4
Diphtheria	76	59	3	5	2	5	1	3
Encephalitis								
primary	1,351	1,504	1,362	1,492	1,464	1,761	1,257	1,376
postinfectious	78	84	40	43	36	34	108	161
Gonorrhea	1,013,436	1,004,058	1,004,029	990,864	960,633	900,435	878,556	911,419
Granuloma inguinale	72	76	51	66	17	24	30	44
Hansen disease (Leprosy)	168	185	223	256	250	259	290	361
Hepatitis								
A (infectious)	29,500	30,407	29,087	25,802	23,403	21,532	22,040	23,210
B (serum)	15,016	15,452	19,015	21,152	22,177	24,318	26,115	26,611
C/ non–A, non–B¶	§	§	§	§	§	§	3,871	4,184
unspecified	8,776	10,534	11,894	10,975	8,564	7,149	5,531	5,517
Legionellosis	761	593	475	408	654	852	750	830
Leptospirosis	110	94	85	82	100	61	40	57
Lymphogranuloma venereum	284	250	199	263	235	335	170	226
Malaria	731	894	2,062	1,388	1,056	813	1,007	1,049
Measles	26,871	13,597	13,506	3,124	1,714	1,497	2,587	2,822
Meningococcal disease, invasive	2,505	2,724	2,840	3,525	3,056	2,736	2,746	2,479
Mumps	16,817	14,225	8,576	4,941	5,270	3,355	3,021	2,982
Murine typhus fever	46	69	81	61	58	62	53	37
Pertussis	2,063	1,623	1,730	1,248	1,895	2,463	2,276	3,589
Plague	12	13	18	13	19	40	31	17
Poliomyelitis, total	8	22	9	10	12	13	9	8
paralytic	8	22	9	10	12	13	9	8
Psittacosis	140	137	124	136	152	142	172	119
Rabies								
animal	3,254	5,119	6,421	7,118	6,212	5,878	5,567	5,565
human	4	4	—	2	—	2	3	1
Rheumatic fever, acute	851	629	432	264	137	88	117	90
Rocky Mountain spotted fever	1,063	1,070	1,163	1,192	976	1,126	838	714
Rubella	18,269	11,795	3,904	2,077	2,325	970	752	630
Rubella, congenital syndrome	30	62	50	19	7	22	5	—
Salmonellosis	29,410	33,138	33,715	39,990	40,936	44,250	40,861	65,347
Shigellosis	19,511	20,135	19,041	9,859	18,129	19,719	17,371	17,057
Syphilis, total, all stages	64,875	67,049	68,832	72,799	75,579	74,637	69,888	67,563
primary and secondary	21,656	24,874	27,204	31,266	33,613	32,698	28,607	27,131
congenital (age <1 yr)	434	332	277	287	259	239	305	329
Tetanus	86	81	95	72	88	91	74	83
Toxic–shock syndrome	§	§	§	§	§	§	482	384
Trichinosis	67	157	131	206	115	45	68	61
Tuberculosis	28,521	27,669	27,749	27,373	25,520	23,846	22,255	22,201
Tularemia	141	196	234	288	275	310	291	177
Typhoid fever	505	528	510	584	425	507	390	402
Varicella	154,089	199,081	190,894	200,766	167,423	177,462	221,983	178,162

* No cases of yellow fever were reported during 1978–1985.
† Acquired immunodeficiency syndrome.
§ Not 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, 2002–2007

Cause of death	ICD-10* cause of death code	No. of deaths					
		2002	2003	2004	2005	2006	2007
AIDS†	B20-B24	14,095	13,658	13,063	12,543	12,133	11,295
Anthrax	A22	0	0	0	0	0	0
Encephalitis, arboviral							
California serogroup virus	A83.5	0	0	0	1	1	1
Eastern equine encephalitis virus	A83.2	1	1	2	2	2	0
Powassan virus	A84.8	0	0	0	0	0	0
St. Louis encephalitis virus	A83.3	3	2	2	1	2	1
Western equine encephalitis virus	A83.1	0	0	0	0	0	0
Botulism, foodborne	A05.1	2	6	0	5	3	6
Brucellosis	A23	1	0	0	2	2	1
Chancroid	A57	0	0	0	0	0	0
Chlamydia trachomatis genital infection	A56	0	0	0	0	0	0
Cholera	A00	0	0	0	0	0	1
Coccidioidomycosis	B38	84	73	100	76	110	99
Cryptosporidiosis	A07.2	1	0	1	2	2	2
Cyclosporiasis	A07.8	0	0	0	0	0	0
Diphtheria	A36	0	1	0	0	0	0
Ehrlichiosis	A79.8	0	1	0	0	0	0
Giardiasis	A07.1	1	0	1	0	1	0
Gonoccocal infections	A54	7	6	2	3	3	6
Haemophilus influenzae	A49.2	7	5	11	4	4	10
Hansen disease (Leprosy)	A30	2	2	5	1	1	2
Hantavirus pulmonary syndrome	A98.5	0	0	0	0	8	6
Hemolytic uremic syndrome, postdiarrheal	D59.3	35	29	27	30	29	20
Hepatitis A, viral, acute	B15	76	54	58	43	34	34
Influenza-associated pediatric mortality	J10,J11	25	146	51	61	62	71
Legionellosis	A48.1	62	98	72	78	91	67
Listeriosis	A32	32	33	37	31	30	34
Lyme disease	A69.2,L90.4	6	4	6	7	5	8
Malaria	B50-B54	12	4	8	6	9	5
Measles	B05	0	1	0	1	0	0
Meningococcal disease	A39	161	161	138	123	105	87
Mumps	B26	1	0	0	0	1	0
Pertussis	A37	18	11	16	31	9	9
Plague	A20	0	0	1	1	3	2
Poliomyelitis	A80	0	0	0	0	0	0
Psittacosis	A70	0	0	0	0	0	0
Q fever	A78	0	1	1	2	2	4
Rabies, human	A82	3	2	3	1	2	1
Rocky Mountain spotted fever	A77.0	8	9	5	6	4	4
Rubella	B06	0	0	1	0	0	1
Rubella, congenital syndrome	P35.0	6	4	5	8	2	4
Salmonellosis	A02	21	43	30	30	34	30
Shiga toxin-producing *Escherichia coli* (STEC)	A04.0-A04.4	4	2	4	5	3	3
Shigellosis	A03	4	2	0	9	3	4
Smallpox	B03	0	0	0	0	0	0
Streptococcal disease, invasive, group A	A40.0,A49.1	109	115	121	118	117	144
Streptococcus pneumoniae, invasive disease (restricted to <5 years of age)	A40.3,B95.3,J13	13	15	13	12	22	12
Syphilis, total, all stages	A50-A53	41	34	43	47	38	42
Tetanus	A35	5	4	4	1	4	5
Toxic-shock syndrome (other than streptococcal)	A48.3	78	71	71	55	57	18
Trichinellosis	B75	0	0	0	0	1	0
Tuberculosis	A16-A19	784	711	657	648	652	554
Tularemia	A21	2	2	1	0	0	2
Typhoid fever	A01.0	0	0	0	0	0	0
Varicella	B01	32	16	19	13	18	14
Yellow fever §	A95	1	0	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, 1999-2007. Underlying causes of death are classified according to ICD 10. Data for 2008-2010 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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