Centers for Disease Control and Prevention
MMWR
Morbidity and Mortality Weekly Report
Weekly / Vol. 62 / No. 53
October 23, 2015

Summary of Notifiable Infectious Diseases and Conditions — United States, 2013

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

CONTENTS

CONTENTS (*Continued*)

The *MMWR* series of publications is published by the Center for Surveillance, Epidemiology, and Laboratory Services (proposed), Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30329-4027.

Suggested citation: Centers for Disease Control and Prevention. [Summary of Notifiable Diseases, 20xx]. Published month day, 20xx for MMWR Morb Mortal Wkly Rep 20xx;63(No. 53):[inclusive page numbers].

Summary of Notifiable Infectious Diseases and Conditions — United States, 2013

Deborah Adams[1]
Kathleen Fullerton, MPH[2]
Ruth Jajosky, DMD, MPH[1]
Pearl Sharp[1]
Diana Onweh[1]
Alan Schley[1]
Willie Anderson[1]
Amanda Faulkner, MPH[3]
Kiersten Kugeler, PhD, MPH[4]
and the Nationally Notifiable Infectious Conditions Group
[1]*Division of Health Informatics and Surveillance, Office of Public Health Scientific Services, CDC*
[2]*Division of Foodborne, Waterborne, and Environmental Diseases, Office of Infectious Diseases, CDC*
[3]*Division of Bacterial Diseases, Office of Infectious Diseases, CDC*
[4]*Division of Vector-Borne Diseases, Office of Infectious Diseases, CDC*

Preface

The *Summary of Notifiable Infectious Diseases and Condition—United States, 2013* (hereafter referred to as the summary) contains the official statistics, in tabular and graphic form, for the reported occurrence of nationally notifiable infectious diseases and conditions in the United States for 2013. Unless otherwise noted, data are final totals for 2013 reported as of June 30, 2014. These statistics are collected and compiled from reports sent by U.S. state and territory, New York City, and District of Columbia health departments to the National Notifiable Diseases Surveillance System (NNDSS), which is operated by CDC in collaboration with the Council of State and Territorial Epidemiologists (CSTE). This summary is available at http://www.cdc.gov/mmwr/mmwr_nd/index.html. This site also includes summary publications from previous years.

The Highlights section presents noteworthy epidemiologic and prevention information for 2013 for selected infectious diseases and conditions and additional information to aid in the interpretation of surveillance and infectious diseases- and conditions-trend data. Part 1 contains tables showing incidence data for the nationally notifiable infectious diseases and conditions reported during 2013; these tables do not include rows for conditions with zero cases reported in 2013.* The tables provide the number of cases reported to CDC for 2013 and the distribution of cases by month, geographic location, and patients' demographic characteristics (e.g., age, sex, race, and ethnicity). Part 1 also includes a table with the reported incidence of notifiable diseases during 2003–2013 and a table enumerating deaths associated with specified notifiable infectious diseases and conditions reported to CDC's National Center for Health Statistics (NCHS) during 2005–2011. Part 2 contains graphs and maps that depict summary data for selected notifiable infectious diseases and conditions described in tabular form in Part 1. Historical notifiable disease data, annotated as Part 3 in previous releases of this summary will no longer be included beginning with this report. Historical notifiable disease data during 1944–2012 are available online in previous years' summaries (http://www.cdc.gov/mmwr/mmwr_nd). Efforts are underway to post finalized data for years 2004–2012 on CDC WONDER (http://wonder.cdc.gov). The Selected Reading section presents general and disease-specific references for notifiable infectious diseases and conditions. These references provide additional information on surveillance and epidemiologic concerns, diagnostic concerns, and infectious 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 e-mailed to NNDSSweb@cdc.gov with the following subject line: "Annual Summary".

Background

The infectious diseases and conditions designated by CSTE and CDC as nationally notifiable during 2013 are listed in this section. A notifiable infectious disease or condition is one for which regular, frequent, and timely information regarding individual cases is considered necessary for the prevention and control of the disease or condition. A brief history of the reporting of nationally notifiable infectious diseases and conditions in the United States is available at http://wwwn.cdc.gov/nndss/history.html. In 1961, CDC assumed responsibility for the collection of data on nationally notifiable diseases and deaths in 122 U.S. cities. Data are collected through NNDSS, which is neither a single surveillance system nor a method of reporting. Rather, it is a 'system of systems', which is coordinated by CDC at the national level across disease-specific programs in order to optimize data compilation, analysis, and dissemination of notifiable disease data. Monitoring surveillance data enables public health authorities to detect sudden changes in disease or condition occurrence and distribution, identify changes in agents and host factors, and detect changes in health-care practices. National level surveillance data are compiled from case notification reports of nationally notifiable infectious diseases and conditions submitted from the state, territory, and selected local health departments to CDC.

Cases are first identified through reports of infectious diseases and conditions from the local level to the state or territory. Legislation, regulation, or other rules in those jurisdictions require health-care providers, hospitals, laboratories, and others to provide information on reportable conditions to public health authorities or their agents. Case 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;

* No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated Coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; yellow fever; vancomycin resistant *Staphylococcus aureus* (VRSA) and viral hemorrhagic fevers were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

eliminate environmental hazards; and close premises where disease transmission is believed to be ongoing.

Although infectious disease and condition reporting is mandated at the state, territory, and local levels by legislation or regulation, state and territory notification to CDC is voluntary. Selected local, state, and territorial health departments voluntarily notify CDC about nationally notifiable infectious diseases and conditions; the data in these case notifications to CDC are obtained through the reportable disease and condition surveillance systems in place at the state and local levels. Case notification of nationally notifiable infectious diseases and conditions helps public health authorities monitor the effect of these diseases and conditions, measure the disease and condition 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.

The list of nationally notifiable infectious diseases and conditions is revised periodically. An infectious disease or condition might be added to the list as a new pathogen emerges, or a disease or condition might be removed as its incidence declines. Public health officials at state and territorial health departments collaborate with CDC staff in determining which infectious diseases and conditions should be considered nationally notifiable. CSTE, with input from CDC, makes recommendations annually for additions and deletions to the list. The list of infectious diseases and conditions considered reportable in each jurisdiction varies over time and across jurisdictions. Current and historic national public health surveillance case definitions used for classifying and enumerating cases consistently at the national level across reporting jurisdictions are available at http://wwwn.cdc.gov/nndss/conditions.

Infectious Diseases and Conditions Designated by CSTE and CDC as Nationally Notifiable During 2013*

- Anthrax
- Arboviral diseases, neuroinvasive and nonneuroinvasive
  - California serogroup viruses
  - Eastern equine encephalitis virus
  - Powassan virus
  - St. Louis encephalitis virus
  - West Nile virus
  - Western equine encephalitis virus
- Babesiosis
- Botulism
  - foodborne
  - infant
  - other (includes wound and unspecified)
- Brucellosis
- Chancroid
- *Chlamydia trachomatis* infection
- Cholera (*Vibrio cholerae* O1 or O139)
- Coccidioidomycosis
- Cryptosporidiosis
- Cyclosporiasis
- Dengue virus infections
  - Dengue fever
  - Dengue hemorrhagic fever
- Diphtheria
- Ehrlichiosis/Anaplasmosis
  - *Anaplasma phagocytophilum*
  - *Ehrlichia chaffeensis*
  - *Ehrlichia ewingii*
  - Undetermined human ehrlichiosis/anaplasmosis
- Giardiasis
- Gonorrhea
- *Haemophilus influenzae*, invasive disease
- Hansen disease (leprosy)†
- Hantavirus pulmonary syndrome
- Hemolytic uremic syndrome, post-diarrheal
- Hepatitis, viral
  - Hepatitis A, acute
  - Hepatitis B, acute
  - Hepatitis B, chronic
  - Hepatitis B, perinatal infection
  - Hepatitis C, acute
  - Hepatitis C, past or present
- Human Immunodeficiency Virus (HIV) diagnoses§
- Influenza-associated pediatric mortality
- Invasive pneumococcal disease (*Streptococcus pnuemoniae*, invasive disease)
- Legionellosis (Legionnaire's Disease or Pontiac fever)
- Listeriosis
- Lyme disease
- Malaria
- Measles†
- Meningococcal disease (*Neisseria meningitidis*)
- Mumps
- Novel influenza A virus infections†
- Pertussis
- Plague
- Poliomyelitis, paralytic
- Poliovirus infection, nonparalytic
- Psittacosis
- Q fever
  - Acute
  - Chronic
- Rabies
  - Animal
  - Human
- Rubella†
- Rubella, congenital syndrome
- Salmonellosis
- Severe acute respiratory syndrome-associated Coronavirus disease (SARS-CoV)
- Shiga toxin-producing *Escherichia coli* (STEC)
- Shigellosis
- Smallpox
- Spotted fever rickettsiosis
- Streptococcal toxic-shock syndrome
- Syphilis¶
- Syphilis, congenital
- Tetanus
- Toxic-shock syndrome (other than streptococcal)
- Trichinellosis
- Tuberculosis
- Tularemia
- Typhoid fever (caused by *Salmonella enterica* serotype *Typhi*)
- Vancomycin-intermediate *Staphylococcus aureus* (VISA) infection
- Vancomycin-resistant *Staphylococcus aureus* (VRSA) infection
- Varicella (morbidity)
- Varicella (mortality)
- Vibriosis (any species of the family *Vibrionaceae*, other than toxigenic *Vibrio cholerae* O1 or O139)
- Viral Hemorrhagic Fever
  - Crimean-Congo Hemorrhagic fever virus
  - Ebola virus
  - Lassa virus
  - Lujo virus
  - Marburg virus
  - New World Arenaviruses (Guanarito, Machupo, Junin, and Sabia viruses)
- Yellow fever

* This list reflects position statements approved in 2012 by the Council of State and Territorial Epidemiologists (CSTE) for national surveillance, which were implemented in January 2013. No additions or deletions of diseases or conditions were made to the list of nationally notifiable infectious diseases and conditions for 2013, with the exception of leptospirosis, which was approved by CSTE in 2012, but because of delays in OMB approval, was not added to the list of nationally notifiable conditions until 2014. National surveillance case definitions for these infectious diseases and conditions are available at http://wwwn.cdc.gov/nndss/conditions.

† The year 2013 reflects a modified surveillance case definition for this disease per approved 2012 CSTE position statements.

§ AIDS (Acquired Immunodeficiency Syndrome) has been reclassified as HIV stage III.

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

Data Sources

Provisional data on the reported occurrence of nationally notifiable infectious diseases and conditions are published weekly in *MMWR* throughout the year. After each reporting year, staff in state and territory health departments finalize reports of cases for that year with local or county health departments and reconcile the data with reports previously sent to CDC throughout the year. These data are compiled in final form in this summary, which represents the official and archival counts of cases for each year. The data in these reports are approved by the appropriate chief epidemiologist from each submitting state or territory before being published in this summary. Data published in *MMWR Surveillance Summaries* or other surveillance reports produced by CDC programs might differ from data reported in this summary because of differences in the timing of reports, the source of the data, or surveillance methodology.

Data in this 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 (reporting jurisdictions). Data were reported for *MMWR* weeks 1–52, which correspond to the period for the week ending January 5, 2013 through the week ending December 28, 2013. More information regarding notifiable infectious diseases and conditions, including national surveillance case definitions, is available at http://wwwn.cdc.gov/nndss/conditions. Policies for reporting notifiable infectious disease and condition cases can vary by disease, condition, or reporting jurisdiction. The case-status categories used to determine which cases reported to NNDSS are published by infectious disease or condition and are listed in the publication criteria column of the 2013 NNDSS event code list (Exhibit).

For a report of a nationally notifiable disease or condition to publish in MMWR (formerly described as "print criteria", currently described as "publication criteria"), the reporting state or territory must have designated the infectious disease or condition reportable in their state or territory for the year corresponding to the year of report to CDC. After this criterion is met, the infectious disease- or condition-specific criteria listed in the Exhibit are applied. Where the Exhibit indicates that all reports will be published, this means that cases designated with unknown or suspect case confirmation status will be included in the counts along with probable and confirmed cases. Because CSTE position statements are not customarily finalized until July of each year, NNDSS data for newly added infectious diseases or conditions are not usually available from all reporting jurisdictions until January of the year following the approval of the CSTE position statement.

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

Office of Public Health Scientific Services

National Center for Health Statistics (NCHS)

- Division of Vital Statistics (deaths from selected notifiable diseases)

Office of Infectious Diseases

National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention

- Division of HIV/AIDS Prevention (AIDS and HIV infection)
- Division of Viral Hepatitis
- Division of STD Prevention (chancroid; *Chlamydia trachomatis*; gonorrhea; syphilis; and congenital syphilis)
- Division of Tuberculosis Elimination (tuberculosis)

National Center for Immunization and Respiratory Diseases

- Influenza Division (influenza-associated pediatric mortality, initial detections of novel influenza A virus infections)
- 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 High-Consequence Pathogens and Pathology (animal rabies)

Population estimates were obtained from the NCHS postcensal estimates of the resident population of the United States during April 1, 2010–July 1, 2012 (release date: June 13, 2013), by year, county, single year of age (range: 0 to ≥85 years), bridged-race (white, black or African American, American Indian or Alaska Native, Asian or Pacific Islander), Hispanic ethnicity (not Hispanic or Latino, Hispanic or Latino), and sex (Vintage 2012), prepared under a collaborative arrangement with the U.S. Census Bureau. Population estimates for states are available at http://www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm#vintage2012. Population estimates for Territories are from the 2012 U.S. Census Bureau International Data Base, available at http://www.census.gov/population/international/data/idb/informationGateway.php. The choice of population denominators for incidence reported in *MMWR* is based on the availability of census population data at the time of preparation for publication and the desire for consistent use of the same population data to compute incidence reported by different CDC programs.

Incidence in this summary was calculated as the number of reported cases for each infectious 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. For Territories, incidence in this summary was calculated as the number of reported cases for each infectious disease or condition divided by either the Territorial resident population for the specified demographic population or the total Territorial resident population, multiplied by 100,000. When a nationally notifiable infectious disease or condition is associated with a specific age restriction, the same age restriction was 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 reportable or was not available are 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

The completeness of information on notifiable infectious diseases and conditions was highly variable and related to the disease or condition being reported (*1*–*8*). Incidence data in this summary are presented by the *MMWR* week and year (http://wwwn.cdc.gov/nndss/document/MMWR_Week_overview.pdf) assigned by the state or territorial health department, with some exceptions, including human immunodeficiency virus (HIV) (presented by date of diagnosis), tuberculosis (presented by date CDC surveillance staff verified that the case met the criteria in the national surveillance case definition), domestic arboviral diseases (presented by date of illness onset), and varicella deaths (presented by date of death). Data were reported by the jurisdiction of the person's "usual residence" at the time of disease or condition onset (http://wwwn.cdc.gov/nndss/document/11-SI-04.pdf). For certain nationally notifiable infectious diseases and conditions, surveillance data are reported independently to various CDC programs. For this reason, surveillance data reported by other CDC programs might vary from data reported in this summary because of differences in 1) the date used to aggregate data (e.g., date of report or date of disease or condition 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 jurisdiction should submit the case notification to CDC). In addition, the "date of disease occurrence" of conditions might vary. For infectious diseases, the meaning of the "date of disease occurrence" varies across jurisdictions and by disease and might be a date of symptom or disease onset, diagnosis, laboratory result, reporting of a case to a jurisdiction, or notification of a case to CDC.

Data reported in this summary are useful for analyzing infectious disease or condition trends and determining relative infectious disease or condition numbers. However, reporting practices affect how these data should be interpreted. Infectious disease and condition reporting is likely incomplete, and completeness might vary depending on the infectious disease or condition 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 infectious disease or condition, and the resources and priorities of state and local officials responsible for controlling infectious diseases and conditions, and for public health surveillance. Finally, factors such as changes in methods for public health surveillance, introduction of new diagnostic tests, or discovery of new infectious disease or condition entities can cause changes in reporting that are independent of the actual incidence of infectious disease or condition.

Public health surveillance data are published for selected racial/ethnic populations because these characteristics can be risk markers for certain notifiable infectious diseases or conditions. 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. Different racial/ethnic populations might have different patterns of access to health care, potentially resulting in data that are not representative of actual infectious disease or condition incidence among specific population groups. In addition, not all race and ethnicity data are collected or reported uniformly for all infectious diseases and conditions; for example, the recommended standard for classifying a person's race or ethnicity is based on self-reporting. However, this procedure might not always be followed.

The standardized categories used for classifying 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 nationally notifiable infectious diseases and conditions. All data submitted to CDC, even those data using the new 1997 standard, are converted to the 1977 standard. Until CDC can accept data using the 1997 OMB standard across all conditions and across all reporting jurisdictions, the data will be converted to the 1977 standard. The current standard is the 1997 Office of Management and Budget (OMB) race and ethnicity standard, which includes the collection of multiple races per person; this should have been implemented by federal programs beginning January 1, 2003. CDC's Tuberculosis, HIV/AIDS, and Sexually Transmitted Diseases programs

have implemented the 1997 OMB Standard. In addition, the National Electronic Disease Surveillance System Base System (NBS), which was in development in 1999 and by 2003 was in production by the first state, implemented the 1997 OMB standard. However, progress has been slow in updating the national case notification messaging standard across all reporting jurisdictions to enable CDC to aggregate data collected using the 1997 OMB standard for all nationally notifiable infectious diseases and conditions. Most of the case notification data submitted to CDC are in National Electronic Telecommunications System for Surveillance (NETSS) data format, which uses the 1977 OMB standard, in which race and ethnicity were collected as one variable.

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 this summary might be underestimated.

Transitions in NNDSS Data Collection

A total of 57 public health departments (50 state health departments, two city health departments [New York City and the District of Columbia] and five territorial health departments) submitted to CDC notifiable infectious diseases and conditions data for inclusion in this summary. Data collection in NNDSS has undergone various transitions over time. Before 1990, data were reported to CDC as cumulative counts rather than as individual case reports. In 1990, using NETSS, states began electronically capturing and reporting individual cases to CDC without personal identifiers. In 2001, CDC launched the National Electronic Disease Surveillance System (NEDSS), now a component of the Public Health Information Network (PHIN), 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, territorial, and national levels. Additional information concerning NEDSS is available at http://wwwn.cdc.gov/nndss/nedss.html.

One of the objectives of NEDSS is to improve the accuracy, completeness, and timeliness of disease reporting at the local, state, territorial, and national levels. A major feature of NEDSS is its ability to capture data already in electronic form (e.g., electronic laboratory results, which are needed for case confirmation) rather than having to enter these data manually, as in NETSS. Certain public health surveillance information systems are NEDSS-compatible. In 1999, CDC initiated development of the NBS, which the first state began using in 2003. Since the NBS launch, states and commercial vendors have developed several other NEDSS-compatible systems.

As of August 2013, all 50 state health departments use NEDSS-compatible public health surveillance information systems: 32 (64%) use state- or vendor-developed systems and 18 (36%) use the CDC-developed NBS. In addition, New York City uses a vendor-developed system and the District of Columbia uses both NBS and a vendor-developed system. In September 2013, Guam began to use NBS selectively as part of the territory's transition plan to use the system for all reportable infectious diseases and conditions. At that time, the remaining territorial health departments were not using NEDSS-compatible systems.

In 2013, CDC began to conceptualize improvements to strengthen and modernize the technical infrastructure supporting NNDSS. In 2014, CDC and selected states began work on the NNDSS Modernization Initiative (NMI), a multiyear commitment to enhance NNDSS surveillance capabilities. An important benefit for public health decision making will be the ability to acquire higher quality data that are more comprehensive and timely. Through NMI, CDC and its state partners will increase the robustness of the NNDSS technological infrastructure so that it is based on interoperable, standardized data and data exchange mechanisms. Additional information is available at http://www.cdc.gov/nmi.

Method for Identifying which Nationally Notifiable Infectious Diseases and Conditions are Reportable

States and jurisdictions are sovereign entities. Reportable conditions are determined by laws and regulations of each state, territory, or local jurisdiction. Some infectious diseases and conditions deemed nationally notifiable by CSTE might not be designated as reportable in certain states or jurisdictions. Only data from reporting states, territories, and jurisdictions that designated the infectious disease or condition as reportable are included in the summary tables. This ensures the data displayed in this summary are from population-based surveillance efforts and are generally comparable across states, territories, and other jurisdictions. When a CSTE- and CDC-recommended nationally notifiable disease or condition is judged by state, territory, or other jurisdiction officials to be not reportable, an "N" indicator for "not reportable" is inserted in the table for the specified reporting state, territory, or jurisdiction and applicable year. Each year, the NNDSS Data Processing Team solicits information from each NNDSS reporting state, territory, and

jurisdiction (all 50 U.S. states, the District of Columbia, New York City, and five U.S. territories) about infectious diseases and conditions that are mandated by state, territory, or jurisdiction laws or regulations to be nationally reportable.

Revised International Health Regulations

At its annual meeting in June 2007, CSTE approved a position statement that supports implementation of International Health Regulations (IHR) in the United States (*9*). CSTE approval followed the adoption of revised IHR in May 2005 by the World Health Assembly (*10*) 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 events that might constitute a Public Health Emergency of International Concern (PHEIC). A PHEIC is an extraordinary event that constitutes a public health risk to other countries through international spread of disease and potentially requires a coordinated international response. All WHO member countries 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, and outbreaks determined to be reportable by local, state, or territorial law or regulation. Additionally, all health-care providers should work with their local, state, or territorial health agencies to identify and report events occurring in their location that might constitute a PHEIC. 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 monitoring such an event. In the case of human infectious disease, the U.S. state or territorial departments of health will notify CDC through existing formal and informal reporting mechanisms (*10*). CDC will further analyze the event by use of the decision algorithm in Annex 2 of the IHR and notify the U.S. Department of Health and Human Services (HHS) Secretary's Operations Center (SOC), as appropriate.

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

An IHR decision algorithm (Annex 2 of the IHR) was developed to help countries determine whether an event should be reported. If any two of the following four questions are answered in the affirmative, then 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?

The revised IHR reflects a conceptual shift from the use of 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. A PHEIC is an event that falls within those criteria (further defined in a decision algorithm in Annex 2 of the revised IHR). Any one of these four conditions always constitutes 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 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 reported to WHO.

Additional information concerning IHR is available at http://www.who.int/csr/ihr/en and http://www.cdc.gov/globalhealth/ihregulations.htm. CSTE also approved a position statement that added initial detections of novel influenza A virus infections to the list of nationally notifiable infectious diseases, beginning in January 2007 (*11*).

Acknowledgements

We acknowledge John Florence for his technical review of this report. We acknowledge the following state health departments for review of data for novel influenza A virus infections: Arkansas Department of Health, Illinois Department of Public Health, Indiana State Department of Health, Iowa Department of Public Health, Michigan Department of Community Health, and Ohio Department of Health. We acknowledge all local, state, and territorial health departments in the United States for collecting the data included in this report.

References

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. CDC. Assessing completeness of perinatal hepatitis B virus infection reporting through comparison of immunization program and surveillance data—United States. MMWR Morb Mortal Wkly Rep 2011;60:410–3.
3. CDC. Evaluation of acute hepatitis C infection surveillance—United States, 2008. MMWR Morb Mortal Wkly Rep 2010;59:1407–10.
4. Hwang J, McClintock S, Kachur SP, Slutsker L, Arguin P. Comparison of national malaria surveillance system with the national notifiable diseases surveillance system in the United States. J Public Health Manag Pract 2009;15:345–51.
5. CDC. Cryptosporidiosis surveillance—United States, 2009–2010. MMWR Surveill Summ 2012;61(No. SS-5).
6. Painter JE, Gargano JW, Collier SA, Yoder JS. Giardiasis surveillance–United States, 2011-2012. MMWR Surveill Summ 2015;64(No SS-3).
7. Wilson NO, Hall RL, Montgomery SP, Jones JL. Trichinellosis surveillance—United States, 2008–2012. MMWR Surveill Summ 2015;64(No. SS-1).
8. CDC. Babesiosis surveillance—18 States, 2011. MMWR Morb Mortal Wkly Rep 2012;61:505–9.
9. 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://c.ymcdn.com/sites/www.cste.org/resource/resmgr/PS/07-ID-06.pdf.
10. World Health Organization. Third report of Committee A. Annex 2. Geneva, Switzerland: World Health Organization; 2005. Available at http://whqlibdoc.who.int/publications/2008/9789241580410_eng.pdf.
11. Council of State and Territorial Epidemiologists. Council of State and Territorial Epidemiologists position statement; 2007. National reporting for initial detections of novel influenza A viruses. Available at http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/PS/07-ID-01.pdf.

EXHIBIT. Publication criteria for conditions reported to the National Notifiable Diseases Surveillance System, 2013

Code	Notifiable Condition	Publication Criteria*,†,§
11090	*Anaplasma phagocytophilum*	Confirmed and probable
10350	Anthrax	Confirmed and probable
12010	Babesiosis	Confirmed and probable
10530	Botulism, foodborne	Confirmed
10540	Botulism, infant	Confirmed
10550	Botulism, other (includes wound)	Confirmed
10548	Botulism, other (unspecified)	Confirmed
10549	Botulism, wound	Confirmed
10020	Brucellosis	Confirmed and probable
10054	California serogroup viruses, neuroinvasive disease	Data for publication received from ArboNET
10061	California serogroup viruses, nonneuroinvasive disease	Data for publication received from ArboNET
10273	Chancroid	All reports
10274	*Chlamydia trachomatis* infection	All reports
10470	Cholera (toxigenic *Vibrio cholerae* O1 or O139)	Confirmed
11900	Coccidioidomycosis	Confirmed
11580	Cryptosporidiosis	Confirmed and probable
11575	Cyclosporiasis	Confirmed and probable
10680	Dengue fever (DF)	Confirmed and probable
10685	Dengue hemorrhagic fever (DHF)	Confirmed and probable
10040	Diphtheria	Confirmed, probable, and unknown
10053	Eastern equine encephalitis virus, neuroinvasive disease	Data for publication received from ArboNET
10062	Eastern equine encephalitis virus, nonneuroinvasive disease	Data for publication received from ArboNET
11088	*Ehrlichia chaffeensis*	Confirmed and probable
11089	*Ehrlichia ewingii*	Confirmed and probable
11091	Ehrlichiosis/Anaplasmosis, undetermined	Confirmed and probable
11570	Giardiasis	Confirmed and probable
10280	Gonorrhea	All reports
10590	*Haemophilus influenzae*, invasive disease	Confirmed, probable, and unknown
10380	Hansen disease (leprosy)	Confirmed
11590	Hantavirus pulmonary syndrome	Confirmed
11550	Hemolytic uremic syndrome, postdiarrheal	Confirmed and probable
10110	Hepatitis A, acute	Confirmed
10100	Hepatitis B, acute	Confirmed
10104	Hepatitis B perinatal infection	Confirmed
10101	Hepatitis C, acute	Confirmed
11061	Influenza-associated pediatric mortality	Confirmed
10490	Legionellosis	Confirmed
10640	Listeriosis	Confirmed
11080	Lyme disease	Confirmed and probable
10130	Malaria	Confirmed

See table footnotes on page 12.

EXHIBIT. (*Continued*) Publication criteria for conditions reported to the National Notifiable Diseases Surveillance System, 2013

Code	Notifiable Condition	Publication Criteria*,†,§
10140	Measles (rubeola), total	Confirmed and unknown
10150	Meningococcal disease (*Neisseria meningitidis*)	Confirmed and probable
10180	Mumps	Confirmed, probable, and unknown
10317	Neurosyphilis	All reports
11062	Novel influenza A virus infections, initial detections of	Confirmed
10190	Pertussis	Confirmed, probable, and unknown
10440	Plague	All reports
10410	Poliomyelitis, paralytic	Confirmed
10405	Poliovirus infection, nonparalytic	Confirmed
10057	Powassan virus, neuroinvasive disease	Data for publication received from ArboNET
10063	Powassan virus, nonneuroinvasive disease	Data for publication received from ArboNET
10450	Psittacosis (Ornithosis)	Confirmed and probable
10257	Q fever, acute	Confirmed and probable
10258	Q fever, chronic	Confirmed and probable
10340	Rabies, animal	Confirmed
10460	Rabies, human	Confirmed
10200	Rubella	Confirmed and unknown
10370	Rubella, congenital syndrome	Confirmed, probable, and unknown
11000	Salmonellosis	Confirmed and probable
10575	Severe acute respiratory syndrome-associated coronavirus (SARS-CoV) disease	Confirmed and probable
11563	Shiga toxin-producing *Escherichia coli* (STEC)	Confirmed and probable
11010	Shigellosis	Confirmed and probable
11800	Smallpox	Confirmed and probable
10250	Spotted fever rickettsiosis	Confirmed, probable, and unknown
10051	St. Louis encephalitis virus, neuroinvasive disease	Data for publication received from ArboNET
10064	St. Louis encephalitis virus, nonneuroinvasive disease	Data for publication received from ArboNET
11700	Streptococcal toxic-shock syndrome	Confirmed and probable
11723	*Streptococcus pneumoniae*, invasive disease (IPD) (all ages)	Confirmed
10316	Syphilis, congenital	All reports
10313	Syphilis, early latent	All reports
10314	Syphilis, late latent	All reports
10318	Syphilis, late with clinical manifestations other than neurosyphilis	All reports
10311	Syphilis, primary	All reports
10312	Syphilis, secondary	All reports
10310	Syphilis, total primary and secondary	All reports
10315	Syphilis, unknown latent	All reports
10210	Tetanus	All reports
10520	Toxic-shock syndrome (staphylococcal)	Confirmed and probable
10270	Trichinellosis	Confirmed
10220	Tuberculosis	Publication criteria determined by the CDC Tuberculosis program

See table footnotes on page 12.

EXHIBIT. (*Continued*) Publication criteria for conditions reported to the National Notifiable Diseases Surveillance System, 2013

Code	Notifiable Condition	Publication Criteria*,†,§
10230	Tularemia	Confirmed and probable
10240	Typhoid fever (caused by *Salmonella typhi*)	Confirmed and probable
11663	Vancomycin-intermediate *Staphylococcus aureus* (VISA)	Confirmed
11665	Vancomycin-resistant *Staphylococcus aureus* (VRSA)	Confirmed
10030	Varicella (Chickenpox)	Confirmed and probable
11545	Vibriosis (any species of the family *Vibrionacaeae*, other than toxigenic *Vibrio cholerae* O1 or O139)	Confirmed and probable
11647	Viral hemorrhagic fevers	Confirmed
10056	West Nile virus, neuroinvasive disease	Data for publication received from ArboNET
10049	West Nile virus, nonneuroinvasive disease	Data for publication received from ArboNET
10052	Western equine encephalitis virus, neuroinvasive disease	Data for publication received from ArboNET
10065	Western equine encephalitis virus, nonneuroinvasive disease	Data for publication received from ArboNET
10660	Yellow fever	Data for publication received from ArboNET

Abbreviations: ArboNET = Software for Arboviral Surveillance and Case Management; CDC = Centers for Disease Control and Prevention; CSTE = Council of State and Territorial Epidemiologists; IPD = invasive pneumococcal disease.

* 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. In both situations, cases are verified to meet the case classification (e.g., confirmed, probable, and suspected) specified in the publication criteria.

† Publication criteria for the National Notifiable Diseases Surveillance System (NNDSS): for a case report of a nationally notifiable disease to be published in MMWR, the reporting state or territory must have designated the disease reportable in their state or territory for the year corresponding to the year of report to CDC. After this criterion is met, the disease-specific criteria listed in the Exhibit are applied. When the above-listed table indicates that all reports will be earmarked for publication, this means that cases designated with unknown or suspect case confirmation status will be published just as probable and confirmed cases will be published. Because CSTE position statements customarily are not finalized until July of each year, NNDSS data for the newly added conditions usually are not available from all reporting jurisdictions until January of the year following the approval of the CSTE position statement.

§ Based on case classification status.

Nationally Notifiable Infectious Conditions Group

Contributors

(All group members meet the CDC and *MMWR* criteria for contributors)

John Abellera, MPH, Willie Anderson, Kaitlin Benedict, MPH, Tina Benoit, MPH, David Blaney, MPH, Anna Bowen, MD, Delicia Carey, PhD, Tom Chiller, MD, Amanda Conrad, MPH, Kristina Cordes, MPH, MBA, Rosalyn Dhara, MPH, Elizabeth Ervin, MPH, Julia Gargano, PhD, Elizabeth B. Gray, MPH, Marta Guerra, DVM, Rebecca L. Hall, MPH, Alesia Harvey, Michele Hlavsa, MPH, Scott Holmberg, MD, Deborah Holtzman, Jacqueline Hurd, MPH, Brendan R. Jackson, MD, Kelly A. Jackson, MPH, Ruth Jiles, PhD, Anna Satcher Johnson, MPH, Michael Judd, MPH, Grishma Kharod, MPH, Sarah Kidd, MD, Robert Kirkcaldy, MD, Monina Klevens, DDS, Barbara Knust, DVM, Ben Kupronis, MPH, Jennifer Lehman, Anastasia Litvintseva, PhD, Adriana Lopez, MHS, Kathleen Ly, MPH, Jessica R. MacNeil, MPH, Harold S. Margolis, MD, Barbara Mahon, MD, Orion McCotter, MPH, Paul Mead, MD, Prachi Mehta, PhD, Rajal Mody, MD, William Morrill, MPH, Anna Newton, MPH, Agam Rao, MD, Susan B. Redd, Pierre E. Rollin, MD, Amanda Santander, MPH, Tyler M. Sharp, PhD, Tami H. Skoff, MS, John Su, MD, Kimberly Thomas, MPH, Elizabeth Torrone, PhD, Rita Traxler, MHS, Greg S. Wallace, MD, Tony Winters, MSPH, Jonathan Yoder, MPH.

Highlights for 2013

Below are summary highlights for certain national notifiable diseases and conditions. 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).

Domestic Arboviral Disease, Neuroinvasive and Nonneuroinvasive

In 2013, a total of 2,469 West Nile virus (WNV) disease cases were reported, including 1,267 cases of neuroinvasive disease (e.g., meningitis, encephalitis, and acute flaccid paralysis) and 119 deaths (*1*). WNV disease cases were reported from 47 states and the District of Columbia. Approximately half (51%) of the WNV neuroinvasive disease cases were reported from six states (California, Colorado, Illinois, North Dakota, Oklahoma, and Texas). The incidence of neuroinvasive disease declined substantially in 2013 (0.40 per 100,000 population) compared with 2012 (0.92 per 100,000 population) when a large multistate outbreak occurred (*2*). However, the incidence in 2013 was similar to that during 2004–2007 and was higher than that during 2008–2011.

After WNV, the next most commonly reported cause of neuroinvasive arboviral disease was La Crosse virus, followed by Jamestown Canyon virus, Powassan virus, and Eastern equine encephalitis virus. In 2013, more Jamestown Canyon virus cases (N = 22) were reported than in any previous year and included the first cases reported from eight states. This increase is likely related to the initiation of routine immunoglobulin M testing at CDC and suggests that the incidence of Jamestown Canyon virus infection might have been underestimated in previous years. Although rare, Eastern equine encephalitis virus disease remained the most severe arboviral disease, with a 50% case-fatality ratio for reported cases in 2013.

1. Lindsey NP, Lehman JA, Staples JE, Fischer M. West Nile virus and other arboviral diseases—United States, 2013. MMWR Morb Mortal Wkly Rep 2014;63:521–6.
2. CDC. West Nile Virus and other arboviral diseases—United States, 2012. MMWR Morb Mortal Wkly Rep 2013;62:513–7.

Babesiosis

Babesiosis is a disease caused by protozoan parasites of the genus *Babesia* that infect red blood cells. *Babesia* infection can range from asymptomatic to life threatening. Clinical manifestations might include fever, chills, other nonspecific influenza-like symptoms, and hemolytic anemia. *Babesia* parasites usually are tickborne, but can also be transmissible via blood transfusion or congenitally (*1*).

In 2013, 95% of cases were reported in residents of seven states (Connecticut, Massachusetts, Minnesota, New Jersey, New York, Rhode Island, and Wisconsin). The median age of patients was 62 years (range: <1–98 years); 65% were male, 32% were female, and the sex was unknown for 3%. Among the patients for whom data were available, 85% had symptom onset dates during June–August.

1. Herwaldt BL, Linden JV, Bosserman E, Young C, Olkowska D, Wilson M. Transfusion-associated babesiosis in the United States: a description of cases. Ann Intern Med 2011;155:509–19.

Botulism

Botulism is a severe paralytic illness caused by toxins produced by *Clostridium botulinum*. Exposure to the toxin can occur by ingestion (foodborne botulism), *in situ* production from *C. botulinum* colonization of either a wound (wound botulism) or the gastrointestinal tract (infant botulism and adult intestinal colonization botulism), or overdose of botulinum toxin used for cosmetic or therapeutic purposes (*1*). In 2013, a total of 152 cases of botulism reported, including 136 cases in infants, four foodborne cases, and 12 cases classified as other, including wound botulism. During 2013, no outbreaks (events with two or more cases) of foodborne botulism were reported.

All states maintain 24-hour telephone services for reporting of botulism and other public health emergencies. Health-care providers should report suspected botulism cases immediately to their state health departments. CDC maintains intensive surveillance for cases of botulism in the United States and provides consultation and antitoxin for suspected cases. State health departments can reach the CDC botulism duty officer on call 24 hours a day, 7 days a week via the CDC Emergency Operations Center (telephone: 770-488-7100).

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

Brucellosis

In 2013, 99 brucellosis cases were reported from 28 U.S. states and territories. The number of cases decreased 13% from 2012 to 2013.

Brucellosis is reportable in all states and territories and is also a nationally notifiable condition. According to the CDC/CSTE case classification and diagnostic lab criteria, probable cases are defined as those that have clinically compatible illness and are epidemiologically linked to a confirmed human or animal case, and/or have presumptive laboratory evidence of *Brucella* infection. This presumptive laboratory evidence can be indicated either by a total antibody titer of 1:160 by standard tube agglutination or *Brucella* microagglutination in at least one serum specimen obtained after symptom onset, or by detection of *Brucella* DNA in a clinical specimen by PCR assay. Confirmed cases must have definitive evidence of *Brucella* infection, either via culture and identification of *Brucella* from clinical specimens or a fourfold or greater rise in *Brucella* antibody titer between acute and convalescent phase serum specimens, obtained at least two weeks apart.

Chlamydia

In 2013, approximately 1.4 million cases of *Chlamydia trachomatis* infections were reported (*1*). During 2012–2013, the rate of reported chlamydia decreased 1.5% from 453.3 to 446.6 cases per 100,000 population,* representing the first time since national reporting began that the overall chlamydia rate has decreased. The rate among women decreased 2.4% (638.7 to 623.1 cases per 100,000 population) and the rate among men increased slightly (0.8%) (260.6 to 262.6). Decreases among women were primarily among young women; the rate among women aged 15–19 years decreased 8.7% (3,331.7 to 3,043.3 cases per 100,000 population). Chlamydial infections are usually asymptomatic and rates of reported cases are affected by the proportion of the population screened and the diagnostic test used. Consequently, increases in chlamydia case rates might reflect increases in incidence of infection, screening coverage, and use of more sensitive diagnostic tests. Likewise, decreases in chlamydia case rates might suggest decreases in incidence of infection or screening coverage.

* The rate for 2012 was calculated using the 2012 population estimates and differs from 2012 rates presented in table 7, which were calculated using 2011 population estimates.

1. CDC. Sexually transmitted disease surveillance 2013. Atlanta, GA: US Department of Health and Human Services, CDC; 2014.

Cholera

Cholera continues to be rare in the United States and is most often acquired during travel in countries where toxigenic *Vibrio cholerae* O1 or O139 is circulating (*1–3*). Since epidemic cholera emerged in Haiti in October 2010, associated cases have been reported in the United States in travelers who have recently arrived from Hispaniola (*2,3*). Of the 14 cholera infections in 2013, a total of 13 were travel-associated, including nine with travel to Hispaniola (eight to Haiti and one to the Dominican Republic) and four to other cholera affected countries (including two with travel to Cuba). Cholera remains a global threat to health, particularly in areas with poor access to improved water and sanitation, such as Haiti and sub-Saharan Africa (*4,5*).

1. Steinberg EB, Greene KD, Bopp CA, Cameron DN, Wells JG, Mintz ED. Cholera in the United States, 1995–2000: trends at the end of the twentieth century. J Infect Dis 2001;184:799–802.
2. Newton AE, Heiman KE, Schmitz A, et al. Cholera in United States associated with epidemic in Hispaniola. Emerg Infect Dis 2011;17:2166–8.
3. Loharikar A, Newton AE, Stroika S, et al. Cholera in the United States, 2001–2011: a reflection of patterns of global epidemiology and travel. Epidemiol Infect 2014;May 27:1–9.
4. Tappero J, Tauxe RV. Lessons learned during public health response to cholera epidemic in Haiti and the Dominican Republic. Emerg Infect Dis 2011;17:2087–93.
5. Mintz ED, Guerrant RL. A lion in our village—the unconscionable tragedy of cholera in Africa. New Engl J Med 2009;360:1061–3.

Coccidioidomycosis

Coccidioidomycosis (i.e., Valley Fever) is a fungal infection caused by inhalation of *Coccidioides spp*. spores that are present in the arid soil of the southwestern United States, California, and parts of Central and South America. *Coccidioides* was also recently identified in soil in south-central Washington, far north of its known range, in association with three cases of human disease (*1,2*). After a substantial increase during 1998–2011 (*3*) and a decrease of approximately 22% from 2011 to 2012, the incidence of reported coccidioidomycosis decreased by 47% from 2012 (17,802) to 2013 (9,438). This decrease was largely a result of a 55% decrease in Arizona, which reports the most cases of any state. California, which reports the second-highest number of cases, experienced a decrease of 27%.

Reasons for the overall decrease in reported cases are not known but might be related to changes in the environment or changes in the at-risk population. Much of the decrease in Arizona was likely related to a change in testing methods in December 2012 at a major commercial laboratory that reports approximately 70% of coccidioidomycosis cases in Arizona (*4*). Despite the recent decrease, morbidity associated with this disease and the number of reported cases remains considerable, particularly in Arizona (5,861 cases) and California (3,272 cases). Physicians should continue to maintain a high suspicion for acute coccidioidomycosis among patients with an

influenza-like illness or pneumonia who live in or have traveled to areas in which the disease is endemic, and they should be aware of the possibility for coccidioidomycosis outside of its previously recognized geographic range.

1. Marsden-Haug N, Hill H, Litvintseva AP, et al. *Coccidioides immitis* identified in soil outside of its known range—Washington, 2013. MMWR Morb Mort Wkly Rep 2014;63:450.
2. Marsden-Haug N, Goldoft M, Ralston C, et al. Coccidioidomycosis acquired in Washington State. Clin Infect Dis 2013;56:847–50.
3. CDC. Increase in reported coccidioidomycosis—United States, 1998–2011. MMWR Morb Mort Wkly Rep 2013;62:217–21.
4. Arizona Department of Health Services. Valley Fever 2012 Annual Report. Available at http://azdhs.gov/phs/oids/epi/valley-fever/documents/reports/valley-fever-2012.pdf.

Cryptosporidiosis

Although cryptosporidiosis affects persons in all age groups, cases are most frequently reported in children aged 1–4 years (*1*). A substantial increase in transmission of *Cryptosporidium* occurs during summer, coinciding with increased use of recreational water, which is a known risk factor for cryptosporidiosis. *Cryptosporidium* has emerged as the leading cause of reported recreational water-associated outbreaks and waterborne disease outbreaks overall (*2*). Transmission through recreational water is facilitated by the substantial number (10^8–10^9) of *Cryptosporidium* oocysts that can be shed in a single bowel movement (*3*), the extended time that oocysts can be shed (*4*), the low (≤10 oocysts) infectious dose (*5*), and the extreme tolerance of *Cryptosporidium* oocysts to chlorine (*6*). The increased reporting observed since 2005 continued; the rate of cryptosporidiosis increased 13% from 2012 to 2013. Furthermore, the proportion of probable cases has increased to 37% of all reported cases, primarily because of changes in the national case definition since 2011.

To reduce the burden of cryptosporidiosis associated with recreational water, enhanced prevention measures are needed. In the United States, pool codes are reviewed and approved by state or local officials; no federal agency regulates the design, construction, operation, and maintenance of treated aquatic venues. This lack of uniform national standards has been identified as a barrier to the prevention and control of outbreaks associated with treated recreational water. To provide support to state and local health departments, CDC led the development of the Model Aquatic Health Code (MAHC) (http://www.cdc.gov/mahc). This guidance document integrates the latest knowledge based on science and best practices with specific code language and explanatory materials covering the design, construction, operation, and maintenance of public swimming pools, spas, hot tubs, and other public aquatic facilities. Local and state agencies needing to create or update swimming pool and spa codes, rules, regulations, guidance, laws, or standards can use MAHC as a resource to protect public health while saving time and resources previously used to write or update code language.

1. Painter JE, Hlavsa MC, Collier SA, et al. Cryptosporidiosis Surveillance—United States, 2011–2012. MMWR Surveill Summ 2015;64(No. SS-3).
2. Hlavsa MC, Roberts VA, Kahler AM, et al. Outbreaks of illness associated with recreational water—United States, 2011–2012. MMWR Morb Mort Wkly Rep 2015;64:668–72.
3. Goodgame RW, Genta RM, White AC, Chappell CL. Intensity of infection in AIDS-associated cryptosporidiosis. J Infect Dis 1993;167:704–9.
4. 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.
5. Chappell CL, Okhuysen PC, Langer-Curry R, et al. *Cryptosporidium hominis*: experimental challenge of healthy adults. Am J Trop Med Hyg 2006;75:851–7.
6. Shields JM, Hill VR, Arrowood MJ, Beach MJ. Inactivation of *Cryptosporidium parvum* under chlorinated recreational water conditions. J Water Health 2008;6:513–20.

Cyclosporiasis

In 2013, the largest number of outbreak-associated cyclosporiasis cases was reported to CDC since 1997, and the largest number of cyclosporiasis cases was reported since the first year of national surveillance for the disease in 1999 (*1,2*). Of the 784 reported cases in 2013, a total of 631 (80%) occurred during June–August and were classified as outbreak associated. At least two outbreaks linked to two different fresh produce vehicles (bagged salad mix and cilantro) imported from Mexico occurred during this period. Only 199 (32%) of the 631 outbreak-associated cases could be directly linked to either of the two outbreaks; the vehicle(s) of infection for two thirds of the laboratory-confirmed domestically acquired cases could not be determined. Advanced molecular detection methods for *Cyclospora* are needed to link cases of cyclosporiasis to each other and to particular vehicles and sources of infection.

1. Herwaldt BL. *Cyclospora cayetanensis*: A review, focusing on outbreaks of Cyclosporiasis in the 1990s. Clin Infect Dis 2000;31:1040–57.
2. CDC. Summary of U.S. foodborne outbreaks of cyclosporiasis, 2000–2014. Available at http://www.cdc.gov/parasites/cyclosporiasis/outbreaks/foodborneoutbreaks.html.

Dengue

Dengue is an acute febrile illness characterized by myalgia, headache, leukopenia, and minor bleeding manifestations (*1*). Patients with severe dengue experience plasma leakage resulting in fluid accumulation, hemorrhage, and/or major organ impairment (e.g., liver failure, myocarditis, and impaired

consciousness). An estimated 390 million dengue virus infections occurred worldwide in 2010, of which 96 million resulted in clinically apparent illness (*2*). With proper clinical management, the case-fatality rate of hospitalized dengue patients can be <0.5% (*3*). Dengue is endemic throughout the tropics, including in the U.S. territories of Puerto Rico and the U.S. Virgin Islands. In 2013, dengue outbreaks occurred in Florida, Texas, and Puerto Rico.

In 2013, dengue epidemics occurred in the Americas and the Caribbean, including in Puerto Rico and the U.S. Virgin Islands. As a result, the 794 travel-associated cases was higher than in previous years. Travelers of all age groups continued to be affected. In association with increased incidence of travel-associated dengue, local dengue outbreaks occurred in at least three states in 2013. A dengue outbreak in southern Texas that was associated with an ongoing epidemic in northern Mexico resulted in 53 detected dengue cases, of which half were locally acquired. In Florida, an outbreak in Martin and Saint Lucie counties resulted in 25 locally acquired cases. As with the Key West outbreak during 2009–2010 (*4*), the sole dengue virus-type (DENV) detected in Florida in 2013 was DENV-1; however, it was distinct from the virus responsible for the Key West outbreak, suggesting that an independent importation event led to the 2013 outbreak. A single locally acquired case was detected in Long Island, New York in late 2013.

1. World Health Organization. Dengue: guidelines for diagnosis, treatment, prevention and control. Geneva, Switzerland: World Health Organization; 2009.
2. Bhatt S, Gething PW, Brady OJ, et al. The global distribution and burden of dengue. Nature 2013;496:504–7.
3. Lam PK, Tam DT, Diet TV, et al. Clinical characteristics of dengue shock syndrome in Vietnamese children: a 10-year prospective study in a single hospital. Clin Infect Dis 2013;57:1577–86.
4. Munoz-Jordan JL, Santiago GA, Margolis H, Stark L. Genetic relatedness of dengue viruses in Key West, Florida, USA, 2009–2010. Emerg Infect Dis 2013;19:652–4.

Ehrlichiosis and Anaplasmosis

Ehrlichiosis and anaplasmosis are rickettsial tickborne diseases that have been notifiable since 1998. The number of reported cases of *Ehrlichia chaffeensis* in 2013 (N = 1,518) was greater than previous years for the third year in a row. Similarly, the annual number of reported cases of *Ehrlichia ewingii* in 2013 (N = 31) was greater for the fourth year in a row. The lonestar tick (*Amblyomma americanum*) transmits both of these *Ehrlichia* species to humans. In contrast, the number of reported cases of *Anaplasma phagocytophilum* in 2013 (N = 2,782) was similar to 2011 (N = 2,575) and 2012 (N = 2,389). The blacklegged tick (*Ixodes scapularis*) and the Western blacklegged tick (*Ixodes pacificus*) transmit *A. phagocytophilum* to humans. This difference in trends between ehrlichiosis and anaplasmosis might be a result of changes in the ecology of these tick vectors, interactions between humans, animals, and ticks, use of diagnostic assays, or reporting practices.

Giardiasis

Giardiasis is the most common enteric parasitic infection in the United States, infecting an estimated 1.2 million persons annually (*1*). Symptomatology is variable, but giardiasis is normally characterized by diarrhea, abdominal cramps, bloating, weight loss, and malabsorption; extraintestinal symptoms are possible (*2*). Infected persons can shed *Giardia* for several weeks, and recent studies indicate a potential for chronic sequelae from giardiasis (*3*). *Giardia* is endemic worldwide, including in the United States and is the most commonly diagnosed pathogen among travelers returning to the United States from other countries (*4*). *Giardia* is commonly detected in internationally adopted children screened in the United States; often, these children do not have gastrointestinal symptoms (*5*).

Giardia is transmitted through the fecal-oral route with the ingestion of *Giardia* cysts through the consumption of fecally contaminated water and food or through person-to-person (or, to a lesser extent, animal-to-person) transmission. Most information on giardiasis transmission comes from outbreak investigations; however, the overwhelming majority of reported giardiasis cases are not linked to known outbreaks. Among reported cases, <2% are documented as outbreak-associated (*6*). The relative contributions of person-to-person, animal-to-person, foodborne, and waterborne transmission to sporadic human giardiasis in the United States are not well understood. New epidemiologic studies are needed to understand transmission pathways and to identify effective public health prevention measures.

Until recently, no reliable serologic assays for *Giardia* have been available, and no population studies of *Giardia* seroprevalence have been conducted. With recent laboratory advances (*7*), such studies might now be feasible and would contribute substantially to understanding the prevalence of giardiasis in the United States. Enhanced genotyping methods would increase knowledge of the molecular epidemiology of Giardia, including elucidating species-specific sub-assemblages (*8*). These tools, combined with traditional epidemiology and surveillance, would improve understanding of giardiasis risk factors, enable researchers to identify outbreaks by linking cases currently classified as sporadic infections, and provide risk factor information needed to inform prevention strategies.

1. Scallan E, Hoekstra RM, Angulo FJ, et al. Foodborne illness acquired in the United States—major pathogens. Emerg Infect Dis 2011;17:7–15.
2. Cantey PT, Roy S, Lee B, et al. Study of nonoutbreak giardiasis: novel findings and implications for research. Am J Med 2011;124:1175.e1–8.
3. Hanevik K, Wensaas KA, Rortveit G, et al. Irritable bowel syndrome and chronic fatigue 6 years after *Giardia* infection: a controlled prospective cohort study. Clin Infect Dis 2014;59:1394–400.
4. CDC. Surveillance for travel-related disease—GeoSentinel Surveillance System, United States, 1997–2011. MMWR Surveill Summ 2013;62:(No. SS-3).
5. Staat MA, Rice M, Donauer S, et al. Intestinal parasite screening in internationally adopted children: importance of multiple stool specimens. Pediatrics 2011;128:e613–22.
6. Painter JE, Gargano JW, Collier SA, Yoder JS. Giardiasis Surveillance -- United States, 2011-2012. MMWR Surveill Summ 2015;64:(No. SS-3).
7. Priest JW, Moss DM, Visvesvara GS, et al. Multiplex assay detection of immunoglobulin G antibodies that recognize *Giardia intestinalis* and *Cryptosporidium parvum* antigens. Clin Vaccine Immunol 2010;17: 1695–707.
8. Feng Y, Xiao L. Zoonotic potential and molecular epidemiology of *Giardia* species and giardiasis. Clin Microbiol Rev 2011;24:110–40.

Gonorrhea

The national rate of reported gonorrhea cases reached an historic low in 2009. However, from 2009 to 2012, the rate increased 8.8%, from 98.1 to 106.7 cases per 100,000 population.* In 2013, the gonorrhea rate decreased slightly (0.6%) to 106.1 cases. Although trends varied by region, the decrease during 2012–2013 was observed primarily among women. Nationwide, the gonorrhea rate among men increased 4.3%, and the rate among women decreased 5.1%. The increase among men compared with the decrease among women suggests either increased transmission or increased case ascertainment (e.g., through increased extragenital screening) among gay, bisexual, and other men who have sex with men. As in previous years, the highest rates were observed among persons aged 15–24 years, among blacks, and in the South. In 2013, the gonorrhea rate among blacks was 12.4 times the rate among whites (*1*).

Treatment for gonorrhea is complicated by antimicrobial resistance. Declining susceptibility to cephalosporins during 2006–2011 resulted in a change in the CDC treatment guidelines in 2012. The only CDC-recommended treatment regimen for gonorrhea is dual therapy with intramuscular ceftriaxone and oral azithromycin (*2*). Treatment with oral cefixime is no longer recommended because use might hasten the development of resistance to ceftriaxone. In CDC's sentinel surveillance system, Gonococcal Isolate Surveillance Project, the percentage of isolates with elevated ceftriaxone minimum inhibitory concentrations (MICs) decreased from a peak of 0.4% in 2011 to 0.05% in 2013, and the percentage of isolates with elevated cefixime MICs decreased from 1.4% in 2011 to 0.4% in 2013 (*1*).

*The rates for 2009 and 2012 were calculated using the 2009 and 2012 population estimates respectively and differ from 2009 and 2012 rates presented in table 7 (calculated using 2008 and 2011 population rates, respectively).

1. CDC. Sexually transmitted disease surveillance 2013. Atlanta, GA: US Department of Health and Human Services; 2014.
2. CDC. Sexually Transmitted Diseases Treatment Guidelines, 2015. MMWR Recomm Rep 2015;64(No. RR-3):1-137.

Hansen Disease (Leprosy)

In 2013, approximately 62% of 81 cases were reported from Texas (20%), New York City (12%), Florida (12%), and Hawaii (17%). An additional 18 cases were reported from U.S. territories with Guam accounting for 94% of these cases.

Hantavirus Pulmonary Syndrome

Hantavirus Pulmonary Syndrome (HPS) is a severe, sometimes fatal, respiratory disease in humans caused by infection with a hantavirus. Anyone who comes into contact with rodents that carry hantavirus is at risk for HPS. Rodent infestation in and around the home remains the primary risk for hantavirus exposure.

In 2013, two cases of HPS caused by infection with Bayou virus were confirmed, one in a Louisiana resident and one in a Texas resident. This is Louisiana's third and Texas' fourth HPS case due to Bayou virus infection. Of the 639 HPS cases reported since 1995, seven cases were related to Bayou virus and occurred in only Louisiana and Texas. Bayou virus is associated with the Rice Rat (*Oryzomys palustris),* which is found in marshy and semiaquatic areas in the southeastern United States and Central America (*1*).

Also in 2013, one patient with laboratory-confirmed acute hantavirus infection did not have respiratory symptoms and did not fit the clinical definition of HPS. CDC has recorded 10 such nonpulmonary hantavirus infections during the preceding 20 years of surveillance, which are not included in the national HPS case counts (*2*). This presents a missed opportunity to better understand the full spectrum of hantavirus-related disease. In 2014, CSTE recommended that Hantavirus infection, non-HPS become nationally notifiable (*3*).

1. Mills JN, Amman BR, Glass GE. Ecology of hantaviruses and their hosts in North America. Vector Borne Zoonotic Dis 2009;10:563–74.
2. Knust B, Rollin PE. Twenty-year summary of surveillance for human hantavirus infections, United States. Emerg Infect Dis 2013;19:1934–7.
3. Council of State and Territorial Epidemiologists. Public health reporting and national notification for hantavirus infection. Position statement 14-ID-08.

Hemolytic Uremic Syndrome

Hemolytic uremic syndrome (HUS) is characterized by the triad of hemolytic anemia, thrombocytopenia, and renal insufficiency. The most common etiology of postdiarrheal HUS in the United States is infection with Shiga toxin-producing *Escherichia coli* (STEC), principally STEC O157:H7 (*1,2*). Children aged <5 years progress to HUS more often than all other persons infected with STEC O157:H7 (15.3% vs. 6.3%) (*3*). In 2013, as in previous years of surveillance, the age group with the most reported cases was children aged 1–4 years (148 of 329 cases).

1. Banatvala N, Griffin PM, Greene KD, et al. The United States prospective hemolytic uremic syndrome study: microbiologic, serologic, clinical, and epidemiologic findings. J Infect Dis 2001;183:1063–70.
2. Mody RK, Luna-Gierke RE, Jones TF, et al. Infections in pediatric postdiarrheal hemolytic uremic syndrome: factors associated with identifying shiga toxin-producing *Escherichia coli*. Arch Pediatr Adolesc Med 2012;166:902–9.
3. Gould LH, Demma L, Jones TF, et al. Hemolytic uremic syndrome and death in persons with *Escherichia coli* O157:H7 infection, Foodborne Diseases Active Surveillance Network sites, 2000–2006. Clin Infect Dis 2009;49:1480–5.

Human Immunodeficiency Virus Diagnoses

As of April 2008, all 50 states, the District of Columbia, and six U.S. territories have had laws or regulations requiring confidential name-based reporting for human immunodeficiency virus (HIV) infection, in addition to reporting persons whose disease has been classified as stage 3 (acquired immunodeficiency syndrome [AIDS]). In 2008, CDC published a revised surveillance case definition for HIV infection that includes AIDS and incorporates the HIV infection classification (*1*). Laboratory-confirmed evidence of HIV infection is required to meet the surveillance case definition for HIV infection, including stage 3 (AIDS).

This summary marks the first use of HIV data from the National HIV Surveillance System (NHSS) after implementation of updated methods for processing national HIV surveillance data. Key differences between the previous and current national data processing include more accurate deduplication resulting in lower overall numbers (approximately 1% fewer cases in the national data set) and an increase (approximately 70%) in the number of persons of multiple races living with diagnosed HIV because of the use of information from multiple records for a case when additional race information is available.

Gay, bisexual, and other men who have sex with men continue to be the risk group most affected by HIV in the United States (*2*). During 2013, data reported to NHSS indicated that blacks/African Americans remained the racial/ethnic group most affected by HIV, accounting for 45.7% of diagnoses that year.

1. CDC. Revised surveillance case definitions for HIV infection among adults, adolescents and children aged <18 months and for HIV infection and AIDS among children aged 18 months to <13 years—United States, 2008. MMWR Recomm Rep 2008;57(No. RR-10).
2. CDC. HIV Surveillance report, 2013; vol. 25. Available at http://www.cdc.gov/hiv/library/reports/surveillance/2013/surveillance_Report_vol_25.html.

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 nationally notifiable diseases where <1000 cases are reported during the preceding year. *MMWR* counts of deaths are by date of report in a calendar year and not by date of occurrence. From December 30, 2012 to December 28, 2013*, a total of 161 influenza-associated pediatric deaths were reported to CDC from 36 states, New York City, District of Columbia (one death), and Puerto Rico (one death). This compares with a mean of 69 deaths (range: 43–118) per calendar year reported for seasonal influenza during 2005–2012. A total of 358 deaths were reported from April 15, 2009 to October 2, 2010, coinciding with the 2009 influenza A (H1N1) pandemic.

Of the 161 influenza-associated pediatric deaths reported to CDC during 2013, one death occurred during the 2011–12 influenza season, 154 occurred during the 2012–13 influenza season, and six occurred during the 2013–14 influenza season. An influenza season spans the time period between *MMWR* week 40 of a calendar year to *MMWR* week 39 of the following year. Seventy-five (46.5%) deaths were associated with influenza A viruses, 81 (50.3%) with influenza B viruses, and one (0.6%) with an influenza virus for which the type was not determined; in addition, three (2%) deaths were associated with influenza A virus and influenza B virus co-infections, and one (0.6%) with an influenza A (H3N2) and A (H1N1) pdm09 co-infection. Of 75 influenza A viruses, subtype was

* For 2013, *MMWR* only included influenza-associated pediatric deaths that were reported from MMWR week 1 through MMWR week 52 (December 30, 2012–December 28, 2013). There were no influenza-associated pediatric deaths reported on December 30 or December 31, 2012.

determined for 39 (52%); nine were pH1N1 viruses and 30 were A (H3N2) viruses.

Among the 161 cases reported in 2013, a total of 17 children (11%) were aged <6 months, 47 (29%) were aged 6–59 months, and 97 (60%) were aged 5–17 years; the median age at the time of death was 6.7 years (range: 1 month–17 years). This median age is similar to that observed before the 2009 A (H1N1) pandemic for the surveillance years 2005–2008, January–April 2009, and 2011(median age range: 4–7.5 years), but lower than that observed when pH1N1 viruses circulated widely during May–December 2009 (median age: 9.3 years) and 2010 (median age: 8.2 years).

For the 161 cases reported in 2013, the overall influenza-associated mortality rate was 0.22 deaths per 100,000 children aged <18 years. This represents a more than three-fold increase in the overall rate when compared with 2012 (0.07 deaths per 100,000 children aged <18years) and a two-fold decrease in the rate compared with 2009 (0.48 deaths per 100,000 children aged <18 years). The rates by age group were 0.31 per 100,000 population for children aged <5 years, and 0.18 for children aged 5 to <18 years (*1*).

Information on the location of death was available for 156 (97%) of the 161 children: 95 (61%) children died after being admitted to the hospital (85 were admitted to the intensive care unit), 36 (23%) died in the emergency department, and 25 (16%) died outside the hospital. Information on pre-existing medical conditions was reported for 153 (95%) children: 83 (54%) children had one or more underlying or chronic medical conditions placing them at increased risk for influenza-associated complications (*2*). The most common group of underlying conditions was neurologic disorders (e.g., moderate to severe developmental delay, seizure disorders, cerebral palsy, mitochondrial disorders, neuromuscular disorders, and neurologic conditions), which was reported for 42 (27%) of 153 children. Seventeen (11%) of 153 children had cardiac disease or congenital heart disease, 15 (10%) had chromosomal abnormalities, and 37 (24%) had a chronic pulmonary condition (e.g., asthma, cystic fibrosis, or other chronic pulmonary disease).

Of 94 (58%) children who had specimens collected for bacterial culture from normally sterile sites, 46 (49%) had positive cultures, and nine (20%) of the 46 were positive for more than one pathogen. *Staphylococcus aureus* was detected in 24 (52%) of 46 positive cultures; 10 were methicillin-resistant, 10 were methicillin-sensitive, and for four specimens methicillin-sensitivity testing was not done. Eleven cultures (24%) were positive for *Streptococcus pneumoniae* and five (11%) were positive for Group A *Streptococcus.* Other bacterial pathogens identified included one each with *Haemophilus influenzae*, *Haemophilus* species, *Pseudomonas aeruginosa*, *Escherichia coli, Moraxella,* and *Veillonella*.

Of 107 children aged ≥6 months at the time of illness for whom seasonal vaccination status was known, 17 (16%) were vaccinated against influenza as recommended by the Advisory Committee on Immunization Practices (ACIP) (*3*). Twenty-one children were aged <6 months at the time of illness onset and ineligible for vaccination.

The number of influenza-associated pediatric deaths reported during 2013 was the highest observed since reporting began in the fall of 2004, excluding the influenza A (H1N1) pandemic in 2009 and 2010, although that increase covered several calendar years. The 2012–13 influenza season was moderately severe and peaked in late December 2012, but the majority of pediatric deaths associated with that season were reported in 2013 (*4*). Continued surveillance for influenza-associated mortality is important to monitor the effects of seasonal and novel influenza, factors contributing to severe influenza-associated disease, and the influence of interventions among children. Because of low vaccination rates it is recommended that increased efforts be directed towards achieving higher vaccination rates among all eligible children and encourage vaccination especially among children with the underlying medical conditions.

1. National Center for Health Statistics. Vintage 2012 post-censal estimates of the resident population of the United States (April 1, 2010, July 1, 2010–July 1, 2012), by year, county, single-year of age (0, 1, 2, .., 85 years and over), bridged race, Hispanic origin, and sex. Available at ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Datasets/NVSS/bridgepop/2012/documentation_bridged_postcen_V2012.pdf.
2. CDC Prevention and control of influenza with vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP)—United States, 2012–13 influenza season. MMWR Morb Mort Wkly Rep 2012;61;613–8.
3. CDC. Recommended immunization schedules for persons aged 0 through 18 years—United States, 2012. MMWR Morb Mort Wkly Rep 2012;61:1–4.
4. CDC. Influenza activity—United States, 2012–13 season and composition of the 2013–14 influenza vaccine. MMWR Morb Mort Wkly Rep 2013;62;473–9.

Listeriosis

Listeria monocytogenes infection (listeriosis) is rare but can cause severe invasive disease (e.g., bacteremia, meningitis). Listeriosis is predominately acquired through contaminated food and occurs most frequently among older adults, persons with certain immunocompromising conditions, and pregnant women and their newborns. Pregnancy-associated listeriosis is usually a relatively mild illness for the woman, but can result in fetal loss or severe neonatal disease.

Listeriosis has been nationally notifiable since 2000. In 2013, the incidence of listeriosis reported to NNDSS was 0.23 infections per 100,000 population. Progress toward the 2020 national target of 0.20 infections per 100,000 population (*1*) is measured through the Foodborne Diseases Active Surveillance Network (FoodNet), which conducts active, population-based surveillance for listeriosis in 10 US states. FoodNet reported a preliminary annual incidence of *Listeria monocytogenes* in 2013 of 0.26 infections per 100,000 population, similar to the rate reported to NNDSS (*2*).

The *Listeria* Initiative is an enhanced surveillance system designed to aid in the rapid investigation of listeriosis outbreaks by combining molecular subtyping results with epidemiologic data collected by state and local health departments (*3*). As part of the *Listeria* Initiative, CDC recommends that all clinical isolates of *L. monocytogenes* be forwarded routinely to a public health laboratory for pulsed-field gel electrophoresis (PFGE) subtyping, and that these PFGE subtyping results be submitted to PulseNet, the National Molecular Subtyping Network for Foodborne Disease Surveillance (*4*); clinical isolates also should be promptly sent to CDC for further characterization. In addition, communicable disease programs are asked to interview all patients with listeriosis promptly using the standard *Listeri*a Initiative questionnaire, which is available in English and Spanish (http://www.cdc.gov/listeria/surveillance.html).

Beginning in September 2013, whole genome sequencing has been performed on all clinical isolates as part of a project conducted by CDC, state and local health departments, the Food and Drug Administration, the U.S. Department of Agriculture's Food Safety and Inspection Service, the National Institutes of Health, and international partners (*5*). All isolate sequences are deposited in publicly available databases at the National Center for Biotechnology Information of the National Institutes of Health. The *Listeria* Initiative has aided in the timely identification and removal of contaminated food during several listeriosis investigations, including a multistate outbreak of 6 illnesses that was linked to farmstead cheese in 2013 (*6*).

1. US Department of Health and Human Services. Healthy people 2020 objectives. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=14.
2. Crim SM, Iwamoto M, Huang JY, et al. Incidence and trends of infection with pathogens transmitted commonly through food—Foodborne Diseases Active Surveillance Network, 10 U.S. sites, 2006–2013. MMWR Morb Mort Wkly Rep 2014;63:328–32.
3. CDC. National Enteric Disease Surveillance: The *Listeria* Initiative. Atlanta, Georgia: US Department of Health and Human Services, CDC, 2014. Available at http://www.cdc.gov/listeria/pdf/ListeriaInitiativeOverview_508.pdf.
4. CDC. PulseNet. Available at http://www.cdc.gov/pulsenet.
5. CDC. AMD Projects: Learning from listeria. Available at http://www.cdc.gov/amd/project-summaries/listeria.html.
6. CDC. Multistate Outbreak of Listeriosis linked to Crave Brothers Farmstead Cheeses (Final Update). Available at http://www.cdc.gov/listeria/outbreaks/cheese-07-13/index.html.

Lyme Disease

National surveillance for Lyme disease was implemented in the United States in 1991 using a case definition based on clinical and laboratory findings. CSTE revised the case definition, effective 2008, to standardize laboratory criteria for confirmation and to allow reporting of "probable" cases.

In 2013, the number of confirmed and probable Lyme disease cases reported to CDC increased compared with the average number reported during 2010–2012. However, the number of confirmed cases in 2013 remained lower than the average reported during 2007–2009. Nevertheless, the geographic distribution of cases continues to increase. In 2013, a total of 412 counties had a reported incidence of ≥10 confirmed cases per 100,000 persons compared with 356 counties in 2012, and 324 counties in 2008.

Measles

Measles was declared eliminated from the United States in 2000. Since then, elimination has been maintained through high population immunity along with adequate disease surveillance and public health response capacity (*1,2*). 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 (*3*). As in recent years, most measles cases (98%) were import associated (*4*). Measles was classified as internationally imported in 52 cases (*5*), 30 of which were in U.S. residents exposed while traveling abroad.

A measles outbreak is defined as a chain of transmission involving three or more cases. Ten outbreaks occurred in 2013, accounting for 75% of the total cases. The three largest outbreaks accounted for 55% of the cases. In each of these outbreaks, transmission occurred after a U.S. resident traveler introduced measles into communities with pockets of persons unvaccinated because of philosophical or religious beliefs. This allowed for spread to occur, mainly in households and community gatherings, before public health interventions could be implemented.

The largest outbreak occurred in New York City (58 cases). None of the patients had documentation of vaccination at the time of exposure. Twelve patients were aged <12 months. Of those who were eligible for vaccination, 67% had objected or had parental objection to vaccination because of religious or philosophical beliefs (*6*). The second largest outbreak

occurred in North Carolina (23 cases, including a California resident) and mainly involved persons not vaccinated because of personal belief exemptions (*7*). The third largest outbreak was among 21 members of a church community in Texas aged 4 months–44 years. Nineteen (90%) of the cases were in patients aged >12 months, and 81% of those were unvaccinated (*8*). These outbreaks illustrate that imported measles cases can result in large outbreaks, particularly if introduced into areas with pockets of unvaccinated persons.

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. Papania MJ, Wallace GS, Rota PA, et al. Elimination of endemic measles, rubella and congenital rubella syndrome from the Western Hemisphere—The United States experience. JAMA Pediatr 2014;168:148–55.
3. 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.
4. 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.
5. CDC. Prevention of measles, rubella, congenital rubella syndrome, and mumps, 2013: Summary recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Recomm Rep 2013;62(No. RR-4).
6. CDC. Measles outbreak among members of a religious community—Brooklyn, New York, March–June 2013. MMWR Morb Mort Wkly Rep 2013;62:752–3.
7. CDC. Measles outbreak associated with a traveler returning from India—North Carolina, April–May 2013. MMWR Morb Mort Wkly Rep 2013;62;753.
8. CDC. Measles—United States, January 1–August 24, 2013. MMWR Morb Mort Wkly Rep 2013;62:741–3.

Meningococcal Disease

Neisseria meningitidis is an important cause of bacterial meningitis and sepsis in the United States. In 2013, rates of meningococcal disease continued to be at historic lows in the United States (0.18 per 100,000 population). Meningococcal disease incidence remained highest among infants aged <1 year and adolescents and young adults (*1,2*). Among infants, disease incidence peaks within the first six months of life and most cases in this age group are caused by serogroup B (*2*). Serogroups C, Y, or W cause 73% of all cases of meningococcal disease among persons aged ≥11 years (2). In 2013, two universities, one in New Jersey and one in California, experienced serogroup B outbreaks with a combined 13 cases and one death reported.

CDC's Advisory Committee on Immunization Practices recommends routine use of quadrivalent (A, C, W, Y) meningococcal conjugate vaccine in adolescents and others at increased risk for disease (*1,3*). In October 2010, a booster dose was recommended for adolescents at age 16 years (*1*). In 2013, coverage with at least one dose of meningococcal conjugate vaccine was 77.8% among adolescents aged 13–17 years in the United States; however, coverage ranged from 40.4%–93.7% by state, including the District of Columbia (*4*). Two serogroup B meningococcal vaccines were licensed for use in the United States in 2014 and 2015. Both vaccines are approved for use in persons aged 10–25 years.

1. CDC. Prevention and control of meningococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Recomm Rep 2013;62(No.RR-2).
2. Cohn AC, MacNeil JR, Harrison LH, et al. Changes in *Neisseria meningitidis* disease epidemiology in the United States, 1998–2007: implications for prevention of meningococcal disease. Clin Infect Dis 2010:50:184–91.
3. CDC. Use of MenACWY-CRM vaccine in children aged 2 through 23 months at increased risk for meningococcal disease. MMWR Morb Mort Wkly Rep 2014;63:527–30.
4. CDC. National and state vaccination coverage among adolescents aged 13–17 years—United States, 2013. MMWR Morb Mort Wkly Rep 2014;63:625–33.

Novel Influenza A Viruses

In 2007, CSTE added human infection with a novel influenza A virus to the list of conditions reportable to NNDSS (*1*). Novel influenza A virus infections are human infections with influenza A viruses that are different from currently circulating human seasonal influenza viruses. These viruses include those that are subtyped as nonhuman in origin and those that cannot be subtyped with standard methods and reagents used for currently circulating influenza viruses.

Influenza viruses that circulate in swine are called swine influenza viruses when isolated from swine, but are called variant viruses when isolated from humans. During 2005–2013, all cases of human infection with novel influenza A viruses involved variant viruses, rather than avian-origin influenza viruses. Although most persons identified with variant influenza virus infection report contact with swine preceding their illness, limited human-to-human transmission of these viruses has occurred (*2*). Because the implications of sustained, ongoing transmission of these viruses between humans are potentially severe, prompt and thorough investigation of sporadic human infections with nonhuman influenza viruses is needed to reduce the risk for sustained transmission (*3*).

In 2013, a total of 21 cases of human infection with novel influenza A viruses were reported from six states (Arkansas [two], Illinois [one], Indiana [14], Iowa [one], Michigan [two], and Ohio [one]) (*4,5*). Two cases (Arkansas) were associated with an influenza A (H1N1) variant virus (H1N1v), and the other 19 cases were associated with influenza A (H3N2) variant viruses (H3N2v). Twelve cases occurred in June (Indiana), four cases in July (Illinois [one], Indiana [two], and Ohio [one]),

two cases in August (Michigan), and three cases in September (Arkansas [two] and Iowa [one]). The median age of patients was six years (range: 2–69 years), and 20 (95%) were aged <18 years; seven (33%) were male. The most commonly reported symptoms were fever (100%), cough (90%), fatigue (74%), and vomiting or diarrhea (57%); 19 (90%) patients reported influenza-like illness (e.g., fever (≥100°F [37.8°C], oral or equivalent) with cough and/or sore throat). Overall, six (29%) patients had at least one underlying medical condition known to confer increased risk for complications from influenza (*6*), the most common of which was asthma, which occurred in three patients. Twenty patients (95%) sought health care for illness and one of the 21 patients (with H3N2v virus infection) was hospitalized for influenza; all 21 fully recovered from their illness. All 21 patients reported direct contact (touching or handling) or indirect contact (walking through an area or coming within 6 feet) with swine in the week preceding illness onset. No cases were identified that were associated with likely human-to-human transmission of novel influenza A viruses.

Transmission of variant influenza A viruses to humans usually occurs among persons in direct contact with pigs or in those who have visited places where pigs were present (e.g., agricultural fairs, farms, and petting zoos). CDC conducts surveillance for human infections with novel influenza A viruses in conjunction with state and local public health laboratories year-round and conducts extensive epidemiologic investigations on each case. Any specimen with results suggestive of the presence of a novel influenza A virus or that cannot be subtyped using standard methods and reagents at a public health laboratory is immediately submitted to CDC for further testing. Surveillance for human infections with novel influenza A viruses is essential, and early identification and investigation of these cases are critical to evaluate the extent of outbreaks, and the potential for human-to-human transmission.

1. Council of State and Territorial Epidemiologists. National reporting for initial detections of novel influenza A viruses. Position statement 07-ID-01. Available at http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/PS/07-ID-01.pdf.
2. Jhung MA, Epperson S, Biggerstaff M, et al. Outbreak of Variant Influenza A (H3N2) virus in the United States. CID 2013;57:1703–12.
3. CDC. Update: Influenza A (H3N2)v transmission and guidelines—five states, 2011. MMWR Morb Mort Wkly Rep 2012;60:1741–4.
4. CDC. Update: Influenza activity—United States and Worldwide, May 19–September, 2013. MMWR Morb Mort Wkly Rep 2013;62:838–42.
5. CDC. Update: Influenza activity—United States, September 29–December 7, 2013. MMWR Morb Mort Wkly Rep 2013;62:1032–6.
6. CDC. Prevention and control of seasonal influenza with vaccines: recommendations of the Advisory Committee on Immunization Practices—United States, 2013-2014. MMWR Recomm Rep 2013;62:(No. RR-7).

Pertussis

Reported pertussis cases decreased from 2012 (incidence: 15.4 per 100,000 population) to 2013 (9.1); however, U.S. pertussis case notifications continue to exceed those reported during the 1990s and early 2000s. Age-specific pertussis rates were highest among infants aged <1 year (102.8 per 100,000 population); children aged 7–10 years contributed the second highest rates of disease nationally (30.6), followed closely by adolescents aged 11–14 years (28.7).

A single dose of tetanus, diphtheria, and acellular pertussis (Tdap) vaccine is recommended for all adults and adolescents aged ≥11 years. Although coverage among adolescents aged 13–17 years continues to improve (84.6% in 2012 to 86.0% in 2013), coverage among adults remains low (14.2% in 2012) (*1–3*). To reduce the burden of pertussis among young infants, Tdap vaccination during pregnancy remains a priority. ACIP recommends a dose of Tdap vaccine during every pregnancy (*4*).

1. CDC. National and state vaccination coverage among adolescents aged 13–17 years—United States, 2012. MMWR Morb Mort Wkly Rep 2013;62:685–93.
2. CDC. National and state vaccination coverage among adolescents aged 13–17 years—United States, 2013. MMWR Morb Mort Wkly Rep 2014;63:625–33.
3. CDC. Noninfluenza vaccination coverage among adults—United States, 2012. MMWR Morb Mort Wkly Rep 2014;63:95–102.
4. CDC. Updated recommendations for use of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine (Tdap) in pregnant women—Advisory Committee on Immunization Practices (ACIP), 2012. MMWR Morb Mort Wkly Rep 2013;62;131–5.

Poliomyelitis, Paralytic and Poliovirus Infections

Vaccine-Associated Paralytic Poliomyelitis (VAPP) is a rare adverse reaction that can occur following vaccination with live-attenuated oral poliovirus vaccine (OPV) or after a susceptible person is exposed to someone who has been vaccinated with OPV (*1,2*). Inactivated poliovirus vaccine (IPV) does not cause VAPP. To reduce the risk for 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 (*3,4*). Before the use of OPV was discontinued in 2000, approximately eight cases of VAPP occurred in the United States each year (*5*). Since that time, only three cases of VAPP have been reported in the U.S.: one in 2005 in an unvaccinated traveler to countries using OPV (*6*), a second in 2009 in a U.S.-born resident with longstanding common variable immunodeficiency (*7*), and a third described below in a person who had severe combined immunodeficiency syndrome (SCIDS) (*8*).

In 2013, the Texas Department of State Health Services reported VAPP in a male infant from India with severe combined immunodeficiency. The infant, aged 7 months, was referred to a community hospital in early July 2013 with intermittent fever associated with a draining skin lesion at the site of a baccile Calmette-Guérin (BCG) vaccination. The child later developed increased irritability and decreased movement of the left leg. Blood culture confirmed the diagnosis of BCG-osis (disseminated BCG infection) and stool culture identified immunodeficiency-related vaccine derived poliovirus iVDPV type 1 (iVDPV1). Genetic evaluation of the iVDPV1 isolate was consistent with receipt of the first of two OPV doses administered during national immunization days in India, although other potential sources of secondary exposure are possible. The child developed respiratory distress and subsequently died.

1. Henderson DA, Witte JJ, Morris L, Langmuir AD. Paralytic disease associated with oral polio vaccines. JAMA 1964;190:41–8.
2. Nkowane MB, Wassilak SGF, Orenstein WA, et al. Vaccine-associated paralytic poliomyelitis. United States: 1973 through 1984. JAMA 1987;257:1335–40.
3. 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 Recomm Rep 1997;46(No. RR-3).
4. CDC. Poliomyelitis prevention in the United States: updated recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Recomm Rep 2000;49(No. RR-5).
5. Alexander LN, Seward JF, Santibanez TA, et al. Vaccine policy changes and epidemiology of poliomyelitis United States. JAMA 2004;292:1696–701.
6. CDC. Imported vaccine-associated paralytic poliomyelitis—United States, 2005. MMWR Morb Mort Wkly Rep 2006;55:97–9.
7. DeVries AS, Harper J, Murray A, et al. Vaccine-derived poliomyelitis 12 years after infection in Minnesota. New Engl J Med 2011;364:2316–23.
8. CDC. Vaccine-associated paralytic poliomyelitis and BCG-osis in an immigrant child with severe combined immunodeficiency syndrome—Texas, 2013. MMWR Morb Mort Wkly Rep 2014;63:721–4.

Q fever

Q fever is a worldwide disease with acute and chronic stages caused by the bacteria *Coxiella burnetii*. During June–December 2013, an outbreak of Q fever in the United States occurred in Missouri resulted in 47 cases that met the outbreak case definition. This outbreak was associated with a large-scale cow and goat dairy. Two categories of Q fever have been notifiable since 2008: acute Q fever and chronic Q fever. Although patients with acute Q fever have good survival rates, chronic Q fever can be life threatening, especially when untreated. Thirty-three cases of chronic Q fever were reported in 2013, an increase in the annual number of reported cases (range: 16–26) since chronic Q fever became a reportable condition.

Salmonellosis

In 2013, the incidence of salmonellosis in the United States was 15.5 laboratory-confirmed infections per 100,000 population, approximately one and a half times the 2020 national health objective target of 11.4 infections per 100,000 population (*1*). Data from the Foodborne Diseases Active Surveillance Network (FoodNet), which conducts active surveillance for salmonellosis in 10 U.S. states, are used to measure progress towards Healthy People 2020 objectives. In 2013, FoodNet reported a preliminary annual incidence of *Salmonella* of 15.2 infections per 100,000 population, slightly lower than the rate reported to NNDSS (*2*). During 2013, as in previous years of surveillance, children aged <5 years had the highest reported incidence rates of salmonellosis. Salmonellosis is reported most frequently in late summer and early fall; in 2013, this seasonality was evident, with most reports in June, July, August, and September.

Accounting for underdiagnosis, *Salmonella* causes an estimated 1.2 million illnesses annually in the United States, approximately 1 million of which are transmitted by food consumed in the United States (*3*). *Salmonella* can contaminate a wide range of foods, and different serotypes tend to have different animal reservoirs and food sources, making control challenging. In 2013, the largest multistate outbreak of *Salmonella* infections (serotype Heidelberg) was traced to contaminated chicken; other notable outbreaks were linked to live poultry (serotypes Typhimurium, Infantis, Lille, Newport, and Mbandaka), tahini sesame paste (serotypes Montevideo and Mbandaka), cucumbers (serotype Saintpaul), ground beef (serotype Typhimurium), and small turtles (serotypes Sandiego, Pomona, and Poona) (*4*).

1. US Department of Health and Human Services. Healthy People 2020 objectives. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=14.
2. CDC. Foodborne Diseases Active Surveillance Network. Available at http://www.cdc.gov/foodnet/data/trends/tables/2013/table2a-b.html#table-2b.
3. Scallan E, Hoekstra RM, Angulo FJ, et al. Foodborne illness acquired in the United States—major pathogens. Emerg Infect Dis 2011;17:7–15.
4. CDC. Reports of selected *Salmonella* outbreak investigations, 2013. Available at http://www.cdc.gov/salmonella/outbreaks.html.

Shiga toxin-producing *Escherichia coli* (STEC)

In 2013, the incidence of laboratory-confirmed Shiga toxin-producing *Escherichia coli* (STEC) infections in the United States was 1.9 cases per 100,000 population. As in previous years of surveillance, the age group with the highest incidence of reported STEC infections was children aged <5 years. In

2013, multistate outbreaks of STEC infection linked to foods included ready-to-eat salads (STEC O157:H7) and frozen food products from a single manufacturer (STEC O121) (*1*).

Public health actions to monitor, prevent, and control STEC infections are based on serogroup characterization. Development of postdiarrheal hemolytic uremic syndrome (HUS), a severe complication of STEC infection, is most strongly associated with STEC O157. Non-O157 STEC, a diverse group that varies in virulence, comprises over 50 other serogroups. In the United States, STEC O157 is the most commonly reported serogroup of STEC causing human infection; however, increased use of assays for the detection of Shiga toxins in clinical laboratories in recent years has led to increased reporting of non-O157 STEC infection (*2*). STEC can produce Shiga toxins (Stx): Stx1, Stx2, or both. In general, strains that produce certain types of Stx 2 are the most virulent (*3*). Accounting for underdiagnosis, approximately 96,000 illnesses are caused by STEC O157, and approximately 168,000 illnesses are caused by non-O157 STEC each year (*4*).

Stool specimens from patients with community-acquired diarrhea submitted to clinical laboratories should be tested routinely both by culture for STEC O157 and by an assay that detects Shiga toxins (or the genes that encode them). Detection of Shiga toxin alone is inadequate for clinical management and public health investigation; characterizing STEC isolates by serogroup and by pulsed-field gel electrophoresis pattern is important to detect, investigate, and control outbreaks.

1. CDC. Reports of selected *E. coli* outbreak investigations. Available at http://www.cdc.gov/ecoli/outbreaks.html.
2. Gould LH, Mody RK, Ong KL, et al. Increased recognition of non-O157 Shiga toxin-producing Escherichia coli infections in the United States during 2000–2010: epidemiologic features and comparison with *E. coli* O157 infections. Foodborne Pathogens and Disease 2013;10:453–60.
3. Mody RK, Griffin PM. Fecal shedding of Shiga toxin-producing Escherichia coli: what should be done to prevent secondary cases? Clin Infect Dis 2013;56:1141–4.
4. Scallan E, Hoekstra RM, Angulo FJ, et al. Foodborne illness acquired in the United States—major pathogens. Emerg Infect Dis 2011;17:7–15.

Shigellosis

In 2013, the incidence of reported shigellosis in the United States was 4.1 infections per 100,000 population; *Shigella* infections have not declined appreciably since 2003 (*1*). In 2013, as in previous years, the highest number of reported cases of shigellosis occurred among children aged <10 years. *S. sonnei* infections generally account for about 75% of shigellosis in the United States (*1*). Shigellosis does not demonstrate marked seasonality, likely reflecting the importance of person-to-person transmission.

Accounting for underdiagnosis, *Shigella* causes an estimated 500,000 illnesses annually in the United States, approximately 130,000 of which are transmitted by food consumed in the United States (*2*). *Shigella* is often transmitted person-to-person, including through sexual contact between men who have sex with men (MSM), and can also be transmitted by contaminated food or by contaminated water used for drinking or recreational purposes (*3*). Some cases of shigellosis are also acquired during international travel (*4,5*). Child care-associated outbreaks are common and are often difficult to control (*6*).

MSM and HIV-positive persons appear to be at the greatest risk for *Shigella* with decreased susceptibility to azithromycin. In 2013, all isolates known to be resistant to azithromycin harbored *mph*A or *erm*B macroslide resistance genes that are commonly plasmid-encoded. Clinicians are urged to test MSM and HIV-positive persons with shigellosis for antimicrobial resistance testing to determine the best course of treatment (*7*).

1. CDC. National *Shigella* Surveillance annual summary, 2012. Atlanta, Georgia: US Department of Health and Human Services, CDC, 2013. Available at http://www.cdc.gov/ncezid/dfwed/pdfs/shigella-annual-report-2012-508c.pdf.
2. Scallan E, Hoekstra RM, Angulo FJ, et al. Foodborne illness acquired in the United States—major pathogens. Emerg Infect Dis 2011;17:7–15.
3. Gupta A, Polyak CS, Bishop RD, Sobel J, Mintz ED. Laboratory confirmed shigellosis in the United States, 1989–2002: epidemiologic trends and patterns. Clin Infect Dis 2004;38:1372–7.
4. Ram PK, Crump JA, Gupta SK, Miller MA, Mintz, ED. Review article: part II. Analysis of data gaps pertaining to *Shigella* infections in low and medium human development index countries, 1984–2005. Epidemiol Infect 2008;136:577–603.
5. Gupta SK, Strockbine N, Omondi M, Hise K, Fair MA, Mintz ED. Emergence of Shiga toxin 1 genes within *Shigella dysenteriae* Type 4 isolates from travelers returning from the island of Hispaniola. Am J Trop Med Hyg 2007;76:1163–5.
6. Arvelo W, Hinkle J, Nguyen TA, et al. Transmission risk factors and treatment of pediatric shigellosis during a large daycare center-associated outbreak of multidrug resistant *Shigella sonnei.* Pediatr Infect Dis J 2009;11:976–80.
7. CDC. Shigella with decreased susceptibility to azithromycin among men who have sex with men—United States, 2002–2013. MMWR Morb Mortal Wkly Rep 2014;63:132–3.

Spotted Fever Rickettsiosis

Spotted fever rickettsioses (SFR) are a group of tickborne infections caused by some members of the genus *Rickettsia*. The number of reported cases of SFR decreased from 4,470 in 2012 to 3,359 in 2013. Although a decrease in reported SFR cases occurred, 2013 represents the second highest year of SFR reports since 1920, when national surveillance of SFR began. Rocky Mountain spotted fever (RMSF), the most virulent of the SFR, is vectored by the American dog tick (*Dermacentor variabilis*), the brown dog tick (*Rhipicephalus sanguineus*), and

the Rocky Mountain wood tick (*Dermacentor andersoni*) in the United States.

Syphilis, Congenital

Trends in congenital syphilis usually follow trends in primary and secondary syphilis among women, with a lag of 1–2 years. During 2009–2012, national rates of female primary and secondary syphilis and congenital syphilis declined. In 2013, the rate of congenital syphilis increased from 8.4 to 8.7 cases per 100,000 live births, the first increase since 2008. This increase was largely driven by increased cases in the West, and coincided with the increased rate of primary and secondary syphilis among women in the West during 2010–2013. Racial and ethnic disparities persisted: rates of congenital syphilis among blacks (29.0 cases per 100,000 live births) and among Hispanics (9.7 cases per 100,000 live births) were 10.4 and 3.5 times, respectively, the rate among whites (2.8 cases per 100,000 live births) (*1*).

1. CDC. Sexually transmitted disease surveillance 2013. Atlanta, GA: US Department of Health and Human Services, CDC; 2014.

Syphilis, Primary and Secondary

In 2013, rates of primary and secondary syphilis were the highest reported since 1995. During 2012–2013, the rate of primary and secondary syphilis increased from 5.0 cases to 5.5 cases per 100,000 population. The rate among women (0.9 cases per 100,000 population) remained unchanged in 2013, but among men increased from 9.2 (in 2012) to 10.3 (in 2013) cases per 100,000 population, marking the 13th consecutive year the rate increased among men. Rates were highest in men aged 20–24 years and 25–29 years *(1)*. In 2013, the rate among men remained highest among blacks aged 20–24 years and 25–29 years (96.4 cases and 97.2 cases per 100,000 population, respectively) (*1*). During 2007–2013, a total of 33 jurisdictions reported sex-of-sexual-partner data for 70% or more cases of primary and secondary syphilis each year; cases among gay, bisexual, and other men who have sex with men (MSM) increased each year. In 2013, 75% of all cases of primary and secondary syphilis were among MSM.

1. CDC. Sexually transmitted disease surveillance 2013. Atlanta, GA: US Department of Health and Human Services, CDC; 2014.

Trichinellosis

In 2013, a total of 22 trichinellosis cases were reported. The 18 cases for which a suspected or known source of *Trichinella* infection was documented were attributed to the consumption of wild boar (n = 10), bear (n = six), and unspecified type of pork (n = two). No likely source of infection could be identified for the remaining four cases reported.

Two outbreaks were reported in 2013. One outbreak involved illnesses in three of five persons, all residents of Maryland, who ate bear meat that was hunted in Alaska. The meat was prepared into patties that were reportedly cooked on a charcoal grill for 15 minutes. This underscores the unreliability of cook time or subjective measures (e.g., color/appearance of meat) to assess doneness and the need to use a food thermometer to ensure that the meat has reached a safe temperature for consumption (*1*). The other 2013 outbreak affected members of two families in Illinois. A member of one of the families prepared sausage with deer meat and the meat of a wild boar that he hunted at a wild game park in Missouri. He shared the meat with his own family and members of a second family; all nine persons who consumed the deer and wild boar sausage developed trichinellosis (*2*). No boar meat was available for testing, but leftover samples of deer meat and the sausage were sent to CDC for confirmation and molecular characterization. The deer meat was negative for *Trichinella* parasites, but *Trichinella spiralis* larvae were found in the sausage; therefore, the wild boar and not the deer was determined to be the source of infection. This was the second reported trichinellosis outbreak in three years associated with boar from a wild game park. This highlights the risks associated with eating meat from wild animals, even those hunted in relative captivity, such as those in wild game parks (*2,3*). The best way to prevent *Trichinella* infection is to thoroughly cook all meats to the USDA-recommended temperatures before consumption (*1*).

1. CDC. Trichinellosis: Prevention and control. July 19, 2013. Available at http://www.cdc.gov/parasites/trichinellosis/prevent.html.
2. CDC. Trichinellosis caused by consumption of wild boar meat—Illinois, 2013. MMWR Morb Mort Wkly Rep 2013;63:451.
3. Holzbauer M, Agger W, Hall R, et al. Outbreak of *Trichinella spiralis* infections associated with a wild boar hunted at a game farm in Iowa. Clin Infect Dis 2014;59:1750–56.

Typhoid Fever

Typhoid fever is rare in the United States. Since 2009, an annual average of less than 400 cases have been reported. In 2013, a total of 338 cases were reported. Approximately 75% of U.S. cases are associated with international travel (*1*), and the risk for infection is highest for travelers visiting friends and relatives in countries where typhoid fever is endemic, perhaps because they are less likely than other travelers to seek pretravel vaccination and to observe strict safe water and food practices.

The risk also is higher for travelers who visit areas where the disease is highly endemic, such as the Indian subcontinent, even for a short time (*2*). In 2011, CDC removed pretravel typhoid vaccination recommendations for 26 low-risk destinations; pretravel vaccination guidelines are available at http://wwwnc.cdc.gov/travel (*3*).

1. Lynch MF, Blanton EM, Bulens S, et al. Typhoid fever in the United States, 1999–2006. JAMA 2009;302:859-65.
2. Steinberg EB, Bishop RB, Dempsey AF, et al. Typhoid fever in travelers: who should be targeted for prevention? Clin Infect Dis 2004;39:186–91.
3. Johnson KJ, Gallagher NM, Mintz ED, Newton AE, Brunette GW, Kozarsky PE. From the CDC: New country-specific recommendations for pre-travel typhoid vaccination. J Travel Med 2011; 18:430–3.

Varicella

A second dose of varicella vaccine was added to the vaccination schedule for children in 2006 (*1*). Since then, the number of states reporting varicella cases to CDC through the National Notifiable Diseases Surveillance System (NNDSS) has increased from 29 to 40 as of 2013. Among these 40 states, varicella incidence in 31 states meeting criteria for adequate and consistent reporting (*2*) has declined 80.6% from 31.4 per 100,000 in 2006 to 6.1 per 100,000 in 2013.

National varicella surveillance data are being used to monitor trends in varicella incidence. Monitoring the association of the varicella vaccination program and disease trends requires data from variables such as age, vaccination status, disease severity (e.g., number of lesions), outcome of the case (e.g., hospitalized or died), and whether the case is associated with an outbreak. In 2013, among the cases reported from the 31 states with adequate and consistent reporting (*2*), data on age, vaccination status, disease severity, outcome, and whether the case was outbreak-related were included for 94%, 45%, 30%, 20%, and 65% of the cases, respectively. Of the limited number of cases with complete information, 50% were aged 1–9 years and 22.9% were aged 10–19 years; 54.9% had received at least one dose of varicella vaccine, and of those with information on number of doses, 56.3% received 2 doses; 49.2% reported mild disease (<50 lesions); 2% of cases had been hospitalized; and 14.2% were associated with outbreaks. Additionally, 27.8% of reported cases had laboratory testing for varicella, of which 7.4% were laboratory confirmed. As states continue improving varicella surveillance practices (*3*), increasing completeness of reporting for the clinical and epidemiologic variables and increasing laboratory testing of reported cases will allow for effective continued monitoring of the association of the 2-dose varicella vaccine program and changing varicella epidemiology.

1. CDC. Prevention of varicella: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Recomm Rep 2007;56:(No. RR-4).
2. CDC. Evolution of varicella surveillance—selected states, 2000–2010. MMWR Morb Mortal Wkly Rep 2012;61:609–12.
3. Lopez AS, Lichtenstein M, Schmid SD, Bialek S. Assessment of Varicella Surveillance and Outbreak Control Practices—United States, 2012. MMWR Morb Mortal Wkly Rep 2014;63:785–88.

Vibriosis

The incidence of reported vibriosis (infection caused by a species from the family *Vibrionaceae* other than toxigenic *Vibrio cholerae* O1 or O139) has increased since 2007 (*1*). In 2012, an outbreak of *V. parahaemoyticus* infections was associated with consumption of shellfish harvested from Oyster Bay Harbor, New York (*2*). This same strain continued to cause illness in 2013 resulting in a total of 104 cases in 13 states. Illness was associated with consumption of shellfish harvested from Connecticut, Massachusetts, New York, and Virginia (*3*).

1. Newton A, Kendall M, Vugia DJ, et al. Increasing rates of vibriosis in the United States, 1996–2010: review of surveillance data from 2 systems. Clin Infect Dis 2012;54 Suppl 5:S391–5.
2. Martinez-Urtaza J, Baker-Austin C, Jones JL, Newton AE, Gonzalez-Aviles GD, DePaola A. Spread of Pacific Northwest *Vibrio parahaemolyticus* strain. N Engl J Med 2013;369:1573–4.
3. Newton AE, Garrett N, Stroika SG, Halpin JL, Turnsek M, Mody RK. Increase in Vibrio parahaemolyticus infections associated with consumption of Atlantic coast shellfish—2013. MMWR Morb Mort Wkly Rep 2014;63:335–6.

Viral Hepatitis

Viral hepatitis is caused by infection with any of at least five distinct viruses: hepatitis A virus (HAV), hepatitis B virus (HBV), hepatitis C virus (HCV), hepatitis D virus (HDV), and hepatitis E virus (HEV). Most viral hepatitis infections in the United States are attributable to HAV, HBV, and HCV. All three of these unrelated viruses can produce an acute illness characterized by nausea, malaise, abdominal pain and jaundice; however, many of these acute infections are asymptomatic or cause only mild disease. Thus, many persons infected with HBV or HCV are unaware they are infected and have clinically silent infections for decades until developing cirrhosis, end-stage liver disease, or hepatocellular carcinoma. Both HAV and HBV are vaccine-preventable diseases and there are effective treatments for HBV and cure for HCV. Until recently, acute viral hepatitis disease had declined; however, surveillance detected increases in all three viral infections (HAV, HBV, and HCV).

The number of reported cases of acute HAV infection declined during 2006–2011. However, after this historic decline, the number increased 27.4%, from 1,398 cases in 2011 to 1,781 cases in 2013. During 2012–2013, the number of reported cases and rates increased for all persons aged ≥30 years, with the greatest increase from 207 to 302 reported cases (45.9%) among persons aged 30–39 years. In 2013, whites had the highest number of cases, but Asian/Pacific Islanders and Hispanics had the highest rate of HAV infection. Rates of HAV infection have been similar for males and females since 2003. Half of all HAV infections are now acquired outside the United States by adult travelers (*1*). Pre-exposure vaccination of international travelers, especially of those traveling areas where HAV is endemic, provides an opportunity to decrease the number and rate of HAV infection in the United States.

During 1990–2012, the number of acute cases of HBV infection declined, resulting in the lowest number of reported cases in 2012; however, during 2012–2013, the number of reported cases of acute HBV infection increased 5.3%, from 2,895 cases to 3,050 cases. The number of reported cases and rates increased among persons aged 30–39 and 40–49 years. Although the number and rate of acute HBV infection declined from 1.52 cases per 100,000 population to 1.27 cases per 100,000 population among non-Hispanic Blacks during 2012–2013, the rate remained the highest relative to all other race/ethnic groups, despite an increase in the rate among American Indian/Alaska Natives and non-Hispanic Whites. The rate of acute HBV infection was 1.6 times higher for males (1.2 cases per 100,000 population) than for females (0.73 cases per 100,000).

After receiving reports of approximately 800–1,000 cases of acute HCV infection each year during 2006–2010, there was an increase of 73.9% (from 1,232 in 2011 to 2,138 in 2013) in the number of cases reported to CDC (*2*). During 2010–2013, the number of reported cases and rates increased among all age groups, with the greatest increase occurring among those aged 20–29 years. Epidemiologic investigations have demonstrated that a marked increase in the number of acute cases of HCV infection have been found among young, nonminority persons who inject drugs, many of whom also abuse oral prescription opioid drugs (*3*–*5*). In 2013, American Indians/Alaska Natives had the highest rate (1.7 cases per 100,000 population) of acute HCV infection, 1.9 times higher than the rate for non-Hispanic whites, 6.9 times higher than Hispanics, 8 times higher than non-Hispanic Blacks, and 20.6 times higher than Asian/Pacific Islanders. Rates of acute HCV infection were similar for males and females in 2013.

Enhanced surveillance for viral hepatitis is necessary for early identification of persons previously unaware of their conditions. Early identification provides an opportunity for infected individuals to be linked to counseling and medical care, preventing continued transmission and advancement of hepatitis disease.

1. Klevens RM, Miller J, Iqbal K, et al. The Evolving epidemiology of hepatitis A in the United States: incidence and molecular epidemiology from population-based surveillance. Arch Intern Med 2010;170:1811–18.
2. CDC. Viral hepatitis surveillance—United States, 2012. Available at http://www.cdc.gov/hepatitis/Statistics/2012Surveillance/PDFs/2012HepSurveillanceRpt.pdf.
3. CDC. Hepatitis C virus infection among adolescents and young adults—Massachusetts, 2002–2009. MMWR Morb Mort Wkly Rep 2011;60:537–41.
4. CDC. Risk factors for Hepatitis C virus infections among young adults—Massachusetts, 2010. MMWR Morb Mort Wkly Rep 2011;60:1457–8.
5. Suryaprasad AG, White JZ, Xu F, et al. Emerging epidemic of hepatitis C virus infections among young non-urban persons who inject drugs in the United States, 2006–2011. Clin Infect Dis 2014;59:1411–19.

PART 1
Summaries of Notifiable Diseases in the United States, 2013

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, 2013* might differ from data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, the use of different case definitions, and print criteria.

TABLE 1. Reported cases of notifiable diseases,* by month — United States, 2013

Disease	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Month not stated	Total
Arboviral diseases†														
California serogroup viruses														
neuroinvasive	—	—	—	—	1	10	14	37	26	6	1	—	—	95
nonneuroinvasive	1	—	—	—	—	4	4	5	3	—	—	—	—	17
Eastern equine encephalitis virus														
neuroinvasive	2	—	1	—	—	1	—	2	—	2	—	—	—	8
Powassan virus														
neuroinvasive	—	—	—	—	3	1	2	2	1	2	1	—	—	12
nonneuroinvasive	—	—	—	—	—	1	—	1	—	—	1	—	—	3
St. Louis encephalitis virus														
neuroinvasive	—	—	—	—	—	—	—	—	—	1	—	—	—	1
West Nile virus														
neuroinvasive	1	—	2	1	2	16	131	440	523	139	11	1	—	1,267
nonneuroinvasive	1	—	1	2	3	22	150	496	448	71	6	2	—	1,202
Babesiosis, total	7	6	14	7	22	222	513	481	176	143	81	124	—	1,796
confirmed	3	4	2	3	11	185	463	420	136	110	59	86	—	1,482
probable	4	2	12	4	11	37	50	61	40	33	22	38	—	314
Botulism, total	12	10	21	11	11	12	10	11	10	12	13	19	—	152
foodborne	—	—	—	—	—	2	—	—	—	—	1	1	—	4
infant	11	8	20	10	10	9	9	11	10	12	10	16	—	136
other, (wound and unspecified)	1	2	1	1	1	1	1	—	—	—	2	2	—	12
Brucellosis	8	3	7	6	7	13	8	10	8	11	8	10	—	99
Chancroid§	—	—	—	1	3	—	1	2	1	—	1	1	—	10
Chlamydia trachomatis infection§	101,875	110,849	138,658	109,846	109,008	130,607	102,560	141,065	108,877	111,788	131,504	105,269	—	1,401,906
Cholera	3	1	—	1	—	—	—	4	1	1	—	3	—	14
Coccidioidomycosis	814	794	572	597	697	889	669	889	645	688	1,202	982	—	9,438
Cryptosporidiosis, total	373	378	465	442	354	533	1,134	2,111	1,288	858	653	467	—	9,056
confirmed	242	240	291	275	232	364	703	1,239	807	598	421	286	—	5,698
probable	131	138	174	167	122	169	431	872	481	260	232	181	—	3,358
Cyclosporiasis	2	4	1	4	4	156	253	276	29	19	5	31	—	784
Dengue Virus Infection†														
Dengue fever	68	29	48	38	27	51	95	198	67	79	101	36	—	837
Dengue hemorrhagic fever	—	1	—	—	—	2	—	3	—	—	—	—	—	6
Ehrlichiosis/Anaplasmosis														
Anaplasma phagocytophilum	11	16	23	44	160	675	661	458	218	213	190	113	—	2,782
Ehrlichia chaffeensis	7	3	6	13	82	292	381	309	147	85	64	129	—	1,518
Ehrlichia ewingii	—	—	—	—	1	5	7	15	2	1	—	—	—	31
Undetermined	1	3	1	2	11	34	56	48	24	22	11	7	—	220
Giardiasis	853	958	1,151	957	961	1,238	1,333	1,992	1,682	1,448	1,377	1,156	—	15,106
Gonorrhea§	24,460	25,220	30,938	24,944	24,554	30,910	25,478	34,360	26,818	27,119	31,448	26,755	—	333,004
Haemophilus influenzae, invasive disease														
all ages, all serotypes	370	349	352	332	314	409	258	289	213	273	276	357	—	3,792
age <5 years														
serotype b	1	5	3	3	2	1	1	2	3	3	3	4	—	31
nonserotype b	16	24	19	22	24	22	9	12	15	19	18	22	—	222
unknown serotype	14	25	20	12	19	18	15	8	14	9	14	17	—	185
Hansen disease (leprosy)	4	5	3	4	15	5	6	9	3	9	5	13	—	81
Hantavirus pulmonary syndrome	—	—	1	2	5	3	1	—	4	2	1	2	—	21
Hemolytic uremic syndrome postdiarrheal	15	7	16	13	21	37	51	52	33	38	27	19	—	329
Hepatitis virus, acute														
A	86	119	127	104	188	227	152	185	191	146	141	115	—	1,781
B	194	238	240	226	234	295	249	280	224	264	330	276	—	3,050
C	115	146	199	169	167	209	140	225	195	141	217	215	—	2,138
Hepatitis B perinatal infection	2	3	6	6	4	7	4	6	3	2	3	2	—	48
Human immunodeficiency virus (HIV) diagnoses¶	3,658	3,350	3,441	3,566	3,350	3,272	3,331	3,352	2,952	2,756	1,568	373	—	34,969
Influenza-associated pediatric mortality**	27	36	30	27	12	5	4	3	3	3	5	5	—	160
Invasive pneumococcal disease														
all ages	2,237	1,842	2,277	1,717	1,458	1,260	606	690	685	955	1,511	1,955	—	17,193
age <5 years	94	103	160	115	122	80	53	50	69	79	120	126	—	1,171
Legionellosis	175	203	194	142	212	892	816	787	481	402	324	326	—	4,954
Listeriosis	30	25	42	37	41	71	93	124	87	68	63	54	—	735
Lyme disease, total	784	746	849	898	1,454	6,082	8,985	7,087	3,292	2,559	2,093	1,478	—	36,307
confirmed	496	457	550	552	988	4,918	7,221	5,504	2,350	1,774	1,447	946	—	27,203
probable	288	289	299	346	466	1,164	1,764	1,583	942	785	646	532	—	9,104
Malaria	88	80	82	99	117	203	181	222	173	96	126	127	—	1,594

See table footnotes on the next page.

TABLE 1. (*Continued*) Reported cases of notifiable diseases,* by month — United States, 2013

Disease	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Month not stated	Total
Measles, total	7	6	13	23	33	36	15	28	6	—	16	4	—	187
indigenous	4	3	8	20	29	30	2	22	4	—	13	—	—	135
imported	3	3	5	3	4	6	13	6	2	—	3	4	—	52
Meningococcal disease														
All serogroups	60	69	63	59	45	30	36	38	29	32	51	44	—	556
serogroup ACWY	11	14	14	16	17	7	13	13	5	9	11	12	—	142
serogroup B	10	17	11	14	14	4	4	4	3	3	5	10	—	99
serogroup other	1	3	3	2	—	—	1	1	—	—	3	3	—	17
serogroup unknown	38	35	35	27	14	19	18	20	21	20	32	19	—	298
Mumps	19	22	61	106	137	38	20	49	61	38	22	11	—	584
Novel influenza A virus infection	—	—	—	—	—	5	9	4	2	1	—	—	—	21
Pertussis	1,650	1,697	2,047	1,771	2,053	2,706	2,591	3,237	2,309	2,225	3,217	3,136	—	28,639
Plague	—	—	—	—	—	—	—	2	1	1	—	—	—	4
Poliomyelitis, paralytic	—	—	—	—	—	—	1	—	—	—	—	—	—	1
Psittacosis	—	—	—	1	1	—	—	1	2	—	—	1	—	6
Q fever, total	5	7	11	7	10	22	20	25	22	7	8	26	—	170
acute	4	6	7	6	7	18	14	21	18	6	6	24	—	137
chronic	1	1	4	1	3	4	6	4	4	1	2	2	—	33
Rabies														
animal	156	281	320	365	403	411	351	610	466	322	291	272	—	4,248
human	—	—	1	—	1	—	—	—	—	—	—	—	—	2
Rubella	1	—	1	1	—	—	3	—	—	—	1	2	—	9
Rubella, congential syndrome	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Salmonellosis	1,807	1,802	2,881	2,855	3,554	5,440	5,728	7,292	5,562	5,297	4,697	3,719	—	50,634
Shiga toxin-producing *Escherichia coli* (STEC)	244	213	361	353	568	800	820	1,140	720	552	492	400	—	6,663
Shigellosis	511	622	706	620	673	994	1,008	1,520	1,210	1,329	1,747	1,789	—	12,729
Spotted fever rickettsiosis, total	30	47	50	69	219	573	569	739	419	295	159	190	—	3,359
confirmed	2	3	5	8	17	31	31	34	18	17	3	5	—	174
probable	28	44	44	60	202	542	538	704	401	277	156	185	—	3,181
Streptococcal toxic-shock syndrome	26	21	24	26	22	17	11	12	19	7	18	21	—	224
Syphilis, total all stages§††	3,729	4,188	5,423	4,427	4,381	5,168	4,133	5,504	4,689	4,607	5,297	4,925	—	56,471
congenital§	25	20	31	27	33	32	31	36	22	26	31	34	—	348
primary and secondary§	1,072	1,261	1,652	1,318	1,322	1,593	1,279	1,744	1,548	1,378	1,656	1,552	—	17,375
Tetanus	4	2	—	2	1	1		2	5	2	4	3	—	26
Toxic-shock syndrome (other than streptococcal)	6	8	3	8	9	4	7	11	8	1	4	2	—	71
Trichinellosis	—	4	5	2	—	1	—	—	2	1	5	2	—	22
Tuberculosis§§	493	611	668	795	789	892	882	783	768	895	769	1,237	—	9,582
Tularemia	2	2	3	5	16	63	33	38	14	14	7	6	—	203
Typhoid fever	24	17	30	30	24	39	39	28	28	21	32	26	—	338
Vancomycin-intermediate *Staphylococcus aureus* (VISA)	9	14	17	36	21	25	18	15	27	29	15	22	—	248
Varicella (Chickenpox)														
morbidity	710	941	1,206	1,038	1,127	1,018	496	752	1,027	1,015	1,139	890	—	11,359
mortality¶¶	—	—	—	—	2	1	—	—	—	—	—	—	—	3
Vibriosis	15	31	24	33	55	116	271	361	170	119	61	43	—	1,299

* No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of **June 1, 2014**.

§ Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of **June 4, 2014**.

¶ Total number of HIV diagnoses reported to the Division of HIV/AIDS Prevention, NCHHSTP through **December 28, 2013**.

** Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD), as of **December 28, 2013**.

†† 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 STD Prevention, NCHHSTP, as of **June 4, 2014**.

§§ Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of **July 1, 2014.**

¶¶ Totals reported to the Division of Viral Diseases, NCIRD, as of **May 30, 2014**.

TABLE 2. Reported cases of notifiable diseases,* by geographic division and area — United States, 2013

Area	Total resident population (in thousands)	Arboviruses†							
		California serogroup§		Eastern equine encephalitis	Powassan		St. Louis encephalitis	West Nile	
		Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Neuro-invasive	Nonneuro-invasive
United States	313,875	95	17	8	12	3	1	1,267	1,202
New England	14,564	3	—	2	3	—	—	11	5
Connecticut	3,592	—	—	1	—	—	—	1	3
Maine	1,329	—	—	—	1	—	—	—	—
Massachusetts	6,645	1	—	1	1	—	—	7	1
New Hampshire	1,322	1	—	—	1	—	—	1	—
Rhode Island	1,050	1	—	—	—	—	—	1	—
Vermont	626	—	—	—	—	—	—	1	1
Mid. Atlantic	41,208	3	1	—	5	1	—	34	21
New Jersey	8,868	—	—	—	1	—	—	10	2
New York (Upstate)	11,232	3	—	—	4	1	—	10	12
New York City	8,344	—	—	—	—	—	—	8	2
Pennsylvania	12,764	—	1	—	—	—	—	6	5
E.N. Central	46,567	29	10	—	3	2	—	167	54
Illinois	12,868	—	—	—	—	—	—	86	31
Indiana	6,538	1	—	—	—	—	—	19	4
Michigan	9,883	—	—	—	—	—	—	24	12
Ohio	11,553	14	2	—	—	—	—	21	3
Wisconsin	5,725	14	8	—	3	2	—	17	4
W.N. Central	20,755	5	1	—	1	—	—	288	455
Iowa	3,075	—	—	—	—	—	—	24	20
Kansas	2,885	—	—	—	—	—	—	34	57
Minnesota	5,380	5	1	—	1	—	—	31	48
Missouri	6,025	—	—	—	—	—	—	24	5
Nebraska	1,855	—	—	—	—	—	—	54	172
North Dakota	701	—	—	—	—	—	—	64	61
South Dakota	834	—	—	—	—	—	—	57	92
S. Atlantic	61,187	27	2	5	—	—	—	36	18
Delaware	917	—	—	—	—	—	—	3	—
District of Columbia	633	—	—	—	—	—	—	—	1
Florida	19,321	—	—	3	—	—	—	5	2
Georgia	9,916	1	1	1	—	—	—	4	6
Maryland	5,885	—	—	—	—	—	—	11	5
North Carolina	9,748	13	—	1	—	—	—	3	—
South Carolina	4,723	1	—	—	—	—	—	3	4
Virginia	8,187	2	—	—	—	—	—	6	—
West Virginia	1,857	10	1	—	—	—	—	1	—
E.S. Central	18,639	27	1	—	—	—	—	48	33
Alabama	4,818	2	—	—	—	—	—	3	6
Kentucky	4,380	—	—	—	—	—	—	1	2
Mississippi	2,986	2	1	—	—	—	—	27	18
Tennessee	6,455	23	—	—	—	—	—	17	7
W.S. Central	37,429	—	—	1	—	—	1	223	121
Arkansas	2,950	—	—	1	—	—	—	16	2
Louisiana	4,602	—	—	—	—	—	—	34	20
Oklahoma	3,816	—	—	—	—	—	—	60	29
Texas	26,061	—	—	—	—	—	1	113	70
Mountain	22,611	—	2	—	—	—	—	216	343
Arizona	6,551	—	—	—	—	—	—	50	12
Colorado	5,189	—	—	—	—	—	—	90	232
Idaho	1,596	—	1	—	—	—	—	14	26
Montana	1,005	—	—	—	—	—	—	10	28
Nevada	2,754	—	1	—	—	—	—	8	3
New Mexico	2,084	—	—	—	—	—	—	24	14
Utah	2,855	—	—	—	—	—	—	4	3
Wyoming	577	—	—	—	—	—	—	16	25
Pacific	50,915	1	—	—	—	—	—	244	152
Alaska	730	—	—	—	—	—	—	—	—
California	38,000	—	—	—	—	—	—	237	142
Hawaii	1,390	—	—	—	—	—	—	—	—
Oregon	3,900	1	—	—	—	—	—	7	9
Washington	6,895	—	—	—	—	—	—	—	1
Territories									
American Samoa	55	—	—	—	—	—	—	—	—
C.N.M.I.	51	—	—	—	—	—	—	—	—
Guam	160	—	—	—	—	—	—	—	—
Puerto Rico	3,673	—	—	—	—	—	—	—	—
U.S. Virgin Islands	105	—	—	—	—	—	—	—	—

* No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of **June 1, 2014**.

§ California serogroup viral diseases for 2013 include LaCrosse encephalitis, Jamestown Canyon and California serogroup not specified.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2013

Area	Babesiosis			Botulism				Brucellosis	Chancroid§
	Total	Confirmed	Probable	Total	Foodborne	Infant	Other†		
United States	1,796	1,482	314	152	4	136	12	99	10
New England	920	812	108	1	1	—	—	1	2
Connecticut	289	249	40	—	—	—	—	1	—
Maine	36	30	6	—	—	—	—	—	—
Massachusetts	425	396	29	1	1	—	—	—	2
New Hampshire	22	18	4	—	—	—	—	—	—
Rhode Island	142	117	25	—	—	—	—	—	—
Vermont	6	2	4	—	—	—	—	—	—
Mid. Atlantic	705	553	152	28	—	27	1	8	—
New Jersey	171	137	34	4	—	4	—	—	—
New York (Upstate)	459	348	111	1	—	1	—	4	—
New York City	75	68	7	3	—	3	—	—	—
Pennsylvania	N	N	N	20	—	19	1	4	—
E.N. Central	85	70	15	6	—	6	—	13	—
Illinois	4	2	2	1	—	1	—	5	—
Indiana	1	—	1	—	—	—	—	1	—
Michigan	2	2	—	—	—	—	—	—	—
Ohio	N	N	N	5	—	5	—	2	—
Wisconsin	78	66	12	—	—	—	—	5	—
W.N. Central	67	34	33	6	—	6	—	9	—
Iowa	N	N	N	3	—	3	N	2	—
Kansas	N	N	N	1	—	1	—	—	—
Minnesota	64	32	32	—	—	—	—	1	—
Missouri	N	N	N	1	—	1	—	2	—
Nebraska	1	—	1	1	—	1	—	3	—
North Dakota	1	1	—	—	—	—	—	—	—
South Dakota	1	1	—	—	—	—	—	1	—
S. Atlantic	12	7	5	15	—	15	—	18	—
Delaware	2	2	—	3	—	3	—	—	—
District of Columbia	N	N	N	—	—	—	—	—	—
Florida	N	N	N	—	—	—	—	9	—
Georgia	N	N	N	—	—	—	—	5	—
Maryland	9	4	5	8	—	8	—	—	—
North Carolina	N	N	N	—	—	—	—	—	—
South Carolina	1	1	—	—	—	—	—	1	—
Virginia	N	N	N	3	—	3	—	3	—
West Virginia	—	—	—	1	—	1	—	—	—
E.S. Central	—	—	—	5	—	5	—	3	1
Alabama	—	—	—	—	—	—	—	1	1
Kentucky	N	N	N	2	—	2	—	1	—
Mississippi	N	N	N	2	—	2	—	—	—
Tennessee	—	—	—	1	—	1	—	1	—
W.S. Central	3	2	1	14	—	12	2	22	1
Arkansas	N	N	N	1	—	1	—	3	—
Louisiana	2	1	1	3	—	3	—	3	—
Oklahoma	N	N	N	1	—	1	—	5	—
Texas	1	1	—	9	—	7	2	11	1
Mountain	—	—	—	12	—	12	—	2	—
Arizona	N	N	N	1	—	1	—	1	—
Colorado	N	N	N	4	—	4	—	1	—
Idaho	N	N	N	1	—	1	—	—	—
Montana	—	—	—	—	—	—	—	—	—
Nevada	N	N	N	1	—	1	—	—	—
New Mexico	N	N	N	3	—	3	—	—	—
Utah	—	—	—	2	—	2	—	—	—
Wyoming	—	—	—	—	—	—	—		—
Pacific	4	4	—	65	3	53	9	23	6
Alaska	N	N	N	1	1	—	—	—	—
California	3	3	—	56	1	46	9	20	6
Hawaii	N	N	N	—	—	—	—	—	—
Oregon	—	—	—	4	1	3	—	2	—
Washington	1	1	—	4	—	4	—	1	—
Territories									
American Samoa	U	U	U	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—	—	—
Puerto Rico	N	N	N	—	—	—	—	—	—
U.S. Virgin Islands	N	N	N	—	—	—	—	—	—

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

* No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Includes cases reported as wound and unspecified botulism.

§ Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, as of **June 4, 2014**.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2013

Area	*Chlamydia trachomatis* infection†	Cholera	Coccidioidomycosis	Cryptosporidiosis			Cyclosporiasis
				Total	Confirmed	Probable	
United States	1,401,906	14	9,438	9,056	5,698	3,358	784
New England	48,696	4	1	277	256	21	9
Connecticut	12,775	1	N	36	36	—	3
Maine	3,438	—	N	35	25	10	N
Massachusetts	23,210	3	—	123	123	—	5
New Hampshire	3,119	—	1	45	34	11	1
Rhode Island	4,312	—	—	12	12	—	—
Vermont	1,842	—	N	26	26	—	N
Mid. Atlantic	176,186	1	—	844	636	208	34
New Jersey	28,327	1	N	70	69	1	13
New York (Upstate)	37,922	—	N	252	243	9	6
New York City	57,881	—	N	81	81	—	15
Pennsylvania	52,056	—	N	441	243	198	N
E.N. Central	213,348	1	28	1,524	1,085	439	56
Illinois	63,797	1	N	266	143	123	23
Indiana	28,023	—	N	139	107	32	1
Michigan	44,835	—	16	270	234	36	2
Ohio	53,121	—	7	372	124	248	7
Wisconsin	23,572	—	5	477	477	—	23
W.N. Central	82,195	2	91	2,547	1,083	1,464	252
Iowa	10,953	1	N	1,505	498	1,007	148
Kansas	11,012	—	N	99	60	39	4
Minnesota	18,742	1	64	324	224	100	3
Missouri	27,328	—	17	210	97	113	5
Nebraska	7,301	—	1	151	103	48	91
North Dakota	2,932	—	9	84	63	21	N
South Dakota	3,927	—	N	174	38	136	1
S. Atlantic	282,067	5	8	1,181	716	465	57
Delaware	5,213	1	1	16	8	8	—
District of Columbia	6,414	—	1	15	14	1	N
Florida	80,182	4	N	409	201	208	47
Georgia	51,070	—	N	287	287	—	6
Maryland	26,723	—	6	65	45	20	—
North Carolina	48,416	—	N	126	49	77	—
South Carolina	25,594	—	N	98	65	33	—
Virginia	33,316	—	N	144	36	108	4
West Virginia	5,139	—	N	21	11	10	—
E.S. Central	94,432	—	—	352	220	132	1
Alabama	29,464	—	N	144	40	104	N
Kentucky	17,134	—	N	72	55	17	N
Mississippi	17,464	—	N	49	49	—	N
Tennessee	30,370	—	N	87	76	11	1
W.S. Central	192,325	—	4	923	765	158	371
Arkansas	15,447	—	N	57	48	9	17
Louisiana	28,739	—	4	378	376	2	3
Oklahoma	18,278	—	N	76	30	46	N
Texas	129,861	—	N	412	311	101	351
Mountain	93,766	—	6,029	734	559	175	2
Arizona	30,564	—	5,861	42	33	9	—
Colorado	20,386	—	N	99	71	28	1
Idaho	5,428	—	N	147	111	36	N
Montana	3,818	—	3	125	117	8	—
Nevada	11,781	—	90	20	13	7	N
New Mexico	12,249	—	30	49	49	—	—
Utah	7,535	—	42	86	82	4	—
Wyoming	2,005	—	3	166	83	83	1
Pacific	218,891	1	3,277	674	378	296	2
Alaska	5,774	—	—	6	6	—	—
California	167,346	—	3,272	306	283	23	2
Hawaii	6,640	—	N	1	1	—	—
Oregon	14,181	—	5	277	35	242	—
Washington	24,950	1	N	84	53	31	—
Territories							
American Samoa	—	—	N	N	N	N	N
C.N.M.I.	—	—	—	—	—	—	—
Guam	937	—	1	—	—	—	—
Puerto Rico	5,969	—	N	—	—	—	—
U.S. Virgin Islands	775	—	—	—	—	—	—

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

* No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, as of **June 4, 2014**.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2013

Area	Dengue Virus Infection†		Ehrlichiosis/Anaplasmosis			
	Dengue Fever	Dengue Hemorrhagic Fever	*Anaplasma phagocytophilum*	*Ehrlichia chaffeensis*	*Ehrlichia ewingii*	Undetermined
United States	837	6	2,782	1,518	31	220
New England	34	—	747	73	1	7
Connecticut	18	—	125	—	—	—
Maine	1	—	94	3	1	2
Massachusetts	—	—	330	8	—	—
New Hampshire	4	—	88	7	—	2
Rhode Island	9	—	69	49	—	—
Vermont	2	—	41	6	—	3
Mid. Atlantic	206	2	591	166	1	37
New Jersey	—	—	80	50	—	2
New York (Upstate)	51	1	454	92	—	18
New York City	131	1	23	14	1	—
Pennsylvania	24	—	34	10	—	17
E.N. Central	65	—	705	89	—	93
Illinois	26	—	9	44	—	—
Indiana	6	—	—	—	—	48
Michigan	16	—	4	1	—	1
Ohio	9	—	4	10	—	2
Wisconsin	8	—	688	34	—	42
W.N. Central	38	3	660	454	20	59
Iowa	—	2	N	N	N	N
Kansas	8	—	7	86	3	—
Minnesota	21	1	630	7	—	42
Missouri	5	—	13	354	17	14
Nebraska	—	—	2	6	—	—
North Dakota	1	—	8	—	—	3
South Dakota	3	—	—	1	—	—
S. Atlantic	216	1	48	288	6	7
Delaware	2	—	—	14	1	1
District of Columbia	—	—	N	N	N	N
Florida	151	—	2	21	—	—
Georgia	9	—	—	20	—	—
Maryland	11	—	5	31	1	1
North Carolina	13	—	15	78	—	—
South Carolina	7	—	—	7	—	—
Virginia	21	1	23	113	4	3
West Virginia	2	—	3	4	—	2
E.S. Central	16	—	9	166	2	6
Alabama	5	—	3	11	—	1
Kentucky	—	—	—	67	—	—
Mississippi	1	—	1	3	—	1
Tennessee	10	—	5	85	2	4
W.S. Central	107	—	18	280	1	—
Arkansas	2	—	7	164	1	—
Louisiana	6	—	1	2	—	—
Oklahoma	4	—	10	106	—	—
Texas	95	—	—	8	—	—
Mountain	12	—	1	2	—	2
Arizona	1	—	—	—	—	2
Colorado	—	—	N	N	N	N
Idaho	1	—	N	N	N	N
Montana	5	—	—	1	—	—
Nevada	4	—	1	—	—	—
New Mexico	—	—	N	N	N	N
Utah	—	—	—	1	—	—
Wyoming	1	—	—	—	—	—
Pacific	143	—	3	—	—	9
Alaska	1	—	N	N	N	N
California	119	—	—	—	—	9
Hawaii	10	—	N	N	N	N
Oregon	—	—	1	—	—	—
Washington	13	—	2	—	—	—
Territories						
American Samoa	—	—	N	N	N	N
C.N.M.I.	—	—	—	—	—	—
Guam	—	—	N	N	N	N
Puerto Rico	9,557	153	N	N	N	N
U.S. Virgin Islands	169	5	—	—	—	—

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

* No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Total number of reported laboratory-positive dengue cases including all confirmed cases [by anti-dengue virus (DENV) molecular diagnostic methods or sero-conversion of anti-DENV IgM] and all probable cases (by a single positive anti-DENV IgM). Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases, as of **July 1, 2014**.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2013

Area	Giardiasis	Gonorrhea†	*Haemophilus influenzae*, invasive disease				Hansen disease (leprosy)
			All ages, serotypes	Age <5 years			
				Serotype b	Nonserotype b	Unknown serotype	
United States	15,106	333,004	3,792	31	222	185	81
New England	1,443	6,883	362	2	7	1	1
Connecticut	230	2,860	55	—	1	—	—
Maine	218	245	25	2	1	—	N
Massachusetts	664	3,106	232	—	2	—	1
New Hampshire	117	121	25	—	1	1	—
Rhode Island	41	454	13	—	—	—	—
Vermont	173	97	12	—	2	—	N
Mid. Atlantic	2,865	40,807	609	8	22	27	13
New Jersey	336	7,014	114	—	—	12	2
New York (Upstate)	1,010	6,460	183	2	13	1	N
New York City	764	13,459	105	—	—	12	10
Pennsylvania	755	13,874	207	6	9	2	1
E.N. Central	1,953	55,395	640	3	51	13	1
Illinois	311	16,464	162	1	6	1	—
Indiana	203	7,144	141	1	12	1	1
Michigan	547	10,569	102	—	9	4	—
Ohio	507	16,619	149	1	24	2	—
Wisconsin	385	4,599	86	—	—	5	—
W.N. Central	1,561	17,713	271	2	5	30	3
Iowa	273	1,472	1	—	—	1	1
Kansas	102	2,161	40	—	5	—	—
Minnesota	618	3,873	90	—	—	12	1
Missouri	244	7,546	95	—	—	9	—
Nebraska	169	1,385	29		—	8	1
North Dakota	44	492	13	2	—	—	N
South Dakota	111	784	3	—	—	—	—
S. Atlantic	2,543	73,802	945	—	25	60	19
Delaware	20	1,390	9	—	—	1	—
District of Columbia	79	2,478	12	N	N	1	—
Florida	1,114	20,818	273	—	—	22	10
Georgia	641	14,252	162	—	5	14	6
Maryland	228	5,989	102	—	8	—	2
North Carolina	N	13,666	144	—	—	19	1
South Carolina	133	7,194	106	—	8	3	—
Virginia	278	6,952	98	—	3	—	—
West Virginia	50	1,063	39	—	1	—	N
E.S. Central	174	25,164	259	2	15	9	5
Alabama	174	8,377	74	1	7	2	1
Kentucky	N	4,315	47	1	—	1	1
Mississippi	N	5,096	29	—	2	5	3
Tennessee	N	7,376	109	—	6	1	—
W.S. Central	374	51,814	195	1	16	5	16
Arkansas	119	4,007	25	—	3	—	—
Louisiana	255	8,669	52	—	—	5	—
Oklahoma	N	5,303	113	—	13	—	N
Texas	N	33,835	5	1	N	N	16
Mountain	1,148	15,316	328	8	55	5	3
Arizona	115	6,412	112	3	22	2	—
Colorado	355	2,820	81	—	9	—	3
Idaho	137	211	19	1	3	3	—
Montana	91	224	6	—	4	—	—
Nevada	91	2,714	14	—	—	—	—
New Mexico	99	1,918	48	1	7	—	—
Utah	228	951	42	3	10	—	—
Wyoming	32	66	6	—	—	—	—
Pacific	3,045	46,110	183	5	26	35	20
Alaska	82	1,128	21	2	7	—	1
California	1,991	38,166	39	—	—	31	5
Hawaii	60	718	28	—	—	4	14
Oregon	364	1,729	84	1	10	—	N
Washington	548	4,369	11	2	9	—	N
Territories							
American Samoa	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—
Guam	2	92	—	—	—	—	17
Puerto Rico	48	356	1	—	—	1	1
U.S. Virgin Islands	—	58	N	N	N	N	—

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

* No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, as of **June 4, 2014**.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2013

Area	Hantavirus pulmonary syndrome	Hemolytic uremic syndrome, postdiarrheal	Hepatitis, viral, acute			Hepatitis B perinatal infection	HIV diagnoses†
			A	B	C		
United States	21	329	1,781	3,050	2,138	48	34,969
New England	—	18	92	94	185	—	895
Connecticut	N	5	19	8	—	—	287
Maine	—	2	10	11	8	—	27
Massachusetts	—	5	43	71	174	—	476
New Hampshire	—	4	9	2	N	—	30
Rhode Island	—	—	4	U	U	—	70
Vermont	—	2	7	2	3	—	5
Mid. Atlantic	—	20	288	225	318	7	5,408
New Jersey	—	4	68	65	106	1	1,053
New York (Upstate)	—	11	75	49	115	—	862
New York City	—	4	92	68	16	—	2,297
Pennsylvania	—	1	53	43	81	6	1,196
E.N. Central	—	39	290	482	442	8	3,644
Illinois	—	5	79	94	37	—	1,294
Indiana	—	9	32	101	175	2	406
Michigan	—	7	83	53	74	1	693
Ohio	—	9	59	225	116	5	1,004
Wisconsin	—	9	37	9	40	—	247
W.N. Central	—	45	94	116	77	2	1,065
Iowa	—	6	17	11	—	—	117
Kansas	—	4	11	11	17	1	135
Minnesota	—	17	32	19	47	1	256
Missouri	—	13	8	61	6	—	440
Nebraska	—	3	13	9	2	—	68
North Dakota	—	2	9	—	4	—	17
South Dakota	—	—	4	5	1	—	32
S. Atlantic	—	40	284	884	413	5	10,902
Delaware	—	—	4	14	U	—	109
District of Columbia	—	—	—	—	—	—	351
Florida	—	14	115	323	134	2	4,859
Georgia	—	11	36	104	48	—	1,400
Maryland	—	2	29	43	53	—	1,005
North Carolina	—	7	46	75	79	1	1,451
South Carolina	—	—	14	58	—	—	697
Virginia	—	6	36	72	41	2	967
West Virginia	—	—	4	195	58	—	63
E.S. Central	—	21	59	621	354	1	1,978
Alabama	N	2	10	90	30	—	467
Kentucky	—	N	24	214	226	—	323
Mississippi	N	—	5	55	U	N	471
Tennessee	—	19	20	262	98	1	717
W.S. Central	4	31	146	314	117	2	5,115
Arkansas	—	3	9	50	30	—	157
Louisiana	1	—	14	82	19	—	1,275
Oklahoma	2	8	14	40	40	—	288
Texas	1	20	109	142	28	2	3,395
Mountain	13	33	182	106	83	2	1,590
Arizona	5	9	66	28	U	1	659
Colorado	2	12	51	24	21	1	300
Idaho	1	4	8	13	14	—	27
Montana	2	—	6	4	16	—	19
Nevada	—	1	19	29	9	—	386
New Mexico	3	3	20	3	12	—	117
Utah	—	3	12	5	11	—	71
Wyoming	—	1	—	—	—	—	11
Pacific	4	82	346	208	149	21	4,372
Alaska	N	N	1	1	—	—	21
California	3	57	255	138	72	19	3,661
Hawaii	—	4	16	4	—	—	68
Oregon	1	21	29	32	14	—	188
Washington	—	—	45	33	63	2	434
Territories							
American Samoa	N	N	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	1
Guam	N	—	31	75	71	—	—
Puerto Rico	—	N	10	36	N	—	454
U.S. Virgin Islands	—	N	—	—	—	—	17

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

* No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Total number of HIV cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention through **December 28, 2014**.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2013

Area	Influenza-associated pediatric mortality†	Invasive Pneumococcal disease§		Legionellosis	Listeriosis	Lyme disease			Malaria
		All Ages	Age <5 years			Total	Confirmed	Probable	
United States	160	17,193	1,171	4,954	735	36,307	27,203	9,104	1,594
New England	8	1,220	47	363	61	12,892	9,496	3,396	130
Connecticut	—	315	16	63	22	2,925	2,111	814	20
Maine	—	121	6	23	4	1,373	1,127	246	10
Massachusetts	5	550	20	189	25	5,290	3,816	1,474	71
New Hampshire	3	101	5	27	5	1,687	1,324	363	10
Rhode Island	—	76	—	46	4	724	444	280	14
Vermont	—	57	—	15	1	893	674	219	5
Mid. Atlantic	19	2,293	128	1,431	179	14,139	11,278	2,861	418
New Jersey	5	598	39	241	29	3,766	2,785	981	93
New York (Upstate)	9	1,022	51	456	63	3,872	3,018	854	58
New York City	4	673	38	300	32	743	494	249	196
Pennsylvania	1	N	N	434	55	5,758	4,981	777	71
E.N. Central	24	3,054	187	1,311	102	2,580	2,073	507	149
Illinois	4	N	41	299	38	337	337	—	64
Indiana	4	726	36	91	11	110	101	9	20
Michigan	5	743	43	272	14	168	114	54	21
Ohio	8	1,161	43	491	24	93	74	19	33
Wisconsin	3	424	24	158	15	1,872	1,447	425	11
W.N. Central	12	1,043	99	183	21	2,667	1,625	1,042	109
Iowa	1	N	N	11	2	247	153	94	12
Kansas	3	149	N	17	3	34	18	16	8
Minnesota	4	536	43	49	12	2,340	1,431	909	67
Missouri	—	N	32	77	2	3	1	2	6
Nebraska	1	156	14	19	2	10	7	3	6
North Dakota	—	103	10	3	—	29	12	17	3
South Dakota	3	99	N	7	—	4	3	1	7
S. Atlantic	25	3,601	288	770	145	3,559	2,442	1,117	403
Delaware	1	29	1	16	1	509	400	109	9
District of Columbia	1	85	2	14	5	35	33	2	13
Florida	8	1,089	95	250	41	138	87	51	54
Georgia	4	1,138	91	66	14	8	8	—	67
Maryland	5	492	27	162	20	1,197	801	396	147
North Carolina	—	N	N	90	23	180	39	141	27
South Carolina	4	439	19	22	11	42	33	9	9
Virginia	2	N	37	123	29	1,307	925	382	75
West Virginia	—	329	16	27	1	143	116	27	2
E.S. Central	6	1,459	95	193	33	89	39	50	33
Alabama	1	182	18	41	5	24	11	13	2
Kentucky	2	255	13	50	11	40	17	23	9
Mississippi	1	233	18	19	4	—	—	—	3
Tennessee	2	789	46	83	13	25	11	14	19
W.S. Central	27	2,325	189	240	38	85	49	36	115
Arkansas	5	252	11	24	4	—	—	—	2
Louisiana	2	358	25	29	3	—	—	—	9
Oklahoma	2	N	21	19	3	3	1	2	14
Texas	18	1,715	132	168	28	82	48	34	90
Mountain	21	2,012	116	190	24	109	74	35	86
Arizona	4	786	44	69	3	32	22	10	33
Colorado	5	504	26	48	11	—	—	—	32
Idaho	—	N	4	12	—	19	14	5	5
Montana	—	31	1	9	—	18	16	2	—
Nevada	3	139	5	19	4	16	11	5	8
New Mexico	4	328	12	11	3	6	—	6	1
Utah	5	202	23	22	3	15	10	5	7
Wyoming	—	22	1	—	—	3	1	2	—
Pacific	18	186	22	273	132	187	127	60	151
Alaska	—	105	15	1	—	14	14	—	4
California	16	N	N	203	101	112	90	22	103
Hawaii	2	81	7	7	3	N	N	N	1
Oregon	—	N	N	20	7	43	12	31	13
Washington	—	N	N	42	21	18	11	7	30
Territories									
American Samoa	—	N	—	N	N	N	N	N	—
C.N.M.I.	—	—	—	—	—	—	—	—	—
Guam	—	18	—	—	—	—	—		—
Puerto Rico	1	—	—	13	—	N	N	N	—
U.S. Virgin Islands	—	—	—	—	—	N	N	N	—

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

* No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases, as of **December 28, 2013**.

§ *Streptococcus pneumoniae*, invasive disease. Since January 1, 2010, "Invasive pneumococcal disease (IPD)" has been nationally notifiable and separate notifications for "Drug resistant *S. pneumoniae*" and "IPD in children <5 years of age" have been discontinued.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2013

Area	Measles			Meningococcal disease				
	Total	Indigenous	Imported	All Serogroups	Serogroups ACWY	Serogroup B	Serogroup Other	Serogroup Unknown
United States	187	135	52	556	142	99	17	298
New England	2	—	2	25	14	8	2	1
Connecticut	—	—	—	3	1	—	1	1
Maine	—	—	—	4	2	1	1	—
Massachusetts	1	—	1	11	7	4	—	—
New Hampshire	—	—	—	2	1	1	—	—
Rhode Island	1	—	1	1	1	—	—	—
Vermont	—	—	—	4	2	2	—	—
Mid. Atlantic	80	70	10	82	18	14	2	48
New Jersey	15	12	3	20	—	—	—	20
New York (Upstate)	3	—	3	24	10	9	1	4
New York City	62	58	4	16	—	—	—	16
Pennsylvania	—	—	—	22	8	5	1	8
E.N. Central	12	3	9	52	21	24	3	4
Illinois	5	—	5	10	6	3	1	—
Indiana	2	1	1	15	6	9	—	—
Michigan	5	2	3	4	2	1	—	1
Ohio	—	—	—	10	5	3	1	1
Wisconsin	—	—	—	13	2	8	1	2
W.N. Central	5	—	5	38	6	6	1	25
Iowa	—	—	—	1	1	—	—	—
Kansas	—	—	—	3	2	—	—	1
Minnesota	2	—	2	12	—	—	—	12
Missouri	3	—	3	10	—	—	—	10
Nebraska	—	—	—	5	—	3	—	2
North Dakota	—	—	—	3	—	2	1	—
South Dakota	—	—	—	4	3	1	—	—
S. Atlantic	31	27	4	98	17	9	3	69
Delaware	—	—	—	2	—	2	—	—
District of Columbia	1	1	—	—	—	—	—	—
Florida	7	5	2	58	—	—	—	58
Georgia	—	—	—	12	4	1	1	6
Maryland	1	—	1	3	1	1	—	1
North Carolina	22	21	1	10	6	3	—	1
South Carolina	—	—	—	4	3	—	1	—
Virginia	—	—	—	7	2	2	—	3
West Virginia	—	—	—	2	1	—	1	—
E.S. Central	—	—	—	16	6	4	1	5
Alabama	—	—	—	5	2	2	1	—
Kentucky	—	—	—	1	1	—	—	—
Mississippi	—	—	—	4	—	—	—	4
Tennessee	—	—	—	6	3	2	—	1
W.S. Central	27	23	4	59	23	13	—	23
Arkansas	—	—	—	7	2	4	—	1
Louisiana	—	—	—	16	—	—	—	16
Oklahoma	—	—	—	6	4	2	—	—
Texas	27	23	4	30	17	7	—	6
Mountain	3	1	2	40	23	9	2	6
Arizona	1	—	1	12	9	3	—	—
Colorado	2	1	1	9	5	2	—	2
Idaho	—	—	—	4	1	1	—	2
Montana	—	—	—	1	1	—	—	—
Nevada	—	—	—	1	—	—	—	1
New Mexico	—	—	—	2	1	—	1	—
Utah	—	—	—	9	5	2	1	1
Wyoming	—	—	—	2	1	1	—	—
Pacific	27	11	16	146	14	12	3	117
Alaska	—	—	—	—	—	—	—	—
California	17	7	10	113	—	—	—	113
Hawaii	—	—	—	1	—	—	1	—
Oregon	6	3	3	12	7	3	1	1
Washington	4	1	3	20	7	9	1	3
Territories								
American Samoa	—	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	—	—	—	1	—	—	—	1
Puerto Rico	—	—	—	1	—	1	—	—
U.S. Virgin Islands	—	—	—	—	—	—	—	—

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

* No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2013

Area	Mumps	Novel influenza A virus infections†	Pertussis	Plague	Poliomyelitis, paralytic	Psittacosis	Q fever		
							Total	Acute	Chronic
United States	584	21	28,639	4	1	6	170	137	33
New England	79	—	1,147	—	—	—	2	1	1
Connecticut	4	—	61	—	—	N	—	—	—
Maine	1	—	332	—	—	—	—	—	—
Massachusetts	69	—	349	—	—	—	—	—	—
New Hampshire	1	—	131	—	—	—	N	N	N
Rhode Island	3	—	160	—	—	—	2	1	1
Vermont	1	—	114	—	—	—	N	N	N
Mid. Atlantic	146	—	1,903	—	—	—	7	5	2
New Jersey	80	—	406	—	—	—	2	2	—
New York (Upstate)	10	—	722	—	—	—	1	—	1
New York City	35	—	142	—	—	—	—	—	—
Pennsylvania	21	—	633	—	—	—	4	3	1
E.N. Central	50	18	5,111	—	—	—	25	19	6
Illinois	26	1	785	—	—	—	6	3	3
Indiana	4	14	616	—	—	—	1	1	—
Michigan	6	2	988	—	—	—	1	1	—
Ohio	12	1	1,464	—	—	—	8	6	2
Wisconsin	2	—	1,258	—	—	—	9	8	1
W.N. Central	15	1	2,523	—	—	1	42	35	7
Iowa	3	1	308	—	—	—	N	N	N
Kansas	—	—	405	—	—	—	3	3	—
Minnesota	3	—	865	—	—	—	2	2	—
Missouri	8	—	559	—	—	—	24	22	2
Nebraska	—	—	232	—	—	1	8	3	5
North Dakota	1	—	87	—	—	—	1	1	—
South Dakota	—	—	67	—	—	—	4	4	—
S. Atlantic	214	—	2,599	—	—	1	15	13	2
Delaware	—	—	57	—	—	—	—	—	—
District of Columbia	1	—	42	—	—	—	N	N	N
Florida	1	—	732	—	—	—	2	2	—
Georgia	10	—	317	—	—	—	2	2	—
Maryland	87	—	213	—	—	—	2	1	1
North Carolina	4	—	583	—	—	—	5	5	—
South Carolina	2	—	218	—	—	1	1	1	—
Virginia	109	—	418	—	—	—	3	2	1
West Virginia	—	—	19	—	—	—	—	—	—
E.S. Central	13	—	889	—	—	—	7	6	1
Alabama	4	—	200	—	—	—	2	2	—
Kentucky	2	—	383	—	—	—	1	—	1
Mississippi	—	—	59	—	—	—	—	—	—
Tennessee	7	—	247	—	—	—	4	4	—
W.S. Central	19	2	4,920	—	1	—	26	25	1
Arkansas	3	2	466	—	—	—	3	3	—
Louisiana	2	—	214	—	—	—	—	—	—
Oklahoma	1	—	255	—	—	—	3	3	—
Texas	13	—	3,985	—	1	N	20	19	1
Mountain	13	—	5,935	4	—	1	25	13	12
Arizona	1	—	1,440	—	—	1	8	4	4
Colorado	4	—	1,418	—	—	—	8	4	4
Idaho	—	—	237	—	—	—	2	1	1
Montana	—	—	663	—	—	—	2	1	1
Nevada	5	—	181	—	—	—	—	—	—
New Mexico	1	—	613	4	—	—	2	2	—
Utah	2	—	1,308	—	—	—	3	1	2
Wyoming	—	—	75	—	—	—	—	—	—
Pacific	35	—	3,612	—	—	3	21	20	1
Alaska	—	—	317	—	—	—	—	—	—
California	30	—	2,011	—	—	1	16	16	—
Hawaii	—	—	50	—	—	—	—	—	—
Oregon	3	—	486	—	—	2	3	3	—
Washington	2	—	748	—	—	—	2	1	1
Territories									
American Samoa	—	—	—	—	—	N	N	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—
Guam	8	—	—	—	—	—	N	N	N
Puerto Rico	3	—	34	—	—	N	—	—	—
U.S. Virgin Islands	—	—	—	—	—	—	—	—	—

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

* No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases, as of **December 28, 2013**.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2013

Area	Rabies		Rubella	Rubella, Congenital syndrome	Salmonellosis	Shiga toxin-producing *Escherichia Coli* (STEC)†
	Animal	Human				
United States	4,248	2	9	1	50,634	6,663
New England	307	—	—	—	2,116	256
Connecticut	148	—	—	—	426	71
Maine	50	—	—	—	131	27
Massachusetts	—	—	—	—	1,143	108
New Hampshire	30	—	—	—	213	27
Rhode Island	28	—	—	—	128	3
Vermont	51	—	—	—	75	20
Mid. Atlantic	742	—	1	1	5,112	725
New Jersey	—	—	—	—	1,062	137
New York (Upstate)	335	—	—	1	1,298	221
New York City	56	—	1	—	1,131	88
Pennsylvania	351	—	—	—	1,621	279
E.N. Central	166	—	1	—	5,561	1,031
Illinois	54	—	—	—	1,783	279
Indiana	10	—	—	—	705	121
Michigan	41	—	—	—	997	184
Ohio	61	—	1	—	1,181	222
Wisconsin	N	—	—	—	895	225
W.N. Central	223	—	—	—	3,235	1,009
Iowa	—	—	—	—	575	171
Kansas	60	—	—	—	423	89
Minnesota	62	—	—	—	799	305
Missouri	39	—	—	—	847	276
Nebraska	34	—	—	—	307	82
North Dakota	—	—	—	—	102	43
South Dakota	28	—	—	—	182	43
S. Atlantic	1,238	2	—	—	13,710	549
Delaware	—	—	—	—	121	15
District of Columbia	U	—	—	—	52	5
Florida	103	—	—	—	6,133	121
Georgia	302	—	—	—	2,281	121
Maryland	376	1	—	—	862	64
North Carolina	379	1	—	—	1,877	71
South Carolina	—	—	—	—	1,139	8
Virginia	—	—	—	—	1,051	109
West Virginia	78	—	—	—	194	35
E.S. Central	59	—	—	—	3,397	327
Alabama	39	—	—	—	1,086	53
Kentucky	15	—	—	—	526	110
Mississippi	5	—	—	—	917	30
Tennessee	—	—	—	—	868	134
W.S. Central	1,180	—	1	—	7,845	813
Arkansas	152	—	—	—	706	76
Louisiana	7	—	—	—	1,282	24
Oklahoma	84	—	1	—	911	107
Texas	937	—	—	—	4,946	606
Mountain	108	—	3	—	3,133	791
Arizona	N	—	—	—	1,010	246
Colorado	—	—	—	—	631	186
Idaho	27	—	2	—	134	106
Montana	36	—	—	—	93	49
Nevada	13	—	—	—	522	59
New Mexico	11	—	1	—	350	30
Utah	12	—	—	—	322	84
Wyoming	9	—	—	—	71	31
Pacific	225	—	3	—	6,525	1,162
Alaska	7	—	—	—	87	N
California	196	—	—	—	5,043	623
Hawaii	—	—	1	—	349	28
Oregon	10	—	1	—	375	189
Washington	12	—	1	—	671	322
Territories						
American Samoa	U	U	—	—	—	—
C.N.M.I.	—	—	—	—	—	—
Guam	—	—	—	—	18	82
Puerto Rico	54	—	—	N	586	7
U.S. Virgin Islands	—	—	—	—	—	—

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

* No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin positive, not serogrouped.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2013

Area	Shigellosis	Spotted Fever Rickettsiosis†			Streptococcal toxic-shock syndrome	Syphilis§		
		Total	Confirmed	Probable		All Stages	Primary & Secondary	Congenital (age <1 yr)
United States	12,729	3,359	174	3,181	224	56,471	17,375	348
New England	515	9	1	8	39	1,327	502	4
Connecticut	57	—	—	—	18	133	56	—
Maine	5	2	—	2	16	21	10	—
Massachusetts	174	1	—	1	1	990	360	4
New Hampshire	8	4	1	3	—	79	28	—
Rhode Island	268	2	—	2	2	94	45	—
Vermont	3	—	—	—	2	10	3	—
Mid. Atlantic	871	86	4	82	37	8,626	2,163	13
New Jersey	137	42	2	40	27	968	233	—
New York (Upstate)	273	25	1	24	9	1,052	298	5
New York City	315	3	1	2	—	5,121	1,161	6
Pennsylvania	146	16	—	16	1	1,485	471	2
E.N. Central	1,348	171	7	164	90	5,624	2,031	49
Illinois	312	102	3	99	59	2,661	798	23
Indiana	117	32	2	30	13	543	215	—
Michigan	169	3	—	3	9	1,068	487	9
Ohio	714	23	1	22	9	1,095	436	17
Wisconsin	36	11	1	10	—	257	95	—
W.N. Central	870	292	11	281	1	1,753	698	3
Iowa	342	8	—	8	—	226	106	—
Kansas	40	—	—	—	—	196	51	—
Minnesota	132	15	1	14	—	541	193	—
Missouri	89	245	4	241	1	609	251	3
Nebraska	63	15	5	10	—	95	41	—
North Dakota	18	2	—	2	—	25	12	—
South Dakota	186	7	1	6	—	61	44	—
S. Atlantic	2,483	972	107	865	23	13,072	4,211	78
Delaware	14	11	—	11	—	146	52	1
District of Columbia	15	6	5	1	—	609	168	2
Florida	1,018	24	4	20	N	5,024	1,513	37
Georgia	886	81	81	—	—	2,990	1,017	20
Maryland	107	8	—	8	1	1,361	456	14
North Carolina	201	426	11	415	9	1,150	404	1
South Carolina	120	60	1	59	4	753	271	1
Virginia	115	350	4	346	8	1,000	315	2
West Virginia	7	6	1	5	1	39	15	—
E.S. Central	1,264	915	16	897	10	2,347	597	8
Alabama	313	255	1	254	—	679	183	2
Kentucky	63	72	2	68	10	395	122	4
Mississippi	222	39	1	38	N	293	78	—
Tennessee	666	549	12	537	—	980	214	2
W.S. Central	3,320	809	15	794	4	9,953	2,193	119
Arkansas	273	480	4	476	1	527	177	12
Louisiana	451	5	—	5	3	1,998	423	32
Oklahoma	210	241	10	231	N	383	118	—
Texas	2,386	83	1	82	N	7,045	1,475	75
Mountain	770	86	11	73	20	2,438	828	17
Arizona	428	63	9	54	—	962	287	13
Colorado	113	6	—	6	—	475	163	—
Idaho	11	1	1	—	—	42	15	—
Montana	69	2	—	2	—	8	5	—
Nevada	54	1	—	1	9	523	205	2
New Mexico	60	4	1	3	—	247	78	2
Utah	25	7	—	5	11	172	74	—
Wyoming	10	2	—	2	—	9	1	—
Pacific	1,288	19	2	17	—	11,331	4,152	57
Alaska	1	N	—	—	—	35	23	1
California	1,068	15	1	14	N	9,971	3,532	56
Hawaii	42	N	N	N	—	87	46	—
Oregon	55	2	1	1	N	527	267	—
Washington	122	2	—	2	N	711	284	—
Territories								
American Samoa	—	N	N	N	N	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	7	N	N	N	—	24	6	1
Puerto Rico	4	N	N	N	N	810	385	1
U.S. Virgin Islands	—	N	N	N	—	9	2	—

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

* No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Total case count includes four unknown case status reports.

§ 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 STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, as of **June 4, 2014**.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2013

Area	Tetanus	Toxic-shock syndrome	Trichinellosis	Tuberculosis†	Tularemia
United States	26	71	22	9,582	203
New England	1	—	—	325	8
Connecticut	—	N	—	62	—
Maine	1	—	—	15	—
Massachusetts	—	—	—	201	8
New Hampshire	—	—	—	15	—
Rhode Island	—	—	—	27	—
Vermont	—	—	—	5	—
Mid. Atlantic	1	14	2	1,405	2
New Jersey	—	3	—	319	2
New York (Upstate)	1	6	2	216	—
New York City	—	3	—	656	—
Pennsylvania	—	2	—	214	—
E.N. Central	2	21	9	760	12
Illinois	—	5	9	327	4
Indiana	1	—	—	94	5
Michigan	1	10	—	141	—
Ohio	—	3	—	148	2
Wisconsin	—	3	—	50	1
W.N. Central	2	8	1	380	92
Iowa	1	1	—	47	4
Kansas	—	—	—	36	28
Minnesota	1	6	—	151	—
Missouri	—	1	—	104	36
Nebraska	—	—	1	21	17
North Dakota	—	—	—	12	—
South Dakota	—	—	—	9	7
S. Atlantic	7	12	6	1,746	7
Delaware	—	—	—	19	—
District of Columbia	—	—	—	38	—
Florida	5	N	—	652	1
Georgia	—	10	N	340	—
Maryland	—	N	3	176	2
North Carolina	—	1	1	216	2
South Carolina	—	1	—	112	—
Virginia	2	N	2	180	2
West Virginia	—	—	—	13	—
E.S. Central	2	5	—	374	7
Alabama	—	1	—	108	—
Kentucky	1	1	N	59	3
Mississippi	—	N	—	65	—
Tennessee	1	3	—	142	4
W.S. Central	3	2	—	1,502	49
Arkansas	1	2	N	72	38
Louisiana	—	—	—	139	—
Oklahoma	—	N	—	69	10
Texas	2	N	—	1,222	1
Mountain	3	3	—	450	15
Arizona	—	1	—	184	—
Colorado	—	1	—	74	1
Idaho	1	—	—	11	3
Montana	—	—	—	6	5
Nevada	—	—	—	92	—
New Mexico	1	—	—	50	4
Utah	1	1	—	33	2
Wyoming	—	—	—	—	—
Pacific	5	6	4	2,640	11
Alaska	—	N	2	71	1
California	4	6	2	2,171	2
Hawaii	—	N	—	115	—
Oregon	1	N	—	73	3
Washington	—	N	—	210	5
Territories					
American Samoa	—	N	N	2	—
C.N.M.I.	—	—	—	16	—
Guam	—	—	—	48	—
Puerto Rico	1	N	N	50	—
U.S. Virgin Islands	—	—	—	2	—

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

* No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Totals reported to the Division of Tuberculosis Elimination, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, as of **July 1, 2014**.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2013

Area	Typhoid fever	Vancomycin-intermediate *Staphylococcus aureus* (*VISA*)	Varicella		Vibriosis
			Morbidity	Mortality†	
United States	338	248	11,359	3	1,299
New England	27	—	1,116	—	179
Connecticut	5	—	223	—	41
Maine	—	—	140	—	9
Massachusetts	18	—	510	N	101
New Hampshire	3	N	104	—	4
Rhode Island	1	—	39	—	19
Vermont	—	—	100	—	5
Mid. Atlantic	79	54	1,204	1	162
New Jersey	30	8	419	—	56
New York (Upstate)	16	35	N	1	73
New York City	23	6	N	—	27
Pennsylvania	10	5	785	—	6
E.N. Central	29	37	2,834	—	50
Illinois	12	7	731	—	15
Indiana	4	—	321	—	8
Michigan	4	15	722	—	10
Ohio	5	12	661	N	11
Wisconsin	4	3	399	—	6
W.N. Central	14	133	1,237	1	31
Iowa	1	N	N	N	N
Kansas	2	1	434	—	1
Minnesota	7	—	478	—	19
Missouri	1	131	230	1	5
Nebraska	—	—	16	—	3
North Dakota	—	—	36	—	3
South Dakota	3	1	43	N	N
S. Atlantic	51	14	1,404	1	365
Delaware	1	—	23	—	7
District of Columbia	—	N	10	—	1
Florida	11	5	659	1	191
Georgia	11	—	54	—	25
Maryland	13	4	N	—	57
North Carolina	5	2	N	N	26
South Carolina	—	—	168	—	14
Virginia	10	3	374	N	42
West Virginia	—	—	116	—	2
E.S. Central	10	—	165	—	41
Alabama	4	—	160	—	18
Kentucky	3	N	N	N	—
Mississippi	—	—	5	N	11
Tennessee	3	—	N	—	12
W.S. Central	14	10	2,185	—	130
Arkansas	—	—	249	—	N
Louisiana	—	1	62	—	39
Oklahoma	1	1	N	N	7
Texas	13	8	1,874	N	84
Mountain	22	—	1,093	—	42
Arizona	12	—	354	—	19
Colorado	2	N	353	N	10
Idaho	2	N	N	N	N
Montana	1	—	84	—	3
Nevada	1	—	N	N	5
New Mexico	1	N	66	—	3
Utah	3	—	227	—	2
Wyoming	—	—	9	N	—
Pacific	92	—	121	—	299
Alaska	5	N	61	—	2
California	69	N	30	—	150
Hawaii	4	—	30	—	30
Oregon	3	N	N	N	27
Washington	11	N	N	—	90
Territories					
American Samoa	—	N	N	N	N
C.N.M.I.	—	—	—	—	—
Guam	—	—	57	N	1
Puerto Rico	—	2	305	—	—
U.S. Virgin Islands	—	—	—	—	—

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

* No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

† Totals reported to the Division of Viral Diseases, National Center for Immunization and Respiratory Diseases, as of **May 30, 2014**.

TABLE 3. Reported cases and incidence* of notifiable diseases,† by age group — United States, 2013

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		
Arboviral diseases§																
California serogroup viruses																
neuroinvasive	2	(0.05)	18	(0.11)	51	(0.12)	6	(0.01)	6	(0.01)	10	(0.01)	2	(0.00)	—	**95**
nonneuroinvasive	1	(0.03)	1	(0.01)	3	(0.01)	—	(0.00)	2	(0.00)	9	(0.01)	1	(0.00)	—	**17**
Eastern equine encephalitis virus																
neuroinvasive	—	(0.00)	—	(0.00)	2	(0.00)	—	(0.00)	—	(0.00)	3	(0.00)	3	(0.01)	—	**8**
Powassan virus																
neuroinvasive	—	(0.00)	1	(0.01)	—	(0.00)	—	(0.00)	1	(0.00)	5	(0.00)	5	(0.01)	—	**12**
nonneuroinvasive	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	3	(0.01)	—	**3**
St. Louis encephalitis virus																
neuroinvasive	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	—	(0.00)	—	**1**
West Nile virus																
neuroinvasive	1	(0.03)	1	(0.01)	18	(0.04)	65	(0.15)	161	(0.26)	563	(0.54)	458	(1.06)	—	**1,267**
nonneuroinvasive	1	(0.03)	3	(0.02)	27	(0.07)	80	(0.18)	209	(0.34)	628	(0.60)	254	(0.59)	—	**1,202**
Babesiosis, total¶	2	(0.09)	5	(0.05)	19	(0.08)	29	(0.11)	94	(0.26)	694	(1.15)	702	(2.91)	251	**1,796**
confirmed	2	(0.08)	4	(0.04)	11	(0.04)	18	(0.07)	72	(0.19)	549	(0.86)	589	(2.32)	237	**1,482**
probable	—	(0.00)	1	(0.01)	8	(0.03)	11	(0.04)	22	(0.06)	145	(0.22)	113	(0.45)	14	**314**
Botulism, total	136	(3.45)	—	(0.00)	—	(0.00)	2	(0.00)	4	(0.01)	9	(0.01)	1	(0.00)	—	**152**
foodborne	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	2	(0.00)	1	(0.00)	—	**4**
infant	136	(3.45)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	**136**
other, (wound and unspecified)	—	(0.00)	—	(0.00)	—	(0.00)	2	(0.00)	3	(0.00)	7	(0.01)	—	(0.00)	—	**12**
Brucellosis	—	(0.00)	2	(0.01)	6	(0.01)	6	(0.01)	33	(0.05)	33	(0.03)	19	(0.04)	—	**99**
Chancroid**	—	(0.00)	—	(0.00)	—	(0.00)	5	(0.01)	3	(0.00)	1	(0.00)	—	(0.00)	—	**10**
Chlamydia trachomatis infection**	—	(0.00)	—	(0.00)	—	(0.00)	949,270	(2160.73)	384,095	(621.65)	51,709	(49.78)	1,377	(3.19)	2,052	**1,401,906**
Cholera	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	1	(0.00)	9	(0.01)	2	(0.00)	1	**14**
Coccidioidomycosis¶	6	(0.40)	44	(0.71)	369	(2.32)	891	(5.19)	1,926	(8.06)	3,920	(9.86)	2,195	(13.55)	87	**9,438**
Cryptosporidiosis, total	135	(3.42)	1,165	(7.26)	1,302	(3.16)	1,287	(2.93)	2,167	(3.51)	1,940	(1.87)	978	(2.27)	82	**9,056**
confirmed	84	(2.13)	759	(4.73)	814	(1.98)	877	(2.00)	1,345	(2.18)	1,237	(1.19)	535	(1.24)	47	**5,698**
probable	51	(1.29)	406	(2.53)	488	(1.19)	410	(0.93)	822	(1.33)	703	(0.68)	443	(1.03)	35	**3,358**
Cyclosporiasis	—	(0.00)	13	(0.09)	17	(0.05)	35	(0.09)	138	(0.25)	422	(0.46)	157	(0.42)	2	**784**
Dengue virus infection																
Denque fever	1	(0.03)	5	(0.03)	71	(0.17)	143	(0.33)	177	(0.29)	357	(0.34)	83	(0.19)	—	**837**
Denque hemorrhagic fever	—	(0.00)	—	(0.00)	—	(0.00)	2	(0.00)	2	(0.00)	2	(0.00)	—	(0.00)	—	**6**
Ehrlichiosis/Anaplasmosis																
Anaplasma phagocytophilum	1	(0.03)	13	(0.09)	123	(0.31)	121	(0.29)	261	(0.44)	1,088	(1.10)	827	(2.01)	348	**2,782**
Ehrlichia chaffeensis	1	(0.03)	18	(0.12)	61	(0.16)	89	(0.21)	156	(0.27)	691	(0.70)	490	(1.19)	12	**1,518**
Ehrlichia ewingii	—	(0.00)	—	(0.00)	—	(0.00)	4	(0.01)	4	(0.01)	18	(0.02)	5	(0.01)	—	**31**
Undetermined	—	(0.00)	3	(0.02)	12	(0.03)	14	(0.03)	31	(0.05)	102	(0.10)	54	(0.13)	4	**220**
Giardiasis	86	(2.68)	1,794	(13.73)	1,932	(5.75)	1,738	(4.79)	2,934	(5.76)	4,745	(5.47)	1,492	(4.09)	385	**15,106**
Gonorrhea**	—	(0.00)	—	(0.00)	—	(0.00)	185,127	(421.39)	114,201	(184.83)	29,442	(28.34)	825	(1.91)	525	**333,004**
Haemophilus influenzae, invasive disease																
all ages, all serotypes	275	(6.98)	163	(1.02)	126	(0.30)	103	(0.23)	209	(0,34)	897	(0.86)	1,887	(4.37)	132	**3,792**
age<5 yrs																
serotype b	19	(0.48)	12	(0.07)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	**31**
nonserotype b	144	(4.04)	78	(0.54)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	**222**
unknown serotype	112	(3.15)	73	(0.50)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	**185**
Hansen disease	—	(0.00)	—	(0.00)	—	(0.00)	11	(0.03)	20	(0.04)	23	(0.02)	13	(0.03)	14	**81**
Hantavirus pulmonary syndrome	—	(0.00)	—	(0.00)	2	(0.01)	1	(0.00)	5	(0.01)	10	(0.01)	3	(0.01)	—	**21**
Hemolytic uremic syndrome postdiarrheal	5	(0.13)	148	(0.94)	98	(0.24)	28	(0.06)	8	(0.01)	19	(0.02)	20	(0.05)	3	**329**
Hepatitis virus, acute																
A	1	(0.03)	22	(0.14)	75	(0.18)	237	(0.54)	461	(0.75)	675	(0.65)	284	(0.66)	26	**1,781**
B	—	(0.00)	1	(0.01)	5	(0.01)	119	(0.27)	1,211	(1.97)	1,492	(1.44)	156	(0.36)	66	**3,050**
C	10	(0.26)	3	(0.02)	1	(0.00)	474	(1.13)	963	(1.62)	514	(0.52)	28	(0.07)	145	**2,138**
Hepatitis B perinatal infection	27	(0.69)	19	(0.12)	1	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	1	**48**
Human immunodeficiency virus (HIV) diagnoses††	29	(0.70)	37	(0.20)	95	(0.20)	7,319	(16.70)	13,888	(22.20)	12,854	(12.40)	747	(1.70)	—	**34,969**
Influenza-associated pediatric mortality§§	24	(0.61)	40	(0.25)	73	(0.18)	23	(0.18)	—	(0.00)	—	(0.00)	—	(0.00)	—	**160**
Invasive pneumococcal disease																
all ages	362	(13.93)	693	(6.56)	420	(1.55)	328	(1.14)	1,232	(3.05)	7,009	(10.21)	6,568	(22.80)	581	**17,193**
age<5 yrs	388	(13.12)	783	(6.51)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	**1,171**
Legionellosis	4	(0.10)	9	(0.06)	5	(0.01)	39	(0.09)	287	(0.46)	2,413	(2.32)	1,844	(4.27)	353	**4,954**

See table footnotes on the next page.

TABLE 3. (*Continued*) Reported cases and incidence* of notifiable diseases,† by age group — United States, 2013

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		
Listeriosis	38	(0.96)	3	(0.02)	4	(0.01)	23	(0.05)	50	(0.08)	202	(0.19)	400	(0.93)	15	**735**
Lyme disease, total	17	(0.43)	1,212	(7.59)	5,149	(12.57)	3,221	(7.36)	3,966	(6.45)	11,420	(11.04)	5,422	(12.63)	5,900	**36,307**
confirmed	16	(0.41)	1,039	(6.50)	4,027	(9.83)	2,292	(5.24)	2,908	(4.73)	8,669	(8.38)	3,951	(9.20)	4,301	**27,203**
probable	1	(0.03)	173	(1.08)	1,122	(2.74)	929	(2.12)	1,058	(1.72)	2,751	(2.66)	1,471	(3.43)	1,599	**9,104**
Malaria	3	(0.08)	67	(0.42)	142	(0.35)	195	(0.44)	498	(0.81)	570	(0.55)	92	(0.21)	27	**1,594**
Measles, total	23	(0.58)	49	(0.31)	44	(0.11)	32	(0.07)	21	(0.03)	18	(0.02)	—	(0.00)	—	**187**
indigenous	16	(0.41)	34	(0.21)	37	(0.09)	27	(0.06)	11	(0.02)	10	(0.01)	—	(0.00)	—	**135**
imported	7	(0.18)	15	(0.09)	7	(0.02)	5	(0.01)	10	(0.02)	8	(0.01)	—	(0.00)	—	**52**
Meningococcal disease																
all serogroups	47	(1.19)	46	(0.29)	31	(0.08)	110	(0.25)	83	(0.13)	130	(0.13)	103	(0.24)	6	**556**
serogroup ACWY	13	(0.33)	4	(0.02)	4	(0.01)	21	(0.05)	17	(0.03)	37	(0.04)	41	(0.10)	5	**142**
serogroup B	15	(0.38)	16	(0.10)	13	(0.03)	24	(0.05)	10	(0.02)	16	(0.02)	4	(0.01)	1	**99**
serogroup other	1	(0.03)	1	(0.01)	1	(0.00)	4	(0.01)	2	(0.00)	7	(0.01)	1	(0.00)	—	**17**
serogroup unknown	18	(0.46)	25	(0.16)	13	(0.03)	61	(0.14)	54	(0.09)	70	(0.07)	57	(0.13)	—	**298**
Mumps	2	(0.05)	33	(0.21)	48	(0.12)	285	(0.65)	96	(0.16)	74	(0.07)	14	(0.03)	32	**584**
Novel influenza A virus infection	—	(0.00)	8	(0.05)	11	(0.03)	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	1	**21**
Pertussis	4,000	(101.48)	3,853	(24.01)	11,281	(27.42)	3,818	(8.69)	1,840	(2.98)	2,894	(2.79)	851	(1.97)	102	**28,639**
Plague	—	(0.00)	—	(0.00)	1	(0.00)	1	(0.00)	—	(0.00)	1	(0.00)	1	(0.00)	—	**4**
Poliomyelitis, paralytic	—	(0.00)	1	(0.01)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	**1**
Psittacosis	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	5	(0.01)	—	(0.00)	—	**6**
Q fever, total	—	(0.00)	—	(0.00)	2	(0.00)	6	(0.01)	24	(0.04)	85	(0.08)	34	(0.08)	19	**170**
acute	—	(0.00)	—	(0.00)	2	(0.00)	5	(0.01)	21	(0.03)	66	(0.06)	25	(0.06)	18	**137**
chronic	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	3	(0.00)	19	(0.02)	9	(0.02)	1	**33**
Rabies, human	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	—	(0.00)	1	(0.00)	—	(0.00)	—	**2**
Rubella	1	(0.03)	1	(0.01)	1	(0.00)	1	(0.00)	4	(0.01)	1	(0.00)	—	(0.00)	—	**9**
Rubella, congenital syndrome	1	(0.03)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	**1**
Salmonellosis	5,440	(138.01)	7,558	(47.10)	6,289	(15.29)	4,609	(10.49)	6,631	(10.73)	11,906	(11.46)	7,239	(16.78)	962	**50,634**
Shiga toxin-producing *Escherichia coli* (STEC)	187	(4.76)	1,583	(9.89)	1,251	(3.05)	1,166	(2.66)	879	(1.43)	901	(0.87)	594	(1.38)	102	**6,663**
Shigellosis	206	(5.23)	3,248	(20.24)	3,949	(9.60)	1,010	(2.30)	1,976	(3.20)	1,745	(1.68)	458	(1.06)	137	**12,729**
Spotted Fever Rickettsiosis, total	3	(0.08)	39	(0.24)	163	(0.40)	296	(0.68)	602	(0.98)	1,520	(1.47)	722	(1.68)	14	**3,359**
confirmed	1	(0.03)	4	(0.03)	9	(0.02)	9	(0.02)	31	(0.05)	76	(0.07)	41	(0.10)	3	**174**
probable	2	(0.05)	35	(0.22)	154	(0.38)	286	(0.65)	571	(0.93)	1,442	(1.39)	681	(1.59)	10	**3,181**
Streptococcal toxic-shock syndrome	2	(0.08)	5	(0.05)	13	(0.05)	8	(0.03)	29	(0.07)	84	(0.12)	83	(0.28)	—	**224**
Syphilis, total all stages**,¶¶	—	(0.00)	—	(0.00)	—	(0.00)	12,179	(27.72)	23,391	(37.86)	19,103	(18.39)	1,362	(3.16)	25	**56,471**
congenital**	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	**348**
primary and secondary**	—	(0.00)	—	(0.00)	—	(0.00)	4,542	(10.34)	7,576	(12.26)	5,057	(4.87)	162	(0.38)	10	**17,375**
Tetanus	—	(0.00)	—	(0.00)	2	(0.00)	1	(0.00)	5	(0.01)	3	(0.00)	5	(0.01)	10	**26**
Toxic-shock syndrome	1	(0.03)	3	(0.03)	17	(0.06)	20	(0.06)	8	(0.02)	11	(0.01)	1	(0.00)	10	**71**
Trichinellosis	—	(0.00)	—	(0.00)	1	(0.00)	4	(0.01)	8	(0.01)	9	(0.01)	—	(0.00)	—	**22**
Tuberculosis***	67	(1.70)	230	(1.43)	188	(0.46)	978	(2.23)	2,252	(3.64)	3,673	(3.54)	2,194	(5.09)	—	**9,582**
Tularemia	—	(0.00)	16	(0.10)	38	(0.09)	12	(0.03)	25	(0.04)	73	(0.07)	31	(0.07)	8	**203**
Typhoid fever	7	(0.18)	38	(0.24)	60	(0.15)	57	(0.13)	95	(0.15)	59	(0.06)	17	(0.04)	5	**338**
Vancomycin-intermediate *Staphylococcus aureus* (VISA)	2	(0.06)	1	(0.01)	3	(0.01)	20	(0.06)	43	(0.09)	92	(0.11)	68	(0.20)	19	**248**
Vibriosis	1	(0.03)	15	(0.10)	80	(0.20)	86	(0.20)	224	(0.37)	507	(0.50)	271	(0.65)	115	**1,299**

* Per 100,000 population.

† No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

§ Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of **June 1, 2014**.

¶ Notifiable in <25 states.

** Cases among persons aged <15 years are not shown because some might not be caused by sexual transmission; totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of **June 4, 2014**.

†† Total number of HIV diagnoses reported to the Division of HIV/AIDS Prevention, NCHHSTP through December 28, 2013.

§§ Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD), as of **December 31, 2013**.

¶¶ 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 STD Prevention, NCHHSTP, as of **June 4, 2014**.

*** Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of **July 1, 2014**.

TABLE 4. Reported cases and incidence* of notifiable diseases,† by sex — United States, 2013

Disease	Male		Female		Sex not stated	Total
	No.	Rate	No.	Rate		
Arboviral diseases§						
California serogroup viruses						
neuroinvasive	59	(0.04)	36	(0.02)	—	**95**
nonneuroinvasive	12	(0.01)	5	(0.00)	—	**17**
Eastern equine encephalitis virus						
neuroinvasive	6	(0.00)	2	(0.00)	—	**8**
Powassan virus						
neuroinvasive	9	(0.01)	3	(0.00)	—	**12**
nonneuroinvasive	2	(0.00)	1	(0.00)	—	**3**
St. Louis encephalitis virus						
neuroinvasive	1	(0.00)		(0.00)	—	**1**
West Nile virus						
neuroinvasive	761	(0.49)	506	(0.32)	—	**1,267**
nonneuroinvasive	664	(0.43)	538	(0.34)	—	**1,202**
Babesiosis, total¶	1,154	(1.28)	577	(0.62)	65	**1,796**
confirmed	968	(1.02)	450	(0.46)	64	**1,482**
probable	186	(0.20)	127	(0.13)	1	**314**
Botulism, total	77	(0.05)	75	(0.05)	—	**152**
foodborne		(0.00)	4	(0.00)	—	**4**
infant	65	(3.23)	71	(3.69)	—	**136**
other, (wound and unspecified)	12	(0.01)		(0.00)	—	**12**
Brucellosis	63	(0.04)	36	(0.02)	—	**99**
Chancroid**	6	(0.00)	4	(0.00)	—	**10**
Chlamydia trachomatis infection**	405,652	(262.60)	993,348	(623.19)	2906	**1,401,906**
Cholera	7	(0.00)	6	(0.00)	1	**14**
Coccidioidomycosis¶	5,088	(8.54)	4,307	(7.06)	43	**9,438**
Cryptosporidiosis, total	4,397	(2.85)	4,623	(2.90)	36	**9,056**
confirmed	2,844	(1.84)	2,848	(1.78)	6	**5,698**
probable	1,553	(1.01)	1,775	(1.11)	30	**3,358**
Cyclosporiasis	333	(0.24)	446	(0.32)	5	**784**
Dengue virus infection						
Denque fever	425	(0.28)	412	(0.26)	—	**837**
Denque hemorrhagic fever	3	(0.00)	3	(0.00)	—	**6**
Ehrlichiosis/Anaplasmosis						
Anaplasma phagocytophilum	1,480	(1.01)	967	(0.64)	335	**2,782**
Ehrlichia chaffeensis	899	(0.61)	604	(0.40)	15	**1,518**
Ehrlichia ewingii	19	(0.01)	12	(0.01)	—	**31**
Undetermined	118	(0.08)	99	(0.07)	3	**220**
Giardiasis	9,048	(7.06)	5,985	(4.52)	73	**15,106**
Gonorrhea**	169,130	(109.49)	163,208	(102.39)	666	**333,004**
Haemophilus influenzae, invasive disease						
all ages, all serotypes	1,641	(1.06)	1,999	(1.25)	152	**3,792**
age <5 yrs						
serotype b	21	(0.21)	10	(0.10)	—	**31**
nonserotype b	127	(1.25)	93	(0.95)	2	**222**
unknown serotype	109	(1.07)	74	(0.76)	2	**185**
Hansen disease	46	(0.03)	21	(0.01)	14	**81**
Hantavirus pulmonary syndrome	11	(0.01)	10	(0.01)	—	**21**
Hemolytic uremic syndrome postdiarrheal	133	(0.09)	195	(0.12)	1	**329**
Hepatitis virus, acute						
A	864	(0.56)	914	(0.57)	3	**1,781**
B	1,873	(1.22)	1,163	(0.73)	14	**3,050**
C	1,142	(0.77)	993	(0.65)	3	**2,138**
Hepatitis B perinatal infection	20	(0.01)	28	(0.02)	—	**48**
Human immunodeficiency virus (HIV)						
diagnoses††	27,992	(18.00)	6,977	(4.30)	—	**34,969**
Influenza-associated pediatric mortality§§	82	(0.22)	78	(0.22)	—	**160**
Invasive pneumococcal disease						
all ages	8,537	(8.39)	8,044	(7.64)	612	**17,193**
age <5 yrs	636	(8.30)	433	(5.90)	102	**1,171**
Legionellosis	3,153	(2.04)	1,794	(1.13)	7	**4,954**
Listeriosis	362	(0.23)	371	(0.23)	2	**735**

See table footnotes on the next page.

TABLE 4. (*Continued*) Reported cases and incidence* of notifiable diseases,† by sex — United States, 2013

Disease	Male		Female		Sex not stated	Total
	No.	Rate	No.	Rate		
Lyme disease, total	20,731	(13.48)	15,067	(9.49)	509	**36,307**
confirmed	15,642	(10.17)	11,205	(7.06)	356	**27,203**
probable	5,112	(3.32)	3,874	(2.44)	118	**9,104**
Malaria	989	(0.64)	596	(0.37)	9	**1,594**
Measles, total	97	(0.06)	89	(0.06)	1	**187**
indigenous	69	(0.04)	65	(0.04)	1	**135**
imported	28	(0.02)	24	(0.02)	—	**52**
Meningococcal disease						
all serogroups	291	(0.19)	265	(0.17)	—	**556**
serogroup ACWY	74	(0.05)	68	(0.04)	—	**142**
serogroup B	51	(0.03)	48	(0.03)	—	**99**
serogroup other	10	(0.01)	7	(0.00)	—	**17**
serogroup unknown	156	(0.10)	142	(0.09)	—	**298**
Mumps	294	(0.19)	288	(0.18)	2	**584**
Novel influenza A virus infection	7	(0.00)	4	(0.00)	10	**21**
Pertussis	13,115	(8.49)	15,417	(9.67)	107	**28,639**
Plague	3	(0.00)	1	(0.00)	—	**4**
Poliomyelitis, paralytic	1	(0.00)		(0.00)	—	**1**
Psittacosis	3	(0.00)	3	(0.00)	—	**6**
Q fever, total	118	(0.08)	35	(0.02)	17	**170**
acute	92	(0.06)	29	(0.02)	16	**137**
chronic	26	(0.02)	6	(0.00)	1	**33**
Rabies, human	2	(0.00)		(0.00)	—	**2**
Rubella	7	(0.00)	2	(0.00)	—	**9**
Rubella, congenital syndrome	1	(0.00)		(0.00)	—	**1**
Salmonellosis	23,926	(15.49)	26,466	(16.60)	242	**50,634**
Shiga toxin-producing *Escherichia coli* (STEC)	2,989	(1.94)	3,646	(2.29)	28	**6,663**
Shigellosis	6,403	(4.14)	6,266	(3.93)	60	**12,729**
Spotted Fever Rickettsiosis, total	2,208	(1.44)	1,142	(0.72)	9	**3,359**
confirmed	98	(0.06)	74	(0.05)	2	**174**
probable	2,108	(1.37)	1,066	(0.67)	7	**3,181**
Streptococcal toxic-shock syndrome	113	(0.11)	111	(0.10)	—	**224**
Syphilis, total all stages**,¶¶	45,926	(29.73)	10,271	(6.44)	274	**56,471**
congenital**	60	(2.98)	72	(3.74)	216	**348**
primary and secondary**	15,861	(10.27)	1,500	(0.94)	14	**17,375**
Tetanus	12	(0.01)	14	(0.01)	—	**26**
Toxic-shock syndrome (other than streptococcal)	25	(0.02)	46	(0.04)	—	**71**
Trichinellosis	11	(0.01)	11	(0.01)	—	**22**
Tuberculosis***	5,816	(3.76)	3,760	(2.36)	6	**9,582**
Tularemia	132	(0.09)	69	(0.04)	2	**203**
Typhoid fever	166	(0.11)	172	(0.11)	—	**338**
Vancomycin-intermediate *Staphylococcus aureus* (VISA)	134	(0.11)	109	(0.09)	5	**248**
Vibriosis	822	(0.55)	374	(0.24)	103	**1,299**

* Per 100,000 population.
† No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.
§ Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of **June 1, 2014**.
¶ Notifiable in <25 states.
** Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of **June 4, 2014**.
†† Total number of HIV diagnoses reported to the Division of HIV/AIDS Prevention, NCHHSTP through **December 28, 2014**.
§§ Totals reported to the Division of Influenza, National Center for Immunization and Respiratory Diseases, as of **December 28, 2013**.
¶¶ 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 STD Prevention, NCHHSTP, as of **June 4, 2014**.
*** Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of **July 1, 2014**.

TABLE 5. Reported cases and incidence* of notifiable diseases,† by race — United States, 2013

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 viruses											
neuroinvasive	0	(0.00)	0	(0.00)	3	(0.01)	79	(0.03)	0	13	**95**
West Nile Virus											
neuroinvasive	23	(0.52)	12	(0.07)	69	(0.16)	889	(0.36)	28	246	**1,267**
nonneuroinvasive	16	(0.36)	5	(0.03)	15	(0.03)	859	(0.35)	19	288	**1,202**
Babesiosis, total¶	7	(0.29)	44	(0.34)	32	(0.14)	1,076	(0.74)	25	612	**1,796**
confirmed	4	(0.14)	41	(0.31)	28	(0.11)	892	(0.59)	24	493	**1,482**
probable	3	(0.11)	3	(0.02)	4	(0.02)	184	(0.12)	1	119	**314**
Botulism, total	1	(0.02)	8	(0.04)	11	(0.03)	97	(0.04)	1	34	**152**
infant	—	(—)	8	(3.40)	10	(1.47)	86	(2.92)	1	31	**136**
Brucellosis	2	(0.05)	4	(0.02)	5	(0.01)	59	(0.02)	10	19	**99**
Chlamydia trachomatis infection**	18,477	(420.33)	21,137	(116.70)	436,817	(1,011.2)	467,915	(188.55)	55,808	401,752	**1,401,906**
Coccidioidomycosis¶	82	(3.61)	157	(1.78)	245	(1.91)	2,401	(2.48)	238	6,315	**9,438**
Cryptosporidiosis, total	40	(0.91)	90	(0.50)	668	(1.55)	5,797	(2.34)	230	2,231	**9,056**
confirmed	21	(0.48)	62	(0.34)	477	(1.10)	3,630	(1.46)	145	1,363	**5,698**
probable	19	(0.43)	28	(0.15)	191	(0.44)	2,167	(0.87)	85	868	**3,358**
Cyclosporiasis	0	(0.00)	12	(0.07)	21	(0.06)	527	(0.24)	4	220	**784**
Dengue fever	2	(0.05)	88	(0.49)	43	(0.10)	447	(0.18)	40	217	**837**
Ehrlichiosis/Anaplasmosis											
Anaplasma phagocytophilum	28	(0.72)	7	(0.04)	14	(0.03)	1,678	(0.71)	44	1,011	**2,782**
Ehrlichia chaffeensis	30	(0.77)	4	(0.02)	25	(0.06)	995	(0.42)	21	443	**1,518**
Ehrlichia ewingii	0	(0.00)	0	(0.00)	0	(0.00)	21	(0.01)	2	8	**31**
Undetermined	2	(0.05)	0	(0.00)	4	(0.01)	156	(0.07)	9	49	**220**
Giardiasis	52	(1.49)	650	(3.98)	1,086	(3.13)	6,869	(3.34)	537	5,912	**15,106**
Gonorrhea**	3,798	(86.40)	3,313	(18.29)	158,297	(366.44)	88,122	(35.51)	10,308	69,166	**333,004**
Haemophilus influenzae, invasive disease											
all ages, all serotypes	50	(1.14)	61	(0.34)	448	(1.04)	2,307	(0.93)	119	807	**3,792**
age <5 years											
serotype b	4	(1.03)	—	(—)	2	(0.06)	20	(0.13)	1	4	**31**
nonserotype b	17	(4.37)	3	(0.25)	31	(0.91)	118	(0.79)	9	44	**222**
unknown serotype	2	(0.51)	8	(0.67)	35	(1.03)	82	(0.55)	18	40	**185**
Hansen disease	0	(0.00)	21	(0.13)	5	(0.01)	29	(0.01)	2	24	**81**
Hemolytic uremic syndrome postdiarrheal	1	(0.02)	8	(0.04)	6	(0.01)	257	(0.11)	14	43	**329**
Hepatitis virus, acute											
A	7	(0.16)	103	(0.57)	77	(0.18)	1,163	(0.47)	68	363	**1,781**
B	18	(0.41)	58	(0.32)	388	(0.90)	1,967	(0.80)	80	539	**3,050**
C	39	(0.98)	14	(0.08)	78	(0.19)	1,595	(0.67)	46	366	**2,138**
Hepatitis B perinatal infection	0	(0.00)	24	(0.13)	5	(0.01)	5	(0.00)	3	11	**48**
Human immunodeficiency virus (HIV)											
diagnoses††	175	(7.50)	740	(4.60)	15,966	(40.90)	10,196	(5.20)	7,892	—	**34,969**
Influenza-associated pediatric mortality§§	6	(0.44)	8	(0.19)	24	(0.20)	107	(0.19)	3	12	**160**
Invasive pneumococcal disease											
all ages	214	(8.32)	163	(1.75)	2,557	(8.14)	9,842	(6.01)	378	4,039	**17,193**
age <5 years	19	(7.00)	30	(4.03)	227	(8.01)	537	(4.82)	33	325	**1,171**
Legionellosis	11	(0.25)	56	(0.31)	853	(1.97)	3,114	(1.25)	107	813	**4,954**
Listeriosis	1	(0.02)	53	(0.29)	73	(0.17)	496	(0.20)	19	93	**735**
Lyme disease, total	144	(3.28)	366	(2.13)	315	(0.73)	22,277	(8.99)	995	12,210	**36,307**
Confirmed	103	(2.35)	266	(1.55)	216	(0.50)	16,860	(6.81)	827	8,931	**27,203**
Probable	41	(0.93)	100	(0.58)	99	(0.23)	5,417	(2.19)	168	3,279	**9,104**

See table footnotes on the next page.

TABLE 5. (*Continued*) Reported cases and incidence* of notifiable diseases,† by race — United States, 2013

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			
Malaria	3	(0.07)	126	(0.70)	765	(1.77)	206	(0.08)	67	427	**1,594**
Measles, total	0	(0.00)	19	(0.10)	3	(0.01)	115	(0.05)	3	47	**187**
indigenous	0	(0.00)	6	(0.03)	0	(0.00)	90	(0.04)	3	36	**135**
imported	0	(0.00)	13	(0.07)	3	(0.01)	25	(0.01)	0	11	**52**
Meningococcal disease											
All serogroups	5	(0.11)	7	(0.04)	66	(0.15)	372	(0.15)	22	84	**556**
serogroup ACWY	4	(0.09)	4	(0.02)	16	(0.04)	95	(0.04)	4	19	**142**
serogroup B	1	(0.02)	1	(0.01)	3	(0.01)	80	(0.03)	1	13	**99**
serogroup unknown	0	(0.00)	2	(0.01)	42	(0.10)	186	(0.07)	17	51	**298**
Mumps	0	(0.00)	24	(0.13)	17	(0.04)	309	(0.12)	13	221	**584**
Pertussis	283	(6.44)	398	(2.20)	1,368	(3.17)	20,559	(8.28)	799	5,232	**28,639**
Q fever, total	1	(0.02)	6	(0.03)	4	(0.01)	92	(0.04)	4	63	**170**
acute	0	(0.00)	6	(0.03)	2	(0.00)	72	(0.03)	4	53	**137**
chronic	1	(0.02)	0	(0.00)	2	(0.00)	20	(0.01)	0	10	**33**
Salmonellosis	353	(8.03)	1,799	(9.93)	4,334	(10.03)	30,235	(12.18)	1,778	12,135	**50,634**
Shiga toxin-producing *Escherichia coli* (STEC)	28	(0.66)	154	(0.85)	244	(0.57)	4,618	(1.86)	195	1,424	**6,663**
Shigellosis	360	(8.19)	203	(1.12)	2,591	(6.00)	5,802	(2.34)	603	3,170	**12,729**
Spotted fever rickettsiosis, total	75	(1.76)	18	(0.10)	85	(0.20)	2,277	(0.92)	57	847	**3,359**
confirmed	10	(0.23)	1	(0.01)	3	(0.01)	122	(0.05)	4	34	**174**
probable	65	(1.48)	17	(0.10)	82	(0.19)	2,152	(0.87)	53	812	**3,181**
Streptococcal toxic-shock syndrome	1	(0.04)	6	(0.06)	18	(0.06)	170	(0.10)	3	26	**224**
Syphilis, total all stages**,¶¶	297	(6.76)	1,398	(7.72)	22,779	(52.73)	24,627	(9.92)	3,424	3,946	**56,471**
congenital**	2	(2.56)	4	(1.70)	160	(23.55)	101	(3.43)	11	70	**348**
primary and secondary**	116	(2.64)	450	(2.48)	6,646	(15.38)	8,381	(3.38)	853	929	**17,375**
Tetanus	1	(0.02)	1	(0.01)	1	(0.00)	17	(0.01)	0	6	**26**
Toxic-shock syndrome (other than streptococcal)	0	(0.00)	3	(0.02)	3	(0.01)	49	(0.03)	4	12	**71**
Tuberculosis***	143	(3.25)	3,017	(16.66)	2,146	(4.97)	4,016	(1.62)	216	44	**9,582**
Tularemia	12	(0.27)	1	(0.01)	2	(0.00)	143	(0.06)	1	44	**203**
Typhoid fever	3	(0.07)	179	(0.99)	28	(0.06)	56	(0.02)	15	57	**338**
Vancomycin-intermediate *Staphylococcus aureus* (VISA)	1	(0.03)	1	(0.01)	49	(0.13)	134	(0.07)	2	61	**248**
Vibriosis	2	(0.05)	43	(0.24)	83	(0.19)	814	(0.34)	20	337	**1,299**

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

† No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

§ Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of **June 1, 2014**.

¶ Notifiable in <25 states.

** 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.

†† 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 28, 2013**.

§§ Totals reported to the Division of Influenza, National Center for Immunization and Respiratory Diseases, as of **December 28, 2013**.

¶¶ 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 STD Prevention, NCHHSTP, as of **June 4, 2014**.

*** Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of **July 1, 2014**.

TABLE 6. Reported cases and incidence* of notifiable diseases† by ethnicity — United States, 2013

Disease	Hispanic		Non-Hispanic		Ethnicity not stated	Total
	No.	Rate	No.	Rate		
Arboviral diseases§						
California serogorup viruses						
neuroinvasive	1	(0.00)	75	(0.03)	19	**95**
West Nile virus						
neuroinvasive	133	(0.25)	780	(0.30)	354	**1,267**
nonneuroinvasive	51	(0.10)	778	(0.30)	373	**1,202**
Babesiosis, total¶	96	(0.27)	831	(0.57)	869	**1,796**
confirmed	84	(0.23)	676	(0.43)	722	**1,482**
probable	12	(0.03)	155	(0.10)	147	**314**
Botulism, total	25	(0.05)	94	(0.04)	33	**152**
infant	20	(1.97)	84	(2.87)	32	**136**
Brucellosis	45	(0.08)	42	(0.02)	12	**99**
Chlamydia trachomatis infection**	197,808	(373.44)	687,629	(263.56)	516,469	**1,401,906**
Coccidioidomycosis¶	1,151	(5.05)	2,079	(2.12)	6,208	**9,438**
Cryptosporidiosis, total	556	(1.05)	5,495	(2.11)	3,005	**9,056**
confirmed	383	(0.72)	3,387	(1.30)	1,928	**5,698**
probable	173	(0.33)	2,108	(0.81)	1,077	**3,358**
Cyclosporiasis	61	(0.12)	498	(0.22)	225	**784**
Dengue Virus Infection						
Dengue fever	300	(0.57)	357	(0.14)	180	**837**
Ehrlichiosis/Anaplasmosis						
Anaplasma phagocytophilum	25	(0.05)	1,668	(0.67)	1,089	**2,782**
Ehrlichia chaffeensis	27	(0.05)	1,048	(0.42)	443	**1,518**
Ehrlichia ewingii	1	(0.00)	26	(0.01)	4	**31**
Undetermined	1	(0.00)	160	(0.06)	59	**220**
Giardiasis	1,061	(2.57)	7,260	(3.31)	6,785	**15,106**
Gonorrhea**	34,655	(65.43)	194,857	(74.68)	103,492	**333,004**
Haemophilus influenzae, invasive disease						
all ages, all serotypes	207	(0.39)	2,144	(0.82)	1,441	**3,792**
age <5 years						
serotype b	1	(0.02)	21	(0.14)	9	**31**
nonserotype b	26	(0.51)	126	(0.85)	70	**222**
unknown serotype	29	(0.57)	93	(0.63)	63	**185**
Hansen disease (leprosy)	14	(0.03)	48	(0.02)	19	**81**
Hemolytic uremic syndrome postdiarrheal	33	(0.06)	239	(0.09)	57	**329**
Hepatitis virus, acute						
A	278	(0.52)	1,076	(0.41)	427	**1,781**
B	205	(0.39)	1,974	(0.76)	871	**3,050**
C	114	(0.23)	1,335	(0.53)	689	**2,138**
Hepatitis B perinatal infection	0	(0.00)	34	(0.01)	14	**48**
Human immunodeficiency virus (HIV) diagnoses§§	7,211	(13.30)	27,758	(10.60)	-	**34,969**
Influenza-associated pediatric mortality**	35	(0.20)	101	(0.18)	24	**160**
Invasive pneumococcal disease						
all ages	1,139	(3.58)	9,098	(5.19)	6,956	**17,193**
age <5 years	134	(3.96)	585	(5.04)	452	**1,171**
Legionellosis	247	(0.47)	3,427	(1.31)	1,280	**4,954**
Listeriosis	83	(0.16)	481	(0.18)	171	**735**
Lyme disease, total	618	(1.17)	16,192	(6.24)	19,497	**36,307**
Confirmed	455	(0.86)	12,166	(4.69)	14,582	**27,203**
Probable	163	(0.31)	4,026	(1.55)	4,915	**9,104**

See table footnotes on the next page.

TABLE 6. (*Continued*) Reported cases and incidence* of notifiable diseases† by ethnicity — United States, 2013

Disease	Hispanic		Non-Hispanic		Ethnicity not stated	Total
	No.	Rate	No.	Rate		
Malaria	25	(0.05)	1,146	(0.44)	423	**1,594**
Measles, total	5	(0.01)	143	(0.05)	**39**	**187**
indigenous	5	(0.01)	103	(0.04)	27	**135**
imported	0	(0.00)	40	(0.02)	12	**52**
Meningococcal disease						
All serogroups	93	(0.18)	346	(0.13)	117	**556**
serogroup ACWY	17	(0.03)	94	(0.04)	31	**142**
serogroup B	11	(0.02)	68	(0.03)	20	**99**
serogroup unknown	65	(0.12)	168	(0.06)	65	**298**
Mumps	41	(0.08)	307	(0.12)	236	**584**
Pertussis	4,718	(8.91)	17,691	(6.78)	6,230	**28,639**
Q fever, total	20	(0.04)	89	(0.03)	61	**170**
acute	19	(0.04)	66	(0.03)	52	**137**
chronic	1	(0.00)	23	(0.01)	9	**33**
Salmonellosis	6,766	(12.77)	28,862	(11.06)	15,006	**50,634**
Shiga toxin-producing *Escherichia coli* (STEC)	858	(1.62)	4,089	(1.57)	1,716	**6,663**
Shigellosis	2,853	(5.39)	6,343	(2.43)	3,533	**12,729**
Spotted fever rickettsiosis, total	102	(0.19)	2,199	(0.85)	1,058	**3,359**
confirmed	5	(0.01)	121	(0.05)	48	**174**
probable	96	(0.18)	2,076	(0.80)	1,009	**3,181**
Streptococcal toxic-shock syndrome	13	(0.06)	143	(0.08)	68	**224**
Syphilis, total, all stages**,¶¶	13,225	(24.97)	39,094	(14.98)	4,152	**56,471**
congenital**	92	(9.06)	247	(8.44)	9	**348**
primary and secondary**	3,459	(6.53)	12,905	(4.95)	1,011	**17,375**
Tetanus	1	(0.00)	20	(0.01)	5	**26**
Toxic-shock syndrome (other than streptococcal)	4	(0.01)	39	(0.02)	28	**71**
Tuberculosis***	2,699	(5.10)	6,872	(2.63)	11	**9,582**
Tularemia	7	(0.01)	157	(0.06)	39	**203**
Typhoid fever	39	(0.07)	241	(0.09)	58	**338**
Vancomycin-intermediate *Staphylococcus aureus* (VISA)	11	(0.03)	178	(0.08)	59	**248**
Vibriosis	100	(0.19)	789	(0.31)	410	**1,299**

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

† No cases of anthrax; diphtheria; eastern equine encephalitis, nonneuroinvasive disease; poliovirus infection, nonparalytic; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; St. Louis encephalitis, nonneuroinvasive disease; western equine encephalitis, neuroinvasive and nonneuroinvasive disease; vancomycin-resistant staphylococcus aureus (VRSA); viral hemorrhagic fevers and Yellow fever were reported in the United States during 2013. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

§ Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of **June 1, 2014**.

¶ Notifiable in <25 states.

** 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.

†† 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 28, 2013**.

§§ Totals reported to the Division of Influenza, National Center for Immunization and Respiratory Diseases, as of **December 28, 2013**.

¶¶ 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 STD Prevention, NCHHSTP, as of **June 4, 2014**.

*** Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of **July 1, 2014**.

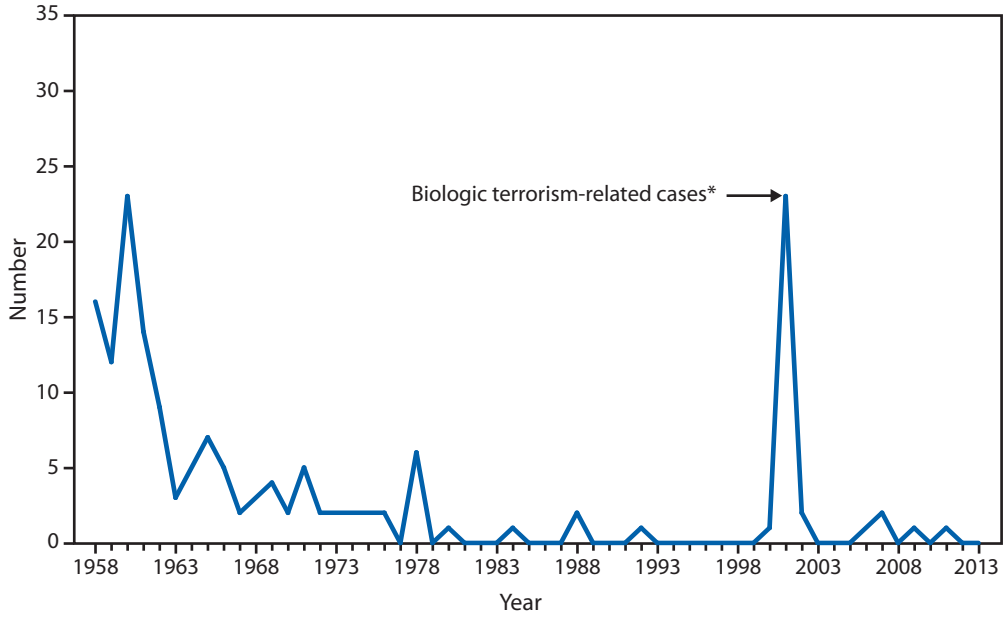
PART 2

Graphs and Maps for Selected Notifiable Diseases in the United States, 2013

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
NYC	New York City
AS	American Samoa
CNMI	Commonwealth of Northern Mariana Islands
GU	Guam
PR	Puerto Rico
VI	U.S. Virgin Islands

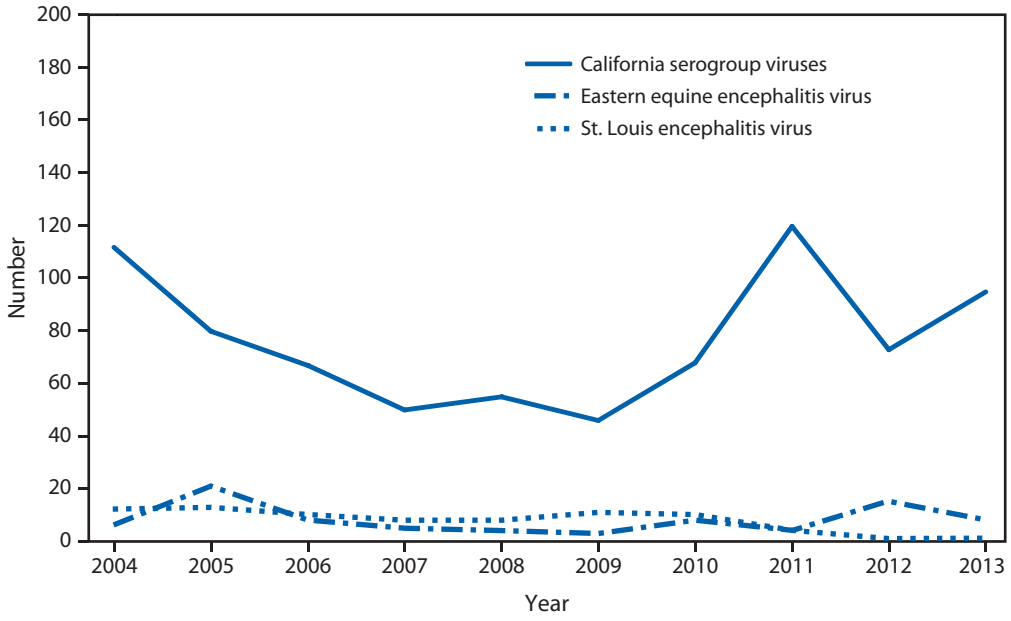
ANTHRAX. Number* of reported cases, by year — United States, 1958–2013



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

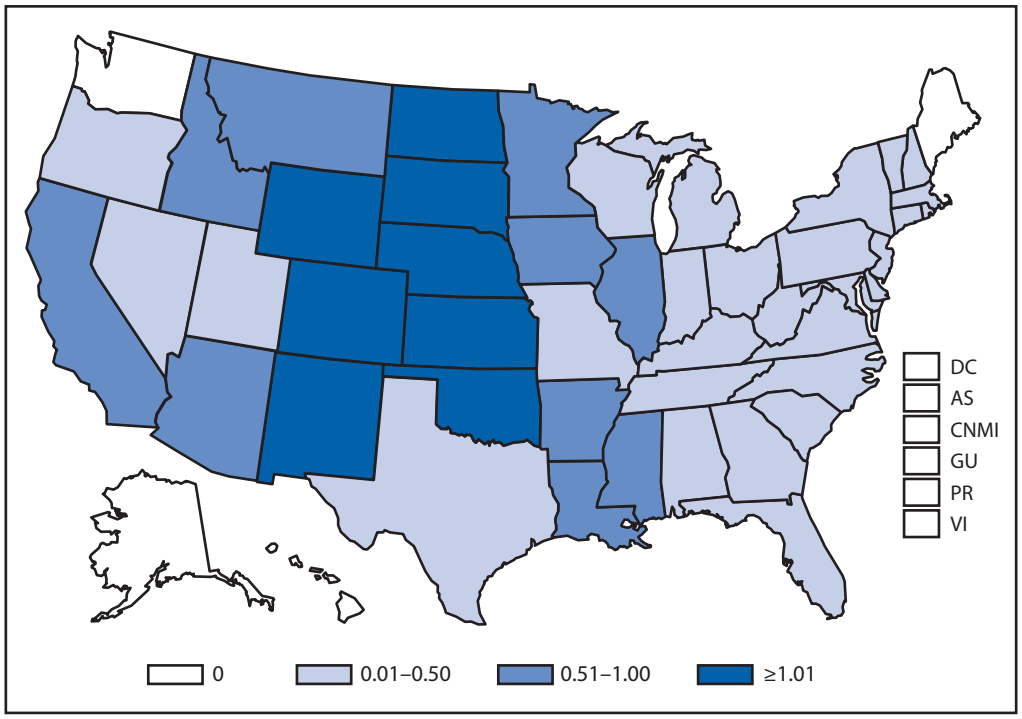
Updated prevention and treatment guidelines for adults and for pregnant and postpartum women, which might be used for patient management following naturally occurring or bioterrorism-related cases, were published in the February 2014 *Emerging Infectious Diseases Journal*.

ARBOVIRAL DISEASES. Number* of reported cases of neuroinvasive disease, by year — United States, 2004–2013



* 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.

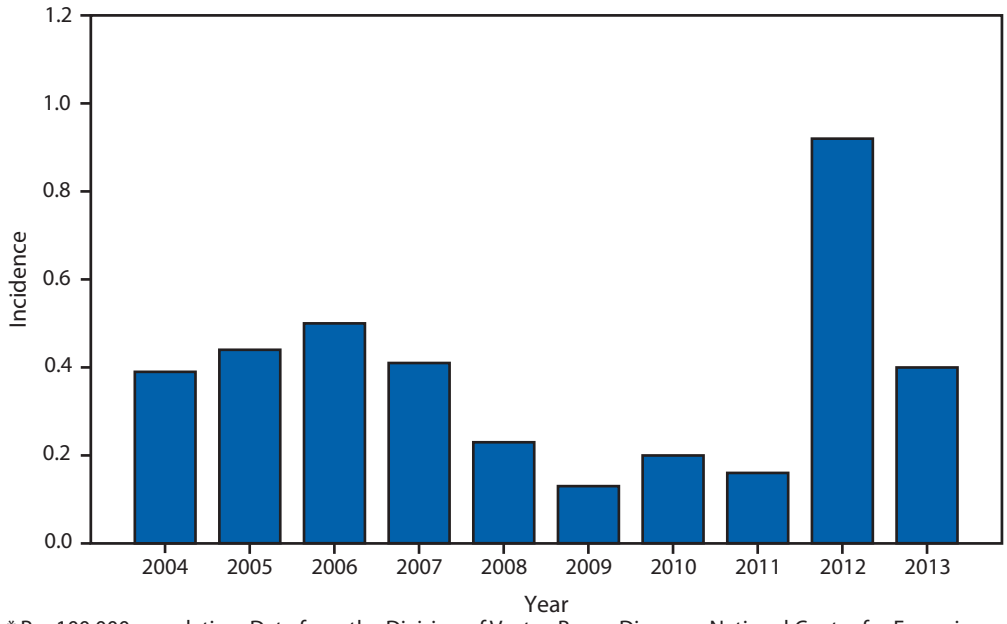
ARBOVIRAL DISEASES, WEST NILE VIRUS. Incidence* of reported cases of neuroinvasive disease — United States and U.S. territories, 2013



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

In 2013, eight states reported an incidence of West Nile virus (WNV) neuroinvasive disease >1 case per 100,000; the four states with the highest reported incidence were North Dakota (8.9), South Dakota (6.8), Nebraska (2.9), and Wyoming (2.8). Six states reported approximately half of the WNV neuroinvasive disease cases: California (237 cases), Texas (113), Colorado (90), Illinois (86), North Dakota (64), and Oklahoma (60).

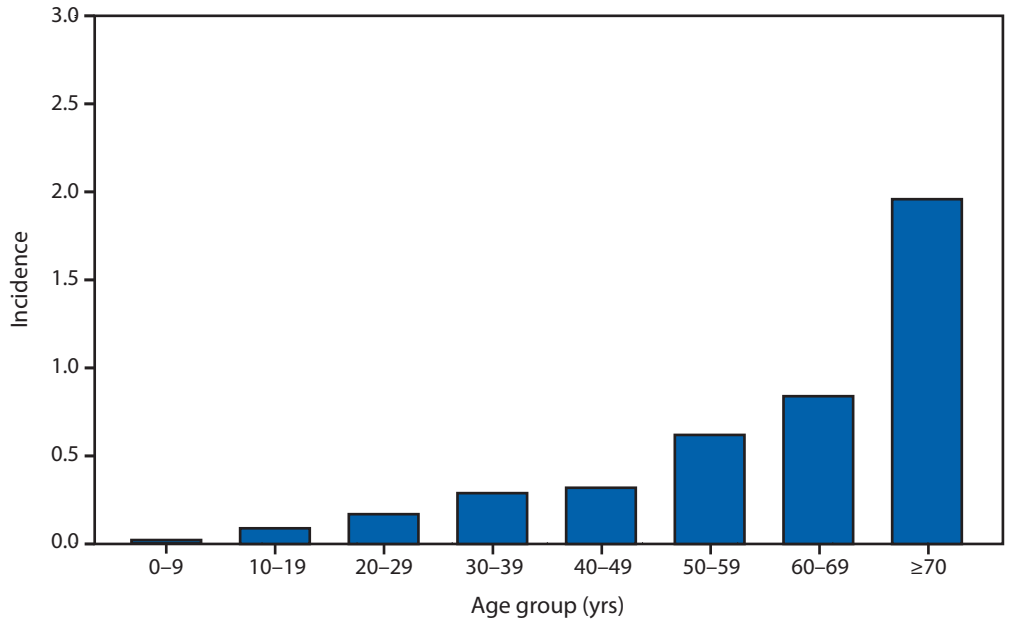
ARBOVIRAL DISEASES, WEST NILE VIRUS. Incidence* of reported cases of neuroinvasive disease, by year — United States, 2004–2013



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

In 2013, the incidence declined substantially compared with 2012, when a large multistate outbreak of WNV occurred. The incidence in 2013 was similar to that during 2004–2007 and was higher than that during 2008–2011.

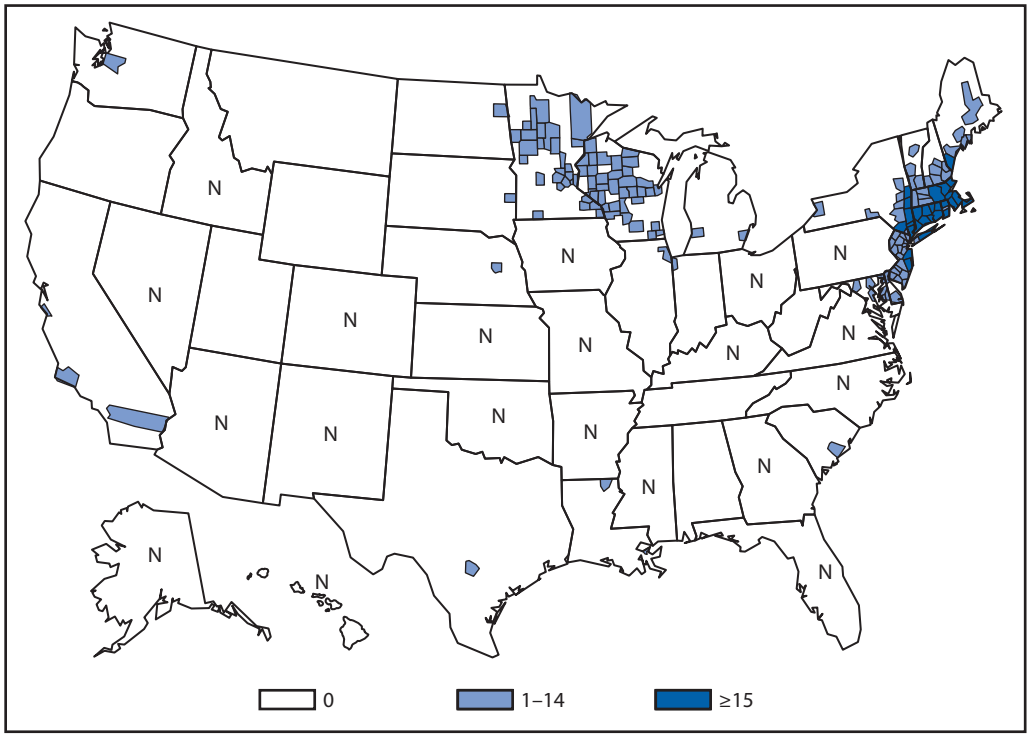
ARBOVIRAL DISEASES, WEST NILE VIRUS. Incidence* of reported cases of neuroinvasive disease, by age group — United States, 2013



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

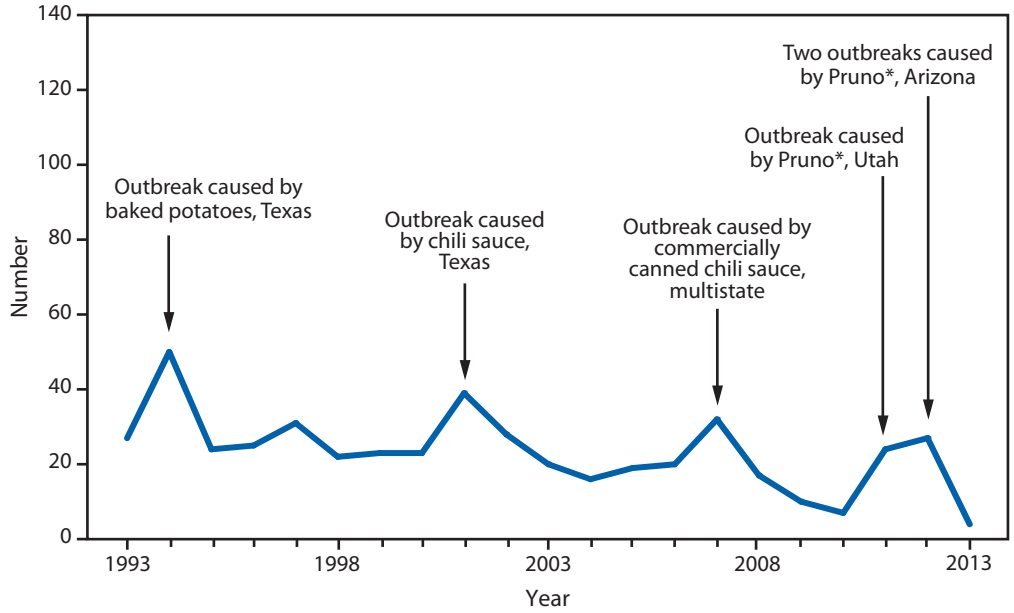
In 2013, the median age of patients with West Nile virus neuroinvasive disease was 59 years (range: 11 months–97 years), with increasing incidence among older age groups.

BABESIOSIS. Number of reported cases, by county — United States, 2013



Babesiosis, a tickborne parasitic infection, became nationally notifiable in 2011. In 2013, babesiosis became reportable in four additional states (Louisiana, South Carolina, South Dakota, and Texas). Approximately 95% of cases were reported from the Northeast and upper Midwest.

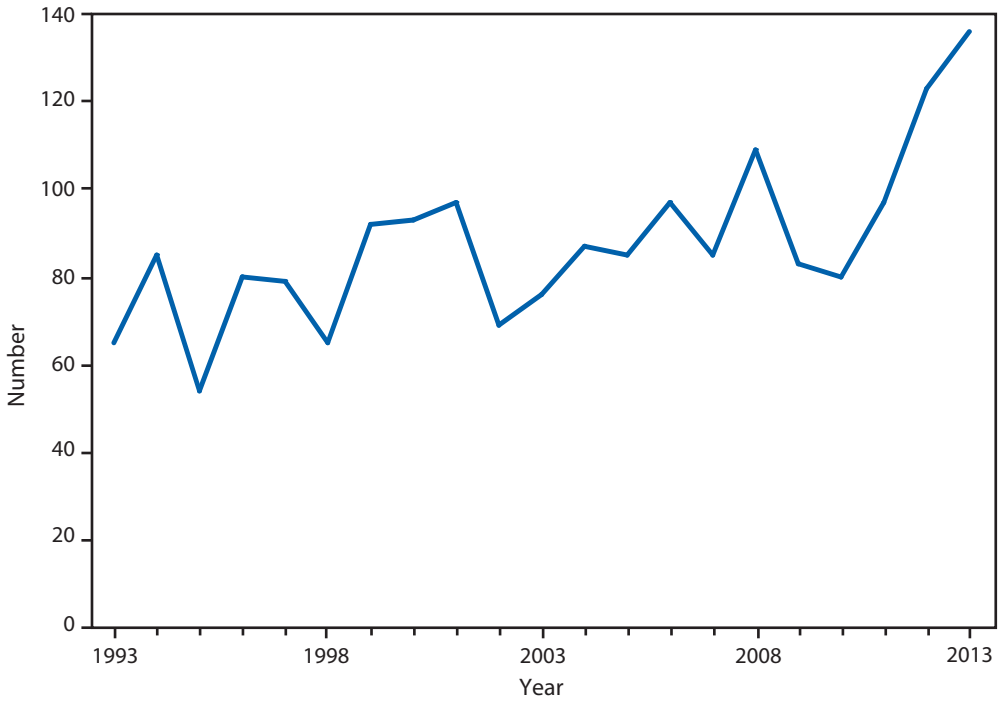
BOTULISM, FOODBORNE. Number of reported cases, by year — United States, 1993–2013



* Pruno is an illicit alcoholic beverage brewed by prison inmates.

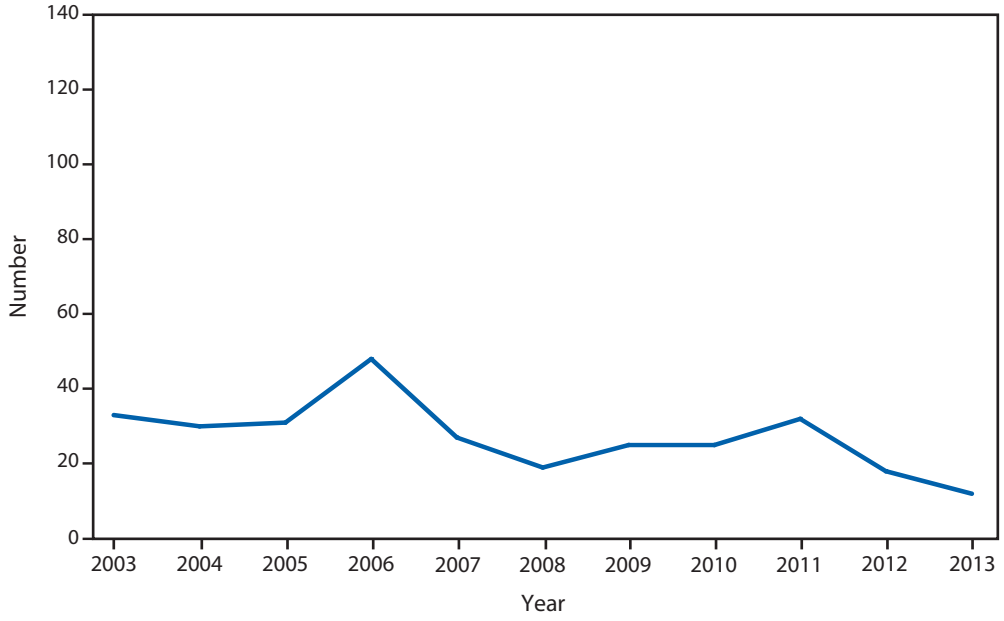
The number of foodborne botulism cases, caused by ingestion of preformed toxin, is at its lowest level in 20 years.

BOTULISM, INFANT. Number of reported cases, by year — United States, 1993–2013



Infant botulism remains the most common transmission category of botulism in the United States and accounted for most botulism cases in 2013. Reported cases have been increasing over the past 3 years.

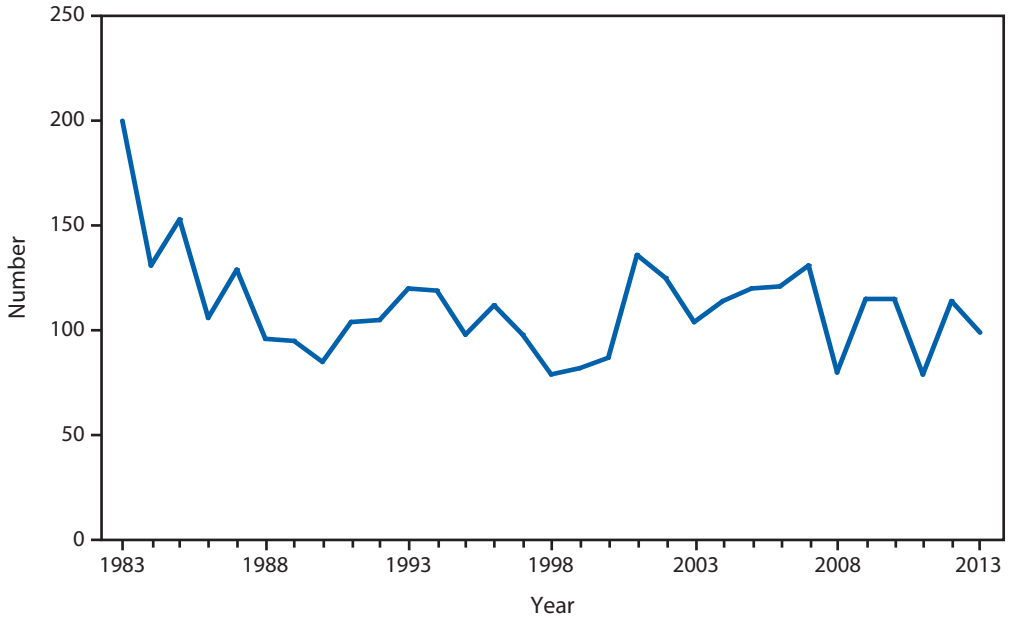
BOTULISM, OTHER. Number* of reported cases, by year — United States, 2003–2013



* Includes wound and unspecified.

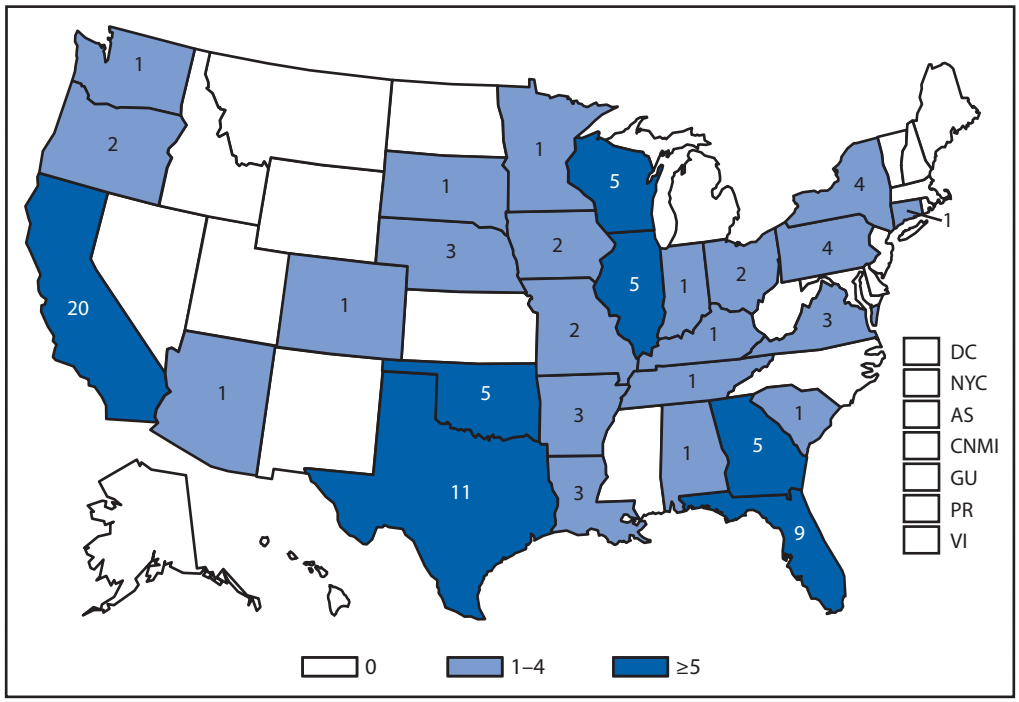
Annual numbers of cases of wound botulism and of botulism in "unspecified" transmission categories have remained generally stable during the past decade but reached a 10-year low in 2013.

BRUCELLOSIS. Number of reported cases, by year — United States, 1983–2013



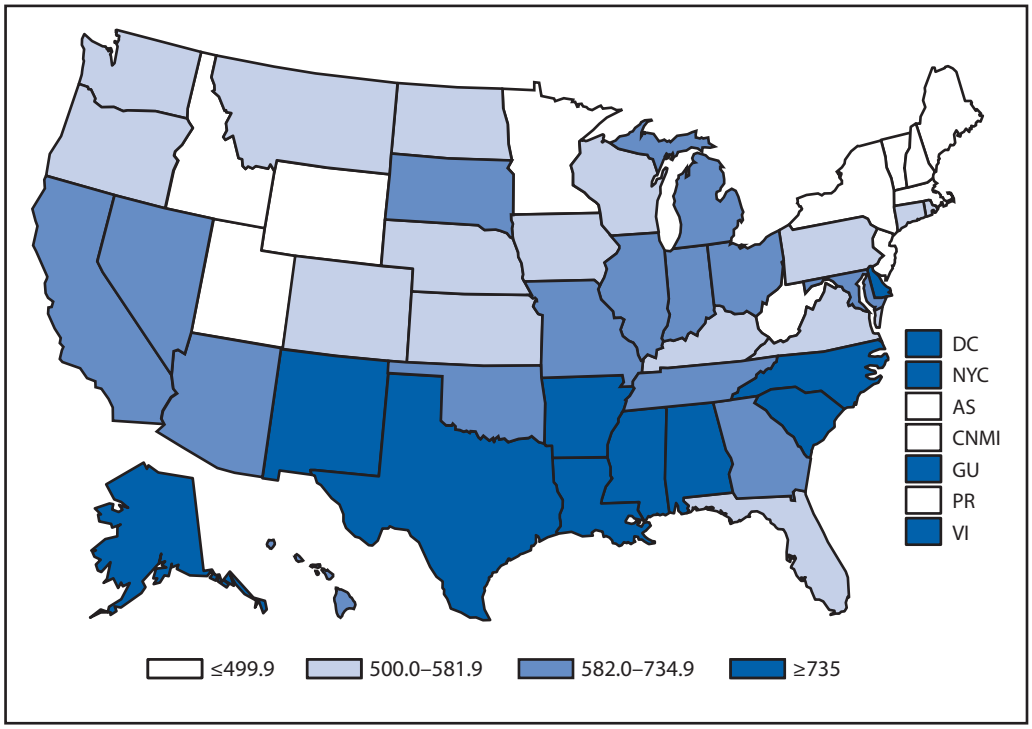
After a sharp increase in reported cases from 2011 to 2012, the number of reported cases declined in 2013.

BRUCELLOSIS. Number of reported cases — United States and U.S. territories, 2013



The total number of cases declined, but in Georgia, Oklahoma, and Wisconsin, the number of cases increased.

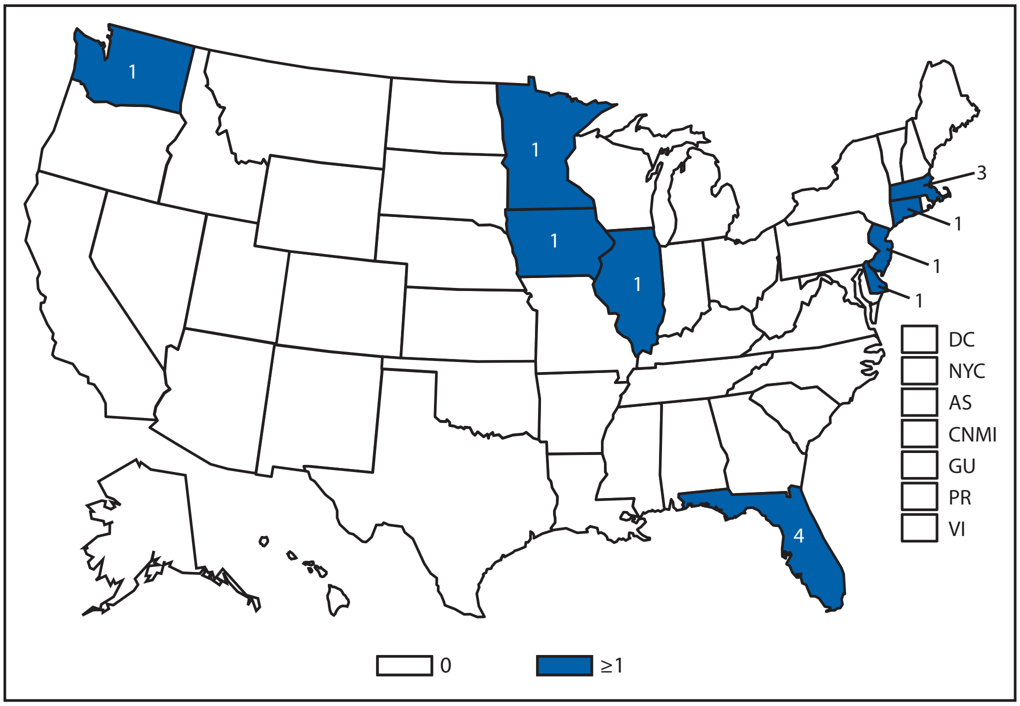
CHLAMYDIA. Incidence* of reported cases among women — United States and U.S. Territories, 2013



* Per 100,000 population.

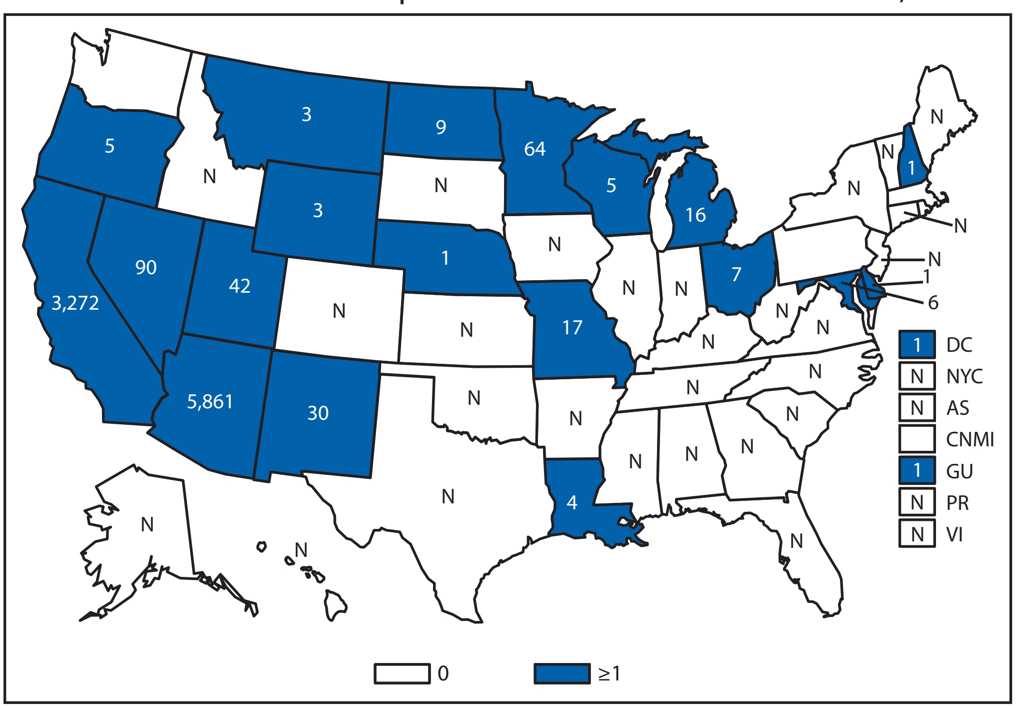
In 2013, rates of reported cases of chlamydia by state ranged from 236.2 cases per 100,000 population in New Hampshire to 789.4 cases in Alaska; the rate in the District of Columbia was 1,104.4.

CHOLERA. Number of reported cases — United States and U.S. territories, 2013



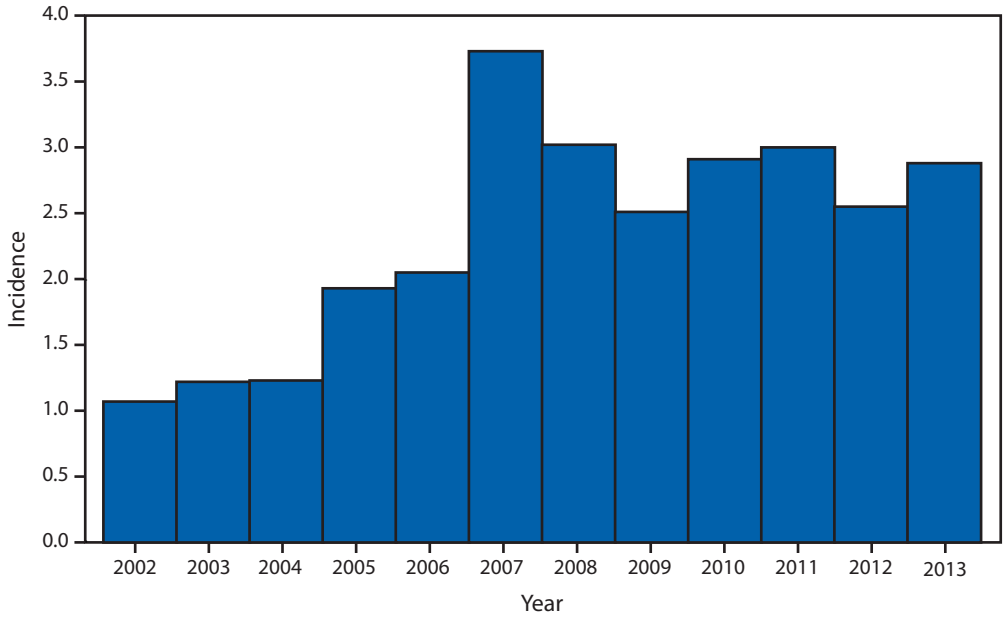
Of the 14 cholera infections reported in 2013, the majority of cases were reported by states on the East coast. Thirteen of the reported cases were travel-associated. Nine patients traveled to Hispaniola (eight to Haiti and one to the Dominican Republic) and four traveled to other cholera-affected countries (including two to Cuba).

COCCIDIOIDOMYCOSIS. Number of reported cases — United States and U.S. territories, 2013



In the United States, coccidioidomycosis is endemic in the Southwestern states. The fungus that causes coccidioidomycosis also was recently found in south-central Washington State. Cases reported from states outside the endemic area usually occur among travelers returning from areas in which the disease is endemic.

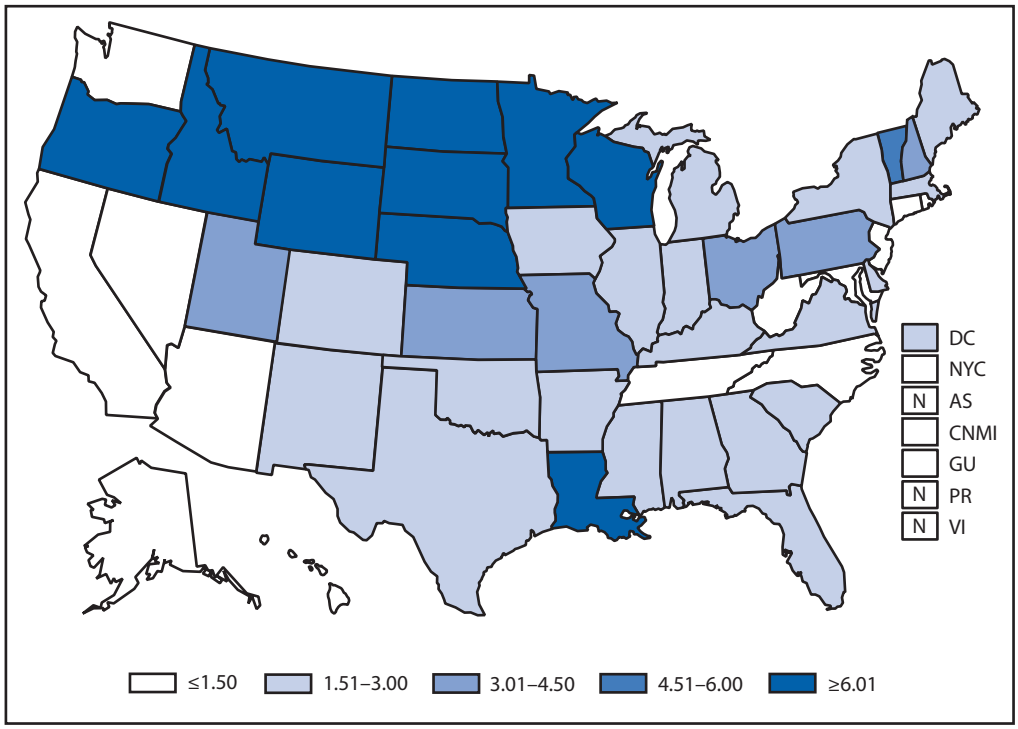
CRYPTOSPORIDIOSIS. Incidence* of reported cases, by year — United States, 2002–2013



* Per 100,000 population.

The incidence of reported cryptosporidiosis remains historically elevated relative to the baseline observed before 2005. Whether this increase reflects a change in the true incidence of cryptosporidiosis or changing diagnosis, testing, or reporting patterns is unclear.

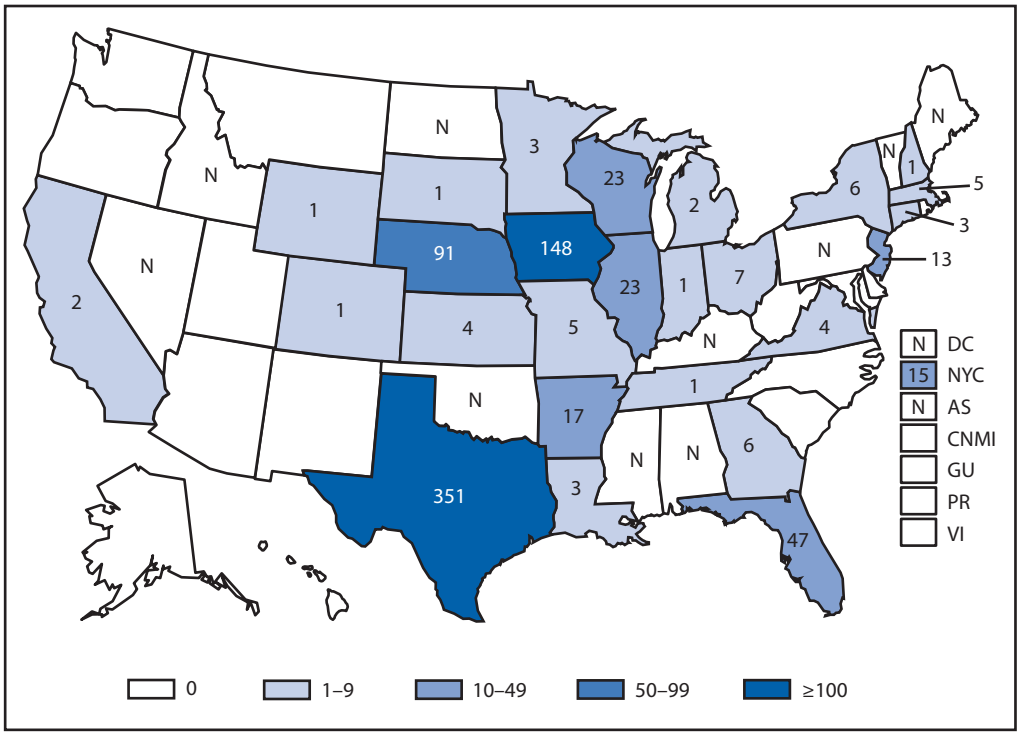
CRYPTOSPORIDIOSIS. Incidence* of reported cases — United States and U.S. territories, 2013



* Per 100,000 population.

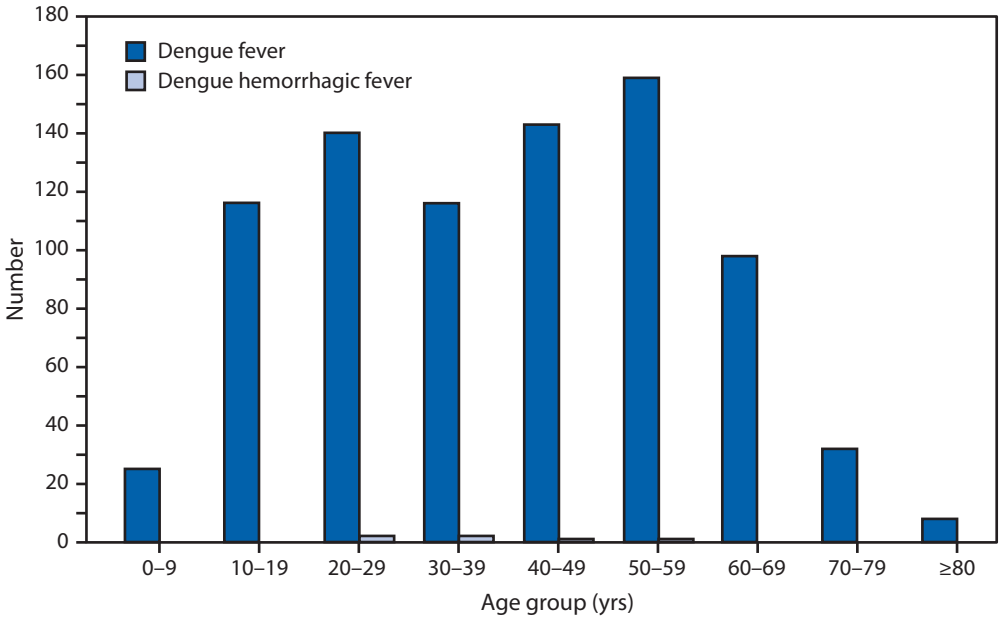
Cryptosporidiosis is widespread geographically in the United States. Although incidence appears to be consistently higher in certain states, differences in reported incidence among states might reflect differences in risk factors; the number of cases associated with outbreaks; or the capacity to detect, investigate, and report cases. Incidence categories have been modified to reflect the recent increase in incidence.

CYCLOSPORIASIS. Number of reported cases — United States and U.S. territories, 2013



In 2013, a total of 784 cyclosporiasis cases were reported from 26 states and New York City, representing the largest number of reported cases since 1997. Of the 784 cases, 631 (80%) were outbreak-associated cyclosporiasis cases from 25 states that occurred during June–August 2013.

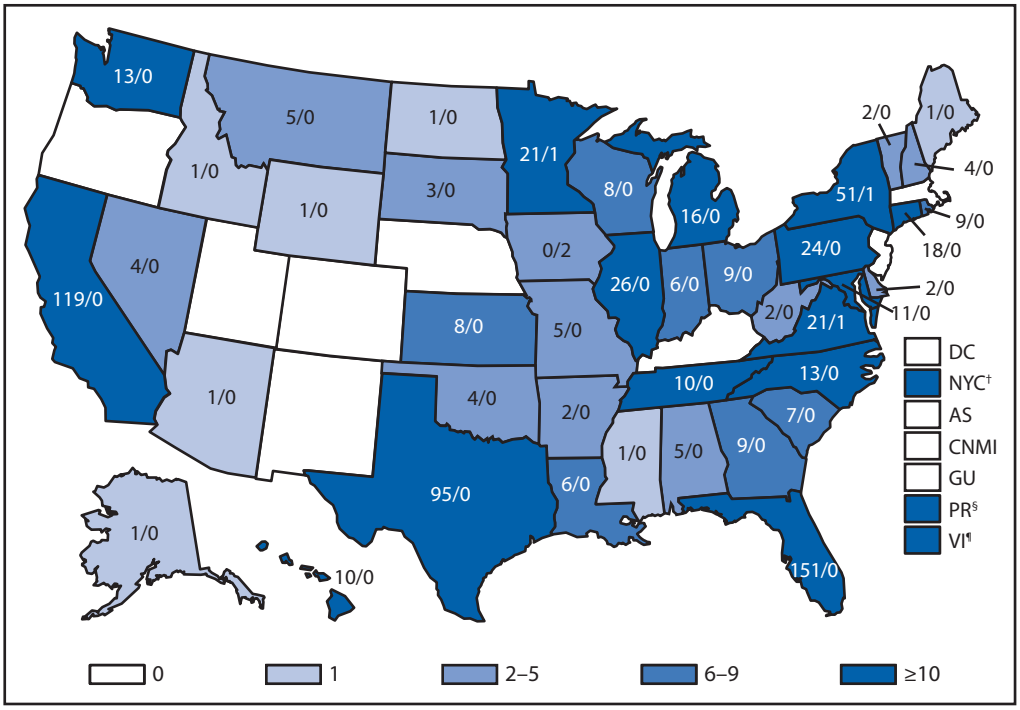
DENGUE VIRUS INFECTION. Number* of reported cases, by age group — United States, 2013



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

Persons of all age groups (range: 0–9 years through >80 years) were affected by dengue in 2013, although most (83%) cases occurred in adults. Local dengue outbreaks were detected in 2013 in Texas (24 cases), Florida (24 cases), and New York (one case).

DENGUE FEVER AND DENGUE HEMORRHAGIC FEVER. Number* of reported cases, by location of residence — United States and U.S. territories, 2013



* Number of Dengue fever cases/number of Dengue Hemmorrhagic fever cases. Data from the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance).

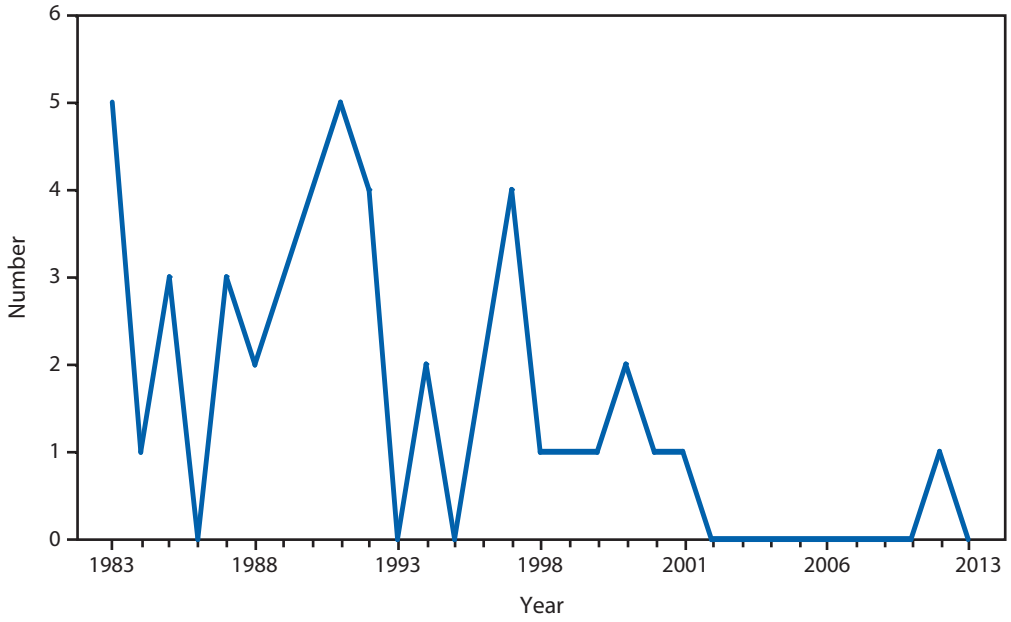
† New York City reported cases 131/1.

§ Puerto Rico locally acquired cases 9,557/153.

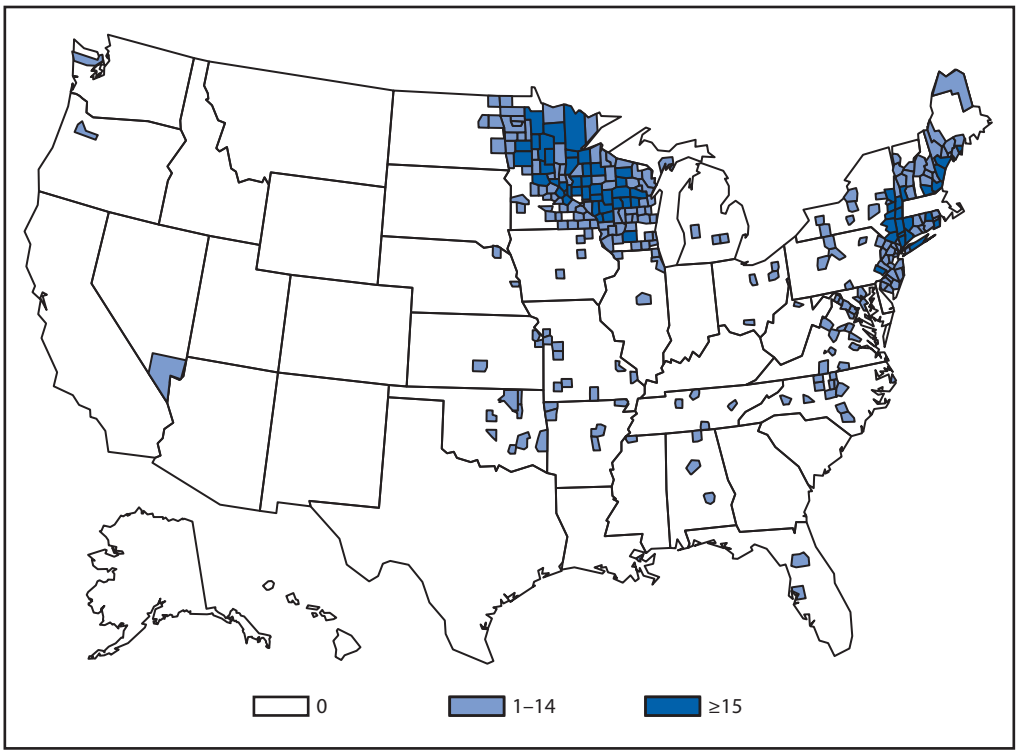
¶ Virgin Islands reported cases 169/5.

In 2013, a total of 17 jurisdictions reported more than 10 dengue cases.Among these jurisdictions, New York (both upstate New York and New York City), Florida, California, Texas, Illinois, and Pennsylvania reported the highest number of cases in 2013. The majority of cases were travel-associated, and the most common destinations of travel were Puerto Rico, the Dominican Republic, Mexico, India, and Haiti. An epidemic that began in Puerto Rico in late 2012 continued through much of 2013, resulting in more than 9,700 cases in 2013, making it the largest epidemic in Puerto Rico since 2010.

DIPHTHERIA. Number of reported cases, by year — United States, 1983–2013

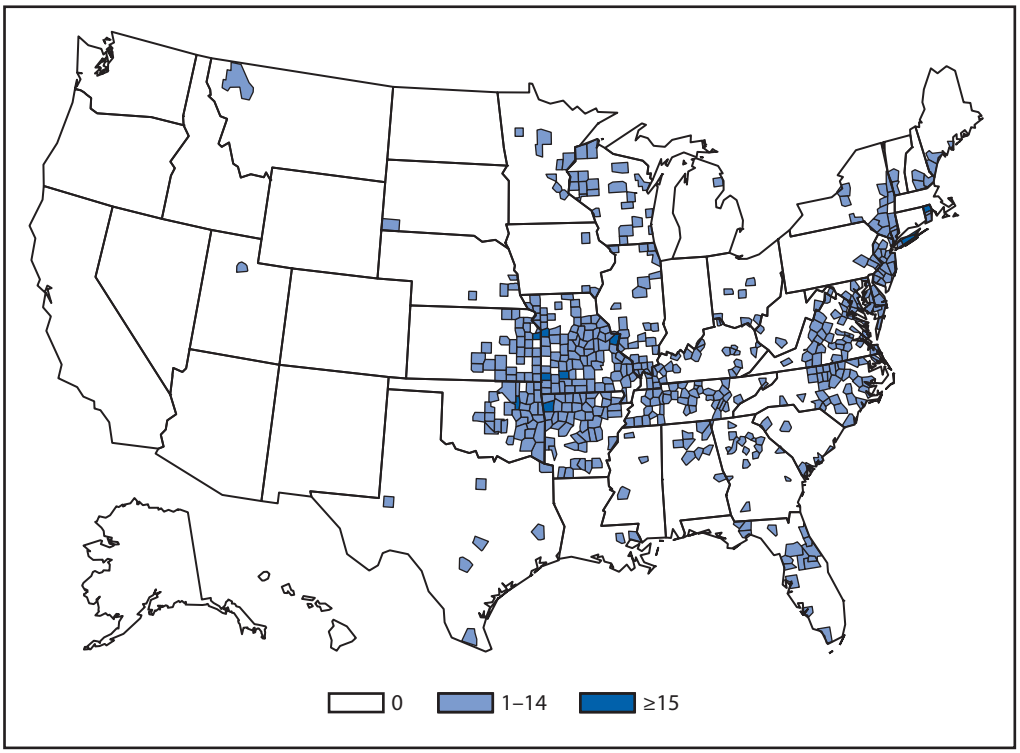


EHRLICHIOSIS, *ANAPLASMA PHAGOCYTOPHILUM*. Number of reported cases, by county — United States, 2013



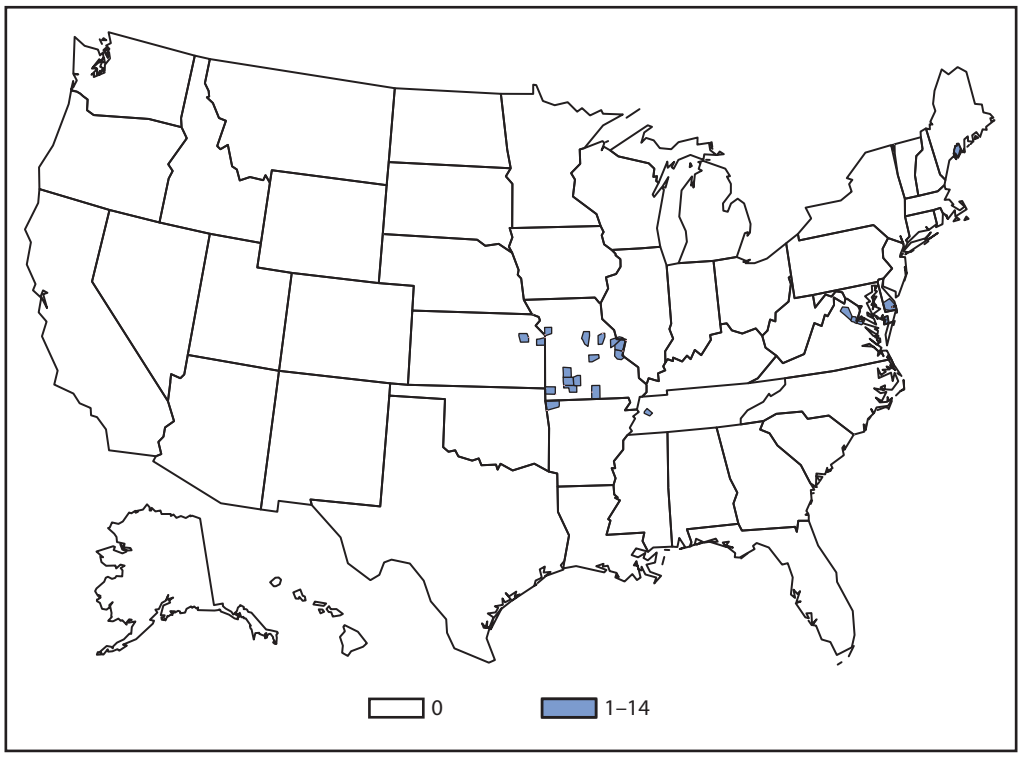
Cases are reported primarily from the Upper Midwest and coastal New England, reflecting both the range of the primary tick vector species, *Ixodes scapularis*, also known to transmit Lyme disease and babesiosis, and the range of preferred animal hosts for tick feeding.

EHRLICHIOSIS, *EHRLICHIA CHAFFEENSIS*. Number of reported cases, by county — United States, 2013



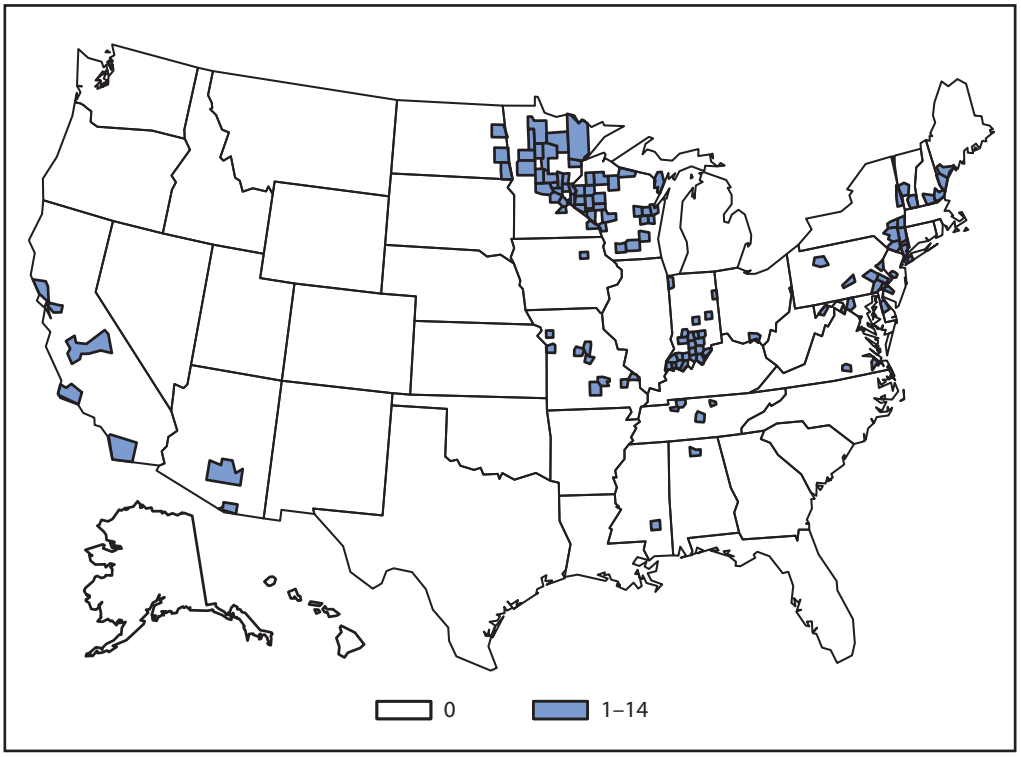
Ehrlichia chaffeensis is the most common type of ehrlichiosis infection in the United States. This tickborne pathogen is transmitted by *Amblyomma americanum*, the lonestar tick, whose geographic range extends from the Southeast into parts of the Northeast and Midwest. The majority of cases of *E. chaffeensis* ehrlichiosis are reported from the Midwest, South, and Northeast regions.

EHRLICHIOSIS, *EHRLICHIA EWINGII*. Number of reported cases, by county — United States, 2013



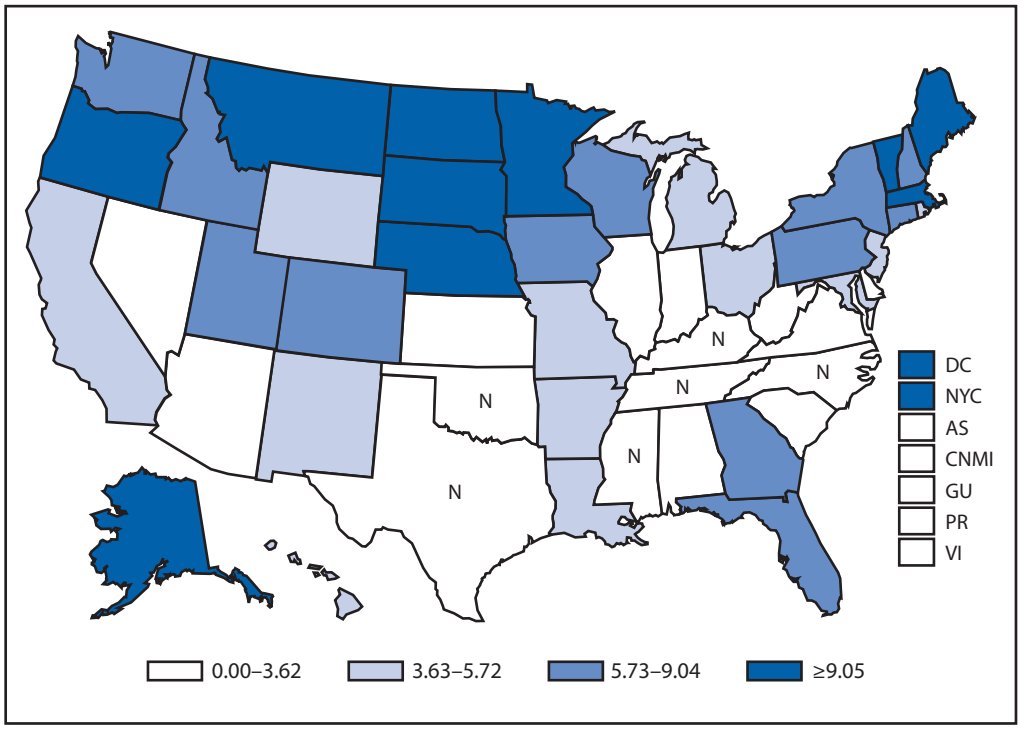
Ehrlichia ewingii is the least common cause of ehrlichiosis. *Ehrlichia ewingii* is carried by *Amblyomma americanum*, the lonestar tick, which is the same vector that transmits *E. chaffeensis*, and whose geographic range extends from the Southeast into parts of the Northeast and Midwest. No serologic tests are used to distinguish between the two species, and differentiation can only be made by molecular genotyping.

EHRLICHIOSIS, UNDETERMINED. Number of reported cases, by county — United States, 2013



Cases of ehrlichiosis and anaplasmosis, caused by an undetermined species, are reported across the United States but are more likely to be reported in the Midwest region and the Middle Atlantic division. This classification of "undetermined" is most often used in geographic areas where no clear geographic boundary separates the individual tick vectors. Because ehrlichiosis and anaplasmosis elicit some cross reactivity in antibody detection, this category can also be used when single, inappropriate diagnostic tests are performed that do not provide differentiation of etiology.

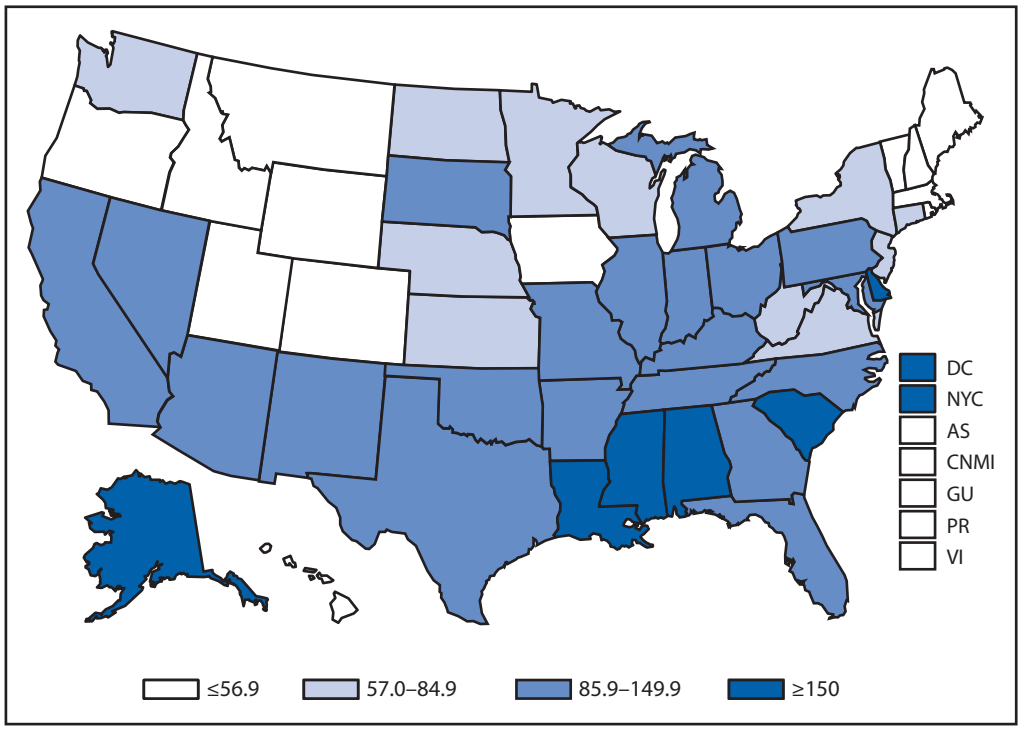
GIARDIASIS. Incidence* of reported cases — United States and U.S. territories, 2013



* Per 100,000 population.

Giardiasis is widespread geographically in the United States, and the states with the highest rates are in the northern half of the country. These geographic differences might reflect differences in exposures and behaviors, although varying giardiasis case detection and reporting among states might also contribute.

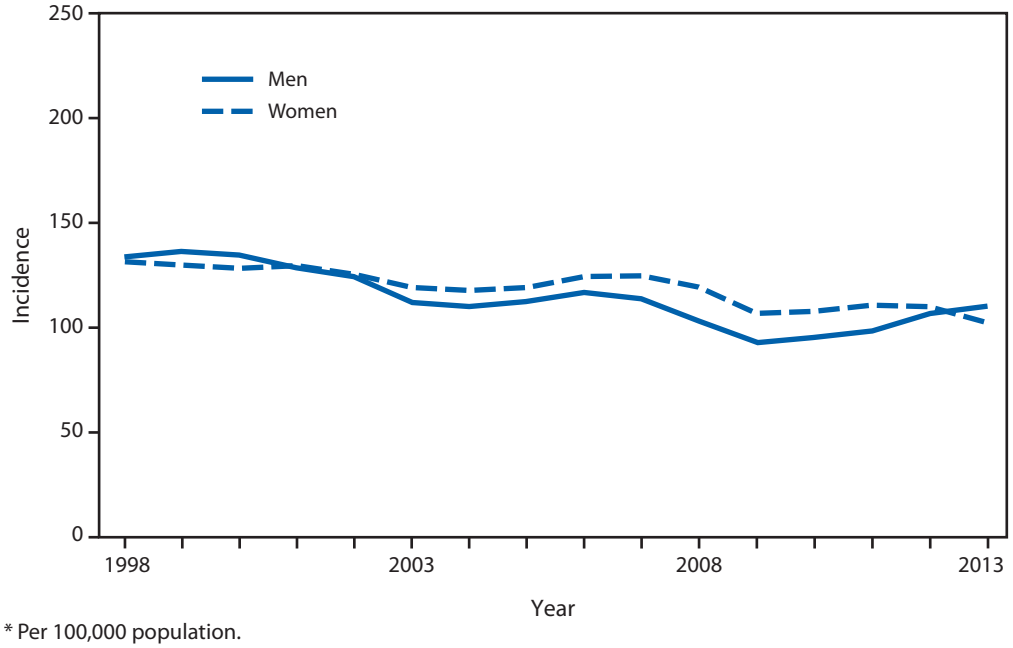
GONORRHEA. Incidence* of reported cases — United States and U.S. territories, 2013



* Per 100,000 population.

In 2013, rates of reported gonorrhea cases per 100,000 population ranged by state from 9.2 in New Hampshire to 188.4 in Louisiana; the gonorrhea rate in the District of Columbia was 391.9.

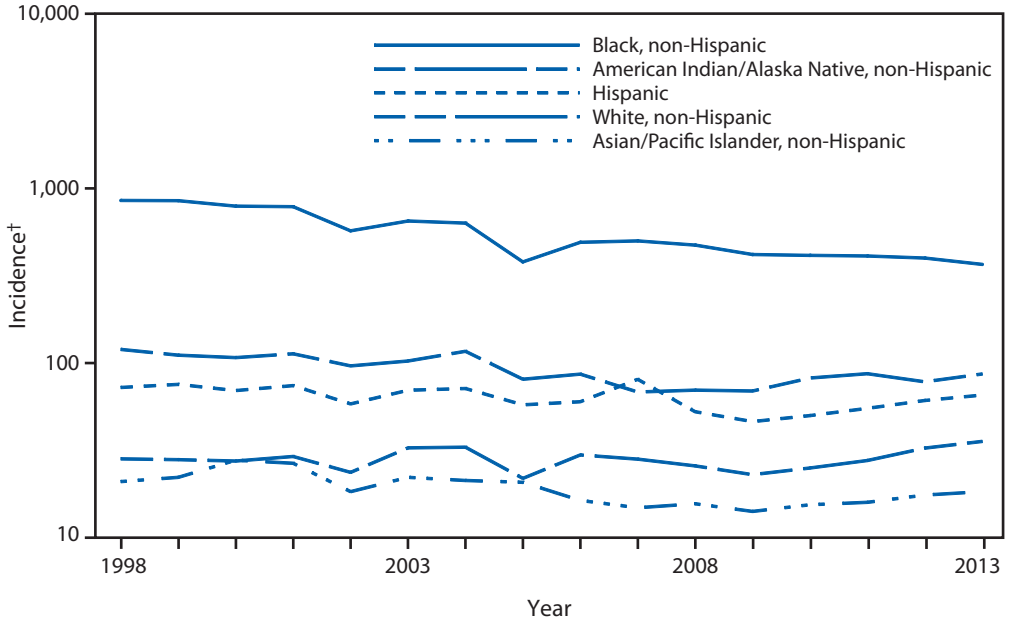
GONORRHEA. Incidence* of reported cases by sex — United States, 1998–2013



* Per 100,000 population.

Rates of gonorrhea are similar among men and women; however, in 2013, the gonorrhea rate among men was higher than the rate among women for the first time since 2000.

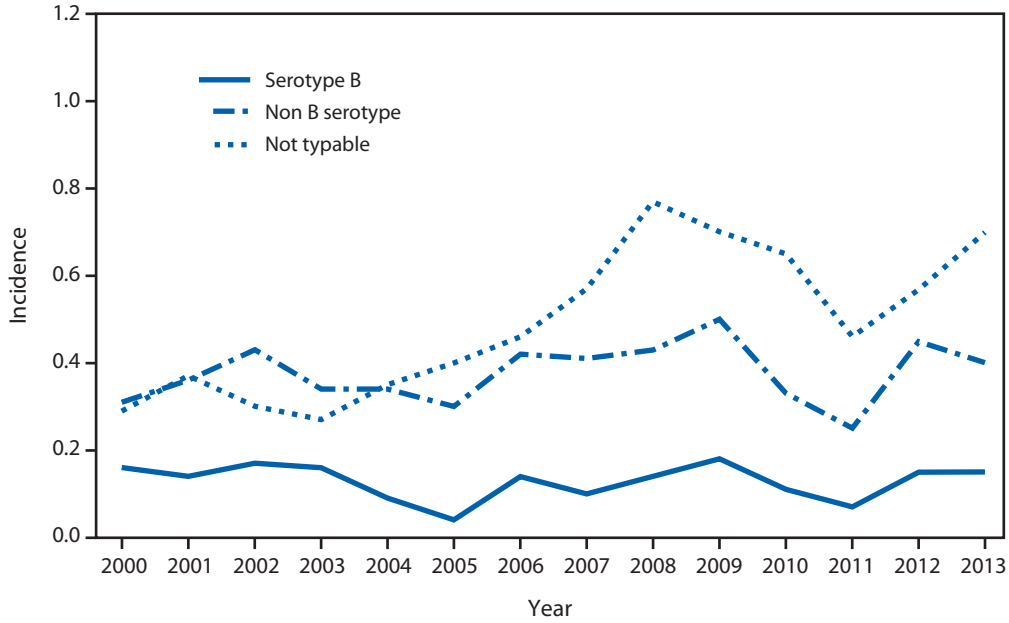
GONORRHEA. Incidence* of reported cases by race/ethnicity — United States, 1998–2013



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

The gonorrhea rate among non-Hispanic blacks is considerably higher than other races/ethnicities. In 2013, the rate among non-Hispanic blacks was approximately 12 times the rate among non-Hispanic whites.

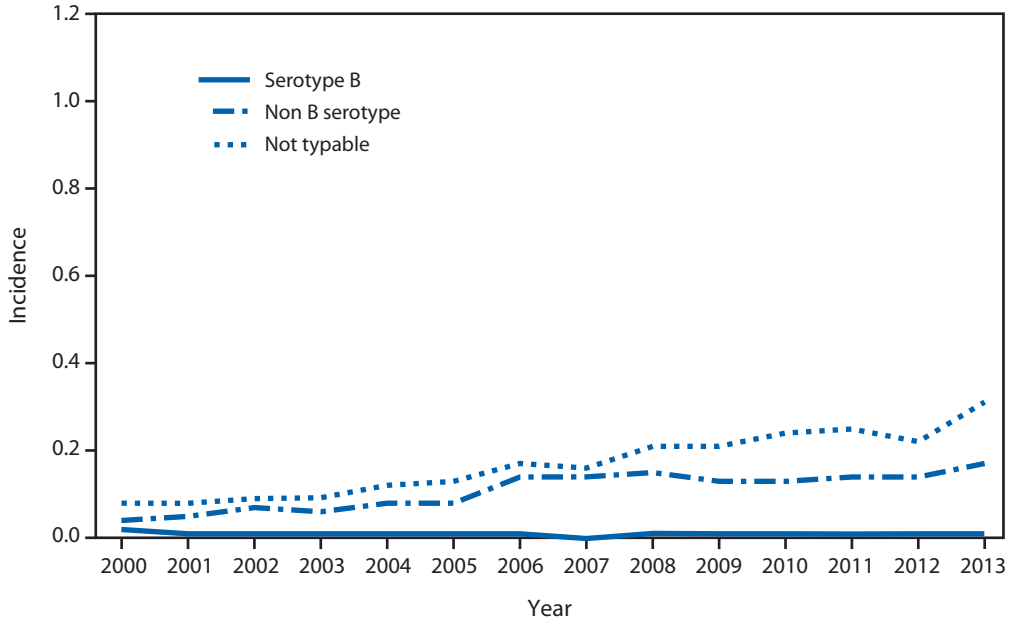
***HAEMOPHILUS INFLUENZAE*, INVASIVE DISEASE. Incidence* of reported cases, by serotype among persons aged <5 years — United States, 2000–2013**



* Per 100,000 population.

The epidemiology of invasive *Haemophilus influenzae* disease has changed in the United States in the post-Hib vaccine era. The epidemiology of invasive *Haemophilus influenzae* disease has changed in the United States in the post-Hib vaccine era (the vaccine for serotype B was introduced in 1985). Nontypeable *Haemophilus influenzae* now causes the majority of invasive disease in children <5 years of age. Hib disease incidence remains below the Healthy People 2020 goal of 0.27/100,000 population. Nontypeable *Haemophilus influenzae* now causes the majority of invasive disease in children aged <5 years. Hib disease incidence remains below the Healthy People 2020 goal of 0.27 per 100,000 population.

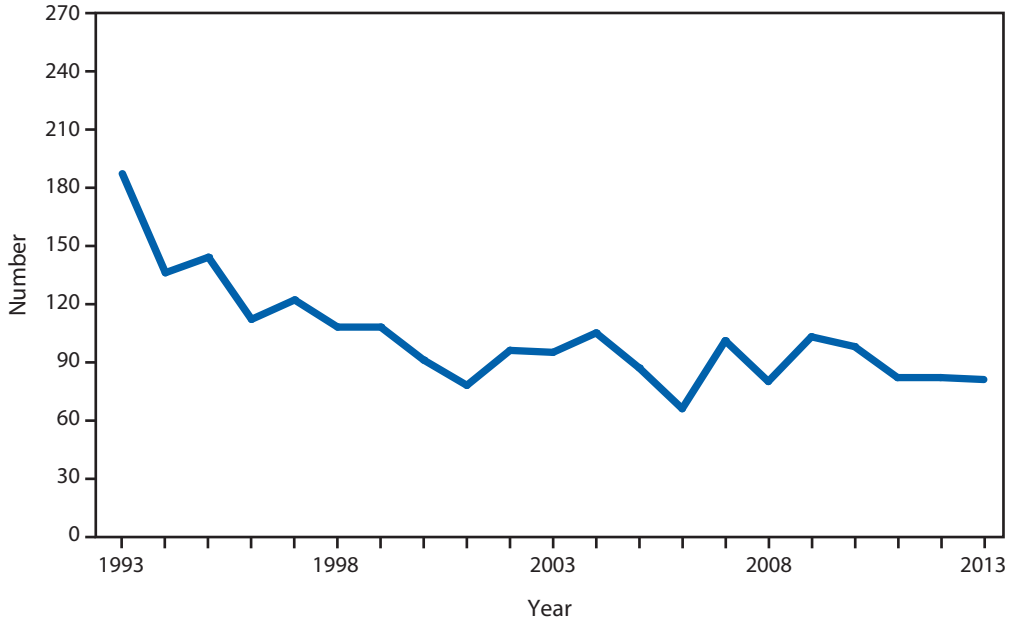
***HAEMOPHILUS INFLUENZAE*, INVASIVE DISEASE. Incidence* of reported cases, by serotype among persons aged ≥5 years — United States, 2000–2013**



* Per 100,000 population.

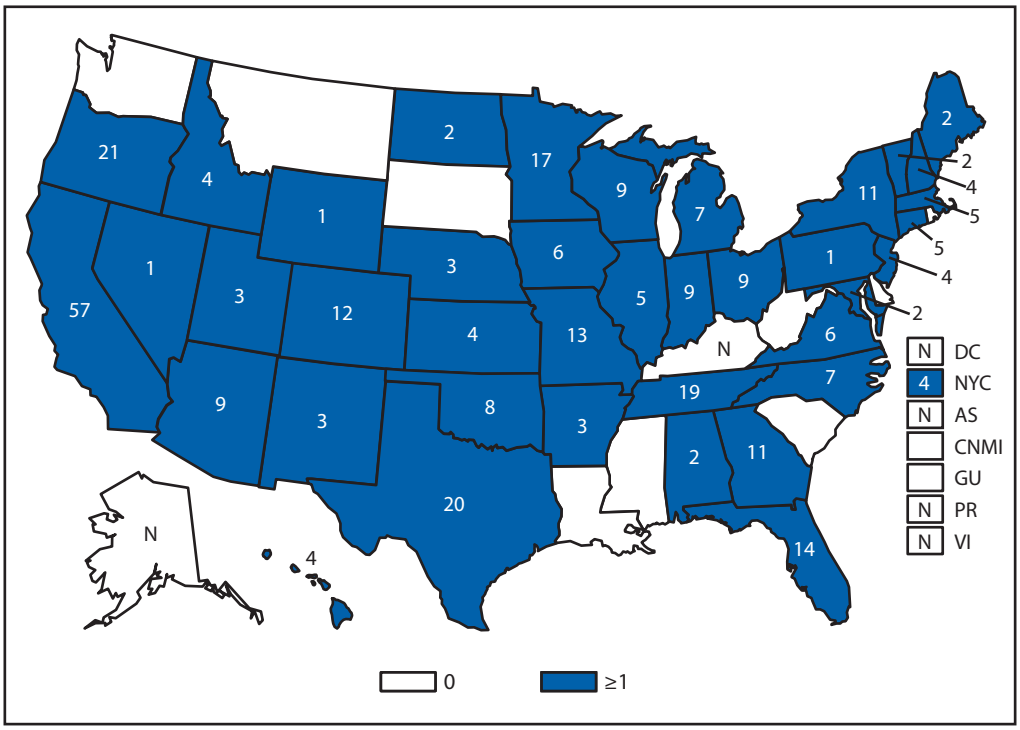
The epidemiology of invasive *Haemophilus influenzae* disease has changed in the United States in the post-Hib vaccine era (the vaccine for serotype B was introduced in 1985). Nontypeable *Haemophilus influenzae* now causes the majority of invasive disease in children aged <5 years. Hib disease incidence remains below the Healthy People 2020 goal of 0.27 per 100,000 population.

HANSEN DISEASE (LEPROSY). Number of reported cases, by year — United States, 1993–2013



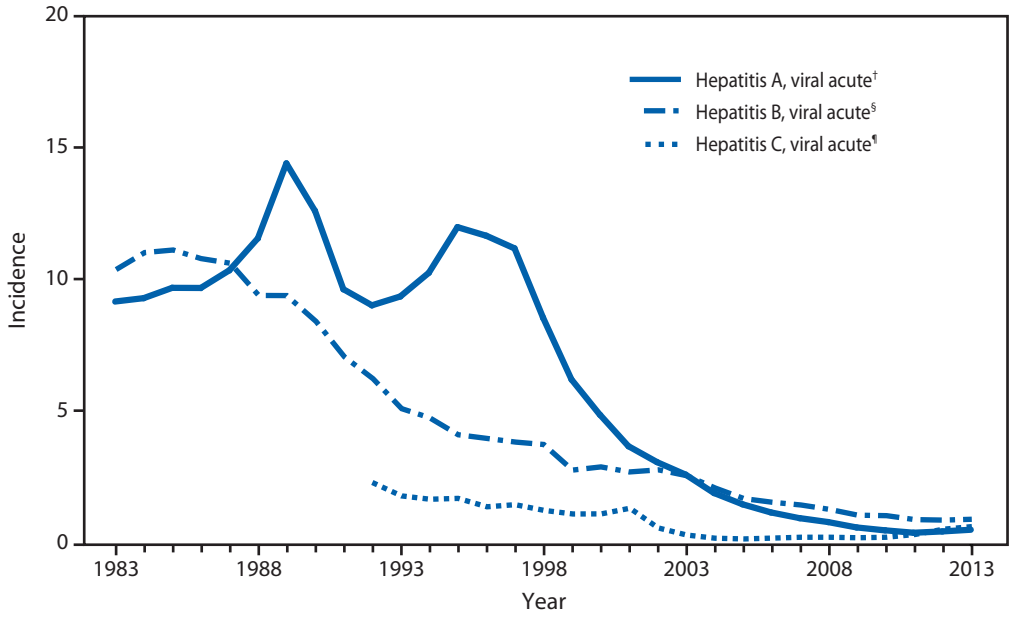
Annual reported cases of Hansen's disease have remained fairly steady since 2011.

HEMOLYTIC UREMIC SYNDROME, POSTDIARRHEAL. Number of reported cases — United States and U.S. territories, 2013



In 2013, 40 jurisdictions (states, districts, and territories) reported cases. Most cases of postdiarrheal hemolytic uremic syndrome (HUS) are caused by Shiga toxin-producing *Escherichia coli* (STEC).

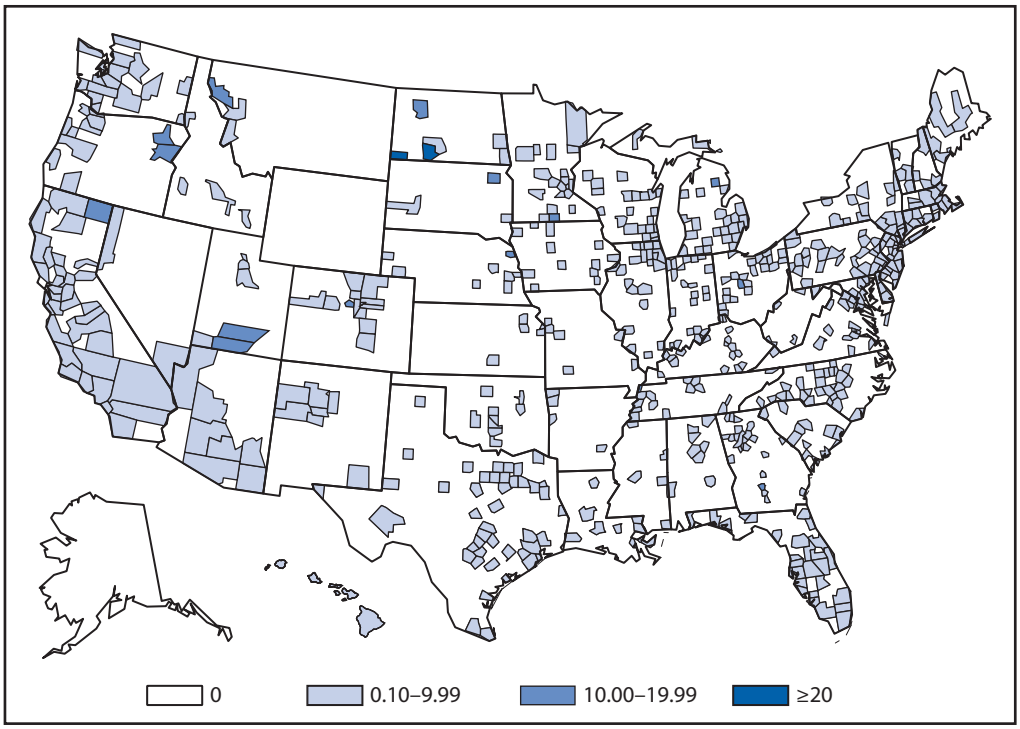
HEPATITIS, VIRAL. Incidence* of reported cases, by year — United States, 1983–2013



* 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 declined during 1998–2011 and increased in 2012 and 2013. The hepatitis A vaccine became available in 1995, the last year a peak in incidence of acute, symptomatic hepatitis A was observed. Coinciding with the implementation of the national vaccination strategy to eliminate hepatitis B infections, the incidence of acute hepatitis B has declined since 1987. Acute hepatitis B incidence has remained stable since 2008. The incidence of acute hepatitis C remained fairly stable during 1992–2000, declined in 2001 and 2002, remained stable during 2003–2005, and increased in 2011, 2012, and 2013. Recent investigations suggest this increase is largely driven by acute infections in nonurban young persons who start injecting drugs after habituation to oral prescription opioid drugs such as "OxyContin" and oxycodone.

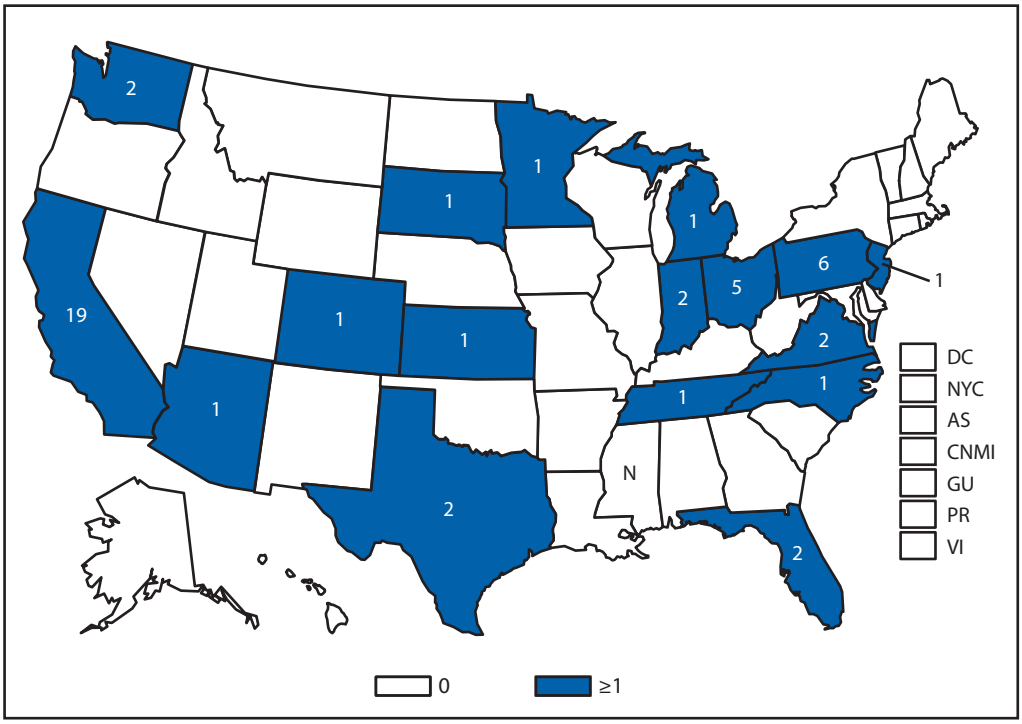
HEPATITIS A. Incidence* of reported cases, by county — United States, 2013



* Per 100,000 population.

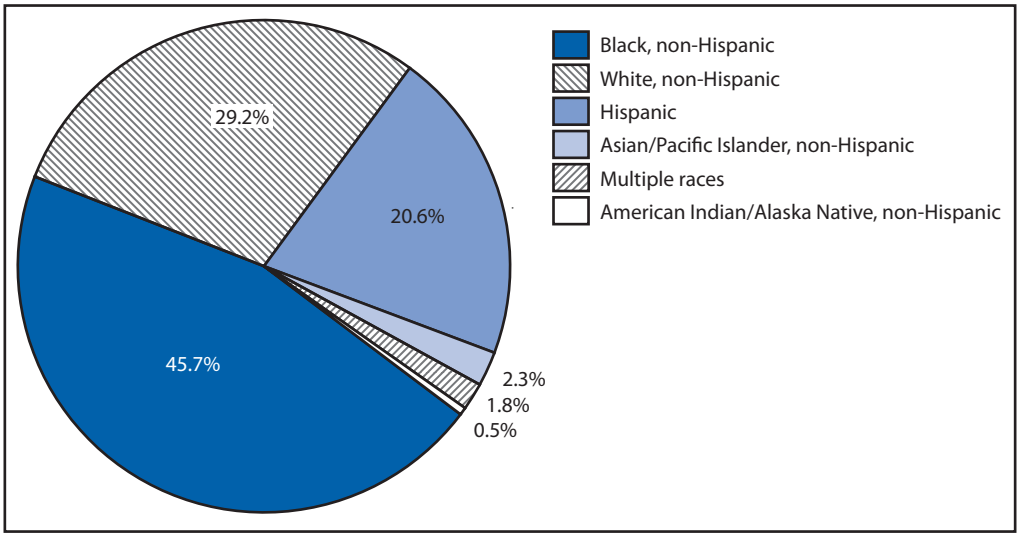
Although effective vaccines to prevent Hepatitis A virus infections have been available in the United States since 1995, cases still occur in almost every state. In 2013, a total of 1,781 cases were reported and 17 counties in 13 states reported incidence rates of >10 cases per 100,000 population. Two of these counties in one state reported incidence rates of >20 cases.

HEPATITIS B PERINATAL INFECTION. Number of reported cases — United States and U.S. territories, 2013



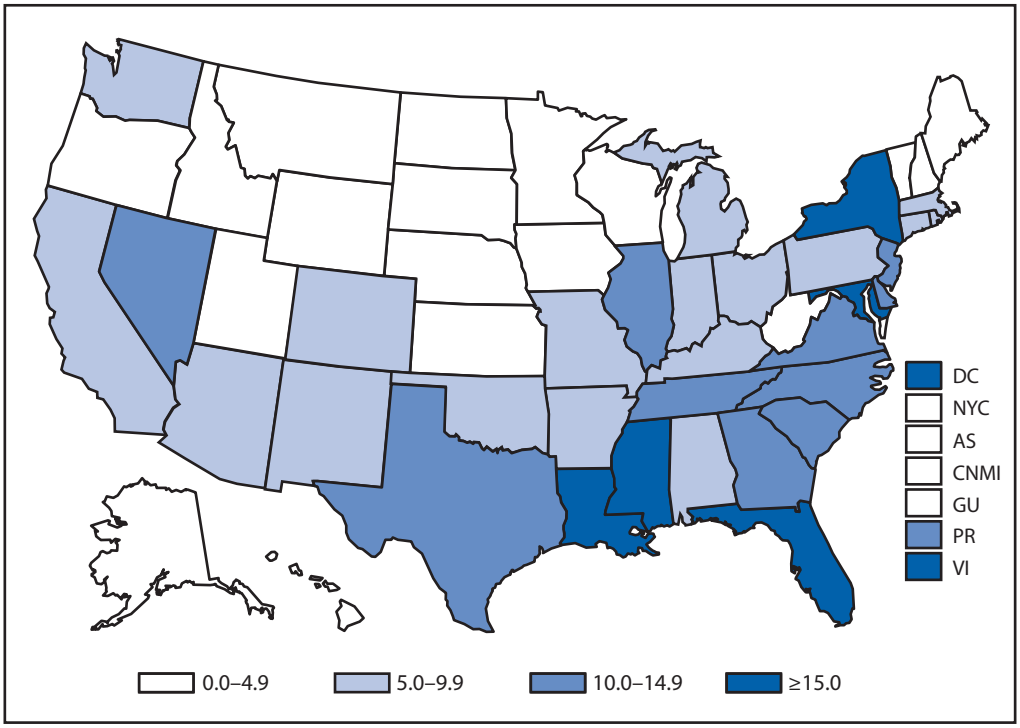
In 2013, a total of 16 states reported 48 cases of perinatal hepatitis B. Because of the asymptomatic nature of hepatitis B in young children, lack of timely testing among exposed infants, and incomplete reporting of infants with hepatitis B to public health surveillance programs, the reported number of cases of perinatal hepatitis B is considered low and represents only a proportion of all infants infected with hepatitis B virus at birth.

HUMAN IMMUNODEFICIENCY VIRUS DIAGNOSES. Percentage of diagnosed cases, by race/ethnicity — United States, 2013



Of persons diagnosed with HIV infection in 2013, the greatest percentage was among blacks/African Americans followed by whites, Hispanics/Latinos, Asians/Pacific Islanders, persons of multiple races, and American Indians/Alaska Natives.

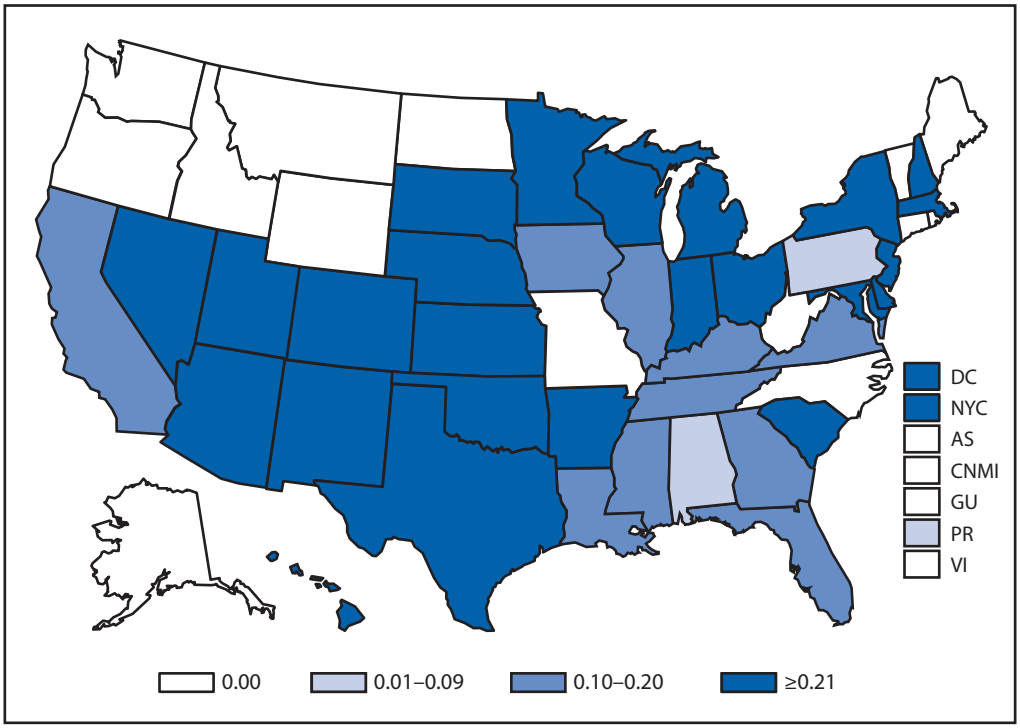
HUMAN IMMUNODEFICIENCY VIRUS DIAGNOSES. Diagnosis incidence* — United States and U.S. territories, 2013



* Per 100,000 population.

The highest rates (i.e., ≥15 diagnoses per 100,000 population) of HIV diagnoses were in certain states in the Southeast and Northeast. A rate of ≥15 diagnoses per 100,000 population also was observed in the District of Columbia and the U.S. Virgin Islands.

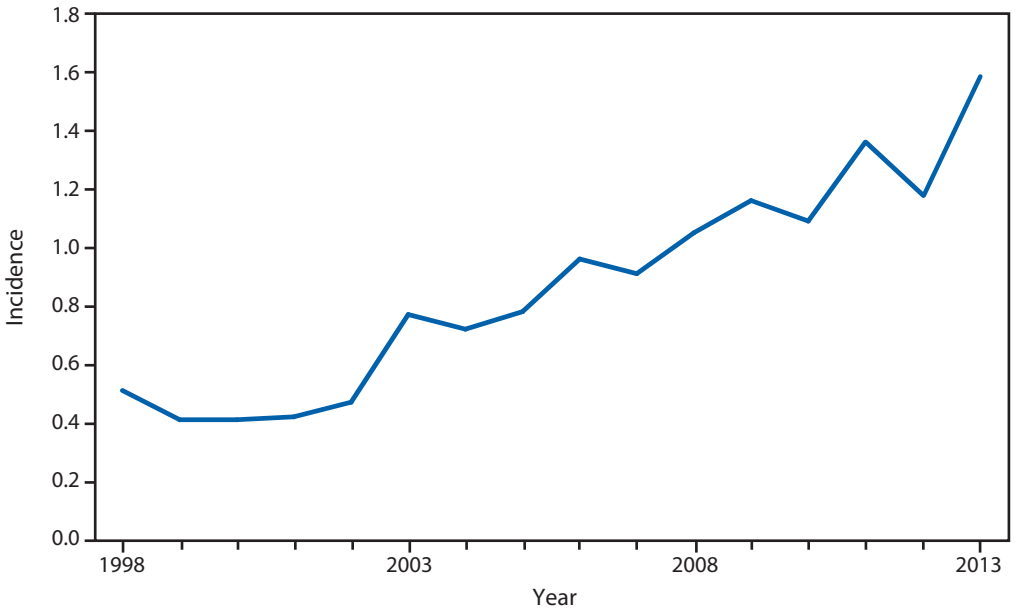
INFLUENZA-ASSOCIATED PEDIATRIC MORTALITY. Incidence* of reported cases — United States and U.S. territories, 2013



* Per 100,000 population.

In 2013, New York City and 37 states reported 160 influenza-associated pediatric deaths for an overall incidence rate in the United States of 0.22 deaths per 100,000 children aged <18 years.

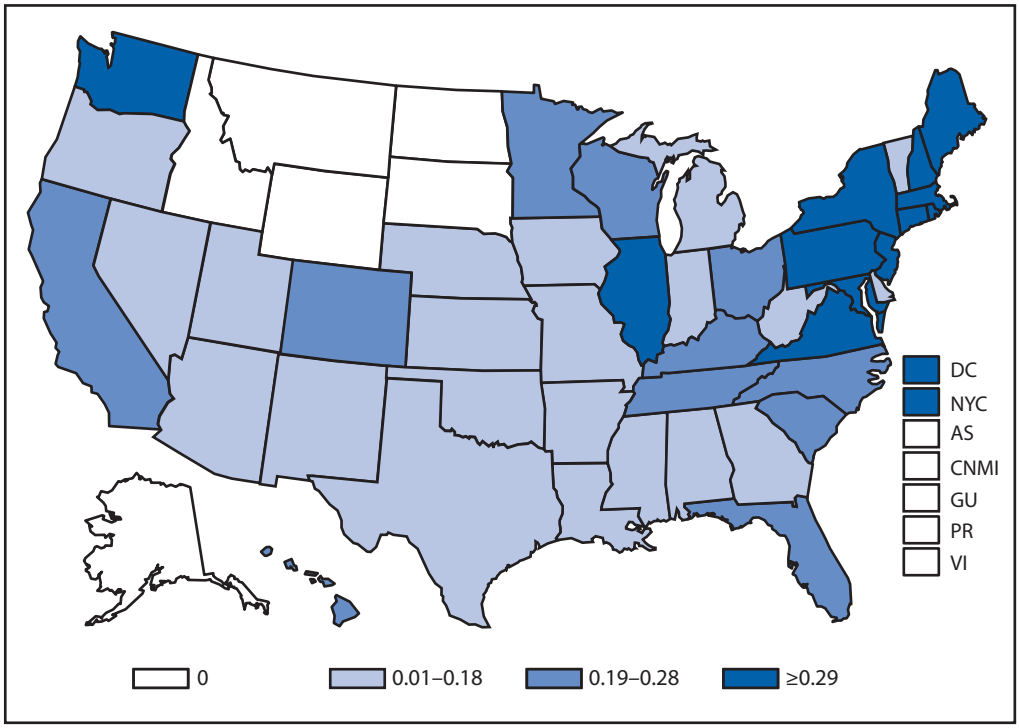
LEGIONELLOSIS. Incidence* of reported cases, by year — United States, 1998–2013



* Per 100,000 population.

The incidence of legionellosis increased again in 2013, continuing a general increase that began in 2003. Decreases since 2003 do not result in a lower incidence beyond the immediate past year. Factors contributing to this increase might include increased diagnostic testing or an increase in disease transmission.

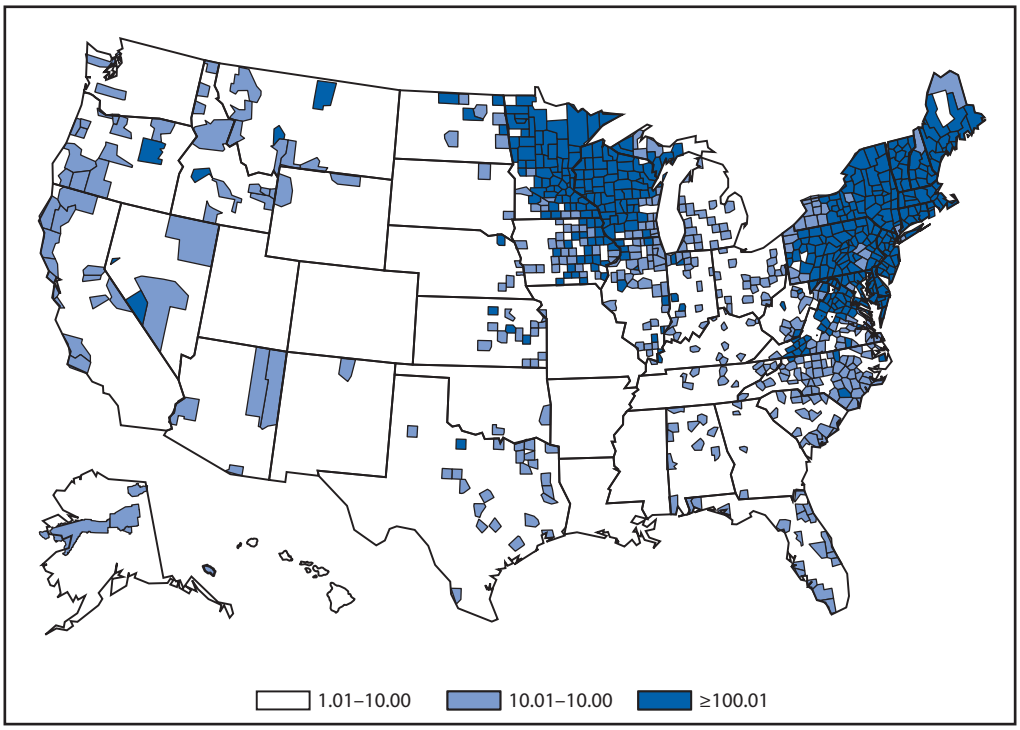
LISTERIOSIS. Incidence* of reported cases — United States and U.S. territories, 2013



* Per 100,000 population.

In 2013, a total of 44 states, the District of Columbia, and New York City reported 735 cases of listeriosis for an overall incidence rate in the United States of 0.23 infections per 100,000, which is unchanged from 2012. Incidence rates were highest in the Northeastern states. To improve outbreak detection and better link cases to food sources, prospective, real-time whole genome sequencing of *L. monocytogenes* isolates began in September 2013.

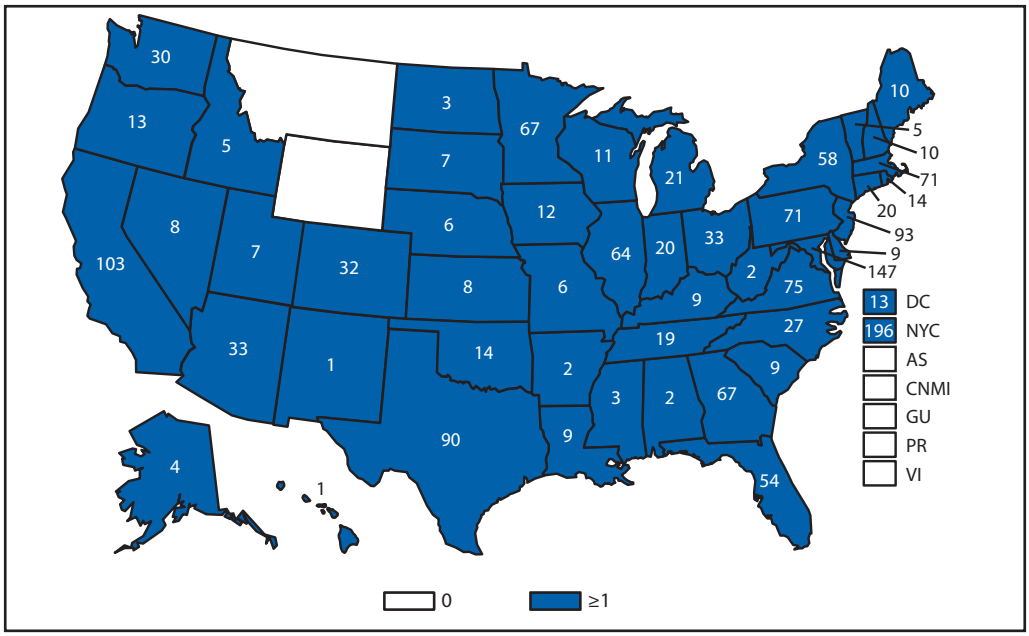
LYME DISEASE. Incidence* of reported confirmed cases, by county — United States, 2013



* Per 100,000 population.

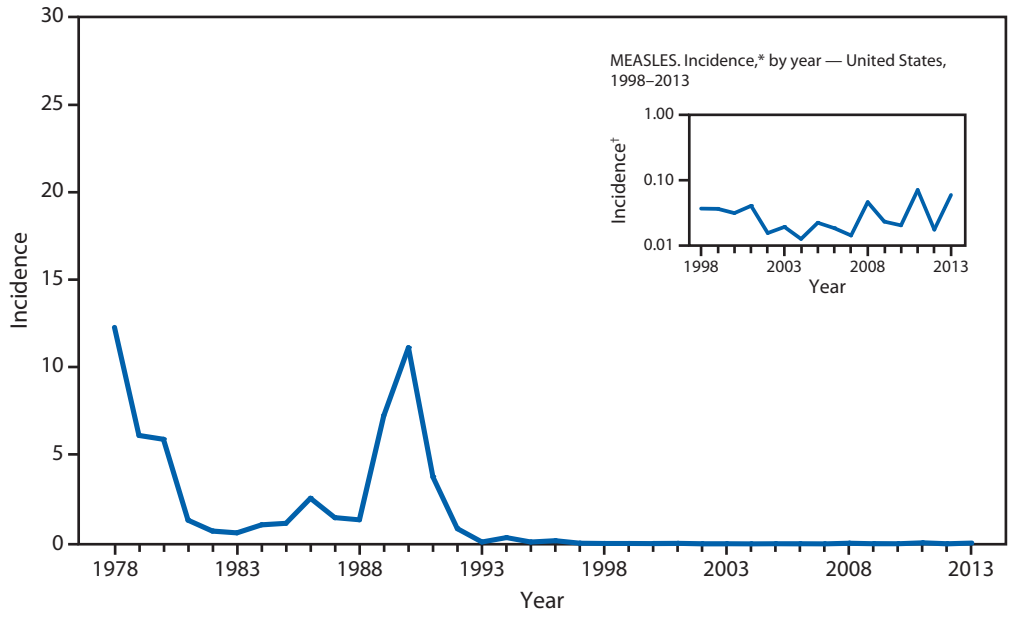
Approximately 95% of confirmed Lyme disease cases are reported from states in the Northeast, mid-Atlantic, and upper Midwest. A rash that can be confused with early Lyme disease sometimes occurs following bites of the lone star tick (*Amblyomma americanum*). These ticks, which do not transmit the Lyme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

MALARIA. Number of reported cases — United States and U.S. territories, 2013



In 2013, cases of malaria were reported from almost every state, and nearly all cases reported in the United States were acquired overseas. Cases in eight states or areas (California, Maryland, Massachusetts, New Jersey, New York City, Pennsylvania, Texas, and Virginia) accounted for 53% of the reported cases because of large immigrant populations and international travelers.

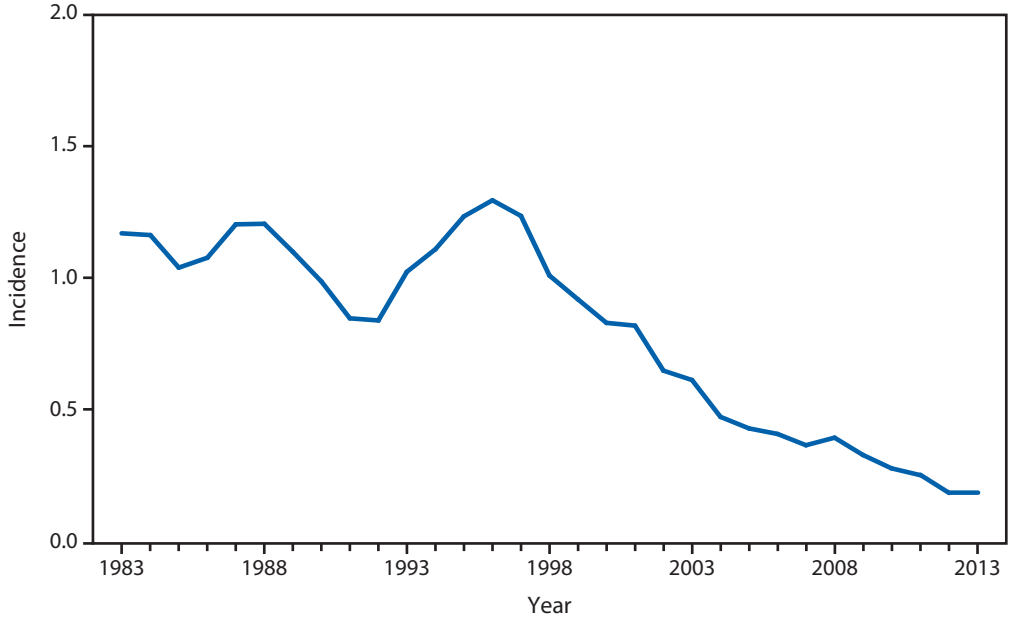
MEASLES. Incidence* of reported cases, by year — United States, 1978–2013



* Per 100,000 population.
† In the inset figure, the Y axis is a log scale.

In 2000, the U.S. achieved measles elimination (defined as interruption of year-round endemic measles transmission). Measles elimination has been maintained in the United States for more than a decade through high population immunity secondary to high measles-mumps-rubella vaccination coverage.

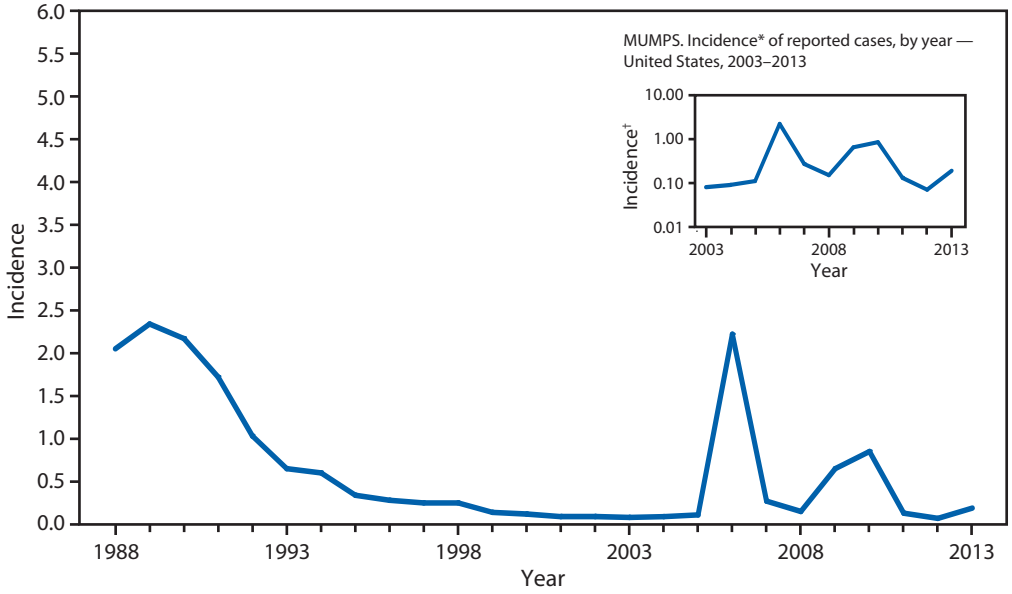
MENINGOCOCCAL DISEASE. Incidence* of reported cases, by year — United States, 1983–2013



* Per 100,000 population.

In 2013, meningococcal disease incidence remained low, but it continues to cause substantial morbidity and mortality in the United States. In 2005, a quadrivalent (A,C,W,Y) meningococcal conjugate vaccine was licensed and recommended for adolescents and others at increased risk for disease. In October 2010, a booster dose was added to recommendations for adolescents at age 16 years.

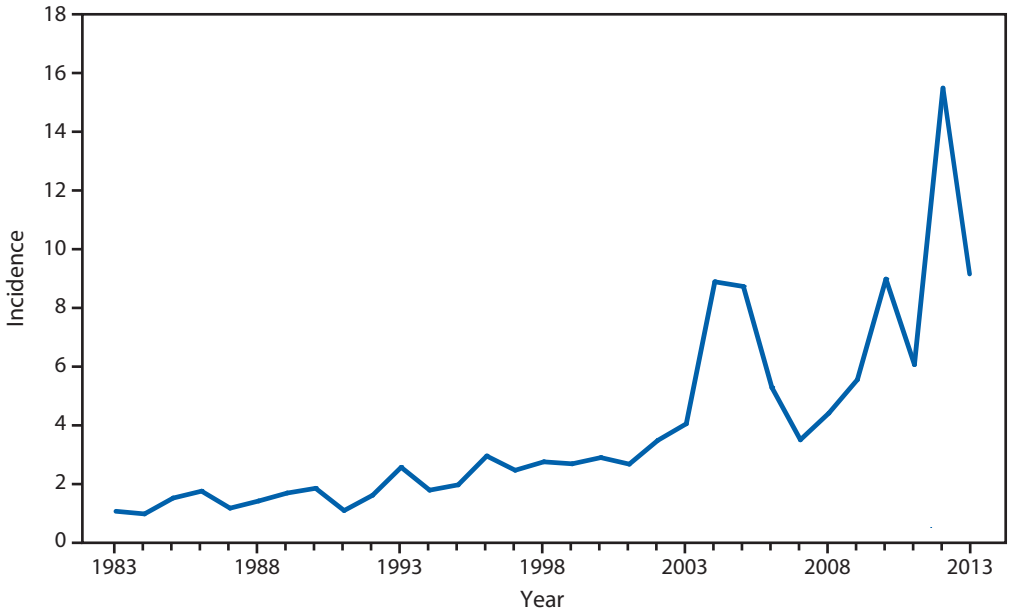
MUMPS. Incidence* of reported cases, by year — United States, 1988–2013



* Per 100,000 population.
† In the inset figure, the Y axis is a log scale.

The widespread use of a second dose of mumps vaccine beginning in 1989 was followed by historically low morbidity until 2006, when the United States experienced the largest mumps outbreak in two decades. The 2006 outbreak of approximately 6,000 cases primarily affected college students aged 18–24 years in the Midwest. A second large outbreak occurred during 2009–2010 and affected Orthodox Jewish communities in the Northeast.

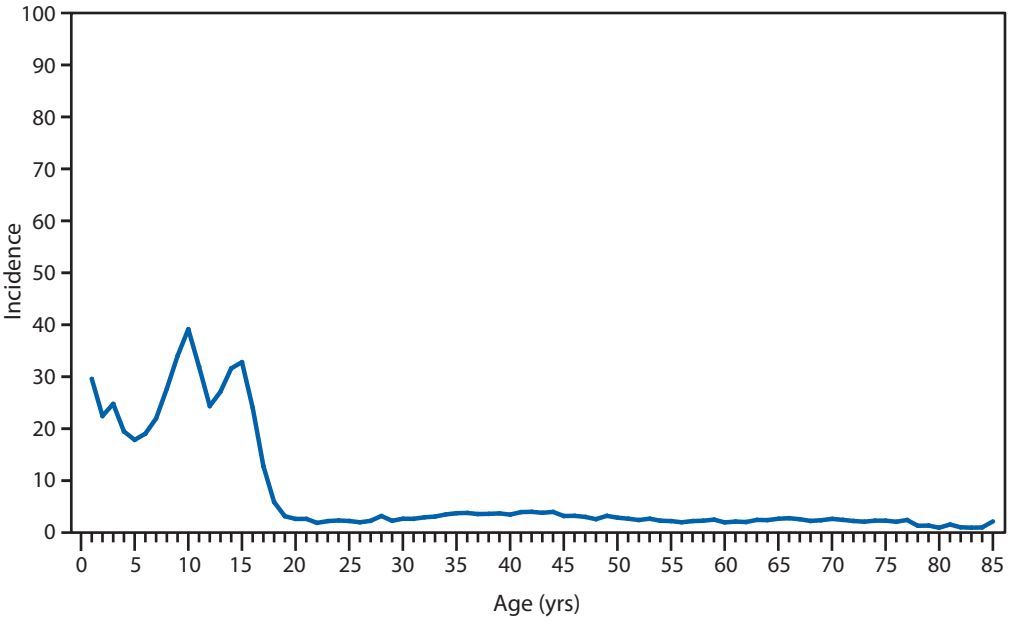
PERTUSSIS. Incidence* of reported cases, by year — United States, 1983–2013



* Per 100,000 population.

Pertussis remains endemic in the United States with cyclic peaks occurring every 2–5 years. Incidence decreased 41% from 2012 to 2013, but rates remain higher than rates observed during the 1990s and early 2000s.

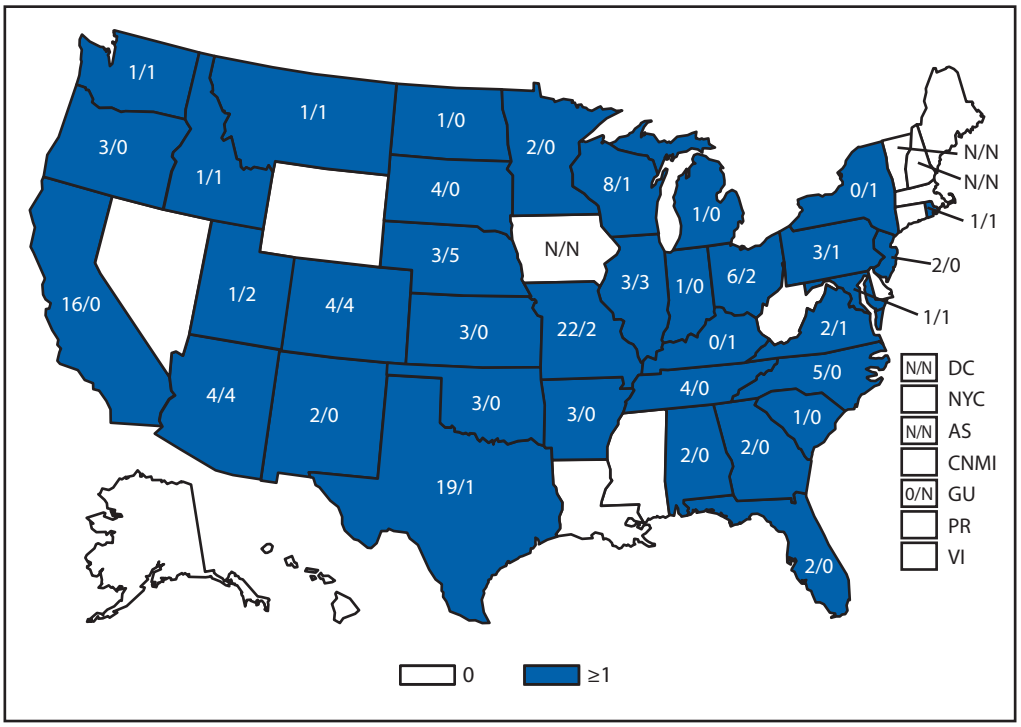
PERTUSSIS. Incidence* of reported cases, by age — United States, 2013



* Per 100,000 population.

Infants, especially those who are too young to be fully vaccinated, are at greatest risk for severe disease and death from pertussis. Historically, the highest rates of pertussis have been observed among children aged <1 year; however, rates have increased among school-aged children and adolescents in recent years.

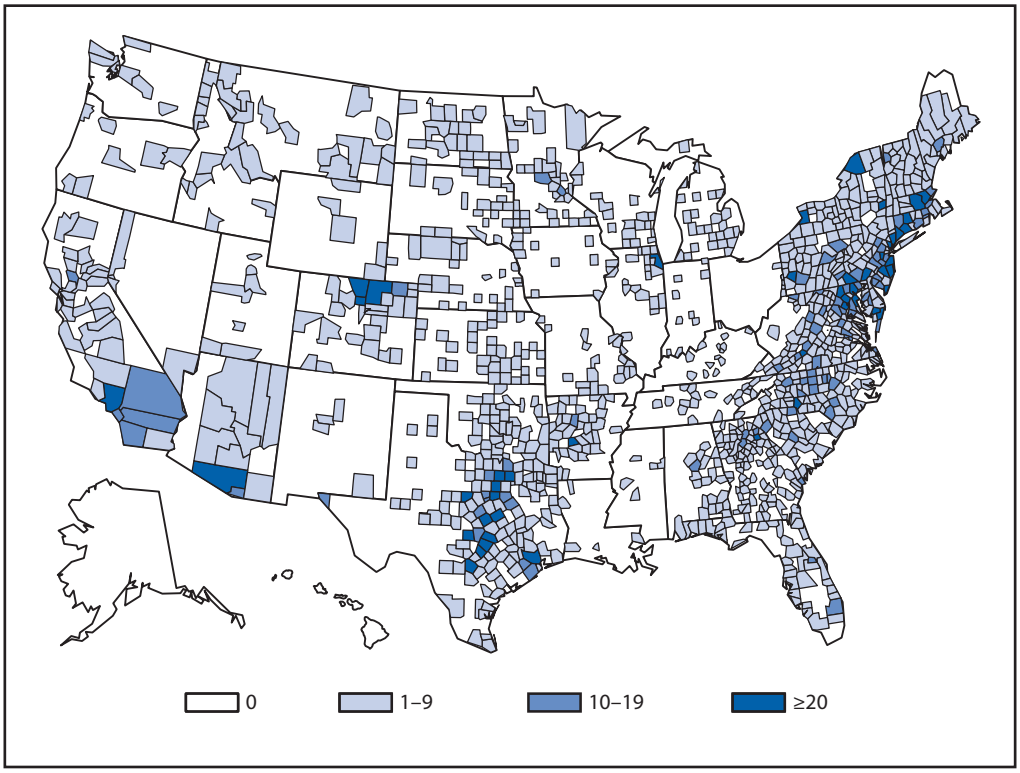
Q FEVER, ACUTE AND CHRONIC. Number* of reported cases — United States and U.S. territories, 2013



* Number of Q fever acute cases/number of Q fever chronic cases.

In 2013, Q fever, caused by *Coxiella burnetii*, was reported in 36 jurisdictions (states, districts, or territories). Human cases of Q fever most often result from contact with infected livestock, especially sheep, goats, and cattle.

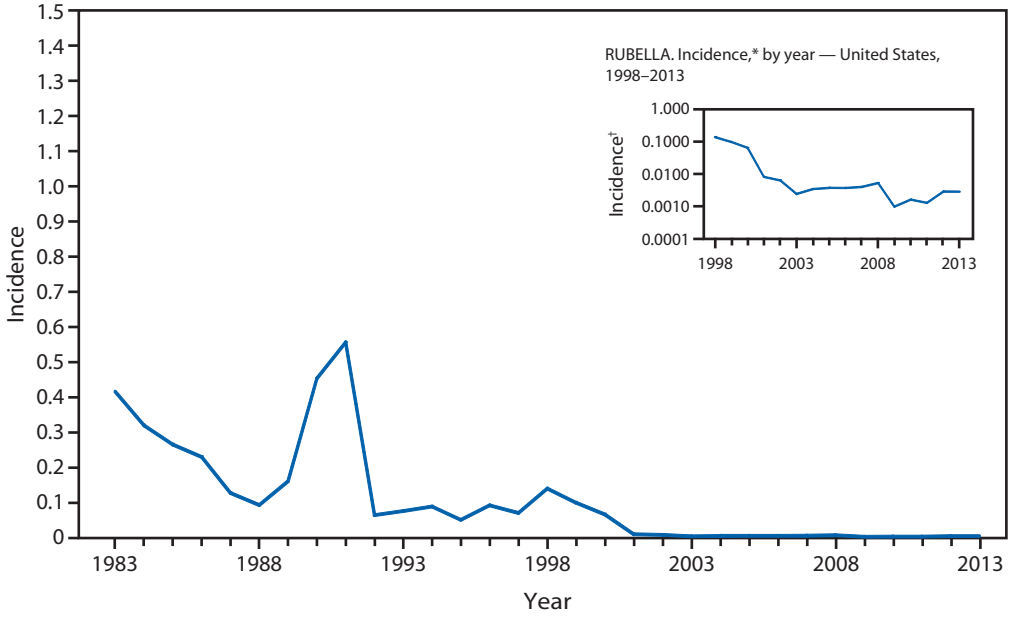
RABIES, ANIMAL. Number* of reported cases, by county — United States, 2013



* Data from the National Center for Emerging and Zoonotic Infectious Diseases, Division of High-consequence Pathogens and Pathology.

In 2013, rabid animals were reported in all jurisdictions except Hawaii. Because reporting is based on the number of animals tested, the burden of disease is likely underestimated.

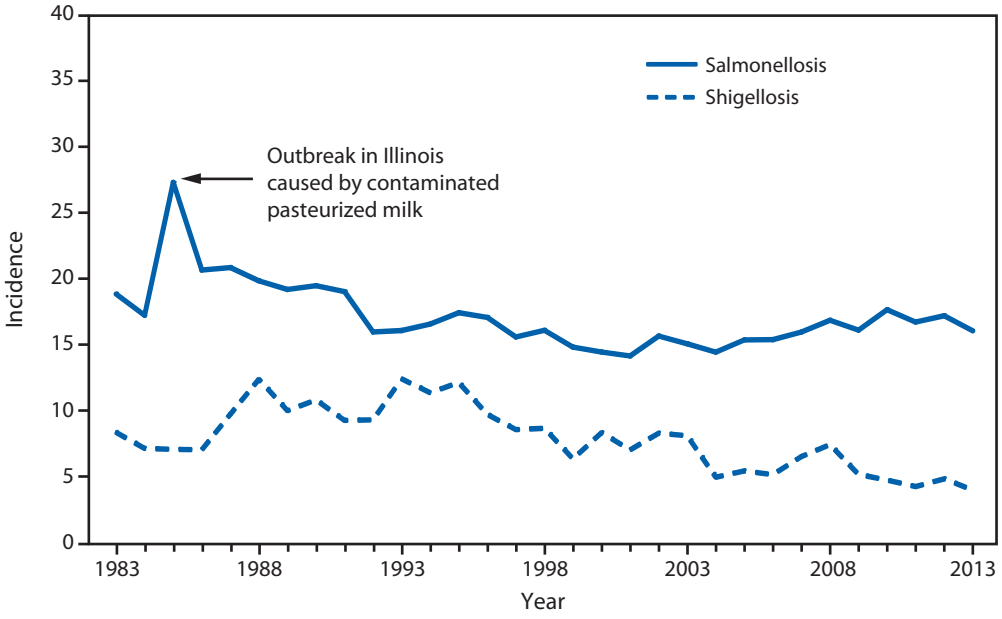
RUBELLA. Incidence* of reported cases, by year — United States, 1983–2013



* Per 100,000 population.
† In the inset figure, the y-axis is a log scale.

In 2004, rubella was certified as no longer endemic in the U.S.

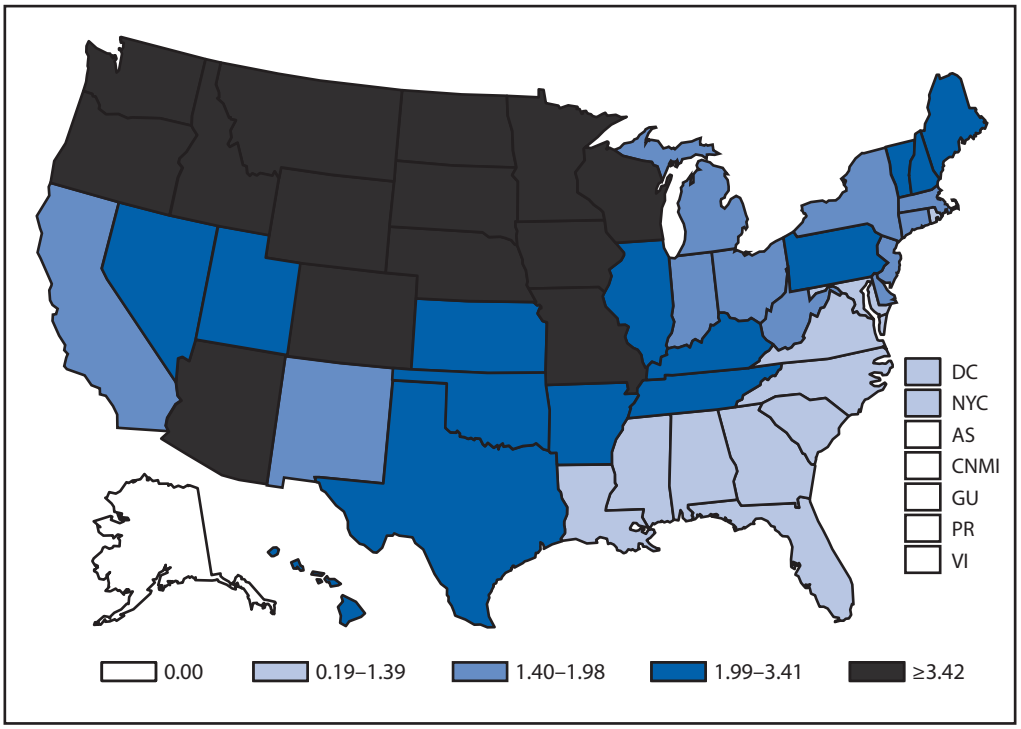
SALMONELLOSIS AND SHIGELLOSIS. Incidence* of reported cases, by year — United States, 1983–2013



* Per 100,000 population.

Although incidence rates of salmonellosis have remained relatively stable since the early 1990s, incidence rates of shigellosis during the same period have followed a general decreasing trend.

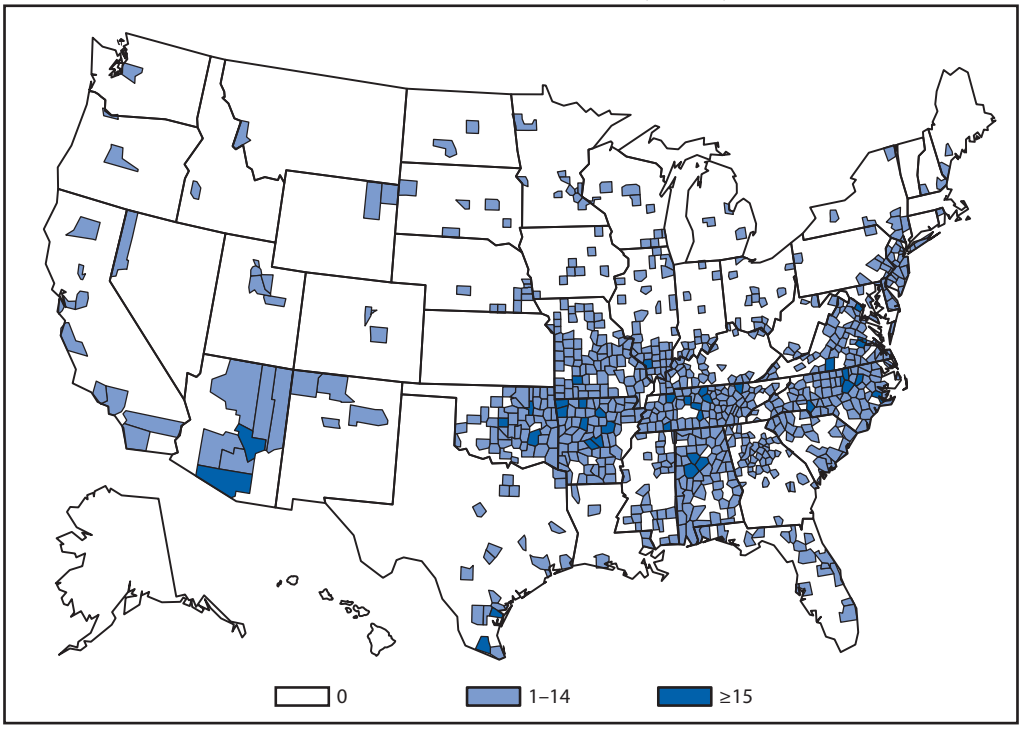
SHIGA TOXIN-PRODUCING *ESCHERICHIA COLI* (STEC). Incidence* of reported cases — United States and U.S. territories, 2013



* Per 100,000 population.

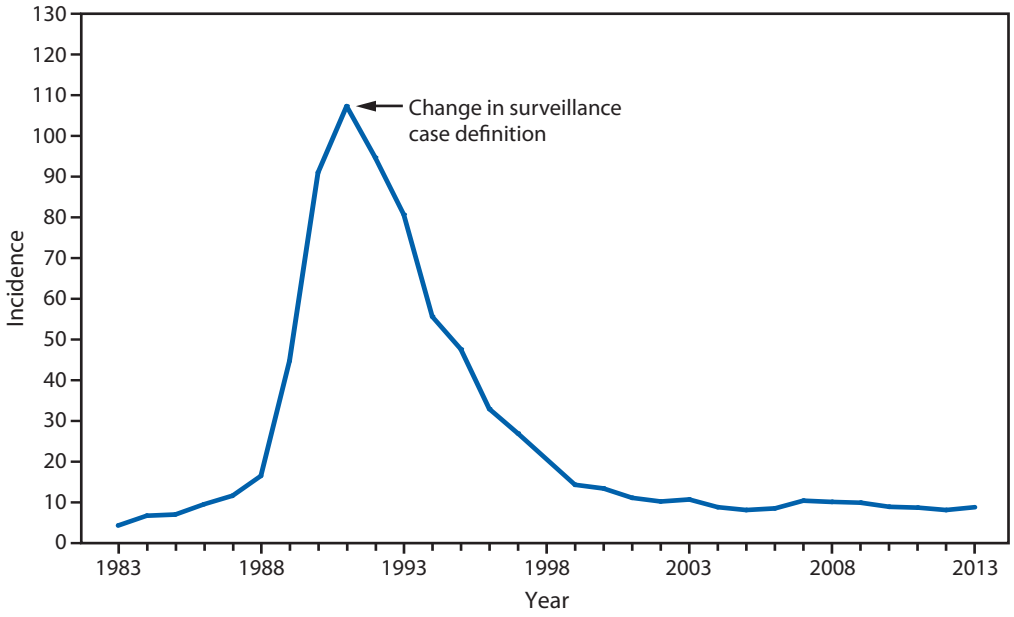
Incidence rates were generally highest in the northern and western states. States with the highest incidence rates were Idaho, North Dakota, and Minnesota.

SPOTTED FEVER RICKETTSIOSIS. Number of reported cases, by county — United States, 2013



In the United States, the majority of cases of spotted fever rickettsiosis (SFR) are attributed to infection with *Rickettsia rickettsii*, the causative agent of Rocky Mountain spotted fever (RMSF). Cases of SFR also might be from other agents such as *Rickettsia parkeri* and *Rickettsia* species 364D. RMSF is ubiquitous across the United States, which represents the widespread nature of the three tick vectors known to transmit RMSF: *Dermacentor variabilis* in the East, *Dermacentor andersoni* in the West, and *Rhipicephalus sanguineus*, recently recognized as a new tick vector in parts of Arizona. Historically, much of the incidence of RMSF has been in the Central Atlantic region and parts of the Midwest; however, endemic transmission of RMSF in Arizona communities has led to a substantial reported incidence rate.

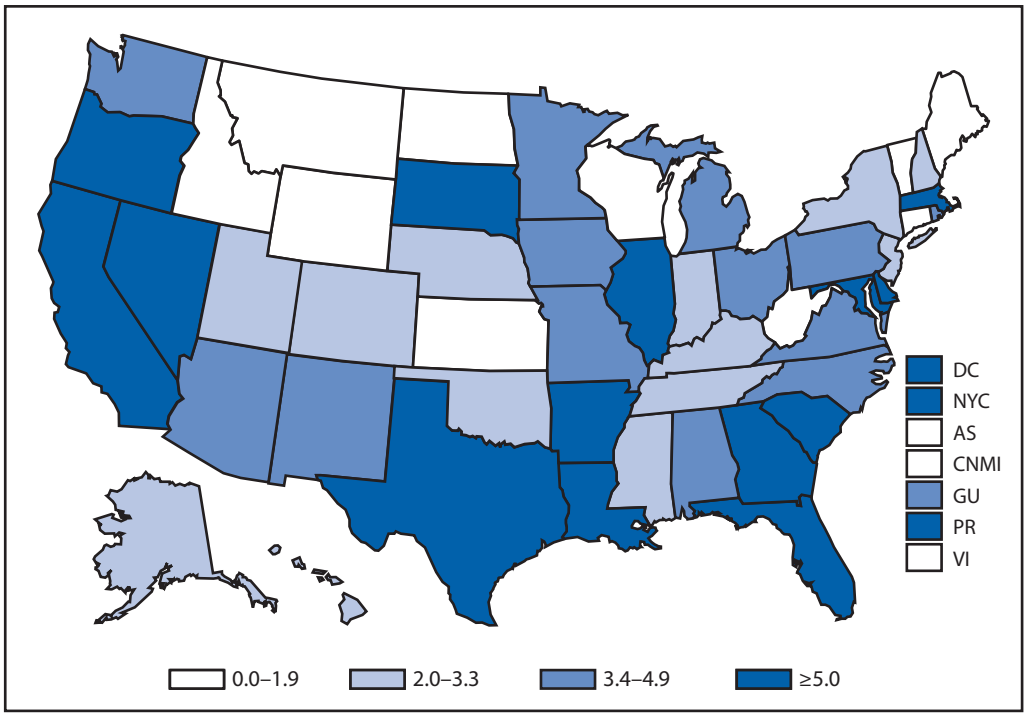
SYPHILIS, CONGENITAL. Incidence* of reported cases among infants, by year of birth — United States, 1983–2013



* Per 100,000 live births.

In 2013, the rate of congenital syphilis was near historic lows. However, for the first time since 2008, the rate of congenital syphilis increased from 2012 to 2013, from 8.4 to 8.7 cases per 100,000 live births (a 4% increase).

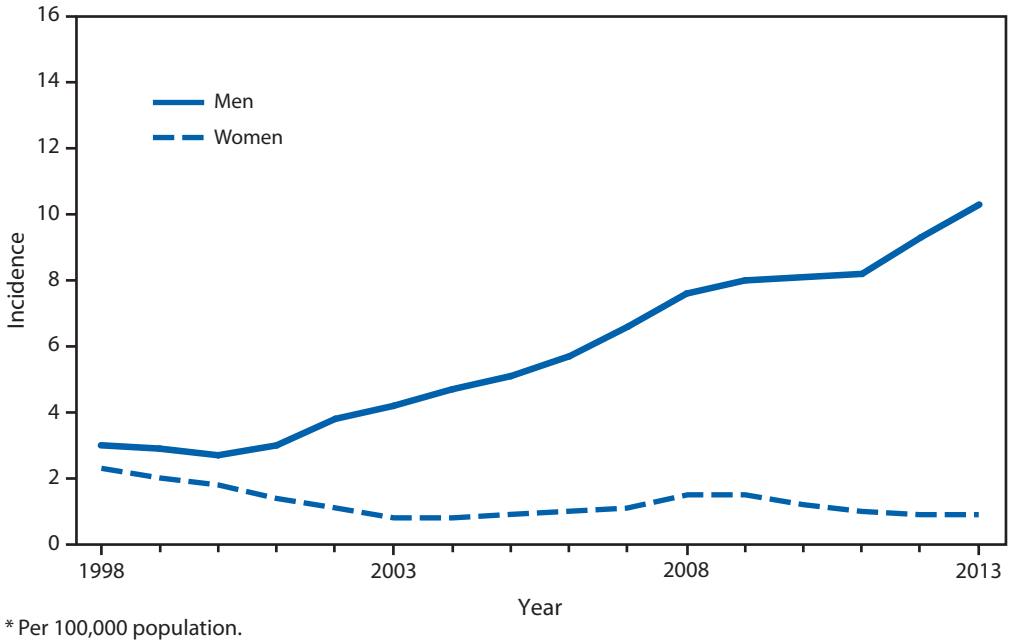
SYPHILIS, PRIMARY AND SECONDARY. Incidence* of reported cases — United States and U.S. territories, 2013



* Per 100,000 population.

In 2013, jurisdictions in all census regions of the U.S. and many outlying territories reported cases of primary and secondary syphilis. A total of 15 states and areas (including the District of Columbia) with the highest rates of primary and secondary syphilis accounted for 70% of all U.S. cases of primary and secondary syphilis; the rate of primary and secondary syphilis in 14 of these 15 states and areas exceeded the national rate of 5.5 cases per 100,000 population; nine of these 15 states and areas were in the South.

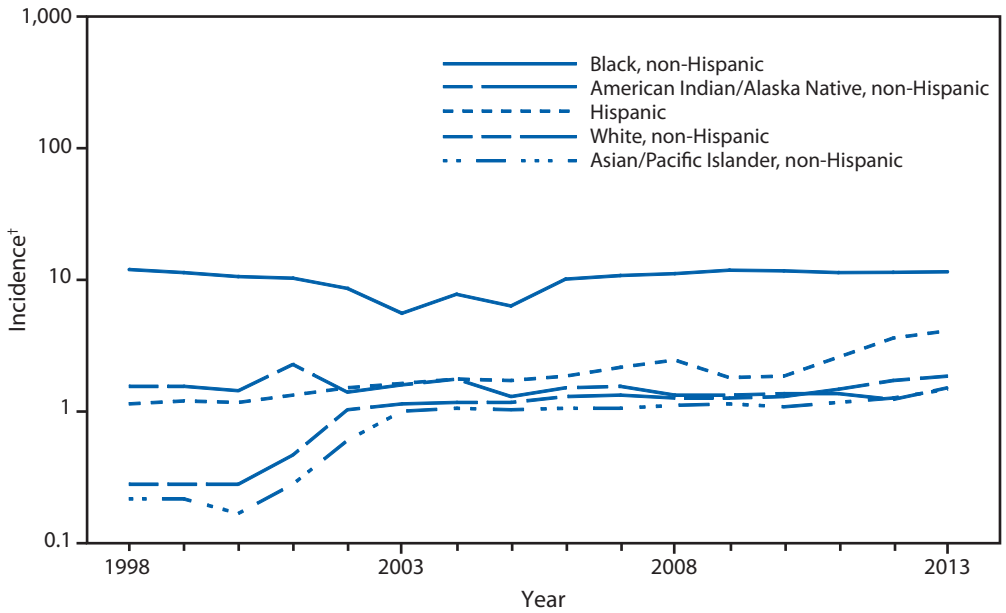
SYPHILIS, PRIMARY AND SECONDARY. Incidence* of reported cases by sex — United States, 1998–2013



* Per 100,000 population.

During 2012–2013, the rate of primary and secondary syphilis in the United States remained constant in women and increased in men (women: constant at 0.9; men: increased from 9.2 to 10.3) per 100,000 population.

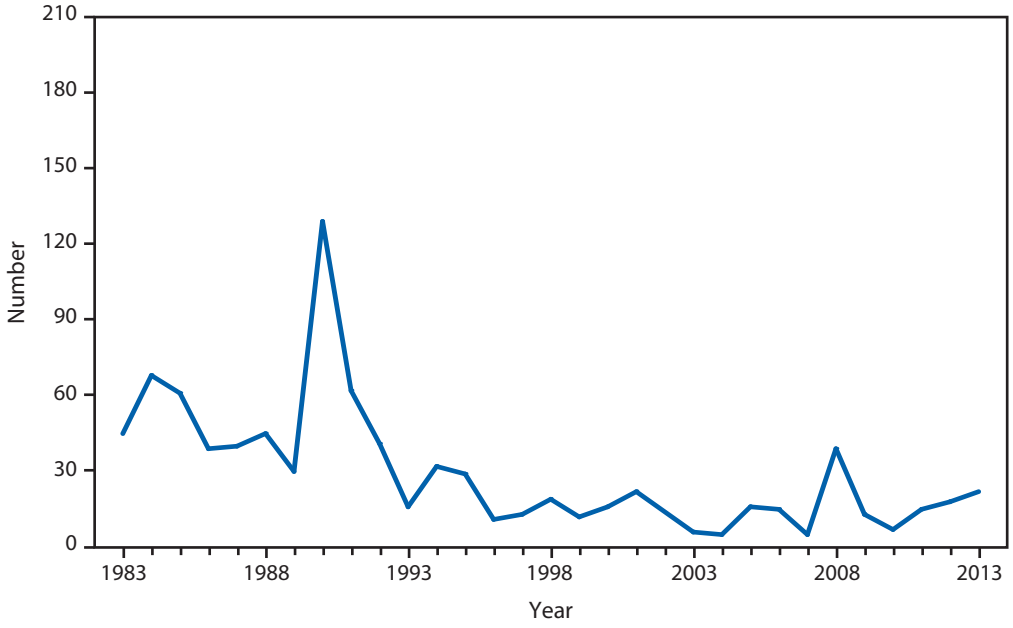
SYPHILIS, PRIMARY AND SECONDARY. Incidence* of reported cases by race/ethnicity — United States, 1998–2013



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

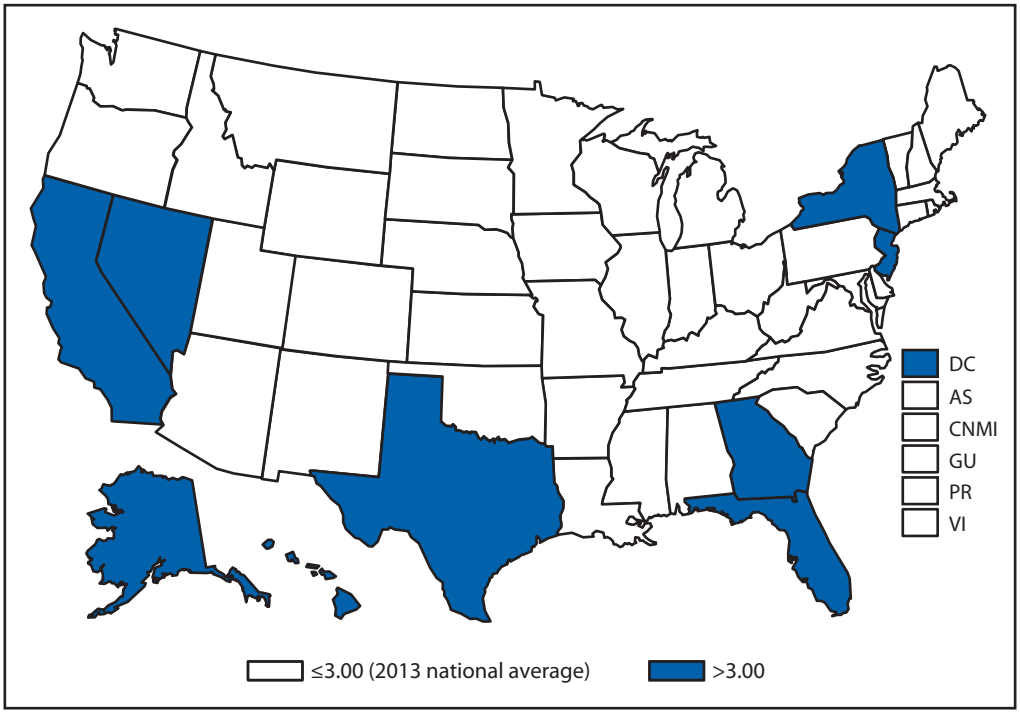
During 1998–2013, the rate of primary and secondary syphilis was highest among non-Hispanic blacks (16.8 cases per 100,000 population in 2013). In 2013, the rate among non-Hispanic blacks was 5.6 times the rate among non-Hispanic whites (3.0 cases), and the rate among Hispanics (6.3 cases) was 2.1 times the rate among non-Hispanic whites.

TRICHINELLOSIS. Number of reported cases, by year — United States, 1983–2013



In 2013, a total of 22 trichinellosis cases were reported from eight states. A trichinellosis outbreak was reported involving nine persons from two families from one state, all of whom consumed meat from a boar that was hunted in a wild game park in a neighboring state. This is the second reported trichinellosis outbreak in 3 years associated with a wild game park.

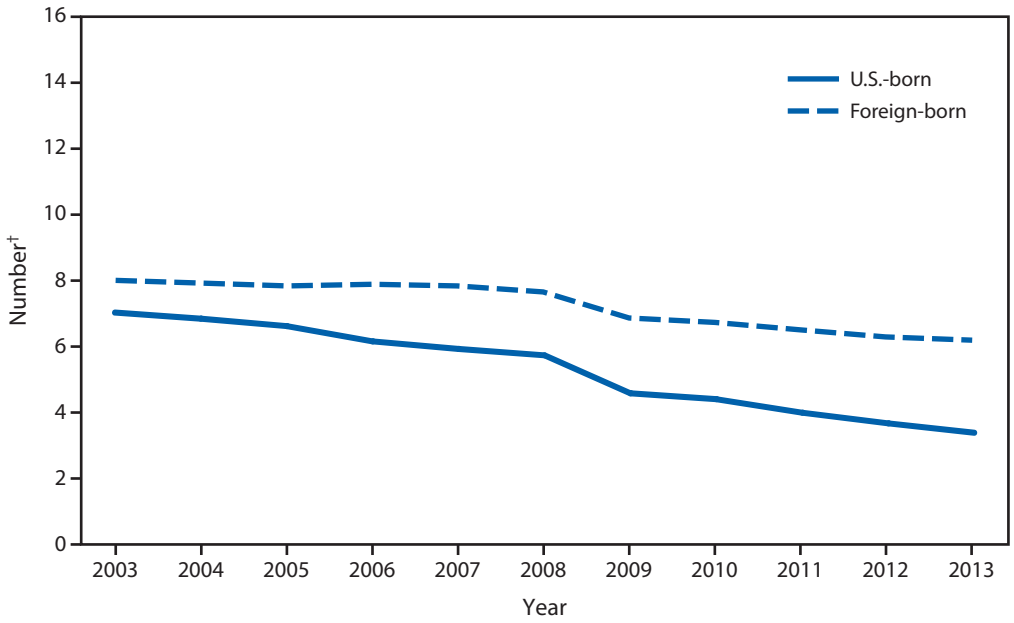
TUBERCULOSIS. Incidence* of reported cases — United States and U.S. territories, 2013



* Per 100,000 population. Data from the Division of Tuberculosis Elimination, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.

In 2013, the tuberculosis incidence rate in the United States declined for the 21st consecutive year. Nine states and the District of Columbia reported an incidence rate above the national average.

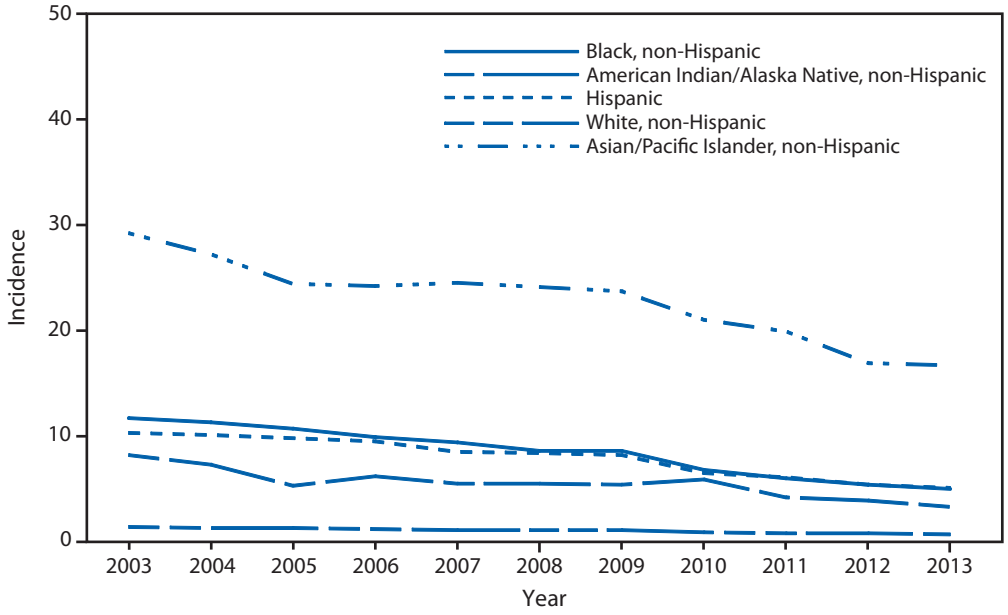
TUBERCULOSIS. Number of reported cases among U.S.-born and foreign-born persons,* by year — United States, 2003–2013



* Cases in U.S.-born tuberculosis (TB) patients continue to decline, continuing a trend begun in 1993.
† Number represented is in thousands. Data from the Division of Tuberculosis Elimination, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.

The number of tuberculosis cases reported among U.S.-born and foreign-born patients has consistently declined since 2003. In 2009, the number of cases declined significantly and has continued to decrease more modestly.

TUBERCULOSIS. Incidence* of reported cases, by race/ethnicity† — United States, 2003–2013

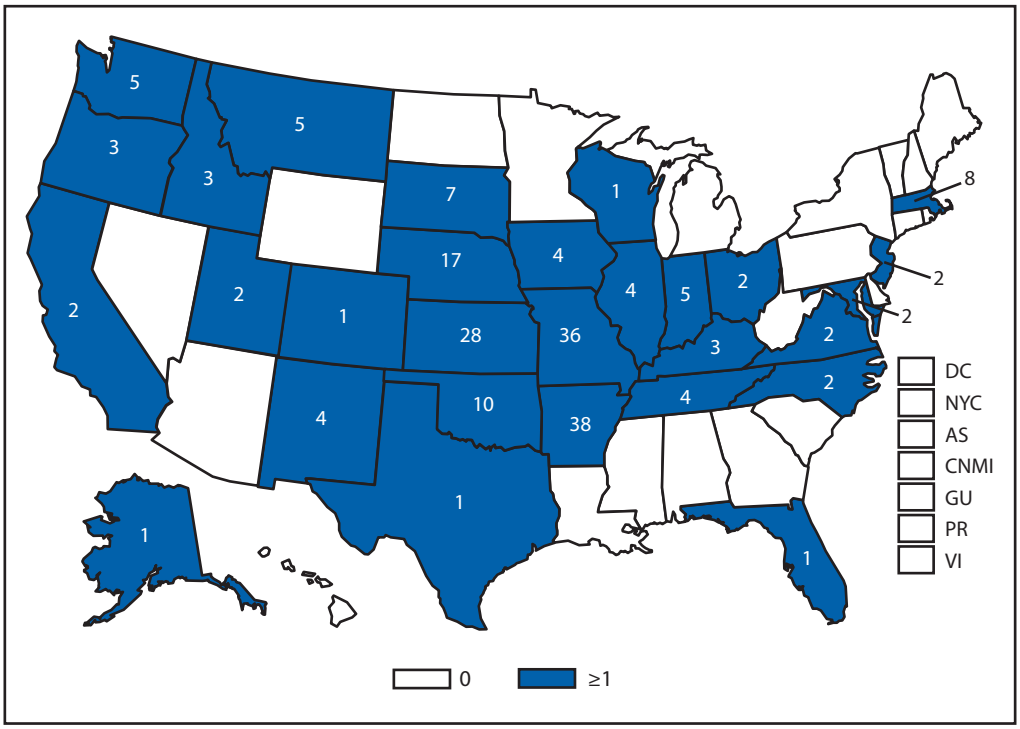


* Per 100,000 population.

† Tuberculosis incidence rates declined for all races/ethnicities in 2013. Data from the Division of Tuberculosis Elimination, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.

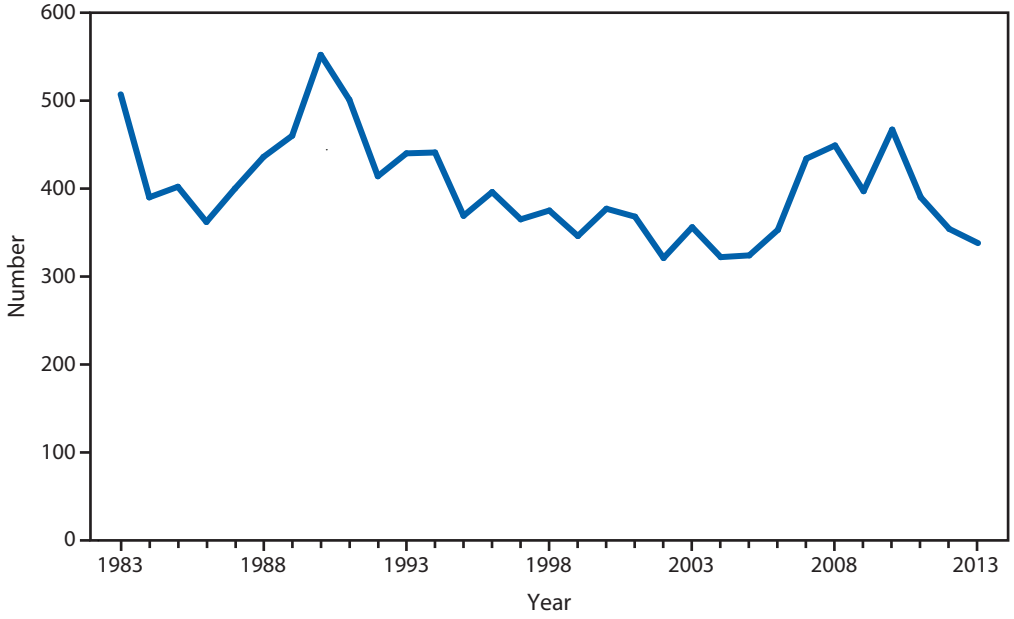
The factor of difference between Asian/Pacific Islanders has widened from 21 times that of non-Hispanic whites in 2003 to 26 times that of non-Hispanic whites by 2013.

TULAREMIA. Number of reported cases by year — United States and U.S. territories, 2013



In 2013, tularemia cases were reported from 29 states. Although the disease occurs across a broad geographic area, over half (64%) of all cases were reported from the south central states of Arkansas, Kansas, Missouri, Nebraska, and Oklahoma.

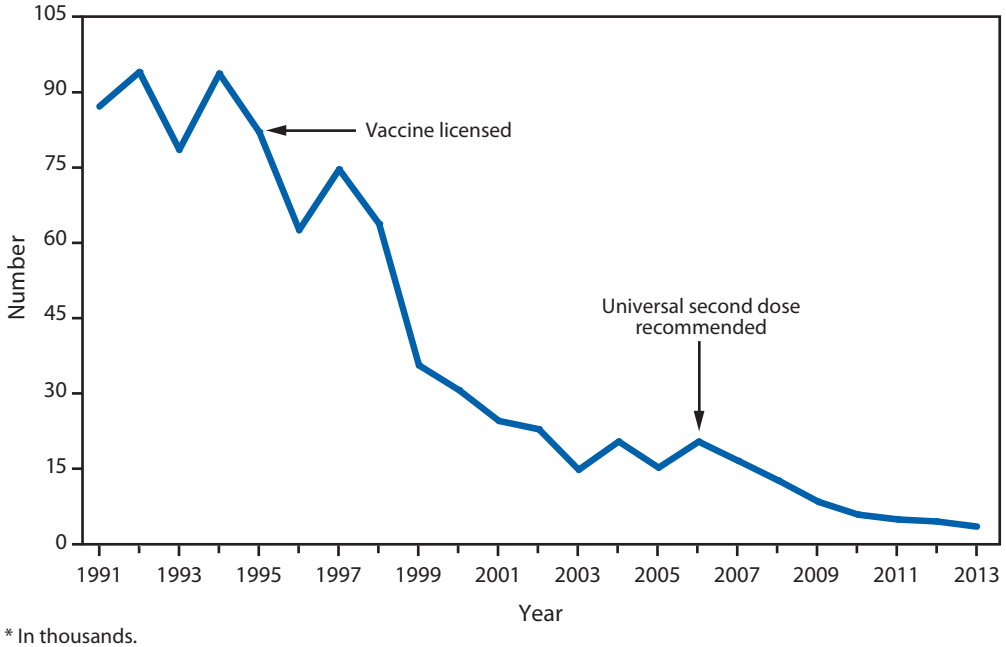
TYPHOID FEVER. Number* of reported cases by year — United States, 1983–2013



* Per 100,000 population.

In the United States, typhoid fever remains primarily a disease of travelers to countries where typhoid fever is endemic, for whom vaccination against typhoid fever is recommended. During the last 30 years, the annual number of typhoid fever cases peaked in 1990 (552 cases) and then declined to a low of 321 cases in 2002. Case counts then returned to levels observed in the early 1990s before declining to 338 in 2013.

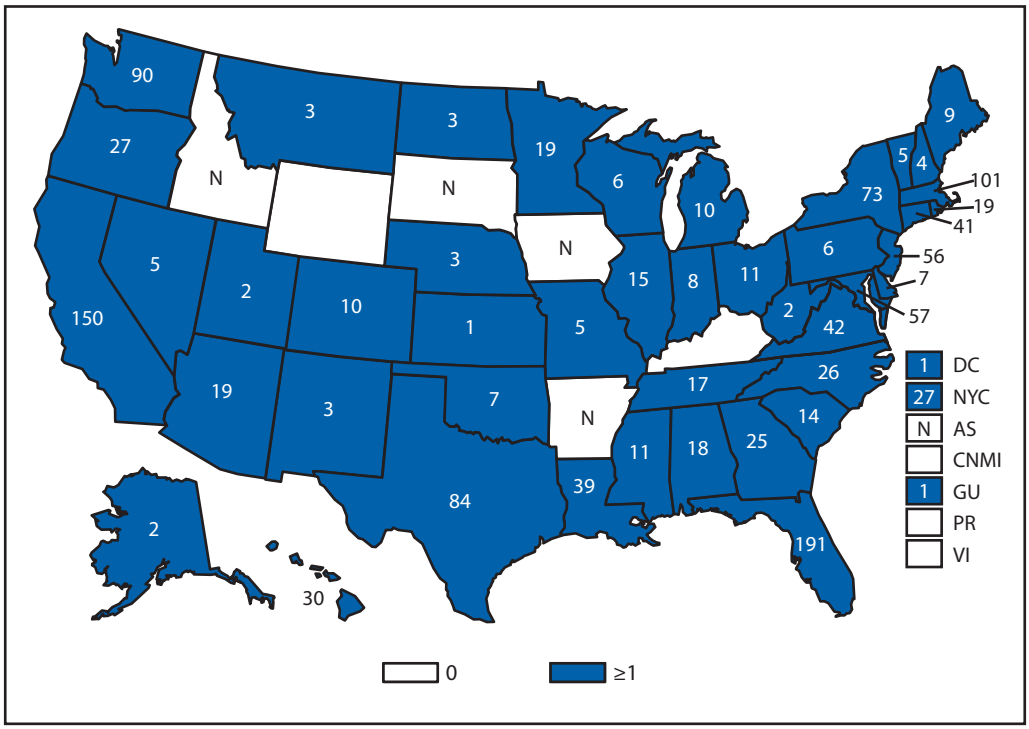
VARICELLA (CHICKENPOX). Number* of reported cases — Illinois, Michigan, Texas, and West Virginia, 1991–2013



* In thousands.

In four states (Michigan, Illinois, Texas, and West Virginia), the number of cases reported in 2013 was 23% lower than 2012, 74% lower than the average annual number reported during the mature 1-dose varicella vaccination era of 2000–2006, and 96% lower than the average annual number reported during the prevaccine years of 1993–1995.

VIBRIOSIS. Number of reported cases — United States and U.S. territories, 2013



In 2013, the number of *Vibrio parahaemolyticus* infections of a particular strain increased markedly, and illness was associated with consumption of shellfish harvested from Connecticut, Massachusetts, New York, and Virginia coastal waters. Before 2012, infections with this strain had only been associated with shellfish from the Pacific Northwest.

PART 3

Historical Summaries of Notifiable Diseases in the United States, 2003–2013

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, 2011 might differ from data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, the use of different case definitions, and print criteria.

TABLE 7. Reported incidence* of notifiable diseases — United States, 2003–2013

Disease	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
AIDS	15.36	15.28	14	12.9	12.5	13	†	†	†	†	†
Anthrax	—	—	—	0	0	0	0	0	0	0	0
Arboviral diseases§											
California serogroup virus disease											
neuroinvasive	—	—	0.02	0.02	0.02	0.02	0.02	0.02	0.04	0.02	0.03
nonneuroinvasive	¶	¶	0	0	0	0	0	0	0.01	0	0.01
Eastern equine encephalitis virus disease											
neuroinvasive	—	—	0	0	0	0	0	0	0	0	0
nonneuroinvasive	¶	¶	0	0	0	0	0	—	—	—	—
Powassan virus disease											
neuroinvasive	—	—	0	0	0	0	0	0	0	0	0
nonneuroinvasive	¶	¶	0	0	0	0	—	—	0	0	0
St. Louis encephalitis virus disease											
neuroinvasive	—	—	0	0	0	0	0	0	0	0	0
nonneuroinvasive	¶	¶	0	0	0	0	0	0	0	0	0
West Nile virus disease											
neuroinvasive	—	—	0.45	0.5	0.41	0.23	0.13	0.2	0.16	0.92	0.4
nonneuroinvasive	¶	¶	0.58	0.94	0.8	0.22	0.11	0.13	0.07	0.9	0.38
Western equine encephalitis virus disease											
neuroinvasive	—	—	—	—	—	—	—	—	—	—	—
nonneuroinvasive	¶	¶	—	—	—	—	—	—	—	—	—
Babesiosis, total**											
confirmed	¶	¶	¶	¶	¶	¶	¶	¶	0.39	0.22	0.77
probable	¶	¶	¶	¶	¶	¶	¶	¶	0.12	0.06	0.16
Botulism, total	0.01	0.02	0.01	0.02	0.05	0.05	0.04	0.04	0.01	0.05	0.05
foodborne	0.01	0.01	0.01	0.01	0.01	0.01	0	0	0.01	0.01	0
infant	1.87	2.12	2.09	2.35	2.05	2.56	1.92	1.88	2.34	3.1	3.45
other (wound and unspecified)	—	—	—	—	—	—	—	—	—	0.01	0
Brucellosis	0.04	0.04	0.04	0.04	0.04	0.03	0.04	0.04	0.03	0.04	0.03
Chancroid††	0.02	0	0.01	0.01	0.01	0.01	0.01	0.01	0	0	0
Chlamydia trachomatis infections††	304.7	319.6	332.5	348	370	401.3	409.2	426	457.1	456.7	446.7
Cholera	0	0	0	0	0	0	0	0	0.01	0.01	0
Coccidioidomycosis	2.57	4.14	6.24	6.79	14.4	7.76	13.24	§	16.49	12.97	7.82
Cryptosporidiosis, total**	1.22	1.23	1.93	2.05	3.73	3.02	2.52	2.91	3	2.56	2.89
confirmed	¶	¶	¶	¶	¶	¶	2.43	2.73	1.98	1.68	1.82
probable	¶	¶	¶	¶	¶	¶	0.09	0.19	1.01	0.87	1.06
Cyclosporiasis	0.03	0.14	0.24	0.06	0.04	0.05	0.05	0.07	0.05	0.04	0.28
Dengue Virus Infection§											
Dengue Fever	¶	¶	¶	¶	¶	¶	¶	0.22	0.08	0.17	0.27
Dengue Hemorrhagic Fever	¶	¶	¶	¶	¶	¶	¶	0	0	0	0
Diphtheria	0	—	—	—	—	—	—	—	—	—	—
Ehrlichiosis											
human granulocytic (HGE)	0.13	0.2	0.28	0.23	0.31	¶	¶	¶	¶	¶	¶
human monocytic (HME)	0.11	0.12	0.18	0.2	0.3	¶	¶	¶	¶	¶	¶
human (other & unspecified)§§	—	—	0.04	0.08	0.12	¶	¶	¶	¶	¶	¶
Ehrlichiosis/Anaplasmosis											
Ehrlichia chaffeensis	¶	¶	¶	¶	¶	0.35	0.34	0.26	0.29	0.38	0.51
Ehrlichia ewingii	¶	¶	¶	¶	¶	0	0	0	0	0.01	0.01
Anaplasma phagocytophilum	¶	¶	¶	¶	¶	0.43	0.42	0.61	0.88	0.81	0.93
Undetermined	¶	¶	¶	¶	¶	0.06	0.06	0.04	0.05	0.06	0.07
Encephalitis/meningitis, arboviral¶¶											
California serogroup virus	0.06	0	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶
Eastern equine virus	0	0	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶
Powassan virus	0	0	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶
St. Louis virus	0.01	0	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶
West Nile virus	1	0.43	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶
Western equine virus	0	—	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶
Enterohemorrhagic *Escherichia coli*											
O157:H7	0.93	0.87	0.89	¶	¶	¶	¶¶	¶¶	¶¶	¶¶	¶¶
non-O157	0.09	0.13	0.19	¶	¶	¶	¶¶	¶¶	¶¶	¶¶	¶¶
not serogrouped	0.05	0.13	0.16	¶	¶	¶	¶¶	¶¶	¶¶	¶¶	¶¶
Giardiasis	6.84	8.35	7.82	7.28	7.66	7.41	7.37	7.64	6.42	5.87	5.8

See table footnotes page 108.

TABLE 7. (*Continued*) Reported incidence* of notifiable diseases — United States, 2003–2013

Disease	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Gonorrhea††	116.4	113.5	115.6	121	119	111.6	99.05	100.8	104.1	107.5	106.1
Haemophilus influenzae, invasive disease											
all ages, serotypes	0.7	0.72	0.78	0.82	0.85	0.96	0.99	1.03	1.15	1.1	1.21
age <5 yrs											
serotype b	0.16	0.03	0.04	0.14	0.11	0.14	0.18	0.11	0.06	0.15	0.16
nonserotype b	0.59	0.04	0.67	0.86	0.97	1.18	1.17	0.94	0.57	1.02	1.11
unknown serotype	1.15	0.97	1.08	0.88	0.88	0.79	0.79	1.05	0.89	1.04	0.93
Hansen disease (Leprosy)	0.03	0.04	0.03	0.03	0.04	0.03	0.04	0.04	0.03	0.03	0.03
Hantavirus pulmonary syndrome	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Hemolytic uremic syndrome postdiarrheal	0.06	0.07	0.08	0.11	0.1	0.12	0.09	0.09	0.1	0.09	0.11
Hepatitis, viral, acute***											
A	2.66	1.95	1.53	1.21	1	0.86	0.65	0.54	0.45	0.5	0.57
B	2.61	2.14	1.78	1.62	1.51	1.34	1.12	1.1	0.94	0.93	0.97
C	0.38	0.31	0.23	0.26	0.28	0.29	0.27	0.29	0.42	0.59	0.71
Hepatitis B perinatal infection	—	—	—	—	—	—	—	—	—	0.01	0.02
Human immunodeficiency virus (HIV) diagnoses†	—	—	—	—	—	—	12.13	11.64	11.32	11.26	11.06
Influenza-associated pediatric mortality†††	¶	¶	0.02	0.07	0.1	0.12	0.48	0.08	0.17	0.07	0.22
Invasive pneumococcal disease, all ages§§§	—	—	—	—	—	—	—	—	—	7.72	8.3
age<5 years	—	—	—	—	—	—	—	—	—	8.35	7.8
Legionellosis	0.78	0.71	0.78	0.96	0.91	1.05	1.16	1.09	1.36	1.19	1.58
Listeriosis	0.24	0.32	0.31	0.3	0.27	0.25	0.28	0.27	0.28	0.23	0.23
Lyme disease, total¶¶¶	7.39	6.84	7.94	6.75	9.21	11.67	12.71	9.86	10.78	9.96	11.62
confirmed	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	9.59	9.85	7.38	7.92	7.1	8.71
probable	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	2.08	2.8	2.49	2.84	2.84	2.91
Malaria	0.49	0.51	0.51	0.5	0.47	0.42	0.48	0.58	0.56	0.48	0.51
Measles	0.02	0.01	0.02	0.02	0.01	0.05	0.02	0.02	0.06	0.02	0.06
indigenous	—	—	—	—	—	—	—	—	—	0.01	0.04
imported	—	—	—	—	—	—	—	—	—	0.01	0.02
Meningococcal disease, invasive****											
all serogroups	0.61	0.47	0.42	0.4	0.36	0.39	0.32	0.27	0.25	0.18	0.18
serogroup AWYC	****	****	0.1	0.11	0.11	0.11	0.1	0.09	0.08	0.05	0.05
serogroup B	****	****	0.05	0.07	0.06	0.06	0.06	0.04	0.05	0.04	0.03
other serogroup	****	****	0.01	0.01	0.01	0.01	0.01	0	0.01	0.01	0.01
serogroup unknown	****	****	0.26	0.22	0.18	0.2	0.16	0.13	0.1	0.08	0.09
Mumps	0.08	0.09	0.11	2.22	0.27	0.15	0.65	0.85	0.13	0.07	0.19
Novel influenza A virus infections	¶	¶	¶	¶	0	0	14.37	0	0	0.1	0.1
Pertussis	4.04	8.88	8.72	5.27	3.49	4.4	5.54	8.97	6.06	15.49	9.12
Plague	0	0	0	0.01	0	0	0	0	0	0	0
Poliomyelitis, paralytic	0	0	0	0	—	—	0	—	—	—	—
Poliovirus infection, nonparalytic	¶	¶	¶	¶	—	—	—	—	—	—	—
Psittacosis	0	0	0.01	0.01	0	0	0	0	0	0	0
Q Fever††††	0.02	0.03	0.05	0.06	0.06	0.04	0.04	0.04	0.04	0.04	0.05
acute	††††	††††	††††	††††	††††	0.04	0.03	0.04	0.04	0.04	0.04
chronic	††††	††††	††††	††††	††††	0	0.01	0.01	0.01	0.01	0.01
Rabies											
animal	0	0	0	0	0	0	0	0	0	1.48	1.41
human	0	0	0	0	0	0	0	0	0	0	0
Rubella	0	0	0	0	0	0.01	0	0	0	0	0
Rubella, congenital syndrome	0	0	0	0	0	—	—	0	—	0	0
Salmonellosis	15.16	14.47	15.43	15.5	16	16.92	16.18	17.73	16.79	17.27	16.13
SARS-CoV§§§§	0	—	—	—	—	—	—	—	—	—	—
Shiga toxin-producing *Escherichia coli* (STEC)	¶	¶	¶	1.71	1.62	1.76	1.53	1.78	1.96	2.08	2.13
Shigellosis	8.19	4.99	5.51	5.23	6.6	7.5	5.24	4.82	4.32	4.9	4.06
Spotted Fever Rickettsiosis, total¶¶¶¶	0.38	0.6	0.66	0.8	0.77	0.85	0.6	0.65	0.91	1.44	1.08
confirmed	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	0.06	0.05	0.05	0.08	0.06	0.06
probable	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	0.78	0.55	0.59	0.83	1.38	1.02
Smallpox	¶	—	—	—	—	—	—	—	—	—	—
Streptococcal disease, invasive, group A	2.04	1.82	2	2.24	1.89	2.3	2.13	¶	¶	¶	¶
Streptococcal, toxic shock syndrome	0.06	0.06	0.07	0.06	0.06	0.07	0.08	0.07	0.09	0.1	0.11
Streptococcus pneumoniae invasive disease (IPD)*****											
all ages	*****	*****	*****	*****	*****	*****	*****	8.83	8.52	—	—
age <5 yrs	*****	*****	*****	*****	*****	*****	*****	14.15	7.64	—	—

See table footnotes page 108.

TABLE 7. (*Continued*) Reported incidence* of notifiable diseases — United States, 2003–2013

Disease	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Streptococcus pneumoniae invasive disease											
drug resistant, all ages	0.99	1.49	1.42	2.19	1.49	1.6	1.75	*****	*****	*****	*****
age <5 yrs	—	—	—	—	3.73	3.51	4.54	*****	*****	*****	*****
non-drug resistant,age <5 yrs	8.86	8.22	8.21	11.9	13.6	13.36	12.93	*****	*****	*****	*****
Syphilis, total††											
all stages	11.9	11.94	11.33	12.5	13.7	15.34	14.74	14.93	14.9	16.02	17.99
congenital	10.56	9.12	8.24	9.07	10.5	10.12	9.9	8.85	8.68	8.12	8.83
primary and secondary	2.49	2.71	2.97	3.29	3.83	4.48	4.6	4.49	4.52	5.03	5.54
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	0.04	0.04	0.05	0.04	0.03	0.03	0.04	0.03	0.03	0.03
Trichinellosis	0	0	0.01	0.01	0	0.01	0	0	0.01	0.01	0.01
Tuberculosis†††††	5.17	5.09	4.8	4.65	4.44	4.28	3.8	3.64	3.41	3.19	3.05
Tularemia	0.04	0.05	0.05	0.03	0.05	0.04	0.03	0.04	0.05	0.05	0.06
Typhoid fever	0.12	0.11	0.11	0.12	0.14	0.15	0.13	0.15	0.13	0.11	0.11
Vancomycin-intermediate *Staphylococcus aureus*	§	—	0	0	0.02	0.03	0.03	0.04	0.04	0.06	0.1
Vancomycin-resistant *Staphylococcus aureus*	§	0	0	0	0	0	0	0	—	—	—
Varicella (chickenpox morbidity)§§§§§	7.27	18.41	19.64	28.7	18.7	13.56	8.71	6.46	5.79	5.33	4.62
Varicella (chickenpox mortality)	—	—	—	—	—	—	—	—	—	0	0
Vibriosis	§	§	§	§	0.25	0.24	0.3	0.3	0.29	0.39	0.43
Viral hemorrhagic fevers	§	§	§	§	§	§	§	0	0	0	0
Yellow fever¶¶¶¶¶	—	—	—	—	—	—	—	—	—	—	—

* 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. (CDC. Revised surveillance case definitions for HIV infection among adults, adolescents, and children aged <18 months and for HIV infection and AIDS among children aged 18 months to <13 years—United States, 2008. MMWR 2008;57(No.RR-10):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, 2012).

§ Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of **June 1, 2014**.

¶ Not nationally notifiable.

** Revision of National Surveillance Case Definition distinguishing between confirmed and probable cases.

†† Total reported to the Division of STD Prevention, NCHHSTP, as of **June 4, 2014**.

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

¶¶ 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 diseases for the six domestic arboviruses listed above were added to the list of nationally notifiable diseases.

*** Data on hepatitis B chronic, 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, as of **December 28, 2013**.

§§§ The previous categories of invasive pneumococcal disease among children aged <5 years and invasive, drug-resistant *Streptococcus pneumoniae* were eliminated. All cases of invasive *Streptococcus pneumoniae* disease, regardless of age or drug resistance are reported under a single disease code.

¶¶¶ The National surveillance case definition was 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.

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

¶¶¶¶ Revision of the National Surveillance Case Definition distinguishing between confirmed and probable cases; total case count includes four case reports with unknown case status.

***** The previous categories of invasive pneumococcal disease among children aged <5 years and invasive, drug-resistant *Streptococcus pneumoniae* were eliminated.

††††† Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of **July 1, 2014**.

§§§§§ Varicella became nationally notifiable in 2003.

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

TABLE 8. Number of deaths from selected nationally notifiable infectious diseases — United States, 2005–2011*

Cause of death	ICD-10† cause of death code	No. of deaths						
		2005	2006	2007	2008	2009	2010	2011
Anthrax	A22	0	0	0	0	0	0	0
Babesiosis	B60.0	4	5	6	7	6	4	5
Botulism, foodborne	A05.1	5	3	6	4	3	0	0
Brucellosis	A23	2	2	1	0	1	0	1
Cholera (toxigenic *Vibrio cholerae* O1 or O139)	A00	0	0	1	0	1	0	0
Coccidioidomycosis	B38	76	110	99	72	87	92	88
Cryptosporidiosis	A07.2	2	2	2	3	2	4	4
Cyclosporiasis	A07.8	0	0	0	0	0	0	0
Dengue fever	A90	2	0	0	0	1	2	0
Dengue hemorrhagic fever	A91	0	0	0	0	0	1	0
Diphtheria	A36.0, A36.1, A36.2	0	0	0	0	0	0	0
Ehrlichiosis and anaplasmosis (*Anaplasma phagocytophilum*, *Ehrlichia cheffeensis*, *Ehrlichia ewingii*, Ehrlichiosis and Anaplasmosis, Undetermined human ehrlichiosis/anaplasmosis)	A79	0	3	1	1	0	1	1
Giardiasis	A07.1	0	1	0	1	0	1	1
Haemophilus influenzae infection	A41.3, J14, G00.0	4	4	10	3	7	4	65
Hansen disease (leprosy)	A30	1	1	2	2	1	4	1
Hantavirus pulmonary syndrome	B33.4+	0	8	6	2	0	5	8
Hemolytic uremic syndrome, postdiarrheal	D59.3	30	29	20	32	25	20	25
Hepatitis A, viral, acute	B15	43	34	34	37	26	29	25
Human Immunodeficiency Virus (HIV) diagnosis	B20-B24	12,543	12,133	11,295	10,285	9,406	8,369	7,683
Influenza-associated pediatric mortality	J09, J10, J11	61	62	71	78	165	38	85
Legionellosis	A48.1, A48.2	78	91	67	92	104	104	111
Listeriosis	A32, P37.2	31	30	34	28	29	27	52
Lyme disease	A69.2, L90.4	7	5	8	10	12	10	6
Malaria	B50-B54	6	9	5	5	3	10	3
Measles	B05	1	0	0	0	2	2	0
Meningococcal disease	A39.0+	123	105	87	102	99	79	26
Mumps	B26	0	1	0	2	2	1	0
Pertussis	A37.0	31	9	9	20	15	26	1
Plague	A20	1	3	2	0	1	0	0
Poliomyelitis, acute	A80	0	0	0	0	0	0	0
Psittacosis	A70	0	0	0	0	0	0	0
Q fever	A78, J17.8, I39.8	2	2	4	0	1	0	2
Rabies, human	A82	1	2	1	2	4	1	4
Rubella	B06	0	0	1	0	1	1	1
Rubella congenital syndrome	P35.0	8	2	4	5	4	8	5
Salmonellosis	A02	30	34	30	42	26	28	44
Severe acute respiratory syndrome-associated coronavirus (SARS-CoV)	U04	0	0	0	0	0	0	0
Shiga toxin-producing *Escherichia coli* (STEC)	A04.3	5	3	3	1	3	8	0
Shigellosis	A03	9	3	4	3	4	2	3
Smallpox	B03	0	0	0	0	0	0	0
Spotted fever rickettsiosis (replaced Rocky Mountain spotted fever)	A77	6	4	4	4	8	8	10
Streptococcus pneumoniae, invasive disease (IPD) (all ages)	A40.3, G00.1, J13	670	574	568	534	570	468	454
Tetanus	A35, A33, A34	1	4	5	3	6	3	6
Toxic-shock syndrome	A48.3	55	57	18	20	21	24	23
Trichinellosis	B75	0	1	0	0	0	0	0
Tuberculosis	A15-A19	648	652	554	585	529	569	539
Tularemia	A21	0	0	2	1	3	0	0
Typhoid fever	A01.0	0	0	0	2	0	0	0
Varicella	B01	13	18	14	18	22	16	14
Vibriosis	A05.3, B98.1	1	2	0	1	0	0	0

Source: CDC. CDC WONDER Compressed Mortality files (http://wonder.cdc.gov/mortSQL.html) provided by the National Center for Health Statistics. National Vital Statistics System, 2003–2009. Underlying causes of death are classified according to ICD 10. Data for 2010–2012 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.

* List of nationally notifiable conditions in 2011.

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

Selected Reading for 2013

General

Adams DA, Jajosky RA, Ajani U, et al. Summary of notifiable diseases—United States, 2012. MMWR Morb Mort Wkly Rep 2014;61:1–121.

Adekoya N, Truman BI, Ajani UA. Completeness of Reporting of Race and Ethnicity Data in the Nationally Notifiable Diseases Surveillance System, United States, 2006–2010. J Public Health Manag Pract 2014.

Armstrong KE, McNabb S, Ferland LD, et al. Capacity of public health surveillance to comply with revised international health regulations, USA. Emerg Infect Dis 2010;5:804–8.

Beltran VM, Harrison KM, Hall HI, Dean HD. Collection of social determinant of health measures in US natonal surveillance systems for HIV, viral hepatitis, STDs, and TB. Public Health Rep 2011;126 Suppl 3:41–53.

Blau DM, Clark SC, Nolte KB, et al. Infectious disease surveillance by medical examiners and coroners. Emerging Infect Dis 2013;19:821–2.

Boehmer TK, Patnaik JL, Burnite SJ, et al. Use of hospital discharge data to evaluate notifiable disease reporting to Colorado's Electronic Disease Reporting System. Public Health Rep 2011;126:100–6.

Buehler JW, Hopkins RS, Overhage JM, et al. Framework for evaluating public health surveillance systems for early detection of outbreaks: recommendations from the CDC Working Group. MMWR Recomm Rep 2004;53(No. RR-5).

CDC. Automated detection and reporting of notifiable diseases using electronic medical records versus passive surveillance—Massachusetts, June 2006–July 2007. MMWR Morb Mort Wkly Rep 2008;57:373–6.

CDC. CDC's vision for public health surveillance in the 21st century. MMWR Surveillance Summaries 2012;61(Suppl; July 27, 2012).

CDC. Comparison of provisional with final notifiable disease case counts—National Notifiable Diseases Surveillance System, 2009. MMWR Morb Mort Wkly Rep 2013;62;747–51.

CDC. Framework for program evaluation in public health. MMWR Recomm Rep 1999;48(No. RR-11).

CDC. Historical perspectives: notifiable disease surveillance and notifiable disease statistics United States, June 1946 and June 1996. MMWR Morb Mort Wkly Rep 1996;45:530–6.

CDC. Manual for the surveillance of vaccine-preventable diseases 5th Edition. Atlanta, GA: US Department of Health and Human Services; CDC, 2012. Available at http://www.cdc.gov/vaccines/pubs/surv-manual/index.html.

CDC. NCHHSTP Atlas. US Department of Health and Human Services; CDC. Available at http://www.cdc.gov/nchhstp/atlas.

CDC. National Electronic Disease Surveillance System (NEDSS): a standards-based approach to connect public health and clinical medicine. J Public Health Manag Pract 2001;7:43–50.

CDC. Notice to Readers: Changes in presentation of data from the National Notifiable Diseases Surveillance System—January 13, 2006. MMWR Morb Mort Wkly Rep 2006;55:13–14.

CDC. Potential effects of electronic laboratory reporting on improving timeliness of infectious disease notification—Florida, 2002–2006. MMWR Morb Mort Wkly Rep 2008;57:1325–8.

CDC. Progress in increasing electronic reporting of laboratory results to public health agencies—United States, 2013. MMWR Morb Mort Wkly Rep 2013;62:797–999.

CDC. Public Health Information Network: Connecting public health. Atlanta, GA: US Department of Health and Human Services; CDC. Available at http://www.cdc.gov/phin/about/index.html.

CDC. Reporting race and ethnicity data—National Electronic Telecommunications System for Surveillance, 1994–1997. MMWR Morb Mort Wkly Rep 1999;48:305–12.

CDC. State Electronic Disease Surveillance Systems—United States, 2007 and 2010. MMWR Morb Mort Wkly Rep 2011;60:1421–23.

CDC. Ten leading nationally notifiable infectious diseases—United States, 1995. MMWR Morb Mort Wkly Rep 1996;45:883–4.

CDC. Updated guidelines for evaluating public health surveillance systems: recommendations from the Guidelines Working Group. MMWR Recomm Rep 2001;50(No. RR-13).

CDC. Use of race and ethnicity in public health surveillance: summary of the CDC/ATSDR workshop. MMWR Recomm Rep 1993;42(No. RR-10).

Chang MH, Glynn MK, Groseclose SL. Endemic, notifiable bioterrorism-related diseases, United States, 1992–1999. Emerg Infect Dis 2003;9:556–64.

Cronquist AB, Mody RK, Atkinson R, et al. Impacts of culture-independent diagnostic practices on public health surveillance for bacterial enteric pathogens. Clin Infect Dis 2012;54 (Suppl 5):S432–9.

Dato V, Wagner MM, Fapohunda A. How outbreaks of infectious disease are detected: a review of surveillance systems and outbreaks. Public Health Rep 2004 Sep–Oct;119:464–71.

Dixon BE, Siegel JA, Oemig TV, Grannis SJ. Electronic health information quality challenges and interventions to improve public health surveillance data and practice. Public Health Rep 2013;128:546–53.

Edelstein M, Heymann DL, Giesecke J, Weinberg J. Validity of International Health Regulations in reporting emerging infectious diseases. Emerg Infect Dis 2012;18:1115–20.

Effler P, Ching-Lee M, Bogard A, et al. Statewide system of electronic notifiable disease reporting from clinical laboratories: comparing automated reporting with conventional methods. JAMA 1999;282:1845–50.

Fairchild A, Bayer R, Colgrove J. Privacy and public health surveillance: the enduring tension. Virtual Mentor 2007;9:838–41.

Frieden TR. A framework for public health action: the health impact pyramid. Am J Public Health 2010;100:590–95.

Friedlin J, Grannis S, Overhage JM. Using natural language processing to improve accuracy of automated notifiable disease reporting. AMIA Symposium Proceedings 2008:207–11.

German R. Sensitivity and predictive value positive measurements for public health surveillance systems. Epidemiology 2000;11:720–7.

Government Accountability Office. Emerging infectious diseases: review of state and federal disease surveillance efforts. Washington, DC: Government Accountability Office; 2004. GAO-04-877. Available at http://www.gao.gov/new.items/d04877.pdf.

Gubernot DM, Boyer BL, Moses MS. Animals as early detectors of bioevents: veterinary tools and a framework for animal-human integrated zoonotic disease surveillance. Public Health Rep 2008;123:300–15.

Hagmann SH, Han PV, Stauffer WM, et al. Travel-associated disease among US residents visiting US GeoSentinel clinics after return from international travel. Fam Pract 2014;31:678–87.

Heymann DL, ed. Control of communicable diseases manual. 20th ed. Washington, DC: American Public Health Association; 2014.

Hopkins RS. Design and operation of state and local infectious disease surveillance systems. J Public Health Manag Pract 2005;11:184–90.

Jajosky RA, Groseclose SL. Evaluation of reporting timeliness of public health surveillance systems for infectious diseases. BMC Public Health 2004;4:29.

Jajosky R, Rey A, Park M, et al. Findings from the Council of State and Territorial Epidemiologists' 2008 assessment of state reportable and nationally notifiable conditions in the United States and considerations for the future. Public Health Manag Pract 2011;17:255–64.

Kleinman KP, Abrams AM. Assessing the utility of public health surveillance using specificity, sensitivity, and lives saved. Stat Med 2008;27:4057–68.

Krause G, Brodhun B, Altmann D, Claus H, Benzler J. Reliability of case definitions for public health surveillance assessed by round-robin test methodology. BMC Public Health 2006;6:129.

Lazarus R, Klompas M, Campion F, et al. Electronic support for public health: validated case finding and reporting for notifiable diseases using electronic medical data. J Am Med Inform Assn 2009;16:18–24.
Lee LM, Teutsch SM, Thacker SB, St Louis ME, eds. Principles and practice of public health surveillance. 3rd ed. New York, NY: Oxford University Press; 2010:1–17.
Lee LM, Thacker SB. The cornerstone of public health practice: public health surveillance, 1961–2011. MMWR Surveill Summ 2011;60 Suppl 4:15–21.
M'ikanatha NM, Iskander J. Concepts and methods in infectious disease surveillance. Malden, MA: Wiley; 2014.
M'ikanatha NM, Lynfield R, Van Beneden CA, de Valk H. Infectious disease surveillance, 2nd edition. Malden, MA: Wiley; 2013.
Nguyen TQ, Thorpe L, Makki HA, Mostashari F. Benefits and barriers to electronic laboratory results reporting for notifiable diseases: the New York City Department of Health and Mental Hygiene experience. Am J Public Health 2007;97 Suppl 1:S142–5.
Office of the National Coordinator for Health Information Technology (ONC). Federal health information technology strategic plan 2011–2015. Washington, DC: US Department of Health and Human Services; ONC. Available at http://www.healthit.gov/sites/default/files/utility/final-federal-health-it-strategic-plan-0911.pdf.
Overhage JM, Grannis S, McDonald CJ. A comparison of the completeness and timeliness of automated electronic laboratory reporting and spontaneous reporting of notifiable conditions. Am J Public Health 2008;98:344–50.
Pickering LK, editor. Red Book: 2012 Report of the Committee on Infectious Diseases. 29th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2012.
Roush S, Murphy T, et al. Historical comparisons of morbidity and mortality for vaccine-preventable diseases in the United States. JAMA 2007;298:2155–63.
Scallan E, Hoekstra RM, Angulo FJ, et al. Foodborne illness acquired in the United States—major pathogens. Emerg Infect Dis 2011;17:7–15.
Sickbert-Bennett EE, Weber DJ, Poole C, et al. Completeness of communicable disease reporting, North Carolina, USA, 1995–1997 and 2000–2006. Emerg Infect Dis 2011;17:23–9.
Silk BJ, Berkelman RL. A review of strategies for enhancing the completeness of notifiable disease reporting. J Public Health Manag Pract 2005;11:191–200.
Struelens MJ, Brisse S. From molecular to genomic epidemiology: transforming surveillance and control of infectious diseases. Euro surveillance: European Communicable Disease Bulletin 2013;18:20386.
Vogt RL, Spittle R, Cronquist A, Patnaik JL. Evaluation of the timeliness and completeness of a web-based notifiable disease reporting system by a local health department. J Public Health Manag Pract 2006;12:540–4.

Anthrax

Bradley JS, Peacock G, Krug SE, Bower WA, Cohn AC, Meaney-Delman D, et al. Pediatric anthrax clinical management. Pediatrics 2014;133:e1411–36.
Hendricks KA, Wright ME, Shadomy SV, et al. Centers for Disease Control and Prevention (CDC) expert panel meetings on prevention and treatment of anthrax in adults. Emerg Infect Dis 2014:20:130687.
Meaney-Delman D, Zotti ME, Creanga AA, Misegades LK, Wako E, Treadwell TA, et al. Special considerations for prophylaxis for and treatment of anthrax in pregnant and postpartum women. Emerg Infect Dis 2014;20:e130611.

Domestic Arboviral, Neuroinvasive and Nonneuroinvasive

Blau DM, Rabe IB, Bhatnagar J, Civen R, Trivedi KK, Rollin D, Hocevar S, Kuehnert M, Staples JE, Zaki SR, Fischer M, and the West Nile Virus Transplant-Associated Transmission Investigation Team. West Nile virus RNA detected in tissues of a deceased donor associated with transmission of the virus through solid organ transplantation. Emerg Infect Dis 2013;19:1518–20.
Gaensbauer J, Lindsey NP, Messacar K, Staples JE, Fischer M. Neuroinvasive arboviral disease in the United States: 2003 to 2012. Pediatrics 2014;134:e642–e650.
Geissler AL, Thorp E, Van Houten C, Lanciotti RS, Panella N, Gunnels B, Murphy T, Staples JE. Colorado tick fever virus among humans and ticks in a national parks and forest—Wyoming 2010. Vector Borne Zoonotic Dis 2014;14:675–80.
Lindsey NP, Lehman JA, Staples JE, Fischer M. West Nile virus and other arboviral diseases—United States, 2013. MMWR Morb Mort Wkly Rep 2014;63:521–526.
Lindsey NP, Staples JE, Delorey MJ, and Fischer M. Lack of evidence of increased West Nile virus disease severity in the United States in 2012. Am J Trop Med Hyg 2014;90(1):163–168.
Lindsey NP, Staples JE, Lehman JA, Fischer M. Surveillance for West Nile Virus Disease—United States, 1999–2008. MMWR Surveill Summ 2010;59(No. SS-2).
Rabe IB, Schwartz B, Farnon E, et al. Fatal transplant-associated West Nile virus encephalitis and public health response—California, 2010. Transplantation 2013;96:463–8.
Reimann CA, Hayes EB, DiGuiseppi C, et al. Epidemiology of Neuroinvasive Arboviral Disease in the United States, 1999–2007. Am J Trop Med Hyg 2008;79:974–9.
Ruktanonchai DJ, Pillai S, Stonecipher S, et al. Effect of aerial insecticide spraying on West Nile virus disease—North Texas, 2012. Am J Trop Med Hyg 2014;91:240–5.
Staples JE, Shankar M, Sejvar JJ, Meltzer M, Fischer M. Acute and long-term costs of West Nile virus disease among patients hospitalized in Colorado. Amer J Trop Med Hyg 2014;90:402–9.
Yendell SJ, Taylor J, Biggerstaff BJ, Tabony L, Staples JE, Fischer M. Use of laboratory reports as predictors of West Nile Virus disease cases—Texas, 2008–2012. Epidemiol Infect 2014;24:1–8.

Babesiosis

CDC. Babesiosis surveillance—18 states, 2011. MMWR Morb Mort Wkly Rep 2012;61:505–9.
Herwaldt BL, Linden JV, Bosserman E, Young C, Olkowska D, Wilson M. Transfusion-associatedbabesiosis in the United States: a description of cases. Ann Intern Med 2011;155:509–19.
Joseph JT, Purtill K, Wong SJ, et al. Vertical transmission of *Babesia microti*, United States. Emerg Infect Dis 2012;18:1318–21.
Perez Acosta ME, Ender PT, Smith EM, Jahre JA. *Babesia microti* infection, eastern Pennsylvania, USA. Emerg Infect Dis 2013;19:1105–7.
Vannier E, Krause PJ. Human babesiosis. N Engl J Med 2012;366:2397–407.

Brucellosis

Ashford DA, di Pietra J, Lingappa J, et al. Adverse events in humans associated with accidental exposure to the livestock brucellosis vaccine RB51. Vaccine 2004;22:3435–9.
CDC. Brucellosis (Brucella melitensis, abortus, suis, and canis). Atlanta, GA: US Department of Health and Human Services; 2012.

CDC. Brucellosis. Atlanta, GA: US Department of Health and Human Services, CDC; 2010. Available at http://www.cdc.gov/nczved/divisions/dfbmd/diseases/brucellosis.
CDC. Brucellosis case definition. Atlanta, GA: US Department of Health and Human Services, CDC; 2010. Available at http://wwwn.cdc.gov/nndss/conditions/brucellosis/case-definition/2010.
CDC. Brucella suis infection associated with feral swine hunting—three states, 2007–2008. MMWR Morb Mort Wkly Rep 2009;58:618–21.
CDC. Public health consequences of a false-positive laboratory test result for Brucella—Florida, Georgia, and Michigan, 2005. MMWR Morb Mort Wkly Rep 2008;57:603–5.
CDC. Laboratory-acquired brucellosis—Indiana and Minnesota, 2006. MMWR Morb Mort Wkly Rep 2008;57:39–42.
Chomel BB, DeBess EE, Mangiamele DM, et al. Changing trends in the epidemiology of human brucellosis in California from 1973 to 1992: a shift toward foodborne transmission. J Infect Dis 1994;170:1216–23.
Glynn MK, Lynn TV. Brucellosis. J Am Vet Med Assoc 2008;233:900–8.
Traxler RM, Lehman MW, Bosserman EA, Guerra MA, Smith TL. A literature review of laboratory-acquired brucellosis. J Clin Microbiol 2013;51:3055–62.
Yagupsky P, Baron EJ. Laboratory exposures to Brucellae and implications for bioterrorism. Emerg Infect Dis 2005;11:1180–5.

Botulism

Arnon SS, Barzilay EJ. Clostridial infections: botulism and infant botulism. In: Pickering LK, Baker CJ, Kimberlin DW, Long SS, eds. The Red Book: 2009 report of the Committee on Infectious Diseases. Elk Grove Village: American Academy of Pediatrics;2009:259–62.
Barzilay, EJ. Botulism and Intestinal Botulism. In: DL Heymann, ed. Control of communicable diseases manual, Washington, DC: American Public Health Association Press; 2008.
CDC. Infant botulism—New York City, 2001–2002. MMWR Morb Mort Wkly Rep 2003;52:21–4.
Fagan RP, McLaughlin JB, Castrodale LJ, et al. Endemic foodborne botulism among Alaska Native persons—Alaska, 1947–2007. Clin Infect Dis 2011;52:585–92.
Newkirk RW, Hedberg CW. Rapid detection of foodborne botulism outbreaks facilitated by epidemiological linking of cases: implications for food defense and public health response. Foodborne Pathog Dis 2012;9:150–5.
Shapiro RL, Hatheway C, Becher J, Swerdlow DL. Botulism surveillance and emergency response: a public health strategy for a global challenge. JAMA 1997;278:433–5.
Shapiro RL, Hatheway C, Swerdlow DL. Botulism in the United States: a clinical and epidemiologic review. Ann Intern Med 1998;129:221–8.
Sobel J. Botulism. Clin Infect Dis 2005;41:1167–73.
Sobel J, Tucker N, McLaughlin J, Maslanka, S. Foodborne botulism in the United States, 1990–2000. Emerg Infect Dis 2004;10:1606–12.

Chlamydia trachomatis infection

CDC. Sexually transmitted disease surveillance, 2013. Atlanta, GA: US Department of Health and Human Services; 2014.
CDC. Sexually transmitted diseases treatment guidelines, 2015. MMWR Surveill Summ 2015;64(No. SS-3).
Satterwhite CL, Torrone E, Meites E, et al. Sexually transmitted infections among US women and men: prevalence and incidence estimates, 2008. Sex Transm Dis 2013;40:187–93.
Torrone E, Papp J, Weinstock H. Prevalence of Chlamydia trachomatis Genital Infection Among Persons Aged 14-39 Years—United States, 2007-2012. MMWR Morb Mort Wkly Rep 2014;63:834–8.

Cholera

Besser RE, Feikin DR, Eberhart-Phillips JE, Mascola L, Griffin PM. Diagnosis and treatment of cholera in the United States. Are we prepared? JAMA 1994;272:1203–5.
Loharikar A, Newton AE, Stroika S, et al. Cholera in the United States, 2001–2011: a reflection of patterns of global epidemiology and travel. Epidemiol Infect 2014;142:1–9.
Newton AE, Heiman KE, Schmitz A, et al. Cholera in United States associated with epidemic in Hispaniola. Emerg Infect Dis 2011;17:2166–8.
Siddique AK, Nair GB, Alam M, et al. El Tor cholera with severe disease: a new threat to Asia and beyond. Epidemiol Infect 2010;138:347–52.
Steinberg EB, Greene KD, Bopp CA, Cameron DN. Wells JG, Mintz ED. Cholera in the United States, 1995–2000: trends at the end of the twentieth century. J Infect Dis 2001;184:799–802.
Tappero J, Tauxe RV. Lessons learned during public health response to cholera epidemic in Haiti and the Dominican Republic. Emerg Infect Dis 2011;17:2087–93.
World Health Organization. Cholera, 2012. Wkly Epidemiol Rec 2013;88:321–336.

Coccidioidomycosis

Blair JE, Chang YH, Cheng MR, Vaszar LT, Vikram HR, Orenstein R, et al. Characteristics of patients with mild to moderate primary pulmonary coccidioidomycosis. Emerg Infect Dis 2014;20:983–90.
Sondermeyer G, Lee L, Gilliss D, Tabnak F, Vugia D. Coccidioidomycosis-associated hospitalizations, California, USA, 2000–2011. Emerg Infect Dis 2013;19:1590–7.
Nguyen C, Barker BM, Hoover S, et al. Recent advances in our understanding of the environmental, epidemiological, immunological, and clinical dimensions of Coccidioidomycosis. Clin Microbiol Rev 2013;26:505–25.

Cryptosporidiosis

CDC. DPDx—Laboratory identification of parasitic diseases of public health concern: Cryptosporidiosis. Atlanta, GA: US Department of Health and Human Services, CDC; 2013. Available at http://www.cdc.gov/dpdx/cryptosporidiosis/dx.html.
Hlavsa MC, Roberts VA, Kahler AM, et. al. Outbreaks of illness associated with recreational water — United States, 2011–2012. MMWR Morb Mort Wkly Rep 2015;64:668–72.
Painter JE, Hlavsa, MC Collier SA, et al. Cryptosporidiosis surveillance—United States, 2011–2012. MMWR Surveill Summ 2015;64(No. SS-3).
Roy SL, DeLong SM, Stenzel S, et al. Risk factors for sporadic cryptosporidiosis among immunocompetent persons in the United States from 1999 to 2001. J Clin Microbiol 2004;42:2944–51.
Yoder JS, Beach MJ. *Cryptosporidium* surveillance and risk factors in the United States. Exp Parasitol 2010;124:31–9.

Cyclosporiasis

Hall RL, Jones JL, Herwaldt BL. Surveillance for laboratory-confirmed sporadic cases of cyclosporiasis—United States, 1997–2008. MMWR Surveill Summ 2011;60(No. SS-2).
Hall RL, Jones JL, Hurd S, Smith G, Mahon BE, Herwaldt BL. Population-based active surveillance for *Cyclospora* infection—United States, Foodborne Diseases Active Surveillance Network (FoodNet), 1997–2009. Clin Infect Dis 2012;54(Suppl 5):S411–S17.
Herwaldt BL. *Cyclospora cayetanensis*: a review, focusing on the outbreaks of cyclosporiasis in the 1990s. Clin Infect Dis 2000;31:1040–57.

Herwaldt BL. The ongoing saga of U.S. outbreaks of cyclosporiasis associated with imported fresh produce: what *Cyclospora cayetanensis* has taught us and what we have yet to learn. In: Institute of Medicine. Addressing foodborne threats to health: policies, practices, and global coordination. Washington, DC: The National Academies Press;2006:85–115, 133–40.
Ortega YR, Sanchez R. Update on *Cyclospora cayetanensis*, a food-borne and waterborne parasite. Clin Microbiol Rev 2010;23:218–34.

Dengue fever

Simmons CP, Farrar JJ, Nguyen V, Wills B. Dengue. New Engl J Med 2012;366:1423–32.

Diptheria

Dewinter LM, Bernard KA, Romney MG. Human clinical isolates of *Corynebacterium diphtheriae* and *Corynebacterium ulcerans* collected in Canada from 1999 to 2003 but not fitting reporting criteria for cases of diphtheria. Clin Microbiol 2005;43:3447–9.
Tiwari TW, Wharton M. Diphtheria Toxoid (Chapter 12) In: Plotkin O, Orenstein W , Offitt P, eds. Vaccines 2013.
Wagner KS, Stickings P, White JM, et al. A review of the international issues surrounding the availability and demand for diphtheria antitoxin for therapeutic use. Vaccine 2009;28:14–20.
Wagner KS, White JM, Crowcroft NS, DeMartin S, Mann G, Efstratiou A. Diphtheria in the United Kingdom, 1986–2008: the increasing role of *Corynebacterium ulcerans*. Epidemiol Infect 2010;138:1519–30.
Wagner KS, White JM, Lucenko I, et al. Diphtheria in the postepidemic period, Europe, 2000–2009. Emerg Infect Dis 2012;18:217–25.
Zakikhany K, Efstratiou A. Diphtheria in Europe: current problems and new challenges. Future Microbiol 2012;7:595–607.

Ehrlichiosis and Anaplasmosis

Banatvala N, Griffin PM, Greene KD, et al. The United States prospective hemolytic uremic syndrome study: microbiologic, serologic, clinical, and epidemiologic findings. J Infect Dis 2001;183:1063–70.
CDC. Diagnosis and management of tickborne rickettsial diseases: Rocky Mountain spotted fever, ehrlichioses, and anaplasmosis—United States. MMWR Recomm Rep 2006;55(No. RR-4).
Dahlgren FS, Mandel EJ, Krebs JW, Massung RF, McQuiston JH. Increasing incidence of Ehrlichia chaffeensis and Anaplasma phagocytophilum in the United States, 2000–2007. Am J Trop Med Hyg 2011;85:124–31.
Dumler JS, Madigan JE, Pusterla N, Bakken JS. Ehrlichioses in humans: epidemiology, clinical presentation, diagnosis, and treatment. Clin Infect Dis 2007;45(Suppl 1):545–51.
Regan J, Matthias J, Green-Murphy A, et al. A confirmed Ehrlichia ewingii infection likely acquired through platelet transfusion. Clin Infect Dis 2013;56:E105–7.
Walker D. Rickettsiae and rickettsial infections: the current state of knowledge. Clin Infect Dis 2007;45(Suppl 1):539–44.

Giardiasis

Cantey PT, Roy S, Lee B, et al. Study of nonoutbreak giardiasis: novel findings and implications for research. Am J Med 2011;124:1175.e1–8.
Clinical and Laboratory Standards Institute. Procedures for the recovery and identification of parasites from the intestinal tract; approved guideline. CLSI document M28–A2 Second Edition ed. Wayne, PA: Clinical and Laboratory Standards Institute; 2005.
CDC. Surveillance for travel-related disease—GeoSentinel Surveillance System, United States, 1997–2011. MMWR Surveill Summ 2013;62(No. SS-3).
Drugs for parasitic infections. Treatment Guidel Med Lett 2010;8(suppl):e5.
Painter JE, Gargano JW, Collier SA, Yoder JS. Giardiasis Surveillance — United States, 2011-2012. MMWR Surveill Summ 2015;64(No. SS-3).
Saiman L, Aronson J, Zhou J, et al. Prevalence of infectious diseases among internationally adopted children. Pediatrics 2001;108:608–12.
Staat MA, Rice M, Donauer S, et al. Intestinal parasite screening in internationally adopted children: importance of multiple stool specimens. Pediatrics 2011;128:e613–22.

Gonorrhea

CDC. Sexually transmitted disease surveillance, 2013. Atlanta, GA: US Department of Health and Human Services; 2014.
CDC. Sexually transmitted diseases treatment guidelines, 2015. MMWR Recomm Rep 2015;64:(No. RR-3).
Torrone ES, Johnson RE, Tian LH, et al. Prevalence of Neisseria gonorrhoeae among persons 14 to 39 years of age, United States, 1999 to 2008. Sex Transm Dis 2013;40:202–5.

Haemophilus influenzae

Briere E, Jackson M, Shah S, et al. *Haemophilus influenzae* type b disease and vaccine booster dose deferral, United States, 1998–2009. Pediatrics 2012;130:1–7.
Briere EC, Rubin L, Moro PL, Cohn A, Clark T, Messonnier N. Prevention and control of Haemophilus influenzae type b disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Recomm Reop 2014;63(No. RR-1).
MacNeil JR, Cohn AC, Farley M, et al. Current epidemiology and trends in invasive *Haemophilus influenzae* disease—United States, 1989–2008. Clin Infect Dis 2011:53:1230–6.
Schuchat A, Messonnier NR. From pandemic suspect to the postvaccine era: the *Haemophilus influenzae* story. Clin Infect Dis 2007;44:817–9.

Hansen Disease (leprosy)

Britton WJ, Lockwood NJ. Leprosy. Lancet 2004;363:1209–19.
Bruce S, Schroeder TL, Ellner K, et al. Armadillo exposure and Hansen's disease: an epidemiologic survey in southern Texas. J Am Acad Dermatol 2000;43:223–8.
Hartzell JD, Zapor M, Peng S, Straight T. Leprosy: a case series and review. South Med J 2004;97:1252–6.
Hastings R, ed. Leprosy. 2nd ed. New York, NY: Churchill Livingstone; 1994.
Joyce MP, Scollard DM. Leprosy (Hansen's disease). In: Rakel RE, Bope ET, eds. Conn's current therapy 2004: latest approved methods of treatment for the practicing physician. 56th ed. Philadelphia, PA: Saunders; 2004:100–5.
Ooi WW, Moschella SL. Update on leprosy in immigrants in the United States: status in the year 2000. Clin Infect Dis 2001;32:930–7.
Scollard DM, Adams LB, Gillis TP, et al. The continuing challenges of leprosy. Clin Microbiol Rev 2006;19:338–81.

Hantavirus Pulmonary Syndrome

CDC. Hantavirus pulmonary syndrome—United States: updated recommendations for risk reduction. MMWR Recomm Rep 2002;51(No. RR-9).
Khan AS, Khabbaz RF, Armstrong LR, et al. Hantavirus pulmonary syndrome—the first 100 US cases. J Infect Dis 1996;173:1297–303.
Knust B, Rollin PE. Twenty-year summary of surveillance for human hantavirus infections, United States. Emerg Infect Dis 2013;19:1934–7.
MacNeil A, Ksiazek TG, Rollin PE. Hantavirus Pulmonary Syndrome, United States, 1993–2009. Emerg Infect Dis 2011;17:1195–201.
MacNeil A, Nichol ST, Spiropoulou CF. Hantavirus pulmonary syndrome. Virus Res 2011;162:138–47.

Hemolytic Uremic Syndrome

Gould L, Demma L, Jones TF, et al. Hemolytic uremic syndrome and death in persons with Escherichia coli O157:H7 infection, Foodborne Diseases Active Surveillance Network Sites, 2000–2006. Clin Infect Dis 2009;49:1480–5.

Mody RK, Luna-Gierke RE, Jones TF, et al. Infections in pediatric postdiarrheal hemolytic uremic syndrome: factors associated with identifying shiga toxin-producing Escherichia coli. Arch Pediatr Adolesc Med 2012;166:902–9.

Ong KL, Apostal M, Comstock N, et al. Strategies for surveillance of pediatric hemolytic uremic syndrome: Foodborne Diseases Active Surveillance Network (FoodNet), 2000–2007. Clin Infect Dis 2012;54(Suppl 5):424–31.

Tarr PI, Gordon CA, Chandler WL. Shiga toxin-producing Escherichia coli and haemolytic uraemic syndrome. Lancet 2005;365:1073–86.

Hepatitis

Bender TJ, Sharapov UM, Utah O, et al. Evaluation of Hepatitis B vaccine immunogenicity among assisted living facility residents vaccinated during an outbreak response—Virginia, 2010. Vaccine 2014;32:852–6.

Denniston MM, Jiles RB, Drobeniuc J, et al. Chronic Hepatitis C virus infection in the United States: National Health and Nutrition Examination Survey 2003 to 2010. Ann Intern Med 2014;160:293–300.

Gordon SC, Lamerato LE, Rupp LB, et al. Antiviral therapy for chronic Hepatitis B virus infection and development of hepatocellular carcinoma in a U.S. population, the Chronic Hepatits Cohort Study (CHeCS). Clin Gastroenterol Hepatol;2014;12:885–93.

Holmberg SD, Spradling PR, Moorman AC, Denniston MM. Hepatitis C in the United States. N Engl J Med 2013;368:1859–61.

Klevens RM, Liu S, Roberts H, Jiles RB, Holmberg SD. Estimating acute viral Hepatitis infections from nationally reported cases. Am J Public Health 2014;104:482–7.

Liu G, Holmberg SD, Kamili S, Xu F. (2014). Racial disparities in the proportion of current, unresolved Hepatitis C virus infections in the United States, 2003–2010. Dig Dis Sci 2014;59:1950–7.

Liu SJ, Iqbal K, Shallow S, et al. Characterization of chronic Hepatitis B cases among foreign-born persons in six population-based surveillance sites, United States 2001–2010. J Immigr Minor Health 2014;17:7–12.

Ly KN, Roberts H, Williams RE, et al. (2014). Hepatitis B vaccination for healthcare personnel in American Samoa: pre-implementation survey for policy decision. Epidemiol Infect 2014;142:2610–5.

Mahajan R, Xing J, Liu S, et al. Mortality among Persons in Care with Hepatitis C Virus Infection–The Chronic Hepatitis Cohort Study (CHeCS), 2006–2010. Clin Infect Dis 2014;58:1055–61.

Middleman AB, Baker CJ, Kozinetz CA, et al. Duration of protection after infant hepatitis B vaccination series. Pediatrics 2014;133:346.

Roberts HW, Utuama OA, Klevens M, Teshale E, Hughes E, Jiles R. The contribution of viral hepatitis to the burden of chronic liver disease in the United States. Am J Gastroenterol 2014;109:387–93.

Valdiserri RO, Khalsa J, Dan C, Holmberg S, et al. Confronting the emerging epidemic of Hepatitis C virus among young injection drug users. Am J Public Health 2014 [VOL:pages].

Vijayadeva V, Spradling P, Moorman A, et al. Hepatitis B virus testing and prevalence by country of origin among Asian/Pacific Islanders. Am J Manag Care 2014;20.

HIV Infection

CDC. Estimated HIV incidence in the United States, 2007–2010. HIV Surveillance Supplemental Report 2012;17(No.4). Available at http://www.cdc.gov/hiv/pdf/statistics_hssr_vol_17_no_4.pdf.

CDC. HIV Surveillance Report, 2012; vol. 24. Available at http://www.cdc.gov/hiv/library/reports/surveillance.

CDC. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas, 2012. HIV Surveillance Supplemental Report 2014;19(No.3).

CDC. Revised surveillance case definitions for HIV infection among adults, adolescents, and children aged <18 months and for HIV infection and AIDS among children aged 18 months to <13 years—United States, 2008. MMWR Recomm Rep 2008;57(No. RR-10).

Cohen SM, Gray KM, Ocfemia MC, Johnson AS, Hall HI. The status of the National HIV Surveillance System, United States, 2013. Public Health Rep 2014;129:335–41.

Johnson AS, Hall HI, Hu X, Lansky A, Holtgrave DR, Mermin J. Trends in diagnoses of HIV infection in the United States, 2002–2011. JAMA 2014;312:432–4.

Influenza-Associated Pediatric Mortality

Bhat N, Wright JG, Broder KR, et al. Influenza-associated deaths among children in the United States, 2003–2004. N Engl J Med 2005;352:2559–67.

Blanton L, Peacock G, Cox CM, l Jhung, M Finelli, L, Moore C. Neurologic disorders among pediatric deaths associated with the 2009 pandemic influenza. Pediatrics 2012;130:390–6.

CDC. Update: Influenza-associated deaths reported among children aged <18 years—United States, 2003–04 influenza season. MMWR Morb Mort Wkly Rep 2004;52:1254–5.

CDC. Update: influenza-associated deaths reported among children aged <18 years—United States, 2003–04 influenza Season. MMWR Morb Mort Wkly Rep 2004;52:1286–8.

CDC. Mid-year addition of influenza-associated pediatric mortality to the list of nationally notifiable diseases, 2004. MMWR Morb Mort Wkly Rep 2004;53:951–2.

CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Morb Mort Wkly Rep 2011;60;1128–32.

Council of State and Territorial Epidemiologists (CSTE). Influenza-associated pediatric mortality, 2004. Atlanta, GA: Council of State and Territorial Epidemiologists; 2004. Available at http://www.cste.org/PositionStatementsResolutions2.htm.

CSTE. Position statement 04-ID-04: influenza-associated pediatric mortality 2004. Atlanta, GA: Council of State and Territorial Epidemiologists; 2004. Available at http://www.cste.org/ps/2004pdf/04-ID-04-final.pdf.

Cox CM, Blanton L, Dhara R, Brammer L, Finelli L. 2009 Pandemic influenza A (H1N1) deaths among children—United States, 2009–2010. Infect Dis 2011);52 (suppl 1):69–74.

Finelli L, Fiore A, Dhara R, et al. Influenza-associated pediatric mortality in the United States: increase of *staphylococcus aureus* coinfection. Pediatrics 2008;122:805–11.

Guarner J, Paddock CD, Shieh WJ, et al. Histopathologic and immunohistochemical features of fatal influenza virus infection in children during the 2003–2004 season. Clin Infect Dis 2006:43;132–4.

Peebles PJ, Dhara R, Brammer L, Fry AM, Finelli L. Influenza-associated mortality among children—United States: 2007–2008. Influenza and Other Respiratory Viruses 2011;5:25–31.

Quandelacy TM, Viboud C, Charu V, Lipsitch M, Goldstein E. Age- and sex-related risk factors for influenza-associated mortality in the United States between 1997–2007. Am J Epidemiol 2014);179:156–67.

Wong K, Jain S, Blanton L, Dhara R, Brammer L, Fry AM, Finelli L. Influenza-associated pediatric deaths in the United States, 2004–2012. Pediatrics 2013;132:796–804.

Invasive Pneumococcal Disease and Drug-Resistant *Streptococcus pneumoniae*

CDC. Antibiotic resistance threats in the United States, 2013. Available at http://www.cdc.gov/drugresistance/threat-report-2013.

CDC. Use of 13-valent pneumococcal conjugate vaccine and 23-Valent pneumococcal polysaccharide vaccine among children aged 6–18 years with immunocompromising conditions: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Morb Mort Wkly Rep 2013;62:521–4.

CDC. Use of 13-valent pneumococcal conjugate vaccine and 23-valent pneumococcal polysaccharide vaccine for adults with immunocompromising conditions: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Morb Mort Wkly Rep 2012; 61;816–9.

Nuorti JP, Whitney CG. Prevention of pneumococcal disease among infants and children—use of 13-valent pneumococcal conjugate vaccine and 23-valent pneumococcal polysaccharide vaccine: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Recomm Rep 2010;59(No. RR-11).

Tomczyk S, Bennett NM, Stoecker C, et al. Use of 13-valent pneumococcal conjugate vaccine and 23-valent pneumococcal polysaccharide vaccine among adults aged ≥65 years: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Morb Mort Wkly Rep 2014;63:822–5.

Legionellosis

CDC. Legionellosis—United States, 2000–2009. MMWR Morb Mort Wkly Rep 2011;60:1083–6.

CDC. Surveillance for waterborne disease outbreaks associated with drinking water and other nonrecreational water—United States, 2009–20010. MMWR Morb Mort Wkly Rep 2013;62:714–20.

CDC. Surveillance for waterborne disease outbreaks and other health events associated with recreational water—United States, 2007–2008. MMWR Surveill Summ 2011;60(No. SS-12).

CDC. Surveillance for travel-associated legionnaires' disease—United States, 2005–2006. MMWR Morb Mort Wkly Rep 2007;56:1261–3.

European Centre for Disease Prevention and Control. Legionnaires disease in Europe, 2011. Stockholm, Sweden: ECDC; 2013. Available at http://ecdc.europa.eu/en/publications/publications/legionnaires-disease-in-europe-2011.pdf.

European Working Group on Legionella Infections. EWGLI technical guidelines for the investigation, control, and prevention of travel associated Legionnaires' disease. Stockholm, Sweden: ECDC; 2011. Available at http://ecdc.europa.eu/en/activities/surveillance/ELDSNet/ Documents/EWGLI-Technical-Guidelines.pdf.

Fields BS, Benson RF, Besser RE. *Legionella* and Legionnaires' disease: 25 years of investigation. Clin Microbiol Rev 2002;15:506–26.

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

Neil K, Berkelman R. Increasing incidence of legionellosis in the United States: changing epidemiological trends. Clin Infect Dis 2008;47:591–9.

Listeriosis

Cartwright EJ, Jackson KA, Johnson SD, et al. Listeriosis Outbreaks and Associated Food Vehicles, United States, 1998–2008. Emerg Infect Dis 2013;19:1–9.

CDC. Vital signs: Listeria illnesses, deaths, and outbreaks—United States, 2009–2011. MMWR Morb Mort Wkly Rep 2013;62:448–52.

de Noordhout CM, Devleesschauwer B, Angulo FJ, et al. The global burden of listeriosis: a systematic review and meta-analysis. Lancet 2014;14:1027–8.

Jackson KA, Biggerstaff M, Tobin-D'Angelo M, et al. Multistate outbreak of Listeria monocytogenes associated with Mexican-style cheese made from pasteurized milk among pregnant, Hispanic women. J Food Prot 2011;74:949–53.

Jackson KA, Iwamoto M, Swerdlow DL. Pregnancy-associated listeriosis. Epidemiol Infect 2010;138:1503–9.

McCollum JT, Cronquist AB, Silk BJ, et al. Multistate outbreak of listeriosis associated with cantaloupe. N Engl J Med 2013;639:944–53.

Pouillot R, Hoelzer K, Jackson KA, et al. Relative risk of listeriosis in Foodborne Diseases Active Surveillance Network (FoodNet) sites according to age, pregnancy, and ethnicity. Clin Infect Dis 2012;54:S396–S404.

Scallan E, Hoekstra RM, Angulo FJ, et al. Foodborne illness acquired in the United States—major pathogens. Emerg Infect Dis 2011;17:7–15.

Silk BJ, Date KA, Jackson KA, et al. Invasive listeriosis in the Foodborne Diseases Active Surveillance Network (FoodNet), 2004–2009: Further targeted prevention needed for higher-risk groups. Clin Infect Dis 2012;54:S405–S410.

Silk BJ, McCoy MH, Iwamoto M, et al. Foodborne Listeriosis Acquired in Hospitals. Clin Infect Dis 2014;4:532–40.

Lyme disease

Bacon RM, Kugeler KJ, Mead PS. Surveillance for Lyme disease—United States, 1992–2006. MMWR Surveill Summ 2008;57(No. SS-10).

CDC. Caution regarding testing for Lyme disease. MMWR Morb Mort Wkly Rep 2005;54:125.

CDC. Concerns regarding a new culture method for *Borrelia burgdorferi* not approved for the diagnosis of Lyme disease. MMWR Morb Mort Wkly Rep 2014;63:333.

CDC. Three Sudden Cardiac Deaths Associated with Lyme Carditis—United States, November 2012–July 2013. MMWR Morb Mort Wkly Rep 2013;62:993–6.

Hayes EG, Piesman J. How can we prevent Lyme disease? N Engl J Med 2003;348:2424–30.

Hinckley AF, Connally NP, Meek JI, et al. Lyme disease testing by large commercial laboratories in the United States. Clin Infect Dis 2014;59:676–81.

Stafford KC III. Tick management handbook: an integrated guide for homeowners, pest control operators, and public health officials for the prevention of tick-associated disease. New Haven, CT: Connecticut Agricultural Experiment Station; 2004. Available at http://www.cdc.gov/lyme/resources/index.html.

Wormser GP, Dattwyler RJ, Shapiro ED, et al. The clinical assessment, treatment, and prevention of Lyme disease, human granulocytic, anaplasmosis, and babesiosis: clinical practice guidelines by the Infectious Disease Society of America. Clin Infect Dis 2006;43:1089–134.

Malaria

Abanyie FA, Agguin PM, Gutman J. State of malaria diagnostic testing at clinical laboratories in the United States, 2010: a nationwide survey. Malar J 2011;10:340.

Cullen KA, Arguin PM. Malaria surveillance—United States, 2011. MMWR Surveill Summ 2013;62(No. SS-5).

Jensenius M, Han PV, Schlagenhauf P, et al. Acute and potentially life-threatening tropical diseases in western travelers—a GeoSentinel multicenter study, 1996–2011. Am J Trop Med 2013;88:397–404.

Krause G, Schoneberg I, Altmann D, Stark K. Chemoprophylaxis and malaria death rates. Emerg Infect Dis 2006;12:447–51.

Measles

CDC. Prevention of measles, rubella, congenital rubella syndrome, and mumps, 2013: summary recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Recomm Rep 2013;62(No. RR-4).
Papania MJ, Wallace GS, Rota PA, et al. Elimination of endemic measles, rubella, and congenital rubella syndrome from the western hemisphere: the US experience. JAMA Pediatr 2014;168:148–55.

Meningococcal disease

CDC. Prevention and control of meningococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Recomm Rep 2013;62(No.RR-2).
Cohn AC, MacNeil JR, Harrison LH, et al. Changes in *Neisseria meningitidis* disease epidemiology in the United States, 1998–2007: implications for prevention of meningococcal disease. Clin Infect Dis 2010:50:184–91.
Rosenstein NE, Perkins BA, Stephens DS, et al. Meningococcal disease. N Engl J Med 2001;334:1378–88.

Mumps

Fiebelkorn AP, Lawler J, Curns AT, Brandeburg C, Wallace GS. Mumps postexposure prophylaxis with a third dose of measles-mumps-rubella vaccine, Orange County, New York, USA. Emerg Infect Dis 2013;19:1411–7.
Fiebelkorn AP, Rosen JB, Brown C, et al. Environmental factors potentially associated with mumps transmission in Yeshivas during a mumps outbreak among highly vaccinated students Brooklyn, New York, 2009–2010. Human Vaccines & Immunotherapeutics 2013;9:195–200.

Novel influenza A virus

CDC. Antibodies cross-reactive to influenza A (H3N2) variant virus and impact of 2010–11 seasonal influenza vaccination on cross-reactive antibodies—United States. MMWR Morb Mort Wkly Rep 2012;61:237–41.
Duchatez MF, Hause B, Stigger-Rosser E, et al. Multiple reassortment between pandemic (H1N1) 2009 and endemic influenza viruses in pigs, United States. Emerg Infect Dis 2011;17:1624–9.
Epperson S, Jhung M, Richards S, et al. Human infections with influenza A (H3N2) variant virus in the United States, 2011–12. Clin Infect Dis 2013;57:S4–S11.
Jhung MA, Epperson S, Biggerstaff M, et al. Outbreak of variant influenza A (H3N2) virus in the United States. Clin Infect Dis 2013;57:1703–12.
Myers KP, Olsen CW, Gray GC. Cases of swine influenza in humans: a review of the literature. Clin Infect Dis 2007;44:1084–8.
Olsen CW. The emergence of novel swine influenza viruses in North America. Virus Res 2002;85:199–210.
Shinde V, Bridges CB, Uyeki TM, et al. Triple-reassortant swine influenza A (H1) in humans in the United States, 2005–2009. N Engl J Med 2009;360:2616–25.
Vincent AL, Ma W, Lager KM, et al. Swine influenza viruses: a North American perspective. Adv Virus Res 2008;72:127–54.
Vincent AL, Swenson SL, Lager KM, et al. Characterization of an influenza A virus isolated from pigs during an outbreak of respiratory disease in swine and people during a county fair in the United States. Vet Microbiol 2009;137:51–9.

Pertussis

CDC. Pertussis Epidemic—Washington, 2012. MMWR Morb Mort Wkly Rep 2012;61;517–22.
CDC. Updated recommendations for use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis (Tdap) vaccine in adults aged 65 years and older—Advisory Committee on Immunization Practices (ACIP), 2012. MMWR Morb Mort Wkly Rep 2012;61;468–70.
CDC. Updated recommendations for use of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine (Tdap) in pregnant women—Advisory Committee on Immunization Practices (ACIP), 2012. MMWR Morb Mort Wkly Rep 2013;62;131–5.
Clark TA, Messonnier NE, Hadler SC. Pertussis control: time for something new? Trends Microbiol 2012;20:211–3.
Misegades LK, Winter K, Harriman K, et al. Association of childhood pertussis with receipt of 5 doses of pertussis vaccine by time since last vaccine dose, California, 2010. JAMA 2012;308:2126–32.

Plague

CDC. Human plague—four states, 2006. MMWR Morb Mort Wkly Rep 2006;55:940–3.
Dennis DT, Gage KL, Gratz N, Poland JD, Tikhomirov E. Plague manual: epidemiology, distribution, surveillance, and control. Geneva, Switzerland: World Health Organization; 1999.
Gould LH, Pape J, Ettestadt P, et al. Dog-associated risk factors for human plague. Zoonoses Public Health 2008;55:448–54.
Inglesby TV, Dennis DT, Henderson DA, et al. Plague as a biological weapon: medical and public health management. Working Group on Civilian Defense. JAMA 2000;283:2281–90.
Tourdjman M, Ibraheem M, Brett M, et al. Misidentification of *Yersinia pestis* by automated systems resulting in delayed diagnosis of human plague infections—Oregon and New Mexico, 2010–2011. Clin Infect Dis 2012;55:58–60.

Polio

Alexander JP, Wallace G, Wassilak SG. Poliomyelitis. In: The yellow book: CDC health information for international travel, 2012. New York, NY: Oxford University Press; 2012.

Q Fever

Anderson A, Bijlmer H, Fournier PE, et al. Diagnosis and management of Q Fever—United States, 2013 recommendations from CDC and the Q Fever working group. MMWR Recom Rep 2013;62(No. RR-3).
Angelakis E, Raoult D. Q fever. Vet Micro 2010;140:297–309.
Kersh GJ, Fitzpatrick KA, Self JS, et al. Presence and persistence of Coxiella burnetii in the environments of goat farms associated with a Q fever outbreak. Appl Environ Microbiol 2013;79:1697–703.
McQuiston JH, Holman RC, McCall CL, et al. National surveillance and the epidemiology of Q fever in the United States, 1978–2004. Am J Trop Med Hyg 2006;75:36–40.
Parker N, Barralet J, Bell A. Q fever. Lancet 2006;367:679–88.
Tissot-Dupont D, Raoult D. Q fever. Infect Dis Clin North Am 2008;22:505–14.

Rabies

CDC. Compendium of animal rabies prevention and control, 2011: National Association of State Public Health Veterinarians, Inc. MMWR Recomm Rep 2011;60(No. RR-6).

CDC. Human rabies prevention—United States, 2008: recommendation of the Advisory Committee on Immunization Practices (ACIP). MMWR Recomm Rep 2008;57(No. RR-3).

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 Recomm Rep 2010;59(No. RR-2).

Rubella, Congenital Rubella Syndrome

CDC. Three cases of congenital rubella syndrome in the postelimination era—Maryland, Alabama, and Illinois, 2012. MMWR Morb Mort Wkly Rep 2013;62:226–9.

Salmonellosis

Chai SJ, White PL, Lathrop SL, et al. Salmonella enterica serotype Enteritidis: increasing incidence of domestically acquired infections. Clin Infect Dis 2012;54(Suppl 5):488–97.

Gaffga NH, Barton Behravesh C, Ettestad PJ, et al. Outbreak of salmonellosis linked to live poultry from a mail-order hatchery. N Engl J Med 2012;366:2065–73.

Guo C, Hoekstra RM, Schroeder CM, et al. Application of Bayesian techniques to model the burden of human salmonellosis attributable to US food commodities at the point of processing: adaptation of a Danish model. Foodborne Pathog Dis 2011;8:509–16.

Jackson BR, Griffin PM, Cole D, Walsh KA, Chai SJ. Outbreak-associated Salmonella enterica serotypes and food Commodities, United States, 1998–2008. Emerg Infect Dis 2013;19:1239–44.

Jones TF, Ingram LA, Cieslak PR, et al. Salmonellosis outcomes differ substantially by serotype. J Infect Dis 2008;198:109–14.

Medalla F, Hoekstra RM, Whichard JM, et al. Increase in resistance to ceftriaxone and nonsusceptibility to ciprofloxacin and decrease in multidrug resistance among Salmonella strains, United States, 1996–2009. Foodborne Pathog Dis 2013;10:302–9.

Painter JA, Hoekstra RM, Ayers T, et al. Attribution of foodborne illnesses, hospitalizations, and deaths to food commodities by using outbreak data, United States, 1998–2008. Emerg Infect Dis 2013;19:407–15.

Scallan E, Mahon B, Hoekstra RM, Griffin PM. Estimates of illnesses, hospitalizations and deaths caused by major bacterial enteric pathogens in young children in the United States. Ped Infect Dis J 2013;32:217–21.

Shiga toxin-producing *Escherichia coli* (STEC)

Brooks JT, Sowers EG, Wells JB, et al. Non-O157 Shiga toxin-producing *Escherichia coli* infections in the United States, 1983–2002. J Infect Dis 2005;192:1422–9.

Cronquist AB, Mody RK, Atkinson R, Besser J, Tobin D'Angelo M, Hurd S, Robinson T, Nicholson C, Mahon BE. Impacts of culture-independent diagnostic practices on public health surveillance for bacterial enteric pathogens. Clin Infect Dis 2012;54(Suppl 5):432–9.

Gould LH, Mody RK, Ong KL, et al. Increased recognition of non-O157 Shiga toxin-producing *Escherichia coli* infections in the United States during 2000–2010: epidemiologic features and comparison with *E. coli* O157 infections. 2013. Foodborne Pathogens and Disease 2013;10:453–60.

Hale CR, Scallan E, Cronquist AB, et al. Estimates of enteric illness attributable to contact with animals and their environments in the United States. Clin Infect Dis 2012;54(Suppl 5):472–9.

Jones TF, Gerner-Smidt P. Nonculture diagnostic tests for enteric diseases. Emerg Infect Dis 2012;18:513–4.

Mody RK, Luna-Gierke RE, Jones TF, et al. Infections in pediatric postdiarrheal hemolytic uremic syndrome: factors associated with identifying shiga toxin-producing *Escherichia coli*. Arch Pediatr Adolesc Med 2012;166:902–9.

Tarr PI, Gordon CA Chandler WL. Shiga-toxin-producing *Escherichia coli* and haemolytic uraemic syndrome. Lancet 2005;365:1073–86.

Shigellosis

Arvelo W, Hinkle CJ, Nguyen TA, et al. Transmission risk factors and treatment of pediatric shigellosis during a large daycare center-associated outbreak of multidrug resistant *Shigella sonnei*: implications for the management of shigellosis outbreaks among children. Pediatr Infect Dis J 2009;976–80.

CDC. Notes from the field: emergence of *Shigella flexneri* 2a resistant to ceftriaxone and ciprofloxacin—South Carolina, October 2010. MMWR Morb Mortal Wkly Rep 2010;59:1619.

CDC. Outbreaks of multidrug-resistant *Shigella sonnei* gastroenteritis associated with day care centers—Kansas, Kentucky, and Missouri, 2005. MMWR Morb Mortal Wkly Rep 2006;55:1068–71.

CDC. Outbreak of infections caused by *Shigella sonnei* with decreased susceptibility to azithromycin—Los Angeles, California, 2012. MMWR Morb Mortal Wkly Rep 2013;62:171.

Folster JP, Pecic G, Bowen A, et al. Decreased susceptibility to ciprofloxacin among *Shigella* isolates in the United States, 2006 to 2009. Antimicrob Agents Chemother 2011;55:1758–60.

Garrett V, Bornschlegel K, Lange D, et al. A recurring outbreak of *Shigella sonnei* among traditionally observant Jewish children in New York City: the risks of daycare and household transmission. Epidemiol Infect 2006;134:1231–6.

Gupta A, Polyak CS, Bishop RD, Sobel J, Mintz ED. Laboratory-confirmed shigellosis in the United States, 1989–2002: epidemiologic trends and patterns. Clin Infect Dis 2004;38:1372–7.

Haley CC, Ong KL, Hedberg K, et al. Risk factors for sporadic shigellosis, FoodNet 2005. Foodborne Pathog Dis 2010;7:741–7.

Howie RL, Folster JP, Bowen A, et al. Reduced azithromycin susceptibility in *Shigella sonnei*, United States. Microb Drug Resist 2010;16:245–8.

Nygren B, Schilling K, Blanton E, Silk B, Cole D, Mintz E. Foodborne outbreaks of shigellosis in the USA, 1998–2008. Epidemiol Infect 2012;140:1–9.

Shane A, Crump J, Tucker N, Painter J, Mintz E. Sharing *Shigella*: risk factors and costs of a multi-community outbreak of shigellosis. Arch Pediatr Adolesc Med 2003;157:601–3.

Wallender EK, Ailes EC, Yoder JS, Roberts VA, Brunkard JM. Contributing Factors to Disease Outbreaks Associated with Untreated Groundwater. Ground Water 2013;52:886–97.

Spotted Fever Rickettsiosis (Including Rocky Mountain Spotted Fever)

CDC. Diagnosis and management of tickborne rickettsial diseases: Rocky Mountain spotted fever, ehrlichioses, and anaplasmosis—United States. MMWR Recomm Rep 2006;55(No. RR-4).

Dahlgren FS, Holman RC, Paddock CD, Callinan LS, McQuiston JH. Fatal Rocky Mountain spotted fever in the United States, 1999–2007. Am J Trop Med Hyg 2012;86:713–9.

Demma LJ, Traeger MS, Nicholson WL, et al. Rocky Mountain spotted fever from an unexpected tick reservoir in Arizona. N Engl J Med 2005;353:587–94.

Openshaw JJ, Swerdlow DL, Krebs JW, et al. Rocky Mountain spotted fever in the United States, 2000–2007: interpreting contemporary increases in incidence. Am J Trop Med Hyg 2010;83:174–82.
Walker D. Rickettsiae and rickettsial infections: the current state of knowledge. Clin Infect Dis 2007;45(Suppl 1):539–44.
Zientek J, Dahlgren FS, McQuiston JH, Regan J. Self-reported treatment practices by healthcare providers could lead to death from Rocky Mountain spotted fever. J Pediatr 2013;2014:416–8.

Streptococcal Toxic Shock Syndrome

CDC. 2013. Active Bacterial Core Surveillance Report, Emerging Infections Program Network, Group A *Streptococcus*, 2013—provisional. Available at http://www.cdc.gov/abcs/reports-findings/survreports/gas13.pdf.
CDC. Investigating clusters of group A streptococcal disease. Atlanta, GA: US Department of Health and Human Services, CDC; 2009. Available at www.cdc.gov/strepAcalculator.
Dale JB, Fischetti VA, Carapatis JR, et al. Group A streptococcal vaccines: Paving a path for accelerated development. Vaccine 2013;31S:B216–22.
O'Loughlin RE, Roberson A, Cieslak PR, et al. The epidemiology of invasive group A streptococcal infections and potential vaccine implications, United States, 2000–2004. Clin Infect Dis 2007;45:853–62.
Prevention of Invasive Group A Streptococcal Infections Workshop Participants. Prevention of invasive group A streptococcal disease among household contacts of case patients among postpartum and postsurgical patients: recommendations from the Centers for Disease Control and Prevention. Clin Infect Dis 2002;35:950–9.

Syphilis, Congenital

CDC. Sexually transmitted disease surveillance, 2013. Atlanta, GA: US Department of Health and Human Services; 2014.
CDC. Sexually transmitted diseases treatment guidelines, 2015. MMWR Recomm Rep 2015;64(No. RR-3).

Syphilis, Primary and Secondary

CDC. Sexually transmitted disease surveillance, 2013. Atlanta, GA: US Department of Health and Human Services; 2014.
CDC. Sexually transmitted diseases treatment guidelines, 2015. MMWR Recomm Rep 2015;64(No. RR-3).
CDC. Primary and secondary syphilis—United States, 2005–2013. MMWR Morb Mort Wkly Rep 2014;63:402–6.
Su JR, Beltrami JF, Zaidi AA, Weinstock HS. Primary and secondary syphilis among black and Hispanic men who have sex with men: case report data from 27 states. Ann Intern Med 2011;155:145–51.

Tetanus

CDC. Tetanus—Puerto Rico, 2002. MMWR Morb Mort Wkly Rep 2002;51:613–5.
Khetsuriani N, Zakikhany K, Jabirov S, et al. Seroepidemiology of diphtheria and tetanus among children and young adults in Tajikistan: nationwide population-based survey, 2010. Vaccine 2013;31:4917–22.
McQuillan GM, Kruszon-Moran D, Deforest A, Chu SY, Wharton M. Serologic immunity to diphtheria and tetanus in the United States. Ann Intern Med 2002;136:660–6.
Pascual FB, McGinley EL, Zanardi LR, Cortese MM, Murphy TV. Tetanus surveillance—United States, 1998–2000. MMWR Surveill Summ 2003;52(No. SS-3).
Roper M, Wassilak S, Tiwari T, Orenstein W. Tetanus Toxoid (Chapter 33) In: Plotkin O, Orenstein W, Offitt P, eds. Vaccines 2013.

Trichinellosis

CDC. Trichinellosis caused by consumption of wild boar meat—Illinois, 2013. MMWR Morb Mort Wkly Rep 2013;63:451.
Gamble HR, Bessonov AS, Cuperlovic K, et al. International Commission on Trichinellosis: recommendations on methods for the control of *Trichinella* in domestic and wild animals intended for human consumption. Vet Parasitol 2000;93:393–408.
Gottstein B, Pozio E, Nockler K. Epidemiology, diagnosis, treatment, and control of trichinellosis. Clin Microbiol Rev 2009;22:127–45.
Holzbauer M, Agger W, Hall R, et al. Outbreak of Trichinella spiralis infections associated with a wild boar hunted at a game farm in Iowa. Clin Infect Dis 2014;59:1750–6.
Kennedy ED, Hall RL, Montgomery SP, et al. Trichinellosis surveillance—United States, 2002–2007. In: Surveillance Summaries, December 4, 2009. MMWR Surveill Summ 2009;58(No. SS-9).
Roy SL, Lopez AS, Schantz PM. Trichinellosis surveillance—United States, 1997–2001. MMWR Surveill Summ 2003;52(No. SS-6).

Tuberculosis

Alami NN, Courtney MY, Roque M, et al. Trends in tuberculosis—United States, 2013. MMWR Morb Mortal Wkly Rep, 2014;63:229–33.
Manangan LP, Tryon C, Magee E, Miramones R. Innovative quality-assurance strategies for tuberculosis surveillance in the United States. Tuberc Res Treat 2012:481230.
CDC. Reported tuberculosis in the United States, 2013. Atlanta, GA: U.S. Department of Health and Human Services, CDC, October 2014.
Woodruff RS, Winston CA, Miramontes R. Predicting U.S. tuberculosis case counts through 2020. PLoS One 2013;8:e65276.

Tularemia

CDC. Tularemia—United States, 2001–2010. MMWR Morb Mort Wkly Rep 2013;62:963–6.
CDC. Tularemia—United States, 1990–2000. MMWR Morb Mort Wkly Rep 2002;51:182–4.
Dennis DT, Inglesby TV, Henderson DA, et al. Tularemia as a biological weapon: medical and public health management. JAMA 2001;285:2763–73.
Kugeler KJ, Mead PS, Janusz AM, et al. Molecular epidemiology of *Francisella tularensis* in the United States. Clin Infect Dis 2009;48:863–70.
Tarnvik A. WHO guidelines on tularemia. Vol. WHO/CDS/EPR/2007.7. Geneva, Switzerland: World Health Organization; 2007.
Weber IB, Turabelidze G, Patrick S, et al. Clinical recognition and management of tularemia in Missouri: a retrospective records review of 121 cases. Clin Infect Dis 2012;55:1283–90.

Typhoid Fever

Loharikar A, Newton A, Rowley P. et al. Typhoid fever outbreak associated with frozen mamey pulp imported from Guatemala to the western United States, 2010. Clin Infect Dis 2012;55:61–6.
Lynch MF, Blanton EM, Bulens S, et al. Typhoid fever in the United States, 1999–2006. JAMA 2009;302:859–65.
Mahon BE, Newton AE, Mintz ED. Effectiveness of typhoid vaccination in US travelers. Vaccine 2014;32:3577–9.
Olsen SJ, Bleasdale SC, Magnano AR, et al. Outbreaks of typhoid fever in the United States, 1960–1999. Epidemiol Infect 2003;130:13–21.
Steinberg EB, Bishop RB, Dempsey AF, et al. Typhoid fever in travelers: who should be targeted for prevention? Clin Infect Dis 2004;39:186–91.

Varicella

Bialek SR, Perella D, Zhang J, et al. Impact of a routine two-dose varicella vaccination program on varicella epidemiology. Pediatrics 2013; 132:1134–40.
CDC. Evolution of varicella surveillance—selected states, 2000–2010. MMWR Morb Mort Wkly Rep 2012;61:609–12.
CDC. Prevention of varicella: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Recomm Rep 2007;56(No. RR-4).
Lopez AS, Zhang J, Brown C, Bialek S. Varicella-related hospitalizations in the United States, 2000–2006: the 1-dose varicella vaccination era. Pediatrics 2011;127:238–45.
Marin M, Zhang JX, Seward JF. Near elimination of varicella deaths in the US after implementation of the vaccination program. Pediatrics 2011;128:214–20.

Vibriosis

Daniels NA, MacKinnon L, Bishop R, et al. *Vibrio parahaemolyticus* infections in the United States, 1973–1998. J Infect Dis 2000;181:1661–6.
Dechet A, Yu PA, Koram N, Painter J. Nonfoodborne *Vibrio* infections: an important cause of morbidity and mortality in the United States, 1997–2006. Clin Infect Dis 2008;46:970–6.
McLaughlin JB, DePaola A, Bopp CA, et al. Outbreak of *Vibrio parahaemolyticus* gastroenteritis associated with Alaskan oysters. N Engl J Med 2005;353:1463–70.
Newton AE, Garrett N, Stroika SG, Halpin JL, Turnsek M, Mody RK. Increase in Vibrio parahaemolyticus Infections Associated with Consumption of Atlantic Coast Shellfish—2013. MMWR Morb Mort Wkly Rep 2014;63:335–6.
Newton A, Kendall M, Vugia DJ, Henao OL, Mahon BE. Increasing rates of vibriosis in the United States, 1996–2010: review of surveillance data from 2 systems. Clin Infect Dis. 2012;54(Suppl 5):391–5.
Shapiro RL, Altekruse S, Hutwagner L, et al. The role of Gulf Coast oysters in warmer months in *Vibrio vulnificus* infections in the United States, 1998–1996. J Infect Dis 1998;178:752–9.
Tobin-D'Angelo M, Smith AR, Bulens SN, et al. Severe diarrhea caused by cholera toxin-producing *Vibrio cholerae* serogroup O75 infections acquired in the southeastern United States. Clin Infect Dis 2008;47:1035–40.
Vugia DJ, Tabnak F, Newton AE, Hernandez M, Griffin PM. Impact of 2003 state regulation on raw oyster–associated *Vibrio vulnificus* illnesses and deaths, California, USA. Emerg Infect Dis 2013;19:1276–80.

Viral Hemorrhagic Fevers

Amorosa V, MacNeil A, McConnell R, et al. Imported Lassa fever, Pennsylvania, USA, 2010. Emerg Infect Dis 2010;16:1598–600.
CDC. Imported case of Marburg Hemorrhagic fever—Colorado, 2008. MMWR Morb Mort Wkly Rep 2009;58:1377–81.
Ergonul O. Crimean-Congo Haemorrhagic Fever. Lancet 2006;6:203–14.
Fichet-Calvet E, Rogers DJ. Risk maps of Lassa fever in West Africa. PLoS Negl Trop Dis 2009;3:e388.
Rollin PE, Nichol ST, Zaki S, Ksiazek TG. Arenaviruses and filoviruses. In: Murray PR, Baron EJ, Landry ML, Jorgensen JH, Pfaller MA, eds. Manual of clinical microbiology, 9th edition. Washington, DC: ASM Press; 2007:1510–22.

The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format. To receive an electronic copy each week, visit MMWR's free subscription page at *http://www.cdc.gov/mmwr/mmwrsubscribe.html.* Paper copy subscriptions are available through the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone 202-512-1800.

Readers who have difficulty accessing this PDF file may access the HTML file at http://www.cdc.gov/mmwr/xxxxxxxxxx. Address all inquiries about the *MMWR* Series, including material to be considered for publication, to Executive Editor, *MMWR* Series, Mailstop E-90, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30329-4027 or to *mmwrq@cdc.gov.*

ISSN: 0149-2195