Centers for Disease Control and Prevention
MMWR
Morbidity and Mortality Weekly Report
Weekly / Vol. 61 /No. 53
September 19, 2014

Summary of Notifiable Diseases — United States, 2012

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 Public Health Scientific Services, 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, 2012]. Published September 19, 2014 for MMWR 2014;61(No. 53):[inclusive page numbers].

Summary of Notifiable Diseases — United States, 2012

Deborah A. Adams, Coordinator, *Summary of Notifiable Diseases*
Ruth Ann Jajosky, DMD
Umed Ajani, MBBS
Jeffrey Kriseman, PhD
Pearl Sharp
Diana H. Onweh
Alan W. Schley
Willie J. Anderson
Anna Grigoryan, MD
Aaron E. Aranas, MPH
Michael S. Wodajo
John P. Abellera, MPH
Division of Health Informatics and Surveillance ,
Office of Public Health Scientific Services, CDC

Preface

The *Summary of Notifiable Diseases — United States, 2012* contains the official statistics, in tabular and graphic form, for the reported occurrence of nationally notifiable infectious diseases in the United States for 2012. Unless otherwise noted, the data are final totals for 2012 reported as of June 30, 2013. These statistics are collected and compiled from reports sent by state health departments and territories to the National Notifiable Diseases Surveillance System (NNDSS), which is operated by CDC in collaboration with the Council of State and Territorial Epidemiologists (CSTE). The *Summary* is available at http://www.cdc.gov/mmwr/mmwr_nd/index.html. This site also includes *Summary* publications from previous years.

The Highlights section presents noteworthy epidemiologic and prevention information for 2012 for selected diseases and additional information to aid in the interpretation of surveillance and disease-trend data. Part 1 contains tables showing incidence data for the nationally notifiable infectious diseases reported during 2012.* The tables provide the number of cases reported to CDC for 2012 and the distribution of cases by month, geographic location, and patients' demographic characteristics (e.g., age, sex, race, and ethnicity). Part 2 contains graphs and maps that depict summary data for selected notifiable infectious diseases described in tabular form in Part 1. Part 3 contains tables that list the number of cases of notifiable diseases reported to CDC since 1981. This section also includes a table enumerating deaths associated with specified notifiable diseases reported to CDC's National Center for Health Statistics (NCHS) during 2004–2010. The Selected Reading section presents general and disease-specific references for notifiable infectious diseases. These references provide additional information on surveillance and epidemiologic concerns, diagnostic concerns, and disease-control activities.

Comments and suggestions from readers are welcome. To increase the usefulness of future editions, comments regarding the current report and descriptions of how information is or could be used are invited. Comments should be sent to the Data Operations Team at soib@cdc.gov.

Background

The infectious diseases designated as notifiable at the national level during 2012 are listed in this section. A notifiable disease is one for which regular, frequent, and timely information regarding individual cases is considered necessary for the prevention and control of the disease. A brief history of the reporting of nationally notifiable infectious diseases in the United States is available at http://www.cdc.gov/lyme/. In 1961, CDC assumed responsibility for the collection and publication of data on nationally notifiable diseases. NNDSS is neither a single surveillance system nor a method of reporting. Rather, it is a 'system of systems', which is coordinated at the national level across disease-specific programs in order to optimize data compilation, analysis, and dissemination of notifiable disease data.

Case notifications about nationally notifiable diseases are sent to CDC voluntarily without personal identifiers by state and selected local health departments. Data about nationally notifiable diseases are obtained through reportable disease surveillance. Health-care providers, hospitals, laboratories, and other public health reporters are required by legislation, regulation, or rules to report cases about reportable diseases and conditions to local, county, state, or territorial public health authorities. Case-reporting of reportable diseases at the local level protects the public's health by ensuring the proper identification and follow-up of cases. Public health workers ensure that persons who are already ill receive appropriate treatment; trace contacts who need vaccines, treatment, quarantine, or education; investigate and halt outbreaks; eliminate environmental hazards; and close premises where spread has occurred. Surveillance of notifiable conditions helps public health authorities monitor the effect of notifiable conditions, measure disease trends, assess the effectiveness of control and prevention measures, identify populations or geographic areas at high risk, allocate resources appropriately, formulate prevention strategies, and develop public health policies. Monitoring surveillance data enables public health authorities to detect sudden changes in disease occurrence and distribution, identify changes in agents and host factors, and detect changes in health-care practices.

The list of nationally notifiable infectious diseases is revised periodically. A disease might be added to the list as a new pathogen emerges, or a disease might be deleted as its incidence declines. Public health officials at state health departments and CDC collaborate in determining which diseases should be nationally notifiable. CSTE, with input from CDC, makes recommendations annually for additions and deletions. Although disease reporting is mandated by legislation or regulation at the state and local levels, state reporting to CDC is voluntary. Reporting completeness of notifiable diseases is highly variable and related to the condition or disease being reported (*1*). The list of diseases considered reportable varies by reporting jurisdiction and year. The list of notifiable diseases (the diseases or conditions that state and local health departments send to CDC) also might vary by year. 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/script/casedefDefault.aspx.

* No cases of anthrax; eastern equine encephalitis non-neuroinvasive virus disease; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus non-neuroinvasive virus disease; severe acute respiratory syndrome-associated coronavirus disease; smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

Infectious Diseases Designated as Notifiable at the National Level During 2012*

- 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 (wound and unspecified)
- Brucellosis
- Chancroid
- *Chlamydia trachomatis* infection
- Cholera
  - toxigenic *Vibrio cholerae* 01 or 0139
- Coccidioidomycosis
- Cryptosporidiosis†
- Cyclosporiasis
- Dengue virus infections
  - Dengue fever
  - Dengue hemorrhagic fever
  - Dengue shock syndrome
- Diphtheria
- Ehrlichiosis/Anaplasmosis
  - *Ehrlichia chaffeensis*
  - *Ehrlichia ewingii*
  - *Anaplasma phagocytophilum*
  - 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 virus, perinatal infection
  - Hepatitis B, chronic†
  - Hepatitis C, acute†
  - Hepatitis C, past or present†
- Human Immunodeficiency Virus (HIV) infection diagnosis§
- Influenza-associated pediatric mortality
- Invasive pneumococcal disease
- Legionellosis
- Listeriosis
- Lyme disease
- Malaria
- Measles
- Meningococcal disease
- Mumps†
- Novel influenza A virus infections
- Pertussis
- Plague
- Poliomyelitis, paralytic
- Poliovirus infection, nonparalytic
- Psittacosis
- Q fever
  - Acute
  - Chronic
- Rabies
  - Animal
  - Human
- Rubella
- Rubella, congenital syndrome
- Salmonellosis†
- Severe acute respiratory syndrome-associated coronavirus (SARS-CoV) disease
- 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
- 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* 01 or 0139
- Viral Hemorrhagic Fever
  - Crimean-Congo Hemorrhagic fever virus
  - Ebola virus
  - Lassa virus
  - Lujo virus
  - Marburg virus
  - New World Arenaviruses (Guanarito, Lujo, Machupo, Junin, and Sabia viruses)
- Yellow fever

* This list reflects position statements approved in 2011 by the Council of State and Territorial Epidemiologists (CSTE) for national surveillance, which were implemented in January 2012. No additions or deletions of diseases or conditions were made to the list of nationally notifiable infectious diseases. National surveillance case definitions for these diseases and conditions are available at http://wwwn.cdc.gov/nndss/.

† The year 2012 reflects a modified surveillance case definition for this condition, per approved 2011 CSTE position statements.

§ AIDS has been reclassified as HIV stage III.

Data Sources

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

Notifiable disease reports are the authoritative and archival counts of cases. They are approved by the appropriate chief epidemiologist from each submitting state or territory before being published in the *Summary*. Data published in *MMWR Surveillance Summaries* or other surveillance reports produced by CDC programs might differ from data reported in the annual *Summary* because of differences in the timing of reports, the source of the data, or surveillance methodology.

Data in the *Summary* were derived primarily from reports transmitted to CDC from health departments in the 50 states, five territories, New York City, and the District of Columbia. Data were reported for *MMWR* weeks 1–52, which correspond to the period for the week ending January 7, 2012 through the week ending December 29, 2012. More information regarding infectious notifiable diseases, including national surveillance case definitions, is available at http://wwwn.cdc.gov/nndss. Policies for reporting notifiable disease cases can vary by disease or reporting jurisdiction. The case-status categories used to determine which cases reported to NNDSS are published by disease or condition and are listed in the print criteria column of the 2012 NNDSS event code list (Exhibit).

The print criteria for NNDSS are as follows: for a report of a nationally notifiable disease to print 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 the 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 printing, this means that cases designated with unknown or suspect case confirmation status will print just as probable and confirmed cases will print. Because CSTE position statements are not customarily finalized until July of each year, the NNDSS data for the newly added 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 diseases are derived from the surveillance records of the CDC programs listed below. Requests for further information regarding these data should be directed to the appropriate program.

Office of Public Health Scientific Services
National Center for Health Statistics (NCHS)

Office of Vital and Health Statistics Systems (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*, genital infection; gonorrhea; and 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 Viral and Rickettsial Diseases (animal rabies)

NCHS postcensal estimates of the resident population of the United States for July 1, 2011–July 1, 2012, 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 origin (not Hispanic or Latino, Hispanic or Latino), and sex (Vintage 2011), 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#vintage2011 as of June 13, 2013.

Population estimates for territories are 2012 estimates from the U.S. Census Bureau. The choice of population denominators for incidence reported in *MMWR* is based on 1) the availability of census population data at the time of preparation for publication and 2) the desire for consistent use of the same population data to compute incidence reported by different CDC programs. Incidence in the *Summary* is calculated as the number of reported cases for each disease or condition divided by either the U.S. resident population for the specified demographic population or the total U.S. resident population, multiplied by 100,000. When a nationally notifiable disease is associated with a specific age restriction, the same age restriction is applied to the population in the denominator of the incidence calculation. In addition, population data from states in which the disease or condition was not 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

Incidence data in the *Summary* are presented by the date of report to CDC as determined by the *MMWR* week and year assigned by the state or territorial health department, except for the domestic arboviral diseases, which are presented by date of diagnosis. Data are reported by the jurisdiction of the person's "usual residence" at the time of disease onset (http://wwwn.cdc.gov/nndss/document/11-SI-04.pdf). For certain nationally notifiable infectious diseases, surveillance data are reported independently to different CDC programs. For this reason, surveillance data reported by other CDC programs might vary from data reported in the *Summary* because of differences in 1) the date used to aggregate data (e.g., date of report or date of disease occurrence); 2) the timing of reports; 3) the source of the data; 4) surveillance case definitions; and 5) policies regarding case jurisdiction (i.e., which jurisdiction should submit the case notification to CDC).

Data reported in the *Summary* are useful for analyzing disease trends and determining relative disease numbers. However, reporting practices affect how these data should be interpreted. Disease reporting is likely incomplete, and completeness might vary depending on the disease and reporting state. The degree of completeness of data reporting might be influenced by the diagnostic facilities available, control measures in effect, public awareness of a specific disease, and the resources and priorities of state and local officials responsible for disease control and public health surveillance. Finally, factors such as changes in methods for public health surveillance, introduction of new diagnostic tests, or discovery of new disease entities can cause changes in disease reporting that are independent of the actual incidence of disease.

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

In addition, not all race and ethnicity data are collected or reported uniformly for all diseases, the standards for race and ethnicity have changed over time, and the transition in implementation to the newest race and ethnicity standard has taken varying amounts of time for different CDC surveillance systems. For example, in 1990, the National Electronic Telecommunications System for Surveillance (NETSS) was established to facilitate data collection and submission of case-specific data to CDC's National Notifiable Diseases Surveillance System, except for selected diseases. In 1990, NETSS implemented the 1977 Office of Management and Budget (OMB) standard for race and ethnicity, in which race and ethnicity were collected in one variable. Other surveillance programs implemented two variables for collection of race and ethnicity data. The 1997 OMB race and ethnicity standard, which requires collection of multiple races per person using multiple race variables, should have been implemented by federal programs beginning January 1, 2003. In 2003, the CDC Tuberculosis and HIV/AIDS programs were able to update their surveillance information systems to implement 1997 OMB standards. In 2005, the Sexually Transmitted Diseases Management Information System also was updated to implement the 1997 OMB standards. However, other diseases reported to the NNDSS using NETSS were undergoing a major change in the manner in which data were collected and reported to CDC. This change is caused by the transition from NETSS to the National Electronic Disease Surveillance System (NEDSS), which implemented the newer 1997 OMB standard for race and ethnicity. However, the transition from NETSS to NEDSS was slower than originally expected relative to reporting data to CDC using NEDSS; thus, some data are currently reported to CDC using NETSS formats, even if the data in the reporting jurisdictions are collected using NEDSS. Until the transition to NEDSS is complete, race and ethnicity data collected or reported to NETSS using different race and ethnicity standards will need to be converted to one standard. The data are now converted to the 1977 OMB standard originally implemented in NETSS. Although the recommended standard for classifying a person's race or ethnicity is based on self-reporting, this procedure might not always be followed.

Transition in NNDSS Data Collection and Reporting

Before 1990, data were reported to CDC as cumulative counts rather than 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 NEDSS, now a component of the Public Health Information Network, to promote the use of data and information system standards that advance the development

of efficient, integrated, and interoperable surveillance information systems at the local, state, and federal levels. One of the objectives of NEDSS is to improve the accuracy, completeness, and timeliness of disease reporting at the local, state, and national levels. One of the objectives of NEDSS is to improve the accurracy, completeness, and timeliness of disease reporting at the local, atate, and national levels. A major feature of NEDSS is the ability to capture data already in electronic form (e.g., electronic laboratory results, which are needed for case confirmation) rather than enter these data manually as in NETSS. Certain public health surveillance information systems are NEDSS-compatible. In 2001, CDC initiated development of the first NEDSS-compatible system, which is referred to as the NEDSS Base System (NBS). The first state went into production with the NBS in 2003. Since the development of the NBS, states and vendors have developed several other NEDSS compatible systems.

A total of 57 health departments (50 state health departments, 2 city health departments [New York City and Washington DC] and 5 territorial health departments) send CDC notifiable disease data for inclusion in this report. As of October 2012, 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 Washington DC uses both the NBS and a vendor-developed system. Lastly, as of October 2012, all five territorial health departments were not using NEDSS–compatible systems. Additional information concerning NEDSS is available at http://wwwn.cdc.gov/nndss/script/nedss.aspx.

Method for Identifying Which Nationally Notifiable Infectious Diseases Are Reportable

States and jurisdictions are sovereign entities. Reportable conditions are determined by laws and regulations of each state and jurisdiction. It is possible that some conditions deemed nationally notifiable might not be reportable in certain states or jurisdictions. Only data from reporting jurisdictions which made the nationally notifiable condition reportable are included in the tables of this report. This ensures the data displayed in this report are from population-based surveillance efforts, and are generally comparable across jurisdictions. When a nationally notifiable disease is not reportable in a reporting jurisdiction, an "N" indicator for "not reportable" is inserted in the table for the specified reporting jurisdiction and year. Determining which nationally notifiable infectious diseases are reportable in NNDSS reporting jurisdictions was decided by asking them to update previously analyzed results of the 2010 CSTE State Reportable Conditions Assessment (SRCA) individually, because the 2012 SRCA results were not available at the time this report was prepared. The 2010 assessment solicited information from each NNDSS reporting jurisdiction (all 50 U.S. states, the District of Columbia, New York City, and five U.S. territories) regarding which public health conditions were reportable for >6 months in 2010 by clinicians, laboratories, hospitals, or "other" public health reporters, as mandated by law or regulation. Additional background information about the SRCA has been published previously (*2*).

Revised International Health Regulations

In May 2005, the World Health Assembly adopted revised International Health regulations (IHR) (*3*) that went into effect in the United States on July 18, 2007. This international legal instrument governs the role of the World Health Organization (WHO) and its member countries, including the United States, in identifying, responding to, and sharing information about Public Health Emergencies of International Concern (PHEIC). A PHEIC is an extraordinary event that 1) constitutes a public health risk to other countries through international spread of disease, and 2) potentially requires a coordinated international response. All WHO member states are required to notify WHO of a potential PHEIC. WHO makes the final determination about the existence of a PHEIC.

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

The revised IHR reflects a conceptual shift from a predefined disease list to a framework of reporting and responding to events on the basis of an assessment of public health criteria, including seriousness, unexpectedness, and international travel and trade implications. A PHEIC is an event that falls within those criteria (further defined in a decision algorithm in Annex 2 of the revised IHR). Four conditions always constitute a PHEIC and do not require the use of the IHR decision instrument in Annex 2: severe acute respiratory syndrome (SARS), smallpox, poliomyelitis caused by wild-type

poliovirus, and human influenza caused by a new subtype. Any other event requires the use of the decision algorithm 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.

Health-care providers in the United States are required to report diseases, conditions, or outbreaks as determined by local, state, or territorial law and regulation, and as outlined in each state's list of reportable conditions. All health-care providers should work with their local, state, and territorial health agencies to identify and report events that might constitute a potential PHEIC occurring in their location. U.S. State and Territorial Departments of Health have agreed to report information about a potential PHEIC to the most relevant federal agency responsible for the event. In the case of human disease, the U.S. State or Territorial Departments of Health will notify CDC rapidly through existing formal and informal reporting mechanisms (*4*). CDC will further analyze the event based on the decision algorithm in Annex 2 of the IHR and notify the U.S. Department of Health and Human Services (DHHS) Secretary's Operations Center (SOC), as appropriate.

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

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

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

Additional information concerning IHR is available at http://www.who.int/csr/ihr/en and http://www.cdc.gov/globalhealth/ihregulations.htm. At its annual meeting in June 2007, CSTE approved a position statement to support the implementation of IHR in the United States (*4*). CSTE also approved a position statement in support of the 2005 IHR adding initial detections of novel influenza A virus infections to the list of nationally notifiable diseases reportable to NNDSS, beginning in January 2007 (*5*).

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. 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.
3. 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.
4. 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.
5. 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. Print criteria for conditions reported to the National Notifiable Diseases Surveillance System, 2012

Code	Notifiable Condition	Print Criteria*,†,§
11090	*Anaplasma phagocytophilum*	Confirmed and probable; unknown from California (CA)
10350	Anthrax	Confirmed and probable; unknown from CA
12010	Babesiosis	Confirmed and probable; unknown from CA
10530	Botulism, foodborne	Confirmed; unknown from CA
10540	Botulism, infant	Confirmed
10550	Botulism, other (includes wound)	Confirmed; unknown from CA
10548	Botulism, other (unspecified)	Confirmed; unknown from CA
10549	Botulism, wound	Confirmed; unknown from CA
10020	Brucellosis	Confirmed and probable; unknown from CA
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 printed
10274	*Chlamydia trachomatis* infection	All reports printed
10470	Cholera (toxigenic *Vibrio cholerae* O1 or O139)	Confirmed; unknown from CA verified as confirmed
11900	Coccidioidomycosis	Confirmed; unknown from CA
11580	Cryptosporidiosis	Confirmed and probable; unknown from CA
11575	Cyclosporiasis	Confirmed and probable; unknown from CA
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; unknown from CA
11089	*Ehrlichia ewingii*	Confirmed and probable; unknown from CA
11091	Ehrlichiosis/Anaplasmosis, undetermined	Confirmed and probable; unknown from CA
11570	Giardiasis	Confirmed and probable; unknown from CA
10280	Gonorrhea	All reports printed
10590	*Haemophilus influenzae*, invasive disease	Confirmed, probable, and unknown
10380	Hansen disease (leprosy)	Confirmed; unknown from CA
11590	Hantavirus pulmonary syndrome	Confirmed and unknown from CA
11550	Hemolytic uremic syndrome, postdiarrheal	Confirmed, probable, and unknown from CA
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; unknown from CA
10640	Listeriosis	Confirmed; unknown from CA
11080	Lyme disease	Confirmed
10130	Malaria	Confirmed; unknown from CA
10140	Measles (rubeola), total	Confirmed and unknown
10150	Meningococcal disease (*Neisseria meningitidis*)	Confirmed
10180	Mumps	Confirmed, probable, and unknown

See table footnotes on page 10.

EXHIBIT. (*Continued*) Print criteria for conditions reported to the National Notifiable Diseases Surveillance System, 2012

Code	Notifiable Condition	Print Criteria*,†,§
10317	Neurosyphilis	All reports printed
11062	Novel influenza A virus infections, initial detections of	Confirmed, unknown CA, verified confirmed
10190	Pertussis	Confirmed, probable, and unknown
10440	Plague	All reports printed
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; unknown from CA
10257	Q fever, acute	Confirmed and probable; unknown from CA
10258	Q fever, chronic	Confirmed and probable; unknown from CA
10340	Rabies, animal	Confirmed and unknown from CA
10460	Rabies, human	Confirmed; unknown from CA verified as confirmed
10200	Rubella	Confirmed and unknown
10370	Rubella, congenital syndrome	Confirmed, probable, and unknown
11000	Salmonellosis	Confirmed and probable; unknown from CA
10575	Severe acute respiratory syndrome-associated coronavirus (SARS-CoV) disease	Confirmed and probable
11563	Shiga toxin-producing *Escherichia coli* (STEC)	Confirmed, probable, unknown from CA
11010	Shigellosis	Confirmed and probable; unknown from CA
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; unknown from CA
11723	*Streptococcus pneumoniae*, invasive disease (IPD) (all ages)	Confirmed; unknown from CA
10316	Syphilis, congenital	All reports printed
10313	Syphilis, early latent	All reports printed
10314	Syphilis, late latent	All reports printed
10318	Syphilis, late with clinical manifestations other than neurosyphilis	All reports printed
10311	Syphilis, primary	All reports printed
10312	Syphilis, secondary	All reports printed
10310	Syphilis, total primary and secondary	All reports printed
10315	Syphilis, unknown latent	All reports printed
10210	Tetanus	All reports printed
10520	Toxic-shock syndrome (staphylococcal)	Confirmed and probable; unknown from CA
10270	Trichinellosis	Confirmed; unknown from CA
10220	Tuberculosis	Print criteria determined by the CDC tuberculosis program
10230	Tularemia	Confirmed and probable; unknown from CA
10240	Typhoid fever (caused by *Salmonella typhi*)	Confirmed and probable; unknown from CA
11663	Vancomycin-intermediate *Staphylococcus aureus* (VISA)	Confirmed; unknown from CA verified as confirmed
11665	Vancomycin-resistant *Staphylococcus aureus* (VRSA)	Confirmed; unknown from CA verified as confirmed
10030	Varicella (Chickenpox)	Confirmed and probable

See table footnotes on page 10.

EXHIBIT. (*Continued*) Print criteria for conditions reported to the National Notifiable Diseases Surveillance System, 2011

Code	Notifiable Condition	Print Criteria*,†,§
11545	Vibriosis	Confirmed, probable, and unknown from CA
11647	Viral hemorrhagic fever	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; CA = California; IPD = invasive pneumococcal disease; VPD = vaccine-preventable 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 print criteria.

† Print criteria for the National Notifiable Diseases Surveillance System (NNDSS): for a case report of a nationally notifiable disease to print in the 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 printing, this means that cases designated with unknown or suspect case confirmation status will print just as probable and confirmed cases will print. Because CSTE position statements customarily are not finalized until July of each year, the 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.

Highlights for 2012

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

Anthrax

Naturally occurring outbreaks of anthrax occur every year among U.S. wildlife and livestock populations. In 2012, anthrax outbreaks were reported in states that routinely experience such outbreaks including Texas, North Dakota, and Nevada; however, livestock outbreaks occurred in 2012 in Mississippi, Oregon, and Colorado, where anthrax outbreaks had not been reported in livestock for 20 years or more. These outbreaks were associated with potential cutaneous exposures in persons handling and disposing of affected livestock and collecting diagnostic specimens. Although no human infections resulted, these exposures reflect the importance of timely recognition of anthrax in susceptible animals and the use of appropriate protective measures to prevent human exposures.

Domestic Arboviral Disease, Neuroinvasive and Nonneuroinvasive

During 2012, a large multistate outbreak of West Nile virus (WNV) disease occurred, and more cases were reported nationally than in any year since 2003 (*1*). A total of 5,674 WNV disease cases were reported, including 2,873 cases of neuroinvasive disease (e.g., meningitis, encephalitis, and acute flaccid paralysis) and 286 deaths. WNV disease cases were reported from 48 states (including the first reported from Maine), the District of Columbia, and Puerto Rico. However, approximately half of the WNV neuroinvasive disease cases were reported from just four states: California, Illinois, Louisiana, and Texas. Despite an increased incidence of neuroinvasive disease in 2012, national surveillance data showed no evidence of changes in epidemiology or increased disease severity compared with the previous 8 years (*2*).

After WNV, the next most commonly reported cause of neuroinvasive arboviral disease was La Crosse virus, followed by Eastern equine encephalitis virus, Powassan virus, and St. Louis encephalitis virus. The 15 Eastern equine encephalitis disease cases were the largest reported since 2005, and included the first ever reported from Vermont. Eastern equine encephalitis virus disease, although rare, remained the most severe domestic arboviral disease, with a 33% case fatality rate.

1. CDC. West Nile virus disease and other arboviral diseases—United States, 2012. MMWR 2013;62:513–7.

2. Lindsey NP, Staples JE, Delorey MJ, Fischer M. Lack of evidence of increased West Nile virus disease severity in the United States in 2012. Am J Trop Med Hyg 2014;90:163–8.

Babesiosis

Babesiosis, a tickborne disease, is 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 they also are transmissible via blood transfusion or congenitally (*1*). In recent years, reports of tickborne and transfusion-associated cases have increased in number and geographic distribution (*1*).

During 2012, a total of 911 unique cases were reported among residents of 14 of the 22 states where babesiosis surveillance was conducted; 871 (96%) cases were reported among residents of seven states (Connecticut, Massachusetts, Minnesota, New Jersey, New York, Rhode Island, and Wisconsin). The median age of patients was 62 years (range: age <1–98 years); 572 (63%) were male, 308 (34%) were female, and the sex was unknown for 31 (3%). Among the patients for whom data were available, 459 (72%) of 638 had symptom onset dates during June–August.

1. Herwaldt BL, Linden JV, Bosserman E, et al. 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 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*). Instances of reported botulism from all of these exposure routes were reported in 2012, with infant botulism remaining the most frequently observed transmission category. During 2012, two outbreaks (events with two or more cases) of foodborne botulism (four cases and eight cases) occurred in an Arizona prison. These cases were associated with consumption of pruno,

an illicit alcoholic brew. Additionally, an outbreak (two cases) was associated with home-canned spaghetti and meat, and another (three cases) with home-canned beets.

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

The number of brucellosis cases reported in 2012 increased by 44%, from 79 cases in 2011 to 114 cases in 2012. Although cases reported from Arizona, California, Florida, Illinois, North Carolina, and Texas accounted for almost three quarters (73.7%) of the reported cases, the number of reported cases from Florida in 2012 was more than doubled that reported in 2011. Health-care providers and health departments are encouraged to continue reporting cases to CDC. In an effort to remind laboratories working with the *Brucella* spp. of exposure risks associated with specimen handling and manipulation, the Bacterial Special Pathogens Branch (BSPB) has recently updated laboratory exposure risk assessment and PEP guidelines (*1*), which are now available at http://www.cdc.gov/brucellosis/laboratories/risk-level.html.

Recommendations for safe laboratory practices when handling *Brucella* spp. can be found at http://www.cdc.gov/brucellosis/laboratories/safety.html. BSPB is available for assistance with evaluating risk occurring after laboratory exposures, and can be contacted via e-mail (bspb@cdc.gov), or by telephone (404–639–1711).

1. Traxler RM, Guerra MA, Morrow MG, et al. Review of brucellosis cases from laboratory exposures in the United States in 2008 to 2011 and improved strategies for disease prevention. J Clin Microbiol 2013;51:3132–6.

Chlamydia

In 2012, more than 1.4 million cases of *Chlamydia trachomatis* infections were reported; the largest number of cases ever reported to CDC for any condition (*1*). This case count corresponds to a rate of 456.7 cases per 100,000 population, an increase of only 0.7% compared with the rate in 2011, the smallest annual increase since nationwide reporting for chlamydia began. The rate among women aged 15–19 years decreased 5.6% from 3,485.2 cases per 100,000 females in 2011 to 3,291.5 cases per 100,000 women in 2012. Similarly, chlamydia rates for men aged 15–19 years decreased 5.1% from 816.3 cases per 100,000 males in 2011 to 774.8 cases per 100,000 males in 2012. This is the first time that chlamydia rates among persons aged 15–19 years have decreased since 2000. Because chlamydial infections are usually asymptomatic, reported case rates are affected by screening coverage. Decreases in reported cases might reflect reduced screening or changes in morbidity.

1. CDC. Sexually transmitted disease surveillance 2012. Atlanta, GA: US Department of Health and Human Services; 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*). 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*). Of the 17 cholera infections reported in the United States in 2012, a total of 16 were travel-associated; 12 patients had arrived recently from Hispaniola (nine from Haiti and three from the Dominican Republic) and four from other cholera-affected countries. 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 (*3,4*).

1. Steinberg EB, Greene KD, Bopp CA, et al. 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. Tappero JW, Tauxe RV. Lessons learned during public health response to cholera epidemic in Haiti and the Dominican Republic. Emerg Infect Dis 2011;17:2087–93.
4. Mintz ED, Guerrant RL. A lion in our village—the unconscionable tragedy of cholera in Africa. N Engl J Med 2009;360:1060–3.

Coccidioidomycosis

Coccidioidomycosis is a fungal infection caused by inhalation of airborne *Coccidioides spp*. spores that are present in the arid soil of California, other parts of the southwestern United States, and parts of Central and South America. After a substantial overall increase during 1998–2011 (*1*), the incidence of reported coccidioidomycosis decreased by approximately 22% during 2012. The decrease was similar in Arizona and California, the two states that report the most

cases. Incidence decreased among all age groups, although rates remained highest among persons aged ≥60 years. Since 2009, the majority of cases have occurred among women in Arizona, whereas the majority of cases have occurred among men elsewhere in the United States.

The reasons for the recent decrease are not known but might be related to changes in the environment, changes in the at-risk population, or changes in testing practices. The majority of laboratories in endemic areas perform testing using an enzyme immunoassay, the specificity of which is controversial (*2*). Despite the decrease in reported cases in 2012, the morbidity of this disease in Arizona and California remains considerable (*3*). Coccidioidomycosis is currently the second most commonly reported infectious condition in Arizona (12,920) and the fifth in California (4,431). More than 25,000 coccidioidomycosis-associated hospitalizations occurred in California during 2000–2011, totaling more than $2 billion in hospital charges (*4*). Physicians, particularly in areas where the disease is endemic, should continue to maintain a high suspicion for acute coccidioidomycosis, especially among patients with an influenza-like illness or pneumonia who live in or have visited areas in which the disease is endemic.

1. CDC. Increase in reported coccidioidomycosis—United States, 1998–2011. MMWR 2013;62:217–21.
2. Kuberski T, Herrig J, Pappagianis D. False-positive IgM serology in coccidioidomycosis. J Clin Microbiol 2010;48:2047–9.
3. Hector RF, Rutherford GW, Tsang CA, et al. The public health impact of coccidioidomycosis in Arizona and California. Int J Environ Res Public Health 2011;8:1150–73.
4. Sondermeyer G, Lee L, Gilliss D, Tabnak F, Vugia D. Coccidioidomycosis-associated hospitalizations, California, USA, 2000–2011. Emerg Infect Dis 2013;19:1590–7.

Congenital Rubella Syndrome

Infection with rubella virus during pregnancy, generally during the first trimester, can result in congenital rubella syndrome (CRS) in the infant. The devastating manifestations of CRS can include deafness, cataracts, cardiac defects, mental retardation, and death (*1*). With the elimination of rubella from the United States, congenital rubella syndrome is rare in this country (*2*). However, rubella still circulates outside the Western hemisphere, especially in regions where rubella vaccination programs are not well developed (*3*). In 2012, three infants were born in the United States with CRS. All three mothers had been in Africa early during their pregnancies (*4*).

1. Plotkin SA, Reef SE. Rubella vaccine. In: Plotkin SA, Orenstein WA, Offit PA, eds. Vaccines. 5th ed. Philadelphia, PA: Elsevier, 2008:735–71.
2. CDC. Elimination of rubella and congenital rubella syndrome—United States, 1969–2004. MMWR 2005;54:279–82.
3. World Health Organization. Immunization surveillance, assessment and monitoring. Geneva, Switzerland: World Health Organization; 2014. Available at http://www.who.int/entity/immunization_monitoring/data/year_vaccine_introduction.xls.
4. CDC. Three cases of CRS in the post-elimination era, Alabama, Illinois, and Maryland, 2012. MMWR 2013;62:226–9.

Cryptosporidiosis

Cryptosporidiosis is a nationally notifiable gastrointestinal illness caused by the extremely chlorine-tolerant protozoa of the genus *Cryptosporidium*. *Cryptosporidium* is transmitted by the fecal-oral route with the ingestion of *Cryptosporidium* oocysts through the consumption of fecally contaminated food or water or through direct person-to-person or animal-to-person contact.

Although cryptosporidiosis affects persons in all age groups, cases are reported most frequently in children aged 1–4 years (*1*). A substantial increase in transmission of *Cryptosporidium* in children occurs during summer through early fall, 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 (*2*). Transmission through recreational water is facilitated by the substantial number of *Cryptosporidium* oocysts that can be shed in a single bowel movement (*3*), the extended time that oocysts can be shed (*4*), the low infectious dose (*5*), and the extreme tolerance of *Cryptosporidium* oocysts to chlorine (*6*).

To reduce the number of cryptosporidiosis cases associated with recreational water, enhanced public health prevention measures are needed. In the United States, pool codes are reviewed and approved by state or local public health officials; no federal agency regulates the design, construction, and operation of public treated recreational water venues (e.g., pools). 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 is sponsoring development of the Model Aquatic Health Code (MAHC) (http://www.cdc.gov/mahc). MAHC is a collaborative effort between local, state, and federal public health agencies and the aquatics sector to develop a data-driven, knowledge-based resource for state and local jurisdictions reviewing and updating their existing pool codes to optimally prevent and control recreational water-associated illness, including cryptosporidiosis. The first official edition of MAHC will be available in the summer of 2014.

The systematic collection and molecular characterization of *Cryptosporidium* isolates would further the understanding of U.S. cryptosporidiosis epidemiology by revealing transmission patterns and potential risk factors (*7*). Such an effort would

require phasing out the practice of preserving stool specimens with formalin, which decreases the ability to perform molecular amplification methods.

1. CDC. Cryptosporidiosis surveillance—United States, 2009–2010. MMWR 2012;61:(No. SS-5).
2. CDC. Surveillance for waterborne disease outbreaks and other health events associated with recreational water—United States, 2007–2008. MMWR 2011;60:(No. SS-12).
3. Goodgame RW, Genta RM, White AC, Chappell CL. Intensity of infection in AIDS-associated cryptosporidiosis. J Infect Dis 1993;167:704–9.
4. Jokipii L, Jokipii AM. Timing of symptoms and oocyst excretion in human cryptosporidiosis. N Engl J Med 1986;315:1643–7.
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.
7. Chalmers RM, Elwin K, Thomas AL, Guy EC, Mason B. Long-term Cryptosporidium typing reveals the aetiology and species-specific epidemiology of human cryptosporidiosis in England and Wales, 2000 to 2003. Euro Surveill 2009;14:2.

Cyclosporiasis

Approximately one third of the laboratory-confirmed cases of cyclosporiasis—and the only outbreak—that were reported in the United States in 2012 occurred in Texas. Overall, CDC received notification of 44 laboratory-confirmed cases in Texas residents during 2012, nine of which were classified as outbreak associated. The illnesses in the reported outbreak were associated with eating at a Mexican-style restaurant in Texas during June and July 2012. Because many of the food items served at the restaurant contained similar combinations of ingredients, no vehicle of infection could be definitively implicated.

Of the 35 confirmed cases in Texas residents that were not associated with this restaurant, 31 occurred in persons not known to have traveled outside of the United States or Canada during the 14 days before becoming ill; their illness onset dates ranged from mid-June to mid-September. Even after excluding the nine restaurant-associated cases, the number of cases reported in Texas during 2012 was substantially higher than the 14 cases reported in 2011. During 2012, although the Texas Department of State Health Services conducted an epidemiologic investigation of the non-restaurant–associated cases, no vehicles of infection could be implicated. Molecular subtyping tools, which would facilitate linking cases to each other and to particular food items or sources, are not yet available for *Cyclospora cayetanensis* (*1,2*).

1. Hall RL, Jones JL, Herwaldt BL. Surveillance for laboratory-confirmed sporadic cases of cyclosporiasis–United States, 1997–2008. MMWR 2011;60:(No. SS-2).
2. Herwaldt BL. The ongoing saga of US 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.

Dengue

During 2012, Florida, California, and Illinois reported the largest number of dengue cases in the 50 United States. In late 2012, an epidemic began in Puerto Rico, resulting in more reported cases in this territory than during 2011, but fewer than during the large epidemic in 2010. Persons of all age groups (range: age 0–9 through >80) were affected by dengue in 2012. The majority of dengue cases reported in the United States in 2012 were travel-associated and from top travel destinations (Jamaica, Dominican Republic, Haiti, and Puerto Rico).

Diphtheria

During 2012, one probable, nonfatal case of diphtheria was reported to CDC representing the first since 2003. One man aged 28 years who was a resident of New York had a positive polymerase chain reaction test for diphtheria *tox* gene A and B. The patient was inadequately immunized and also had a history of AIDS. All close family members were culture negative.

Ehrlichiosis and Anaplasmosis

In 2012, the reported incidence of *Ehrlichia chaffeensis* (1,128 cases) and *Anaplasma phagocytophilum* (2,389) were within the range of the incidence of the previous 5 years. A total of 17 cases of *Ehrlichia ewingii* were reported, with Illinois, Kansas, and Virginia each reporting a case for the first time. Increased use of molecular methods might be responsible for differentiating more reported cases of *E. ewingii* from *E. chaffeensis* and *A. phagocytophilum*.

Giardiasis

Giardia is transmitted through the fecal-oral route with the ingestion of *Giardia* cysts through the consumption of fecally contaminated water or through person-to-person (or, to a lesser extent, animal-to-person) transmission. Giardiasis normally is characterized by diarrhea, abdominal cramps, bloating, weight loss, and malabsorption.

Although giardiasis is the most common enteric parasitic infection in the United States and no declines in incidence have occurred in recent years, knowledge of its epidemiology

remains incomplete. Giardiasis symptomatology is variable, infected persons can shed Giardia for several weeks, and recent studies indicate a potential for chronic sequelae from giardiasis (*1,2*). New epidemiologic studies are needed to identify effective public health prevention measures.

The majority of data on giardiasis transmission come from outbreak investigations; however, the overwhelming majority of reported giardiasis cases are not linked to known outbreaks. During 2009–2010, <1% of reported giardiasis cases were associated with outbreaks (*3*). 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.

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 (*4*), 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 subassemblages (*5*). 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. 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.
2. Wensaas KA, Langeland N, Hanevik K, et al. Irritable bowel syndrome and chronic fatigue 3 years after acute giardiasis: historic cohort study. Gut 2012;61:214–9.
3. CDC. Giardiasis surveillance—United States, 2009–2010. MMWR 2012;61:(No. SS-5).
4. 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.
5. Feng Y, Xiao L. Zoonotic potential and molecular epidemiology of Giardia species and giardiasis. Clin Microbiol Rev 2011;24:110–40.

Gonorrhea

After a 79% decline in the rate of reported gonorrhea during 1975–2009 and after reaching the lowest gonorrhea rate ever recorded in 2009, the national gonorrhea rate increased in 2012 for the third consecutive year. During 2009–2012, the national rate increased 9.6%. During 2011–2012, the rate increase was higher among men (8.3%) than women (0.6%), and in the West (19.4%) than Northeast (8.4%), Midwest (3.4%), or South (which decreased 1.4%). As in previous years, the highest rates were observed among persons aged 15–24 years, among blacks, and in the South. In 2012, the gonorrhea rate among blacks was 14.9 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 ceftriaxone and either azithromycin or doxycycline (*2*). In CDC's sentinel surveillance system, the Gonococcal Isolate Surveillance Project (GISP), the percentage of isolates with elevated ceftriaxone minimum inhibitory concentrations (MICs) decreased from 0.4% in 2011 to 0.3% in 2012, and the percentage of isolates with elevated cefixime MICs decreased from 1.4% in 2011 to 1.0% (*1*).

1. CDC. Sexually transmitted disease surveillance 2012. Atlanta, GA: US Department of Health and Human Services; 2014.
2. CDC. Update to CDC's sexually transmitted diseases treatment guidelines, 2010: oral cephalosporins no longer a recommended treatment for gonococcal infections. MMWR 2012;61:590–4.

Hansen Disease (leprosy)

The number of leprosy cases reported during 2011 and 2012 remained stable. More than half (69.5%) of all cases were reported from Hawaii (29.3%), California (15.8%), Florida (12.2%), and Texas (12.2%). The majority of cases (89%) reported location of acquisition of infection as unknown (73.2%) or as acquired outside of the United States (15.8%).

Hantavirus pulmonary syndrome

An outbreak of hantavirus infections in visitors to Yosemite National Park occurred during 2012, with 10 patients developing laboratory-confirmed hantavirus infection after overnight visits to the park during June and July. Eight patients had symptoms that met the case definition of Hantavirus pulmonary syndrome (HPS), and three patients died (*1*). The 10 confirmed patients came from three states: California (eight), Pennsylvania (one) and West Virginia (one). Further investigation found that nine patients had stayed in signature tent cabins at the Curry Village campground of the park; these structures have insulation between the canvas exterior and interior hard walls. Rodent infestations were detected in the insulation of these cabins, and all signature cabins were closed and dismantled. Efforts also were made to educate visitors and staff about HPS symptoms and prevention, and to preclude rodents from infesting existing structures at the park.

Also during 2012, a hiker who was camping in the Adirondak mountains of New York state developed HPS following an overnight stay in a three-sided shelter where rodent exposures

were noted. Persons engaging in outdoor activities such as camping should be aware of the potential for exposure to rodents and hantavirus. Efforts should be made to eliminate rodents from overnight structures and to inspect structures carefully for potential rodent infestation. If a person develops symptoms of HPS within 8 weeks of the exposure, they should make their doctor aware of potential rodent exposures from outdoor activities so that hantavirus infection is considered.

Hantavirus infections, such as Punmala virus, that are not causing symptoms of HPS are not reportable. However, an imported case of hemorrhagic fever with renal syndrome (HFRS) occurred in a German visitor to Florida in 2012 (*2*). The patient had acute renal failure caused by Puumala virus infection, which was acquired in Germany. HFRS caused by Puumala virus is common in Germany and many other countries in Europe, with thousands of cases reported each year (*3*). HFRS should be considered as a cause of acute renal failure in visitors from areas where the disease is endemic in Europe.

1. CDC. Notes from the field: Hantavirus pulmonary syndrome in visitors to a national park—Yosemite Valley, California, 2012. MMWR 2012;60:952.
2. Knust B, Rollin PE. Twenty-year summary of surveillance for human hantavirus infections, United States. Emerg Infect Dis 2013;19:1934–7.
3. Heyman P, Ceianu CS, Christova I, et al. A five-year perspective on the situation of haemorrhagic fever with renal syndrome and status of the hantavirus reservoirs in Europe, 2005–2010. Euro Surveill 2011;16:3.

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*, principally *E. coli* O157:H7 (*1,2*). Approximately 6.3% of all persons were infected with *E. coli* O157:H7, but the condition progressed to HUS in 5% of children aged <5 years (*3*). During 2012, as has previously been reported, the majority of reported cases occurred among children aged 1–4 years.

1. Banatvala N, Griffin PM, Greene KD, et al. The United States prospective hemolytic uremic syndrome study: microbiologic, serologic, clinical, and epidemiologic findings. J Infect Dis 2001;183:1063–70.
2. 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.

Influenza-Associated Pediatric Mortality

In June 2004, the Council of State and Territorial Epidemiologists added influenza-associated pediatric mortality (i.e., among persons aged <18 years) to the list of conditions reportable to the National Notifiable Diseases Surveillance System. Cumulative year-to-date incidence is published each week in *MMWR* Table I for low-incidence nationally notifiable diseases. *MMWR* counts of deaths are by date of report in a calendar year and not by date of occurrence. A total of 52 influenza-associated pediatric deaths were reported to CDC during January 1–December 31, 2012. This compares with a mean of 73 deaths (range: 43–118) per year reported for seasonal influenza during 2005–2011. A total of 348 deaths were reported from April 15, 2009 to September 30, 2010, coinciding with the 2009 influenza A (H1N1) pandemic.

Of the 52 influenza-associated pediatric deaths reported to CDC during 2012, a total of 34 occurred during the 2011–12 influenza season and the remaining 18 occurred during the 2012–13 influenza season. Approximately 35 (67%) deaths were associated with influenza A viruses and 16 (31%) with influenza B viruses. One death was associated with an influenza virus for which the type was not determined. Of 35 influenza A viruses, subtype was determined for 22 (63%); 10 were 2009 influenza A (H1N1) (pH1N1) viruses and 12 were A(H3N2) viruses.

In 2012, the median age at the time of death was 6.9 years (range: 16 days–16.4 years). This is similar to that observed before the 2009 A (H1N1) pandemic during the years 2005–2008, January–April 2009, and 2011 (4–7.5 years), but lower than that seen when pH1N1 viruses circulated widely during May–December 2009 (9.3 years), and in 2010 (8.2 years). Seven children (13%) were aged <6 months, 12 (23%) were aged 6–59 months, and 33 (63%) were aged 5–17 years. The overall influenza-associated death rate for children aged <18 years during 2012 was 0.07 per 100,000 population. The rates by age group were 0.09 per 100,000 for children aged <5 years and 0.06 for children aged 5 to <18years (*1*).

Information on the location of death was available for all children. Twenty seven (52%) children died after being admitted to the hospital (25 were admitted to the intensive care unit), a total of 14 (27%) died in the emergency department, and 11 (21%) died outside the hospital. Information on underlying or chronic medical condition was reported for 51 (98%) children: 28 (55%) 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), reported for 15 of 51 children. Approximately ten of 51 children had cardiac disease or congenital heart disease, and 14 of 51 children had a chronic pulmonary condition (e.g., asthma, cystic fibrosis, or other chronic pulmonary disease). Of 29 children who had specimens collected for bacterial culture from normally sterile sites, eight (28%) had positive cultures. *Staphylococcus aureus* was detected in two of eight (25%) positive cultures; one was methicillin-sensitive and for the other, methicillin-sensitivity testing was not done. Two cultures (25%) were positive for *Streptococcus pneumoniae* and two (25%) were positive for Group A Streptococcus. Group B Streptococcus, *Pseudomonas aeruginosa*, and coagulase-negative staphylococcus were identified in one patient each with the exception of one child who had positive culture for two pathogens (MSSA and *pseudomonas aeruginosa*). All children aged ≥6 months were recommended to be vaccinated in 2012 (*3*). Of the 36 children aged ≥6 months for whom seasonal vaccination status was known, six (17%) were vaccinated against influenza, as recommended by the Advisory Committee on Immunization Practices (ACIP). Seven children were aged <6 months and ineligible for vaccination (*2,4*).

The number of influenza-associated pediatric deaths reported during 2012 was lower than that in 5 of the previous 7 years. Influenza seasons typically span 2 calendar years and can vary widely in terms of severity and timing of peak activity, thus affecting the number of deaths reported in a calendar year. The 2011–12 influenza season was unusually mild and the peak of activity occurred during mid-March (*5*). All 35 pediatric deaths associated with that season were reported in 2012 or later. The 2012–13 influenza season was more severe and began earlier, peaking in late December, 2012, but the majority of pediatric deaths associated with that season were reported in 2013 (*6*). 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.

1. CDC. Bridged-race population estimates, data files, and documentation. 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. Atlanta, GA: US Department of Health and Human Services, CDC; 2012. Available at http://www.cdc.gov/nchs/nvss/bridged_race/data_documentation.htm.
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 2012;61:613–8.
3. CDC. Prevention and control of influenza with vaccines: recommendations of the Advisory Committee on Immunization Practices (ACIP), 2011. MMWR 2011;60:1128–32.
4. CDC. Recommended immunization schedules for persons aged 0 through 18 years—United States, 2012. MMWR 2012;61:147.
5. CDC. Update: influenza activity—United States, 2011–12 season and composition of the 2012–13 influenza vaccine. MMWR 2012;61:414–20.
6. CDC. Update: influenza activity—United States, 2012–13 season and composition of the 2013–14 influenza vaccine. MMWR 2012;62:473–9.

Listeriosis

Listeria monocytogenes infection (listeriosis) is rare but can cause severe invasive disease (e.g., bacteremia and meningitis). Listeriosis is predominately acquired through contaminated food and occurs most frequently among older adults, persons with certain immunocompromising conditions, and in 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.

Since 2000, listeriosis has been nationally notifiable. During 2012, approximately 0.23 infections per 100,000 population were reported to NNDSS. 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 U.S. states. In 2012, FoodNet reported a preliminary annual incidence of *Listeria monocytogenes* of 0.25 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 should also be promptly sent to CDC for further characterization. Additionally, 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 at http://www.cdc.gov/listeria/surveillance.html.

The *Listeria* Initiative has aided in the timely identification and removal of contaminated food during several listeriosis investigations, including a multistate outbreak of 22 illnesses that was linked to imported ricotta salata (a semi-firm cheese) in 2012 (*5*).

1. US Department of Health and Human Services. Healthy People 2020 Objectives. Washington, DC: US Department of Health and Human Services; 2013. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=14.

2. CDC. Foodborne Diseases Active Surveillance Network. Atlanta, GA: US Department of Health and Human Services, CDC; 2012. Available at http://www.cdc.gov/features/dsfoodnet2012/reportcard.html.
3. CDC. The *Listeria* Initiative surveillance overview. Atlanta, GA: US Department of Health and Human Services, CDC; 2011. Available at http://www.cdc.gov/listeria/pdf/ListeriaInitiativeOverview_508.pdf.
4. CDC. PulseNet. Atlanta, GA: US Department of Health and Human Services, CDC; 2013. Available at http://www.cdc.gov/pulsenet/.
5. CDC. PulseNet Outbreaks. Atlanta, GA: US Department of Health and Human Services, CDC; 2012. Available at http://www.cdc.gov/listeria/outbreaks/cheese-09-12/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. The CSTE revised the case definition, effective 2008, to standardize laboratory criteria for confirmation and to allow reporting of probable cases.

During 2012, the number of confirmed and probable Lyme disease cases reported to CDC was similar to the number reported in 2010 and 2011, and substantially lower than the number reported in 2008 and 2009, however, the geographic distribution of cases increased nevertheless. In 2012, a total of 356 counties had a reported incidence of ≥10 confirmed cases per 100,000 persons, as compared with 324 counties in 2008.

Meningococcal Disease

Neisseria meningitidis is an important cause of bacterial meningitis and sepsis in the United States. The highest incidence of meningococcal disease occurs among infants aged <1 year, with a second peak occurring in adolescents and young adults (*1*,*2*). Among infants, disease incidence peaks within the first 6 months of life and most cases in this age group are caused by serogroup B (*2*). Rates of meningococcal disease are at historic lows in the United States, but meningococcal disease continues to cause significant morbidity and mortality in persons of all ages.

CDC's ACIP recommends routine use of quadrivalent (A, C, Y, W-135) meningococcal conjugate vaccine in adolescents and others at increased risk for meningococcal disease (*1*). In October 2010, a booster dose was recommended for adolescents at age 16 years (*3*). In 2012, coverage with at least 1 dose of meningococcal conjugate vaccine was 74.0% among adolescents aged 13–17 years in the United States; however, coverage ranged from 37.5% to 94.3%, by state (*4*).

1. CDC. Prevention and control of meningococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 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. Updated recommendations for use of meningococcal conjugate vaccines—Advisory Committee on Immunization Practices (ACIP), 2010. MMWR 2011;60:72–6.
4. CDC. National and state vaccination coverage among adolescents aged 13–17 years—United States, 2012. MMWR 2013;62:685–93.

Pertussis

Reported pertussis increased significantly between 2011 (incidence: 6.1 per 100,000 population) and 2012 (15.4 per 100,000 population). Several states experienced epidemic levels of disease, resulting in more U.S. pertussis case reports in 2012 (N = 48,277) than any year since 1955 (N = 62,786). Age-specific pertussis rates were highest among infants aged <1 year (126.7 per 100,000 population); adolescents aged 11–14 years contributed the second highest rates of disease nationally (59.2 per 100,000 population), followed closely by children aged 7–10 years (58.5 per 100,000).

Tetanus, diphtheria, and a cellular pertussis (Tdap) coverage among adolescents aged 13–17 years continues to improve (78.2% in 2011 to 84.6% in 2012); however, coverage among adults remains low (12.5% in 2011) (*1*–*3*). In February 2012, ACIP recommended that all adults aged ≥19 years not previously vaccinated with Tdap receive a single dose (*3*). In October 2012, the Tdap pregnancy recommendation was expanded to include vaccination during every pregnancy, regardless of a patient's Tdap history (*4*).

1. CDC. National and state vaccination coverage among adolescents aged 13–17 years—United States, 2011. MMWR 2012;61:671–7.
2. CDC. National and state vaccination coverage among adolescents aged 13–17 years—United States, 2012. MMWR 2013;62:685–93.
3. CDC. Noninfluenza vaccination coverage among adults—United States, 2011. MMWR 2013;62:66–72.
4. 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 2012;61:468–70.
5. 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 2013;62:131–5.

Rabies

During 2012, one case of human rabies was reported in the United States. The case was reported from California after the patient died abroad and was diagnosed by the Swiss rabies center and confirmed at CDC as a rabies virus variant associated with the insectivorous Mexican free-tailed bat

(*Tadarida brasiliensis*) (*1*). During 2012, the total number of animals submitted to state and local laboratories for rabies diagnosis increased 2.1%, compared with 2011. Among animals submitted, increases in the number of animals reported rabid were observed for the following species: bats (21.7%), cattle (76.9%), dogs (20.0%), horses/mules (6.8%), and sheep/goats (8.3%) (*2*). Decreases in the number of reported rabid cats (15.2%), foxes (20.4%), raccoons (1.4%), and skunks (5.4%) also were reported, compared with 2011 (*2*).

1. CDC. US-acquired human rabies with symptom onset and diagnosis abroad, 2012. MMWR 2012;61:777–81.
2. Dyer JL, Wallace R, Orciari L, et al. Rabies surveillance in the United States during 2012. J Am Vet Med Assoc 2013;243:805–15.

Salmonellosis

During 2012, a total of 17.4 laboratory-confirmed *Salmonella* infections per 100,000 population were reported; this is one and a half times the *Healthy People 2020* objective 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 toward *Healthy People 2020* objectives. FoodNet reported a preliminary annual incidence of Salmonellosis in 2012 of 16.4 infections per 100,000 population, lower than the rate reported to NNDSS (*2*).

During 2012, as in previous years, the age groups with the highest number of reported cases of salmonellosis were children aged <5 years and adults aged ≥65 years. Salmonellosis is reported most frequently in late summer and early fall; in 2012, 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.

During 2012, multistate outbreaks of *Salmonella* infections were linked to cantaloupe (serotypes Typhimurium and Newport); mangoes (serotype Branderup); ground beef (serotype Enteritidis); raw scraped ground tuna product (serotypes Bareilly and Nchanga); and peanut butter (serotype Bredeney) (*4*). An increasing number of outbreaks associated with contact with animals were also investigated, including outbreaks linked to live poultry (serotypes Infantis, Newport, Lille, Montevideo, and Hadar); small turtles (serotypes Sandiego, Pomona, and Poona) and hedgehogs (serotype Typhimurium); and dry dog food (serotype Infantis) (*5*).

In 2012, the national case definition for salmonellosis was updated to include a suspect category for reporting of cases of salmonellosis detected through the use of culture-independent diagnostic tests, which are increasingly being used by laboratories (*6–8*).

1. US Department of Health and Human Services. Healthy People 2020 objectives. Washington, DC: US Department of Health and Human Services; 2013. Available at http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=14.
2. CDC. Foodborne Diseases Active Surveillance Network. Atlanta, GA: US Department of Health and Human Services, CDC; 2013. Available at http://www.cdc.gov/foodnet/data/trends/tables/2012/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. Atlanta, GA: US Department of Health and Human Services, CDC; 2013. Available at http://www.cdc.gov/salmonella/outbreaks.html.
5. CDC. Gastrointestinal (enteric) diseases from animals. Atlanta, GA: US Department of Health and Human Services, CDC; 2013. Available at www.cdc.gov/zoonotic/gi.
6. Council of State and Territorial Epidemiologists. Public health reporting and national notification for Salmonellosis. Position statement 11-ID-08. Atlanta, GA: Council of State and Territorial Epidemiologists; 2012. Available at http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/PS/11-ID-08.pdf.
7. 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.
8. Jones TF, Gerner-Smidt P. Nonculture diagnostic tests for enteric diseases. Emerg Infect Dis 2012;18:513–4.

Shigellosis

During 2012, the incidence of reported shigellosis in the United States was 4.9 infections per 100,000 population; *Shigella* infections have not declined over the past 10 years. During 2012, as in previous years, the age group with the highest number of reported cases was children aged <10 years. *S. sonnei* infections generally account for approximately 75% of reported shigellosis cases 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 494,000 illnesses annually in the United States, approximately 131,000 of which are transmitted by food consumed in the United States (*1*). *Shigella* is often spread from one person to another, including through sexual contact between men who have sex with men, and also can be transmitted by contaminated food or by contaminated water used for drinking or recreational purposes (*3*). Some cases are acquired during international travel (*4,5*). Day care-associated outbreaks are common and are often difficult to control (*6*).

During 2012, an outbreak of infections caused by *Shigella sonnei* with decreased susceptibility to azithromycin was reported in Los Angeles, California; this outbreak represents the first known transmission of *Shigella sonnei* with decreased susceptibility to azithromycin in the United States (*7*). Resistance to ampicillin and trimethoprim-sulfamethoxazole among *S. sonnei* strains in the United States remains common, and resistance to quinolones, including ciprofloxacin, is emerging and cause for concern (*8*).

In 2012, the national case definition for shigellosis was updated to include a "suspect" category for reporting of cases detected through the use of culture-independent diagnostic tests (*9*).

1. CDC. National Shigella surveillance annual summary, 2011. Atlanta, GA: US Department of Health and Human Services, CDC; 2013. Available at http://www.cdc.gov/ncezid/dfwed/pdfs/shigella-annual-report-2011-508c.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, et al. Short report: 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;28:976–80.
7. CDC. Notes from the field: outbreak of infections caused by *Shigella sonnei* with decreased susceptibility to azithromycin—Los Angeles, CA, 2012. MMWR 2013;62:171.
8. CDC. National Antimicrobial Resistance Monitoring System for enteric bacteria (NARMS): Human isolates final report, 2011. Atlanta, GA: US Department of Health and Human Services, CDC; 2013. Available at http://www.cdc.gov/narms.
9. Council of State and Territorial Epidemiologists. Public health reporting and national notification for Shigellosis. Position statement 11-ID-19. Atlanta, GA: Council of State and Territorial Epidemiologists; 2012. Available at http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/PS/11-ID-19.pdf.

Spotted Fever Rickettsiosis (Including RMSF)

During 2012, a total of 4,470 cases of spotted fever rickettsiosis (SFR) were reported, which was 60% more reported cases than during 2011 (2,802 cases) and the largest number of cases since reporting began. Case reports increased from 2011 to 2012 in every geographic region except the Pacific region, with the largest increases occurring in the East South Central (580 cases), South Atlantic (528 cases), and West South Central (377 cases). These recent changes in reported incidence suggest a widespread change in exposure to SFR during 2012 over a large portion of the United States, possibly because of increased tick vector activity. However, because tick population counts in the United States are not linked to this surveillance system, the reasons for this increase remain uncertain.

Shiga Toxin-Producing *Escherichia coli*

In 2012, the incidence in the United States of reported Shiga toxin-producing *Escherichia coli* (STEC) was 2.1 infections per 100,000 population. During 2012, as in previous years, the age group with the highest number of reported cases was children aged <5 years, although infections can occur in patients of all ages. During 2012, several multistate outbreaks of STEC infection were linked to foods, including organic spinach and spring mix blend (STEC O157:H7) and raw clover sprouts (STEC O26) (*1*).

Public health actions to monitor, prevent, and control STEC infections are taken on the basis of 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 more than 50 other serogroups. In the United States, STEC O157 is the most commonly reported serogroup causing human infection (*2*); 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 (*3*). STEC can produce Shiga toxin (Stx) 1, Stx 2, or both. In general, strains that produce certain types of Stx 2 are the most virulent (*4*). Accounting for underdiagnosis, an estimated >96,000 illnesses were caused by STEC O157, and approximately 168,000 illnesses were caused by non-O157 STEC occur each year (*5*).

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) (*6*). 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. Atlanta, GA: US Department of Health and Human Services, CDC; 2013. Available at http://www.cdc.gov/ecoli/outbreaks.html.
2. CDC. National Shiga toxin-producing *Escherichia coli* (STEC) Surveillance Annual Summary, 2011. Atlanta, Georgia: US Department of Health and Human Services, CDC; 2013. Available at http://www.cdc.gov/ncezid/dfwed/pdfs/national-stec-surv-summ-2011-508c.pdf.

3. Gould LH, Mody RK, Ong KL; Emerging Infections Program Foodnet Working Group. 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 Pathog Dis 2013;10:453–60.
4. 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.
5. Scallan E, Hoekstra RM, Angulo FJ, et al. Foodborne illness acquired in the United States—major pathogens. Emerg Infect Dis 2011;17:7–15.
6. CDC. Recommendations for diagnosis of Shiga toxin-producing *Escherichia coli* infections by clinical laboratories, 2009. MMWR 2009;58:(No. RR-12).

Syphilis, Congenital

Trends in congenital syphilis (CS) usually follow trends in primary and secondary (P&S) syphilis among women, with a lag of 1–2 years. During 2005–2008, rates of female P&S and CS increased. From 2009 to 2012 the rates of female P&S and CS declined. In 2012, the CS rate of 7.8 cases per 100,000 live births was the lowest rate reported since the surveillance case definition for CS was revised in 1988. However, racial and ethnic disparities remain: rates of CS among blacks (29.6 cases per 100,000 live births) and among Hispanics (7.9 cases per 100,000 live births) were 14.1 and 3.8 higher times, respectively, the rate among whites (2.1 cases per 100,000 live births) (*1*).

1. CDC. Sexually transmitted disease surveillance 2012. Atlanta, GA: US Department of Health and Human Services, CDC; 2014.

Syphilis, Primary and Secondary

Rates of primary and secondary (P&S) syphilis increased from 4.5 cases per 100,000 population in 2011 to 5.0 cases per 100,000 population in 2012. Rates remained unchanged among women (0.9 cases per 100,000 population), but increased among men for the 12th consecutive year. Rates were highest in men aged 20–24 years and 25–29 years. The increase in cases during 2011–2012 (15%) was larger than in previous years (6% during 2008–2009, 10% during 2009–2010, and 8% during 2010–2011). During 2007–2011, rates among black men aged 20–24 years increased 75% from 54.9 to 96.2 cases per 100,000 population; the magnitude of this increase (41.3 cases per 100,000 population) was the greatest reported for any age, sex, or race/ethnicity group. (*1*) In 2012, rates among men remained highest among blacks aged 20–24 years and 25–29 years (96.7 cases and 89.2 cases per 100,000 population, respectively). (*1*) During 2007–2012, 33 states and areas reported sex-of-partner data for 70% or more cases of P&S syphilis each year; cases among men having sex with men (MSM) increased each year. In 2012, 75% of cases of all primary and secondary syphilis cases were among MSM.

1. CDC. Sexually transmitted disease surveillance 2012. Atlanta: U.S. Department of Health and Human Services, CDC; 2014.

Trichinellosis

The 12 cases in which a suspected or known source of infection was documented were attributed to the consumption of pork (n = six), bear (n = five), and wild boar (n = one). The pork exposures included domestic Berkshire (n = three), an unspecified type (n = two), and a foreign source (n = one). Of the persons who reported consuming bear meat, four admitted to either eating the meat rare or preparing it in a manner that was unlikely to thoroughly cook the meat (e.g., fried or with a countertop grill). For seven cases, no likely source of infection could be identified. The case reported in the Arizona resident occurred in late 2011 but was not reported until 2012.

Three small outbreaks were reported in 2012. The first was a three-person outbreak in a family for which no likely source of infection was identified because multiple undercooked pork and game meat meals were consumed during the incubation period. The second outbreak involved two persons who reported eating undercooked bear meat from Alaska. The third outbreak involved two persons who reported consuming undercooked pork chops at a restaurant and accounted for two of three domestic Berkshire pork-associated cases that might have come from free-range pigs. Although the U.S. demand for organic and free-range pork is increasing, the research regarding its safety relative to conventionally produced pork is limited and results are conflicting (*1*). Both organic/free-range and conventionally raised pork should be thoroughly cooked before consumption to prevent trichinellosis (*2*).

A confirmed diagnosis of trichinellosis is determined by a clinically compatible illness in a person with history of consumption of a likely meat source of infection and a positive laboratory test result that confirms infection with the parasite. In the majority of patients, trichinellosis is confirmed by serologic testing for *Trichinella*-specific antibodies. Specific antibodies typically are detectable between 3 and 5 weeks after infection, but might take as long as 60 days postinfection to develop (*3*). Multiple serum specimens should be drawn several weeks apart to demonstrate seroconversion in patients with clinically compatible illness and history of consumption of a likely meat source of infection whose initial specimen was negative. For patients without a clinically compatible illness and exposure to a likely meat source, the utility of serologic tests for *Trichinella* is limited because of the low predictive value of a positive result in such instances.

1. US Department of Agriculture. Food safety fact sheet: organic pork and food safety. West Lafayette, IN: US Department of Agriculture; 2011. Available at http://www.ars.usda.gov/SP2UserFiles/Place/36022000/Organic%20Pork%20Food%20Safety%20Fact%20Sheet.pdf.
2. CDC. Trichinellosis: prevention and control. July 19, 2013. Atlanta, GA: US Department of Health and Human Services, CDC; 2013. Available at http://www.cdc.gov/parasites/trichinellosis/prevent.html.
3. Morakote N, Sukhavat K, Khamboonruang C, et al. Persistence of IgG, IgM, and IgE antibodies in human trichinosis. Trop Med Parasitol 1992;43:167–9.

Typhoid Fever

Typhoid fever is rare in the United States, and approximately 75% of cases are associated with international travel (*1*). 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 the areas when it is most 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 www.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, et al. From the CDC: new country-specific recommendations for pre-travel typhoid vaccination. J Travel Med 2011;18:430–3.

Varicella

In 2012, data on varicella cases were reported to CDC through the National Notifiable Diseases Surveillance System from 40 states, an increase from 39 states in 2011. A second dose of varicella vaccine was added to the vaccination schedule for children in 2006 (*1*); varicella incidence in the 31 states meeting criteria for adequate and consistent reporting (*2*) has declined 77.1% from 31.4 per 100,000 in 2006 to 7.2 per 100,000 in 2012.

Variables critical for monitoring the effect of the varicella vaccination program include age, vaccination status, disease severity (e.g., number of lesions), outcome of the case (e.g., hospitalized), and whether the case is associated with an outbreak. Among the cases reported from the 31 states with adequate and consistent reporting (*2*) through 2012, data on age, vaccination status, disease severity, outcome, and whether the case was outbreak-related were included for 92%, 45%, 22%, 28%, and 65% of the cases, respectively, compared with 82%, 44%, 14%, 30%, and 65% in 2011. Reporting improved for some variables but not others. States are encouraged to increase completeness of reporting of these and other demographic, clinical, and epidemiologic variables to allow for effective continued monitoring of the impact 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 2007;56:(No. RR-4).
2. CDC. Evolution of varicella surveillance—selected states, 2000–2010. MMWR 2012;61:609–12.

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 over the past 15 years (*1*). Although vibriosis only became a nationally notifiable condition in 2007 (*2*), most states were reporting cases as early as 2000. In addition, the increase in reported cases nationally since 1996 is consistent with a similar increase in vibriosis cases reported by the 10 Foodborne Diseases Active Surveillance Network (FoodNet) sites (*1*). California and Florida report the largest numbers of cases annually. In 2012, an outbreak of *V. parahemoyticus* infections was associated with consumption of shellfish harvested from Oyster Bay Harbor, New York (*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. Council of State and Territorial Epidemiologists. National reporting for non-cholera *Vibrio* infections (vibriosis). Position statement 06-ID-05. Atlanta, GA: Council of State and Territorial Epidemiologists; 2006.
3. Martinez-Urtaza J, Baker-Austin C, Jones JL. Spread of pacific northwest *Vibrio parahaemolyticus* strain. N Engl J Med 2013;369:1573–4.

PART 1
Summaries of Notifiable Diseases in the United States, 2012

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, 2012* 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, 2012

Disease	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Month not stated	Total
Arboviral diseases†														
California serogroup viruses														
neuroinvasive	—	—	1	—	2	9	21	20	14	6	—	—	—	73
nonneuroinvasive	—	—	—	—	1	2	4	—	1	—	—	—	—	8
Eastern equine encephalitis virus														
neuroinvasive	—	—	—	—	—	1	2	3	8	1	—	—	—	15
Powassan virus														
neuroinvasive	—	—	—	—	3	4	—	—	—	—	—	—	—	7
St. Louis encephalitis virus														
neuroinvasive	—	—	—	—	—	—	—	—	1	—	—	—	—	1
nonneuroinvasive	—	—	—	—	—	—	1	1	—	—	—	—	—	2
West Nile virus														
neuroinvasive	—	—	1	1	4	61	695	1,310	613	150	32	5	—	2,872
nonneuroinvasive	—	—	1	1	7	56	597	1,322	662	122	31	2	—	2,801
Babesiosis	15	4	18	21	54	158	222	119	66	61	120	79	—	937
confirmed	12	2	9	11	41	127	196	95	49	48	83	43	—	716
probable	3	2	9	10	13	31	26	24	17	13	37	36	—	221
Botulism, total	7	11	16	10	15	29	12	18	9	9	8	24	—	168
foodborne	—	—	4	2	1	3	1	6	1	1	1	7	—	27
infant	6	10	9	8	13	26	8	10	5	7	6	15	—	123
other(wound and unspecified)	1	1	3	—	1	—	3	2	3	1	1	2	—	18
Brucellosis	6	9	4	21	12	13	10	13	8	4	3	11	—	114
Chancroid§	1	1	—	3	2	1	1	—	2	1	1	2	—	15
Chlamydia trachomatis, infection§	105,502	110,857	140,484	110,083	113,318	131,723	106,784	114,812	139,652	114,657	97,623	137,481	—	1,422,976
Cholera	—	1	1	1	2	6	—	1	3	—	1	1	—	17
Coccidioidomycosis	1,677	1,650	2,059	1,821	1,590	1,894	1,456	993	1,199	1,063	1,177	1,223	—	17,802
Cryptosporidiosis, total	430	413	672	538	520	748	751	1,035	1,157	602	473	617	—	7,956
confirmed	253	251	393	306	321	455	520	728	776	404	303	388	—	5,098
probable	162	151	276	221	190	280	216	297	373	182	155	215	—	2,718
Cyclosporiasis	3	1	1	2	8	19	40	17	19	6	3	4	—	123
Dengue Virus infections†														
Dengue fever	25	15	14	10	13	47	65	92	85	53	67	58	—	544
Dengue hemorrhagic fever	—	—	—	—	—	—	—	—	1	—	2	—	—	3
Diphtheria	—	—	1	—	—	—	—	—	—	—	—	—	—	1
Ehrlichiosis/Anaplasmosis														
Anaplasma phagocytophilum	37	28	114	191	318	559	378	234	172	117	118	123	—	2,389
Ehrlichia chaffeensis	3	4	27	48	115	262	208	106	105	52	21	177	—	1,128
Ehrlichia ewingii	—	—	—	2	—	3	6	5	1	—	—	—	—	17
Undetermined	1	1	6	10	29	42	35	24	11	12	11	9	—	191
Giardiasis	921	980	1,248	964	1,029	1,314	1,297	1,528	2,024	1,323	1,031	1,519	—	15,178
Gonorrhea§	24,907	23,979	30,933	24,249	25,906	31,073	26,294	27,658	33,841	28,202	23,335	34,449	—	334,826
Haemophilus influenzae, invasive disease														
all ages, all serotypes	326	310	361	276	283	302	205	194	246	194	237	484	—	3,418
age <5 yrs														
serotype b	4	3	1	3	2	1	1	3	5	1	1	5	—	30
nonserotype b	23	25	20	11	15	18	8	11	11	12	17	34	—	205
unknown serotype	12	27	24	17	14	25	9	9	16	13	20	24	—	210
Hansen disease (leprosy)	6	5	8	6	5	2	8	6	7	11	7	11	—	82
Hantavirus pulmonary syndrome	1	2	1	5	5	1	4	3	3	1	3	1	—	30
Hemolytic uremic syndrome, post-diarrheal	8	11	15	22	28	16	34	40	40	21	17	22	—	274
Hepatitis virus, acute														
A	75	139	143	121	162	133	116	109	166	120	87	191	—	1,562
B	203	195	288	218	223	289	254	234	245	225	197	324	—	2,895
C	105	136	153	139	139	194	128	151	171	124	114	228	—	1,782
Hepatitis B perinatal infection	2	2	2	2	2	5	3	1	7	5	2	7	—	40
Human immunodeficiency virus (HIV) diagnoses¶	3,806	3,404	3,543	3,458	3,602	3,429	3,382	3,388	2,817	2,719	1,507	301	5	35,361
Influenza-associated pediatric mortality**	1	3	9	7	6	5	3	—	—	1	1	16	—	52
Invasive pneumococcal disease														
all ages	1,536	1,554	2,109	1,345	1,189	1,070	649	536	892	992	1,132	2,631	—	15,635
age <5 yrs	106	103	159	100	112	85	54	43	105	108	105	186	—	1,266
Legionellosis	163	170	183	147	247	406	286	525	545	380	261	375	—	3,688
Listeriosis	40	37	47	47	54	73	68	77	83	81	39	81	—	727
Lyme disease, total	1,024	907	1,344	1,574	2,206	6,309	5,786	3,552	2,807	1,864	1,476	1,982	—	30,831
Confirmed	632	601	844	952	1,469	4,866	4,456	2,598	1,980	1,309	1,017	1,290	—	22,014
Probable	392	306	500	622	737	1,443	1,330	954	827	555	459	692	—	8,817
Malaria	102	55	84	77	106	179	171	175	207	102	66	179	—	1,503

See table footnotes on page 26.

TABLE 1. (*Continued*) Reported cases of notifiable diseases,* by month — United States, 2012

Disease	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Month not stated	Total
Measles, total	15	13	—	7	4	5	4	—	6	—	1	—	—	55
indigenous	9	12	—	3	—	3	3	—	4	—	—	—	—	34
imported	6	1	—	4	4	2	1	—	2	—	1	—	—	21
Meningococcal disease														
all serogroups	48	44	77	51	46	47	34	23	32	38	38	73	—	551
serogroup A,C,Y, and W-135	14	8	23	13	12	14	9	6	9	15	14	24	—	161
serogroup B	5	9	18	10	10	13	5	7	6	9	6	12	—	110
serogroup other	1	1	3	3	—	3	1	1	1	1	—	5	—	20
serogroup unknown	28	26	33	25	24	17	19	9	16	13	18	32	—	260
Mumps	21	16	28	18	13	21	18	22	16	13	11	32	—	229
Novel influenza A virus infection	—	—	1	—	—	1	8	268	33	—	—	2	—	313
Pertussis	1,989	2,198	3,049	3,963	5,153	6,392	5,176	4,760	4,778	3,271	3,249	4,299	—	48,277
Plague	—	—	—	—	—	3	—	—	1	—	—	—	—	4
Psittacosis	1	—	—	—	—	1	—	—	—	—	—	—	—	2
Q fever, total	11	14	9	18	15	11	12	11	9	8	4	13	—	135
acute	9	14	7	16	14	9	11	9	6	7	3	8	—	113
chronic	2	—	2	2	1	2	1	2	3	1	1	5	—	22
Rabies														
animal	186	360	414	385	408	464	405	474	498	335	256	356	—	4,541
human	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Rubella	1	1	—	2	—	1	—	2	—	1	—	1	—	9
Rubella, congenital syndrome	—	1	1	—	—	—	—	—	1	—	—	—	—	3
Salmonellosis	1,989	2,052	2,860	3,164	3,834	5,739	5,635	6,640	7,792	5,327	4,413	4,355	—	53,800
Shiga toxin-producing *E. coli* (STEC)	242	213	325	395	484	666	667	809	899	632	538	593	—	6,463
Shigellosis	909	945	1,096	1,001	1,121	1,345	1,275	1,373	1,901	1,553	1,288	1,476	—	15,283
Spotted fever rickettsiosis, total	53	74	132	198	356	918	642	544	634	250	146	523	—	4,470
confirmed	5	3	15	15	20	28	24	33	19	6	7	13	—	188
probable	47	70	117	183	336	889	617	511	615	244	139	510	—	4,278
Streptococcal toxic-shock syndrome	23	19	23	21	19	14	17	6	10	6	22	14	—	194
Syphillis, total, all stages[§,††]	3,240	3,606	4,951	3,939	3,954	4,569	3,762	3,965	4,932	4,334	3,625	5,026	—	49,903
congenital (age <1 yr)[§]	16	26	26	21	29	25	22	21	47	30	22	37	—	322
primary and secondary[§]	1,006	1,116	1,479	1,146	1,199	1,489	1,211	1,259	1,534	1,411	1,192	1,625	—	15,667
Tetanus	1	2	5	6	1	5	3	1	3	2	3	5	—	37
Toxic-shock syndrome (other than streptococcal)	5	6	3	4	4	4	6	7	10	6	4	6	—	65
Trichinellosis	1	3	1	1	3	—	—	4	—	1	3	1	—	18
Tuberculosis[§§]	507	695	790	758	875	937	858	835	747	890	729	1,324	—	9,945
Tularemia	—	—	1	14	20	24	23	10	18	22	8	9	—	149
Typhoid fever	30	22	31	22	22	28	26	32	50	31	9	51	—	354
Vancomycin-intermediate *Staphylococcus aureus* (VISA)	2	6	15	10	8	8	5	8	13	14	18	27	—	134
Vancomycin-resistant *Staphylococcus aureus* (VRSA)	—	—	—	—	—	1	—	1	—	—	—	—	—	2
Varicella (Chickenpox)														
morbidity	1,043	1,240	1,849	1,354	1,373	1,030	545	552	1,149	1,027	919	1,366	—	13,447
mortality[¶¶]	—	1	—	—	1	1	—	—	—	—	—	—	—	3
Vibriosis	28	21	55	57	54	120	139	181	197	112	77	70	—	1,111

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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 (DVBD), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) (ArboNET Surveillance), as of June 1, 2013.

§ Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of May 29, 2013.

¶ Total number of HIV diagnoses reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) through December 31, 2012.

** Totals reported to the Division of Influenza, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2012.

†† 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 May 29, 2013.

§§ Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of June 15, 2013.

¶¶ Totals reported to the Division of Viral Diseases, NCIRD, as of May 1, 2013.

TABLE 2. Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	Total Resident Population (in thousands)	Arboviral diseases†							
		California serogroup viruses		Eastern equine encephalitis virus	Powassan virus	St. Louis encephalitis virus		West Nile virus	
		Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Neuro-invasive	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive
United States	**311,589**	**73**	**8**	**15**	**7**	**1**	**2**	**2,872**	**2,801**
New England	14,519	—	—	9	—	—	—	42	21
Connecticut	3,587	—	—	—	—	—	—	12	9
Maine	1,329	—	—	—	—	—	—	1	—
Massachusetts	6,607	—	—	7	—	—	—	25	8
New Hampshire	1,318	—	—	—	—	—	—	1	—
Rhode Island	1,051	—	—	—	—	—	—	2	2
Vermont	627	—	—	2	—	—	—	1	2
Mid. Atlantic	41,081	1	—	—	1	—	—	116	99
New Jersey	8,835	—	—	—	—	—	—	22	26
New York (Upstate)	11,232	1	—	—	1	—	—	35	31
New York City	8,270	—	—	—	—	—	—	26	15
Pennsylvania	12,744	—	—	—	—	—	—	33	27
E.N. Central	46,504	16	3	—	2	—	—	494	253
Illinois	12,860	—	—	—	—	—	—	187	103
Indiana	6,516	2	1	—	—	—	—	46	31
Michigan	9,877	—	—	—	—	—	—	141	61
Ohio	11,541	12	1	—	—	—	—	76	45
Wisconsin	5,710	2	1	—	2	—	—	44	13
W.N. Central	20,641	4	—	—	4	—	—	225	437
Iowa	3,064	—	—	—	—	—	—	11	20
Kansas	2,870	—	—	—	—	—	—	20	36
Minnesota	5,347	4	—	—	4	—	—	34	36
Missouri	6,009	—	—	—	—	—	—	17	3
Nebraska	1,842	—	—	—	—	—	—	42	151
North Dakota	685	—	—	—	—	—	—	39	50
South Dakota	824	—	—	—	—	—	—	62	141
S. Atlantic	60,544	39	5	6	—	—	—	185	129
Delaware	908	—	—	—	—	—	—	2	7
District of Columbia	619	—	—	—	—	—	—	8	2
Florida	19,082	—	—	2	—	—	—	52	21
Georgia	9,812	—	—	1	—	—	—	46	53
Maryland	5,840	—	—	—	—	—	—	25	22
North Carolina	9,651	26	—	2	—	—	—	7	—
South Carolina	4,673	2	—	—	—	—	—	20	9
Virginia	8,104	2	—	1	—	—	—	20	10
West Virginia	1,855	9	5	—	—	—	—	5	5
E.S. Central	18,548	10	—	—	—	—	—	173	192
Alabama	4,804	—	—	—	—	—	—	38	24
Kentucky	4,367	—	—	—	—	—	—	13	10
Mississippi	2,977	1	—	—	—	—	—	103	144
Tennessee	6,400	9	—	—	—	—	—	19	14
W.S. Central	36,930	3	—	—	—	1	2	1,146	1,312
Arkansas	2,939	—	—	—	—	—	—	44	20
Louisiana	4,575	—	—	—	—	—	—	155	180
Oklahoma	3,784	—	—	—	—	—	—	103	88
Texas	25,632	3	—	—	—	1	2	844	1,024
Mountain	22,345	—	—	—	—	—	—	190	165
Arizona	6,467	—	—	—	—	—	—	87	46
Colorado	5,116	—	—	—	—	—	—	62	69
Idaho	1,584	—	—	—	—	—	—	5	12
Montana	998	—	—	—	—	—	—	1	5
Nevada	2,720	—	—	—	—	—	—	5	4
New Mexico	2,079	—	—	—	—	—	—	24	23
Utah	2,814	—	—	—	—	—	—	3	2
Wyoming	567	—	—	—	—	—	—	3	4
Pacific	50,477	—	—	—	—	—	—	301	193
Alaska	724	—	—	—	—	—	—	—	—
California	37,684	—	—	—	—	—	—	297	182
Hawaii	1,378	—	—	—	—	—	—	—	—
Oregon	3,868	—	—	—	—	—	—	—	11
Washington	6,823	—	—	—	—	—	—	4	—
Territories									
American Samoa	55	—	—	—	—	—	—	—	—
C.N.M.I.	52	—	—	—	—	—	—	—	—
Guam	160	—	—	—	—	—	—	—	—
Puerto Rico	3,707	—	—	—	—	—	—	1	—
U.S. Virgin Islands	106	—	—	—	—	—	—	—	—

Abbreviations: N = not reportable; U = unavailable; — = no reported cases; CNMI = Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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 (DVBD), National Center for Emerging and Zoonotic Infectious Diseases (NCZVED) (ArboNET Surveillance), as of June 1, 2013.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	Babesiosis			Botulism				Brucellosis	Chancroid§
	Total	Confirmed	Probable	Total	Foodborne	Infant	Other†		
United States	**937**	**716**	**221**	**168**	**27**	**123**	**18**	**114**	**15**
New England	471	418	53	2	—	2	—	—	1
Connecticut	123	106	17	1	—	1	—	—	—
Maine	10	8	2	—	—	—	—	—	—
Massachusetts	261	237	24	1	—	1	—	—	1
New Hampshire	19	18	1	—	—	—	—	—	—
Rhode Island	56	47	9	—	—	—	—	—	—
Vermont	2	2	—	—	—	—	—	—	—
Mid. Atlantic	346	224	122	37	2	34	1	4	—
New Jersey	92	75	17	7	1	6	—	—	—
New York (Upstate)	226	130	96	5	—	4	1	—	—
New York City	28	19	9	4	1	3	—	3	—
Pennsylvania	N	N	N	21	—	21	—	1	—
E.N. Central	72	55	17	11	4	7	—	10	3
Illinois	2	1	1	1	—	1	—	5	—
Indiana	1	—	1	—	—	—	—	3	1
Michigan	—	—	—	4	2	2	—	1	2
Ohio	N	N	N	6	2	4	—	—	—
Wisconsin	69	54	15	—	—	—	—	1	—
W.N. Central	41	14	27	2	—	1	1	2	—
Iowa	N	N	N	—	—	—	—	—	—
Kansas	N	N	N	1	—	—	1	1	—
Minnesota	40	13	27	—	—	—	—	—	—
Missouri	N	N	N	1	—	1	—	1	—
Nebraska	1	1	—	—	—	—	—	—	—
North Dakota	—	—	—	—	—	—	—	—	—
South Dakota	N	N	N	—	—	—	—	—	—
S. Atlantic	3	1	2	10	1	8	1	28	3
Delaware	—	—	—	1	1	—	—	—	—
District of Columbia	N	N	N	1	—	1	—	—	—
Florida	N	N	N	1	—	1	—	17	—
Georgia	N	N	N	1	—	1	—	4	—
Maryland	3	1	2	2	—	2	—	1	1
North Carolina	N	N	N	1	—	1	—	5	1
South Carolina	N	N	N	1	—	—	1	—	—
Virginia	N	N	N	2	—	2	—	—	1
West Virginia	N	N	N	—	—	—	—	1	—
E.S. Central	—	—	—	7	—	7	—	2	1
Alabama	—	—	—	—	—	—	—	—	1
Kentucky	N	N	N	4	—	4	—	1	—
Mississippi	N	N	N	2	—	2	—	—	—
Tennessee	—	—	—	1	—	1	—	1	—
W.S. Central	—	—	—	4	—	3	1	22	—
Arkansas	N	N	N	1	—	1	—	2	—
Louisiana	N	N	N	—	—	—	—	2	—
Oklahoma	N	N	N	1	—	1	—	—	—
Texas	N	N	N	2	—	1	1	18	—
Mountain	—	—	—	30	12	18	—	9	—
Arizona	N	N	N	14	12	2	—	5	—
Colorado	N	N	N	1	—	1	—	2	—
Idaho	N	N	N	2	—	2	—	—	—
Montana	—	—	—	—	—	—	—	—	—
Nevada	N	N	N	—	—	—	—	—	—
New Mexico	N	N	N	2	—	2	—	—	—
Utah	N	N	N	9	—	9	—	2	—
Wyoming	—	—	—	2	—	2	—	—	—
Pacific	4	4	—	65	8	43	14	37	7
Alaska	N	N	N	3	3	—	—	1	—
California	4	4	—	52	3	36	13	34	7
Hawaii	N	N	N	—	—	—	—	2	—
Oregon	—	—	—	4	1	3	—	—	—
Washington	—	—	—	6	1	4	1	—	—
Territories									
American Samoa	U	U	U	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—	—	—
Puerto Rico	N	N	N	N	N	N	N	—	—
U.S. Virgin Islands	N	N	N	—	—	—	—	—	—

Abbreviations: N = not reportable; U: Unavailable —: No reported cases C.N.M.I.: Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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, NCHHSTP, as of May 29, 2013.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	*Chlamydia trachomatis* infection†	Cholera	Coccidioidomycosis	Cryptosporidiosis			Cyclosporiasis
				Total	Confirmed	Probable	
United States	**1,422,976**	**17**	**17,802**	**7,956**	**5,098**	**2,718**	**123**
New England	49,137	1	3	391	333	58	7
Connecticut	13,065	—	N	41	41	—	6
Maine	3,413	—	N	58	32	26	N
Massachusetts	23,550	1	—	155	155	—	1
New Hampshire	3,072	—	2	54	22	32	—
Rhode Island	4,313	—	1	16	16	—	—
Vermont	1,724	—	N	67	67	—	N
Mid. Atlantic	182,810	6	4	809	669	140	28
New Jersey	27,271	—	N	42	41	1	7
New York (Upstate)	38,227	—	N	229	220	9	5
New York City	62,319	4	N	124	121	3	16
Pennsylvania	54,993	2	4	414	287	127	N
E.N. Central	221,639	—	51	1,863	1,154	709	2
Illinois	67,701	—	N	173	73	100	2
Indiana	29,505	—	N	164	127	37	—
Michigan	47,566	—	27	351	285	66	—
Ohio	53,141	—	22	569	64	505	—
Wisconsin	23,726	—	2	606	605	1	—
W.N. Central	81,983	—	151	1,349	626	723	2
Iowa	11,377	—	N	328	78	250	—
Kansas	11,135	—	N	122	65	57	—
Minnesota	18,056	—	119	347	213	134	—
Missouri	27,835	—	17	239	109	130	2
Nebraska	6,748	—	1	165	127	38	—
North Dakota	2,908	—	14	35	3	32	N
South Dakota	3,924	—	N	113	31	82	—
S. Atlantic	285,340	9	9	1,142	686	456	34
Delaware	4,438	—	1	15	7	8	—
District of Columbia	6,808	—	1	N	N	N	N
Florida	77,644	7	N	470	243	227	25
Georgia	52,418	—	N	257	257	—	2
Maryland	26,534	2	7	86	30	56	4
North Carolina	50,596	—	N	86	28	58	2
South Carolina	27,149	—	N	72	36	36	—
Virginia	34,963	—	N	144	81	63	1
West Virginia	4,790	—	N	12	4	8	—
E.S. Central	103,473	—	—	284	148	136	2
Alabama	30,621	—	N	109	19	90	N
Kentucky	17,273	—	N	63	50	13	N
Mississippi	23,054	—	N	40	40	—	N
Tennessee	32,525	—	N	72	39	33	2
W.S. Central	187,843	1	4	596	482	114	45
Arkansas	16,611	—	N	42	41	1	—
Louisiana	27,353	—	4	155	155	—	1
Oklahoma	16,843	—	N	97	14	83	—
Texas	127,036	1	N	302	272	30	44
Mountain	93,204	—	13,140	830	676	154	1
Arizona	30,444	—	12,920	47	35	12	—
Colorado	21,631	—	N	102	63	39	1
Idaho	4,550	—	N	267	182	85	N
Montana	3,827	—	3	69	69	—	N
Nevada	11,137	—	118	15	9	6	N
New Mexico	11,898	—	37	94	91	3	—
Utah	7,615	—	56	202	196	6	—
Wyoming	2,102	—	6	34	31	3	—
Pacific	217,547	—	4,440	692	324	228	2
Alaska	5,462	—	N	7	7	—	N
California	167,695	—	4,431	365	216	9	1
Hawaii	6,340	—	N	5	5	—	—
Oregon	13,454	—	2	214	16	198	1
Washington	24,596	—	7	101	80	21	—
Territories							
American Samoa	—	—	N	N	N	N	N
C.N.M.I.	—	—	—	—	—	—	—
Guam	1,031	—	—	—	—	—	—
Puerto Rico	6,227	—	N	N	N	N	N
U.S. Virgin Islands	802	—	—	—	—	—	—

Abbreviations: N = not reportable; U = unavailable; — = no reported cases; CNMI = Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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, NCHHSTP, as of May 29, 2013.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	Dengue virus infection†		Diphtheria	Ehrlichiosis/Anaplasmosis			
	Dengue fever	Dengue hemorrhagic fever		*Anaplasma phagocytophilum*	*Ehrlichia chaffeensis*	*Ehrlichia ewingii*	Undetermined
United States	**544**	**3**	**1**	**2,389**	**1,128**	**17**	**191**
New England	17	—	—	659	52	—	—
Connecticut	16	—	—	142	—	—	—
Maine	—	—	—	52	3	—	—
Massachusetts	—	—	—	318	25	—	—
New Hampshire	—	—	—	52	3	—	—
Rhode Island	—	—	—	86	21	—	—
Vermont	1	—	—	9	—	—	—
Mid. Atlantic	132	—	1	482	123	—	31
New Jersey	—	—	—	139	58	—	1
New York (Upstate)	16	—	1	315	48	—	13
New York City	95	—	—	20	11	—	—
Pennsylvania	21	—	—	8	6	—	17
E.N. Central	55	1	—	604	61	1	102
Illinois	20	1	—	12	36	1	1
Indiana	9	—	—	—	—	—	35
Michigan	9	—	—	6	2	—	—
Ohio	6	—	—	1	3	—	1
Wisconsin	11	—	—	585	20	—	65
W.N. Central	19	1	—	538	236	11	27
Iowa	2	—	—	N	N	N	N
Kansas	1	—	—	7	41	1	—
Minnesota	9	—	—	503	9	—	17
Missouri	5	1	—	23	186	10	9
Nebraska	—	—	—	2	—	—	—
North Dakota	—	—	—	3	—	—	—
South Dakota	2	—	—	—	—	—	1
S. Atlantic	185	—	—	56	334	2	11
Delaware	—	—	—	1	16	1	—
District of Columbia	—	—	—	N	N	N	N
Florida	139	—	—	5	23	—	—
Georgia	11	—	—	5	24	—	2
Maryland	9	—	—	5	37	—	—
North Carolina	7	—	—	21	109	—	2
South Carolina	2	—	—	—	2	—	—
Virginia	17	—	—	18	123	1	6
West Virginia	—	—	—	1	—	—	1
E.S. Central	12	—	—	26	102	3	11
Alabama	4	—	—	11	10	—	5
Kentucky	1	—	—	1	29	—	—
Mississippi	1	—	—	1	2	—	—
Tennessee	6	—	—	13	61	3	6
W.S. Central	23	—	—	24	220	—	1
Arkansas	—	—	—	8	85	—	—
Louisiana	6	—	—	—	1	—	1
Oklahoma	1	—	—	15	130	—	—
Texas	16	—	—	1	4	—	—
Mountain	13	—	—	—	—	—	2
Arizona	8	—	—	—	—	—	1
Colorado	—	—	—	N	N	N	N
Idaho	1	—	—	N	N	N	N
Montana	2	—	—	N	N	N	N
Nevada	2	—	—	—	—	—	—
New Mexico	—	—	—	N	N	N	N
Utah	—	—	—	—	—	—	1
Wyoming	—	—	—	—	—	—	—
Pacific	88	1	—	—	—	—	6
Alaska	1	—	—	N	N	N	N
California	64	—	—	—	—	—	6
Hawaii	8	—	—	N	N	N	N
Oregon	—	—	—	—	—	—	—
Washington	15	1	—	—	—	—	—
Territories							
American Samoa	—	—	—	N	N	N	N
C.N.M.I.	—	—	—	—	—	—	—
Guam	—	—	—	N	N	N	N
Puerto Rico	5,907	118	—	N	N	N	N
U.S. Virgin Islands	141	1	—	—	—	—	—

Abbreviations: N = not reportable; U = unavailable; — = no reported cases; CNMI = Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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 seroconversion of anti-DENV IgM] and all probable cases (by a single, positive anti-DENV IgM). Totals reported to the DVBD, NCEZID (ArboNET Surveillance), as of June 1, 2013.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	Giardiasis	Gonorrhea†	*Haemophilus influenza*, invasive disease				Hansen disease (leprosy)
			All ages, serotypes	Age <5 years			
				Serotype b	Nonserotype b	Unknown serotype	
United States	**15,178**	**334,826**	**3,418**	**30**	**205**	**210**	**82**
New England	1,436	5,970	235	2	13	7	3
Connecticut	223	2,133	61	—	—	3	1
Maine	169	456	23	—	2	—	N
Massachusetts	698	2,628	111	2	10	—	1
New Hampshire	105	147	12	—	—	4	1
Rhode Island	58	507	19	—	—	—	—
Vermont	183	99	9	—	1	—	N
Mid. Atlantic	2,928	45,447	674	8	29	24	5
New Jersey	423	7,486	124	—	—	11	—
New York (Upstate)	975	7,884	201	4	9	3	N
New York City	872	14,687	123	—	—	7	4
Pennsylvania	658	15,390	226	4	20	3	1
E.N. Central	2,203	59,268	570	6	40	41	2
Illinois	347	18,149	159	1	11	13	—
Indiana	227	7,338	104	2	13	1	—
Michigan	547	12,584	82	—	—	16	2
Ohio	578	16,493	158	3	16	—	—
Wisconsin	504	4,704	67	—	—	11	—
W.N. Central	1,726	17,676	245	2	7	23	4
Iowa	251	2,006	—	—	—	—	—
Kansas	133	2,228	32	—	1	3	—
Minnesota	610	3,082	85	2	6	6	1
Missouri	330	7,889	82	—	—	8	3
Nebraska	194	1,429	31	—	—	3	—
North Dakota	64	335	15	—	—	3	N
South Dakota	144	707	—	—	—	—	—
S. Atlantic	2,438	73,447	818	3	30	55	12
Delaware	24	899	8	—	1	—	—
District of Columbia	77	2,402	3	—	—	1	—
Florida	1,095	19,462	229	—	—	24	10
Georgia	544	15,326	186	—	8	16	1
Maryland	239	5,686	87	1	7	—	—
North Carolina	N	14,318	99	—	—	11	1
South Carolina	128	7,638	72	1	4	3	—
Virginia	272	6,885	101	—	8	—	—
West Virginia	59	831	33	1	2	—	N
E.S. Central	178	29,526	220	1	16	3	2
Alabama	178	9,270	55	1	2	1	1
Kentucky	N	4,283	36	—	1	—	—
Mississippi	N	6,875	26	—	6	—	1
Tennessee	N	9,098	103	—	7	2	—
W.S. Central	332	50,094	207	—	16	11	14
Arkansas	108	4,307	30	—	1	3	1
Louisiana	224	8,873	57	—	—	8	3
Oklahoma	N	4,441	117	—	15	—	N
Texas	N	32,473	3	—	N	N	10
Mountain	1,199	13,576	307	5	47	7	3
Arizona	113	5,809	120	2	23	1	—
Colorado	356	2,822	58	—	4	—	—
Idaho	153	167	18	—	3	1	—
Montana	67	108	6	—	1	—	—
Nevada	91	2,264	21	—	1	1	2
New Mexico	95	1,883	46	1	8	1	—
Utah	287	479	33	2	6	3	1
Wyoming	37	44	5	—	1	—	—
Pacific	2,738	39,822	142	3	7	39	37
Alaska	96	726	15	—	—	5	—
California	1,715	33,579	32	—	—	30	13
Hawaii	34	815	22	—	—	4	24
Oregon	381	1,464	69	2	4	—	N
Washington	512	3,238	4	1	3	—	N
Territories							
American Samoa	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—
Guam	2	92	—	—	—	—	10
Puerto Rico	24	345	—	—	—	—	—
U.S. Virgin Islands	—	136	N	N	N	N	—

Abbreviations: N = not reportable; U = unavailable; — = no reported cases; CNMI = Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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, NCHHSTP, as of May 29, 2013.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	Hantavirus pulmonary syndrome	Hemolytic uremic syndrome, postdiarrheal	Hepatitis, viral, acute			Hepatitis B perinatal infection	HIV diagnoses†
			A	B	C		
United States	**30**	**274**	**1,562**	**2,895**	**1,782**	**40**	**35,361**
New England	—	10	83	105	85	—	935
Connecticut	N	2	23	15	34	—	277
Maine	—	2	9	9	8	—	38
Massachusetts	—	5	40	75	37	—	510
New Hampshire	—	—	6	4	N	—	44
Rhode Island	—	—	3	U	U	—	62
Vermont	—	1	2	2	6	—	4
Mid. Atlantic	2	16	233	246	230	12	5,616
New Jersey	—	3	60	70	71	2	990
New York (Upstate)	1	12	63	50	83	3	1,327
New York City	—	1	48	63	10	4	2,026
Pennsylvania	1	N	62	63	66	3	1,273
E.N. Central	1	42	235	457	245	4	3,771
Illinois	1	7	67	86	26	1	1,388
Indiana	—	12	11	90	110	—	472
Michigan	—	5	100	81	76	2	654
Ohio	—	10	36	178	7	1	1,013
Wisconsin	—	8	21	22	26	—	244
W.N. Central	2	52	89	99	62	2	1,161
Iowa	1	10	7	13	3	—	116
Kansas	—	7	15	9	16	—	147
Minnesota	—	13	29	17	32	1	308
Missouri	—	18	20	48	4	1	496
Nebraska	—	1	16	10	3	—	58
North Dakota	—	3	2	—	—	—	9
South Dakota	1	—	—	2	4	—	27
S. Atlantic	1	26	267	754	423	5	10,327
Delaware	—	—	9	11	—	1	136
District of Columbia	N	N	—	—	—	—	509
Florida	—	1	87	247	107	1	4,629
Georgia	—	7	46	109	82	1	1,236
Maryland	—	4	28	52	39	—	1,016
North Carolina	—	7	34	73	63	—	1,145
South Carolina	—	4	6	37	1	—	716
Virginia	—	3	49	84	76	2	871
West Virginia	1	—	8	141	55	—	69
E.S. Central	—	26	78	577	331	1	2,120
Alabama	N	7	19	79	24	—	545
Kentucky	—	N	25	180	178	1	312
Mississippi	N	1	11	78	U	N	441
Tennessee	—	18	23	240	129	—	822
W.S. Central	—	26	161	367	140	6	5,118
Arkansas	—	3	8	74	5	1	125
Louisiana	—	1	7	44	11	—	1,156
Oklahoma	—	9	12	79	80	1	253
Texas	—	13	134	170	44	4	3,584
Mountain	11	17	163	89	112	—	1,504
Arizona	1	2	93	14	U	—	590
Colorado	3	6	28	24	42	—	362
Idaho	—	3	11	5	11	—	24
Montana	3	1	6	2	9	—	20
Nevada	—	—	10	28	12	—	326
New Mexico	1	—	10	3	21	—	109
Utah	2	5	4	13	17	—	65
Wyoming	1	—	1	—	—	—	8
Pacific	13	59	253	201	154	10	4,809
Alaska	N	N	1	1	—	—	26
California	9	44	209	136	63	7	4,037
Hawaii	—	—	5	5	—	1	43
Oregon	2	15	9	25	37	—	205
Washington	2	—	29	34	54	2	498
Territories							
American Samoa	N	N	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—
Guam	N	—	—	—	—	—	2
Puerto Rico	—	N	6	32	N	—	507
U.S. Virgin Islands	—	N	—	—	—	—	8

Abbreviations: N = not reportable; U = unavailable; — = no reported cases; CNMI = Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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 diagnoses reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) through December 31, 2012.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	Influenza-associated pediatric mortality†	Invasive pneumococcal disease§				Lyme disease			Malaria
		All Ages	Age <5 years	Legionellosis	Listeriosis	Total	Confirmed	Probable	
United States	**52**	**15,635**	**1,266**	**3,688**	**727**	**30,831**	**22,014**	**8,817**	**1,503**
New England	1	1,199	77	308	60	11,095	7,455	3,640	104
Connecticut	—	309	17	55	22	2,657	1,653	1,004	21
Maine	1	102	3	18	5	1,111	885	226	5
Massachusetts	—	571	50	173	27	5,138	3,396	1,742	48
New Hampshire	—	80	6	19	3	1,450	1,002	448	9
Rhode Island	—	73	1	31	2	217	133	84	17
Vermont	—	64	—	12	1	522	386	136	4
Mid. Atlantic	6	2,290	130	975	166	11,607	8,922	2,685	386
New Jersey	3	596	39	173	44	3,576	2,732	844	67
New York (Upstate)	2	1,045	64	325	43	2,456	1,714	742	42
New York City	—	649	27	177	38	542	330	212	225
Pennsylvania	1	N	N	300	41	5,033	4,146	887	52
E.N. Central	7	2,894	228	847	102	2,209	1,765	444	145
Illinois	1	N	49	226	29	204	204	—	43
Indiana	1	728	37	54	10	74	64	10	22
Michigan	3	540	30	178	21	98	80	18	26
Ohio	—	1,149	86	288	28	67	49	18	41
Wisconsin	2	477	26	101	14	1,766	1,368	398	13
W.N. Central	2	846	92	171	30	1,735	1,032	703	101
Iowa	—	N	N	13	3	165	92	73	6
Kansas	—	N	N	16	7	19	9	10	7
Minnesota	1	499	31	51	7	1,515	911	604	58
Missouri	1	N	36	68	8	2	1	1	19
Nebraska	—	143	14	11	5	15	5	10	4
North Dakota	—	108	—	3	—	15	10	5	2
South Dakota	—	96	11	9	—	4	4	—	5
S. Atlantic	8	3,210	277	613	116	3,842	2,667	1,175	355
Delaware	—	34	2	17	3	669	507	162	2
District of Columbia	—	60	4	N	N	N	N	N	6
Florida	4	988	80	213	33	118	67	51	59
Georgia	—	997	81	56	20	31	31	—	66
Maryland	—	426	31	123	16	1,651	1,113	538	112
North Carolina	2	N	N	65	13	122	27	95	34
South Carolina	1	382	27	26	9	44	35	9	9
Virginia	1	N	36	76	18	1,110	805	305	65
West Virginia	—	323	16	37	4	97	82	15	2
E.S. Central	1	1,298	96	137	32	70	24	46	36
Alabama	—	112	16	20	10	25	13	12	10
Kentucky	—	209	11	43	11	14	8	6	10
Mississippi	—	187	25	17	4	1	1	—	4
Tennessee	1	790	44	57	7	30	2	28	12
W.S. Central	11	1,967	197	229	41	86	37	49	143
Arkansas	2	185	13	20	6	—	—	—	4
Louisiana	—	247	29	29	2	7	3	4	13
Oklahoma	2	N	26	22	5	4	1	3	24
Texas	7	1,535	129	158	28	75	33	42	102
Mountain	6	1,714	142	135	34	44	29	15	75
Arizona	1	661	50	44	14	13	7	6	19
Colorado	—	429	35	24	10	—	—	—	24
Idaho	—	N	1	5	1	5	—	5	8
Montana	—	31	2	4	1	6	6	—	—
Nevada	4	107	9	18	1	10	10	—	8
New Mexico	1	273	20	9	5	1	1	—	2
Utah	—	183	23	27	2	5	2	3	14
Wyoming	—	30	2	4	—	4	3	1	—
Pacific	10	217	27	273	146	143	83	60	158
Alaska	—	138	19	1	1	10	4	6	8
California	7	N	N	219	97	70	61	9	108
Hawaii	1	79	8	4	6	N	N	N	4
Oregon	—	N	N	22	16	48	5	43	12
Washington	2	N	N	27	26	15	13	2	26
Territories									
American Samoa	—	N	—	N	N	N	N	N	—
C.N.M.I.	—	—	—	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—	—	—
Puerto Rico	—	—	—	2	—	N	N	N	1
U.S. Virgin Islands	—	—	—	—	—	N	N	N	—

Abbreviations: N = not reportable; U = unavailable; — = no reported cases; CNMI = Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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 (NCIRD), as of December 31, 2012.

§ *Streptococcus pneumoniae*, invasive disease. The previous categories of invasive pneumococcal disease among children less than 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.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	Measles			Meningococcal disease				
	Total	Indigenous	Imported	All serogroups	Serogroup A, C, Y, and W-135	Serogroup B	Serogroup other	Serogroup unknown
United States	**55**	**34**	**21**	**551**	**161**	**110**	**20**	**260**
New England	1	—	1	15	6	4	2	3
Connecticut	1	—	1	4	2	2	—	—
Maine	—	—	—	3	2	—	1	—
Massachusetts	—	—	—	6	2	1	1	2
New Hampshire	—	—	—	—	—	—	—	—
Rhode Island	—	—	—	—	—	—	—	—
Vermont	—	—	—	2	—	1	—	1
Mid. Atlantic	9	1	8	85	17	21	2	45
New Jersey	2	1	1	14	—	—	—	14
New York (Upstate)	1	—	1	21	8	10	—	3
New York City	4	—	4	25	—	—	—	25
Pennsylvania	2	—	2	25	9	11	2	3
E.N. Central	17	13	4	72	34	24	6	8
Illinois	—	—	—	17	8	5	4	—
Indiana	15	13	2	8	2	5	—	1
Michigan	1	—	1	13	7	6	—	—
Ohio	1	—	1	25	14	4	1	6
Wisconsin	—	—	—	9	3	4	1	1
W.N. Central	6	4	2	40	5	4	—	31
Iowa	—	—	—	2	—	1	—	1
Kansas	6	4	2	6	4	1	—	1
Minnesota	—	—	—	12	1	1	—	10
Missouri	—	—	—	16	—	—	—	16
Nebraska	—	—	—	3	—	—	—	3
North Dakota	—	—	—	1	—	1	—	—
South Dakota	—	—	—	—	—	—	—	—
S. Atlantic	4	4	—	83	16	8	2	57
Delaware	1	1	—	1	1	—	—	—
District of Columbia	1	1	—	2	—	—	—	2
Florida	—	—	—	45	—	—	—	45
Georgia	2	2	—	11	5	2	—	4
Maryland	—	—	—	4	3	1	—	—
North Carolina	—	—	—	6	3	2	—	1
South Carolina	—	—	—	5	2	1	2	—
Virginia	—	—	—	5	—	1	—	4
West Virginia	—	—	—	4	2	1	—	1
E.S. Central	—	—	—	17	10	3	1	3
Alabama	—	—	—	6	3	—	1	2
Kentucky	—	—	—	1	1	—	—	—
Mississippi	—	—	—	3	—	2	—	1
Tennessee	—	—	—	7	6	1	—	—
W.S. Central	4	2	2	58	27	21	2	8
Arkansas	4	2	2	8	5	3	—	—
Louisiana	—	—	—	4	—	—	—	4
Oklahoma	—	—	—	9	3	4	2	—
Texas	—	—	—	37	19	14	—	4
Mountain	5	5	—	41	20	6	2	13
Arizona	2	2	—	6	6	—	—	—
Colorado	—	—	—	6	2	4	—	—
Idaho	—	—	—	4	1	—	—	3
Montana	—	—	—	10	4	2	1	3
Nevada	—	—	—	3	1	—	—	2
New Mexico	2	2	—	5	1	—	1	3
Utah	1	1	—	4	2	—	—	2
Wyoming	—	—	—	3	3	—	—	—
Pacific	9	5	4	140	26	19	3	92
Alaska	—	—	—	2	—	—	—	2
California	8	5	3	87	—	—	—	87
Hawaii	—	—	—	2	—	—	—	2
Oregon	1	—	1	25	14	10	—	1
Washington	—	—	—	24	12	9	3	—
Territories								
American Samoa	—	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—	—
Puerto Rico	2	2	—	—	—	—	—	—
U.S. Virgin Islands	—	—	—	—	—	—	—	—

Abbreviations: N = not reportable; U = unavailable; — = no reported cases; CNMI = Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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, 2012

Area	Mumps	Novel influenza A virus infections†	Pertussis	Plague	Psittacosis	Q fever		
						Total	Acute	Chronic
United States	**229**	**313**	**48,277**	**4**	**2**	**135**	**113**	**22**
New England	8	—	2,594	—	—	1	1	—
Connecticut	—	—	182	—	N	—	—	—
Maine	—	—	737	—	—	—	—	—
Massachusetts	6	—	648	—	—	1	1	—
New Hampshire	—	—	269	—	—	N	N	N
Rhode Island	2	—	113	—	—	—	—	—
Vermont	—	—	645	—	—	N	N	N
Mid. Atlantic	30	11	6,511	—	1	10	6	4
New Jersey	—	—	1,395	—	—	3	3	—
New York (Upstate)	6	—	2,715	—	—	3	1	2
New York City	20	—	456	—	—	1	—	1
Pennsylvania	4	11	1,945	—	1	3	2	1
E.N. Central	60	275	11,085	—	—	29	29	—
Illinois	32	4	2,026	—	—	4	4	—
Indiana	4	138	441	—	—	2	2	—
Michigan	10	6	845	—	—	3	3	—
Ohio	6	107	893	—	—	2	2	—
Wisconsin	8	20	6,880	—	—	18	18	—
W.N. Central	23	10	8,104	—	—	13	8	5
Iowa	6	1	1,736	—	—	N	N	N
Kansas	4	—	887	—	—	2	1	1
Minnesota	7	8	4,142	—	—	—	—	—
Missouri	5	1	815	—	—	3	2	1
Nebraska	1	—	240	—	—	6	3	3
North Dakota	—	—	214	—	—	—	—	—
South Dakota	—	—	70	—	—	2	2	—
S. Atlantic	22	15	2,891	—	—	15	15	—
Delaware	—	—	57	—	—	—	—	—
District of Columbia	2	—	26	—	—	N	N	N
Florida	5	—	575	—	—	1	1	—
Georgia	3	—	318	—	—	4	4	—
Maryland	—	12	369	—	—	1	1	—
North Carolina	2	—	612	—	—	9	9	—
South Carolina	1	—	224	—	—	—	—	—
Virginia	7	—	625	—	—	—	—	—
West Virginia	2	3	85	—	—	—	—	—
E.S. Central	6	—	1,260	—	—	5	3	2
Alabama	2	—	212	—	—	—	—	—
Kentucky	2	—	666	—	—	3	1	2
Mississippi	—	—	77	—	—	—	—	—
Tennessee	2	—	305	—	—	2	2	—
W.S. Central	22	—	2,692	—	—	15	10	5
Arkansas	1	—	248	—	—	1	1	—
Louisiana	2	—	72	—	—	—	—	—
Oklahoma	4	—	154	—	—	2	1	1
Texas	15	—	2,218	—	N	12	8	4
Mountain	15	1	6,097	2	—	18	13	5
Arizona	3	—	1,130	—	—	2	1	1
Colorado	7	—	1,494	1	—	9	8	1
Idaho	—	—	235	—	—	1	—	1
Montana	1	—	549	—	—	2	2	—
Nevada	—	—	112	—	—	—	—	—
New Mexico	—	—	924	1	—	1	1	—
Utah	3	1	1,591	—	—	3	1	2
Wyoming	1	—	62	—	—	—	—	—
Pacific	43	1	7,043	2	1	29	28	1
Alaska	—	—	353	—	—	—	—	—
California	34	—	795	—	1	22	22	—
Hawaii	1	1	73	—	—	—	—	—
Oregon	6	—	906	2	—	4	4	—
Washington	2	—	4,916	—	—	3	2	1
Territories								
American Samoa	—	—	—	—	N	N	N	N
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	4	—	1	—	—	N	N	N
Puerto Rico	4	—	—	—	N	—	—	—
U.S. Virgin Islands	—	—	—	—	—	—	—	—

Abbreviations: N = not reportable; U = unavailable; — = no reported cases; CNMI = Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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, NCIRD, as of December 31, 2012.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	Rabies		Rubella	Rubella, Congenital syndrome	Salmonellosis	Shiga toxin-producing *E. Coli* (STEC)†
	Animal	Human				
United States	**4,541**	**1**	**9**	**3**	**53,800**	**6,463**
New England	386	—	1	—	1,993	209
Connecticut	173	—	—	—	444	50
Maine	91	—	—	—	161	20
Massachusetts	—	—	1	—	1,036	96
New Hampshire	28	—	—	—	156	23
Rhode Island	28	—	—	—	108	2
Vermont	66	—	—	—	88	18
Mid. Atlantic	832	—	2	—	5,417	675
New Jersey	—	—	—	—	1,147	138
New York (Upstate)	420	—	1	—	1,395	243
New York City	13	—	1	—	1,180	85
Pennsylvania	399	—	—	—	1,695	209
E.N. Central	170	—	3	1	5,896	1,176
Illinois	63	—	1	1	1,970	218
Indiana	8	—	1	—	781	181
Michigan	59	—	—	—	995	285
Ohio	40	—	—	—	1,268	238
Wisconsin	N	—	1	—	882	254
W.N. Central	252	—	—	—	3,554	1,025
Iowa	33	—	—	—	622	181
Kansas	56	—	—	—	491	97
Minnesota	—	—	—	—	781	258
Missouri	28	—	—	—	1,071	308
Nebraska	—	—	—	—	353	102
North Dakota	75	—	—	—	66	32
South Dakota	60	—	—	—	170	47
S. Atlantic	1,334	—	2	1	15,344	610
Delaware	—	—	—	—	148	13
District of Columbia	—	—	—	—	70	8
Florida	103	—	—	—	6,523	93
Georgia	286	—	—	—	2,637	136
Maryland	325	—	2	1	951	74
North Carolina	—	—	—	—	2,200	162
South Carolina	—	—	—	—	1,452	25
Virginia	560	—	—	—	1,144	81
West Virginia	60	—	—	—	219	18
E.S. Central	71	—	—	1	4,229	308
Alabama	55	—	—	1	1,150	64
Kentucky	14	—	—	—	732	87
Mississippi	2	—	—	—	1,246	30
Tennessee	—	—	—	—	1,101	127
W.S. Central	899	—	—	—	8,697	705
Arkansas	131	—	—	—	1,404	69
Louisiana	4	—	—	—	1,544	27
Oklahoma	81	—	—	—	759	110
Texas	683	—	—	—	4,990	499
Mountain	313	—	—	—	2,465	723
Arizona	N	—	—	—	859	141
Colorado	183	—	—	—	509	175
Idaho	23	—	—	—	134	139
Montana	N	—	—	—	109	44
Nevada	18	—	—	—	185	37
New Mexico	47	—	—	—	334	55
Utah	15	—	—	—	260	107
Wyoming	27	—	—	—	75	25
Pacific	284	1	1	—	6,205	1,032
Alaska	6	—	—	—	59	N
California	252	1	1	—	4,562	588
Hawaii	—	—	—	—	341	20
Oregon	17	—	—	—	401	192
Washington	9	—	—	—	842	232
Territories						
American Samoa	—	—	4	—		
C.N.M.I.	—	—	—	—	—	—
Guam	—	—	—	—	13	—
Puerto Rico	27	—	—	N	165	4
U.S. Virgin Islands	—	N	—	—	—	—

Abbreviations: N = not reportable; U = unavailable; — = no reported cases; CNMI = Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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, 2012

Area	Shigellosis	Spotted Fever Rickettsiosis†			Streptococcal toxic-shock syndrome	Syphilis§		
		Total	Confirmed	Probable		All Stages	Congenital (age <1 yr)	Primary and Secondary
United States	15,283	4,470	188	4,278	194	49,903	322	15,667
New England	212	26	1	25	37	1,118	1	474
Connecticut	46	—	—	—	19	121	—	55
Maine	7	3	—	3	10	22	—	17
Massachusetts	131	7	—	7	2	806	1	316
New Hampshire	8	2	—	2	—	64	—	36
Rhode Island	15	13	—	13	—	93	—	44
Vermont	5	1	1	—	6	12	—	6
Mid. Atlantic	2,478	204	6	198	27	7,544	15	1,947
New Jersey	952	128	—	128	10	883	1	229
New York (Upstate)	828	28	5	23	11	939	8	233
New York City	564	7	—	7	—	4,373	—	991
Pennsylvania	134	41	1	40	6	1,349	6	494
E.N. Central	2,568	232	11	218	74	5,147	51	1,839
Illinois	280	151	9	142	37	2,423	27	804
Indiana	161	33	2	28	17	531	—	224
Michigan	251	3	—	3	9	786	7	295
Ohio	1,749	23	—	23	10	1,138	16	425
Wisconsin	127	22	—	22	1	269	1	91
W.N. Central	973	349	5	344	2	1,111	3	399
Iowa	91	8	—	8	—	143	—	70
Kansas	130	—	—	—	—	129	—	24
Minnesota	390	15	—	15	—	335	1	118
Missouri	71	315	4	311	1	426	1	157
Nebraska	272	9	1	8	1	35	1	8
North Dakota	8	1	—	1	—	14	—	4
South Dakota	11	1	—	1	—	29	—	18
S. Atlantic	2,903	1,279	119	1,160	21	11,442	72	3,805
Delaware	22	30	—	30	—	106	1	38
District of Columbia	26	2	1	1	—	589	—	165
Florida	1,702	31	3	28	N	4,483	37	1,369
Georgia	660	92	92	—	—	2,432	14	937
Maryland	222	9	—	9	N	1,243	12	431
North Carolina	136	591	12	579	7	1,036	1	347
South Carolina	37	61	7	54	4	623	6	225
Virginia	91	461	4	457	7	906	1	285
West Virginia	7	2	—	2	3	24	—	8
E.S. Central	1,250	950	13	937	8	2,618	7	782
Alabama	332	167	3	164	N	705	4	216
Kentucky	426	62	3	59	8	390	2	150
Mississippi	285	25	2	23	N	456	—	150
Tennessee	207	696	5	691	—	1,067	1	266
W.S. Central	2,780	1,332	13	1,319	1	9,560	121	2,222
Arkansas	96	837	5	832	—	468	11	173
Louisiana	215	9	—	9	1	1,779	32	339
Oklahoma	543	409	6	403	N	256	—	83
Texas	1,926	77	2	75	N	7,057	78	1,627
Mountain	789	75	11	64	24	2,138	16	698
Arizona	444	50	10	40	—	787	14	202
Colorado	123	6	1	5	2	503	—	208
Idaho	9	4	—	4	—	53	—	26
Montana	11	3	—	3	N	3	—	2
Nevada	55	—	—	—	3	445	1	113
New Mexico	108	4	—	4	—	234	1	101
Utah	34	6	—	6	18	101	—	42
Wyoming	5	2	—	2	1	12	—	4
Pacific	1,330	23	9	13	—	9,225	36	3,501
Alaska	7	N	—	—	—	34	1	11
California	1,071	21	8	12	N	8,015	34	2,953
Hawaii	27	N	N	N	—	43	—	23
Oregon	92	1	—	1	N	424	1	212
Washington	133	1	1	—	N	709	—	302
Territories								
American Samoa	5	N	N	N	N	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	1	N	N	N	—	27	—	6
Puerto Rico	2	N	N	N	N	704	1	306
U.S. Virgin Islands	—	N	N	N	—	2	—	—

Abbreviations: N = not reportable; U = unavailable; — = no reported cases; CNMI = Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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, NCHHSTP, as of May 29, 2013.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	Tetanus	Toxic-shock syndrome	Trichinellosis	Tuberculosis†	Tularemia
United States	37	65	18	9,945	149
New England	—	—	—	342	8
Connecticut	—	N	—	74	—
Maine	—	—	—	17	—
Massachusetts	—	—	—	215	8
New Hampshire	—	—	—	9	—
Rhode Island	—	—	—	23	—
Vermont	—	—	—	4	—
Mid. Atlantic	4	18	2	1,402	—
New Jersey	—	3	2	302	—
New York (Upstate)	—	9	—	215	—
New York City	1	—	—	651	—
Pennsylvania	3	6	—	234	—
E.N. Central	8	12	4	818	8
Illinois	1	4	1	347	4
Indiana	3	1	—	102	4
Michigan	2	6	1	149	—
Ohio	2	1	—	149	—
Wisconsin	—	—	2	71	—
W.N. Central	3	9	1	406	64
Iowa	—	1	—	46	1
Kansas	—	—	—	42	22
Minnesota	2	4	1	162	—
Missouri	1	4	—	89	27
Nebraska	—	—	—	22	6
North Dakota	—	—	—	26	3
South Dakota	—	—	—	19	5
S. Atlantic	7	11	4	1,901	5
Delaware	—	1	—	28	—
District of Columbia	—	—	1	37	—
Florida	4	N	—	679	—
Georgia	—	9	N	357	—
Maryland	—	N	1	224	2
North Carolina	—	—	—	211	1
South Carolina	2	1	—	122	—
Virginia	1	N	2	235	2
West Virginia	—	—	—	8	—
E.S. Central	2	3	—	459	6
Alabama	1	—	—	134	—
Kentucky	—	—	N	80	4
Mississippi	1	N	—	81	—
Tennessee	—	3	—	164	2
W.S. Central	5	1	1	1,540	39
Arkansas	—	1	N	70	22
Louisiana	—	—	—	149	—
Oklahoma	2	N	—	88	17
Texas	3	N	1	1,233	—
Mountain	2	4	1	457	10
Arizona	—	1	1	211	—
Colorado	1	—	—	64	1
Idaho	—	1	—	15	1
Montana	—	N	—	5	3
Nevada	—	—	—	82	1
New Mexico	1	—	—	40	1
Utah	—	2	—	37	2
Wyoming	—	—	—	3	1
Pacific	6	7	5	2,620	9
Alaska	1	N	5	66	2
California	4	7	—	2,191	2
Hawaii	—	N	—	117	—
Oregon	—	N	—	61	—
Washington	1	N	—	185	5
Territories					
American Samoa	—	N	N	1	—
C.N.M.I.	—	—	—	21	—
Guam	—	—	—	68	—
Puerto Rico	1	N	N	71	—
U.S. Virgin Islands	—	N	—	4	—

Abbreviations: N = not reportable; U = unavailable; — = no reported cases; CNMI = Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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, NCHHSTP, as of June 15, 2013.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2012

Area	Typhoid fever	Vancomycin-intermediate *Staphylococcus aureus*	Vancomycin-resistant *Staphylococcus aureus*	Varicella		Vibriosis§
				Morbidity	Mortality†	
United States	354	134	2	13,447	3	1,111
New England	17	3	—	1,424	—	118
Connecticut	2	—	—	265	—	24
Maine	—	—	—	258	—	10
Massachusetts	12	2	—	534	N	70
New Hampshire	1	N	—	142	—	3
Rhode Island	2	1	—	80	—	11
Vermont	—	—	—	145	N	—
Mid. Atlantic	97	40	—	1,327	1	80
New Jersey	20	3	—	466	1	41
New York (Upstate)	22	30	—	N	N	N
New York City	45	4	—	—	—	27
Pennsylvania	10	3	—	861	—	12
E.N. Central	47	25	—	3,583	—	51
Illinois	14	4	—	898	—	22
Indiana	4	N	—	469	—	6
Michigan	9	10	—	971	—	7
Ohio	15	9	—	806	N	11
Wisconsin	5	2	—	439	—	5
W.N. Central	13	21	—	881	—	27
Iowa	3	N	—	N	N	N
Kansas	1	N	N	395	—	N
Minnesota	5	1	—	—	—	15
Missouri	3	20	—	388	—	8
Nebraska	—	—	—	27	—	2
North Dakota	1	—	—	39	—	2
South Dakota	—	—	—	32	N	N
S. Atlantic	46	16	1	1,611	—	322
Delaware	—	—	1	3	—	6
District of Columbia	1	2	—	19	—	4
Florida	11	7	—	816	—	147
Georgia	12	1	—	51	—	29
Maryland	7	1	—	N	—	53
North Carolina	4	2	—	N	N	31
South Carolina	1	—	—	11	—	11
Virginia	10	2	—	505	N	41
West Virginia	—	1	—	206	—	N
E.S. Central	5	1	1	201	—	55
Alabama	1	1	—	190	N	20
Kentucky	—	N	N	N	N	2
Mississippi	1	—	—	11	N	16
Tennessee	3	—	1	N	—	17
W.S. Central	33	26	—	2,715	1	119
Arkansas	2	—	—	236	—	N
Louisiana	2	1	—	69	N	53
Oklahoma	—	2	—	N	N	—
Texas	29	23	—	2,410	1	66
Mountain	17	2	—	1,578	—	45
Arizona	7	2	—	535	—	29
Colorado	7	N	—	483	N	10
Idaho	—	N	N	N	N	N
Montana	—	N	N	132	—	N
Nevada	1	—	—	N	N	4
New Mexico	—	N	N	99	—	1
Utah	2	—	—	310	—	1
Wyoming	—	—	—	19	N	—
Pacific	79	—	—	127	1	294
Alaska	—	N	N	58	N	3
California	61	N	N	24	1	170
Hawaii	5	—	—	45	—	35
Oregon	2	N	N	N	N	19
Washington	11	N	—	N	—	67
Territories						
American Samoa	4	N	N	N	N	N
C.N.M.I.	—	N	—	—	—	—
Guam	—	—	—	50	N	1
Puerto Rico	—	—	—	199	—	N
U.S. Virgin Islands	—	—	—	—	—	—

Abbreviations: N = not reportable; U = unavailable; — = no reported cases; CNMI = Commonwealth of the Northern Mariana Islands.

* No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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, NCIRD, as of May 1, 2013.

§ Vibriosis refers to any species of the family *Vibrionaceae*, other than toxigenic *Vibrio cholerae* O1 or O139.

TABLE 3. Reported cases and incidence* of notifiable diseases,† by age group — United States, 2012

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	1	(0.03)	9	(0.06)	47	(0.11)	3	(0.01)	5	(0.01)	7	(0.01)	1	(0.00)	—	**73**
nonneuroinvasive	—	(0.00)	1	(0.01)	6	(0.01)	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	—	**8**
Eastern equine encephalitis virus																
neuroinvasive	—	(0.00)	—	(0.00)	4	(0.01)	—	(0.00)	1	(0.00)	5	(0.00)	5	(0.01)	—	**15**
Powassan virus																
neuroinvasive	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	2	(0.00)	2	(0.00)	3	(0.01)	—	**7**
St. Louis encephalitis virus																
neuroinvasive	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	—	(0.00)	—	**1**
nonneuroinvasive	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	2	(0.00)	—	(0.00)	—	**2**
West Nile virus																
neuroinvasive	4	(0.10)	7	(0.04)	38	(0.09)	126	(0.29)	313	(0.51)	1,272	(1.22)	1,112	(2.69)	—	**2,872**
nonneuroinvasive	2	(0.05)	13	(0.08)	60	(0.15)	142	(0.32)	490	(0.80)	1,414	(1.36)	680	(1.64)	—	**2,801**
Babesiosis¶	3	(0.15)	3	(0.04)	13	(0.07)	20	(0.09)	64	(0.21)	366	(0.70)	339	(1.68)	129	**937**
confirmed	3	(0.08)	2	(0.01)	4	(0.01)	9	(0.02)	47	(0.08)	267	(0.26)	274	(0.66)	110	**716**
probable	—	(0.00)	1	(0.01)	9	(0.02)	11	(0.03)	17	(0.03)	99	(0.09)	65	(0.15)	19	**221**
Botulism, total	118	(2.98)	1	(0.01)	1	(0.00)	7	(0.02)	18	(0.03)	15	(0.01)	7	(0.02)	1	**168**
foodborne	—	(0.00)	—	(0.00)	—	(0.00)	5	(0.01)	15	(0.02)	5	(0.00)	2	(0.00)	—	**27**
infant	118	(2.98)	1	(0.01)	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	2	(0.00)	1	**123**
other(wound and unspecified)	—	(0.00)	—	(0.00)	1	(0.00)	2	(0.00)	3	(0.00)	9	(0.01)	3	(0.01)	—	**18**
Brucellosis	—	(0.00)	3	(0.02)	11	(0.03)	10	(0.02)	25	(0.04)	40	(0.04)	25	(0.06)	—	**114**
Chancroid	—	(0.00)	—	(0.00)	—	(0.00)	7	(0.02)	5	(0.01)	1	(0.00)	2	(0.00)	—	**15**
Chlamydia trachomatis, infection**	—	(0.00)	—	(0.00)	—	(0.00)	987,412	(2254.18)	365,410	(595.19)	49,153	(47.33)	1,134	(2.74)	4,590	**1,422,976**
Cholera	—	(0.00)	1	(0.01)	—	(0.00)	1	(0.00)	3	(0.00)	5	(0.00)	6	(0.01)	1	**17**
Coccidioidomycosis¶	24	(1.36)	84	(1.17)	690	(3.79)	1,948	(9.87)	4,087	(15.00)	7,357	(15.88)	3,514	(19.18)	98	**17,802**
Cryptosporidiosis, total	90	(2.27)	904	(5.60)	1,004	(2.45)	1,165	(2.67)	1,587	(2.59)	1,950	(1.88)	1,156	(2.80)	100	**7,956**
confirmed	63	(1.58)	648	(4.05)	672	(1.67)	775	(1.76)	1,016	(1.65)	1,186	(1.13)	659	(1.59)	79	**5,098**
probable	26	(0.66)	249	(1.54)	319	(0.78)	368	(0.84)	534	(0.87)	721	(0.69)	483	(1.17)	18	**2,718**
Cyclosporiasis	1	(0.03)	1	(0.01)	2	(0.01)	5	(0.01)	32	(0.06)	63	(0.07)	17	(0.05)	2	**123**
Dengue virus infection																
Dengue fever	—	(0.00)	5	(0.03)	41	(0.10)	64	(0.15)	135	(0.22)	225	(0.22)	71	(0.17)	3	**544**
Dengue hemorrhagic fever	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	1	(0.00)	1	(0.00)	—	**3**
Diphtheria	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	—	(0.00)	—	(0.00)	—	**1**
Ehrlichiosis/Anaplasmosis																
Anaplasma phagocytophilum	—	(0.00)	15	(0.10)	104	(0.27)	141	(0.34)	275	(0.47)	1,008	(1.02)	664	(1.69)	182	**2,389**
Ehrlichia chaffeensis	—	(0.00)	11	(0.07)	58	(0.15)	53	(0.13)	144	(0.25)	511	(0.52)	340	(0.86)	11	**1,128**
Ehrlichia ewingii	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)		(0.00)	11	(0.01)	6	(0.02)	—	**17**
Undetermined	—	(0.00)	5	(0.03)	14	(0.04)	12	(0.03)	27	(0.05)	92	(0.09)	41	(0.10)	—	**191**
Giardiasis	112	(3.45)	1,939	(14.73)	2,031	(6.05)	1,705	(4.70)	2,912	(5.75)	4,726	(5.44)	1,379	(3.94)	374	**15,178**
Gonorrhea**	—	(0.00)	—	(0.00)	—	(0.00)	196,772	(449.21)	106,054	(172.74)	26,578	(25.59)	644	(1.56)	1,376	**334,826**
Haemophilus influenzae, invasive disease																
all ages, all serotypes	280	(7.06)	165	(1.02)	108	(0.26)	105	(0.24)	205	(0.33)	886	(0.85)	1,632	(3.94)	37	**3,418**
age <5 yrs																
serotype b	16	(0.40)	14	(0.09)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	**30**
nonserotype b	124	(3.46)	81	(0.55)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	**205**
unknown serotype	140	(3.90)	70	(0.48)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	**210**
Hansen disease (leprosy)	—	(0.00)	—	(0.00)	—	(0.00)	5	(0.01)	19	(0.03)	21	(0.02)	12	(0.03)	25	**82**
Hantavirus pulmonary syndrome	—	(0.00)	—	(0.00)	3	(0.01)	2	(0.00)	8	(0.01)	12	(0.01)	3	(0.01)	2	**30**
Hemolytic uremic syndrome, post-diarrheal	5	(0.13)	122	(0.80)	81	(0.21)	16	(0.04)	10	(0.02)	11	(0.01)	15	(0.04)	14	**274**
Hepatitis virus, acute																
A	3	(0.08)	32	(0.20)	82	(0.20)	262	(0.60)	360	(0.59)	541	(0.52)	260	(0.63)	22	**1,562**
B	2	(0.05)	—	(0.00)	3	(0.01)	129	(0.30)	1,146	(1.87)	1,391	(1.34)	146	(0.35)	78	**2,895**
C	10	(0.26)	—	(0.00)	1	(0.00)	448	(1.06)	786	(1.33)	479	(0.48)	24	(0.06)	34	**1,782**
Hepatitis B perinatal infection	25	(0.64)	14	(0.09)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	1	**40**
Human immunodeficiency virus (HIV) diagnoses††	48	(1.20)	43	(0.30)	119	(0.30)	7,500	(17.10)	13,957	(22.60)	13,018	(12.50)	676	(1.60)	—	**35,361**
Influenza-associated pediatric mortality§§	10	(0.26)	9	(0.06)	28	(0.07)	5	(0.04)	—	(0.00)	—	(0.00)	—	(0.00)	—	**52**
Invasive pneumococcal disease																
all ages	369	(14.40)	749	(7.14)	457	(1.71)	292	(1.03)	1,187	(3.00)	6,303	(9.31)	5,861	(21.52)	417	**15,635**
age <5 yrs	419	(14.09)	847	(6.96)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	**1,266**
Legionellosis	1	(0.03)	1	(0.01)	6	(0.01)	38	(0.09)	248	(0.41)	1,863	(1.80)	1,442	(3.49)	89	**3,688**
Listeriosis	36	(0.91)	2	(0.01)	5	(0.01)	20	(0.05)	63	(0.10)	183	(0.18)	395	(0.96)	23	**727**
Lyme disease, total	13	(0.33)	891	(5.55)	4,297	(10.52)	3,063	(7.04)	3,452	(5.66)	9,588	(9.29)	4,325	(10.52)	5,202	**30,831**
Confirmed	13	(0.33)	743	(4.62)	3,274	(8.01)	2,000	(4.59)	2,382	(3.90)	6,987	(6.76)	3,103	(7.54)	3,512	**22,014**
Probable	—	(0.00)	148	(0.92)	1,023	(2.50)	1,063	(2.44)	1,070	(1.75)	2,601	(2.52)	1,222	(2.97)	1,690	**8,817**

See table footnotes on page 41.

TABLE 3. (*Continued*) Reported cases and incidence* of notifiable diseases,† by age group — United States, 2012

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		
Malaria	1	(0.03)	48	(0.30)	140	(0.34)	243	(0.55)	420	(0.68)	560	(0.54)	60	(0.15)	31	**1,503**
Measles, total	4	(0.10)	11	(0.07)	19	(0.05)	2	(0.00)	12	(0.02)	7	(0.01)	—	(0.00)	—	**55**
indigenous	1	(0.03)	6	(0.04)	14	(0.03)	2	(0.00)	8	(0.01)	3	(0.00)	—	(0.00)	—	**34**
imported	3	(0.08)	5	(0.03)	5	(0.01)	—	(0.00)	4	(0.01)	4	(0.00)	—	(0.00)	—	**21**
Meningococcal disease																
all serogroups	64	(1.61)	47	(0.29)	28	(0.07)	95	(0.22)	81	(0.13)	134	(0.13)	101	(0.24)	1	**551**
serogroup A,C,Y, and W-135	13	(0.33)	5	(0.03)	9	(0.02)	25	(0.06)	16	(0.03)	56	(0.05)	37	(0.09)	—	**161**
serogroup B	29	(0.73)	20	(0.12)	10	(0.02)	20	(0.05)	13	(0.02)	11	(0.01)	7	(0.02)	—	**110**
serogroup other	2	(0.05)	2	(0.01)	1	(0.00)	3	(0.01)	4	(0.01)	4	(0.00)	4	(0.01)	—	**20**
serogroup unknown	20	(0.50)	20	(0.12)	8	(0.02)	47	(0.11)	48	(0.08)	63	(0.06)	53	(0.13)	1	**260**
Mumps	4	(0.10)	37	(0.23)	54	(0.13)	23	(0.05)	37	(0.06)	57	(0.05)	16	(0.04)	1	**229**
Novel influenza A virus infection	7	(0.17)	96	(0.59)	175	(0.42)	17	(0.03)	3	(0.00)	12	(0.00)	1	(0.00)	2	**313**
Pertussis	4,955	(124.93)	5,802	(35.90)	21,852	(53.24)	5,636	(12.87)	3,377	(5.50)	4,916	(4.73)	1,139	(2.75)	600	**48,277**
Plague	—	(0.00)	—	(0.00)	1	(0.00)	—	(0.00)	1	(0.00)	1	(0.00)	1	(0.00)	—	**4**
Psittacosis	—	(0.00)	—	(0.00)	1	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	—	(0.00)	—	**2**
Q fever, total	—	(0.00)	—	(0.00)	—	(0.00)	7	(0.02)	23	(0.04)	78	(0.08)	26	(0.06)	1	**135**
acute	—	(0.00)	—	(0.00)	—	(0.00)	7	(0.02)	21	(0.03)	67	(0.07)	17	(0.04)	1	**113**
chronic	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	2	(0.00)	11	(0.01)	9	(0.02)	—	**22**
Rabies, human	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	—	(0.00)	—	(0.00)	—	**1**
Rubella	—	(0.00)	—	(0.00)	1	(0.00)	1	(0.00)	6	(0.01)	1	(0.00)	—	(0.00)	—	**9**
Rubella, congenital syndrome	3	(0.08)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	**3**
Salmonellosis	5,649	(142.43)	8,524	(52.74)	6,566	(16.00)	4,997	(11.41)	7,038	(11.46)	12,742	(12.27)	7,476	(18.07)	808	**53,800**
Shiga toxin-producing *E. coli* (STEC)	193	(4.88)	1,510	(9.37)	1,204	(2.94)	1,091	(2.50)	892	(1.46)	956	(0.92)	538	(1.30)	79	**6,463**
Shigellosis	289	(7.29)	4,487	(27.76)	4,478	(10.91)	1,176	(2.68)	2,224	(3.62)	1,836	(1.77)	585	(1.41)	208	**15,283**
Spotted fever rickettsiosis, total	6	(0.15)	63	(0.39)	278	(0.68)	401	(0.92)	805	(1.32)	1,990	(1.93)	915	(2.23)	12	**4,470**
confirmed	—	(0.00)	7	(0.04)	15	(0.04)	11	(0.03)	35	(0.06)	83	(0.08)	37	(0.09)	—	**188**
probable	6	(0.15)	56	(0.35)	263	(0.64)	390	(0.89)	769	(1.26)	1,905	(1.84)	877	(2.13)	12	**4,278**
Streptococcal toxic-shock syndrome	2	(0.08)	4	(0.04)	9	(0.03)	10	(0.04)	33	(0.09)	80	(0.12)	55	(0.20)	1	**194**
Syphillis, total, all stages**,¶¶	—	(0.00)	—	(0.00)	—	(0.00)	11,083	(25.30)	20,189	(32.88)	16,977	(16.35)	1,161	(2.81)	128	**49,903**
congenital (age <1 yr)**	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	**322**
primary and secondary**	—	(0.00)	—	(0.00)	—	(0.00)	4,160	(9.50)	6,683	(10.89)	4,671	(4.50)	123	(0.30)	20	**15,667**
Tetanus	2	(0.05)	1	(0.01)	1	(0.00)	4	(0.01)	9	(0.01)	6	(0.01)	6	(0.01)	8	**37**
Toxic-shock syndrome(other than streptococcal)	—	(0.00)	4	(0.03)	16	(0.05)	33	(0.10)	7	(0.02)	4	(0.01)	1	(0.00)	—	**65**
Trichinellosis	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	7	(0.01)	9	(0.01)	2	(0.01)	—	**18**
Tuberculosis***	58	(1.46)	202	(1.25)	226	(0.55)	1,020	(2.33)	2,421	(3.94)	3,811	(3.67)	2,204	(5.32)	3	**9,945**
Tularemia	—	(0.00)	16	(0.10)	19	(0.05)	7	(0.02)	15	(0.02)	53	(0.05)	33	(0.08)	6	**149**
Typhoid fever	4	(0.10)	49	(0.30)	63	(0.15)	65	(0.15)	102	(0.17)	49	(0.05)	9	(0.02)	13	**354**
Vancomycin-intermediate *Staphylococcus aureus* (VISA)	—	(0.00)	—	(0.00)	2	(0.01)	4	(0.01)	12	(0.03)	60	(0.08)	54	(0.17)	2	**134**
Vancomycin-resistant *Staphylococcus aureus* (VRSA)	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	—	**2**
Vibriosis	11	(0.30)	18	(0.12)	92	(0.24)	70	(0.17)	179	(0.32)	434	(0.46)	239	(0.63)	68	**1,111**

* Per 100,000 population.

† No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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 (DVBD), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) (ArboNET Surveillance), as of June 1, 2013.

¶ 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 May 29, 2013.

†† Total number of HIV diagnoses reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) through December 31, 2012.

§§ Totals reported to the Division of Influenza, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2012.

¶¶ 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 (NCHHSTP), as of May 29, 2013.

*** Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of June 15, 2013.

TABLE 4. Reported cases and incidence* of notifiable diseases,† by sex — United States, 2012

Disease	Male		Female		Age not stated	Total
	No.	Rate	No.	Rate		
Arboviral diseases§						
California serogroup viruses						
neuroinvasive	41	(0.03)	32	(0.02)	—	**73**
nonneuroinvasive	4	(0.00)	4	(0.00)	—	**8**
Eastern equine encephalitis virus						
neuroinvasive	13	(0.01)	2	(0.00)	—	**15**
Powassan virus						
neuroinvasive	4	(0.00)	3	(0.00)	—	**7**
St. Louis encephalitis virus						
neuroinvasive	—	(0.00)	1	(0.00)	—	**1**
nonneuroinvasive	1	(0.00)	1	(0.00)	—	**2**
West Nile virus						
neuroinvasive	1,717	(1.12)	1,155	(0.73)	—	**2,872**
nonneuroinvasive	1,475	(0.96)	1,326	(0.84)	—	**2,801**
Babesiosis¶	585	(0.76)	321	(0.40)	31	**937**
confirmed	453	(0.29)	233	(0.14)	30	**716**
probable	132	(0.08)	88	(0.05)	1	**221**
Botulism, total	110	(0.07)	57	(0.04)	1	**168**
foodborne	22	(0.01)	5	(0.00)	—	**27**
infant	74	(3.65)	48	(2.48)	1	**123**
other(wound and unspecified)	14	(0.01)	4	(0.00)	—	**18**
Brucellosis	70	(0.05)	44	(0.03)	—	**114**
Chancroid**	7	(0.00)	8	(0.01)	—	**15**
Chlamydia trachomatis, infection**	402,557	(262.66)	1,018,272	(643.15)	2,147	**1,422,976**
Cholera	8	(0.01)	9	(0.01)	—	**17**
Coccidioidomycosis¶	8,581	(12.62)	9,025	(13.03)	196	**17,802**
Cryptosporidiosis, total	3,725	(2.44)	4,212	(2.67)	19	**7,956**
confirmed	2,434	(1.58)	2,652	(1.67)	12	**5,098**
probable	1,214	(0.79)	1,498	(0.94)	6	**2,718**
Cyclosporiasis	57	(0.04)	66	(0.05)	—	**123**
Dengue virus infection						
Dengue fever	269	(0.18)	274	(0.17)	1	**544**
Dengue hemorrhagic fever	3	(0.00)	—	(0.00)	—	**3**
Diphtheria	1	(0.00)	—	(0.00)	—	**1**
Ehrlichiosis/Anaplasmosis						
Anaplasma phagocytophilum	1,356	(0.93)	975	(0.65)	58	**2,389**
Ehrlichia chaffeensis	661	(0.45)	463	(0.31)	4	**1,128**
Ehrlichia ewingii	10	(0.01)	7	(0.00)	—	**17**
Undetermined	105	(0.07)	86	(0.06)	—	**191**
Giardiasis	8,872	(6.97)	6,227	(4.73)	79	**15,178**
Gonorrhea**	162,235	(105.86)	172,066	(108.68)	525	**334,826**
Haemophilus influenzae, invasive disease						
all ages, all serotypes	1,566	(1.02)	1,835	(1.16)	17	**3,418**
age <5 yrs						
serotype b	16	(0.16)	14	(0.14)	—	**30**
nonserotype b	120	(1.17)	84	(0.85)	1	**205**
unknown serotype	132	(1.28)	78	(0.79)	—	**210**
Hansen disease (leprosy)	39	(0.03)	19	(0.01)	24	**82**
Hantavirus pulmonary syndrome	16	(0.01)	14	(0.01)	—	**30**
Hemolytic uremic syndrome, post-diarrheal	107	(0.07)	152	(0.10)	15	**274**
Hepatitis virus, acute						
A	769	(0.50)	783	(0.49)	10	**1,562**
B	1,803	(1.18)	1,084	(0.69)	8	**2,895**
C	957	(0.65)	823	(0.54)	2	**1,782**
Hepatitis B perinatal infection	19	(0.01)	20	(0.01)	1	**40**
Human immunodeficiency virus (HIV) diagnoses††	28,221	(18.30)	7,140	(4.50)	—	**35,361**
Influenza-associated pediatric mortality§§	25	(0.07)	27	(0.07)	—	**52**
Invasive pneumococcal disease						
all ages	7,893	(7.94)	7,559	(7.33)	183	**15,635**
age <5 yrs	758	(9.79)	501	(6.76)	7	**1,266**
Legionellosis	2,339	(1.53)	1,341	(0.85)	8	**3,688**
Listeriosis	288	(0.19)	437	(0.28)	2	**727**
Lyme disease, total	16,907	(11.10)	13,269	(8.43)	655	**30,831**
Confirmed	12,278	(8.05)	9,265	(5.88)	471	**22,014**
Probable	4,629	(3.03)	4,004	(2.54)	184	**8,817**
Malaria	998	(0.65)	492	(0.31)	13	**1,503**

See table footnotes on page 43.

TABLE 4. (*Continued*) Reported cases and incidence* of notifiable diseases,† by sex — United States, 2012

Disease	Male		Female		Age not stated	Total
	No.	Rate	No.	Rate		
Measles, total	34	(0.02)	20	(0.01)	1	**55**
indigenous	22	(0.01)	11	(0.01)	1	**34**
imported	12	(0.01)	9	(0.01)	—	**21**
Meningococcal disease						
all serogroups	265	(0.17)	284	(0.18)	2	**551**
serogroup A,C,Y, and W-135	71	(0.05)	89	(0.06)	1	**161**
serogroup B	57	(0.04)	53	(0.03)	—	**110**
serogroup other	7	(0.00)	13	(0.01)	—	**20**
serogroup unknown	130	(0.08)	129	(0.08)	1	**260**
Mumps	131	(0.09)	98	(0.06)	—	**229**
Novel influenza A virus infection	148	(0.10)	1	(0.00)	164	**313**
Pertussis	21,786	(14.21)	25,907	(16.36)	584	**48,277**
Plague	2	(0.00)	2	(0.00)	—	**4**
Psittacosis	1	(0.00)	1	(0.00)	—	**2**
Q fever, total	102	(0.07)	32	(0.02)	1	**135**
acute	84	(0.06)	28	(0.02)	1	**113**
chronic	18	(0.01)	4	(0.00)	—	**22**
Rabies, human	1	(0.00)		(0.00)	—	**1**
Rubella	6	(0.00)	3	(0.00)	—	**9**
Rubella, congenital syndrome	2	(0.00)	1	(0.00)	—	**3**
Salmonellosis	25,876	(16.88)	27,548	(17.40)	376	**53,800**
Shiga toxin-producing *E. coli* (STEC)	3,025	(1.98)	3,391	(2.15)	47	**6,463**
Shigellosis	7,462	(4.87)	7,773	(4.91)	48	**15,283**
Spotted fever rickettsiosis, total	2,856	(1.88)	1,607	(1.02)	7	**4,470**
confirmed	126	(0.08)	62	(0.04)	—	**188**
probable	2,730	(1.79)	1,541	(0.98)	7	**4,278**
Streptococcal toxic-shock syndrome	93	(0.09)	101	(0.10)	—	**194**
Syphillis, total, all stages**,¶¶	40,151	(26.20)	9,684	(6.12)	68	**49,903**
congenital (age <1 yr)**	176	(8.68)	133	(6.86)	13	**322**
primary and secondary**	14,190	(9.26)	1,458	(0.92)	19	**15,667**
Tetanus	24	(0.02)	13	(0.01)	—	**37**
Toxic-shock syndrome(other than streptococcal)	9	(0.01)	56	(0.05)	—	**65**
Trichinellosis	12	(0.01)	6	(0.00)	—	**18**
Tuberculosis***	6,028	(3.93)	3,914	(2.47)	3	**9,945**
Tularemia	94	(0.06)	51	(0.03)	4	**149**
Typhoid fever	172	(0.11)	182	(0.11)	—	**354**
Vancomycin-intermediate *Staphylococcus aureus* (VISA)	80	(0.07)	54	(0.05)	—	**134**
Vancomycin-resistant *Staphylococcus aureus* (VRSA)	1	(0.00)	1	(0.00)	—	**2**
Vibriosis	743	(0.53)	359	(0.25)	9	**1,111**

* Per 100,000 population.
† No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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 (DVBD), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) (ArboNET Surveillance), as of June 1, 2013.
¶ 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 May 29, 2013.
†† Total number of HIV diagnoses reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) through December 31, 2012.
§§ Totals reported to the Division of Influenza, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2012.
¶¶ 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 (NCHHSTP), as of May 29, 2013.
*** Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of June 15, 2013.

TABLE 5. Reported cases and incidence* of notifiable diseases,† by race— United States, 2012

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	2	(0.05)	0	(0.00)	2	(0.00)	65	(0.03)	0	4	**73**
West Nile virus											
neuroinvasive	16	(0.37)	28	(0.16)	276	(0.65)	2,097	(0.85)	36	419	**2,872**
nonneuroinvasive	13	(0.30)	21	(0.12)	140	(0.33)	2,054	(0.83)	30	543	**2,801**
Babesiosis¶	8	(0.41)	25	(0.21)	15	(0.08)	523	(0.42)	16	350	**937**
confirmed	4	(0.09)	22	(0.13)	14	(0.03)	421	(0.16)	14	241	**716**
probable	4	(0.09)	3	(0.02)	1	(0.00)	102	(0.03)	2	109	**221**
Botulism, total	6	(0.14)	10	(0.06)	5	(0.01)	113	(0.05)	3	31	**168**
foodborne	6	(0.14)	1	(0.01)	1	(0.00)	14	(0.01)	1	4	**27**
infant	—	(0.00)	9	(3.87)	3	(0.44)	89	(2.99)	2	20	**123**
Brucellosis	1	(0.02)	3	(0.02)	4	(0.01)	78	(0.03)	7	21	**114**
Chlamydia trachomatis, infection**	18,989	(437.85)	20,374	(115.79)	460,473	(1078.5)	463,538	(187.70)	52,121	407,481	**1,422,976**
Coccidioidomycosis¶	159	(8.29)	216	(2.50)	459	(3.30)	3,340	(2.96)	301	13,327	**17,802**
Cryptosporidiosis, total	38	(0.88)	87	(0.50)	576	(1.36)	5,498	(2.23)	224	1,533	**7,956**
confirmed	25	(0.58)	69	(0.39)	377	(0.88)	3,458	(1.40)	147	1,022	**5,098**
probable	13	(0.30)	18	(0.10)	199	(0.47)	2,040	(0.83)	77	371	**2,718**
Cyclosporiasis	0	(0.00)	1	(0.01)	3	(0.01)	77	(0.04)	4	38	**123**
Dengue fever	4	(0.09)	65	(0.37)	57	(0.13)	240	(0.10)	31	147	**544**
Ehrlichiosis/Anaplasmosis											
Anaplasma phagocytophilum	15	(0.40)	15	(0.09)	9	(0.02)	1,522	(0.65)	28	800	**2,389**
Ehrlichia chaffeensis	26	(0.69)	3	(0.02)	36	(0.09)	744	(0.32)	18	301	**1,128**
Undetermined	1	(0.03)	3	(0.02)	2	(0.00)	117	(0.05)	5	63	**191**
Giardiasis	52	(1.51)	782	(4.91)	1,151	(3.35)	6,534	(3.19)	498	6,161	**15,178**
Gonorrhea**	3,380	(77.94)	3,080	(17.50)	170,048	(398.28)	80,274	(32.50)	9,160	68,884	**334,826**
Haemophilus influenzae, invasive disease											
all ages, all serotypes	40	(0.92)	57	(0.32)	403	(0.94)	2,153	(0.87)	102	663	**3,418**
age <5 yrs											
serotype b	—	(0.00)	—	(0.00)	1	(0.03)	24	(0.16)	1	4	**30**
nonserotype b	10	(2.55)	7	(0.59)	35	(1.02)	96	(0.63)	12	45	**205**
unknown serotype	7	(1.79)	6	(0.51)	32	(0.94)	114	(0.75)	6	45	**210**
Hansen disease (leprosy)	0	(0.00)	16	(0.10)	3	(0.01)	26	(0.01)	1	36	**82**
Hantavirus pulmonary syndrome	3	(0.07)	3	(0.02)	0	(0.00)	18	(0.01)	1	5	**30**
Hemolytic uremic syndrome, post-diarrheal	1	(0.02)	8	(0.05)	9	(0.02)	209	(0.09)	9	38	**274**
Hepatitis virus											
A, acute	7	(0.16)	103	(0.59)	96	(0.22)	935	(0.38)	79	342	**1,562**
B, acute	19	(0.44)	68	(0.39)	448	(1.05)	1,792	(0.73)	62	506	**2,895**
C, acute	44	(1.12)	16	(0.09)	59	(0.14)	1,308	(0.55)	41	314	**1,782**
Hepatitis B perinatal infection	1	(0.02)	25	(0.14)	1	(0.00)	4	(0.00)	0	9	**40**
Human immunodeficiency virus (HIV) diagnoses††	187	(8.10)	717	(4.60)	16,152	(41.70)	10,371	(5.20)	7,934	—	**35,361**
Influenza-associated pediatric mortality§§	1	(0.07)	3	(0.07)	9	(0.07)	28	(0.05)	2	9	**52**
Invasive pneumococcal disease											
all ages	194	(7.79)	177	(1.98)	2,431	(7.89)	9,097	(5.67)	294	3,442	**15,635**
age <5 yrs	31	(10.98)	41	(5.64)	265	(9.30)	609	(5.38)	45	275	**1,266**
Legionellosis	10	(0.23)	45	(0.26)	604	(1.43)	2,340	(0.95)	54	635	**3,688**
Listeriosis	3	(0.07)	43	(0.24)	67	(0.16)	465	(0.19)	26	123	**727**
Lyme disease, total	102	(2.36)	305	(1.83)	323	(0.76)	17,802	(7.23)	943	11,356	**30,831**
Confirmed	70	(1.62)	212	(1.27)	219	(0.51)	12,604	(5.11)	747	8,162	**22,014**
Probable	32	(0.74)	93	(0.56)	104	(0.24)	5,198	(2.11)	196	3,194	**8,817**
Malaria	2	(0.05)	122	(0.69)	866	(2.03)	248	(0.10)	33	232	**1,503**
Measles, total	0	(0.00)	5	(0.03)	8	(0.02)	37	(0.01)	2	3	**55**
indigenous	0	(0.00)	1	(0.01)	5	(0.01)	26	**(0.01)**	0	2	**34**
Meningococcal disease											
all serogroups	10	(0.23)	14	(0.08)	83	(0.19)	351	**(0.14)**	20	73	**551**
serogroup A,C,Y, and W-135	4	(0.09)	1	(0.01)	25	(0.06)	104	**(0.04)**	6	21	**161**
serogroup B	1	(0.02)	3	(0.02)	5	(0.01)	86	**(0.03)**	4	11	**110**
serogroup unknown	4	(0.09)	10	(0.06)	48	(0.11)	155	**(0.06)**	9	34	**260**

See table footnotes on page 45.

TABLE 5. (*Continued*) Reported cases and incidence* of notifiable diseases,† by race— United States, 2012

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			
Mumps	0	(0.00)	27	(0.15)	14	(0.03)	117	(0.05)	17	54	**229**
Novel influenza A virus infection	0	(0.00)	6	(0.03)	1	(0.00)	13	(0.01)	11	282	**313**
Pertussis	543	(12.52)	655	(3.72)	1,761	(4.12)	33,067	(13.39)	1,453	10,798	**48,277**
Q fever, total	0	(0.00)	4	(0.02)	2	(0.00)	85	(0.03)	3	41	**135**
acute	0	(0.00)	4	(0.02)	2	(0.00)	70	(0.03)	3	34	**113**
Salmonellosis	347	(8.00)	1,568	(8.91)	5,013	(11.74)	32,739	(13.26)	1,713	12,420	**53,800**
Shiga toxin-producing *E. coli* (STEC)	32	(0.76)	116	(0.66)	276	(0.65)	4,434	(1.80)	175	1,430	**6,463**
Shigellosis	193	(4.45)	224	(1.27)	3,085	(7.23)	8,004	(3.24)	629	3,148	**15,283**
Spotted fever rickettsiosis, total	158	(3.75)	20	(0.12)	116	(0.27)	2,827	(1.15)	36	1,313	**4,470**
confirmed	11	(0.25)	0	(0.00)	6	(0.01)	135	(0.05)	0	36	**188**
probable	147	(3.39)	20	(0.12)	110	(0.26)	2,689	(1.09)	36	1,276	**4,278**
Streptococcal toxic-shock syndrome	1	(0.04)	6	(0.07)	18	(0.06)	131	(0.08)	4	34	**194**
Syphillis, total, all stages**,¶¶	285	(6.57)	1,127	(6.41)	21,386	(50.09)	21,447	(8.68)	2,840	2,818	**49,903**
congenital (age <1 yr)**	2	(2.59)	6	(2.58)	185	(27.12)	116	(3.90)	6	7	**322**
primary and secondary**	77	(1.78)	341	(1.94)	6,391	(14.97)	7,530	(3.05)	725	603	**15,667**
Tetanus	0	(0.00)	0	(0.00)	3	(0.01)	28	(0.01)	0	6	**37**
Toxic-shock syndrome(other than streptococcal)	0	(0.00)	1	(0.01)	5	(0.02)	48	(0.03)	1	10	**65**
Tuberculosis***	169	(3.90)	2,977	(16.92)	2,286	(5.35)	4,199	(1.70)	175	139	**9,945**
Tularemia	10	(0.23)	2	(0.01)	2	(0.00)	108	(0.04)	0	27	**149**
Typhoid fever	4	(0.09)	198	(1.13)	19	(0.04)	48	(0.02)	32	53	**354**
Vancomycin-intermediate *Staphylococcus aureus* (VISA)	1	(0.04)	0	(0.00)	30	(0.08)	75	(0.04)	1	27	**134**
Vibriosis	1	(0.03)	50	(0.30)	67	(0.16)	719	(0.32)	21	253	**1,111**

* Per 100,000 population. Diseases for which <25 cases were reported are not included in this table.
† No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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 (DVBD), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) (ArboNET Surveillance), as of June 1, 2013.
¶ 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 31, 2012.
§§ Totals reported to the Division of Influenza, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2012.
¶¶ 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 (NCHHSTP), as of May 29, 2013.
*** Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of June 15, 2013.

TABLE 6. Reported cases and incidence* of notifiable diseases,† by ethnicity — United States, 2012

Disease	Hispanic	Rate	Non-Hispanic	Rate	Ethnicity not stated	Total
Arboviral diseases§						
California serogroup viruses						
neuroinvasive	1	(0.00)	65	(0.03)	7	**73**
West Nile virus						
neuroinvasive	339	(0.65)	1,855	(0.71)	678	**2,872**
nonneuroinvasive	208	(0.40)	1,806	(0.70)	787	**2,801**
Babesiosis¶	35	(0.13)	469	(0.36)	433	**937**
confirmed	33	(0.06)	387	(0.14)	296	**716**
probable	2	(0.00)	82	(0.02)	137	**221**
Botulism, total	35	(0.07)	96	(0.04)	37	**168**
foodborne	6	(0.01)	15	(0.01)	6	**27**
infant	20	(1.94)	75	(2.56)	28	**123**
Brucellosis	60	(0.12)	42	(0.02)	12	**114**
Chlamydia trachomatis, infection**	196,493	(378.74)	681,833	(262.54)	544,650	**1,422,976**
Coccidioidomycosis¶	1,626	(7.40)	3,028	(4.07)	13,148	**17,802**
Cryptosporidiosis, total	508	(0.98)	4,989	(1.93)	2,459	**7,956**
confirmed	382	(0.74)	3,136	(1.21)	1,580	**5,098**
probable	126	(0.24)	1,853	(0.71)	739	**2,718**
Cyclosporiasis	15	(0.03)	68	(0.03)	40	**123**
Dengue fever	163	(0.31)	235	(0.09)	146	**544**
Ehrlichiosis/Anaplasmosis						
Anaplasma phagocytophilum	35	(0.07)	1,422	(0.58)	932	**2,389**
Ehrlichia chaffeensis	19	(0.04)	758	(0.31)	351	**1,128**
Undetermined	5	(0.01)	120	(0.05)	66	**191**
Giardiasis	942	(2.33)	7,043	(3.23)	7,193	**15,178**
Gonorrhea**	31,590	(60.89)	190,563	(73.38)	112,673	**334,826**
Haemophilus influenzae, invasive disease						
all ages, all serotypes	208	(0.40)	1,942	(0.75)	1,268	**3,418**
age <5 yrs						
serotype b	1	(0.02)	23	(0.15)	6	**30**
nonserotype b	24	(0.47)	94	(0.63)	87	**205**
unknown serotype	30	(0.58)	122	(0.81)	58	**210**
Hansen disease (leprosy)	18	(0.04)	33	(0.01)	31	**82**
Hantavirus pulmonary syndrome	5	(0.01)	22	(0.01)	3	**30**
Hemolytic uremic syndrome, post-diarrheal	24	(0.05)	194	(0.08)	56	**274**
Hepatitis virus, acute						
A	259	(0.50)	895	(0.34)	408	**1,562**
B	193	(0.37)	1,804	(0.70)	898	**2,895**
C	104	(0.21)	1,099	(0.44)	579	**1,782**
Hepatitis B perinatal infection	2	(0.00)	26	(0.01)	12	**40**
Human immunodeficiency virus (HIV) diagnoses††	7,266	(13.70)	28,095	(10.80)	—	**35,361**
Influenza-associated pediatric mortality§§	7	(0.04)	31	(0.05)	14	**52**
Invasive pneumococcal disease						
all ages	951	(3.09)	8,054	(4.69)	6,630	**15,635**
age <5 yrs	140	(4.12)	661	(5.62)	465	**1,266**
Legionellosis	196	(0.38)	2,403	(0.93)	1,089	**3,688**
Listeriosis	83	(0.16)	450	(0.17)	194	**727**
Lyme disease, total	559	(1.08)	12,386	(4.80)	17,886	**30,831**
Confirmed	361	(0.70)	8,736	(3.38)	12,917	**22,014**
Probable	198	(0.38)	3,650	(1.41)	4,969	**8,817**
Malaria	34	(0.07)	1,098	(0.42)	371	**1,503**
Measles, total	2	(0.00)	49	(0.02)	4	**55**
indigenous	1	(0.00)	31	(0.01)	2	**34**
Meningococcal disease						
all serogroups	100	(0.19)	331	(0.13)	120	**551**
serogroup A,C,Y, and W-135	20	(0.04)	106	(0.04)	35	**161**
serogroup B	16	(0.03)	69	(0.03)	25	**110**
serogroup unknown	62	(0.12)	146	(0.06)	52	**260**
Mumps	33	(0.06)	133	(0.05)	63	**229**
Novel influenza A virus infection	8	(0.02)	233	(0.09)	72	**313**
Pertussis	5,831	(11.24)	29,954	(11.53)	12,492	**48,277**

See table footnotes on page 47.

TABLE 6. (*Continued*) Reported cases and incidence* of notifiable diseases,† by ethnicity — United States, 2012

Disease	Hispanic		Non-Hispanic		Ethnicity not stated	Total
		Rate		Rate		
Q fever, total	17	(0.03)	70	(0.03)	48	**135**
acute	16	(0.03)	58	(0.02)	39	**113**
Salmonellosis	6,674	(12.86)	30,614	(11.79)	16,512	**53,800**
Shiga toxin-producing *E. coli* (STEC)	713	(1.38)	3,949	(1.52)	1,801	**6,463**
Shigellosis	3,174	(6.12)	8,531	(3.28)	3,578	**15,283**
Spotted fever rickettsiosis, total	111	(0.21)	2,841	(1.10)	1,518	**4,470**
confirmed	2	(0.00)	124	(0.05)	62	**188**
probable	109	(0.21)	2,715	(1.05)	1,454	**4,278**
Streptococcal toxic-shock syndrome	18	(0.09)	108	(0.06)	68	**194**
Syphillis, total, all stages**,¶¶	11,312	(21.80)	35,397	(13.63)	3,194	**49,903**
congenital (age <1 yr)**	79	(7.64)	232	(7.91)	11	**322**
primary and secondary**	3,089	(5.95)	11,864	(4.57)	714	**15,667**
Tetanus	9	(0.02)	18	(0.01)	10	**37**
Toxic-shock syndrome(other than streptococcal)	3	(0.01)	43	(0.02)	19	**65**
Tuberculosis***	2,790	(5.38)	7,140	(2.75)	15	**9,945**
Tularemia	4	(0.01)	110	(0.04)	35	**149**
Typhoid fever	39	(0.08)	267	(0.10)	48	**354**
Vancomycin-intermediate *Staphylococcus aureus* (VISA)	10	(0.03)	87	(0.04)	37	**134**
Vibriosis	94	(0.19)	675	(0.29)	342	**1,111**

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

† No cases of anthrax; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus nonneuroinvasive disease; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; yellow fever; and viral hemorrhagic fevers were reported in the United States during 2012. 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 (DVBD), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) (ArboNET Surveillance), as of June 1, 2013.

¶ 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 31, 2012.

§§ Totals reported to the Division of Influenza, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2012.

¶¶ 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 (NCHHSTP), as of May 29, 2013.

*** Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of June 15, 2013.

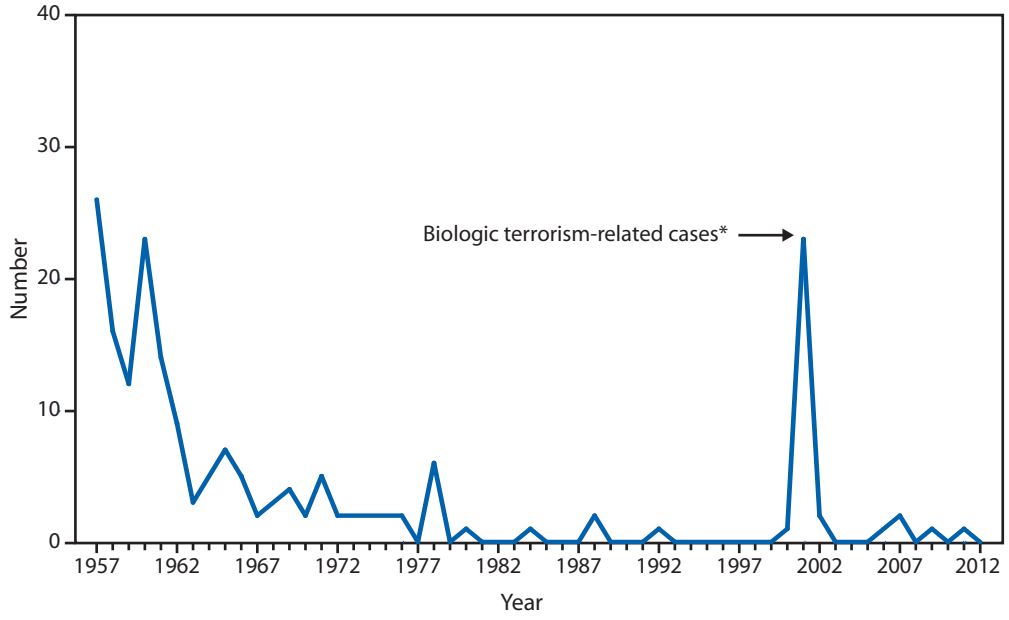
PART 2

Graphs and Maps for Selected Notifiable Diseases in the United States, 2012

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

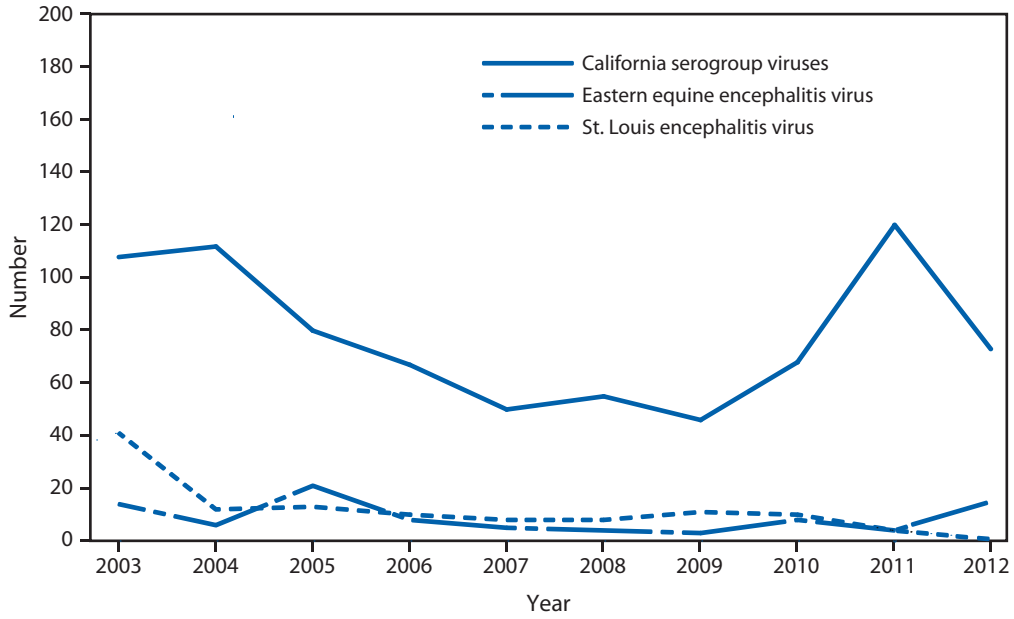
ANTHRAX. Number of both naturally occurring and biological terrorism-related reported cases, by year — United States, 1957–2012



* Twenty-two bioterrorism-associated cases were reported from Connecticut, Florida, Maryland, New Jersey, Pennsylvania, and Virginia in 2001, and one naturally occurring epizootic-associated case was reported from Texas.

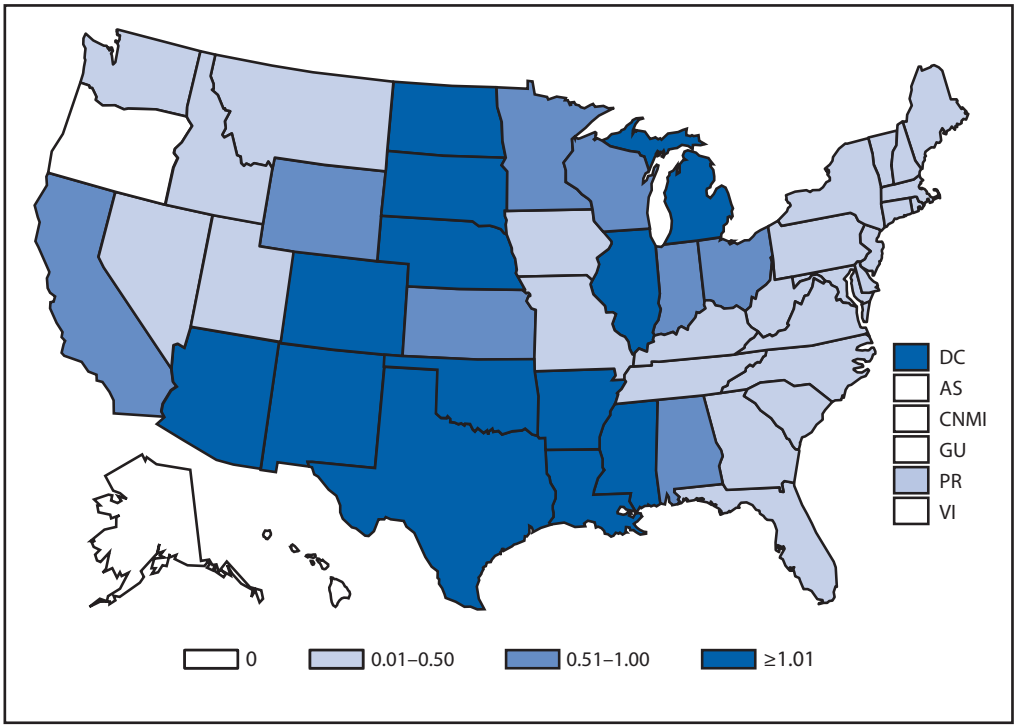
Naturally occurring anthrax epizootics occur annually among U.S. wildlife and livestock populations. In 2012, these were reported in states that routinely experience such outbreaks including Texas, North Dakota, and Nevada; however, livestock outbreaks additionally occurred in 2012 in Mississippi, Oregon, and Colorado, where anthrax outbreaks were not reported in livestock for ≥2 decades. These outbreaks were associated with exposures in persons handling and disposing of affected livestock and collecting diagnostic specimens. Although no human infections resulted, these exposures reflect the importance of timely recognition of anthrax in susceptible animals and the use of appropriate protective measures to prevent human exposures.

ARBOVIRAL DISEASES. Number* of reported cases of neuroinvasive disease, by year — United States, 2003–2012



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

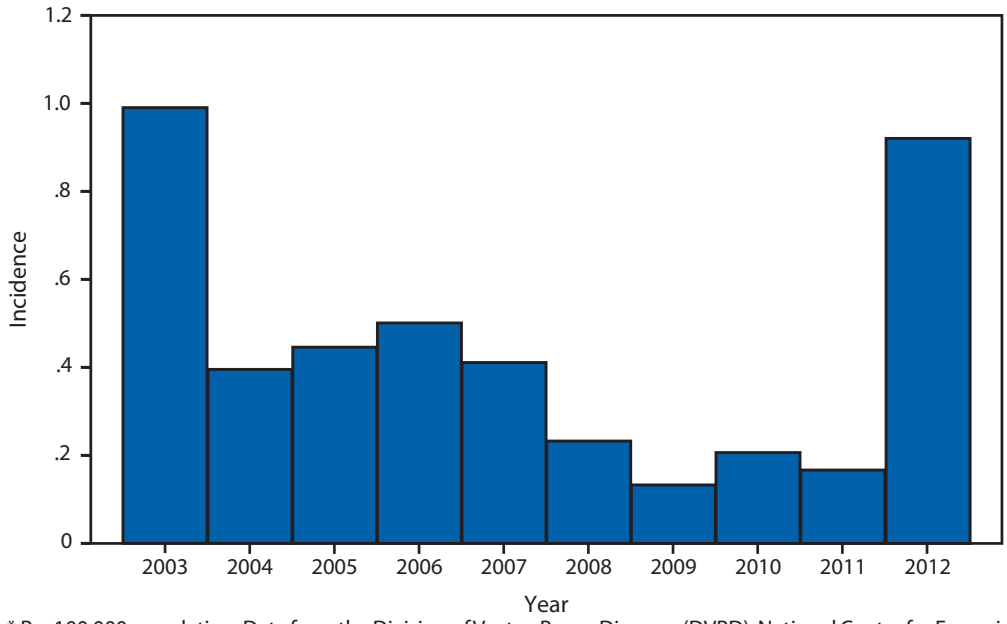
ARBOVIRAL DISEASES, WEST NILE VIRUS. Incidence* of reported cases of neuroinvasive disease — United States and U.S. territories, 2012



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

In 2012, the states with the highest reported incidence of West Nile virus (WNV) neuroinvasive disease were South Dakota (7.44 per 100,000), North Dakota (5.57), Mississippi (3.45), Louisiana (3.37), and Texas (3.24). Four states reported more than half of the WNV neuroinvasive disease cases: Texas (844 cases), California (297), Illinois (187), and Louisiana (155).

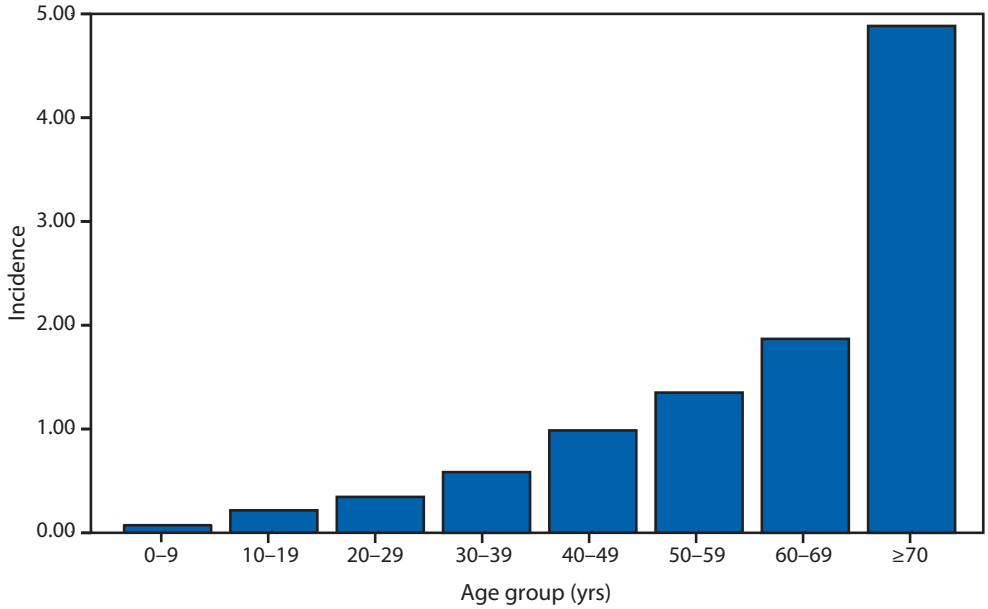
ARBOVIRAL DISEASES, WEST NILE VIRUS. Incidence* of reported cases of neuroinvasive disease, by year — United States, 2003–2012



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

During 2004–2011, sporadic cases and smaller outbreaks continued to occur, but national incidence generally declined until 2012, when a large multistate outbreak of WNV occurred.

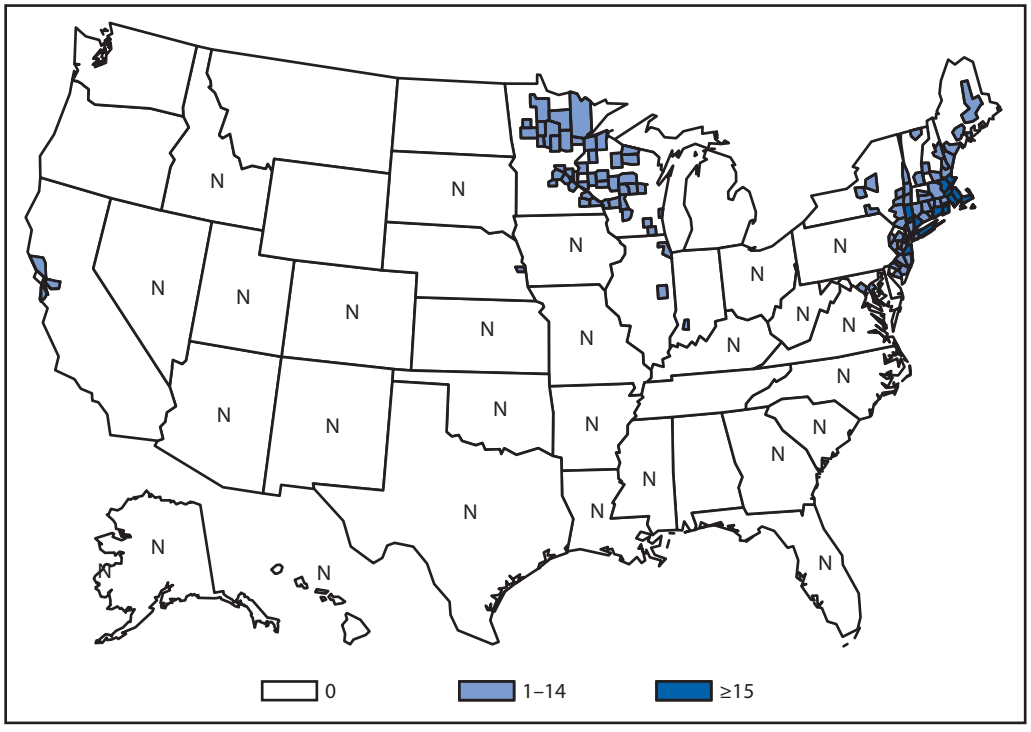
ARBOVIRAL DISEASES, WEST NILE VIRUS. Incidence* of reported cases of neuroinvasive disease, by age group — United States, 2012



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

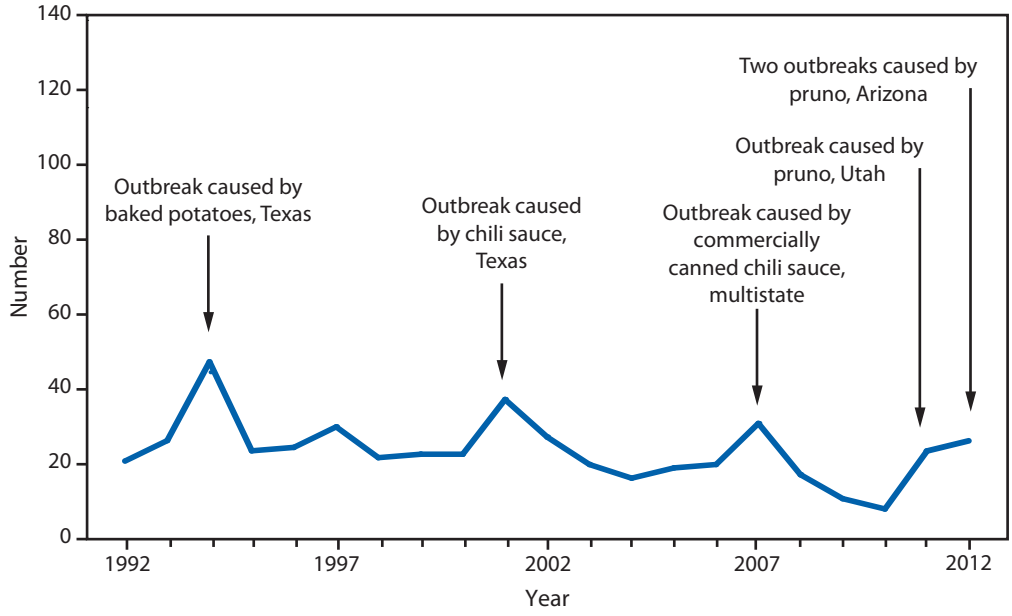
In 2012, the median age of patients with West Nile virus neuroinvasive disease was 59 years (range: 1 month–100 years), with increasing incidence among older age groups.

BABESIOSIS. Number of reported cases, by county — United States, 2012



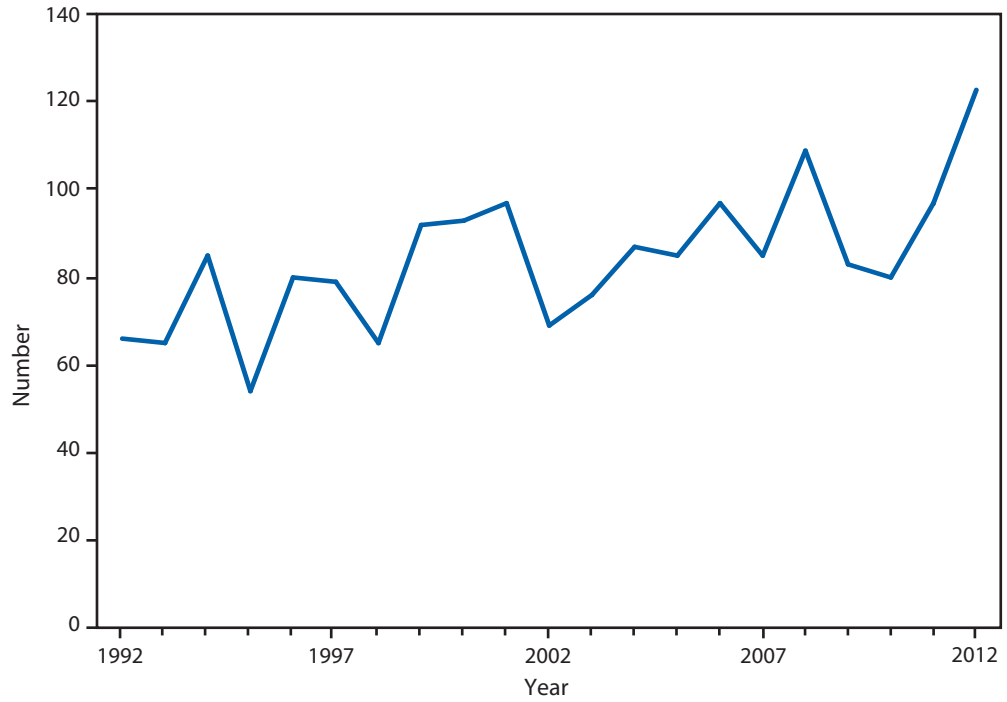
Babesiosis, a tickborne parasitic infection, became nationally notifiable in 2011. Approximately 97% of cases were reported from the Northeast and Upper Midwest.

BOTULISM, FOODBORNE. Number of reported cases, by year — United States, 1992–2012



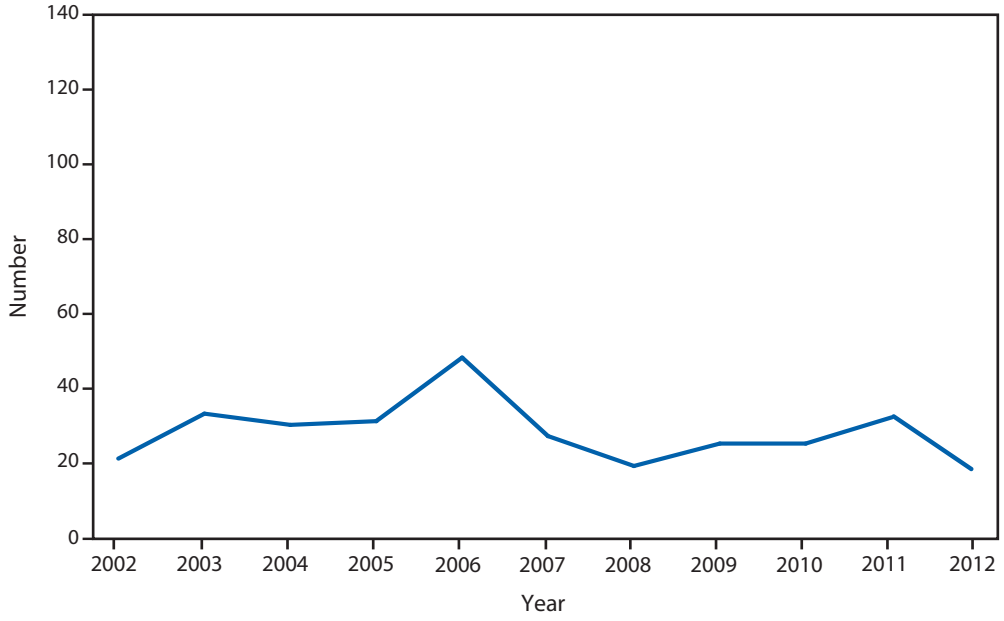
The number of foodborne botulism cases has remained fairly steady, with peaks corresponding to larger outbreaks. In 2012, four outbreaks occurred, two associated with consumption of pruno, an illicit alcoholic brew, in an Arizona prison (4 cases and 8 cases), one associated with home-canned spaghetti and meat sauce (2 cases), and one associated with home-canned beets (3 cases).

BOTULISM, INFANT. Number of reported cases, by year — United States, 1992–2012



In 2012, infant botulism, caused by production of botulinum toxin in the intestine, remained the most common category of botulism in the United States.

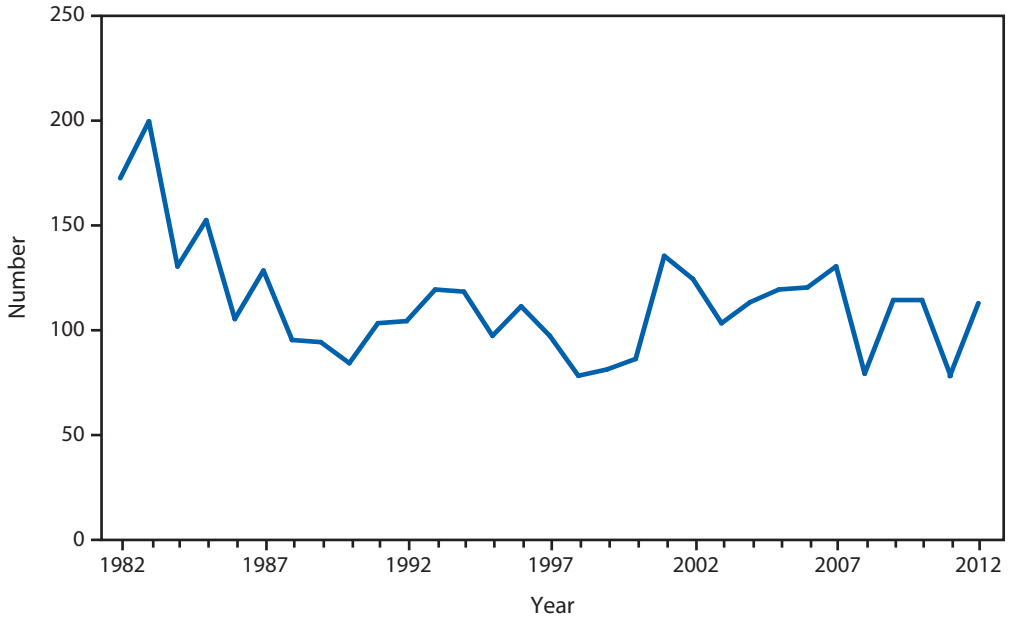
BOTULISM, OTHER. Number* of reported cases, by year — United States, 2002–2012



* Includes wound and unspecified.

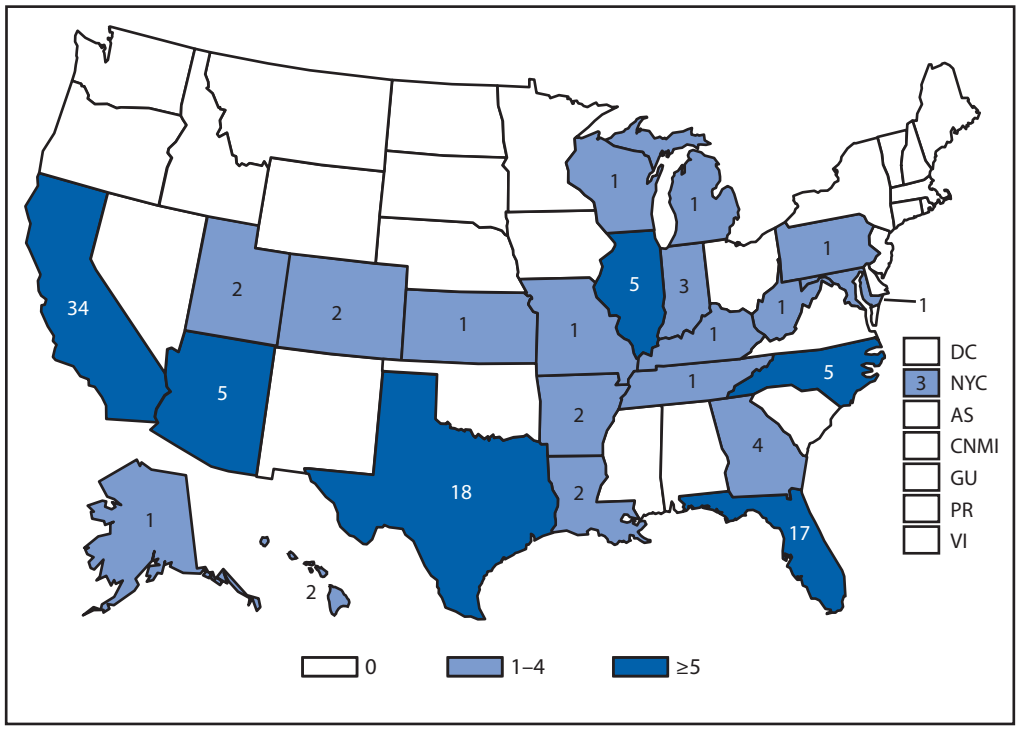
Annual numbers of cases of wound botulism and of botulism in "unspecified" transmission categories have remained generally stable during the past decade.

BRUCELLOSIS. Number of reported cases, by year — United States, 1982–2012



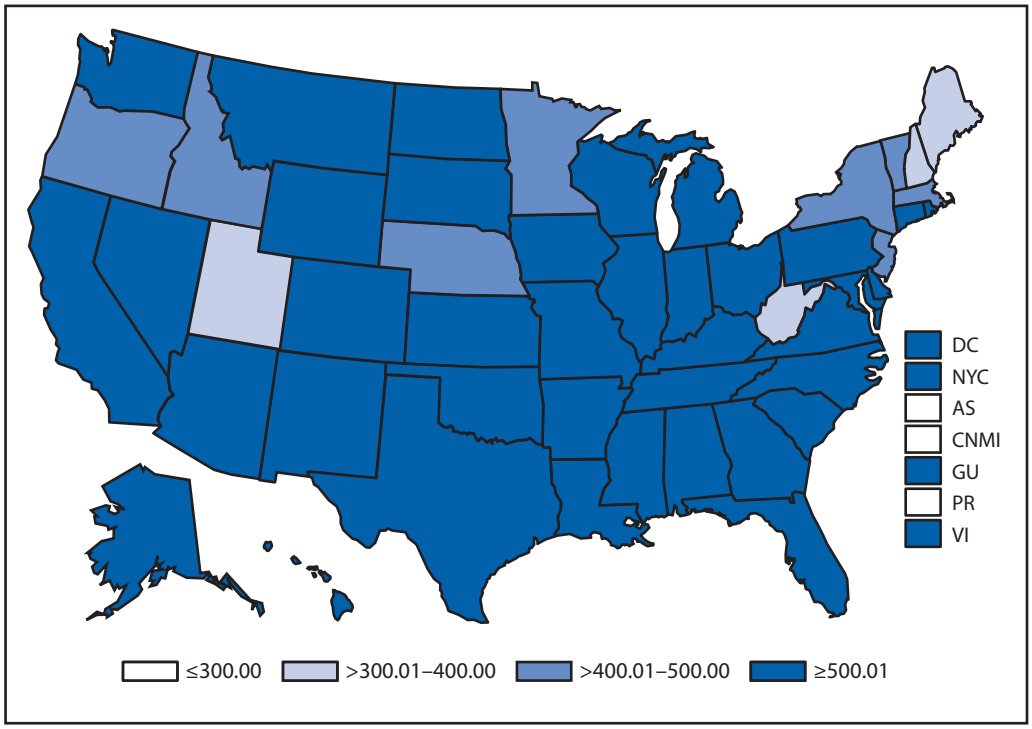
Reported cases for 2012 increased by 44% compared with 2011.

BRUCELLOSIS. Number of reported cases — United States and U.S. territories, 2012



Cases from Arizona, California, Florida, Illinois, North Carolina, and Texas accounted for approximately three quarters (73.7%) of all reported cases.

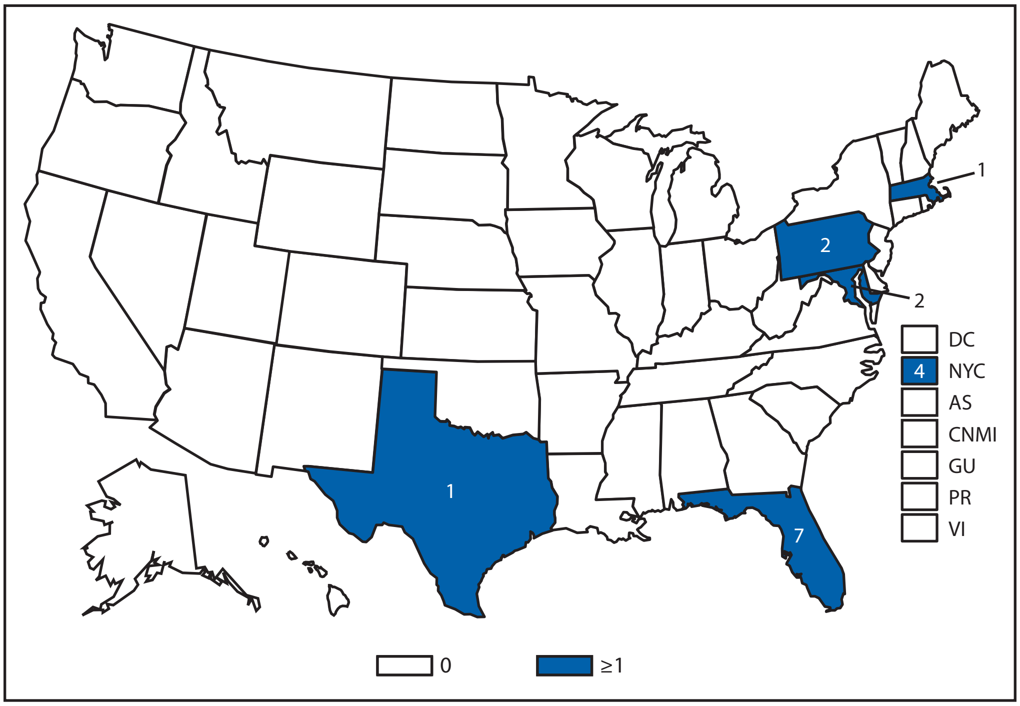
CHLAMYDIA. Incidence* among women — United States and U.S. territories, 2012



* Per 100,000 population.

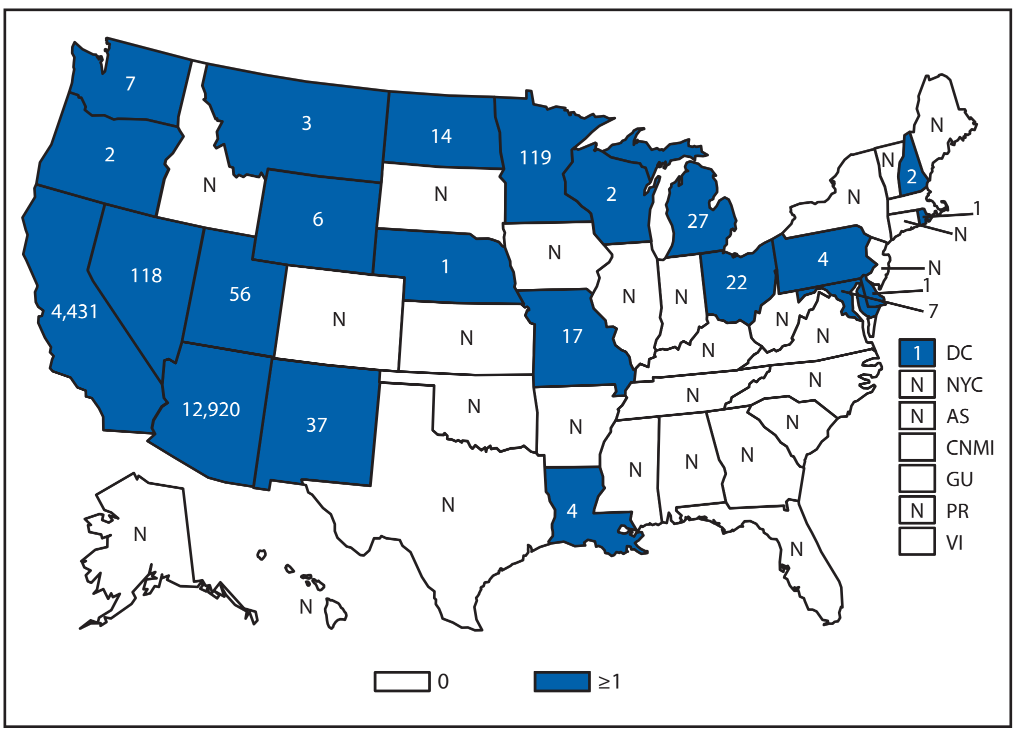
In 2012, the chlamydia rate among women in the U.S. and territories (Guam, Puerto Rico, and Virgin Islands) was 639.0 cases per 100,000 population.

CHOLERA. Number of reported cases — United States and U.S. territories, 2012



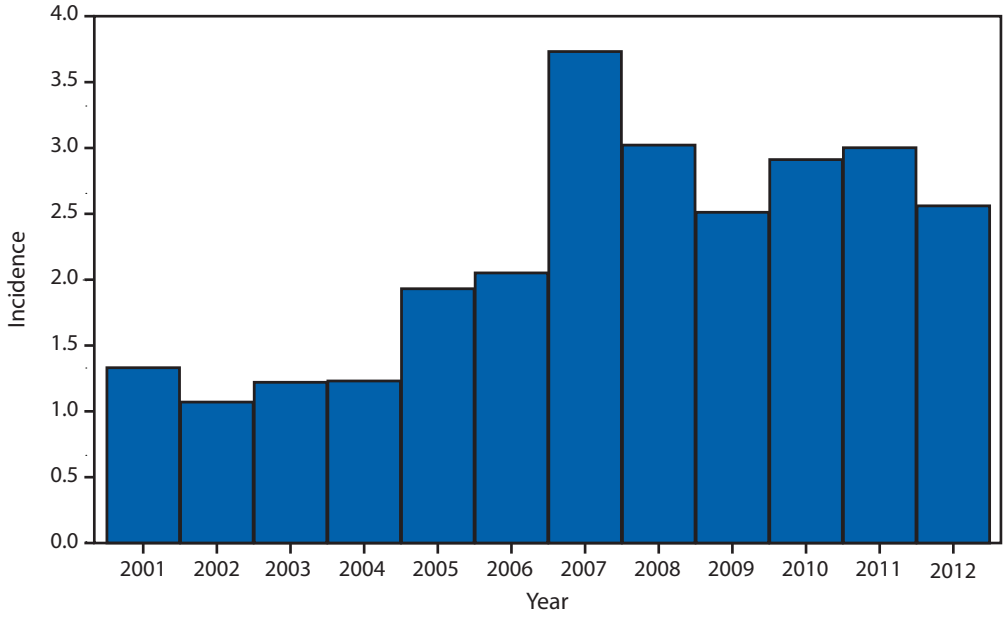
In 2012, as in 2010 and 2011, most cases of cholera reported the United States were in travelers who had recently arrived from Hispaniola. Of the 17 cholera infections in 2012, 16 were travel-associated (12 with travel to Hispaniola [nine to Haiti and three to the Dominican Republic] and four to other cholera-affected countries). One patient reported exposure to *Vibrio cholerae* in a laboratory.

COCCIDIOIDOMYCOSIS. Number of reported cases — United States and U.S. territories, 2012



In 2012, 72.6% of reported coccidioidomycosis cases were from Arizona, 24.9% from California, 1.2% from other endemic states (Nevada, New Mexico, and Utah) combined, and 1.3% from nonendemic states.

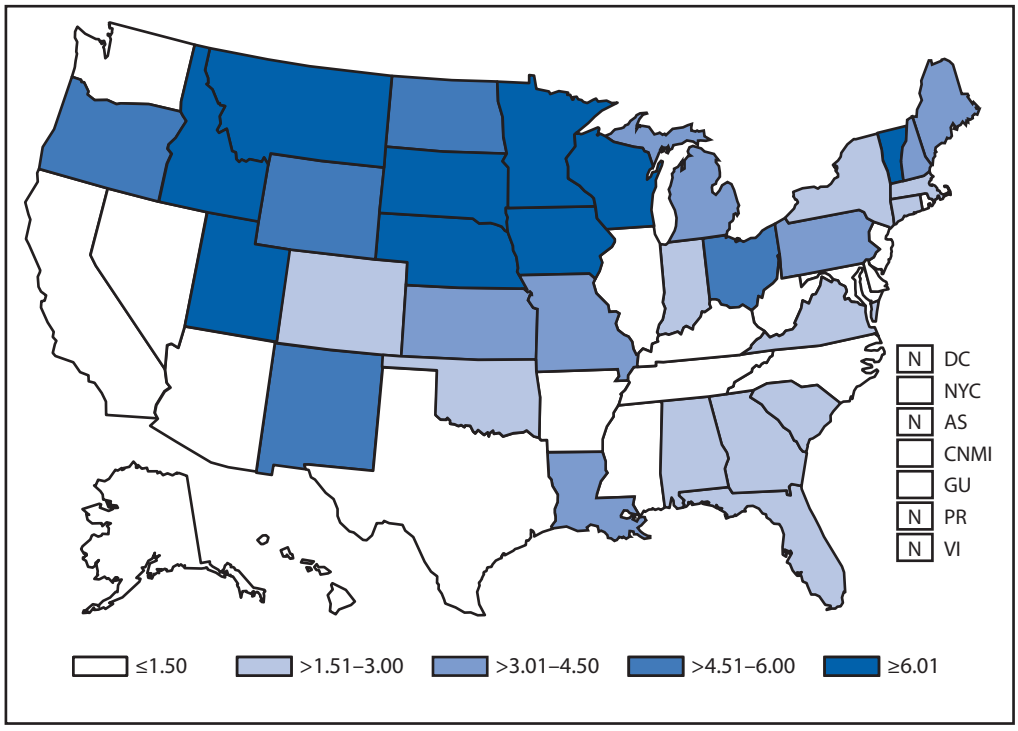
CRYPTOSPORIDIOSIS. Incidence,* by year — United States, 2001–2012



* Per 100,000 population.

Cryptosporidiosis incidence remains historically elevated relative to the baseline observed before 2005. Whether the changes in cryptosporidiosis reporting reflect a real change in cryptosporidiosis incidence or changing diagnosis, testing, or reporting patterns is unclear.

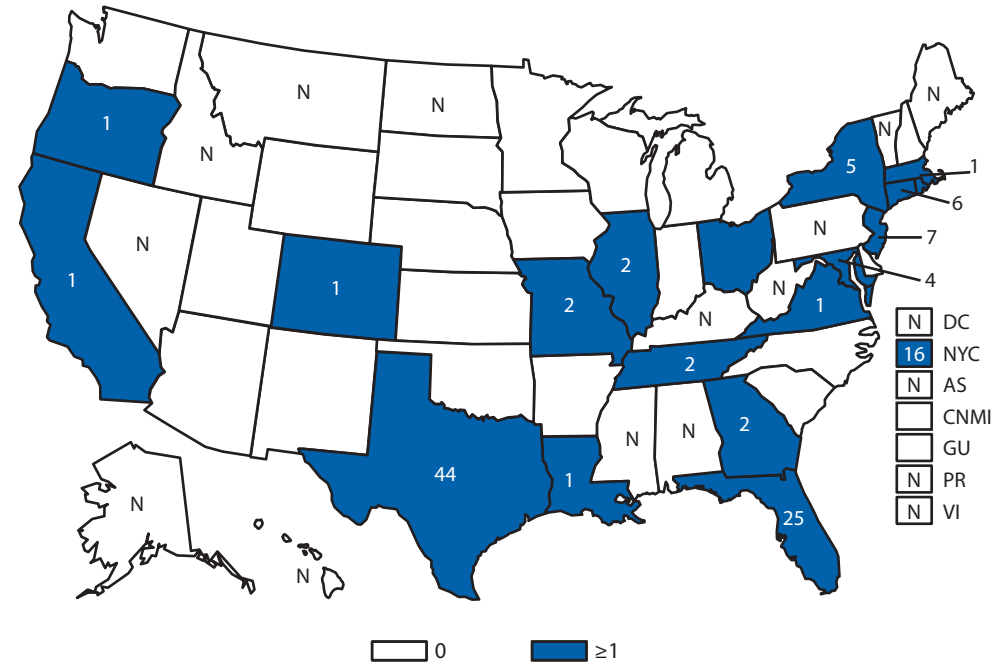
CRYPTOSPORIDIOSIS. Incidence* — United States and U.S. territories, 2012



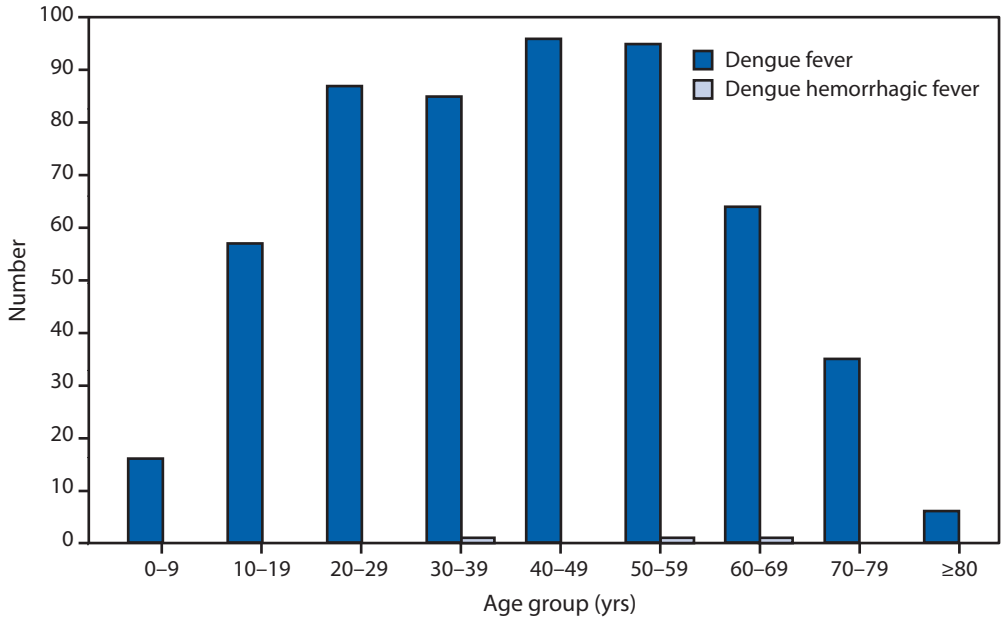
* Per 100,000 population.

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 in 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, 2012

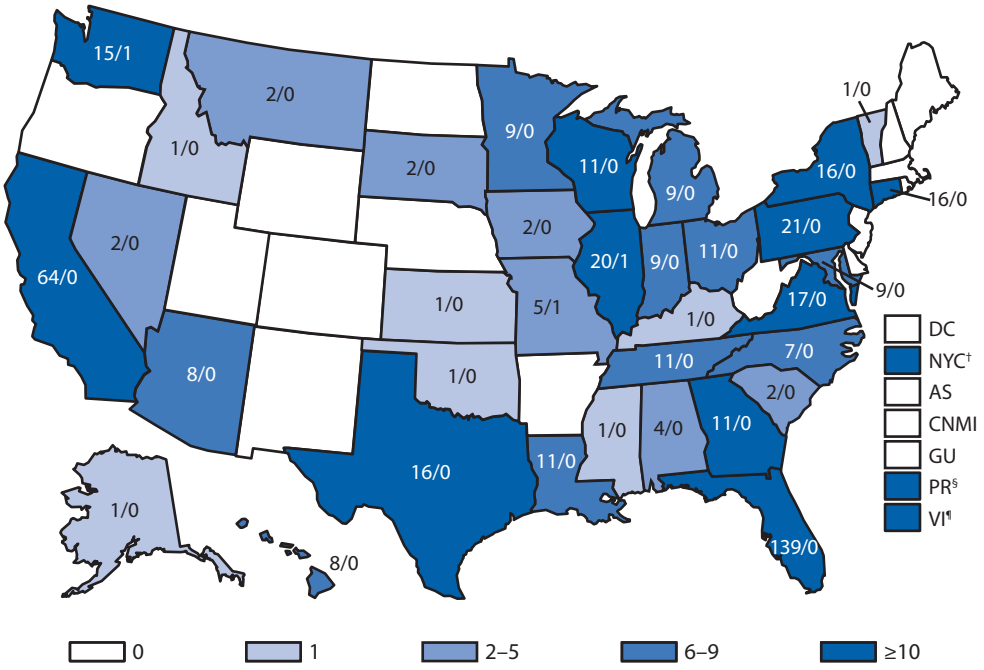


DENGUE VIRUS INFECTION. Number* of reported cases, by age group — United States, 2012



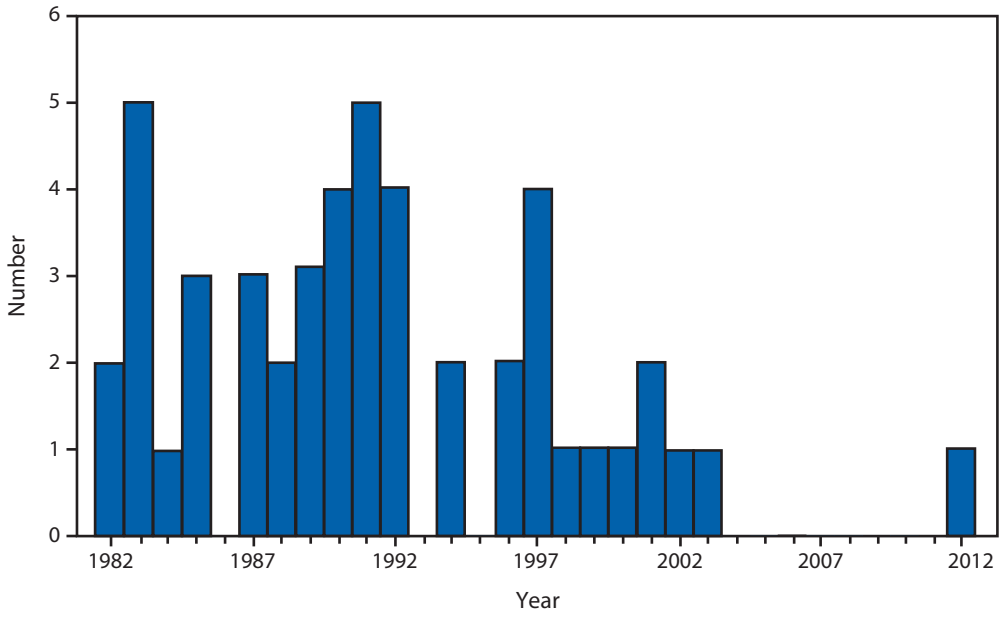
* Data from the Division of Vector-Borne Diseases (DVBD), National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance).

DENGUE FEVER AND DENGUE HEMORRHAGIC FEVER. Number of reported cases, by location of residence* — United States and U.S. territories, 2012



* Number of Dengue fever cases/number of Dengue Hemmorrhagic fever. Data from the Division of Vector-Borne Diseases (DVBD), National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance).
† New York City reported cases 95/0.
§ Puerto Rico locally acquired cases 5,907/118.
¶ Virgin Islands reported cases 141/1.

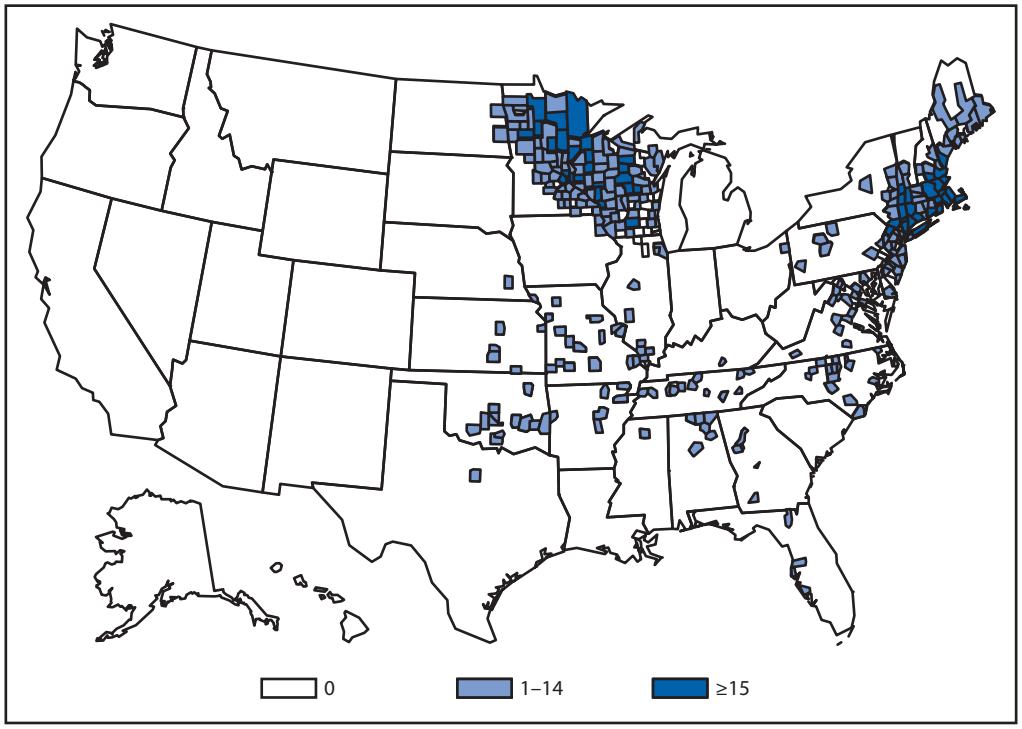
DIPHTHERIA. Number* of reported cases, by year — United States, 1982–2012



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

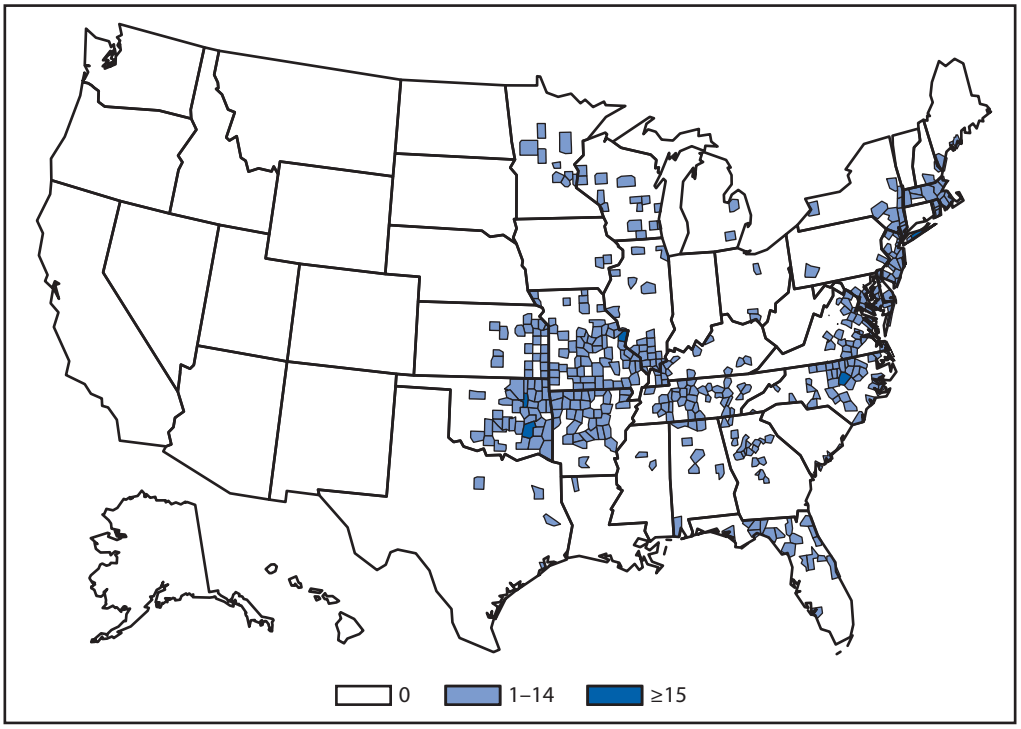
In 2012, a probable case of non-fatal respiratory diphtheria with a positive PCR test for diphtheria tox gene A and B was reported in an inadequately immunized adult male with a history of AIDS. This is the first case of respiratory diphtheria reported to CDC since 2003. Respiratory diphtheria can manifest as an acute membranous pharyngitis in persons who are unimmunized or inadequately immunized.

EHRLICHIOSIS, *ANAPLASMA PHAGOCYTOPHILUM*. Number of reported cases, by county — United States, 2012



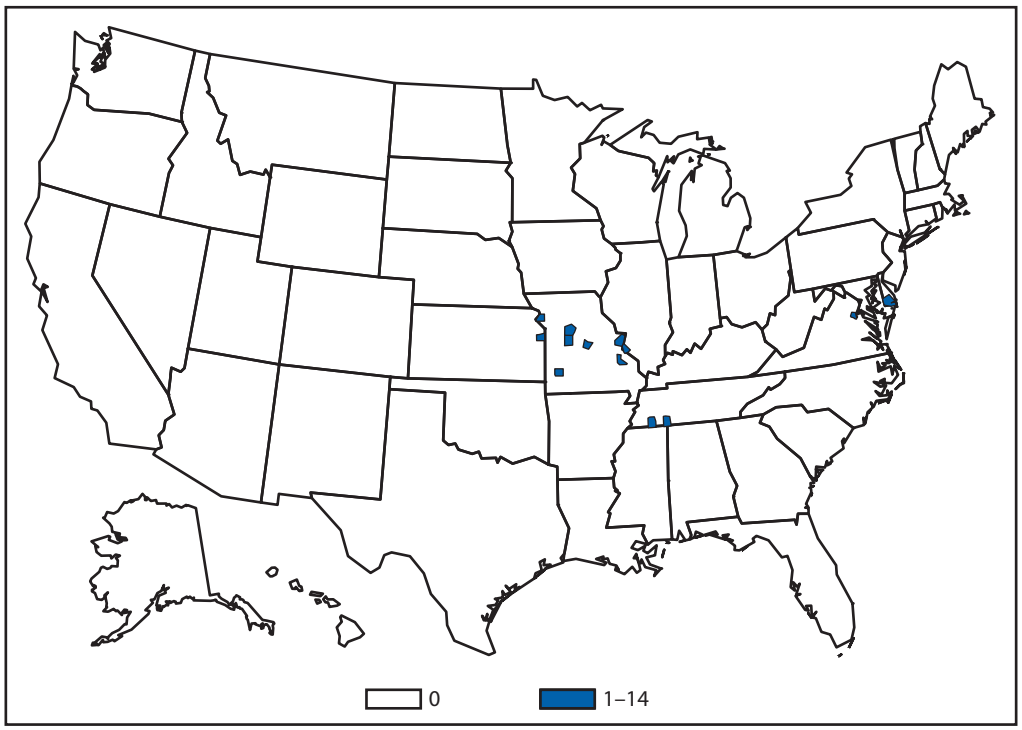
Anaplasmosis is caused by infection with *Anaplasma phagocytophilum*. Cases are reported primarily from the upper Midwest and coastal New England, reflecting both the range of the primary tick vector species, *Ixodes scapularis* — also known to transmit Lyme disease and babesiosis—and the range of preferred animal hosts for tick feeding.

EHRLICHIOSIS, *EHRLICHIA CHAFFEENSIS*. Number of reported cases, by county — United States, 2012



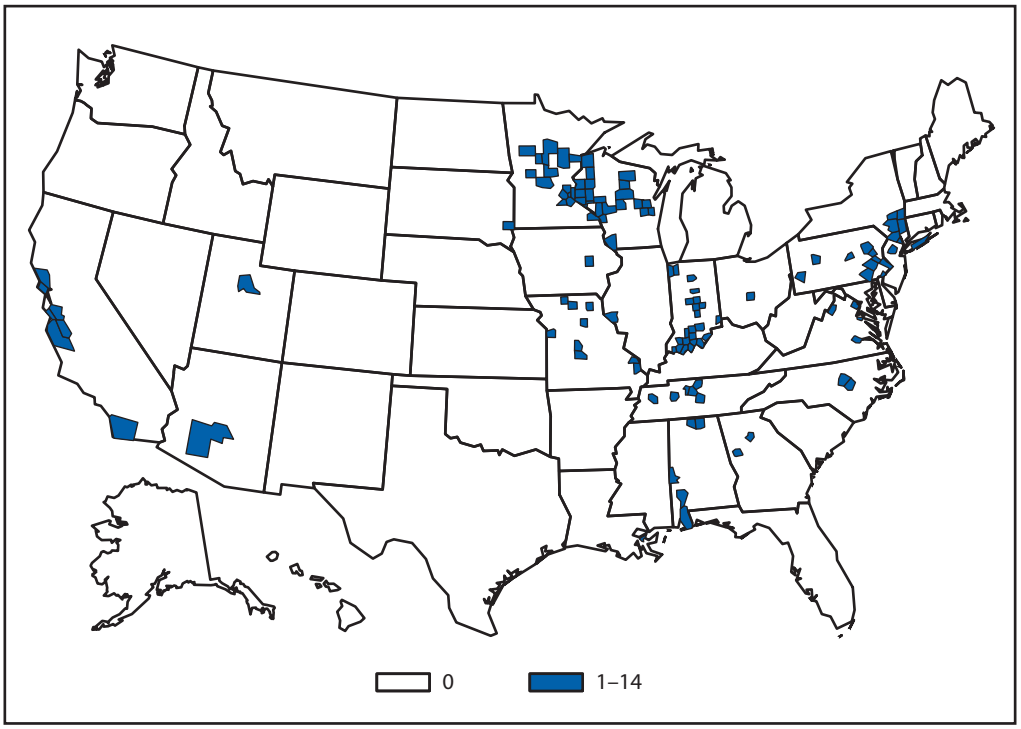
Ehrlichia chaffeensis is the most common type of ehrlichiosis infection in the United States. This tick-borne pathogen is transmitted by *Amblyomma americanum*, the lonestar tick. The majority of cases of *E. chaffeensis* are reported from the Midwest, South, and Northeast regions.

EHRLICHIOSIS, *EHRLICHIA EWINGII*. Number of reported cases, by county — United States, 2012



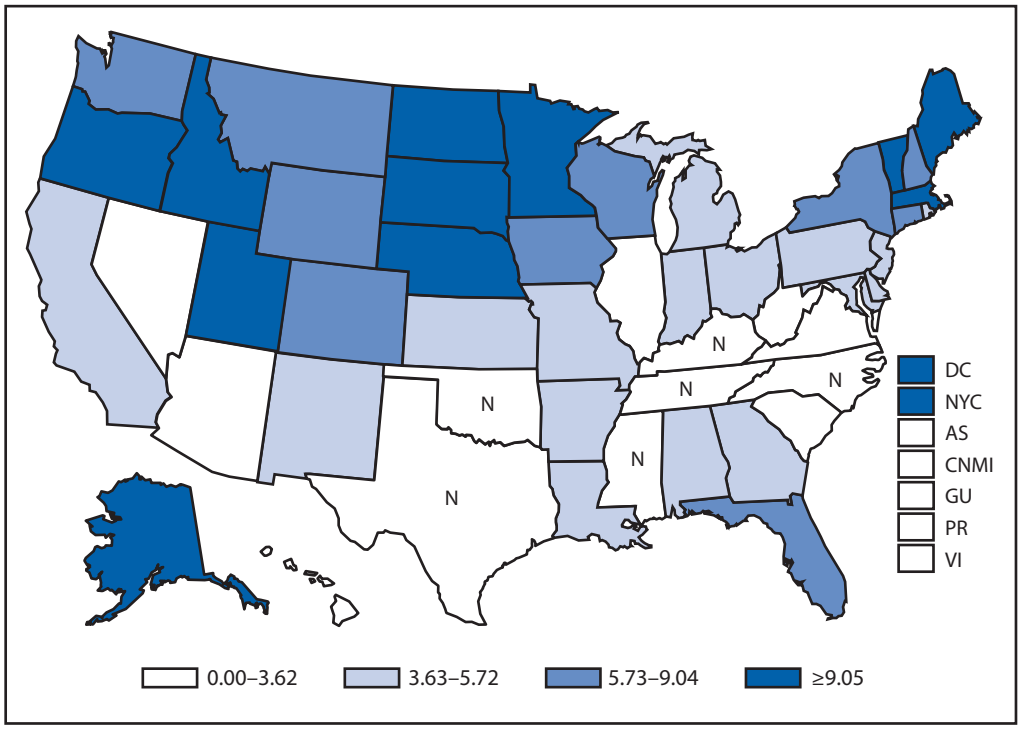
Ehrlichiosis ewingii is the least common cause of ehrlichiosis. *E. ewingii* is carried by *Amblyomma americanum*, the lonestar tick, which is the same vector that transmits *E. chaffeensis*. Currently, no serologic tests are used to distinguish between the two species, and differentiation can only be made by molecular genotyping.

EHRLICHIOSIS, UNDETERMINED. Number of reported cases, by county — United States, 2012



Cases of ehrlichiosis and anaplasmosis caused by an undetermined species are reported across the United States, but these cases are more likely to be reported in the Midwest region and the Middle Atlantic division. This classification 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 also can be used when single, inappropriate diagnostic tests are performed.

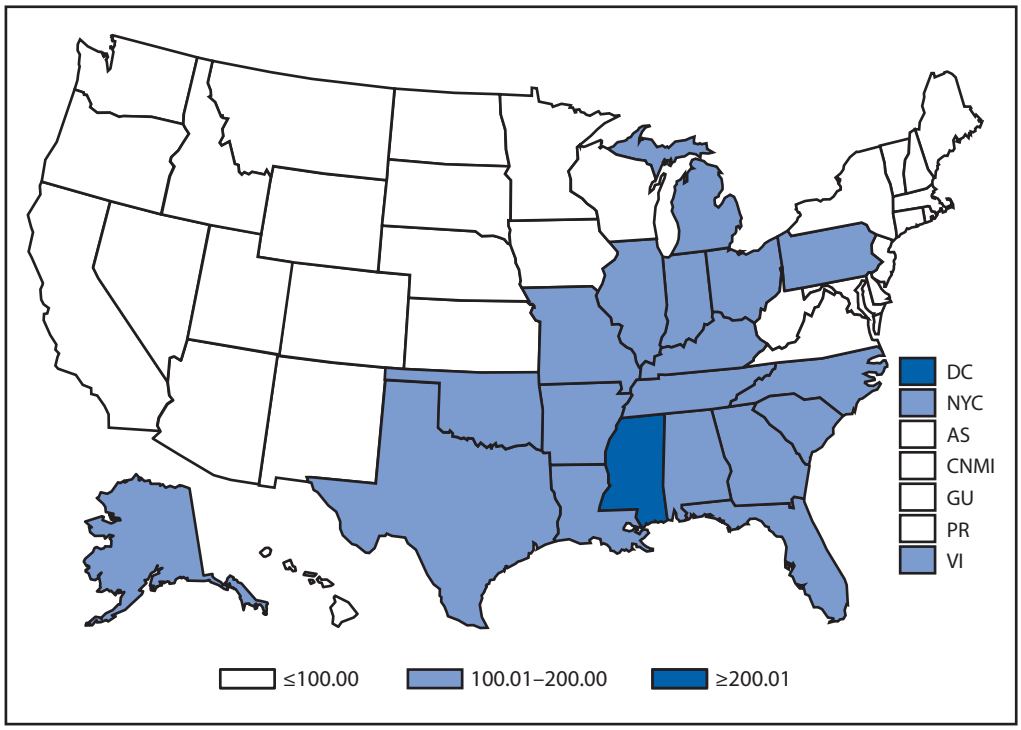
GIARDIASIS. Incidence* — United States and U.S. territories, 2012



* Per 100,000 population.

Giardiasis is widespread geographically in the United States, with varying reported rates in certain states and regions. Whether these differences are of biologic significance or reflect differences in giardiasis case detection and reporting among states is unclear.

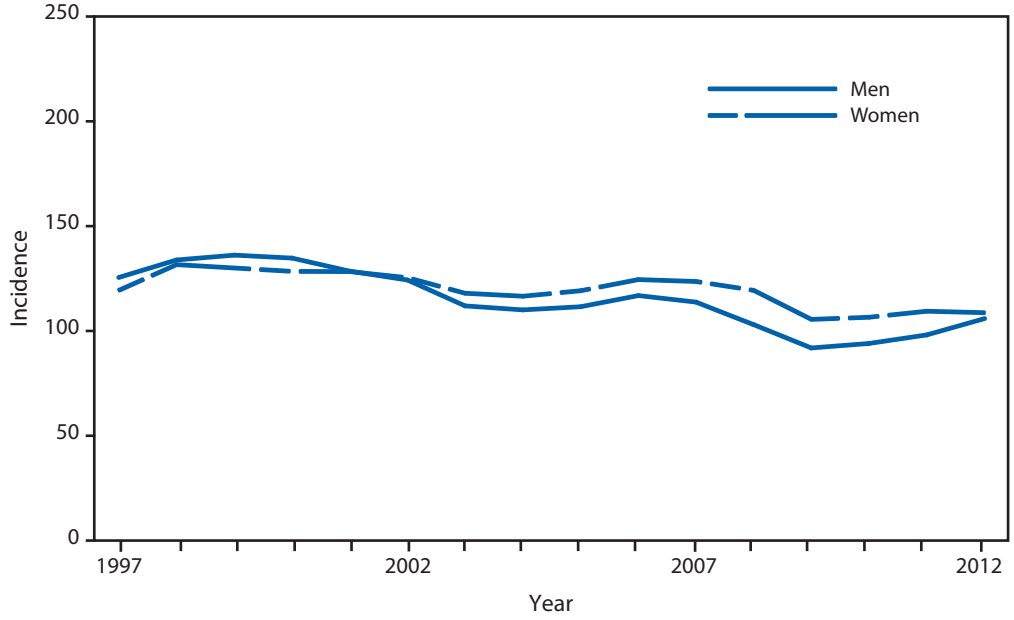
GONORRHEA. Incidence* — United States and U.S. territories, 2012



* Per 100,000 population.

In 2012, the gonorrhea rate in the U.S. and territories (Guam, Puerto Rico, and Virgin Islands) was 106.3 cases per 100,000 population, an increase from the rate in 2011.

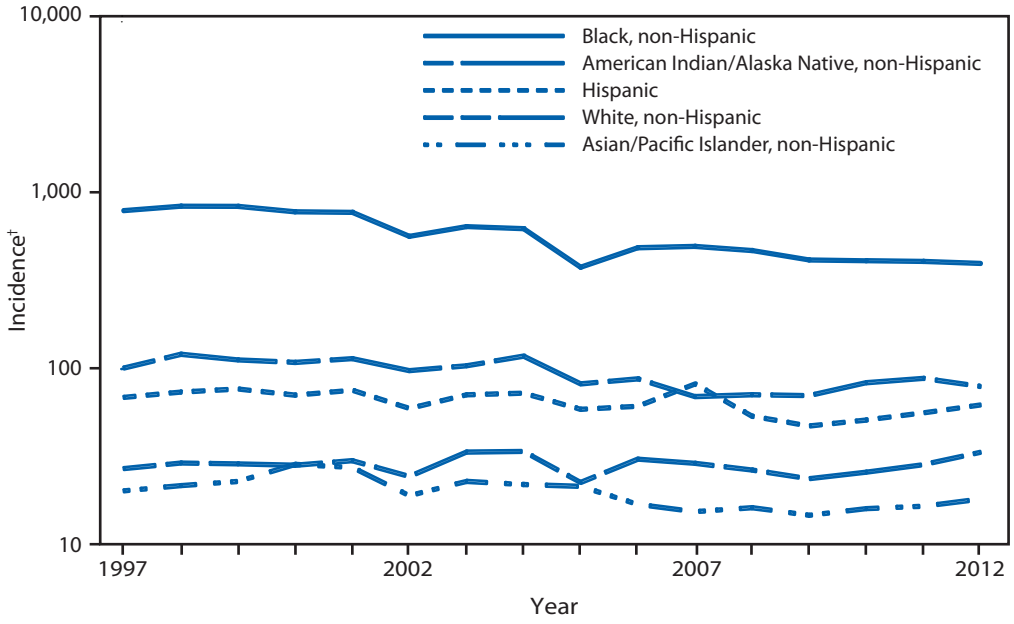
GONORRHEA. Incidence,* by sex — United States, 1997–2012



* Per 100,000 population.

For the eleventh year in a row, the gonorrhea rate among women was slightly higher than the rate among men.

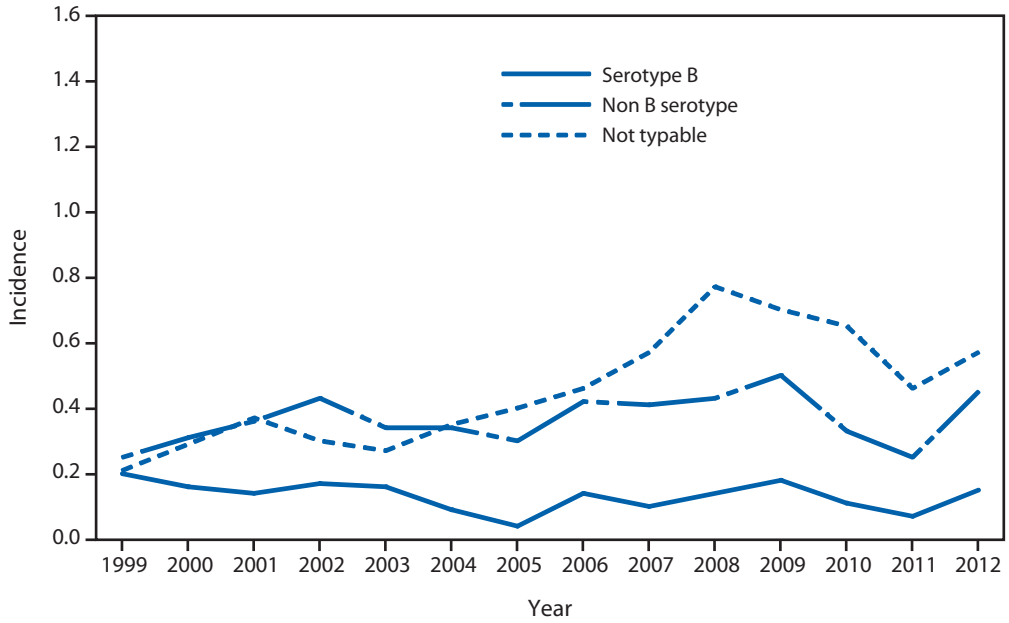
GONORRHEA. Incidence,* by race/ethnicity — United States, 1997–2012



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

Gonorrhea incidence among blacks decreased considerably during the 1990s but continues to be the highest among all races/ethnicities. In 2012, incidence among non-Hispanic blacks was approximately 14 times greater than that for non-Hispanic whites.

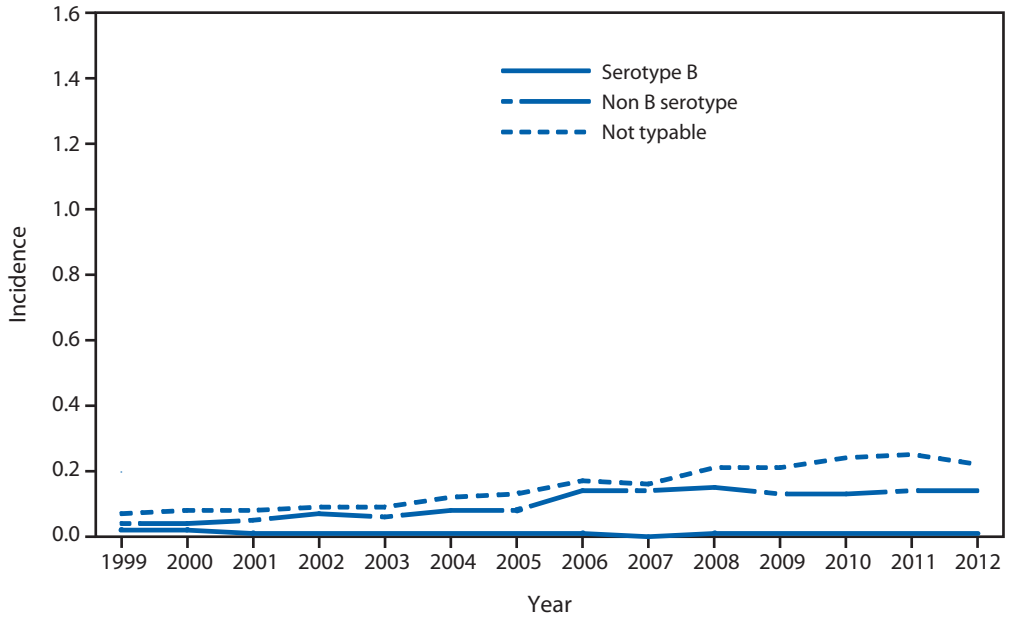
***HAEMOPHILUS INFLUENZAE*, INVASIVE DISEASE. Incidence,* by serotype among children aged <5 years — United States, 1999–2012**



* Per 100,000 population.

Incidence rates are for all invasive *Haemophilus influenzae* (serotype b (Hib), non-b, and nontypeable) among children aged <5 years. The epidemiology of invasive *Haemophilus influenzae* disease has changed in the United States in the post vaccine era. Since the introduction of conjugate Hib vaccines in 1987, the incidence of invasive Hib disease among children aged <5 years decreased by 99% to <1 case per 100,000 children. Nontypeable *Haemophilus influenzae* now causes the majority of invasive disease in all age groups. To ensure appropriate chemophrophylaxis measures for contacts of invasive Hib disease and to detect emergence of invasive non-Hib disease, serotyping of all *Haemophilus influenzae* isolates in children <5 years, and thorough and timely investigation of all cases of Hib disease are essential.

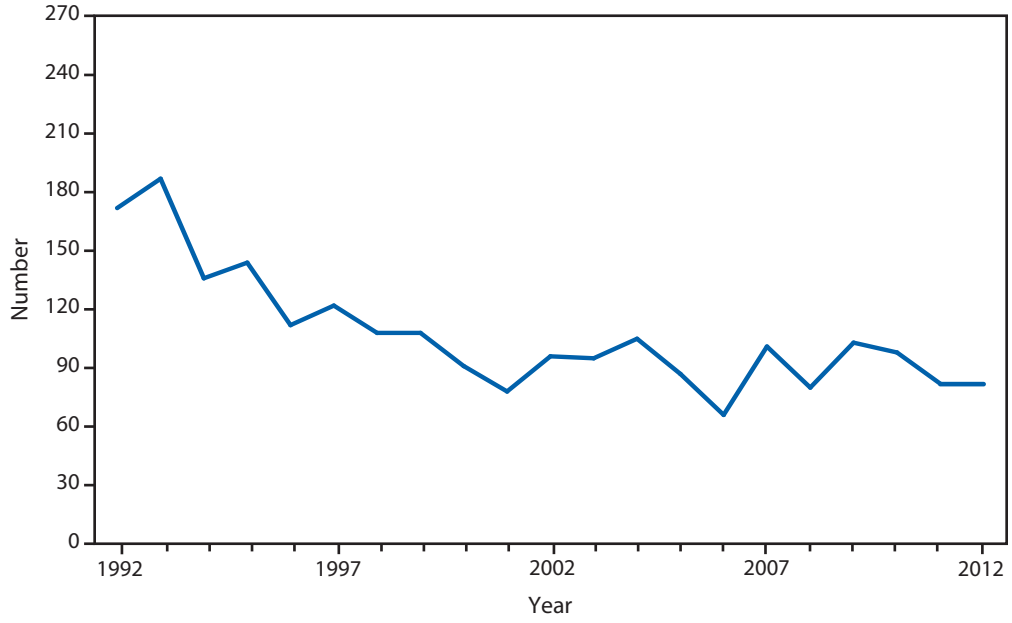
***HAEMOPHILUS INFLUENZAE*, INVASIVE DISEASE. Incidence,* by serotype among persons aged ≥5 years — United States, 1999–2012**



* Per 100,000 population.

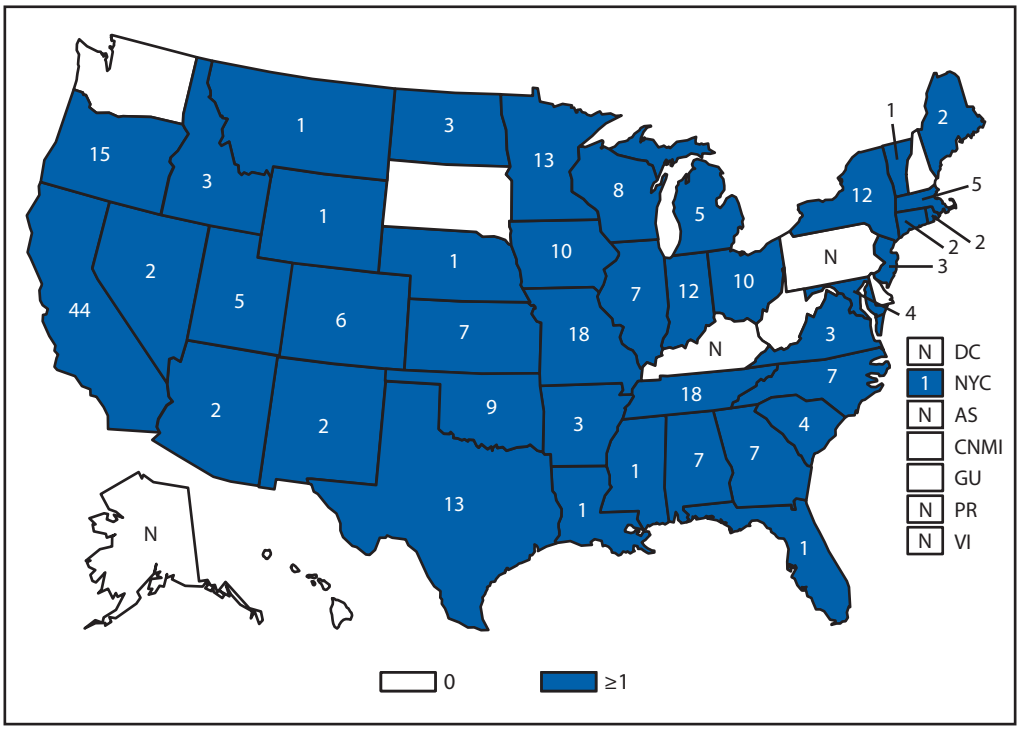
Incidence rates are for all invasive *Haemophilus influenzae* (serotype b (Hib), non-b, and nontypeable) among persons aged ≥5 years. The epidemiology of invasive *Haemophilus influenzae* disease has changed in the United States in the post vaccine era. Nontypeable *Haemophilus influenzae* now causes the majority of invasive disease in all age groups. To ensure appropriate chemophrophylaxis measures for contacts of invasive Hib disease and to detect emergence of invasive non-Hib disease, serotyping of all *Haemophilus influenzae* isolates in children <5 years, and thorough and timely investigation of all cases of Hib disease are essential.

HANSEN DISEASE (LEPROSY). Number of reported cases, by year — United States, 1992–2012



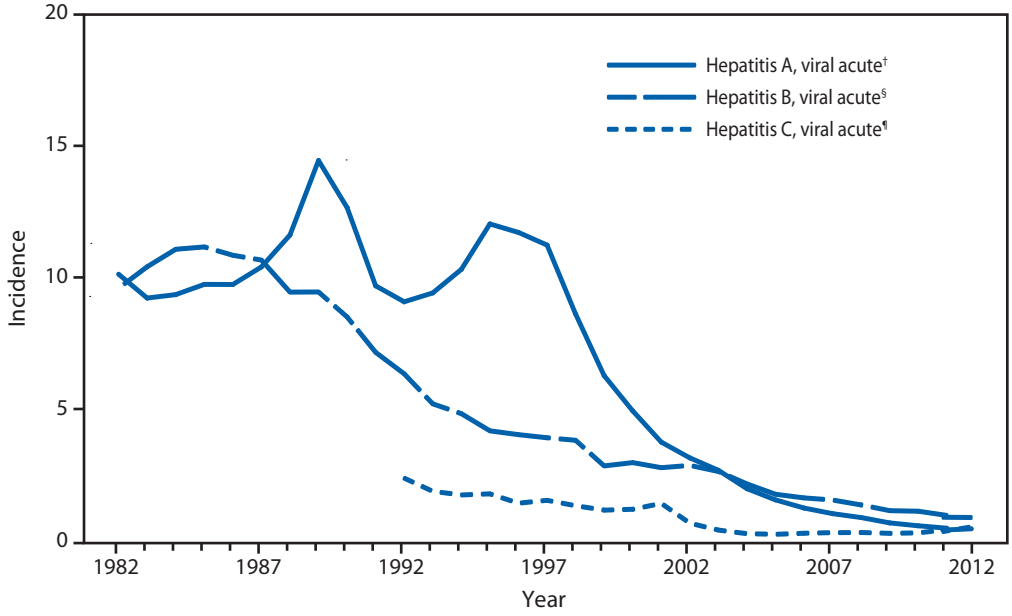
The number of Hansen disease cases reported in 2011 and 2012 remained stable.

HEMOLYTIC UREMIC SYNDROME, POSTDIARRHEAL. Number of reported cases — United States and U.S. territories, 2012



In 2012, cases continued to be reported from all regions of the country. The majority of cases of postdiarrheal hemolytic uremic syndrome (HUS) are caused by Shiga toxin-producing *Escherichia coli* (STEC). STEC O157:H7 is the serotype most commonly identified in patients with HUS (based on data collected in the FoodNet surveillance system).

HEPATITIS, VIRAL. Incidence,* by year — United States, 1982–2012

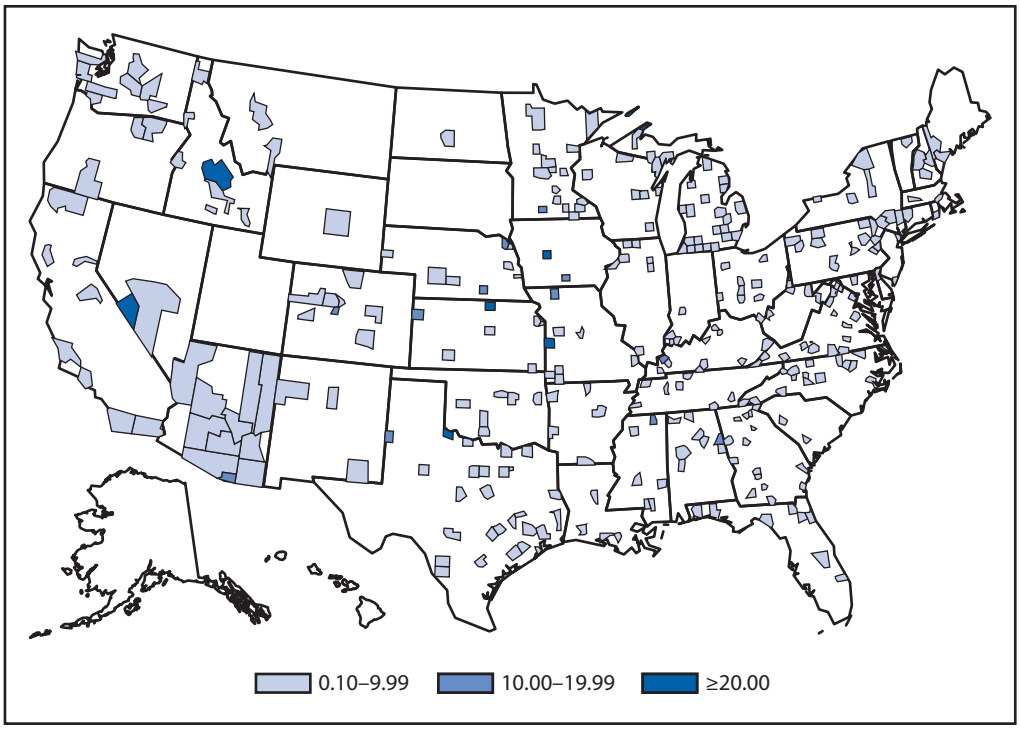


* Per 100,000 population.
† Hepatitis A vaccine was first licensed in 1995.
§ Hepatitis B vaccine was first licensed in June 1982.
¶ An anti-hepatitis C virus (HCV) antibody test first became available in May 1990.

Hepatitis A incidence remains at the lowest rate recorded since 2010. 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 declined between 1992 and 2005, remained stable from 2006 to 2010, and increased in both 2011 and 2012. Some of the increase reflects increased case ascertainment by state and local health departments funded by CDC to conduct more active investigations of persons who have positive laboratory results.

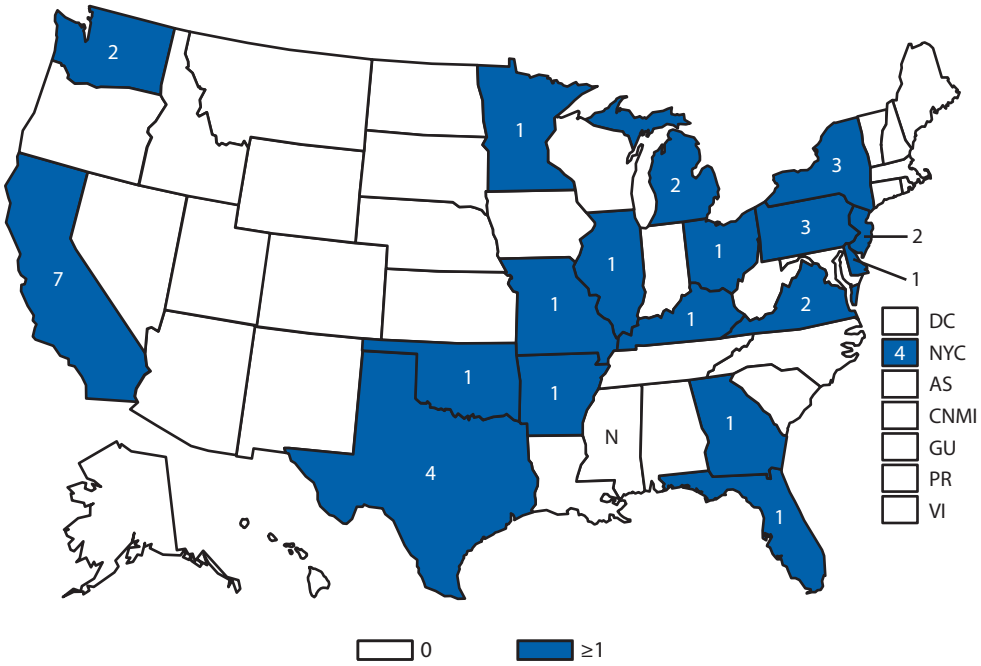
HEPATITIS A. Incidence,* by county — United States, 2012



* Per 100,000 population.

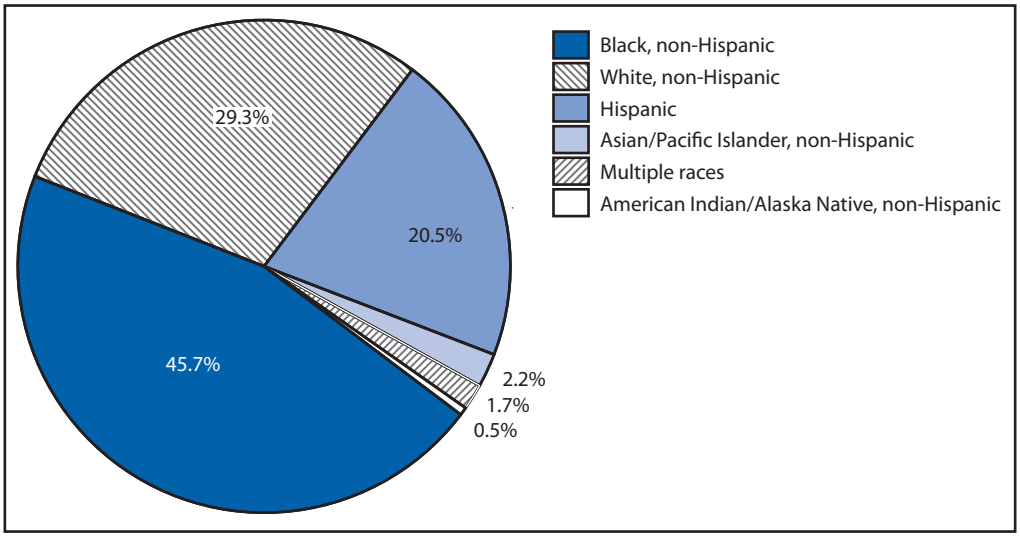
Hepatitis A virus infection rates are the lowest ever reported. However, several counties shown in this map had rates of disease ≥20 cases /100,000 population in 2012. Low rates of hepatitis A are because of, at least in part, increasing vaccination rates among young persons.

HEPATITIS B PERINATAL INFECTION. Number of reported cases — United States and U.S. territories, 2012



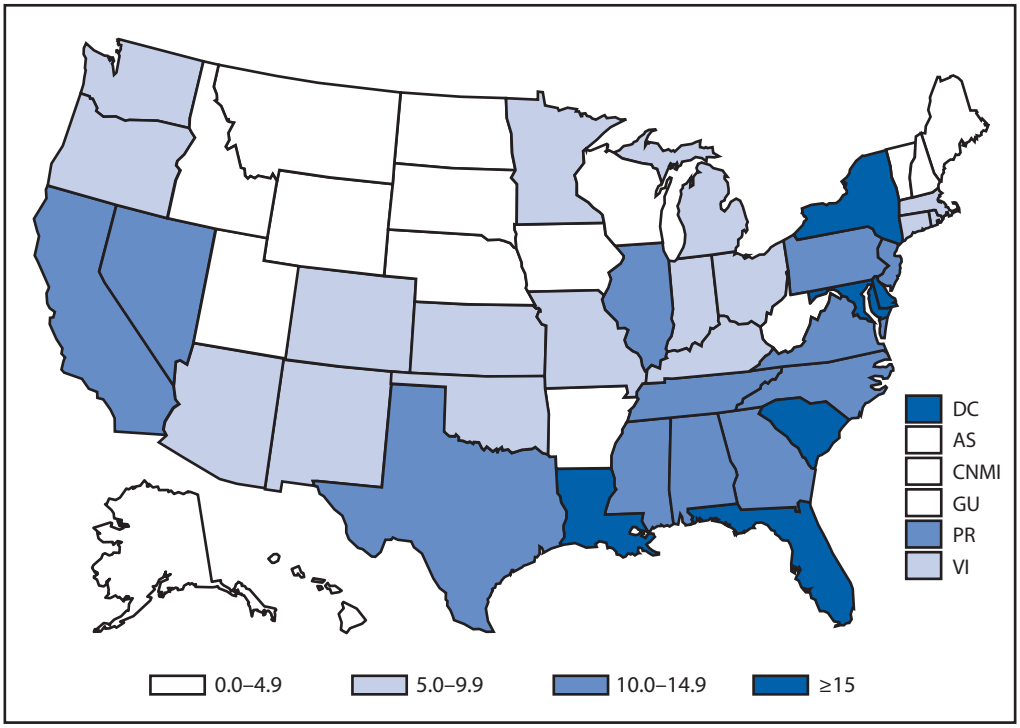
Perinatal hepatitis B, defined as hepatitis B surface antigen (HBsAg) positivity in any infant aged <24 months who was born in the United States or in a U.S. territory to an HBsAg positive mother, became nationally notifiable in 1995. Because of the asymptomatic nature of hepatitis B in young children, lack of timely testing among exposed infants, and incomplete reporting of infants with hepatitis B to public health surveillance programs, the reported cases of perinatal hepatitis B is considered low and represent only a fraction of all infants infected with hepatitis B virus at birth.

HUMAN IMMUNODEFICIENCY VIRUS DIAGNOSES. Percentage of diagnosed cases, by race/ethnicity — United States, 2012



Of persons diagnosed with HIV infection in 2012, 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.

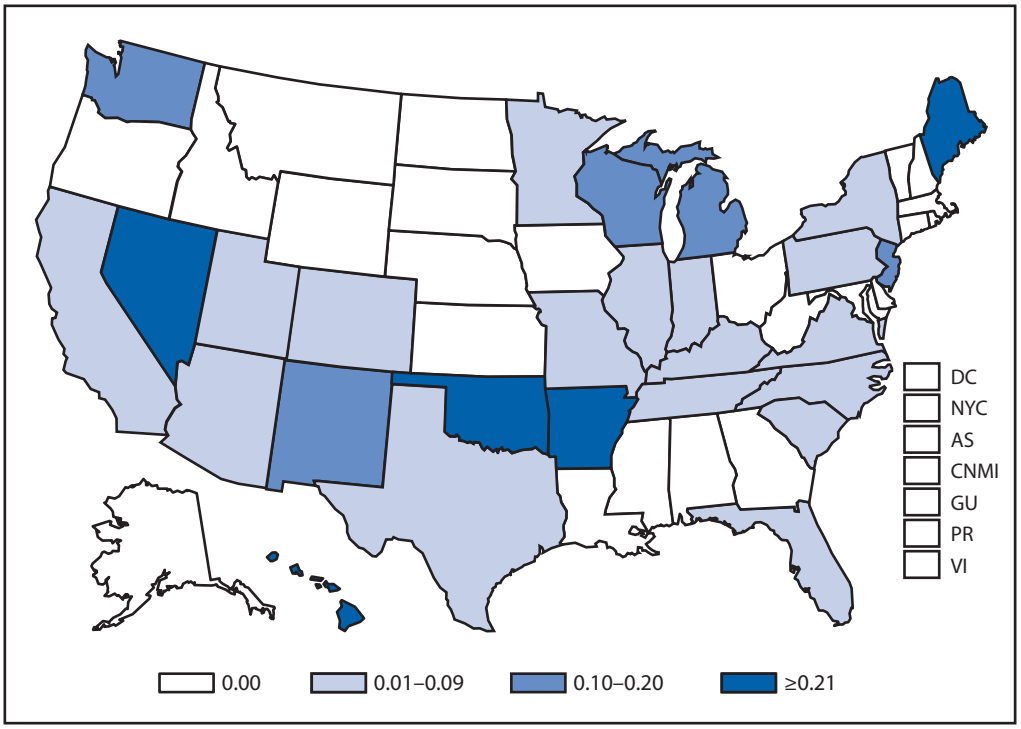
HUMAN IMMUNODEFICIENCY VIRUS DIAGNOSES. Diagnosis rates* — United States and U.S. territories, 2012



* Per 100,000 population.

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

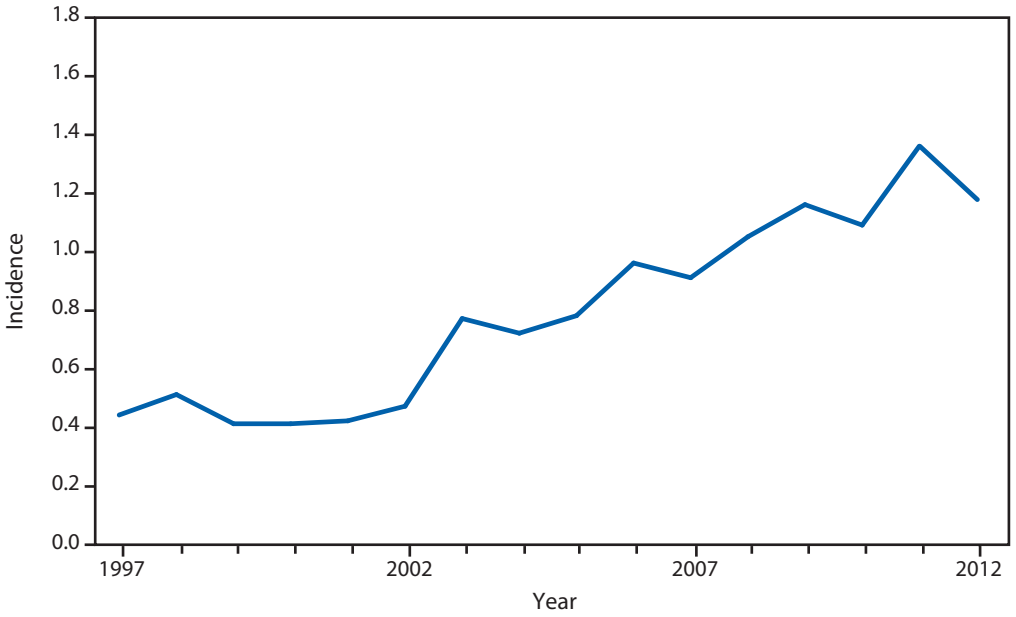
INFLUENZA-ASSOCIATED PEDIATRIC MORTALITY. Incidence* — United States and U.S. territories, 2012



* Per 100,000 population.

During 2012, a total of 24 states reported 52 influenza-associated pediatric deaths to CDC for an overall incidence rate in the United States of 0.07 deaths per 100,000 children aged <18 years. This represents a decrease in the overall rate when compared with 2011 (0.16 deaths per 100, 000 children aged <18 years) and a substantial decrease in the rate compared with 2009 (0.48 deaths per 100,000 children aged <18 years) when three peaks in influenza-associated deaths were observed: one from seasonal influenza activity, a small peak during the summer months from the initial pandemic 2009 A(H1N1) activity, followed by a much larger peak associated with pandemic activity in the fall of 2009. The state-to-state variation in rates are more likely related to the small numbers of deaths in each state rather than true differences in disease burden.

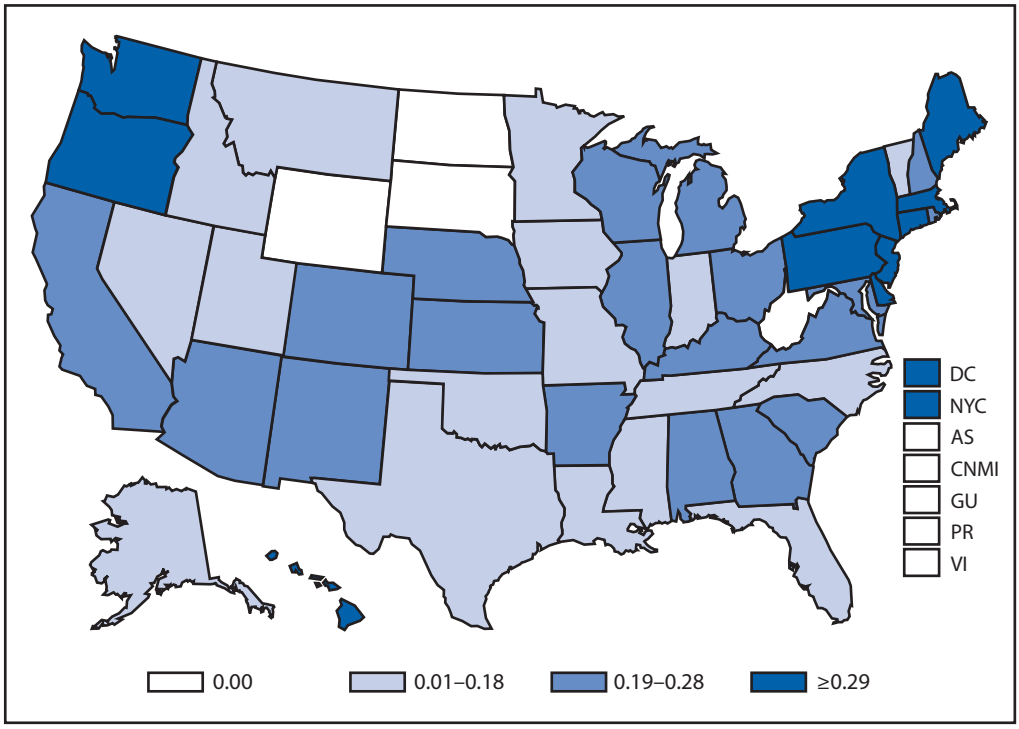
LEGIONELLOSIS. Incidence,* by year — United States, 1997–2012



* Per 100,000 population.

The incidence of legionellosis decreased slightly from 2011 to 2012, but a general increasing trend in disease began in 2003. Factors contributing to this increase include a true increase in disease transmission, greater use of diagnostic testing, and increased reporting.

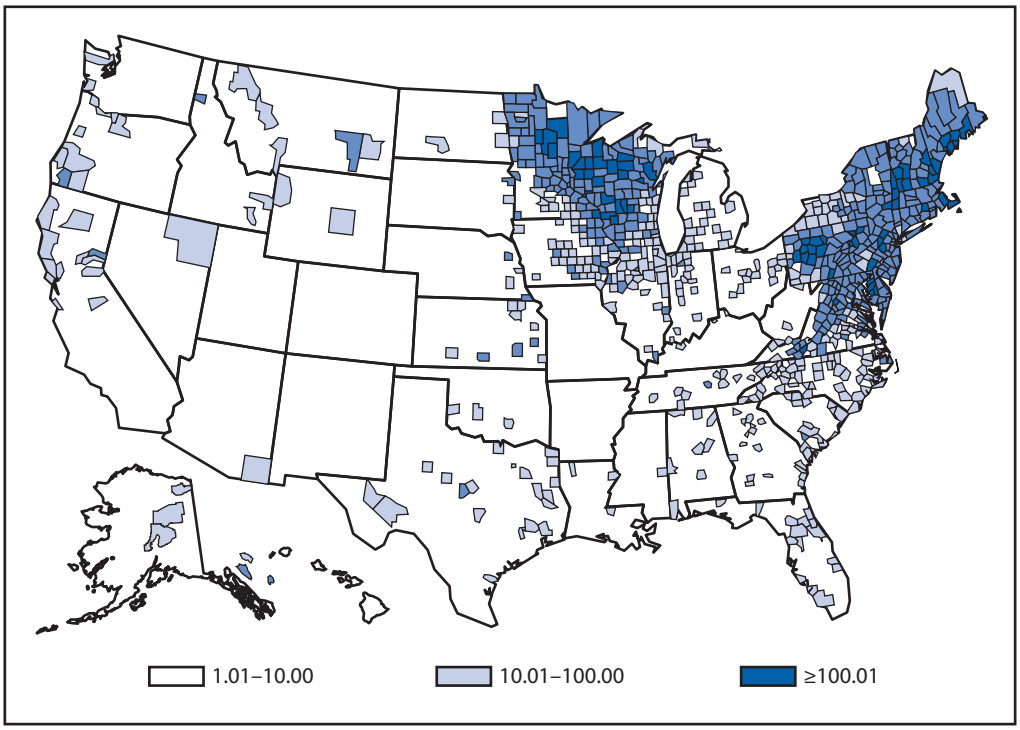
LISTERIOSIS. Incidence* — United States and U.S. territories, 2012



* Per 100,000 population.

During 2012, a total of 47 states and New York City reported 727 cases of listeriosis for an overall incidence rate in the United States of 0.23 infections per 100,000. Incidence rates were generally highest in the Northeastern and Northwestern states. Listeriosis is foodborne and occurs most frequently among older adults or persons who are pregnant or immunocompromised.

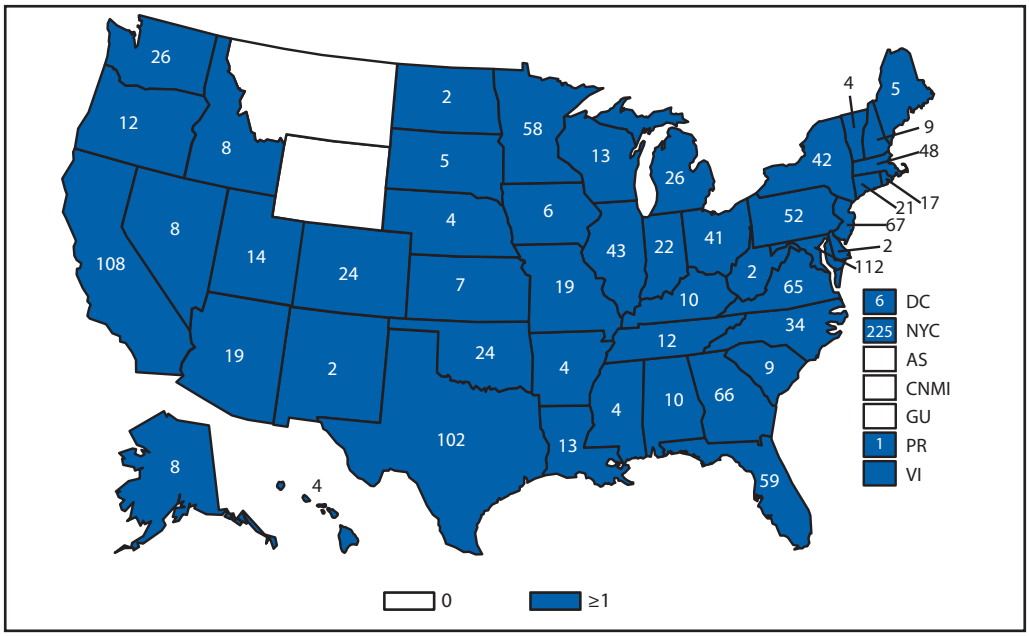
LYME DISEASE. Incidence* of reported confirmed cases, by county — United States, 2012



* Per 100,000 population.

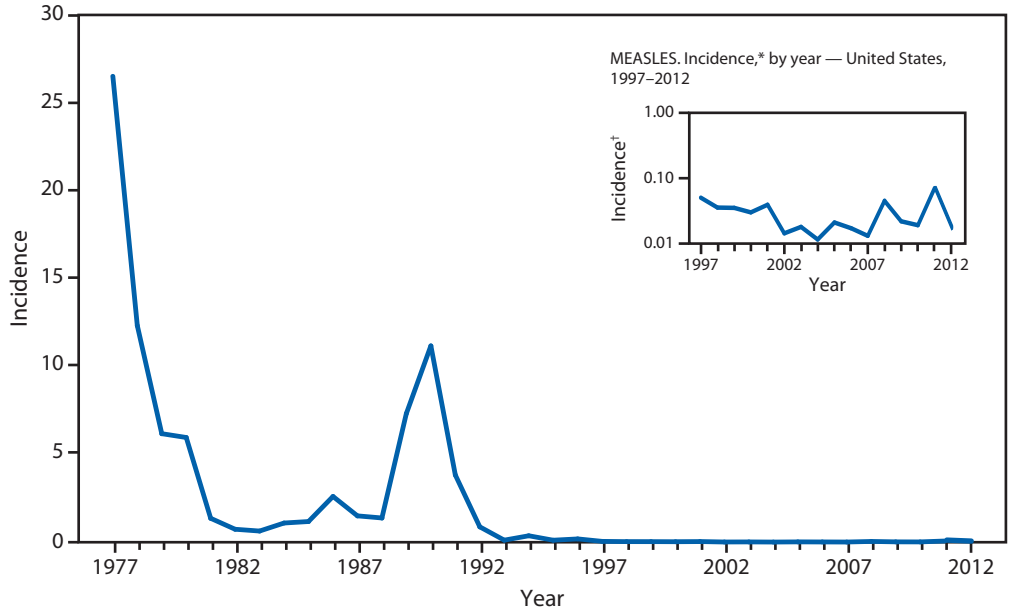
Approximately 95% of confirmed Lyme disease cases were reported from states in the Northeast, mid-Atlantic, and upper Midwest. A rash that can be confused with early Lyme disease sometimes occurs following bites of the lone star tick (*Amblyomma americanum*). These ticks, which do not transmit the Lyme 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, 2012



The numbers on the map represent the number of reported malaria cases with illness onset in 2012. In 2012, cases of malaria were reported from almost every state, and almost all cases reported in the United States were acquired overseas. Cases in New York City (n = 225), Maryland (n = 112), California (n = 108), Texas (n = 102), New Jersey (n = 67), Georgia (n = 66), Virginia (n = 65), and Florida (n = 59) accounted for 53% of the reported cases, from large immigrant populations and international travelers.

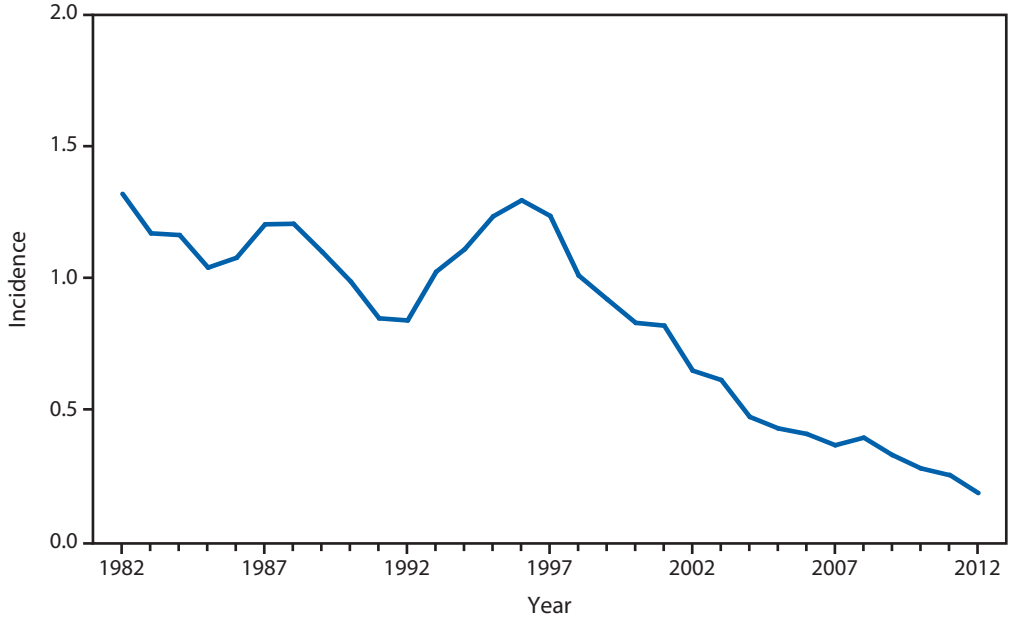
MEASLES. Incidence,* by year — United States, 1977–2012



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

Measles vaccine was licensed in 1963. Endemic measles was declared eliminated from the United States in 2000.

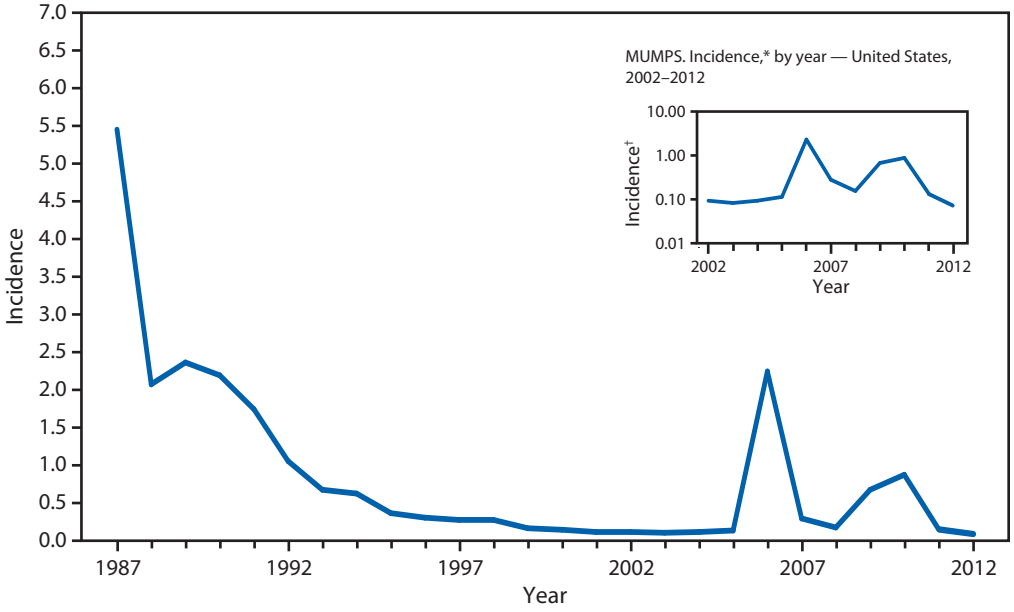
MENINGOCOCCAL DISEASE. Incidence,* by year — United States, 1982–2012



* Per 100,000 population.

Meningococcal disease incidence remained low in 2012, but it continues to cause significant morbidity and mortality in the United States. The highest incidence of meningococcal disease occurs among infants, with a second peak occurring in late adolescence. In 2005, a quadrivalent (A, C, Y, W-135) meningococcal conjugate vaccine was licensed and recommended for adolescents and others at increased risk for disease. In October 2010, a booster dose was recommended to be added for adolescents at age 16 years.

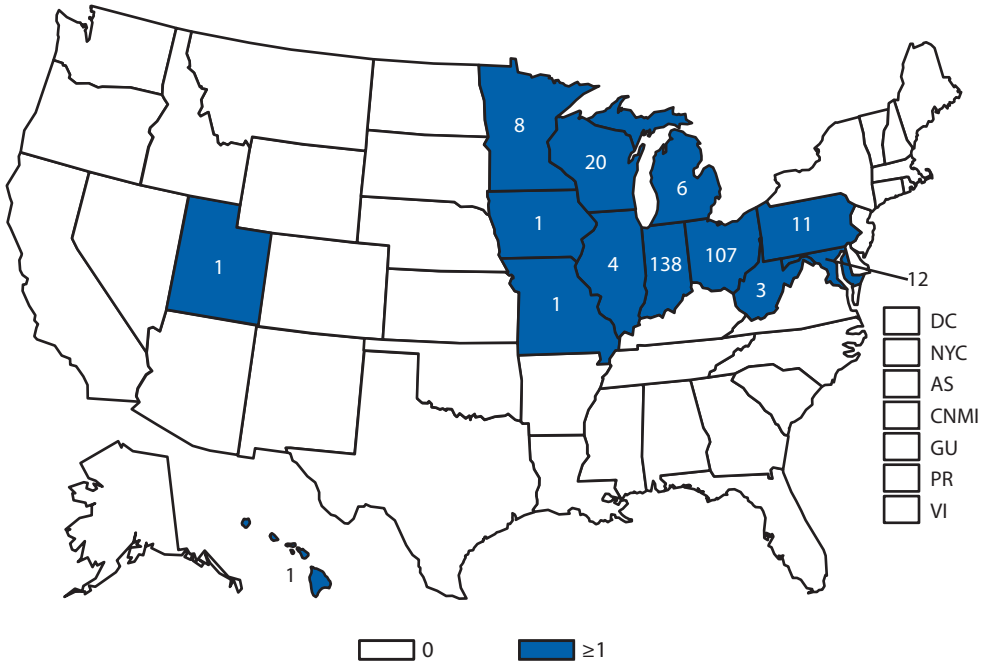
MUMPS. Incidence,* by year — United States, 1987–2012



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

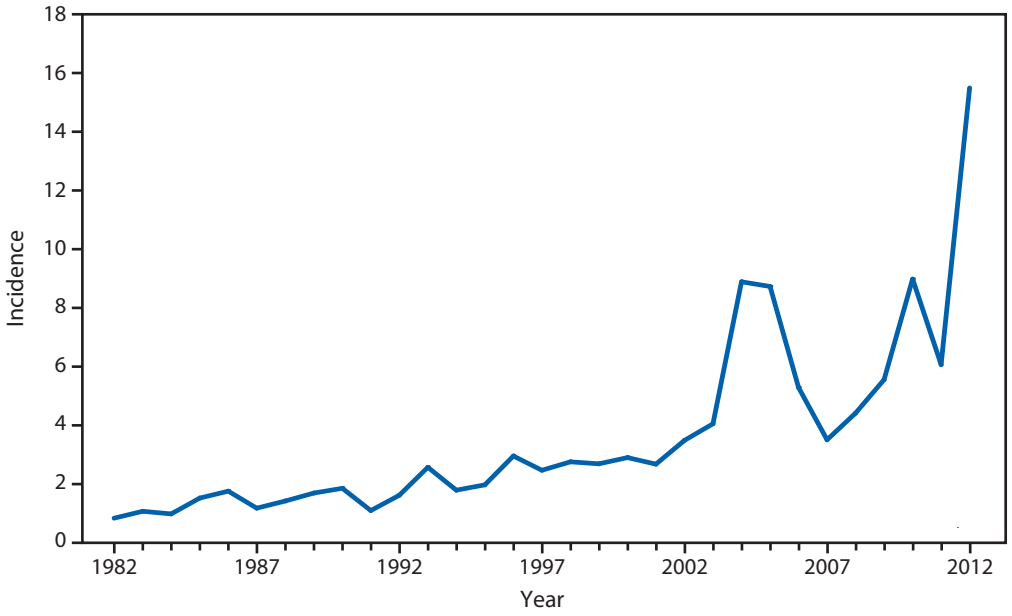
The widespread use of a second dose of mumps vaccine, beginning in 1989, was followed by historically low morbidity until 2006, when the United States experienced the largest mumps outbreak in 2 decades. The 2006 outbreak of more than 6,000 cases primarily affected college students aged 18–24 years in the Midwest.

NOVEL INFLUENZA A VIRUS INFECTIONS. Number of reported cases — United States and U.S. territories, 2012



H3N2v viruses with the matrix (M) gene from the 2009 H1N1 pandemic virus were first detected in people in 2011 and were responsible for a multi-state outbreak in the summer of 2012. Most cases of H3N2v identified during 2012 were associated with exposure to pigs at agricultural fairs. Agricultural fairs take place across the United States every year, primarily during the summer months and into early fall. Many fairs have swine barns, where pigs from different places come in close contact with each other and with people. These venues might allow spread of influenza viruses both among pigs and between pigs and people. Data indicate that infected pigs might spread influenza viruses even if they show no sign of infection (e.g., coughing or sneezing). Although instances of limited person-to-person spread of this virus have been identified in the past, sustained, or community-wide transmission of H3N2v has not occurred.

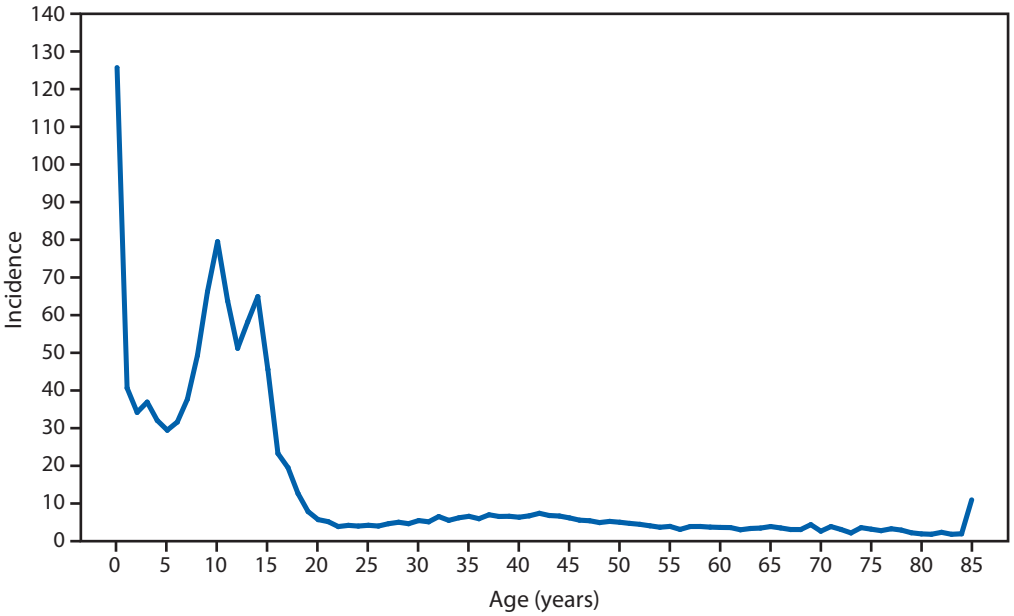
PERTUSSIS. Incidence,* by year — United States, 1982–2012



* Per 100,000 population.

Pertussis remains endemic in the United States with cyclic peaks occurring every 2–5 years. Incidence increased more than 150% during 2011–2012; cases reported in 2012 represent the largest number of reported cases in the United States since 1955.

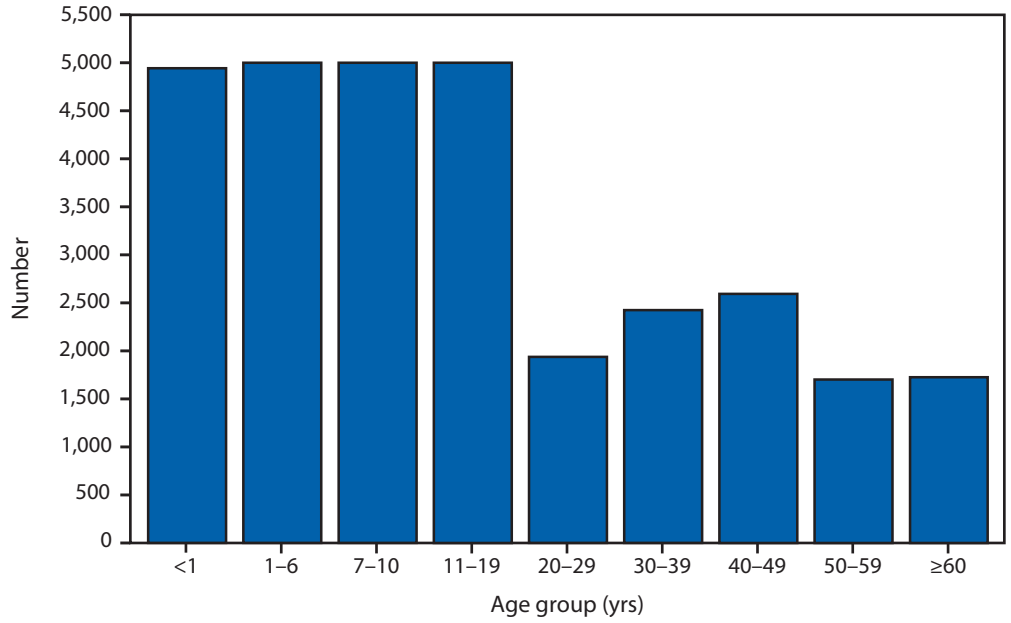
PERTUSSIS. Incidence,* by age — United States, 2012



* Per 100,000 population.

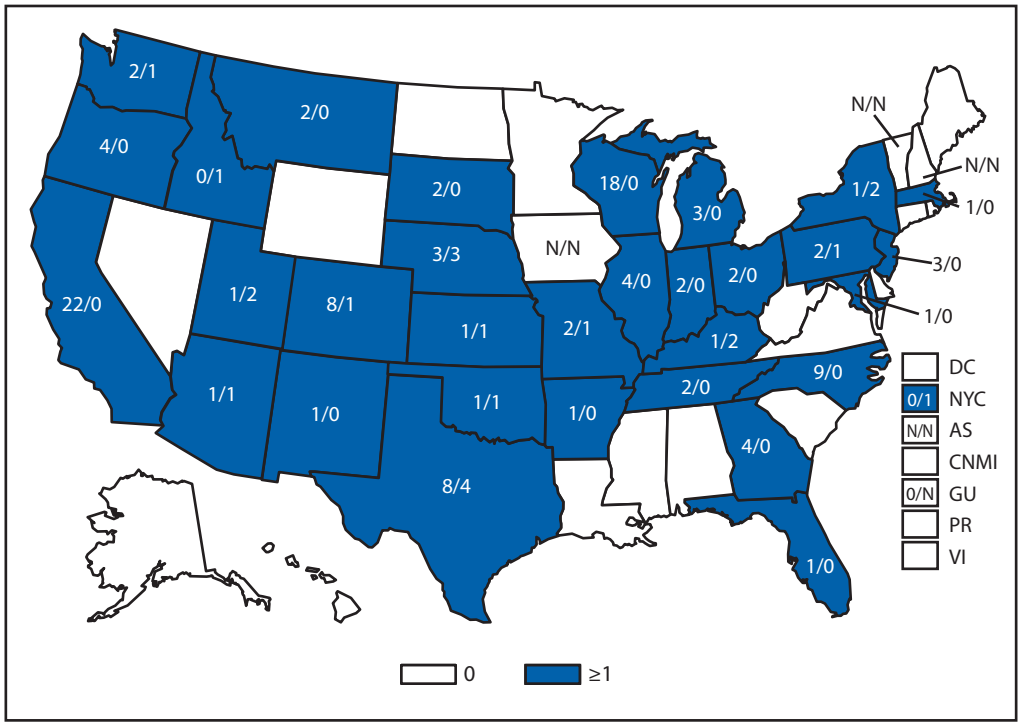
Pertussis continues to have cyclic peaks every 3 to 5 years. Incidence in 2011 declined 32% following the peak in 2010.

PERTUSSIS. Number of reported cases, by age group — United States, 2012



Infants, especially those who are too young to be fully vaccinated, are at greatest risk for severe disease and death from pertussis, and continue to have the greatest prevalence of reported disease. During 2012, increased rates of pertussis occurred among school-aged children and adolescents, similar to trends observed in recent years.

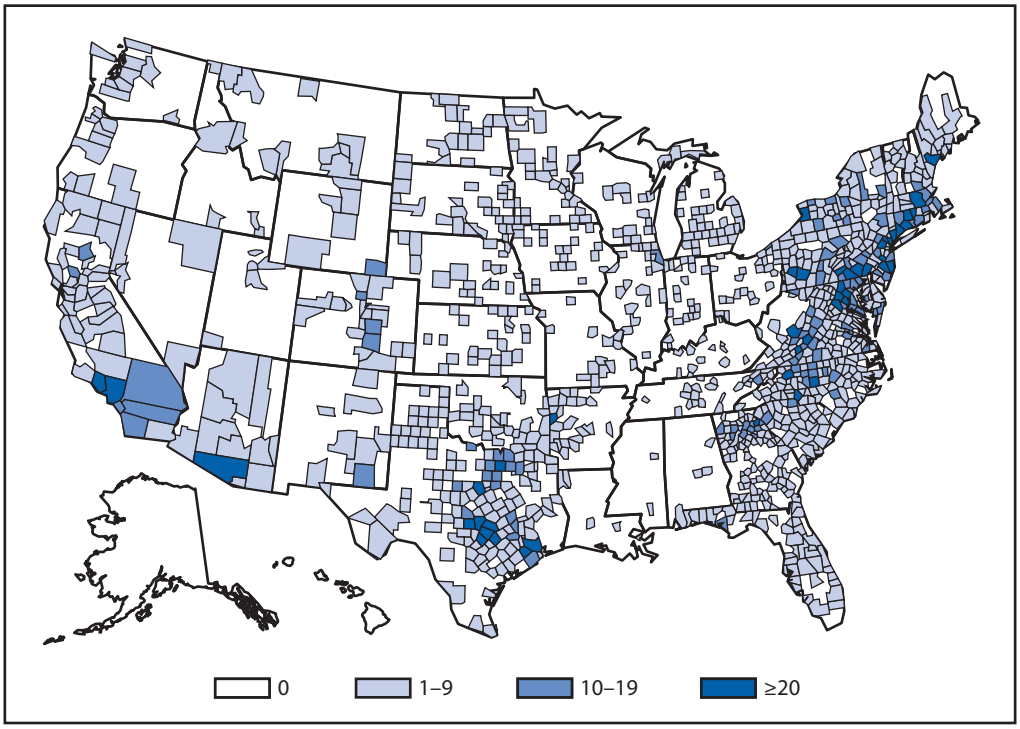
Q FEVER, ACUTE AND CHRONIC. Number of reported cases* — United States and U.S. territories, 2012



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

Q fever, caused by *Coxiella burnetii*, is reported throughout the United States. Human cases of Q fever most often result from contact with infected livestock, especially sheep, goats, and cattle.

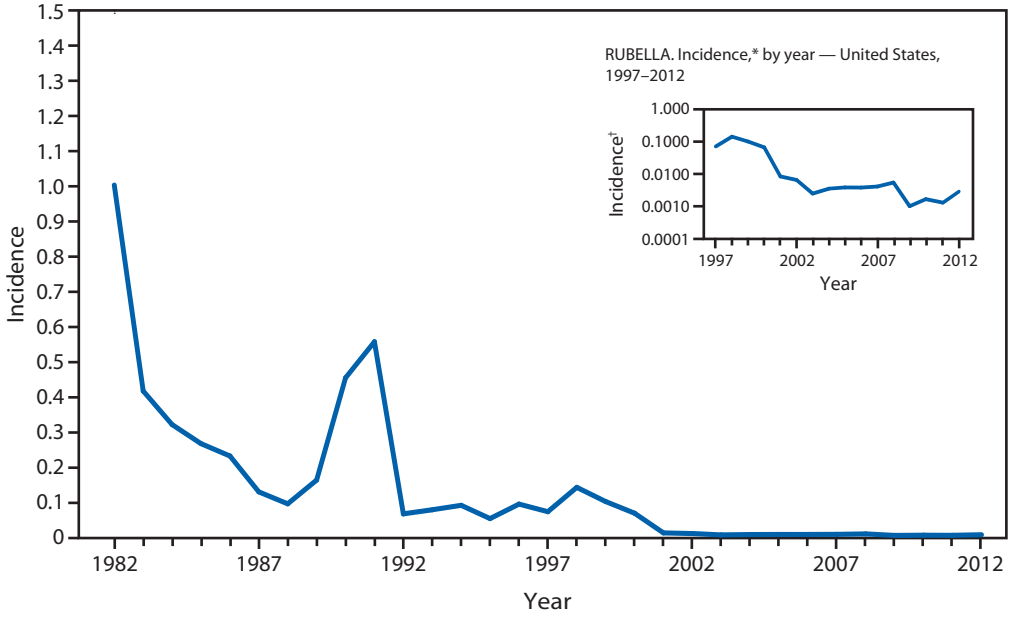
RABIES, ANIMAL. Number* of reported cases, by county — United States, 2012



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

Several rabies virus variants associated with distinct reservoir species have been identified in the United States. The circulation of rabies virus variants associated with raccoons (eastern United States), skunks (central United States and California), and foxes (Texas, Arizona, and Alaska) occur over defined geographic areas. Several distinct rabies virus variants associated with different bat species are broadly distributed across the contiguous United States. Hawaii is the only state considered free of rabies.

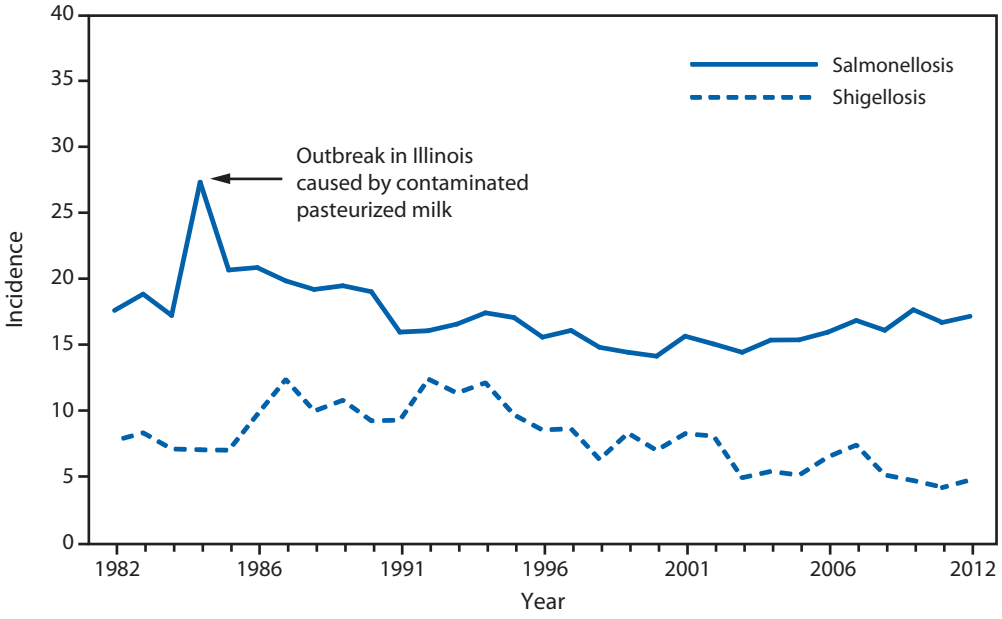
RUBELLA. Incidence,* by year — United States, 1982–2012



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

Rubella vaccine was licensed in 1969. Elimination of endemic rubella virus transmission was documented in the United States in 2004.

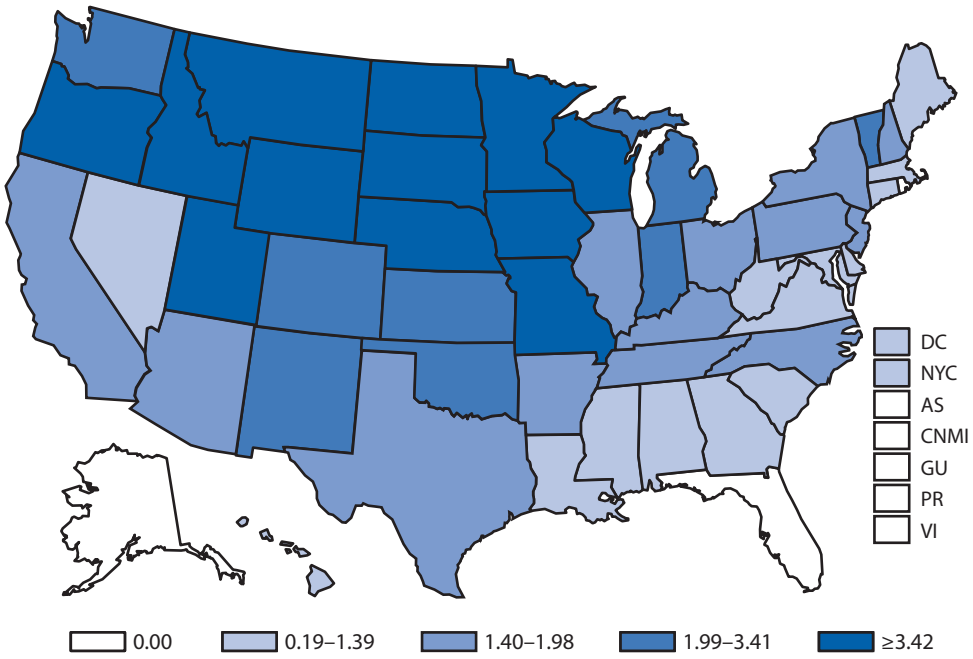
SALMONELLOSIS AND SHIGELLOSIS. Incidence,* by year — United States, 1982–2012



* Per 100,000 population.

The incidence of reported salmonellosis has remained relatively stable during the past 2 decades. During 2012, an increasing number of outbreaks associated with contact with animals (hedgehogs, live poultry, and small turtles) were investigated (www.cdc.gov/zoonotic/gi).

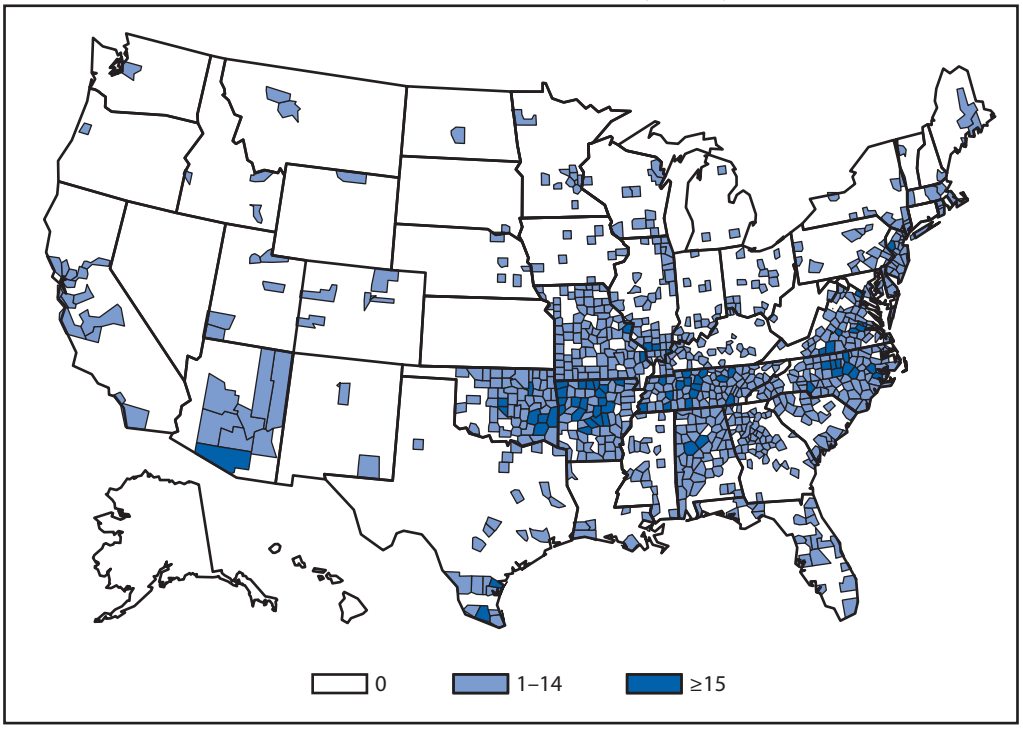
SHIGA TOXIN-PRODUCING *ESCHERICHIA COLI* (STEC). Incidence* of reported cases — United States and U.S. territories, 2012



* Per 100,000 population.

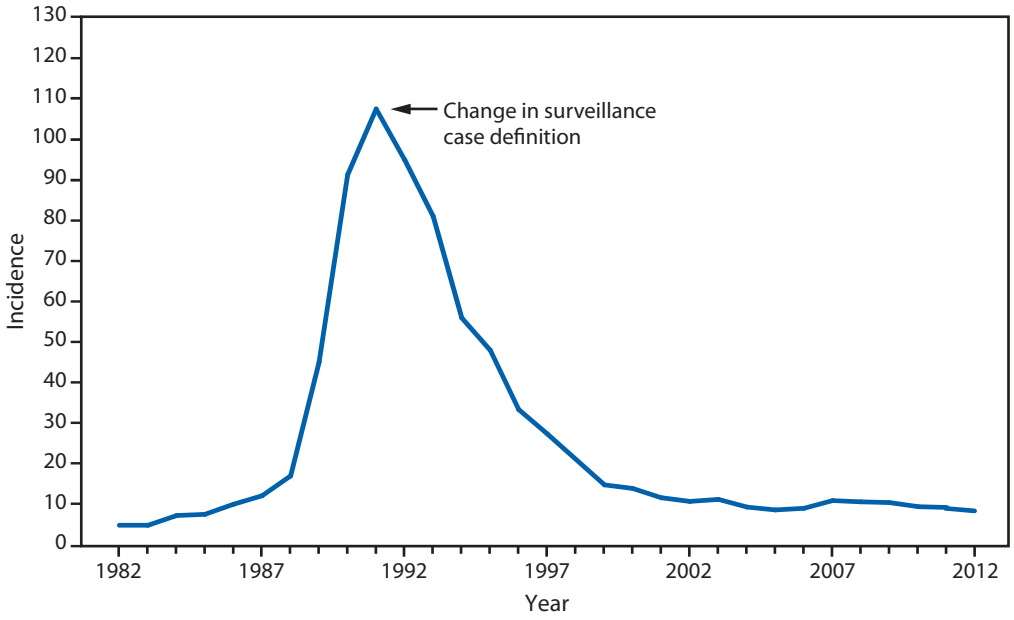
The highest rates (≥3.42 infections per 100,000 population) of STEC infection were reported from states in the northern portions of the Midwest, West, and Pacific regions.

SPOTTED FEVER RICKETTSIOSIS. Number of reported cases, by county — United States, 2012



In the United States, the majority of cases of spotted fever rickettsiosis are attributed to infection with *Rickettsia rickettsii*, the causative agent of Rocky Mountain spotted fever (RMSF), but might also 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.

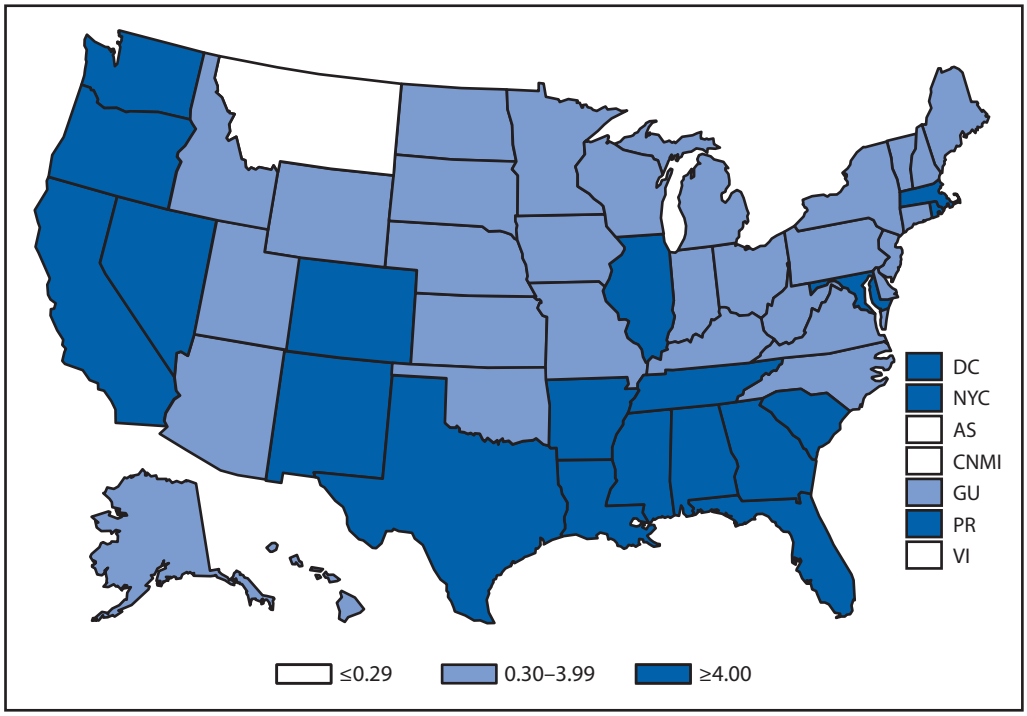
SYPHILIS, CONGENITAL. Incidence* among infants, by year of birth — United States, 1982–2012



* Per 100,000 live births.

Following a decline in the incidence of congenital syphilis since 1991, overall congenital syphilis rates decreased from 2011 to 2012, from 8.7 to 7.8 cases per 100,000 live births.

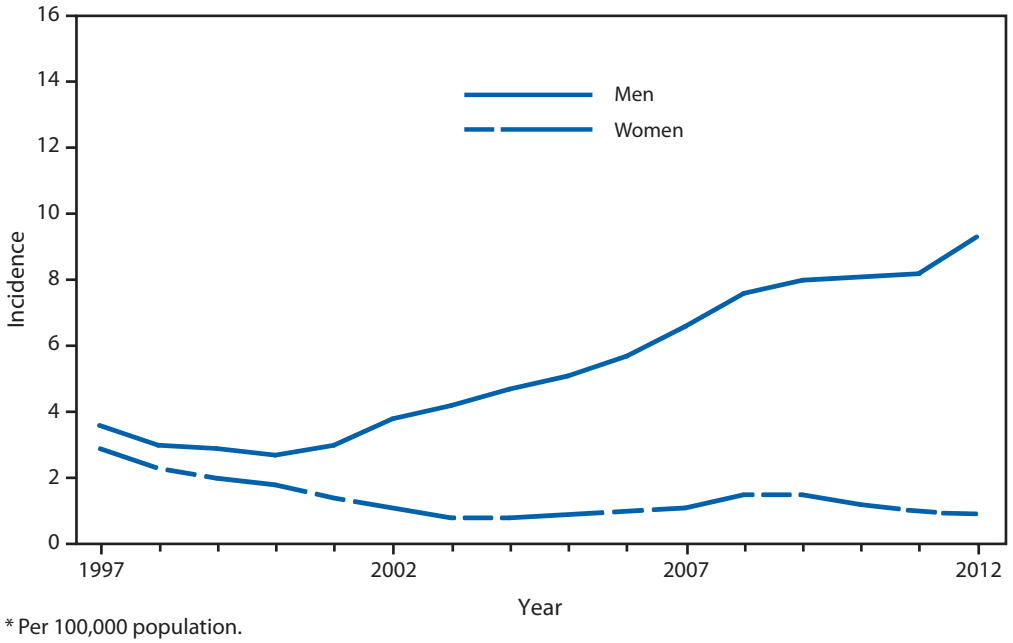
SYPHILIS, PRIMARY AND SECONDARY. Incidence* — United States and U.S. territories, 2012



* Per 100,000 population.

In 2012, the primary and secondary syphilis rate in the United States and territories (Guam, Puerto Rico, and Virgin Islands) was 5.1 cases per 100,000 population.

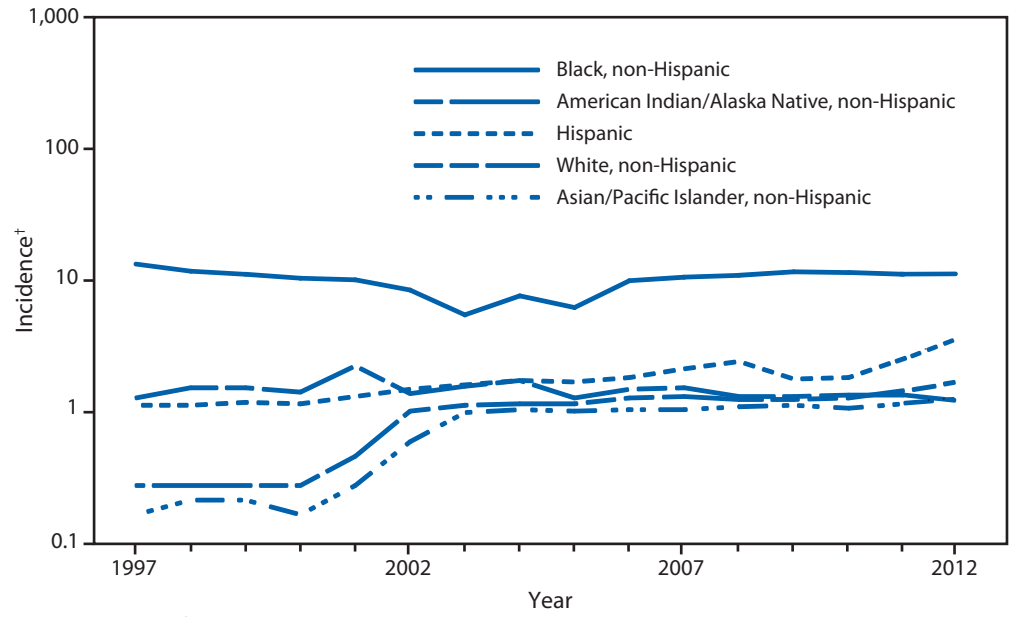
SYPHILIS, PRIMARY AND SECONDARY. Incidence,* by sex — United States, 1997–2012



* Per 100,000 population.

During 2011–2012, the incidence 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 8.1 to 9.3) per 100,000 population.

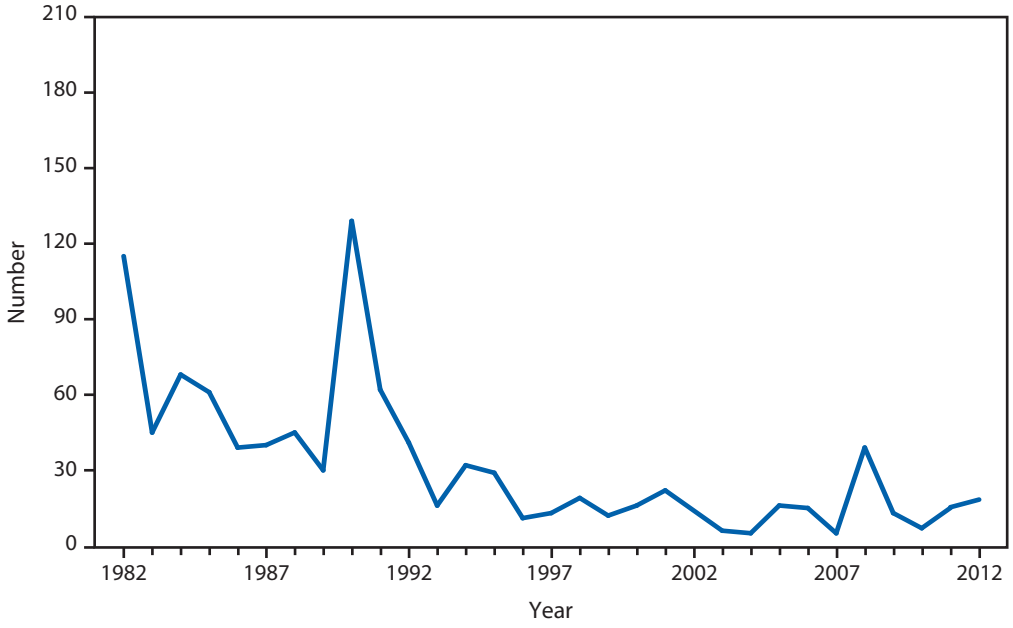
SYPHILIS, PRIMARY AND SECONDARY. Incidence,* by race/ethnicity — United States, 1997–2012



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

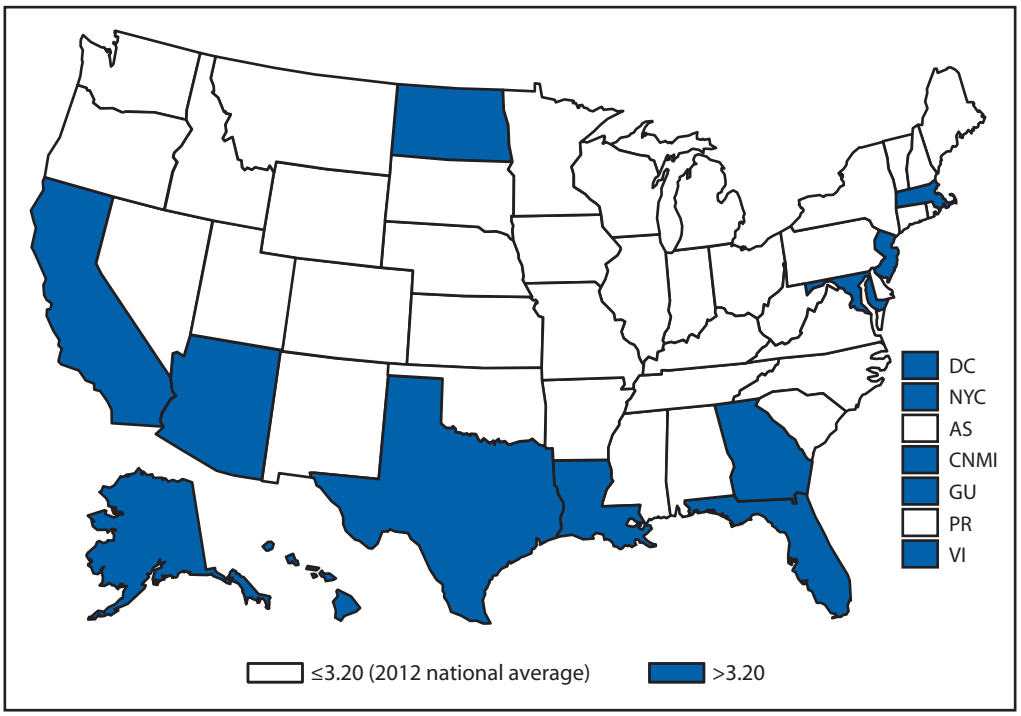
During 2011–2012, incidence of primary and secondary syphilis increased among all races/ethnicities except American Indians/Alaska Natives. Incidence per 100,000 population increased from 2.3 to 2.6 among non-Hispanic whites; from 4.5 to 5.9 among Hispanics; from 15.3 to 15.8 among non-Hispanic blacks; from 1.5 to 2.0 among Asians/Pacific Islanders; and decreased from 2.7 to 2.5 among American Indians/Alaska Natives.

TRICHINELLOSIS. Number of reported cases, by year — United States, 1982–2012



The 12 cases with a suspected or known source of infection were attributed to the consumption of pork (n = 6), bear (n = 5), and wild boar (n = 1). Trichinellosis can be prevented by thoroughly cooking meat to USDA-recommended temperatures.

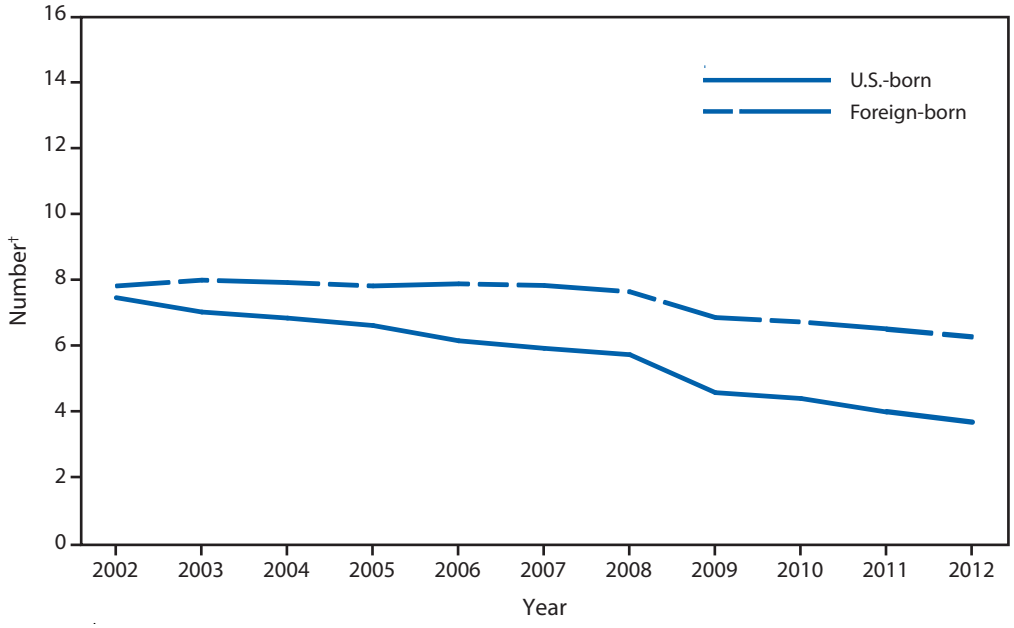
TUBERCULOSIS. Incidence* — United States and U.S. territories, 2012



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

In 2012, the rate of TB in the United States decreased to 3.2 cases per 100,000.

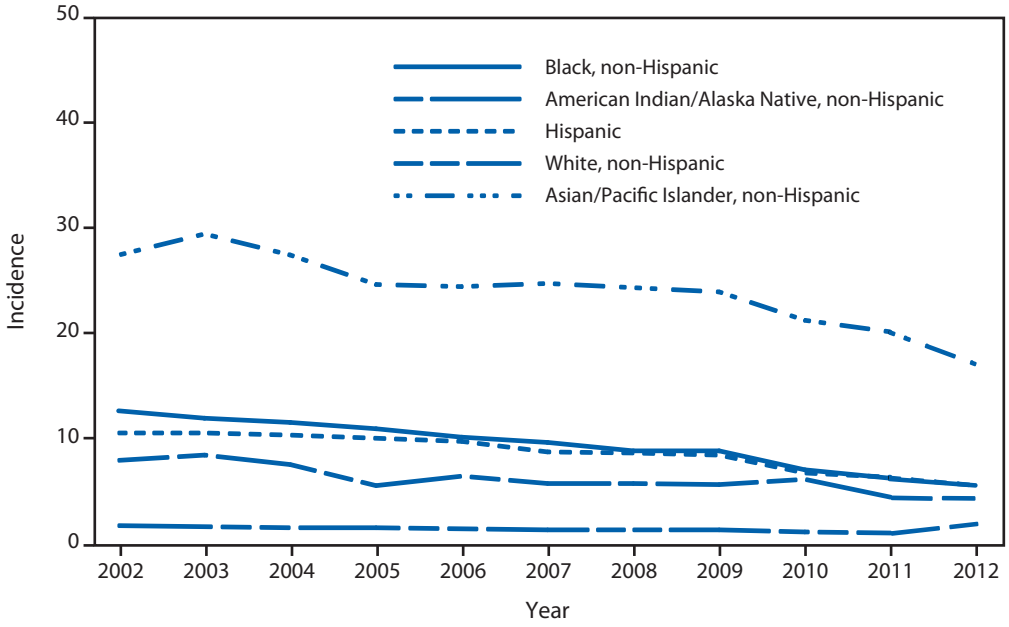
TUBERCULOSIS. Number of reported cases among U.S.-born and foreign-born persons,* by year — United States, 2002–2012



* 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.

TB in both U.S.-born and foreign-born persons continues to decline, although the decline in foreign-born persons has been slower. In 2002, the proportion of U.S. TB cases that were foreign-born was 51%; this proportion rose to 63% by 2012.

TUBERCULOSIS. Incidence,* by race/ethnicity† — United States, 2002–2012

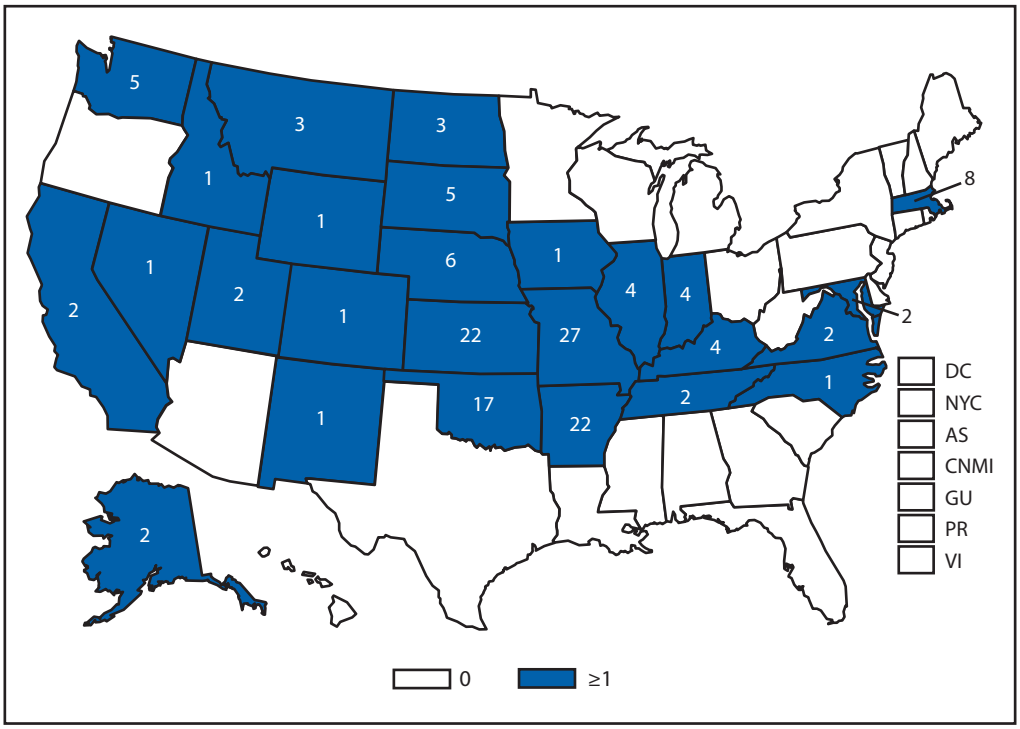


* Per 100,000 population.

† Data from the Division of Tuberculosis Elimination, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.

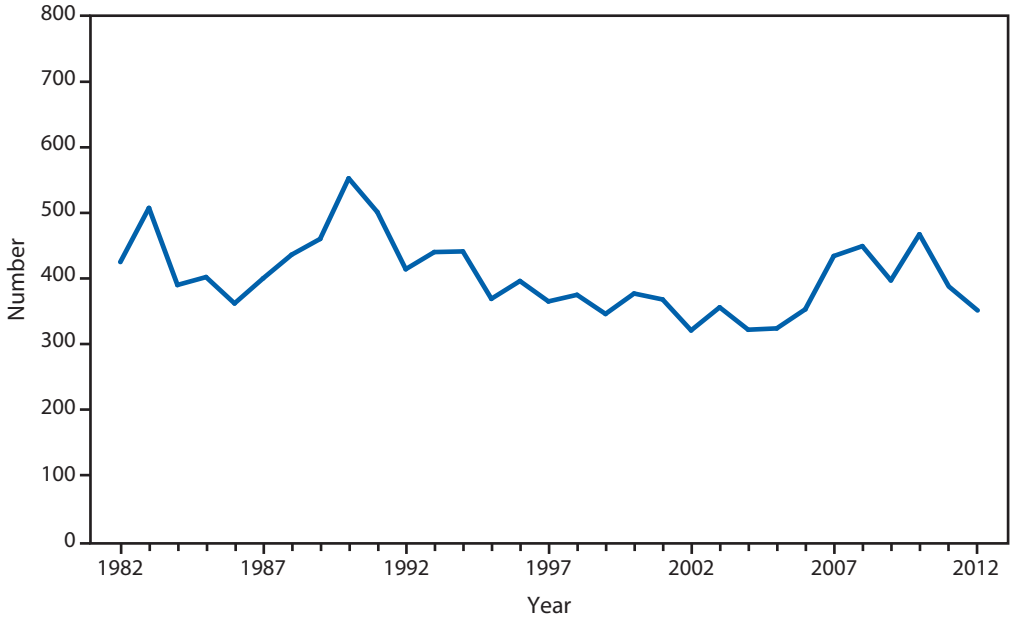
Non-Hispanic Asian/Pacific Islanders still have a disproportionate prevalence of TB in the United States; it is approximately 25 times higher than non-Hispanic whites.

TULAREMIA. Number of reported cases — United States and U.S. territories, 2012



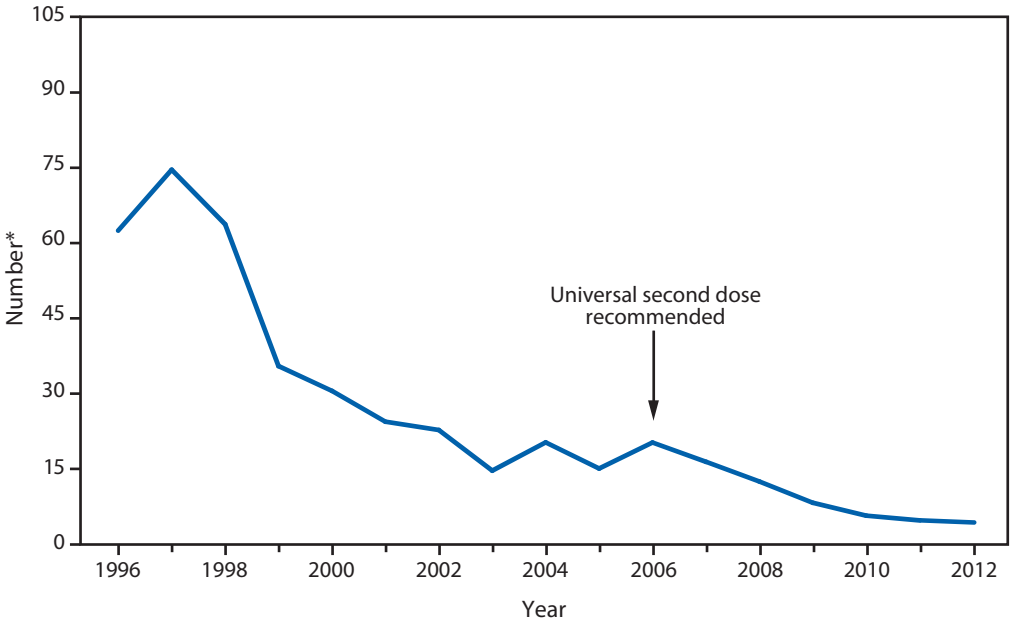
To better define the geographic distribution of *Francisella tularensis* subspecies, CDC requests that isolates be forwarded to the CDC laboratory in Fort Collins, Colorado.

TYPHOID FEVER. Number of reported cases, by year — United States, 1982–2012



Typhoid fever in the United States remains primarily a disease of travelers to countries where typhoid fever is endemic; CDC recommends vaccination against typhoid fever for all travelers to endemic areas.

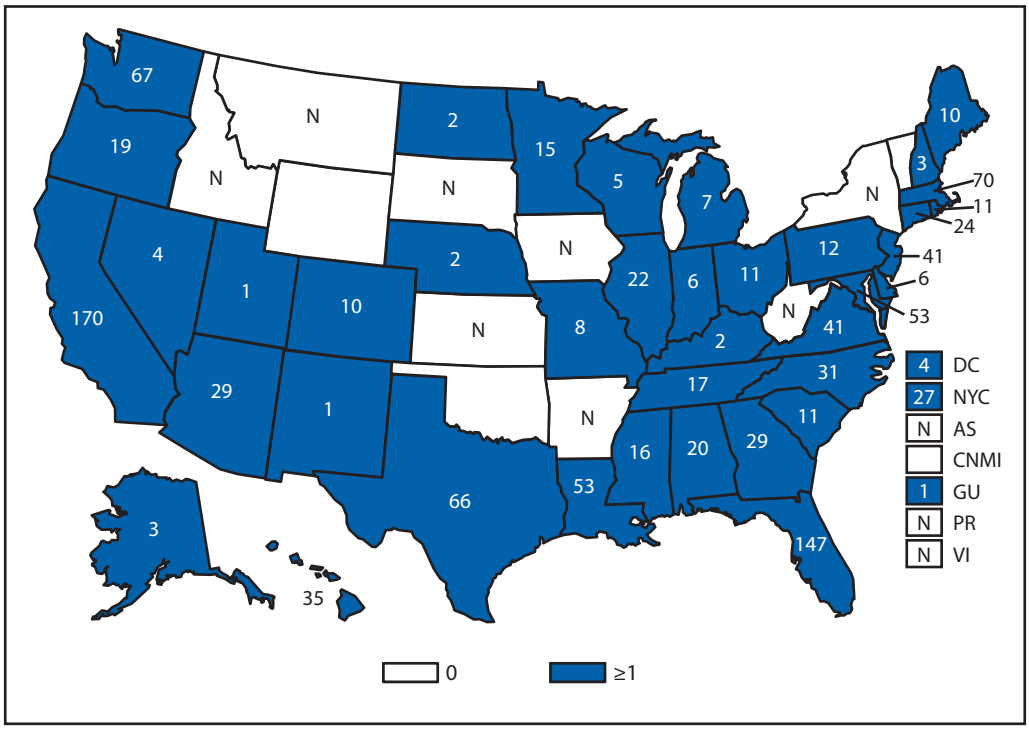
VARICELLA (CHICKENPOX). Number of reported cases — Illinois, Michigan, Texas, and West Virginia, 1996–2012



* In thousands.

Varicella was not nationally notifiable in 1996, when the first dose of the varicella vaccine was recommended in the United States. However, four states (Michigan, Illinois, Texas, and Virginia) were reporting varicella cases to CDC before the varicella vaccine was recommended and have continued reporting, providing consistent data to allow for monitoring of trends in varicella disease. In these four states, the number of cases reported in 2012 was 8% lower than 2011 and 94% less than the average number reported during the pre-vaccine years (1993–1995).

VIBRIOSIS. Number of reported cases — United States and U.S. territories, 2012



Consumption of raw or undercooked seafood, especially molluscan shellfish, remains a major risk factor for foodborne vibriosis (infection caused by a species from the family *Vibrionaceae* other than toxigenic *Vibrio cholerae* O1 or O139). In 2012, a multistate outbreak of *Vibrio parahaemolyticus* infections of a serotype previously only associated in the United States with shellfish from the Pacific Northwest was associated with consumption of shellfish harvested from Oyster Bay Harbor, New York.

PART 3

Historical Summaries of Notifiable Diseases in the United States, 1980–2012

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, 2002–2012

Disease	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
AIDS	15.29	15.36	15.28	14.00	12.87	12.53	13.00	†	†	†	†
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
nonneuroinvasive	¶	¶	¶	0	0	0	0	0	0	0.01	0
Eastern equine encephalitis virus disease											
neuroinvasive	—	—	—	0	0	0	0	0	0	0	0
nonneuroinvasive	¶	¶	¶	0	0	0	0	0	0	0	—
Powassan virus disease											
neuroinvasive	—	—	—	0	0	0	0	0	0	0	0
nonneuroinvasive	¶	¶	¶	0	0	0	0	0	0	0	0
St. Louis encephalitis virus disease											
neuroinvasive	—	—	—	0	0	0	0	0	0	0	0
nonneuroinvasive	¶	¶	¶	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
nonneuroinvasive	¶	¶	¶	0.58	0.94	0.8	0.22	0.11	0.13	0.07	0.90
Western equine encephalitis virus disease											
neuroinvasive	—	—	—	—	—	—	—	—	—	—	—
nonneuroinvasive	¶	¶	¶	—	—	—	—	—	—	—	—
Babesiosis**											
confirmed	¶	¶	¶	¶	¶	¶	¶	¶	¶	0.39	0.22
probable	¶	¶	¶	¶	¶	¶	¶	¶	¶	0.12	0.06
Botulism, total	0.03	0.01	0.02	0.01	0.02	0.05	0.05	0.04	0.04	0.01	0.05
foodborne	0	0.01	0.01	0.01	0.01	0.01	0.01	0	0	0.01	0.01
infant	1.79	1.87	2.12	2.09	2.35	2.05	2.56	1.92	1.88	2.34	3.1
other (wound and unspecified)	—	—	—	—	—	—	—	—	—	—	0.01
Brucellosis	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.04	0.04	0.03	0.04
Chancroid††	0.02	0.02	0	0.01	0.01	0.01	0.01	0.01	0.01	0	0
Chlamydia trachomatis infections††	296.55	304.71	319.61	332.51	347.8	370.2	401.34	409.19	426.01	457.14	456.69
Cholera	0	0	0	0	0	0	0	0	0	0.01	0.01
Coccidioidomycosis	3.03	2.57	4.14	6.24	6.79	14.39	7.76	13.24	§	16.49	12.97
Cryptosporidiosis**	1.07	1.22	1.23	1.93	2.05	3.73	3.02	2.52	2.91	3	2.56
confirmed	¶	¶	¶	¶	¶	¶	¶	2.43	2.73	1.98	1.68
probable	¶	¶	¶	¶	¶	¶	¶	0.09	0.19	1.01	0.87
Cyclosporiasis	0.06	0.03	0.14	0.24	0.06	0.04	0.05	0.05	0.07	0.05	0.04
Dengue virus infection§											
Dengue fever	¶	¶	¶	¶	¶	¶	¶	¶	0.22	0.08	0.17
Dengue hemorrhagic fever	¶	¶	¶	¶	¶	¶	¶	¶	0	0	0
Diphtheria	0	0	—	—	—	—	—	—	—	—	—
Ehrlichiosis											
human granulocytic (HGE)	0.18	0.13	0.2	0.28	0.23	0.31	§§	§§	§§	§§	§§
human monocytic (HME)	0.08	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
Ehrlichia ewingii	¶	¶	¶	¶	¶	¶	0	0	0	0	0.01
Anaplasma phagocytophilum	¶	¶	¶	¶	¶	¶	0.43	0.42	0.61	0.88	0.81
Undetermined	¶	¶	¶	¶	¶	¶	0.06	0.06	0.04	0.05	0.06
Encephalitis/meningitis, arboviral***											
California serogroup virus	0.06	0.06	0	***	***	***	***	***	***	***	***
Eastern equine virus	0	0	0	***	***	***	***	***	***	***	***
Powassan virus	0	0	0	***	***	***	***	***	***	***	***
St. Louis virus	0.01	0.01	0	***	***	***	***	***	***	***	***
West Nile virus	1.01	1	0.43	***	***	***	***	***	***	***	***
Western equine virus	0	0	0	***	***	***	***	***	***	***	***
Enterohemorrhagic *Escherichia coli*											
O157:H7	1.36	0.93	0.87	0.89	¶	¶	¶	§§	§§	§§	§§
non—O157	0.08	0.09	0.13	0.19	¶	¶	¶	§§	§§	§§	§§
not serogrouped	0.02	0.05	0.13	0.16	¶	¶	¶	§§	§§	§§	§§
Giardiasis	8.06	6.84	8.35	7.82	7.28	7.66	7.41	7.37	7.64	6.42	5.87
Gonorrhea††	125.03	116.37	113.52	115.64	120.9	118.9	111.64	99.05	100.76	104.14	107.46

See table footnotes on page 103.

TABLE 7. (*Continued*) Reported incidence* of notifiable diseases —United States, 2002—2012

Disease	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Haemophilus influenzae, invasive disease											
all ages, serotypes	0.62	0.70	0.72	0.78	0.82	0.85	0.96	0.99	1.03	1.15	1.10
age<5 yrs											
serotype b	0.18	0.16	0.03	0.04	0.14	0.11	0.14	0.18	0.11	0.06	0.15
nonserotype b	0.75	0.59	0.04	0.67	0.86	0.97	1.18	1.17	0.94	0.57	1.02
unknown serotype	0.80	1.15	0.97	1.08	0.88	0.88	0.79	0.79	1.05	0.89	1.04
Hansen disease (leprosy)	0.04	0.03	0.04	0.03	0.03	0.04	0.03	0.04	0.04	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	0.08	0.06	0.07	0.08	0.11	0.10	0.12	0.09	0.09	0.10	0.09
Hepatitis, viral, acute***											
A	3.13	2.66	1.95	1.53	1.21	1.00	0.86	0.65	0.54	0.45	0.50
B	2.84	2.61	2.14	1.78	1.62	1.51	1.34	1.12	1.10	0.94	0.93
C	0.65	0.38	0.31	0.23	0.26	0.28	0.29	0.27	0.29	0.42	0.59
Hepatitis B perinatal infection	—	—	—	—	—	—	—	—	—	—	0.01
Human immunodeficiency virus (HIV) diagnoses†	—	—	—	—	—	—	—	12.13	11.64	11.32	11.26
Influenza-associated pediatric mortality†††	¶	¶	¶	0.02	0.07	0.10	0.12	0.48	0.08	0.17	0.07
Invasive pneumococcal disease§§§											
all ages	§§§	§§§	§§§	§§§	§§§	§§§	§§§	§§§	8.83	8.52	7.72
age <5 years	§§§	§§§	§§§	§§§	§§§	§§§	§§§	§§§	14.15	7.64	8.35
Legionellosis	0.47	0.78	0.71	0.78	0.96	0.91	1.05	1.16	1.09	1.36	1.19
Listeriosis	0.24	0.24	0.32	0.31	0.30	0.27	0.25	0.28	0.27	0.28	0.23
Lyme disease, total¶¶¶	8.44	7.39	6.84	7.94	6.75	9.21	11.67	12.71	9.86	10.78	9.96
confirmed	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	9.59	9.85	7.38	7.92	7.10
probable	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	2.08	2.8	2.49	2.84	2.84
Malaria	0.51	0.49	0.51	0.51	0.50	0.47	0.42	0.48	0.58	0.56	0.48
Measles	0.02	0.02	0.01	0.02	0.02	0.01	0.05	0.02	0.02	0.06	0.02
indigenous	—	—	—	—	—	—	—	—	—	—	0.01
imported	—	—	—	—	—	—	—	—	—	—	0.01
Meningococcal disease, invasive****											
all serogroups	0.64	0.61	0.47	0.42	0.40	0.36	0.39	0.32	0.27	0.25	0.18
serogroup A,C,Y, & W-135	¶	¶	¶	0.10	0.11	0.11	0.11	0.10	0.09	0.08	0.05
serogroup B	¶	¶	¶	0.05	0.07	0.06	0.06	0.06	0.04	0.05	0.04
other serogroup	¶	¶	¶	0.01	0.01	0.01	0.01	0.01	0	0.01	0.01
serogroup unknown	¶	¶	¶	0.26	0.22	0.18	0.20	0.16	0.13	0.10	0.08
Mumps	0.10	0.08	0.09	0.11	2.22	0.27	0.15	0.65	0.85	0.13	0.07
Novel influenza A virus infections	¶	¶	¶	¶	¶	0	0	14.37	0	0	0.10
Pertussis	3.47	4.04	8.88	8.72	5.27	3.49	4.40	5.54	8.97	6.06	15.49
Plague	0	0	0	0	0.01	0	0	0	0	0	0
Poliomyelitis, paralytic	0	0	0	0	0	—	—	0	—	—	—
Poliovirus infection, nonparalytic	¶	¶	¶	¶	¶	—	—	—	—	—	—
Psittacosis	0.01	0	0	0.01	0.01	0	0	0	0	0	0
Q Fever,††††	0.02	0.02	0.03	0.05	0.06	0.06	0.04	0.04	0.04	0.04	0.04
acute	¶	¶	¶	¶	¶	¶	0.04	0.03	0.04	0.04	0.04
chronic	¶	¶	¶	¶	¶	¶	0	0.01	0.01	0.01	0.01
Rabies											
animal	0	0	0	0	0	0	0	0	0	0	1.48
human	0	0	0	0	0	0	0	0	0	0	0
Rubella	0.01	0	0	0	0	0	0.01	0	0	0	0
Rubella, congenital syndrome	0	0	0	0	0	0	—	—	0	—	0
Salmonellosis	15.73	15.16	14.47	15.43	15.45	16.03	16.92	16.18	17.73	16.79	17.27
SARS-CoV§§§§	¶	0	—	—	—	—	—	—	—	—	—
Shiga toxin-producing *E. coli* (STEC)	¶	¶	¶	¶	1.71	1.62	1.76	1.53	1.78	1.96	2.08
Shigellosis	8.37	8.19	4.99	5.51	5.23	6.60	7.50	5.24	4.82	4.32	4.90
Spotted Fever Rickettsiosis, total¶¶¶¶	0.39	0.38	0.60	0.66	0.80	0.77	0.85	0.60	0.65	0.91	1.44
confirmed	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	0.06	0.05	0.05	0.08	0.06
probable	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	0.78	0.55	0.59	0.83	1.38
Smallpox	¶	¶	—	—	—	—	—	—	—	—	—
Streptococcal disease, invasive, group A	1.69	2.04	1.82	2.00	2.24	1.89	2.30	2.13	¶	¶	¶
Streptococcal, toxic shock syndrome	0.05	0.06	0.06	0.07	0.06	0.06	0.07	0.08	0.07	0.09	0.10
Streptococcus pneumoniae invasive disease(IPD)*****											
all ages	*****	*****	*****	*****	*****	*****	*****	*****	8.83	8.52	—
age <5 yrs	*****	*****	*****	*****	*****	*****	*****	*****	14.15	7.64	—

See table footnotes on page 103.

TABLE 7. (*Continued*) Reported incidence* of notifiable diseases —United States, 2002—2012

Disease	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Streptococcus pneumoniae, invasive disease											
drug resistant, all ages	1.14	0.99	1.49	1.42	2.19	1.49	1.60	1.75	****	****	****
age <5 yrs	—	—	—	—	—	3.73	3.51	4.54	****	****	****
non-drug resistant, age <5 yrs	3.62	8.86	8.22	8.21	11.93	13.59	13.36	12.93	****	****	****
Syphilis, total, all stages††	11.68	11.90	11.94	11.33	12.46	13.67	15.34	14.74	14.93	14.90	16.02
congenital (age <1 yr)	11.44	10.56	9.12	8.24	9.07	10.46	10.12	9.90	8.85	8.68	8.12
primary and secondary	2.44	2.49	2.71	2.97	3.29	3.83	4.48	4.60	4.49	4.52	5.03
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	0.05	0.04	0.04	0.05	0.04	0.03	0.03	0.04	0.03	0.03
Trichinellosis	0.01	0	0	0.01	0.01	0	0.01	0	0	0.01	0.01
Tuberculosis†††††	5.36	5.17	5.09	4.80	4.65	4.44	4.28	3.80	3.64	3.41	3.19
Tularemia	0.03	0.04	0.05	0.05	0.03	0.05	0.04	0.03	0.04	0.05	0.05
Tyhoid fever	0.11	0.12	0.11	0.11	0.12	0.14	0.15	0.13	0.15	0.13	0.11
Vancomycin-intermediate *Staphylococcus aureus*	¶	¶	—	0	0	0.02	0.03	0.03	0.04	0.04	0.06
Vancomycin—resistant *Staphylococcus aureus*	¶	¶	0	0	0	0	0	0	0	—	—
Varicella (chickenpox morbidity)§§§§§	10.27	7.27	18.41	19.64	28.65	18.68	13.56	8.71	6.46	5.79	5.33
Varicella (chickenpox mortality)	—	—	—	—	—	—	—	—	—	—	0
Vibriosis	¶	¶	¶	¶	¶	0.25	0.24	0.30	0.30	0.29	0.39
Viral hemorrhagic fevers	¶	¶	¶	¶	¶	¶	¶	¶	0	0	0
Yellow fever¶¶¶¶¶	0	—	—	—	—	—	—	—	—	—	—

* Per 100,000 population.

† In 2008, CDC published a revised HIV case definition. This combined separate surveillance case definitions for HIV infection and AIDS into a single case definition for HIV infection that includes AIDS (and incorporates the HIV infection classification system). The revised HIV case definition provides a more complete presentation of the HIV epidemic on a population level. Please see the Centers for Disease Control and Prevention revised surveillance case definitions for HIV infection among adults, adolescents, and children aged <18 months and for HIV infection and AIDS among children aged 18 months to <13 years—United States, 2008. MMWR 2008;57(No.RR-10):1–12. These case counts can be found under "HIV Diagnoses" in this table. The total number of HIV diagnoses includes all cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), through December 31, 2012. AIDS: Acquired Immunodeficiency Syndrome. HIV: Human Immunodeficiency Virus.

§ Totals reported to the Division of Vector-Borne Diseases (DVBD), National Center for Emerging and Zoonotic Infectious Diseases (NCZVED) (ArboNET Surveillance), as of June 1, 2013.

¶ 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 May 3, 2013.

§§ 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 (NCIRD), as of December 31, 2012.

§§§ 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 two 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 June 15, 2013.

§§§§§ 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. Reported cases of notifiable diseases — United States, 2005–2012

Disease	2005	2006	2007	2008	2009	2010	2011	2012
AIDS*	41,120	38,423	37,503	39,202	†	†	†	†
Anthrax	—	1	1	—	1	—	1	—
Arboviral diseases§								
California serogroup virus disease								
neuroinvasive	73	64	50	55	46	68	120	73
nonneuroinvasive	7	5	5	7	9	7	17	8
Eastern equine encephalitis virus disease								
neuroinvasive	21	8	3	4	3	10	4	15
nonneuroinvasive	—	—	1	—	1	—	—	—
Powassan virus disease								
neuroinvasive	1	1	7	2	6	8	12	7
nonneuroinvasive	—	—	—	—	—	—	4	—
St. Louis encephalitis virus disease								
neuroinvasive	7	7	8	8	11	8	4	1
nonneuroinvasive	6	3	1	5	1	2	2	2
Western equine encephalitis virus disease								
neuroinvasive	—	—	—	—	—	—	—	—
nonneuroinvasive	—	—	—	—	—	—	—	—
West Nile virus disease								
neuroinvasive	1,309	1,495	1,227	689	386	629	486	2,872
nonneuroinvasive	1,691	2,744	2,403	667	334	392	226	2,801
Babesiosis††								
confirmed	¶	¶	¶	¶	¶	¶	850	716
probable	¶	¶	¶	¶	¶	¶	278	221
Botulism, total	135	165	144	145	118	112	153	168
foodborne	19	20	32	17	10	7	24	27
infant	85	97	85	109	83	80	97	123
other (wound and unspecified)	—	—	—	—	—	—	32	18
Brucellosis	120	121	131	80	115	115	79	114
Chancroid**	17	33	23	25	28	24	8	15
Chlamydia trachomatis infections**	976,445	1,030,911	1,108,374	1,210,523	1,244,180	1,307,893	1,412,791	1,422,976
Cholera	8	9	7	5	10	13	40	17
Coccidioidomycosis	6,542	8,917	8,121	7,523	12,926	¶	22,634	17,802
Cryptosporidiosis, total††	5,659	6,071	11,170	9,113	7,654	8,944	9,250	7,956
confirmed	††	††	††	††	7,393	8,375	6,130	5,098
probable	††	††	††	††	261	569	3,120	2,718
Cyclosporiasis	543	137	93	139	141	179	151	123
Dengue virus infection§								
Dengue fever	¶	¶	¶	¶	¶	690	251	544
Dengue hemorrhagic fever	¶	¶	¶	¶	¶	10	3	3
Diphtheria	—	—	—	—	—	—	—	1
Ehrlichiosis								
human granulocytic (HGE)	786	646	834	§§	§§	§§	§§	§§
human monocytic (HME)	506	578	828	§§	§§	§§	§§	§§
human (other & unspecified)	112	231	337	§§	§§	§§	§§	§§
Ehrlichiosis/Anaplasmosis								
Ehrlichia chaffeensis	¶	¶	¶	957	944	740	850	1,128
Ehrlichia ewingii	¶	¶	¶	9	7	10	13	17
Anaplasma phagocytophilum	¶	¶	¶	1,009	1,161	1,761	2,575	2,389
Undetermined	¶	¶	¶	132	155	104	148	191
Enterohemorrhagic *Escherichia coli* infection								
Shiga toxin-positive								
O157:H7	2,621	¶	¶	¶	¶	¶	¶	¶
non—O157	501	¶	¶	¶	¶	¶	¶	¶
not serogrouped	407	¶	¶	¶	¶	¶	¶	¶
Giardiasis	19,733	18,953	19,417	18,908	19,399	19,811	16,747	15,178
Gonorrhea**	339,593	358,366	355,991	336,742	301,174	309,341	321,849	334,826
Haemophilus influenzae, invasive disease								
all ages, serotypes	2,304	2,436	2,541	2,886	3,022	3,151	3,539	3,418
age <5 yrs.								
serotype b	9	29	22	30	38	23	14	30
nonserotype b	135	175	199	244	245	200	145	205
unknown serotype	217	179	180	163	166	223	226	210

See table footnotes on page 106.

TABLE 8. (*Continued*) Reported cases of notifiable diseases — United States, 2005–2012

Disease	2005	2006	2007	2008	2009	2010	2011	2012
Hansen disease (leprosy)	87	66	101	80	103	98	82	82
Hantavirus pulmonary syndrome	26	40	32	18	20	20	23	30
Hemolytic uremic syndrome, postdiarrheal	221	288	292	330	242	266	290	274
Hepatitis, viral, acute[¶¶]								
A	4,488	3,579	2,979	2,585	1,987	1,670	1,398	1,562
B	5,119	4,713	4,519	4,033	3,405	3,374	2,903	2,895
C	652	766	845	877	782	849	1,229	1,782
Hepatitis B perinatal infection	—	—	—	—	—	—	—	40
Human immunodeficiency virus (HIV) diagnoses[†]	—	—	—	—	36,870	35,741	35,266	35,361
Influenza-associated pediatric mortality[***]	45	43	77	90	358	61	118	52
Invasive pneumococcal disease								
all ages	—	—	—	—	—	—	—	15,635
age<5 years	—	—	—	—	—	—	—	1,266
Legionellosis	2,301	2,834	2,716	3,181	3,522	3,346	4,202	3,688
Listeriosis	896	884	808	759	851	821	870	727
Lyme disease, total[††]	23,305	19,931	27,444	35,198	38,468	30,158	33,097	30,831
confirmed	†††	†††	†††	28,921	29,959	22,561	24,364	22,014
probable	†††	†††	†††	6,277	8,509	7,597	8,733	8,817
Malaria	1,494	1,474	1,408	1,255	1,451	1,773	1,724	1,503
Measles	66	55	43	140	71	63	220	55
indigenous	—	—	—	—	—	—	—	34
imported	—	—	—	—	—	—	—	21
Meningococcal disease, invasive[§§§]								
all serogroups	1,245	1,194	1,077	1,172	980	833	759	551
serogroup A,C,Y, & W-135	297	318	325	330	301	280	257	161
serogroup B	156	193	167	188	174	135	159	110
other serogroup	27	32	35	38	23	12	20	20
serogroup unknown	765	651	550	616	482	406	323	260
Mumps	314	6,584	800	454	1,991	2,612	404	229
Novel influenza A virus infections	¶	¶	4	2	43,696	4	14	313
Pertussis	25,616	15,632	10,454	13,278	16,858	27,550	18,719	48,277
Plague	8	17	7	3	8	2	3	4
Poliomyelitis, paralytic[¶¶¶]	1	—	—	—	1	—	—	—
Poliovirus infection, nonparalytic	—	—	—	—	—	—	—	—
Psittacosis	16	21	12	8	9	4	2	2
Q Fever[****]	136	169	171	120	113	131	134	135
acute	§§§§	§§§§	§§§§	106	93	106	110	113
chronic	§§§§	§§§§	§§§§	14	20	25	24	22
Rabies								
animal	5,915	5,534	5,862	4,196	5,343	4,331	4,357	4,541
human	2	3	1	2	4	2	6	1
Rubella	11	11	12	16	3	5	4	9
Rubella, congenital syndrome	1	1	—	—	2	—	—	3
Salmonellosis	45,322	45,808	47,995	51,040	49,192	54,424	51,887	53,800
SARS-CoV[††††]	—	—	—	—	—	—	—	—
Shiga toxin-producing *E. coli* (STEC)	¶	4,432	4,847	5,309	4,643	5,476	6,047	6,463
Shigellosis	16,168	15,503	19,758	22,625	15,931	14,786	13,352	15,283
Spotted Fever Rickettsiosis, total[§§§§]	1,936	2,288	2,221	2,563	1,815	1,985	2,802	4,470
confirmed	§§§§	§§§§	§§§§	190	151	156	234	188
probable	§§§§	§§§§	§§§§	2,367	1,662	1,835	2,562	4,278
Streptococcal disease, invasive, group A	4,715	5,407	5,294	5,674	5,279	¶	¶	¶
Streptococcal, toxic shock syndrome	129	125	132	157	161	142	168	194
Streptococcus pneumoniae invasive disease(IPD)								
all ages	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	16,569	17,138	†††††
age <5 yrs	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	¶¶¶¶	2,186	1,459	†††††
Streptococcus pneumoniae, invasive disease								
drug resistant, all ages	2,996	3,308	3,329	3,448	3,370	†††††	†††††	†††††
age <5 yrs	—	—	563	532	583	†††††	†††††	†††††
non-drug resistant, age <5 yrs	1,495	1,861	2,032	1,998	1988	†††††	†††††	†††††
Syphilis, total, all stages[**]	33,278	36,935	40,920	46,277	44,828	45,834	46,042	49,903
congenital (age <1 yr.)	339	382	430	431	427	377	360	322
primary and secondary	8,724	9,756	11,466	13,500	13,997	13,774	13,970	15,667
Tetanus	27	41	28	19	18	26	36	37
Toxic-shock syndrome	90	101	92	71	74	82	78	65

See table footnotes on page 106.

TABLE 8. (*Continued*) Reported cases of notifiable diseases — United States, 2005–2012

Disease	2005	2006	2007	2008	2009	2010	2011	2012
Trichinellosis	16	15	5	39	13	7	15	18
Tuberculosis*****	14,097	13,779	13,299	12,904	11,545	11,182	10,528	9,945
Tularemia	154	95	137	123	93	124	166	149
Typhoid fever	324	353	434	449	397	467	390	354
Vancomycin-intermediate *Staphylococcus aureus*	3	6	37	63	78	91	82	134
Vancomycin-resistant *Staphylococcus aureus*	2	1	2	—	1	2	—	2
Varicella (chickenpox)†††††	32,242	48,445	40,146	30,386	20,480	15,427	14,513	13,447
Varicella (deaths) §§§§§	3	—	6	2	2	4	5	3
Vibriosis (noncholera Vibrio species infections)	¶	¶	549	588	789	846	832	1,111
Viral hemorrhagic fever	¶	¶	¶	¶	¶	1	¶	¶
Yellow fever¶¶¶¶¶	—	—	—	—	—	—	—	—

* Acquired Immunodeficiency syndrome (AIDS). The total number of AIDS cases includes all cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP).

† In 2008, CDC published a revised HIV case definition. This combined separate surveillance case definitions for HIV infection and AIDS into a single case definition for HIV infection that includes AIDS (and incorporates the HIV infection classification system). The revised HIV case definition provides a more complete presentation of HIV on a population level. Please see the Centers for Disease Control and Prevention revised surveillance case definitions for HIV infection among adults, adolescents, and children aged <18 months and for HIV infection and AIDS among children aged 18 months to <13 years—United States, 2008. MMWR 2008;57(No.RR-10):1–12. These case counts can be found under 'HIV diagnoses' in this table. The total number of HIV diagnoses includes all cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), through December 31, 2012. HIV: Human Immunodeficiency Virus.

§ Totals reported to the Division of Vector-Borne Diseases (DVBD), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) (ArboNET Surveillance), as of June 1, 2013.

¶ Not nationally notifiable.

** Totals reported to the Division of STD Prevention, NCHHSTP, as of May 3, 2013.

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

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

¶¶ Data 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 (NCIRD), as of December 31, 2012.

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

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

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

**** Q fever acute and chronic reporting categories were recognized as a result of revision to the Q fever case definition. Before then, acute and chronic Q fever cases were not reported separately.

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

§§§§ Revision of national surveillance case definition distinguishing between confirmed and probable cases; total case count includes two 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. All cases of invasive *Streptococcus pneumoniae* disease, regardless of age or drug resistance are reported under a single disease code.

***** Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of June 15, 2013.

††††† Varicella was removed from the nationally notifiable disease list in 1991. Varicella became nationally notifiable again in 2003.

§§§§§ Totals reported to the Division of Viral Diseases, National Center for Immunization and Respiratory Diseases (NCIRD), as of May 1, 2013.

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

TABLE 9. Reported cases of notifiable diseases—United States, 1997–2004

Disease	1997	1998	1999	2000	2001	2002	2003	2004
AIDS*	58,492	46,521	45,104	40,758	41,868	42,745	44,232	44,108
Anthrax	—	—	—	1	23	2	—	—
Botulism, total (including wound and unspecified)	132	116	154	138	155	118	129	133
foodborne	31	22	23	23	39	28	20	16
infant	79	65	92	93	97	69	76	87
Brucellosis	98	79	82	87	136	125	104	114
Chancroid†	243	189	143	78	38	67	54	30
Chlamydia trachomatis infections†	526,671	604,420	656,721	702,093	783,242	834,555	877,478	929,462
Cholera	6	17	6	5	3	2	2	5
Coccidioidomycosis	1,749	2,274	2,826	2,867	3,922	4,968	4,870	6,449
Cryptosporidiosis	2,566	3,793	2,361	3,128	3,785	3,016	3,506	3,577
Cyclosporiasis	§	§	§	60	147	156	75	171
Diphtheria	4	1	1	1	2	1	1	—
Ehrlichiosis								
human granulocytic	§	§	203	351	261	511	362	537
human monocytic	§	§	99	200	142	216	321	338
human (other and unspecified)	§	§	¶	¶	¶	¶	¶	¶
Encephalitis/Meningitis, arboviral								
California serogroup virus	129	97	70	114	128	164	108	112
Eastern equine virus	14	4	5	3	9	10	14	6
Powassan virus	§	§	§	§	§	1	—	1
St. Louis virus	13	24	4	2	79	28	41	12
West Nile virus	§	§	§	§	§	2,840	2,866	1,142
Western equine virus	—	—	1	—	—	—	—	—
Enterohemorrhagic *Escherichia coli* infection								
Shiga toxin-positive								
O157:H7	2,555	3,161	4,513	4,528	3,284	3,840	2,671	2,544
Non-O157	§	§	§	§	171	194	252	316
not serogrouped	§	§	§	§	20	60	156	308
Giardiasis	§	§	§	§	§	21,206	19,709	20,636
Gonorrhea†	324,907	355,642	360,076	358,995	361,705	351,852	335,104	330,132
Haemophilus influenzae, invasive disease								
all ages, serotypes	1,162	1,194	1,309	1,398	1,597	1,743	2,013	2,085
age <5 yrs								
serotype b	§	§	§	§	§	34	32	19
nonserotype b	§	§	§	§	§	144	117	135
unknown serotype	§	§	§	§	§	153	227	177
Hansen disease (Leprosy)	122	108	108	91	79	96	95	105
Hantavirus Pulmonary Syndrome	NA	NA	33	41	8	19	26	24
Hemolytic uremic syndrome, postdiarrheal	91	119	181	249	202	216	178	200
Hepatitis, viral, acute								
A	30,021	23,229	17,047	13,397	10,609	8,795	7,653	5,683
B	10,416	10,258	7,694	8,036	7,843	7,996	7,526	6,212
C/non-A, non-B**	3,816	3,518	3,111	3,197	3,976	1,835	1,102	720
Legionellosis	1,163	1,355	1,108	1,127	1,168	1,321	2,232	2,093
Listeriosis	§	§	§	755	613	665	696	753
Lyme disease	12,801	16,801	16,273	17,730	17,029	23,763	21,273	19,804
Malaria	2,001	1,611	1,666	1,560	1,544	1,430	1,402	1,458
Measles	138	100	100	86	116	44	56	37
Meningococcal disease, invasive	3,308	2,725	2,501	2,256	2,333	1,814	1,756	1,361
Mumps	683	666	387	338	266	270	231	258
Pertussis	6,564	7,405	7,288	7,867	7,580	9,771	11,647	25,827
Plague	4	9	9	6	2	2	1	3
Poliomyelitis, paralytic	6	3	2	—	—	—	—	—
Psittacosis	33	47	16	17	25	18	12	12
Q Fever	§	§	§	21	26	61	71	70
Rabies								
animal	8,105	7,259	6,730	6,934	7,150	7,609	6,846	6,345
human	2	1	—	4	1	3	2	7
Rubella	181	364	267	176	23	18	7	10
Rubella, congenital syndrome	5	7	9	9	3	1	1	—
Salmonellosis, excluding typhoid fever	41,901	43,694	40,596	39,574	40,495	44,264	43,657	42,197
SARS-CoV	—	—	—	—	—	—	8	—
Shigellosis	23,117	23,626	17,521	22,922	20,221	23,541	23,581	14,627

See table footnotes on page 108.

TABLE 9. (*Continued*) Reported cases of notifiable diseases—United States, 1997–2004

Disease	1997	1998	1999	2000	2001	2002	2003	2004
Spotted Fever Rickettsiosis	409	365	579	495	695	1,104	1,091	1,713
Streptococcal disease, invasive, group A	1,973	2,260	2,667	3,144	3,750	4,720	5,872	4,395
Streptococcal toxic-shock syndrome	33	58	65	83	77	118	161	132
Streptococcus pneumoniae, invasive disease,								
drug-resistant, all ages	1,799	2,823	4,625	4,533	2,896	2,546	2,356	††††
non-drug resistant age <5 yrs	§	§	§	§	498	513	845	††††
Syphilis, total, all stages†	46,540	37,977	35,628	31,575	32,221	32,871	34,270	33,401
congenital (age <1 yr)	1,081	843	579	580	504	460	432	375
primary and secondary	8,550	6,993	6,657	5,979	6,103	6,862	7,177	7,980
Tetanus	50	41	40	35	37	25	20	34
Toxic-shock syndrome	157	138	113	135	127	109	133	95
Trichinellosis	13	19	12	16	22	14	6	5
Tuberculosis††	19,851	18,361	17,531	16,377	15,989	15,075	14,874	14,517
Tularemia	§	§	§	142	129	90	129	134
Typhoid fever	365	375	346	377	368	321	356	322
Varicella (chickenpox)§§	98,727	82,455	46,016	27,382	22,536	22,841	20,948	32,931
Varicella (deaths)¶¶	§	§	§	§	§	9	2	9
Yellow fever***	—	—	—	—	—	1	—	—

* Acquired immunodeficiency syndrome.
† Cases were reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP).
§ Not nationally notifiable.
¶ Data for ehrlichiosis attributable to other or unspecified agents were being withheld from publication pending the outcome of discussions concerning the reclassification of certain Ehrlichia species, which will probably affect how data in this category were reported.
** The anti-hepatitis C virus antibody test became available in May 1990.
†† Cases were updated through the Division of Tuberculosis Elimination, NCHHSTP.
§§ Varicella was removed from the nationally notifiable disease list in 1981. Certain states continued to report these cases to CDC.
¶¶ Totals reported to the Division of Viral Diseases, National Center for Immunization and Respiratory Diseases (NCIRD).
*** The last indigenous case of yellow fever was reported in 1911; all other case reports since 1911 have been imported.

TABLE 10. Reported cases of notifiable diseases — United States, 1989–1996

Disease	1989	1990	1991	1992	1993	1994	1995	1996
AIDS*	33,722	41,595	43,672	45,472	103,691	78,279	71,547	66,885
Amebiasis	3,217	3,328	2,989	2,942	2,970	2,983	—	—
Anthrax	—	—	—	1	—	—	—	—
Aseptic meningitis	10,274	11,852	14,526	12,223	12,848	8,932	—	—
Botulism, total (including wound and unspecified)	89	92	114	91	97	143	97	119
foodborne	23	23	27	21	27	50	24	25
infant	60	65	81	66	65	85	54	80
Brucellosis	95	82	104	105	120	119	98	112
Chancroid	4,692	4,212	3,476	1,886	1,399	773	606	386
Chlamydia trachomatis infections	—	—	—	—	—	—	447,638	498,884
Cholera	—	6	26	103	18	39	23	4
Coccidioidomycosis	—	—	—	—	—	—	1,212	1,697
Crytosporidiosis	—	—	—	—	—	—	2,970	2,827
Cyclosporiasis	†	†	†	†	†	†	†	†
Diphtheria†	3	4	5	4	—	2	—	2
human granulocytic	§	§	§	§	§	§	§	§
human monocytic	§	§	§	§	§	§	§	§
human (other and unspecified)	§	§	§	§	§	§	§	§
Encephalitis, primary	981	1,341	1,021	774	919	717	**	**
Postinfectious¶	88	105	82	129	170	143	**	**
Enterohemorrhagic *Escherichia coli* infection Shiga toxin-positive								
O157:H7	¶	¶	¶	¶	¶	1,420	2,139	2,741
Non-O157	¶	¶	¶	¶	¶	¶	—	§
not serogrouped	¶	¶	¶	¶	¶	¶	—	§
Giardiasis	§	§	§	§	§	§	§	§
Gonorrhea	733,151	690,169	620,478	501,409	439,673	418,068	392,848	325,883
Granuloma inguinale	7	97	29	6	19	3	—	—
Haemophilus influenzae, invasive disease								
all ages, serotypes	¶	¶	¶	1,412	1,419	1,174	1,180	1,170
age<5 yrs								
serotype b	§	§	§	§	§	§	§	§
nonserotype b	§	§	§	§	§	§	§	§
unknown serotype	§	§	§	§	§	§	§	§
Hansen disease (leprosy)	163	198	154	172	187	136	144	112
Hantavirus pulmonary syndrome	NA	NA	NA	NA	NA	NA	NA	NA
Hemolytic uremic syndrome, postdiarrheal	—	—	—	—	—	—	72	97
Hepatitis, viral, acute								
A	35,821	31,441	24,378	23,112	24,238	26,796	31,582	31,302
B	23,419	21,102	18,003	16,126	13,361	12,517	10,805	10,637
C/ non-A, non-B**	2,529	2,553	3,582	6,010	4,786	4,470	4,576	3,716
unspecified	2,306	1,671	1,260	884	627	444	—	—
Legionellosis	1,190	1,370	1,317	1,339	1,280	1,615	1,241	1,198
Leptospirosis	93	77	58	54	51	38	—	—
Listeriosis	§	§	§	§	§	§	§	§
Lyme disease	**	**	**	9,895	8,257	13,043	11,700	16,455
Lymphogranuloma venereum	189	277	471	302	285	235	—	—
Malaria	1,277	1,292	1,278	1,087	1,411	1,229	1,419	1,800
Measles	18,193	27,786	9,643	2,237	312	963	309	508
Meningococcal disease, invasive	2,727	2,451	2,130	2,134	2,637	2,886	3,243	3,437
Mumps	5,712	5,292	4,264	2,572	1,692	1,537	906	751
Murine typhus fever	41	50	43	28	25	**	—	—
Pertussis	4,157	4,570	2,719	4,083	6,586	4,617	5,137	7,796
Plague	4	2	11	13	10	17	9	5
Poliomyelitis, paralytic	11	6	10	6	4	8	7	7
Psittacosis	116	113	94	92	60	38	64	42
Rabies								
animal	4,724	4,826	6,910	8,589	9,337	8,147	7,811	6,982
human	1	1	3	1	3	6	5	3
Rheumatic fever, acute	144	108	127	75	112	112	—	—
Rocky Mountain spotted fever	623	651	628	502	456	465	590	831
Rubella	396	1,125	1,401	160	192	227	128	238
Rubella, congenital syndrome	3	11	47	11	5	7	6	4

See table footnotes on page 110.

TABLE 10. (*Continued*) Reported cases of notifiable diseases — United States, 1989–1996

Disease	1989	1990	1991	1992	1993	1994	1995	1996
Salmonellosis	47,812	48,603	48,154	40,912	41,641	43,323	45,970	45,471
SARS-CoV	—	—	—	—	—	—	—	—
Shigellosis	25,010	27,077	23,548	23,931	32,198	29,769	32,080	25,978
Streptococcal disease, invasive, Group A	—	—	—	—	—	—	613	1,445
Streptococcal toxic-shock syndrome	—	—	—	—	—	—	10	19
Streptococcus pneumoniae, invasive disease,								
drug-resistant, all ages	—	—	—	—	—	—	309	1,514
non-drug resistant age <5 yrs	§	§	§	§	§	§	§	§
Syphilis,								
total, all stages	110,797	134,255	128,569	112,581	101,259	81,696	68,953	52,976
congenital (age <1 yr)	1,837	3,865	4,424	4,067	3,420	2,452	1,863	1,282
primary and secondary	44,540	50,223	42,935	33,973	26,498	20,627	16,500	11,387
Tetanus	53	64	57	45	48	51	41	36
Toxic-shock syndrome	400	322	280	244	212	192	191	145
Trichinosis	30	129	62	41	16	32	29	11
Tuberculosis	23,495	25,701	26,283	26,673	25,313	24,361	22,860	21,337
Tularemia	152	152	193	159	132	96	§	§
Typhoid fever	460	552	501	414	440	441	369	460
Varicella	185,441	173,099	147,076	158,364	134,722	151,219	120,624	83,511
Varicella (chickenpox)	§	§	§	§	§	§	§	§
Yellow fever††	—	—	—	—	—	—	—	1

* Acquired immunodeficiency syndrome.
† Cutaneous diphtheria ceased being nationally notifiable after 1979.
§ In 1984, data were recorded by date of report to state health departments.
¶ Not nationally notifiable.
** The anti-hepatitis C virus antibody test became available in 1990.
†† No cases of yellow fever were reported during 1989–1996.

TABLE 11. Reported cases of notifiable diseases* — United States, 1981–1988

Disease	1981	1982	1983	1984	1985	1986	1987	1988
AIDS†	§	§	§	4,445	8,249	12,932	21,070	31,001
Amebiasis	6,632	7,304	6,658	5,252	4,433	3,532	3,123	2,860
Anthrax	–	–	–	1	–	–	1	2
Aseptic meningitis	9,547	9,680	12,696	8,326	10,619	11,374	11,487	7,234
Botulism, total (including wounds and unspecified)	103	97	133	123	122	109	82	84
foodborne	§	§	§	§	49	23	17	28
infant	§	§	§	§	70	79	59	50
Brucellosis	185	173	200	131	153	106	129	96
Chancroid	850	1,392	847	666	2,067	3,756	4,998	5,001
Chlamydia trachomatis infections	–	–	–	–	–	–	–	–
Cholera	19	–	1	1	4	23	6	8
Diphtheria	5	2	5	1	3	–	3	2
Encephalitis								–
primary	1,492	1,464	1,761	1,257	1,376	1,302	1,418	882
postinfectious	43	36	34	108	161	124	121	121
Enterohemorrhagic *Escherichia coli*								
Gonorrhea	990,864	960,633	900,435	878,556	911,419	900,868	780,905	719,536
Granuloma inguinale	66	17	24	30	44	61	22	11
Hansen disease (leprosy)	256	250	259	290	361	270	238	184
Hepatitis								
A (infectious)	25,802	23,403	21,532	22,040	23,210	23,430	25,280	28,507
B (serum)	21,152	22,177	24,318	26,115	26,611	26,107	25,916	23,177
C/ non-A, non-B¶	§	§	§	3,871	4,184	3,634	2,999	2,619
unspecified	10,975	8,564	7,149	5,531	5,517	3,940	3,102	2,470
Legionellosis	408	654	852	750	830	980	1,038	1,085
Leptospirosis	82	100	61	40	57	41	43	54
Lymphogranuloma venereum	263	235	335	170	226	396	303	185
Malaria	1,388	1,056	813	1,007	1,049	1,123	944	1,099
Measles	3,124	1,714	1,497	2,587	2,822	6,282	3,655	3,396
Meningococcal disease, invasive	3,525	3,056	2,736	2,746	2,479	2,594	2,930	2,964
Mumps	4,941	5,270	3,355	3,021	2,982	7,790	12,848	4,866
Murine typhus fever	61	58	62	53	37	67	49	54
Pertussis	1,248	1,895	2,463	2,276	3,589	4,195	2,823	3,450
Plague	13	19	40	31	17	10	12	15
Poliomyelitis, total	10	12	13	9	8	10	9	9
paralytic	10	12	13	9	8	10	9	9
Psittacosis	136	152	142	172	119	224	98	114
Rabies								
animal	7,118	6,212	5,878	5,567	5,565	5,504	4,658	4,651
human	2	–	2	3	1	–	1	–
Rheumatic fever, acute	264	137	88	117	90	147	141	158
Rocky Mountain spotted fever	1,192	976	1,126	838	714	760	604	609
Rubella	2,077	2,325	970	752	630	551	306	225
Rubella, congenital syndrome	19	7	22	5	–	14	5	6
Salmonellosis	39,990	40,936	44,250	40,861	65,347	49,984	50,916	48,948
Shigellosis	9,859	18,129	19,719	17,371	17,057	17,138	23,860	30,617
Syphilis								
congenital (age <1 yr)	287	259	239	305	329	410	480	741
primary and secondary	31,266	33,613	32,698	28,607	27,131	27,883	35,147	40,117
total, all stages	72,799	75,579	74,637	69,888	67,563	68,215	86,545	103,437
Tetanus	72	88	91	74	83	64	48	53
Toxic-shock syndrome	§	§	§	482	384	412	372	390
Trichinosis	206	115	45	68	61	39	40	45
Tuberculosis	27,373	25,520	23,846	22,255	22,201	22,768	22,517	22,436
Tularemia	288	275	310	291	177	170	214	201
Typhoid fever	584	425	507	390	402	362	400	436
Varicella	200,766	167,423	177,462	221,983	178,162	183,243	213,196	192,857

* No cases of yellow fever were reported during 1981–1988.
† Acquired immunodeficiency syndrome.
§ Not nationally notifiable.
¶ The anti-hepatitis C virus antibody test became available in 1990.

TABLE 12. Number of deaths from selected nationally notifiable infectious diseases — United States, 2004–2010

Cause of death	ICD-10* cause of death code	No. of deaths						
		2004	2005	2006	2007	2008	2009	2010
AIDS†	B20-B24	13,063	12,543	12,133	11,295	10,285	9,406	8,369
Anthrax	A22	0	0	0	0	0	0	0
Encephalitis, arboviral								
California serogroup virus	A83.5	0	1	1	1	0	0	0
Eastern equine encephalitis virus	A83.2	2	2	2	0	0	2	3
Powassan virus	A84.8	0	0	0	0	0	0	0
St. Louis encephalitis virus	A83.3	2	1	2	1	2	0	3
Western equine encephalitis virus	A83.1	0	0	0	0	0	0	0
Botulism, foodborne	A05.1	0	5	3	6	4	3	0
Brucellosis	A23	0	2	2	1	0	1	0
Chancroid	A57	0	0	0	0	0	0	0
Chlamydia trachomatis infections	A56	0	0	0	0	0	0	0
Cholera	A00	0	0	0	1	0	1	0
Coccidioidomycosis	B38	100	76	110	99	72	87	92
Cryptosporidiosis	A07.2	1	2	2	2	3	2	4
Cyclosporiasis	A07.8	0	0	0	0	0	0	0
Diphtheria	A36	0	0	0	0	0	0	0
Ehrlichiosis	A79.8	0	0	0	0	0	0	0
Giardiasis	A07.1	1	0	1	0	1	0	1
Gonoccocal infections	A54	2	3	3	6	2	1	2
Haemophilus influenzae	A49.2	11	4	4	10	3	7	4
Hansen disease (leprosy)	A30	5	1	1	2	2	1	4
Hantavirus pulmonary syndrome	A98.5	0	0	8	6	2	0	5
Hemolytic uremic syndrome, postdiarrheal	D59.3	27	30	29	20	32	25	20
Hepatitis A, viral, acute	B15	58	43	34	34	37	26	29
Influenza-associated pediatric mortality	J10, J11	51	61	62	71	78	165	38
Legionellosis	A48.1	72	78	91	67	92	104	104
Listeriosis	A32	37	31	30	34	28	29	27
Lyme disease	A69.2, L90.4	6	7	5	8	10	12	10
Malaria	B50-B54	8	6	9	5	5	3	10
Measles	B05	0	1	0	0	0	2	2
Meningococcal disease	A39	138	123	105	87	102	99	79
Mumps	B26	0	0	1	0	2	2	1
Pertussis	A37	16	31	9	9	20	15	26
Plague	A20	1	1	3	2	0	1	0
Poliomyelitis	A80	0	0	0	0	0	0	0
Psittacosis	A70	0	0	0	0	0	0	0
Q fever	A78	1	2	2	4	0	1	0
Rabies, human	A82	3	1	2	1	2	4	1
Rocky Mountain spotted fever	A77.0	5	6	4	4	4	8	8
Rubella	B06	1	0	0	1	0	1	1
Rubella congenital syndrome	P35.0	5	8	2	4	5	4	8
Salmonellosis	A02	30	30	34	30	42	26	28
Shiga toxin-producing *Escherichia coli* (STEC)	A04.0-A04.4	4	5	3	3	1	3	8
Shigellosis	A03	0	9	3	4	3	4	2
Smallpox	B03	0	0	0	0	0	0	0
Streptococcal disease, invasive, group A	A40.0, A49.1	121	118	117	144	143	148	163
Streptococcus pneumoniae, invasive disease (restricted to <5 years of age)	A40.3, B95.3, J13	13	12	22	12	20	18	14
Syphilis, total, all stages	A50-A53	43	47	38	42	34	34	28

See table footnotes on page 113.

TABLE 12. (*Continued*) Number of deaths from selected nationally notifiable infectious diseases — United States, 2004–2010

Cause of death	ICD-10* cause of death code	No. of deaths						
		2004	2005	2006	2007	2008	2009	2010
Tetanus	A35	4	1	4	5	3	6	3
Toxic-shock syndrome (other than streptococcal)	A48.3	71	55	57	18	20	21	24
Trichinellosis	B75	0	0	1	0	0	0	0
Tuberculosis	A16-A19	657	648	652	554	585	529	569
Tularemia	A21	1	0	0	2	1	3	0
Typhoid fever	A01.0	0	0	0	0	2	0	0
Varicella	B01	19	13	18	14	18	22	16
Yellow fever[§]	A95	0	0	0	0	0	0	0

Source: CDC. CDC WONDER Compressed Mortality files (http://wonder.cdc.gov/mortSQL.html) provided by the National Center for Health Statistics. National Vital Statistics System, 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.

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

† Acquired immunodeficiency syndrome.

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

Selected Reading for 2012

General

Adekoya N. Nationally notifable disease surveillance (NNDSS) and the Healthy People 2010 objectives. The eJournal of the South Carolina Medical Association 2005;101:e68–72.

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.

Atlas RM. Bioterriorism: from threat to reality. Annu Rev Microbiol 2002;56:167–85.

Baker MG, Fidler DP. Global public health surveillance under new international health regulations. Emerg Infect Dis 2006;12:1058–65.

Bayer R, Fairchild AL. Public health: surveillance and privacy. Science 2000;290:1898–9.

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

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 Jan–Feb;126:100–6.

Brookmeyer R, Stroup DF, eds. Monitoring the health of populations: statistical principles and methods for public health surveillance. New York, NY: Oxford University Press; 2004.

CDC. Automated detection and reporting of notifiable diseases using electronic medical records versus passive surveillance—Massachusetts, June 2006–July 2007. MMWR 2008;57:373–6. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5714a4.htm?%0As_cid=mm5714a4_e.

CDC. Comparison of provisional with final notifiable disease case counts—National Notifiable Diseases Surveillance System, 2009. MMWR 2013;62;747–751. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6236a4.htm?s_cid=mm6236a4_w.

CDC. Racial disparities in nationally notifiable diseases—United States, 2002. MMWR 2005;54:9–11. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5401a4.htm.

CDC. Progress in improving state and local disease surveillance—United States, 2000–2005. MMWR 2005;54:822–5.

CDC. Case definitions for infectious conditions under public health surveillance. MMWR 1997;46(No. RR-10). Available at ftp://ftp.cdc.gov/pub/publications/mmwr/rr/rr4610.pdf.

CDC. Framework for evaluating public health surveillance systems for early detection of outbreaks; recommendations from the CDC working group. MMWR 2004;53(No. RR-5). Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5305a1.htm.

CDC. Framework for program evaluation in public health. MMWR 1999;48(No. RR-11). Available at http://www.cdc.gov/mmwr/PDF/RR/RR4811.pdf.

CDC. Historical perspectives: notifiable disease surveillance and notifiable disease statistics United States, June 1946 and June 1996. MMWR 1996;45:530–6. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/00042744.htm.

CDC. Manual of procedures for the reporting of nationally notifiable diseases to CDC. Atlanta, GA: US Department of Health and Human Services; CDC.

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 Practice 2001;7:43–50.

CDC. Notice to Readers: Changes in presentation of data from the National Notifiable Diseases Surveillance System—January 13, 2006. MMWR 2006;55:13–14. Available at http://www.cdc.gov/mmwr//preview/mmwrhtml/mm5501a5.htm.

CDC. Public Health Information Network—improving early detection by using a standards-based approach to connecting public health and clinical medicine. MMWR 2004;53 (Suppl):199–202. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/su5301a36.htm.

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. Racial disparities in nationally notifiable diseases—United States, 2002. MMWR 2005 14;54:9–11. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5401a4.htm.

CDC. Reporting race and ethnicity data—National Electronic Telecommunications System for Surveillance, 1994–1997. MMWR 1999;48:305–12. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/00056960.htm.

CDC. State Electronic Disease Surveillance Systems—United States, 2007 and 2010. MMWR 2011, 60;1421–23. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6041a3.htm.

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

CDC. The cornerstone of public health practice: public health surveillance, 1961–2011. MMWR 2011: 60;15–21 Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/su6004a4.htm?s_cid=su6004a4_w.

CDC. Updated guidelines for evaluating public health surveillance systems: recommendations from the Guidelines Working Group. MMWR 2001;50(No. RR-13). Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5013a1.htm.

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

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

Chang MH, Glynn MK, Groseclose SL. Endemic, notifiable bioterrorismrelated 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.

Doyle TJ, Ma H, Groseclose SL, Hopkins RS. PHSkb: a knowledgebase to support notifiable disease surveillance. BMC Med Inform Decis Mak 2005;5:27.

Doyle TJ, Glynn MK, Groseclose SL. Completeness of notifiable infectious disease reporting in the United States: an analytical literature review. Am J Epidemiol 2002;155:866–74.

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.

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

Freimuth V, Linnan HW, Potter P. Communicating the threat of emerging infections to the public. Emerg Infect Dis 2000;6:337–47.

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.
Hardiman MC. World Health Organization Perspective on Implementation of International Health Regulations. Emerg Infect Dis 2012;18:1041–6.
Heyman DL, ed. Control of communicable diseases manual. 19th ed. Washington, DC: American Public Health Association; 2008.
Hopkins RS. Design and operation of state and local infectious disease surveillance systems. J Public Health Manag Practice 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. J Public Health Manag Practice 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.
Koo D, Caldwell B. The role of providers and health plans in infectious disease surveillance. Eff Clin Pract 1999;2:247–52.
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 Assoc 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.
Lin SS, Kelsey JL. Use of race and ethnicity in epidemiologic research: concepts, methodological issues, and suggestions for research. Epidemiol Rev 2000;22:187–202.
McNabb S, Chungong S, Ryan M, et al. Conceptual framework of public health surveillance and action and its application in health sector reform. BMC Public Health 2002;2:2.
McNabb S, Surdo A, Redmond A, et al. Applying a new conceptual framework to evaluate tuberculosis surveillance and action performance and measure the costs, Hillsborough County, Florida, 2002. Ann Epidemiol 2004;14:640–5.
M'ikanatha NM, Lynfield R, Van Beneden CA, de Valk H. Infectious disease surveillance, 2nd edition. Malden, MA: Wiley; 2013.
Miller MA, Sentz J, Rabaa MA, et al. Global epidemiology of infections due to Shigella, Salmonella serotype Typhi, and enterotoxigenic Escherichia coli. Epidemiol Infect 2008;136:433–5.
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.
Panackal AA, M'ikanatha NM, Tsui FC, et al. Automatic electronic laboratory- based reporting of notifiable infectious diseases at a large health system. Emerg Infect Dis 2002;8:685–91.
Perry HN, McDonnell SM, Alemu W, et al. Planning an integrated disease surveillance and response system: a matrix of skills and activities. BMC Med 2007;5:24.
Pinner RW, Jernigan DB, Sutliff SM. Electronic laboratory-based reporting for public health. Mil Med 2000;165(Suppl 2):20–4.
Quandelacy TM, Johns MC, Andraghetti R, et al. The role of disease surveillance in achieving IHR compliance by 2012. Biosecur Bioterror 2011 Dec; 9:408–12.
Roush S, Birkhead G, Koo D, Cobb A, Fleming D. Mandatory reporting of diseases and conditions by health care professionals and laboratories. JAMA 1999;282:164–70.
Roush S, Murphy T. 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.
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.
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

Blackburn JK, McNyset KM, Curtis A, Hugh-Jones ME. Modeling the geographic distribution of Bacillus anthracis, the causative agent of anthrax disease, for the contiguous United States using predictive ecological niche modeling. Am J Trop Med Hyg 2007;77:1103–10.
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.

Domestic Arboviral Disease, Neuroinvasive and Nonneuroinvasive

CDC. West Nile virus disease and other arboviral diseases—United States, 2012. MMWR 2013;62:513–7.
CDC. Fatal West Nile virus infection following probable transfusion-associated transmission—Colorado, 2012. MMWR 2013;64:622–4.
Gibney KB, Colborn J, Baty S, et al. Modifiable risk factors for West Nile virus infection during an outbreak—Arizona, 2010. Am J Trop Med Hyg 2012;86:895–901.
Lindsey NP, Staples JE, Delorey MJ, Fischer M. Lack of evidence of increased West Nile virus disease severity in the United States in 2012. Am J Trop Med Hyg 2014;90:163–8.
Lindsey NP, Staples JE, Lehman JA, Fischer M. Medical risk factors for severe West Nile virus disease, United States, 2008–2010. Am J Trop Med Hyg 2012;87:179–84.
Lindsey NP, Staples JE, Lehman JA, Fischer M. Surveillance for West Nile virus disease—United States, 1999–2008. MMWR 2010;59:(No. SS-2).
Petersen LR, Fischer M. Unpredictable and difficult to control: West Nile virus enters adolescence. N Engl J Med 2012;367:1281–4.
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;79:974–79.
Weber I, Lindsey N, Bunko-Patterson A, et al. Completeness of West Nile virus testing among patients with meningitis and encephalitis during an outbreak in Arizona. Epidemiol Infect 2012;140:1632–36.

Babesiosis

CDC. Babesiosis surveillance—18 states, 2011. MMWR 2012;61:505–9.
Herwaldt BL, Linden JV, Bosserman E, et al. Transfusion-associated babesiosis 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.

Menis M, Anderson SA, Izurieta HS, et al. Babesiosis among elderly Medicare beneficiaries, United States, 2006–2008. Emerg Infect Dis 2012;18:128–31.
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.

Botulism

Arnon SS, Barzilay EJ. Clostridial infections: botulism and infants. In: Pickering LK, Baker CJ, Kimberlin DW, Long SS, eds. The Red Book: 2009 report of the Committee on Infectious Diseases. Elk Grove Village, NY: 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 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, Swerdlow DL. Botulism in the United States: a clinical and epidemiologic review. Ann Intern Med 1998;129:221–8.
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.
Botulism SJ. 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.

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. http://wwwn.cdc.gov/nndss/script/casedef.aspx?CondYrID=625&DatePub=1/1/2010%2012:00:00%20AM.
CDC. *Brucella suis* infection associated with feral swine hunting—three states, 2007–2008. MMWR 2009;58:618–21.
CDC. Public health consequences of a false-positive laboratory test result for Brucella—Florida, Georgia, and Michigan, 2005. MMWR 2008;57:603–5.
CDC. Laboratory-acquired brucellosis—Indiana and Minnesota, 2006. MMWR 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.

Chlamydia trachomatis infection

CDC. Sexually transmitted disease surveillance, 2012. Atlanta, GA: US Department of Health and Human Services; 2014.
CDC. Sexually transmitted diseases treatment guidelines, 2010. MMWR 2010;59:(No. RR-12).
Datta SP, Torrone E, Kyuszon-Moran D, et al. Chlamydia trachomatis trends in the United States among persons 14 to 19 years of age, 1999 to 2008. Sex Transm Dis 2012;39:92–6.
Satterwhite CL, Torrone E, Meites E, et al. Sexually transmitted infections among US women andmen: prevalence and incidence estimates, 2008. Sex Transm Dis 2013;40:187–93.
Satterwhite CL, Tian LH, Braxton J, Weinstock H. Chlamydia prevalence among women and men entering the National Job Training Program: United States, 2003–2007. Sex Transm Dis 2010;37:63–7.

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.
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, et al. 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; 88:321–36.

Coccidioidomycosis

Chen S, Erhart L, Anderson S, et al. Coccidioidomycosis: knowledge, attitudes, and practices among healthcare providers—Arizona, 2007. Med Mycol 2011;49:649–56.
Huang JY, Bristow B, Shafir S, Sorvillo F. Coccidioidomycosis-associated deaths, United States, 1990–2008. Emerg Infect Dis 2012;18:1723–8.
Marsden-Haug N, Goldoft M, Ralston C, et al. Coccidioidomycosis acquired in Washington State. Clin Infect Dis 2012;56:847–50.

Cryptosporidiosis

CDC. Cryptosporidiosis surveillance—United States, 2009–2010. MMWR 2012;61:1–12.
CDC. Diagnostic procedures for stool specimens. Atlanta, GA: US Department of Health and Human Services, CDC; 2009. Available at http://www.dpd.cdc.gov/dpdx/HTML/DiagnosticProcedures.htm.
Hlavsa MC, Roberts VA, Anderson AR, et al. Surveillance for waterborne disease outbreaks and other health events associated with recreational water—United States, 2007–2008. MMWR 2011;60:1–32.
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, Hurd S, et al. Population-based active surveillance for *Cyclospora* infection—United States, Foodborne Diseases Active Surveillance Network (FoodNet), 1997–2009. Clin Infect Dis 2012; 54:S411–7.

Hall RL, Jones JL, Herwaldt BL. Surveillance for laboratory-confirmed sporadic cases of cyclosporiasis—United States, 1997–2008. MMWR 2011;60:(No. SS-2).

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.

Herwaldt BL. *Cyclospora cayetanensis*: a review, focusing on the outbreaks of cyclosporiasis in the 1990s. Clin Infect Dis 2000;31:1040–57.

Ortega YR, Sanchez R. Update on *Cyclospora cayetanensis*, a food-borne and waterborne parasite. Clin Microbiol Rev 2010;23:218–34.

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 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

Brunkard JM, Ailes E, Roberts VA, et al. Surveillance for waterborne disease outbreaks associated with drinking water—United States, 2007–2008. MMWR 2011;60:(No. SS-12).

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.

Yoder JS, Gargano JY, Wallace RM, Beach MJ. Giardiasis surveillance—United States, 2009–2010. MMWR 2012;61:(No. SS-5).

Gonorrhea

CDC. Sexually transmitted disease surveillance, 2012. Atlanta, GA: US Department of Health and Human Services; 2014.

CDC. Update to CDC's sexually transmitted diseases treatment guidelines, 2010: oral cephalosporins no longer a recommended treatment for gonococcal infections. MMWR 2012;61:590–4.

CDC. Sexually transmitted diseases treatment guidelines, 2010. MMWR 2010;59:(No. RR-12).

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.

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, editor. 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 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 2013:1934–7.

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.

Hepatitis

Klevens RM, Hu D, Jiles R, Holmberg SD. Evolving epidemiology of hepatitis C virus in the United States. Clin Infect Dis 2012;55:S3–9.

Moorman AC, Gordon SC, Rupp LB, et al. Baseline characteristics and mortality among people in care for chronic viral hepatitis: the chronic hepatitis cohort study. Clin Infect Dis 2013;56:40–50.

Holmberg SD. Emerging epidemic of hepatitis C in young nonurban injection drug users (IDU). Presented at: report on technical consultation. Hepatitis C virus infection in young persons who inject drugs. Washington, DC, February 26–27, 2013. Silver Spring, MD: US Department of Health and Human Services, FDA; 2013. Available at http://aids.gov/pdf/hcv-and-young-pwid-consultation-report.pdf.

US Food and Drug Administration. FDA approves rapid test for antibodies to hepatitis C virus. News and events Silver Springs, MD: US Department of Health and Human Services, FDA; 2013. Available at http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm217318.htm.

Hemoylitic 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):S424–31.
Tarr PI, Gordon CA, Chandler WL. Shiga toxin-producing *Escherichia coli* and haemolytic uraemic syndrome. Lancet 2005;365:1073–86.

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, et al. 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 2004;52:1254–5.
CDC. Update: influenza-associated deaths reported among children aged <18 years—United States, 2003–04 influenza season. MMWR 2004;52:1286–8.
CDC. Mid-year addition of influenza-associated pediatric mortality to the list of nationally notifiable diseases, 2004. MMWR 2004;53:951–2.
CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2011;60:1128–32.

Legionellosis

CDC. Legionellosis—United States, 2000–2009. MMWR 2011;60:1083–6.
CDC. Surveillance for waterborne disease outbreaks associated with drinking water and other nonrecreational water—United States, 2009–20010. MMWR 2013;62:714–20.
CDC. Surveillance for waterborne disease outbreaks and other health events associated with recreational water—United States, 2007–2008. MMWR 2011;60:1–32.
CDC. Surveillance for travel-associated legionnaires' disease—United States, 2005–2006. MMWR 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). 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 2013;62:448–52.
Gaul LK, Farag FH, Shim T, et al. Hospital-acquired listeriosis outbreak caused by contaminated diced celery—Texas, 2010. Clin Infect Dis 2013;56:20–6.
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.
Laksanalamai P, Joseph LA, Silk BJ, et al. Genomic characterization of *Listeria monocytogenes* strains involved in a multistate listeriosis outbreak associated with cantaloupe in US. PLoS ONE 2012;7:e42448.
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:S396–404.
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:S405–10.

Lyme disease

Bacon RM, Kugeler KJ, Mead PS. Surveillance for Lyme disease—United States, 1992–2006. MMWR 2008;57:(No. SS-10).
CDC. Caution regarding testing for Lyme disease. MMWR 2005;54:125.
Connally NP, Durante AJ, Yousey-Hindes KM, et al. Peridomestic Lyme disease prevention: results of a population-based case-control study. Am J Prev Med 2009;37:201–6.
Hayes EG, Piesman J. How can we prevent Lyme disease? N Engl J Med 2003;348:2424–30.
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. http://www.ct.gov/caes/lib/caes/documents/publications/bulletins/b1010.pdf.
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.
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.
Mali S, Kachur SP, Arguin PM. Malaria surveillance—United States, 2010. MMWR 2012;61:(No. SS-2).

Measles

CDC. Hospital-associated measles outbreak—Pennsylvania, March–April 2009. MMWR 2012;61:30–2.

Parker Fiebelkorn A, Uzicanin A. Measles (rubeola). In: The yellow book: CDC health information for international travel, 2012. New York, NY: Oxford University Press; 2012.

Meningococcal disease

CDC. Prevention and control of meningococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 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

Barskey AE, Schulte C, Rosen JB, et al. Mumps outbreak in Orthodox Jewish communities in the United States. N Engl J Med 2012;367:1704–13.

Pertussis

CDC. Pertussis epidemic—Washington, 2012. MMWR 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 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 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 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:e58–60.

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 2013;62:1–28.
Angelakis E, Raoult D. Q fever. Vet Micro 2010;140:2–309.
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 2011;60:1–14.
CDC. Use of a reduced (4-dose) vaccine schedule for postexposure prophylaxis to prevent human rabies: recommendations of the Advisory Committee on Immunization Practices. MMWR 2010;59:1–9.
CDC. Human rabies prevention—United States, 2008: recommendation of the Advisory Committee on Immunization Practices (ACIP). MMWR 2008;57:1–28.

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):S488–97.
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.
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.
Jones TF, Gerner-Smidt P. Nonculture diagnostic tests for enteric diseases. Emerg Infect Dis 2012;18:513–4.
Majowicz SE, Musto J, Scallan E, et al. The global burden of nontyphoidal *Salmonella* gastroenteritis. Clin Infect Dis 2010;50:882–9.
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.
Mody RK, Meyer S, Trees E, et al. Outbreak of *Salmonella enterica* serotype I 4,5,12:i:- infections: the challenges of hypothesis generation and microwave cooking. Epidemiol Infect 2013;142:1–11.
Olsen SJ, Bishop R, Brenner FW, et al. The changing epidemiology of *Salmonella*: trends in serotypes isolated from humans in the United States, 1987–1997. J Infect Dis 2001;183:756–61.
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, Hoekstra RM, Angulo FJ, et al. Foodborne illness acquired in the United States—major pathogens. Emerg Infect Dis 2011;17:7–15.
Scallan E, Mahon BE, Hoekstra RM, Griffin PM. Estimates of illnesses, hospitalizations and deaths caused by major bacterial enteric pathogens in young children in the United States. Pediatr Infect Dis J 2013;32:217–21.
Sjolund-Karlsson M, Howie R, Krueger A, et al. CTX-M-producing non-Typhi *Salmonella* spp. isolated from humans, United States. Emerg Infect Dis 2011;17:97–9.

Shigellosis

CDC. Notes from the field: emergence of *Shigella flexneri* 2a resistant to ceftriaxone and ciprofloxacin—South Carolina, October 2010. MMWR 2010;59:1619.
CDC. Notes from the field: outbreak of infections caused by *Shigella sonnei* with decreased susceptibility to azithromycin—Los Angeles, California, 2012. MMWR 2013;62:171.
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.
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.
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. Published online 2010 Jul 12.
Nygren B, Schilling K, Blanton E, et al. Foodborne outbreaks of shigellosis in the USA, 1998–2008. Epidemiol Infect 2012;141:1–9.
Scallan E, Mahon BE, Hoekstra RM, Griffin PM. Estimates of illnesses, hospitalizations and deaths caused by major bacterial enteric pathogens in young children in the United States. Pediatr Infect Dis J 2013;32:217–21.
Wallender EK, Ailes EC, Yoder JS, Roberts VA, Brunkard JM. Contributing factors to disease outbreaks associated with untreated groundwater. Ground Water 2013:10.1111/gwat.12121[Epub ahead of print].

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 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.

Shiga toxin-producing *E. coli*

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, 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.
Gould LH, Mody RK, Ong KL; Emerging Infections Program Foodnet Working Group. 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 Pathog Dis 2013;10:453–60.
Hadler JL, Clogher P, Hurd S, et al. Ten-year trends and risk factors for non-O157 shiga toxin-producing *Escherichia coli* found through shiga toxin testing, Connecticut, 2000–2009. Clin Infect Dis 2011;53:269–76.
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):S472–9.
Hedican EB, Medus C, Besser JM, et al. Characteristics of O157 versus non-O157 shiga toxin-producing *Escherichia coli* infections in Minnesota, 2000–2006. Clin Infect Dis 2009;49:358–64.
Jones TF, Gerner-Smidt P. Nonculture diagnostic tests for enteric diseases. Emerg Infect Dis 2012r;18:513–4.
Lathrop S, Edge K, Bareta J, et al. Shiga toxin–producing *Escherichia coli*, New Mexico, USA. Emerg Infect Dis 2004–2007;15:1289.
McCollum JT, Williams NJ, Beam SW, et al. Multistate outbreak of *Escherichia coli* O157:H7 infections associated with in-store sampling of an aged raw-milk Gouda cheese, 2010. J Food Prot 2012;75:1759–65.
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.
Slayton RB, Turabelidze G, Bennett SD, et al. Outbreak of Shiga toxin-producing *Escherichia coli* (STEC) O157:H7 associated with romaine lettuce consumption, 2011. PLoS ONE 2013;8:e55300.
Tarr PI, Gordon CA, Chandler WL. Shiga-toxin-producing *Escherichia coli* and haemolytic uraemic syndrome. Lancet 2005;365:1073–86.

Streptococcal Toxic Shock Syndrome

CDC. Active bacterial core surveillance report, Emerging Infections Program Network, Group A *Streptococcus*, 2012. Atlanta, GA: US Department of Health and Human Services, CDC; 2012. Available at http://www.cdc.gov/abcs/reports-findings/survreports/gas12.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, Primary and Secondary

CDC. Sexually transmitted disease surveillance, 2012. Atlanta, GA: US Department of Health and Human Services; 2014.
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.

Trichinellosis

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 2009;22:127–45.
Hall RL, Lindsay A, Hammond C, et al. Outbreak of human trichinellosis in Northern California caused by *Trichinella murrelli.* Am J Trop Med Hyg 2012;87:297–302.
Kennedy ED, Hall RL, Montgomery SP, Pyburn DG, Jones JL. Trichinellosis surveillance—United States, 2002–2007. MMWR 2009;58:1–7.
Roy SL, Lopez AS, Schantz PM. Trichinellosis surveillance—United States, 1997–2001. MMWR 2003;52:1–8.

Tularemia

CDC. Tularemia—United States, 2001–2010. MMWR 2013;62:963–6.
CDC. Tularemia—United States, 1990–2000. MMWR 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;302:898–9.
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:e1134–40.
CDC. Prevention of varicella: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2007;56:(No. RR-4).
CDC. Evolution of varicella surveillance—selected states, 2000–2010. MMWR 2012;61:609–12.
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

CDC. *Vibrio mimicus* infection from consuming crayfish—Spokane, Washington. MMWR 2010;59:1374.
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 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):S391–5.
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.

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 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.

Address all inquiries about the *MMWR* Series, including material to be considered for publication, to Editor, *MMWR* Series, Mailstop E-90, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30329-4027 or to *mmwrq@cdc.gov.*

ISSN: 1546-0738