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*Centers for Disease Control and Prevention*



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## Summary of Notifiable Diseases — United States, 2010



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

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# Summary of Notifiable Diseases — United States, 2010

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## Preface

The *Summary of Notifiable Diseases United States, 2010* contains the official statistics, in tabular and graphic form, for the reported occurrence of nationally notifiable infectious diseases in the United States for 2010. Unless otherwise noted, the data are final totals for 2010, reported as of June 30, 2011. 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\\_su/mmwr\\_nd/](http://www.cdc.gov/mmwr/mmwr_su/mmwr_nd/). This site also includes *Summary* publications from previous years.

The Highlights section presents noteworthy epidemiologic and prevention information from 2010 for selected diseases and additional information to aid in the interpretation of surveillance and disease-trend data. Part 1 contains tables illustrating incidence data for the nationally notifiable infectious diseases reported during 2010.\* The tables provide the number of cases reported to CDC for 2010 and the distribution of cases by month, geographic location, and the patients' demographic characteristics (age, sex, race, and ethnicity). Part 2 contains graphs and maps that depict summary data for certain notifiable infectious diseases described in tabular form in Part 1. Part 3 contains tables that list the number of cases of notifiable diseases reported to CDC since 1979. This section also includes a table enumerating deaths associated with specified notifiable diseases reported to CDC's National Center for Health Statistics (NCHS) during 2002–2008. The Selected Reading section presents general and disease-specific references for notifiable infectious diseases. These references provide additional information on surveillance and epidemiologic concerns, diagnostic concerns, and disease-control activities.

Comments and suggestions from readers are welcome. To increase the usefulness of future editions, comments regarding the current report and descriptions of how information is or could be used are invited. Comments should be sent to Data Operations Team NNDSS, Division of Notifiable Diseases and Healthcare Information (proposed), Public Health Surveillance and Informatics Program Office (proposed) at [soib@cdc.gov](mailto:soib@cdc.gov).

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\* No cases of anthrax; diphtheria; eastern equine encephalitis virus disease, non-neuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus disease, non-neuroinvasive; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; and yellow fever were reported in 2010. Data on hepatitis B virus, perinatal infection are not included. Data on chronic hepatitis B and hepatitis C virus infection (chronic) are not included because they are undergoing data quality review.

## Background

The infectious diseases designated as notifiable at the national level during 2010 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/osels/ph\\_surveillance/nndss/nndsshis.htm](http://www.cdc.gov/osels/ph_surveillance/nndss/nndsshis.htm). In 1961, CDC assumed responsibility for the collection and publication of data on nationally notifiable diseases. NNDSS is neither a single surveillance system nor a method of reporting. Certain NNDSS data are reported to CDC through separate surveillance information systems and through different reporting mechanisms; however, these data are aggregated and compiled for publication purposes.

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

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

## Infectious Diseases Designated as Notifiable at the National Level during 2010\*

Anthrax†	Measles
Arboviral diseases, neuroinvasive and nonneuroinvasive	Meningococcal disease
California serogroup virus	Mumps
Eastern equine encephalitis virus	Novel influenza A virus infections
Powassan virus	Pertussis
St. Louis encephalitis virus	Plague
West Nile virus	Poliomyelitis, paralytic
Western equine encephalitis virus	Poliovirus infection, nonparalytic
Botulism	Psittacosis†
foodborne	Q fever†
infant	Acute
other (wound and unspecified)	Chronic
Brucellosis†	Rabies
Chancroid	Animal
<i>Chlamydia trachomatis</i> infection	Human†
Cholera	Rubella
Cryptosporidiosis	Rubella, congenital syndrome
Cyclosporiasis†	Salmonellosis
Dengue Virus Infection	Severe acute respiratory syndrome-associated coronavirus (SARS-CoV) disease
Dengue fever	Shiga toxin-producing <i>Escherichia coli</i> (STEC)
Dengue hemorrhagic fever	Shigellosis
Dengue shock syndrome	Smallpox
Diphtheria	Spotted fever rickettsiosis‡¶
Ehrlichiosis/Anaplasmosis†	Streptococcal toxic-shock syndrome†
<i>Ehrlichia chaffeensis</i>	<i>Streptococcus pneumoniae</i> , invasive disease
<i>Ehrlichia ewingii</i>	Syphilis
<i>Anaplasma phagocytophilum</i>	Syphilis, congenital
Undetermined	Tetanus
Giardiasis	Toxic-shock syndrome (other than streptococcal)
Gonorrhea	Trichinellosis
<i>Haemophilus influenzae</i> , invasive disease†	Tuberculosis†
Hansen disease (leprosy)	Tularemia
Hantavirus pulmonary syndrome†	Typhoid fever
Hemolytic uremic syndrome, post-diarrheal	Vancomycin-intermediate <i>Staphylococcus aureus</i> (VISA) infection
Hepatitis, viral	Vancomycin-resistant <i>Staphylococcus aureus</i> (VRSA) infection
Hepatitis A, acute	Varicella (morbidity)
Hepatitis B, acute	Varicella (mortality)
Hepatitis B virus, perinatal infection	Vibriosis
Hepatitis B, chronic	Viral hemorrhagic fevers
Hepatitis C, acute	New World Arenavirus
Hepatitis C, chronic§	Crimean-Congo hemorrhagic fever virus
Human Immunodeficiency Virus (HIV) infection**	Ebola virus
Influenza-associated pediatric mortality	Lassa virus
Legionellosis	Marburg virus
Listeriosis	Yellow fever
Lyme disease	
Malaria†	

\* This list reflects position statements CSTE approved in 2009 for national surveillance, which were implemented beginning in January 2010. The following changes were made to the 2010 list of nationally notifiable diseases: a) dengue virus and viral hemorrhagic fever were added to the list; b) coccidioidomycosis and invasive Group A *Streptococcus* disease were deleted from the list; and c) *Streptococcus pneumoniae* invasive disease replaced two previously notifiable conditions: drug-resistant *Streptococcus pneumoniae* and *Streptococcus pneumoniae*, invasive disease non-drug-resistant in children aged < 5 years.

† 2010 reflects a modified surveillance case definition for this condition, per approved 2009 CSTE position statements.

¶ Previously named Rocky Mountain Spotted Fever

§ Previously named hepatitis C virus infection, past or present

\*\* AIDS has been reclassified as HIV stage III.

## Data Sources

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

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

Data in the *Summary* were derived primarily from reports transmitted to CDC from health departments in the 50 states, five territories, New York City, and the District of Columbia. Data were reported for *MMWR* weeks 1–52, which correspond to the period for the week ending January 9, 2010, through the week ending January 1, 2011. More information regarding infectious notifiable diseases, including case definitions, is available at [http://www.cdc.gov/osels/ph\\_surveillance/nndss/nndsshis.htm](http://www.cdc.gov/osels/ph_surveillance/nndss/nndsshis.htm). Policies for reporting notifiable disease cases can vary by disease or reporting jurisdiction. The case-status categories used to determine which cases reported to NNDSS are published by disease or condition and are listed in the print criteria column of the 2010 NNDSS event code list (Exhibit) available at [http://www.cdc.gov/osels/ph\\_surveillance/nndss/nndsshis.htm](http://www.cdc.gov/osels/ph_surveillance/nndss/nndsshis.htm).

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

### Office of Surveillance, Epidemiology and Laboratory Services

#### National Center for Health Statistics (NCHS)

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

#### Office of Infectious Diseases (Proposed)

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

Division of HIV/AIDS Prevention (HIV infection diagnoses) Division of STD Prevention (chancroid; *Chlamydia trachomatis*, genital infection; gonorrhea; and syphilis) Division of Tuberculosis Elimination (tuberculosis)

#### National Center for Immunization and Respiratory Diseases

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

#### National Center for Emerging and Zoonotic Infectious Diseases

Division of Vector-Borne Diseases (arboviral diseases)

Division of High-Consequence Pathogens and Pathology (animal rabies)

NCHS postcensal estimates of the resident population of the United States for July 1, 2000–July 1, 2009, by year, county, age, bridged race, Hispanic origin, and sex (Vintage 2009), prepared under a collaborative arrangement with the U.S. Census Bureau and released June 20, 2010. Available from: [www.cdc.gov/nchs/nvss/bridged\\_race.htm](http://www.cdc.gov/nchs/nvss/bridged_race.htm) as of July 23, 2010.

Populations for territories are 2009 estimates from the U.S. Census Bureau International Data Base, available at <http://www.census.gov/population/international/data/idb/informationGateway.php>. The choice of population denominators for incidence reported in *MMWR* is based on 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 were excluded from incidence calculations. Unless otherwise stated, disease totals for the United States do not include data for American Samoa, Guam, Puerto Rico, the Commonwealth of the Northern Mariana Islands, or the U.S. Virgin Islands.

## Interpreting Data

Incidence data in the *Summary* are presented by the date of report to CDC as determined by the *MMWR* week and year assigned by the state or territorial health department, except for the domestic arboviral diseases, which are presented by date of diagnosis. Data are reported by the state in which the patient resided at the time of diagnosis. For certain nationally notifiable infectious diseases, surveillance data are reported independently to different CDC programs. For this reason, surveillance data reported by other CDC programs might vary from data reported in the *Summary* because of differences in 1) the date used to aggregate data (e.g., date of report or date of disease occurrence),

2) the timing of reports, 3) the source of the data, 4) surveillance case definitions, 5) policies regarding case jurisdiction (i.e., which state should report the case to CDC), and print criteria.

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

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

In addition, not all race and ethnicity data are collected or reported uniformly for all diseases, the standards for race and ethnicity have changed over time, and the transition in implementation to the newest race and ethnicity standard has taken varying amounts of time for different CDC surveillance systems. For example, in 1990, the National Electronic Telecommunications System for Surveillance (NETSS) was established to facilitate data collection and submission of case-specific data to CDC's National Notifiable Diseases Surveillance System, except for selected diseases. In 1990, NETSS implemented the 1977 Office of Management and Budget (OMB) standard for race and ethnicity, in which race and ethnicity were collected in one variable. Other surveillance programs implemented two variables for collection of race and ethnicity data. The 1997 OMB race and ethnicity standard, which requires collection of multiple races per person using multiple race variables, should have been implemented by federal programs beginning January 1, 2003. In 2003, the

CDC Tuberculosis and HIV/AIDS programs were able to update their surveillance information systems to implement 1997 OMB standards. In 2005, the Sexually Transmitted Diseases Management Information System also was updated to implement the 1997 OMB standards. However, other diseases reported to the NNDSS using NETSS were undergoing a major change in the manner in which data were collected and reported to CDC. This change is known as the transition from NETSS to the National Electronic Disease Surveillance System (NEDSS). NEDSS implemented the newer 1997 OMB standard for race and ethnicity. However, the transition from NETSS to NEDSS was slower than originally expected relative to reporting data to CDC using NEDSS; thus, some data are currently reported to CDC using NETSS formats, even if the data in the reporting jurisdictions are collected using NEDSS. Until the transition to NEDSS is complete, race and ethnicity data collected or reported to NETSS using different race and ethnicity standards will need to be converted to one standard. The data are now converted to the 1977 OMB standard originally implemented in NETSS.

Although the recommended standard for classifying a person's race or ethnicity is based on self-reporting, this procedure might not always be followed.

## Transition in NNDSS Data Collection and Reporting

Before 1990, data were reported to CDC as cumulative counts rather than individual case reports. In 1990, using NETSS, states began electronically capturing and reporting individual case reports to CDC without personal identifiers. In 2001, CDC launched NEDSS, now a component of the Public Health Information Network, to promote the use of data and information system standards that advance the development of efficient, integrated, and interoperable surveillance information systems at the local, state, and federal levels. One of the objectives of NEDSS is to improve the accuracy, completeness, and timeliness of disease reporting at the local, state, and national levels. To meet this objective, CDC has developed the NEDSS Base System (NBS), a public health surveillance information system. At the time of publication, the system had been adopted by 19 reporting jurisdictions; 29 reporting jurisdictions had a state or vendor-developed NEDSS-compatible system; and 9 remaining jurisdictions were either in the process of adopting or changing their NEDSS-compatible system or were using a non-NEDSS-compatible system. A major feature of all NEDSS-compatible solutions, which includes NBS, is the ability to capture data already in electronic form (e.g., electronic laboratory results, which

are needed for case confirmation) rather than enter these data manually as in NETSS. In 2010, 16 states used NBS to transmit nationally notifiable infectious diseases to CDC, 32 states used a NEDSS-compatible based system, and the remaining state and territorial jurisdictions continued to use a non-NEDSS-compatible system. Additional information concerning NEDSS is available at <http://www.cdc.gov/phin/activities/applications-services/nedss/index.html>.

## Methodology for Identifying which Nationally Notifiable Infectious Diseases are Reportable

States and jurisdictions are sovereign entities. Reportable conditions are determined by laws and regulations of each state and jurisdiction, and some conditions deemed nationally notifiable might not be reportable in certain states or jurisdictions. Determining which nationally notifiable infectious diseases are reportable in NNDSS reporting jurisdictions was determined by analyzing results of the 2010 CSTE State Reportable Conditions Assessment (SRCA). This assessment solicited information from each NNDSS reporting jurisdiction (all 50 U.S. states, the District of Columbia, New York City, and five U.S. territories) regarding which public health conditions were reportable for more than 6 months in 2010 by clinicians, laboratories, hospitals, or other public health reporters, as mandated by law or regulation. To assist in the implementation of SRCA, the NNDSS program provided technical assistance to the CSTE for the 2010 SRCA.

In 2007, SRCA became the first collaborative project of such technical magnitude ever conducted by CSTE and CDC. Previously, CDC and CSTE had gathered public health reporting requirements independently. The 2010 SRCA collected information regarding whether each reportable condition was 1) explicitly reportable (i.e., listed as a specific disease or as a category of diseases on reportable disease lists); 2) whether it was implicitly reportable (i.e., included in a general category of the reportable disease list, such as rare diseases of public health importance); or 3) not reportable. Only explicitly reportable conditions were considered reportable for the purpose of national public health surveillance and thus reflected in NNDSS. Moreover, to determine whether a condition included in SRCA was reportable in at least one public health reporter category for a specific nationally notifiable infectious disease (NNID) in a reporting jurisdiction, CDC developed and applied an algorithm to run on the data collected in SRCA. Analyzed results of the 2010 SRCA were used to determine whether a NNID was not reportable in a reporting jurisdiction

in 2010 and thus noted with an "N" indicator (for "not reportable") in the front tables of this report.

Unanalyzed results from the 2007, 2008, 2009 and 2010 SRCA are available using CSTE's web query tool at <http://www.cste.org/dnn/programsandactivities/publichealthinformatics/statereportableconditionsqueryresults/tabid/261/default.aspx>. Background information about the CSTE SRCA have 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.

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

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

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

Health-care providers in the United States are required to report diseases, conditions, or outbreaks as determined by local, state, or territorial law and regulation, and as outlined in each state's list of reportable conditions. All health-care providers should work with their local, state, and territorial health agencies to identify and report events that might constitute a potential PHEIC occurring in their location. U.S. State and Territorial Departments of Health have agreed to report information about a potential PHEIC to the most relevant federal agency responsible for the event. In the case of human disease, the U.S. State or Territorial Departments of Health will notify CDC rapidly through existing formal and informal reporting mechanisms (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. The DHHS SOC is the central body for the United States responsible for reporting potential events to WHO. The United States has 48 hours to assess the risk of the reported event. If authorities determine that a potential PHEIC exists, the WHO member country has 24 hours to report the event to WHO.

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

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

Additional information concerning IHR is available at <http://www.who.int/csr/ihr/en>, <http://www.globalhealth.gov>, <http://www.cdc.gov/globalhealth/ihregulations.htm>, and <http://www.cste.org/PS/2007ps/2007psfinal/ID/07-ID-06.pdf>. At its annual meeting in June 2007, CSTE approved a position statement to support the implementation of IHR in the United States (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;155:86–74.
2. Jajosky R, Park M, Macdonald S, Ferland L. 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 Pract* 2011;17:255–64. Available at [http://journals.lww.com/jphmp/Abstract/2011/05000/findings\\_from\\_the\\_Council\\_of\\_State\\_and\\_Territorial.9.aspx](http://journals.lww.com/jphmp/Abstract/2011/05000/findings_from_the_Council_of_State_and_Territorial.9.aspx).
3. World Health Organization. Third report of Committee A. Annex 2. Geneva, Switzerland: World Health Organization; 2005. Available at [http://www.who.int/gb/ebwha/pdf\\_files/WHA58/A58\\_55-en.pdf](http://www.who.int/gb/ebwha/pdf_files/WHA58/A58_55-en.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://www.cste.org/PS/2007ps/2007psfinal/ID/07-ID-06.pdf>.
5. Available at <http://www.cste.org/PS/2007ps/2007psfinal/ID/07-ID-01.pdf>.

**EXHIBIT. Print criteria for conditions reported to the National Notifiable Diseases Surveillance System, January 2010**

Code	Event	Print Criteria*
11090	<i>Anaplasma phagocytophilum</i>	Confirmed and probable; unknown from California (CA)
10350	Anthrax	Confirmed and probable; unknown reported from CA
10530	Botulism, foodborne	Confirmed; unknown from CA
10540	Botulism, infant	Confirmed; unknown from CA
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 virus, neuroinvasive disease	Data for publication received from ArboNET
10061	California serogroup virus, nonneuroinvasive disease	Data for publication received from ArboNET
10273	Chancroid	All reports are printed.
10274	<i>Chlamydia trachomatis</i> infection	All reports are printed.
10470	Cholera (toxigenic <i>Vibrio cholerae</i> O1 or O139)	Confirmed; unknown from CA verified as confirmed
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 case status are printed.
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	<i>Ehrlichia chaffeensis</i>	Confirmed and probable; unknown from CA
11089	<i>Ehrlichia ewingii</i>	Confirmed and probable; unknown from CA
11087	Ehrlichiosis, human, other or unspecified agent	—
11091	Ehrlichiosis/Anaplasmosis, undetermined	Confirmed and probable; unknown from CA
11570	Giardiasis	Confirmed and probable; unknown from CA
10280	Gonorrhea	All reports are printed.
10590	<i>Haemophilus influenzae</i> , invasive disease	CSTE VPD print criteria are used. Cases with confirmed, probable, and unknown case status are printed.
10380	Hansen disease (Leprosy)	Confirmed; unknown from CA
11590	Hantavirus pulmonary syndrome	Confirmed and unknown
11550	Hemolytic uremic syndrome postdiarrheal	Confirmed, probable, and unknown from CA
10110	Hepatitis A, acute	Confirmed; unknown from CA
10100	Hepatitis B, acute	Confirmed; unknown from CA
10101	Hepatitis C, acute	Confirmed; unknown from CA
11061	Influenza-associated pediatric mortality	Cases with confirmed case status are printed.
10490	Legionellosis	Confirmed; unknown from CA
10640	Listeriosis	Confirmed; unknown from CA
11080	Lyme disease	Confirmed and probable; unknown from CA
10130	Malaria	Confirmed; unknown from CA
10140	Measles (rubeola), total	CSTE VPD print criteria are used. Cases with confirmed and unknown case status are printed.
10150	Meningococcal disease ( <i>Neisseria meningitidis</i> )	Confirmed and probable; unknown from CA
10180	Mumps	CSTE VPD print criteria are used. Cases with confirmed, probable, and unknown case status are printed.
10317	Neurosyphilis	All reports are printed.

See footnotes page 10.

**EXHIBIT. (Continued) Print criteria for conditions reported to the National Notifiable Diseases Surveillance System, January 2010**

Code	Event	Print Criteria*
11062	Novel influenza A virus infections, initial detections of	Cases with confirmed status and cases reported from CA with unknown status, later verified to be confirmed, are printed.
10190	Pertussis	CSTE VPD print criteria are used. Cases with confirmed, probable, and unknown case status are printed.
10440	Plague	All reports are printed.
10410	Poliomyelitis, paralytic	Confirmed; unknown from CA that are verified as confirmed
10405	Poliovirus infection, nonparalytic	Confirmed; unknown from CA that are verified as 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	CSTE VPD print criteria are used. Cases with confirmed and unknown case status are printed.
10370	Rubella, congenital syndrome	CSTE VPD print criteria are used. Cases with confirmed, probable, and unknown case status are printed.
11000	Salmonellosis	Confirmed and probable; unknown from CA
10575	Severe acute respiratory syndrome (SARS)-associated coronavirus disease (SARS-CoV)	Cases with confirmed and probable case status are printed.
11563	Shiga toxin-producing <i>Escherichia coli</i> (STEC)	All reports printed
11010	Shigellosis	Confirmed and probable; unknown from CA
11800	Smallpox	Cases with confirmed and probable case status are printed.
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	<i>Streptococcus pneumoniae</i> , invasive disease (IPD) (all ages)	Confirmed; unknown from CA
10316	Syphilis, congenital	All reports are printed.
10313	Syphilis, early latent	All reports are printed.
10314	Syphilis, late latent	All reports are printed.
10318	Syphilis, late with clinical manifestations other than neurosyphilis	All reports are printed.
10311	Syphilis, primary	All reports are printed.
10312	Syphilis, secondary	All reports are printed.
10310	Syphilis, total primary and secondary	All reports are printed.
10315	Syphilis, unknown latent	All reports are printed.
10210	Tetanus	CSTE VPD criteria are used. All reports are printed.
10520	Toxic-shock syndrome (staphylococcal)	Confirmed and probable; unknown from CA
10270	Trichinellosis	Confirmed; unknown from CA
10220	Tuberculosis	Print criteria are determined by the CDC Tuberculosis program.
10230	Tularemia	All reports are printed.
10240	Typhoid fever (caused by <i>Salmonella typhi</i> )	Confirmed and probable; unknown from CA
11663	Vancomycin-intermediate <i>Staphylococcus aureus</i> (VISA)	Confirmed; unknown from CA verified as confirmed
11665	Vancomycin-resistant <i>Staphylococcus aureus</i> (VRSA)	Confirmed; unknown from CA verified as confirmed

See footnotes page 10.

**EXHIBIT. (Continued) Print criteria for conditions reported to the National Notifiable Diseases Surveillance System, January 2010**

Code	Event	Print Criteria*
10030	Varicella (Chickenpox)	VPD print criteria are used. Cases with confirmed, probable, and unknown case status from CA are printed.
11545	Vibriosis (non-cholera <i>Vibrio</i> species infections)	Confirmed, probable, and unknown from California
11647	Viral hemorrhagic fever	Confirmed; footnote will denote the specific VHF (Ebola or Marburg, Lassa, new world Arenaviruses, or Crimean-Congo) reported to CDC
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

\* Print policy for the National Notifiable Diseases Surveillance System (NNDSS): For a case report of a nationally notifiable disease to print in the *Morbidity and Mortality Weekly Report (MMWR)*, the reporting state or territory must have designated the disease reportable in their state or territory for the year corresponding to the data year of report to CDC. After this criterion is met, the disease-specific criteria listed in the Exhibit are applied. When the above-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. Print criteria for Vaccine Preventable Diseases reflect the case confirmation status print criteria described by 1999 Position Statement #ID-08 entitled Vaccine Preventable Diseases Surveillance Data, and subsequent CSTE position statements. Because CSTE position statements are not customarily finalized until July each year, the NNDSS data for the newly added conditions are not available from all reporting jurisdictions until January of the year following the approval of the CSTE position statement.

**Abbreviations and other notes:**

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

For purposes of this document, "line-listed" data are meant to mean "case-specific" data.

## Highlights for 2010

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).

### Domestic Arboviral, Neuroinvasive and Nonneuroinvasive

During 2010, West Nile virus (WNV) disease cases were reported from 40 states and the District of Columbia. The number of reported WNV neuroinvasive disease cases increased 62% from that reported in 2009, and the reported incidence of neuroinvasive disease was 0.20 cases per 100,000 population. Despite the decline in neuroinvasive disease incidence over previous years, the overall morbidity caused by WNV continues to be substantial. Based on serosurvey results, for every case of neuroinvasive disease, there are an estimated 26.5 nonneuroinvasive disease cases. Using the 629 reported neuroinvasive disease cases, an estimated 16,669 cases of WNV nonneuroinvasive disease occurred in 2010. However, only 392 nonneuroinvasive disease cases were diagnosed and reported; 2% of the cases that are estimated to have occurred. Evidence of WNV human disease was detected in all geographic regions of the United States. The states with the highest incidence of neuroinvasive disease were Arizona (1.60 per 100,000), New Mexico (1.03), Nebraska (0.55), and Colorado (0.51). Among the neuroinvasive disease cases, 345 (55%) cases were reported from four states: Arizona (107 cases), New York (89), Texas (77), and California (72). Arizona reported 17% of all WNV neuroinvasive disease cases in 2010. New York, which reported only six neuroinvasive disease cases in 2009, reported 89 (14%) cases in 2010 (1).

Among the other domestic arboviral disease in the United States, La Crosse virus remained the most common cause of neuroinvasive disease in children and eastern equine encephalitis virus disease, although rare, remained the most severe with a 50% case-fatality rate. In 2010, the District of Columbia reported two nonneuroinvasive disease cases of St. Louis encephalitis virus (SLEV); cases of SLEV haven't been reported from this jurisdiction since 1975.

1. CDC. West Nile virus and other arboviral disease—United States, 2010. MMWR 2011;60(30):1009–13.

### Botulism

Botulism is a severe paralytic illness caused by toxins produced by *Clostridium botulinum*. Exposure to toxin can occur by ingestion (foodborne botulism), by in situ production from

*C. botulinum* colonization of a wound (wound botulism), or the gastrointestinal tract (infant botulism and adult intestinal colonization botulism) (1). Cases of botulism caused by all of these exposure routes were reported in 2010. Health-care providers should report suspected botulism cases immediately to their state health departments; all states maintain 24-hour telephone services for reporting botulism and other public health emergencies. CDC maintains intensive surveillance for cases of botulism in the United States and offers a 24 hour/7 day a week consultation service. The CDC botulism duty officer can be reached via the CDC Emergency Operations Center, telephone 770-488-7100.

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

### Brucellosis

Compared with 2009, no change occurred in the number of reported brucellosis cases in 2010. Cases were reported from 27 states and the District of Columbia. No cases were reported from any of the U.S. territories. California, Texas, Arizona, and Florida accounted for approximately half (56.5%) of the reported cases. The geographic distribution of cases differs from those reported in 2009 when California, Florida, Georgia, Michigan, and Texas accounted for 56.5% of the reported cases. During 2010, Michigan and Georgia reported 40% and 20% decreases in cases respectively. The reason for the decline is unknown. In 2010, the number of cases reported by Arizona increased by 33%. The reason for the increase is unknown. A total of 61.3% of cases with known ethnicity occurred among Hispanics; this proportion was similar to that reported in 2009 (61.5%).

Brucellosis is a zoonotic disease caused by *Brucella* species. The three common pathogenic *Brucella* species are *B. abortus*, *B. melitensis*, and *B. suis*. The incubation period varies from 5 to 60 days and up to 6 months. Human infections usually occur following occupational exposure (in laboratory or veterinary settings), consumption of contaminated animal products (unpasteurized milk or cheese), or hunting.

To prevent the risk of contracting brucellosis, consumers should avoid eating or drinking unpasteurized milk and milk products or products processed through unknown methods. More information on raw milk and pasteurization can be found at <http://www.cdc.gov/foodsafety/rawmilk/raw-milk-questions-and-answers.html#history>.

Hunters are at an elevated risk for brucellosis from handling the carcasses or meat of infected animals. The use of gloves, aprons, or other barriers is recommended when handling animal tissue. Wild game meat also should be thoroughly cooked before consumption. Laboratory staff members should only manipulate *Brucella* and/or unknown isolates using biosafety level 3 (BSL-3) containment equipment and facilities. Veterinarians are considered to be at risk because of possible exposure to infected animals' blood, excretion, or other fluids. In case of accidental needle-stick injury with RB-51 vaccine, post exposure prophylaxis and serologic testing are recommended.

*B. abortus*, *B. melitensis* and *B. suis* are included on the list of category B bioterrorism agents. In addition to reporting cases to CDC's Bacterial Special Pathogens Branch, all laboratory exposures should be reported to the Division of Select Agents and Toxins by completing and submitting a form 3 (Report of Theft, Loss or Release of Select Agents and Toxins) as required by regulation (7 CFR 331.19, 9 CFR 121.19, and 42 CFR 73.19). The form can be downloaded from: <http://www.selectagents.gov/>.

1. CDC. Bioterrorism agents/diseases, by category. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at: <http://www.bt.cdc.gov/agent/agentlist-category.asp#adef>.
2. CDC, National Institutes of Health. Biosafety in microbiological and biomedical laboratories (BMBL). 5th ed. Washington, DC: US Department of Health and Human Services, CDC, National Institutes of Health; 2007. Available at: <http://www.cdc.gov/biosafety/publications/bmbl5/index.htm>.
3. CDC. Laboratory-acquired brucellosis—Indiana and Minnesota, 2006. MMWR 2008;57:39–42.
4. National Select Agent Registry: <http://www.selectagents.gov/>.

## Cholera

Cholera continues to be rare in the United States. It is most often acquired during travel in countries where *Vibrio cholerae* is circulating (1). Epidemic cholera emerged in Haiti in October 2010, and six cases in travelers to Haiti were reported in the United States toward the end of 2010. Of the 13 cholera infections reported in the United States in 2010, all were travel-associated; six related to travel in Haiti, and the other seven reported travel to other cholera-affected countries. Until the cholera epidemic in Hispaniola wanes, more associated cases are expected in the United States (2). 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, Cameron DN, Wells JG, Mintz ED. Cholera in the United States, 1995–2000: trends at the end of the twentieth century. *J Infect Dis* 2001;184:799–802.
2. Newton AE, Heiman KE, Schmitz A, et al. Cholera in United States associated with epidemic in Hispaniola. *Emerg Infect Dis* 2011;17:2166–8.

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

## Cryptosporidiosis

Cryptosporidiosis incidence remained relatively stable during 2008–2010, following a >3-fold increase during 2004–2007. Whether the changes in cryptosporidiosis reporting reflect a true change in cryptosporidiosis incidence, revision to the case definition as of 2009 (i.e., adding clinical criteria to the case definition), or changing diagnosis, testing, and reporting patterns is unclear. Concerns about rapid cartridge tests led to the revision of the 2011 cryptosporidiosis case definition (1).

Although cryptosporidiosis affects persons in all age groups, cases are most frequently reported in children aged 1–9 years. A substantial increase in transmission of *Cryptosporidium* in these children occurs during summer through early fall, coinciding with increased use of recreational water, which is a known risk factor for cryptosporidiosis. Good hygiene practices are essential to prevention, especially in high-risk settings. Persons also should avoid food and water that might be contaminated. *Cryptosporidium* oocysts can be detected routinely in treated recreational water (2). Contamination of, and the subsequent transmission through, recreational water is facilitated by the substantial number of *Cryptosporidium* oocysts that can be shed by a single person; the extended time that oocysts can be shed (3); the low infectious dose (4); and the chlorine tolerance of *Cryptosporidium* oocysts (5). The application of molecular epidemiology (i.e., genotyping and subtyping *Cryptosporidium* specimens) to clinical and environmental samples has demonstrated potential to expand our knowledge of *Cryptosporidium* epidemiology (6).

1. CDC. Cryptosporidiosis 2011 case definition. Atlanta, GA: US Department of Health and Human Services, CDC; 2009. Available at [http://www.cdc.gov/osels/ph\\_surveillance/nndss/casedef/cryptosporidiosis\\_current.htm](http://www.cdc.gov/osels/ph_surveillance/nndss/casedef/cryptosporidiosis_current.htm).
2. Shields JM, Gleim ER, Beach MJ. Prevalence of *Cryptosporidium* spp. and *Giardia intestinalis* in swimming pools, Atlanta, Georgia. *Emerg Infect Dis* 2008;14:948–50.
3. Chappell CL, Okhuysen PC, Sterling CR, DuPont HL. *Cryptosporidium parvum*: intensity of infection and oocyst excretion patterns in healthy volunteers. *J Infect Dis* 1996;173:232–6.
4. 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.
5. Shields JM, Hill VR, Arrowood MJ, Beach MJ. Inactivation of *Cryptosporidium parvum* under chlorinated recreational water conditions. *J Water Health* 2008;6:513–20.
6. Xiao L. Molecular epidemiology of cryptosporidiosis: an update. *Exp Parasitol* 2010;124:80–89.

## Dengue

During 2010, dengue became a nationally notifiable disease for the first time. In the United States, disease occurs in three epidemiologic settings. Dengue is endemic in tropical and subtropical areas, including Puerto Rico, U.S. Virgin Islands, and U.S.-affiliated Pacific Islands. In the remainder of the country, the majority of cases occur among travelers returning from dengue-endemic countries worldwide, whereas sporadic outbreaks occur from importations of dengue virus (DENV) into areas where the mosquito vector exists, such as along the U.S.-Mexico border (1), Hawaii (2), and Florida.

Dengue cases reached historically high levels in Puerto Rico during a periodic epidemic that is common to the epidemiology of this disease (3) and mirrored a period of markedly increased disease activity in the region (4). Traveler-associated dengue remains a substantial problem throughout the United States, with 642 reported cases in 2010. In October 2010, state health authorities reported a cluster of dengue-like illnesses in six of 28 missionary workers from Nebraska and Georgia who recently returned after 7–11 days in Haiti. Dengue was confirmed by laboratory testing in seven persons, all of whom had symptoms of dengue, and five were hospitalized (5). Overall, based on information reported by 85.4% of affected persons, travel-associated dengue cases originated from the following countries: Puerto Rico (93), Dominican Republic (82), India (51), Haiti (38), Nicaragua (26), Venezuela (23), Philippines (22), Colombia (21), Honduras (21), Mexico (14), Costa Rica (13), Granada (11), Guatemala (10), Jamaica (10), Bangladesh (8), Indonesia (8), St Bart's (8), Brazil (7), St. Martin (7), El Salvador (6), Guyana (6), Thailand (6), Viet Nam (6), Ecuador (5), Martinique (5), and <5 cases each from Belize, Curacao, Tanzania, Trinidad & Tobago, Cambodia, Ghana, Guadalupe, Laos, Netherlands Antilles, Pakistan, Peru, St. Thomas, Barbados, Cayman Islands, Cuba, East Timor, Liberia, Malaysia, Nigeria, Sri Lanka, St. Kitts, and Vanuatu.

In Florida, dengue reemerged in 2009 (6,7) and during 2010, 58 locally acquired dengue cases were reported. All the cases were in Key West, except for two cases in more northern counties. Clinicians should be vigilant for dengue among travelers returning from international destinations where DENV transmission is endemic or likely to be endemic (8) and should consider dengue in the differential diagnosis for persons living in areas of the United States where the disease has occurred previously. Suspected cases of dengue should be reported to public health authorities.

1. CDC. Dengue fever at the U.S.-Mexico border, 1995–1996. MMWR 1996;45:841–4.
2. Effler PV, Pang L, Kitsutani P, et.al. Dengue fever, Hawaii, 2001–2002. Emerg Infect Dis 2005;11:742–9

3. Sharp TM, Rivera A, Rodriguez-Acosta R, et al. An island-wide dengue epidemic – Puerto Rico, 2010. Am J trop Med Hyg 2011;85(suppl):400.
4. [http://new.paho.org/hq/index.php?option=com\\_content&task=view&id=3409&itemid=1091&lang=en](http://new.paho.org/hq/index.php?option=com_content&task=view&id=3409&itemid=1091&lang=en).
5. Sharp T, Pillai P, Hunsperger E, et. al. A cluster of dengue cases in American missionaries returning from Haiti, 2010. Am J Trop Med Hyg 2012; 86:16–22.
6. CDC. Locally acquired dengue—Key West, Florida, 2009–2010. MMWR. 2010;59:77–81.
7. Radke EG, Gregory CJ, Kintziger KW, et al. Dengue outbreak in Key West, Florida, USA, 2009. Emerg Infect Dis 2012; 18:135–7.
8. Streit JA, Yang M, Cavanaugh JE, Polgreen PM. Upward trend in dengue incidence among hospitalized patients, United States. Emerg Infect Dis 2011; 17:914–6

## Ehrlichiosis and Anaplasmosis

Four categories of ehrlichiosis and anaplasmosis were reportable during 2010: 1) *Ehrlichia chaffeensis*, 2) *Ehrlichia ewingii*, 3) *Anaplasma phagocytophilum*, and 4) Human ehrlichiosis/anaplasmosis - undetermined.

During 2010, infections caused by *E. chaffeensis* were reported primarily from the lower Midwest, the Southeast, and the east coast, reflecting the currently known range of the primary tick vector species (*Amblyomma americanum*). Infections caused by *A. phagocytophilum* were reported primarily from the upper Midwest and coastal New England, reflecting both the range of the primary tick vector species (*Ixodes scapularis*) and preferred animal hosts for tick feeding. A total of ten cases of ehrlichiosis resulting from *E. ewingii* infection were reported from Missouri, Tennessee, and Delaware. The category “Human ehrlichiosis/anaplasmosis - undetermined” includes cases for which a specific etiologic agent could not be identified using available serologic tests. The high numbers of “Human ehrlichiosis/anaplasmosis - undetermined” cases reported from certain northern states (1) continue to reflect state-specific classifications based on indistinguishable antigenic cross-reactivity or situations in which physicians ordered single or inappropriate tests (e.g., ordering only ehrlichiosis tests in a region where anaplasmosis expected to predominate).

During 2010, cases attributed to *E. chaffeensis* declined almost 22% (944 to 740), whereas those cases attributed to *A. phagocytophilum* infection increased by 52% (1,161 to 1,761). Cumulative declines in ehrlichiosis were reported by states in all geographic divisions. Increases in anaplasmosis were primarily the result of increases in numbers of cases reported by Minnesota and Wisconsin, two states that reported more than two thirds of all cases of anaplasmosis in 2010. Changes in the numbers of reported cases might be the result of several factors, including ecological changes influencing vector tick populations and disease transmission, changes in diagnostic approaches that alter detection rates, or changes in surveillance and reporting.

- CDC. Anaplasmosis and Ehrlichiosis—Maine, 2008. MMWR 2009;58(37):1033–6.

## Giardiasis

*Giardia* infection is the most common intestinal parasitic infection reported in the United States (1). The disease is thought to be highly underreported with an estimated 1.2 million infections occurring annually (2). Multiple factors might contribute to this under diagnosis. Giardiasis patients sometimes experience diarrhea intermittently, which might contribute to delayed diagnosis (3). Furthermore, shedding of the parasite is often intermittent, even if the symptoms are not (4). These observations form the basis for the recommendation that health-care providers test at least three stool samples collected on multiple days to rule out giardiasis as a cause of diarrhea (3).

Emerging evidence points to the existence of extra-intestinal and prolonged symptoms of giardiasis. A recent study of non-outbreak giardiasis cases reported that one third of patients experienced extra-intestinal symptoms, including joint pain, rash, and urinary symptoms; these symptoms often persisted more than 30 days (3). Other sequelae, including irritable bowel syndrome and fatigue, were strongly associated with a history of giardiasis 3 years after a large outbreak (5). Although these findings need further study, it is important to recognize that giardiasis symptoms can be highly variable and might cause considerable morbidity even after successful eradication of the parasite.

- Kappus KD, Lundgren RG, Jr., Juranek DD, Roberts JM, Spencer HC. Intestinal parasitism in the United States: update on a continuing problem. Am J Trop Med Hyg. 1994;50:705–13.
- Scallan E, Hoekstra RM, Angulo FJ, et al. Foodborne illness acquired in the United States—major pathogens. Emerg Infect Dis. 2011;17:7–15.
- Caney PT, Roy S, Lee B, et al. Study of nonoutbreak giardiasis: novel findings and implications for research. Am J Med. 2011 [Epub ahead of print].
- 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.
- Wensaas KA, Langeland N, Hanevik K, Mørch K, Eide GE, Rortveit G. Irritable bowel syndrome and chronic fatigue 3 years after acute giardiasis: historic cohort study. Gut. 2011 [Epub ahead of print].

## Hansen Disease (Leprosy)

In 2010, the number of reported cases of leprosy decreased by 4.8% from 2009. Cases were reported from 18 states. No cases were reported from any of the U.S. territories. Florida, Texas, California, and Hawaii accounted for 79.6% of the reported cases. Fifty percent of cases reported location of acquisition of infection as “unknown” and 24.5% did not provide a location;

25.5 % reported a location where the infection was acquired. Of those who reported a location, 72% were reported to have been acquired outside of the United States. All cases might not be newly diagnosed in the year surveillance data were collected. Providers are encouraged to contact the National Hansen Disease Program <http://www.hrsa.gov/hansensdisease/> for guidance on clinical management and treatment.

## Hantavirus Pulmonary Syndrome

In 2010, an imported case of hantavirus pulmonary syndrome was confirmed in a traveler from Brazil who experienced an acute illness in transit and was hospitalized in the United States. This case, along with a confirmed 2009 case of Seoul virus hemorrhagic fever and renal syndrome that occurred in a Wisconsin patient who recently traveled in China (1), serves as a reminder that hantaviral disease should be considered in patients with compatible clinical illness and a history of travel in countries endemic for hantavirus.

- Nielsen CF, Sethi V, Petroll AE, et al. Seoul virus infection in a Wisconsin patient with recent travel to China, March 2009: first documented case in the Midwestern United States. Am J Trop Med Hyg 2010; 83: 1266–1268.

## 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. This highlight reports 61 influenza-associated pediatric deaths reported to CDC during the year 2010. Thirty two of these deaths occurred in 2009 and were reported several months later in 2010. Twenty nine deaths occurred in 2010. This compares with a mean of 65 deaths (range: 43–90) per year that have been reported for seasonal influenza during the period 2005–2009.

Of the 61 influenza-associated pediatric deaths reported to CDC during the year 2010, the majority of pediatric deaths (53) occurred from September 2009 to June 2010. Of the 61 influenza-associated pediatric deaths reported, 56 (92%) were associated with influenza A viruses, four (7%) with influenza B viruses, and one (1%) with an untyped influenza virus. Of the 56 influenza A viruses, the subtype was determined for

39 (70%): 35 were 2009 A (H1N1) pdm09, one was seasonal A(H1N1), and three were A(H3N2) viruses.

In 2010, the median age at the time of death was 8.2 years (range: 33 days – 17.9 years). This is higher than that observed (4 – 7.5 years) before the 2009 A (H1N1) pandemic for the years 2006–2008 and January – April 2009 but lower than that seen during May 2009 – December 2009 after A (H1N1) pdm09 viruses began to circulate (9.3 years). Seven children (11%) who died were aged <6 months; 8 (13%) were aged 6–23 months; 7 (11%) were aged 24–59 months; 15 (26%) were aged 5–8 years; 8 (13%) were aged 9–12 years; and the remaining 16 (26%) were aged 13–17 years. Information on death location was available for 59 of 61 children: 36 (61%) children died after being admitted to the hospital; 14 (24%) died in the emergency room; and nine (15%) died outside the hospital. Information on underlying or chronic medical condition was reported for 57 children: 36 (63%) children had one or more underlying or chronic medical conditions placing them at increased risk for influenza-associated complications (1). The most commonly reported chronic medical conditions were developmental delay (18), asthma (11), and seizure disorder (10). Of 28 children who had specimens collected for bacterial culture from normally sterile sites, test results for 14 (50%) resulted in positive cultures. *Staphylococcus aureus* was detected in 8 of 14 (57%) of the positive cultures; four were methicillin-resistant, three were methicillin-sensitive, and one had unknown sensitivity. The remaining specimens were positive for *Pseudomonas aeruginosa*, Group A Streptococcus, *Streptococcus pneumoniae*, Acinetobacter, Enterococcus, and *Hemophilus influenzae*, not type B. Of the 40 children aged ≥6 months for whom seasonal vaccination status was known, 7 (18%) were vaccinated against influenza as recommended by the Advisory Committee on Immunization Practices for 2010 (1). Continued surveillance of influenza-associated mortality is important to monitor both the effects of seasonal and novel influenza and the effect of interventions in children.

1. CDC. Prevention and control of influenza with vaccines: recommendations of the Advisory Committee on Immunization Practices (ACIP) 2010. MMWR 2010;59(No. RR-8).

## Listeriosis

*Listeria monocytogenes* infection (listeriosis) causes rare but severe invasive disease (e.g., sepsis, meningitis, fetal death). Listeriosis has been nationally notifiable since 2000. Listeriosis is primarily acquired through contaminated food and occurs most frequently among older adults, persons who are immunocompromised, and pregnant women. Pregnancy-associated listeriosis is usually a mild illness in women but is often associated with fetal death or

severe neonatal disease. During 2010, most cases occurred among persons aged ≥65 years.

Molecular subtyping of *L. monocytogenes* isolates and sharing that information through the National Molecular Subtyping Network for Foodborne Disease Surveillance (PulseNet) has enhanced the ability of public health officials to detect and investigate outbreaks (1). Outbreaks in 2010 were linked to pre-cut celery served in chicken salad, hogs head cheese (2), and Mexican-style cheese made from pasteurized milk.

CDC recommends that all clinical isolates be submitted routinely to a state public health laboratory for molecular subtyping using pulsed-field gel electrophoresis (PFGE). Also, all persons with listeriosis should be interviewed promptly by a public health official using the standard *Listeria* Initiative case form, available in English and Spanish at [http://www.cdc.gov/listeria\\_surveillance.html](http://www.cdc.gov/listeria_surveillance.html). Rapid analysis of molecular and epidemiologic data allows for timely identification and removal of contaminated food during outbreaks.

1. <http://www.cdc.gov/pulsenet/>

2. CDC. Outbreak of invasive listeriosis associated with the consumption of hog head cheese—Louisiana, 2010. MMWR 2011;60:401–05.

## Lyme disease

In North America, Lyme disease is caused by *Borrelia burgdorferi sensu stricto*, a spirochete transmitted by certain species of *Ixodes* ticks. Manifestations of infection include erythema migrans, arthritis, carditis, and neurologic deficits. Human illness occurs in two major foci, one in the Northeastern and mid-Atlantic states, and one in the North-central states. Additional endemic areas occur along the Pacific coast. Effective January 2008, the national surveillance case definition was revised to include reporting of probable cases and to update laboratory criteria to reflect current testing practices.

During 2006–2009, the total number of Lyme disease cases reported to CDC increased each year, albeit with no consistent trend across states. In 2010, however, confirmed cases decreased 25% and probable cases decreased 11% as compared with 2009. In addition, regional trends were apparent. Among 12 high-incidence states in the Northeastern and mid-Atlantic regions, all but Virginia reported a decrease in confirmed cases. Conversely, the number of confirmed cases increased >20% in Minnesota and Wisconsin. The reasons for these patterns are unknown. Given the observed regional consistencies, surveillance artifact is an unlikely explanation.

## Measles

Measles was declared eliminated from the United States in 2000. Since then, elimination has been maintained through high population immunity along with early detection of cases and rapid public health intervention (including contact tracing, isolation, and vaccination) (1,2). Nonetheless, because measles remains endemic in much of the world, importations continue to result in sporadic cases and outbreaks in the United States, which can be costly to control (2). In recent years, the majority (87%) of measles cases in 2010 were import associated (3). Measles was classified as internationally imported in 39 cases, 24 of which were in U.S. residents exposed while traveling abroad, and 15 of which were among international visitors. Source countries for imported cases included India (5 cases), Italy (5 cases), Ethiopia (4 cases), South Africa (3 cases), Germany, Ireland, Philippines, Switzerland, and Zambia (2 cases each), Austria, Belgium, Canada, France, Indonesia, Kuwait, Malawi, Morocco, Ukraine, United Kingdom, and Vietnam (1 case each). For the 14 internationally imported cases for which the genotype is known, genotype B3 accounted for 4 cases (2 from Ethiopia, 1 from Zambia, 1 from Germany), 3 cases were D4 (1 from India, 1 from Italy, 1 from Switzerland), 4 cases were D8 (all from India), 1 case was D9 (Indonesia), and 2 were H1 (1 from Canada and 1 from Vietnam).

Thirty-three states reported no measles cases in 2010; 10 states reported fewer than 3 cases. Four outbreaks (defined as 3 or more epidemiologically linked cases) occurred in 2010. Outbreaks were small, ranging in size from 3 to 4 cases (median: 3). Of the 47 cases that occurred in U.S. residents, 41 (87%) were unvaccinated or had undocumented vaccination status, 2 (4%) had received 1 dose of MMR vaccine, and 4 (9%) had received 2 doses of MMR vaccine. Of the 41 unvaccinated U.S. residents with measles in 2010, 36% (17/47) held personal or religious beliefs opposing vaccination. Another 13% (6/47) were missed opportunities in young U.S. resident travelers who should have been vaccinated on schedule and before their international travel (2).

1. Hutchins SS, Bellini W, Coronado V, et al. Population immunity to measles in the United States. *J Infect Dis* 2004;189(Suppl 1):S91–97.
2. CDC. Measles, mumps, and rubella—vaccine use and strategies for elimination of measles, rubella, and congenital rubella syndrome and control of mumps: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 1998;47:1–57.
3. Parker AA, Staggs W, Dayan G, et al. Implications of a 2005 measles outbreak in Indiana for sustained elimination of measles in the United States. *N Engl J Med* 2006; 355:447–55.
4. Council of State and Territorial Epidemiologists. Revision of measles, rubella, and congenital syndrome case classification as part of elimination goals in the United States. Position statement 2006-ID-16. Available at <http://www.cste.org/PS/2006pdfs/PSFINAL2006/06-ID-16FINAL.pdf>.

## Mumps

The majority (66%) of mumps cases reported in the United States during 2010 continued to be associated with a large outbreak focused in the Northeastern states (primarily New York and New Jersey) that began in New York in June 2009 (1). A total of 1,724 cases occurred January 1, 2010 through June 27, 2010. The outbreak primarily affected adolescent boys in Orthodox Jewish communities. Fewer than 3% of the cases associated with this outbreak occurred among persons outside this community. The majority (65%) of these cases occurred among males and 19% were among adolescents aged 13–17 years. Among the patients for whom vaccination status was reported, 90% had received at least 1 dose of mumps-containing vaccine, and 74% had received 2 doses. This was the largest mumps outbreak to occur in the United States since 2006 (2).

1. CDC. Update: mumps outbreak—New York and New Jersey, June 2009–January 2010. *MMWR* 2010; 59(5):125–30.
2. Dayan G, Quinlisk P, et al. Recent resurgence of mumps in the United States. *New Engl J Med* 2008;358:1580–9.

## Novel Influenza A

In 2007, the Council of State and Territorial Epidemiologists added novel influenza A virus infection to the list of conditions reportable to the National Notifiable Diseases Surveillance System (1). Novel influenza A virus infections are human infections with influenza A viruses that are different from currently circulating human influenza A (H1) and A (H3) viruses. These viruses include those that are subtyped as non-human in origin and those that cannot be subtyped with standard methods and reagents used for currently circulating influenza viruses. Non-human influenza virus infections rarely result in human-to-human transmission, but the implications of sustained ongoing transmission between humans is potentially severe; therefore prompt and thorough identification and investigation of these sporadic human infections with non-human influenza viruses are needed to reduce the risk for sustained transmission (2).

In 2010, four cases of human infection with novel influenza A viruses were reported from three states: (Minnesota [2], Pennsylvania, and Wisconsin) [3]). These four cases were sporadic cases of human infection with swine-origin influenza A (H3N2) viruses. These viruses are similar to those swine influenza A (H3N2) viruses that have been circulating among U.S. pigs since 1998 (4) and ten other swine-origin influenza A (H3N2) viruses identified from previous human infections since 2009 (2). One case occurred in September (Wisconsin), one case in October (Pennsylvania), and two cases in November (Minnesota). Two of the four patients were hospitalized; all four recovered fully from their illness. Three of

the four affected persons had contact with or had a likely exposure to swine and the fourth likely acquired infection from one of the persons with a confirmed case. The Wisconsin patient reported contact with pigs in the week preceding symptom onset and no direct contact with pigs was identified in the Pennsylvania case; however, the patient lives in an area close to pig farms. The two cases from Minnesota occurred in a father and child. The father had direct swine exposure 6 days before illness onset. The child had no history of recent swine exposure and her symptom onset occurred 3 days after her father's symptom onset, suggesting that she acquired the infection from exposure to her father during his illness. A nasopharyngeal swab was collected from the child and initially tested negative; her infection with swine-origin influenza A (H3N2) virus was confirmed several weeks later by serologic testing. An additional three members in the same household also had ILI during the same period, but serologic results were negative.

Transmission of swine-origin influenza A viruses to humans usually occurs among people in direct contact with pigs or in those who have visited places where pigs were present (e.g., agricultural fairs, farms, and petting zoos). CDC conducts surveillance for human infections with novel influenza A viruses year-round and carries out epidemiologic investigations on each case. Surveillance for human infections with novel influenza A viruses is essential; early identification and investigation of these cases are critical to evaluate the extent of outbreaks and the potential for human-to-human transmission.

1. Council of State and Territorial Epidemiologists. National reporting for initial detections of novel influenza A viruses. Position statement 07-ID01. Available at <http://www.cste.org/PS/2007ps/2007psfinal/ID/07-ID-06.pdf>.
2. CDC. Swine-origin influenza A (H3N2) virus infection in two children—Indiana and Pennsylvania, July–August 2011. *MMWR* 2011;60:1213–5.
3. CDC. Update: influenza activity—United States, 2010–11 season, and composition of the 2011–12 influenza vaccine. *MMWR* 2011;60:705–12.
4. Vincent AL, MA W, Lager KM, Janke BH, Richt JA. Swine influenza viruses: a North American perspective. In: Maramorosch K, Slatkin AJ, Murphy FA, eds. *Advances in virus research*, Vol 72. Burlington: Academic Press; 2008:127–54.

## Psittacosis

Psittacosis is a respiratory infection resulting from exposure to the bacterium *Chlamydophila (Chlamydia) psittaci* through the feces, respiratory secretions, plumage, or tissues of infected birds. Persons with psittacosis generally have high fever, cough, and malaise within 5–14 days of exposure. A minority of cases might progress to severe pneumonia with respiratory compromise. The Council of State and Territorial Epidemiologists position statement and case definition for psittacosis was revised in June 2009 to include more stringent laboratory criteria for confirmed and probable cases. In 2010, a total of four psittacosis cases were reported, compared with an average of 16 (range: 9–25) cases

reported during the period 2000–2009. Additional information about psittacosis and case-reporting tools can be found at <http://www.nasphv.org/documentsCompendiaPsittacosis.html>.

## Q fever

During 2010, both acute and chronic Q fever infections were considered notifiable. Among the 131 cases reported in 2010, 106 were acute infection, and 25 were chronic Q fever. Cases remained distributed across the United States, consistent with Q fever being enzootic in ruminants (sheep, goats, and cattle) throughout the country.

During 2010, the number of cases of Q fever reported increased 16% over those reported during the previous year. Although few human cases are reported annually, Q fever is believed to be substantially underreported because of its non-specific presentation and the subsequent failure of physicians to suspect infection and request appropriate diagnostic tests.

## Rabies

During 2010, two cases of human rabies were reported in the United States: an imported case reported from Louisiana and a domestically acquired case reported from Wisconsin. The Louisiana case originated from Mexico, and is the second imported human rabies case not associated with a canine rabies virus variant; it is also the first imported case of a human infected with the vampire bat rabies virus variant in the United States (1). The human rabies case reported from Wisconsin was associated with a bat (*Perimyotis subflavus*) rabies virus variant (2); in each incident, the patient died (1,2).

Each year, specimens from more than 100,000 animals are submitted for rabies diagnosis in the United States. However, during 2010, specimens for rabies diagnosis declined by more than 12% compared with 2009. The national surveillance network for rabies consists of more than 125 laboratories (state health, state agriculture, and university veterinary pathology laboratories) that perform primary diagnosis. This network is supported by local health departments, animal control services, law enforcement, private veterinarians, and the general public to ensure animals are appropriately captured, euthanized, and submitted for testing. The rabies surveillance system is robust because of the role of rabies diagnosis in animals to determine human postexposure prophylaxis decisions, yet it is susceptible to fluctuations in local policies and budgetary restrictions that affect the collection, submission, and testing of animals. (3)

Despite the overall decline in submissions and reported rabid animals during 2010, some notable epizootics occurred. Most notably a sizeable rabies epizootic in raccoons occurred around Central Park

in New York City, accounting for a 400% increase in the number of reported rabid animals in the city, compared with 2009.

1. CDC. Human rabies from exposure to a vampire bat in Mexico—Louisiana, 2010. MMWR 2011; 60(31):1050–2.
2. CDC. Human rabies—Wisconsin, 2010. MMWR 2011;60(34):1164–6.
3. Blanton JD, Palmer D, Dyer J, Rupprecht CE. Rabies surveillance in the United States during 2010. J Am Vet Med Assoc. 2011;239(6):773–83.

## Salmonellosis

During 2010, as in previous years, the age group with the highest incidence of salmonellosis was children aged <5 years. Salmonellosis is reported most frequently in late summer and early fall; in 2010, this seasonality was evident, with the highest number of reports in August, September, and October. *Salmonella* infections have not declined during the past 10 years. In 2010, the incidence was nearly three times the 2010 national health objective target (6.8 infections per 100,000 population) (1).

In the United States, *Salmonella* causes an estimated 1.2 million illnesses annually, approximately 1 million of which are transmitted by food consumed in the United States (2). *Salmonella* can contaminate several foods, and different serotypes tend to have different animal reservoirs and food sources, making control challenging. During 2010, a national outbreak of *Salmonella* serotype Enteritidis infections led to a massive recall of approximately 500 million eggs (3,4). This occurred just before implementation of new egg regulations, implementation of which could have prevented the outbreak and the associated recall (5). Other multistate outbreaks of *Salmonella* infection were linked to frozen rodents used as reptile feed (serotype I, 4,[5], 12:i:-) and to the consumption of salami products made with contaminated imported black and red pepper (serotype Montevideo), alfalfa sprouts (serotypes Newport and I, 4,[5],12:i:-), and a commercially distributed frozen chicken and rice entrée (serotype Chester).

Public health actions to prevent and control *Salmonella* infections are based on serotype characterization; in 2005, the Council of State and Territorial Epidemiologists adopted a position statement calling for serotype-specific reporting of laboratory-confirmed salmonellosis cases (6). Infections with certain *Salmonella* serotypes are more likely to be invasive and to lead to poor outcomes than infections with other serotypes (7).

1. US Department of Health and Human Services. Healthy People 2010 (midcourse review). Washington, DC: US Department of Health and Human Services; 2000.
2. Scallan E, Hoekstra RM, Angulo FJ, et al. Foodborne illness acquired in the United States—major pathogens. Emerg Infect Dis 2011;17:15.
3. Final multistate outbreak investigation update (December 2, 2010) available at <http://www.cdc.gov/salmonella/enteritidis/index.html>

4. Kuehn BM. *Salmonella* cases traced to egg producers: findings trigger recall of more than 500 million eggs. JAMA. 2010;304(12):1316.
5. Food and Drug Administration, US Department of Agriculture, Food Safety and Inspection Service. Prevention of *Salmonella* Enteritidis in shell eggs during production, storage, and transportation. Final rule. Federal Register 2009;74:33029–101.
6. Council of State and Territorial Epidemiologists. Position statement 05-ID-09. Serotype specific national reporting for salmonellosis. Atlanta, GA: Council of State and Territorial Epidemiologists, 2005. Available at <http://www.cste.org/PS/2005pdf/final2005/05-ID-09final.pdf>.
7. Jones TF, Ingram LA, Cieslak PR, et al. Salmonellosis outcomes differ substantially by serotype. J Infect Dis 2008;198:109–14.

## Shigellosis

*Shigella sonnei* infections continue to account for >75% of shigellosis in the United States (1). Most cases occur among young children, and large day care-associated outbreaks are common and often difficult to control (2). Some cases of shigellosis are acquired during international travel (3,4). In addition to spreading from one person to another, *Shigellae* can be transmitted through contaminated foods, sexual contact, and water used for drinking or recreational purposes (1). Resistance to ampicillin and trimethoprim-sulfamethoxazole among *S. sonnei* strains in the United States remains common (5). Shigellosis does not demonstrate marked seasonality, likely reflecting the importance of person-to-person transmission. Public health actions to prevent and control *Shigella* infections are based on species characterization; in 2005, the Council of State and Territorial Epidemiologists adopted a position statement calling for species-specific reporting of laboratory-confirmed shigellosis cases (6).

1. Gupta A, Polyak CS, Bishop RD, Sobel J, Mintz ED. Laboratory confirmed shigellosis in the United States, 1989–2002: epidemiologic trends and patterns. Clin Infect Dis 2004;38:1372–7.
2. Arvelo W, Hinkle J, Nguyen TA, et al. Transmission risk factors and treatment of pediatric shigellosis during a large daycare center-associated outbreak of multidrug resistant *Shigella sonnei*. Pediatr Infect Dis J 2009;11:976–80.
3. Ram PK, Crump JA, Gupta SK, Miller MA, Mintz, ED. Review article: part II. Analysis of data gaps pertaining to *Shigella* infections in low and medium human development index countries, 1984–2005. Epidemiol Infect 2008;136:577–603.
4. Gupta SK, Strockbine N, Omondi M, Hise K, Fair MA, Mintz ED. Short report: emergence of Shiga toxin 1 genes within *Shigella dysenteriae* Type 4 isolates from travelers returning from the island of Hispaniola. Am J Trop Med Hyg 2007;76:1163–5.
5. CDC. National Antimicrobial Resistance Monitoring System for enteric bacteria (NARMS): Human isolates final report, 2006. Atlanta, GA: US Department of Health and Human Services, CDC; 2009. Available at <http://www.cdc.gov/narms>.
6. Council of State and Territorial Epidemiologists. Position statement 05-ID-08. Serotype specific national reporting for shigellosis. Atlanta, GA: Council of State and Territorial Epidemiologists, 2005. Available at <http://www.cste.org/PS/2005pdf/final2005/05-ID-08final.pdf>.

## Spotted Fever Rickettsiosis (including Rocky Mountain Spotted Fever)

Because serologic tests commonly used to diagnose Rocky Mountain spotted fever (RMSF) exhibit cross-reactivity between spotted fever rickettsial pathogens, some cases reported as RMSF might actually be disease caused by other spotted fever rickettsial infections, and therefore are more correctly referred to as spotted fever rickettsiosis (SFR). The Council of State and Territorial Epidemiologists approved this change at their 2009 annual meeting. The change became effective in January 2010 (1).

During 2010, SFR cases increased 9% over those reported in 2009 (1,815 to 1,985). Cases reported in 2010 were distributed across the United States, reflecting the endemic status of SFR and the widespread ranges of the primary tick vectors (primarily *Dermacentor variabilis* and *Dermacentor andersoni*) responsible for transmission. SFR cases associated with infections caused by *Rhipicephalus sanguineus*, first reported in 2004 (2), continued to be reported from Arizona during 2010.

Although SFR case reports increased more than 400% from 2000 through 2008 (495 to 2,563), reported case totals in 2009 and 2010 have been 29% and 23% lower. Reporting fluctuations might be the result of several factors, including ecological changes influencing vector tick populations and disease transmission, changes in diagnostic approaches that alter detection rates, or changes in surveillance and reporting practices.

1. Council of State and Territorial Epidemiologists. Revision of the surveillance case definitions for Spotted Fever Rickettsiosis (including Rocky Mountain spotted fever). Position statement 09-ID-16. Atlanta, GA: Council of State and Territorial Epidemiologists; 2009. Available at <http://www.cste.org/ps2009/09-ID-16.pdf>.
2. L Demma, Traeger M, Nicholson W, et al. Rocky Mountain spotted fever from an unexpected tick vector in Arizona. *New Engl J Med* 2005;353:587–94.

## Shiga Toxin-Producing *Escherichia coli* (STEC)

In 2010, more Shiga toxin-producing *Escherichia coli* (STEC) infections were reported than in 2009. In the Foodborne Diseases Active Surveillance Network (FoodNet), which conducts active surveillance for STEC infection, the reported incidence of STEC O157 infection decreased and incidence of STEC non-O157 infection increased. Development of post-diarrheal hemolytic uremic syndrome (HUS), a severe complication of STEC infection, is most strongly associated with STEC O157. STEC non-O157 a diverse group that varies in virulence, comprises approximately 50 other serogroups. The national Healthy People 2010 target for STEC O157 infection ( $\leq 1.0$  case per 100,000 population

as measured in FoodNet) was met in both 2009 and 2010; the Healthy People 2020 target is 0.6 cases per 100,000 population (1).

*Escherichia coli* O157:H7 infection has been nationally notifiable since 1994 (2). Shiga toxin-producing *E. coli* (STEC) infection caused by any serotype was made nationally notifiable in 2001, originally using the nomenclature enterohemorrhagic *E. coli* (EHEC) and changing to STEC in 2006 (3). Public health actions to monitor, prevent, and control STEC infections are based on serogroup characterization. Increased use of assays for the detection of Shiga toxins in clinical laboratories in recent years has led to increased reporting of STEC non-O157 infection (4). Stool specimens from patients with community-acquired diarrhea submitted to clinical laboratories should be tested routinely both by culture for STEC O157 and by an assay that detects Shiga toxins (5). Detection of Shiga toxin alone is inadequate for outbreak detection; characterizing STEC isolates by serogroup and by pulsed-field gel electrophoresis pattern is important to detect, investigate, and control outbreaks.

1. CDC. Incidence and trends of infection with pathogens transmitted commonly through food—Foodborne Diseases Active Surveillance Network, 10 U.S. Sites, 1996–2010. *MMWR* 2011;60(22):749–55.
2. Mead PS, Griffin PM. *Escherichia coli* O157:H7. *Lancet* 1998;352:1207–12.
3. Council of State and Territorial Epidemiologists. Revision of the Enterohemorrhagic *Escherichia coli* (EHEC) condition name to Shiga toxin-producing *Escherichia coli* (STEC) and adoption of serotype specific national reporting for STEC. Position statement 05-ID-07. Atlanta, GA: Council of State and Territorial Epidemiologists; 2005. Available at <http://www.cste.org/position%20statements/searchbyyear2005.asp>.
4. Hoefer, D., Hurd, S. Laboratory practices for the identification of Shiga toxin-producing *Escherichia coli* in the United States, FoodNet Sites, 2007. *Foodborne Pathogens and Disease* 8(4): 555–60.
5. CDC. Recommendations for diagnosis of Shiga toxin-producing *Escherichia coli* infections by clinical laboratories, 2009. *MMWR* 2009;58(No.RR12):1–14.

## Congenital Syphilis

Rates of congenital syphilis decreased during 2010 for the second consecutive year. During 2008–2010, rates decreased 16%. This decrease parallels a similar rate decrease in primary and secondary syphilis among women during 2008–2010. However, rates of congenital syphilis among black and Hispanic women were 12.3 and 3.1 times, respectively, the rate among white women during 2010 (1).

1. CDC. Sexually Transmitted Disease Surveillance, 2010. Atlanta: U.S. Department of Health and Human Services; 2011.

## Primary and Secondary Syphilis

Rates of primary and secondary syphilis reached historic lows in 2000, but increased each year during 2001–2009. During 2010, overall rates of primary and secondary syphilis decreased for the first time since 2000 (1). Rates among women increased during 2004–2008 but decreased 27% during 2008–2010. Rates among men, however, continued to increase, but only by 1% during 2009–2010; this was the tenth consecutive year of increasing rates among men. Rates among men were highest among those aged 20–24 years, a marked shift from 2005, when rates were highest among men aged 35–39 years. In particular, rates among black and Hispanic men aged 20–24 years (92.5 cases and 19.8 cases per 100,000 population, respectively) were 15 times and 3 times the rate among white men aged 20–24 years (6.2 cases per 100,000 population), respectively. During 2006–2010, rates among black men aged 20–24 years increased 134%; the magnitude of this rate increase (53 cases per 100,000 population) was the greatest of any sex, age group, or race/ethnicity group (1). Recent analyses indicate that these trends of increasing primary and secondary syphilis occur mostly among young men having sex with men. (1,2)

1. CDC. Sexually Transmitted Disease Surveillance, 2010. Atlanta: U.S. Department of Health and Human Services; 2011.
2. 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 Int Med 2011;155:145–51.

## Trichinellosis

No outbreaks were reported in 2010, that was the first year since 2004 that no trichinellosis outbreaks were reported (1–3). Wild game meat was reported as the source of *Trichinella* infection in two cases; one person consumed wild boar and another consumed both bear and raccoon meat. Pork was the suspected source in four cases; one person reported consuming store-bought pork, one person likely acquired the infection from pork consumed during international travel, and two persons reported consuming pork frequently either at home or at restaurants. No information on source of infection was given for one case.

In May 2011, USDA lowered its recommended cooking temperature of whole cuts of pork from 160°F to 145°F. Ground pork should still be cooked to 160°F (4). Both whole cuts and ground game meat should still be cooked to 160°F (5). National trichinellosis surveillance will continue to monitor for changes in incidence following this new recommendation.

1. Kennedy ED, Hall RL, Montgomery SP, Pyburn DG, Jones JL. Trichinellosis surveillance—United States, 2002–2007. In: Surveillance Summaries, December 4, 2009. MMWR 2009;58 (No. SS-9).

2. CDC. Summary of Notifiable Diseases—United States, 2008. MMWR 2010;57(No. 54).
3. CDC. Summary of Notifiable Diseases—United States, 2009. MMWR 2011;58(No. 53).
4. U.S. Department of Agriculture (USDA), 2011. USDA Revises Recommended Cooking Temperature for All Whole Cuts of Meat, Including Pork, to 145 °F. USDA News & Events. Published May 24, 2011. Accessed November 2, 2011. [http://www.fsis.usda.gov/News\\_Events/NR\\_052411\\_01/index.asp](http://www.fsis.usda.gov/News_Events/NR_052411_01/index.asp).
5. U.S. Department of Agriculture (USDA), 2011. Fact Sheets. Meat preparation: game from farm to table. Washington, D.C. Last updated May 27, 2011. Accessed November 2, 2011.

## Typhoid Fever

Typhoid fever is rare in the United States, and approximately 75% of cases are associated with international travel (1). The risk of infection is highest for international travelers visiting friends and relatives in countries where typhoid fever is endemic, perhaps because they are less likely than other travelers to seek pre-travel vaccination and to observe strict safe water and food practices. The risk also is higher for travelers who visit the most highly endemic areas, such as the Indian subcontinent, even for a short time (2). From 1960 through 1999, a total of 60 outbreaks of typhoid fever were reported in the United States (3). The first domestically acquired outbreak of typhoid fever in over a decade occurred in 2010. Twelve cases were identified, and illness was linked to consumption of imported frozen mamey fruit. Mamey from the same producer in Guatemala also was implicated in the previous domestic typhoid fever outbreak, which occurred in 1999 (4).

1. Lynch MF, Blanton EM, Bulens S, et al. Typhoid fever in the United States, 1999–2006. JAMA 2009;302:898–9.
2. Steinberg EB, Bishop RB, Dempsey AF, et al. Typhoid fever in travelers: who should be targeted for prevention? Clin Infect Dis 2004;39:186–91.
3. Outbreaks of typhoid fever in the United States, 1960–1999. Epidemiol Infect 2003;130:13–21.
4. Katz D, Cruz MA, Trepka MJ, Suarez JA, Fiorella PD, Hammond RM. An outbreak of typhoid fever in Florida associated with an imported frozen fruit. Clin Infect Dis 2002;186:234–9.

## Varicella

Varicella was added to the nationally notifiable diseases list in 2003. Surveillance for varicella is conducted through the National Notifiable Disease Surveillance System (NNDSS). The number of states reporting varicella data to NNDSS has increased over time. In 2010, a total of 37 states and DC reported varicella cases to CDC through NNDSS, including limited varicella-specific data (e.g., vaccination status, disease severity). Information on vaccination status and disease severity was reported for 32% and 11% of the varicella cases, respectively. Sixty percent of the varicella cases that had information on vaccination history and disease severity had received varicella

vaccine and 50% of those reported mild disease (<50 lesions). Collecting standard demographic, clinical, and epidemiologic data, including information on disease severity (e.g., number of lesions, hospitalizations), vaccination status (e.g., whether received varicella-containing vaccine, number of doses), and age of patients, is needed to update varicella vaccination policy.

## Vibriosis

Vibriosis became a nationally notifiable condition in 2007 (1). California, Florida, and Texas report the largest numbers of cases. *Vibrio parahaemolyticus*, *vulnificus*, and *alginolyticus* account for approximately 75% of reported infections. In 2010, a cluster of toxigenic (producing cholera toxin) *V. mimicus* infections was associated with consumption of cooked crayfish (2).

1. Council of State and Territorial Epidemiologists. National reporting for non-cholera *Vibrio* infections (vibriosis). Position statement 06-ID-05. Atlanta, GA: Council of State and Territorial Epidemiologists; 2006.
2. CDC. *Vibrio mimicus* infection from consuming crayfish—Spokane, Washington 2010. MMWR; 59(42):1374.

## Viral Hemorrhagic Fever

Viral hemorrhagic fever infections became reportable to the National Notifiable Diseases Surveillance System for the first time in 2010. These included infections with Ebola virus, Marburg virus, Crimean-Congo hemorrhagic fever virus, Lassa virus, Lujo virus, and the New World arenaviruses (Guaranito, Machupo, Junin, and Sabia). None of these viruses are endemic in the United States. In January 2010, a case of Lassa virus infection was confirmed in a patient who had recently traveled to Liberia, where the virus is endemic (1). The patient developed clinical illness in Liberia and sought medical attention upon return to the United States. No secondary cases were identified. This patient represents the sixth known occurrence of imported Lassa fever in the United States.

1. Amorosa V, MacNeil A, McConnell R, et al. Imported lassa fever, Pennsylvania, USA, 2010. Emerg Infect Dis 2010; 16: 1598–1600.



## PART 1

### Summaries of Notifiable Diseases in the United States, 2010

#### 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, 2010* might not match 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, 2010**

Name	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Month not stated	Total
Arboviral diseases <sup>†</sup>														
California serogroup virus														
neuroinvasive	—	—	1	—	—	3	16	22	16	9	1	—	—	68
nonneuroinvasive	—	—	—	—	—	—	2	4	1	—	—	—	—	7
Eastern equine encephalitis virus	—	—	—	—	—	1	5	4	—	—	—	—	—	10
Powassan virus	—	—	—	1	2	1	1	—	—	1	1	1	—	8
St. Louis encephalitis virus														
neuroinvasive	—	—	—	—	—	1	1	1	4	1	—	—	—	8
nonneuroinvasive	—	—	—	—	—	—	—	—	1	—	1	—	—	2
West Nile virus														
neuroinvasive	1	—	—	—	—	13	79	218	246	65	5	2	—	629
nonneuroinvasive	—	—	1	2	4	17	80	161	106	20	1	—	—	392
Botulism, total	6	6	6	10	9	7	8	11	13	13	5	18	—	112
foodborne	1	—	1	2	1	—	—	—	1	—	—	1	—	7
infant	5	5	5	7	5	5	8	7	9	8	4	12	—	80
other (wound and unspecified)	—	1	—	1	3	2	—	4	3	5	1	5	—	25
Brucellosis	2	8	5	11	15	14	17	10	8	5	4	16	—	115
Chancroid <sup>§</sup>	9	1	2	3	3	—	2	—	1	1	2	—	—	24
<i>Chlamydia trachomatis</i> infection <sup>§</sup>	93,152	98,253	101,265	97,729	128,123	96,251	123,111	102,644	101,825	129,882	98,268	137,390	—	1,307,893
Cholera	—	—	1	1	—	1	3	—	—	—	1	6	—	13
Cryptosporidiosis, total	465	383	419	494	636	590	1,207	1,526	1,252	906	444	622	—	8,944
confirmed	458	379	411	483	616	571	1,150	1,354	1,151	826	413	563	—	8,375
probable	7	4	8	11	20	19	57	172	101	80	31	59	—	569
Cyclosporiasis	16	5	9	6	11	19	58	14	15	14	7	5	—	179
Denque fever	29	20	19	15	26	51	163	168	92	63	25	19	—	690
Denque hemorrhagic fever	—	—	1	—	2	—	1	2	3	—	1	—	—	10
Ehrlichiosis/Anaplasmosis														
<i>Ehrlichia chaffeensis</i>	12	12	16	17	81	110	153	98	55	37	24	125	—	740
<i>Ehrlichia ewingii</i>	—	—	—	—	—	2	7	1	—	—	—	—	—	10
<i>Anaplasma phagocytophilum</i>	9	4	13	38	189	493	460	136	94	136	99	90	—	1,761
Undetermined	—	—	2	3	14	19	26	8	3	7	4	18	—	104
Giardiasis	1,255	1,348	1,406	1,302	1,735	1,340	2,027	2,064	2,023	2,174	1,365	1,772	—	19,811
Gonorrhea <sup>§</sup>	22,916	22,020	22,143	21,759	29,831	23,166	30,356	24,928	25,196	31,325	22,942	32,759	—	309,341
<i>Haemophilus influenzae</i> , invasive disease, all ages serotypes	277	242	256	283	285	256	266	173	198	235	252	428	—	3,151
age<5 yrs														
serotype b	—	3	2	1	2	1	4	2	3	1	1	3	—	23
nonserotype b	23	21	24	20	23	16	13	9	6	9	15	21	—	200
unknown serotype	28	15	16	13	17	7	18	12	15	21	26	35	—	223
Hansen disease (leprosy)	9	8	9	11	7	6	11	6	11	11	6	3	—	98
Hantavirus pulmonary syndrome	1	2	1	—	2	2	3	5	—	2	—	2	—	20
Hemolytic uremic syndrome post-diarrheal	8	10	10	12	18	23	31	29	40	36	24	25	—	266
Hepatitis, virus, acute														
A	102	130	130	107	161	98	143	157	151	170	138	183	—	1,670
B	177	243	244	261	327	252	317	302	278	320	232	421	—	3,374
C	43	67	57	61	86	63	90	60	81	69	83	89	—	849
HIV diagnoses <sup>¶</sup>	3,573	3,414	4,004	3,741	3,441	3,502	3,442	3,290	2,909	2,515	1,611	291	8	35,741
Influenza-associated pediatric mortality**	30	9	4	4	5	2	—	2	—	1	1	3	—	61
Legionellosis	171	143	146	143	248	378	429	368	332	477	218	293	—	3,346
Listeriosis	51	49	55	38	67	83	104	112	77	71	54	60	—	821
Lyme disease, total	875	757	973	1,366	2,577	5,375	7,222	3,416	2,377	2,489	1,317	1,414	—	30,158
confirmed	595	505	650	914	1,855	4,302	5,726	2,553	1,750	1,820	935	956	—	22,561
probable	280	252	323	452	722	1,073	1,496	863	627	669	382	458	—	7,597
Malaria	103	101	72	93	132	132	205	229	190	184	113	219	—	1,773
Measles, total	3	3	7	2	15	4	7	8	3	3	4	4	—	63
indigenous	—	1	5	—	11	1	3	1	—	—	1	—	—	23
imported	3	2	2	2	4	3	4	7	3	3	3	4	—	40
Meningococcal disease., invasive, all serogroups	75	67	81	73	85	57	62	47	36	73	60	117	—	833
serogroup A,C,Y, and W-135	23	25	31	31	32	19	19	8	10	28	19	35	—	280
serogroup B	12	15	12	11	11	13	9	10	6	13	6	17	—	135
serogroup other	1	—	2	1	2	1	1	2	1	—	1	—	—	12
serogroup unknown	39	27	36	30	40	24	33	27	19	32	34	65	—	406
Mumps	278	314	369	180	518	475	161	45	49	66	62	95	—	2,612
Pertussis	774	912	912	1,083	1,716	1,757	2,955	2,927	2,711	3,360	2,694	5,749	—	27,550
Plague	—	—	—	—	—	—	—	1	1	—	—	—	—	2
Psittacosis	1	—	1	2	—	—	—	—	—	—	—	—	—	4
Q fever, total	4	10	10	5	14	13	15	7	13	17	4	19	—	131
acute	1	8	9	4	13	12	14	5	12	11	4	13	—	106
chronic	3	2	1	1	1	1	1	2	1	6	—	6	—	25

See table footnotes on page 25.

TABLE 1. (Continued) Reported cases of notifiable diseases,\* by month — United States, 2010

Name	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Month not stated	Total
Rabies														
animal	180	345	311	398	446	331	484	508	398	376	249	305	—	4,331
human	—	—	—	—	—	—	1	—	—	—	—	1	—	2
Rubella	1	—	—	1	3	—	—	—	—	—	—	—	—	5
Salmonellosis	2,499	1,962	2,088	2,478	3,900	4,531	7,417	6,990	6,403	6,989	4,511	4,656	—	54,424
Shiga toxin-producing <i>E. coli</i> (STEC)	211	122	188	307	381	487	886	705	510	621	449	609	—	5,476
Shigellosis	919	1,075	1,041	832	1,387	1,238	1,359	1,206	1,211	1,489	1,202	1,827	—	14,786
Spotted fever rickettsiosis, total	10	25	25	47	159	251	308	323	213	194	90	340	—	1,985
confirmed	3	4	1	4	15	32	25	17	15	16	1	23	—	156
probable	8	21	25	43	148	220	283	306	197	178	89	317	—	1,835
Streptococcal toxic-shock syndrome	6	17	21	14	27	8	11	4	7	8	7	12	—	142
Streptococcus pneumoniae, invasive disease, drug resistant	1,513	1,590	1,809	1,763	1,752	938	803	466	660	1,328	1,276	2,671	—	16,569
all ages														
age <5 yrs	182	256	257	229	239	155	107	68	95	166	152	280	—	2,186
Syphilis, total, all stages <sup>§,††</sup>	3,177	3,247	3,413	3,613	4,388	3,397	4,456	3,878	3,618	4,771	3,365	4,511	—	45,834
congenital (age <1 yr) <sup>§</sup>	33	38	41	31	22	23	35	38	32	29	28	27	—	377
primary and secondary <sup>§</sup>	910	928	1,021	1,012	1,318	997	1,415	1,213	1,185	1,425	981	1,369	—	13,774
Tetanus	—	1	2	—	4	1	3	3	4	1	2	5	—	26
Toxic-shock syndrome (other than streptococcal)	11	7	7	3	9	5	5	7	5	10	7	6	—	82
Trichinellosis	—	1	—	2	—	—	—	1	1	—	1	1	—	7
Tuberculosis <sup>§§</sup>	536	672	936	945	879	1,031	948	936	938	853	834	1,674	—	11,182
Tularemia	1	3	—	1	17	25	26	19	8	11	6	7	—	124
Typhoid fever	34	38	24	25	29	26	53	63	49	51	25	50	—	467
Vancomycin-intermediate <i>Staphylococcus aureus</i> (VISA)	4	5	9	8	13	4	8	5	3	10	8	14	—	91
Vancomycin-resistant <i>Staphylococcus aureus</i> (VRSA)	—	—	1	—	—	—	—	1	—	—	—	—	—	2
Varicella (Chickenpox)														
morbidity	1,096	1,350	1,544	1,630	2,253	1,070	713	601	990	1,540	1,096	1,544	—	15,427
mortality <sup>¶¶</sup>	—	—	—	1	—	—	1	1	—	—	—	1	—	4
Vibriosis	47	11	11	25	60	71	136	169	118	86	38	74	—	846
Viral hemorrhagic fevers	1	—	—	—	—	—	—	—	—	—	—	—	—	1

\* No cases of anthrax; diphtheria; eastern equine encephalitis virus disease, non-neuroinvasive; poliomylitis, paralytic; poliovirus, infection, nonparalytic; Powassan virus disease, non-neuroinvasive; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; and yellow fever were reported in 2010. Data on hepatitis B, perinatal infection, chronic hepatitis B, and chronic hepatitis C virus infection are not included because they are undergoing data quality review. Data on human immunodeficiency virus (HIV) infections are not included because HIV infection reporting has been implemented on different dates and using different methods than for AIDS case reporting.

† Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of May 9, 2011.

‡ Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of June 8, 2011.

¶ Total number of HIV cases reported to the Division of HIV/AIDS Prevention, NCHHSTP through December 31, 2010.

\*\* Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2010.

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

§§ Totals reported to the Division of TB Elimination, NCHHSTP, as of July 1, 2011.

¶¶ Totals reported to the Division of Viral Diseases, NCIRD, as of June 30, 2011.

TABLE 2. Reported cases of notifiable diseases,\* by geographic division and area — United States, 2010

Area	Total resident population (in thousands)	Arboviral diseases†							
		California serogroup virus		Eastern equine encephalitis virus		Powassan virus		St. Louis encephalitis virus	
		Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Neuro-invasive	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive
United States	307,009	68	7	10	8	8	2	629	392
New England	14,430	—	—	2	—	—	—	14	5
Connecticut	3,518	—	—	—	—	—	—	7	4
Maine	1,318	—	—	—	—	—	—	—	—
Massachusetts	6,594	—	—	1	—	—	—	6	1
New Hampshire	1,325	—	—	—	—	—	—	1	—
Rhode Island	1,053	—	—	1	—	—	—	—	—
Vermont	622	—	—	—	—	—	—	—	—
Mid. Atlantic	40,855	—	1	1	1	—	—	123	63
New Jersey	8,708	—	—	—	—	—	—	15	15
New York (Upstate)	11,150	—	1	1	1	—	—	56	30
New York City	8,392	—	—	—	—	—	—	33	9
Pennsylvania	12,605	—	—	—	—	—	—	19	9
E.N. Central	46,501	22	4	3	4	2	—	80	30
Illinois	12,910	—	—	—	—	—	—	45	16
Indiana	6,423	—	—	—	—	—	—	6	7
Michigan	9,970	2	—	3	—	2	—	25	4
Ohio	11,543	20	4	—	—	—	—	4	1
Wisconsin	5,655	—	—	—	4	—	—	—	2
W.N. Central	20,337	1	—	—	3	1	—	32	75
Iowa	3,008	—	—	—	—	—	—	5	4
Kansas	2,819	—	—	—	—	—	—	4	15
Minnesota	5,266	1	—	—	3	—	—	4	4
Missouri	5,988	—	—	—	—	1	—	3	—
Nebraska	1,797	—	—	—	—	—	—	10	29
North Dakota	647	—	—	—	—	—	—	2	7
South Dakota	812	—	—	—	—	—	—	4	16
S. Atlantic	59,196	34	—	4	—	—	2	38	22
Delaware	885	—	—	—	—	—	—	—	—
District of Columbia	600	—	—	—	—	—	2	3	3
Florida	18,538	—	—	4	—	—	—	9	3
Georgia	9,829	2	—	—	—	—	—	4	9
Maryland	5,699	2	—	—	—	—	—	17	6
North Carolina	9,381	22	—	—	—	—	—	—	—
South Carolina	4,561	—	—	—	—	—	—	1	—
Virginia	7,883	—	—	—	—	—	—	4	1
West Virginia	1,820	8	—	—	—	—	—	—	—
E.S. Central	18,271	10	2	—	—	—	—	8	10
Alabama	4,709	—	—	—	—	—	—	1	2
Kentucky	4,314	1	—	—	—	—	—	2	1
Mississippi	2,952	—	—	—	—	—	—	3	5
Tennessee	6,296	9	2	—	—	—	—	2	2
W.S. Central	35,850	1	—	—	—	5	—	104	20
Arkansas	2,889	—	—	—	—	2	—	6	1
Louisiana	4,492	—	—	—	—	—	—	20	7
Oklahoma	3,687	—	—	—	—	—	—	1	—
Texas	24,782	1	—	—	—	3	—	77	12
Mountain	22,124	—	—	—	—	—	—	157	127
Arizona	6,596	—	—	—	—	—	—	107	60
Colorado	5,025	—	—	—	—	—	—	26	55
Idaho	1,546	—	—	—	—	—	—	—	1
Montana	975	—	—	—	—	—	—	—	2
Nevada	2,643	—	—	—	—	—	—	—	—
New Mexico	2,010	—	—	—	—	—	—	21	4
Utah	2,785	—	—	—	—	—	—	1	1
Wyoming	544	—	—	—	—	—	—	2	4
Pacific	49,445	—	—	—	—	—	—	73	40
Alaska	698	—	—	—	—	—	—	—	—
California	36,962	—	—	—	—	—	—	72	39
Hawaii	1,295	—	—	—	—	—	—	—	—
Oregon	3,826	—	—	—	—	—	—	—	—
Washington	6,664	—	—	—	—	—	—	1	1
Territories									
American Samoa	66	—	—	—	—	—	—	—	—
C.N.M.I.	51	—	—	—	—	—	—	—	—
Guam	178	—	—	—	—	—	—	—	—
Puerto Rico	3,967	—	—	—	—	—	—	—	—
U.S. Virgin Islands	110	—	—	—	—	—	—	—	—

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

\* No cases of anthrax; diphtheria; eastern equine encephalitis virus disease, non-neuroinvasive; poliomyelitis, paralytic; poliovirus infection, nonparalytic; Powassan virus disease, non-neuroinvasive; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive; or yellow fever were reported in 2010. Data on hepatitis B virus, perinatal infection, chronic hepatitis B, and chronic hepatitis C virus infection 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 May 9, 2011.

TABLE 2. (Continued) Reported cases of notifiable diseases,\* by geographic division and area — United States, 2010

Area	Total	Botulism				Brucellosis	Chancroid <sup>§</sup>	<i>Chlamydia trachomatis</i> infection <sup>§¶</sup>
		Foodborne	Infant	Other <sup>†</sup>				
United States	112	7	80	25		115	24	1,307,893
New England	1	—	1	—		5	1	43,514
Connecticut	—	—	—	—		—	—	12,649
Maine	—	—	—	—		2	—	2,586
Massachusetts	1	—	1	—		2	1	21,080
New Hampshire	—	—	—	—		1	—	2,462
Rhode Island	—	—	—	—		—	—	3,480
Vermont	—	—	—	—		—	—	1,257
Mid. Atlantic	22	—	22	—		7	—	173,580
New Jersey	5	—	5	—		3	—	26,142
New York (Upstate)	1	—	1	—		—	—	36,279
New York City	2	—	2	—		4	—	63,641
Pennsylvania	14	—	14	—		—	—	47,518
E.N. Central	3	—	2	1		9	—	207,361
Illinois	—	—	—	—		1	—	60,672
Indiana	—	—	—	—		—	—	22,825
Michigan	—	—	—	—		4	—	49,478
Ohio	3	—	2	1		—	—	51,150
Wisconsin	—	—	—	—		4	—	23,236
W.N. Central	—	—	—	—		10	—	72,196
Iowa	—	—	—	—		—	—	10,542
Kansas	—	—	—	—		4	—	9,601
Minnesota	—	—	—	—		3	—	15,294
Missouri	—	—	—	—		3	—	26,049
Nebraska	—	—	—	—		—	—	5,114
North Dakota	—	—	—	—		—	—	2,404
South Dakota	—	—	—	N		—	—	3,192
S. Atlantic	14	—	13	1		15	3	259,382
Delaware	3	—	3	—		1	—	4,464
District of Columbia	—	—	—	—		1	—	5,589
Florida	1	—	1	—		9	1	74,744
Georgia	1	—	1	—		2	—	45,147
Maryland	5	—	4	1		1	—	26,192
North Carolina	—	—	—	—		1	1	42,048
South Carolina	—	—	—	—		—	1	26,525
Virginia	1	—	1	—		—	—	30,797
West Virginia	3	—	3	—		—	—	3,876
E.S. Central	3	1	1	1		6	2	93,161
Alabama	1	—	1	—		2	1	27,041
Kentucky	1	—	—	1		1	—	16,376
Mississippi	1	1	—	—		2	—	21,417
Tennessee	—	—	—	—		1	1	28,327
W.S. Central	11	—	10	1		21	12	178,749
Arkansas	1	—	—	1		—	—	15,424
Louisiana	—	—	—	—		—	—	29,151
Oklahoma	2	—	2	—		—	—	14,302
Texas	8	—	8	—		21	12	119,872
Mountain	8	2	6	—		12	—	83,773
Arizona	—	—	—	—		9	—	26,861
Colorado	4	1	3	—		1	—	19,447
Idaho	1	—	1	—		—	—	4,208
Montana	1	—	1	—		—	—	3,082
Nevada	—	—	—	—		—	—	9,666
New Mexico	1	1	—	—		2	—	11,706
Utah	1	—	1	—		—	—	6,690
Wyoming	—	—	—	—		—	—	2,113
Pacific	50	4	25	21		30	6	196,177
Alaska	3	3	—	—		—	—	6,019
California	41	1	20	20		26	5	150,443
Hawaii	1	—	1	—		2	—	6,015
Oregon	1	—	1	—		2	—	12,352
Washington	4	—	3	1		—	1	21,348
Territories								
American Samoa	—	—	—	—		—	—	—
C.N.M.I.	—	—	—	—		—	—	—
Guam	—	—	—	—		—	—	899
Puerto Rico	—	—	—	N		—	—	5,960
U.S. Virgin Islands	—	—	—	—		—	—	609

N: Not reportable.

U: Unavailable.

—: No reported cases.

C.N.M.I.: Commonwealth of Northern Mariana Islands.

† Includes cases reported as wound and unspecified botulism.

§ Totals reported to the Division of STD Prevention, NCHHSTP, as of June 8, 2011.

¶ Name change to coincide with the National Surveillance Case Definition.

TABLE 2. (Continued) Reported cases of notifiable diseases,\* by geographic division and area — United States, 2010

Area	Cholera	Cryptosporidiosis			Cyclosporiasis	Dengue Virus Infection†	
		Total	Confirmed	Probable		Dengue fever	Dengue hemorrhagic fever
United States	13	8,944	8,375	569	179	690	10
New England	—	490	470	20	27	10	—
Connecticut	—	77	77	—	11	—	—
Maine	—	93	74	19	N	6	—
Massachusetts	—	173	173	—	15	—	—
New Hampshire	—	59	58	1	—	—	—
Rhode Island	—	18	18	—	1	1	—
Vermont	—	70	70	—	N	3	—
Mid. Atlantic	1	875	867	8	42	224	5
New Jersey	—	52	52	—	11	29	—
New York (Upstate)	—	228	224	4	13	32	2
New York City	1	107	107	—	18	141	3
Pennsylvania	—	488	484	4	N	22	—
E.N. Central	3	2,403	2,353	50	10	69	1
Illinois	—	334	303	31	2	23	—
Indiana	—	285	285	—	—	14	—
Michigan	—	320	319	1	6	9	—
Ohio	3	476	458	18	—	16	—
Wisconsin	—	988	988	—	2	7	1
W.N. Central	—	1,854	1,564	290	1	34	1
Iowa	—	396	345	51	—	2	—
Kansas	—	107	107	—	—	4	—
Minnesota	—	397	397	—	1	14	—
Missouri	—	548	358	190	—	6	—
Nebraska	—	264	233	31	—	7	—
North Dakota	—	35	35	—	N	1	—
South Dakota	—	107	89	18	—	—	1
S. Atlantic	7	1,080	1,021	59	86	238	2
Delaware	—	9	9	—	—	—	—
District of Columbia	—	8	8	—	6	—	—
Florida	4	408	386	22	63	189	2
Georgia	1	266	266	—	9	12	—
Maryland	—	42	37	5	4	—	—
North Carolina	1	94	93	1	1	8	—
South Carolina	—	123	98	25	2	13	—
Virginia	1	109	104	5	1	14	—
West Virginia	—	21	20	1	—	2	—
E.S. Central	—	348	328	20	1	7	—
Alabama	—	184	164	20	N	4	—
Kentucky	—	85	85	—	N	2	—
Mississippi	—	24	24	—	N	—	—
Tennessee	—	55	55	—	1	1	—
W.S. Central	2	578	514	64	10	28	1
Arkansas	—	33	32	1	1	—	1
Louisiana	—	66	66	—	—	4	—
Oklahoma	—	120	90	30	—	5	—
Texas	2	359	326	33	9	19	—
Mountain	—	608	588	20	—	24	—
Arizona	—	40	38	2	—	12	—
Colorado	—	134	133	1	—	—	—
Idaho	—	110	102	8	N	3	—
Montana	—	49	49	—	N	4	—
Nevada	—	38	34	4	N	4	—
New Mexico	—	137	135	2	—	1	—
Utah	—	72	72	—	—	—	—
Wyoming	—	28	25	3	—	—	—
Pacific	—	708	670	38	2	56	—
Alaska	—	6	6	—	—	1	—
California	—	381	381	—	—	36	—
Hawaii	—	1	1	—	—	—	—
Oregon	—	218	188	30	—	—	—
Washington	—	102	94	8	2	19	—
Territories	—	—	—	—	—	—	—
American Samoa	—	N	N	N	N	—	—
C.N.M.I.	—	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—
Puerto Rico	—	N	N	N	N	10,674	237
U.S. Virgin Islands	—	—	—	—	—	—	—

N: Not reportable. U: Unavailable. —: No reported cases.

C.N.M.I.: Commonwealth of Northern Mariana Islands.

† 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 Division of Vector-Borne Diseases (DVBD), National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) (ArboNET Surveillance), as of May 9, 2011.

TABLE 2. (Continued) Reported cases of notifiable diseases,\* by geographic division and area — United States, 2010

Area	Ehrlichiosis/Anaplasmosis					
	<i>Ehrlichia chaffeensis</i>	<i>Ehrlichia ewingii</i>	<i>Anaplasma phagocytophilum</i>	Undetermined	Giardiasis	Gonorrhea†
<b>United States</b>	740	10	1,761	104	19,811	309,341
New England	8	—	122	2	1,663	5,714
Connecticut	—	—	43	—	291	2,569
Maine	4	—	17	—	223	162
Massachusetts	—	—	—	—	725	2,483
New Hampshire	3	—	20	2	156	151
Rhode Island	1	—	40	—	83	291
Vermont	—	—	2	—	185	58
<b>Mid. Atlantic</b>	92	—	293	17	3,422	37,075
New Jersey	52	—	77	1	484	5,872
New York (Upstate)	33	—	204	13	1,230	5,916
New York City	5	—	11	—	922	12,404
Pennsylvania	2	—	1	3	786	12,883
<b>E.N. Central</b>	44	—	512	46	3,286	57,487
Illinois	16	—	9	3	691	15,777
Indiana	—	—	—	15	398	6,496
Michigan	2	—	4	—	697	13,627
Ohio	7	—	2	—	872	16,496
Wisconsin	19	—	497	28	628	5,091
<b>W.N. Central</b>	132	8	733	21	2,123	15,024
Iowa	N	N	N	N	284	1,803
Kansas	6	—	1	—	208	2,084
Minnesota	12	—	720	11	843	2,119
Missouri	112	8	12	10	426	7,159
Nebraska	2	N	—	—	222	1,187
North Dakota	N	N	N	N	37	204
South Dakota	—	—	—	—	103	468
<b>S. Atlantic</b>	254	1	64	6	4,004	76,604
Delaware	17	1	4	—	35	1,010
District of Columbia	N	N	N	N	56	2,104
Florida	10	—	3	—	2,139	20,163
Georgia	20	—	1	1	796	15,852
Maryland	22	—	15	2	262	7,413
North Carolina	99	—	28	—	N	14,111
South Carolina	5	—	1	—	147	7,970
Virginia	78	—	12	3	512	7,402
West Virginia	3	—	—	—	57	579
<b>E.S. Central</b>	88	1	20	9	220	25,594
Alabama	12	—	7	N	220	7,933
Kentucky	16	—	—	1	N	4,345
Mississippi	3	—	2	1	N	6,195
Tennessee	57	1	11	7	N	7,121
<b>W.S. Central</b>	120	—	17	1	397	49,838
Arkansas	19	—	5	—	138	4,769
Louisiana	1	—	—	—	197	8,912
Oklahoma	97	—	9	—	62	4,369
Texas	3	—	3	1	N	31,788
<b>Mountain</b>	—	—	—	—	1,764	9,592
Arizona	—	—	—	—	167	3,249
Colorado	N	N	N	N	691	2,787
Idaho	N	N	N	N	215	147
Montana	N	N	N	N	109	102
Nevada	N	—	N	N	107	1,728
New Mexico	N	N	N	N	108	1,229
Utah	—	—	—	—	313	310
Wyoming	—	—	—	—	54	40
<b>Pacific</b>	2	—	—	2	2,932	32,413
Alaska	N	N	N	N	98	1,273
California	2	—	—	2	1,773	26,441
Hawaii	N	N	N	N	59	759
Oregon	—	—	—	—	481	1,076
Washington	—	—	—	—	521	2,864
<b>Territories</b>						
American Samoa	N	N	N	N	—	—
C.N.M.I.	—	—	—	—	—	—
Guam	N	N	N	N	3	97
Puerto Rico	N	N	N	N	93	312
U.S. Virgin Islands	—	—	—	—	—	151

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

† Totals reported to the Division of STD Prevention, NCHHSTP, as of June 8, 2011.

TABLE 2. (Continued) Reported cases of notifiable diseases,\* by geographic division and area — United States, 2010

Area	<i>Haemophilus influenzae</i> , invasive disease				Hansen disease (leprosy)	Hantavirus pulmonary syndrome	Hemolytic uremic syndrome, postdiarrheal			
	All ages, serotypes	Age <5 yrs								
		Serotype b	Nonserotype b	Unknown serotype						
United States	3,151	23	200	223	98	20	266			
New England	201	1	13	5	5	—	9			
Connecticut	49	—	1	—	—	N	3			
Maine	13	—	—	—	—	—	1			
Massachusetts	97	—	7	1	4	—	2			
New Hampshire	12	1	1	1	—	—	3			
Rhode Island	15	—	1	1	1	—	—			
Vermont	15	—	3	2	N	—	—			
Mid. Atlantic	603	3	21	43	5	—	19			
New Jersey	111	—	—	5	1	—	2			
New York (Upstate)	170	2	18	3	N	—	12			
New York City	99	—	—	18	3	—	5			
Pennsylvania	223	1	3	17	1	—	N			
E.N. Central	515	3	36	31	1	—	31			
Illinois	173	—	—	22	—	—	—			
Indiana	110	—	16	—	1	—	7			
Michigan	37	—	3	3	—	—	14			
Ohio	121	3	10	5	—	—	2			
Wisconsin	74	—	7	1	—	—	8			
W.N. Central	233	—	9	21	—	1	33			
Iowa	1	—	—	—	—	—	5			
Kansas	24	—	—	6	—	1	2			
Minnesota	81	—	9	—	—	—	—			
Missouri	87	—	—	10	—	—	18			
Nebraska	27	—	—	4	—	—	6			
North Dakota	13	—	—	1	N	—	—			
South Dakota	—	—	—	—	—	—	2			
S. Atlantic	779	6	46	45	16	—	32			
Delaware	6	—	—	—	—	—	—			
District of Columbia	6	—	—	—	—	—	—			
Florida	191	3	14	15	12	—	8			
Georgia	169	—	15	10	1	—	6			
Maryland	71	1	3	2	1	—	8			
North Carolina	128	—	—	13	1	—	7			
South Carolina	84	—	2	3	—	—	—			
Virginia	85	2	10	1	1	—	2			
West Virginia	39	—	2	1	N	—	1			
E.S. Central	185	—	18	8	1	—	22			
Alabama	35	—	7	—	—	N	5			
Kentucky	39	—	—	8	—	—	N			
Mississippi	15	—	1	—	1	—	—			
Tennessee	96	—	10	—	—	—	17			
W.S. Central	167	2	15	9	28	1	36			
Arkansas	22	—	1	3	2	—	6			
Louisiana	30	—	—	6	—	—	—			
Oklahoma	103	—	14	—	N	—	11			
Texas	12	2	—	—	26	1	19			
Mountain	313	8	32	14	2	10	30			
Arizona	115	2	16	—	1	—	2			
Colorado	82	2	8	2	—	5	12			
Idaho	19	—	2	3	—	2	3			
Montana	2	—	—	1	—	—	2			
Nevada	10	—	—	—	—	1	1			
New Mexico	46	3	3	6	—	2	3			
Utah	33	1	3	1	1	—	7			
Wyoming	6	—	—	1	—	—	—			
Pacific	155	—	10	47	40	8	54			
Alaska	27	—	—	12	—	N	N			
California	28	—	—	24	16	3	39			
Hawaii	21	—	—	5	24	—	—			
Oregon	69	—	—	6	N	3	14			
Washington	10	—	10	—	N	2	1			
Territories										
American Samoa	—	—	—	—	—	N	N			
C.N.M.I.	—	—	—	—	—	—	—			
Guam	—	—	—	—	10	N	—			
Puerto Rico	1	—	—	—	—	—	N			
U.S. Virgin Islands	—	—	—	—	—	—	—			

N: Not reportable.

U: Unavailable.

—: No reported cases.

C.N.M.I.: Commonwealth of Northern Mariana Islands.

TABLE 2. (Continued) Reported cases of notifiable diseases,\* by geographic division and area — United States, 2010

Area	Hepatitis, viral, acute			HIV diagnoses <sup>†</sup>	Influenza-associated pediatric mortality <sup>§</sup>	Legionellosis	Listeriosis
	A	B	C				
United States	1,670	3,374	849	35,741	61	3,346	821
New England	95	55	54	1,023	1	274	54
Connecticut	29	22	37	356	1	56	18
Maine	7	13	2	55	—	12	1
Massachusetts	48	13	13	446	—	131	26
New Hampshire	2	5	N	51	—	23	2
Rhode Island	9	U	U	108	—	43	3
Vermont	—	2	2	7	—	9	4
Mid. Atlantic	276	288	104	6,011	16	939	182
New Jersey	76	77	28	941	—	151	39
New York (Upstate)	59	60	47	1,461	10	300	52
New York City	88	79	3	2,232	4	164	45
Pennsylvania	53	72	26	1,377	2	324	46
E.N. Central	203	481	93	3,299	5	679	119
Illinois	48	135	1	1,068	3	149	26
Indiana	12	75	27	413	—	56	15
Michigan	73	122	45	650	1	179	31
Ohio	47	95	10	913	—	232	29
Wisconsin	23	54	10	255	1	63	18
W.N. Central	102	130	26	1,225	—	128	30
Iowa	11	15	—	108	—	15	3
Kansas	14	11	2	110	—	12	1
Minnesota	37	23	16	336	—	40	8
Missouri	21	67	6	533	—	37	12
Nebraska	14	12	2	95	—	9	2
North Dakota	4	—	—	11	—	6	1
South Dakota	1	2	—	32	—	9	3
S. Atlantic	351	913	188	11,054	8	562	144
Delaware	7	24	U	122	—	18	4
District of Columbia	1	3	2	638	—	19	1
Florida	139	297	56	4,862	2	172	54
Georgia	40	165	32	1,170	5	65	20
Maryland	23	67	24	1,195	1	113	11
North Carolina	48	113	39	1,324	—	64	22
South Carolina	26	59	1	750	—	16	13
Virginia	52	97	13	918	—	79	13
West Virginia	15	88	21	75	—	16	6
E.S. Central	48	387	162	2,152	3	136	34
Alabama	8	68	7	570	—	22	6
Kentucky	26	136	109	270	—	30	9
Mississippi	2	33	U	486	2	12	5
Tennessee	12	150	46	826	1	72	14
W.S. Central	158	630	81	4,845	14	181	84
Arkansas	2	66	1	202	—	19	4
Louisiana	11	55	4	1,164	2	11	18
Oklahoma	6	115	41	247	1	15	9
Texas	139	394	35	3,232	11	136	53
Mountain	144	135	66	1,568	7	173	31
Arizona	61	26	U	544	2	65	10
Colorado	36	46	20	408	4	31	9
Idaho	8	6	11	36	—	8	—
Montana	4	—	4	12	—	5	1
Nevada	14	41	7	344	—	20	1
New Mexico	5	5	14	135	1	9	6
Utah	12	8	10	68	—	27	3
Wyoming	4	3	—	21	—	8	1
Pacific	293	355	75	4,564	7	274	143
Alaska	5	5	U	35	—	2	1
California	242	252	31	3,786	6	224	94
Hawaii	8	6	U	51	—	2	8
Oregon	17	42	19	198	1	16	16
Washington	21	50	25	494	—	30	24
Territories	—	—	—	—	—	N	N
American Samoa	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—
Guam	4	77	61	—	—	1	—
Puerto Rico	20	29	N	479	—	2	—
U.S. Virgin Islands	—	—	—	16	—	—	—

N: Not reportable.

U: Unavailable.

—: No reported cases.

C.N.M.I.: Commonwealth of Northern Mariana Islands.

† Data on human immunodeficiency virus (HIV) diagnoses include persons with a diagnosis of HIV infection regardless of stage of disease (i.e., AIDS status) at diagnosis. Total number of HIV diagnoses case counts was reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) through December 31, 2010.

§ Totals reported to the Division of Influenza, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2010.

**TABLE 2. (Continued) Reported cases of notifiable diseases,\* by geographic division and area — United States, 2010**

Area	Lyme disease				Measles		
	Total	Confirmed	Probable	Malaria	Total	Indigenous	Imported†
United States	30,158	22,561	7,597	1,773	63	23	40
New England	8,958	6,119	2,839	124	4	2	2
Connecticut	3,068	1,964	1,104	22	1	1	—
Maine	751	559	192	6	—	—	—
Massachusetts	3,263	2,380	883	73	3	1	2
New Hampshire	1,339	830	509	5	—	—	—
Rhode Island	181	115	66	15	—	—	—
Vermont	356	271	85	3	—	—	—
Mid. Atlantic	10,942	9,003	1,939	519	10	—	10
New Jersey	3,712	3,320	392	106	—	—	—
New York (Upstate)	2,698	1,972	726	81	2	—	2
New York City	727	413	314	271	6	—	6
Pennsylvania	3,805	3,298	507	61	2	—	2
E.N. Central	3,840	2,799	1,041	164	2	1	1
Illinois	135	135	—	60	—	—	—
Indiana	78	62	16	15	—	—	—
Michigan	95	76	19	31	—	—	—
Ohio	44	21	23	43	2	1	1
Wisconsin	3,488	2,505	983	15	—	—	—
W.N. Central	2,101	1,401	700	115	6	5	1
Iowa	85	68	17	14	—	—	—
Kansas	10	7	3	13	—	—	—
Minnesota	1,960	1,293	667	48	3	2	1
Missouri	4	4	—	21	3	3	—
Nebraska	8	7	1	15	—	—	—
North Dakota	33	21	12	1	—	—	—
South Dakota	1	1	—	3	—	—	—
S. Atlantic	3,910	2,998	912	452	5	1	4
Delaware	656	656	—	2	—	—	—
District of Columbia	42	34	8	13	—	—	—
Florida	84	56	28	139	1	—	1
Georgia	10	10	—	71	1	—	1
Maryland	1,617	1,163	454	99	—	—	—
North Carolina	82	21	61	52	—	—	—
South Carolina	29	19	10	6	—	—	—
Virginia	1,245	911	334	67	3	1	2
West Virginia	145	128	17	3	—	—	—
E.S. Central	43	12	31	31	1	—	1
Alabama	2	1	1	9	—	—	—
Kentucky	5	5	—	8	1	—	1
Mississippi	—	—	—	2	—	—	—
Tennessee	36	6	30	12	—	—	—
W.S. Central	145	57	88	113	—	—	—
Arkansas	—	—	—	4	—	—	—
Louisiana	3	2	1	5	—	—	—
Oklahoma	—	—	—	6	—	—	—
Texas	142	55	87	98	—	—	—
Mountain	28	20	8	67	3	1	2
Arizona	2	2	—	28	1	—	1
Colorado	3	1	2	21	—	—	—
Idaho	9	6	3	5	—	—	—
Montana	4	3	1	3	—	—	—
Nevada	2	2	—	6	1	—	1
New Mexico	5	3	2	1	—	—	—
Utah	3	3	—	3	—	—	—
Wyoming	—	—	—	—	1	1	—
Pacific	191	152	39	188	32	13	19
Alaska	7	7	—	5	—	—	—
California	129	126	3	126	27	9	18
Hawaii	N	N	N	4	4	4	—
Oregon	39	7	32	14	—	—	—
Washington	16	12	4	39	1	—	1
Territories							
American Samoa	N	N	N	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—
Puerto Rico	N	N	N	5	—	—	—
U.S. Virgin Islands	—	—	—	—	—	—	—

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

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

TABLE 2. (Continued) Reported cases of notifiable diseases,\* by geographic division and area — United States, 2010

Area	Meningococcal disease					Mumps	Novel influenza A virus infections†
	All serogroups	Serogroup A, C, Y, and W-135	Serogroup B	Other serogroup	Unknown serogroup		
United States	833	280	135	12	406	2,612	4
New England	21	8	9	—	4	25	—
Connecticut	3	2	—	—	1	11	—
Maine	5	1	3	—	1	2	—
Massachusetts	7	3	3	—	1	9	—
New Hampshire	—	—	—	—	—	3	—
Rhode Island	1	—	1	—	—	—	—
Vermont	5	2	2	—	1	—	—
Mid. Atlantic	83	10	8	—	65	2,147	1
New Jersey	23	—	—	—	23	354	—
New York (Upstate)	14	7	6	—	1	663	—
New York City	20	—	—	—	20	1,061	—
Pennsylvania	26	3	2	—	21	69	1
E.N. Central	137	56	34	1	46	84	1
Illinois	24	—	—	—	24	31	—
Indiana	33	23	8	—	2	4	—
Michigan	24	8	6	—	10	20	—
Ohio	35	14	12	—	9	24	—
Wisconsin	21	11	8	1	1	5	1
W.N. Central	58	20	7	1	30	86	2
Iowa	10	7	2	1	—	38	—
Kansas	8	1	4	—	3	5	—
Minnesota	9	8	1	—	—	8	2
Missouri	23	—	—	—	23	10	—
Nebraska	6	3	—	—	3	23	—
North Dakota	2	1	—	—	1	—	—
South Dakota	—	—	—	—	—	2	—
S. Atlantic	134	71	27	5	31	59	—
Delaware	2	—	—	—	2	—	—
District of Columbia	1	—	—	—	1	3	—
Florida	60	33	9	2	16	10	—
Georgia	12	5	5	—	2	5	—
Maryland	9	5	3	1	—	12	—
North Carolina	14	11	1	1	1	10	—
South Carolina	12	9	2	1	—	4	—
Virginia	21	6	6	—	9	13	—
West Virginia	3	2	1	—	—	2	—
E.S. Central	45	14	8	1	22	10	—
Alabama	9	6	3	—	—	6	—
Kentucky	18	—	—	—	18	1	—
Mississippi	5	1	2	1	1	—	—
Tennessee	13	7	3	—	3	3	—
W.S. Central	100	40	24	2	34	135	—
Arkansas	6	4	2	—	—	5	—
Louisiana	17	—	—	—	17	8	—
Oklahoma	18	12	3	2	1	1	—
Texas	59	24	19	—	16	121	—
Mountain	58	40	11	2	5	21	—
Arizona	14	8	5	—	1	5	—
Colorado	21	18	2	1	—	8	—
Idaho	5	4	1	—	—	1	—
Montana	2	2	—	—	—	—	—
Nevada	8	3	2	1	2	1	—
New Mexico	4	3	—	—	1	2	—
Utah	1	1	—	—	—	3	—
Wyoming	3	1	1	—	1	1	—
Pacific	197	21	7	—	169	45	—
Alaska	1	—	—	—	1	1	—
California	131	—	—	—	131	29	—
Hawaii	1	1	—	—	—	5	—
Oregon	33	—	—	—	33	3	—
Washington	31	20	7	—	4	7	—
Territories							
American Samoa	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—
Guam	—	—	—	—	—	502	—
Puerto Rico	2	—	—	—	2	1	—
U.S. Virgin Islands	—	—	—	—	—	—	—

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

† Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2010.

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TABLE 2. (Continued) Reported cases of notifiable diseases,\* by geographic division and area — United States, 2010

Area	Pertussis	Plague	Psittacosis	Q Fever			Rabies	
				Total	Acute	Chronic	Animal	Human
United States	27,550	2	4	131	106	25	4,331	2
New England	529	—	—	—	—	—	306	—
Connecticut	107	—	N	—	—	—	145	—
Maine	53	—	—	—	—	—	62	—
Massachusetts	284	—	—	—	—	—	—	—
New Hampshire	23	—	—	N	N	N	17	—
Rhode Island	44	—	—	—	—	—	29	—
Vermont	18	—	—	N	N	N	53	—
Mid. Atlantic	1,980	—	1	21	15	6	1,051	—
New Jersey	169	—	—	8	6	2	—	—
New York (Upstate)	721	—	—	6	5	1	498	—
New York City	111	—	—	3	1	2	145	—
Pennsylvania	979	—	1	4	3	1	408	—
E.N. Central	5,758	—	1	17	11	6	234	1
Illinois	1,057	—	—	6	4	2	115	—
Indiana	747	—	—	—	—	—	—	—
Michigan	1,564	—	—	5	3	2	72	—
Ohio	1,807	—	1	1	—	—	47	—
Wisconsin	583	—	—	5	4	1	N	1
W.N. Central	2,924	—	—	16	11	5	283	—
Iowa	697	—	—	N	N	N	27	—
Kansas	182	—	—	4	4	—	60	—
Minnesota	1,140	—	—	1	1	—	59	—
Missouri	604	—	—	3	2	1	63	—
Nebraska	214	—	—	3	—	3	52	—
North Dakota	58	—	—	1	—	1	22	—
South Dakota	29	—	—	4	4	—	—	—
S. Atlantic	2,030	—	—	9	8	1	1,134	—
Delaware	15	—	—	—	—	—	—	—
District of Columbia	16	—	—	1	1	—	—	—
Florida	328	—	—	2	2	—	121	—
Georgia	247	—	—	2	2	—	—	—
Maryland	139	—	—	1	1	—	362	—
North Carolina	343	—	—	1	1	—	—	—
South Carolina	392	—	—	—	—	—	N	—
Virginia	384	—	—	2	1	1	573	—
West Virginia	166	—	—	—	—	—	78	—
E.S. Central	848	—	—	2	2	—	170	—
Alabama	206	N	—	—	—	—	69	—
Kentucky	303	—	—	—	—	—	21	—
Mississippi	106	—	—	—	—	—	—	—
Tennessee	233	—	—	2	2	—	80	—
W.S. Central	3,341	—	—	16	14	2	869	1
Arkansas	245	—	—	4	4	—	34	—
Louisiana	50	—	—	—	—	—	—	1
Oklahoma	198	—	—	—	—	—	62	—
Texas	2,848	—	N	12	10	2	773	—
Mountain	1,940	—	—	17	14	3	66	—
Arizona	546	—	—	4	3	1	N	—
Colorado	540	—	—	4	4	—	—	—
Idaho	187	—	—	—	—	—	11	—
Montana	121	—	—	1	—	1	N	—
Nevada	38	—	—	3	3	—	8	—
New Mexico	144	—	—	4	4	—	13	—
Utah	352	—	—	—	—	—	10	—
Wyoming	12	—	—	1	—	1	24	—
Pacific	8,200	2	2	33	31	2	218	—
Alaska	45	—	—	—	—	—	12	—
California	7,195	—	2	26	26	—	175	—
Hawaii	67	—	—	—	—	—	—	—
Oregon	286	2	—	4	4	—	17	—
Washington	607	—	—	3	1	2	14	—
Territories								
American Samoa	—	—	N	N	N	N	N	N
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	3	—	—	—	—	N	—	—
Puerto Rico	4	—	N	—	—	—	41	—
U.S. Virgin Islands	—	—	—	—	—	—	—	—

N: Not reportable.

U: Unavailable.

—: No reported cases.

C.N.M.I.: Commonwealth of Northern Mariana Islands.

**TABLE 2. (Continued) Reported cases of notifiable diseases,\* by geographic division and area — United States, 2010**

Area	Rubella	Salmonellosis	Shiga toxin-producing <i>E. coli</i> (STEC) <sup>†</sup>	Shigellosis	Spotted Fever Rickettsiosis <sup>§</sup>		
					Total	Confirmed	Probable
United States	5	54,424	5,476	14,786	1,985	156	1,835
New England	—	2,341	210	319	5	—	5
Connecticut	—	491	60	69	—	—	—
Maine	—	133	21	8	2	—	2
Massachusetts	—	1,284	83	211	—	—	—
New Hampshire	—	177	21	14	1	—	1
Rhode Island	—	175	3	16	2	—	2
Vermont	—	81	22	1	—	—	—
Mid. Atlantic	—	5,853	579	1,684	106	2	104
New Jersey	—	1,203	128	372	61	1	60
New York (Upstate)	—	1,448	211	235	19	1	18
New York City	—	1,309	79	300	11	—	11
Pennsylvania	—	1,893	161	777	15	—	15
E.N. Central	—	5,850	812	1,548	88	4	78
Illinois	—	1,982	156	841	37	3	34
Indiana	—	770	143	64	27	1	20
Michigan	—	933	155	260	2	—	2
Ohio	—	1,311	137	309	15	—	15
Wisconsin	—	854	221	74	7	—	7
W.N. Central	—	3,008	911	2,070	291	13	291
Iowa	—	530	170	57	5	—	5
Kansas	—	435	77	302	—	—	13
Minnesota	—	711	290	66	2	—	2
Missouri	—	843	236	1,582	278	10	268
Nebraska	—	244	82	56	5	3	2
North Dakota	—	59	21	—	1	—	1
South Dakota	—	186	35	7	—	—	—
S. Atlantic	2	15,891	759	2,784	594	82	512
Delaware	—	177	6	39	22	1	21
District of Columbia	—	94	9	35	1	1	—
Florida	—	6,282	239	1,212	14	3	11
Georgia	—	2,785	102	789	57	57	—
Maryland	—	1,089	107	130	49	—	49
North Carolina	—	2,345	97	253	286	15	271
South Carolina	—	1,715	24	70	20	1	19
Virginia	2	1,210	149	145	145	4	141
West Virginia	—	194	26	111	—	—	—
E.S. Central	—	3,969	276	790	425	20	404
Alabama	—	1,064	56	239	83	5	78
Kentucky	—	587	70	221	6	6	—
Mississippi	—	1,218	30	60	26	1	25
Tennessee	—	1,100	120	270	310	8	301
W.S. Central	—	7,838	524	3,412	435	15	420
Arkansas	—	794	48	82	162	4	158
Louisiana	—	1,361	21	288	3	—	3
Oklahoma	—	754	104	416	236	8	228
Texas	—	4,929	351	2,626	34	3	31
Mountain	1	2,898	676	858	32	12	20
Arizona	1	996	100	465	17	9	8
Colorado	—	579	219	96	2	1	1
Idaho	—	168	112	23	5	—	5
Montana	—	95	42	9	3	2	1
Nevada	—	307	41	49	—	—	—
New Mexico	—	339	49	166	1	—	1
Utah	—	350	94	50	3	—	3
Wyoming	—	64	19	—	1	—	1
Pacific	2	6,776	729	1,321	9	8	1
Alaska	—	81	2	2	N	—	—
California	1	5,073	354	1,098	7	7	—
Hawaii	—	331	29	50	N	N	N
Oregon	—	511	118	59	1	—	1
Washington	1	780	226	112	1	1	—
Territories	—	—	—	—	—	—	—
American Samoa	—	2	—	4	N	N	N
C.N.M.I.	—	—	—	—	—	—	—
Guam	—	11	—	5	N	N	N
Puerto Rico	—	622	—	7	N	N	N
U.S. Virgin Islands	—	—	—	—	—	—	—

N: Not reportable. U: Unavailable. —: No reported cases.

C.N.M.I.: Commonwealth of Northern Mariana Islands.

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

§ Total case count includes 7 unknown case status reports. Revision of national surveillance case definition.

TABLE 2. (Continued) Reported cases of notifiable diseases,\* by geographic division and area — United States, 2010

Area	Streptococcal toxic-shock syndrome	Streptococcus pneumoniae, invasive disease†		Syphilis§			Tetanus	Toxic-shock syndrome
		All ages	Age <5 yrs	All stages	Congenital (age <1 yr)	Primary and secondary		
United States	142	16,569	2,186	45,834	377	13,774	26	82
New England	10	942	107	1,040	3	482	—	1
Connecticut	N	389	30	234	2	98	—	N
Maine	N	130	10	41	—	32	—	N
Massachusetts	4	71	47	639	1	285	—	—
New Hampshire	1	145	6	43	—	22	—	1
Rhode Island	1	123	8	79	—	41	—	—
Vermont	4	84	6	4	—	4	—	—
Mid. Atlantic	29	1,701	262	6,813	22	1,711	3	12
New Jersey	8	754	64	947	3	244	1	2
New York (Upstate)	15	155	120	724	16	146	1	5
New York City	—	792	78	4,135	—	952	—	—
Pennsylvania	6	N	N	1,007	3	369	1	5
E.N. Central	26	3,299	375	4,590	40	1,895	7	21
Illinois	—	N	100	2,236	27	908	2	3
Indiana	11	781	55	412	—	175	—	2
Michigan	2	744	82	680	2	235	2	11
Ohio	12	1,227	100	1,076	10	528	1	4
Wisconsin	1	547	38	186	1	49	2	1
W.N. Central	10	875	157	1,091	2	358	3	5
Iowa	—	N	N	68	—	19	1	1
Kansas	—	N	N	110	—	19	—	—
Minnesota	6	649	87	350	—	149	—	—
Missouri	4	N	40	512	2	152	2	2
Nebraska	—	139	16	33	—	12	—	2
North Dakota	—	87	3	6	—	3	—	—
South Dakota	N	N	11	12	—	4	—	—
S. Atlantic	24	4,282	577	10,608	73	3,286	7	12
Delaware	—	50	2	44	2	9	—	—
District of Columbia	—	78	9	495	1	134	—	—
Florida	N	1,509	204	4,069	19	1,184	5	N
Georgia	—	1,461	162	2,347	18	795	—	5
Maryland	N	526	53	1,015	22	328	1	N
North Carolina	10	N	N	1,233	10	396	1	2
South Carolina	—	519	56	579	—	155	—	3
Virginia	10	N	59	800	1	279	—	2
West Virginia	4	139	32	26	—	6	—	—
E.S. Central	14	1,289	126	3,108	29	904	1	5
Alabama	N	N	N	781	9	260	—	2
Kentucky	14	205	12	311	—	139	1	—
Mississippi	N	N	19	823	9	228	—	N
Tennessee	—	1,084	95	1,193	11	277	—	3
W.S. Central	1	2,263	331	9,701	147	2,073	2	3
Arkansas	—	194	22	534	11	205	1	2
Louisiana	1	157	28	2,484	33	546	1	1
Oklahoma	N	N	55	272	—	92	—	N
Texas	N	1,912	226	6,411	103	1,230	—	N
Mountain	27	1,804	234	1,973	22	625	3	9
Arizona	—	823	105	904	15	230	2	3
Colorado	1	546	63	342	—	138	—	4
Idaho	—	N	8	20	1	6	—	—
Montana	N	N	N	5	—	3	1	N
Nevada	2	N	N	412	5	130	—	—
New Mexico	—	174	20	151	—	53	—	—
Utah	24	232	34	133	1	65	—	2
Wyoming	—	29	4	6	—	—	—	—
Pacific	1	114	17	6,910	39	2,440	—	14
Alaska	—	110	17	15	—	3	—	N
California	N	N	N	6,114	38	2,065	—	14
Hawaii	1	4	—	73	—	35	—	N
Oregon	N	N	N	173	—	71	—	N
Washington	N	N	N	535	1	266	—	N
<b>Territories</b>								
American Samoa	—	N	—	—	—	—	—	N
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	—	—	—	11	—	1	—	—
Puerto Rico	N	—	—	723	2	228	2	N
U.S. Virgin Islands	—	—	—	4	—	—	—	—

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

† 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.

§ Includes the following categories: primary, secondary, latent (including early latent, late latent, and latent syphilis of unknown duration), neurosyphilis, late (including late syphilis with clinical manifestations other than neurosyphilis), and congenital syphilis. Totals reported to the Division of STD Prevention, NCHHSTP, as of June 8, 2011.

**TABLE 2. (Continued) Reported cases of notifiable diseases,\* by geographic division and area — United States, 2010**

Area	Trichinellosis	Tuberculosis†	Tularemia	Typhoid fever	Vancomycin-intermediate <i>Staphylococcus aureus</i>	Vancomycin-resistant <i>Staphylococcus aureus</i>
United States	7	11,182	124	467	91	2
New England	2	356	4	28	7	—
Connecticut	—	85	—	8	—	—
Maine	1	8	—	2	—	—
Massachusetts	—	222	3	14	7	—
New Hampshire	—	10	1	3	N	—
Rhode Island	1	26	—	1	—	—
Vermont	—	5	—	—	—	—
Mid. Atlantic	1	1,597	2	122	34	—
New Jersey	1	405	1	40	7	—
New York (Upstate)	—	243	—	14	18	—
New York City	—	711	—	52	7	—
Pennsylvania	—	238	1	16	2	—
E.N. Central	2	891	4	45	21	—
Illinois	1	372	1	20	7	—
Indiana	—	90	3	2	N	—
Michigan	—	184	—	6	5	—
Ohio	1	190	—	10	8	—
Wisconsin	—	55	—	7	1	—
W.N. Central	1	390	51	16	1	—
Iowa	—	48	—	3	N	—
Kansas	—	46	16	1	N	N
Minnesota	—	135	—	6	—	—
Missouri	1	107	18	2	—	—
Nebraska	—	27	5	2	1	—
North Dakota	—	12	1	1	—	—
South Dakota	—	15	11	1	—	—
S. Atlantic	—	2,262	4	75	8	2
Delaware	—	20	—	1	—	2
District of Columbia	—	44	—	3	N	N
Florida	—	835	—	22	1	—
Georgia	N	411	—	18	1	—
Maryland	—	220	—	10	1	—
North Carolina	—	296	3	9	4	—
South Carolina	—	153	—	1	—	—
Virginia	—	268	1	11	1	—
West Virginia	—	15	—	—	—	—
E.S. Central	—	545	5	8	2	—
Alabama	—	146	—	3	N	N
Kentucky	N	90	2	3	N	N
Mississippi	—	116	—	1	2	—
Tennessee	—	193	3	1	—	—
W.S. Central	—	1,749	28	36	15	—
Arkansas	N	78	19	1	—	—
Louisiana	—	200	—	2	4	—
Oklahoma	—	86	8	1	1	—
Texas	—	1,385	1	32	10	—
Mountain	1	567	12	17	3	—
Arizona	—	283	1	6	2	—
Colorado	—	71	3	3	N	—
Idaho	1	15	—	—	N	N
Montana	—	6	1	—	N	N
Nevada	—	114	1	5	1	—
New Mexico	—	51	1	—	N	N
Utah	—	20	2	3	—	—
Wyoming	—	7	3	—	—	—
Pacific	—	2,825	14	120	—	—
Alaska	—	57	—	—	N	N
California	—	2,327	8	91	N	N
Hawaii	—	115	—	1	—	—
Oregon	—	87	3	6	N	N
Washington	—	239	3	22	N	N
Territories						
American Samoa	N	3	—	—	—	—
C.N.M.I.	—	32	—	—	—	—
Guam	—	100	—	—	—	—
Puerto Rico	N	80	—	—	—	—
U.S. Virgin Islands	—	—	—	—	—	—

N: Not reportable.

U: Unavailable.

—: No reported cases.

C.N.M.I.: Commonwealth of Northern Mariana Islands.

† Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of July 1, 2011.

TABLE 2. (Continued) Reported cases of notifiable diseases,\* by geographic division and area — United States, 2010

Area	Varicella			
	Morbidity	Mortality <sup>†</sup>	Vibriosis	Viral hemorrhagic fever
<b>United States</b>	15,427	4	846	1
<b>New England</b>	1,163	—	44	—
Connecticut	320	—	32	—
Maine	247	—	5	—
Massachusetts	258	N	—	—
New Hampshire	162	—	3	N
Rhode Island	46	—	4	—
Vermont	130	N	—	—
<b>Mid. Atlantic</b>	1,717	1	48	1
New Jersey	568	—	24	—
New York (Upstate)	N	N	N	—
New York City	—	—	15	—
Pennsylvania	1,149	1	9	1
<b>E.N. Central</b>	4,868	1	46	—
Illinois	1,195	1	13	—
Indiana	357	—	6	N
Michigan	1,450	—	10	—
Ohio	1,349	N	11	—
Wisconsin	517	—	6	N
<b>W.N. Central</b>	1,022	—	19	—
Iowa	N	N	N	—
Kansas	394	—	N	—
Minnesota	—	—	14	—
Missouri	489	—	5	—
Nebraska	25	—	N	—
North Dakota	52	—	N	—
South Dakota	62	—	N	—
<b>S. Atlantic</b>	2,105	—	291	—
Delaware	39	—	5	—
District of Columbia	20	—	5	N
Florida	977	—	130	—
Georgia	N	N	22	N
Maryland	N	—	45	—
North Carolina	N	N	28	—
South Carolina	83	—	16	—
Virginia	548	N	40	—
West Virginia	438	—	N	—
<b>E.S. Central</b>	308	—	36	—
Alabama	296	—	13	N
Kentucky	N	N	5	N
Mississippi	12	N	8	—
Tennessee	N	—	10	—
<b>W.S. Central</b>	3,070	2	108	—
Arkansas	220	—	N	—
Louisiana	90	N	28	—
Oklahoma	N	N	1	—
Texas	2,760	2	79	—
<b>Mountain</b>	1,052	—	30	—
Arizona	—	—	18	—
Colorado	404	N	8	N
Idaho	N	N	N	N
Montana	198	—	N	N
Nevada	N	N	1	—
New Mexico	95	—	2	N
Utah	334	—	1	—
Wyoming	21	N	—	—
<b>Pacific</b>	122	—	224	—
Alaska	48	N	—	—
California	36	—	115	—
Hawaii	38	—	24	—
Oregon	N	N	26	—
Washington	N	N	59	—
<b>Territories</b>				
American Samoa	N	N	N	N
C.N.M.I.	—	—	—	—
Guam	28	N	—	—
Puerto Rico	636	—	N	—
U.S. Virgin Islands	—	—	—	—

N: Not reportable.

U: Unavailable.

—: No reported cases.

C.N.M.I.: Commonwealth of Northern Mariana Islands.

<sup>†</sup>Totals reported to the Division of Viral Diseases, National Center for Immunization and Respiratory Diseases (NCIRD), as of June 30, 2011.

**TABLE 3. Reported cases and incidence\* of notifiable diseases,<sup>†</sup> by age group — United States, 2010**

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 <sup>§</sup>																
California serogroup virus																
neuroinvasive	1	(0.02)	15	(0.04)	43	(0.11)	4	(0.01)	—	(0.00)	3	(0.00)	2	(0.01)	—	68
nonneuroinvasive	—	(0.00)	1	(0.01)	5	(0.01)	1	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	7
Eastern equine virus	—	(0.00)	1	(0.01)	—	(0.00)	1	(0.00)	—	(0.00)	7	(0.01)	1	(0.00)	—	10
Powassan virus	—	(0.00)	—	(0.00)	2	(0.00)	2	(0.00)	1	(0.00)	1	(0.00)	2	(0.01)	—	8
St. Louis encephalitis virus																
neuroinvasive	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	—	(0.00)	4	(0.00)	3	(0.01)	—	8
nonneuroinvasive	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	1	(0.00)	—	(0.00)	—	2
West Nile virus																
neuroinvasive	—	(0.00)	1	(0.01)	14	(0.03)	29	(0.07)	71	(0.11)	263	(0.26)	251	(0.63)	—	629
nonneuroinvasive	—	(0.00)	2	(0.01)	7	(0.02)	18	(0.04)	56	(0.09)	224	(0.22)	85	(0.21)	—	392
Botulism, total	79	(1.85)	—	(0.00)	—	(0.00)	—	(0.00)	8	(0.01)	19	(0.02)	4	(0.01)	2	112
foodborne	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	4	(0.00)	3	(0.01)	—	7
infant	79	(1.85)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	1	80
other (wound and unspecified)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	8	(0.01)	15	(0.01)	1	(0.00)	1	25
Brucellosis	—	(0.00)	5	(0.03)	9	(0.02)	11	(0.03)	20	(0.03)	44	(0.04)	26	(0.07)	—	115
Chancroid <sup>¶</sup>	—	(0.00)	—	(0.00)	—	(0.00)	16	(0.04)	6	(0.01)	2	(0.00)	—	(0.00)	—	24
<i>Chlamydia trachomatis</i> infection <sup>¶</sup>	792	(18.59)	171	(1.00)	14,719	(36.27)	930,338	(2159.69)	319,317	(514.16)	39,243	(39.10)	954	(2.41)	2,359	1,307,893
Cholera	—	(0.00)	2	(0.01)	2	(0.00)	1	(0.00)	1	(0.00)	6	(0.01)	1	(0.00)	—	13
Cryptosporidiosis, total	123	(2.89)	1,248	(7.32)	1,391	(3.43)	1,150	(2.67)	1,824	(2.94)	1,999	(1.99)	1,110	(2.81)	99	8,944
confirmed	111	(2.60)	1,105	(6.49)	1,246	(3.07)	1,107	(2.57)	1,684	(2.71)	1,943	(1.94)	1,098	(2.77)	81	8,375
probable	12	(0.28)	143	(0.84)	145	(0.36)	43	(0.10)	140	(0.23)	56	(0.06)	12	(0.03)	18	569
Cyclosporiasis	—	(0.00)	2	(0.01)	—	(0.00)	12	(0.03)	42	(0.08)	92	(0.10)	24	(0.07)	7	179
Dengue fever	1	(0.02)	3	(0.02)	44	(0.11)	96	(0.22)	151	(0.24)	329	(0.33)	66	(0.17)	—	690
Denque hemorrhagic fever	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	5	(0.00)	4	(0.00)	1	(0.00)	—	10
Ehrlichiosis/Anaplasmosis																
<i>Ehrlichia chaffeensis</i>	—	(0.00)	14	(0.09)	27	(0.07)	61	(0.15)	81	(0.14)	335	(0.35)	220	(0.59)	2	740
<i>Ehrlichia ewingii</i>	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	3	(0.01)	5	(0.01)	2	(0.01)	—	10
<i>Anaplasma phagocytophilum</i>	1	(0.03)	15	(0.09)	77	(0.20)	86	(0.21)	200	(0.34)	805	(0.85)	571	(1.53)	6	1,761
Undetermined	—	(0.00)	1	(0.01)	4	(0.01)	6	(0.02)	13	(0.02)	50	(0.05)	30	(0.08)	—	104
Giardiasis	268	(7.59)	3,409	(24.19)	3,394	(10.04)	2,031	(5.60)	3,392	(6.51)	5,351	(6.26)	1,498	(4.40)	468	19,811
Gonorrhea <sup>¶</sup>	137	(3.21)	110	(0.65)	3,080	(7.59)	193,869	(450.05)	90,060	(145.01)	21,011	(20.93)	520	(1.31)	554	309,341
<i>Haemophilus influenzae</i> , invasive disease, all ages, serotypes	262	(6.15)	184	(1.08)	122	(0.30)	99	(0.23)	164	(0.26)	777	(0.77)	1,483	(3.75)	60	3,151
age<5 years																
serotype b	11	(0.26)	12	(0.07)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	23
nonserotype b	123	(2.89)	77	(0.45)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	200
unknown serotype	128	(3.00)	95	(0.56)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	223
Hansen disease (leprosy)	—	(0.00)	—	(0.00)	—	(0.00)	5	(0.01)	16	(0.03)	37	(0.04)	16	(0.05)	24	98
Hantavirus pulmonary syndrome	—	(0.00)	—	(0.00)	1	(0.00)	2	(0.00)	7	(0.01)	10	(0.01)	—	(0.00)	—	20
Hemolytic uremic syndrome, post-diarrheal	11	(0.27)	128	(0.79)	77	(0.20)	19	(0.05)	7	(0.01)	12	(0.01)	11	(0.03)	1	266
Hepatitis viral, acute																
A	11	(0.26)	40	(0.23)	155	(0.38)	320	(0.74)	388	(0.62)	472	(0.47)	260	(0.66)	24	1,670
B	1	(0.02)	8	(0.05)	11	(0.03)	142	(0.33)	1,299	(2.10)	1,644	(1.64)	245	(0.62)	24	3,374
C	5	(0.12)	—	(0.00)	—	(0.00)	169	(0.41)	400	(0.68)	250	(0.26)	13	(0.03)	12	849
Human immunodeficiency virus (HIV) infection diagnosis <sup>††</sup>	43	(1.01)	35	(0.21)	102	(0.25)	7,217	(16.75)	13,838	(22.28)	13,865	(13.81)	641	(1.62)	—	35,741
Influenza-associated pediatric mortality**	10	(0.23)	12	(0.07)	27	(0.07)	12	(0.09)	—	(0.00)	—	(0.00)	—	(0.00)	—	61
Legionellosis	6	(0.14)	4	(0.02)	7	(0.02)	38	(0.09)	240	(0.39)	1,699	(1.69)	1,296	(3.28)	56	3,346
Listeriosis	58	(1.36)	9	(0.05)	10	(0.02)	31	(0.07)	72	(0.12)	193	(0.19)	434	(1.10)	14	821
Lyme disease, total	16	(0.38)	1,043	(6.15)	4,629	(11.45)	2,897	(6.75)	3,561	(5.76)	10,488	(10.49)	4,130	(10.49)	3,394	30,158
confirmed	14	(0.33)	899	(5.30)	3,656	(9.04)	2,058	(4.80)	2,555	(4.13)	7,910	(7.91)	2,954	(7.50)	2,515	22,561
probable	2	(0.05)	144	(0.85)	973	(2.41)	839	(1.96)	1,006	(1.63)	2,578	(2.58)	1,176	(2.99)	879	7,597
Malaria	5	(0.12)	49	(0.29)	164	(0.40)	327	(0.76)	483	(0.78)	637	(0.63)	98	(0.25)	10	1,773
Measles, total	8	(0.19)	16	(0.09)	5	(0.01)	7	(0.02)	19	(0.03)	7	(0.01)	—	(0.00)	1	63
Measles, indigenous	4	(0.09)	6	(0.04)	3	(0.01)	—	(0.00)	8	(0.01)	2	(0.00)	—	(0.00)	—	23
Measles, imported	4	(0.09)	10	(0.06)	2	(0.00)	7	(0.02)	11	(0.02)	5	(0.00)	—	(0.00)	1	40
Meningococcal disease, invasive, all serogroups	112	(2.63)	91	(0.53)	46	(0.11)	158	(0.37)	103	(0.17)	169	(0.17)	151	(0.38)	3	833
serogroup A,C,Y, and W-135	25	(0.59)	18	(0.11)	15	(0.04)	57	(0.13)	35	(0.06)	66	(0.07)	64	(0.16)	—	280
serogroup B	43	(1.01)	23	(0.13)	7	(0.02)	24	(0.06)	12	(0.02)	15	(0.01)	9	(0.02)	2	135
other serogroup	3	(0.07)	1	(0.01)	1	(0.00)	1	(0.00)	4	(0.01)	1	(0.00)	1	(0.00)	—	12
serogroup unknown	41	(0.96)	49	(0.29)	23	(0.06)	76	(0.18)	52	(0.08)	87	(0.09)	77	(0.19)	1	406
Mumps	29	(0.68)	268	(1.57)	884	(2.18)	767	(1.78)	442	(0.71)	191	(0.19)	24	(0.06)	7	2,612
Pertussis	4,120	(96.68)	4,489	(26.35)	10,056	(24.78)	2,572	(5.97)	2,348	(3.78)	3,110	(3.10)	696	(1.76)	159	27,550
Plague	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	—	(0.00)	1	(0.00)	—	(0.00)	—	2

See table footnotes on page 40.

**TABLE 3. (Continued) Reported cases and incidence\* of notifiable diseases,† by age group — United States, 2010**

Disease	<1 yr		1–4 yrs		5–14 yrs		15–24 yrs		25–39 yrs		40–64 yrs		>65 yrs		Age not stated	Total
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate		
Psittacosis	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	3	(0.01)	—	4
Q fever, total	—	(0.00)	—	(0.00)	—	(0.00)	13	(0.03)	16	(0.03)	70	(0.07)	32	(0.08)	—	131
Acute	—	(0.00)	—	(0.00)	—	(0.00)	12	(0.03)	12	(0.02)	58	(0.06)	24	(0.06)	—	106
Chronic	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	4	(0.01)	12	(0.01)	8	(0.02)	—	25
Rabies, human	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	—	2
Rubella	—	(0.00)	—	(0.00)	1	(0.00)	2	(0.00)	—	(0.00)	2	(0.00)	—	(0.00)	—	5
Salmonellosis	5,828	(136.76)	9,494	(55.72)	6,940	(17.10)	5,120	(11.89)	7,103	(11.44)	12,254	(12.21)	6,881	(17.39)	804	54,424
Shiga toxin-producing <i>E.coli</i> (STEC)	192	(4.51)	1,479	(8.68)	1,068	(2.63)	849	(1.97)	651	(1.05)	730	(0.73)	451	(1.14)	56	5,476
Shigellosis	266	(6.24)	4,309	(25.29)	4,489	(11.06)	1,150	(2.67)	2,156	(3.47)	1,841	(1.83)	445	(1.12)	130	14,786
Spotted fever rickettsiosis, total	3	(0.07)	41	(0.24)	132	(0.33)	177	(0.41)	344	(0.56)	913	(0.92)	373	(0.95)	2	1,985
confirmed	2	(0.05)	8	(0.05)	7	(0.02)	16	(0.04)	14	(0.02)	69	(0.07)	40	(0.10)	—	156
probable	1	(0.02)	33	(0.19)	126	(0.31)	163	(0.38)	332	(0.54)	847	(0.85)	331	(0.84)	2	1,835
Streptococcal toxic-shock syndrome	—	(0.00)	5	(0.05)	3	(0.01)	11	(0.04)	17	(0.04)	63	(0.10)	43	(0.17)	—	142
<i>Streptococcus pneumoniae</i> , invasive disease																
all ages	596	(23.05)	1,298	(12.54)	494	(1.99)	395	(1.51)	1,349	(3.58)	6,457	(10.48)	5,865	(23.94)	115	16,569
age <5 years	682	(22.07)	1,504	(12.17)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	2,186
Syphilis, total, all stages <sup>¶,§§</sup>	384	(9.01)	3	(0.02)	52	(0.13)	10,629	(24.67)	17,889	(28.80)	15,654	(15.60)	1,203	(3.04)	20	45,834
congenital (age <1 yr) <sup>¶</sup>	377	(8.85)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	377
primary and secondary <sup>¶</sup>	1	(0.02)	—	(0.00)	18	(0.04)	3,839	(8.91)	5,703	(9.18)	4,102	(4.09)	107	(0.27)	4	13,774
Tetanus	—	(0.00)	—	(0.00)	2	(0.00)	3	(0.01)	3	(0.00)	10	(0.01)	5	(0.01)	3	26
Toxic-shock syndrome (other than streptococcal)	—	(0.00)	2	(0.02)	21	(0.07)	30	(0.09)	16	(0.03)	10	(0.01)	3	(0.01)	—	82
Trichinellosis	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	1	(0.00)	4	(0.00)	1	(0.00)	—	7
Tuberculosis <sup>¶,¶¶</sup>	77	(1.81)	288	(1.69)	272	(0.67)	1,200	(2.79)	2,770	(4.46)	4,341	(4.32)	2,230	(5.64)	4	11,182
Tularemia	—	(0.00)	13	(0.08)	22	(0.05)	8	(0.02)	12	(0.02)	39	(0.04)	26	(0.07)	4	124
Typhoid fever	5	(0.12)	53	(0.31)	115	(0.28)	75	(0.17)	125	(0.20)	70	(0.07)	12	(0.03)	12	467
Vancomycin-intermediate <i>Staphylococcus aureus</i> (VISA) infection	—	(0.00)	—	(0.00)	—	(0.00)	2	(0.01)	4	(0.01)	33	(0.04)	44	(0.15)	8	91
Vancomycin-resistant <i>Staphylococcus aureus</i> (VRSA) infection	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	1	(0.00)	1	(0.00)	—	2
Vibriosis	4	(0.10)	20	(0.13)	81	(0.22)	49	(0.13)	145	(0.25)	352	(0.39)	190	(0.53)	5	846
Viral hemorrhagic fevers	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	—	(0.00)	1	1

\* Per 100,000 population.

† No cases of anthrax; diphtheria; eastern equine encephalitis virus disease; nonneuroinvasive; poliomylitis, paralytic; poliovirus infection; nonparalytic; Powassan virus disease, non-neuroinvasive; rubella; congenital syndrome; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox, western equine encephalitis virus disease, neuroinvasive and nonneuroinvasive, and yellow fever were reported in 2010. Data on hepatitis B virus, perinatal infection, chronic hepatitis B, and chronic hepatitis C virus infection are not included because they are undergoing data quality review.

§ Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of May 9, 2011.

¶ Cases among persons aged &lt;15 years are not shown because some might not be caused by sexual transmission; these cases are included in the totals. Totals reported to the Division of STD Prevention, NCHHSTP, as of June 8, 2011.

¶¶ Total number of HIV cases reported to the Division of HIV/AIDS Prevention, NCHHSTP through December 31, 2010.

\*\* Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases, as of December 31, 2010.

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

¶¶¶ Totals reported to the Division of TB Elimination, NCHHSTP, as of July 1, 2011.

**TABLE 4. Reported cases and incidence\* of notifiable diseases,<sup>†</sup> by sex — United States, 2010**

Disease	Male		Female		Sex not stated	Total
	No.	Rate	No.	Rate		
Arboviral diseases <sup>§</sup>						
California serogroup virus						
neuroinvasive	37	(0.02)	31	(0.02)	—	68
nonneuroinvasive	5	(0.00)	2	(0.00)	—	7
Eastern equine encephalitis virus	7	(0.00)	3	(0.00)	—	10
Powassan virus	7	(0.00)	1	(0.00)	—	8
St. Louis encephalitis virus						
neuroinvasive	4	(0.00)	4	(0.00)	—	8
nonneuroinvasive	1	(0.00)	1	(0.00)	—	2
West Nile virus						
neuroinvasive	366	(0.24)	263	(0.17)	—	629
nonneuroinvasive	208	(0.14)	184	(0.12)	—	392
Botulism, total	61	(0.04)	51	(0.03)	—	112
foodborne	4	(0.00)	3	(0.00)	—	7
infant	36	(1.65)	44	(2.11)	—	80
other (wound and unspecified)	21	(0.01)	4	(0.00)	—	25
Brucellosis	64	(0.04)	50	(0.03)	1	115
Chancroid <sup>¶</sup>	10	(0.01)	13	(0.01)	1	24
<i>Chlamydia trachomatis</i> infection <sup>¶</sup>	353,923	(233.69)	949,802	(610.58)	4,168	1,307,893
Cholera	6	(0.00)	7	(0.00)	—	13
Cryptosporidiosis, total	4,291	(2.83)	4,602	(2.96)	51	8,944
confirmed	4,023	(2.66)	4,311	(2.77)	41	8,375
probable	268	(0.18)	291	(0.19)	10	569
Cyclosporiasis	91	(0.07)	88	(0.06)	—	179
Dengue fever	351	(0.23)	339	(0.22)	—	690
Dengue hemorrhagic fever	5	(0.00)	5	(0.00)	—	10
Ehrlichiosis, Anaplasmosis						
<i>Ehrlichia chaffeensis</i>	426	(0.30)	300	(0.20)	14	740
<i>Ehrlichia ewingii</i>	4	(0.00)	6	(0.00)	—	10
<i>Anaplasma phagocytophilum</i>	1,016	(0.71)	740	(0.51)	5	1,761
Undetermined	51	(0.04)	53	(0.04)	—	104
Giardiasis	11,126	(8.70)	8,493	(6.46)	192	19,811
Gonorrhea <sup>¶</sup>	142,470	(94.07)	165,693	(106.52)	1,178	309,341
<i>Haemophilus influenzae</i> , invasive disease, all ages, all serotypes	1,425	(0.94)	1,698	(1.09)	28	3,151
age <5 yrs						
serotype b	13	(0.12)	10	(0.10)	—	23
nonserotype b	109	(1.00)	90	(0.86)	1	200
unknown serotype	117	(1.07)	105	(1.01)	1	223
Hansen disease (leprosy)	52	(0.04)	22	(0.02)	24	98
Hantavirus pulmonary syndrome	13	(0.01)	6	(0.00)	1	20
Hemolytic uremic syndrome post-diarrheal	120	(0.08)	143	(0.10)	3	266
Hepatitis, viral, acute						
A	867	(0.57)	795	(0.51)	8	1,670
B	2,062	(1.37)	1,290	(0.83)	22	3,374
C	454	(0.32)	391	(0.26)	4	849
Human immunodeficiency virus (HIV) diagnosis <sup>††</sup>	27,827	(18.37)	7,914	(5.09)	—	35,741
Influenza-associated pediatric mortality <sup>**</sup>	28	(0.07)	33	(0.09)	—	61
Legionellosis	2,148	(1.42)	1,192	(0.77)	6	3,346
Listeriosis	395	(0.26)	423	(0.27)	3	821
Lyme disease, total	16,452	(10.91)	13,009	(8.40)	697	30,158
confirmed	12,388	(8.22)	9,536	(6.16)	637	22,561
probable	4,064	(2.70)	3,473	(2.24)	60	7,597
Malaria	1,110	(0.73)	649	(0.42)	14	1,773
Measles, total	39	(0.03)	23	(0.01)	1	63
indigenous	17	(0.01)	6	(0.00)	—	23
imported	22	(0.01)	17	(0.01)	1	40
Meningococcal disease., invasive, all serogroup	424	(0.28)	409	(0.26)	—	833
serogroup A,C,Y, and W-135	132	(0.09)	148	(0.10)	—	280
serogroup B	77	(0.05)	58	(0.04)	—	135
serogroup other	5	(0.00)	7	(0.00)	—	12
serogroup unknown	210	(0.14)	196	(0.13)	—	406
Mumps	1,728	(1.14)	883	(0.57)	1	2,612
Pertussis	12,266	(8.10)	15,144	(9.74)	140	27,550

See table footnotes on page 42.

**TABLE 4. (Continued) Reported cases and incidence\* of notifiable diseases,<sup>†</sup> by sex — United States, 2010**

Disease	Male		Female		Sex not stated	Total
	No.	Rate	No.	Rate		
Plague	—	(0.00)	2	(0.00)	—	2
Psittacosis	3	(0.00)	1	(0.00)	—	4
Q fever, total	92	(0.06)	37	(0.02)	2	131
acute	75	(0.05)	30	(0.02)	1	106
chronic	17	(0.01)	7	(0.00)	1	25
Rabies, human	2	(0.00)	—	(0.00)	—	2
Rubella	3	(0.00)	2	(0.00)	—	5
Salmonellosis	25,800	(17.04)	28,287	(18.18)	337	54,424
Shiga toxin-producing <i>E.coli</i> (STEC)	2,533	(1.67)	2,912	(1.87)	31	5,476
Shigellosis	7,051	(4.66)	7,641	(4.91)	94	14,786
Spotted fever rickettsiosis, total	1,268	(0.84)	683	(0.44)	34	1,985
confirmed	94	(0.06)	61	(0.04)	1	156
probable	1,180	(0.78)	622	(0.40)	33	1,835
Streptococcal toxic-shock syndrome	71	(0.08)	71	(0.07)	—	142
<i>Streptococcus pneumoniae</i> , invasive disease						
all ages	8,384	(9.07)	8,091	(8.49)	94	16,569
age <5 yrs	1,102	(13.96)	785	(10.39)	299	2,186
Syphilis, total, all stages <sup>¶,§§</sup>	34,832	(23.00)	10,815	(6.95)	187	45,834
congenital (age <1 yr) <sup>¶</sup>	194	(8.91)	167	(8.02)	16	377
primary and secondary <sup>¶,¶¶</sup>	11,981	(7.91)	1,780	(1.14)	13	13,774
Tetanus	18	(0.01)	8	(0.01)	—	26
Toxic-shock syndrome (other than streptococcal)	16	(0.01)	66	(0.06)	—	82
Trichinellosis	5	(0.00)	2	(0.00)	—	7
Tuberculosis <sup>¶,¶¶</sup>	6,835	(4.51)	4,296	(2.76)	51	11,182
Tularemia	78	(0.05)	45	(0.03)	1	124
Typhoid fever	234	(0.15)	229	(0.15)	4	467
Vancomycin - intermediate <i>Staphylococcus aureus</i> (VISA) infection	50	(0.04)	39	(0.03)	2	91
Vancomycin - resistant <i>Staphylococcus aureus</i> (VRSA) infection	—	(0.00)	1	(0.00)	1	2
Vibriosis	567	(0.41)	269	(0.19)	10	846
Viral hemorrhagic fevers	1	(0.00)	—	(0.00)	—	1

\* Per 100,000 population.

† No cases of anthrax; diphtheria; eastern equine encephalitis virus disease, non-neuroinvasive; poliomylitis, paralytic; poliovirus, infection, nonparalytic; Powassan virus disease, non-neuroinvasive; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox; western equine encephalitis virus disease, neuroinvasive and non-neuroinvasive, and yellow fever were reported in 2010. Data on hepatitis B virus, perinatal infection, chronic hepatitis B, and chronic hepatitis C virus infection are not included because they are undergoing data quality review.

§ Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of May 9, 2011.

¶ Cases among persons aged &lt;15 years are not shown because some might not be caused by sexual transmission; these cases are included in the totals. Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of June 8, 2011.

\*\* Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases, as of December 31, 2010.

†† Total number of HIV cases reported to the Division of HIV/AIDS Prevention, NCHHSTP through December 31, 2010.

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

¶¶ Totals reported to the Division of TB Elimination, NCHHSTP, as of July 1, 2011.

**TABLE 5. Reported cases and incidence\* of notifiable diseases,<sup>†</sup> by race — United States, 2010**

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 <sup>§</sup>											
California serogroup virus, neuroinvasive	2	(0.06)	1	(0.01)	2	(0.00)	59	(0.02)	1	3	68
West Nile virus											
neuroinvasive	14	(0.40)	4	(0.03)	31	(0.08)	436	(0.18)	15	129	629
nonneuroinvasive	6	(0.17)	2	(0.01)	11	(0.03)	248	(0.10)	4	121	392
Botulism, total	2	(0.06)	3	(0.02)	5	(0.01)	57	(0.02)	3	42	112
infant	—	(—)	2	(0.86)	4	(0.56)	49	(1.51)	2	23	80
other (wound and unspecified)	0	(0.00)	1	(0.01)	0	(0.00)	7	(0.00)	0	17	25
Brucellosis	2	(0.06)	3	(0.02)	7	(0.02)	59	(0.02)	5	39	115
<i>Chlamydia trachomatis</i> infection <sup>¶</sup>	16,041	(458.25)	17,685	(113.89)	457,952	(1,117.0)	385,395	(156.04)	38,988	391,832	1,307,893
Cryptosporidiosis, total	56	(1.60)	67	(0.43)	617	(1.50)	5,974	(2.42)	216	2,014	8,944
confirmed	51	(1.46)	66	(0.43)	585	(1.43)	5,620	(2.28)	165	1,888	8,375
probable	5	(0.14)	1	(0.01)	32	(0.08)	354	(0.14)	51	126	569
Cyclosporiasis	0	(0.00)	1	(0.01)	5	(0.01)	129	(0.06)	3	41	179
Dengue fever	1	(0.03)	60	(0.39)	32	(0.08)	346	(0.14)	45	206	690
Ehrlichiosis/Anaplasmosis											
<i>Ehrlichia chaffeensis</i>	26	(0.89)	5	(0.04)	24	(0.06)	487	(0.21)	12	186	740
<i>Anaplasma phagocytophilum</i>	13	(0.45)	11	(0.08)	9	(0.02)	1,117	(0.48)	10	601	1,761
undetermined	1	(0.03)	0	(0.00)	4	(0.01)	72	(0.03)	1	26	104
Giardiasis	82	(2.63)	1,203	(8.49)	1,620	(4.86)	7,520	(3.60)	739	8,647	19,811
Gonorrhea	2,865	(81.85)	2,390	(15.39)	169,216	(412.72)	61,848	(25.04)	6,116	66,906	309,341
<i>Haemophilus influenzae</i> , invasive disease, all ages, all serotypes											
age <5 yrs	54	(1.54)	35	(0.23)	392	(0.96)	2,010	(0.81)	56	604	3,151
nonserotype b	7	(2.05)	3	(0.25)	35	(1.00)	116	(0.71)	5	34	200
unknown serotype	18	(5.28)	6	(0.51)	43	(1.23)	88	(0.54)	7	61	223
Hansen disease (leprosy)	0	(0.00)	15	(0.10)	5	(0.01)	38	(0.02)	1	39	98
Hemolytic uremic syndrome post-diarrheal	3	(0.09)	8	(0.05)	8	(0.02)	197	(0.09)	11	39	266
Hepatitis, viral, acute											
A	7	(0.20)	157	(1.01)	101	(0.25)	882	(0.36)	67	456	1,670
B	29	(0.83)	94	(0.61)	680	(1.66)	1,798	(0.73)	64	709	3,374
C	23	(0.76)	12	(0.08)	42	(0.11)	632	(0.27)	7	133	849
Human immunodeficiency virus (HIV) diagnosis <sup>††</sup>	189	(5.40)	586	(3.77)	17,253	(42.08)	10,501	(4.25)	7,212	—	35,741
Influenza-associated pediatric mortality <sup>**</sup>	1	(0.17)	2	(0.10)	14	(0.17)	40	(0.11)	—	4	61
Legionellosis	8	(0.23)	42	(0.27)	568	(1.39)	2,130	(0.86)	48	550	3,346
Listeriosis	1	(0.03)	43	(0.28)	66	(0.16)	528	(0.21)	22	161	821
Lyme disease, total	97	(2.78)	263	(1.79)	352	(0.86)	16,648	(6.75)	167	12,631	30,158
Lyme disease, confirmed	68	(1.95)	201	(1.37)	257	(0.63)	12,193	(4.95)	114	9,728	22,561
Lyme disease, probable	29	(0.83)	62	(0.42)	95	(0.23)	4,455	(1.81)	53	2,903	7,597
Malaria	4	(0.11)	186	(1.20)	867	(2.11)	274	(0.11)	58	384	1,773
Measles, total	3	(0.09)	6	(0.04)	4	(0.01)	40	(0.02)	2	8	63
Measles, imported	0	(0.00)	4	(0.03)	4	(0.01)	23	(0.01)	2	7	40
Meningococcal disease, invasive, all serogroups											
Meningococcal disease, serogroup A,C,Y, and W-135	8	(0.23)	25	(0.16)	113	(0.28)	526	(0.21)	17	144	833
Meningococcal disease, serogroup B	3	(0.09)	8	(0.05)	37	(0.09)	193	(0.08)	5	34	280
Meningococcal disease, serogroup unknown	1	(0.03)	2	(0.01)	12	(0.03)	97	(0.04)	5	18	135
Mumps	1	(0.03)	44	(0.28)	39	(0.10)	2,365	(0.96)	16	147	2,612
Pertussis	217	(6.20)	532	(3.43)	1,192	(2.91)	17,451	(7.07)	512	7,646	27,550
Q fever, total	2	(0.06)	1	(0.01)	2	(0.00)	88	(0.04)	4	34	131
acute	2	(0.06)	1	(0.01)	2	(0.00)	73	(0.03)	4	24	106
chronic	0	(0.00)	0	(0.00)	0	(0.00)	15	(0.01)	0	10	25

See table footnotes on page 44.

**TABLE 5. (Continued) Reported cases and incidence\* of notifiable diseases,† by race — United States, 2010**

Disease	American Indian or Alaska Native		Asian or Pacific Islander		Black		White		Race not stated	Total
	No.	Rate	No.	Rate	No.	Rate	No.	Rate		
Salmonellosis	356	(10.17)	1,502	(9.67)	4,824	(11.77)	31,386	(12.71)	1,361	14,995
Shiga toxin-producing <i>E.coli</i> (STEC)	31	(0.89)	107	(0.69)	234	(0.57)	3,588	(1.45)	149	1,367
Shigellosis	194	(5.54)	217	(1.40)	3,383	(8.25)	6,593	(2.67)	620	3,779
Spotted fever rickettsiosis, total	80	(2.37)	18	(0.12)	84	(0.21)	1,269	(0.52)	49	485
confirmed	12	(0.34)	1	(0.01)	8	(0.02)	113	(0.05)	1	21
probable	68	(1.95)	18	(0.12)	76	(0.19)	1,163	(0.47)	48	462
Streptococcal toxic-shock syndrome	2	(0.11)	6	(0.08)	7	(0.03)	108	(0.07)	3	16
<i>Streptococcus pneumoniae</i> , invasive disease										142
all ages	189	(10.16)	149	(1.98)	2,795	(10.38)	9,803	(6.48)	170	3,463
age <5 yr	31	(12.89)	50	(7.03)	430	(15.36)	938	(8.02)	40	697
Syphilis, all stages‡§§	214	(6.11)	920	(5.92)	21,619	(52.73)	17,949	(7.27)	1,340	3,792
congenital (age <1 yr)¶	1	(1.41)	9	(3.84)	209	(29.43)	136	(4.19)	14	8
primary and secondary¶	71	(2.03)	217	(1.40)	6,589	(16.07)	5,842	(2.37)	372	683
Tetanus	0	(0.00)	0	(0.00)	2	(0.00)	20	(0.01)	1	3
Toxic-shock syndrome (other than streptococcal)	0	(0.00)	2	(0.02)	5	(0.02)	58	(0.03)	2	15
Tuberculosis¶¶	187	(5.34)	3,187	(20.52)	2,726	(6.65)	4,803	(1.94)	130	149
Tularemia	12	(0.34)	1	(0.01)	0	(0.00)	82	(0.03)	2	27
Typhoid fever	0	(0.00)	201	(1.29)	34	(0.08)	53	(0.02)	51	128
Vancomycin-intermediate <i>Staphylococcus aureus</i> (VISA)	0	(0.00)	0	(0.00)	18	(0.05)	34	(0.02)	1	38
Vibriosis	1	(0.03)	23	(0.15)	57	(0.15)	558	(0.25)	11	196
										846

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

† No cases of anthrax; diphtheria; eastern equine encephalitis virus disease, nonneuroinvasive; poliomyelitis, paralytic; poliovirus, infection, nonparalytic; Powassan virus disease, non-neuroinvasive; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV); smallpox, western equine encephalitis virus disease, neuroinvasive and nonneuroinvasive; and yellow fever were reported in 2010. Data on hepatitis B virus, perinatal infection, chronic hepatitis B, and chronic hepatitis C virus infection are not included because they are undergoing data quality review.

‡ Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of May 9, 2011.

§ Cases among persons aged <15 years are not shown because some might not be caused by sexual transmission; these cases are included in the totals. Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of June 8, 2011.

\*\* Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases, as of December 31, 2010.

†† Total number of HIV cases reported to the Division of HIV/AIDS Prevention, NCHHSTP through December 31, 2010.

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

¶¶ Totals reported to the Division of TB Elimination, NCHHSTP, as of July 1, 2011.

**TABLE 6. Reported cases and incidence\* of notifiable diseases,<sup>†</sup> by ethnicity — United States, 2010**

Disease	Hispanic		Non-Hispanic		Ethnicity not stated	Total
	No.	Rate	No.	Rate		
Arboviral diseases <sup>§</sup>						
California serogroup virus, neuroinvasive	1	(0.00)	53	(0.02)	14	68
West Nile virus	89	(0.18)	360	(0.14)	180	629
nonneuroinvasive	25	(0.05)	230	(0.09)	137	392
Botulism, total	32	(0.07)	57	(0.02)	23	112
infant	20	(1.81)	46	(1.46)	14	80
other (wound and unspecified)	11	(0.02)	9	(0.00)	5	25
Brucellosis	57	(0.12)	36	(0.01)	22	115
<i>Chlamydia trachomatis</i> infection <sup>¶</sup>	178,979	(369.64)	622,999	(240.92)	505,915	1,307,893
Cryptosporidiosis, total	571	(1.18)	5,408	(2.09)	2,965	8,944
confirmed	526	(1.09)	5,065	(1.96)	2,784	8,375
probable	45	(0.09)	343	(0.13)	181	569
Cyclosporiasis	18	(0.04)	123	(0.05)	38	179
Dengue fever	236	(0.49)	291	(0.11)	163	690
Ehrlichiosis, Anaplasmosis						
<i>Ehrlichia chaffeensis</i>	11	(0.02)	418	(0.17)	311	740
<i>Anaplasma phagocytophilum</i>	12	(0.03)	951	(0.39)	798	1,761
Undetermined	0	(0.00)	60	(0.03)	44	104
Giardiasis	1,374	(3.61)	8,605	(3.89)	9,832	19,811
Gonorrhea <sup>¶</sup>	24,168	(49.91)	179,264	(69.32)	105,909	309,341
<i>Haemophilus influenzae</i> , invasive disease, all ages, serotypes	203	(0.42)	1,868	(0.72)	1,080	3,151
age <5 yrs nonserotype	31	(0.57)	106	(0.67)	63	200
age <5 yrs unknown serotype	37	(0.67)	117	(0.74)	69	223
Hansen disease (leprosy)	22	(0.05)	39	(0.02)	37	98
Hemolytic uremic syndrome post-diarrheal	33	(0.07)	172	(0.07)	61	266
Hepatitis, viral, acute						
A	351	(0.72)	894	(0.35)	425	1,670
B	310	(0.64)	2,100	(0.82)	964	3,374
C	65	(0.14)	532	(0.22)	252	849
Human immunodeficiency virus (HIV) diagnosis <sup>††</sup>	6,741	(13.92)	29,000	(11.21)	—	35,741
Influenza-associated pediatric mortality <sup>**</sup>	10	(0.06)	41	(0.07)	10	61
Legionellosis	181	(0.37)	2,186	(0.85)	979	3,346
Listeriosis	121	(0.25)	494	(0.19)	206	821
Lyme disease, total	510	(1.06)	12,510	(4.86)	17,138	30,158
confirmed	340	(0.70)	9,408	(3.65)	12,813	22,561
probable	170	(0.35)	3,102	(1.21)	4,325	7,597
Malaria	49	(0.10)	1,257	(0.49)	467	1,773
Measles, total	7	(0.01)	45	(0.02)	11	63
imported	3	(0.01)	27	(0.01)	10	40
Meningococcal disease, invasive, all serogroups	123	(0.25)	507	(0.20)	203	833
serogroup A,C,Y, and W-135	44	(0.09)	172	(0.07)	64	280
serogroup B	15	(0.03)	86	(0.03)	34	135
serogroup unknown	64	(0.13)	238	(0.09)	104	406
Mumps	160	(0.33)	2,294	(0.89)	158	2,612
Pertussis	5,272	(10.89)	16,317	(6.31)	5,961	27,550
Q fever, total	18	(0.04)	82	(0.03)	31	131
acute	17	(0.04)	71	(0.03)	18	106
chronic	1	(0.00)	11	(0.00)	13	25
Salmonellosis	6,959	(14.37)	30,040	(11.62)	17,425	54,424
Shiga toxin-producing <i>E.coli</i> (STEC)	587	(1.21)	3,364	(1.30)	1,525	5,476
Shigellosis	3,331	(6.88)	7,520	(2.91)	3,935	14,786
Spotted fever rickettsiosis, total	57	(0.12)	1,207	(0.47)	721	1,985
confirmed	5	(0.01)	113	(0.04)	38	156
probable	52	(0.11)	1,101	(0.43)	682	1,835
Streptococcal toxic-shock syndrome	10	(0.05)	77	(0.04)	55	142
<i>Streptococcus pneumoniae</i> , invasive disease, all ages	1,263	(4.56)	8,516	(5.32)	6,790	16,569
age <5 yrs	285	(8.15)	922	(7.72)	979	2,186
Syphilis, total, all stages <sup>¶, §§</sup>	9,762	(20.16)	32,414	(12.54)	3,658	45,834
congenital (age <1 yr) <sup>¶</sup>	89	(8.06)	278	(8.81)	10	377
primary and secondary <sup>¶</sup>	2,238	(4.62)	10,803	(4.18)	733	13,774
Tetanus	1	(0.00)	14	(0.01)	11	26

See table footnotes on page 46.

**TABLE 6. (Continued) Reported cases and incidence\* of notifiable diseases,<sup>†</sup> by ethnicity — United States, 2010**

Disease	Hispanic		Non-Hispanic		Ethnicity not stated	Total
	No.	Rate	No.	Rate		
Toxic-shock syndrome (other than streptococcal)	5	(0.02)	47	(0.02)	30	82
Tuberculosis <sup>¶¶</sup>	3,236	(6.68)	7,907	(3.06)	39	11,182
Tularemia	5	(0.01)	86	(0.03)	33	124
Typhoid fever	39	(0.08)	330	(0.13)	98	467
Vancomycin-intermediate <i>Staphylococcus aureus</i> (VISA)	6	(0.02)	24	(0.01)	61	91
Vibriosis	70	(0.15)	522	(0.22)	254	846

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

† No cases of anthrax; diphtheria; eastern equine encephalitis virus disease, nonneuroinvasive; poliomylitis, paralytic; poliovirus, infection, nonparalytic; Powassan virus disease; non-neuroinvasive; rubella, congenital syndrome; severe acute respiratory syndrome-associated coronavirus disease (SARS-CoV), smallpox, western equine encephalitis virus disease, neuroinvasive and nonneuroinvasive; and yellow fever were reported in 2010. Data on hepatitis B virus, perinatal infection are not included. Data on chronic hepatitis B and chronic hepatitis C virus infection are not included because they are undergoing data quality review.

§ Totals reported to the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases (ArboNET Surveillance), as of May 9, 2011.

¶ Cases among persons aged <15 years are not shown because some might not be caused by sexual transmission; these cases are included in the totals. Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of June 8, 2011.

\*\* Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases, as of December 31, 2010.

†† Total number of HIV cases reported to the Division of HIV/AIDS Prevention, NCHHSTP through December 31, 2010.

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

¶¶ Totals reported to the Division of TB Elimination, NCHHSTP, as of July 1, 2011.

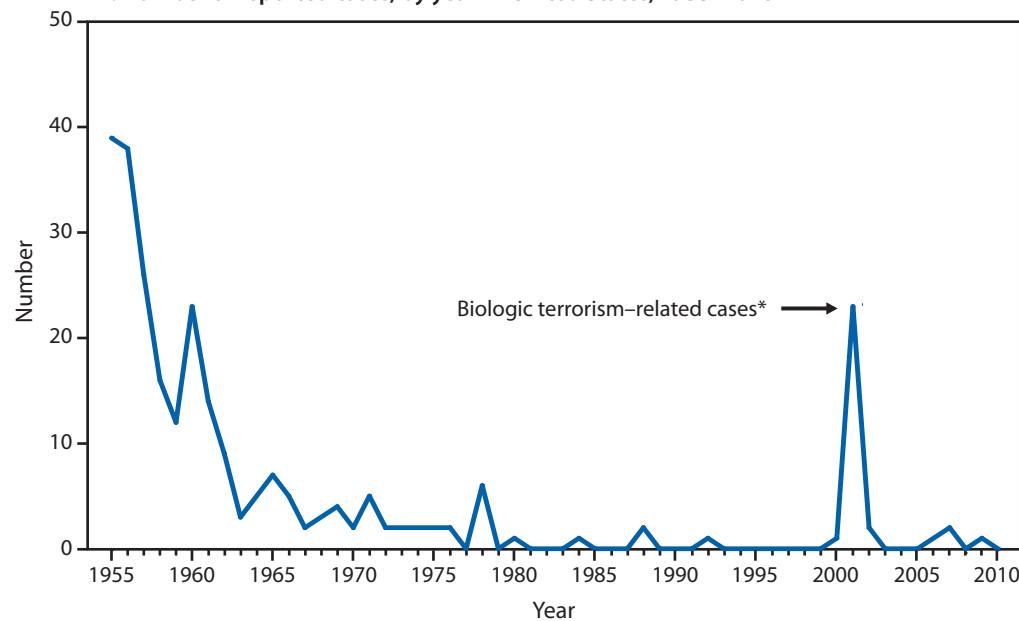
## PART 2

### Graphs and Maps for Selected Notifiable Diseases in the United States, 2010

#### Abbreviations and Symbols Used in Graphs and Maps

<b>U</b>	Data not available.
<b>N</b>	Not reportable (i.e., report of disease not required in that jurisdiction).
<b>DC</b>	District of Columbia
<b>NYC</b>	New York City
<b>AS</b>	American Samoa
<b>CNMI</b>	Commonwealth of Northern Mariana Islands
<b>GU</b>	Guam
<b>PR</b>	Puerto Rico
<b>VI</b>	U.S. Virgin Islands

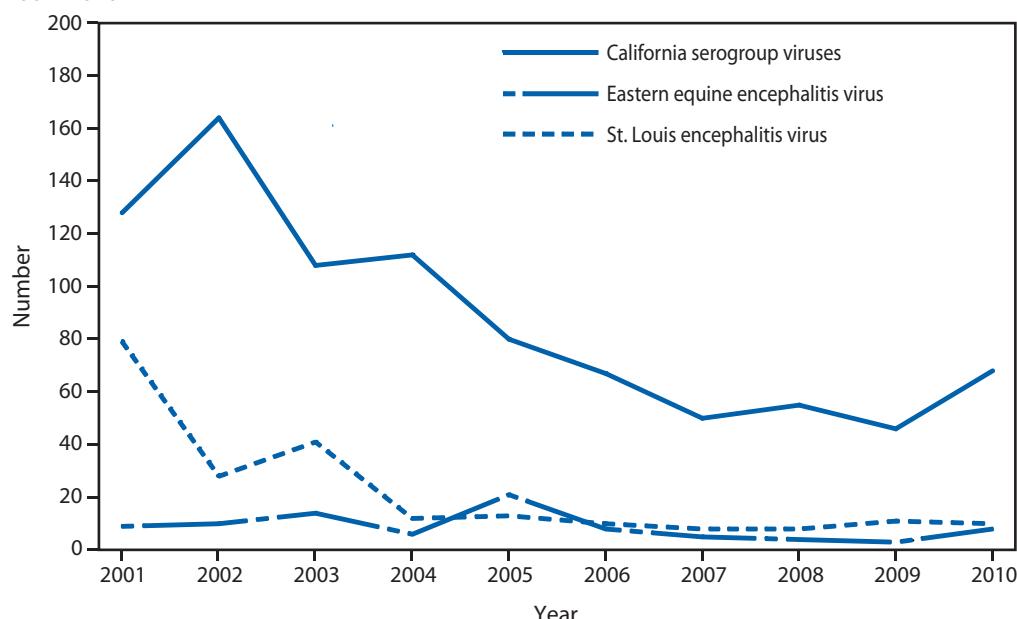
ANTHRAX. Number of reported cases, by year — United States, 1955–2010



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

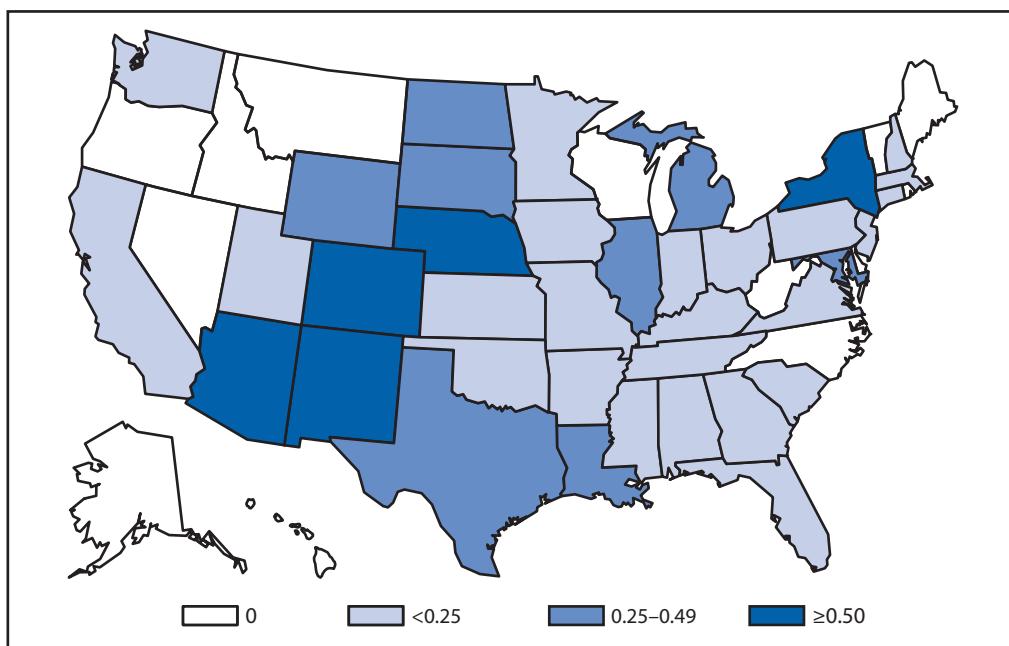
No cases of anthrax were reported to CDC in 2010. Two or fewer naturally occurring cases have been reported in the United States and U.S. territories per year for the past 30 years.

**ARBOVIRAL DISEASES. Number\* of reported cases of neuroinvasive disease, by year — United States, 2001–2010**



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

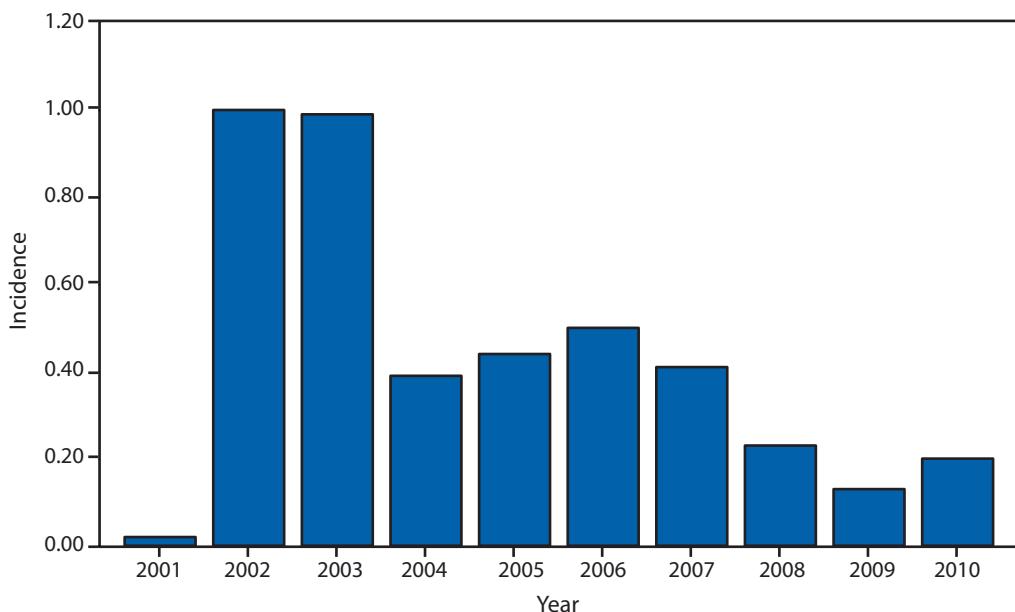
The most common arthropod-borne viruses (arboviruses) that cause neuroinvasive disease in humans in the United States are West Nile virus (WNV), La Crosse virus (LACV), St. Louis encephalitis virus (SLEV), and eastern equine encephalitis virus (EEEV). LACV is the most common California (CAL) serogroup virus in the United States. LACV causes neuroinvasive disease primarily among children. In 2010, 68 cases of CAL serogroup virus neuroinvasive disease, including 67 cases caused by LACV, were reported from 10 states (Georgia, Kentucky, Maryland, Michigan, Minnesota, North Carolina, Ohio, Tennessee, Texas, and West Virginia); 60 (88%) of the cases occurred among children aged <18 years. During 2001–2010, a median of 71 (range: 46–167) cases per year were reported in the United States. EEEV disease in humans is associated with high mortality rates (>20%) and severe neurologic sequelae. In 2010, 10 cases of EEEV neuroinvasive disease cases were reported from five states (Florida, Massachusetts, Michigan, New York, and Rhode Island). Five (50%) of the 10 reported cases were fatal. During 2001–2010, a median of nine (range: 3–21) cases per year were reported in the United States. Before the introduction of WNV, SLEV was the leading cause of arboviral encephalitis in the United States, with periodic large outbreaks with hundreds to thousands of cases. In 2010, eight cases of SLEV neuroinvasive disease were reported from four states (Arkansas, Michigan, Missouri, and Texas). During 2001–2010, a median of 7 (range: 7–79) cases per year were reported in the United States. Whether the recent decline in the number of reported SLEV disease cases is related to normal periodicity in viral activity, surveillance artifact, or possible competitive displacement of SLEV by WNV is unknown.

**ARBOVIRAL DISEASES, WEST NILE VIRUS. Incidence\* of reported cases of neuroinvasive disease, by state — United States, 2010**

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

In 2010, the states with the highest reported incidence of West Nile virus (WNV) neuroinvasive disease were Arizona (1.60 per 100,000), New Mexico (1.03), Nebraska (0.55), and Colorado (0.51). The four states with the highest number of reported cases were Arizona (107), New York (89), Texas (77), and California (72). Arizona reported 17% of all WNV neuroinvasive disease cases in 2010.

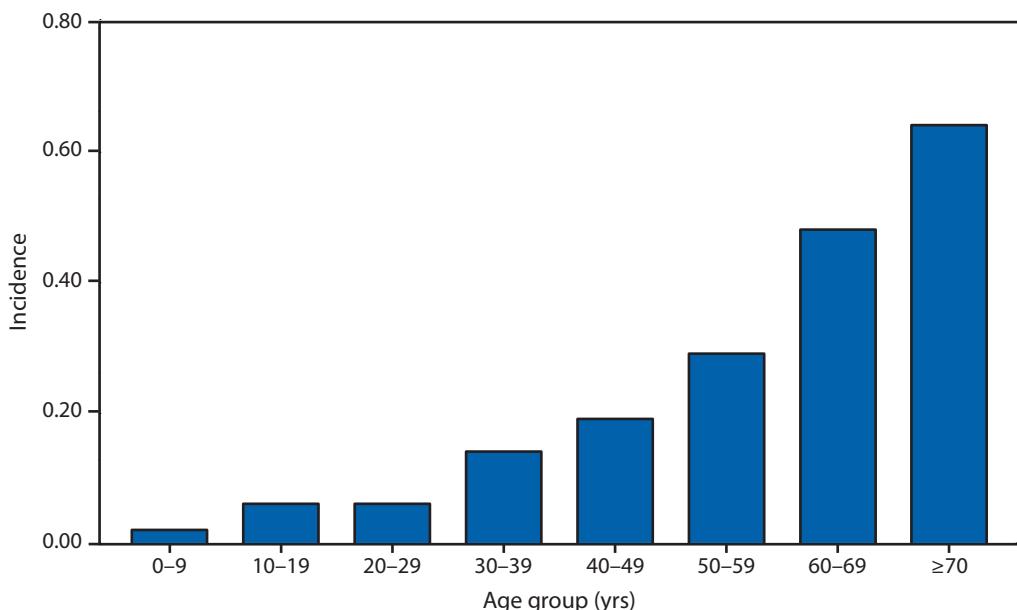
**ARBOVIRAL DISEASES, WEST NILE VIRUS. Incidence\* of reported cases of neuroinvasive disease, by year — United States, 2001–2010**



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

West Nile virus (WNV) was first detected in the United States in 1999. Despite substantial geographic spread of the virus from 1999 through 2001, WNV neuroinvasive disease incidence remained low until 2002, when there were large outbreaks in the Midwest and Great Plains. The national incidence of WNV neuroinvasive disease peaked in 2002 and 2003 and was relatively stable from 2004 through 2007. WNV had appeared to reach a stable incidence but incidence decreased in 2008 and continued to decline in 2009. However, in 2010, the number of reported WNV neuroinvasive disease cases increased 62% from that reported in 2009. The reported incidence of WNV neuroinvasive disease in the United States in 2010 was 0.20 per 100,000 population.

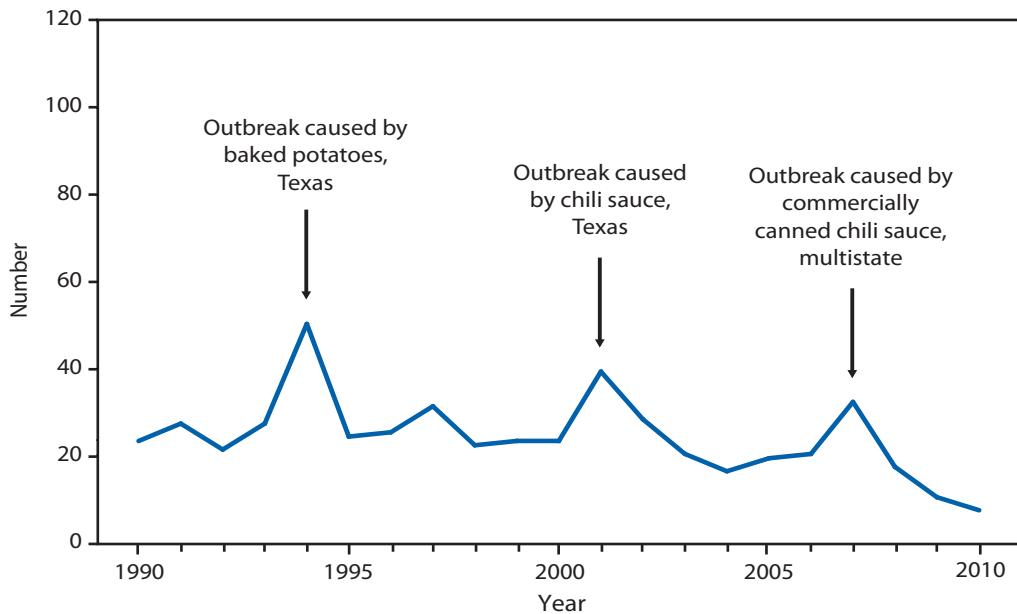
**ARBOVIRAL DISEASES, WEST NILE VIRUS. Incidence\* of reported cases of neuroinvasive disease, by age group — United States, 2010**



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

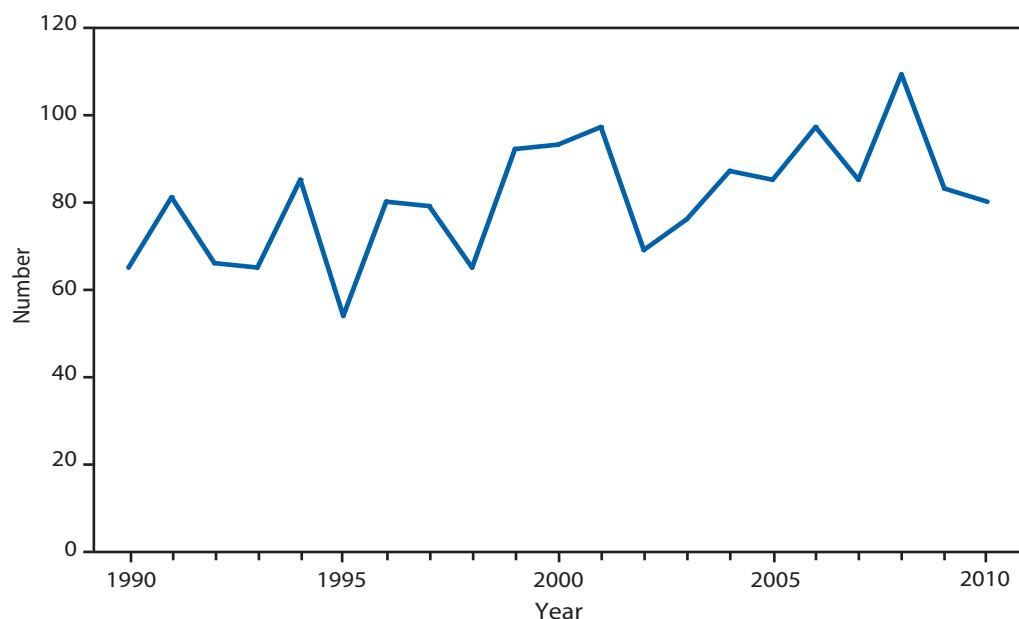
In 2010, the median age of patients with West Nile virus neuroinvasive disease was 59 years (range: 1–98 years), with increasing incidence among older age groups.

**BOTULISM, FOODBORNE Number of reported cases, by year — United States, 1990–2010**



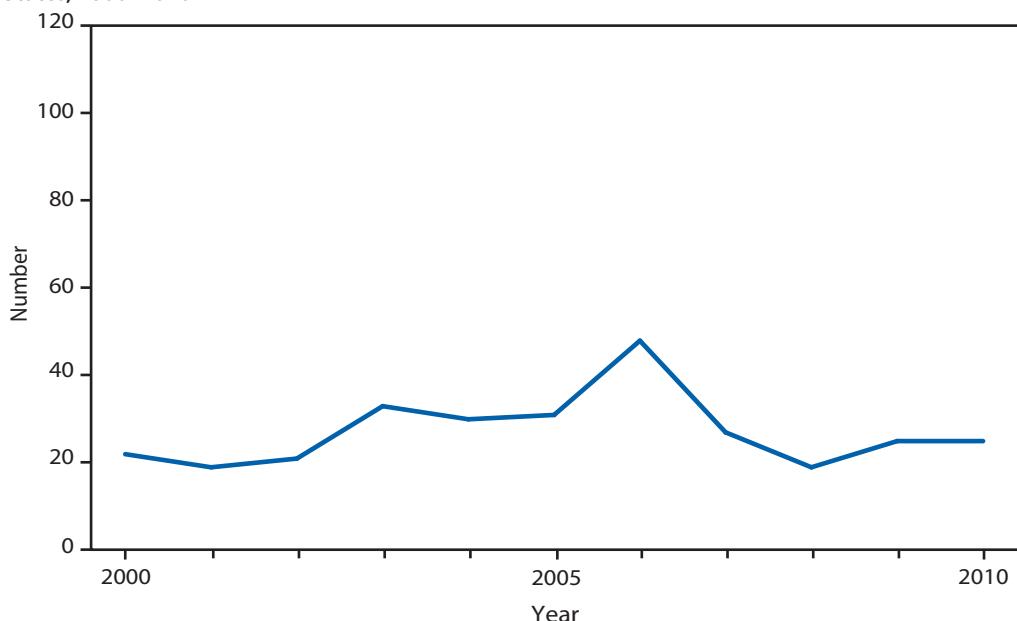
Numbers of foodborne botulism cases have remained stable during the past 2 decades. In 2010, cases were caused by consumption of home-canned foods, Alaska Native aquatic game foods, and baked potato.

**BOTULISM, INFANT. Number of reported cases, by year — United States, 1990–2010**



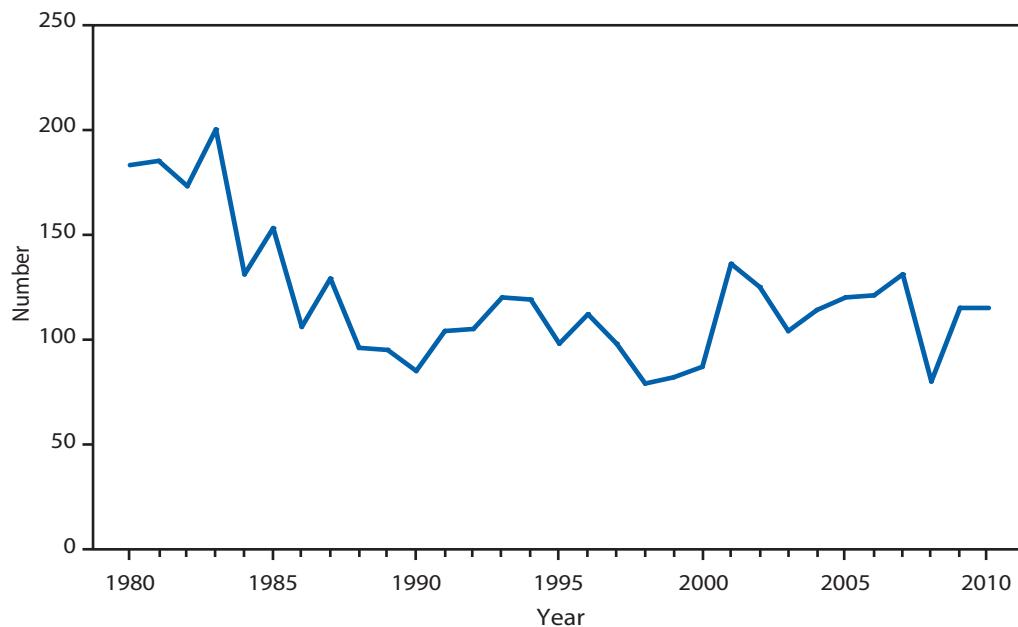
Infant botulism remains the most common cause of botulism in the United States and accounted for 76% of U.S. botulism cases in 2010.

**BOTULISM, OTHER (Includes wound and unspecified). Number of reported cases, by year — United States, 2000–2010**



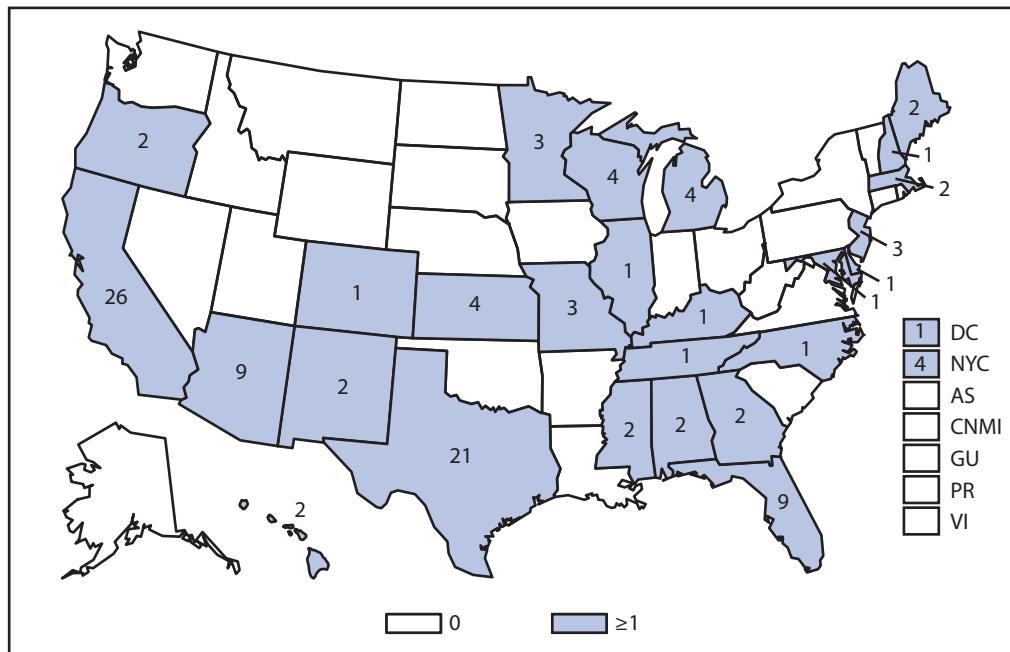
Annual numbers of wound and unspecified forms of botulism have remained stable during the past decade. In 2010, the majority (94%) of cases occurred among injection-drug users in California.

**BRUCELLOSIS. Number of reported cases, by year — United States, 1980–2010**



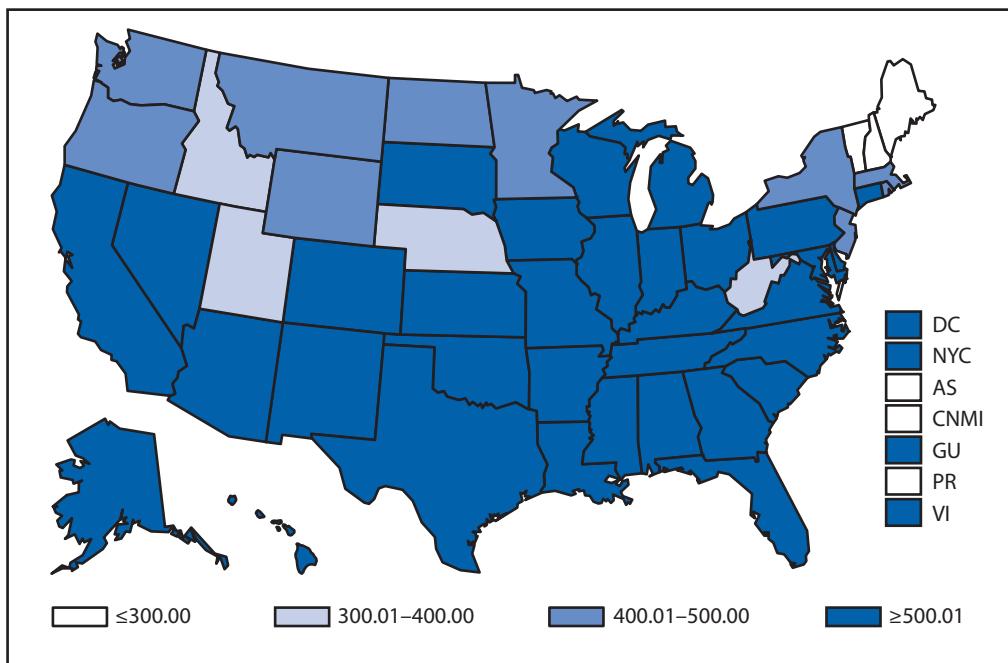
In the last decade, the highest number of brucellosis cases was reported in 2001. Reported cases for 2009 and 2010 were the same.

**BRUCELLOSIS. Number of reported cases — United States and U.S. territories, 2010**



The highest number (56.5%) of brucellosis cases was reported by California, Texas, Arizona, and Florida.

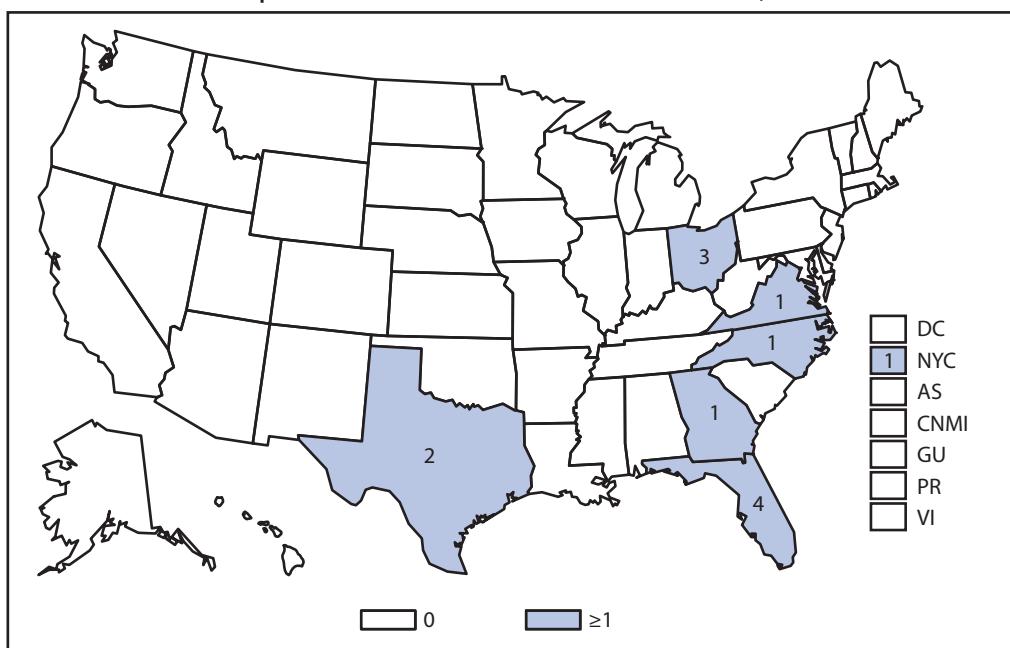
**CHLAMYDIA. Incidence\* among women — United States and U.S. territories, 2010**



\* Per 100,000 population.

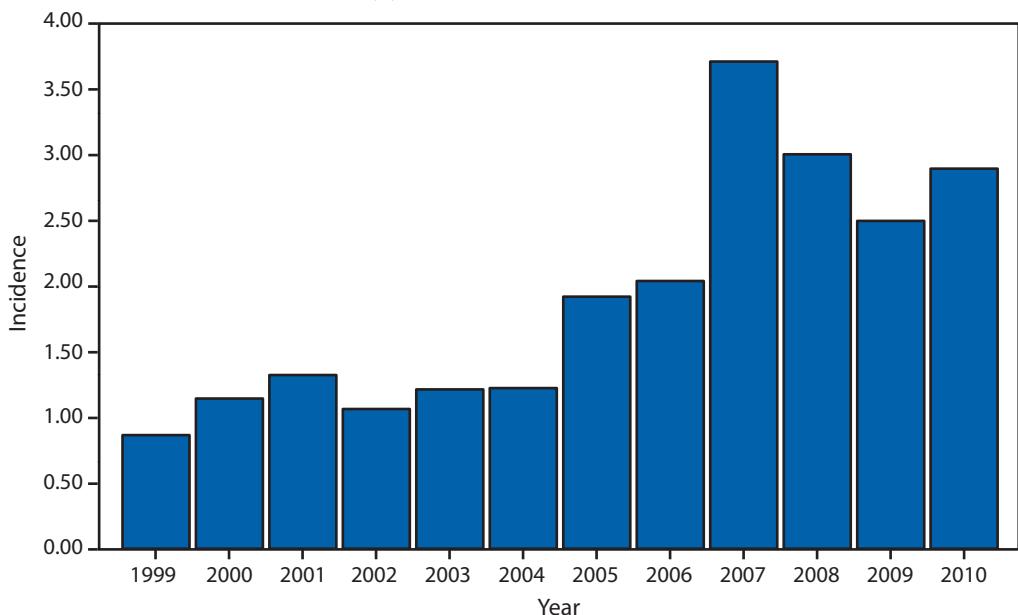
In 2010, the chlamydia rate among women in the United States and U. S. territories (Guam, Puerto Rico, and Virgin Islands) was 605.8 cases per 100,000 population.

**CHOLERA. Number of reported cases — United States and U.S. territories, 2010**



In 2010, all cholera infections in the United States were acquired during travel; six patients reported travel to Haiti, where a cholera epidemic started in October, and seven had travelled to other cholera-affected countries.

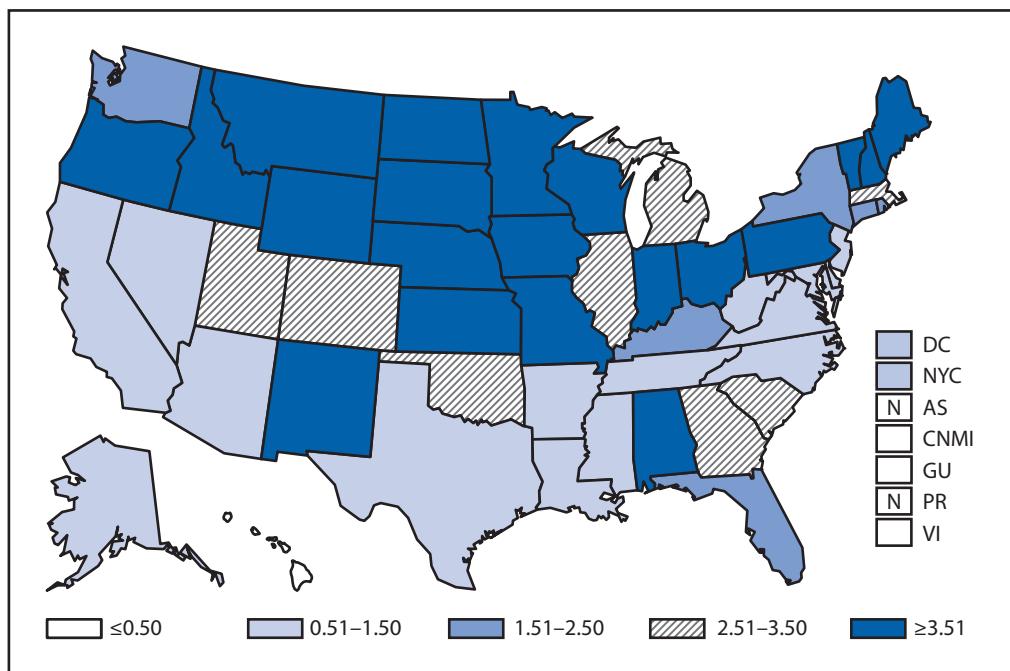
## CRYPTOSPORIDIOSIS. Incidence,\* by year — United States, 1999–2010



\* Per 100,000 population.

Cryptosporidiosis incidence remained relatively stable during 2008–2010 following a >3-fold increase during 2004–2007. Whether the changes in cryptosporidiosis reporting reflect a real change in cryptosporidiosis incidence, revision to the case definition as of 2009 (i.e., adding clinical criteria to the case definition), or changing diagnosis, testing, or reporting patterns is unclear.

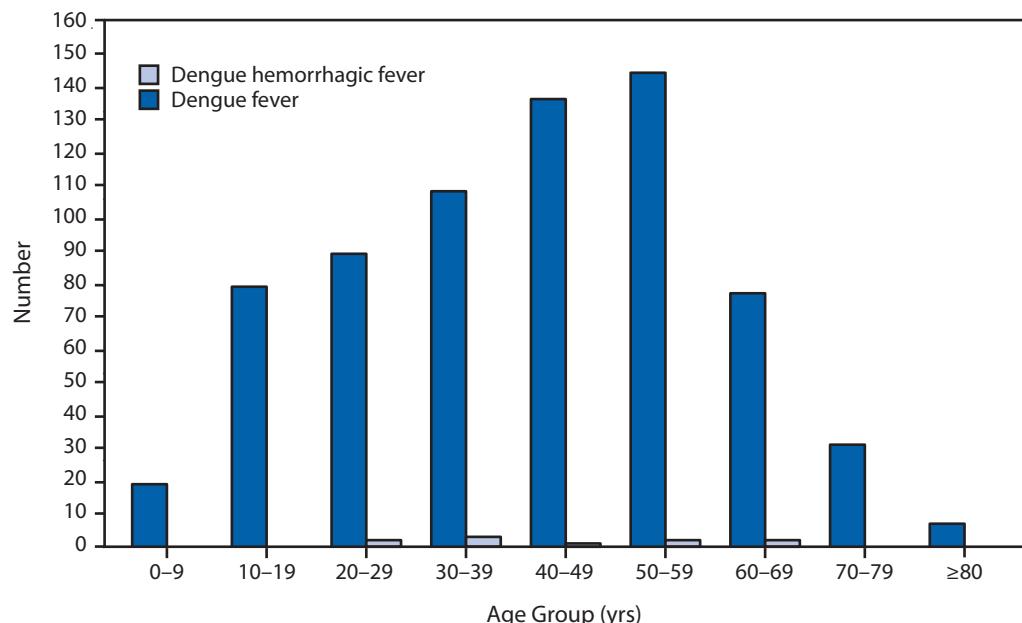
## CRYPTOSPORIDIOSIS. Incidence\* — United States and U.S. territories, 2010



\* Per 100,000 population.

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

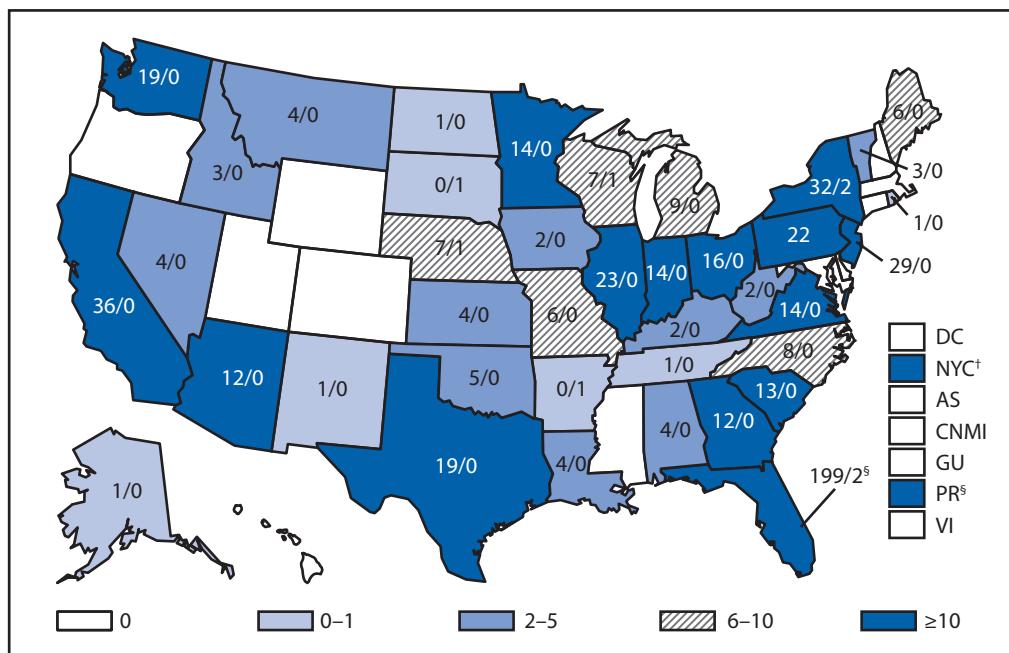
## DENGUE VIRUS INFECTION. Number of reported cases, by age group — United States, 2010



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

In 2010, dengue fever and dengue hemorrhagic fever were made nationally notifiable diseases in the United States. This bar graph represents the number of travel and locally acquired cases of dengue fever and dengue hemorrhagic fever with illness onset in 2010 stratified by age group. The median age of persons with dengue fever was 44 years (range: 1–89 years); most cases occurred in persons aged 50–59 years. The median age for persons with dengue hemorrhagic fever was 40.5 years (range: 28–65).

**DENGUE FEVER AND DENGUE HEMORRHAGIC FEVER. Number of reported cases, by location of residence\* — United States and U.S. territories, 2010**



\* Number of dengue fever cases/number of dengue hemorrhagic fever cases.

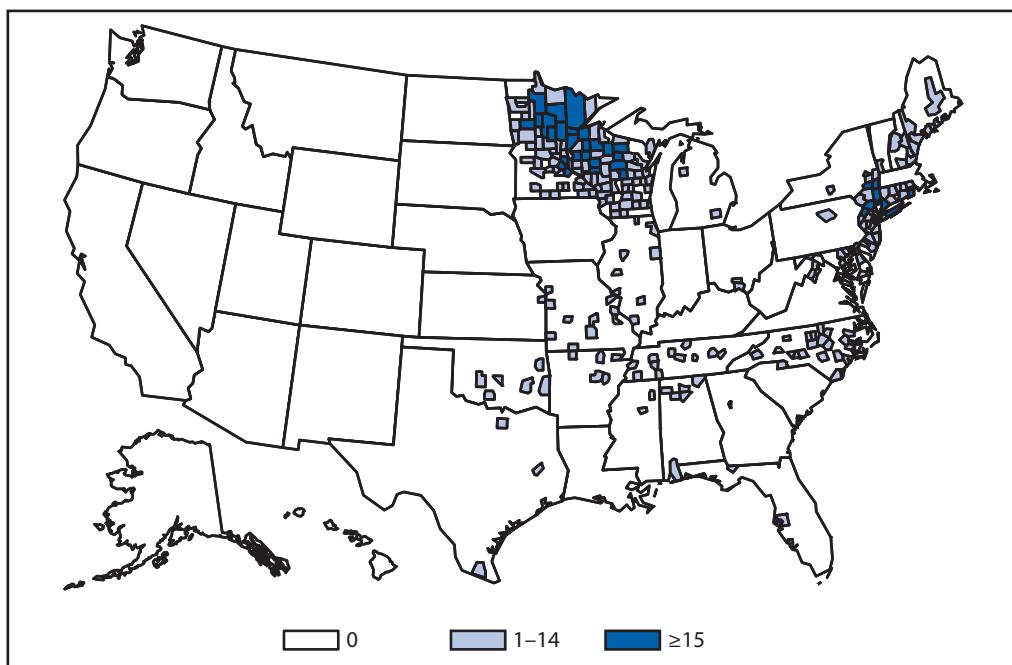
† New York City reported cases 141/3.

§ States and territories with locally acquired cases: Florida 55/2 and Puerto Rico 10,674/237.

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

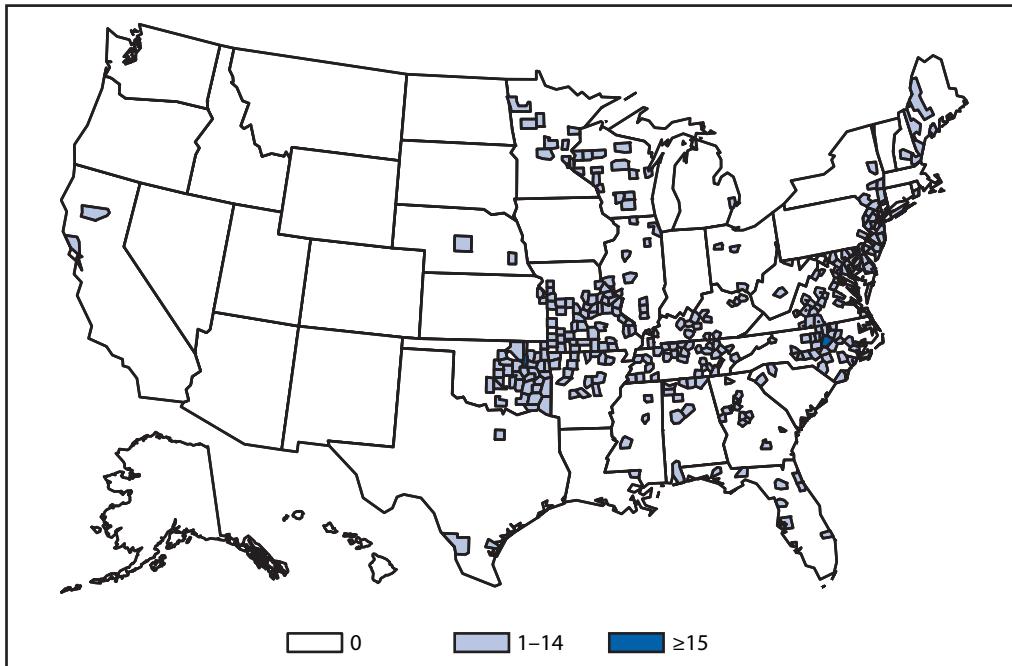
In 2010, dengue fever and dengue hemorrhagic fever were made nationally notifiable diseases in the United States. The numbers on this map represent the number of dengue fever and dengue hemorrhagic fever cases with illness onset in 2010 by residence. Both travel-associated and locally acquired cases are presented. Florida, New York City, California, Illinois, and New York had the highest number of travel-associated cases. Florida and the U.S. territory of Puerto Rico were the only jurisdictions reporting locally acquired dengue cases.

**EHRLICHIOSIS, *ANAPLASMA PHAGOCYTOPHILUM*. Number of reported cases, by county — United States, 2010**

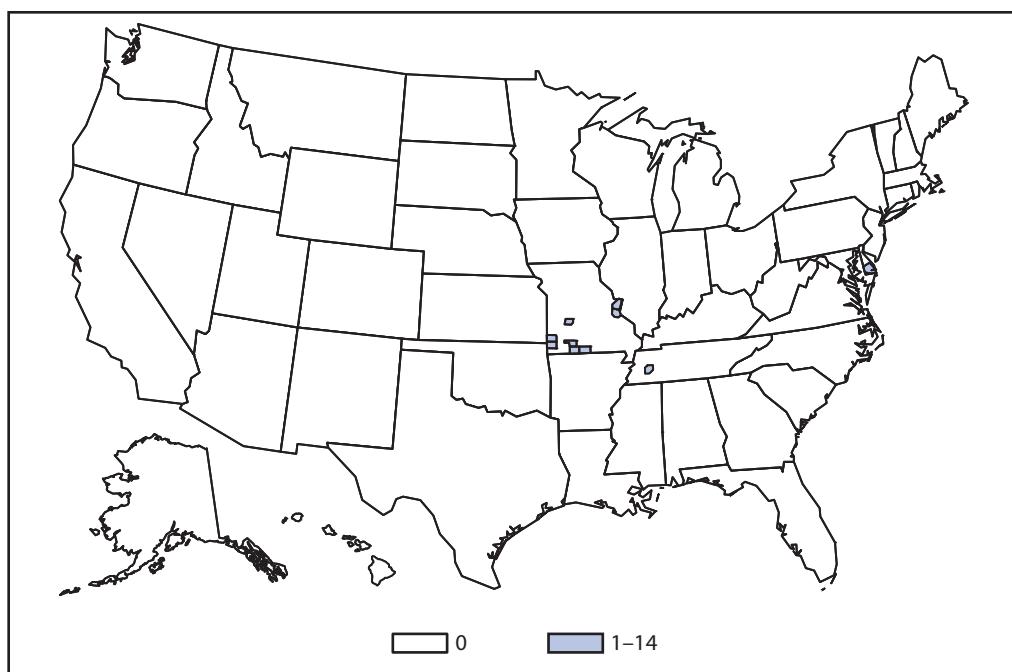


Anaplasmosis is caused by infection with *Anaplasma phagocytophilum*. Cases are reported primarily from the upper Midwest and coastal New England, reflecting both the range of the primary tick vector species (*Ixodes scapularis*) and the range of preferred animal hosts for tick feeding.

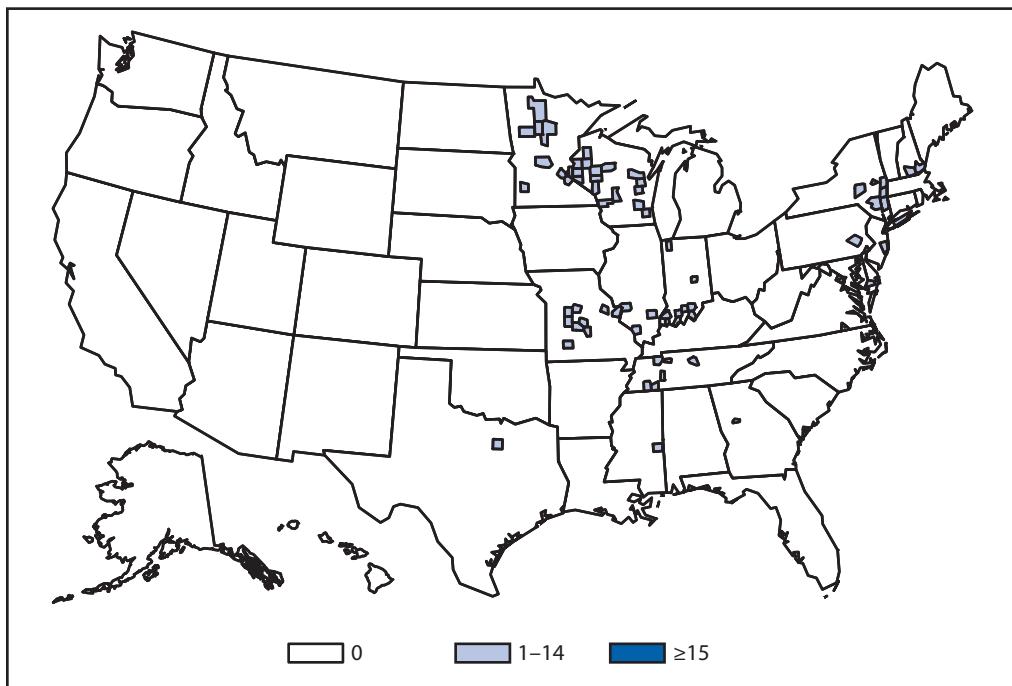
**EHRLICHIOSIS, *EHRLICHIA CHAFFEENSIS*. Number of reported cases, by county — United States, 2010**



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

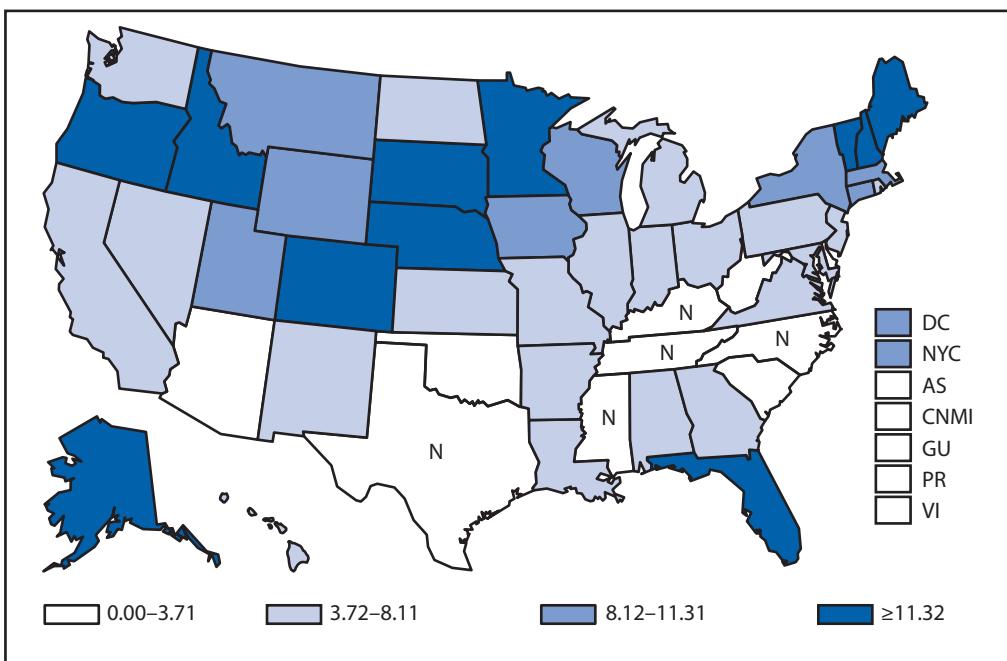
**EHRLICHIOSIS, *EHRLICHIA EWINGII*. Number of reported cases, by county — United States, 2010**

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

**EHRLICHIOSIS, UNDETERMINED. Number of reported cases, by county — United States, 2010**

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

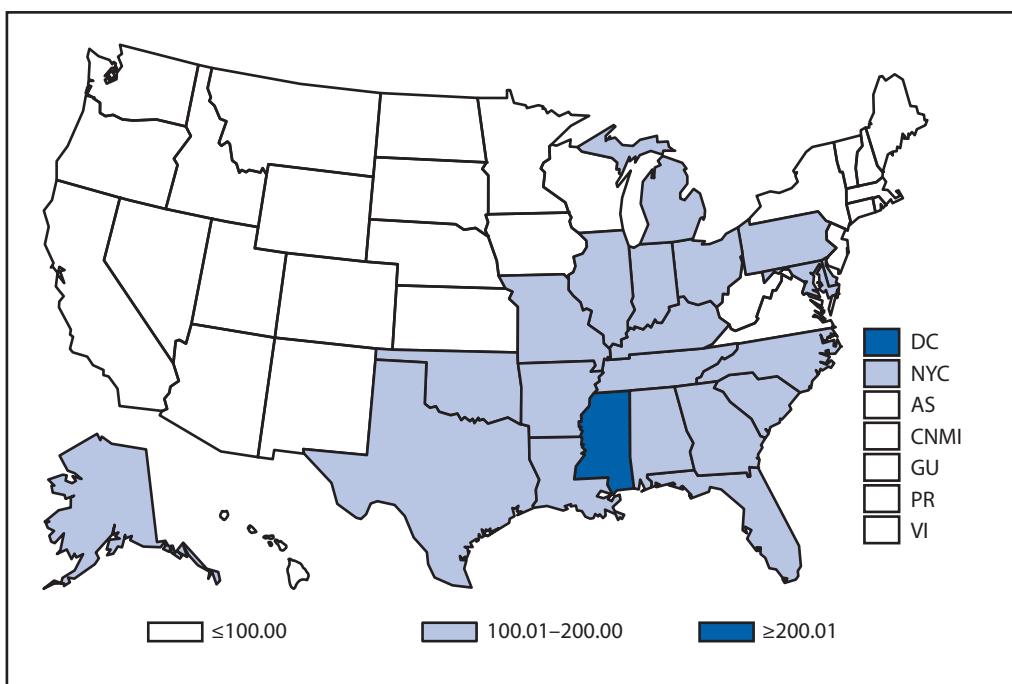
## GIARDIASIS. Incidence\* — United States and U.S. territories, 2010



\* Per 100,000 population.

Giardiasis is widespread geographically in the United States, with increased reporting in certain states and regions. State incidence ranges from 1.7 to 29.7. Whether this difference is of true biologic significance or reflects differences in giardiasis case detection and reporting among states is unclear.

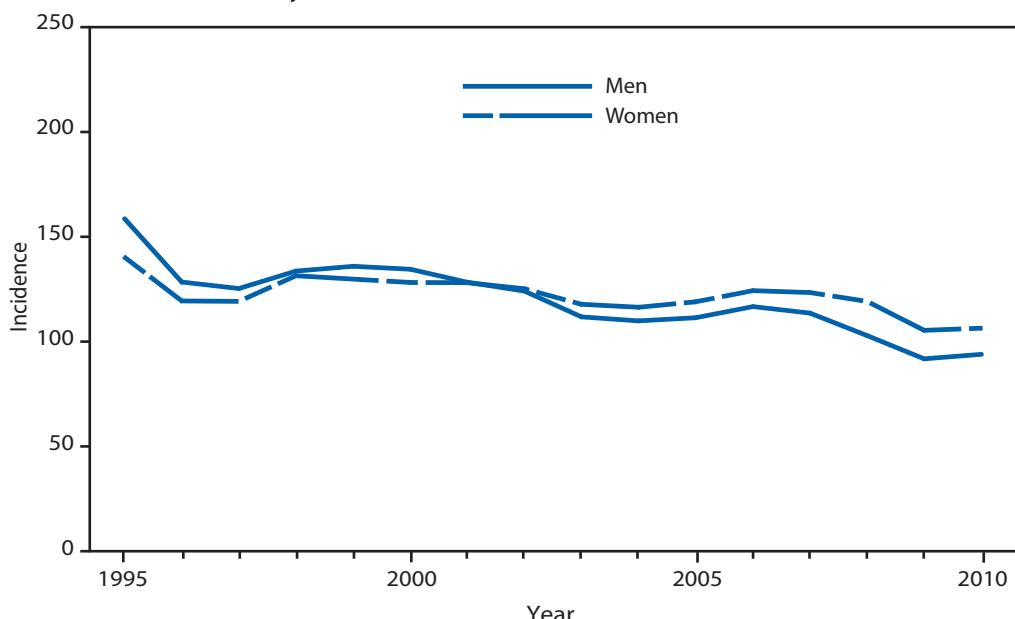
## GONORRHEA. Incidence\* — United States and U.S. territories, 2010



\* Per 100,000 population.

In 2010, the gonorrhea rate in the United States and U.S. territories (Guam, Puerto Rico, and Virgin Islands) was 99.6 cases per 100,000 population, an increase from the rate in 2009.

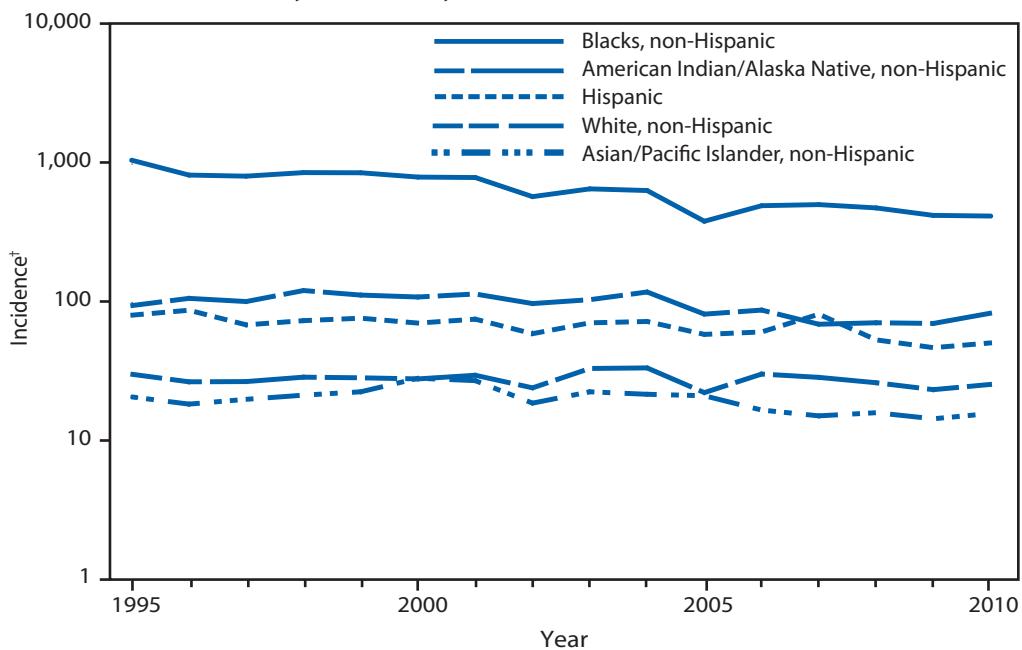
## GONORRHEA. Incidence,\* by sex — United States, 1995–2010



\* Per 100,000 population.

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

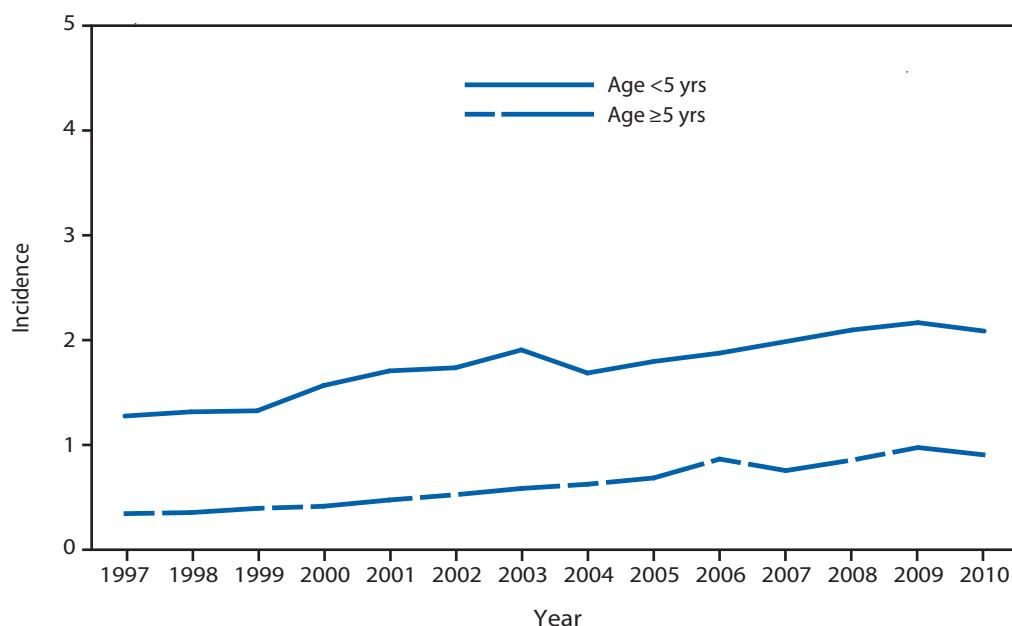
## GONORRHEA. Incidence,\* by race/ethnicity — United States, 1995–2010



\* Per 100,000 population.

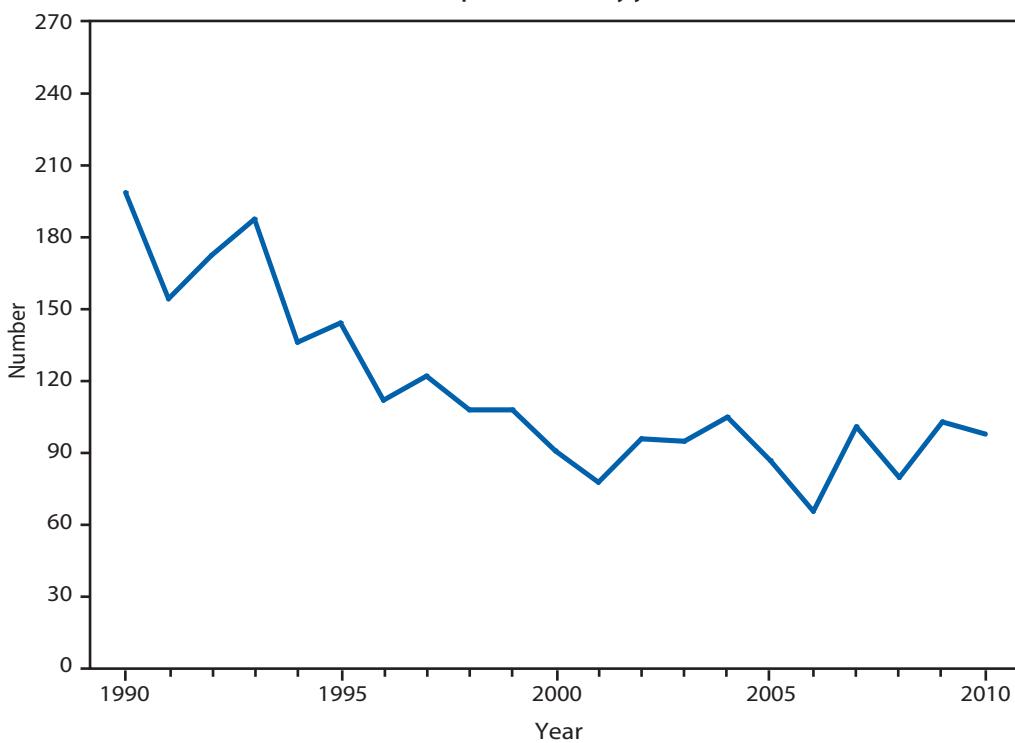
† Y-axis is log scale.

Gonorrhea incidence among blacks decreased considerably during the 1990s but continues to be the highest among all races/ethnicities. In 2010, incidence among non-Hispanic blacks was approximately 20 times greater than that for non-Hispanic whites.

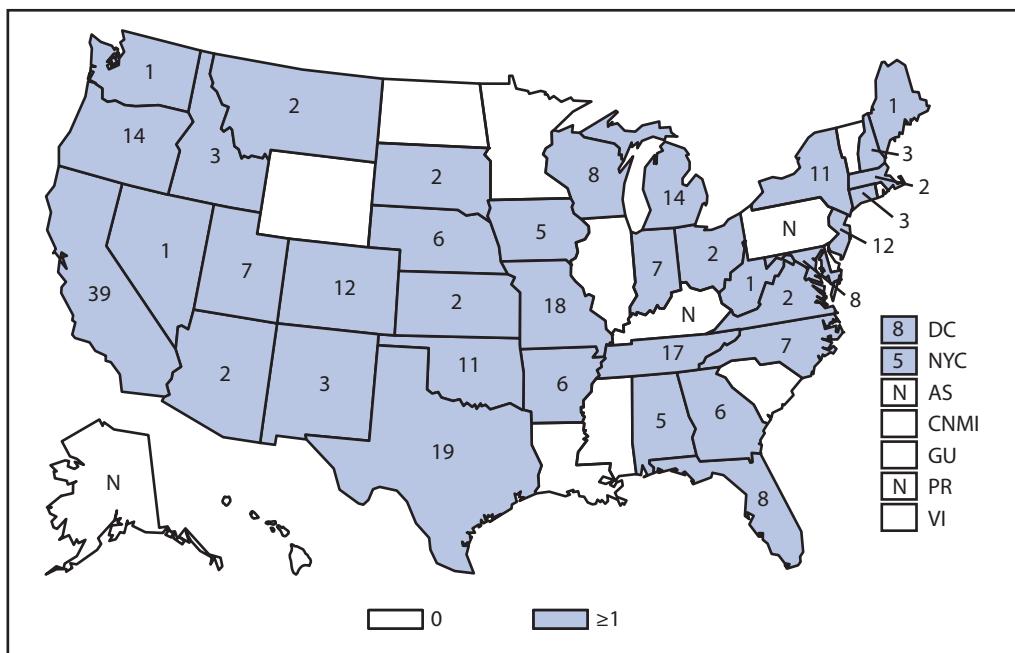
**HAEMOPHILUS INFLUENZAE, INVASIVE DISEASE. Incidence,\* by age group — United States, 1997–2010**

\* Per 100,000 population.

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

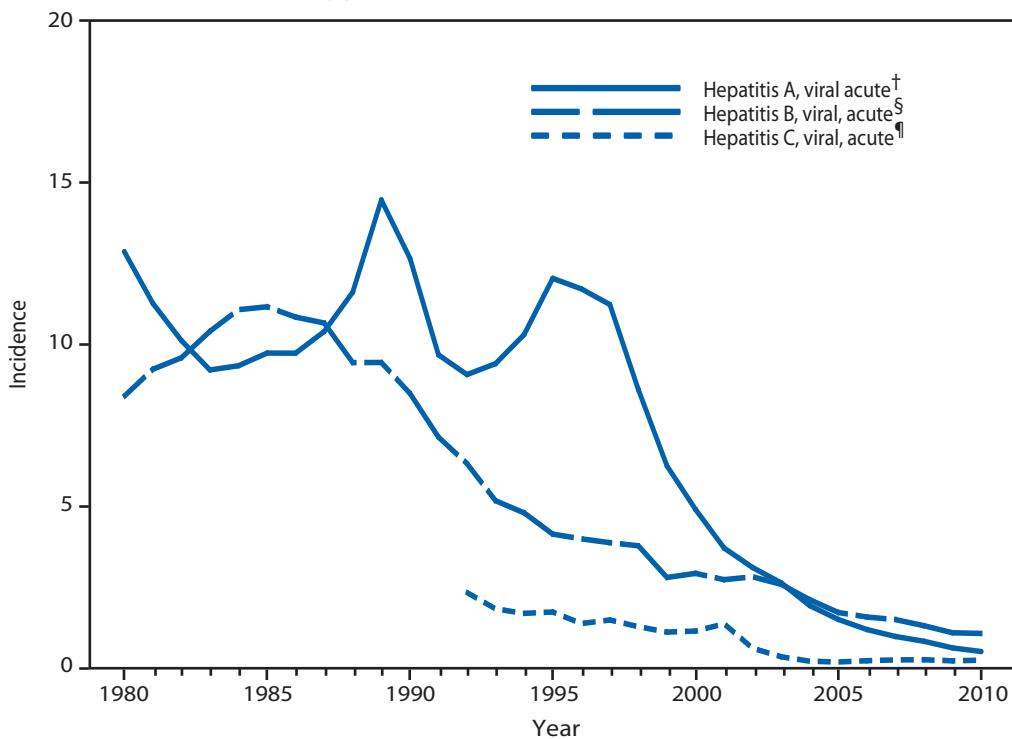
**HANSEN DISEASE (LEPROSY). Number of reported cases, by year — United States, 1990–2010**

During the last two decades, the highest number of Hansen disease (HD) cases was reported in 1990. During 2010, reported HD cases decreased by 4.8% compared with 2009.

**HEMOLYTIC UREMIC SYNDROME, POSTDIARRHEAL. Number of reported cases — United States and U.S. territories, 2010**

During 2010, most cases occurred among children aged 1–4 years followed by children aged 5–9 years. Hemolytic uremic syndrome has been a nationally notifiable disease since 1995. In 2010, cases continued to be reported from all regions in the country. Reporting is likely not complete.

## HEPATITIS, VIRAL. Incidence,\* by year — United States, 1980–2010



\* Per 100,000 population.

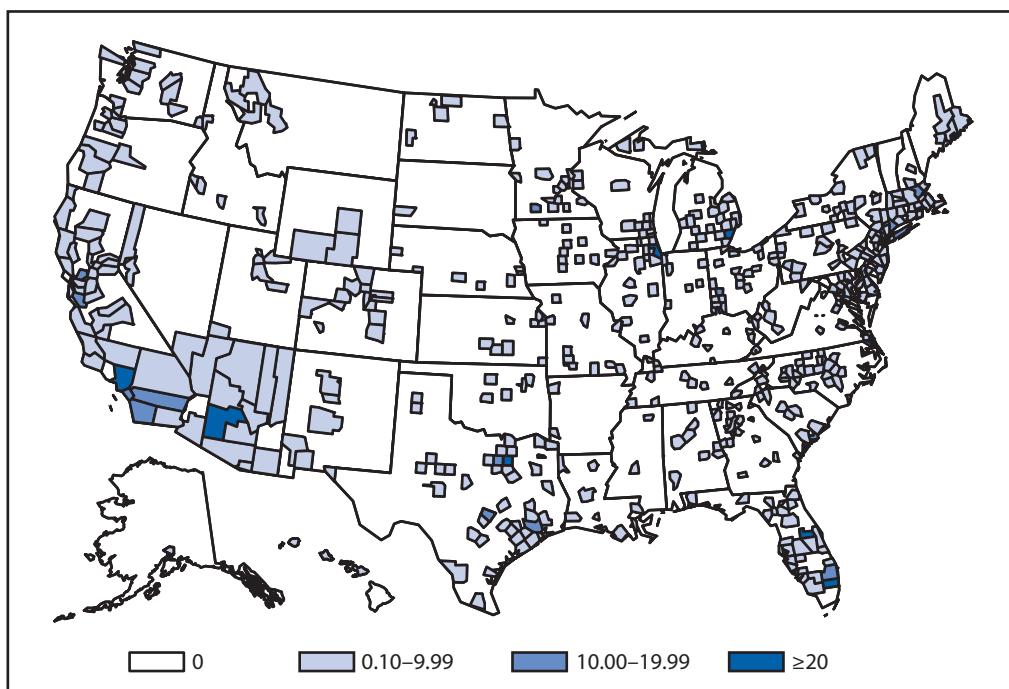
† Hepatitis A vaccine was first licensed in 1995.

§ Hepatitis B vaccine was first licensed in June 1982.

¶ An anti-hepatitis C virus (HCV) antibody test first became available in May 1990.

Hepatitis A incidence continues to decline and in 2010 was the lowest ever recorded. The last peak in acute, symptomatic hepatitis A cases was observed around 1995, when hepatitis A vaccine became available. Since then, the decline in disease incidence has been constant. Acute hepatitis B incidence has declined since the mid-1980s, coinciding with the stepwise implementation of the national vaccination strategy to eliminate hepatitis B infection. Since 2007, hepatitis B incidence has remained stable. The incidence of acute hepatitis C has declined during 1992–2005. The incidence of acute hepatitis C has remained stable from 2006 to 2010.

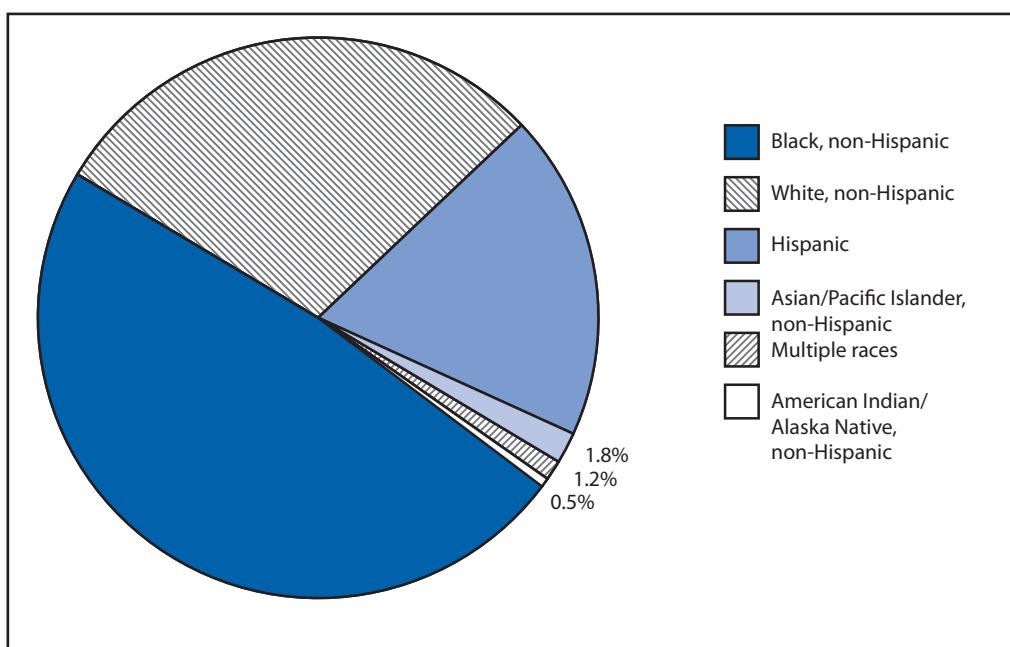
## HEPATITIS A. Incidence,\* by county — United States, 2010



\* Per 100,000 population.

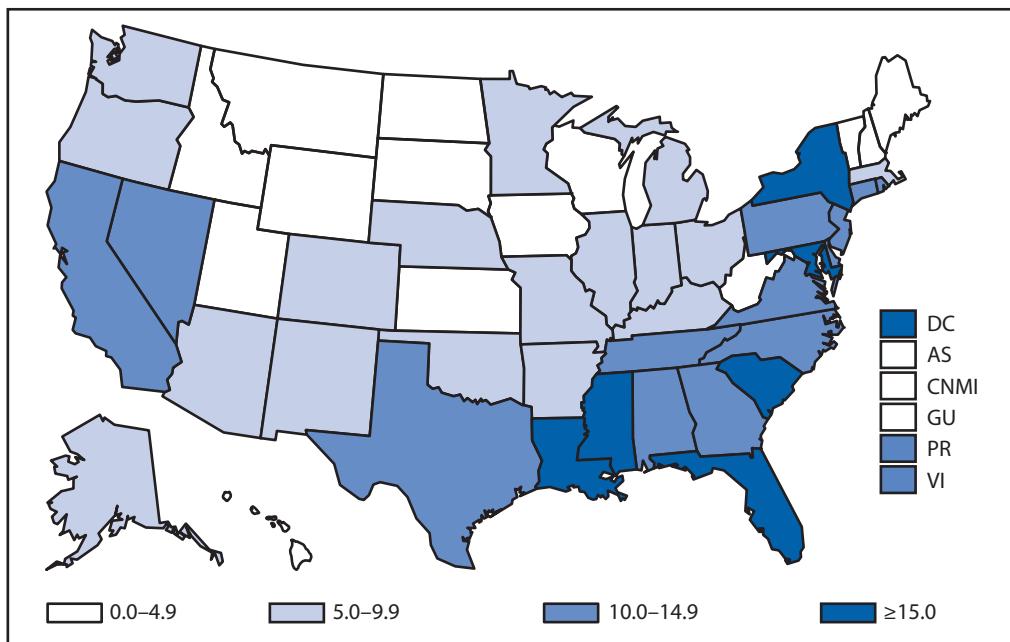
In 1999, routine hepatitis A vaccination was recommended for children living in 11 states with consistently elevated rates of disease. Since then, rates of infection with hepatitis A virus (HAV) have declined in all regions, with the greatest decline occurring in western states. HAV infection rates are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

**HUMAN IMMUNODEFICIENCY VIRUS DIAGNOSES. Percentage of diagnosed cases, by race/ethnicity — United States, 2010**



Of persons diagnosed with HIV infection in 2010, the greatest percentage was among non-Hispanic blacks, followed by non-Hispanic whites, Hispanics, Asians/Pacific Islanders, persons of multiple races, and American Indians/Alaska Natives.

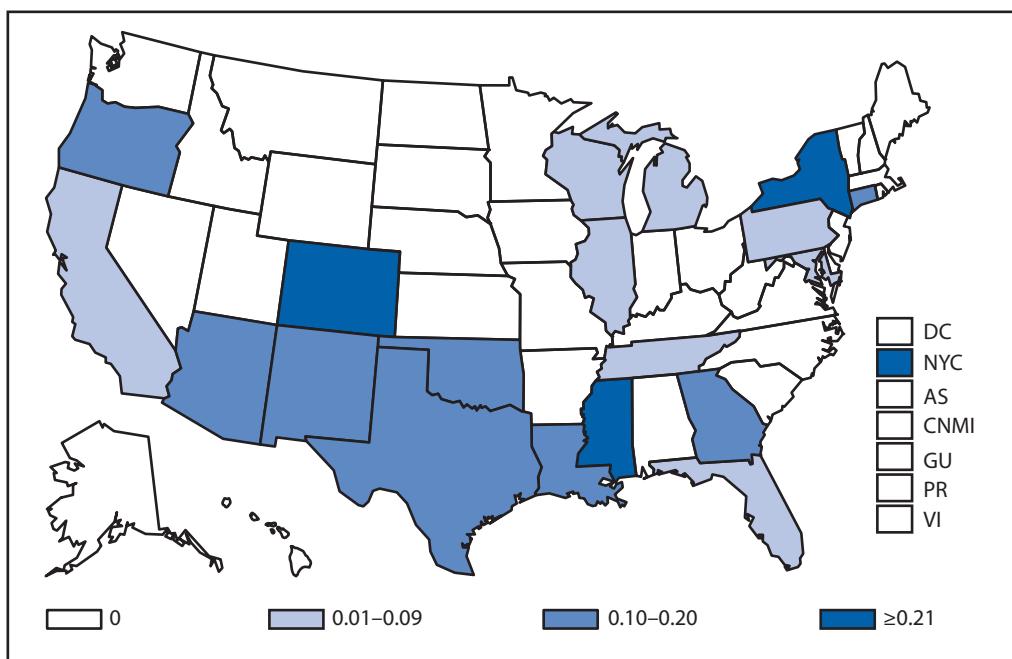
**HUMAN IMMUNODEFICIENCY VIRUS DIAGNOSES. Diagnoses rates\* — United States and U.S. territories, 2010**



\* Per 100,000 population.

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

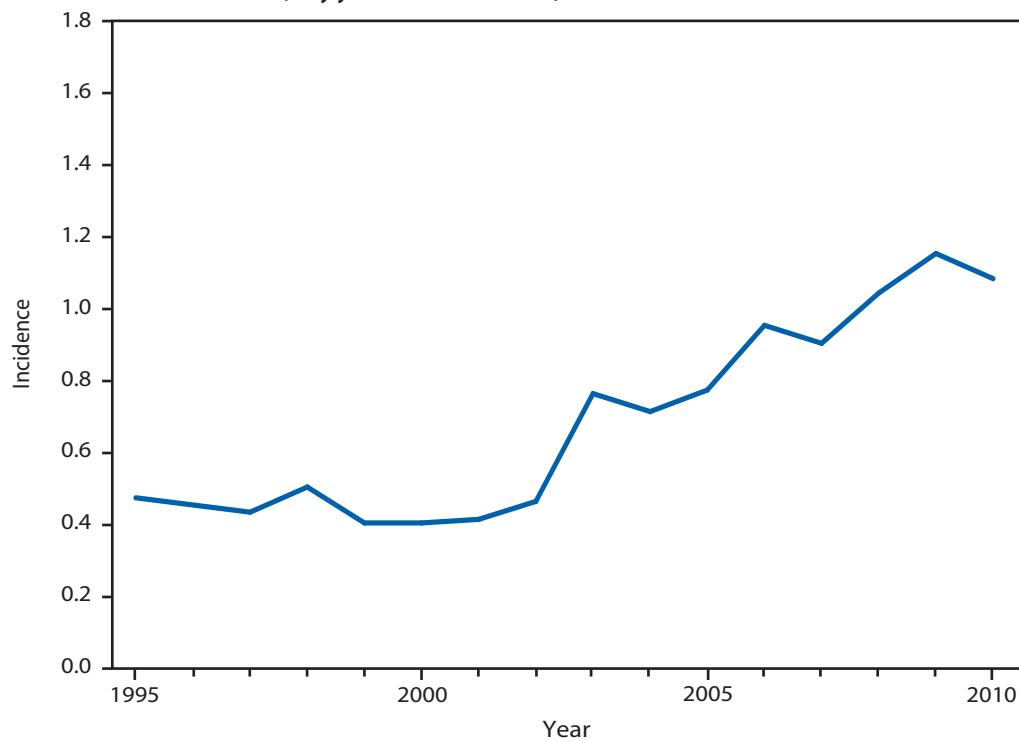
**INFLUENZA-ASSOCIATED PEDIATRIC MORTALITY. Incidence\* — United States and U.S. territories, 2010**



\* Per 100,000 population.

During 2010, 19 states and New York City reported a total of 61 influenza-associated pediatric deaths to CDC for an overall incidence in the United States of 0.08 deaths per 100,000 children aged <18 years. This represents 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 seen: one from seasonal influenza activity, a small peak during the summer months related to the initial pandemic 2009 A(H1N1) activity, followed by a much larger peak associated with pandemic activity in the fall of 2009. In contrast, neither the peak of the 2009–10 or 2010–11 seasons occurred during 2010. The state-to-state variation in rates were likely related to the small numbers of deaths in each state rather than true differences in disease burden.

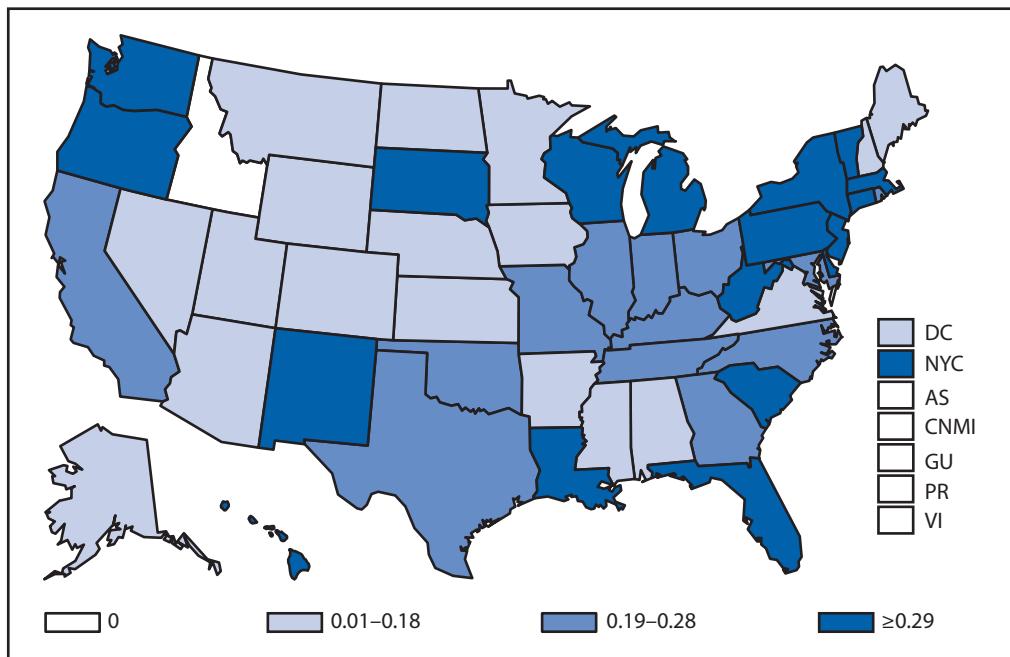
## LEGIONELLOSIS. Incidence,\* by year — United States, 1995–2010



\* Per 100,000 population.

The incidence of legionellosis stabilized in 2010, but reflects an increasing trend that began in 2003. Factors contributing to this increase might include a true increase in disease transmission, greater use of diagnostic testing, and increased reporting.

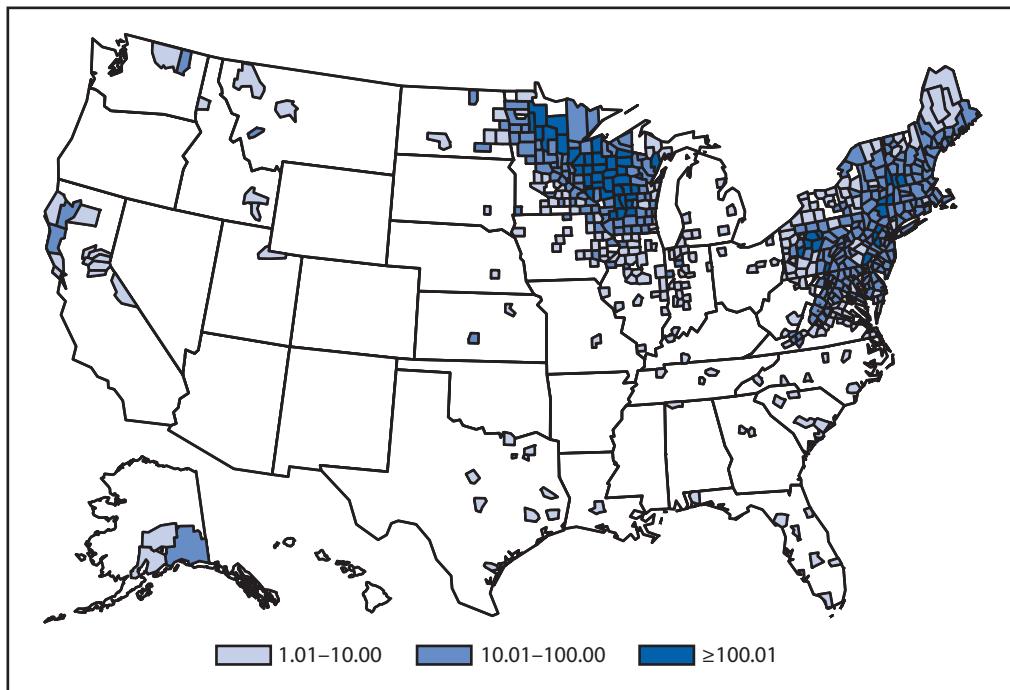
## LISTERIOSIS. Incidence\* — United States and U.S. territories, 2010



\* Per 100,000 population.

Listeriosis is primarily foodborne and occurs most frequently among older adults or persons who are pregnant or immunocompromised. Although the infection is relatively uncommon, listeriosis is a leading cause of death attributable to foodborne illness in the United States. During 2010, outbreaks were linked to the consumption of pre-cut celery, hogs head cheese, and Mexican-style cheese made from pasteurized milk.

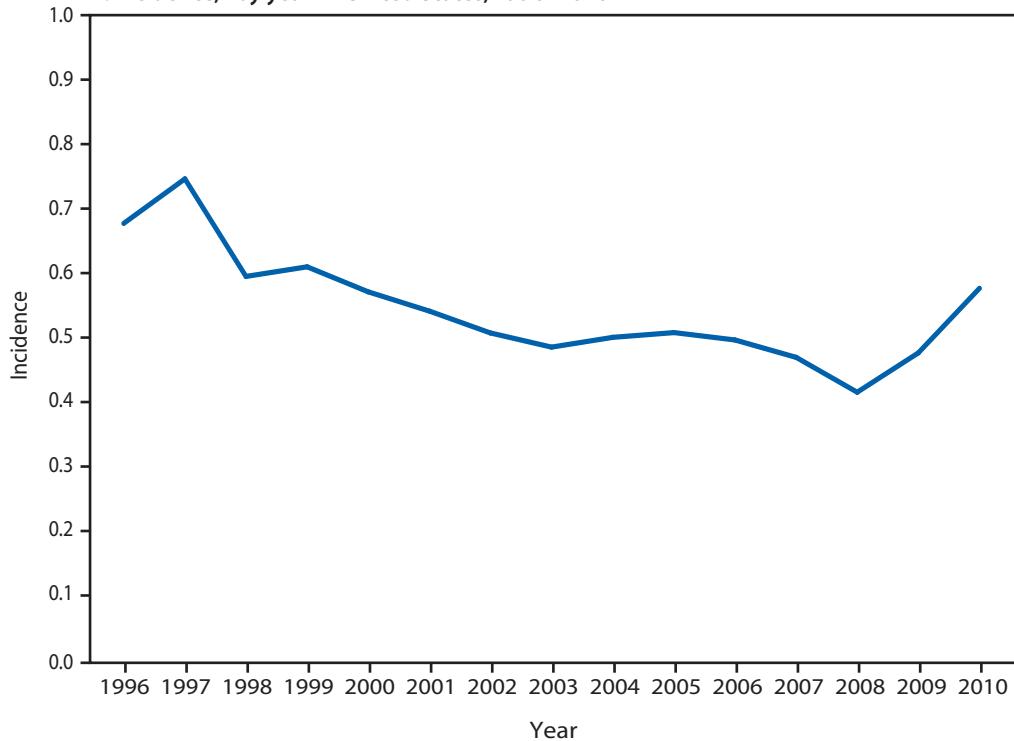
## LYME DISEASE. Incidence\* of reported confirmed cases, by county — United States, 2010



\* Per 100,000 population.

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

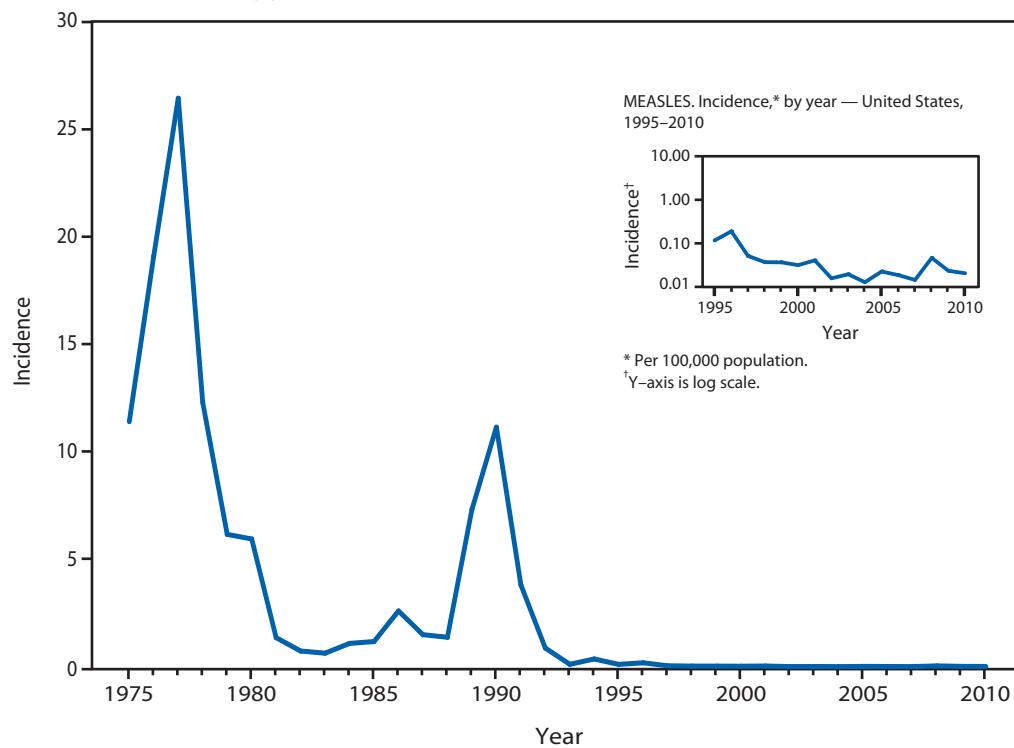
**MALARIA. Incidence,\* by year — United States, 1996–2010**



\* Per 100,000 population.

Malaria in the United States is primarily a disease of travelers, for whom protective prophylaxis is recommended. Since 2008, the number of cases of malaria has steadily increased.

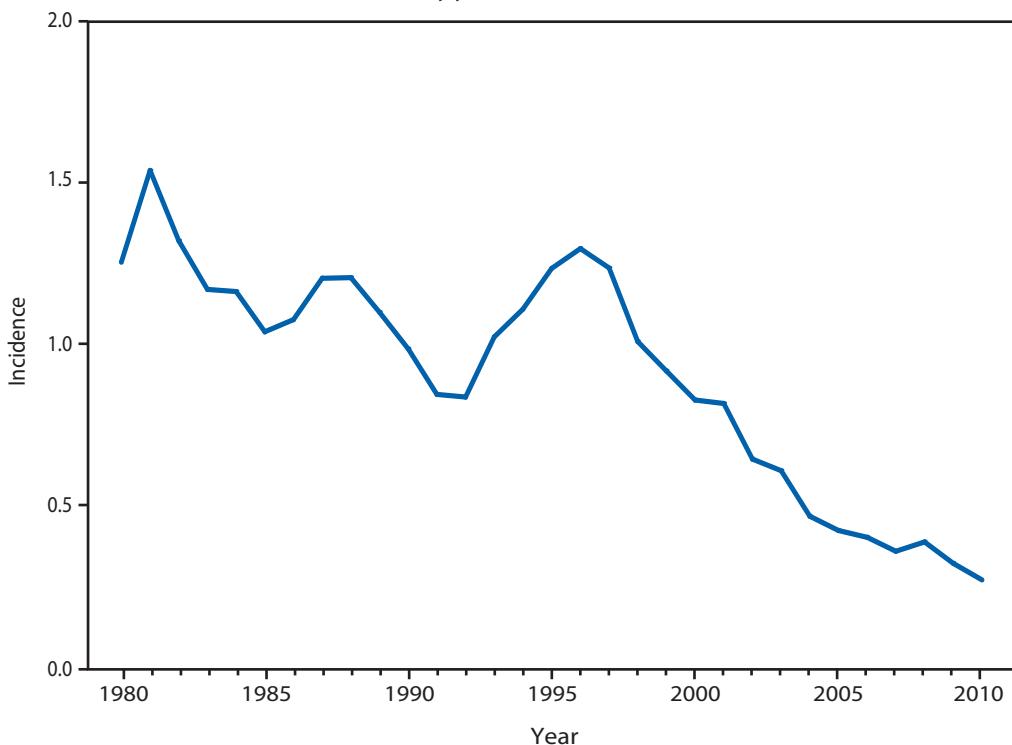
## MEASLES. Incidence,\* by year — United States, 1975–2010



\* Per 100,000 population.

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

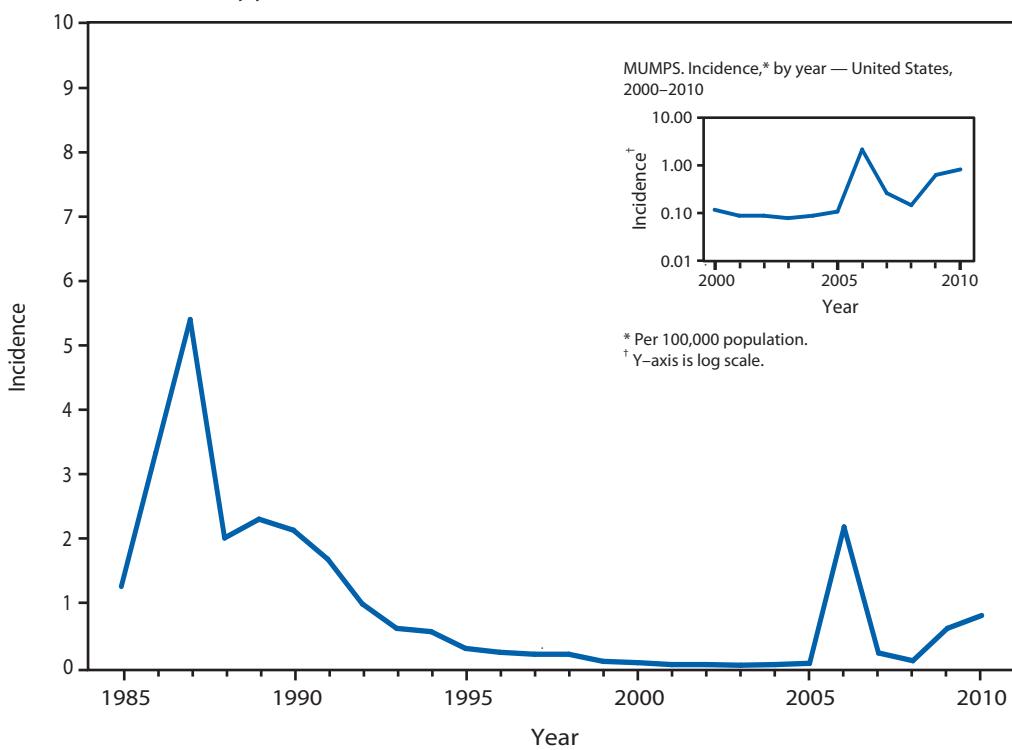
## MENINGOCOCCAL DISEASE. Incidence,\* by year — United States, 1980–2010



\* Per 100,000 population.

Meningococcal disease incidence remained low in 2010, but it continues to cause substantial morbidity and mortality in the United States. The highest incidence of meningococcal disease occurs among infants, with a second peak occurring in late adolescence. In 2005, a quadrivalent (A, C, Y, W-135) meningococcal conjugate vaccine was licensed and recommended for adolescents and others at increased risk for disease. In October 2010, a booster dose was added to recommendations for adolescents at age 16 years. In 2010, coverage with one dose of meningococcal conjugate vaccine was 62.7% among adolescents aged 13–17 years in the United States.

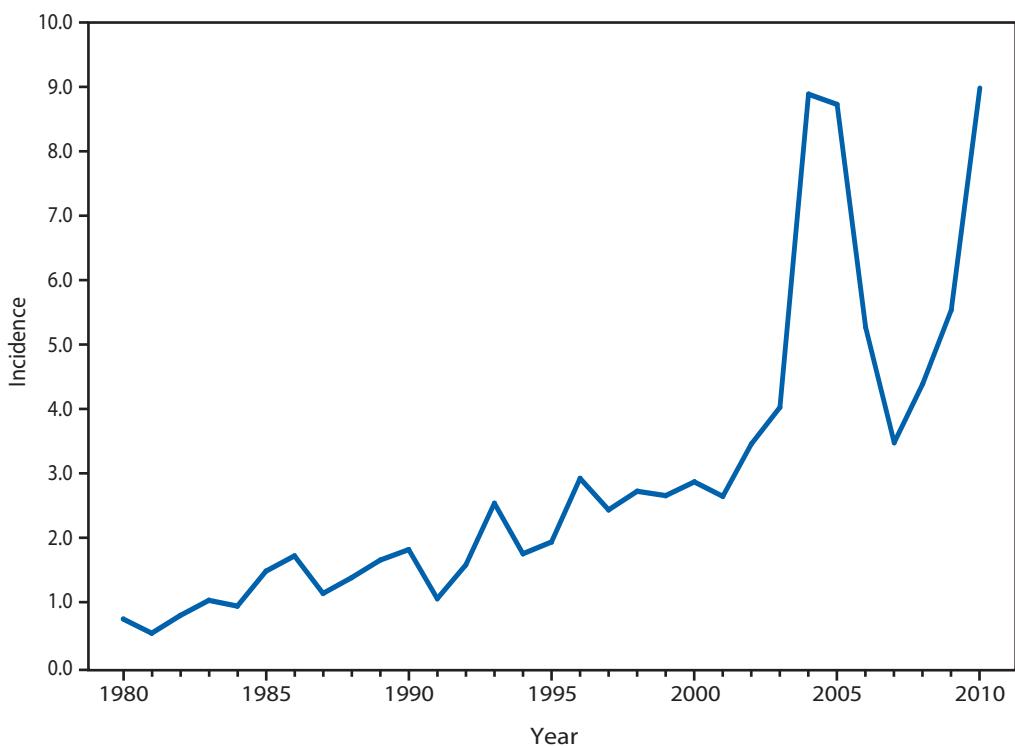
## MUMPS. Incidence,\* by year — United States, 1985–2010



\* Per 100,000 population.

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

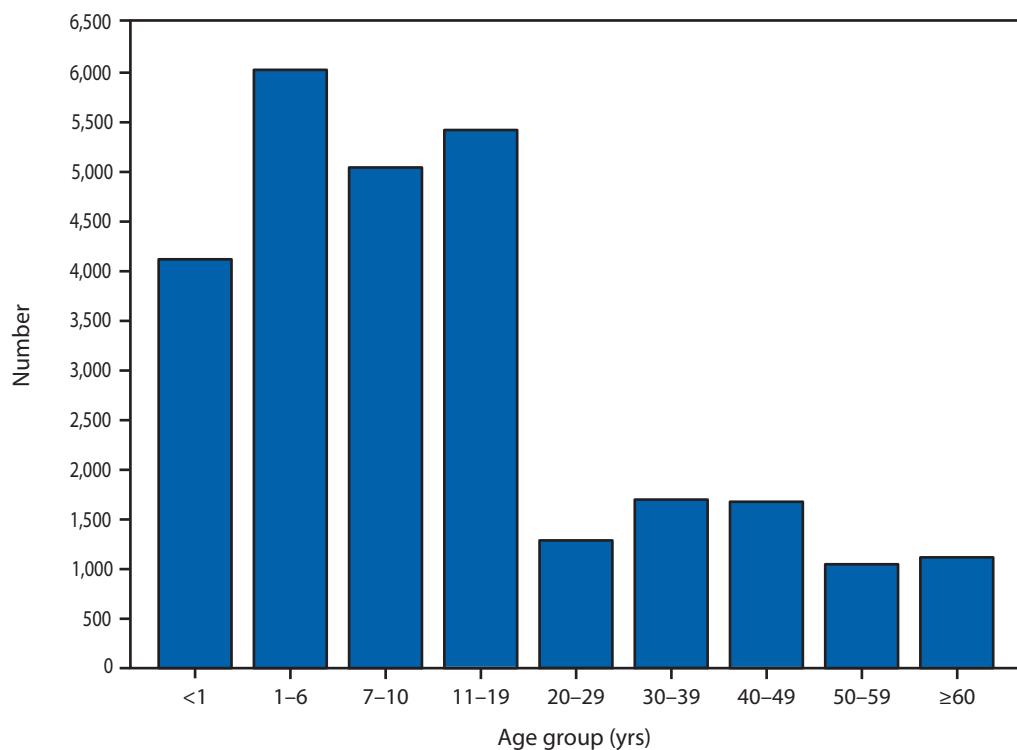
**PERTUSSIS. Incidence,\* by year — United States, 1980–2010**



\* Per 100,000 population.

Pertussis continues to have cyclic peaks every 3 to 5 years. Incidence in 2010 surpassed the previous peaks in 2004 and 2005.

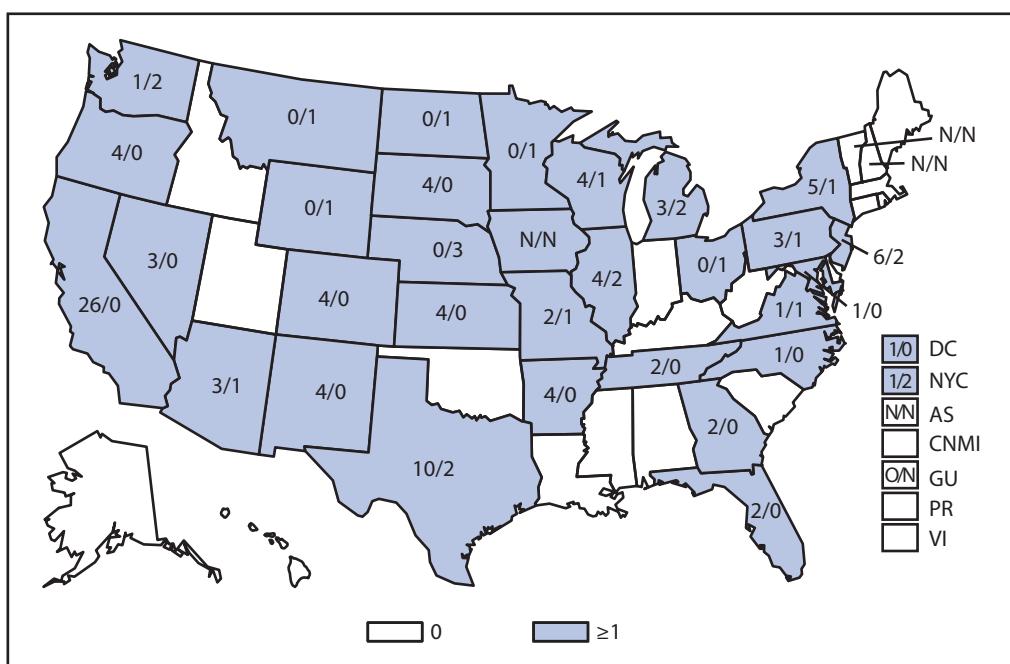
## PERTUSSIS. Number of reported cases,\* by age group — United States, 2010



\* Of 27,550 cases, age was reported unknown for 159 persons.

Infants, especially those who are too young to be fully vaccinated, are at greatest risk for severe disease and death from pertussis. Similar to recent years, a large proportion of reported cases continues to be observed among school-aged children and adolescents.

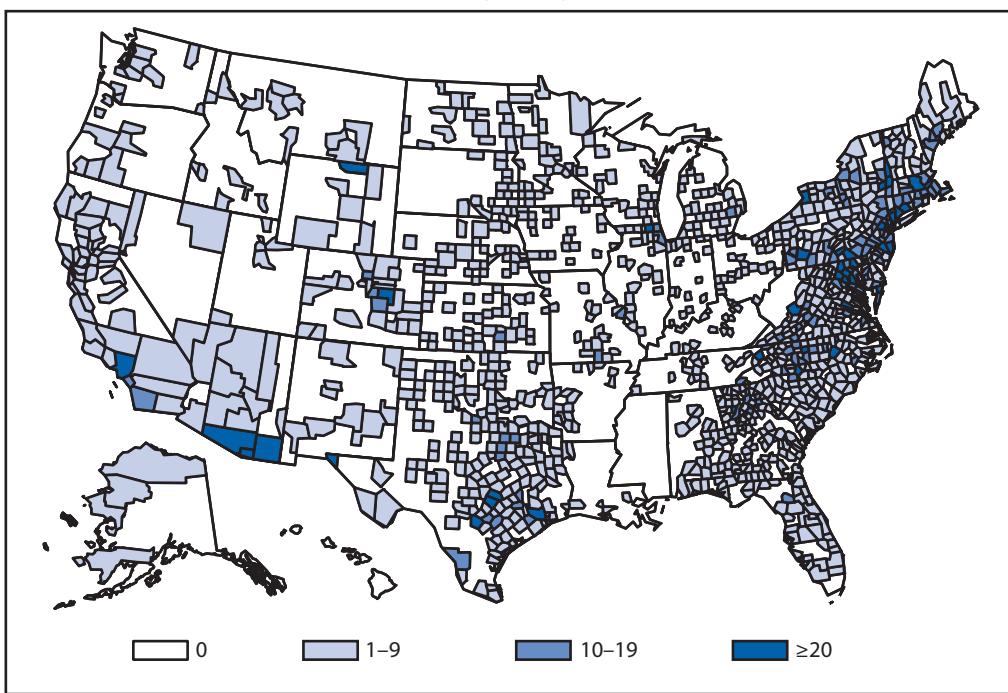
**Q FEVER, ACUTE AND CHRONIC. Number of reported cases\* — United States and U.S. territories, 2010**



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

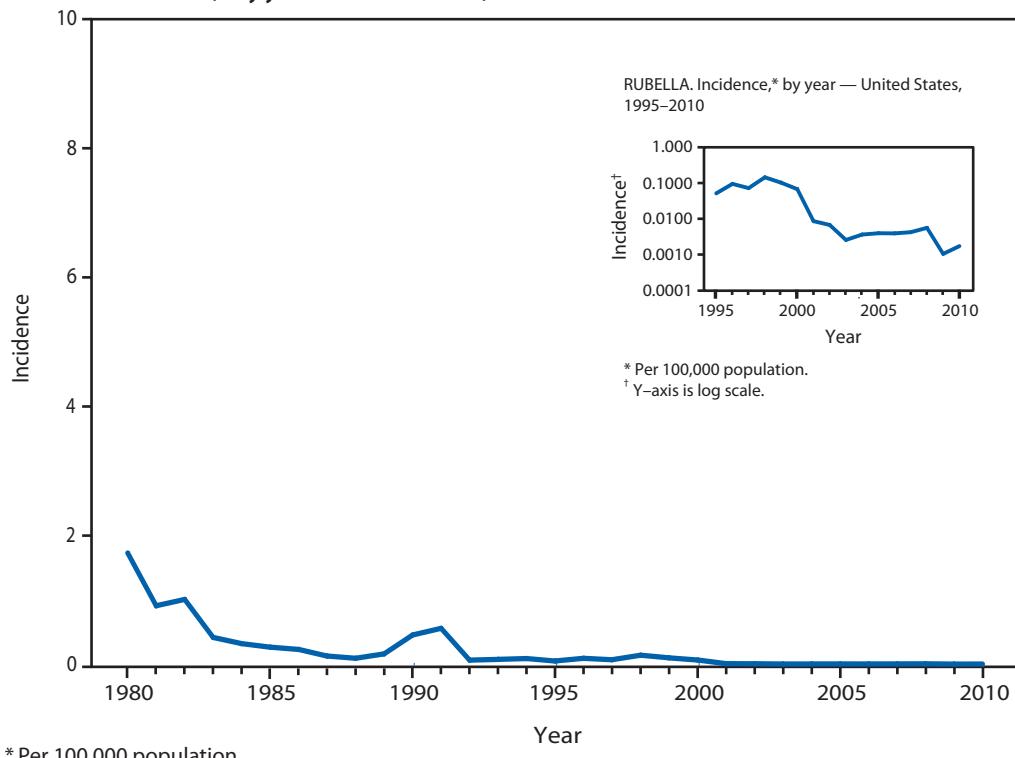
## RABIES, ANIMAL. Number of reported cases, by county — United States, 2010



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

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. In addition, several distinct rabies virus variants associated with different bat species are broadly distributed across the contiguous United States. Hawaii is the only state that has reported to be rabies free.

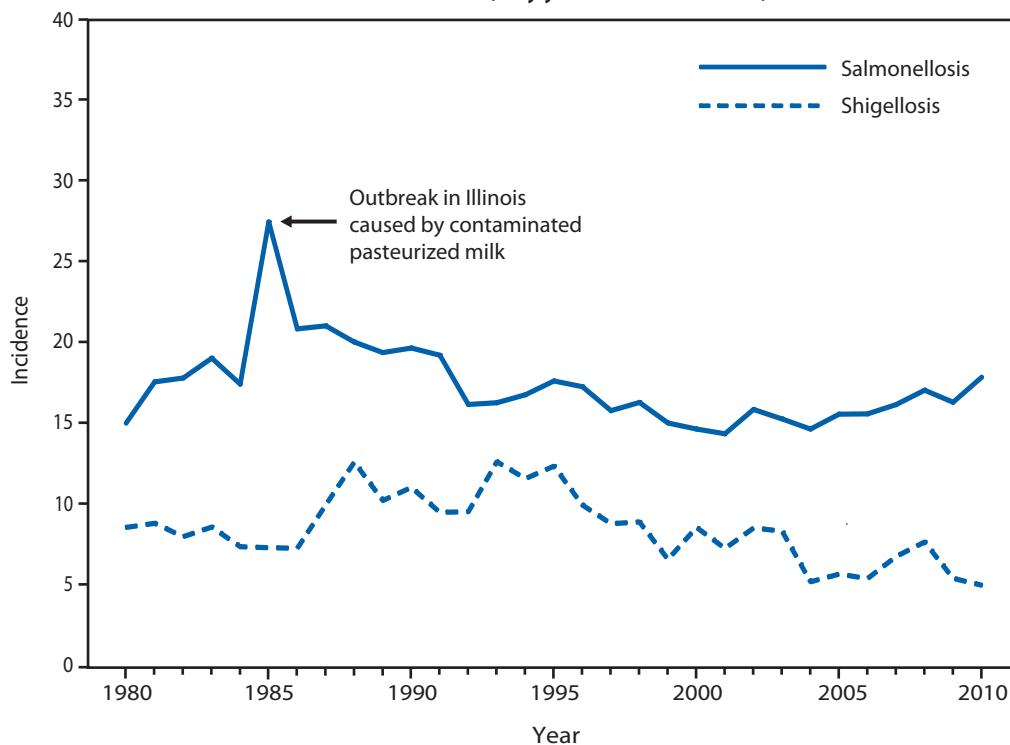
## RUBELLA. Incidence,\* by year — United States, 1980–2010



\* Per 100,000 population.

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

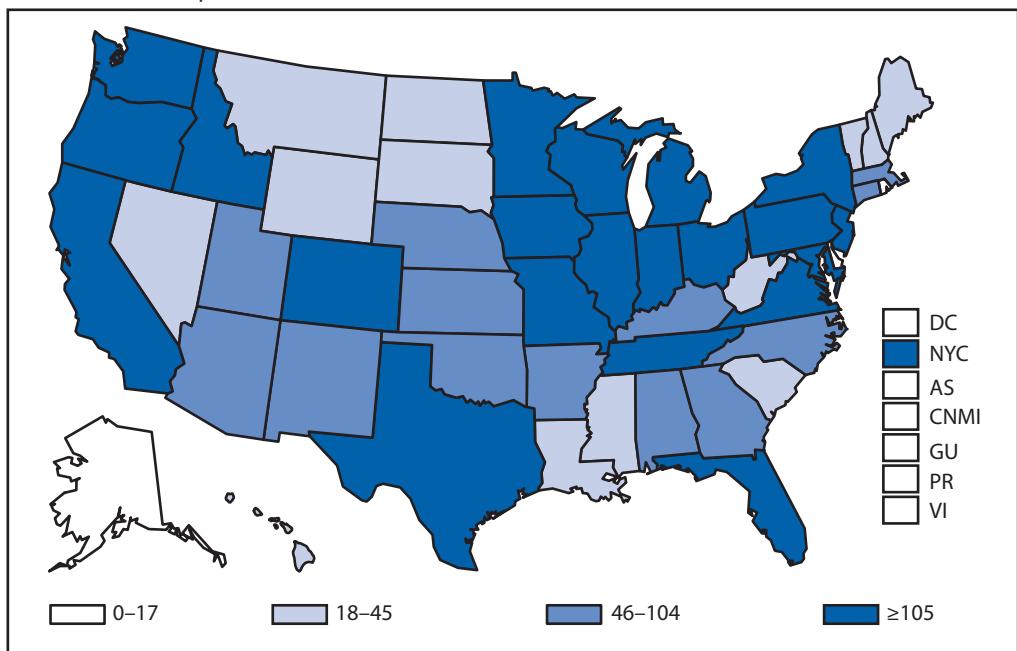
## SALMONELLOSIS AND SHIGELLOSIS. Incidence,\* by year — United States, 1980–2010



\* Per 100,000 population.

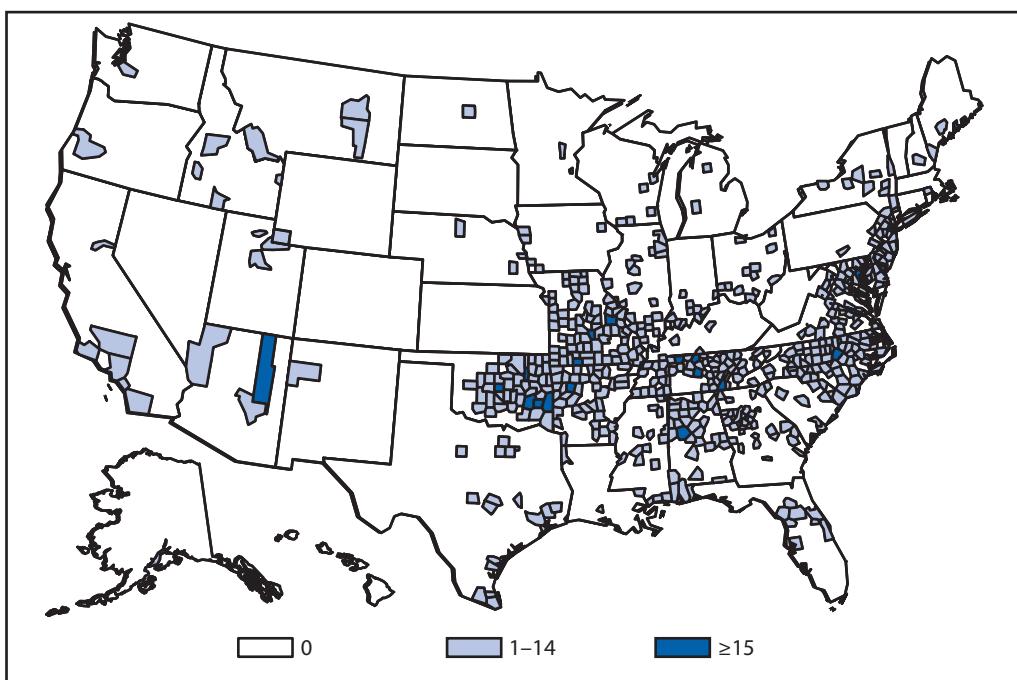
The reported number of cases of salmonellosis and shigellosis has remained relatively stable during the past 2 decades. During 2010, multistate outbreaks of *Salmonella* were linked to frozen rodents used as reptile feed and the consumption of shell eggs, salami products made with contaminated imported black and red pepper, alfalfa sprouts, and a commercially distributed frozen chicken and rice entrée.

**SHIGA TOXIN-PRODUCING *ESCHERICHIA COLI* (STEC). Number of reported cases — United States and U.S. territories, 2010**



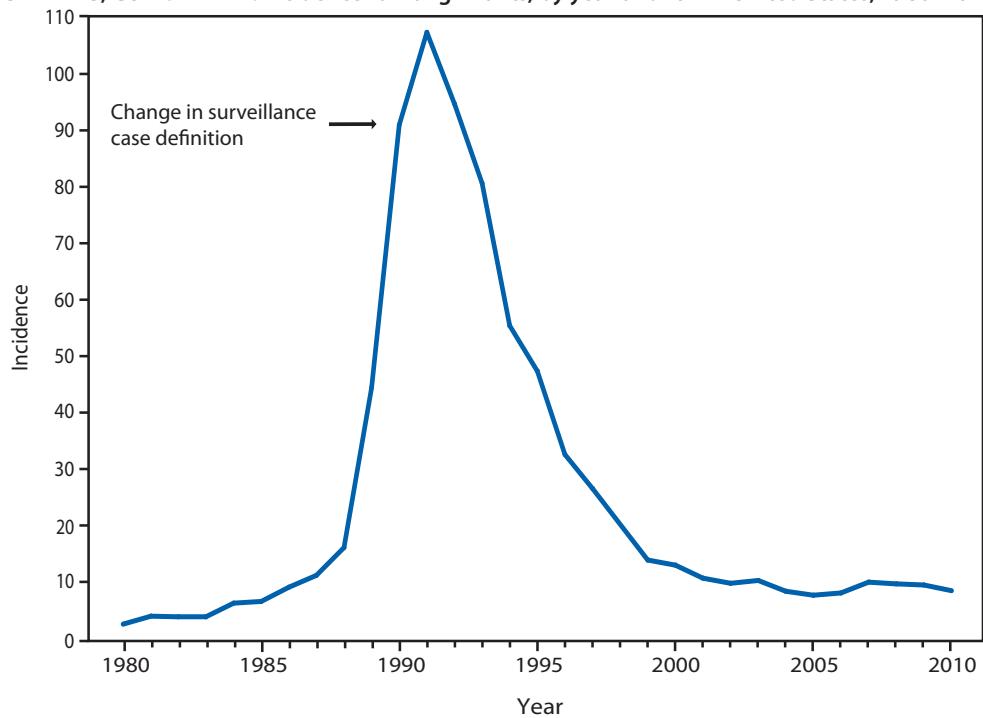
In 2010, the 2010 Healthy People national health objective goals of  $\leq 1$  case per 100,000 population for O157 STEC was met for U.S. states participating in the Foodborne Diseases Active Surveillance Network; STEC O157 is the type of STEC most associated with the hemolytic uremic syndrome. However, total counts of STEC might be increasing because of increasing use of Shiga toxin tests in clinical labs that help detect non-O157 STEC.

**SPOTTED FEVER RICKETTSIOSIS. Number of reported cases, by county — United States, 2010**



Cases of spotted fever rickettsiosis, the majority of which result from infection with *Rickettsia rickettsii*, the causative agent for Rocky Mountain spotted fever, are reported throughout much of the United States. This represents the widespread ranges of the primary tick vectors responsible for transmission, primarily *Dermacentor variabilis* in the East and *Dermacentor andersoni* in the West, but also *Rhipicephalus sanguineus* in some newly recognized focal areas. Studies of the role of tick vectors involved in the transmission of other spotted fever rickettsial species responsible for human disease are ongoing.

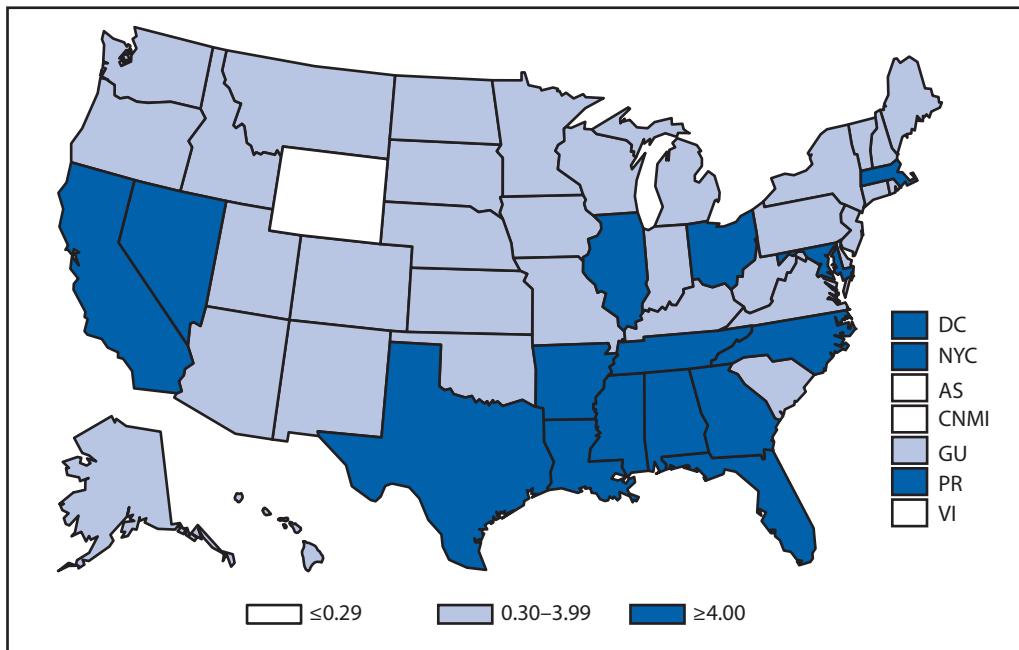
**SYPHILIS, CONGENITAL. Incidence\* among infants, by year of birth — United States, 1980–2010**



\* Per 100,000 live births.

Following a decline in the incidence of congenital syphilis since 1991, overall congenital syphilis rates decreased from 2009 to 2010, from 9.9 to 8.7 cases per 100,000 live births.

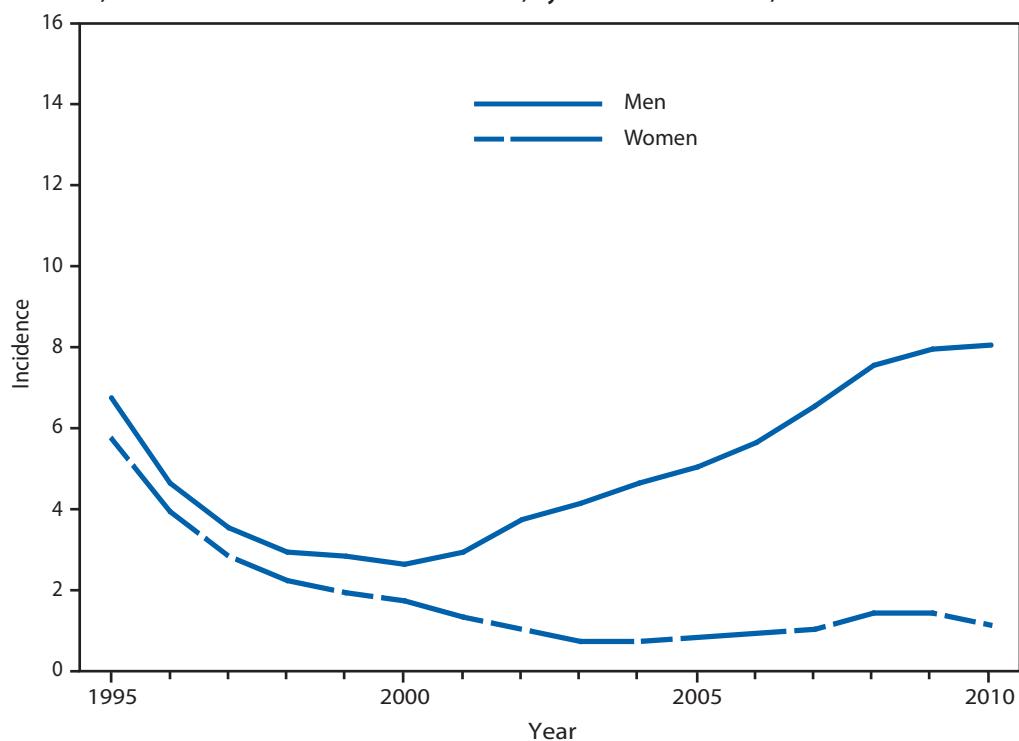
**SYPHILIS, PRIMARY AND SECONDARY. Incidence\* — United States and U.S. Territories, 2010**



\* Per 100,000 population.

In 2010, the primary and secondary syphilis rate in the United States and U.S. territories (Guam, Puerto Rico, and Virgin Islands) was 4.5 cases.

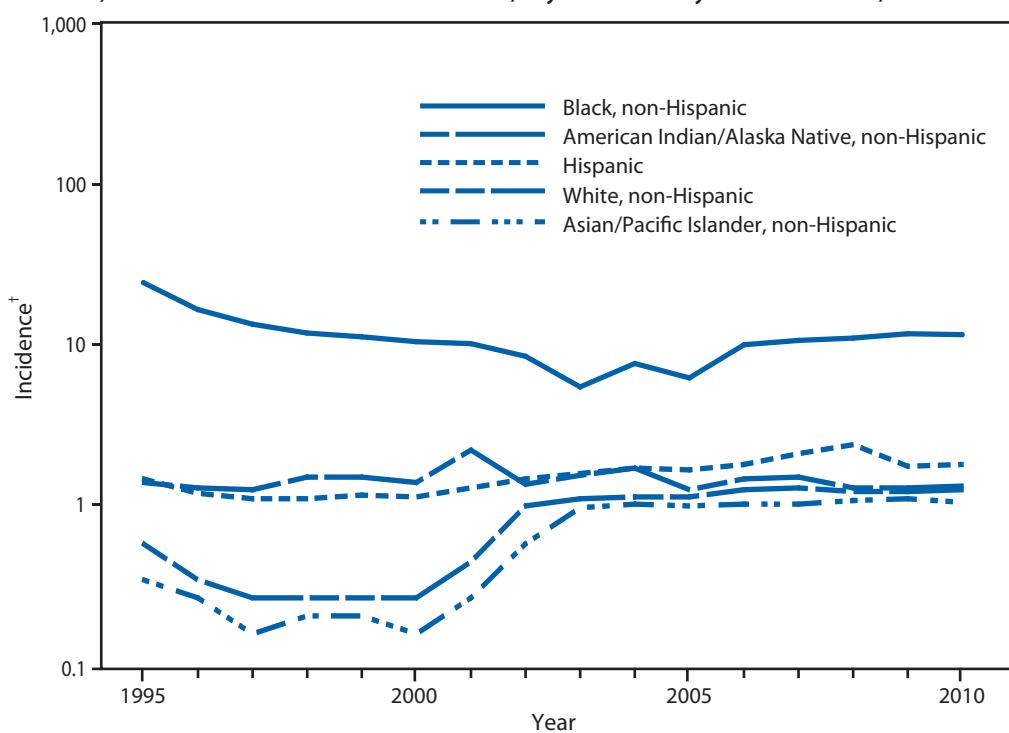
## SYPHILIS, PRIMARY AND SECONDARY. Incidence\*, by sex — United States, 1995–2010



\* Per 100,000 population.

During 2009–2010, the incidence of primary and secondary syphilis in the United States decreased from 4.6 to 4.5 cases (women: decreased from 1.4 to 1.1; men: increased from 7.8 to 7.9 per 100,000 population).

## SYPHILIS, PRIMARY AND SECONDARY. Incidence,\* by race/ethnicity — United States, 1995–2010

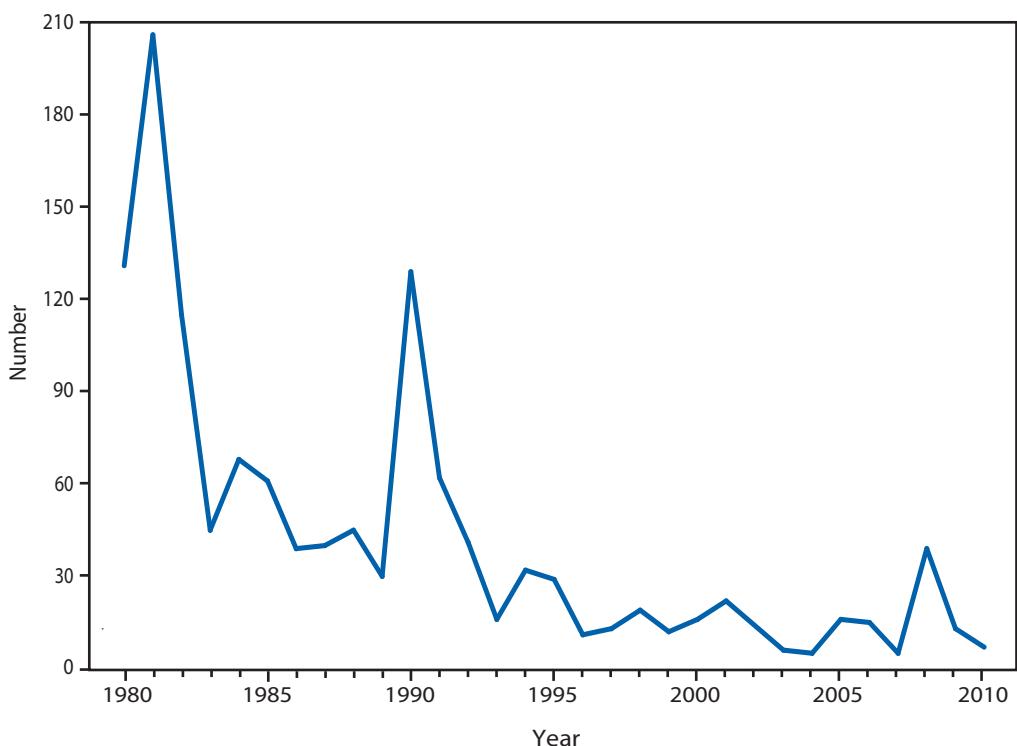


\* Per 100,000 population.

† Y-axis is log scale.

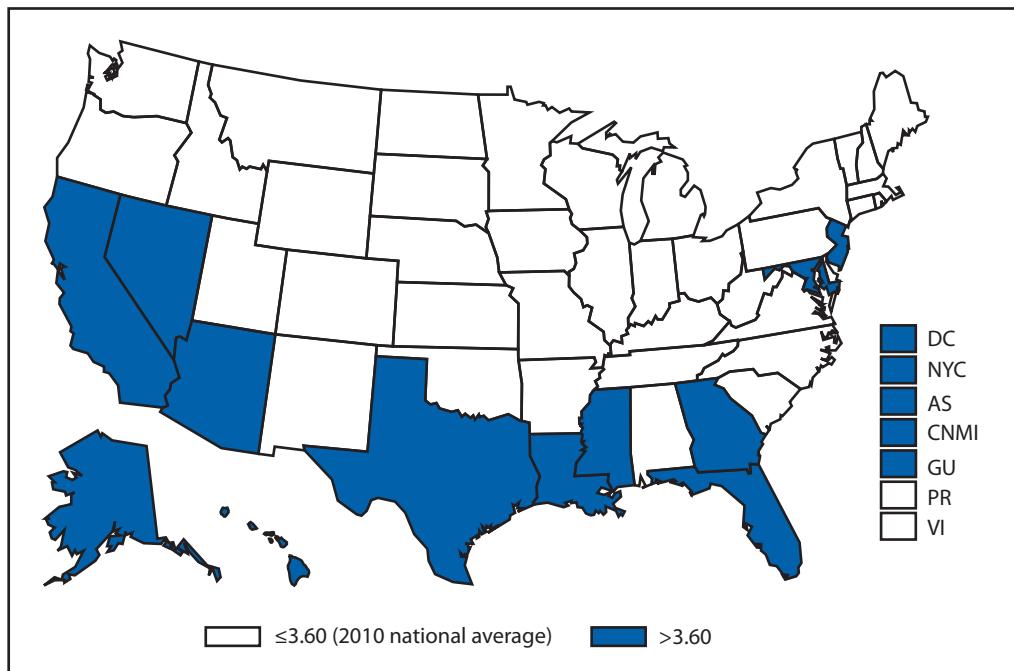
During 2009–2010, incidence of primary and secondary syphilis increased among all races/ethnicities except non-Hispanic blacks and Asians/Pacific Islanders. Incidence per 100,000 population increased from 2.3 to 2.4 among non-Hispanic whites; from 5.4 to 5.9 among Hispanics; from 2.7 to 2.9 among American Indians/Alaska Natives; and decreased from 21.8 to 20.0 among non-Hispanic blacks and 1.7 to 1.6 among Asians/Pacific Islanders.

## TRICHINELLOSIS. Number of reported cases, by year — United States, 1980–2010



Seven isolated cases were reported from seven different states in 2010, which marks the first year since 2004 that no outbreaks were reported.

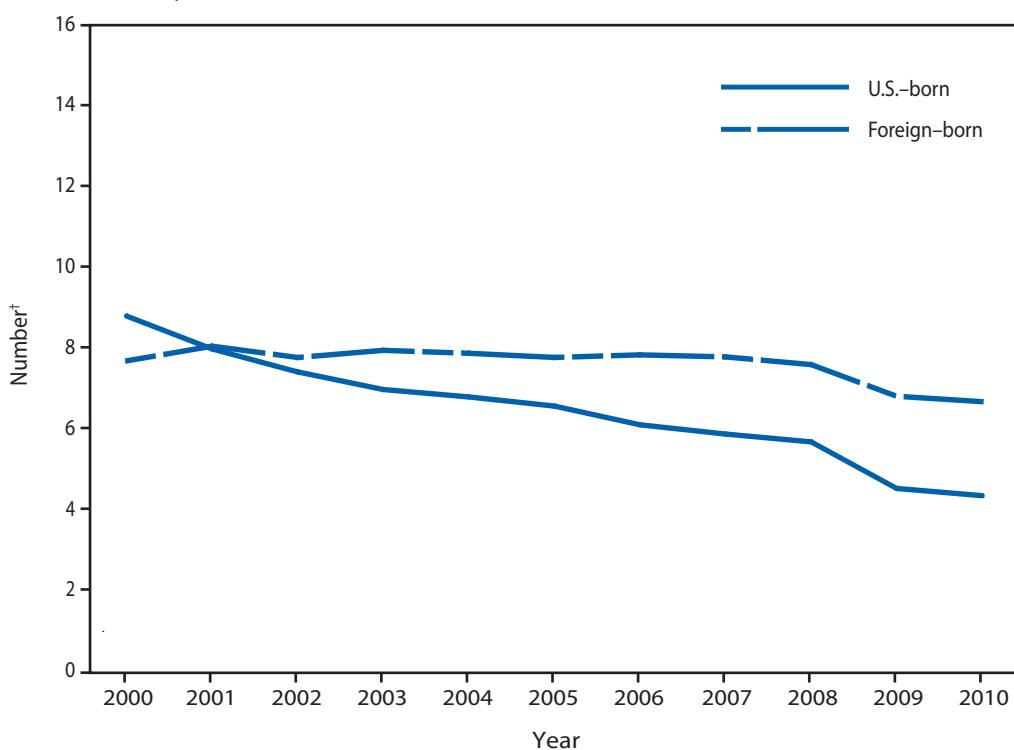
## TUBERCULOSIS. Incidence\* — United States and U.S. territories, 2010



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

Thirteen states and the District of Columbia had an incidence rate above the national average at 3.6 cases.

**TUBERCULOSIS. Number of reported cases among U.S.-born and foreign-born persons,\* by year  
— United States, 2000–2010**

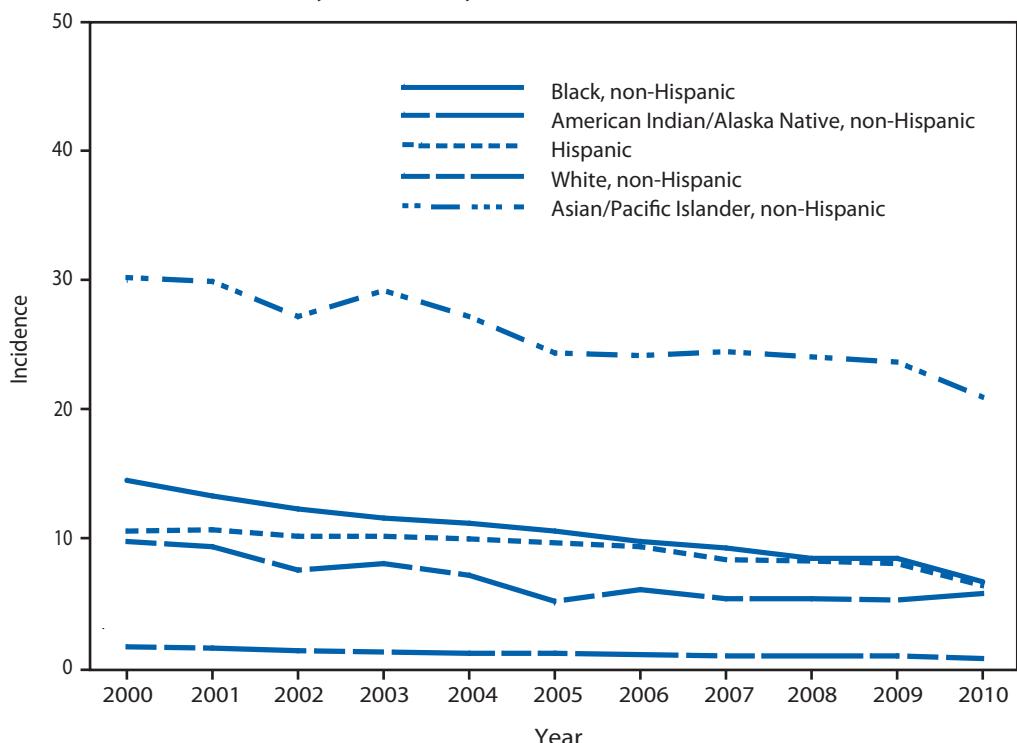


\* For 69 cases, origin of patients was unknown.

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

The number of tuberculosis (TB) cases occurring in the foreign-born remained fairly constant from 2000 through 2008. In 2009 and 2010, the number of TB cases in the foreign-born has dropped substantially. The percentage of U.S. TB cases among the foreign-born has increased from 47% in 2000 to 60% in 2010.

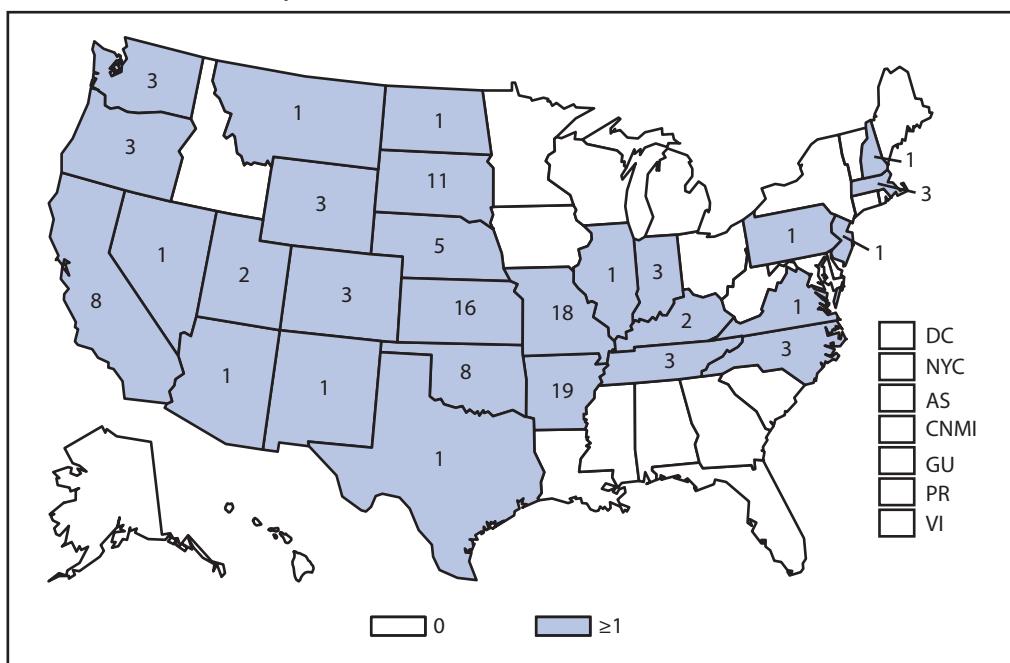
## TUBERCULOSIS. Incidence,\* by race/ethnicity — United States, 2000–2010



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

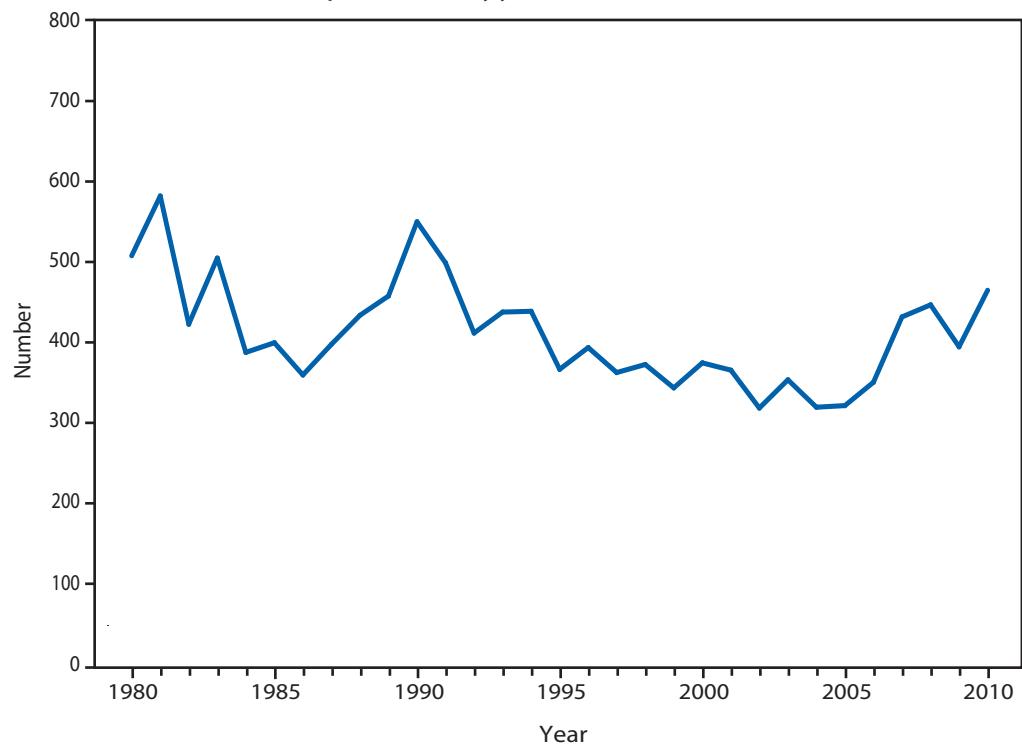
From 2000 to 2010, case rates in Asian / Pacific Islanders declined by 29%. All other racial and ethnic groups declined by at least 39% during this period. Since 2003, Asian only and Native Hawaiian and other Pacific Islanders have been reported separately but were merged for this graph for continuity in reporting trends.

**TULAREMIA. Number of reported cases — United States and U.S. territories, 2010**

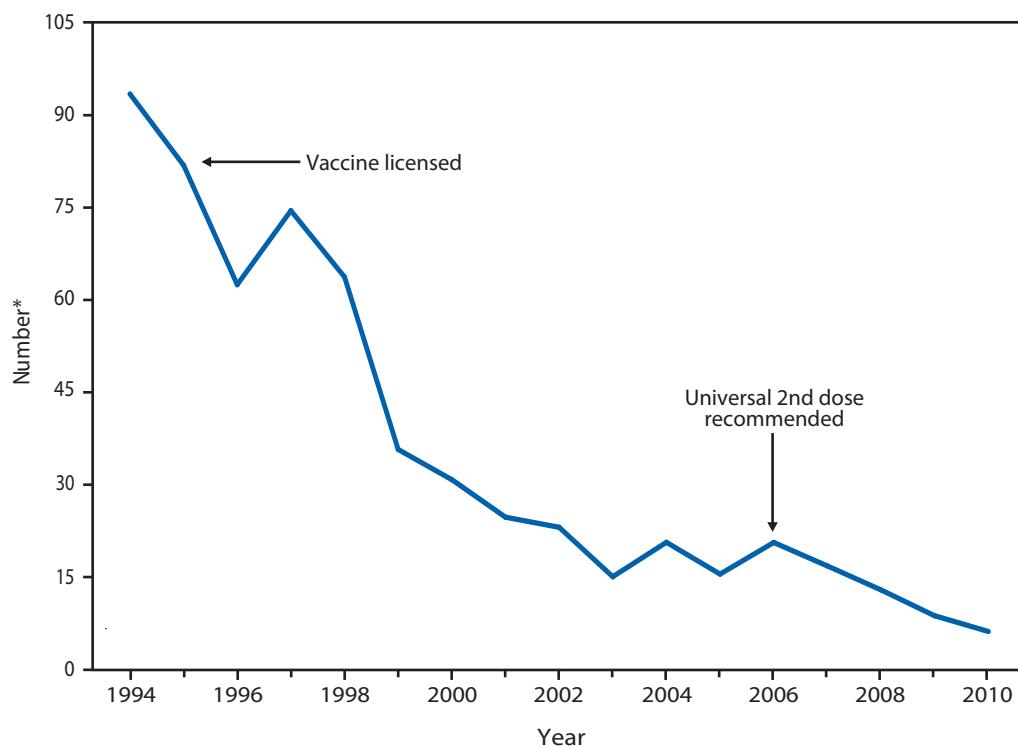


To better define the geographic distribution of *Francisella tularensis* subspecies, CDC requests that isolates be forwarded to the CDC laboratory in Fort Collins, Colorado.

**TYPHOID FEVER. Number of reported cases, by year — United States, 1980–2010**



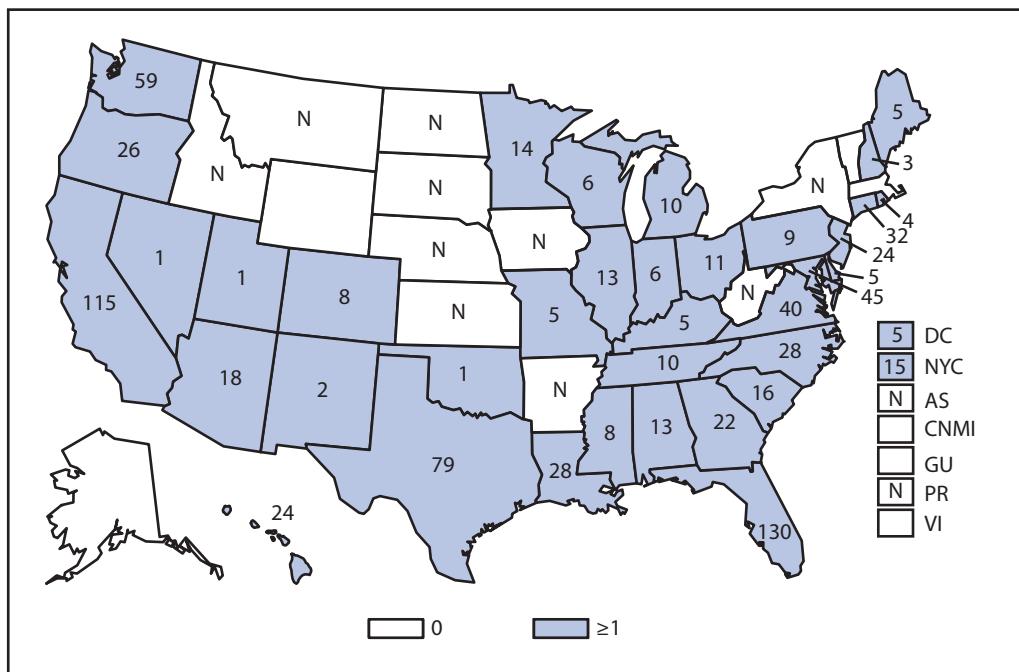
Typhoid fever in the United States remains primarily a disease of travelers, for whom vaccination against typhoid fever is recommended. However, the first domestically acquired outbreak of typhoid fever in a decade occurred in 2010. The outbreak was associated with consumption of imported frozen mamey fruit.

**VARICELLA (CHICKENPOX). Number of reported cases — Illinois, Michigan, Texas, and West Virginia, 1994–2010**

\* In thousands.

In four states (Illinois, Michigan, Texas, and West Virginia), the number of cases reported in 2010 was 30% lower than 2009 and 93% less than the number reported during the prevaccine years 1993–1995.

## VIBRIOSIS. Number of reported cases — United States and U.S. territories, 2010



Consumption of raw or undercooked seafood is a risk factor for vibriosis. In 2010, a cluster of 4 cases of toxigenic (produces cholera toxin) *Vibrio mimicus* infection associated with consumption of cooked crayfish occurred in Spokane, Washington.

## PART 3

### Historical Summaries of Notifiable Diseases in the United States, 1979–2010

#### 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, 2010 might not match 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, 2000–2010**

Disease	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
AIDS	14.95	14.88	15.29	15.36	15.28	14.00	12.87	12.53	13.00	†	†
Anthrax	0	0.01	0	—	—	—	0	0	0	0	0
Arboviral diseases											
California serogroup virus disease											
neuroinvasive	—	—	—	—	—	0.02	0.02	0.02	0.02	0.02	0.02
nonneuroinvasive	§	§	§	§	§	0	0	0	0	0	0
Eastern equine encephalitis virus disease											
neuroinvasive	—	—	—	—	—	0	0	0	0	0	0
nonneuroinvasive	§	§	§	§	§	0	0	0	0	0	—
Powassan virus disease											
neuroinvasive	—	—	—	—	—	0	0	0	0	0	0
nonneuroinvasive	§	§	§	§	§	0	0	0	0	—	—
St. Louis encephalitis virus disease											
neuroinvasive	—	—	—	—	—	0	0	0	0	0	0
nonneuroinvasive	§	§	§	§	§	0	0	0	0	0	0
West Nile virus disease											
neuroinvasive	—	—	—	—	—	0.45	0.50	0.41	0.23	0.13	0.20
nonneuroinvasive	§	§	§	§	§	0.58	0.94	0.80	0.22	0.11	0.13
Western equine encephalitis virus disease											
neuroinvasive	—	—	—	—	—	—	—	—	—	—	—
nonneuroinvasive	§	§	§	§	§	—	—	—	—	—	—
Botulism, total (includes wound and unspecified)	0.05	0.06	0.03	0.01	0.02	0.01	0.02	0.05	0.05	0.04	0.04
foodborne	0.01	0.01	0	0.01	0.01	0.01	0.01	0.01	0.01	0	0
infant	2.44	2.55	1.79	1.87	2.12	2.09	2.35	2.05	2.56	1.92	1.88
Brucellosis	0.03	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.04	0.04
Chancroid	0.03	0.01	0.02	0.02	0	0.01	0.01	0.01	0.01	0.01	0.01
<i>Chlamydia trachomatis</i> infections	257.76	278.32	296.55	304.71	319.61	332.51	347.80	370.20	401.34	409.19	426.01
Cholera	0	0	0	0	0	0	0	0	0	0	0
Coccidioidomycosis	4.69	6.71	3.03	2.57	4.14	6.24	6.79	14.39	7.76	13.24	§
<i>Cryptosporidiosis</i> ¶	1.17	1.34	1.07	1.22	1.23	1.93	2.05	3.73	3.02	2.52	2.91
confirmed	§	§	§	§	§	§	§	§	§	2.43	2.73
probable	§	§	§	§	§	§	§	§	§	0.09	0.19
Cyclosporiasis	0.03	0.07	0.06	0.03	0.14	0.24	0.06	0.04	0.05	0.05	0.07
Denque virus infection											
Denque fever	§	§	§	§	§	§	§	§	§	§	0.22
Denque hemorrhagic fever	§	§	§	§	§	§	§	§	§	§	0
Diphtheria	0	0	0	0	—	—	—	—	—	—	—
Ehrlichiosis											
human granulocytic (HGE)	0.15	0.10	0.18	0.13	0.20	0.28	0.23	0.31	**	**	**
human monocytic (HME)	0.09	0.05	0.08	0.11	0.12	0.18	0.20	0.30	**	**	**
human (other and unspecified)††	—	—	—	—	—	0.04	0.08	0.12	**	**	**
Ehrlichiosis/Anaplasmosis											
<i>Ehrlichia chaffeensis</i>	§	§	§	§	§	§	§	§	0.35	0.34	0.26
<i>Ehrlichia ewingii</i>	§	§	§	§	§	§	§	§	0	0	0
<i>Anaplasma phagocytophilum</i>	§	§	§	§	§	§	§	§	0.43	0.42	0.61
Undetermined	§	§	§	§	§	§	§	§	0.06	0.06	0.04
Encephalitis/meningitis, arboviral§§											
California serogroup virus	0.04	0.05	0.06	0.06	0	§§	§§	§§	§§	§§	§§
Eastern equine virus	0	0	0	0	0	§§	§§	§§	§§	§§	§§
Powassan virus	§	§	0	0	0	§§	§§	§§	§§	§§	§§
St. Louis virus	0	0.03	0.01	0.01	0	§§	§§	§§	§§	§§	§§
West Nile virus	§	§	1.01	1.00	0.43	§§	§§	§§	§§	§§	§§
Western equine virus	0	0	0	0	—	§§	§§	§§	§§	§§	§§
Enterohemorrhagic <i>Escherichia coli</i>											
O157:H7	1.74	1.22	1.36	0.93	0.87	0.89	§	§	§	§§	§§
non-O157	§	0.19	0.08	0.09	0.13	0.19	§	§	§	§§	§§
not serogrouped	§	0.06	0.02	0.05	0.13	0.16	§	§	§	§§	§§
Giardiasis	§	§	8.06	6.84	8.35	7.82	7.28	7.66	7.41	7.37	7.64
Gonorrhea	131.65	128.53	125.03	116.37	113.52	115.64	120.90	118.90	111.64	99.05	100.76

See table footnotes on page 94.

**TABLE 7. (Continued) Reported incidence\* of notifiable diseases — United States, 2000–2010**

Disease	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<i>Haemophilus influenzae</i> , invasive disease											
all ages, serotypes	0.51	0.57	0.62	0.70	0.72	0.78	0.82	0.85	0.96	0.99	1.03
age<5 yrs	§	§	0.18	0.16	0.03	0.04	0.14	0.11	0.14	0.18	0.11
serotype b	§	§	0.75	0.59	0.04	0.67	0.86	0.97	1.18	1.17	0.94
nonserotype b	§	§	0.80	1.15	0.97	1.08	0.88	0.88	0.79	0.79	1.05
unknown serotype	§	§									
Hansen disease (leprosy)	0.04	0.03	0.04	0.03	0.04	0.03	0.03	0.04	0.03	0.04	0.04
Hantavirus pulmonary syndrome	0.02	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Hemolytic uremic syndrome, postdiarrheal	0.10	0.08	0.08	0.06	0.07	0.08	0.11	0.10	0.12	0.09	0.09
Hepatitis, viral, acute											
A	4.91	3.77	3.13	2.66	1.95	1.53	1.21	1.00	0.86	0.65	0.54
B	2.95	2.79	2.84	2.61	2.14	1.78	1.62	1.51	1.34	1.12	1.10
C	1.17	1.41	0.65	0.38	0.31	0.23	0.26	0.28	0.29	0.27	0.29
HIV diagnoses†	—	—	—	—	—	—	—	—	—	12.13	11.64
Influenza-associated pediatric mortality	§	§	§	§	§	0.02	0.07	0.10	0.12	0.48	0.08
Legionellosis	0.42	0.42	0.47	0.78	0.71	0.78	0.96	0.91	1.05	1.16	1.09
Listeriosis	0.29	0.22	0.24	0.24	0.32	0.31	0.30	0.27	0.25	0.28	0.27
Lyme disease, total¶¶	6.53	6.05	8.44	7.39	6.84	7.94	6.75	9.21	11.67	12.71	9.86
confirmed	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	9.59	9.85
probable	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	2.08	2.49
Malaria	0.57	0.55	0.51	0.49	0.51	0.51	0.50	0.47	0.42	0.48	0.58
Measles	0.03	0.04	0.02	0.02	0.01	0.02	0.02	0.01	0.05	0.02	0.02
Meningococcal disease, invasive											
all serogroups	0.83	0.83	0.64	0.61	0.47	0.42	0.40	0.36	0.39	0.32	0.27
serogroup A,C,Y, & W—135	***	***	***	***	***	0.10	0.11	0.11	0.11	0.10	0.09
serogroup B	***	***	***	***	***	0.05	0.07	0.06	0.06	0.06	0.04
other serogroup	***	***	***	***	***	0.01	0.01	0.01	0.01	0.01	0
serogroup unknown	***	***	***	***	***	0.26	0.22	0.18	0.20	0.16	0.13
Mumps	0.13	0.10	0.10	0.08	0.09	0.11	0.22	0.27	0.15	0.65	0.85
Novel influenza A virus infections	§	§	§	§	§	§	§	0	0	14.37	0
Pertussis	2.88	2.69	3.47	4.04	8.88	8.72	5.27	3.49	4.40	5.54	8.97
Plague	0	0	0	0	0	0	0.01	0	0	0	0
Poliomyelitis, paralytic	0	0	0	0	0	0	0	—	—	0	—
Poliovirus infection, nonparalytic	§	§	§	§	§	§	§	—	—	—	—
Psittacosis	0.01	0.01	0.01	0	0	0.01	0.01	0	0	0	0
Q fever†††	0.01	0.01	0.02	0.02	0.03	0.05	0.06	0.06	0.04	0.04	0.04
acute	†††	†††	†††	†††	†††	†††	†††	†††	0.04	0.03	0.04
chronic	†††	†††	†††	†††	†††	†††	†††	†††	0	0.01	0.01
Rabies, human	0	0	0	0	0	0	0	0	0	0	0
Rubella	0.06	0.01	0.01	0	0	0	0	0	0.01	0	0
Rubella, congenital syndrome	0	0	0	0	0	0	0	—	—	0	—
Salmonellosis	14.51	14.39	15.73	15.16	14.47	15.43	15.45	16.03	16.92	16.18	17.73
SARS-CoV§§§	§	§	§	0	—	—	—	—	—	—	—
Shiga toxin-producing <i>Escherichia coli</i> (STEC)	§	§	§	§	§	§	1.71	1.62	1.76	1.53	1.78
Shigellosis	8.41	7.19	8.37	8.19	4.99	5.51	5.23	6.60	7.50	5.24	4.82
Spotted fever rickettsiosis, total¶¶¶	0.18	0.25	0.39	0.38	0.60	0.66	0.80	0.77	0.85	0.60	0.65
confirmed	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	0.06	0.05	0.05
probable	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	¶¶¶	0.78	0.55	0.60
Smallpox	§	§	§	§	—	—	—	—	—	—	—
Streptococcal disease, invasive, group A	1.45	1.60	1.69	2.04	1.82	2.00	2.24	1.89	2.30	2.13	§
Streptococcal, toxic shock syndrome	0.04	0.04	0.05	0.06	0.06	0.07	0.06	0.06	0.07	0.08	0.07
<i>Streptococcus pneumoniae</i> , invasive disease(IPD)****	****	****	****	****	****	****	****	****	****	****	8.83
all ages	****	****	****	****	****	****	****	****	****	****	14.15
<i>Streptococcus pneumoniae</i> , invasive disease											
drug resistant, all ages	2.77	2.11	1.14	0.99	1.49	1.42	2.19	1.49	1.60	1.75	****
age <5 yrs	—	—	—	—	—	—	—	3.73	3.51	4.54	****
non-drug resistant, age <5 yrs	§	1.03	3.62	8.86	8.22	8.21	11.93	13.59	13.36	12.93	****
Syphilis, congenital, age <1 yr	14.29	12.52	11.44	10.56	9.12	8.24	9.07	10.46	10.12	9.90	8.85

See table footnotes on page 94.

**TABLE 7. (Continued) Reported incidence\* of notifiable diseases — United States, 2000–2010**

Disease	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Syphilis, primary and secondary	2.19	2.17	2.44	2.49	2.71	2.97	3.29	3.83	4.48	4.60	4.49
Syphilis, total, all stages	11.58	11.45	11.68	11.90	11.94	11.33	12.46	13.67	15.34	14.74	14.93
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	0.06	0.05	0.05	0.05	0.04	0.04	0.05	0.04	0.03	0.03	0.04
Trichinellosis	0.01	0.01	0.01	0	0	0.01	0.01	0	0.01	0	0
Tuberculosis	6.01	5.68	5.36	5.17	5.09	4.80	4.65	4.44	4.28	3.80	3.64
Tularemia	0.06	0.05	0.03	0.04	0.05	0.05	0.03	0.05	0.04	0.03	0.04
Typhoid fever	0.14	0.13	0.11	0.12	0.11	0.11	0.12	0.14	0.15	0.13	0.15
Vancomycin-intermediate <i>Staphylococcus aureus</i>	§	§	§	§	—	0	0	0.02	0.03	0.03	0.04
Vancomycin-resistant <i>Staphylococcus aureus</i>	§	§	§	§	0	0	0	0	0	0	0
Varicella (chickenpox)††††	26.18	19.51	10.27	7.27	18.41	19.64	28.65	18.68	13.56	8.71	6.46
Vibriosis	§	§	§	§	§	§	§	0.25	0.24	0.30	0.30
Viral hemorrhagic fevers	§	§	§	§	§	§	§	§	§	§	0
Yellow fever	—	0	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. See the CDC revised surveillance case definitions for HIV infection among adults, adolescents, and children aged <18 months and for HIV infection and AIDS among children aged 18 months to <13 years—United States, 2008. MMWR 2008;57(No.RR-10):1–12. These case counts can be found under HIV Diagnoses in this table. The total number of HIV Diagnoses includes all cases reported to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), through December 31, 2010. AIDS: Acquired Immunodeficiency Syndrome. HIV: Human Immunodeficiency Virus.

§ Not nationally notifiable.

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

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

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

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

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

¶¶¶ Revision of national surveillance case definition distinguishing between confirmed and probable cases; total case count includes two case reports with unknown case status.

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

\*\*\*\* 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.

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

TABLE 8. Reported cases of notifiable diseases — United States, 2003–2010

Disease	2003	2004	2005	2006	2007	2008	2009	2010
AIDS*	44,232	44,108	41,120	38,423	37,503	39,202	†	†
Anthrax	—	—	—	1	1	—	1	—
Arboviral diseases§								
California serogroup virus disease								
neuroinvasive	—	—	73	64	50	55	46	68
nonneuroinvasive	1	1	7	5	5	7	9	7
Eastern equine encephalitis virus disease								
neuroinvasive	—	—	21	8	3	4	3	10
nonneuroinvasive	1	1	—	—	1	—	1	—
Powassan virus disease								
neuroinvasive	—	—	1	1	7	2	6	8
nonneuroinvasive	1	1	—	—	—	—	—	—
St. Louis encephalitis virus disease								
neuroinvasive	—	—	7	7	8	8	11	8
nonneuroinvasive	1	1	6	3	1	5	1	2
Western equine encephalitis virus disease								
neuroinvasive	—	—	—	—	—	—	—	—
nonneuroinvasive	1	1	—	—	—	—	—	—
West Nile virus disease								
neuroinvasive	—	—	1,309	1,495	1,227	689	386	629
nonneuroinvasive	1	1	1,691	2,744	2,403	667	334	392
Botulism, total (includes wound and unspecified)	129	133	135	165	144	145	118	112
foodborne	20	16	19	20	32	17	10	7
infant	76	87	85	97	85	109	83	80
Brucellosis	104	114	120	121	131	80	115	115
Chancroid**	54	30	17	33	23	25	28	24
Chlamydia trachomatis infections**	877,478	929,462	976,445	1,030,911	1,108,374	1,210,523	1,244,180	1,307,893
Cholera	2	5	8	9	7	5	10	13
Coccidioidomycosis	4,870	6,449	6,542	8,917	8,121	7,523	12,926	1
Cryptosporidiosis, total††	3,506	3,577	5,659	6,071	11,170	9,113	7,654	8,944
confirmed	††	††	††	††	††	††	7,393	8,375
probable	††	††	††	††	††	††	261	569
Cyclosporiasis	75	171	543	137	93	139	141	179
Denque virus infection								
Denque fever	1	1	1	1	1	1	1	690
Denque hemorrhagic fever	1	1	1	1	1	1	1	10
Diphtheria	1	—	—	—	—	—	—	—
Ehrlichiosis								
human granulocytic (HGE)	362	537	786	646	834	§§	§§	§§
human monocytic (HME)	321	338	506	578	828	§§	§§	§§
human (other and unspecified)	11	11	112	231	337	§§	§§	§§
Ehrlichiosis/Anaplasmosis								
<i>Ehrlichia chaffeensis</i>	1	1	1	1	1	957	944	740
<i>Ehrlichia ewingii</i>	1	1	1	1	1	9	7	10
<i>Anaplasma phagocytophilum</i>	1	1	1	1	1	1,009	1,161	1,761
Undetermined	1	1	1	1	1	132	155	104
Encephalitis/Meningitis, arboviral								
California serogroup virus	108	112	***	***	***	***	***	***
Eastern equine virus	14	6	***	***	***	***	***	***
Powassan virus	—	1	***	***	***	***	***	***
St. Louis virus	41	12	***	***	***	***	***	***
West Nile virus	2,866	1,142	***	***	***	***	***	***
Western equine virus	—	—	***	***	***	***	***	***
Enterohemorrhagic <i>Escherichia coli</i> infection								
Shiga toxin-positive								
O157:H7	2,671	2,544	2,621	1	1	1	1	1
non-O157	252	316	501	1	1	1	1	1
not serogrouped	156	308	407	1	1	1	1	1
Giardiasis	19,709	20,636	19,733	18,953	19,417	18,908	19,399	19,811
Gonorrhea**	335,104	330,132	339,593	358,366	355,991	336,742	301,174	309,341

See table footnotes on page 97.

TABLE 8. (Continued) Reported cases of notifiable diseases — United States, 2003–2010

Disease	2003	2004	2005	2006	2007	2008	2009	2010
Haemophilus influenzae, invasive disease								
all ages, serotypes	2,013	2,085	2,304	2,496	2,541	2,886	3,022	3,151
age <5 yrs								
serotype b	32	19	9	29	22	30	38	23
nonserotype b	117	135	135	175	199	244	245	200
unknown serotype	227	177	217	179	180	163	166	223
Hansen disease (leprosy)	95	105	87	66	101	80	103	98
Hantavirus pulmonary syndrome	26	24	26	40	32	18	20	20
Hemolytic uremic syndrome, postdiarrheal	178	200	221	288	292	330	242	266
Hepatitis, viral, acute <sup>†††</sup>								
A	7,653	5,683	4,488	3,579	2,979	2,585	1,987	1,670
B	7,526	6,212	5,119	4,713	4,519	4,033	3,405	3,374
C	1,102	720	652	766	845	877	782	849
HIV diagnoses <sup>†</sup>	—	—	—	—	—	—	36,870	35,741
Influenza-associated pediatric mortality <sup>§§§</sup>	1	1	45	43	77	90	358	61
Legionellosis	2,232	2,093	2,301	2,834	2,716	3,181	3,522	3,346
Listeriosis	696	753	896	884	808	759	851	821
Lyme disease, total <sup>¶¶¶</sup>	21,273	19,804	23,305	19,931	27,444	35,198	38,468	30,158
confirmed	1111	1111	1111	1111	1111	28,921	29,959	22,561
probable	1111	1111	1111	1111	1111	6,277	8,509	7,597
Malaria	1,402	1,458	1,494	1,474	1,408	1,255	1,451	1,773
Measles	56	37	66	55	43	140	71	63
Meningococcal disease, invasive <sup>****</sup>								
all serogroups	1,756	1,361	1,245	1,194	1,077	1,172	980	833
serogroup A, C, Y, & W-135	—	—	297	318	325	330	301	280
serogroup B	—	—	156	193	167	188	174	135
other serogroup	—	—	27	32	35	38	23	12
serogroup unknown	—	—	765	651	550	616	482	406
Mumps	231	258	314	6,584	800	454	1,991	2,612
Novel influenza A virus infections	1	1	1	1	4	2	43,696	4
Pertussis	11,647	25,827	25,616	15,632	10,454	13,278	16,858	27,550
Plague	1	3	8	17	7	3	8	2
Poliomyelitis, paralytic <sup>††††</sup>	—	—	1	—	—	—	1	—
Poliovirus infection, nonparalytic	—	—	—	—	—	—	—	—
Psittacosis	12	12	16	21	12	8	9	4
Q fever <sup>§§§§</sup>	71	70	136	169	171	120	113	131
acute	§§§§	§§§§	§§§§	§§§§	§§§§	106	93	106
chronic	§§§§	§§§§	§§§§	§§§§	§§§§	14	20	25
Rabies								
animal	6,846	6,345	5,915	5,534	5,862	4,196	5,343	4,331
human	2	7	2	3	1	2	4	2
Rubella	7	10	11	11	12	16	3	5
Rubella, congenital syndrome	1	—	1	1	—	—	2	—
Salmonellosis	43,657	42,197	45,322	45,808	47,995	51,040	49,192	54,424
SARS-CoV <sup>¶¶¶¶</sup>	8	—	—	—	—	—	—	—
Shiga toxin-producing Escherichia coli (STEC)	1	1	1	4,432	4,847	5,309	4,643	5,476
Shigellosis	23,581	14,627	16,168	15,503	19,758	22,625	15,931	14,786
Spotted fever rickettsiosis, total <sup>*****</sup>	1,091	1,713	1,936	2,288	2,221	2,563	1,815	1,985
confirmed	*****	*****	*****	*****	*****	190	151	156
probable	*****	*****	*****	*****	*****	2,367	1,662	1,835
Streptococcal disease, invasive, group A	5,872	4,395	4,715	5,407	5,294	5,674	5,279	1
Streptococcal toxic-shock syndrome	161	132	129	125	132	157	161	142
Streptococcus pneumoniae invasive disease (IPD)								
all ages								16,569
age <5 yrs								2,186
Streptococcus pneumoniae invasive disease, drug-resistant, all ages	2,356	2,590	2,996	3,308	3,329	3,448	3,370	—
age <5 yrs	—	—	—	—	563	532	583	—
non-drug resistant age <5 yrs	845	1,162	1,495	1,861	2,032	1,998	1,988	—
Syphilis, all stages <sup>**</sup>	34,270	33,401	33,278	36,935	40,920	46,277	44,828	45,834
congenital (age <1 yr)	432	375	339	382	430	431	427	377
primary and secondary	7,177	7,980	8,724	9,756	11,466	13,500	13,997	13,774
Tetanus	20	34	27	41	28	19	18	26

See table footnotes on page 97.

**TABLE 8. (Continued) Reported cases of notifiable diseases — United States, 2003–2010**

Disease	2003	2004	2005	2006	2007	2008	2009	2010
Toxic-shock syndrome	133	95	90	101	92	71	74	82
Trichinellosis	6	5	16	15	5	39	13	7
Tuberculosis\$\$\$\$	14,874	14,517	14,097	13,779	13,299	12,904	11,545	11,182
Tularemia	129	134	154	95	137	123	93	124
Typhoid fever	356	322	324	353	434	449	397	467
Vancomycin-intermediate <i>Staphylococcus aureus</i>	1	—	3	6	37	63	78	91
Vancomycin-resistant <i>Staphylococcus aureus</i>	1	1	2	1	2	—	1	2
Varicella (chickenpox)¶¶¶¶¶	20,948	32,931	32,242	48,445	40,146	30,386	20,480	15,427
Varicella (deaths)*****	2	9	3	—	6	2	2	4
Vibriosis (noncholera <i>Vibrio</i> species infections)	1	1	1	1	549	588	789	846
Viral hemorrhagic fever	1	1	1	1	1	1	1	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 the HIV epidemic on a population level. See the CDC revised surveillance case definitions for HIV infection among adults, adolescents, and children aged <18 months and for HIV infection and AIDS among children aged 18 months to <13 years—United States, 2008. MMWR 2008;57(No.RR-10):1–12. These case counts can be found under HIV Diagnoses in this table. The total number of HIV Diagnoses includes all cases reported to the Division of HIV/AIDS Prevention, NCHHSTP, through December 31, 2010. AIDS: Acquired Immune Deficiency Syndrome. HIV: Human Immunodeficiency Virus.

§ Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Emerging and Zoonotic Infectious Diseases (NCZVED) (ArboNET Surveillance), as of May 9, 2011.

¶ Not nationally notifiable.

\*\* Totals reported to the Division of STD Prevention, NCHHSTP, as of June 8, 2011.

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

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

††† The anti-hepatitis C virus antibody test became available May 1990. Data on hepatitis B, perinatal infection, chronic hepatitis B, and chronic hepatitis C virus infection 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, 2010.

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

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

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

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

¶¶¶¶ 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 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.

§§§§§ Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of July 1, 2011.

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

\*\*\*\*\* Total reported to the Division of Viral Diseases, NCIRD, as of June 30, 2011.

††††† 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, 1995–2002

Disease	1995	1996	1997	1998	1999	2000	2001	2002
AIDS*	71,547	66,885	58,492	46,521	45,104	40,758	41,868	42,745
Anthrax	—	—	—	—	—	1	23	2
Botulism, total (including wound and unspecified)	97	119	132	116	154	138	155	118
foodborne	24	25	31	22	23	23	39	28
infant	54	80	79	65	92	93	97	69
Brucellosis	98	112	98	79	82	87	136	125
Chancroid†	606	386	243	189	143	78	38	67
<i>Chlamydia trachomatis</i> infections‡	477,638	498,884	526,671	604,420	656,721	702,093	783,242	834,555
Cholera	23	4	6	17	6	5	3	2
Coccidioidomycosis	1,212	1,697	1,749	2,274	2,826	2,867	3,922	4,968
Cryptosporidiosis	2,970	2,827	2,566	3,793	2,361	3,128	3,785	3,016
Cyclosporiasis	§	§	§	§	56	60	147	156
Diphtheria	—	2	4	1	1	1	2	1
Ehrlichiosis								
human granulocytic	§	§	§	§	203	351	261	511
human monocytic	§	§	§	§	99	200	142	216
human (other and unspecified)	§	§	§	§	¶	¶	¶	¶
Encephalitis/Meningitis								
California serogroup virus	11	123	129	97	70	114	128	164
Eastern equine virus	1	5	14	4	5	3	9	10
Powassan virus	§	§	§	§	§	§	§	1
St. Louis virus	§	2	13	24	4	2	79	28
West Nile virus	§	§	§	§	§	§	§	2,840
Western equine virus	—	2	—	—	1	—	—	—
Enterohemorrhagic <i>Escherichia coli</i> infection								
Shiga toxin-positive								
O157:H7	2,139	2,741	2,555	3,161	4,513	4,528	3,284	3,840
Non-O157	§	§	§	§	§	§	171	194
not serogrouped	§	§	§	§	§	§	20	60
Giardiasis	§	§	§	§	§	§	§	21,206
Gonorrhea§	392,848	325,883	324,907	355,642	360,076	358,995	361,705	351,852
<i>Haemophilus influenzae</i> , invasive disease								
all ages, serotypes	1,180	1,170	1,162	1,194	1,309	1,398	1,597	1,743
age <5 yrs								
serotype b	§	§	§	§	§	§	§	34
nonserotype b	§	§	§	§	§	§	§	144
unknown serotype	§	§	§	§	§	§	§	153
Hansen disease (leprosy)	144	112	122	108	108	91	79	96
Hantavirus pulmonary syndrome	—	NA	NA	NA	33	41	8	19
Hemolytic uremic syndrome, postdiarrheal	72	97	91	119	181	249	202	216
Hepatitis, viral, acute								
A	31,582	31,032	30,021	23,229	17,047	13,397	10,609	8,795
B	10,805	10,637	10,416	10,258	7,694	8,036	7,843	7,996
C/non-A, non-B**	4,576	3,716	3,816	3,518	3,111	3,197	3,976	1,835
Legionellosis	1,241	1,198	1,163	1,355	1,108	1,127	1,168	1,321
Listeriosis	§	§	§	§	§	755	613	665
Lyme disease	11,700	16,455	12,801	16,801	16,273	17,730	17,029	23,763
Malaria	1,419	1,800	2,001	1,611	1,666	1,560	1,544	1,430
Measles	309	508	138	100	100	86	116	44
Meningococcal disease, invasive	3,243	3,437	3,308	2,725	2,501	2,256	2,333	1,814
Mumps	906	751	683	666	387	338	266	270
Pertussis	5,137	7,796	6,564	7,405	7,288	7,867	7,580	9,771
Plague	9	5	4	9	9	6	2	2
Poliomyelitis, paralytic	7	7	6	3	2	—	—	—
Psittacosis	64	42	33	47	16	17	25	18
Q fever	§	§	§	§	§	21	26	61
Rabies								
animal	7,811	6,982	8,105	7,259	6,730	6,934	7,150	7,609
human	5	3	2	1	—	4	1	3
Rocky Mountain spotted fever	590	831	409	365	579	495	695	1,104
Rubella	128	238	181	364	267	176	23	18
Rubella, congenital syndrome	6	4	5	7	9	9	3	1
Salmonellosis, excluding typhoid fever	45,970	45,471	41,901	43,694	40,596	39,574	40,495	44,264

See table footnotes on page 99.

TABLE 9. (Continued) Reported cases of notifiable diseases — United States, 1995–2002

Disease	1995	1996	1997	1998	1999	2000	2001	2002
Shigellosis	32,080	25,978	23,117	23,626	17,521	22,922	20,221	23,541
Streptococcal disease, invasive, Group A	613	1,445	1,973	2,260	2,667	3,144	3,750	4,720
Streptococcal toxic-shock syndrome	10	19	33	58	65	83	77	118
<i>Streptococcus pneumoniae</i> , invasive disease, drug-resistant, all ages	309	1,514	1,799	2,823	4,625	4,533	2,896	2,546
non-drug resistant, age <5 yrs	§	§	§	§	§	§	498	513
Syphilis total, all stages <sup>§</sup>	68,953	52,976	46,540	37,977	35,628	31,575	32,221	32,871
congenital (age <1 yr)	1,863	1,282	1,081	843	579	580	504	460
primary and secondary	16,500	11,387	8,550	6,993	6,657	5,979	6,103	6,862
Tetanus	41	36	50	41	40	35	37	25
Toxic-shock syndrome	191	145	157	138	113	135	127	109
Trichinellosis	29	11	13	19	12	16	22	14
Tuberculosis <sup>††</sup>	22,860	21,337	19,851	18,361	17,531	16,377	15,989	15,075
Tularemia	§	§	§	§	§	142	129	90
Typhoid fever	369	396	365	375	346	377	368	321
Varicella (chickenpox) <sup>§§</sup>	120,624	83,511	98,727	82,455	46,016	27,382	22,536	22,841
Varicella (deaths) <sup>¶¶</sup>	§	§	§	§	§	§	§	9
Yellow fever***	—	1	—	—	—	—	—	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 TB 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.

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

**TABLE 10. Reported cases of notifiable diseases\* — United States, 1987–1994**

Disease	1987	1988	1989	1990	1991	1992	1993	1994
AIDS†	21,070	31,001	33,722	41,595	43,672	45,472	103,691	78,279
Amebiasis	3,123	2,860	3,217	3,328	2,989	2,942	2,970	2,983
Anthrax	1	2	—	—	—	1	—	—
Aseptic meningitis	11,487	7,234	10,274	11,852	14,526	12,223	12,848	8,932
Botulism, total (including wound and unspecified)	82	84	89	92	114	91	97	143
foodborne	17	28	23	23	27	21	27	50
infant	59	50	60	65	81	66	65	85
Brucellosis	129	96	95	82	104	105	120	119
Chancroid	4,998	5,001	4,692	4,212	3,476	1,886	1,399	773
Cholera	6	8	—	6	26	103	18	39
Diphtheria§	3	2	3	4	5	4	—	2
Encephalitis, primary	1,418	882	981	1,341	1,021	774	919	717
Postinfectious¶	121	121	88	105	82	129	170	143
Enterohemorrhagic <i>Escherichia coli</i> infection								
Shiga toxin-positive								
O157:H7	**	**	**	**	**	**	**	1,420
Non-O157	**	**	**	**	**	**	**	**
not serogrouped	**	**	**	**	**	**	**	**
Gonorrhea	780,905	719,536	733,151	690,169	620,478	501,409	439,673	418,068
Granuloma inguinale	22	11	7	97	29	6	19	3
<i>Haemophilus influenzae</i> , invasive disease all ages, serotypes	**	**	**	**	**	1,412	1,419	1,174
Hansen disease (leprosy)	238	184	163	198	154	172	187	136
Hepatitis, viral, acute								
A	25,280	28,507	35,821	31,441	24,378	23,112	24,238	26,796
B	25,916	23,177	23,419	21,102	18,003	16,126	13,361	12,517
C/ non-A, non-B††	2,999	2,619	2,529	2,553	3,582	6,010	4,786	4,470
unspecified	3,102	2,470	2,306	1,671	1,260	884	627	444
Legionellosis	1,038	1,085	1,190	1,370	1,317	1,339	1,280	1,615
Leptospirosis	43	54	93	77	58	54	51	38
Lyme disease	**	**	**	**	**	9,895	8,257	13,043
Lymphogranuloma venereum	303	185	189	277	471	302	285	235
Malaria	944	1,099	1,277	1,292	1,278	1,087	1,411	1,229
Measles	3,655	3,396	18,193	27,786	9,643	2,237	312	963
Meningococcal disease, invasive	2,930	2,964	2,727	2,451	2,130	2,134	2,637	2,886
Mumps	12,848	4,866	5,712	5,292	4,264	2,572	1,692	1,537
Murine typhus fever	49	54	41	50	43	28	25	**
Pertussis	2,823	3,450	4,157	4,570	2,719	4,083	6,586	4,617
Plague	12	15	4	2	11	13	10	17
Poliomyelitis, paralytic	9	9	11	6	10	6	4	8
Psittacosis	98	114	116	113	94	92	60	38
Rabies								
animal	4,658	4,651	4,724	4,826	6,910	8,589	9,337	8,147
human	1	—	1	1	3	1	3	6
Rheumatic fever, acute	141	158	144	108	127	75	112	112
Rocky Mountain spotted fever	604	609	623	651	628	502	456	465
Rubella	306	225	396	1,125	1,401	160	192	227
Rubella, congenital syndrome	5	6	3	11	47	11	5	7
Salmonellosis	50,916	48,948	47,812	48,603	48,154	40,912	41,641	43,323
Shigellosis	23,860	30,617	25,010	27,077	23,548	23,931	32,198	29,769

See table footnotes on page 101.

**TABLE 10. (Continued) Reported cases of notifiable diseases\* — United States, 1987–1994**

Disease	1987	1988	1989	1990	1991	1992	1993	1994
Syphilis, total, all stages	86,545	103,437	110,797	134,255	128,569	112,581	101,259	81,696
congenital (age <1 yr)	480	741	1,837	3,865	4,424	4,067	3,420	2,452
primary and secondary	35,147	40,117	44,540	50,223	42,935	33,973	26,498	20,627
Tetanus	48	53	53	64	57	45	48	51
Toxic-shock syndrome	372	390	400	322	280	244	212	192
Trichinosis	40	45	30	129	62	41	16	32
Tuberculosis	22,517	22,436	23,495	25,701	26,283	26,673	25,313	24,361
Tularemia	214	201	152	152	193	159	132	96
Typhoid fever	400	436	460	552	501	414	440	441
Varicella	213,196	192,857	185,441	173,099	147,076	158,364	134,722	151,219

\* No cases of yellow fever were reported during 1987–1994.

† Acquired immunodeficiency syndrome.

§ Cutaneous diphtheria ceased being notifiable nationally after 1979.

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

\*\* Not nationally notifiable.

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

TABLE 11. Reported cases of notifiable diseases\* — United States, 1979–1986

Disease	1979	1980	1981	1982	1983	1984	1985	1986
AIDS†	§	§	§	§	§	4,445	8,249	12,932
Amebiasis	4,107	5,271	6,632	7,304	6,658	5,252	4,433	3,532
Anthrax	—	1	—	—	—	1	—	—
Aseptic meningitis	8,754	8,028	9,547	9,680	12,696	8,326	10,619	11,374
Botulism, total (including wound and unspecified)	45	89	103	97	133	123	122	109
foodborne	§	§	§	§	§	§	49	23
infant	§	§	§	§	§	§	70	79
Brucellosis	215	183	185	173	200	131	153	106
Chancroid	840	788	850	1,392	847	666	2,067	3,756
Cholera	1	9	19	—	1	1	4	23
Diphtheria	59	3	5	2	5	1	3	—
Encephalitis								
primary	1,504	1,362	1,492	1,464	1,761	1,257	1,376	1,302
postinfectious	84	40	43	36	34	108	161	124
Gonorrhea	1,004,058	1,004,029	990,864	960,633	900,435	878,556	911,419	900,868
Granuloma inguinale	76	51	66	17	24	30	44	61
Hansen disease (leprosy)	185	223	256	250	259	290	361	270
Hepatitis								
A (infectious)	30,407	29,087	25,802	23,403	21,532	22,040	23,210	23,430
B (serum)	15,452	19,015	21,152	22,177	24,318	26,115	26,611	26,107
C/ non-A, non-B¶	§	§	§	§	§	3,871	4,184	3,634
unspecified	10,534	11,894	10,975	8,564	7,149	5,531	5,517	3,940
Legionellosis	593	475	408	654	852	750	830	980
Leptospirosis	94	85	82	100	61	40	57	41
Lymphogranuloma venereum	250	199	263	235	335	170	226	396
Malaria	894	2,062	1,388	1,056	813	1,007	1,049	1,123
Measles	13,597	13,506	3,124	1,714	1,497	2,587	2,822	6,282
Meningococcal disease, invasive	2,724	2,840	3,525	3,056	2,736	2,746	2,479	2,594
Mumps	14,225	8,576	4,941	5,270	3,355	3,021	2,982	7,790
Murine typhus fever	69	81	61	58	62	53	37	67
Pertussis	1,623	1,730	1,248	1,895	2,463	2,276	3,589	4,195
Plague	13	18	13	19	40	31	17	10
Poliomyelitis, total	22	9	10	12	13	9	8	10
paralytic	22	9	10	12	13	9	8	10
Psittacosis	137	124	136	152	142	172	119	224
Rabies								
animal	5,119	6,421	7,118	6,212	5,878	5,567	5,565	5,504
human	4	—	2	—	2	3	1	—
Rheumatic fever, acute	629	432	264	137	88	117	90	147
Rocky Mountain spotted fever	1,070	1,163	1,192	976	1,126	838	714	760
Rubella	11,795	3,904	2,077	2,325	970	752	630	551
Rubella, congenital syndrome	62	50	19	7	22	5	—	14
Salmonellosis	33,138	33,715	39,990	40,936	44,250	40,861	65,347	49,984
Shigellosis	20,135	19,041	9,859	18,129	19,719	17,371	17,057	17,138
Syphilis								
congenital (age <1 yr)	332	277	287	259	239	305	329	410
primary and secondary	24,874	27,204	31,266	33,613	32,698	28,607	27,131	27,883
total, all stages	67,049	68,832	72,799	75,579	74,637	69,888	67,563	68,215
Tetanus	81	95	72	88	91	74	83	64
Toxic-shock syndrome	§	§	§	§	§	482	384	412
Trichinosis	157	131	206	115	45	68	61	39
Tuberculosis	27,669	27,749	27,373	25,520	23,846	22,255	22,201	22,768
Tularemia	196	234	288	275	310	291	177	170
Typhoid fever	528	510	584	425	507	390	402	362
Varicella	199,081	190,894	200,766	167,423	177,462	221,983	178,162	183,243

\* No cases of yellow fever were reported during 1979–1986.

† Acquired immunodeficiency syndrome.

§ Not nationally notifiable.

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

TABLE 12. Number of deaths from selected nationally notifiable infectious diseases — United States, 2002–2008

Cause of death	ICD-10* Cause of death code	No. of deaths						
		2002	2003	2004	2005	2006	2007	2008
AIDS†	B20-B24	14,095	13,658	13,063	12,543	12,133	11,295	10,285
Anthrax	A22	0	0	0	0	0	0	0
Encephalitis, arboviral								
California serogroup virus	A83.5	0	0	0	1	1	1	0
Eastern equine encephalitis virus	A83.2	1	1	2	2	2	0	0
Powassan virus	A84.8	0	0	0	0	0	0	0
St. Louis encephalitis virus	A83.3	3	2	2	1	2	1	2
Western equine encephalitis virus	A83.1	0	0	0	0	0	0	0
Botulism, foodborne	A05.1	2	6	0	5	3	6	4
Brucellosis	A23	1	0	0	2	2	1	0
Chancroid	A57	0	0	0	0	0	0	0
<i>Chlamydia trachomatis</i> infections	A56	0	0	0	0	0	0	0
Cholera	A00	0	0	0	0	0	1	0
Coccidioidomycosis	B38	84	73	100	76	110	99	72
Cryptosporidiosis	A07.2	1	0	1	2	2	2	3
Cyclosporiasis	A07.8	0	0	0	0	0	0	0
Diphtheria	A36	0	1	0	0	0	0	0
Ehrlichiosis	A79.8	0	1	0	0	0	0	0
Giardiasis	A07.1	1	0	1	0	1	0	1
Gonococcal infections	A54	7	6	2	3	3	6	2
Haemophilus influenzae	A49.2	7	5	11	4	4	10	3
Hansen disease (leprosy)	A30	2	2	5	1	1	2	2
Hantavirus pulmonary syndrome	A98.5	0	0	0	0	8	6	2
Hemolytic uremic syndrome, postdiarrheal	D59.3	35	29	27	30	29	20	32
Hepatitis A, viral, acute	B15	76	54	58	43	34	34	37
Influenza-associated pediatric mortality	J10, J11	25	146	51	61	62	71	78
Legionellosis	A48.1	62	98	72	78	91	67	92
Listeriosis	A32	32	33	37	31	30	34	28
Lyme disease	A69.2, L90.4	6	4	6	7	5	8	10
Malaria	B50-B54	12	4	8	6	9	5	5
Measles	B05	0	1	0	1	0	0	0
Meningococcal disease	A39	161	161	138	123	105	87	102
Mumps	B26	1	0	0	0	1	0	2
Pertussis	A37	18	11	16	31	9	9	20
Plague	A20	0	0	1	1	3	2	0
Poliomyelitis	A80	0	0	0	0	0	0	0
Psittacosis	A70	0	0	0	0	0	0	0
Q fever	A78	0	1	1	2	2	4	0
Rabies, human	A82	3	2	3	1	2	1	2
Rocky Mountain spotted fever	A77.0	8	9	5	6	4	4	4
Rubella	B06	0	0	1	0	0	1	0
Rubella, congenital syndrome	P35.0	6	4	5	8	2	4	5
Salmonellosis	A02	21	43	30	30	34	30	42
Shiga toxin-producing <i>Escherichia coli</i> (STEC)	A04.0-A04.4	4	2	4	5	3	3	1
Shigellosis	A03	4	2	0	9	3	4	3
Smallpox	B03	0	0	0	0	0	0	0
Streptococcal disease, invasive, group A	A40.0, A49.1	109	115	121	118	117	144	143
Streptococcus pneumoniae, invasive disease (restricted to age <5 years)	A40.3, B95.3, J13	13	15	13	12	22		20
Syphilis, total, all stages	A50-A53	41	34	43	47	38	42	34
Tetanus	A35	5	4	4	1	4	5	3
Toxic-shock syndrome (other than streptococcal)	A48.3	78	71	71	55	57	18	20
Trichinellosis	B75	0	0	0	0	1	0	1
Tuberculosis	A16-A19	784	711	657	648	652	554	585
Tularemia	A21	2	2	1	0	0	2	1
Typhoid fever	A01.0	0	0	0	0	0	0	2
Varicella	B01	32	16	19	13	18	14	18
Yellow fever§	A95	1	0	0	0	0	0	0

Source: CDC. National Center for Health Statistics. National Vital Statistics System, 1999–2007. Underlying causes of death are classified according to ICD 10. Data for 2009–2011 are not available. Data are limited by the accuracy of the information regarding the underlying cause of death indicated on death certificates and reported to the National Vital Statistics System.

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

† Acquired immunodeficiency syndrome.

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



## Selected Reading for 2010

### General

- 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.
- CDC. Racial disparities in nationally notifiable diseases—United States, 2002. MMWR 2005;54:9–11.
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