MMWR™
Morbidity and Mortality Weekly Report
www.cdc.gov/mmwr

Weekly March 21, 2008, for 2006 / Vol. 55 / No. 53

Summary of Notifiable Diseases — United States, 2006

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

The *MMWR* series of publications is published by the Coordinating Center for Health Information and Service, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

Suggested Citation: Centers for Disease Control and Prevention. [Article title]. MMWR 2007;56:[inclusive page numbers].

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Preface

The *Summary of Notifiable Diseases — United States, 2006* contains the official statistics, in tabular and graphic form, for the reported occurrence of nationally notifiable infectious diseases in the United States for 2006. Unless otherwise noted, the data are final totals for 2006 reported as of June 30, 2007. These statistics are collected and compiled from reports sent by state and territorial health departments to the National Notifiable Diseases Surveillance System (NNDSS), which is operated by CDC in collaboration with the Council of State and Territorial Epidemiologists (CSTE). The *Summary* is available at http://www.cdc.gov/mmwr/summary.html. This site also includes publications from previous years.

The Highlights section presents noteworthy epidemiologic and prevention information for 2006 for selected diseases and additional information to aid in the interpretation of surveillance and disease-trend data. Part 1 contains tables showing incidence data for the nationally notifiable infectious diseases during 2006.* The tables provide the number of cases reported to CDC for 2006 as well as the distribution of cases by month, geographic location, and the patient's demographic characteristics (age, sex, race, and ethnicity). Part 2 contains graphs and maps that depict summary data for certain notifiable infectious diseases described in tabular form in Part 1. Part 3 contains tables that list the number of cases of notifiable diseases reported to CDC since 1975. This section also includes a table enumerating deaths associated with specified notifiable diseases reported to CDC's National Center for Health Statistics (NCHS) during 2002–2004. The Selected Reading section presents general and disease-specific references for notifiable infectious diseases. These references provide additional information on surveillance and epidemiologic concerns, diagnostic concerns, and disease-control activities.

Comments and suggestions from readers are welcome. To increase the usefulness of future editions, comments about the current report and descriptions of how information is or could be used are invited. Comments should be sent to Public Health Surveillance Team — NNDSS, Division of Integrated Surveillance Systems and Services, National Center for Public Health Informatics at soib@cdc.gov.

Background

The infectious diseases designated as notifiable at the national level during 2006 are listed on page 5. 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/epo/dphsi/nndsshis.htm. In 1961, CDC assumed responsibility for the collection and publication of data on nationally notifiable diseases. NNDSS is neither a single surveillance system nor a method of reporting. Certain NNDSS data are reported to CDC through separate surveillance information systems and through different reporting mechanisms; however, these data are aggregated and compiled for publication purposes.

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

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 and territorial 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

* No cases of diphtheria, neuroinvasive or nonneuroinvasive western equine encephalitis virus disease, paralytic poliomyelitis, severe acute respiratory syndrome–associated coronavirus (SARS-CoV), smallpox, yellow fever, or varicella deaths were reported in the United States in 2006; these conditions do not appear in the tables in Part 1. For certain other nationally notifiable diseases, incidence data were reported to CDC but are not included in the tables or graphs of this *Summary*. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. CDC is upgrading its national surveillance data management system for human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). During this transition, CDC is not updating AIDS or HIV infection surveillance data. Therefore, no updates are provided for HIV and AIDS data in this *Summary*.

state and local levels, state reporting to CDC is voluntary. Reporting completeness of notifiable diseases is highly variable and related to the condition or disease being reported (*1*). The list of diseases considered notifiable varies by state and year. Current and historic national public health surveillance case definitions used for classifying and enumerating cases consistently across reporting jurisdictions are available at http://www.cdc.gov/epo/dphsi/nndsshis.htm.

Revised International Health Regulations

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

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

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

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

DHHS has the lead role in carrying out the IHR, in cooperation with multiple federal departments and agencies. The HHS SOC is the central body for the United States responsible for reporting potential events to the 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 the 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?

Additonal information concerning IHR is available at http://www.who.int/csr/ihr/en, http://www.globalhealth.gov/ihr/index.html, http://www.cdc.gov/cogh/ihregulations.htm, and http://www.cste.org/PS/2007ps/2007psfinal/ID/07-ID-06.pdf.

At its annual meeting in June 2007, the Council of State and Territorial Epidemiologists (CSTE) approved a position statement to support the implementation of the 2005

IHR in the United States (*3*). CSTE also approved a position statement in support of the 2005 IHR adding initial detections of novel influenza A virus infections to the list of nationally notifiable diseases reportable to NNDSS, beginning in January 2007 (*4*).

1. Doyle TJ, Glynn MK, Groseclose LS. Completeness of notifiable infectious disease reporting in the United States: an analytical literature review. Am J Epidemiol 2002;155:866–74.
2. World Health Organization. Third report of Committee A. Annex 2. Geneva, Switzerland: World Health Organization; 2005. Available at http://www.who.int/gb/ebwha/pdf_files/WHA58/A58_55-en.pdf.
3. Council of State and Territorial Epidemiologists. Events that may constitute a public health emergency of international concern. Position statement 07-ID-06. Available at http://www.cste.org/PS/2007ps/2007psfinal/ID/07-ID-06.pdf.
4. Council of State and Territorial Epidemiologists. National reporting for initial detections of novel influenza A viruses. Position statement 07-ID-01. Available at: http://www.cste.org/PS/2007ps/2007psfinal/ID/07-ID-01.pdf.

Infectious Diseases Designated as Notifiable at the National Level During 2006

Acquired immunodeficiency syndrome (AIDS)[†]
Anthrax
Botulism
  foodborne
  infant
  other (wound and unspecified)
Brucellosis
Chancroid
Chlamydia trachomatis, genital infection
Cholera
Coccidioidomycosis
Cryptosporidiosis
Cyclosporiasis
Diphtheria
Domestic arboviral diseases, neuroinvasive and nonneuroinvasive
  California serogroup virus disease
  eastern equine encephalitis virus disease
  Powassan virus disease
  St. Louis encephalitis virus disease
  West Nile virus disease
  western equine encephalitis virus disease
Ehrlichiosis
  human granulocytic
  human monocytic
  human, other or unspecified agent
Giardiasis
Gonorrhea
Haemophilus influenzae, invasive disease
Hansen disease (leprosy)
Hantavirus pulmonary syndrome
Hemolytic uremic syndrome, postdiarrheal
Hepatitis A, acute
Hepatitis B, acute
Hepatitis B, chronic
Hepatitis B virus, perinatal infection
Hepatitis C, acute
Hepatitis C virus infection (past or present)[§]
Human immunodeficiency virus (HIV) infection
  adult (age ≥13 yrs)
  pediatric (age <13 yrs)
Influenza-associated pediatric mortality
Legionellosis[§]
Listeriosis
Lyme disease
Malaria
Measles
Meningococcal disease, invasive[§]
Mumps
Pertussis
Plague
Poliomyelitis, paralytic
Psittacosis
Q fever
Rabies
  animal
  human
Rocky Mountain spotted fever
Rubella
Rubella, congenital syndrome
Salmonellosis
Severe acute respiratory syndrome–associated coronavirus (SARS-CoV) disease
Shiga toxin-producing *Escherichia coli* (STEC)[¶]
Shigellosis
Smallpox
Streptococcal disease, invasive, group A
Streptococcal toxic-shock syndrome
Streptococcus pneumoniae, invasive disease
  age <5 years
Streptococcus pneumoniae, invasive disease, drug-resistant
  all ages
Syphilis
Syphilis, congenital
Tetanus
Toxic-shock syndrome (other than streptococcal)
Trichinellosis
Tuberculosis
Tularemia
Typhoid fever
Vancomycin-intermediate *Staphylococcus aureus* infection (VISA)
Vancomycin-resistant *Staphylococcus aureus* infection (VRSA)
Varicella infection (morbidity)
Varicella (mortality)
Yellow fever

[†] The 2005 CSTE position statement approving changes to the AIDS case definition for adults and adolescents aged ≥13 years is pending final review and publication in *MMWR*.
[§] In accord with position statements approved by CSTE in 2005, the national surveillance case definitions for hepatitis C virus infection (past or present), legionellosis, and meningococcal disease were revised.
[¶] Beginning in 2006, STEC replaced the Enterohemorrhagic *Escherichia coli* infection category that was previously nationally notifiable.

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 and territorial 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. 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 compiled and published in the *Summary*.

Data in the *Summary* are derived primarily from reports transmitted to CDC from health departments in the 50 states, five territories (American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, Puerto Rico, and the U.S. Virgin Islands), New York City, and the District of Columbia. Data were reported for *MMWR* weeks 1–52, which correspond to the period for the week ending January 7, 2006, through the week ending December 30, 2006. More information regarding infectious notifiable diseases, including case definitions, is available at http://www.cdc.gov/epo/dphsi/phs.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 2006 NNDSS event code list (available at http://www.cdc.gov/epo/dphsi/phs/files/NNDSSeventcodelistJanuary2007.pdf).

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

Coordinating Center for Health Information and Service
National Center for Health Statistics (NCHS)

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

Coordinating Center for Infectious Diseases
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP)

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

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

Division of Tuberculosis Elimination (tuberculosis)

National Center for Immunization and Respiratory Diseases

Influenza Division (influenza-associated pediatric mortality)

Division of Viral Diseases (poliomyelitis, varicella deaths, and SARS-CoV)

National Center for Zoonotic, Vector-Borne, and Enteric Diseases

Division of Vector-Borne Infectious Diseases (arboviral diseases)

Division of Viral and Rickettsial Diseases (animal rabies)

Population estimates for the states are from the NCHS bridged-race estimates of the July 1, 2000–July 1, 2005 U.S. resident population from the vintage 2005 postcensal series by year, county, age, sex, race, and Hispanic origin, prepared under a collaborative arrangement with the U.S. Census Bureau. This data set was released on August 16, 2005, and is available at http://www.cdc.gov/nchs/about/major/dvs/popbridge/popbridge.htm. Populations for territories are 2005 estimates from the U.S. Census Bureau International Data Base Data Access–Display Mode, available at http://www.census.gov/ipc/www/idb/summaries.html. The choice of population denominators for incidence reported in *MMWR* is based on 1) the availability of census population data at the time of preparation for publication and 2) the desire for consistent use of the same population data to compute incidence reported by different CDC programs. Incidence in the *Summary* is calculated as the number of reported cases for each disease or condition divided by either the U.S. resident population for the specified demographic population or the total U.S. residential population, multiplied by 100,000. When a nationally notifiable disease is associated with a specific age restriction, the same age restriction is applied to the population in the denominator of the incidence calculation. In addition, population data from states in which the disease or condition was not notifiable or was not available were excluded from incidence calculations. Unless otherwise stated, disease totals for the United States do not include data for American Samoa, Guam, Puerto Rico, the Commonwealth of the Northern Mariana Islands, or the U.S. Virgin Islands.

Interpreting Data

Incidence data in the *Summary* are presented by the date of report to CDC as determined by the *MMWR* week and year assigned by the state or territorial health department, except for the domestic arboviral diseases, which are presented by date of diagnosis. Data are reported by the state in which the patient resided at the time of diagnosis. For certain nationally notifiable infectious diseases, surveillance data are reported independently to different CDC programs.

Thus, surveillance data reported by other CDC programs might vary from data reported in the *Summary* because of differences in 1) the date used to aggregate data (e.g., date of report or date of disease occurrence), 2) the timing of reports, 3) the source of the data, 4) surveillance case definitions, and 5) policies regarding case jurisdiction (i.e., which state should report the case to CDC).

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

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

In addition, not all race and ethnicity data are collected uniformly for all diseases. For example, certain disease programs collect data on race and ethnicity using one or two variables, based on the 1977 standards for collecting such data issued by the Office of Management and the Budget (OMB). However, beginning in 2003, certain CDC programs, such as the tuberculosis program, implemented OMB's 1997 revised standards for collecting such data; these programs collect data on multiple races per person using multiple race variables. In addition, although the recommended standard for classifying a person's race or ethnicity is based on self-reporting, this procedure might not always be followed.

Transition in NNDSS Data Collection and Reporting

Before 1990, data were reported to CDC as cumulative counts rather than individual case reports. In 1990, states began electronically capturing and reporting individual case reports (without personal identifiers) to CDC using the National Electronic Telecommunication System for Surveillance (NETSS). In 2001, CDC launched the National Electronic Disease Surveillance System (NEDSS), now a component of the Public Health Information Network (http://www.cdc.gov/phin), to promote the use of data and information system standards that advance the development of efficient, integrated, and interoperable surveillance information systems at the local, state, and federal level. One of the objectives of NEDSS is to improve the accuracy, completeness, and timeliness of disease reporting at the local, state, and national level (*5*). CDC has developed the NEDSS Base System (NBS), a public health surveillance information system that can be used by states that do not wish to develop their own NEDSS-based systems. NBS can capture data that already are in electronic form (e.g., electronic laboratory results, which are needed for case confirmation) rather than requiring that these data be entered manually as in the NETSS application. In 2006, NBS was used by 16 states to transmit nationally notifiable infectious diseases to CDC. Additional information concerning NEDSS is available at http://www.cdc.gov/NEDSS.

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

Highlights for 2006

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

Anthrax

In February 2006, the first naturally-occurring case of inhalation anthrax in the United States since 1976 occurred in a New York City resident. His exposure to *Bacillus anthracis* spores was determined to be the result of making traditional African drums using hard-dried animal hides that were contaminated with spores (*1*). The patient recovered with treatment (*2*). A subsequent, unrelated, fatal case of inhalation anthrax occurred in July 2006 in Scotland; exposure was suspected to result from the playing of traditional African drums. In both cases, the animal hides were suspected to originate from west Africa. These events demonstrate a previously unrecognized risk for serious illness and death from inhalation anthrax resulting from the making and playing of animal-skin drums.

Naturally occurring anthrax epizootics in animal populations continue to be reported in the United States annually. In 2006, epizootics were reported in four states, affecting livestock in Minnesota, North Dakota, and South Dakota and livestock and wildlife in Texas.

1. CDC. Inhalation anthrax associated with dried animal hides—Pennsylvania and New York City, 2006. MMWR 2006;55:280–2.
2. Walsh JJ, Pesik N, Quinn CP, et al. A case of naturally acquired inhalation anthrax: clinical care and analyses of anti-protective antigen immunoglobulin G and lethal factor. Clin Infect Dis 2007;44:968–71.

Arboviral, Neuroninvasive and Nonneuroinvasive (West Nile Virus)

During 2006, for the second consecutive year, West Nile virus (WNV) activity was detected in all 48 contiguous states; in one state (Washington), human cases were reported for the first time (*1*). Cases of WNV disease in humans were reported from 731 counties in 43 states and the District of Columbia. Of these cases, 35% were West Nile neuroinvasive disease (WNND), 61% were uncomplicated fever, and 4% were clinically unspecified. Of the cases with WNND, 12% were fatal. The number of WNND cases reported was the highest since 2003; approximately 10% of these cases were from Idaho, which previously had reported very few cases. Since WNV was first recognized in the United States in 1999, a median of 1,229 (mean:1,238; range:19–2,946) WNND cases have been reported annually.

1. CDC. West Nile virus activity—United States, 2006. MMWR 2007;56;556–9.

Botulism

Botulism is a severe paralytic illness caused by the toxins of *Clostridium botulinum*. Exposure to toxin can occur by ingestion (foodborne botulism) or by in situ production from *C. botulinum* colonization of a wound (wound botulism) or the gastrointestinal tract (infant botulism and adult intestinal colonization of botulism) (*1*). In addition to the National Notifiable Diseases Surveillance System, CDC maintains intensive surveillance for cases of botulism in the United States. In 2006, cases were attributed to foodborne botulism, wound botulism, and infant botulism.

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

Brucellosis

In 2006, two cattle herds in one state were reported by the U.S. Department of Agriculture (USDA) to be affected by brucellosis. USDA has designated 48 states and three territories as being free of cattle brucellosis, with one state regaining and another state losing Brucellosis Class Free state status (*1*). *Brucella abortus* remains enzootic in elk and bison in the greater Yellowstone National Park area, and *Brucella suis* is enzootic in feral swine in the southeast. Hunters exposed to these animals might be at increased risk for infection. Human cases can occur among immigrants and travelers returning from countries with endemic brucellosis and are associated with consumption of unpasteurized milk or soft cheeses. Pathogenic *Brucella* species are considered category B biologic threat agents because of a high potential for aerosol transmission (*2*). For the same reason, biosafety level 3 practices, containment, and equipment are recommended for laboratory manipulation of isolates (*3*).

1. Donch DA, Gertonson AA, Rhyan JH, Gilsdorf MJ. Status report—fiscal year 2006 cooperative state-federal Brucellosis Eradication Program. Washington, DC: US Department of Agriculture; 2007. Available at: http://www.aphis.usda.gov/animal_health/animal_diseases/brucellosis/downloads/yearly_rpt.pdf.

2. CDC. Bioterrorism agents/diseases, by category. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at http://www.bt.cdc.gov/agent/agentlist-category.asp#adef.
3. CDC, National Institutes of Health. Biosafety in microbiological and biomedical laboratories (BMBL). 4th ed. Washington, DC: US Department of Health and Human Services, CDC, National Institutes of Health; 1999. Available at http://www.cdc.gov/OD/OHS/biosfty/bmbl4/bmbl4toc.htm.

Cholera

Cases of cholera continue to be rare in the United States. The number of cases reported in 2006 was slightly higher than the average number of cases per year reported during 2001–2005 (4.6) (*1*). Foreign travel continues to be the primary source of illness for cholera in the United States. Cholera remains a global threat to health, particularly in areas with poor access to improved water and sanitation, such as sub-Saharan Africa (*2*). All patients with domestic exposure had consumed seafood (*3*). Crabs harvested from the U.S. Gulf Coast continue to be a common source of cholera, especially during warmer months, when environmental conditions favor the growth and survival of *Vibrio* species in marine water.

1. Steinberg EB, Greene KD, Bopp CA, Cameron DN, Wells JG, Mintz ED. Cholera in the United States, 1995–2000: trends at the end of the twentieth century. J Infect Dis 2001;184:799–802.
2. Gaffga NH, Tauxe RV, Mintz ED. Cholera: a new homeland in Africa. Am J Trop Med Hyg 2007;77:705–13.
3. Brunkard JM, et al. Cholera, crabs, and Katrina: Is cholera increasing in southern Louisiana? [Abstract]. Presented at the 45th annual meeting of the Infectious Disease Society of America, San Diego, CA; October 4–7, 2007.

Cryptosporidiosis

In 2006, the number of cryptosporidiosis cases continued to increase. This follows a dramatic increase in the number of cases in 2005. The reasons for this increase are unclear but might reflect changes in jurisdictional reporting patterns; increased testing for *Cryptosporidium* following the introduction of nitazoxanide, the first licensed treatment for the disease (*1*); or a real increase in infection and disease caused by *Cryptosporidium*. This drug introduction might have affected clinical practice by increasing the likelihood of health-care providers requesting *Cryptosporidium* testing, leading to an increase in subsequent case reports.

Although cryptosporidiosis is widespread geographically in the United States, a higher incidence is reported by northern states (*2*). However, this observation is difficult to interpret because of differences in cryptosporidiosis surveillance systems and reporting among states.

As in previous years, cryptosporidiosis case reports were clearly influenced by cryptosporidiosis outbreaks. Although cryptosporidiosis affects persons in all age groups, the number of reported cases was highest among children aged 1–9 years. A tenfold increase in transmission of cryptosporidiosis occurred during summer through early fall compared with winter, coinciding with increased use of recreational water by younger children, which is a known risk factor for cryptosporidiosis. Transmission through recreational water is facilitated by the substantial number of *Cryptosporidium* oocysts that can be shed by a single person; the extended periods of time that oocysts can be shed (*3*); the low infectious dose (*4*); the resistance of *Cryptosporidium* oocysts to chlorine (*5*); and the prevalence of improper pool maintenance (i.e., insufficient disinfection, filtration, and recirculation of water), particularly of children's wading pools (*6*).

1. Fox LM, Saravolatz LD. Nitazoxanide: a new thiazolide antiparasitic agent. Clin Infect Dis 2005;40:1173–80.
2. Yoder JS, Beach MJ. Cryptosporidiosis surveillance—United States, 2003–2005. In: Surveillance Summaries, September 7, 2007. MMWR 2007;56(No. SS-7):1–10.
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. DuPont HL, Chappell CL, Sterling CR, Okhuysen PC, Rose JB, Jakubowski W. The infectivity of *Cryptosporidium parvum* in healthy volunteers. N Engl J Med 1995;332:855–9.
5. Korich DG, Mead JR, Madore MS, Sinclair NA, Sterling CR. Effects of ozone, chlorine dioxide, chlorine, and monochloramine on *Cryptosporidium parvum* oocyst viability. Appl Environ Microbiol 1990;56:1423–8.
6. CDC. Surveillance data from swimming pool inspections—selected states and counties, United States, May–September 2002. MMWR 2003;52:513–6.

Ehrlichiosis

Human monocytic ehrlichiosis and human granulocytic ehrlichiosis (now known as human [granulocytic] anaplasmosis) are emerging tick-borne diseases that became nationally notifiable in 1999. Because identification and reporting of these diseases remain incomplete, areas shown in the maps on pages 49–50 of this summary might not be definitive predictors for overall distribution or regional prevalence. Increases in numbers of reported cases of human rickettsial infections might result from several factors, including but not limited to increases in vector tick populations, increases in human-tick contact as a result of encroachment into tick habitat through suburban/rural recreational activities and housing construction; changes in case definitions, case report forms, and laboratory tests; and increased use of active surveillance methods to supplement previously

passive surveillance methods as a result of increased resource availability and perception of high case density in newly surveyed areas.

The pathogen responsible for human granulocytic ehrlichiosis, genus *Ehrlichia*, has been reclassified and now belongs to the genus *Anaplasma*. Diseases resulting from infection with *Ehrlichia chaffeensis, Anaplasma phagocytophilum* (formerly *Ehrlichia phagocytophila*), and other pathogens (comprising *Ehrlichia ewingii* and undifferentiated species) have been referred to respectively by the acronyms "HME," "HGE," and "Ehrlichiosis (unspecified or other agent)." The case definitions for these diseases have been modified by a resolution adopted at the June 2007 meeting of the Council of State and Territorial Epidemiologists; the new category names and the new case definitions became effective January 1, 2008 (*1*).

1. Council of State and Territorial Epidemiologists. Revision of the surveillance case definitions for ehrlichiosis. Position statement 07-ID-03. Available at http://www.cste.org/position%20statements/searchbyyear2007final.asp.

Gonorrhea

In 2006, rates of gonorrhea in the United States increased for the second consecutive year (*1*). Increases in gonorrhea rates in eight western states during 2000–2005 have been described previously (*2*). Increases in quinolone-resistant *Neisseria gonorrhoeae* in 2006 led to changes in national guidelines that now limit the recommended treatment of gonorrhea to a single class of drugs, the cephalosporins (*3*). The combination of increases in gonorrhea morbidity with increases in resistance and decreased treatment options have increased the need for better understanding of the epidemiology of gonorrhea.

1. CDC. Sexually transmitted disease surveillance, 2006. Atlanta, GA: US Department of Health and Human Services, CDC; 2007. Available at http://www.cdc.gov/std/stats/toc2006.htm.
2. CDC. Increases in gonorrhea—eight western states, 2000–2005. MMWR 2007;56:222–5.
3. CDC. Update to CDC's sexually transmitted diseases treatment guidelines, 2006: fluoroquinolones no longer recommended for treatment of gonococcal infections. MMWR 2007;56:332–6.

Haemophilus influenzae

Before the introduction of effective vaccines, *Haemophilus influenzae* type b (Hib) was the leading cause of bacterial meningitis and other invasive bacterial disease among children aged <5 years. Incidence of invasive Hib disease began to decline dramatically in the late 1980s, coincident with licensure of conjugate Hib vaccines; incidence has declined >99% compared with the prevaccine era (*1*). During 2006, approximately 8% of all cases of invasive *Haemophilus influenzae* (Hi) disease reported among children aged <5 years were attributed to Hib, reflecting successful delivery of highly effective conjugate Hib vaccines to children beginning at age 2 months (*2*). Nevertheless, for approximately 50% of reported cases, serotype information was either unknown or missing, and some of these also might be Hib cases. Accurate laboratory information is essential to correctly identify the serotype of the causative Hi isolate and to assess progress toward elimination of Hib invasive disease (*3*).

1. Schuchat A, Rosentein Messonnier N. From pandemic suspect to the postvaccine era: the *Haemophilus influenzae* story. Clin Infect Dis 2007;44:817–9
2. CDC. Progress toward elimination of *Haemophilus influenzae* type b disease among infants and children—United States, 1998–2000. MMWR 2002;51:234–7.
3. LaClaire LL, Tondella ML, Beall DS, et al. Identification of *Haemophilus influenzae* serotypes by standard slide agglutination serotyping and PCR-based capsule typing. J Clin Microbiol 2003;41:393–6.

Hansen Disease (Leprosy)

The number of cases of Hansen disease (HD) reported in the United States peaked at 361 in 1985 and has declined since 1988. In 2006, cases were reported from 20 states and two territories. HD is not highly transmissible; cases appear to be related predominantly to immigration. HD outpatient clinics operated under the guidance and direction of the U.S. Department of Health and Human Services, Health Resources and Services Administration exist in Phoenix, Arizona; Los Angeles, Martinez, and San Diego, California; Miami, Florida; Chicago, Illinois; Baton Rouge, Louisiana; Boston, Massachusetts; New York City, New York; San Juan, Puerto Rico; Austin, Dallas, Harlingen, Houston, and San Antonio, Texas; and Seattle, Washington. Services provided to HD patients include diagnosis, treatment, follow-up of patients and contacts, disability prevention and monitoring, education, and a referral system for HD health-care services. Approximately 6,500 person in the United States are living with HD. Additional information regarding access to clinical care is available at http://www.hrsa.gov/hansens.

Hemolytic Uremic Syndrome, Postdiarrheal

Hemolytic uremic syndrome (HUS) is characterized by the triad of hemolytic anemia, thrombocytopenia, and renal insufficiency. The most common etiology of HUS in the United States is infection with Shiga toxin-producing

Escherichia coli, principally *E. coli* O157:H7 (*1*). Approximately 8% of persons infected with E. coli O157:H7 progress to HUS (*2*). During 2006, the majority of reported cases occurred among children aged <5 years.

1. Banatvala N, Griffin PM, Greene KD, et al. The United States prospective hemolytic uremic syndrome study: microbiologic, serologic, clinical, and epidemiologic findings. J Infect Dis 2001;183:1063–70.
2. Slutsker L, Ries AA, Maloney K, et al. A nationwide case-control study of Escherichia coli O157:H7 infection in the United States. J Infect Dis 1998;177:962–6.

Influenza-Associated Pediatric Mortality

An early and severe influenza season during 2003–2004 was associated with deaths in children in multiple states, prompting CDC to request that all state, territorial, and local health departments report laboratory confirmed influenza-associated pediatric deaths in children aged <18 years (*1,2*). During the 2003–04 influenza season, 153 pediatric influenza-associated deaths were reported to CDC by 40 state health departments (*3*). In June 2004, the Council of State and Territorial Epidemiologists added influenza-associated pediatric mortality to the list of conditions reportable to the National Notifiable Diseases Surveillance System (NNDSS) (*4*). Cumulative year-to-date incidence data are published each week in *MMWR* Table I for low-incidence nationally notifiable diseases.

During 2006, a total of 43 influenza-associated pediatric deaths were reported to CDC. The median age at death was 4 years (range: 28 days–17 years): seven children (16%) were aged <6 months; 12 (28%) were aged 6–23 months; five (12%) were aged 24–59 months; and 19 (44%) were aged >5 years. In 2006, approximately half of all influenza-associated pediatric deaths occurred in the inpatient setting; a slight increase occurred in the number of children who died in the emergency room or outside the hospital compared with 2005 (22 and 17, respectively). Twenty (47%) children had one or more underlying or chronic condition, and 21 (53%) were previously healthy. The more common chronic conditions reported included moderate to severe developmental delay (n = 8), neuromuscular disorders (n = 5), chronic pulmonary disease (n = 5), seizure disorder (n = 4), and asthma (n = 4). Bacterial coinfections were confirmed in seven children. Pathogens cultured were *Staphylococcus aureus*, sensitivity not done; *Staphylococcus aureus*, methicillin-sensitive; *Streptococcus viridans*; Group A Streptococcus; *Pseudomonas aeruginosa*, and one infection with an unidentified gram-negative bacteria. Of the six (14%) children who received ≥1 dose of influenza vaccine before the onset of illness during the 2005–06 season, only three were fully vaccinated. The current recommendations of the Advisory Committee on Immunization Practices highlight the importance of administering 2 doses of influenza vaccine for previously unvaccinated children aged 6 months–<9years (*5*). Continued surveillance of severe influenza-related mortality is important to monitor the impact of influenza and the possible effects of interventions in children.

1. Update: influenza-associated deaths reported among children aged <18 years—United States, 2003–04 influenza season. MMWR 2004;52:1254–5.
2. Update: influenza-associated deaths reported among children aged <18 years—United States, 2003–04 influenza season. MMWR 2004;52: 1286-8.
3. Bhat N, Wright JG, Broder KR, et al. Influenza-associated deaths among children in the United States, 2003-2004. N Engl J Med 2005;352: 2559–67.
4. CDC. Mid-year addition of influenza-associated pediatric mortality to the list of nationally notifiable diseases, 2004. MMWR 2004;53:951–2.
5. CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2007;56(No. RR-6).

Legionellosis

During 2005–2006, nationwide legionellosis case counts increased for the second year in a row. In 2005, in collaboration with CDC, the Council for State and Territorial Epidemiologists adopted a position statement to improve reporting of travel-associated legionellosis (*1*); this might have resulted in an increase in case reporting. Nearly all regions of the United States, with the exception of the West North Central area, reported more cases in 2006 than in 2005. Other possible explanations for the increase include an actual increase in disease incidence or increased use of *Legionella* diagnostic tests.

1. Council of State and Territorial Epidemiologists. Strengthening surveillance for travel-associated legionellosis and revised case definitions for legionellosis. Position statement 05-ID-01. Available at http://www.cste.org/position%20statements/searchbyyear2005.asp.

Listeriosis

Listeriosis is a rare but severe infection caused by *Listeria monocytogenes* that has been a nationally notifiable disease since 2000. Listeriosis is primarily foodborne and occurs most frequently among persons who are older, pregnant, or immunocompromised. During 2005, the majority of reported cases occurred among persons aged >65 years.

Molecular subtyping of *L. monocytogenes* isolates and sharing of that information through PulseNet has enhanced the

ability of public health officials to detect and investigate outbreaks. Recent outbreaks have been linked to ready-to-eat deli meat (*1*) and unpasteurized cheese (*2*). During 2006, the incidence of listeriosis in FoodNet active surveillance sites was 0.3 cases per 100,000 population, representing a decrease of 34% compared with 1996–1998; however, incidence remained higher than at its lowest point in 2002 (*3*).

All clinical isolates should be submitted to state public health laboratories for pulsed-field gel electrophoresis (PFGE) pattern determination, and all persons with listeriosis should be interviewed by a public health official or health-care provider using a standard *Listeria* case form (available at http://www.cdc.gov/nationalsurveillance/ListeriaCaseReportFormOMB0920-0004.pdf). Rapid analysis of surveillance data will allow identification of possible food sources of outbreaks.

1. Gottlieb SL, Newbern EC, Griffin PM et al. Multistate outbreak of listeriosis linked to turkey deli meat and subsequent changes in US regulatory policy. Clin Infect Dis 2006;42:29–36.
2. MacDonald PDM, Whitwam RE, Boggs JD et al. Outbreak of listeriosis among Mexican immigrants caused by illicitly produced Mexican-style cheese. Clin Infect Dis 2005;40:677–82.
3. CDC. Preliminary FoodNet data on the incidence of infection with pathogens transmitted commonly through food—10 states, 2006. MMWR 2007;56:336–9.

Measles

In 2006, the Council of State and Territorial Epidemiologists (CSTE) approved a modified case classification for measles, simultaneously with those for rubella and congenital rubella syndrome (*1*). Because measles is no longer endemic in the United States, its future epidemiology in the U.S. will reflect its global epidemiology. The modification of the case classification clearly identifies the origin of each case and will help define the impact of imported cases on the epidemiology of measles in the United States.

As in recent years, 95% of confirmed measles cases reported during 2006 were import-associated. Of these, 31 cases were internationally imported, 20 resulted from exposure to persons with imported infections, and in one case, virologic evidence indicated an imported source. The sources for the remaining three cases were classified as unknown because no link to importation was detected. Nearly half of all cases occurred among adults aged 20–39 years, and 20% occurred in adults aged >40 years. Four outbreaks occurred during 2006 (size range: 3–18 cases), all from imported sources. Three imported cases occurred in each of two outbreaks, with no secondary transmission. In another outbreak; one imported case and two secondary cases occurred in an immigrant community. In the fourth outbreak, 18 cases occurred among persons aged 25–46 years, most of whom had unknown vaccination histories. The primary exposure setting for this outbreak was a large office building and nearby businesses. Five case-patients were foreign born, including the index case-patient, who had arrived in the United States 9 days before onset of symptoms.

Measles can be prevented by adhering to recommendations for vaccination, including guidelines for travelers (*2,3*). Although the elimination of endemic measles in the United States has been achieved, and population immunity remains high (*4*), an outbreak can occur when measles is introduced into a susceptible group, often at significant cost to control (*5*).

1. Council of State and Territorial Epidemiologists. Revision of measles, rubella, and congenital rubella syndrome case classifications as part of elimination goals in the United States. Position statement 2006-ID-16. Available at http://www.cste.org/position%20statements/searchbyyear2006.asp.
2. CDC. Preventable measles among U.S. residents, 2001–2004. MMWR 2005;54:817–20.
3. 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(No. RR-8).
4. Hutchins SS, Bellini W, Coronado V, et al. Population immunity to measles in the United States. J Infect Dis 2004;189(Suppl 1):S91–S97.
5. 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.

Meningococcal Disease, Invasive

Neisseria meningitidis is a leading cause of bacterial meningitis and sepsis in the United States. Rates of meningococcal disease are highest among infants, with a second peak at age 18 years (*1*). The proportion of cases caused by each serogroup of *N. meningitidis* varies by age group. Among adolescents aged 11–19 years, 75% of cases are caused by serogroups contained in the tetravalent (A,C,Y,W-135) meningococcal conjugate vaccine ([MCV4] Menactra® (Sanofi Pasteur, Swiftwater, Pennsylvania). The majority of cases in infants are caused by serogroup B, for which no vaccine is licensed in the United States.

MCV4 is licensed for persons aged 2–55 years. In 2007, CDC's Advisory Committee on Immunization Practices revised recommendations for routine use of MCV4 to include children aged 11–12 years at the preadolescent vaccination visit and adolescents aged 13–18 years at the earliest opportunity (*2*). MCV4 also is recommended for college freshmen living in dormitories and other populations aged 2–55 years at increased risk for meningococcal disease (*1*). Further reductions in meningococcal disease

could be achieved with the development of an effective serogroup B vaccine.

1. CDC. Prevention and control of meningococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2005;54(No. RR-7).
2. CDC. Notice to readers: revised recommendations of the Advisory Committee on Immunization Practices to vaccinate all persons aged 11–18 years with meningococcal conjugate vaccine. MMWR 2007;56:794–5.
3. CDC. Use of quadrivalent meningococcal conjugate vaccine (MCV4) in children aged 2–10 years at increased risk for invasive meningococcal disease: recommendation of the Advisory Committee on Immunization Practices (ACIP). MMWR. In press.

Mumps

Since vaccine licensure in 1967, the number of cases of mumps in the United States has declined steadily. Since 2001, an average of 265 mumps cases (range: 231–293 cases) has been reported each year (*1*). However, in 2006, the largest mumps outbreak in >20 years occurred, with >5,000 cases reported (*1–3*). The outbreak began in Iowa in December 2005, peaked in April 2006, and declined to lower levels of reporting during summer 2006 (*3*). The majority of cases occurred during March–May, 2006 (*3*). The outbreak was primarily focal in geographic distribution; 84% of cases were reported by six contiguous midwestern states (Illinois, Iowa, Kansas, Nebraska, South Dakota, and Wisconsin) (*3*). In contrast to the childhood age range traditionally associated with mumps disease, young adults aged 18–24 years were the age group most highly affected (*1–3*). In 2006, a total of 63% of reported cases occurred in females; previously, no gender differences in case rates had been reported (*3*).

In response to the outbreak, the Advisory Committee on Immunization Practices (ACIP) updated criteria for mumps immunity and mumps vaccination recommendations (*4*). Acceptable presumptive evidence of immunity to mumps includes one of the following: 1) documentation of adequate vaccination, 2) laboratory evidence of immunity, 3) birth before 1957, or 4) documentation of physician-diagnosed mumps. Documentation of adequate vaccination now requires 2 doses of a live mumps virus vaccine for school-aged children (grades K–12) and adults at high risk (i.e., persons who work in health-care facilities, international travelers, and students at post–high school educational institutions). Health-care workers born before 1957 without other evidence of immunity should now consider 1 dose of live mumps vaccine. During an outbreak, a second dose of live mumps vaccine should be considered for children aged 1–4 years and adults at low risk if affected by the outbreak; health-care workers born before 1957 without other evidence of immunity should strongly consider 2 doses of live mumps vaccine.

1. CDC. Mumps epidemic—Iowa, 2006. MMWR 2006;55:366–8.
2. CDC. Update: multistate outbreak of mumps—United States, January 1–May 2, 2006. MMWR 2006;55:559–63.
3. CDC. Update: mumps activity—United States, January 1–October 7, 2006. MMWR 2006;55:1152–3.
4. CDC. Updated recommendations of the Advisory Committee on Immunization Practices (ACIP) for the control and elimination of mumps. MMWR 2006;55:629–30.

Pertussis

In 2006, incidence of reported pertussis decreased to 5.35 cases per 100,000 population after peaking during 2004–2005 at 8.9 per 100,000. Infants aged <6 months, who are too young to be fully vaccinated, had the highest reported rate of pertussis (84.21 per 100,000 population), but adolescents aged 10–19 years and adults aged >20 years contributed the greatest number of reported cases. Adolescents and adults might be a source of transmission of pertussis to young infants who are at higher risk for severe disease and death and are recommended to be vaccinated with tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine (Tdap) (*1,2*). In 2006, coverage with Tdap in adolescents aged 13–17 years was 10.8%, compared with 49.4% coverage with tetanus and diphtheria toxoids vaccine (Td) (*3*). The decrease in reported pertussis incidence in 2006 is unlikely to be related to use of Tdap and is more likely related to the cyclical nature of disease.

1. CDC. Preventing tetanus, diphtheria, and pertussis among adolescents; use of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccines: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2006;55(No. RR-3).
2. CDC. Preventing tetanus, diphtheria, and pertussis among adults: use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccine:recommendations of the Advisory Committee on Immunization Practices (ACIP) and Recommendation of ACIP, supported by the Healthcare Infection Control Practices Advisory Committee (HICPAC), for use of Tdap among health-care personnel. MMWR 2006;55 (No. RR-17).
3. CDC. National vaccination coverage among adolescents aged 13–17 years—United States, 2006. MMWR 2007;56:885–8.

Plague

The number of human plague cases reported in 2006 was the greatest number since 1994 and was fourfold higher than the average for the preceding 5 years. Six cases were classified as primary septicemic plague, approximately twice the usual frequency of this disease manifestation. Nearly half of the cases reported in 2006 were from New Mexico (n = 8); two of these cases were fatal. Although factors

governing the occurrence of plague are incompletely understood, the disease appears to fluctuate naturally in response to climactic factors.

Poliomyelitis, Paralytic and Polio Virus Infections

In 2006, the Council of State and Territorial Epidemiologists (CSTE) recommended revision of the surveillance case definition for paralytic poliomyelitis to include nonparalytic poliovirus infection and the addition of nonparalytic poliovirus infection to the list of nationally notifiable diseases reported through the National Notifiable Diseases Surveillance System (*1*). These changes resulted from the identification in 2005 of a type 1 vaccine-derived poliovirus (VDPV) infection among unvaccinated Minnesota Amish children who were not paralyzed (*2*). Public health officials should remain alert that paralytic poliomyelitis or poliovirus infections might occur in high-risk (i.e., unvaccinated or undervaccinated) populations and should report any detected poliovirus infections attributed to either wild or vaccine-derived polioviruses and any paralytic poliomyelitis cases.

1. Council of State and Territorial Epidemiologists. Inclusion of poliovirus infection reporting in the National Notifiable Diseases Surveillance System. Position statement 2006-ID-15. Available at: http://www.cste.org/position%20statements/searchbyyear2006.asp.
2. CDC. Poliovirus infections in four unvaccinated children—Minnesota, August–October 2005. MMWR 2005;54:1053–5.

Psittacosis

Psittacosis is an avian zoonosis with a spectrum of disease that ranges from a mild influenza-like illness to severe pneumonia with multiorgan involvement. Case reports of psittacosis in 2006 increased slightly compared with the previous four years. Further information regarding diagnosis, treatment, and prevention of psittacosis is available at http://www.avma.org/pubhlth/psittacosis.asp.

Rabies

During 2006, the majority (92%) of animal rabies cases were reported in wild animal species. Overall an 8.2% increase in rabies cases was reported in animals compared with 2005 (*1*). In the United States five animal species are recognized as reservoir species for various rabies virus variants over defined geographic regions: raccoons (eastern United States), bats (various species, all U.S. states except Hawaii), skunks (North Central United States, South Central United States, and California), foxes (Alaska, Arizona, and Texas), and mongoose (Puerto Rico). During 2006, bats became the second most reported species with rabies.

Reported cases of rabies in domestic animals remain low in part because of high vaccination rates. Dog-to-dog transmission has not been reported in 2 years, making the United States free of the canine rabies virus variant in 2006. As in the past decade, cats were the most commonly reported domestic animal with rabies during 2006.

Vaccination programs to control rabies in wild carnivores were ongoing through the distribution of baits containing an oral rabies vaccine in the Eastern United States and Texas. Oral rabies vaccination programs in Texas are being maintained as a barrier to prevent the reintroduction of canine rabies from Mexico. Oral rabies vaccination programs are also being conducted in the Eastern United States to attempt to stop the westward spread of the raccoon rabies virus variant. Active surveillance conducted by the U. S. Department of Agriculture (USDA) to monitor oral rabies vaccination programs were further enhanced by the deployment of the Direct Rapid Immunohistochemical Test (DRIT) which USDA began implementing in the last half of 2005 after receiving training on its use at CDC. This test is used for screening the large number of samples collected by USDA in the field, reducing the burden on state laboratories and allowing for faster processing of surveillance samples (*2*).

Three cases of human rabies were identified during 2006: one in a male aged 16 years from Texas, one in a female aged 10 years from Indiana, and one in a male aged 11 years from California. The cases in Texas and Indiana were attributable to bat-associated rabies virus variants; free-tailed bat and sliver-haired bat respectively. The case in California was associated with a canine variant from the Philippines. The patient had recently immigrated from the Philippines where an exposure to a dog was noted approximately 2 years before onset of rabies (*2*).

1. Blanton JD, Hanlon CA, Ruprrecht CE. Rabies surveillance in the United States during 2006. J Am Vet Med Assoc 2007;231:540–56.
2. Lembo T, Niezgoda M, Hamir AN, et al. Evaluation of a direct, rapid immunohistochemical test for rabies diagnosis. Emerg Infect Dis 2006;12:310–3.

Salmonellosis

During 2006, as in previous years, the majority of reported cases occurred among persons aged <5 years. Since 1993, the most frequently reported isolates have been *Salmonella enterica* serotype Typhimurium and *S. enterica* serotype Enteritidis (*1*). The epidemiology of *Salmonella*

has been changing over the past decade. *Salmonella* serotype Typhimurium has decreased in incidence, while incidence of serotypes Newport, Mississippi, and Javiana have increased. Specific control programs might have led to the reduction of serotype Enteritidis infections, which have been associated with the consumption of internally contaminated eggs. Rates of antibiotic resistance among several serotypes have been increasing; a substantial proportion of serotypes Typhimurium and Newport isolates are resistant to multiple drugs (*2*).

The epidemiology of *Salmonella* infections is based on serotype characterization; in 2005, the Council of State and Territorial Epidemiologists adopted a position statement for serotype-specific reporting of laboratory-confirmed salmonellosis cases (*3*). However, reporting through the National Notifiable Diseases Surveillance System (NNDSS) does not include serotype; serotypes for *Salmonella* isolates are reported through the Public Health Laboratory Information System (PHLIS). The National Electronic Disease Surveillance System (NEDSS) or compatible systems eventually will replace PHLIS; users of NEDSS or compatible systems should report serotype in NEDSS.

1. CDC. *Salmonella* surveillance summary, 2005. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at http://www.cdc.gov/ncidod/dbmd/phlisdata/salmonella.htm.
2. CDC. National Antimicrobial Resistance Monitoring System for enteric bacteria (NARMS): 2004 human isolates, final report. Atlanta, GA: US Department of Health and Human Services, CDC; 2006.
3. Council of State and Territorial Epidemiologists. Serotype specific national reporting for salmonellosis. Position statement 05-ID-09. Available at http://www.cste.org/position%20statements/searchbyyear2005.asp.

Shiga toxin-producing *Escherichia coli* (STEC)

Escherichia coli O157:H7 has been nationally notifiable since 1994 (*1*). National surveillance for all Shiga toxin-producing *E. coli* (STEC), under the name enterohemorrhagic *E. coli* (EHEC), began in 2001. As of January 1, 2006, the nationally notifiable diseases case definition designation changed from EHEC to STEC, and serotype-specific reporting was implemented (*2*). Because diagnosis solely on the basis of detection of Shiga toxin does not sufficiently protect the public's health, characterizing STEC isolates by serotype and pulsed-field gel electrophoresis (PFGE) patterns is critical to detect, investigate, and control outbreaks. Screening of stool specimens by clinical diagnostic laboratories for Shiga toxin by enzyme immunoassay, subsequent bacterial culture using sorbitol MacConkey agar (SMAC), and forwarding enrichment broths from Shiga toxin-positive specimens that do not yield STEC O157 to state or local public health laboratories are important for public health surveillance of STEC infections (*3*).

Healthy cattle, which harbor the organism as part of the bowel flora, are the main animal reservoir of STEC. The majority of reported outbreaks are caused by contaminated food or water. The substantial decline in cases reported during 2002–2003 coincided with industry and regulatory control activities and with a decrease in the contamination of ground beef (*4*). However, during 2005–2006, incidence of human STEC infections increased. Reasons for the increases are not known. Three large multistate outbreaks of *E. coli* O157 infections during fall 2006 caused by contaminated spinach and lettuce suggest that produce that is consumed raw is an important source of STEC infection (*5,6*).

1. Mead PS, Griffin PM. Escherichia coli O157:H7. Lancet 1998;352:1207–12.
2. Council of State and Territorial Epidemiologists. Revision of the Enterohemorrhagic *Escherichia coli* (EHEC) condition name to Shiga toxin-producing *Escherichia coli* (STEC) and adoption of serotype specific national reporting for STEC. Position statement 05-ID-07. Available at http://www.cste.org/position%20statements/searchbyyear2005.asp.
3. CDC. Importance of culture confirmation of Shiga toxin-producing *Escherichia coli* infection as illustrated by outbreaks of gastroenteritis—New York and North Carolina, 2005. MMWR 2006;55:1042–4.
4. Naugle AL, Holt KG, Levine P, Eckel R. 2005 Food Safety and Inspection Service regulatory testing program for *Escherichia coli* O157:H7 in raw ground beef. J Food Prot 2005;68:462–8.
5. CDC. Ongoing multistate outbreak of *Escherichia coli* serotype O157:H7 associated with consumption of fresh spinach—United States, September 2006. MMWR 2006;55:1045–6.
6. CDC. Multistate outbreak of *E. coli* infections linked to Taco Bell. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at http://www.cdc.gov/ecoli/2006/december/index.htm.

Shigellosis

During 1978–2003, the number of shigellosis cases reported to CDC consistently exceeded 17,000. The approximately 14,000 cases of shigellosis reported to CDC in 2004 represented an all-time low. This number increased to approximately 16,000 in 2005 and decreased slightly in 2006. *Shigella sonnei* infections continue to account for >75% of shigellosis in the United States (*1*). Certain cases of shigellosis are acquired during international travel (*2,3*). In addition to spread 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 (*4*).

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. 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. In press.
3. 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 Hispañola. Am J Trop Med Hyg 2007;76:1163–5.
4. CDC. National Antimicrobial Resistance Monitoring System (NARMS): enteric bacteria. Atlanta, GA: US Department of Health and Human Services, CDC; 2007. Available at http://www.cdc.gov/narms.

Streptococcus pneumoniae, invasive disease

In 1994, the Council of State and Territorial Epidemiologists (CSTE) adopted a position statement making drug-resistant *Streptococcus pneumoniae* (DRSP) invasive disease a nationally notifiable disease (*1*). In 2000, in anticipation of the routine introduction of the 7-valent pneumococcal conjugate vaccine (PCV7) (*2*), CSTE made invasive pneumococcal disease (IPD) among children aged <5 years nationally notifiable (*3*). Consequently, the National Notifiable Diseases Surveillance System (NNDSS) had two event codes for reporting IPD that were not mutually exclusive: DRSP among persons of all ages and IPD among children aged <5 years.

To avoid submissions of duplicate reports, CSTE modified the case classification of DRSP and IPD in 2006. Under the modified case definition, which became effective in January 2007, cases with isolates causing IPD from children aged <5 years for whom antibacterial susceptibilities are available and determined to be DRSP should be reported only as DRSP, and cases with isolates causing IPD from children aged <5 years who are susceptible or for which susceptibilities are not available should be reported only as IPD in children aged <5 years (*4*). Only susceptible IPD episodes among children aged <5 years are reported in this *Summary*. In 2006, for the first time after several years of increasing case counts, the number of cases of pneumococcal disease in both reportable categories declined. The initial increases in reported cases likely represented improvements in surveillance and possibly duplicate reporting of DRSP and IPD cases during the first few years after the adoption of the 2000 position statement. Other data sources have demonstrated substantial declines in the incidence of IPD and DRSP among children and adults after introduction of PCV7 (*5,6*).

Although PCV7 has been recommended for use in children since 2000, recommendations for use of the 23-valent pneumococcal polysaccharide vaccine for adults aged >65 years and for older children and adults with underlying illnesses were updated in 1997 (*7*). Cases of susceptible IPD among persons aged >5 years are not nationally notifiable.

States are encouraged to evaluate their own pneumococcal disease surveillance programs (*8*). CSTE also has recommended that technology for pneumococcal serotyping using polymerase chain reaction (PCR) (*9*) should be shared with state public health laboratories to improve surveillance for vaccine- and nonvaccine-preventable IPD among children aged <5 years (*4*). PCR is used by the majority of state public health laboratories to detect a variety of infectious diseases; therefore, this technology should allow most, if not all, state health departments to enhance surveillance for vaccine-preventable IPD. With better data, public health officials will be able to assess the burden of vaccine-preventable IPD and to evaluate current PCV7 immunization programs.

1. Council of State and Territorial Epidemiologists. National surveillance for drug-resistant *Streptococcus pneumoniae* (DRSP) invasive diseases. Position statement 1994-NSC-10. Available at http://www.cste.org/ps/1994/1994-nsc-10.htm.
2. CDC. Preventing pneumococcal disease among infants and young children: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2000;49(No. RR-9).
3. Council of State and Territorial Epidemiologists. Surveillance for invasive pneumococcal disease in children less than five years of age. Position statement 2000-ID-6. Available at http://www.cste.org/ps/2000/2000-id-06.htm.
4. Council of State and Territorial Epidemiologists. Enhancing local, state and territorial-based surveillance for invasive pneumococcal disease in children less than five years of age. Position statement 06-ID-14. Available at http://www.cste.org/position%20statements/searchbyyear2006.asp.
5. CDC. Direct and indirect effects of routine vaccination of children with 7-valent pneumococcal conjugate vaccine on incidence of invasive pneumococcal disease—United States, 1998-2003. MMWR 2005;54:893–7.
6. Kyaw MH, Lynfield R, Schaffner W, et al. Effect of introduction of the pneumococcal conjugate vaccine on drug-resistant *Streptococcus pneumoniae*. N Engl J Med 2006;354:1455–63.
7. CDC. Prevention of pneumococcal disease. MMWR 1997;46(No. RR-8).
8. CDC. Updated guidelines for evaluating public health surveillance systems: recommendations from the guidelines working group. MMWR 2001;50(No. RR-13).
9. CDC. PCR deduction of pneumococcal serotypes. Atlanta, GA: US Department of Health and Human Services, CDC; 2007. Available at http://www.cdc.gov/ncidod/biotech/strep/PRC.htm.

Syphilis, Primary and Secondary

In 2006, primary and secondary (P&S) syphilis cases reported to CDC increased for the sixth consecutive year (*1*). During 2005–2006, the number of P&S syphilis cases reported to CDC increased 11.8%. Overall increases in rates during 2001–2006 were observed primarily among men (*2*). However, after decreasing during 2001–2004, the rate of primary and secondary syphilis among women increased, from 0.8 cases per 100,000 population in 2004 to 1.0 cases per 100,000 population in 2006. During 2005–2006, P&S syphilis increased among persons of all races and ethnicities.

In 2005, CDC requested that all state health departments report the sex of partners of persons with syphilis. In 2006, of all P&S syphilis cases reported from the 30 areas (29 states and Washington, D.C.) for which complete data were available, 64% occurred among men who have sex with men (*3*).

Although the majority of cases of syphilis in the United States occur among men who have sex with men, recent increases in the number of cases reported among women suggest that heterosexually transmitted syphilis might be an emerging problem. In collaboration with partners throughout the United States, CDC updated the Syphilis Elimination Plan for 2005–2010 and is now working to implement it (*4*). Collaboration with multiple organizations, public health professionals, the private medical community, and other partners is essential for the successful elimination of syphilis in the United States.

1. CDC. Sexually transmitted disease surveillance, 2006. Atlanta, GA: US Department of Health and Human Services, CDC; 2007. Available at http://www.cdc.gov/std/stats/toc2006.htm.
2. Heffelfinger JD, Swint EB, Berman SM, Weinstock HS. Trends in primary and secondary syphilis among men who have sex with men in the United States. Am J Public Health 2007;97:1076–83.
3. Beltrami JF, Weinstock H.S. Primary and secondary syphilis among men who have sex with men in the United States, 2005 [Abstract O-069]. Program and abstracts of the 17th biennial meeting of the International Society for Sexually Transmitted Diseases Research; July 29–August 1, 2006; Seattle, Washington.
4. CDC. The national plan to eliminate syphilis from the United States. Atlanta, GA: US Department of Health and Human Services, CDC; 2006.

Tetanus

In 2006, incidence of reported tetanus and case fatality continued to be low. No neonatal cases were reported. The majority of cases occurred among persons aged 25–59 years and those aged >60 years. Mortality from tetanus was associated with diabetes, intravenous drug use, and advanced age, especially in the setting of unknown vaccination status.

Typhoid Fever

Despite recommendations that travelers to countries in which typhoid fever is endemic should be vaccinated with either of two effective vaccines available in the United States, approximately three fourths of all cases occur among persons who reported international travel during the preceding month and were not immunized. Persons visiting South Asia appear to be at particular risk, even during short visits (*1*). *Salmonella* Typhi strains with decreased susceptibility to ciprofloxacin are increasingly frequent in that region and might require treatment with alternative antimicrobial agents (*2,3*). Although the number of *S.* Typhi infections is decreasing, the number of illnesses attributed to *S.* Paratyphi A infection is increasing. In a cross-sectional laboratory-based surveillance study conducted by CDC, 80% of patients with paratyphoid fever acquired their infections in South Asia, and 75% were infected with nalidixic acid-resistant strains. A vaccine for paratyphoid fever is needed (*4*).

1. 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.
2. Crump JA, Ram PK, Gupta SK, Miller MA, Mintz ED. Review article: part I. analysis of data gaps pertaining to *Salmonella enterica* serotype Typhi infections in low and medium human development index countries, 1984–2005. Epidemiol Infect. In press.
3. Crump JA, Barrett TJ, Nelson JT, Angulo FJ. Reevaluating fluoroquinolones breakpoints for *Salmonella enterica* serotype Typhi and for non-Typhi *Salmonellae.* Clin Infect Dis 2003;37:75–81.
4. Gupta SK, Medalla F, Omondi MW, et al. *Salmonella* Paratyphi A in the United States: travel and quinolone resistance [Abstract]. Presented at the International Conference on Emerging Infectious Diseases, Atlanta, Georgia; March 19–26, 2006.

Varicella (Chickenpox)

Since implementation of the varicella vaccine program in 1995, varicella morbidity and mortality have declined substantially. During 1995–2006, the number of cases declined 85%, the number of hospitalizations declined 85%, and the number of deaths declined 82% (*1*). In 2006, the Advisory Committee on Immunization Practices (ACIP) updated recommendations for varicella vaccination to include a second dose for children and catch-up vaccination for persons without evidence of immunity (*2*). With this new recommendation, case-based and outbreak surveillance for varicella will become increasingly important. In 2006, a total of 33 states and the District of Columbia reported varicella data through the National Notifiable Diseases Surveillance System (NNDSS): 23 (70%) sites reported case-based data and 10 (30%) reported aggregate

data. An additional 12 states conducted either statewide or sentinel case-based varicella surveillance but did not report these data through NNDSS. Although varicella was not a notifiable disease in Indiana in 2006, a total of 910 cases were reported.

1. Roush SW, Murphy TV, Vaccine Disease Table Working Group. Historical comparisons of morbidity and mortality for vaccine-preventable diseases in the United States. JAMA 2007;298:2155–63.
2. CDC. Prevention of varicella: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2007;56 (No. RR-4).

PART 1

Summaries of Notifiable Diseases in the United States, 2006

Abbreviations and Symbols Used in Tables

U	Data not available.
N	Not notifiable (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, 2006* might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and the use of different case definitions.

TABLE 1. Reported cases of notifiable diseases,* by month — United States, 2006

Disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Anthrax	—	1	—	—	—	—	—	—	—	—	—	—	**1**
Botulism													
foodborne	—	—	—	—	1	3	—	1	4	1	5	5	**20**
infant	3	8	9	5	4	9	11	8	7	7	5	21	**97**
other (wound & unspecified)	1	9	2	7	3	3	5	8	1	1	1	7	**48**
Brucellosis	8	6	6	8	13	10	15	10	15	12	7	11	**121**
Chancroid†	2	2	3	7	1	2	6	1	2	2	3	2	33
Chlamydia†§	67,194	77,005	81,645	101,292	79,030	75,189	94,856	81,694	102,408	87,509	72,947	110,142	**1,030,911**
Cholera	1	—	—	—	1	4	1	2	—	—	—	—	**9**
Coccidioidomycosis	491	683	678	1,035	634	609	813	620	572	417	615	1,750	**8,917**
Cryptosporidiosis	217	221	217	273	241	264	481	995	1,445	674	446	597	**6,071**
Cyclosporiasis	13	10	3	4	10	22	26	19	9	5	6	10	**137**
Domestic arboviral diseases¶													
California serogroup													
neuroinvasive	—	—	—	—	—	2	17	23	13	8	1	—	**64**
nonneuroinvasive	—	—	—	—	—	1	1	1	1	—	—	1	**5**
eastern equine, neuroinvasive	—	—	—	—	—	—	1	3	4	—	—	—	**8**
Powassan, neuroinvasive	—	—	—	—	—	1	—	—	—	—	—	—	**1**
St. Louis													
neuroinvasive	1	—	—	2	—	—	—	2	1	1	—	—	**7**
nonneuroinvasive	—	—	—	—	1	—	—	1	—	—	1	—	**3**
West Nile													
neuroinvasive	1	—	1	3	2	26	329	758	301	64	7	3	**1,495**
nonneuroinvasive	—	—	1	1	3	31	515	1,628	488	91	13	3	**2,774**
Ehrlichiosis													
human granulocytic	2	4	5	10	24	71	128	61	56	35	31	219	**646**
human monocytic	19	9	10	13	24	45	95	98	52	49	27	137	**578**
human (other & unspecified)	—	1	—	6	18	52	70	25	18	15	6	20	**231**
Giardiasis	1,002	1,145	1,195	1,379	1,260	1,086	1,789	1,774	2,484	1,677	1,329	2,833	**18,953**
Gonorrhea†	25,182	26,034	26,555	33,788	26,305	26,953	34,207	28,872	37,595	30,107	24,927	37,841	**358,366**
Haemophilus influenzae,													
invasive disease													
all ages, serotypes	197	187	183	240	159	171	243	165	175	161	168	387	**2,436**
age <5 yrs													
serotype b	1	2	2	1	2	2	1	1	2	2	1	12	**29**
nonserotype b	10	15	21	25	4	10	18	10	6	12	11	33	**175**
unknown serotype	15	14	7	20	11	16	10	18	14	11	14	29	**179**
Hansen disease (leprosy)	1	5	4	7	5	10	8	5	8	3	4	6	**66**
Hantavirus pulmonary syndrome	2	3	2	1	3	6	6	—	3	2	3	9	**40**
Hemolytic uremic syndrome,													
postdiarrheal	2	3	5	18	21	17	42	33	75	23	7	42	**288**
Hepatitis, viral acute													
A	263	312	282	391	253	230	266	271	383	274	231	423	**3,579**
B	270	283	345	434	301	385	443	363	426	387	344	732	**4,713**
C	43	61	53	78	66	69	67	54	51	47	41	136	**766**
Influenza-associated													
pediatric mortality**	7	3	4	11	8	3	5	—	1	—	—	1	**43**

* No cases of diphtheria; neuroinvasive or nonneuroinvasive western equine encephalitis virus disease, paralytic poliomyelitis, severe acute respiratory syndrome-associated coronavirus (SARS-CoV), smallpox, and yellow fever, or varicella deaths were reported in 2006. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. CDC is upgrading its national surveillance data management system for human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). During this transition, CDC is not updating AIDS or HIV infection surveillance data. Therefore, no updates are provided for HIV and AIDS data in this *Summary*.

† Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of June 22, 2007.

§ Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.

¶ Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) (ArboNET Surveillance), as of June 1, 2007.

** Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD), as of June 29, 2007.

TABLE 1. (*Continued*) Reported cases of notifiable diseases,* by month — United States, 2006

Disease	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Legionellosis	106	94	92	140	115	228	417	300	446	350	239	307	**2,834**
Listeriosis	50	41	42	66	34	44	115	87	124	101	61	119	**884**
Lyme disease	313	375	439	507	859	2,249	5,388	3,137	2,334	1,234	1,192	1,904	**19,931**
Malaria	97	100	76	81	116	118	171	159	170	98	105	183	**1,474**
Measles	1	2	3	2	15	15	2	4	6	2	—	3	**55**
Meningococcal disease													
all serogroups	104	112	136	143	80	89	82	54	74	57	74	189	**1,194**
serogroup A, C, Y, & W-135	26	27	39	35	25	21	19	9	22	22	25	48	**318**
serogroup B	7	17	21	21	14	16	17	8	13	4	9	46	**193**
other serogroup	3	4	3	2	4	—	—	3	2	2	2	7	**32**
serogroup unknown	68	64	73	85	37	52	46	34	37	29	38	88	**651**
Mumps	24	77	348	2,656	1,673	515	271	149	227	141	164	339	**6,584**
Pertussis	988	1,088	1,120	1,270	951	927	1,338	1,391	1,402	1,194	1,165	2,798	**15,632**
Plague	—	—	1	—	3	1	5	4	1	2	—	—	**17**
Psittacosis	—	2	1	3	1	1	3	2	5	1	2	—	**21**
Q fever	11	5	18	12	13	16	26	18	18	9	8	15	**169**
Rabies													
animal	345	243	362	479	485	436	607	568	770	483	380	376	**5,534**
human	—	—	—	—	—	1	—	—	—	—	1	1	**3**
Rocky Mountain spotted fever	141	70	44	76	136	170	345	360	352	174	128	292	**2,288**
Rubella	1	—	1	1	2	2	—	—	3	—	—	1	**11**
Rubella, congenital syndrome	—	—	—	1	—	—	—	—	—	—	—	—	**1**
Salmonellosis	2,376	1,999	1,963	2,723	2,815	3,444	5,483	5,081	6,416	4,214	3,387	5,907	**45,808**
Shiga toxin-producing *E. coli* (STEC)§§	173	103	141	208	187	315	563	574	789	386	248	745	**4,432**
Shigellosis	792	729	651	784	975	1,004	1,296	1,473	1,963	1,726	1,422	2,688	**15,503**
Streptococcal disease, invasive, group A	449	501	694	653	482	395	419	281	317	272	280	664	**5,407**
Streptococcal toxic-shock syndrome	9	18	17	25	9	7	7	7	2	9	4	11	**125**
Streptococcus pneumoniae, invasive disease													
drug-resistant, all ages	298	336	362	347	236	210	168	112	149	238	207	645	**3,308**
age <5 yrs	124	164	192	178	145	103	95	74	119	151	182	3346	**1,861**
Syphilis†													
all stages¶¶	2,326	2,713	2,857	3,474	2,894	2,673	3,485	3,107	3,622	3,050	2,695	4,039	**36,935**
congenital (age <1 yr)	35	21	16	26	29	38	33	43	33	28	30	17	**349**
primary & secondary	615	680	698	882	722	703	937	863	985	801	696	1,174	**9,756**
Tetanus	1	—	5	4	2	4	5	3	4	4	1	8	**41**
Toxic-shock syndrome	4	10	18	8	2	6	6	5	12	7	6	17	**101**
Trichinellosis	2	—	1	2	—	2	3	1	1	—	—	3	**15**
Tuberculosis***	583	905	1,138	1,102	1,220	1,109	1,164	1,307	1,082	1,131	1,102	1,936	**13,779**
Tularemia	2	1	—	5	13	6	22	14	15	6	2	9	**95**
Typhoid fever	22	19	23	29	26	20	36	31	61	29	15	42	**353**
Vancomycin-intermediate *Staphylococcus aureus*	—	—	1	—	—	1	2	—	—	1	—	1	**6**
Vancomycin-resistant *Staphylococcus aureus*	—	—	—	—	—	—	—	—	—	—	—	1	**1**
Varicella (chickenpox)	3,422	4,350	5,528	6,733	5,604	3,618	1,596	813	2,126	3,008	3,950	7,697	**48,445**

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

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

*** Totals reported to the Division of TB Elimination, NCHHSTP, as of May 25, 2007.

TABLE 2. Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	Total resident population (in thousands)	Anthrax	Botulism			Brucellosis
			Foodborne	Infant	Other†	
United States	296,410	1	20	97	48	121
New England	14,239	—	—	1	—	3
Connecticut	3,510	—	—	—	—	—
Maine	1,321	—	—	—	—	—
Massachusetts	6,399	—	—	1	—	2
New Hampshire	1,310	—	—	—	—	—
Rhode Island	1,076	—	—	—	—	1
Vermont	623	—	—	—	—	—
Mid. Atlantic	40,402	1	—	16	3	2
New Jersey	8,718	—	—	7	—	1
New York (Upstate)	11,111	—	—	1	—	—
New York City	8,143	1	—	—	3	—
Pennsylvania	12,430	—	—	8	—	1
E.N. Central	46,156	—	1	2	—	14
Illinois	12,763	—	1	—	—	8
Indiana	6,272	—	—	—	—	1
Michigan	10,121	—	—	—	—	3
Ohio	11,464	—	—	2	—	2
Wisconsin	5,536	—	—	—	—	—
W.N. Central	19,816	—	—	1	—	12
Iowa	2,966	—	—	1	—	2
Kansas	2,745	—	—	—	—	3
Minnesota	5,133	—	—	—	—	3
Missouri	5,800	—	—	—	—	1
Nebraska	1,759	—	—	—	—	3
North Dakota	637	—	—	—	—	—
South Dakota	776	—	—	—	—	—
S. Atlantic	56,180	—	5	6	1	19
Delaware	844	—	—	—	—	1
District of Columbia	551	—	—	—	—	—
Florida	17,790	—	1	—	—	5
Georgia	9,073	—	3	—	—	5
Maryland	5,600	—	—	5	1	3
North Carolina	8,683	—	1	—	—	2
South Carolina	4,255	—	—	—	—	3
Virginia	7,567	—	—	—	—	—
West Virginia	1,817	—	—	1	—	—
E.S. Central	17,615	—	—	1	—	3
Alabama	4,558	—	—	—	—	1
Kentucky	4,173	—	—	—	—	1
Mississippi	2,921	—	—	—	—	—
Tennessee	5,963	—	—	1	—	1
W.S. Central	33,711	—	—	5	1	20
Arkansas	2,779	—	—	—	—	—
Louisiana	4,524	—	—	—	—	—
Oklahoma	3,548	—	—	—	—	2
Texas	22,860	—	—	5	1	18
Mountain	20,291	—	2	12	—	12
Arizona	5,939	—	—	5	—	4
Colorado	4,665	—	—	1	—	4
Idaho	1,429	—	—	—	—	—
Montana	936	—	—	1	—	—
Nevada	2,415	—	2	1	—	3
New Mexico	1,928	—	—	1	—	—
Utah	2,470	—	—	3	—	—
Wyoming	509	—	—	—	—	1
Pacific	48,000	—	12	53	43	36
Alaska	664	—	6	—	—	—
California	36,132	—	6	44	42	34
Hawaii	1,275	—	—	—	—	2
Oregon	3,641	—	—	—	—	—
Washington	6,288	—	—	9	1	—
American Samoa	58	—	—	—	—	—
C.N.M.I.	80	—	—	—	—	—
Guam	169	—	—	—	—	—
Puerto Rico	3,912	—	—	—	N	—
U.S. Virgin Islands	109	—	—	—	—	—

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

* No cases of diphtheria; neuroinvasive or nonneuroinvasive western equine encephalitis virus disease, paralytic poliomyelitis, severe acute respiratory syndrome-associated coronavirus (SARS-CoV), smallpox, and yellow fever, or varicella deaths were reported in 2006. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. CDC is upgrading its national surveillance data management system for human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). During this transition, CDC is not updating AIDS or HIV infection surveillance data. Therefore, no updates are provided for HIV and AIDS data in this release of the Final 2006 Reports of Nationally Notifiable Infectious Diseases.

† Includes cases reported as wound and unspecified botulism.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	Chancroid§	Chlamydia¶	Cholera	Coccidioidomycosis	Cryptosporidiosis	Cyclosporiasis
United States	33	1,030,911	9	8,917	6,071	137
New England	—	34,976	—	—	379	14
Connecticut	—	10,946	—	N	38	11
Maine	—	2,306	—	—	52	—
Massachusetts	—	15,394	—	—	175	2
New Hampshire	N	1,997	—	—	47	—
Rhode Island	—	3,142	—	—	14	1
Vermont	N	1,191	—	N	53	—
Mid. Atlantic	5	128,401	2	—	667	40
New Jersey	—	20,194	1	N	42	8
New York (Upstate)	1	27,488	—	N	184	2
New York City	4	41,232	1	N	155	23
Pennsylvania	—	39,487	—	N	286	7
E.N. Central	1	170,494	1	46	1,350	4
Illinois	—	53,586	1	—	204	1
Indiana	—	19,859	—	—	113	1
Michigan	1	36,753	—	40	144	—
Ohio	—	40,106	—	6	357	—
Wisconsin	—	20,190	—	N	532	2
W.N. Central	—	62,017	—	56	892	4
Iowa	N	8,390	—	N	176	—
Kansas	—	7,829	—	N	82	—
Minnesota	—	12,935	—	54	242	4
Missouri	—	22,982	—	2	188	—
Nebraska	N	5,428	—	N	98	N
North Dakota	N	1,820	—	N	20	N
South Dakota	—	2,633	—	N	86	—
S. Atlantic	21	199,732	—	6	1,222	65
Delaware	—	3,615	—	1	15	1
District of Columbia	—	3,368	—	—	17	4
Florida	1	48,955	—	N	577	31
Georgia	—	38,972	—	N	275	19
Maryland	—	21,859	—	5	20	2
North Carolina	5	33,615	—	—	101	3
South Carolina	14	22,351	—	N	131	5
Virginia	1	24,087	—	N	71	—
West Virginia	—	2,910	—	N	15	—
E.S. Central	—	76,177	—	—	188	4
Alabama	—	22,915	—	N	72	N
Kentucky	—	8,940	—	N	44	N
Mississippi	—	19,002	—	N	24	N
Tennessee	—	25,320	—	N	48	4
W.S. Central	6	114,679	4	1	438	2
Arkansas	—	8,259	—	N	29	—
Louisiana	1	17,885	4	1	86	—
Oklahoma	N	12,992	—	N	50	1
Texas	5	75,543	—	N	273	1
Mountain	—	71,139	—	5,677	416	1
Arizona	—	24,090	—	5,535	29	—
Colorado	—	16,313	—	N	77	—
Idaho	—	3,345	—	N	38	N
Montana	—	2,650	—	N	141	N
Nevada	—	8,398	—	62	14	—
New Mexico	—	9,829	—	22	45	1
Utah	—	5,092	—	56	21	—
Wyoming	—	1,422	—	2	51	—
Pacific	—	173,296	2	3,131	519	3
Alaska	N	4,525	—	N	4	—
California	—	135,827	2	3,131	340	N
Hawaii	N	5,548	—	N	4	N
Oregon	—	9,577	—	N	76	2
Washington	—	17,819	—	N	95	1
American Samoa	N	—	—	N	N	N
C.N.M.I.	—	—	—	—	—	—
Guam	—	832	—	—	—	—
Puerto Rico	N	5,102	—	N	N	N
U.S. Virgin Islands	—	203	—	—	—	—

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

§ Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention (NCHHSTP), as of June 22, 2007.

¶ Totals reported to the Division of STD Prevention, NCHHSTP, as of June 22, 2007. Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	Domestic arboviral diseases**									
	California serogroup		Eastern equine		Powassan		St. Louis		West Nile	
	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive	Neuro-invasive	Nonneuro-invasive
United States	64	5	8	—	1	—	7	3	1,495	2,774
New England	—	—	5	—	—	—	1	—	9	3
Connecticut	—	—	—	—	—	—	—	—	7	2
Maine	—	—	—	—	—	—	—	—	—	—
Massachusetts	—	—	5	—	—	—	—	—	2	1
New Hampshire	—	—	—	—	—	—	1	—	—	—
Rhode Island	—	—	—	—	—	—	—	—	—	—
Vermont	—	—	—	—	—	—	—	—	—	—
Mid. Atlantic	—	—	—	—	—	—	—	—	26	12
New Jersey	—	—	—	—	—	—	—	—	2	3
New York (Upstate)	—	1	—	—	—	—	—	—	8	4
New York City	—	—	—	—	—	—	—	—	8	4
Pennsylvania	—	—	—	—	—	—	—	—	8	1
E.N. Central	18	1	—	—	1	—	1	—	244	175
Illinois	—	—	—	—	—	—	—	—	127	88
Indiana	3	—	—	—	—	—	—	—	27	53
Michigan	2	—	—	—	—	—	—	—	43	12
Ohio	11	—	—	—	—	—	1	—	36	12
Wisconsin	2	1	—	—	1	—	—	—	11	10
W.N. Central	2	—	—	—	—	—	1	—	224	484
Iowa	1	—	—	—	—	—	—	—	22	15
Kansas	—	—	—	—	—	—	—	—	17	13
Minnesota	1	—	—	—	—	—	—	—	31	34
Missouri	—	—	—	—	—	—	1	—	51	11
Nebraska	—	—	—	—	—	—	—	—	45	219
North Dakota	—	—	—	—	—	—	—	—	20	117
South Dakota	—	—	—	—	—	—	—	—	38	75
S. Atlantic	35	1	2	—	—	—	—	—	18	14
Delaware	—	—	—	—	—	—	—	—	—	—
District of Columbia	—	—	—	—	—	—	—	—	—	2
Florida	1	—	—	—	—	—	—	—	3	—
Georgia	—	1	1	—	—	—	—	—	2	6
Maryland	—	—	—	—	—	—	—	—	10	1
North Carolina	17	—	1	—	—	—	—	—	1	—
South Carolina	1	—	—	—	—	—	—	—	1	—
Virginia	—	—	—	—	—	—	—	—	—	5
West Virginia	16	—	—	—	—	—	—	—	1	—
E.S. Central	7	—	—	—	—	—	1	—	118	101
Alabama	—	—	—	—	—	—	—	—	8	—
Kentucky	—	—	—	—	—	—	1	—	5	1
Mississippi	1	—	—	—	—	—	—	—	89	94
Tennessee	7	—	—	—	—	—	—	—	16	6
W.S. Central	2	1	1	—	—	—	2	1	375	236
Arkansas	—	—	—	—	—	—	—	—	24	5
Louisiana	2	1	1	—	—	—	2	—	91	89
Oklahoma	—	—	—	—	—	—	—	—	27	21
Texas	—	—	—	—	—	—	—	1	233	121
Mountain	—	—	—	—	—	—	1	2	393	1,487
Arizona	—	—	—	—	—	—	1	1	68	82
Colorado	—	—	—	—	—	—	—	—	66	279
Idaho	—	—	—	—	—	—	—	1	139	857
Montana	—	—	—	—	—	—	—	—	12	22
Nevada	—	—	—	—	—	—	—	—	34	90
New Mexico	—	—	—	—	—	—	—	—	3	5
Utah	—	—	—	—	—	—	—	—	56	102
Wyoming	—	—	—	—	—	—	—	—	15	50
Pacific	—	—	—	—	—	—	—	—	88	262
Alaska	—	—	—	—	—	—	—	—	—	—
California	—	—	—	—	—	—	—	—	81	197
Hawaii	—	—	—	—	—	—	—	—	—	—
Oregon	—	—	—	—	—	—	—	—	7	62
Washington	—	—	—	—	—	—	—	—	—	3
American Samoa	—	—	—	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—	—	—	—
Puerto Rico	—	—	—	—	—	—	—	—	—	—
U.S. Virgin Islands	—	—	—	—	—	—	—	—	—	—

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

** Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) (ArboNET Surveillance), as of June 1, 2007. The "not notifiable" indicator is not applied to data on domestic arboviral diseases.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	Ehrlichiosis: Human granulocytic	Ehrlichiosis: Human monocytic	Ehrlichiosis: Human (other & unspecified)	Giardiasis	Gonorrhea††
United States	646	578	231	18,953	358,366
New England	90	13	10	1,456	5,936
Connecticut	37	—	—	307	2,610
Maine	10	4	—	192	137
Massachusetts	30	6	1	621	2,429
New Hampshire	—	1	1	26	180
Rhode Island	13	2	8	117	508
Vermont	—	—	—	193	72
Mid. Atlantic	285	208	1	3,611	34,417
New Jersey	49	67	N	476	5,492
New York (Upstate)	206	125	1	1,375	7,160
New York City	29	16	—	936	10,299
Pennsylvania	1	—	—	824	11,466
E.N. Central	56	37	123	2,806	70,712
Illinois	6	23	3	695	20,186
Indiana	—	4	—	N	8,732
Michigan	1	2	—	715	15,677
Ohio	1	5	—	809	19,190
Wisconsin	48	3	120	587	6,927
W.N. Central	182	92	25	2,307	19,636
Iowa	N	N	N	303	1,966
Kansas	—	—	—	198	2,210
Minnesota	177	19	—	1,001	3,303
Missouri	2	73	24	548	10,204
Nebraska	3	—	1	122	1,433
North Dakota	—	—	—	38	153
South Dakota	—	—	—	97	367
S. Atlantic	18	118	54	2,858	89,406
Delaware	7	14	—	43	1,485
District of Columbia	—	—	—	69	1,887
Florida	1	5	—	1,165	23,976
Georgia	2	14	—	642	19,669
Maryland	5	25	45	256	7,328
North Carolina	1	54	3	—	17,312
South Carolina	—	4	2	112	10,320
Virginia	2	2	4	514	6,476
West Virginia	—	—	—	57	953
E.S. Central	3	35	5	465	31,147
Alabama	2	2	—	224	10,665
Kentucky	—	4	—	N	3,277
Mississippi	—	—	—	N	7,511
Tennessee	1	29	5	241	9,694
W.S. Central	10	75	11	401	50,589
Arkansas	2	32	6	148	4,306
Louisiana	—	1	1	87	10,883
Oklahoma	8	39	—	166	4,951
Texas	—	3	4	N	30,449
Mountain	1	—	1	1,709	15,576
Arizona	—	—	—	163	5,949
Colorado	—	—	—	554	3,695
Idaho	N	N	N	190	206
Montana	N	N	N	103	194
Nevada	1	—	—	110	2,791
New Mexico	—	—	—	80	1,733
Utah	—	—	—	471	888
Wyoming	—	—	1	38	120
Pacific	1	—	1	3,340	40,947
Alaska	N	N	N	113	630
California	—	—	1	2,303	33,740
Hawaii	N	N	N	58	885
Oregon	1	—	—	417	1,461
Washington	N	N	N	449	4,231
American Samoa	N	N	N	N	—
C.N.M.I.	—	—	—	—	—
Guam	N	N	N	5	98
Puerto Rico	N	N	N	276	302
U.S. Virgin Islands	—	—	—	—	34

N: Not notifiable. 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 22, 2007.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	*Haemophilus influenzae,* invasive disease				Hansen disease (leprosy)	Hantavirus pulmonary syndrome	Hemolytic uremic syndrome, postdiarrheal
	All ages, serotypes	Age <5 years					
		Serotype b	Nonserotype b	Unknown serotype			
United States	2,436	29	175	179	66	40	288
New England	195	—	15	4	2	—	16
Connecticut	48	—	3	—	—	N	5
Maine	21	—	2	1	N	—	6
Massachusetts	85	—	7	1	1	—	4
New Hampshire	16	—	—	1	1	—	—
Rhode Island	16	—	2	—	—	—	—
Vermont	9	—	1	1	N	—	1
Mid. Atlantic	499	6	15	44	4	—	21
New Jersey	90	—	—	14	1	—	7
New York (Upstate)	158	1	3	8	N	—	8
New York City	90	—	—	14	3	—	6
Pennsylvania	161	5	12	8	—	—	N
E.N. Central	395	—	19	39	4	—	42
Illinois	120	—	—	20	3	—	8
Indiana	81	—	8	—	—	—	—
Michigan	32	—	5	1	—	—	5
Ohio	93	—	6	7	—	—	15
Wisconsin	69	—	—	11	1	—	14
W.N. Central	180	3	14	5	2	4	48
Iowa	2	1	—	—	1	—	9
Kansas	20	—	—	3	—	—	1
Minnesota	98	2	14	—	—	—	19
Missouri	39	—	—	1	1	—	8
Nebraska	10	—	—	—	—	—	9
North Dakota	11	—	—	1	N	2	1
South Dakota	—	—	—	—	—	2	1
S. Atlantic	579	6	35	25	8	—	27
Delaware	1	—	—	—	—	—	—
District of Columbia	9	—	—	2	—	—	—
Florida	167	3	11	5	7	—	5
Georgia	122	2	—	18	N	—	8
Maryland	83	—	10	—	—	—	N
North Carolina	61	—	5	—	—	—	8
South Carolina	40	1	4	—	—	—	2
Virginia	69	—	3	—	1	—	2
West Virginia	27	—	2	—	N	—	2
E.S. Central	117	—	6	17	—	—	25
Alabama	23	—	1	4	—	N	2
Kentucky	5	—	—	1	—	—	N
Mississippi	13	—	—	3	—	—	—
Tennessee	76	—	5	9	—	—	23
W.S. Central	122	5	10	11	11	2	18
Arkansas	10	—	—	4	2	—	—
Louisiana	23	—	—	6	—	—	—
Oklahoma	78	—	10	1	—	—	2
Texas	11	5	—	—	9	2	16
Mountain	217	4	42	12	4	28	32
Arizona	88	3	19	7	—	9	1
Colorado	51	—	8	—	N	6	8
Idaho	7	—	5	1	1	2	4
Montana	—	—	—	—	—	—	—
Nevada	14	—	2	—	1	2	3
New Mexico	33	1	4	1	1	8	4
Utah	19	—	4	2	1	—	12
Wyoming	5	—	—	1	—	1	—
Pacific	132	5	19	22	31	6	59
Alaska	12	—	—	6	1	N	N
California	40	4	18	4	19	3	47
Hawaii	21	—	—	2	11	—	—
Oregon	54	—	—	7	N	—	11
Washington	5	1	1	3	N	3	1
American Samoa	—	—	—	—	—	N	N
C.N.M.I.	—	—	—	—	—	—	—
Guam	1	—	—	—	3	N	—
Puerto Rico	3	—	—	1	2	N	N
U.S. Virgin Islands	—	—	—	—	—	—	—

N: Not notifiable. 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, 2006

Area	Hepatitis, viral, acute A	Hepatitis, viral, acute B	Hepatitis, viral, acute C	Influenza-associated pediatric mortality§§	Legionellosis	Listeriosis	Lyme disease	Malaria
United States	3,579	4,713	766	43	2,834	884	19,931	1,474
New England	182	120	40	3	190	62	4,588	61
Connecticut	44	49	14	1	59	19	1,788	13
Maine	8	26	2	—	11	6	338	4
Massachusetts	84	19	—	—	69	22	1,432	29
New Hampshire	22	11	N	—	15	7	617	10
Rhode Island	16	11	1	1	28	6	308	4
Vermont	8	4	23	1	8	2	105	1
Mid. Atlantic	400	538	179	8	984	213	10,134	362
New Jersey	111	164	90	1	120	42	2,432	90
New York (Upstate)	102	82	44	—	345	60	4,155	50
New York City	120	120	—	5	185	36	305	173
Pennsylvania	67	172	45	2	334	75	3,242	49
E.N. Central	362	509	128	2	612	130	1,700	165
Illinois	109	132	13	—	128	31	110	83
Indiana	33	80	3	—	54	21	26	13
Michigan	125	141	104	1	151	18	55	21
Ohio	53	123	7	1	231	44	43	29
Wisconsin	42	33	1	N	48	16	1,466	19
W.N. Central	145	152	38	2	85	36	1,039	73
Iowa	13	21	—	—	12	6	97	2
Kansas	27	11	—	2	10	4	4	8
Minnesota	31	32	11	—	26	7	914	50
Missouri	44	62	27	—	22	12	5	6
Nebraska	18	20	—	—	9	4	11	4
North Dakota	3	1	—	—	1	1	7	2
South Dakota	9	5	—	—	5	2	1	1
S. Atlantic	550	1,237	99	4	497	167	2,270	338
Delaware	13	47	3	—	12	2	482	5
District of Columbia	10	9	2	—	33	2	62	5
Florida	213	420	18	—	167	47	34	61
Georgia	56	205	8	1	38	20	8	88
Maryland	60	148	16	N	109	28	1,248	79
North Carolina	104	159	19	1	42	25	31	32
South Carolina	24	97	—	—	8	9	20	10
Virginia	64	78	9	2	68	20	357	55
West Virginia	6	74	24	—	20	14	28	3
E.S. Central	125	332	80	1	112	25	36	25
Alabama	13	95	11	N	10	7	11	9
Kentucky	33	69	36	1	48	3	7	4
Mississippi	9	13	4	—	5	2	3	6
Tennessee	70	155	29	—	49	13	15	6
W.S. Central	427	1,079	85	1	94	56	30	129
Arkansas	48	87	1	—	4	4	—	4
Louisiana	38	63	9	—	11	6	1	9
Oklahoma	11	96	19	1	10	5	—	10
Texas	330	833	56	N	69	41	29	106
Mountain	286	147	52	8	125	37	31	77
Arizona	179	U	—	2	38	7	10	23
Colorado	44	34	28	2	27	12	—	24
Idaho	9	15	3	N	11	—	7	1
Montana	11	5	—	—	7	1	1	2
Nevada	11	42	7	—	11	9	4	4
New Mexico	16	24	4	3	5	6	3	5
Utah	14	26	10	—	26	2	5	18
Wyoming	2	1	—	1	—	—	1	—
Pacific	1,102	599	65	14	135	158	103	244
Alaska	2	8	—	N	1	N	3	23
California	992	427	25	14	96	124	85	157
Hawaii	12	8	6	—	—	4	N	8
Oregon	44	82	11	N	18	12	7	13
Washington	52	74	23	N	20	18	8	43
American Samoa	—	—	—	—	N	N	N	—
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	1	4	—	N	—	N	—	3
Puerto Rico	76	83	—	N	1	—	N	2
U.S. Virgin Islands	—	—	—	—	—	—	—	—

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

§§ Totals reported to the Division of Influenza, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2006.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	Measles		Meningococcal disease				
	Indigenous	Imported¶¶	All serogroups	Serogroup A, C, Y, & W-135	Serogroup B	Other serogroup	Serogroup unknown
United States	24	31	1,194	318	193	32	651
New England	17	3	52	26	17	3	6
Connecticut	—	—	10	9	1	—	—
Maine	—	—	9	1	6	2	—
Massachusetts	17	2	24	14	7	1	2
New Hampshire	—	1	4	—	—	—	4
Rhode Island	—	—	2	2	—	—	—
Vermont	—	—	3	—	3	—	—
Mid. Atlantic	6	7	174	48	18	1	107
New Jersey	—	1	24	—	—	—	24
New York (Upstate)	4	3	40	26	10	—	4
New York City	—	3	58	—	—	—	58
Pennsylvania	2	—	52	22	8	1	21
E.N. Central	—	2	173	41	31	3	98
Illinois	—	—	46	—	—	—	46
Indiana	—	1	24	7	12	—	5
Michigan	—	1	30	14	2	3	11
Ohio	—	—	48	20	17	—	11
Wisconsin	—	—	25	—	—	—	25
W.N. Central	—	3	70	35	19	1	15
Iowa	—	—	20	14	4	—	2
Kansas	—	1	5	2	1	—	2
Minnesota	—	1	16	10	5	—	1
Missouri	—	1	15	6	7	—	2
Nebraska	—	—	6	—	1	1	4
North Dakota	—	—	4	—	—	—	4
South Dakota	—	—	4	3	1	—	—
S. Atlantic	1	5	215	89	52	7	67
Delaware	—	—	6	—	—	—	6
District of Columbia	—	—	2	—	—	—	2
Florida	—	4	79	40	10	3	26
Georgia	—	—	19	8	9	1	1
Maryland	1	1	16	11	4	—	1
North Carolina	—	—	34	12	8	2	12
South Carolina	—	—	26	5	11	—	10
Virginia	—	—	22	5	8	—	9
West Virginia	—	—	11	8	2	1	—
E.S. Central	—	—	50	1	6	2	41
Alabama	—	—	7	—	1	—	6
Kentucky	—	—	11	—	—	—	11
Mississippi	—	—	7	—	—	—	7
Tennessee	—	—	25	1	5	2	17
W.S. Central	—	—	107	27	21	10	49
Arkansas	—	—	11	1	2	—	8
Louisiana	—	—	36	13	4	—	19
Oklahoma	—	—	15	2	4	8	1
Texas	—	—	45	11	11	2	21
Mountain	—	1	71	38	10	5	18
Arizona	—	—	16	4	4	1	7
Colorado	—	1	22	16	1	3	2
Idaho	—	—	4	1	—	—	3
Montana	—	—	6	3	1	—	2
Nevada	—	—	7	4	3	—	—
New Mexico	—	—	6	6	—	—	—
Utah	—	—	6	4	1	1	—
Wyoming	—	—	4	—	—	—	4
Pacific	—	10	282	13	19	—	250
Alaska	—	—	4	—	—	—	4
California	—	6	184	—	—	—	184
Hawaii	—	—	10	—	—	—	10
Oregon	—	2	41	—	—	—	41
Washington	—	2	43	13	19	—	11
American Samoa	—	—	2	—	—	—	2
C.N.M.I.	—	—	—	—	—	—	—
Guam	—	—	1	—	—	—	1
Puerto Rico	—	—	7	—	—	—	7
U.S. Virgin Islands	—	—	—	—	—	—	—

N: Not notifiable. 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, 2006

Area	Mumps	Pertussis	Plague	Psittacosis	Q Fever	Rabies		Rocky Mountain spotted fever
						Animal	Human	
United States	6,584	15,632	17	21	169	5,534	3	2,288
New England	21	1,975	—	1	5	488	—	23
Connecticut	—	126	—	N	1	208	—	—
Maine	—	174	—	—	4	127	—	N
Massachusetts	12	1,238	—	—	—	N	—	12
New Hampshire	5	226	—	1	N	50	—	1
Rhode Island	4	101	—	—	—	30	—	10
Vermont	—	110	—	—	N	73	—	—
Mid. Atlantic	199	2,083	—	7	7	549	—	90
New Jersey	12	301	—	2	1	N	—	41
New York (Upstate)	51	1,083	—	3	1	N	—	—
New York City	19	112	—	—	3	44	—	23
Pennsylvania	117	587	—	2	2	505	—	26
E.N. Central	1,779	2,365	—	—	31	164	1	65
Illinois	798	588	—	—	17	46	—	26
Indiana	10	280	—	—	1	11	1	6
Michigan	84	632	—	—	3	49	—	6
Ohio	45	644	—	—	6	58	—	26
Wisconsin	842	221	—	—	4	N	—	1
W.N. Central	3,960	1,453	—	1	22	318	—	199
Iowa	1,964	345	—	—	N	57	—	5
Kansas	968	310	—	—	1	83	—	1
Minnesota	180	320	—	—	2	42	—	5
Missouri	170	308	—	—	11	66	—	163
Nebraska	368	101	—	1	6	—	—	25
North Dakota	14	43	—	—	—	32	—	—
South Dakota	296	26	—	—	2	38	—	—
S. Atlantic	264	1,311	—	2	21	2,314	—	1,203
Delaware	—	3	—	—	—	—	—	22
District of Columbia	1	6	—	—	—	—	—	1
Florida	15	228	—	1	8	176	—	21
Georgia	6	102	—	—	1	267	—	53
Maryland	48	152	—	1	4	414	—	93
North Carolina	43	334	—	—	4	521	—	852
South Carolina	10	199	—	—	—	181	—	43
Virginia	117	221	—	—	4	637	—	114
West Virginia	24	66	—	—	—	118	—	4
E.S. Central	61	374	—	2	13	247	—	371
Alabama	47	106	N	—	—	84	—	94
Kentucky	1	59	—	—	4	28	—	3
Mississippi	2	37	—	—	—	4	—	9
Tennessee	11	172	—	2	9	131	—	265
W.S. Central	79	1,154	1	—	15	997	1	288
Arkansas	8	112	—	—	2	32	—	104
Louisiana	3	24	—	—	—	7	—	5
Oklahoma	10	64	—	—	—	69	—	139
Texas	58	954	1	N	13	889	1	40
Mountain	120	2,501	14	1	33	213	—	47
Arizona	40	508	—	—	4	140	—	11
Colorado	51	710	4	1	14	—	—	5
Idaho	7	88	—	—	1	24	—	14
Montana	—	115	—	—	—	15	—	2
Nevada	5	71	1	—	7	5	—	—
New Mexico	3	147	8	—	4	10	—	8
Utah	5	779	1	—	—	11	—	—
Wyoming	9	83	—	—	3	8	—	7
Pacific	101	2,416	2	7	22	244	1	2
Alaska	3	91	—	1	N	18	—	N
California	31	1,749	2	3	22	201	1	—
Hawaii	6	87	—	—	—	N	—	N
Oregon	19	112	—	3	—	25	—	2
Washington	42	377	—	—	—	—	—	N
American Samoa	—	—	—	N	N	N	N	N
C.N.M.I.	—	—	—	—	—	—	—	—
Guam	1	64	—	N	N	—	—	N
Puerto Rico	16	3	—	N	—	78	—	N
U.S. Virgin Islands	—	—	—	—	—	—	—	—

N: Not notifiable. 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, 2006

Area	Rubella	Rubella, congenital syndrome	Salmonellosis	Shiga toxin-producing *E. coli* (STEC)***	Shigellosis	Streptococcal disease, invasive, group A	Streptococcal toxic-shock syndrome
United States	11	1	45,808	4,432	15,503	5,407	125
New England	3	—	2,303	287	280	360	22
Connecticut	1	—	503	75	67	98	20
Maine	—	—	161	50	10	19	N
Massachusetts	2	—	1,214	105	168	174	—
New Hampshire	—	—	225	29	11	35	—
Rhode Island	—	—	119	9	18	20	—
Vermont	—	—	81	19	6	14	2
Mid. Atlantic	2	—	5,521	610	922	963	8
New Jersey	—	—	1,120	163	291	149	—
New York (Upstate)	—	—	1,423	193	269	322	4
New York City	2	—	1,277	43	274	167	—
Pennsylvania	—	—	1,701	211	88	325	4
E.N. Central	1	—	5,695	693	1,485	1,000	52
Illinois	—	—	1,603	104	720	307	19
Indiana	—	—	898	95	178	127	12
Michigan	1	—	998	94	152	205	2
Ohio	—	—	1,290	196	196	238	19
Wisconsin	—	—	906	204	239	123	N
W.N. Central	3	—	2,725	722	1,944	372	6
Iowa	—	—	476	163	137	—	—
Kansas	1	—	368	25	138	53	—
Minnesota	—	—	724	220	259	171	4
Missouri	2	—	766	167	658	90	1
Nebraska	—	—	201	79	128	33	1
North Dakota	—	—	55	18	235	15	—
South Dakota	—	—	135	50	389	10	—
S. Atlantic	1	—	11,805	668	3,576	1,218	21
Delaware	—	—	150	16	11	10	2
District of Columbia	—	—	65	4	22	18	—
Florida	1	—	4,928	102	1,646	312	N
Georgia	—	—	1,835	84	1,379	272	—
Maryland	—	—	780	131	139	212	N
North Carolina	—	—	1,696	129	174	164	10
South Carolina	—	—	1,091	17	80	69	—
Virginia	—	—	1,089	168	120	132	—
West Virginia	—	—	171	17	5	29	9
E.S. Central	—	—	2,987	297	895	209	1
Alabama	—	—	910	32	348	N	N
Kentucky	—	—	463	101	237	44	1
Mississippi	—	—	787	11	133	N	N
Tennessee	—	—	827	153	177	165	—
W.S. Central	—	—	5,712	324	2,654	472	—
Arkansas	—	—	918	52	133	27	—
Louisiana	—	—	1,129	18	261	18	—
Oklahoma	—	—	605	44	195	125	N
Texas	—	—	3,060	210	2,065	302	—
Mountain	—	—	2,725	543	1,531	681	13
Arizona	—	—	958	105	729	351	—
Colorado	—	—	625	109	238	122	1
Idaho	—	—	179	106	15	12	—
Montana	—	—	132	—	69	N	N
Nevada	—	—	245	35	143	—	5
New Mexico	—	—	261	46	177	123	—
Utah	—	—	278	122	72	68	7
Wyoming	—	—	47	20	88	5	—
Pacific	1	1	6,335	288	2,216	132	2
Alaska	—	N	82	N	7	N	N
California	1	1	4,939	N	1,873	N	N
Hawaii	—	—	265	19	45	132	2
Oregon	—	—	422	107	121	N	N
Washington	—	—	627	162	170	N	N
American Samoa	—	—	2	N	6	—	N
C.N.M.I.	—	—	—	—	—	—	—
Guam	—	—	38	N	18	—	N
Puerto Rico	—	N	774	—	43	—	N
U.S. Virgin Islands	—	—	—	—	—	—	—

N: Not notifiable. 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.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	*Streptococcus pneumoniae*, invasive disease drug-resistant all ages	*Streptococcus pneumoniae*, invasive disease age <5 yrs	Syphilis†††			Tetanus	Toxic-shock syndrome
			All stages§§§	Congenital (age <1 yr)	Primary & secondary		
United States	3,308	1,861	36,935	349	9,756	41	101
New England	156	147	710	—	227	—	4
Connecticut	106	43	197	—	64	—	N
Maine	12	—	22	—	9	—	N
Massachusetts	—	84	378	—	124	—	1
New Hampshire	—	12	35	—	13	—	2
Rhode Island	20	8	71	—	14	—	—
Vermont	18	—	7	—	3	—	1
Mid. Atlantic	189	227	6,261	30	1,173	4	16
New Jersey	—	73	799	15	173	1	4
New York (Upstate)	72	117	858	8	158	—	2
New York City	—	37	3,719	7	578	—	—
Pennsylvania	117	N	885	—	264	3	10
E.N. Central	651	380	2,768	28	894	9	18
Illinois	33	106	1,473	15	431	1	2
Indiana	198	68	250	—	93	2	1
Michigan	18	75	384	13	118	3	8
Ohio	402	82	491	—	184	3	7
Wisconsin	N	49	170	—	68	—	—
W.N. Central	320	121	840	5	282	3	20
Iowa	—	—	68	—	19	—	—
Kansas	72	14	87	1	27	—	2
Minnesota	199	74	189	1	47	1	9
Missouri	44	16	430	3	168	1	5
Nebraska	1	12	34	—	7	—	4
North Dakota	—	5	3	—	1	1	—
South Dakota	4	—	29	—	13	—	—
S. Atlantic	1,429	382	8,393	61	2,312	5	15
Delaware	—	2	74	—	20	—	—
District of Columbia	27	2	314	1	116	—	—
Florida	774	72	2,945	21	719	2	N
Georgia	504	141	1,933	9	581	—	7
Maryland	3	72	1,038	19	300	1	N
North Carolina	—	—	961	6	309	1	8
South Carolina	—	25	397	2	66	1	N
Virginia	N	50	701	3	190	—	—
West Virginia	121	18	30	—	11	—	—
E.S. Central	222	103	2,654	16	727	1	10
Alabama	N	N	931	9	319	—	2
Kentucky	38	N	188	1	73	—	4
Mississippi	31	19	520	—	86	—	N
Tennessee	153	84	1,015	6	249	1	4
W.S. Central	198	260	6,837	101	1,553	6	3
Arkansas	12	24	243	7	77	1	3
Louisiana	77	24	1,387	13	342	3	—
Oklahoma	109	69	251	2	70	1	N
Texas	—	143	4,956	79	1,064	1	N
Mountain	143	214	1,816	42	513	2	11
Arizona	—	120	926	16	203	1	2
Colorado	—	55	182	2	69	—	8
Idaho	N	3	12	—	3	—	—
Montana	—	N	2	—	1	—	N
Nevada	23	3	388	15	137	—	1
New Mexico	—	33	237	7	79	—	—
Utah	75	—	68	2	21	1	—
Wyoming	45	—	1	—	—	—	—
Pacific	—	27	6,656	66	2,075	11	4
Alaska	N	N	25	—	11	—	N
California	N	N	6,043	66	1,835	11	4
Hawaii	—	27	66	—	18	—	N
Oregon	N	N	99	—	29	—	N
Washington	N	N	423	—	182	—	N
American Samoa	—	N	—	—	—	—	N
C.N.M.I.	—	—	—	—	—	—	—
Guam	—	N	13	—	3	—	—
Puerto Rico	N	N	1,066	13	150	1	N
U.S. Virgin Islands	—	—	5	—	1	—	—

N: Not notifiable. 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 22, 2007.

§§§ Includes primary, secondary, latent (including early latent, late latent, and latent syphilis of unknown duration), neurosyphilis, late (including late syphilis with clinical manifestiations other than neurosyphilis), and congenital syphilis.

TABLE 2. (*Continued*) Reported cases of notifiable diseases,* by geographic division and area — United States, 2006

Area	Trichinellosis	Tuberculosis¶¶¶	Tularemia	Typhoid fever	Vancomycin-intermediate *Staphylococcus aureus*	Vancomycin-resistant *Staphylococcus aureus*	Varicella (morbidity)
United States	15	13,779	95	353	6	1	48,445
New England	—	415	11	14	1	—	4,316
Connecticut	—	89	—	4	1	—	1,727
Maine	—	16	—	1	—	—	238
Massachusetts	—	259	11	7	—	—	1,142
New Hampshire	—	17	—	—	N	—	419
Rhode Island	—	26	—	2	N	N	—
Vermont	—	8	—	—	—	—	790
Mid. Atlantic	3	2,120	2	100	1	—	5,202
New Jersey	2	508	—	15	—	—	N
New York (Upstate)	1	317	1	11	1	—	N
New York City	—	954	—	65	—	—	—
Pennsylvania	—	341	1	9	—	—	5,202
E.N. Central	1	1,229	1	39	1	1	15,321
Illinois	—	569	1	18	—	—	150
Indiana	—	125	—	—	N	—	N
Michigan	—	221	—	7	1	1	5,200
Ohio	—	239	—	11	—	—	8,860
Wisconsin	1	75	—	3	N	N	1,111
W.N. Central	3	491	36	11	1	—	2,001
Iowa	—	40	1	—	—	—	N
Kansas	—	82	7	2	N	N	372
Minnesota	3	217	—	5	—	—	—
Missouri	—	104	14	2	1	—	1,408
Nebraska	—	25	7	1	—	—	N
North Dakota	—	9	2	—	—	—	103
South Dakota	—	14	5	1	—	—	118
S. Atlantic	2	2,846	2	52	2	—	4,832
Delaware	—	29	—	—	—	—	66
District of Columbia	—	72	—	1	N	N	51
Florida	1	1,038	—	16	—	—	N
Georgia	N	504	—	5	1	—	N
Maryland	1	253	—	7	N	N	N
North Carolina	—	374	1	3	1	—	—
South Carolina	—	222	—	—	—	—	1,259
Virginia	—	332	—	20	N	—	1,959
West Virginia	—	22	1	—	—	—	1,497
E.S. Central	—	674	—	6	—	—	601
Alabama	—	196	—	1	N	N	599
Kentucky	N	84	—	2	N	N	N
Mississippi	—	115	—	2	—	—	2
Tennessee	—	279	—	1	—	—	N
W.S. Central	—	2,038	10	18	—	—	13,183
Arkansas	N	102	6	1	N	N	1,214
Louisiana	—	207	1	—	—	—	201
Oklahoma	—	144	3	—	N	N	N
Texas	—	1,585	—	17	—	—	11,768
Mountain	—	659	23	18	—	—	2,989
Arizona	—	315	1	7	—	—	—
Colorado	N	124	3	7	N	—	1,504
Idaho	—	20	1	—	N	N	N
Montana	—	13	4	—	N	N	N
Nevada	—	101	1	1	—	—	10
New Mexico	—	48	7	1	N	N	370
Utah	—	34	3	2	—	—	1,035
Wyoming	—	4	3	—	—	—	70
Pacific	6	3,307	10	95	—	—	—
Alaska	—	70	—	—	N	N	N
California	5	2,779	5	76	N	N	N
Hawaii	—	115	—	8	—	—	N
Oregon	—	81	4	4	N	N	N
Washington	1	262	1	7	N	N	N
American Samoa	N	—	—	1	N	N	N
C.N.M.I.	—	35	—	—	—	—	—
Guam	—	53	—	—	N	—	292
Puerto Rico	N	112	—	—	N	—	615
U.S. Virgin Islands	—	—	—	—	—	—	—

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

¶¶¶ Totals reported to the Division of Tuberculosis Elimination, NCHHSTP, as of May 25, 2007.

TABLE 3. Reported cases and incidence* of notifiable diseases,† by age group — United States, 2006

Disease	<1 yr		1–4 yrs		5–14 yrs		15–24 yrs		25–39 yrs		40–64 yrs		≥65 yrs		Age not stated	Total
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate		
Anthrax	—	0	—	0	—	0	—	0	—	0	1	0	—	0	—	**1**
Botulism																
foodborne	2	0.05	—	0	—	0	—	0	2	0	8	0.01	8	0.02	—	**20**
infant	93	2.26	—	0	—	0	—	0	—	0	—	0	—	0	4	**97**
other (wound & unspecified)	2	0.05	—	0	1	0	—	0	10	0.02	32	0.03	—	0	3	**48**
Brucellosis	—	0	6	0.04	8	0.02	12	0.03	34	0.06	45	0.05	16	0.04	—	**121**
Chlamydia§¶	953	23.21	141	0.87	13,822	34.22	726,669	1,727.00	254,706	416.56	28,942	30.24	889	2.42	4,789	**1,030,911**
Cholera	—	0	—	0	—	0	1	0	2	0	5	0.01	1	0	—	**9**
Coccidioidomycosis**	22	1.66	51	0.97	300	2.27	781	5.81	1,976	10.21	3,685	12.52	2,034	18.69	68	**8,917**
Cryptosporidiosis	121	2.95	1,076	6.64	1,159	2.87	650	1.54	1,335	2.18	1,241	1.30	436	1.19	53	**6,071**
Cyclosporiasis	—	0	1	0.01	4	0.01	12	0.04	28	0.06	80	0.10	11	0.04	1	**137**
Domestic arboviral diseases																
California serogroup																
neuroinvasive	2	0.05	11	0.07	33	0.08	6	0.01	2	0	4	0	6	0.02	—	**64**
nonneuroinvasive	—	0	—	0	1	0	1	0	—	0	1	0	2	0.01	—	**5**
eastern equine, neuroinvasive	—	0	1	0.01	1	0	1	0	—	0	4	0	1	0	—	**8**
Powassan, neuroinvasive	—	0	—	0	—	0	—	0	—	0	1	0	—	0	—	**1**
St. Louis																
neuroinvasive	—	0	—	0	—	0	3	0.01	1	0	2	0	1	0	—	**7**
nonneuroinvasive	—	0	—	0	—	0	—	0	—	0	1	0	2	0.01	—	**3**
West Nile																
neuroinvasive	2	0.05	7	0.04	27	0.07	74	0.18	148	0.24	636	0.66	599	1.63	2	**1,495**
nonneuroinvasive	1	0.02	9	0.06	87	0.22	213	0.51	530	0.87	1,490	1.56	431	1.17	13	**2,774**
Ehrlichiosis																
human granulocytic	—	0	6	0.04	20	0.05	36	0.09	73	0.12	335	0.37	171	0.49	5	**646**
human monocytic	—	0	6	0.04	17	0.04	38	0.09	74	0.13	289	0.32	150	0.43	4	**578**
human (other & unspecified)	—	0	2	0.01	9	0.02	15	0.04	14	0.02	91	0.10	66	0.19	34	**231**
Giardiasis	240	6.78	3,512	25.12	3,096	8.81	1,682	4.58	3,709	6.94	5,118	6.05	1,174	3.57	422	**18,953**
Gonorrhea¶	187	4.55	133	0.82	4,386	10.86	206,569	490.93	113,291	185.28	31,360	32.77	796	2.16	1,644	**358,366**
Haemophilus influenzae,																
invasive disease																
all ages, serotypes	223	5.43	160	0.99	88	0.22	103	0.24	150	0.25	635	0.66	1,067	2.90	10	**2,436**
age <5 yrs																
serotype b	14	0.34	15	0.09	—	0	—	0	—	0	—	0	—	0	—	**29**
nonserotype b	103	2.51	72	0.44	—	0	—	0	—	0	—	0	—	0	—	**175**
unknown serotype	106	2.58	73	0.45	—	0	—	0	—	0	—	0	—	0	—	**179**
Hansen disease (leprosy)	—	0	—	0	—	0	3	0.01	20	0.04	25	0.03	6	0.02	12	**66**
Hantavirus pulmonary syndrome	—	0	—	0	2	0.01	5	0.01	9	0.02	22	0.02	1	0	1	**40**
Hemolytic uremic syndrome,																
postdiarrheal	8	0.21	142	0.94	80	0.21	18	0.05	6	0.01	20	0.02	12	0.04	2	**288**
Hepatitis, viral acute																
A	9	0.22	137	0.85	560	1.39	561	1.33	812	1.33	1,101	1.15	376	1.02	23	**3,579**
B	5	0.12	1	0.01	8	0.02	381	0.92	1,922	3.21	2,037	2.17	247	0.69	112	**4,713**
C	3	0.07	—	0	1	0	153	0.37	268	0.44	297	0.31	26	0.07	18	**766**

* Per 100,000 population.

† No cases of diphtheria; neuroinvasive or non-neuroinvasive western equine encephalitis virus disease, paralytic poliomyelitis, severe acute respiratory syndrome-associated coronavirus (SARS-CoV), smallpox, and yellow fever, or varicella deaths were reported in 2006. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. CDC is upgrading its national surveillance data management system for human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). During this transition, CDC is not updating AIDS or HIV infection surveillance data. Therefore, no updates are provided for HIV and AIDS data in this *Summary*.

§ Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.

¶ Cases among persons aged <15 years are not shown because some of these cases 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 22, 2007.

** Notifiable in <40 states.

TABLE 3. (*Continued*) Reported cases and incidence* of notifiable diseases,† by age group — United States, 2006

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		
Influenza-associated pediatric mortality††	14	0.42	10	0.08	14	0.04	5	0.01	—	0	—	0	—	0	—	**43**
Legionellosis	4	0.10	3	0.02	4	0.01	29	0.07	209	0.34	1,466	1.53	1,111	3.02	8	**2,834**
Listeriosis	53	1.29	5	0.03	6	0.01	37	0.09	71	0.12	238	0.25	467	1.27	7	**884**
Lyme disease	48	1.17	1,062	6.59	3,954	9.83	1,947	4.65	2,374	3.90	7,479	7.85	2,566	7.01	501	**19,931**
Malaria	8	0.19	63	0.39	149	0.37	265	0.63	407	0.67	505	0.53	55	0.15	22	**1,474**
Measles	3	0.07	13	0.08	1	0	4	0.01	23	0.04	11	0.01	—	0	—	**55**
Meningococcal disease																
all serogroups	136	3.31	151	0.93	96	0.24	269	0.64	130	0.21	228	0.24	174	0.47	10	**1,194**
serogroup A, C, Y, & W-135	21	0.51	22	0.14	26	0.06	74	0.18	40	0.07	69	0.07	65	0.18	1	**318**
serogroup B	56	1.36	33	0.20	15	0.04	36	0.09	14	0.02	22	0.02	12	0.03	5	**193**
other serogroup	6	0.15	5	0.03	1	0	3	0.01	3	0	8	0.01	6	0.02	—	**32**
serogroup unknown	53	1.29	91	0.56	54	0.13	156	0.37	73	0.12	129	0.13	91	0.25	4	**651**
Mumps	18	0.44	351	2.17	1,097	2.72	2,270	5.39	1,283	2.10	1,329	1.39	198	0.54	38	**6,584**
Pertussis	2,029	49.41	1,315	8.12	3,730	9.23	2,847	6.77	1,877	3.07	2,907	3.04	424	1.15	503	**15,632**
Plague	—	0	—	0	2	0.01	1	0	3	0	8	0.01	3	0.01	—	**17**
Psittacosis	—	0	—	0	1	0	1	0	4	0.01	11	0.01	3	0.01	1	**21**
Q fever	—	0	—	0	2	0.01	7	0.02	40	0.07	86	0.09	32	0.09	2	**169**
Rabies																
human	—	0	—	0	1	0	1	0	—	0	—	0	—	0	1	**3**
Rocky Mountain spotted fever	3	0.08	45	0.29	234	0.60	271	0.67	505	0.85	934	1.01	282	0.79	14	**2,288**
Rubella	—	0	—	0	—	0	—	0	4	0.01	7	0.01	—	0	—	**11**
Rubella, congenital syndrome	—	0	1	0.01	—	0	—	0	—	0	—	0	—	0	—	**1**
Salmonellosis	4,816	117.27	8,205	50.66	6,288	15.57	4,431	10.53	6,295	10.30	9,712	10.15	5,008	13.61	1,053	**45,808**
Shiga toxin-producing *E. coli* (STEC)§§	136	3.82	916	6.54	887	2.54	766	2.08	478	0.90	736	0.87	430	1.31	83	**4,432**
Shigellosis	301	7.33	4,526	27.94	4,935	12.22	1,207	2.87	2,164	3.54	1,712	1.79	415	1.13	243	**15,503**
Streptococcal disease, invasive, group A	114	3.44	249	1.91	338	1.04	209	0.61	636	1.29	2,018	2.58	1,725	5.64	118	**5,407**
Streptococcal toxic-shock syndrome	—	0	4	0.04	3	0.01	4	0.01	15	0.03	56	0.08	42	0.16	1	**125**
Streptococcus pneumoniae, invasive disease																
drug-resistant, all ages	162	8.03	305	3.85	112	0.56	65	0.30	264	0.87	1,134	2.29	1,155	5.79	111	**3,308**
age <5 yrs	610	19.31	1,251	10.05	—	0	—	0	—	0	—	0	—	0	—	**1,861**
Syphilis primary & secondary¶	1	0.02	2	0.01	13	0.03	1,946	4.62	4,373	7.15	3,332	3.48	81	0.22	8	**9,756**
Tetanus	—	0	—	0	2	0	6	0.01	6	0.01	11	0.01	12	0.03	4	**41**
Toxic-shock syndrome	1	0.03	2	0.02	20	0.07	35	0.11	16	0.03	24	0.03	2	0.01	1	**101**
Trichinellosis	—	0	1	0.01	2	0.01	1	0	3	0.01	4	0	3	0.01	1	15
Tuberculosis¶¶	92	2.24	393	2.43	322	0.80	1,540	3.66	3,502	5.73	5,252	5.49	2,676	7.27	2	**13,779**
Tularemia	1	0.02	4	0.02	18	0.04	14	0.03	18	0.03	32	0.03	8	0.02	—	**95**
Typhoid fever	1	0.02	46	0.28	90	0.22	55	0.13	94	0.15	41	0.04	17	0.05	9	**353**
Vancomycin-intermediate *Staphylococcus aureus*	—	0	—	0	—	0	—	0	—	0	4	0.01	2	0.01	—	**6**
Vancomycin-resistant *Staphylococcus aureus*	—	0	—	0	—	0	—	0	—	0	1	0	—	0	—	**1**

†† Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2006.
§§ Includes *E-coli* O157:H7; shiga toxin-positive, serogroup non-O157; and shiga toxin-positive, not serogrouped.
¶¶ Totals reported to the Division of TB Elimination, NCHHSTP, as of May 25, 2007.

TABLE 4. Reported cases and incidence* of notifiable diseases,† by sex — United States, 2006

Disease	Male		Female		Sex not stated	Total
	No.	Rate	No.	Rate	No.	
Anthrax	1	0	—	0	—	**1**
Botulism						
foodborne	9	0.01	11	0.01	—	**20**
infant	42	2.00	55	2.74	—	**97**
other (wound & unspecified)	35	0.02	13	0.01	—	**48**
Brucellosis	61	0.04	59	0.04	1	**121**
Chancroid§	12	0.01	21	0.01	—	**33**
Chlamydia§¶	252,630	173.03	775,788	515.78	2,493	**1,030,911**
Cholera	4	0	5	0	—	**9**
Coccidioidomycosis**	5,530	8.54	3,332	5.01	55	**8,917**
Cryptosporiasis	3,117	2.13	2,900	1.93	54	**6,071**
Cyclosporiasis	63	0.05	74	0.06	—	**137**
Domestic arboviral diseases						
California serogroup						
neuroinvasive	44	0.03	20	0.01	—	**64**
nonneuroinvasive	3	0	2	0	—	**5**
eastern equine, neuroinvasive	5	0	3	0	—	**8**
Powassan, neuroinvasive	1	0	0	0	—	1
St. Louis						
neuroinvasive	3	0	4	0	—	**7**
nonneuroinvasive	1	0	1	0	1	**3**
West Nile						
neuroinvasive	893	0.61	599	0.40	3	**1,495**
nonneuroinvasive	1,440	0.99	1,329	0.88	5	**2,774**
Ehrlichiosis						
human granulocytic	357	0.26	273	0.19	16	**646**
human monocytic	337	0.24	234	0.16	7	**578**
human (other & unspecified)	130	0.10	100	0.07	1	**231**
Giardiasis	10,538	8.23	8,176	6.19	239	**18,953**
Gonorrhea§	170,508	116.79	187,033	124.35	825	**358,366**
Haemophilus influenzae,						
invasive disease						
all ages, serotypes	1,072	0.73	1,351	0.90	13	**2,436**
age <5 yrs						
serotype b	14	0.13	15	0.15	—	**29**
nonserotype b	87	0.84	87	0.88	1	**175**
unknown serotype	95	0.92	80	0.81	4	**179**
Hansen disease (leprosy)	36	0.03	18	0.01	12	**66**
Hantavirus pulmonary syndrome	23	0.02	17	0.01	—	**40**
Hemolytic uremic syndrome, postdiarrheal	116	0.09	171	0.12	1	**288**
Hepatitis, viral, acute						
A	1,948	1.33	1,610	1.07	21	**3,579**
B	2,984	2.09	1,684	1.14	45	**4,713**
C	412	0.28	350	0.23	4	**766**

* Per 100,000 population.

† No cases of diphtheria; neuroinvasive or nonneuroinvasive western equine encephalitis virus disease, paralytic poliomyelitis, severe acute respiratory syndrome-associated coronavirus (SARS-CoV), smallpox, and yellow fever, or varicella deaths were reported in 2006. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. CDC is upgrading its national surveillance data management system for human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). During this transition, CDC is not updating AIDS or HIV infection surveillance data. Therefore, no updates are provided for HIV and AIDS data in this *Summary*.

§ Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of June 22, 2007.

¶ Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.

** Notifiable in <40 states.

TABLE 4. (*Continued*) Reported cases and incidence* of notifiable diseases,† by sex — United States, 2006

Disease	Male		Female		Sex not stated	Total
	No.	Rate	No.	Rate	No.	
Influenza-associated pediatric mortality††	27	0.09	16	0.05	—	**43**
Legionellosis	1,846	1.26	979	0.65	9	**2,834**
Listeriosis	415	0.28	463	0.31	6	**884**
Lyme disease	10,997	7.57	8,520	5.69	414	**19,931**
Malaria	977	0.67	475	0.32	22	**1,474**
Measles	30	0.02	25	0.02	—	**55**
Meningococcal disease						
all serogroups	613	0.42	575	0.38	6	**1,194**
serogroup A, C, Y, & W-135	159	0.11	158	0.11	1	**318**
serogroup B	113	0.08	79	0.05	1	**193**
other serogroup	15	0.01	17	0.01	—	**32**
serogroup unknown	326	0.22	321	0.21	4	**651**
Mumps	2,407	1.65	4,139	2.75	38	**6,584**
Pertussis	6,603	4.52	8,931	5.94	98	**15,632**
Plague	8	0.01	9	0.01	—	**17**
Psittacosis	8	0.01	13	0.01	—	**21**
Q fever	127	0.09	42	0.03	—	**169**
Rabies						
human	2	0	1	0	—	**3**
Rocky Mountain spotted fever	1,256	0.89	1,007	0.69	25	**2,288**
Rubella	6	0	5	0	—	**11**
Rubella, congenital syndrome	—	0	1	0	—	**1**
Salmonellosis	21,731	14.88	23,536	15.65	541	**45,808**
Shiga toxin-producing *E. coli* (STEC)§§	2,003	1.57	2,388	1.81	41	**4,432**
Shigellosis	7,359	5.04	8,018	5.33	126	**15,503**
Streptococcal disease,						
invasive, group A	2,786	2.35	2,485	2.03	136	**5,407**
Streptococcal toxic-shock syndrome	59	0.06	65	0.06	1	**125**
Streptococcus pneumoniae, invasive disease						
drug-resistant, all ages	1,598	2.16	1,590	2.07	120	**3,308**
age <5 yrs	1,050	13.17	801	10.50	10	**1,861**
Syphilis, primary & secondary§	8,293	5.68	1,458	0.97	5	**9,756**
Tetanus	27	0.02	14	0.01	—	**41**
Toxic-shock syndrome	19	0.02	81	0.07	1	**101**
Trichinellosis	8	0.01	7	0.01	—	**15**
Tuberculosis¶¶	8,547	5.85	5,227	3.48	5	**13,779**
Tularemia	66	0.05	29	0.02	—	**95**
Typhoid fever	185	0.13	163	0.11	5	**353**
Vancomycin-intermediate						
Staphylococcus aureus	3	0	3	0	—	**6**
Vancomycin-resistant						
Staphylococcus aureus	—	0	1	0	—	**1**

†† Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2006.
§§ Includes *E-coli* O157:H7; shiga toxin-positive, serogroup non-O157; and shiga-toxin positive, not serogrouped.
¶¶ Totals reported to the Division of TB Elimination, NCHHSTP, as of May 25, 2007.

TABLE 5. Reported cases and incidence* of notifiable diseases,† by race — United States, 2006

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	No.	No.	
Botulism											
infant	—	0	6	2.96	5	0.75	47	1.47	3	36	**97**
other (wound & unspecified)	0	0	0	0	5	0.01	17	0.01	0	26	**48**
Brucellosis	1	0.03	2	0.01	7	0.02	58	0.02	7	46	**121**
Chlamydia§¶	14,493	458.47	13,476	95.98	349,968	895.65	306,763	127.75	33,086	313,125	**1,030,911**
Coccidioidomycosis**	93	5.93	150	2.00	469	2.99	2,064	1.94	240	5,901	**8,917**
Cryptosporidiosis	29	0.92	66	0.47	521	1.33	3,679	1.53	169	1,607	**6,071**
Cyclosporiasis	1	0.04	2	0.02	4	0.01	87	0.04	4	39	**137**
Domestic arboviral diseases††											
California serogroup											
neuroinvasive	1	0.03	0	0	4	0.01	54	0.02	0	5	**64**
West Nile											
neuroinvasive	17	0.54	9	0.06	104	0.27	1,070	0.45	14	281	**1,495**
nonneuroinvasive	43	1.36	13	0.09	34	0.09	1,832	0.76	15	837	**2,774**
Ehrlichiosis											
human granulocytic	3	0.11	0	0	4	0.01	302	0.13	3	334	**646**
human monocytic	10	0.35	1	0.01	12	0.03	366	0.16	2	187	**578**
human (other & unspecified)	3	0.11	0	0	9	0.02	182	0.08	0	37	**231**
Giardiasis	86	2.91	726	5.55	1,231	3.58	8,059	3.84	720	8,131	**18,953**
Gonorrhea¶	2,725	86.20	2,284	16.27	191,586	490.32	71,359	29.72	6,789	83,623	**358,366**
Haemophilus influenzae,											
invasive disease											
all ages, serotypes	37	1.17	30	0.21	300	0.77	1,461	0.61	73	535	**2,436**
age <5 yrs											
serotype b	2	0.94	3	0.30	2	0.06	13	0.08	5	4	**29**
nonserotype b	8	3.76	3	0.30	26	0.79	88	0.56	8	42	**175**
unknown serotype	9	4.23	3	0.30	25	0.76	79	0.50	9	54	**179**
Hansen disease (leprosy)	0	0	22	0.17	0	0	15	0.01	5	24	**66**
Hantavirus pulmonary syndrome	5	0.17	0	0	1	0	29	0.01	0	5	**40**
Hemolytic uremic syndrome											
postdiarrheal	2	0.07	1	0.01	18	0.05	196	0.09	7	64	**288**

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

† No cases of diphtheria; neuroinvasive or nonneuroinvasive western equine encephalitis virus disease, paralytic poliomyelitis, severe acute respiratory syndrome-associated coronavirus (SARS-CoV), smallpox, and yellow fever, or varicella deaths were reported in 2006. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. CDC is upgrading its national surveillance data management system for human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). During this transition, CDC is not updating AIDS or HIV infection surveillance data. Therefore, no updates are provided for HIV and AIDS data in this *Summary*.

§ Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.

¶ Cases with unknown race have not been redistributed. For this reason, the total number of cases reported here might differ slightly from totals reported in other surveillance summaries. Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of June 22, 2007.

** Notifiable in <40 states.

†† Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) (ArboNET Surveillance), as of June 1, 2007.

TABLE 5. (*Continued*) Reported cases and incidence* of notifiable diseases,† by race — United States, 2006

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	No.	No.	
Hepatitis, viral acute											
A	14	0.44	192	1.37	236	0.60	1,884	0.78	149	1,104	**3,579**
B	31	1.09	162	1.17	847	2.18	2,315	0.99	121	1,237	**4,713**
C	17	0.54	9	0.06	59	0.15	487	0.20	14	180	**766**
Influenza-associated pediatric mortality§§	1	0.13	5	0.17	8	0.08	20	0.04	0	9	**43**
Legionellosis	6	0.19	20	0.14	396	1.01	1,826	0.76	65	521	**2,834**
Listeriosis	3	0.10	27	0.19	85	0.22	553	0.23	20	196	**884**
Lyme disease	23	0.73	98	0.74	166	0.43	9,163	3.82	1,614	8,867	**19,931**
Malaria	2	0.06	111	0.79	661	1.69	291	0.12	60	349	**1,474**
Measles	0	0	7	0.05	4	0.01	36	0.01	2	6	**55**
Meningococcal disease											
all serogroups	8	0.25	32	0.23	163	0.42	700	0.29	21	270	**1,194**
serogroup A, C, Y, & W-135	3	0.09	3	0.02	52	0.13	201	0.08	10	49	**318**
serogroup B	1	0.03	4	0.03	19	0.05	129	0.05	4	36	**193**
other serogroup	2	0.06	1	0.01	3	0.01	19	0.01	0	7	**32**
serogroup unknown	2	0.06	24	0.17	89	0.23	351	0.15	7	178	**651**
Mumps	62	1.96	131	0.93	298	0.76	4,869	2.03	100	1,124	**6,584**
Pertussis	175	5.50	226	1.61	661	1.70	10,830	4.50	393	3,347	**15,632**
Q fever	1	0.03	2	0.01	8	0.02	97	0.04	1	60	**169**
Rocky Mountain spotted fever	43	1.47	14	0.11	138	0.36	1,612	0.69	18	463	**2,288**
Salmonellosis	349	11.04	1,130	8.05	3,848	9.85	24,625	10.25	1,362	14,494	**45,808**
Shiga toxin-producing *E. coli* (STEC)¶¶	26	1.02	53	0.57	159	0.44	2,903	1.37	105	1,186	**4,432**
Shigellosis	754	23.85	197	1.40	2,442	6.25	6,450	2.69	685	4,975	**15,503**
Streptococcal disease, invasive, group A	80	3.51	116	1.36	755	2.23	2,904	1.48	158	1,394	**5,407**
Streptococcal toxic-shock syndrome	0	0	4	0.05	12	0.04	88	0.05	2	19	**125**
Streptococcus pneumoniae, invasive disease											
drug-resistant, all ages	16	1.42	17	0.45	691	3.13	1,983	1.60	98	503	**3,308**
age <5 yrs	33	20.61	57	9.33	393	13.92	856	7.13	74	448	**1,861**
Syphilis, primary & secondary¶	81	2.56	168	1.20	4,060	10.39	4,725	1.97	266	456	**9,756**
Tetanus	0	0	1	0.01	4	0.01	24	0.01	0	12	**41**
Toxic-shock syndrome	0	0	3	0.03	9	0.03	61	0.03	4	24	**101**
Tuberculosis***	197	6.23	3,394	24.17	3,864	9.89	6,252	2.60	42	30	**13,779**
Tularemia	4	0.13	0	0	2	0.01	58	0.02	1	30	**95**
Typhoid fever	2	0.06	140	1.00	26	0.07	35	0.01	21	129	**353**

§§ Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2006.
¶¶ Includes *E-coli* O157:H7; shiga toxin-positive, serogroup non-O157; and shiga toxin-positive, not serogrouped.
*** Totals reported to the Division of TB Elimination, NCHHSTP, as of May 25, 2007.

TABLE 6. Reported cases and incidence* of notifiable diseases,† by ethnicity — United States, 2006

Disease	Hispanic No.	Hispanic Rate	Non-Hispanic No.	Non-Hispanic Rate	Ethnicity not stated No.	Total
Botulism						
infant	25	2.68	44	1.39	28	**97**
other (wound & unspecified)	23	0.05	20	0.01	5	**48**
Brucellosis	60	0.14	30	0.01	31	**121**
Chlamydia§¶	147,625	345.83	505,768	199.34	377,518	**1,030,911**
Coccidioidomycosis**	1,294	6.17	2,009	1.82	5,614	**8,917**
Cryptosporidiosis	412	0.97	3,237	1.28	2,422	**6,071**
Cyclosporiasis	10	0.03	82	0.04	45	**137**
Domestic arboviral diseases††						
California serogroup						
neuroinvasive	4	0.01	46	0.02	14	**64**
West Nile						
neuroinvasive	142	0.33	901	0.36	452	**1,495**
nonneuroinvasive	151	0.35	1,576	0.62	1,047	**2,774**
Ehrlichiosis						
human granulocytic	7	0.02	203	0.08	436	**646**
human monocytic	13	0.03	302	0.13	263	**578**
human (other & unspecified)	4	0.01	182	0.08	45	**231**
Giardiasis	1,584	4.63	7,781	3.44	9,588	**18,953**
Gonorrhea¶	25,555	59.87	208,615	82.22	124,196	**358,366**
Haemophilus influenzae,						
invasive disease						
all ages, serotypes	186	0.44	1,298	0.51	952	**2,436**
age <5 yrs						
serotype b	5	0.11	15	0.10	9	**29**
nonserotype b	31	0.68	79	0.50	65	**175**
unknown serotype	25	0.55	83	0.53	71	**179**
Hansen disease (leprosy)	16	0.04	29	0.01	21	**66**
Hantavirus pulmonary syndrome	4	0.01	23	0.01	13	**40**
Hemolytic uremic syndrome, postdiarrheal	23	0.06	188	0.08	77	**288**

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

† No cases of diphtheria; neuroinvasive or nonneuroinvasive western equine encephalitis virus disease, paralytic poliomyelitis, severe acute respiratory syndrome-associated coronavirus (SARS-CoV), smallpox, and yellow fever, or varicella deaths were reported in 2006. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review. CDC is upgrading its national surveillance data management system for human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). During this transition, CDC is not updating AIDS or HIV infection surveillance data. Therefore, no updates are provided for HIV and AIDS data in this *Summary*.

§ Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.

¶ Cases with unknown ethnicity have not been redistributed. For this reason, the total number of cases reported here might differ slightly from totals reported in other surveillance summaries. Totals reported to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of June 22, 2007.

** Notifiable in <40 states.

†† Totals reported to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) (ArboNET Surveillance), as of June 1, 2007.

TABLE 6. (*Continued*) Reported cases and incidence* of notifiable diseases,† by ethnicity — United States, 2006

Disease	Hispanic		Non-Hispanic		Ethnicity not stated	Total
	No.	Rate	No.	Rate	No.	
Hepatitis, viral, acute						
A	1,000	2.34	1,733	0.68	846	**3,579**
B	477	1.16	2,511	1.01	1,725	**4,713**
C	47	0.11	409	0.16	310	**766**
Influenza-associated pediatric mortality§§	14	0.13	18	0.04	11	**43**
Legionellosis	120	0.28	1,663	0.66	1,051	**2,834**
Listeriosis	114	0.27	506	0.20	264	**884**
Lyme disease	254	0.60	7,118	2.82	12,559	**19,931**
Malaria	67	0.16	860	0.34	547	**1,474**
Measles	3	0.01	46	0.02	6	**55**
Meningococcal disease						
all serogroups	150	0.35	691	0.27	353	**1,194**
serogroup A, C, Y, & W-135	34	0.08	186	0.07	98	**318**
serogroup B	15	0.04	111	0.04	67	**193**
other serogroup	1	0	20	0.01	11	**32**
serogroup unknown	100	0.23	374	0.15	177	**651**
Mumps	336	0.79	4,730	1.86	1,518	**6,584**
Pertussis	1,629	3.82	10,194	4.02	3,809	**15,632**
Q fever	15	0.04	88	0.04	66	**169**
Rocky Mountain spotted fever	83	0.20	1,527	0.62	678	**2,288**
Salmonellosis	5,673	13.29	21,476	8.46	18,659	**45,808**
Shiga toxin-producing *E. coli* (STEC)¶¶	291	0.97	2,515	1.09	1,626	**4,432**
Shigellosis	3,925	9.19	6,287	2.48	5,291	**15,503**
Streptococcal disease,						
invasive, group A	447	1.55	2,425	1.14	2,535	**5,407**
Streptococcal toxic-shock syndrome	12	0.05	54	0.03	59	**125**
Streptococcus pneumoniae, invasive disease						
drug-resistant, all ages	178	1.55	1,748	1.25	1,382	**3,308**
age <5 yrs	246	8.23	802	6.36	813	**1,861**
Syphilis, primary & secondary¶	1,465	3.43	7,202	2.84	1,089	**9,756**
Tetanus	8	0.02	21	0.01	12	**41**
Toxic-shock syndrome	6	0.02	47	0.02	48	**101**
Tuberculosis***	4,066	9.53	9,702	3.82	11	**13,779**
Tularemia	6	0.01	45	0.02	44	**95**
Typhoid fever	40	0.09	214	0.08	99	**353**

§§ Totals reported to the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD), as of December 31, 2006.
¶¶ Includes *E-coli* O157:H7; shiga toxin-positive, serogroup non-O157; and shiga toxin-positive, not serogrouped.
*** Totals reported to the Division of TB Elimination, NCHHSTP, as of May 25, 2007.

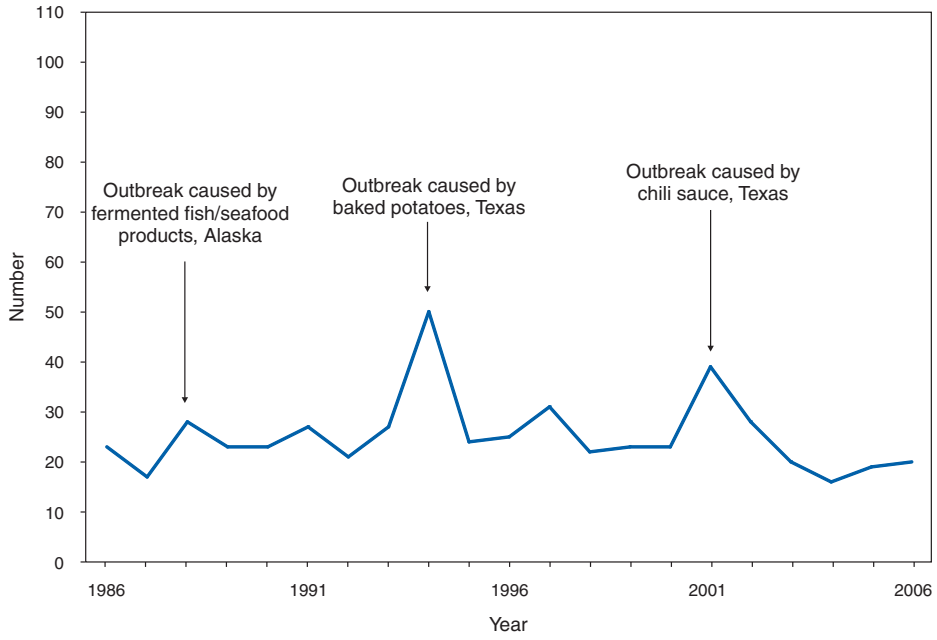
PART 2

Graphs and Maps for Selected Notifiable Diseases in the United States, 2006

Abbreviations and Symbols Used in Graphs and Maps

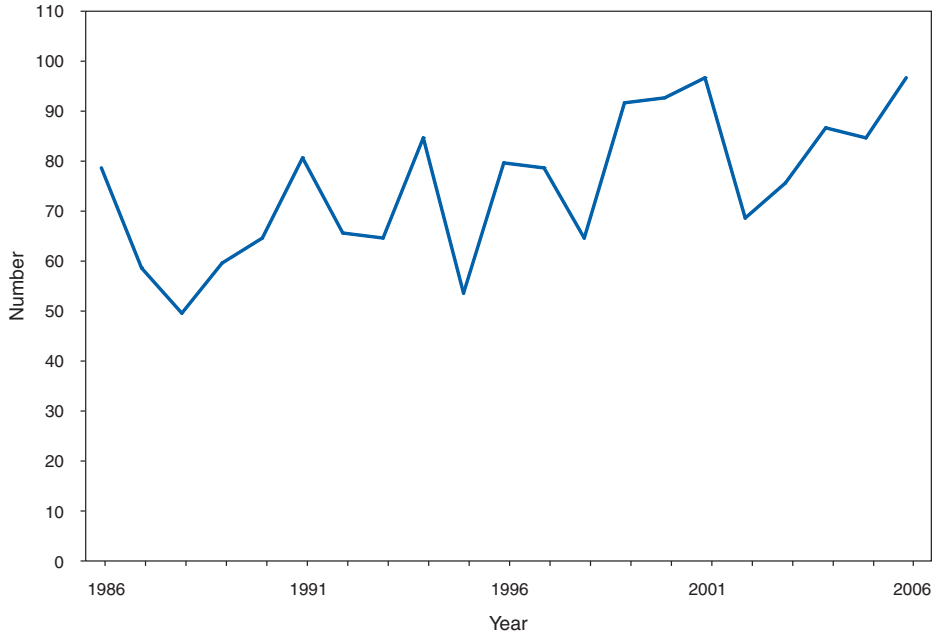
U	Data not available.
N	Not notifiable (i.e., report of disease not required in that jurisdiction).
AS	American Samoa
CNMI	Commonwealth of Northern Mariana Islands
GU	Guam
PR	Puerto Rico
VI	U.S. Virgin Islands

BOTULISM, FOODBORNE. Number of reported cases, by year — United States, 1986–2006



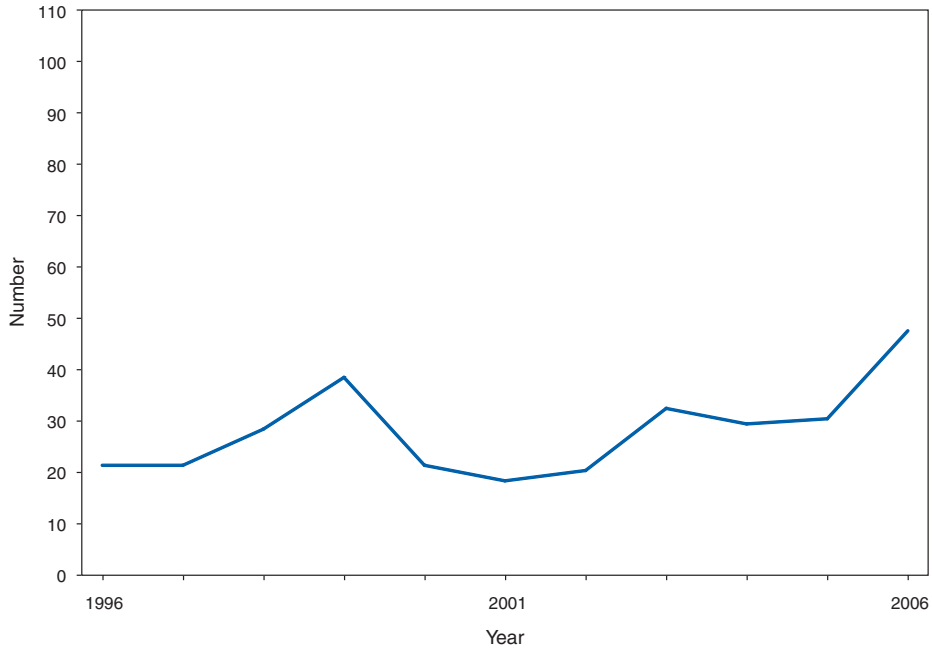
Home-canned foods and Alaska Native foods consisting of fermented foods of aquatic origin remain the principal sources of foodborne botulism in the United States. During 2006, a multistate outbreak of foodborne botulism was linked to commercial carrot juice.

BOTULISM, INFANT. Number of reported cases, by year — United States, 1986–2006



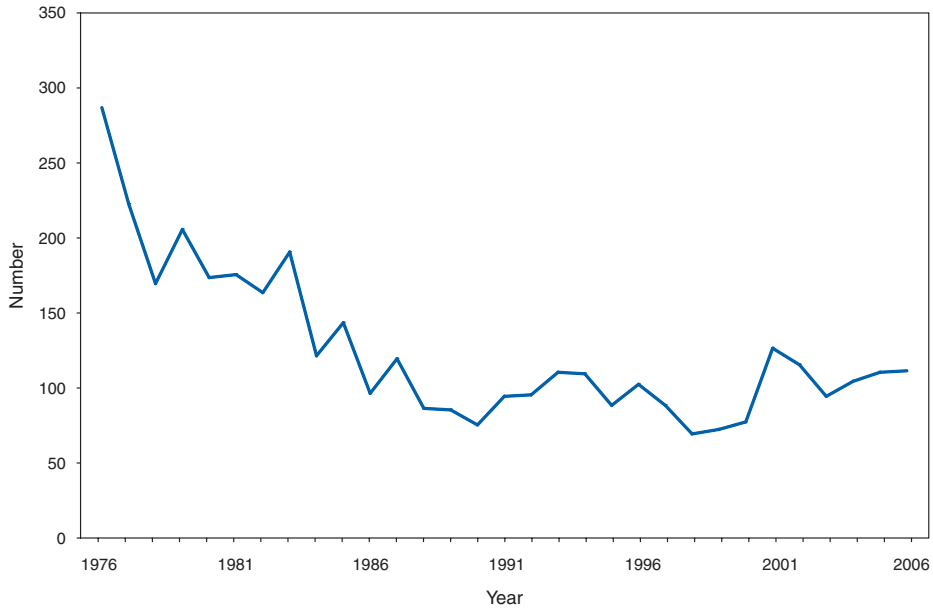
Infant botulism is the most common type of botulism in the United States. Cases are sporadic, and risk factors remain substantially unknown.

BOTULISM, OTHER (includes wound and unspecified). Number of reported cases, by year — United States, 1996–2006



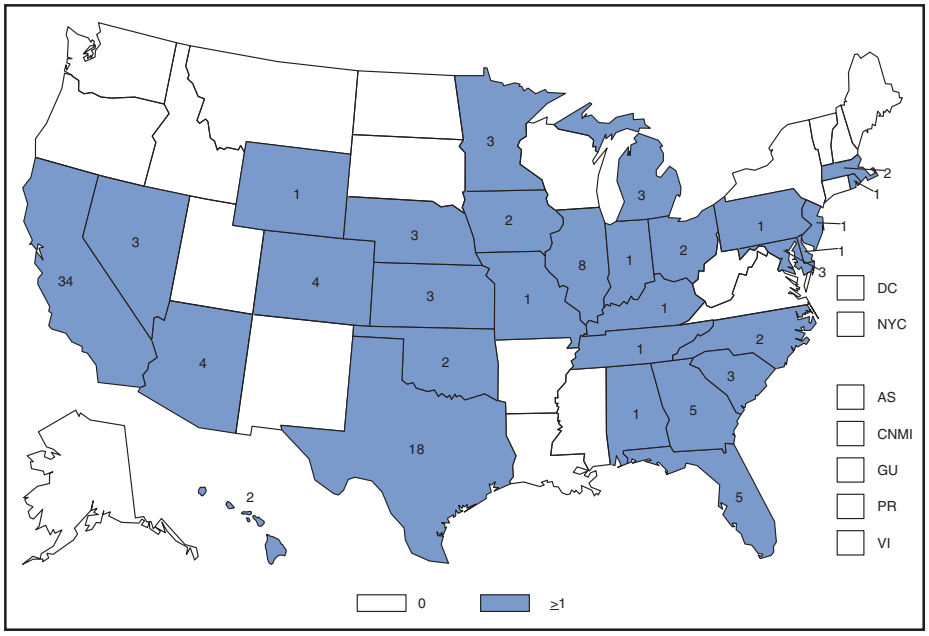
Wound botulism cases occur almost exclusively in the western United States among injection-drug users and are associated with a particular type of heroin known as black tar heroin. The number of reported cases suggests an upward trend, with the highest number of cases reported in 2006.

BRUCELLOSIS. Number of reported cases, by year — United States, 1976–2006



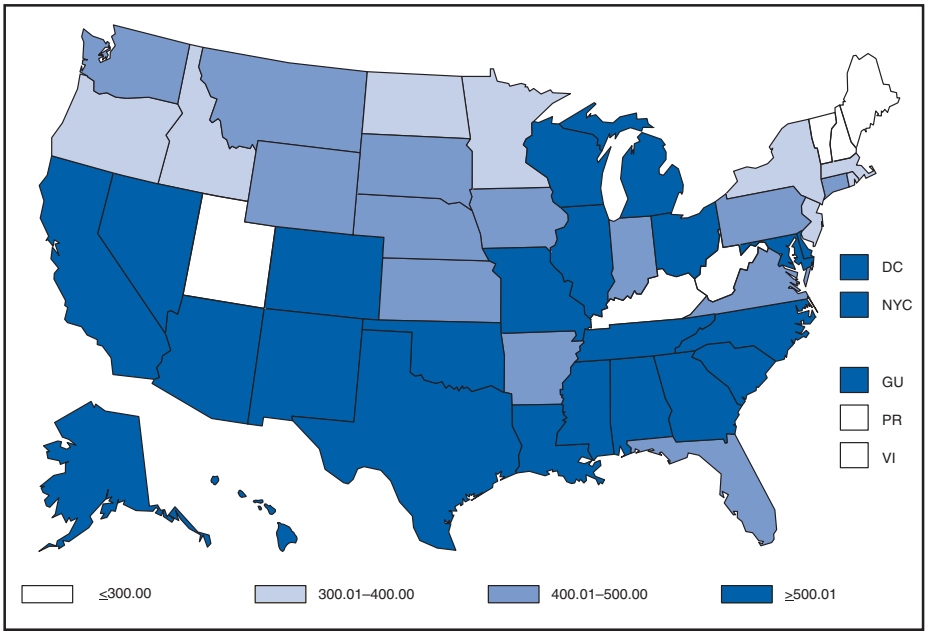
The incidence of brucellosis has remained stable in recent years, reflecting an ongoing risk for infection with *Brucella melitensis* and *B. abortus* acquired through exposure to unpasteurized milk products in countries with endemic brucellosis in sheep, goats, and cattle and *B. suis* acquired through contact with feral swine in the United States.

BRUCELLOSIS. Number of reported cases — United States and U.S. territories, 2006



The incidence of brucellosis has remained stable in recent years, although the distribution of cases regionally has changed. The number of cases in the West South Central region (Arkansas, Louisiana, Oklahoma, and Texas) has been decreasing steadily, whereas the number of cases in the West North Central region (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota) and the South Atlantic region (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia) appears to be on the rise. After an increase in the number of cases last year in the Mid Atlantic region (New Jersey, New York upstate, New York City, and Pennsylvania), incidence has returned to a rate much closer to what it was previously.

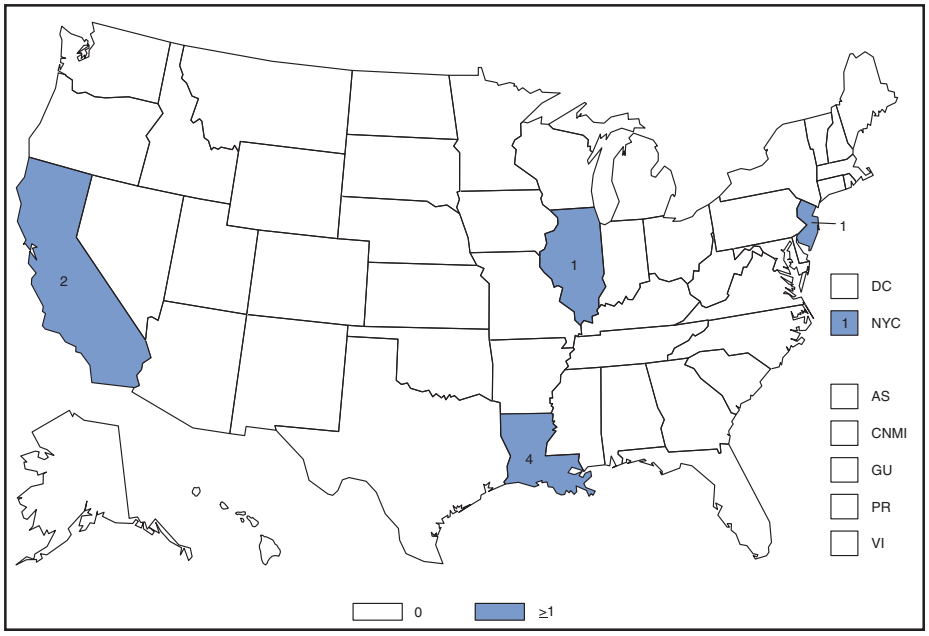
CHLAMYDIA. Incidence* among women — United States and U.S. territories, 2006



* Per 100,000 population.

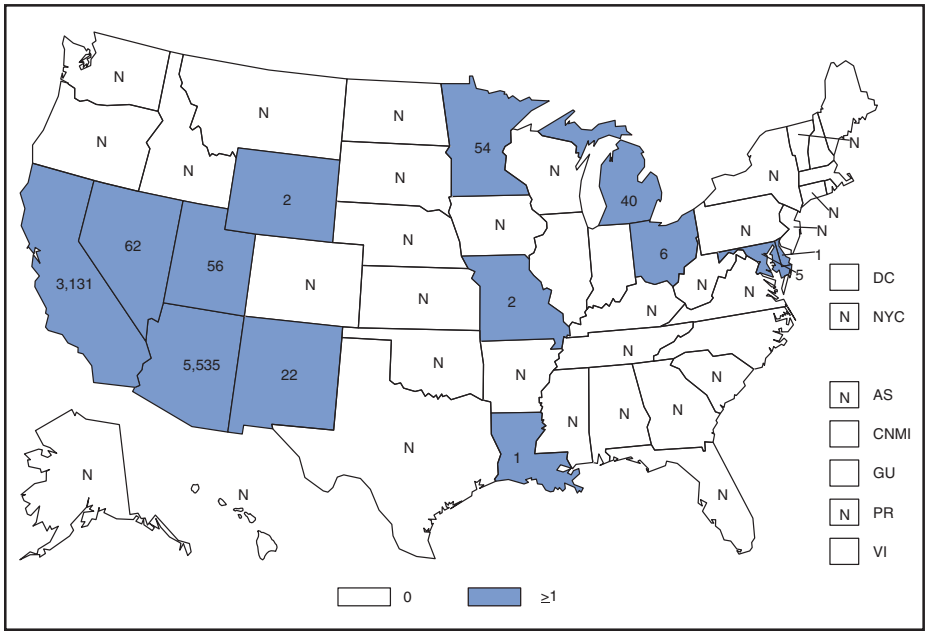
Chlamydia refers to genital infections caused by *Chlamydia trachomatis*. In 2006, the chlamydia rate among women in the United States and U.S. territories was 511.7 cases per 100,000 population.

CHOLERA. Number of reported cases — United States and U.S. territories, 2006



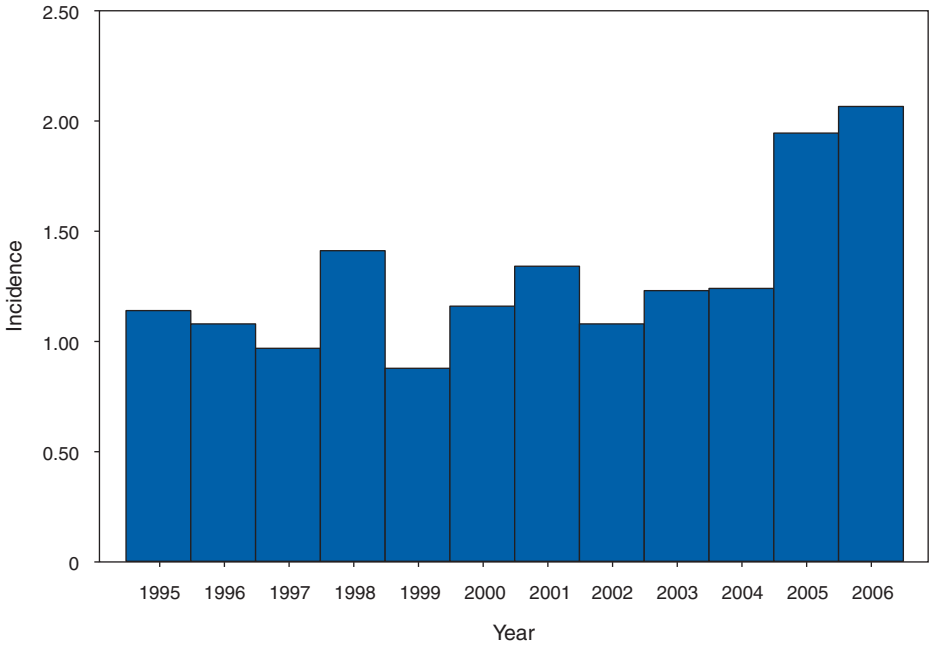
In 2006, approximately half of the cholera infections in the United States were acquired in Louisiana, where noncommercial harvesting of shellfish is a common practice. Louisiana was the focus of cholera infections associated with consumption of contaminated shellfish harvested in local waters. Consumption of contaminated seafood and foreign travel remain the most common sources of infection.

COCCIDIOIDOMYCOSIS. Number of reported cases — United States* and U.S. territories, 2006



* In the United States, coccidioidomycosis is endemic in the southwestern states. However, cases have been reported in other states, typically among travelers returning from areas in which the disease is endemic.

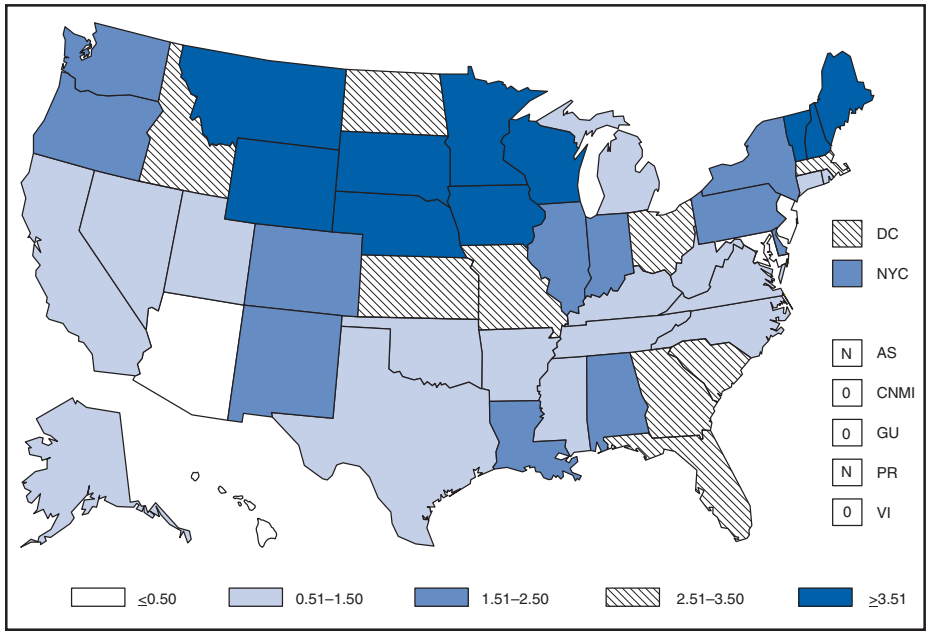
CRYPTOSPORIDIOSIS. Incidence,* by year — United States, 1995–2006



* Per 100,000 population.

The marked increase in the incidence of cryptosporidiosis that began in 2005 was sustained in 2006. Whether this increase reflects changes in reporting patterns and diagnostic testing practices or a real change in infection and disease caused by *Cryptosporidium* is unclear.

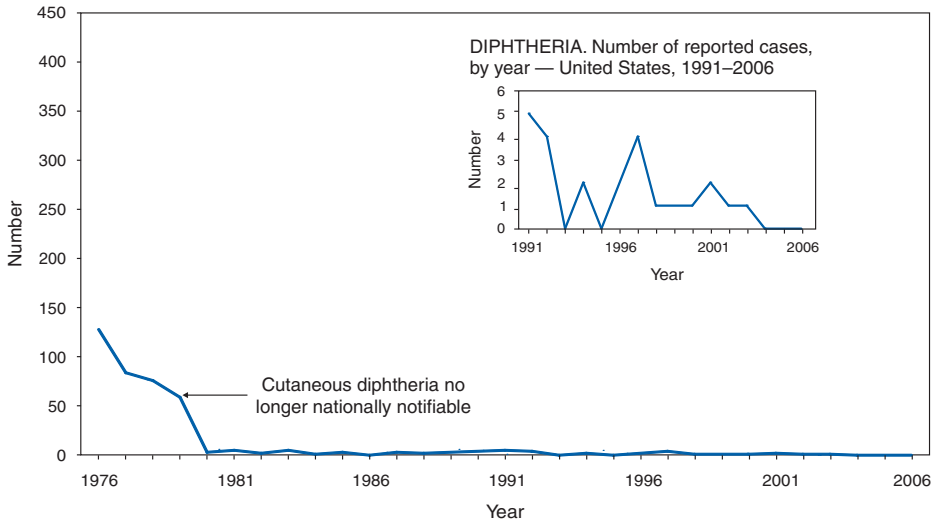
CRYPTOSPORIDIOSIS. Incidence* — United States and U.S. territories, 2006



* Per 100,000 population.

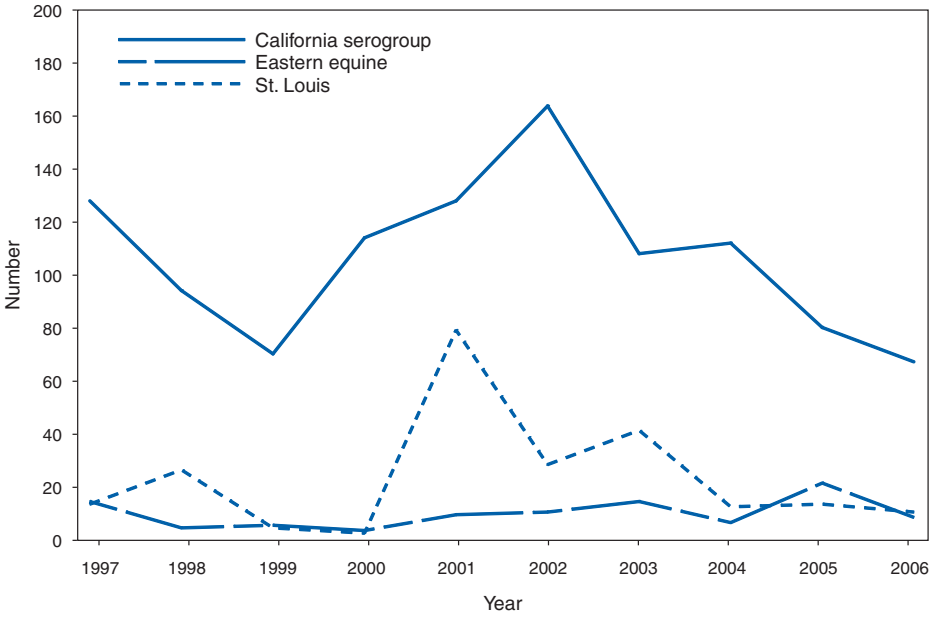
Cryptosporidiosis is widespread geographically in the United States, with increased diagnosis or reporting of cryptosporidiosis in northern states. However, differences in cryptosporidiosis surveillance systems and reporting among states can affect the capability to detect and report cases, making interpretation of this observation difficult. Increased transmission of *Cryptosporidium* occurs during summer through early fall, coinciding with the summer recreational water season.

DIPHTHERIA. Number of reported cases, by year — United States, 1976–2006



For 3 consecutive years since 2004, the national health objective for 2010 of zero cases of respiratory diphtheria has been maintained.

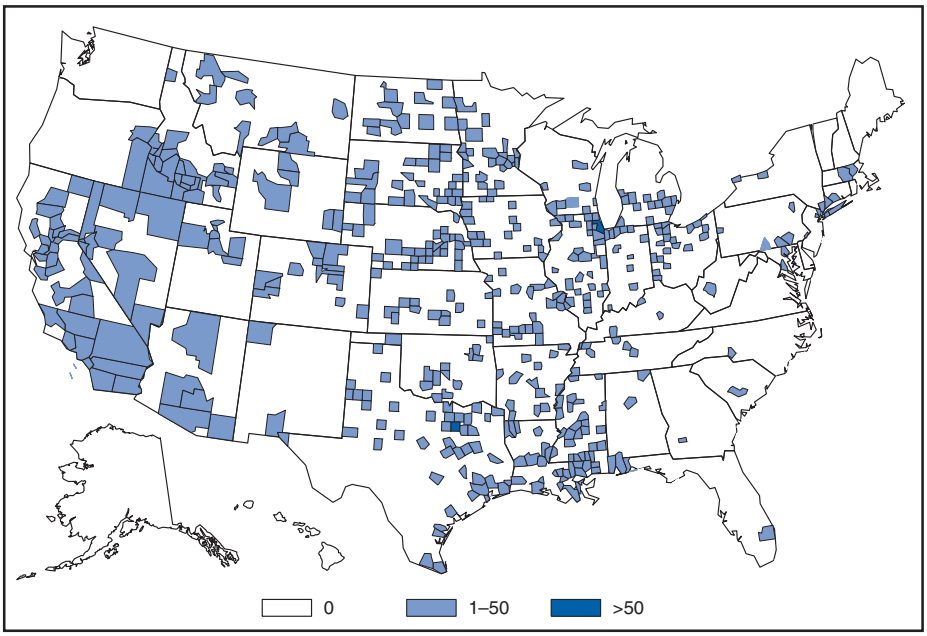
DOMESTIC ARBOVIRAL DISEASES. Number* of reported cases, by year — United States, 1997–2006



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

Arboviral diseases are seasonal, occurring during the summer and fall, with incidence peaking in the late summer. The most common arboviruses affecting humans in the United States are West Nile virus (WNV), La Crosse virus (LACV), Eastern equine encephalitis virus (EEEV), and St. Louis encephalitis virus (SLEV). California serogroup viruses (mainly LACV in the eastern United States) cause encephalitis, especially in children. In 2006, California serogroup virus were reported from 12 states (Florida, Indiana, Iowa, Louisiana, Michigan, Minnesota, North Carolina, Ohio, South Carolina, Tennessee, West Virginia, and Wisconsin). During 1964–2006, a median of 68 (range: 29–167) 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 2006, EEEV cases were reported from four states (Georgia, Louisiana, Massachusetts, and North Carolina). During 1964–2006, a median of five (range: 0–21) cases per year were reported in the United States. Before the introduction of West Nile virus to the United States, SLEV was the nation's leading cause of epidemic viral encephalitis. In 2006, SLEV cases were reported from six states (Arizona, Kentucky, Louisiana, Missouri, New Hampshire, and Ohio). During 1964–2006, a median of 26 (range: 2–1,967) cases per year were reported in the United States.

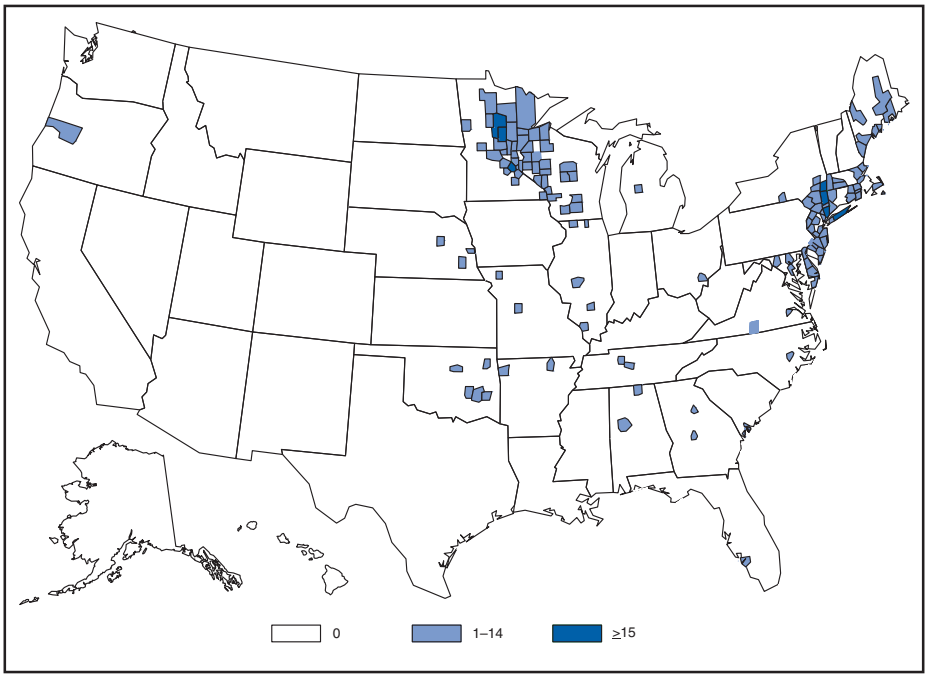
DOMESTIC ARBOVIRAL DISEASES, WEST NILE. Number* of reported cases, by county — United States, 2006



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

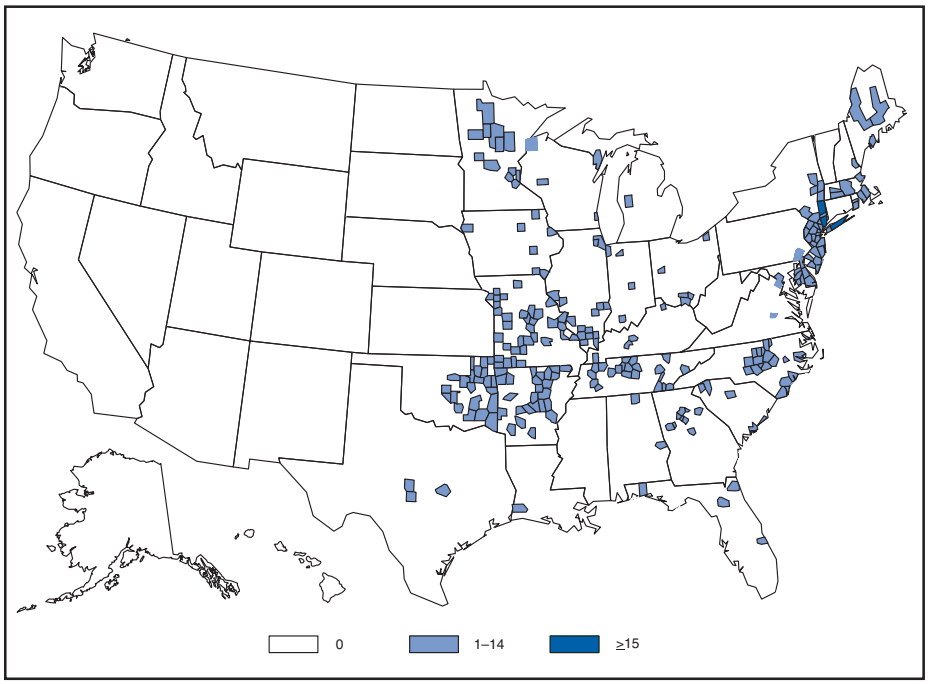
In 2006, a total of 41 states reported neuroinvasive West Nile virus (WNV) disease. More than 30% of West Nile neuroinvasive disease cases were reported from three states (Idaho, Illinois, and Texas).

EHRLICHIOSIS, HUMAN GRANULOCYTIC. Number of reported cases, by county — United States, 2006



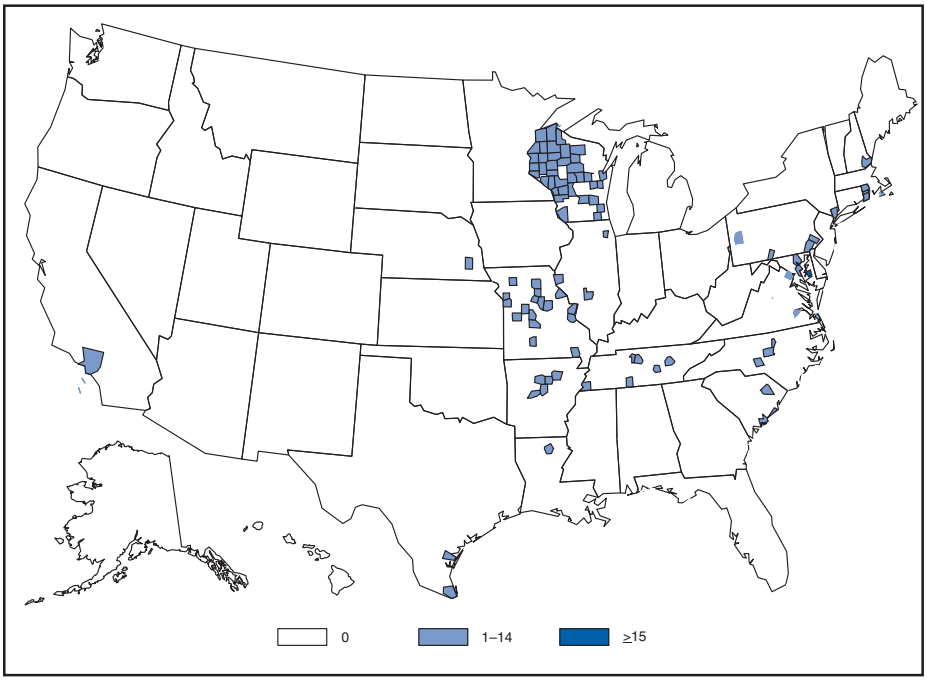
As a result of recent taxonomic changes, human granulocytic enrlichiosis is now known as anaplasmosis (caused by *Anaplasma phagocytophilum*). Cases of this disease are reported primarily from the upper Midwest and coastal New England, reflecting the range of the primary tick vector species, *Ixodes scapularis*, and human population density.

EHRLICHIOSIS, HUMAN MONOCYTIC. Number of reported cases, by county — United States, 2006



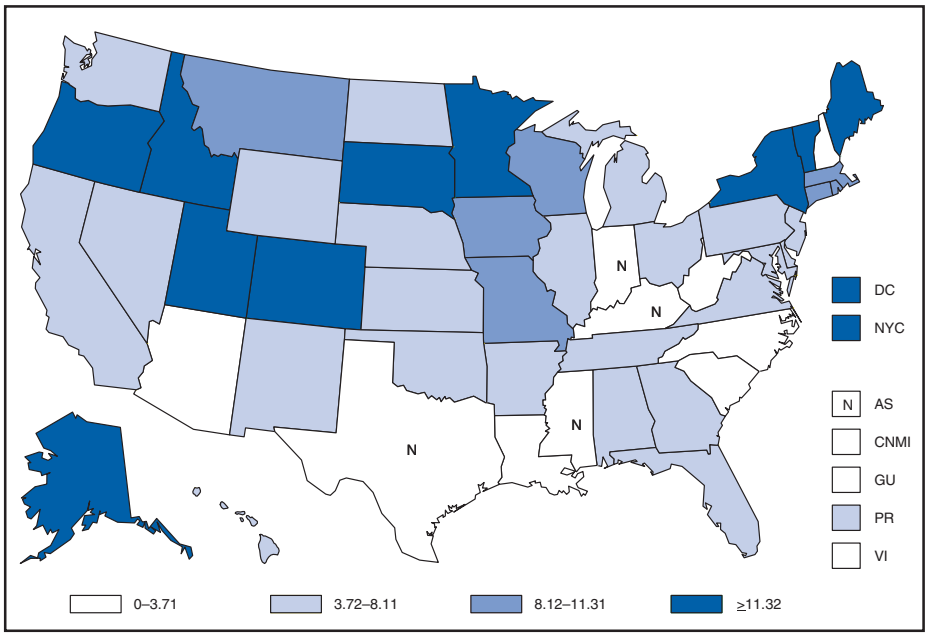
Cases of ehrlichiosis (caused by *Ehrlichia chaffeensis*) occur primarily in the lower Midwest and the Southeast, reflecting the range of the primary tick vector species, *Amblyomma americanum*.

EHRLICHIOSIS, HUMAN (OTHER & UNSPECIFIED). Number of reported cases, by county — United States, 2006



States might report cases of ehrlichiosis caused by *Ehrlichia ewingii* under this category heading. More commonly, states report cases to this category for which the causative species (i.e. *Anaplasma phagocytophilum* or *E. chaffeensis*) is not clearly differentiated by serologic testing.

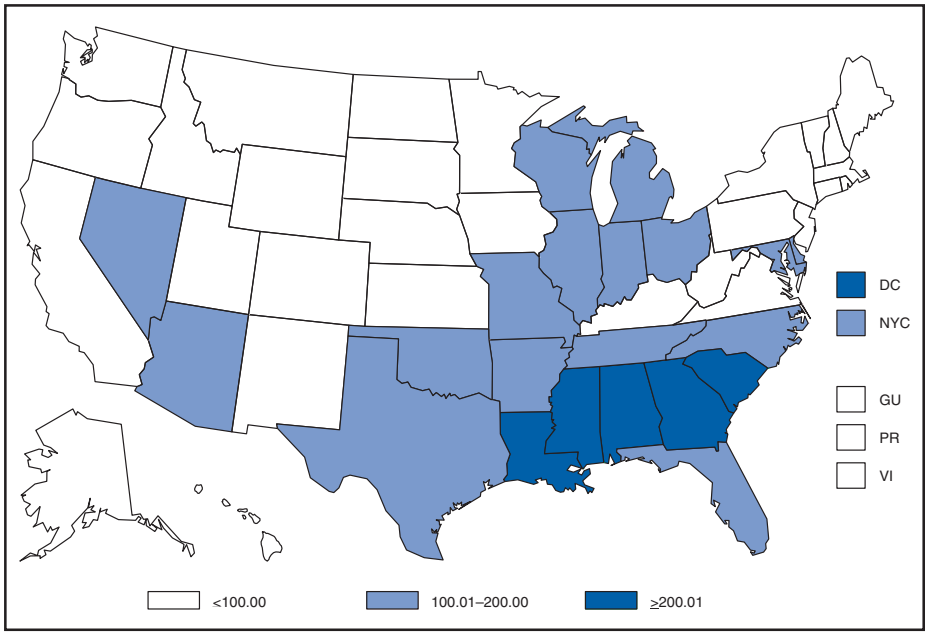
GIARDIASIS. Incidence* — United States and U.S. territories, 2006



* Per 100,000 population.

Giardiasis is widespread geographically in the United States, with increased diagnosis or reporting of giardiasis in northern states. However, because differences in giardiasis surveillance systems among states can affect the capability to detect cases, whether this finding is of true biologic significance or is only the result of differences in case detection or reporting is difficult to determine.

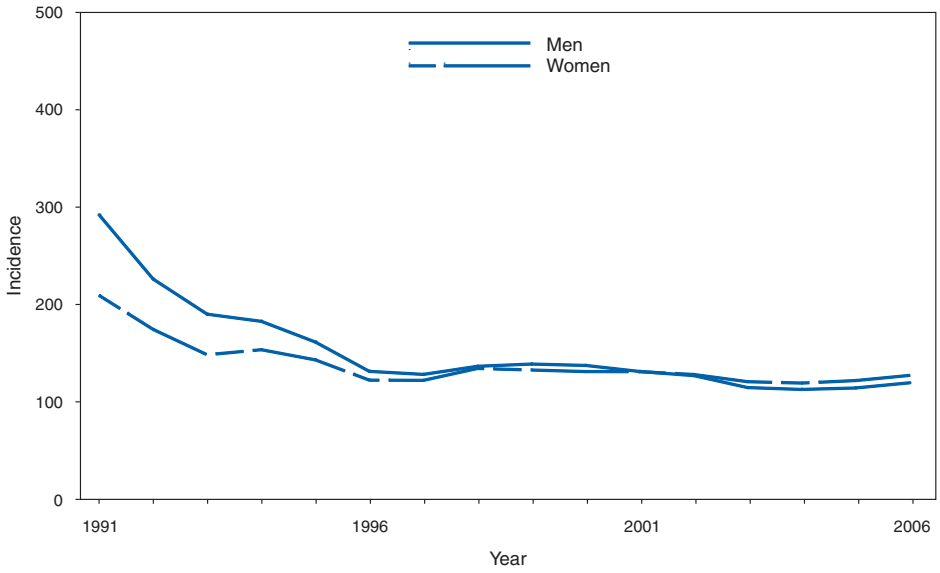
GONORRHEA. Incidence* — United States and U.S. territories, 2006



* Per 100,000 population.

In 2006, the gonorrhea rate in the United States and U.S. territories was 119.4 cases per 100,000 population, an increase of 5.6% from the rate in 2005 (113.1 per 100,000 population). The national health objective for 2010 is ≤19 cases per 100,000 population. Four states (Idaho, Maine, New Hampshire, and Vermont) and Puerto Rico reported rates below the national objective.

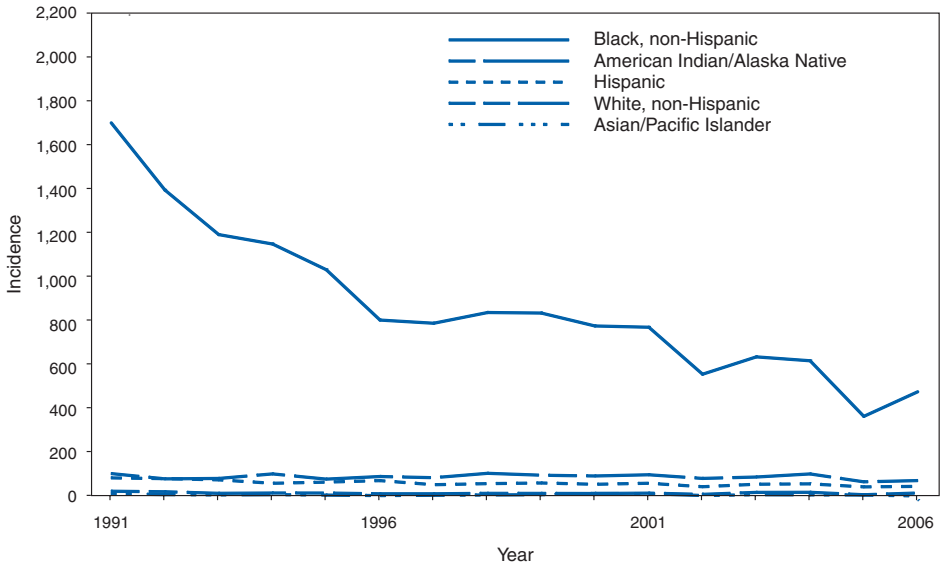
GONORRHEA. Incidence,* by sex — United States, 1991–2006



* Per 100,000 population.

Following a 74% decline in the rate of reported gonorrhea during 1975–1997, overall gonorrhea rates plateaued and then increased for the past 2 years. In 2006, for the sixth year in a row, the gonorrhea rate among women was slightly higher than the rate among men.

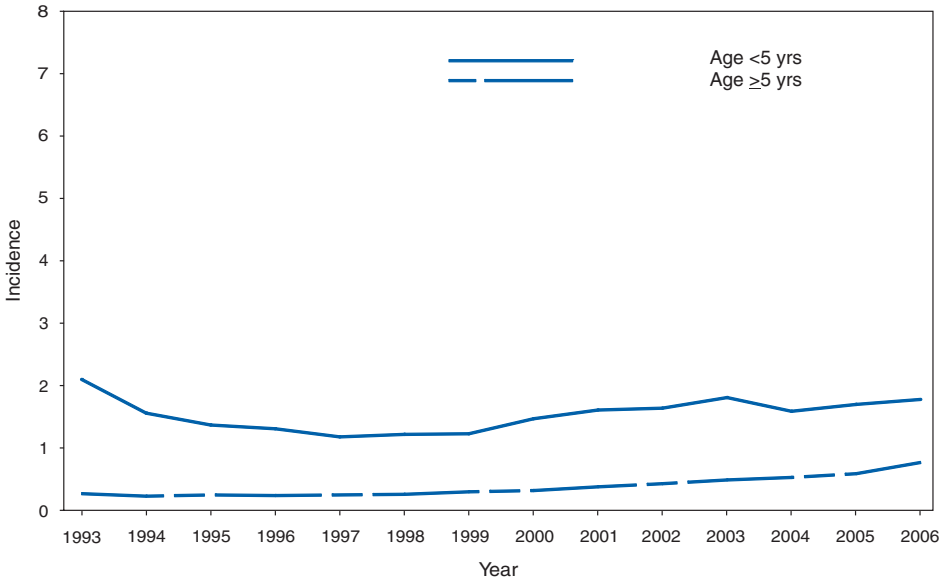
GONORRHEA. Incidence,* by race/ethnicity — United States, 1991–2006



* Per 100,000 population.

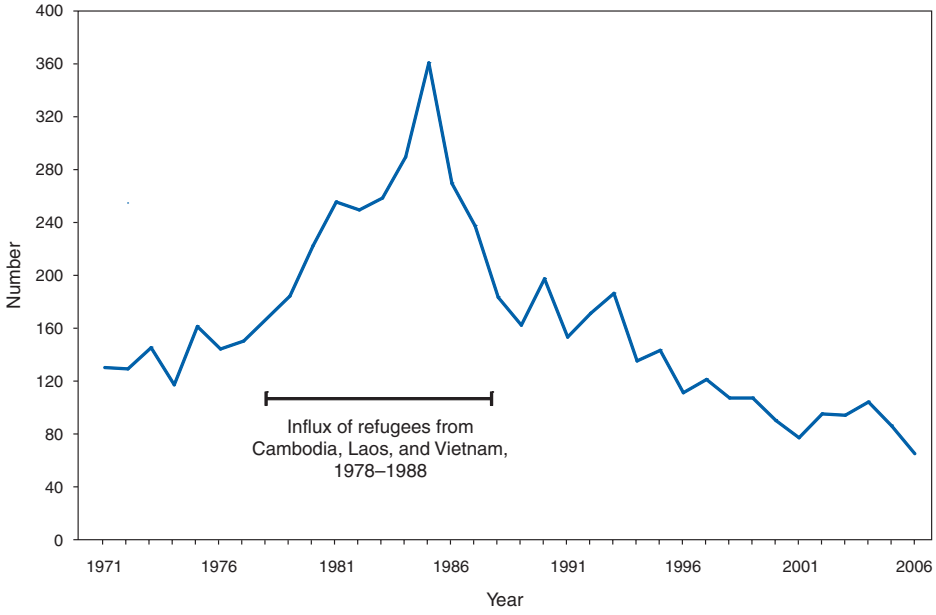
Gonorrhea incidence among blacks decreased considerably during the 1990s but continues to be the highest among all racial/ethnic populations. In 2006, incidence among non-Hispanic blacks was approximately 18 times greater than that for non-Hispanic whites.

HAEMOPHILUS INFLUENZAE, INVASIVE DISEASE. Incidence,* by age group — United States, 1993–2006



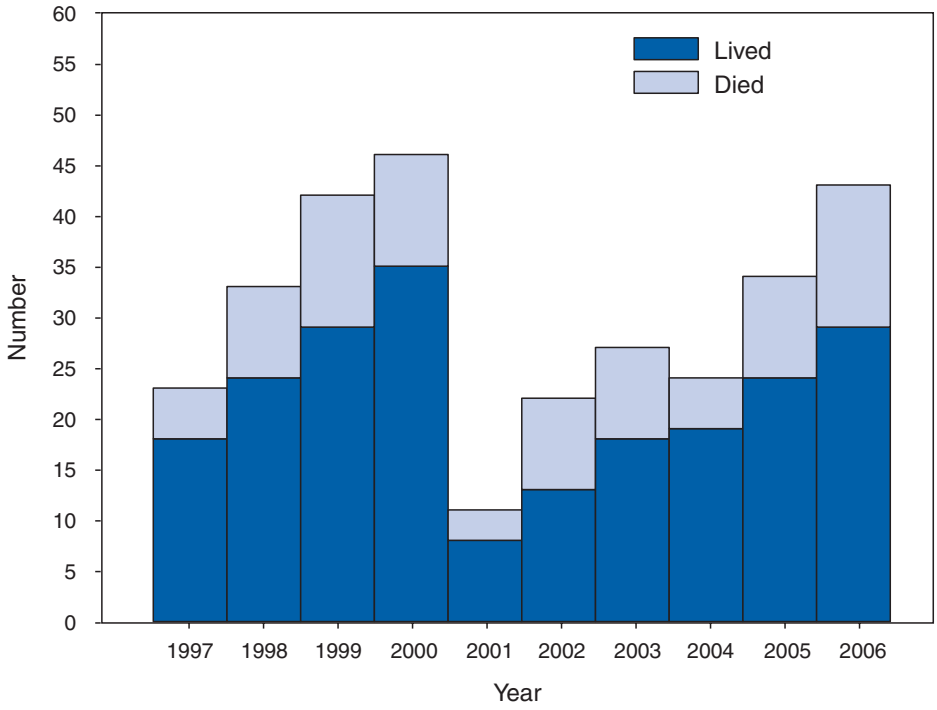
* Per 100,000 population.

HANSEN DISEASE (LEPROSY). Number of reported cases, by year — United States, 1971–2006



The number of cases of Hansen Disease reported per year peaked in 1985 and has gradually declined since 1989.

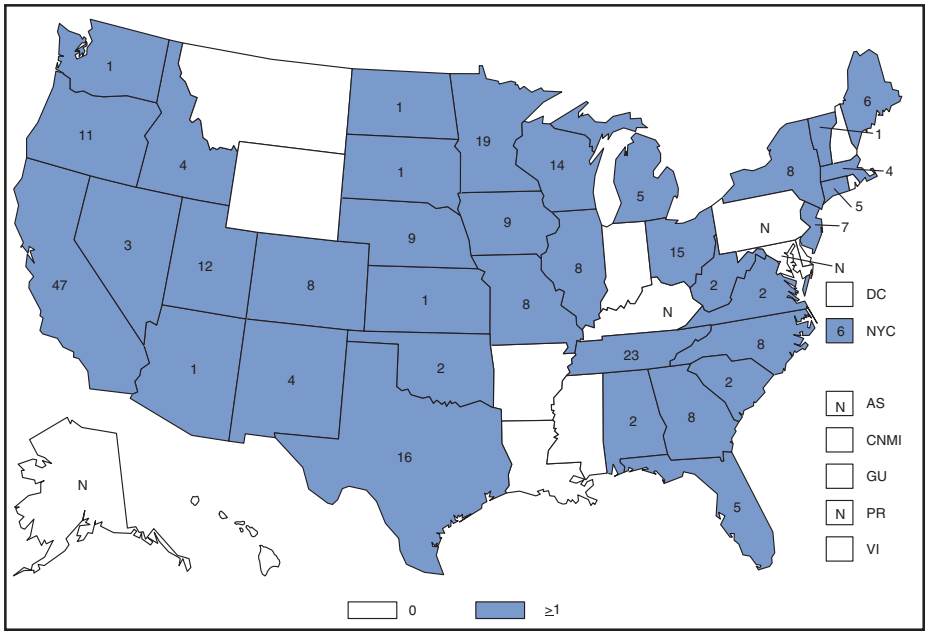
HANTAVIRUS PULMONARY SYNDROME. Number of reported cases, by survival status* and year — United States, 1997–2006



* Data from National Center for Zoonotic, Vector-Borne, and Enteric Diseases, two unknown cases; survival status of two persons could not be determined at the time of publication.

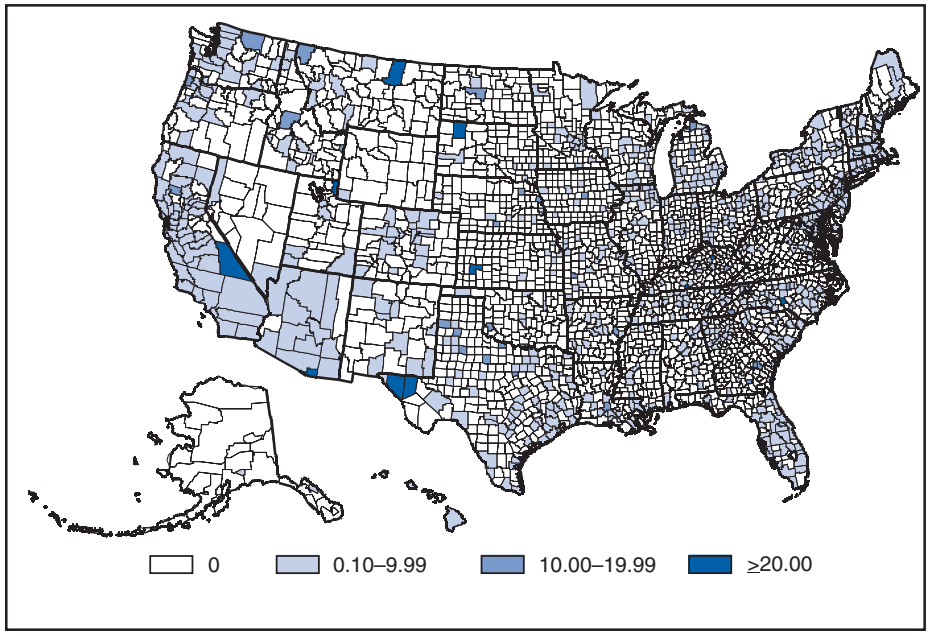
Hantaviruses occur in wild rodents throughout North America, and cause sporadic cases of severe disease in humans after occupational or peridomestic rodent exposure.

HEMOLYTIC UREMIC SYNDROME, POSTDIARRHEAL. Number of reported cases — United States and U.S. territories, 2006



In the United States, the majority of cases of postdiarrheal hemolytic uremic syndrome (HUS) are caused by infection with *Escherichia coli* O157:H7. Infection with other serotypes of Shiga toxin-producing *E. coli* can cause HUS. Half of HUS cases occur among children aged <5 years.

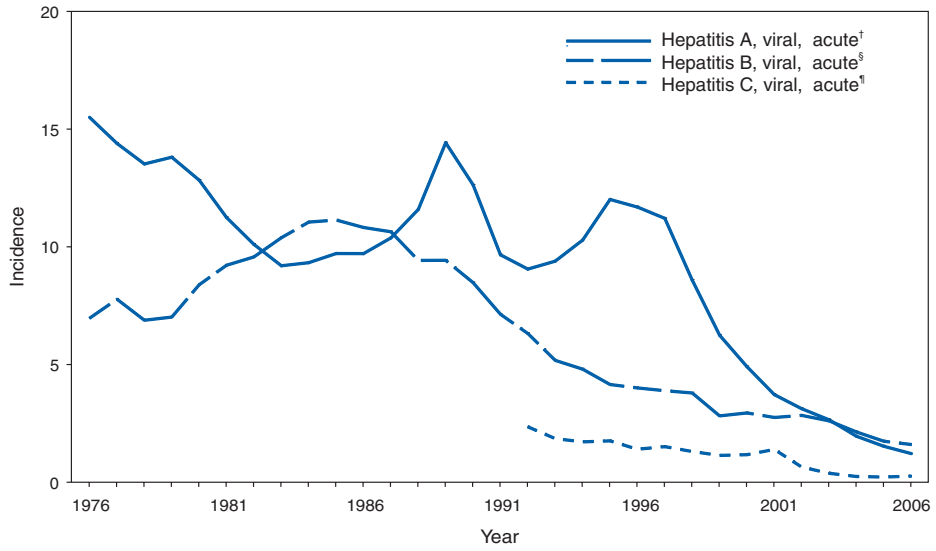
HEPATITIS A. Incidence,* by county — United States, 2006



* 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 hepatitis A have declined in all regions, with the greatest decline occurring in western states. Hepatitis A rates are now the lowest ever reported and similar in all regions. As of 2005, hepatitis A vaccine is recommended for children in all states.

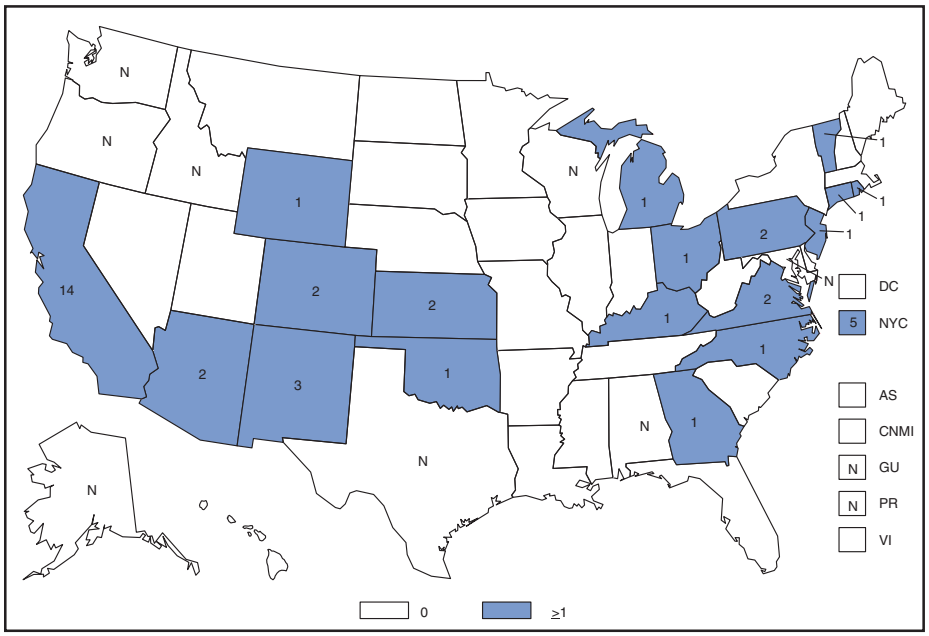
HEPATITIS, VIRAL. Incidence,* by year — United States, 1976–2006



* 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.

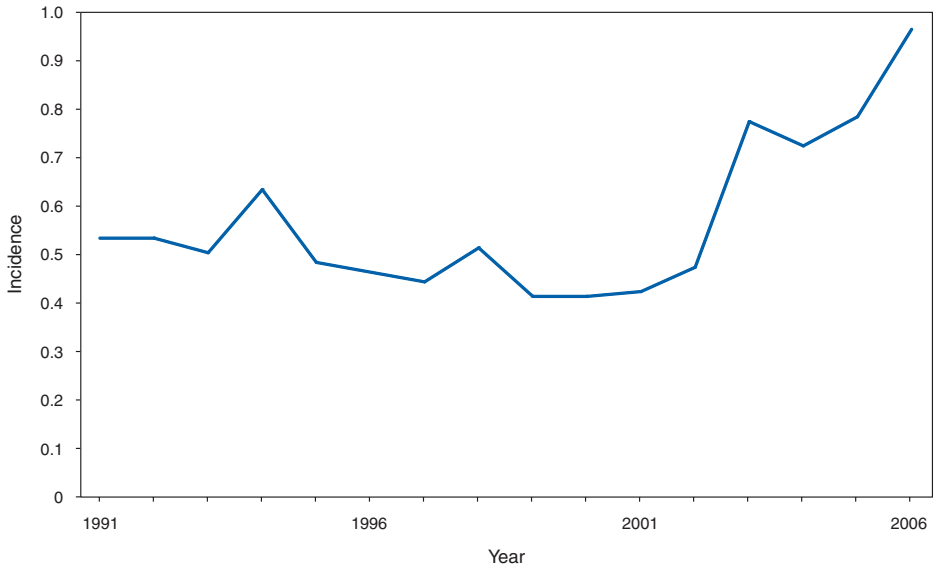
Hepatitis A incidence continues to decline and in 2006 was the lowest ever recorded. This reduction in incidence is attributable at least in part to routine vaccination of children in states with consistently elevated rates. Hepatitis B incidence has declined 90% since the last nationwide outbreak in 1995. Routine hepatitis B vaccination of infants has reduced rates >95% in children. Rates also have declined among adults, but a large proportion of cases continue to occur among adults with high-risk behaviors. Incidence of acute hepatitis C has declined 90% since 1992; however, a large burden of disease caused by chronic HCV infection remains.

INFLUENZA-ASSOCIATED PEDIATRIC MORTALITY. Number of reported cases — United States and U.S. territories, 2006



Initial reporting for this condition began in week 40 (week ending October 9, 2004) of the 2004–05 influenza season. During 2006, a total of 43 influenza-associated pediatric deaths were reported to CDC by 18 states and New York City, with California reporting 14 deaths.

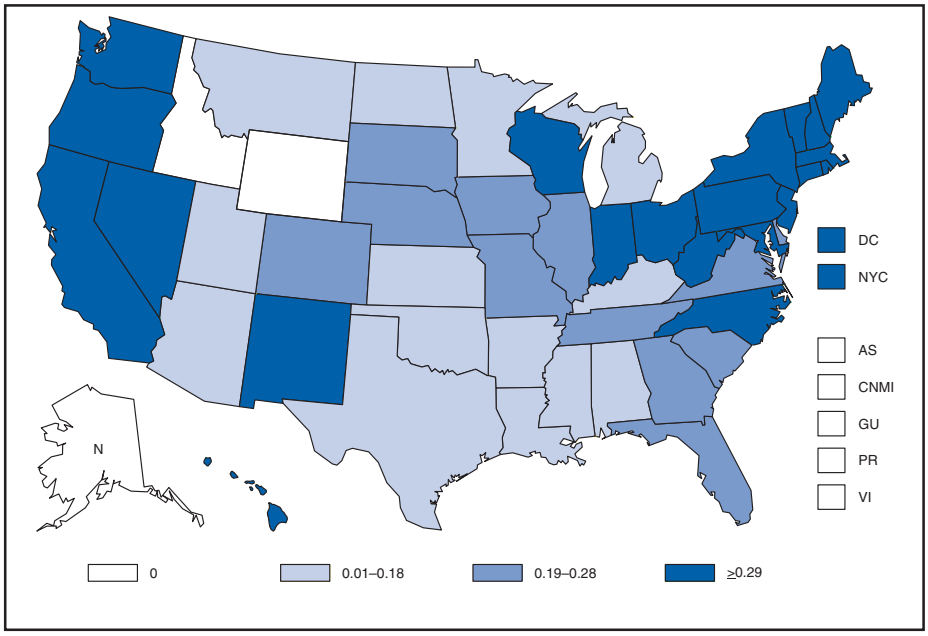
LEGIONELLOSIS. Incidence,* by year — United States, 1991–2006



* Per 100,000 population.

The increase in the incidence of legionellosis continued through 2006. Factors contributing to this increase might include a true increase in disease transmission, greater use of diagnostic testing, and increased reporting.

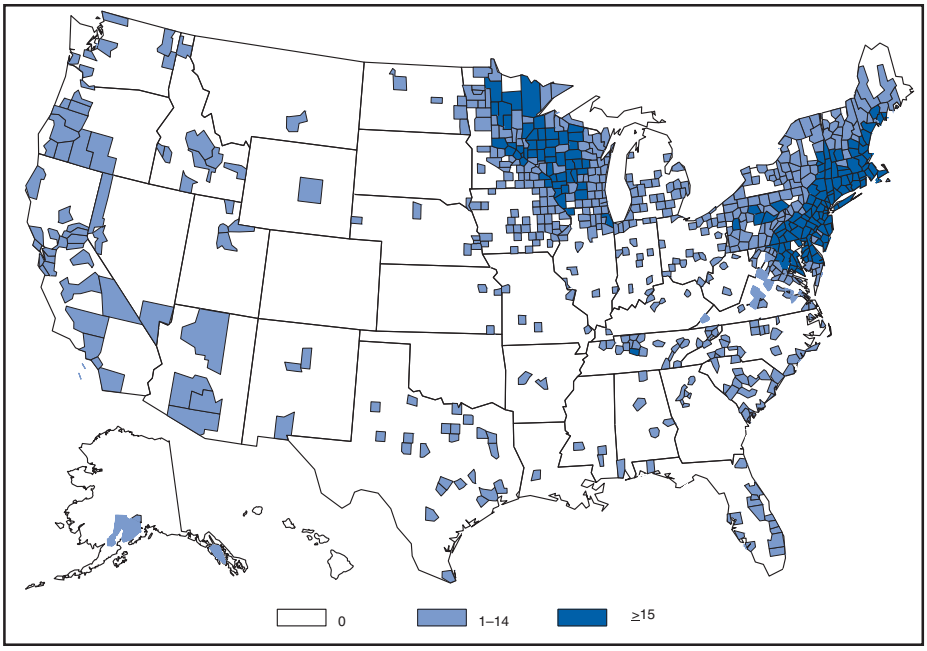
LISTERIOSIS. Incidence* — United States and U.S. territories, 2006



* Per 100,000 population.

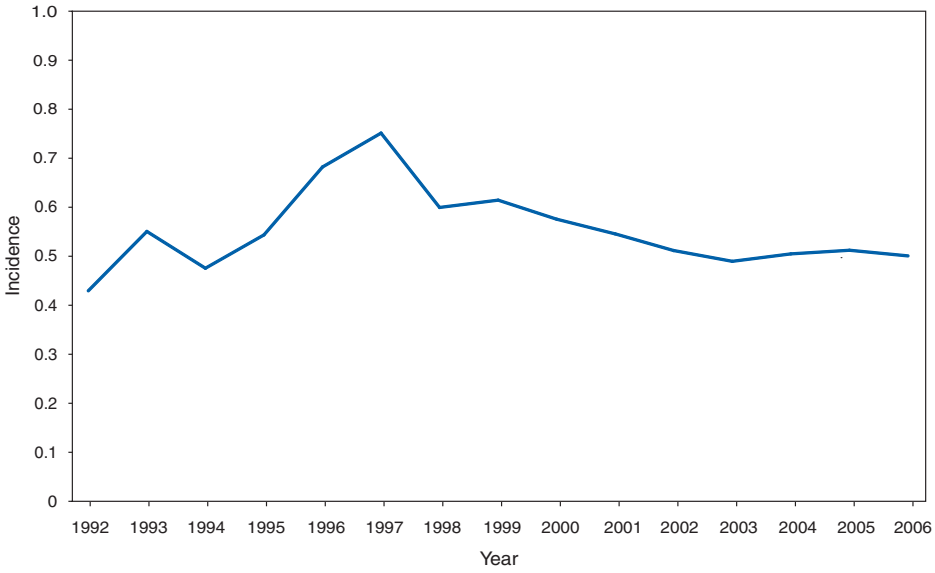
Listeriosis has been nationally notifiable since 2000. Although the infection is relatively uncommon, listeriosis is a leading cause of death attributable to foodborne illness in the United States. Recent outbreaks have been linked to deli meats and unpasteurized cheese.

LYME DISEASE. Number of reported cases, by county — United States, 2006



Cases are reported by state of residence rather than state of exposure. A rash that can be confused with the erythema migrans of 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.

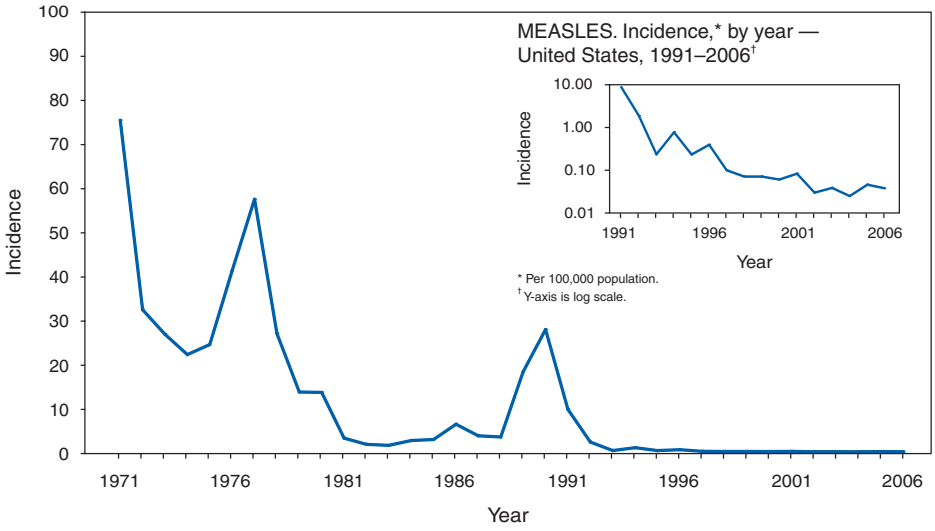
MALARIA. Incidence,* by year — United States, 1992–2006



* Per 100,000 population.

The number of reported cases of malaria in the United States has remained relatively stable for the preceding 15 years. Nearly all of these infections occur in persons who traveled recently to a malaria-endemic country.

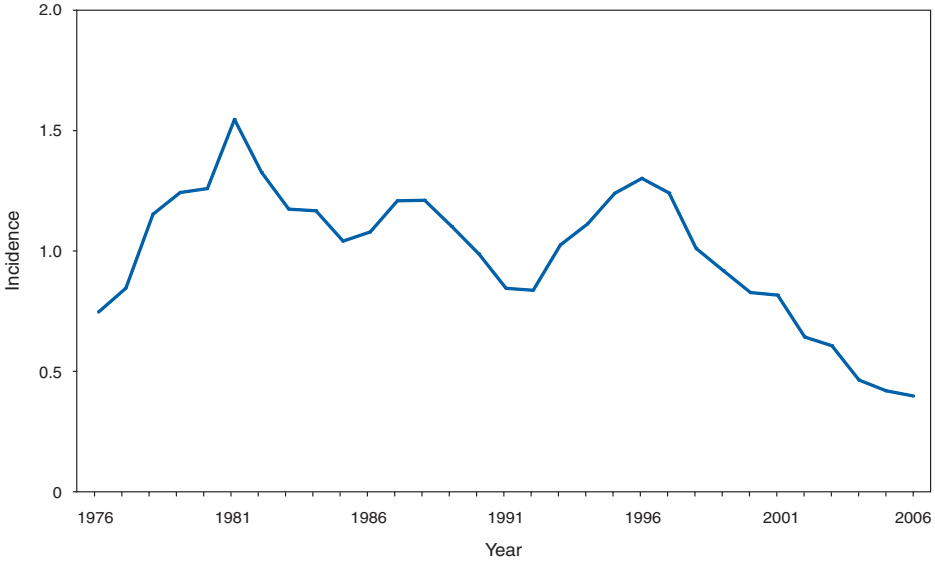
MEASLES. Incidence,* by year — United States, 1971–2006



* Per 100,000 population.

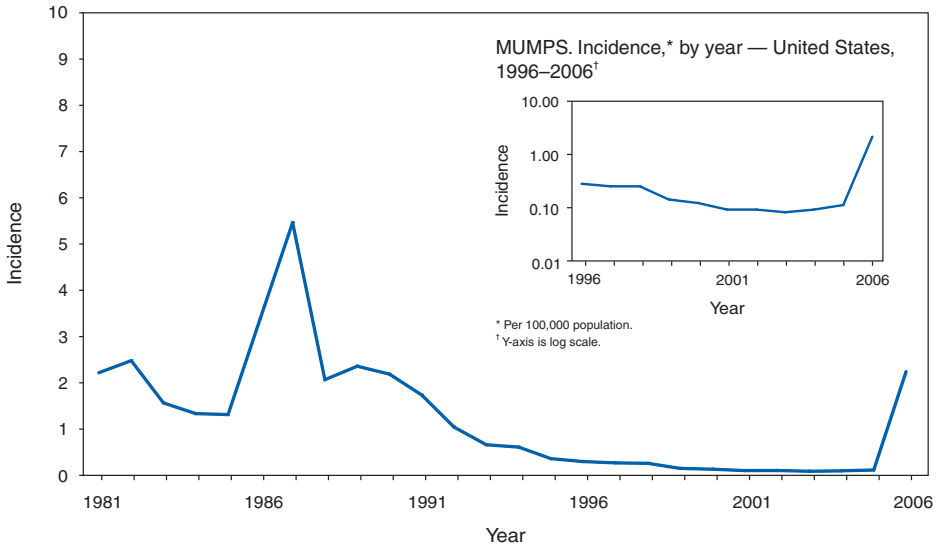
Measles vaccine was licensed in 1963. Evidence suggests that measles is no longer endemic in the United States.

MENINGOCOCCAL DISEASE, INVASIVE. Incidence,* by year — United States, 1976–2006



* Per 100,000 population.

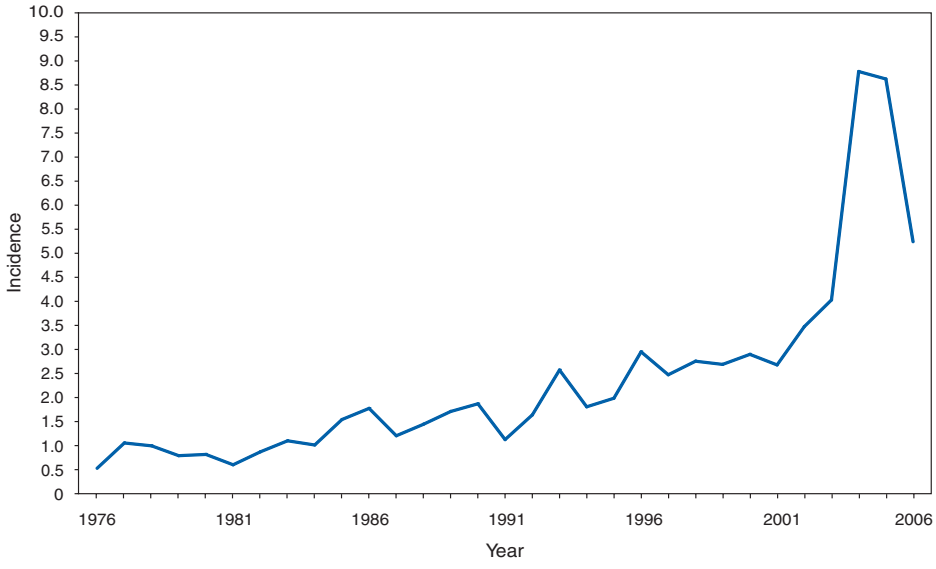
MUMPS. Incidence,* by year — United States, 1981–2006



* Per 100,000 population. Mumps vaccine was licensed in 1967.

In 2006 the U.S. experienced the largest mumps outbreak in two decades, affecting primarily non-Hispanic white college students aged 18–24 years living in the Midwest. As a result, the Advisory Committee on Immunization Practices (ACIP) updated its vaccination recommendations, and the Council of State and Territorial Epidemiologists (CSTE) updated its case definition.

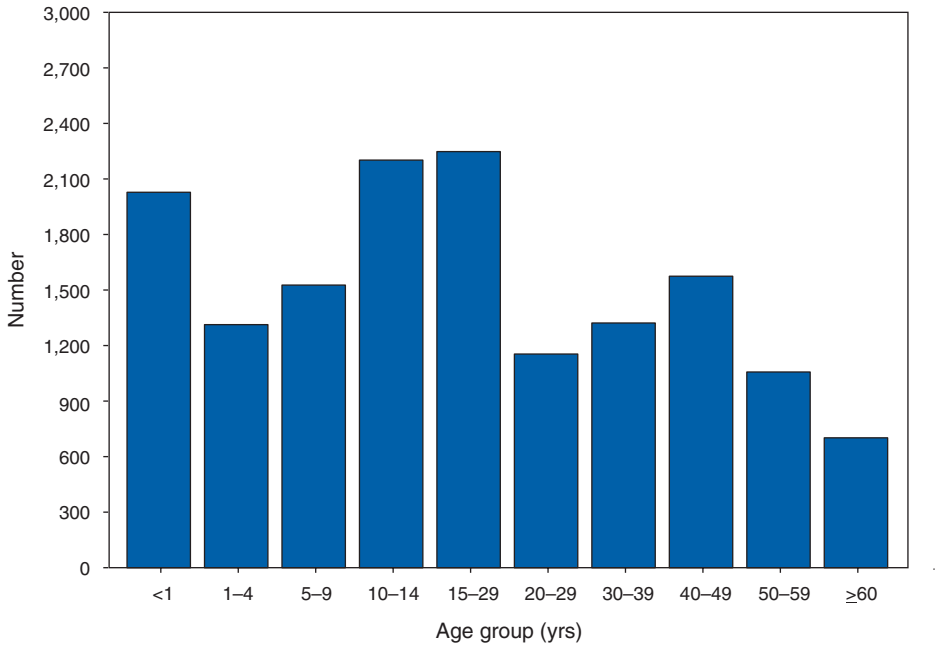
PERTUSSIS. Incidence,* by year — United States, 1976–2006



* Per 100,000 population.

In 2006, incidence of reported pertussis dropped sharply from the peak in 2004 but remains higher than in the 1990s. Reasons for this decrease are unknown, but several statewide outbreaks of pertussis contributed reported cases in 2004 and 2005, but not in 2006. Use of tetanus and diphtheria toxoids, acellular pertussis vaccine (Tdap) among adolescents and adults is not likely to have contributed to decreased pertussis reports because coverage with Tdap was low in 2006, the year adolescent and adult recommendations were published.

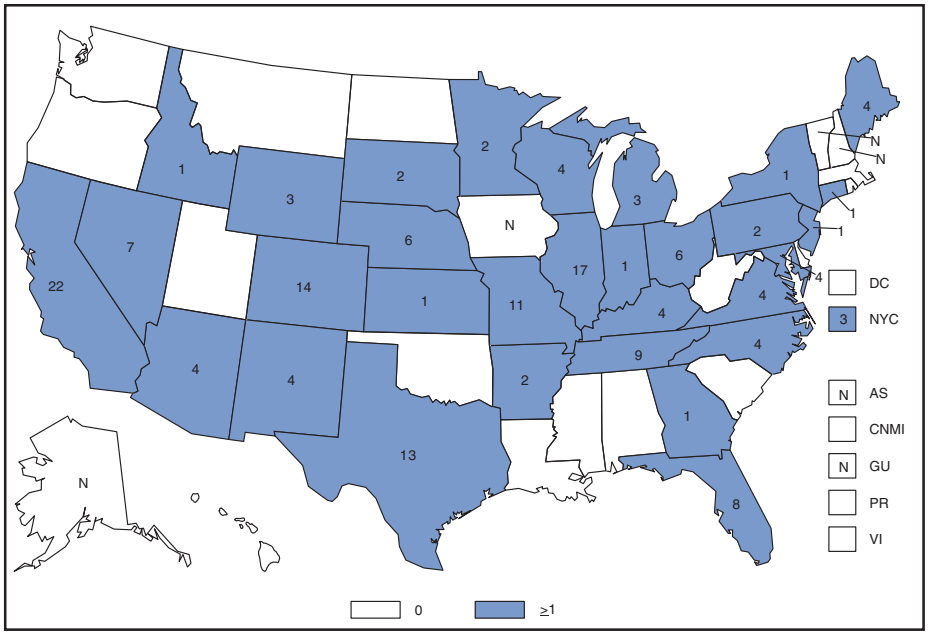
PERTUSSIS. Number of reported cases,* by age group — United States, 2006



*Of 15,632 cases of pertussis, age was reported as unknown for 503 persons.

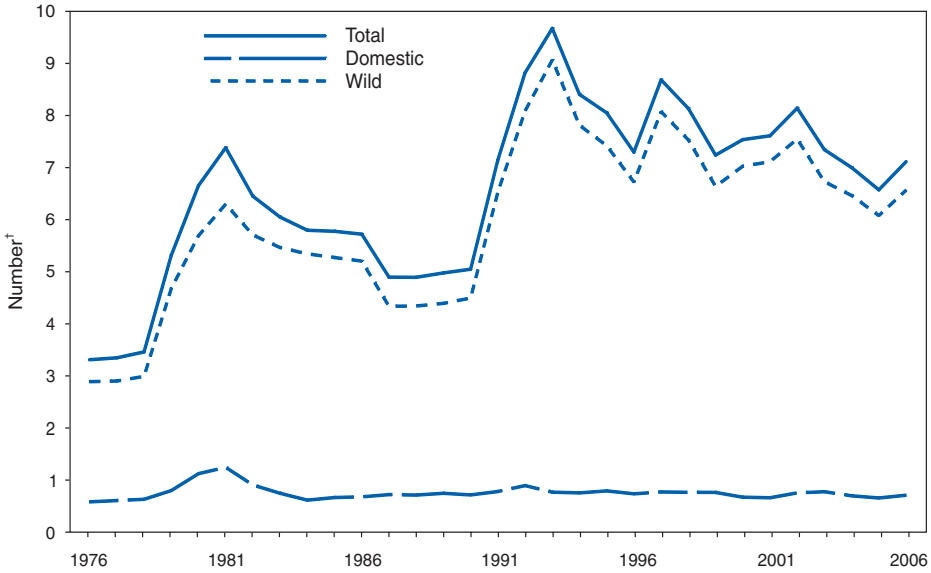
Pertussis is an acute, infectious cough illness that remains endemic in the United States despite longstanding routine childhood pertussis vaccination. Immunity to pertussis wanes 5–10 years after completion of childhood vaccination, leaving adolescents and adults susceptible to infection. Infants, especially those who are undervaccinated, are at increased risk for complicated infections and death from pertussis. Tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccine, adsorbed (Tdap) vaccine is recommended for adolescents and adults, both to reduce the burden of disease in those age groups and to reduce transmission to vulnerable infants.

Q FEVER. Number of reported cases — United States and U.S. territories, 2006



Q fever (caused by *Coxiella burnetii*) occurs through the United States, primarily as a result of human contact with livestock. In 1999, Q fever was made notifiable, effective January 1, 2000. Although more cases were reported in 2006 than in previous surveillance years, this is likely attributable to a continuing increase in national Q fever surveillance activities.

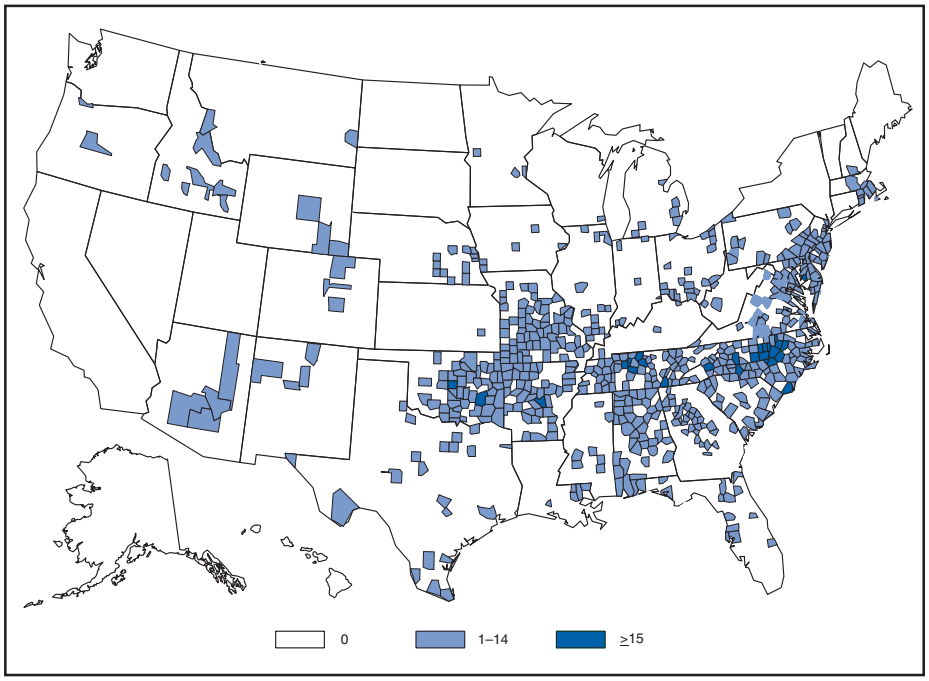
RABIES, ANIMAL. Number of reported cases among wild and domestic animals,* by year — United States and Puerto Rico, 1976–2006



* Data from the National Center for Zoonotic, Vector-Borne, and Enteric Diseases.
† In thousands.

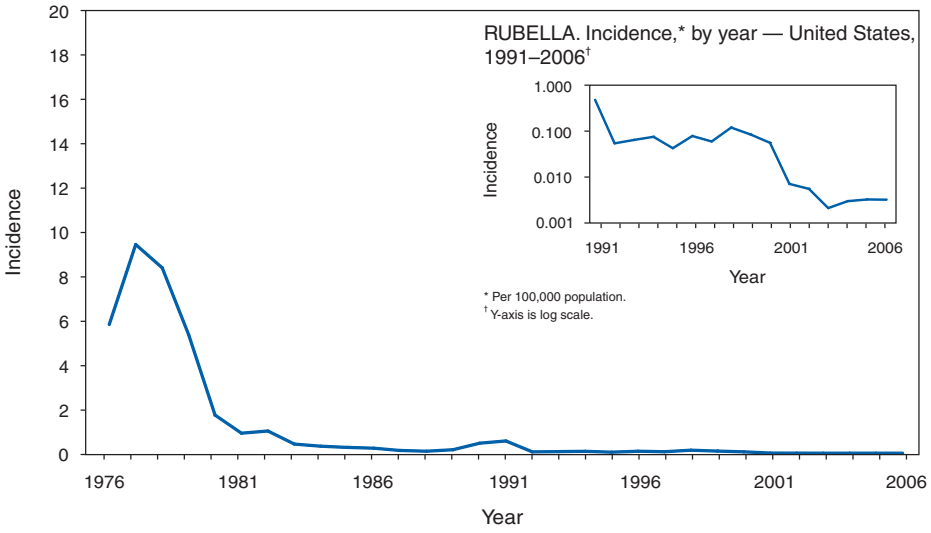
Periods of resurgence and decline of rabies incidence result primarily from cyclic reemergence. The recent increase of >8% in the number of reported cases from 2005 follows 3 years of decline. Although numeric increases are subject to surveillance bias, the proportion of positive cases among tested animals also increased in 2006. Recent increases in the number of reported cases of rabies in bats have led to this order of mammals becoming the second-most-reported group with rabies after raccoons. Ongoing public health control measures and interventions, such as domestic animal vaccination and the oral vaccination of wildlife species, contributed to the elimination of dog-to-dog rabies transmission in 2006.

ROCKY MOUNTAIN SPOTTED FEVER. Number of reported cases, by county — United States, 2006



Rocky Mountain spotted fever (RMSF) is caused by *Rickettsia rickettsii*. Since 2000, the number of reported cases of RMSF has increased during all but a single year. RMSF is reported throughout much of the United States, reflecting the ranges of the primary tick vectors responsible for transmission. Local and regional areas of new or increased reporting and higher incidence are evident in multiple states, including Idaho, Nebraska, North Carolina, and Tennessee.

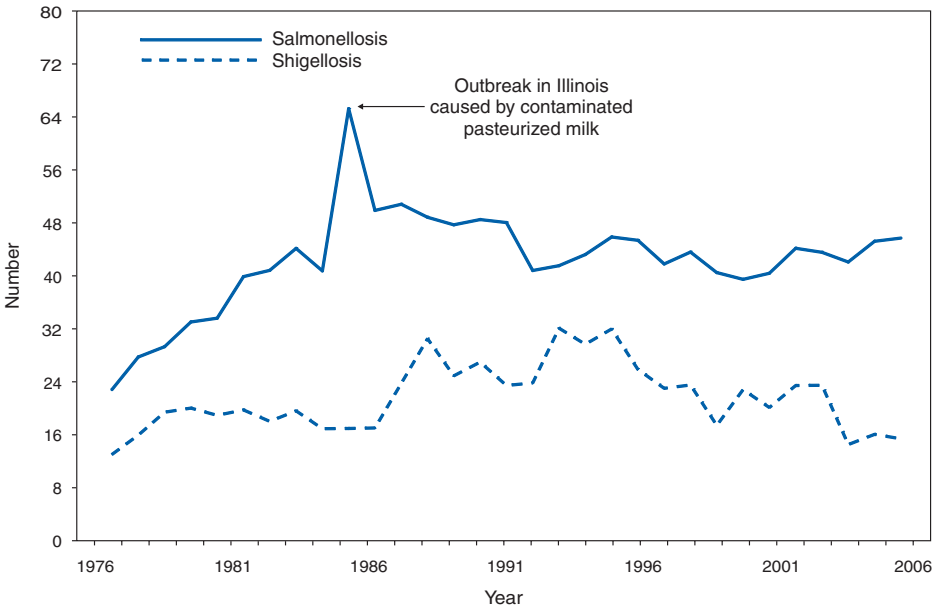
RUBELLA. Incidence,* by year — United States, 1976–2006



* Per 100,000 population.

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

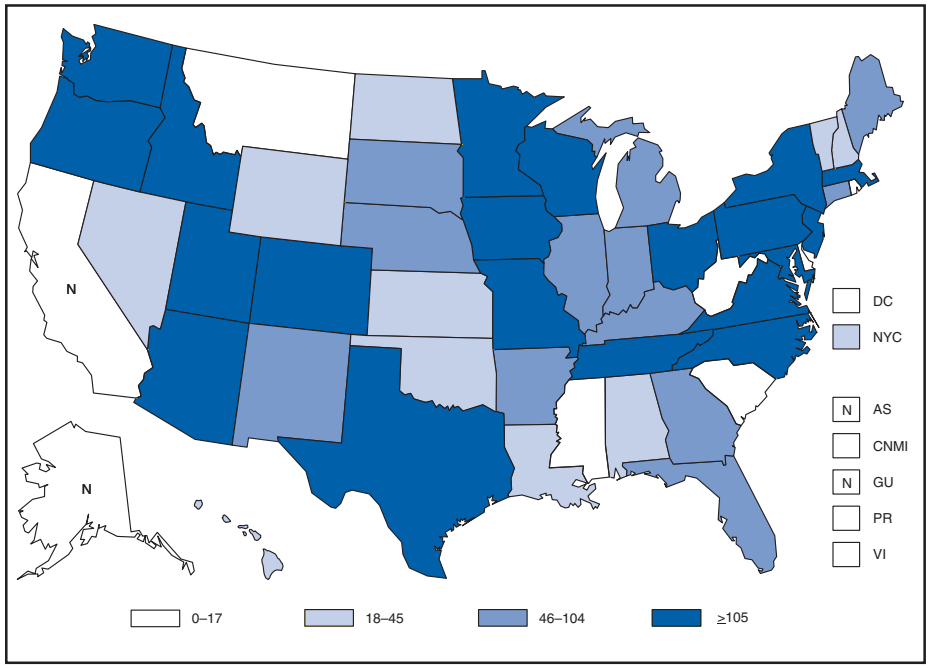
SALMONELLOSIS and SHIGELLOSIS. Number* of reported cases, by year — United States, 1976–2006



* In thousands.

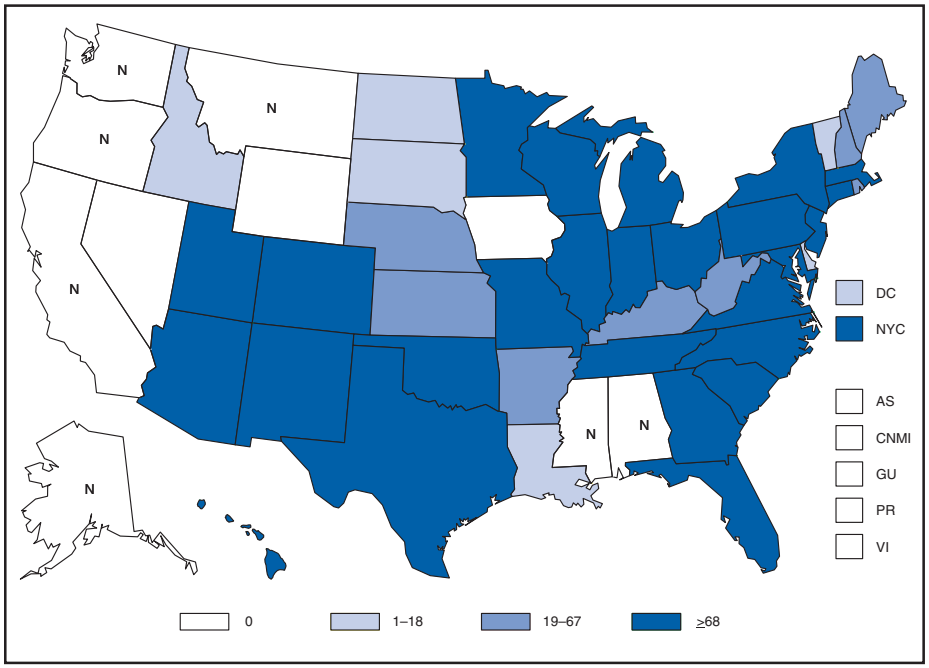
Foodborne transmission accounts for the majority of cases of salmonellosis. In the United States, serotypes Typhimurium, Enteritidis, and Newport are the most common serotypes. During 2006, large multistate outbreaks were linked to consumption of tomatoes, fruit salad, pet turtles, and peanut butter.

SHIGA TOXIN-PRODUCING *ESCHERICHIA COLI* (STEC). Number of reported cases — United States and U.S. territories, 2006



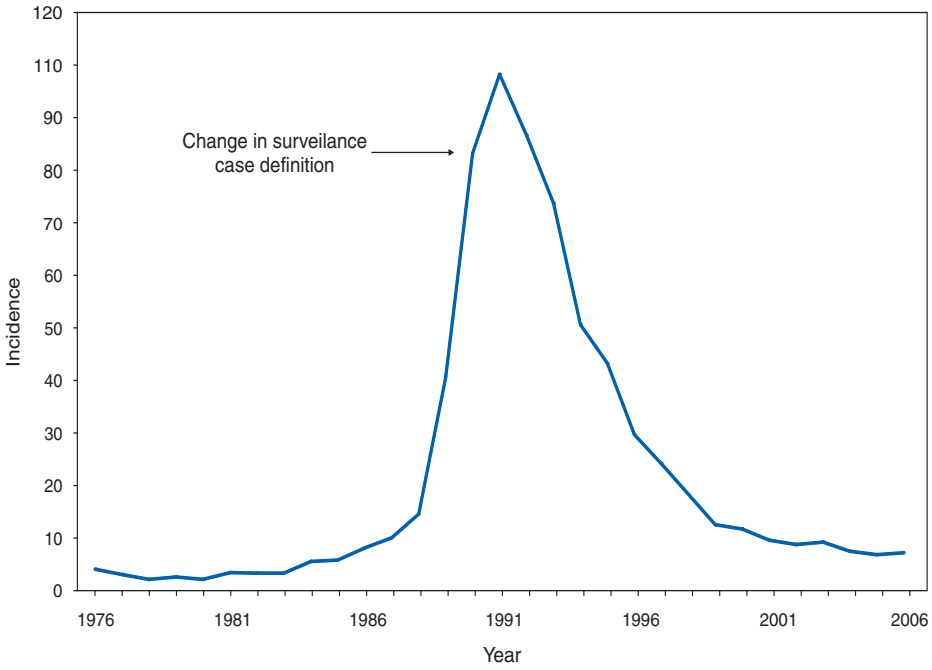
Escherichia coli O157:H7 is the most common serotype of Shiga toxin-producing *E. coli* (STEC) isolated from ill persons. Other serotypes of *E. coli* also produce Shiga toxin and can cause diarrhea and hemolytic uremic syndrome. *E. coli* O157:H7 has been nationally notifiable since 1994. In 2001, all enterohemorrhagic *E. coli* (EHEC) serotypes were made nationally notifiable. In 2006, the National Notifiable Diseases Surveillance System designation was changed by the Council of State and Territorial Epidemiologists from enterohemorrhagic *E. coli* (EHEC) to STEC, and reporting of serotypes to CDC was strongly encouraged.

STREPTOCOCCAL DISEASE, INVASIVE, GROUP A. Number of reported cases — United States and U.S. territories, 2006



Completeness of reporting of invasive group A streptococcal disease to the National Notifiable Diseases Surveillance System (NNDSS) is unknown. In 2006, NNDSS data indicated that incidence of disease was 2.24 cases per 100,000 persons. The NNDSS rate excludes data from seven states in which the disease was not reportable (Alabama, Alaska, California, Mississippi, Montana, Oregon, and Washington). In 2006, the estimated rate of disease from active, laboratory-based surveillance conducted in 10 U.S. sites was 3.8 cases per 100,000 population.

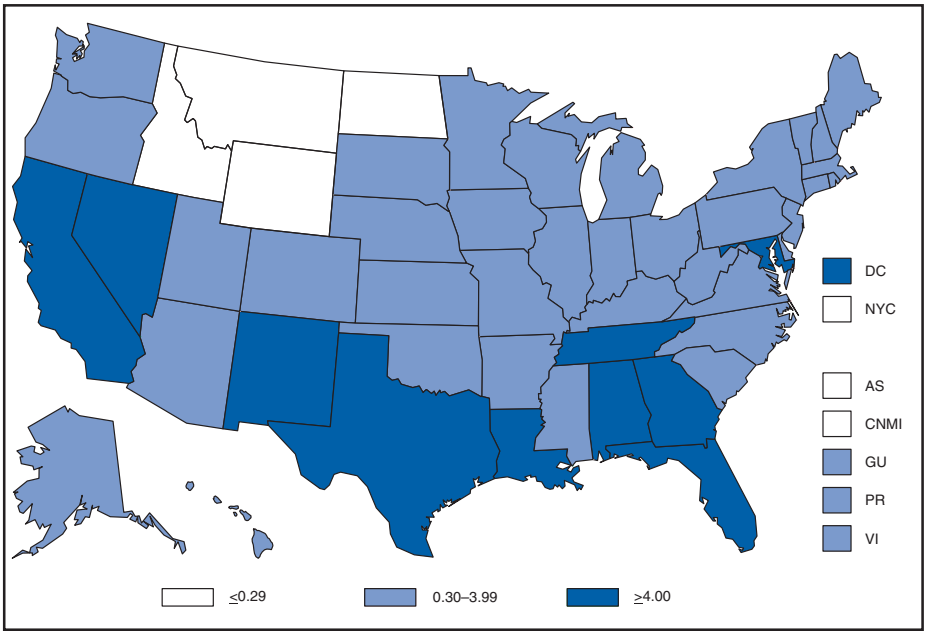
SYPHILIS, CONGENITAL. Incidence* among infants aged <1 year — United States, 1976–2006



* Per 100,000 live births.

Following a decline in the incidence of congenital syphilis since 1991, overall congenital syphilis rates increased slightly during 2005–2006, from 8.2 to 8.5 cases per 100,000 live births.

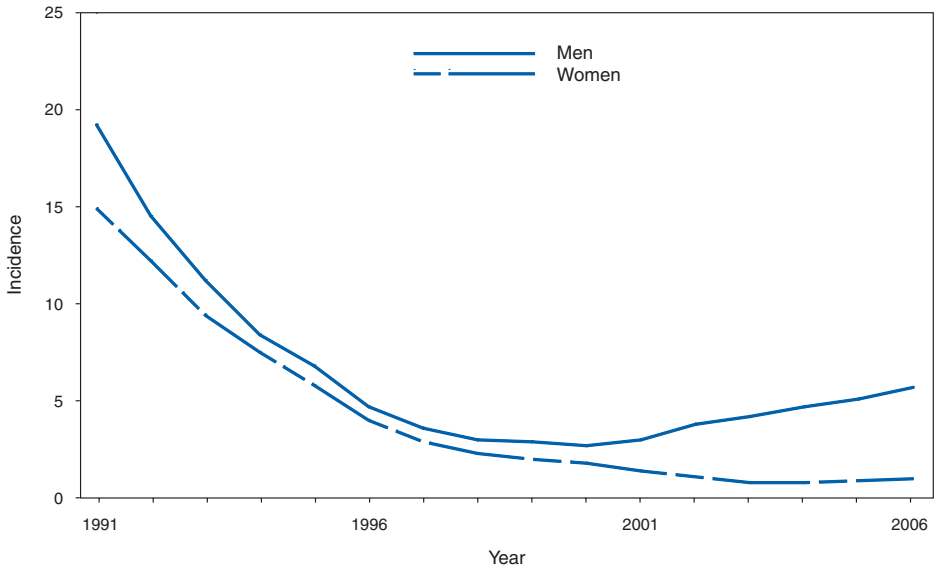
SYPHILIS, PRIMARY AND SECONDARY. Incidence* — United States, 2006



* Per 100,000 population.

In 2006, the primary and secondary syphilis rate in the United States and U.S. territories was 3.3 cases per 100,000 population, which is greater than the national health objective for 2010 of 0.2 cases per 100,000 population per year. Three states (Montana, North Dakota, and Wyoming) reported rates at or below the national objective.

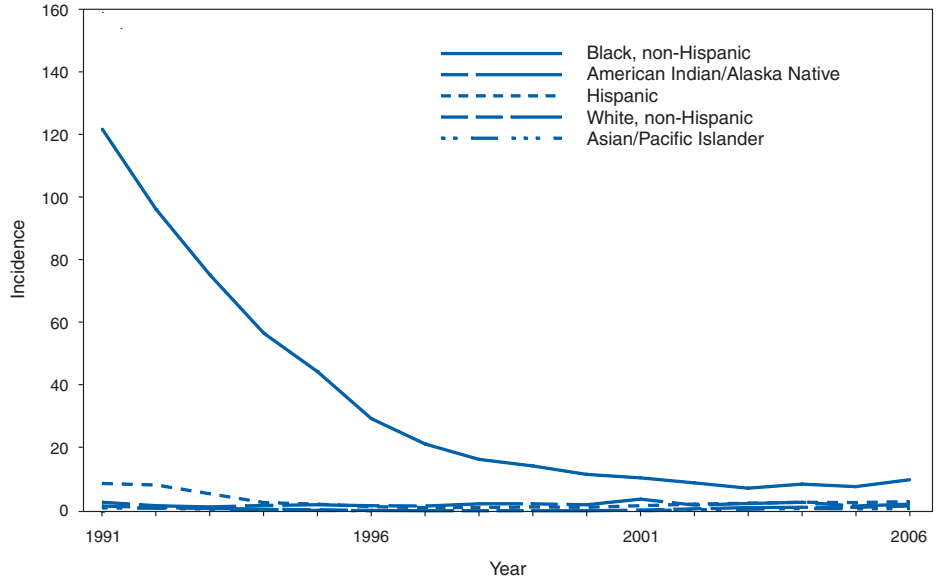
SYPHILIS, PRIMARY AND SECONDARY. Incidence,* by sex — United States, 1991–2006



* Per 100,000 population.

During 2005–2006, incidence of primary and secondary syphilis in the United States per 100,000 population increased slightly, from 2.9 to 3.3 cases (women: from 0.9 to 1.0; men: from 5.1 to 5.7).

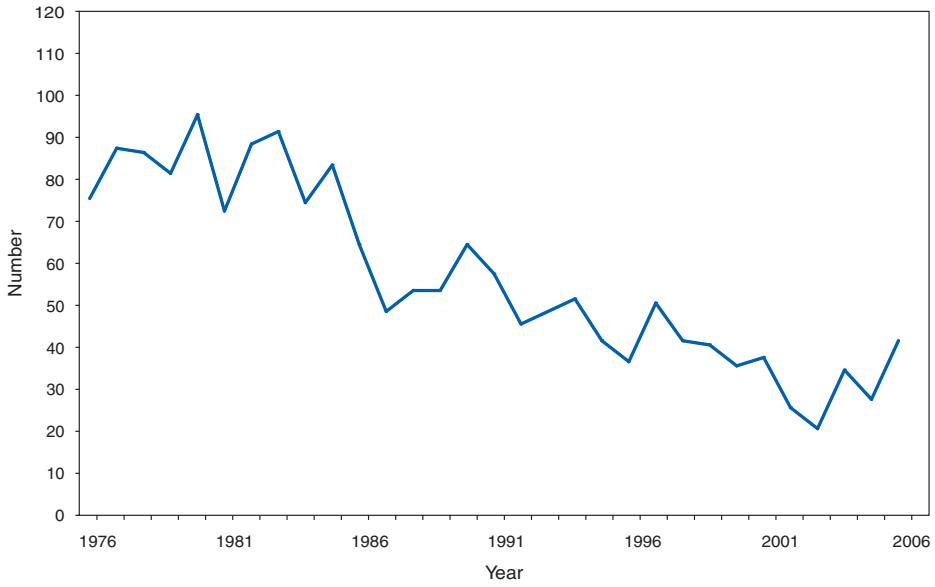
SYPHILIS, PRIMARY AND SECONDARY. Incidence,* by race/ethnicity — United States, 1991–2006



* Per 100,000 population.

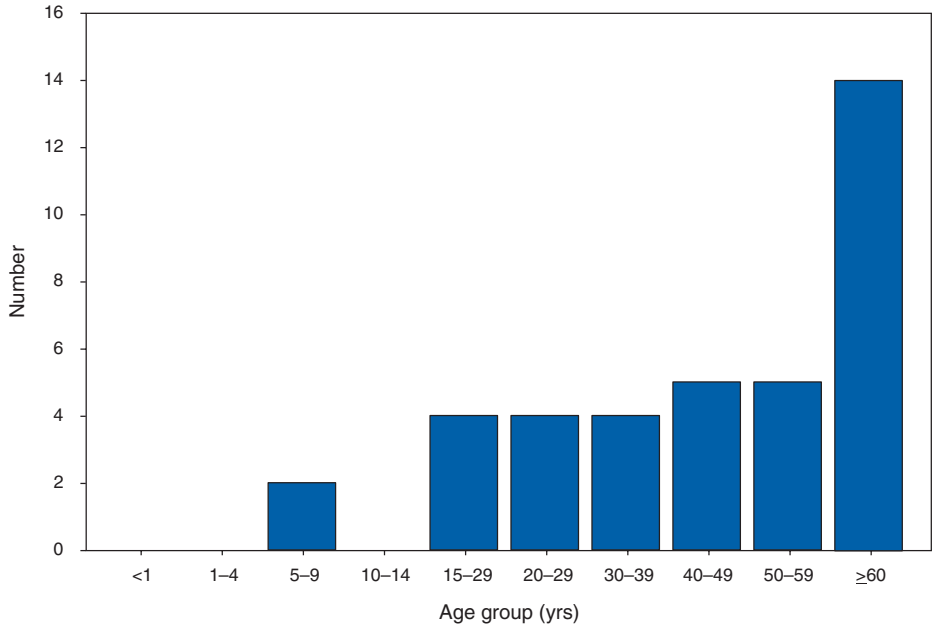
During 2005–2006, incidence of primary and secondary syphilis increased among all racial/ethnic populations. Incidence per 100,000 population increased from 9.7 to 11.3 among non-Hispanic blacks, from 3.2 to 3.6 among Hispanics, from 2.4 to 3.3 among American Indians/Alaska Natives, from 1.8 to 1.9 among non-Hispanic whites, and from 1.1 to 1.3 among Asians/Pacific Islanders.

TETANUS. Number of reported cases,* by year — United States, 1976–2006



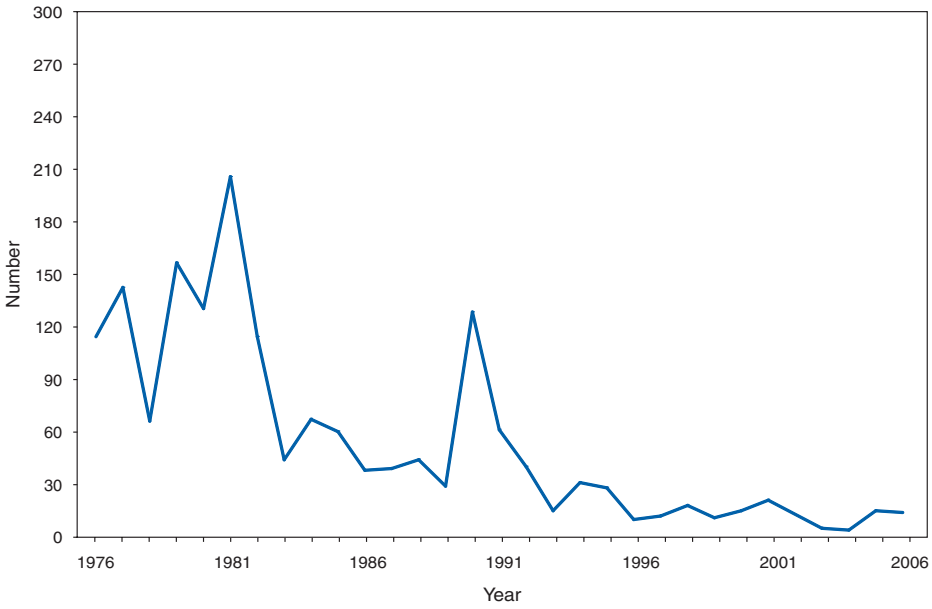
*Including neonatal cases.

TETANUS. Number of reported cases,* by age group — United States, 2006



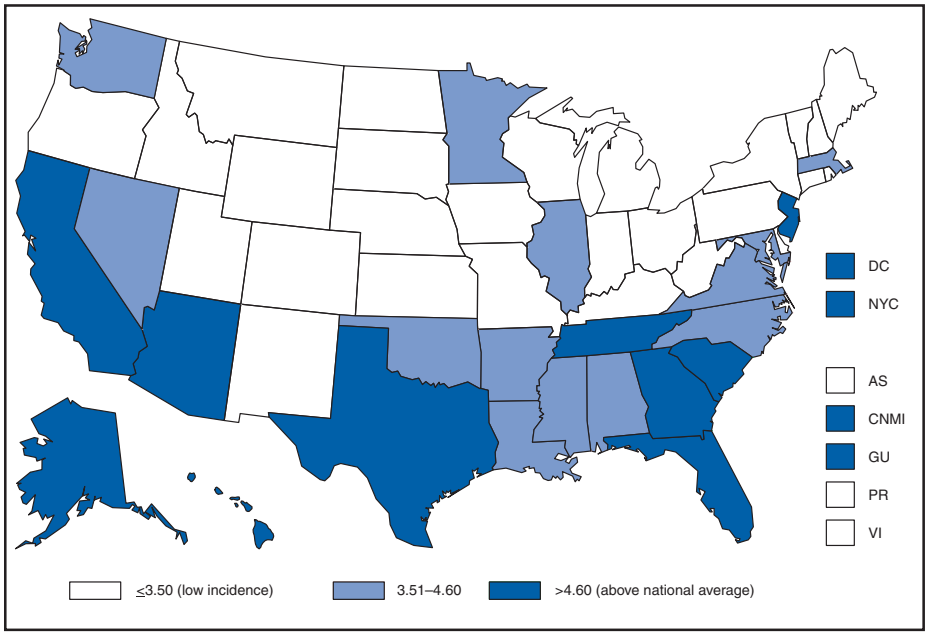
*Of 41 cases, age was unknown for four (10%) persons.

TRICHINELLOSIS. Number of reported cases, by year — United States, 1976–2006



For the eleventh consecutive year ≤25 cases of trichinellosis were reported to CDC. Cases were reported by nine states. Ingestion of raw or undercooked bear meat was implicated in three cases. No food vehicle of infection was identified for the remainder of the cases. Although improved methods of swine husbandry over the past several decades have made pork-associated cases of trichinellosis in the United States extremely rare, consumption of wild game meat continues to be the most commonly identified risk factor for trichinellosis.

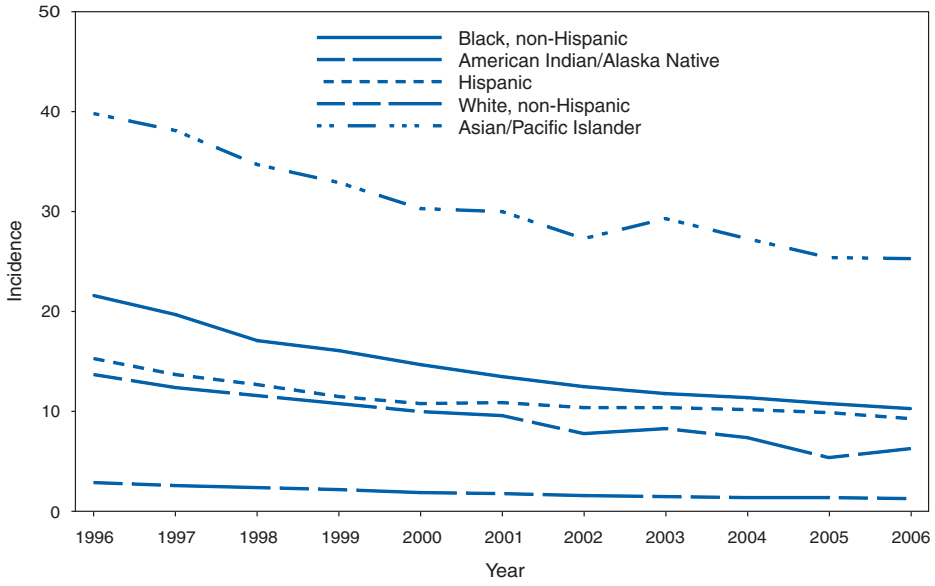
TUBERCULOSIS. Incidence* — United States and U.S. territories, 2006



* Per 100,000 population.

The national average for 2006 was 4.6 cases per 100,000 population. Ten states and the District of Columbia had incidence rates above the national average.

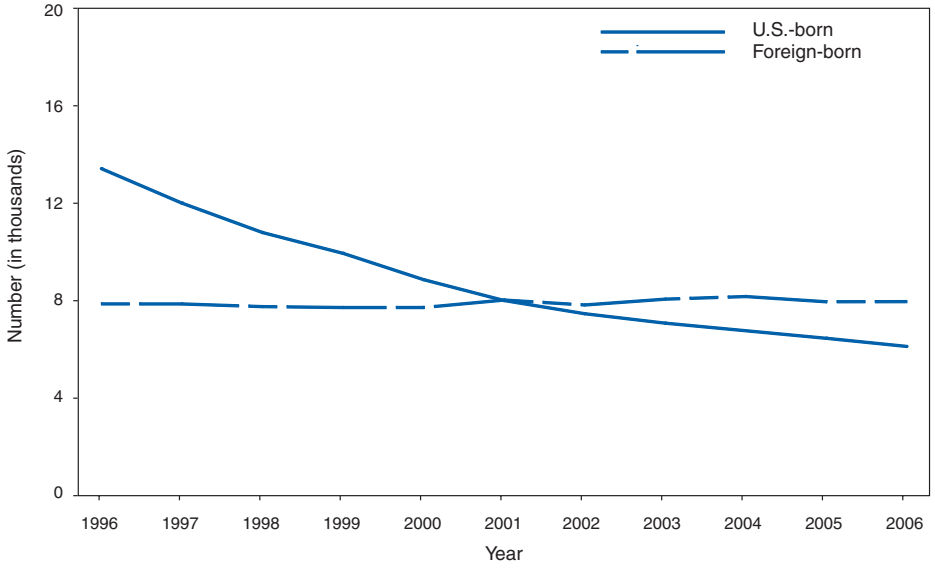
TUBERCULOSIS. Incidence,* by race/ethnicity — United States, 1996–2006



* Per 100,000 population.

Incidence of tuberculosis has continued to decline in all racial/ethnic populations since 1996. Incidence among American Indians/Alaska Natives appears to have trended slightly upward in 2006, but this might be attributable to small case numbers. Asians/Pacific Islanders continue to have the highest incidence rate among all racial/ethnic populations.

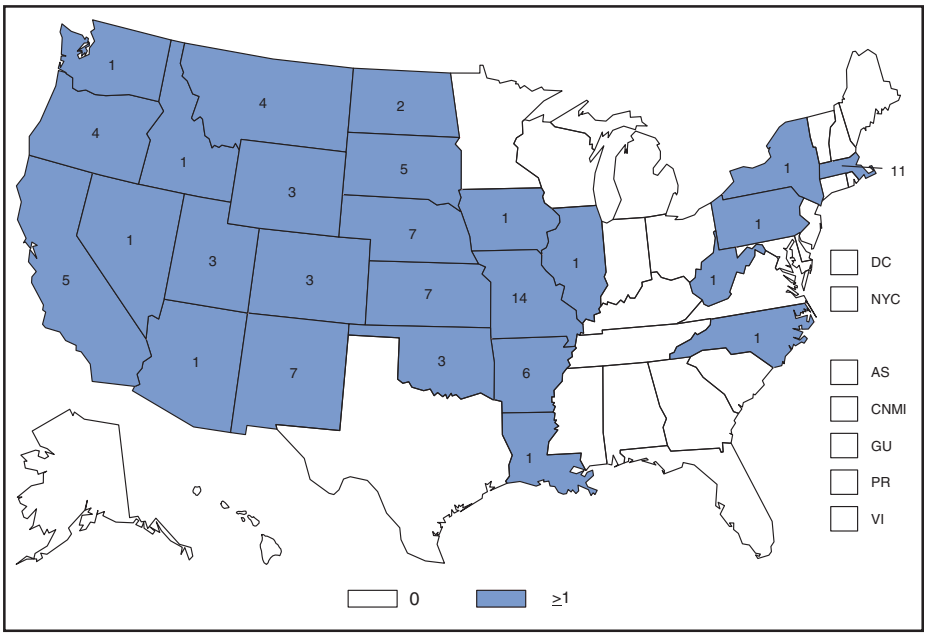
TUBERCULOSIS. Number of reported cases among U.S.-born and foreign-born persons,* by year — United States, 1996–2006



* For 46 cases, the patient's origin was unknown.

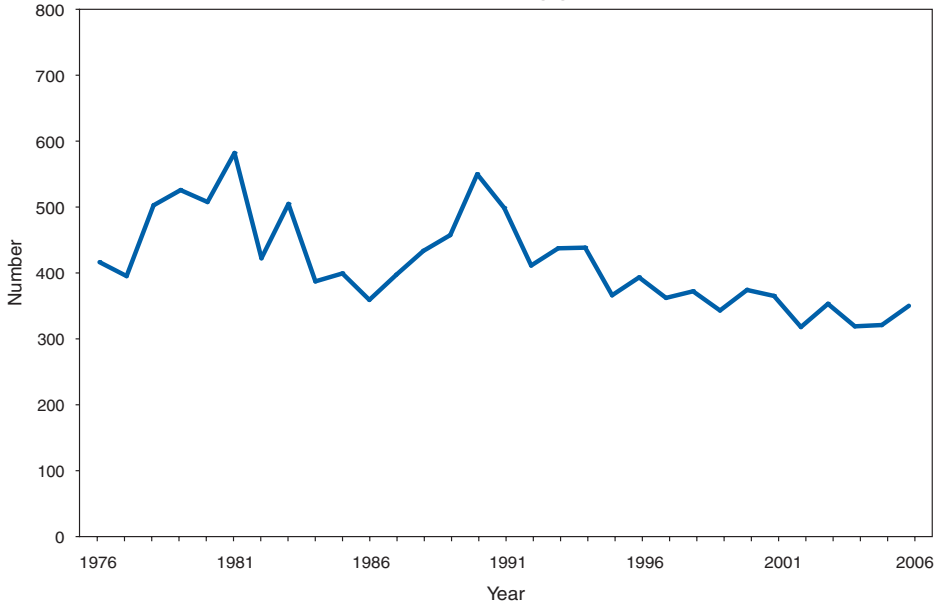
The gap in U.S.-born and foreign-born cases continued to widen in 2006. Since 2001, the number of foreign-born cases has exceeded that of U.S.-born cases.

TULAREMIA. Number of reported cases — United States and U.S. territories, 2006



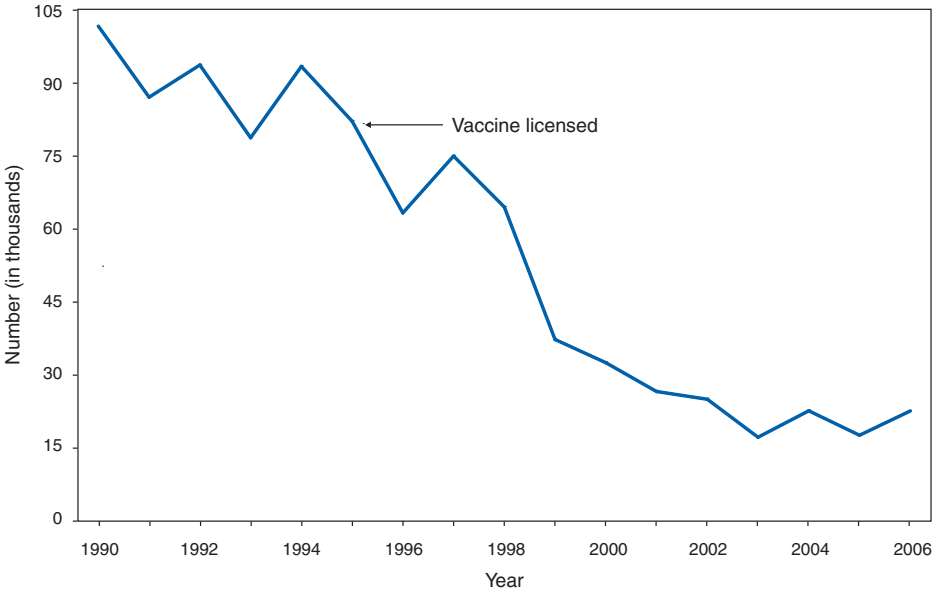
Five states (Arkansas, Kansas, Massachusetts, Missouri, and Nebraska) accounted for 50% of all cases of tularemia reported to CDC in 2006. To define the geographic distribution of *Francisella tularensis* subspecies better, CDC requests that isolates be forwarded to the CDC laboratory in Ft. Collins, Colorado.

TYPHOID FEVER. Number of reported cases, by year — United States, 1976–2006



Although the number of cases of typhoid fever reported annually appears to have stabilized, an increasing proportion of all cases of enteric fever appear to be caused by *Salmonella* Paratyphi A. Increasing antimicrobial resistance has complicated the management of cases of typhoid fever and cases of paratyphoid fever.

VARICELLA (CHICKENPOX). Number of reported cases — Illinois, Michigan, Texas, and West Virginia,* 1990–2006



Source: CDC. National Center for Immunization and Respiratory Diseases, 1990–2006.

* In four states (Michigan, Illinois, Texas, and West Virginia), the number of cases reported in 2006 was 34% higher than in 2005 and 76% less than the number reported during the prevaccine years 1993–1995. This figure has been modified from previous years to include updated data from Illinois.

PART 3

Historical Summaries of Notifiable Diseases in the United States, 1975–2006

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, 2006* might not match data in other CDC surveillance reports because of differences in the timing of reports, the source of the data, and the use of different case definitions.

TABLE 7. Reported incidence* of notifiable diseases — United States, 1996–2006

Disease	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
AIDS†	25.21	21.85	7.21	16.66	14.95	14.88	15.29	15.36	15.28	14.00	§
Anthrax	—	—	—	—	0	0.01	0	—	—	—	0
Botulism, total (includes wound & unspecified)	0.05	0.05	0.04	0.06	0.05	0.06	0.03	0.01	0.02	0.01	0.02
foodborne	0.01	0.02	0.01	0.01	0.01	0.01	0	0.01	0.01	0.01	0.01
Brucellosis	0.05	0.04	0.03	0.03	0.03	0.05	0.04	0.04	0.04	0.04	0.04
Chancroid	0.15	0.09	0.07	0.06	0.03	0.01	0.02	0.02	0	0.01	0.01
Chlamydia¶	188.10	196.80	236.57	254.10	257.76	278.32	296.55	304.71	319.61	332.51	347.80
Cholera	0.01	0.01	0.01	0	0	0	0	0	0	0	0
Coccidioidomycosis	0.64	0.65	0.99	3.58	4.69	6.71	3.03	2.57	4.14	6.24	6.79
Cryptosporidiosis	1.07	1.12	1.61	0.92	1.17	1.34	1.07	1.22	1.23	1.93	2.05
Cyclosporiasis	**	**	**	0.07	0.03	0.07	0.06	0.03	0.14	0.24	0.06
Diphtheria	0.01	0.01	0	0	0	0	0	0	0	0	0
Domestic arboviral diseases											
California sergroup											
neuroinvasive	—	—	—	—	—	—	—	—	—	0.02	0.02
nonneuroinvasive	**	**	**	**	**	**	**	**	**	0	0
eastern equine											
neuroinvasive	—	—	—	—	—	—	—	—	—	0.01	0
nonneuroinvasive	**	**	**	**	**	**	**	**	**	0	0
Powassan											
neuroinvasive	—	—	—	—	—	—	—	—	—	0	0
nonneuroinvasive	**	**	**	**	**	**	**	**	**	0	0
St. Louis											
neuroinvasive	—	—	—	—	—	—	—	—	—	0	0
nonneuroinvasive	**	**	**	**	**	**	**	**	**	0	0
West Nile											
neuroinvasive	—	—	—	—	—	—	—	—	—	0.45	0.50
nonneuroinvasive	**	**	**	**	**	**	**	**	**	0.58	0.94
western equine											
neuroinvasive	—	—	—	—	—	—	—	—	—	0	0
nonneuroinvasive	**	**	**	**	**	**	**	**	**	0	0
Ehrlichiosis											
human granulocytic (HGE)	**	**	0.16	0.14	0.15	0.10	0.18	0.13	0.20	0.28	0.23
human monocytic (HME)	**	**	0.03	0.06	0.09	0.05	0.08	0.11	0.12	0.18	0.20
human (other & unspecified)	**	**	††	††	††	††	††	††	††	0.04	0.08
Encephalitis/meningitis, arboviral§§											
California serogroup	0.04	0.04	0.04	0.03	0.04	0.05	0.06	0.06	0	§§	§§
eastern equine	0	0	0	0	0	0	0	0	0	§§	§§
Powassan	**	**	**	**	**	**	0	0	0	§§	§§
St. Louis	0	0.01	0.01	0	0	0.03	0.01	0.01	0	§§	§§
West Nile	**	**	**	**	**	**	1.01	1.00	0.43	§§	§§
Western equine	0	0	0	0	0	0	0	0	—	§§	§§
Enterohemorrhagic *Escherichia coli*											
0157:H7	1.18	1.04	1.28	1.77	1.74	1.22	1.36	0.93	0.87	0.89	**
non-0157	**	**	**	**	**	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
Gonorrhea	122.80	121.40	132.88	133.20	131.65	128.53	125.03	116.37	113.52	115.64	120.90
Haemophilus influenzae, invasive disease											
all ages, serotypes	0.45	0.44	0.44	0.48	0.51	0.57	0.62	0.70	0.72	0.78	0.82
age<5 yrs											
serotype b	**	**	**	**	**	**	0.18	0.16	0.03	0.04	0.14
nonserotype b	**	**	**	**	**	**	0.75	0.59	0.04	0.67	0.86
unknown serotype	**	**	**	**	**	**	0.80	1.15	0.97	1.08	0.88
Hansen disease (leprosy)	0.05	0.05	0.05	0.04	0.04	0.03	0.04	0.03	0.04	0.03	0.03

* Per 100,000 population
† Acquired immunodeficiency syndrome (AIDS).
§ CDC is upgrading its national surveillance data management system for human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). During this transition, CDC is not updating AIDS or HIV infection surveillance data. Therefore, no updates are provided for HIV and AIDS data in this *Summary*.
¶ Chlamydia refers to genital infections caused by *C. trachomatis*.
** Not nationally notifiable.
†† Data for ehrlichiosis attributable to other or unspecified agents were being withheld from publication pending the outcome of discussions about the reclassification of certain *Ehrlichia* species, which would probably affect how data in this category was reported.
§§ See also "Domestic arboviral" disease incidence rates in this table for years 2005 and 2006. In 2005 and 2006, the domestic arboviral disease surveillance case definitions and categories were revised. The nationally notifiable arboviral encephalitis and meningitis conditions continued to be nationally notifiable in 2005 and 2006, but 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.

TABLE 7. (*Continued*) Reported incidence* of notifiable diseases — United States, 1996–2006

Disease	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Hantavirus Pulmonary Syndrome	NA	NA	NA	NA	0.02	0	0.01	0.01	0.01	0.01	0.01
Hemolytic uremic syndrome postdiarrheal	NA	NA	NA	NA	0.10	0.08	0.08	0.06	0.07	0.08	0.11
Hepatitis, viral, acute											
A	11.70	11.22	8.59	6.25	4.91	3.77	3.13	2.66	1.95	1.53	1.21
B	4.01	3.90	3.80	2.82	2.95	2.79	2.84	2.61	2.14	1.78	1.62
C	1.41	1.43	1.30	1.14	1.17	1.41	0.65	0.38	0.31	0.23	0.26
Influenza-associated pediatric mortality	**	**	**	**	**	**	**	**	**	0.02	0.07
Legionellosis	0.47	0.44	0.51	0.41	0.42	0.42	0.47	0.78	0.71	0.78	0.96
Listeriosis	**	**	**	0.31	0.29	0.22	0.24	0.24	0.32	0.31	0.30
Lyme disease	6.21	4.79	6.39	5.99	6.53	6.05	8.44	7.39	6.84	7.94	6.75
Malaria	0.68	0.75	0.60	0.61	0.57	0.55	0.51	0.49	0.51	0.51	0.50
Measles	0.20	0.06	0.04	0.04	0.03	0.04	0.02	0.02	0.01	0.02	0.02
Meningococcal disease, invasive											
all serogroups	1.30	1.24	1.01	0.92	0.83	0.83	0.64	0.61	0.47	0.42	0.40
serogroup A,C,Y, & W-135	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	0.10	0.11
serogroup B	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	0.05	0.07
other serogroup	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	0.01	0.01
serogroup unknown	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	¶¶	0.26	0.22
Mumps	0.29	0.27	0.25	0.14	0.13	0.10	0.10	0.08	0.09	0.11	2.22
Pertussis	2.94	2.46	2.74	2.67	2.88	2.69	3.47	4.04	8.88	8.72	5.27
Plague	0.01	0.01	0	0	0	0	0	0	0	0	0.01
Poliomyelitis, paralytic	0.03	0.02	0.01	0	0	0	0	0	0	0	0
Psittacosis	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0	0	0.01	0.01
Q Fever	**	**	**	0	0.01	0.01	0.02	0.02	0.03	0.05	0.06
Rabies, human	0.01	0.01	0	0	0	0	0	0	0	0	0
Rocky Mountain spotted fever	0.32	0.16	0.14	0.21	0.18	0.25	0.39	0.38	0.60	0.66	0.80
Rubella	0.10	0.07	0.13	0.10	0.06	0.01	0.01	0	0	0	0
Rubella, congenital syndrome	0	0	0	0	0	0	0	0	0	0	0
Salmonellosis	17.15	15.66	16.17	14.89	14.51	14.39	15.73	15.16	14.47	15.43	15.45
(SARS-CoV) ***	**	**	**	**	**	**	**	0	—	—	—
Shigellosis	9.80	8.64	8.74	6.43	8.41	7.19	8.37	8.19	4.99	5.51	5.23
Shiga toxin *E. coli* (STEC)	**	**	**	**	**	**	**	**	**	**	1.71
Smallpox	**	**	**	**	**	**	**	**	—	—	—
Streptococcal disease, invasive, group A	0.55	0.75	0.83	0.87	1.45	1.60	1.69	2.04	1.82	2.00	2.24
Streptococcal, toxic shock syndrome	0	0.01	0.02	0.02	0.04	0.04	0.05	0.06	0.06	0.07	0.06
Streptococcus, pneumoniae, invasive disease, age <5 yrs	**	**	**	**	**	1.03	3.62	8.86	8.22	8.21	11.93
Streptococcus, pneumoniae, invasive disease, drug-resistant, all ages	0.57	0.67	1.44	2.39	2.77	2.11	1.14	0.99	1.49	1.42	2.19
Syphilis											
primary & secondary	4.29	3.19	2.61	2.50	2.19	2.17	2.44	2.49	2.71	2.97	3.29
total, all stages	19.97	17.39	14.19	13.07	11.58	11.45	11.68	11.90	11.94	11.33	12.46
Tetanus	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Toxic-shock syndrome	0.06	0.06	0.06	0.05	0.06	0.05	0.05	0.05	0.04	0.04	0.05
Trichinellosis	0.01	0.01	0.01	0	0.01	0.01	0.01	0	0	0.01	0.01
Tuberculosis	8.04	7.42	6.79	6.43	6.01	5.68	5.36	5.17	5.09	4.80	4.65
Tularemia	**	**	**	**	0.06	0.05	0.03	0.04	0.05	0.05	0.03
Tyhoid fever	0.15	0.14	0.14	0.13	0.14	0.13	0.11	0.12	0.11	0.11	0.12
Vancomycin-intermediate *Staphylococcus aureus*	**	**	**	**	**	**	**	**	—	0	0
Vancomycin-resistant *Staphylococcus aureus*	**	**	**	**	**	**	**	**	0	0	0
Varicella (chickenpox)†††	44.13	93.55	70.28	44.56	26.18	19.51	10.27	7.27	18.41	19.64	28.65
Yellow fever	0	—	—	0	—	—	0	—	—	—	—

¶¶ To help public health specialists monitor the impact of the new meningococcal conjugate vaccine (Menactra, licensed in the U.S. 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-vaccine-preventable fraction of disease (serogroup B and others).
*** Severe acute respiratory syndrome–associated coronavirus disease.
††† Varicella became a nationally notifiable disease in 2003.

TABLE 8. Reported cases of notifiable diseases — United States, 1999–2006

Disease	1999	2000	2001	2002	2003	2004	2005	2006
AIDS*	45,104	40,758	41,868	42,745	44,232	44,108	41,120	†
Anthrax	—	1	23	2	—	—	—	1
Botulism, total (including wound & unspecified)	154	138	155	118	129	133	135	48
foodborne	23	23	39	28	20	16	19	20
infant	92	93	97	69	76	87	85	97
Brucellosis	82	87	136	125	104	114	120	121
Chancroid	143	78	38	67	54	30	17	33§
Chlamydia¶	656,721	702,093	783,242	834,555	877,478	929,462	976,445	1,030,911§
Cholera	6	5	3	2	2	5	8	9
Coccidioidomycosis	2,826	2,867	3,922	4,968	4,870	6,449	6,542	8,917
Cryptosporidiosis	2,361	3,128	3,785	3,016	3,506	3,577	5,659	6,071
Cyclosporiasis	56	60	147	156	75	171	543	137
Diphtheria	1	1	2	1	1	—	—	—
Domestic arboviral diseases**								
California serogroup								
neuroinvasive	—	—	—	—	—	—	73	64
nonneuroinvasive	††	††	††	††	††	††	7	5
eastern equine								
neuroinvasive	—	—	—	—	—	—	21	8
nonneuroinvasive	††	††	††	††	††	††	—	—
Powassan								
neuroinvasive	—	—	—	—	—	—	1	1
nonneuroinvasive	††	††	††	††	††	††	—	—
St. Louis								
neuroinvasive	—	—	—	—	—	—	7	7
nonneuroinvasive	††	††	††	††	††	††	6	3
western equine								
neuroinvasive	—	—	—	—	—	—	—	—
nonneuroinvasive	††	††	††	††	††	††	—	—
West Nile								
neuroinvasive	—	—	—	—	—	—	1,309	1,495
nonneuroinvasive	††	††	††	††	††	††	1,691	2,774
Ehrlichiosis								
human granulocytic	203	351	261	511	362	537	786	646
human monocytic	99	200	142	216	321	338	506	578
human (other & unspecified)	§§	§§	§§	§§	§§	§§	112	231
Encephalitis/Meningitis, arboviral								
California serogroup	70	114	128	164	108	112	¶¶	¶¶
eastern equine	5	3	9	10	14	6	¶¶	¶¶
Powassan	††	††	††	1	—	1	¶¶	¶¶
St. Louis	4	2	79	28	41	12	¶¶	¶¶
West Nile	††	††	††	2,840	2,866	1,142	¶¶	¶¶
western equine	1	—	—	—	—	—	¶¶	¶¶
Enterohemorrhagic *Escherichia coli* infection								
Shiga toxin-positive								
O157:H7	4,513	4,528	3,287	3,840	2,671	2,544	2,621	††
non-O157	††	††	171	194	252	316	501	††
not serogrouped	††	††	20	60	156	308	407	††
Giardiasis	††	††	††	21,206	19,709	20,636	19,733	18,953
Gonorrhea	360,076	358,995	361,705	351,852	335,104	330,132	339,593	358,366§
Haemophilus influenzae, invasive disease								
all ages, serotypes	1,309	1,398	1,597	1,743	2,013	2,085	2,304	2,496
age <5 yrs								
serotype b	††	††	††	34	32	19	9	29
nonserotype b	††	††	††	144	117	135	135	175
unknown serotype	††	††	††	153	227	177	217	179
Hansen disease (leprosy)	108	91	79	96	95	105	87	66

* Acquired immunodeficiency syndrome.
† CDC is upgrading its national surveillance data management system for human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). During this transition, CDC is not updating AIDS or HIV infection surveillance data. Therefore, no updates are provided for HIV and AIDS data in this *Summary*.
§ Cases were updated through the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of June 22, 2007.
¶ Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.
** Data provided by the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (NCZVED) (ArboNET Surveillance), as of June 1, 2007.
†† Not nationally notifiable.
§§ Data on ehrlichiosis attributable to other or unspecified agents were withheld from publication pending the outcome of discussions about the reclassification of certain *Ehrlichia* species, which probably could affect how data in this category are reported.
¶¶ See also domestic arboviral disease incidence in this table for year 2005. In 2005 and 2006, the domestic arboviral disease surveillance case definitions and categories were revised. The nationally notifiable arboviral encephalitis and meningitis conditions continued to be nationally notifiable in 2005, 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.

TABLE 8. (*Continued*) Reported cases of notifiable diseases — United States, 1999–2006

Disease	1999	2000	2001	2002	2003	2004	2005	2006
Hantavirus pulmonary syndrome	33	41	8	19	26	24	26	40
Hemolytic uremic syndrome, postdiarrheal	181	249	202	216	178	200	221	288
Hepatitis, viral, acute***								
A	17,047	13,397	10,609	8,795	7,653	5,683	4,488	3,579
B	7,694	8,036	7,843	7,996	7,526	6,212	5,119	4,713
C	3,111	3,197	3,976	1,835	1,102	720	652	766
Influenza-associated pediatric mortality	††	††	††	††	††	††	45	43
Legionellosis	1,108	1,127	1,168	1,321	2,232	2,093	2,301	2,834
Listeriosis	823	755	613	665	696	753	896	884
Lyme disease	16,273	17,730	17,029	23,763	21,273	19,804	23,305	19,931
Malaria	1,666	1,560	1,544	1,430	1,402	1,458	1,494	1,474
Measles	100	86	116	44	56	37	66	55
Meningococcal disease, invasive†††								
all serogroups	2,501	2,256	2,333	1,814	1,756	1,361	1,245	1,194
serogroup A, C, Y, & W-135	—	—	—	—	—	—	297	318
serogroup B	—	—	—	—	—	—	156	193
other serogroup	—	—	—	—	—	—	27	32
serogroup unknown	—	—	—	—	—	—	765	651
Mumps	387	338	266	270	231	258	314	6,584
Pertussis	7,288	7,867	7,580	9,771	11,647	25,827	25,616	15,632
Plague	9	6	2	2	1	3	8	17
Poliomyelitis, paralytic§§§	2	—	—	—	—	—	1	—
Psittacosis	16	17	25	18	12	12	16	21
Q Fever	††	21	26	61	71	70	136	169
Rabies								
animal	6,730	6,934	7,150	7,609	6,846	6,345	5,915	5,534
human	—	4	1	3	2	7	2	3
Rocky Mountain spotted fever	579	495	695	1,104	1,091	1,713	1,936	2,288
Rubella	267	176	23	18	7	10	11	11
Rubella, congenital syndrome	9	9	3	1	1	—	1	1
Salmonellosis	40,596	39,574	40,495	44,264	43,657	42,197	45,322	45,808
SARS-CoV¶¶¶	††	††	††	††	8	—	—	—
Shiga toxin-producing *Escherichia coli* (STEC)	††	††	††	††	††	††	††	4,432
Shigellosis	17,521	22,922	20,221	23,541	23,581	14,627	16,168	15,503
Streptococcal disease, invasive, group A	2,667	3,144	3,750	4,720	5,872	4,395	4,715	5,407
Streptococcal toxic-shock syndrome	65	83	77	118	161	132	129	125
Streptococcus pneumoniae, invasive disease, age <5 yrs	††	††	498	513	845	1,162	1,495	1,861
Streptococcus pneumoniae, invasive disease, drug-resistant, all ages	4,625	4,533	2,896	2,546	2,356	2,590	2,996	3,308
Syphilis								
all stages	35,628	31,575	32,221	32,871	34,270	33,401	33,278	36,935****
congenital (age <1 yr)	556	529	441	412	413	353	329	349
primary & secondary	6,657	5,979	6,103	6,862	7,177	7,980	8,724§	9,756
Tetanus	40	35	37	25	20	34	27	41
Toxic-shock syndrome	113	135	127	109	133	95	90	101
Trichinellosis	12	16	22	14	6	5	16	15
Tuberculosis	17,531	16,377	15,989	15,075	14,874	14,517	14,097	13,779††††
Tularemia	††	142	129	90	129	134	154	95
Typhoid fever	346	377	368	321	356	322	324	353
Vancomycin-intermediate *Staphylococcus aureus*	††	††	††	††	††	—	3	6
Vancomycin-resistant *Staphylococcus aureus*	††	††	††	††	††	1	2	1
Varicella (chickenpox)§§§§	46,016	27,382	22,536	22,841	20,948	32,931	32,242	48,445
Varicella (deaths)¶¶¶¶	††	††	††	9	2	9	3	—
Yellow fever*****	—	—	—	1	—	—	—	—

*** The anti-hepatitis C virus antibody test became available May 1990. Data on chronic hepatitis B and hepatitis C virus infection (past or present) are not included because they are undergoing data quality review.

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

§§§ Cases of vaccine-associated paralytic poliomyelitis (VAPP) 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).

¶¶¶ 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 (CCID).

**** Totals reported to the Division of STD Prevention, NCHHSTP, as of June 22, 2006.

†††† Cases were updated through the Division of TB Elimination, NCHHSTP, as of May 25, 2007.

§§§§ Varicella was taken off the nationally notifiable disease list in 1991. Varicella again became nationally notifiable in 2003.

¶¶¶¶ Death counts provided by the Division of Viral Diseases, National Center for Immunization and Respiratory Diseases, as of December 31, 2006.

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

TABLE 9. Reported cases of notifiable diseases — United States, 1991–1998

Disease	1991	1992	1993	1994	1995	1996	1997	1998
AIDS*	43,672	45,472	103,691	78,279	71,547	66,885	58,492	46,521
Amebiasis	2,989	2,942	2,970	2,983	†	†	†	†
Anthrax	—	1	—	—	—	—	—	—
Aseptic meningitis	14,526	12,223	12,848	8,932	†	†	†	†
Botulism, total (including wound & unspecified)	114	91	97	143	97	119	132	116
foodborne	27	21	27	50	24	25	31	22
infant	81	66	65	85	54	80	79	65
Brucellosis	104	105	120	119	98	112	98	79
Chancroid	3,476	1,886	1,399	773	606	386	243	189§
Chlamydia¶	†	†	†	†	477,638	498,884	526,671	604,420§
Cholera	26	103	18	39	23	4	6	17
Coccidioidomycosis	†	†	†	†	1,212	1,697	1,749	2,274
Cryptosporidiosis	†	†	†	†	2,970	2,827	2,566	3,793
Diphtheria	5	4	—	2	—	2	4	1
Encephalitis								
primary	1,021	774	919	717	†	†	†	†
postinfectious	82	129	170	143	†	†	†	†
Encephalitis/Meningitis								
California serogroup viral	†	†	†	†	11	123	129	97
eastern Equine	†	†	†	†	1	5	14	4
St. Louis	†	†	†	†	†	2	13	24
western Equine	†	†	†	†	—	2	—	—
Escherichia coli 0157:H7	†	†	†	1,420	2,139	2,741	2,555	3,161
Gonorrhea	620,478	501,409	439,673	418,068	392,848	325,883	324,907	355,642§
Granuloma inguinale	29	6	19	3	†	†	†	†
Haemophilus influenzae, invasive disease								
all ages, serotypes	†	1,412	1,419	1,174	1,180	1,170	1,162	1,194
Hansen disease (leprosy)	154	172	187	136	144	112	122	108
Hantavirus Pulmonary Syndrome	†	†	†	†	—	NA	NA	NA
Hemolytic uremic syndrome, postdiarrheal	†	†	†	†	72	97	91	119
Hepatitis, viral, acute								
A	24,378	23,112	24,238	26,796	31,582	31,032	30,021	23,229
B	18,003	16,126	13,361	12,517	10,805	10,637	10,416	10,258
C/non-A, non-B**	3,582	6,010	4,786	4,470	4,576	3,716	3,816	3,518
unspecified	1,260	884	627	444	†	†	†	†

* Acquired immunodeficiency syndrome.
† Not nationally notifiable.
§ Cases were updated through the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), as of June 22, 2007.
¶ Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.
** The anti-hepatitis C virus antibody test became available in May 1990.

TABLE 9. (*Continued*) Reported cases of notifiable diseases — United States, 1991–1998

Disease	1991	1992	1993	1994	1995	1996	1997	1998
Legionellosis	1,317	1,339	1,280	1,615	1,241	1,198	1,163	1,355
Leptospirosis	58	54	51	38	†	†	†	†
Lyme disease	9,465	9,895	8,257	13,043	11,700	16,455	12,801	16,801
Lymphogranuloma venereum	471	302	285	235	†	†	†	†
Malaria	1,278	1,087	1,411	1,229	1,419	1,800	2,001	1,611
Measles	9,643	2,237	312	963	309	508	138	100
Meningococcal disease, invasive	2,130	2,134	2,637	2,886	3,243	3,437	3,308	2,725
Mumps	4,264	2,572	1,692	1,537	906	751	683	666
Murine typhus fever	43	28	25	†	†	†	†	†
Pertussis	2,719	4,083	6,586	4,617	5,137	7,796	6,564	7,405
Plague	11	13	10	17	9	5	4	9
Poliomyelitis, paralytic	10	6	4	8	7	7	6	3
Psittacosis	94	92	60	38	64	42	33	47
Rabies								
animal	6,910	8,589	9,377	8,147	7,811	6,982	8,105	7,259
human	3	1	3	6	5	3	2	1
Rheumatic fever, acute	127	75	112	112	†	†	†	†
Rocky Mountain spotted fever	628	502	456	465	590	831	409	365
Rubella	1,401	160	192	227	128	238	181	364
Rubella, congenital syndrome	47	11	5	7	6	4	5	7
Salmonellosis, excluding typhoid fever	48,154	40,912	41,641	43,323	45,970	45,471	41,901	43,694
Shigellosis	23,548	23,931	32,198	29,769	32,080	25,978	23,117	23,626
Streptococcal disease, invasive, group A	†	†	†	†	613	1,445	1,973	2,260
Streptococcal toxic-shock syndrome	†	†	†	†	10	19	33	58
Streptococcus pneumoniae, invasive disease, drug-resistant, all ages	†	†	†	†	309	1,514	1,799	2,823
Syphilis								
all stages	128,569	112,581	101,259	81,696	68,953	52,976	46,540	37,977
primary & secondary	42,935	33,973	26,498	20,627	16,500	11,387	8,550	6,993
Tetanus	57	45	48	51	41	36	50	41
Toxicshock syndrome	280	244	212	192	191	145	157	138
Trichinellosis	62	41	16	32	29	11	13	19
Tuberculosis	26,283	26,673	25,313	24,361	22,860	21,337	19,851	18,361††
Tularemia	193	159	132	96	†	†	†	†
Typhoid fever	501	414	440	441	369	396	365	375
Varicella§§	147,076	158,364	134,722	151,219	120,624	83,511	98,727	82,455
Yellow fever¶¶	—	—	—	—	—	1	—	—

†† Cases were updated through the Division of TB Elimination, NCHHSTP, as of June 22, 2007.

§§ Varicella was taken off the nationally notifiable disease list in 1991. Certain states continued to report these cases to CDC. Varicella became nationally notifiable again in 2003.

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

TABLE 10. Reported cases of notifiable diseases* — United States, 1983–1990

Disease	1983	1984	1985	1986	1987	1988	1989	1990
AIDS†	§	4,445	8,249	12,932	21,070	31,001	33,722	41,595
Amebiasis	6,658	5,252	4,433	3,532	3,123	2,860	3,217	3,328
Anthrax	—	1	—	—	1	2	—	
Aseptic meningitis	12,696	8,326	10,619	11,374	11,487	7,234	10,274	11,852
Botulism, total (including wound & unspecified)	133	123	122	109	82	84	89	92
foodborne	§	§	49	23	17	28	23	23
infant	§	§	70	79	59	50	60	65
Brucellosis	200	131	153	106	129	96	95	82
Chancroid	847	666	2,067	3,756	4,998	5,001	4,692	4,212
Cholera	1	1	4	23	6	8	—	6
Diphtheria¶	5	1	3	—	3	2	3	4
Encephalitis								
primary	1,761	1,257	1,376	1,302	1,418	882	981	1,341
postinfectious**	34	108	161	124	121	121	88	105
Gonorrhea	900,435	878,556	911,419	900,868	780,905	719,536	733,151	690,169
Granuloma inguinale	24	30	44	61	22	11	7	97
Hansen disease (leprosy)	259	290	361	270	238	184	163	198
Hepatitis, viral, acute								
A	21,532	22,040	23,210	23,430	25,280	28,507	35,821	31,441
B	24,318	26,115	26,611	26,107	25,916	23,177	23,419	21,102
C/non-A, non-B††	§	3,871	4,184	3,634	2,999	2,619	2,529	2,553
unspecified	7,149	5,531	5,517	3,940	3,102	2,470	2,306	1,671
Legionellosis	852	750	830	980	1,038	1,085	1,190	1,370
Leptospirosis	61	40	57	41	43	54	93	77
Lymphogranuloma venereum	335	170	226	396	303	185	189	277
Malaria	813	1,007	1,049	1,123	944	1,099	1,277	1,292
Measles	1,497	2,587	2,822	6,282	3,655	3,396	18,193	27,786
Meningococcal disease, invasive	2,736	2,746	2,479	2,594	2,930	2,964	2,727	2,451
Mumps	3,355	3,021	2,982	7,790	12,848	4,866	5,712	5,292
Murine typhus fever	62	53	37	67	49	54	41	50
Pertussis	2,463	2,276	3,589	4,195	2,823	3,450	4,157	4,570
Plague	40	31	17	10	12	15	4	2
Poliomyelitis, total	13	9	8	10	§§	§§	§§	§§
paralytic§§	13	9	8	10	9	9	11	6
Psittacosis	142	172	119	224	98	114	116	113
Rabies								
animal	5,878	5,567	5,565	5,504	4,658	4,651	4,724	4,826
human	2	3	1	—	1	—	1	1
Rheumatic fever, acute	88	117	90	147	141	158	144	108
Rocky Mountain spotted fever	1,126	838	714	760	604	609	623	651
Rubella	970	752	630	551	306	225	396	1,125
Rubella, congenital syndrome	22	5	—	14	5	6	3	11
Salmonellosis	44,250	40,861	65,347	49,984	50,916	48,948	47,812	48,603
Shigellosis	19,719	17,371	17,057	17,138	23,860	30,617	25,010	27,077
Syphilis, primary & secondary	32,698	28,607	27,131	27,883	35,147	40,117	44,540	50,223
total, all stages	74,637	69,888	67,563	68,215	86,545	103,437	110,797	134,255
Tetanus	91	74	83	64	48	53	53	64
Toxic-shock syndrome	§	482	384	412	372	390	400	322
Trichinosis	45	68	61	39	40	45	30	129
Tuberculosis	23,846	22,255	22,201	22,768	22,517	22,436	23,495	25,701
Tularemia	310	291	177	170	214	201	152	152
Typhoid fever	507	390	402	362	400	436	460	552
Varicella	177,462	221,983	178,162	183,243	213,196	192,857	185,441	173,099

* No cases of yellow fever were reported during 1983–1990
† Acquired immunodeficiency syndrome.
§ Not nationally notifiable.
¶ Cutaneous diphtheria ceased being notifiable nationally after 1979.
** Beginning in 1984, data were recorded by date of record to state health departments. Before 1984, data were recorded by onset date.
†† The anti-hepatitis C virus antibody test became available in May 1990.
§§ No cases of paralytic poliomyelitis caused by wild virus have been reported in the United States since 1993.

TABLE 11. Reported cases of notifiable diseases* — United States, 1975–1982

Disease	1975	1976	1977	1978	1979	1980	1981	1982
Amebiasis	2,775	2,906	3,044	3,937	4,107	5,271	6,632	7,304
Anthrax	2	2	—	6	—	1	—	—
Aseptic meningitis	4,475	3,510	4,789	6,573	8,754	8,028	9,547	9,680
Botulism, total (including wound & unspecified)	20	55	129	105	45	89	103	97
Brucellosis	310	296	232	179	215	183	185	173
Chancroid	700	628	455	521	840	788	850	1,392
Cholera	—	—	3	12	1	9	19	—
Diphtheria	307	128	84	76	59	3	5	2
Encephalitis								
primary	4,064	1,651	1,414	1,351	1,504	1,362	1,492	1,464
postinfectious	237	175	119	78	84	40	43	36
Gonorrhea	999,937	1,001,994	1,002,219	1,013,436	1,004,058	1,004,029	990,864	960,633
Granuloma inguinale	60	71	75	72	76	51	66	17
Hansen disease (leprosy)	162	145	151	168	185	223	256	250
Hepatitis								
A (infectious)	35,855	33,288	31,153	29,500	30,407	29,087	25,802	23,403
B (serum)	13,121	14,973	16,831	15,016	15,452	19,015	21,152	22,177
unspecified	†	7,488	8,639	8,776	10,534	11,894	10,975	8,564
Legionellosis	†	235	359	761	593	475	408	654
Leptospirosis	93	73	71	110	94	85	82	100
Lymphogranuloma venereum	353	365	348	284	250	199	263	235
Malaria	373	471	547	731	894	2,062	1,388	1,056
Measles	24,374	41,126	57,345	26,871	13,597	13,506	3,124	1,714
Meningococcal disease, invasive	1,478	1,605	1,828	2,505	2,724	2,840	3,525	3,056
Mumps	59,647	38,492	21,436	16,817	14,225	8,576	4,941	5,270
Murine typhus fever	41	69	75	46	69	81	61	58
Pertussis	1,738	1,010	2,177	2,063	1,623	1,730	1,248	1,895
Plague	20	16	18	12	13	18	13	19
Poliomyelitis, total	13	10	19	8	22	9	10	12
paralytic	13	10	19	8	22	9	10	12
Psittacosis	49	78	94	140	137	124	136	152
Rabies								
animal	2,627	3,073	3,130	3,254	5,119	6,421	7,118	6,212
human	2	2	1	4	4	—	2	—
Rheumatic fever, acute	2,854	1,865	1,738	851	629	432	264	137
Rocky Mountain spotted fever	844	937	1,153	1,063	1,070	1,163	1,192	976
Rubella	16,652	12,491	20,395	18,269	11,795	3,904	2,077	2,325
Rubella, congenital syndrome	30	30	23	30	62	50	19	7
Salmonellosis	22,612	22,937	27,850	29,410	33,138	33,715	39,990	40,936
Shigellosis	16,584	13,140	16,052	19,511	20,135	19,041	9,859	18,129
Syphilis								
primary & secondary	25,561	23,731	20,399	21,656	24,874	27,204	31,266	33,613
total, all stages	80,356	71,761	64,621	64,875	67,049	68,832	72,799	75,579
Tetanus	102	75	87	86	81	95	72	88
Trichinosis	252	115	143	67	157	131	206	115
Tuberculosis§	33,989	32,105	30,145	28,521	27,669	27,749	27,373	25,520
Tularemia	129	157	165	141	196	234	288	275
Typhoid fever	375	419	398	505	528	510	584	425
Varicella	154,248	183,990	188,396	154,089	199,081	190,894	200,766	167,423

* No cases of yellow fever were reported during 1975–1982.
† Not nationally notifiable.
§ Case data are not comparable with earlier years because of changes in reporting criteria that became effective in 1975.

Table 12. Deaths from selected nationally notifiable infectious diseases — United States, 2002–2004

Cause of death	ICD-10* cause of death code	No. deaths 2002	2003	2004
AIDS†	B20–B24	14,095	13,658	13,063
Anthrax	A22	0	0	0
Botulism, foodborne	A05.1	2	6	0
Brucellosis	A23	1	0	0
Chancroid	A57	0	0	0
Chlamydia§	A56	0	0	0
Cholera	A00	0	0	0
Coccidioidomycosis	B38	84	73	100
Cryptosporidiosis	A07.2	1	0	1
Cyclosporiasis	A07.8	0	0	0
Diphtheria	A36	0	1	0
Ehrlichiosis	A79.8	0	1	0
Encephalitis, aboviral				
California serogroup	A83.5	0	0	0
eastern equine	A83.2	1	1	2
St. Louis	A83.3	3	2	2
western equine	A83.1	0	0	0
Giardiasis	A07.1	1	0	1
Gonococcal infections	A54	7	6	2
Haemophilus influenzae	A49.2	7	5	11
Hansen disease (leprosy)	A30	2	2	5
Hantavirus pulmonary syndrome	A98.5	0	0	0
Hemolytic uremic syndrome, postdiarrheal	D59.3	35	29	27
Hepatitis, viral, acute				
A	B15	76	54	58
B	B16	659	583	556
C	B17.1	4,321	4,109	4,099
Hepatitis, viral, chronic				
B	B18.0–B18.1	103	102	87
C	B18.2	518	507	487

Source: CDC. CDC WONDER Compressed Mortality files (http://wonder.cdc.gov/mortSQL.html) provided by the National Center for Health Statistics. National Vital Statistics System, 1999–2004. Underlying causes of death are classified according to ICD 10. Data for 2005–2006 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.

§ Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.

Table 12. (*Continued*) Deaths from selected nationally notifiable infectious diseases — United States, 2002–2004

Cause of death	ICD-10 cause of death code	No. deaths 2002	2003	2004
Influenza-associated pediatric mortality	J10, J11	25	147	51
Legionellosis	A48.1	62	98	72
Listeriosis	A32	32	33	37
Lyme disease	A69.2, L90.4	6	4	6
Malaria	B50–B54	12	4	8
Measles	B05	0	1	0
Meningococcal disease	A39	161	161	138
Mumps	B26	1	0	0
Pertussis	A37	18	11	16
Plague	A20	0	0	1
Poliomyelitis	A80	0	0	0
Psittacosis	A70	0	0	0
Q fever	A78	0	1	1
Rabies, human	A82	3	2	3
Rocky Mountain spotted fever	A77.0	8	9	5
Rubella	B06	0	0	1
Rubella congenital syndrome	P35.0	6	4	5
Salmonellosis	A02	21	43	30
Shiga toxin-producing *Escherichia coli* (STEC)	A04.0–A04.4	4	2	4
Shigellosis	A03	4	2	0
Smallpox	B03	0	0	0
Streptococcal disease, invasive, group A	A40.0, A49.1	109	115	121
Streptococcus pneumoniae, invasive disease (age <5 yrs)	A40.3, B95.3, J13	13	15	13
Syphilis, total, all stages	A50–A53	41	34	43
Tetanus	A35	5	4	4
Toxic-shock syndrome	A48.3	78	71	71
Trichinellosis	B75	0	0	0
Tuberculosis	A16–A19	784	711	657
Tularemia	A21	2	2	1
Typhoid fever	A01.0	0	0	0
Varicella	B01	32	16	19
Yellow fever[¶]	A95	1	0	0

[¶] 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

General

Adekoya N. Nationally notifiable disease surveillance (NNDSS) and the *Healthy People 2010* objectives. The eJournal of the South Carolina Medical Association 2005;101:e68–72. Available at http://www.scmanet.org/Downloads/e-Journal/2005/SCMA_eJournal_March05.pdf.

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

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

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

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

CDC. Case definitions for infectious conditions under public health surveillance. MMWR 1997;46(No. RR-10). Additional information available at http://www.cdc.gov/epo/dphsi/casedef/index.htm.

CDC. Demographic differences in notifiable infectious disease morbidity—United States, 1992–1994. MMWR 1997;46:637–41.

CDC. Framework for evaluating public health surveillance systems for early detection of outbreaks; recommendations from the CDC working group. MMWR 2004;53(No. RR-5).

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

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

CDC. Manual of procedures for the reporting of nationally notifiable diseases to CDC. Atlanta, GA: US Department of Health and Human Services, Public Health Service, CDC; 1995.

CDC. Manual for the surveillance of vaccine-preventable diseases. 3rd ed. Atlanta, GA: US Department of Health and Human Services, Public Health Service, CDC; 2002. Available at http://www.cdc.gov/nip/publications/surv-manual.

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

CDC. Public Health Information Network (PHIN): overview. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at http://www.cdc.gov/phin/index.html.

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

CDC. Sexually transmitted disease surveillance, 2006. Atlanta, GA: US Department of Health and Human Services, CDC; 2007.

CDC. Sexually transmitted diseases treatment guidelines, 2006. MMWR 2006;55(No. RR-11).

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

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

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

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

Chin JE, ed. Control of communicable diseases manual. 17th ed. Washington, DC: American Public Health Association; 2000.

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

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

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

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

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

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

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

Klompas M, Lazarus R, Daniel J. Electronic medical record support for public health (ESP): automated detection and reporting of statutory notifiable diseases to public health authorities. Advances in Disease Surveillance 2007;3:1–5.

Koo D, Caldwell B. The role of providers and health plans in infectious disease surveillance. Eff Clin Pract 1999;2:247–52. Available at http://www.acponline.org/journals/ecp/sepoct99/koo.htm.

Koo D, Wetterhall S. History and current status of the National Notifiable Diseases Surveillance System. J Public Health Management Practice 1996;2:4–10.

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

Lin SS, Kelsey JL. Use of race and ethnicity in epidemiologic research: concepts, methodological issues, and suggestions for research. Epidemiol Rev 2000;22:187–202.

Martin SM, Bean NH. Data management issues for emerging diseases and new tools for managing surveillance and laboratory data. Emerg Infect Dis 1995;1:124–8.

McNabb S, Chungong S, Ryan M, et al. Conceptual framework of public health surveillance and action and its application in health sector reform. BMC Public Health 2002;2:2.

McNabb S, Surdo A, Redmond A, et al. Applying a new conceptual framework to evaluate tuberculosis surveillance and action performance and measure the costs, Hillsborough County, Florida, 2002. Ann Epidemiol 2004;14:640–5.

McNabb SJN, Koo D, Pinner RW, Seligman JD. Informatics and public health at CDC. MMWR 2006;55(Suppl 2):25–8.

Nolte KB, Lathrop SL, Nashelsky MB, et al RE. "Med-X": a medical examiner surveillance model for bioterrorism and infectious disease mortality. Human Pathol 2007;38:718–25.

Niskar AS, Koo D. Differences in notifiable infectious disease morbidity among adult women—United States, 1992–1994. J Womens Health 1998;7:451–8.

Panackal AA, M'ikanatha NM, Tsui FC, et al. Automatic electronic laboratory-based reporting of notifiable infectious diseases at a large health system. Emerg Infect Dis 2002;8:685–91.

Pinner RW, Koo D, Berkelman RL. Surveillance of infectious diseases. In: Lederberg J, Alexander M, Bloom RB, eds. Encyclopedia of microbiology. 2nd ed. San Diego, CA: Academic Press; 2000.

Pinner RW, Jernigan DB, Sutliff SM. Electronic laboratory-based reporting for public health. Mil Med 2000;165(Suppl 2):20–4.

Roush S, Birkhead G, Koo D, Cobb A, Fleming D. Mandatory reporting of diseases and conditions by health care professionals and laboratories. JAMA 1999;282:164–70.

Roush S, Murphy T. Historical comparisons of morbidity and mortality for vaccine-preventable diseases in the United States. JAMA 2007;298:2155–63.

Silk, BJ, Berkelman RL. A review of strategies for enhancing the completeness of notifiable disease reporting. J Public Health Manag Prace 2005;11:191–200.

Teutsch SM, Churchill RE, eds. Principles and practice of public health surveillance. 2nd ed. New York, NY: Oxford University Press; 2000.

Thacker SB, Choi K, Brachman PS. The surveillance of infectious diseases. JAMA 1983;249:1181–5.

Vogt RL, Spittle R, Cronquist A, Patnaik JL. Evaluation of the timeliness and completeness of a web-based notifiable disease reporting system by a local health department. J Public Health Manag Pract 2006;12:540–4.

AIDS

CDC. HIV/AIDS surveillance report, 2005. Atlanta, GA: US Department of Health and Human Services, CDC; 2006. Available at http://www.cdc.gov/hiv/stats/hasrlink.htm.

CDC. Guidelines for national human immunodeficiency virus case surveillance, including monitoring for human immunodeficiency virus infection and acquired immunodeficiency syndrome. MMWR 1999;48(No. RR-13).

Nakashima AK, Fleming PL. HIV/AIDS surveillance in the United States, 1981–2001. J Acquir Immune Defic Syndr 2003;32:68–85.

Anthrax

Bales ME, Dannenberg AL, Brachman PS, Kaufmann AF, Klatsky PC, Ashford DA. Epidemiologic response to anthrax outbreaks: field investigations, 1950–2001. Emerg Infect Dis 2002;8:1163–74.

Bravata DM, Holty JE, Wang E, et al. Inhalational, gastrointestinal, and cutaneous anthrax in children: a systematic review of cases: 1900 to 2005. Arch Pediatr Adolesc Med 2007;161:896–905.

CDC. Use of anthrax vaccine in response to terrorism: supplemental recommendations of the Advisory Committee on Immunization Practices. MMWR 2002;51:1024–6.

Holty JE, Bravata DM, Liu H, Olshen RA, McDonald KM, Owens DK. Systematic review: a century of inhalational anthrax cases from 1900 to 2005. Ann Intern Med 2006;144:270–80.

Hugh-Jones M. 1996–97 Global anthrax report. J Appl Microbiol 1999;87:189–91.

Botulism

Angulo FJ, St. Louis ME. Botulism. In: Evans AS, Brachman PS, eds. Bacterial infections of humans. New York, NY: Plenum; 1998:131–53.

CDC. Infant botulism—New York City, 2001–2002. MMWR 2003;52:21–4.

Shapiro RL, Hatheway C, Becher J, Swerdlow DL. Botulism surveillance and emergency response: a public health strategy for a global challenge. JAMA 1997;278:433–5.

Shapiro RL, Hatheway C, Swerdlow DL. Botulism in the United States: a clinical and epidemiologic review. Ann Intern Med 1998;129:221–8.

Sobel J, Tucker N, McLaughlin J, Maslanka S. Foodborne botulism in the United States, 1999–2000. Emerg Infect Dis 2004;10:1606–12.

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

Brucellosis

CDC. Brucellosis (*Brucella melitensis, abortus, suis*, and *canis*). Atlanta, GA: US Department of Health and Human Services, CDC; 2005. Available at http://www.cdc.gov/ncidod/dbmd/diseaseinfo/brucellosis_g.htm.

CDC. Brucellosis case definition. Atlanta, GA: US Department of Health and Human Services, CDC; 2001. Available at http://www.bt.cdc.gov/Agent/Brucellosis/CaseDef.asp.

CDC. Human exposure to *Brucella abortus* strain RB51—Kansas, 1997. MMWR 1998;47:172–5.

Stevens, MG, Olsen SC, Palmer MV, Cheville NF. US Department of Agriculture, Agricultural Research Service National Animal Disease Center, Iowa State University. *Brucella abortus* strain RB51: a new brucellosis vaccine for cattle. Compendium 1997;19:766–74.

Yagupsky P, Baron EJ. Laboratory exposures to *Brucellae* and implications for bioterrorism. Emerg Infect Dis 2005;11:1180–5.

Chomel BB, DeBess EE, Mangiamele DM, et al. Changing trends in the epidemiology of human brucellosis in California from 1973 to 1992: a shift toward foodborne transmission. J Infect Dis 1994;170:1216–23.

Chancroid

DiCarlo RP, Armentor BS, Martin DH. Chancroid epidemiology in New Orleans men. J Infect Dis 1995;172:446–52.

Mertz KJ, Weiss JB, Webb RM, et al. An investigation of genital ulcers in Jackson, Mississippi, with use of a multiplex polymerase chain reaction assay: high prevalence of chancroid and human immunodeficiency virus infection. J Infect Dis 1998;178:1060–6.

Mertz KJ, Trees D, Levine WC, et al. Etiology of genital ulcers and prevalence of human immunodeficiency virus coinfection in 10 US cities. The Genital Ulcer Disease Surveillance Group. J Infect Dis 1998;178:1795–8.

Chlamydia trachomatis, Genital Infection

CDC. Sexually transmitted disease surveillance 2006 supplement: Chlamydia Prevalence Monitoring Project, annual report 2006. Atlanta, GA: US Department of Health and Human Services, CDC. In press.

Gaydos CA, Howell MR, Pare B, et al. *Chlamydia trachomatis* infections in female military recruits. N Engl J Med 1998;339:739–44.

Datta SP, Sternberg M, Johnson RE, et al. Gonnorhea and chlamydia in the United States among persons 14 to 39 years of age, 1999 to 2002. Ann Intern Med 2007;147:89–96.

Miller WC, Ford CA, Handcock MS, et al. Prevalence of chlamydial and gonococcal infections among young adults in the United States. JAMA 2004;291:2229–36.

Cholera

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.

Brunkard JM, et al. Cholera, crabs, and Katrina: is cholera increasing in southern Louisiana [Abstract]. Presented at the meeting of the Infectious Disease Society of America; October 4–7, 2007; San Diego, California.

World Health Organization. Cholera, 2006. Wkly Epi Rec 2007;82:273–84.

Gaffga NH, Tauxe RV, Mintz ED. Cholera: a new homeland in Africa. Am J Trop Med Hyg 2007;77:705–13.

Coccidioidomycosis

Park BJ, Sigel K, Vaz V, et al. An epidemic of coccidioidomycosis in Arizona associated with climatic changes, 1998–2001. J Infect Dis 2005;191:1981–7.

Cryptosporidiosis

Yoder JS, Beach MJ. Cryptosporidiosis surveillance—United States, 2003–2005. In: Surveillance Summaries, September 7, 2007. MMWR 2007;56(No. SS-7):1–10.

Dziuban EJ, Liang JL, Craun GF, et al. Surveillance for waterborne disease and outbreaks associated with recreational water—United States, 2003–2004. In: Surveillance Summaries, December 22, 2006. MMWR 2006;55(No. SS-12):1–30.

Roy SL, DeLong SM, Stenzel S, et al. Risk factors for sporadic cryptosporidiosis among immunocompetent persons in the United States from 1999 to 2001. J Clin Microbiol 2004;42:2944–51.

CDC. Diagnostic procedures for stool specimens. Atlanta, GA: US Department of Health and Human Services, CDC; 2007. Available at http://www.dpd.cdc.gov/dpdx/HTML/DiagnosticProcedures.htm.

Cyclosporiasis

Herwaldt BL. The ongoing saga of U.S. outbreaks of cyclosporiasis associated with imported fresh produce: what *Cyclospora cayetanensis* has taught us and what we have yet to learn. In: Institute of Medicine. Addressing foodborne threats to health: policies, practices, and global coordination. Washington, DC: The National Academies Press; 2006:85–115, 133–40. Available at http://newton.nap.edu/catalog/11745.html#toc.

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

Diphtheria

Dewinter LM, Bernard KA, Romney MG. Human clinical isolates of *Corynebacterium diphtheriae* and *Corynebacterium ulcerans* collected in Canada from 1999 to 2003 but not fitting reporting criteria for cases of diphtheria. Clin Microbiol 2005;43:3447–9.

Domestic Arboviral Diseases, Neuroinvasive and Nonneuroinvasive

CDC. Revision of guidelines for surveillance, prevention, and control of West Nile virus infection. MMWR 2003;52:797.

CDC. West Nile virus activity—United States, January 1–December 1, 2005. MMWR 2005;54:1253–6.

Hayes EB, Komar N, Nasci RS, et al. Epidemiology and transmission dynamics of West Nile virus disease. Emerg Infect Dis 2005;11:1167–73.

CDC. Eastern equine encephalitis—New Hampshire and Massachusetts, August–September 2005. MMWR 2006;55:697–700.

Ehrlichiosis (Human Granulocytic and Human Monocytic)

Dumler JS, Madigan JE, Pusterla N, and Bakken JS. Ehrlichioses in humans: epidemiology, clinical presentation, diagnosis, and treatment. Clin Iinfect Dis 2007;45:45–51.

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

Demma LJ, Holman RC, McQuiston JH, Krebs JW, Swerdlow DL. Epidemiology of human ehrlichiosis and anaplasmosis in the United States, 2001–2002. Am J Trop Med Hyg 2005;73:400–09.

Paddock CD, Childs JE. *Ehrlichia chaffeensis*: a prototypical emerging pathogen [Review]. J Clin Microbiol 2003;16:37–64.

Giardiasis

Yoder JS, Beach MJ. Giardiasis surveillance—United States, 2003–2005. In: Surveillance Summaries, September 7, 2007. MMWR 2007;56(No. SS-7):11–8.

Liang JL, Dziuban EJ, Craun GF, et al. Surveillance for waterborne disease and outbreaks associated with drinking water and water not intended for drinking—United States, 2003–2004. In: Surveillance Summaries, December 22, 2006. MMWR 2006;55(No. SS-12):31–65.

Stuart JM, Orr HJ, Warburton FG, et al. Risk factors for sporadic giardiasis: a case-control study in southwestern England. Emerg Infect Dis 2003;9:229–33.

CDC. Diagnostic procedures for stool specimens. Atlanta, GA: US Department of Health and Human Services, CDC; 2007. Available at http://www.dpd.cdc.gov/dpdx/HTML/DiagnosticProcedures.htm.

Gonorrhea

CDC. Update to CDC's sexually transmitted diseases guidelines, 2006: fleuroquinolones no longer recommended for treatment of gonococcal infections.. MMWR 2007;56:332–6.

CDC. Sexually transmitted diseases treatment guidelines, 2006. MMWR 2006;55(No. RR-11).

CDC. Sexually transmitted diseases surveillance 2006 supplement: Gonococcal Isolate Surveillance Project (GISP) annual report 2006. Atlanta, GA: US Department of Health and Human Services, CDC. In press.

Haemophilus influenzae, Invasive Disease

CDC. Progress toward elimination of *Haemophilus influenzae* type b disease among infants and children—United States, 1998–2000. MMWR 2002;51:234–7.

Fry AM, Lurie P, Gidley M, Schmink S, Lingappa J, Rosenstein NE. *Haemophilus influenzae* type b (Hib) disease among Amish children in Pennsylvania: reasons for persistent disease. Pediatrics 2001;108:1–6.

Dworkin MS, Park L, Borchardt SM. The changing epidemiology of invasive *Haemophilus influenzae* disease, especially in persons >65 years old. Clin Infect Dis 2007;44:810–6.

McVernon J, Trotter CL, Slack MPE, et al. Trends in type b infections in adults in England and Wales: surveillance study. BMJ 2004;329:655–8.

Flannery B, Heffernan RT, Harrison LH, et al. Changes in invasive pneumococcal disease among HIV-infected adults living in the era of childhood pneumococcal immunization. Ann Intern Med 2006;144:1–9.

Hansen Disease (Leprosy)

Britton WJ, Lockwood NJ. Leprosy. Lancet 2004;363:1209–19.

Hartzell JD, Zapor M, Peng S, Straight T. Leprosy: a case series and review. South Med J 2004;97:1252–6.

Hastings R, ed. Leprosy. 2nd ed. New York, NY: Churchill Livingstone; 1994.

Joyce MP, Scollard DM. Leprosy (Hansen's disease). In: Rakel RE, Bope ET, eds. Conn's current therapy 2004: latest approved methods of treatment for the practicing physician. 56th ed. Philadelphia, PA: Saunders; 2004:100–5.

Ooi WW, Moschella SL. Update on leprosy in immigrants in the United States: status in the year 2000. Clin Infect Dis 2001;32:930–7.

Bruce S, Schroeder TL, Ellner K, Rubin H, Williams T, Wolf JE Jr. Armadillo exposure and Hansen's disease: an epidemiologic survey in southern Texas. J Am Acad Dermatol 2000;43(2 Pt1):223–8.

Hantavirus Pulmonary Syndrome

CDC. Hantavirus pulmonary syndrome—five states, 2006. MMWR 2006;55:627–9.

Hemolytic Uremic Syndrome, Postdiarrheal

Banatvala N, Griffin PM, Greene KED, et al. The United States Prospective Hemolytic Uremic Syndrome Study; microbiologic, serologic, clinical, and epidemiologic findings. J Infect Dis 2001;183:1063–70.

Mahon BE, Griffin PM, Mead PS, Tauxe RV. Hemolytic uremic syndrome surveillance to monitor trends in infection with *Escherichia coli* O157:H7 and other Shiga toxin-producing *E. coli* [Letter]. Emerg Infect Dis 1997;3:409–12.

Hepatitis A

Armstrong GL, Bell BP. Hepatitis A virus infections in the United States: model-based estimates and implications for childhood immunization. Pediatrics 2002;109:839–45.

Bell BP, Kruszon-Moran D, Shapiro CN, Lambert SB, McQuillan GM, Margolis HS. Hepatitis A virus infection in the United States: serologic results from the Third National Health and Nutrition Examination Survey. Vaccine 2005;23:5798–806.

CDC. Prevention of hepatitis A through active or passive immunization: recommendations of the Advisory Committee on Immunization Practices. MMWR 2006;55(No. RR-7).

Wasley A, Samandari T, Bell BP. Incidence of hepatitis A in the United States in the era of vaccination. JAMA 2005;294:194–201.

Wasley A, Fiore A, Bell BP. Hepatitis A in the era of vaccination. Epidemiol Rev 2006;28:101–11.

CDC. Update: prevention of hepatitis after exposure to hepatitis a virus and in international travelers: updated recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2007;56;1080–4.

Hepatitis B

Armstrong GL, Mast EE, Wojczynski M, Margolis HS. Childhood hepatitis B virus infections in the United States before hepatitis B immunization. Pediatrics 2001;108:1123–8.

CDC. Hepatitis B virus: a comprehensive strategy for eliminating transmission in the United States through universal childhood vaccination: recommendations of the Immunization Practices Advisory Committee (ACIP). MMWR 1991;40(No. RR-13).

CDC. A comprehensive immunization strategy to eliminate transmission of hepatitis B virus infection in the United States: recommendations of the Advisory Committee on Immunization Practices (ACIP). Part 1: immunization of infants, children, and adolescents. MMWR 2005;54(No. RR-16).

CDC. A comprehensive strategy to eliminate transmission of hepatitis B virus infection in the United States: recommendations of the Advisory Committee on Immunization Practices (ACIP). Part II: immunization of adults. MMWR 2006;55(No. RR-16).

Shepard CW, Simard EP, Finelli L, Fiore A, Bell BP. Hepatitis B virus infection: epidemiology and vaccination. Epidemiol Rev 2006;28:112–25.

Goldstein ST, Alter MJ, Williams IT, et al. Incidence and risk factors for acute hepatitis B in the United States, 1982–1998: implications for vaccination programs. J Infect Dis 2002;185:713–9.

McQuillan GM, Coleman PJ, Kruszon-Moran D, Moyer LA, Lambert SB, Margolis HS. Prevalence of hepatitis B virus infection in the United States: The National Health and Nutrition Examination Surveys, 1976 through 1994. Am J Public Health 1999;89:14–8.

Hepatitis C

Armstrong GL, Wasley A, Simard EP, McQuillan GM, Kuhnert WL, Alter MJ. The prevalence of hepatitis C virus infection in the United States, 1999 through 2002. Ann Intern Med 2006;144:705–14.

Armstrong GA, Alter MJ, McQuillan GM, Margolis HS. The past incidence of hepatitis C virus infection: implications for the future burden of chronic liver disease in the United States. Hepatology 2000;31:777–82.

CDC. Recommendations for prevention and control of hepatitis C virus (HCV) infection and HCV-related chronic disease. MMWR 1998;47(No. RR-19).

Shepard CW, Finelli L, Alter MJ. The global epidemiology of hepatitis C. Lancet Infect Dis 2005;5:558–67.

Influenza-Associated Pediatric Mortality

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

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

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

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

CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2006;55(No. RR-10).

Council of State and Territorial Epidemiologists. Influenza-associated pediatric mortality 2004. Position statement 04-ID-04. Available at http://www.cste.org/position%20statements/searchbyyear2004.asp.

Guarner J, Paddock CD, Shieh WJ, et al. Histopathologic and immunohistochemical features of fatal influenza virus infection in children during the 2003–2004 season. Clin Infect Dis 2006:43;132–40.

Legionellosis

Cowgill KD, Lucas CE, Benson RF, et al. Recurrence of legionnaires disease at a hotel in the United States Virgin Islands over a 20-year period. Clin Infect Dis 2005;40:1205–7.

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

European Working Group on *Legionella* Infections. European guidelines for control and prevention of travel associated legionnaires' disease. London, UK: United Kingdom Health Protection Agency; 2005.

Joseph CA. Legionnaires' disease in Europe 2000–2002. Epidemiol Infect 2004;132:417–24.

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

Listeriosis

Gottlieb SL, Newbern EC, Griffin PM, et al. Multistate outbreak of listeriosis linked to turkey deli meat and subsequent changes in US regulatory policy. Clin Infect Dis 2006;42:29–36.

Mead PS, Dunne EF, Graves L, et al. Nationwide outbreak of listeriosis due to contaminated meat. Epidemiol Infect 2006;134:744–51.

Mead PS, Slutsker L, Dietz V, et al. Food-related illness and death in the United States. Emerg Infect Dis 1998;5:607–25.

Slutsker L, Schuchat A. Listeriosis in humans. In: Ryser ET Marth EH, eds. *Listeria*, listeriosis, and food safety. 2nd ed. New York, NY: Marcel Dekker, Inc.; Little, Brown and Company; 1999:75–95.

Tappero J, Schuchat A, Deaver K, Mascola L, Wenger J, for the Listeriosis Study Group. Reduction in the incidence of human listeriosis in the United States: effectiveness of prevention efforts. JAMA 1995;273:1118–22.

Lyme Disease

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

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

Aguero-Rosenfeld ME, Wang G, Schwartz I, Wormser GP. Diagnosis of Lyme borreliosis. Clin Microbiol Rev 2005;18:484–509.

Medical Letter. Treatment of Lyme disease. Med Lett Drugs Ther 2005;47:41–3.

CDC. Caution regarding testing for Lyme disease. MMWR 2005;54:125.

Malaria

Baird JK. Effectiveness of antimalarial drugs. N Engl J Med 2005;352:1565–77.

Chen LH, Keystone JS. New strategies for the prevention of malaria in travelers. Infect Dis Clin N Amer 2005;19:185–210.

Guinovart C, Navia MM, Tanner M, et al. Malaria: burden of disease. Curr Mol Med 2006;6:137–40.

Leder K, Black J, O'Brien D, et al. Malaria in travelers: a review of the GeoSentinel Surveillance Network. Clin Infect Dis 2004;39:1104–12.

Skarbinski J, Eliades MJ, Causer LM, et al. Malaria surveillance—United States, 2004. In: Surveillance Summaries, May 26, 2006. MMWR 2006;55(No. SS-4):23–37.

Measles

Papania M, Hinman A, Katz S, Orenstein W, McCauley M, eds. Progress toward measles elimination—absence of measles as an endemic disease in the United States. J Infect Dis 2004;189(Suppl 1):S1–257.

CDC. National, state, and local area vaccination coverage among children aged 19–35 months—United States, 2006. MMWR 2007;56:880–5.

Rota PA, Liffick SL, Rota JS, et al. Molecular epidemiology of measles viruses in the United States, 1997–2001. Emerg Infect Dis 2002;8:902–8.

De Serres G, Gay NJ, Farrington CP. Epidemiology of transmissible diseases after elimination. Am J Epidemiol 2000;151:1039–48.

Meningococcal Disease

CDC. Prevention and control of meningococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2005;54(No. RR-7).

Rosenstein NE, Perkins BA, Stephens DS, et al. Meningococcal disease. N Engl J Med 2001;344:1378–88.

Rosenstein NE, Perkins BA, Stephens DS, et al. The changing epidemiology of meningococcal disease in the United States, 1992–1996. J Infect Dis 1999;180:1894–901.

Mumps

CDC. Mumps epidemic—Iowa, 2006. MMWR 2006;55:366–8.

CDC. Update: multistate outbreak of mumps—United States, January 1–May 2, 2006. MMWR 2006;55:559–63.

CDC. Update: mumps activity—United States, January 1–October 7, 2006. MMWR 2006;55:1152–3.

CDC. Updated recommendations of the Advisory Committee on Immunization Practices (ACIP) for the control and elimination of mumps. MMWR 2006;55:629–30.

Harling R, White JM, Ramsay ME, et al. The effectiveness of the mumps component of the MMR vaccine: a case control study. Vaccine 2005;23:4070–4.

Schaffzin JK, Pollock L, Schulte C, et al. Effectiveness of previous mumps vaccination during a summer camp outbreak. Pediatrics 2007;120:e862–8.

Pertussis

Bisgard KM, Rhodes P, Connelly BL, et al. Pertussis vaccine effectiveness among children 6 to 59 months of age in the United States, 1998–2001. Pediatrics 2005;116:e285–94.

Bisgard KM, Pascual FB, Ehresmann KR, et al. Infant pertussis: who was the source? Pediatr Infect Dis J 2004;23:985–9.

CDC. Preventing tetanus, diphtheria, and pertussis among adolescents; use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccines: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2006;55(No. RR-3).

CDC. Recommended antimicrobial agents for the treatment and postexposure prophylaxis of pertussis: 2005 CDC guidelines. MMWR 2005;54(No. RR-14).

CDC. Pertussis—United States, 2001–2003. MMWR 2005;54:1283–6.

Lee GM, Lebaron C, Murphy TV, Lett S, Schauer S, Lieu TA. Pertussis in adolescents and adults: should we vaccinate? Pediatrics 2005;115:1675–84.

CDC. Preventing tetanus, diphtheria, and pertussis among adults: use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccine (Tdap): recommendations of the Advisory Committee on Immunization Practices (ACIP) and recommendation of ACIP, supported by the Healthcare Infection Control Practices Advisory Committee (HICPAC), for use of Tdap among health-care personnel. MMWR 2006;55(No. RR-17).

Plague

CDC. Imported plague—New York City, 2002. MMWR 2003;53:725–8.

Enscore RE, Biggerstaff BJ, Brown TL, et al. Modeling relationships between climate and the frequency of human plague cases in the southwestern United States, 1960–1997. Am J Trop Med Hyg 2002;66:186–96.

Inglesby TV, Dennis DT, Henderson DA, et al. Plague as a biological weapon: medical and public health management. Working Group on Civilian Biodefense [Review]. JAMA 2000;283:2281–90.

Dennis DT, Gage KL, Gratz N, Poland JD, Tikhomirov E. Plague manual: epidemiology, distribution, surveillance and control. Geneva, Switzerland: World Health Organization; 1999.

Poliomyelitis

CDC. Poliovirus infections in four unvaccinated children—Minnesota, August–October 2005. MMWR 2005; 54:1053–5.

Alexander LN, Seward JF, Santibanez TA, et al. Vaccine policy changes and epidemiology of polio in the United States. JAMA 2004;292:1696–702.

CDC. Progress toward interruption of wild poliovirus transmission—worldwide, January 2006–May 2007. MMWR 2007;56:682–5.

CDC. Laboratory surveillance for wild and vaccine-derived polioviruses—worldwide, January 2006–June 2007. MMWR 2007;56:965–9.

CDC. Update on vaccine-derived polioviruses—worldwide, January 2006–August 2007. MMWR 2007;56:996–1001.

Q Fever

McQuiston JH, Holman RC, McCall CL, Childs JE, Swerdlow DL, Thompson HA. National surveillance and the epidemiology of Q fever in the United States, 1978–2004. Am J Trop Med Hyg 2006;75:36–40.

Mcquiston JH, Nargund VN, Miller JD, Priestly R, Shaw EI, Thompson HA. Prevalence of antibodies to *Coxiella burnetii* among veterinary school dairy herds in the United States, 2003. Vector Borne Zoonotic Dis 2005;5:90–1.

Raoult D, Tissot-Dupont H, Foucault C, et al. Q fever 1985–1998. Clinical and epidemiologic features of 1,383 infections [Review]. Medicine 2000;79:109–25.

Bernard KW, Parham GL, Winkler WG, Helmick CG. Q fever control measures: recommendations for research facilities using sheep. Infect Control 1982;3:461–5.

Rabies, Animal and Human

CDC. Compendium of animal rabies prevention and control, 2005: National Association of State and Territorial Public Health Veterinarians, Inc. MMWR 2005;54 (No. RR-3).

CDC. Human rabies prevention—United States, 1999: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1999;48(No. RR-1).

Blanton JD, Hanlon CA, Ruprrecht CE. Rabies surveillance in the United States during 2006. J Am Vet Med Assoc 2007;231:540–56.

Rocky Mountain spotted fever

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

Chapman AS, Murphy SM, Demma LJ, et al. Rocky Mountain spotted fever in the United States, 1997–2002. Vector Borne Zoonotic Dis 2006;6:170–8.

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

CDC. Fatal cases of Rocky Mountain spotted fever in family clusters—three states, 2003. MMWR 2004;53:407–10.

Thorner AR, Walker DH, Petri WA. Rocky Mountain spotted fever [Review]. Clin Infect Dis 1998;27:1353–60.

Rubella

CDC. Control and prevention of rubella: evaluation and management of suspected outbreaks, rubella in pregnant women, and surveillance for congenital rubella syndrome. MMWR 2001;50(No. RR-12).

Reef S, Cochi S, eds. The evidence for the elimination of rubella and congenital rubella syndrome in the United States: a public health achievement. Clin Infect Dis 2006;43(Suppl 3):S123–68.

CDC. Achievements in public health: elimination of rubella and congenital rubella syndrome—United States, 1969–2004. MMWR 2005;54:279–82.

Salmonellosis

Braden CR. *Salmonella enterica* serotype Enteritidis and eggs: a national epidemic in the United States. Clin Infect Dis 2006;43:512–7.

Olsen SJ, Bishop R, Brenner FW, et al. The changing epidemiology of *Salmonella*: trends in serotypes isolated from humans in the United States, 1987–1997. J Infect Dis 2001;183:756–61.

Voetsch AC, Van Gilder TJ, Angulo FJ, et al. FoodNet estimate of burden of illness caused by nontyphoidal *Salmonella* infections in the United States. Clin Infect Dis 2004;38(Suppl 3):S127–34.

Shiga Toxin-Producing Enterohemorrhagic *Escherichia coli*

Bender JB, Hedberg CW, Besser JM, et al. Surveillance for *Escherichia coli* O157:H7 infections in Minnesota by molecular subtyping. N Engl J Med 1997;337:388–94.

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

Crump JA, Sulka AC, Langer AJ, et al. An outbreak of *Escherichia coli* O157:H7 among visitors to a dairy farm. N Engl J Med 2002;347:555–60.

Griffin PM, Mead PS, Sivapalasingam S. *Escherichia coli* O157:H7 and other enterohemorrhagic *E. coli*. In: Blaser MJ, Smith PD, Ravdin JI, Greenberg HB, Guerrant RL, eds. Infections of the gastrointestinal tract. Philadelphia, PA: Lippincott Williams & Wilkins; 2002:627–42.

Mead PS, Griffin PM. *Escherichia coli* O157:H7. Lancet 1998;352:1207–12.

Shigellosis

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

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

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.

Sivapalasingam S, Nelson JM, Joyce K, Hoekstra M, Angulo FJ, Mintz ED. A high prevalence of antimicrobial resistance among *Shigella* isolates in the United States, 1999–2002. Antimicrob Agents Chemother 2006;50:49–54.

Streptococcal Disease, Invasive, Group A

O'Loughlin RE, Roberson A, Cieslak PR, et al. The epidemiology of invasive group A streptococcal infections and potential vaccine implications, United States, 2000–2004. Clin Infect Dis 2007;45:853–62.

CDC. Active Bacterial Core Surveillance report. Emerging Infections Program Network. Group A Streptococcus, 2005. Atlanta, GA: US Department of Health and Human Services, CDC; 2007. Available at http://www.cdc.gov/ncidod/dbmd/abcs/survreports/gas05.pdf.

Jordan HT, Richards CL, Burton DC, Thigpen MC, Van Beneden CA. Group A streptococcal disease in long-term care facilities: descriptive epidemiology and potential control measures. Clin Infect Dis 2007;45:742–52.

CDC. Investigating clusters of group A streptococcal disease. Atlanta, GA: US Department of Health and Human Services, CDC; 2005. Available at http://www.cdc.gov/strepAcalculator.

The Prevention of Invasive Group A Streptococcal Infections Workshop participants. Prevention of invasive group A streptococcal disease among household contacts of case patients and among postpartum and postsurgical patients: recommendations from the Centers for Disease Control and Prevention. Clin Infect Dis 2002;35:950–9.

Streptococcal Toxic-Shock Syndrome

Bisno AL. Brito MO. Collins CM. Molecular basis of group A streptococcal virulence. Lancet Infect Dis 2003;3:191–200.

O'Loughlin RE, Roberson A, Cieslak PR, et al. The epidemiology of invasive group a streptococcal infections and potential vaccine implications, United States, 2000–2004. Clin Infect Dis 2007;45:853–62.

Stevens DL. Streptococcal toxic shock syndrome associated with necrotizing fasciitis. Annu Rev Med 2000;51:271–88.

The Prevention of Invasive Group A Streptococcal Infections Workshop participants. Prevention of invasive group A streptococcal disease among household contacts of case patients and among postpartum and postsurgical patients: recommendations from the Centers for Disease Control and Prevention. Clin Infect Dis 2002;35:950–9.

Streptococcus pneumoniae, Invasive, Drug-Resistant

CDC. Preventing pneumococcal disease among infants and young children: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2000;49(No. RR-9).

Clinical and Laboratory Standards Institute. Performance standards for antimicrobial susceptibility testing: 15th informational supplement [No. M100-S15]. Wayne, PA: National Committee for Clinical Laboratory Standards; 2005.

Flannery B, Schrag S, Bennett NM, et al. Impact of childhood vaccination on racial disparities in invasive *Streptococcus pneumoniae* infections. JAMA 2004;291:2197–203.

Kyaw MH, Lynfield R, Schaffner W, et al. Effect of introduction of the pneumococcal conjugate vaccine on drug-resistant *Streptococcus pneumoniae*. N Engl J Med 2006;354:1455–63.

Poehling KA, Talbot TR, Griffin MR, et al. Invasive pneumococcal disease among infants before and after introduction of pneumococcal conjugate vaccine. JAMA 2006;295:1668–74.

Ray GT, Whitney CG, Fireman BH, Ciuryla V, Black SB. Cost-effectiveness of pneumococcal conjugate vaccine: evidence from the first 5 years of use in the United States incorporating herd effects. Pediatr Infect Dis J 2006;25:494–501.

Syphilis, Congenital

CDC. Congenital syphilis—United States, 2002. MMWR 2004;53:716–9.

Syphilis, Primary and Secondary

CDC. The national plan to eliminate syphilis from the United States. Atlanta, GA: US Department of Health and Human Services, CDC; 1999.

CDC. The national plan to eliminate syphilis from the United States. Atlanta, GA: US Department of Health and Human Services, CDC; 2006.

CDC Sexually transmitted disease surveillance supplement 2006; syphilis surveillance report. Atlanta, GA: US Department of Health and Human Services, CDC. In press.

Tetanus

Pascual FB, McGinley EL, Zanardi LR, Cortese MM, Murphy TV. Tetanus surveillance—United States, 1998–2000. In: Surveillance Summaries, June 20, 2003. MMWR 2003;52(No. SS-3).

CDC. Tetanus—Puerto Rico, 2002. MMWR 2002;51:613–5.

McQuillan GM, Kruszon-Moran D, Deforest A, Chu SY, Wharton M. Serologic immunity to diphtheria and tetanus in the United States. Ann Intern Med 2002;136:660–6.

CDC. Preventing tetanus, diphtheria, and pertussis among adults: use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccine: recommendations of the Advisory Committee on Immunization Practices (ACIP) and Recommendation of ACIP, supported by the Healthcare Infection Control Practices Advisory Committee (HICPAC), for use of Tdap among health-care personnel. MMWR 2006;55(No. RR-17).

Pascual FB, McGinley EL, Zanardi LR, Cortese MM, Murphy TV. Tetanus surveillance—United States, 1998–2000. In: Surveillance Summaries, June 20, 2003. MMWR 2003;52(No. SS-3).

McQuillan GM, Kruszon-Moran D, Deforest A, Chu SY, Wharton M. Serologic immunity to diphtheria and tetanus in the United States. Ann Intern Med 2002;136:660–6.

Trichinellosis

CDC. Trichinellosis associated with bear meat—New York and Tennessee, 2003. MMWR 2004;53:606–10.

Roy SL, Lopez AS, Schantz PM. Trichinellosis surveillance—United States, 1997–2001. In: Surveillance Summaries, July 25, 2003. MMWR 2003;52(No. SS-6).

Moorhead A, Grunenwald PE, Dietz VJ, Schantz PM. Trichinellosis in the United States, 1991–1996: declining but not gone. Am J Trop Med Hyg 1999;60:66–9.

CDC. Outbreak of trichinellosis associated with eating cougar jerky—Idaho, 1995. MMWR 1996;45:205–6.

Tuberculosis

CDC. Reported tuberculosis in the United States, 2003. Atlanta, GA: US Department of Health and Human Services, CDC; 2004. Available at http://www.cdc.gov/tb/default.htm.

CDC. Trends in tuberculosis—United States, 2004. MMWR 2005;54:245–9.

Saraiya M, Cookson ST, Tribble P, et al. Tuberculosis screening among foreign-born persons applying for permanent US residence. Am J Public Health 2002;92:826–9.

Talbot EA, Moore M, McCray E, Binkin NJ. Tuberculosis among foreign-born persons in the United States, 1993–1998. JAMA 2000;284:2894–900.

Tularemia

CDC. Outbreak of tularemia among commercially distributed prairie dogs, 2002. MMWR 2002;51:688, 699.

CDC. Tularemia—United States, 1990–2000. MMWR 2002;51:182–4.

Dennis DT, Inglesby TV, Henderson DA, et al. Tularemia as a biological weapon: medical and public health management. JAMA 2001;285:2763–73.

Feldman KA, Enscore RE, Lathrop SL, et al. Outbreak of primary pneumonic tularemia on Martha's Vineyard. N Engl J Med 2001;345:1219–26.

Petersen JM, Schriefer ME. Tularemia: emergence/re-emergence. Vet Res 2005;36:455–67.

Typhoid Fever

Crump J, Barrett TJ, Nelson JT, Angulo FJ. Reevaluating fluoroquinolone breakpoints for *Salmonella enterica* serotype Typhi and for non-Typhi *Salmonellae*. Clin Infect Dis 2003;37:75–81.

Kubota K, Barrett TJ, Hunter S et al. Analysis of *Salmonella* serotype Typhi pulsed-field gel electrophoresis patterns associated with international travel. J Clin Micro 2005;43:1205–9.

Olsen SJ, Bleasdale SC, Magnano AR, et al. Outbreaks of typhoid fever in the United States, 1960–1999. Epidemiol Infect 2003;130:13–21.

Reller M, Olsen S, Kressel A. Sexual transmission of typhoid fever: a multi-state outbreak among men who have sex with men. Clin Infect Dis 2003;37:141–4.

Steinberg EB, Bishop RB, Dempsey AF, et al. Typhoid fever in travelers: who should be targeted for prevention? Clin Infect Dis 2004;39:186–91.

Varicella

CDC. Prevention of varicella: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2007;56(No. RR-4).

Seward JF, Zhang JX, Maupin TJ, Mascola L, Jumaan AO. Contagiousness of varicella in vaccinated cases: a household contact study. JAMA 2004;292:704-8.

CDC. Public health response to varicella outbreaks—United States, 2003–2004. MMWR 2006;55:993–5.

CDC. Varicella surveillance practices, United States, 2004. MMWR 2006;55:1126–9.

Vancomycin-Intermediate *Staphylococcus aureus* Infection (VISA)/Vancomycin-Resistant *Staphylococcus aureus* Infection (VRSA)

Fridkin SK, Hageman J, McDougal LK, et al. Vancomycin-Intermediate *Staphylococcus aureus* Epidemiology Study Group. Epidemiological and microbiological characterization of infections caused by *Staphylococcus aureus* with reduced susceptibility to vancomycin, United States, 1997–2001. Clin Infect Dis 2003;36:429–39.

Chang S, Sievert DM, Hageman JC, et al. Vancomycin-Resistant *Staphylococcus aureus* Investigative Team. Infection with vancomycin-resistant *Staphylococcus aureus* containing the vanA resistance gene. N Engl J Med 2003;348:1342–7.

Whitener CJ, Park SY, Browne FA, et al. Vancomycin-resistant *Staphylococcus aureus* in the absence of vancomycin exposure. Clin Infect Dis 2004;38:1049–55.

Weigel LM, Clewell DB, Gill SR, et al. Genetic analysis of a high-level vancomycin-resistant isolate of *Staphylococcus aureus*. Science 2003;302:1569–71.

McDonald LC, Hageman JC. Vancomycin intermediate and resistant *Staphylococcus aureus*: what the nephrologist needs to know. Nephrol News Issues 2004;8:63–4, 66–7, 71–2.

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☆U.S. Government Printing Office: 2008-723-026/41074 Region IV ISSN: 0149-2195