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Pneumonia Hospitalizations Among Young Children Before and After Introduction of Pneumococcal Conjugate Vaccine — United States, 1997–2006

Streptococcus pneumoniae is the leading bacterial cause of community-acquired pneumonia hospitalizations and an important cause of bacteremia and meningitis, especially among young children and older adults (*1,2*). A 7-valent pneumococcal conjugate vaccine (PCV7) was licensed and the Advisory Committee on Immunization Practices formulated recommendations for its use in infants and children in February 2000 (*2*). Vaccination coverage rapidly increased during the second half of 2000, in part through funding by CDC's Vaccines for Children program. Subsequently, active population- and laboratory-based surveillance demonstrated substantial reductions in invasive pneumococcal disease (IPD) among children and adults (*3*). In addition, decreases in hospitalizations and ambulatory-care visits for all-cause pneumonia also were reported (*4,5*). To gauge whether the effects of PCV7 on reducing pneumonia continue, CDC is monitoring pneumonia hospitalizations by using data from the Nationwide Inpatient Sample. This report provides an update for 2005 and 2006, the most recent years for which information is available. In 2005 and 2006, the incidence rates for all-cause pneumonia hospitalizations among children aged <2 years were 9.1 per 1,000 and 8.1 per 1,000, respectively. In 2006, the rate for all-cause pneumonia among children aged <2 years was approximately 35% lower than during 1997–1999. Most of this decrease occurred soon after the vaccine was licensed in 2000, and the rates have remained relatively stable since then. The rate for all-cause pneumonia among children aged 2–4 years did not change after PCV7 licensure and has remained stable. Continued monitoring of pneumonia-related hospitalizations among children is needed to track the effects of pneumococcal immunization programs.

The Nationwide Inpatient Sample contains data on inpatient stays from states that participate in the Healthcare Cost and Utilization Project, sponsored by the Agency for Healthcare Research and Quality. The project is a stratified probability sample of U.S. acute-care hospitals and the largest all-payer inpatient-care database available in the United States. In 2006, this database recorded information from approximately 8 million hospitalizations (approximately 20% of all U.S. hospitalizations) from 1,045 hospitals in 38 states. Data are weighted to generate national estimates while accounting for complex sampling design (*6*). For this analysis, all-cause pneumonia hospitalization was defined as a record in which *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) codes 480–486 (pneumonia) or 487.0 (influenza with pneumonia) were assigned as the primary diagnosis.

Trends in hospitalizations for nonpneumonia acute respiratory illness (ARI) also were evaluated to assess the possibility that, after PCV7 introduction, practitioners were less likely to assign a pneumonia code for respiratory conditions in a vaccinated child and more likely to make other respiratory diagnoses. A nonpneumonia ARI hospitalization was defined as a record with any of the following ICD-9-CM codes assigned as the primary diagnosis: 381–383 (otitis media and mastoiditis), 460–466 (acute respiratory infections, including acute bronchitis, bronchiolitis, acute nasopharyngitis, sinusitis, pharyngitis, tonsillitis, laryngitis, tracheitis, and other acute upper respiratory infections), 487 (influenza, excluding 487.0), 490 (bronchitis), 491 (chronic bronchitis), or 493 (asthma).

INSIDE

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Some of these diagnoses, such as asthma, bronchiolitis, or acute bronchitis generally are not considered to be caused by *S. pneumoniae*.

Hospitalization rates among children aged <2 years and 2–4 years were calculated by dividing the total number of yearly hospitalizations by age-specific population denominators from U.S. census data. Baseline rates before introduction of PCV7 were defined as the average annualized rates during 1997–1999; incidence rate ratios (RRs) were calculated by dividing estimated rates for 2006 by the baseline rates. Point estimates and 95% confidence intervals (CIs) were calculated using outcome-specific Poisson regression models that accounted for the Nationwide Inpatient Sample sampling design. Rate differences between baseline and 2006 rates were multiplied by age-specific census data to estimate changes in the absolute number of hospitalizations during 2006. To examine changes in the distribution of causes of hospitalization after introduction of PCV7, the proportion of all nonbirth-related hospitalizations that were coded as pneumonia and nonpneumonia ARI among children aged <2 years during 1997–1999 and 2006 were calculated.

In 2005, a total of 74,559 children aged <2 years were hospitalized in the United States for all-cause pneumonia, and 67,430 were hospitalized in 2006, accounting for approximately 8% of yearly nonbirth-related hospitalizations in this age group. The rates of all-cause pneumonia hospitalization per 1,000 children aged <2 years were 9.1 in 2005 and 8.1 in 2006. Although the rate of all-cause pneumonia in 2005 was higher than in 2004 (8.0), this increase was not statistically significant. The 2005 and 2006 rates were 27% and 35% lower than the baseline rate of 12.5 per 1,000 (Table). For 2006, the rate reduction represented an estimated 36,300 fewer pneumonia hospitalizations among children aged <2 years during 2006, compared with the average annual number of hospitalizations during 1997–1999. Among children aged 2–4 years, the rate of all-cause pneumonia hospitalization did not change significantly during the study years (Table, Figure).

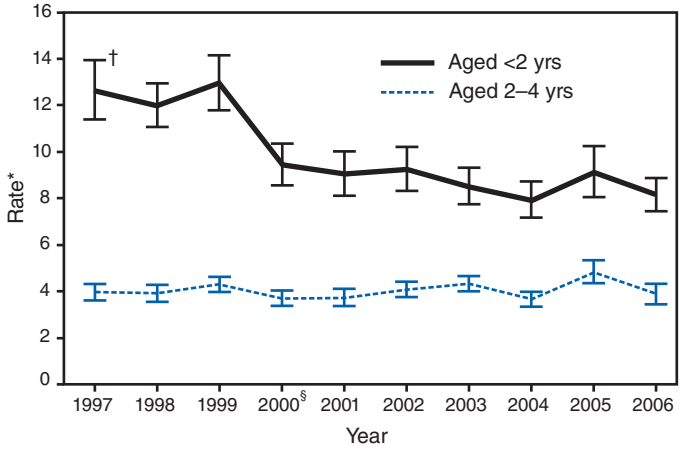
Among children aged <2 years, the rate of nonpneumonia ARI hospitalizations was 24.6 per 1,000 in 2005 and 21.9 per 1,000 in 2006. The rate in 2006 represented a significant decline from the rate of 28.1 during the baseline period (RR = 0.8). For 2006, this rate reduction represented an estimated 51,500 fewer nonpneumonia ARI hospitalizations among children aged <2 years during 2006 compared with the average annual number of hospitalizations during 1997–1999. Among children aged 2–4 years, the rate of nonpneumonia ARI hospitalizations was 6.5 per 1,000 in 2005 and 5.6 per 1,000 in 2006. The 2006 rate was not significantly different compared with the baseline period (RR = 1.0).

TABLE. Hospitalization rates for all-cause pneumonia and nonpneumonia acute respiratory illness among children aged <2 years and 2–4 years before and after pneumococcal conjugate vaccine introduction — Nationwide Inpatient Sample, United States, 1997–1999, 2005, and 2006

Syndrome/Age group	1997–1999 Average annualized rate	1997–1999 (95% CI†)	2005 Rate	2005 (95% CI)	2006 Rate	2006 (95% CI)	Rate ratio 2006 vs. 1997–1999 Rate ratio	Rate ratio 2006 vs. 1997–1999 (95% CI)
All-cause pneumonia								
<2 yrs	12.5	(11.8–13.3)	9.1	(8.1–10.3)	8.1	(7.5–8.9)	0.7	(0.6–0.7)
2–4 yrs	4.1	(3.8–4.3)	4.8	(4.3–5.3)	3.9	(3.5–4.3)	1.0	(0.9–1.1)
Nonpneumonia ARI§								
<2 yrs	28.1	(26.4–30.0)	24.6	(21.4–28.3)	21.9	(19.7–24.3)	0.8	(0.7–0.9)
2–4 yrs	5.8	(5.6–6.1)	6.5	(6.1–7.0)	5.6	(5.2–6.0)	1.0	(0.9–1.0)

* Per 1,000 population.
† Confidence interval.
§ Acute respiratory illness.

FIGURE. Annual all-cause pneumonia hospitalizations rates* among children aged <2 years and 2–4 years — Nationwide Inpatient Sample, United States, 1997–2006



* Per 1,000 population.
† 95% confidence interval.
§ 7-valent pneumococcal conjugate vaccine licensed in February 2000.

Annual rates for all nonbirth-related hospitalizations among children aged <2 years were 120 per 1,000 children in 2005 and 100 per 1,000 children in 2006, compared with 117 per 1,000 children during the baseline period. The proportion of total annual nonbirth-related hospitalizations coded as pneumonia was 8% in 2006, compared with 11% during the baseline period (p<0.001). The proportion of such hospitalizations coded as nonpneumonia ARI was 22% in 2006, compared with 24% during the baseline period (p=0.005).

Reported by: *CG Grijalva, MD, MR Griffin, MD, Vanderbilt Univ, Nashville, Tennessee. JP Nuorti, MD, Respiratory Diseases Br, National Center for Immunization and Respiratory Diseases; ND Walter, MD, EIS Officer, CDC.*

Editorial Note: The results of this analysis cannot, by themselves, establish a causal relationship between the advent of PCV7 and trends in childhood pneumonia hospitalizations. However, the updated analysis of national hospital discharge data suggests that reductions in all-cause pneumonia hospitalizations among U.S. children aged <2 years after routine PCV7 use have been sustained and that the benefits of PCV7 might extend beyond the documented changes in IPD (*3*) to hospitalizations for pneumonia. Moreover, rates of nonpneumonia ARI also declined after introduction of PCV7, indicating that the decreases in pneumonia hospitalizations likely were not the result of a shift in coding of respiratory hospitalizations to nonpneumonia ARI codes. In addition, the analysis suggests that the declines were unlikely to result from a reduction in total hospitalization rates. The transient increase in all-cause pneumonia rates from 2004 to 2005 might reflect increased circulation of respiratory viruses or other seasonal variation.

Although many nonpneumonia ARI diagnoses traditionally have not been considered manifestations of *S. pneumoniae* infection, recent data indicate that the pneumococcus might contribute to a wider range of childhood respiratory illness than previously thought. A randomized clinical trial performed in child care centers in Israel suggested that immunization with a 9-valent pneumococcal conjugate vaccine reduced reported episodes of upper respiratory infections, lower respiratory infections, and otitis media by 15%, 16%, and 17%, respectively (*7*). Furthermore, in a trial of 9-valent pneumococcal conjugate vaccine among South African children, vaccinated children had 45% fewer influenza A–associated pneumonia episodes than unvaccinated children, suggesting that *S. pneumoniae* might be a copathogen in illnesses diagnosed as influenza (*8*).

Although rates of IPD have decreased substantially among children aged 2–4 years after PCV7 introduction (*3*), a reduction in all-cause pneumonia hospitalizations was not observed in this age group. The reasons for this are unknown but might be associated with lower overall rates of pneumococcal infection in this age group. In addition, other etiologic agents are becoming more common causes of pneumonia in children aged >2 years (*1*).

The findings in this report are subject to at least three limitations. First, identification of hospitalizations for pneumonia and nonpneumonia ARI was based on ICD-9-CM codes and might be subject to misclassification, despite internal quality control and validation for consistency within the Nationwide Inpatient Sample. Second, establishing the etiology of pneumonia is difficult. Nationwide Inpatient Sample data are deidentified before public release and chart reviews cannot be performed to confirm recorded diagnoses. Because most pneumococcal pneumonias are classified as pneumonias without further characterization, this report provides an estimate of the effect of PCV7 on all-cause pneumonia without regard to pneumococcal serotypes. Furthermore, serotyping is not part of routine diagnostic work-ups, and this information would not be recorded in medical charts. However, the decrease in nonpneumonia ARI hospitalizations among children aged <2 years suggests that the decreases in pneumonia hospitalizations were unlikely to result from a shift in coding of pneumonia to nonpneumonia ARI codes. Finally, factors other than shifts in coding could affect hospitalization rates. Reduced clinician concerns for severe pneumococcal disease among immunized children, for example, might lead to outpatient treatment rather than hospitalization. However, other data indicate that ambulatory-care visits for pneumonia among children aged <2 years also have decreased since introduction of PCV7 (*5*). In addition, the proportion of all hospitalizations that were attributable to pneumonia or nonpneumonia ARI decreased significantly, suggesting that the declines were unlikely to result from a secular reduction in overall hospitalization rate.

Despite the substantial morbidity associated with childhood pneumonia, no pneumonia-specific prospective population-based surveillance system exists for monitoring trends in the incidence of pneumonia hospitalizations or pneumonia-related ambulatory-care visits in the United States. Monitoring childhood pneumonia is important for the evaluation of effects of current and future pneumococcal immunization programs. Increases in pneumococcal disease caused by serotypes not included in PCV7 could result in some increase in pneumonia, even though observed increases in non-PCV7 serotype IPD have been modest thus far (*9*). In addition, extended-valency pneumococcal conjugate vaccines are expected to be licensed by late 2009 to early 2010 and might further reduce pneumonia rates. Finally, vaccination of children against influenza, as recommended by the Advisory Committee on Immunization Practices, is increasing and also might reduce pneumonia hospitalization rates (*10*).

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Possible Congenital Infection with La Crosse Encephalitis Virus — West Virginia, 2006–2007

La Crosse encephalitis virus (LACV) is a mosquitoborne bunyavirus of the California encephalitis serogroup (*1*). During 2003–2007, West Virginia had the greatest number of cases (95) and highest incidence of LACV disease (5.1 cases per 100,000 population) of any state.* The majority of persons infected with LACV either have no symptoms or a mild febrile illness; a limited number experience encephalitis (*2*). Although only 1%–4% of those infected with LACV develop any symptoms, children aged <16 years are at highest risk for severe neurologic disease and possible long-term sequelae (*2,3*). The effects of LACV infection during pregnancy and the potential for intrauterine transmission and adverse birth or developmental outcomes are unknown. This report describes the first known case of LACV infection in a pregnant woman, with evidence of possible congenital infection with LACV in her infant, based on the presence of immunoglobulin M (IgM)

*Confirmed and probable California serogroup viral (mainly La Crosse) encephalitis cases, human, United States, 1964–2007, by state. Available at http://www.cdc.gov/ncidod/dvbid/arbor/pdf/cal_lac.pdf.

antibodies in umbilical cord serum at delivery. The infant was born healthy with normal neurologic and cognitive functions and no LACV symptoms. Further investigation is needed to confirm the potential for intrauterine LACV transmission and to identify immediate and long-term health risks posed to infants. Because of the potential for congenital infection, pregnant women in areas where LACV is endemic should be advised to avoid mosquitoes; health-care providers should monitor for LACV infection and sequelae among infants born to women infected with LACV during pregnancy.

In August 2006, a previously healthy woman aged 43 years in week 21 of her pregnancy was admitted to a West Virginia hospital after experiencing severe headaches, photophobia, stiff neck, fever, weakness, confusion, and a red papular rash. The patient had reported a 3-month history of severe headaches, which were diagnosed initially as migraines and treated with morphine for pain. Two previous pregnancies had proceeded without complication, and each resulted in delivery of a healthy infant. The patient's medical history included anxiety, depression, and hypothyroidism, for which she received ongoing thyroid hormone replacement therapy.

After hospital admission, analysis of cerebrospinal fluid revealed an elevated white blood cell count (556 cells/mm^3 [94% lymphocytes, 5% monocytes, and 1% polymorphonuclear neutrophilic leukocytes]), elevated protein (66 mg/dL), and normal glucose (55 mg/dL). A diagnostic panel for viral encephalitis was performed, and the patient's serum was determined positive for the presence of LACV-specific IgM and immunoglobulin G (IgG) antibodies by immunofluorescence assay and for IgM by capture enzyme-linked immunosorbent assay (ELISA) (Table). The patient's serum was negative for IgM and IgG antibodies to the other three diseases in the diagnostic panel: eastern equine encephalitis, western equine encephalitis, and St. Louis encephalitis. A diagnosis of La Crosse encephalitis was made, and supportive therapy was initiated. During hospitalization, the patient experienced a low-grade fever and exhibited panleukocytosis (absolute neutrophil count: 12,800/μL), which persisted after discharge despite resolution of clinical signs.

After reporting the case to the West Virginia Department of Health and Human Resources, active follow-up of the patient and her fetus was initiated in collaboration with the patient's primary-care providers and CDC. With her consent, the patient's medical and prenatal histories were reviewed. Because guidelines for evaluating pregnant women infected with LACV do not exist, interim guidelines for West Nile virus were used to direct maternal and infant follow-up (*4*). Specifically, collection of blood and tissue products at time of delivery was arranged with the patient's obstetrician. Umbilical cord serum and maternal serum were tested for LACV-specific antibodies by ELISA and serum-dilution plaque-reduction neutralization test (PRNT). Sera also were tested for neutralizing antibodies to the closely related Jamestown Canyon virus by PRNT to rule out potential cross-reactivity. Umbilical cord and placental tissue were tested for LACV RNA by reverse transcription–polymerase chain reaction (RT-PCR). Data were collected regarding the infant's health at delivery and through routine well-child visits during the first 6 months of life.

The patient had a normal, spontaneous, vaginal delivery of a healthy girl at approximately 40 weeks gestation. The child

TABLE. Summary of laboratory test results during investigation and follow-up of possible congenital infection with La Crosse encephalitis virus (LACV) — West Virginia, 2006–2007

Collection date	Specimen	Test	Result
August 20, 2006	Maternal serum	LACV IgM*capture ELISA†	Positive
	Maternal serum	LACV IgM IFA§	Positive
	Maternal serum	LACV IgG¶ IFA	Positive
	Maternal serum	LACV neutralizing antibodies PRNT**	Positive
	Maternal serum	JCV†† neutralizing antibodies PRNT	Negative
January 5, 2007	Placental tissue	LACV RNA RT-PCR§§	Negative
	Umbilical cord tissue	LACV RNA RT-PCR	Negative
	Umbilical cord serum	LACV IgM capture ELISA	Positive
	Umbilical cord serum	LACV IgG capture ELISA	Equivocal
	Umbilical cord serum	LACV neutralizing antibodies PRNT	Positive
	Umbilical cord serum	JCV neutralizing antibodies PRNT	Negative
March 23, 2007	Maternal serum	LACV IgM capture ELISA	Negative
	Maternal serum	LACV IgG capture ELISA	Positive

* Immunoglobulin M.
† Enzyme-linked immunosorbent assay.
§ Immunofluorescence assay.
¶ Immunoglobulin G.
** Plaque-reduction neutralization test.
†† Jamestown Canyon virus.
§§ Reverse transcription–polymerase chain reaction.

had normal birth weight (2,970 g), length (52 cm), and head circumference (33 cm). Apgar scores at 1 minute and 5 minutes postpartum were within normal limits (8 and 9, respectively). LACV-specific IgM antibodies were detected in umbilical cord serum, although no evidence of LACV RNA was detected in umbilical cord tissue or placental tissue by RT-PCR (Table).

The mother declined collection of additional specimens of infant serum for confirmation of congenital LACV infection. Maternal serum collected at 11 weeks postpartum was positive for LACV IgG antibodies but negative for IgM. Except for intermittent nasal congestion associated with upper respiratory infections, the infant remained healthy and exhibited appropriate growth and development through the first 6 months of life. No neurologic abnormalities or decreased cognitive functions were observed.

Reported by: *A Hinckley, PhD, Div of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases; A Hall, DVM, EIS Officer, CDC.*

Editorial Note: This report summarizes the first case of symptomatic LACV infection identified during pregnancy. Congenital LACV infection of the fetus was suggested through identification of IgM antibodies in umbilical cord serum, although the newborn was asymptomatic and development was normal. Although unlikely to cross the placental barrier, LACV IgM antibodies detected in cord serum might have been attributable to transplacental leakage induced by uterine contractions that disrupt placental barriers during labor, which has been documented for anti-*Toxoplasma* IgM antibodies (*5*). Because specificity of standard laboratory techniques used to detect LACV IgM antibodies in cord serum or newborn serum is unknown, a follow-up evaluation of infant serum is necessary to confirm congenital infection. However, in this case, the mother declined collection of any additional specimens from her infant.

Certain infectious diseases have more severe clinical presentations in pregnant women (*6*). Symptomatic LACV infection is rare among adults; therefore, effects of pregnancy on the risk for or severity of illness are unknown. Because LACV-specific IgM can be present for as long as 9 months after infection (*1*), LACV might not have been responsible for the symptoms reported during this woman's pregnancy. However, the woman resided in an area where LACV is known to be endemic; during 2006, 16 (24%) of 67 LACV cases in the United States reported to CDC occurred in West Virginia, including three other cases from the same county as this patient.[†] Although antimicrobial treatment of pregnant women often is controversial because of limited information regarding efficacy and risk to the developing infant (*7*), certain in vitro evidence indicates that the antiviral agent ribavirin might be useful for treating LACV infection in nonpregnant patients (*2*). However, supportive treatment continues as the standard of care for managing all LACV patients (*2*).

Congenital infection with other arboviral diseases has been reviewed and documented previously (*8*). Although no human congenital infection with a bunyavirus of the California serogroup has been reported, congenital infection with other bunyaviruses of the Bunyamwera serogroup has been associated with macrocephaly. In addition, animal studies have determined that infection with LACV during pregnancy can cause teratogenic effects in domestic rabbits, Mongolian gerbils, and sheep (*9,10*).

Pregnant women in areas where LACV is endemic should take precautions to reduce risk for infection by avoiding mosquitoes, wearing protective clothing, and applying a mosquito repellent to skin and clothing. Additionally, health-care providers serving areas where LACV is endemic should consider LACV in the differential diagnosis of viral encephalitis. As a nationally notifiable disease, all probable and confirmed cases of LACV should be reported to the appropriate state and local public health authorities. When LACV infection is suspected in a pregnant woman or infant, appropriate serologic and virologic testing by a public health reference laboratory is recommended. Testing breast milk for the presence of LACV also might be reasonable to evaluate the potential for maternal-infant transmission and to determine the suitability for continued breastfeeding. Additional investigations are needed to confirm the potential for congenital infection with LACV and to identify immediate and long-term health risks LACV poses to infants.

[†] La Crosse encephalitis, human: cumulative 2006 data. Available at http://diseasemaps.usgs.gov/2006/lac_us_human.html.

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Updated Guidelines for the Use of Nucleic Acid Amplification Tests in the Diagnosis of Tuberculosis

Guidelines for the use of nucleic acid amplification (NAA) tests for the diagnosis of tuberculosis (TB) were published in 1996 (*1*) and updated in 2000 (*2*). Since then, NAA testing has become a routine procedure in many settings because NAA tests can reliably detect *Mycobacterium tuberculosis* bacteria in specimens 1 or more weeks earlier than culture (*3*). Earlier laboratory confirmation of TB can lead to earlier treatment initiation, improved patient outcomes, increased opportunities to interrupt transmission, and more effective public health interventions (*4,5*). Because of the increasing use of NAA tests and the potential impact on patient care and public health, in June 2008, CDC and the Association of Public Health Laboratories (APHL) convened a panel of clinicians, laboratorians, and TB control officials to assess existing guidelines (*1,2*) and make recommendations for using NAA tests for laboratory confirmation of TB. On the basis of the panel's report and consultations with the Advisory Council for the Elimination of TB (ACET),* CDC recommends that NAA testing be performed on at least one respiratory specimen from each patient with signs and symptoms of pulmonary TB for whom a diagnosis of TB is being considered but has not yet been established, and for whom the test result would alter case management or TB control activities, such as contact investigations. These guidelines update the previously published guidelines (*1,2*).

* Additional information regarding ACET is available at http://www.cdc.gov/maso/facm/facmacet.htm.

Background

Conventional tests for laboratory confirmation of TB include acid-fast bacilli (AFB) smear microscopy, which can produce results in 24 hours, and culture, which requires 2–6 weeks to produce results (*5,6*). Although rapid and inexpensive, AFB smear microscopy is limited by its poor sensitivity (45%–80% with culture-confirmed pulmonary TB cases) and its poor positive predictive value (50%–80%) for TB in settings in which nontuberculous mycobacteria are commonly isolated (*3,6,7*).

NAA tests can provide results within 24–48 hours. The Amplified *Mycobacterium tuberculosis* Direct Test (MTD, Gen-Probe, San Diego, California) was approved by the Food and Drug Administration (FDA) in 1995 for use with AFB smear-positive respiratory specimens, and in a supplement application, an enhanced MTD test was approved in 1999 for use with AFB smear-negative respiratory specimens from patients suspected to have TB. In addition, the Amplicor *Mycobacterium tuberculosis* Test (Amplicor, Roche Diagnostics, Basel, Switzerland) was approved by FDA in 1996 for use with AFB smear-positive respiratory specimens from patients suspected to have TB. NAA tests for TB that have not been FDA-approved also have been used clinically (e.g., NAA tests based on analyte specific reagents, often called "home-brew" or "in-house" tests) (*8,9*).

Compared with AFB smear microscopy, the added value of NAA testing lies in its 1) greater positive predictive value (>95%) with AFB smear-positive specimens in settings in which nontuberculous mycobacteria are common and 2) ability to confirm rapidly the presence of *M. tuberculosis* in 50%–80% of AFB smear-negative, culture-positive specimens (*3,7–9*). Compared with culture, NAA tests can detect the presence of *M. tuberculosis* bacteria in a specimen weeks earlier than culture for 80%–90% of patients suspected to have pulmonary TB whose TB is ultimately confirmed by culture (*3,8,9*). These advantages can impact patient care and TB control efforts, such as by avoiding unnecessary contact investigations or respiratory isolation for patients whose AFB smear-positive specimens do not contain *M. tuberculosis*.

Despite being commercially available for more than a decade (*1*), NAA tests for TB have not been widely used in the United States largely because of 1) an uncertainty as to whether NAA test results influence case-management decisions or TB control activities; 2) a lack of information on the overall cost-effectiveness of NAA testing for TB; and 3) a lack of demand from clinicians and public health authorities. However, recent

studies showed that 1) clinicians already rely on the NAA test result as the deciding factor for the initiation of therapy for 20%–50% of TB cases in settings where NAA testing is a routine practice (*4,7*) and 2) overall cost savings can be achieved by using NAA test results for prioritizing contact investigations, making decisions regarding respiratory isolation, or reducing nonindicated TB treatment (*4,7*).

In response to the increasing demand for NAA testing for TB and recognition of the importance of prompt laboratory results in TB diagnosis and control, ACET requested that APHL and CDC convene a panel to evaluate the available information (e.g., current practices, existing guidelines, and publications) and to propose new guidelines for the use of NAA tests for TB diagnosis. The panel met in June 2008 and included TB clinicians; TB control officials; laboratory directors or supervisors from small, medium, and large public health laboratories, hospital laboratories, and commercial laboratories; and representatives from the TB Regional Training and Medical Consultation Centers, ACET, APHL, and CDC. In brief, the panel recommended[†] that NAA testing become a standard practice in the United States to aid in the initial diagnosis of patients suspected to have TB, rather than just being a reasonable approach, as suggested in previously published guidelines (*1,2*). On the basis of the panel's report and consultations with ACET, CDC developed revised guidelines.

Updated Recommendation

NAA testing should be performed on at least one respiratory specimen from each patient with signs and symptoms of pulmonary TB for whom a diagnosis of TB is being considered but has not yet been established, and for whom the test result would alter case management or TB control activities. The following testing and interpretation algorithm is proposed.

Revised Testing and Interpretation Algorithm

1. Routinely collect respiratory specimens (e.g., sputum), process (liquefy, decontaminate, and concentrate), and test by AFB smear microscopy and culture as previously recommended (*6*). Specimen collection and microbiologic testing should not be delayed to await NAA test results.
2. At least one specimen, preferably the first diagnostic specimen, from each patient to be tested by NAA should be processed, suspended in a sufficient volume of buffer to ensure adequate sample volume for all planned tests (e.g., microscopy, culture, and NAA), and tested using an NAA test for TB. NAA testing should be performed in accordance with the manufacturer's instructions or a validated standard operating procedure.
3. Interpret NAA test results in correlation with the AFB smear results.
   a. If the NAA result is positive and the AFB smear result is positive, presume the patient has TB and begin anti-TB treatment while awaiting culture results. The positive predictive value of FDA-approved NAA tests for TB is >95% in AFB smear-positive cases (*8*).
   b. If the NAA result is positive and the AFB smear result is negative, use clinical judgment whether to begin anti-TB treatment while awaiting culture results and determine if additional diagnostic testing is needed. Consider testing an additional specimen using NAA to confirm the NAA result. A patient can be presumed to have TB, pending culture results, if two or more specimens are NAA positive.
   c. If the NAA result is negative and the AFB smear result is positive, a test for inhibitors should be performed and an additional specimen should be tested with NAA. Sputum specimens (3%–7%) might contain inhibitors that prevent or reduce amplification and cause false-negative NAA results (*8,9*).
      i. If inhibitors are detected, the NAA test is of no diagnostic help for this specimen. Use clinical judgment to determine whether to begin anti-TB treatment while awaiting results of culture and additional diagnostic testing.
      ii. If inhibitors are not detected, use clinical judgment to determine whether to begin anti-TB treatment while awaiting culture results and determine if additional diagnostic testing is needed. A patient can be presumed to have an infection with nontuberculous mycobacteria if a second specimen is smear positive and NAA negative and has no inhibitors detected.
   d. If the NAA result is negative and the AFB smear result is negative, use clinical judgment to determine whether to begin anti-TB treatment while awaiting results of culture and additional diagnostic tests. Currently available NAA tests are not sufficiently sensitive (detecting 50%–80% of AFB smear-negative, culture-positive pulmonary TB cases) to exclude the diagnosis of TB in AFB smear-negative patients suspected to have TB (*8,9*).

Cautions

Culture remains the gold standard for laboratory confirmation of TB and is required for isolating bacteria for drug-susceptibility testing and genotyping. In accordance

[†] The full report and recommendations of the panel (released in December 2008) are available at http://www.cdc.gov/tb/amplification_tests/amplification_tests.pdf.

with current recommendations (*6*), sufficient numbers and portions of specimens should always be reserved for culturing. Nonetheless, NAA testing should become standard practice for patients suspected to have TB, and all clinicians and public health TB programs should have access to NAA testing for TB to shorten the time needed to diagnose TB from 1–2 weeks to 1–2 days (*3*). More rapid laboratory results should lead to earlier treatment initiation, improved patient outcomes, and increased opportunities to interrupt transmission (*4,5*). Rapid laboratory confirmation of TB also can help reduce inappropriate use of fluoroquinolones as empiric monotherapy of pneumonias, a practice which is suspected to lead to development of fluoroquinolone-resistant *M. tuberculosis* and delays in initiating appropriate anti-TB therapy (*10*).

To maximize benefits of NAA testing, the interval from specimen collection to communication of the laboratory report to the treating clinician should be as brief as possible. NAA test results should be available within 48 hours of specimen collection. Laboratorians should treat an initial positive NAA test result as a critical test value, immediately report the result to the clinician and public health authorities, and be available for consultation regarding test interpretation and the possible need for additional testing.

Although NAA testing is recommended to aid in the initial diagnosis of persons suspected to have TB, the currently available NAA tests should not be ordered routinely when the clinical suspicion of TB is low, because the positive predictive value of the NAA test is <50% for such cases (*8*). Clinicians, laboratorians, and TB control officials should be aware of the appropriate uses of NAA tests.

Clinicians should interpret all laboratory results on the basis of the clinical situation. A single negative NAA test result should not be used as a definitive result to exclude TB, especially when the clinical suspicion of TB is moderate to high. Rather, the negative NAA test result should be used as additional information in making clinical decisions, to expedite testing for an alternative diagnosis, or to prevent unnecessary TB treatment. Consultation with a TB expert should be considered if the clinician is not experienced in the interpretation of NAA tests or the diagnosis and treatment of TB.

Although FDA-approved NAA tests for TB are eligible for Medicare or Medicaid reimbursement, the costs of adding NAA testing to the routine testing of respiratory specimens from patients suspected to have TB might be considerable (e.g., operating costs exceed $100 per MTD test) (*8*). However, NAA testing has the potential to provide overall cost savings to the treatment center and TB control program through reduced costs for isolation, reduced costs of contact investigations of persons who do not have TB, and increased opportunities to prevent transmission. Within the parameters of these guidelines, each TB control or treatment program should evaluate the overall costs and benefits of NAA testing in deciding the value and optimal use of the test in their setting.

Because the testing algorithm includes NAA testing of AFB smear-negative specimens, laboratories must use an FDA-approved test for such specimens or a test produced and validated in accordance with applicable FDA and Clinical Laboratory Improvement Amendments (CLIA) regulations.[§] However, the performance of in-house tests or FDA-approved tests used for nonapproved indications (off-label use) is variable (*8,9*), and insufficient information is available to provide recommendations on the use of such tests for the diagnosis of TB. Their use should be guided by the clinical context, and the results of such tests should be interpreted on the basis of performance in the local laboratory and in validation studies.

For procedural and economic reasons, NAA testing might be impractical in laboratories with a small volume of testing. Referral of samples for NAA testing to high-volume laboratories might be preferable to improve cost-efficiency, proficiency, and turnaround times. The New York and Florida Fast Track Programs are successful NAA testing services that could serve as models for a regional service (*5*).

Information is limited regarding NAA test performance for nonrespiratory specimens or specimens from patients under treatment (*8*). NAA results often remain positive after culture results become negative during therapy. Further research is needed before specific recommendations can be made on the use of NAA testing in the diagnosis of extrapulmonary TB and TB in children who cannot produce sputum; however, evidence exists for the utility of such testing in individual cases (*8*).

These guidelines do not address the use of molecular tests for detecting drug resistance, which is an urgent public health and diagnostic need. No molecular drug-susceptibility tests (DSTs) have been approved by FDA for use in the United States, although well-characterized molecular DSTs are commercially available in Europe and elsewhere.[¶] Nonetheless, a proposed revision of the Diagnostic Standards and Classification of Tuberculosis in Adults and Children (*6*) is likely to support the use of molecular DSTs for AFB smear-positive sputum sediments from TB patients who are suspected to have drug-resistant disease or who are from a region or population with a high prevalence of drug resistance.

Reported by: *Div of Tuberculosis Elimination, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, CDC.*

[§] Information on ASR regulations (21 CFR 809.10(e), 809.30, and 864.4020) is available at http://www.fda.gov/cdrh/oivd/guidance/1590.html. Information on the Clinical Laboratory Improvement Amendments (42 CFR 493) is available at http://wwwn.cdc.gov/clia/regs/toc.aspx.

[¶] Additional information available at http://www.who.int/tb/features_archive/expert_group_report_june08.pdf.

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Erratum: Vol. 57, No. 40

In the report, "Vaccination Coverage Among Adolescents Aged 13–17 Years — United States, 2007," on page 1100, in the second footnote, an error occurred. The first sentence of the footnote should read as follows:

"† NIS–Teen 2007 was conducted during the fourth quarter 2007 only; eligible participants were born during October 5, 1989–February 14, 1995."

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending January 10, 2009 (1st week)*

Disease	Current week	Cum 2009	5-year weekly average†	Total cases reported for previous years 2008	2007	2006	2005	2004	States reporting cases during current week (No.)
Anthrax	—	—	—	—	1	1	—	—	
Botulism:									
foodborne	—	—	0	13	32	20	19	16	
infant	—	—	2	98	85	97	85	87	
other (wound and unspecified)	—	—	1	24	27	48	31	30	
Brucellosis	—	—	3	84	131	121	120	114	
Chancroid	—	—	0	31	23	33	17	30	
Cholera	—	—	0	2	7	9	8	6	
Cyclosporiasis§	1	1	2	127	93	137	543	160	FL (1)
Diphtheria	—	—	—	—	—	—	—	—	
Domestic arboviral diseases§,¶:									
California serogroup	—	—	—	40	55	67	80	112	
eastern equine	—	—	—	2	4	8	21	6	
Powassan	—	—	—	1	7	1	1	1	
St. Louis	—	—	0	10	9	10	13	12	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis/Anaplasmosis§,**:									
Ehrlichia chaffeensis	3	3	16	855	828	578	506	338	ME (1), NC (1), FL (1)
Ehrlichia ewingii	—	—	—	9	—	—	—	—	
Anaplasma phagocytophilum	—	—	25	494	834	646	786	537	
undetermined	—	—	2	69	337	231	112	59	
Haemophilus influenzae,††									
invasive disease (age <5 yrs):									
serotype b	—	—	1	27	22	29	9	19	
nonserotype b	1	1	5	169	199	175	135	135	NC (1)
unknown serotype	2	2	5	191	180	179	217	177	NY (1), FL (1)
Hansen disease§	—	—	2	72	101	66	87	105	
Hantavirus pulmonary syndrome§	—	—	1	16	32	40	26	24	
Hemolytic uremic syndrome, postdiarrheal§	1	1	6	237	292	288	221	200	CA (1)
Hepatitis C viral, acute	90	90	21	840	845	766	652	720	OH (3), IN (1), KY (2), TN (1), TX (1), AZ (81), CA (1)
HIV infection, pediatric (age <13 years)§§	—	—	2	—	—	—	380	436	
Influenza-associated pediatric mortality§,¶¶	—	—	1	90	77	43	45	—	
Listeriosis	7	7	17	670	808	884	896	753	NY (1), OH (1), GA (1), TN (1), CA (3)
Measles***	—	—	1	134	43	55	66	37	
Meningococcal disease, invasive†††:									
A, C, Y, and W-135	1	1	7	302	325	318	297	—	NV (1)
serogroup B	—	—	5	154	167	193	156	—	
other serogroup	—	—	1	30	35	32	27	—	
unknown serogroup	6	6	19	593	550	651	765	—	OH (2), VA (1), NC (1), FL (1), CA (1)
Mumps	2	2	15	391	800	6,584	314	258	TN (1), HI (1)
Novel influenza A virus infections	—	—	—	1	4	N	N	N	
Plague	—	—	0	1	7	17	8	3	
Poliomyelitis, paralytic	—	—	—	—	—	—	1	—	
Polio virus infection, nonparalytic§	—	—	—	—	—	N	N	N	
Psittacosis§	1	1	0	12	12	21	16	12	PA (1)
Q fever total§,§§§:	—	—	2	116	171	169	136	70	
acute	—	—	0	103	—	—	—	—	
chronic	—	—	—	13	—	—	—	—	
Rabies, human	—	—	0	1	1	3	2	7	
Rubella¶¶¶	2	2	0	17	12	11	11	10	AZ (1), UT (1)
Rubella, congenital syndrome	—	—	—	—	—	1	1	—	
SARS-CoV§,****	—	—	—	—	—	—	—	—	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	—	—	4	131	132	125	129	132	
Syphilis, congenital (age <1 yr)	—	—	7	229	430	349	329	353	
Tetanus	1	1	1	16	28	41	27	34	UT (1)
Toxic-shock syndrome (staphylococcal)§	1	1	3	69	92	101	90	95	TN (1)
Trichinellosis	—	—	0	37	5	15	16	5	
Tularemia	—	—	2	106	137	95	154	134	
Typhoid fever	1	1	9	396	434	353	324	322	CA (1)
Vancomycin-intermediate *Staphylococcus aureus*§	—	—	0	33	37	6	2	—	
Vancomycin-resistant *Staphylococcus aureus*§	—	—	0	—	2	1	3	1	
Vibriosis (noncholera *Vibrio* species infections)§	3	3	4	451	549	N	N	N	NC (2), FL (1)
Yellow fever	—	—	—	—	—	—	—	—	

See Table I footnotes on next page.

TABLE I. (*Continued*) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending January 10, 2009 (1st week)*

—: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.

* Incidence data for reporting year 2008 and 2009 are provisional, whereas data for 2004, 2005, 2006, and 2007 are finalized.

† Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf.

§ Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except starting in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.

¶ Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.

** The names of the reporting categories changed in 2008 as a result of revisions to the case definitions. Cases reported prior to 2008 were reported in the categories: Ehrlichiosis, human monocytic (analogous to *E. chaffeensis*); Ehrlichiosis, human granulocytic (analogous to *Anaplasma phagocytophilum*), and Ehrlichiosis, unspecified, or other agent (which included cases unable to be clearly placed in other categories, as well as possible cases of *E. ewingii*).

†† Data for *H. influenzae* (all ages, all serotypes) are available in Table II.

§§ Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly.

¶¶ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. No confirmed influenza-associated pediatric deaths have been reported for the current 2008-09 season.

*** No measles cases were reported for the current week.

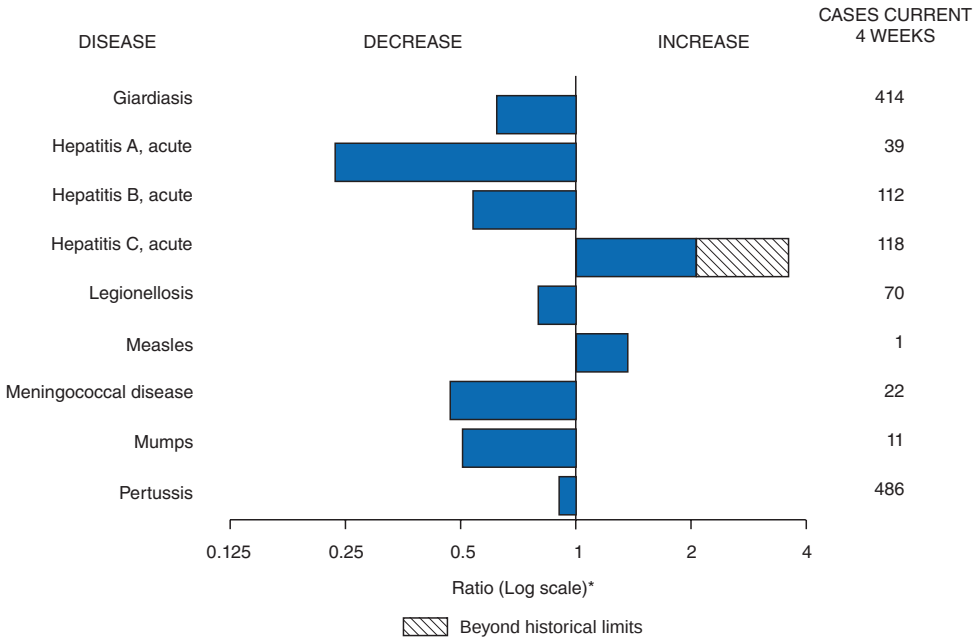
††† Data for meningococcal disease (all serogroups) are available in Table II.

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

¶¶¶ The two rubella cases reported for the current week were unknown.

**** Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals January 10, 2009, with historical data



* Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

Notifiable Disease Data Team and 122 Cities Mortality Data Team

Patsy A. Hall

Deborah A. Adams
Willie J. Anderson
Lenee Blanton
Rosaline Dhara
Michael S. Wodajo
Pearl C. Sharp

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending January 10, 2009, and January 5, 2008 (1st week)*

Reporting area	Chlamydia†					Coccidiodomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 week		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	8,115	21,476	25,221	8,115	13,869	103	122	322	103	308	20	100	431	20	85
New England	369	707	1,048	369	441	—	0	1	—	—	—	5	20	—	40
Connecticut	—	210	473	—	78	N	0	0	N	N	—	0	0	—	38
Maine§	56	51	72	56	43	N	0	0	N	N	—	0	6	—	—
Massachusetts	225	329	623	225	244	N	0	0	N	N	—	1	9	—	1
New Hampshire	32	42	64	32	17	—	0	1	—	—	—	1	4	—	1
Rhode Island§	29	55	208	29	53	—	0	0	—	—	—	0	3	—	—
Vermont§	27	15	52	27	6	N	0	0	N	N	—	1	7	—	—
Mid. Atlantic	315	2,763	5,097	315	1,593	—	0	0	—	—	1	12	34	1	7
New Jersey	—	442	576	—	298	N	0	0	N	N	—	0	2	—	1
New York (Upstate)	145	532	1,355	145	5	N	0	0	N	N	1	4	17	1	—
New York City	—	1,011	3,412	—	578	N	0	0	N	N	—	2	6	—	2
Pennsylvania	170	814	1,088	170	712	N	0	0	N	N	—	5	15	—	4
E.N. Central	975	3,528	4,285	975	3,008	—	1	3	—	1	4	25	126	4	18
Illinois	37	1,084	1,394	37	749	N	0	0	N	N	—	2	13	—	2
Indiana	313	377	713	313	463	N	0	0	N	N	—	3	12	—	—
Michigan	585	841	1,226	585	494	—	0	3	—	—	—	5	13	—	6
Ohio	—	805	1,261	—	930	—	0	2	—	1	4	6	59	4	7
Wisconsin	40	320	615	40	372	N	0	0	N	N	—	9	46	—	3
W.N. Central	165	1,268	1,696	165	806	—	0	2	—	—	3	16	68	3	3
Iowa	—	174	240	—	71	N	0	0	N	N	—	4	30	—	3
Kansas	107	179	529	107	110	N	0	0	N	N	—	1	8	—	—
Minnesota	—	266	373	—	195	—	0	0	—	—	—	4	15	—	—
Missouri	—	490	566	—	272	—	0	2	—	—	2	3	13	2	—
Nebraska§	—	80	244	—	70	N	0	0	N	N	1	2	8	1	—
North Dakota	3	34	58	3	52	N	0	0	N	N	—	0	2	—	—
South Dakota	55	55	85	55	36	N	0	0	N	N	—	1	9	—	—
S. Atlantic	2,919	3,645	6,324	2,919	1,889	—	0	1	—	—	11	17	46	11	9
Delaware	48	69	150	48	36	—	0	1	—	—	—	0	2	—	—
District of Columbia	99	127	207	99	81	—	0	0	—	—	—	0	2	—	—
Florida	1,135	1,368	1,571	1,135	824	N	0	0	N	N	7	7	35	7	5
Georgia	4	458	1,307	4	159	N	0	0	N	N	4	4	13	4	1
Maryland§	367	439	692	367	179	—	0	1	—	—	—	1	4	—	—
North Carolina	—	0	1,208	—	—	N	0	0	N	N	—	0	16	—	—
South Carolina§	840	478	3,043	840	260	N	0	0	N	N	—	1	4	—	1
Virginia§	420	621	1,059	420	314	N	0	0	N	N	—	1	4	—	—
West Virginia	6	60	102	6	36	N	0	0	N	N	—	0	3	—	2
E.S. Central	954	1,567	2,302	954	1,026	—	0	0	—	—	—	3	9	—	1
Alabama§	—	456	561	—	363	N	0	0	N	N	—	1	6	—	1
Kentucky	374	240	373	374	155	N	0	0	N	N	—	0	4	—	—
Mississippi	—	390	1,048	—	187	N	0	0	N	N	—	0	2	—	—
Tennessee§	580	534	792	580	321	N	0	0	N	N	—	1	6	—	—
W.S. Central	329	2,781	3,530	329	1,901	—	0	1	—	—	—	5	155	—	—
Arkansas§	329	276	455	329	118	N	0	0	N	N	—	0	6	—	—
Louisiana	—	417	775	—	132	—	0	1	—	—	—	1	5	—	—
Oklahoma	—	157	392	—	232	N	0	0	N	N	—	1	16	—	—
Texas§	—	1,947	2,343	—	1,419	N	0	0	N	N	—	2	140	—	—
Mountain	889	1,264	1,804	889	828	71	86	182	71	90	—	8	37	—	4
Arizona	283	470	650	283	261	71	86	181	71	89	—	1	9	—	2
Colorado	279	238	579	279	207	N	0	0	N	N	—	1	12	—	—
Idaho§	—	65	314	—	69	N	0	0	N	N	—	1	5	—	1
Montana§	12	59	87	12	36	N	0	0	N	N	—	1	3	—	—
Nevada§	89	177	415	89	110	—	0	6	—	1	—	0	1	—	—
New Mexico§	194	130	455	194	85	—	0	3	—	—	—	1	23	—	1
Utah	6	107	253	6	60	—	0	3	—	—	—	0	6	—	—
Wyoming§	26	31	58	26	—	—	0	1	—	—	—	0	4	—	—
Pacific	1,200	3,663	4,231	1,200	2,377	32	32	159	32	217	1	8	18	1	3
Alaska	45	85	137	45	11	N	0	0	N	N	—	0	1	—	—
California	866	2,875	3,301	866	1,876	32	32	159	32	217	—	5	14	—	1
Hawaii	5	103	161	5	56	N	0	0	N	N	—	0	1	—	—
Oregon§	—	191	631	—	134	N	0	0	N	N	1	1	4	1	2
Washington	284	356	634	284	300	N	0	0	N	N	—	1	11	—	—
American Samoa	—	0	20	—	—	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	4	24	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	53	116	333	53	—	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	13	23	—	6	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.
† Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 10, 2009, and January 5, 2008 (1st week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive All ages, all serotypes†				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	84	304	588	84	183	2,302	5,909	6,818	2,302	4,312	30	46	81	30	58
New England	6	24	49	6	22	39	97	171	39	68	1	2	8	1	4
Connecticut	—	6	14	—	7	—	50	129	—	14	—	0	7	—	—
Maine§	3	3	12	3	—	2	2	6	2	—	1	0	2	1	—
Massachusetts	—	8	17	—	9	31	39	69	31	48	—	0	5	—	4
New Hampshire	2	3	11	2	2	1	2	6	1	—	—	0	1	—	—
Rhode Island§	—	1	8	—	1	4	6	13	4	6	—	0	7	—	—
Vermont§	1	3	13	1	3	1	0	3	1	—	—	0	3	—	—
Mid. Atlantic	12	60	108	12	32	129	621	988	129	319	7	10	18	7	6
New Jersey	—	7	14	—	10	—	101	167	—	68	—	1	7	—	3
New York (Upstate)	8	21	51	8	1	53	117	274	53	—	2	3	7	2	—
New York City	—	16	29	—	8	—	180	633	—	91	—	1	6	—	1
Pennsylvania	4	16	46	4	13	76	213	270	76	160	5	4	8	5	2
E.N. Central	20	48	88	20	50	402	1,197	1,650	402	1,287	4	7	17	4	10
Illinois	—	11	31	—	18	12	361	482	12	320	—	2	6	—	7
Indiana	N	0	0	N	N	114	148	284	114	243	—	1	12	—	—
Michigan	3	12	22	3	9	248	320	657	248	187	—	0	2	—	—
Ohio	16	17	31	16	16	—	277	531	—	424	4	2	6	4	1
Wisconsin	1	9	20	1	7	28	83	176	28	113	—	0	2	—	2
W.N. Central	7	28	143	7	12	24	316	425	24	238	2	3	15	2	7
Iowa	—	6	18	—	4	—	28	48	—	20	—	0	1	—	1
Kansas	—	3	11	—	1	12	40	130	12	26	—	0	3	—	—
Minnesota	—	0	106	—	—	—	55	92	—	55	—	0	10	—	—
Missouri	5	8	22	5	4	—	149	199	—	113	2	1	6	2	4
Nebraska§	1	4	10	1	3	—	25	47	—	21	—	0	2	—	2
North Dakota	—	0	3	—	—	—	2	6	—	3	—	0	3	—	—
South Dakota	1	2	10	1	—	12	7	20	12	—	—	0	0	—	—
S. Atlantic	20	54	87	20	27	909	1,229	2,007	909	715	11	12	25	11	17
Delaware	—	1	3	—	2	7	20	44	7	14	—	0	2	—	—
District of Columbia	—	1	5	—	—	51	52	101	51	28	—	0	2	—	—
Florida	18	24	57	18	13	383	447	522	383	318	8	3	9	8	—
Georgia	—	9	27	—	8	3	165	442	3	37	—	2	9	—	9
Maryland§	2	5	12	2	1	85	117	206	85	74	1	2	6	1	4
North Carolina	N	0	0	N	N	—	0	831	—	—	2	1	9	2	—
South Carolina§	—	2	6	—	1	265	185	829	265	114	—	1	7	—	1
Virginia§	—	7	17	—	2	113	182	486	113	123	—	1	6	—	2
West Virginia	—	1	5	—	—	2	14	26	2	7	—	0	3	—	1
E.S. Central	1	8	21	1	2	350	547	837	350	374	1	3	8	1	4
Alabama§	—	5	12	—	2	—	172	250	—	168	—	0	2	—	2
Kentucky	N	0	0	N	N	124	89	153	124	51	—	0	1	—	—
Mississippi	N	0	0	N	N	—	134	401	—	50	—	0	2	—	1
Tennessee§	1	3	13	1	—	226	163	297	226	105	1	2	6	1	1
W.S. Central	3	7	20	3	1	86	944	1,297	86	703	—	2	8	—	—
Arkansas§	—	2	8	—	—	86	86	167	86	56	—	0	2	—	—
Louisiana	—	2	10	—	—	—	170	317	—	63	—	0	1	—	—
Oklahoma	3	2	9	3	1	—	56	124	—	98	—	1	7	—	—
Texas§	N	0	0	N	N	—	629	763	—	486	—	0	2	—	—
Mountain	1	27	62	1	8	104	206	337	104	158	3	5	14	3	8
Arizona	1	2	8	1	2	43	64	93	43	51	2	2	11	2	1
Colorado	—	10	27	—	1	34	57	99	34	38	—	1	5	—	2
Idaho§	—	3	14	—	—	—	3	13	—	6	—	0	4	—	—
Montana§	—	1	9	—	—	—	2	7	—	—	—	0	1	—	1
Nevada§	—	1	8	—	—	8	39	129	8	32	—	0	2	—	1
New Mexico§	—	1	7	—	3	19	23	47	19	28	—	0	4	—	3
Utah	—	6	18	—	1	—	10	20	—	3	1	1	5	1	—
Wyoming§	—	0	3	—	1	—	2	9	—	—	—	0	2	—	—
Pacific	14	53	85	14	29	259	595	759	259	450	1	2	6	1	2
Alaska	3	2	10	3	1	10	10	17	10	3	—	0	2	—	—
California	9	34	56	9	21	201	497	633	201	363	—	0	3	—	1
Hawaii	—	1	4	—	1	2	11	22	2	7	—	0	2	—	—
Oregon§	2	8	18	2	6	—	23	48	—	35	1	1	4	1	1
Washington	—	8	34	—	—	46	53	90	46	42	—	0	2	—	—
American Samoa	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	1	15	—	—	—	0	0	—	—
Puerto Rico	—	2	13	—	—	1	5	25	1	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	2	6	—	—	N	0	0	N	N

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Data for *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 10, 2009, and January 5, 2008 (1st week)*

Reporting area	Hepatitis (viral, acute), by type†										Legionellosis				
	A					B									
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	12	45	76	12	37	34	66	92	34	45	20	44	145	20	32
New England	—	2	7	—	1	—	1	7	—	—	—	2	16	—	1
Connecticut	—	0	4	—	—	—	0	7	—	—	—	0	5	—	—
Maine§	—	0	2	—	—	—	0	2	—	—	—	0	2	—	—
Massachusetts	—	0	5	—	1	—	0	1	—	—	—	0	2	—	—
New Hampshire	—	0	2	—	—	—	0	2	—	—	—	0	5	—	—
Rhode Island§	—	0	2	—	—	—	0	1	—	—	—	0	14	—	—
Vermont§	—	0	1	—	—	—	0	1	—	—	—	0	1	—	1
Mid. Atlantic	—	6	12	—	6	2	9	14	2	10	5	14	59	5	8
New Jersey	—	1	4	—	—	—	2	7	—	5	—	1	8	—	1
New York (Upstate)	—	1	4	—	—	—	1	6	—	—	3	5	19	3	—
New York City	—	2	6	—	3	—	2	6	—	—	—	2	12	—	2
Pennsylvania	—	1	6	—	3	2	3	8	2	5	2	6	33	2	5
E.N. Central	3	6	16	3	5	13	8	13	13	8	7	8	40	7	11
Illinois	—	2	10	—	1	—	2	6	—	3	—	1	10	—	3
Indiana	—	0	4	—	—	—	1	4	—	—	1	1	6	1	—
Michigan	—	2	7	—	3	1	2	6	1	1	1	2	16	1	4
Ohio	3	1	4	3	1	12	2	8	12	3	5	3	18	5	4
Wisconsin	—	0	2	—	—	—	0	1	—	1	—	0	3	—	—
W.N. Central	—	4	16	—	8	1	2	7	1	1	—	2	9	—	—
Iowa	—	1	7	—	4	—	0	2	—	—	—	0	2	—	—
Kansas	—	0	3	—	1	—	0	3	—	—	—	0	1	—	—
Minnesota	—	0	8	—	—	—	0	4	—	—	—	0	4	—	—
Missouri	—	1	3	—	—	1	1	4	1	1	—	1	7	—	—
Nebraska§	—	0	5	—	2	—	0	2	—	—	—	0	4	—	—
North Dakota	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
South Dakota	—	0	1	—	1	—	0	0	—	—	—	0	1	—	—
S. Atlantic	6	7	14	6	5	9	17	34	9	13	4	8	22	4	7
Delaware	—	0	1	—	—	—	0	3	—	—	—	0	2	—	—
District of Columbia	U	0	0	U	U	U	0	0	U	U	—	0	2	—	1
Florida	4	2	8	4	1	5	6	12	5	2	1	3	7	1	2
Georgia	1	1	4	1	1	4	3	8	4	3	—	0	4	—	—
Maryland§	1	1	3	1	2	—	2	4	—	2	3	2	10	3	4
North Carolina	—	0	9	—	—	—	0	17	—	—	—	0	7	—	—
South Carolina§	—	0	3	—	—	—	1	6	—	2	—	0	2	—	—
Virginia§	—	1	5	—	1	—	2	7	—	1	—	1	4	—	—
West Virginia	—	0	1	—	—	—	1	4	—	3	—	0	3	—	—
E.S. Central	1	1	9	1	1	2	7	13	2	2	2	2	10	2	3
Alabama§	—	0	2	—	—	—	2	6	—	1	—	0	2	—	—
Kentucky	—	0	3	—	1	—	2	5	—	—	1	1	4	1	3
Mississippi	—	0	2	—	—	1	1	3	1	—	—	0	1	—	—
Tennessee§	1	0	6	1	—	1	3	8	1	1	1	0	5	1	—
W.S. Central	—	3	12	—	—	2	12	23	2	1	—	1	9	—	—
Arkansas§	—	0	1	—	—	—	0	4	—	—	—	0	2	—	—
Louisiana	—	0	1	—	—	—	1	4	—	1	—	0	2	—	—
Oklahoma	—	0	3	—	—	—	2	8	—	—	—	0	6	—	—
Texas§	—	3	11	—	—	2	8	19	2	—	—	1	5	—	—
Mountain	1	4	12	1	1	1	4	12	1	4	2	2	8	2	1
Arizona	1	2	11	1	1	—	1	5	—	1	2	0	2	2	1
Colorado	—	0	3	—	—	—	0	3	—	2	—	0	2	—	—
Idaho§	—	0	3	—	—	—	0	2	—	—	—	0	1	—	—
Montana§	—	0	1	—	—	—	0	1	—	—	—	0	1	—	—
Nevada§	—	0	3	—	—	—	0	3	—	—	—	0	2	—	—
New Mexico§	—	0	3	—	—	—	0	2	—	1	—	0	1	—	—
Utah	—	0	2	—	—	1	0	3	1	—	—	0	2	—	—
Wyoming§	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
Pacific	1	10	24	1	10	4	7	17	4	6	—	4	10	—	1
Alaska	—	0	1	—	—	1	0	2	1	—	—	0	1	—	—
California	1	7	24	1	9	3	5	13	3	4	—	3	8	—	1
Hawaii	—	0	2	—	—	—	0	1	—	1	—	0	1	—	—
Oregon§	—	0	3	—	1	—	1	3	—	1	—	0	2	—	—
Washington	—	1	5	—	—	—	1	4	—	—	—	0	3	—	—
American Samoa	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	2	—	—	—	0	5	—	1	—	0	1	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Data for acute hepatitis C, viral are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 10, 2009, and January 5, 2008 (1st week)*

Reporting area	Lyme disease					Malaria					Meningococcal disease, invasive† All serotypes				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	56	440	1,455	56	128	5	20	44	5	10	7	19	47	7	21
New England	1	43	260	1	23	—	0	6	—	1	—	0	3	—	1
Connecticut	—	0	0	—	—	—	0	3	—	—	—	0	1	—	—
Maine§	—	3	73	—	—	—	0	1	—	—	—	0	1	—	—
Massachusetts	—	11	114	—	16	—	0	2	—	1	—	0	3	—	1
New Hampshire	—	13	141	—	7	—	0	2	—	—	—	0	0	—	—
Rhode Island§	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Vermont§	1	3	40	1	—	—	0	1	—	—	—	0	0	—	—
Mid. Atlantic	15	245	1,003	15	73	—	4	14	—	4	—	2	6	—	1
New Jersey	—	31	211	—	27	—	0	0	—	—	—	0	2	—	1
New York (Upstate)	2	99	497	2	4	—	0	5	—	—	—	0	3	—	—
New York City	—	0	4	—	2	—	3	10	—	4	—	0	2	—	—
Pennsylvania	13	84	531	13	40	—	1	3	—	—	—	1	5	—	—
E.N. Central	—	11	145	—	7	1	2	7	1	2	2	3	9	2	4
Illinois	—	0	11	—	—	—	1	6	—	1	—	1	5	—	3
Indiana	—	0	8	—	—	—	0	2	—	—	—	0	4	—	—
Michigan	—	1	10	—	1	—	0	2	—	—	—	0	3	—	1
Ohio	—	1	5	—	—	1	0	3	1	1	2	1	4	2	—
Wisconsin	—	10	129	—	6	—	0	3	—	—	—	0	2	—	—
W.N. Central	—	8	156	—	—	—	1	10	—	—	—	2	8	—	1
Iowa	—	1	8	—	—	—	0	3	—	—	—	0	3	—	1
Kansas	—	0	1	—	—	—	0	2	—	—	—	0	2	—	—
Minnesota	—	4	152	—	—	—	0	8	—	—	—	0	7	—	—
Missouri	—	0	1	—	—	—	0	3	—	—	—	0	3	—	—
Nebraska§	—	0	2	—	—	—	0	2	—	—	—	0	1	—	—
North Dakota	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
S. Atlantic	35	66	219	35	23	1	5	15	1	1	3	2	10	3	3
Delaware	3	12	37	3	5	—	0	1	—	—	—	0	1	—	—
District of Columbia	—	2	11	—	—	—	0	2	—	—	—	0	0	—	—
Florida	3	2	10	3	1	—	1	7	—	—	1	1	3	1	2
Georgia	—	0	3	—	—	—	1	5	—	1	—	0	2	—	—
Maryland§	29	29	158	29	13	—	1	7	—	—	—	0	4	—	—
North Carolina	—	0	7	—	—	1	0	7	1	—	1	0	3	1	—
South Carolina§	—	0	2	—	—	—	0	1	—	—	—	0	3	—	1
Virginia§	—	13	52	—	4	—	1	3	—	—	1	0	2	1	—
West Virginia	—	1	11	—	—	—	0	0	—	—	—	0	1	—	—
E.S. Central	—	0	5	—	—	—	0	2	—	—	—	1	6	—	2
Alabama§	—	0	3	—	—	—	0	1	—	—	—	0	2	—	—
Kentucky	—	0	2	—	—	—	0	1	—	—	—	0	2	—	1
Mississippi	—	0	1	—	—	—	0	1	—	—	—	0	2	—	—
Tennessee§	—	0	3	—	—	—	0	2	—	—	—	0	3	—	1
W.S. Central	—	2	8	—	—	—	1	11	—	—	—	2	7	—	2
Arkansas§	—	0	0	—	—	—	0	0	—	—	—	0	2	—	—
Louisiana	—	0	1	—	—	—	0	1	—	—	—	0	3	—	1
Oklahoma	—	0	0	—	—	—	0	2	—	—	—	0	3	—	1
Texas§	—	2	8	—	—	—	1	11	—	—	—	1	5	—	—
Mountain	1	0	4	1	—	—	0	3	—	1	1	1	4	1	4
Arizona	—	0	2	—	—	—	0	2	—	—	—	0	2	—	—
Colorado	—	0	1	—	—	—	0	1	—	1	—	0	1	—	—
Idaho§	—	0	2	—	—	—	0	1	—	—	—	0	1	—	—
Montana§	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
Nevada§	—	0	2	—	—	—	0	3	—	—	1	0	1	1	1
New Mexico§	—	0	2	—	—	—	0	1	—	—	—	0	1	—	—
Utah	1	0	1	1	—	—	0	1	—	—	—	0	1	—	3
Wyoming§	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
Pacific	4	5	11	4	2	3	2	10	3	1	1	5	19	1	3
Alaska	—	0	2	—	—	—	0	2	—	—	—	0	2	—	—
California	4	3	10	4	2	2	2	8	2	—	1	3	19	1	2
Hawaii	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Oregon§	—	1	4	—	—	1	0	2	1	1	—	1	3	—	1
Washington	—	0	4	—	—	—	0	3	—	—	—	0	3	—	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	2	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	1	0	1	1	—	—	0	1	—	—
U.S. Virgin Islands	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Data for meningococcal disease, invasive caused by serogroups A, C, Y, and W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 10, 2009, and January 5, 2008 (1st week)*

Reporting area	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	89	182	351	89	96	19	102	168	19	37	2	31	145	2	5
New England	—	11	32	—	35	—	7	20	—	—	—	0	2	—	—
Connecticut	—	0	4	—	3	—	4	17	—	—	—	0	0	—	—
Maine†	—	0	5	—	—	—	1	5	—	—	N	0	0	N	N
Massachusetts	—	7	24	—	32	N	0	0	N	N	—	0	1	—	—
New Hampshire	—	1	4	—	—	—	0	3	—	—	—	0	1	—	—
Rhode Island†	—	1	7	—	—	N	0	0	N	N	—	0	2	—	—
Vermont†	—	0	2	—	—	—	1	6	—	—	—	0	0	—	—
Mid. Atlantic	5	20	42	5	7	4	33	67	4	12	—	1	5	—	2
New Jersey	—	1	6	—	2	—	0	0	—	—	—	0	2	—	1
New York (Upstate)	1	7	24	1	—	4	9	20	4	8	—	0	2	—	—
New York City	—	0	5	—	2	—	0	2	—	1	—	0	2	—	1
Pennsylvania	4	8	35	4	3	—	21	52	—	3	—	0	2	—	—
E.N. Central	29	31	189	29	19	1	3	28	1	1	—	1	15	—	—
Illinois	—	6	43	—	1	1	1	21	1	1	—	1	10	—	—
Indiana	1	1	27	1	—	—	0	2	—	—	—	0	3	—	—
Michigan	2	6	14	2	1	—	0	8	—	—	—	0	1	—	—
Ohio	26	10	176	26	15	—	1	7	—	—	—	0	4	—	—
Wisconsin	—	2	7	—	2	N	0	0	N	N	—	0	1	—	—
W.N. Central	30	17	120	30	9	—	3	13	—	—	—	4	32	—	1
Iowa	—	2	20	—	5	—	0	5	—	—	—	0	2	—	—
Kansas	—	1	13	—	—	—	0	0	—	—	—	0	0	—	—
Minnesota	—	2	26	—	—	—	0	10	—	—	—	0	0	—	—
Missouri	28	6	50	28	2	—	1	8	—	—	—	4	31	—	1
Nebraska†	2	2	35	2	1	—	0	0	—	—	—	0	4	—	—
North Dakota	—	0	1	—	—	—	0	7	—	—	—	0	0	—	—
South Dakota	—	0	7	—	1	—	0	2	—	—	—	0	1	—	—
S. Atlantic	16	17	44	16	7	11	37	101	11	21	2	12	71	2	1
Delaware	—	0	3	—	—	—	0	0	—	—	—	0	5	—	—
District of Columbia	—	0	1	—	1	—	0	0	—	—	—	0	2	—	—
Florida	7	5	20	7	1	7	0	77	7	—	—	0	3	—	—
Georgia	—	1	7	—	1	—	5	42	—	4	—	1	8	—	—
Maryland†	5	2	8	5	3	—	8	17	—	8	—	1	7	—	1
North Carolina	—	0	15	—	—	4	9	16	4	7	2	3	55	2	—
South Carolina†	4	2	11	4	—	—	0	0	—	—	—	1	9	—	—
Virginia†	—	3	10	—	1	—	11	24	—	2	—	2	15	—	—
West Virginia	—	0	2	—	—	—	1	9	—	—	—	0	1	—	—
E.S. Central	3	7	28	3	7	—	3	7	—	—	—	3	23	—	—
Alabama†	—	1	5	—	2	—	0	0	—	—	—	1	8	—	—
Kentucky	2	2	11	2	—	—	0	4	—	—	—	0	1	—	—
Mississippi	—	2	5	—	5	—	0	1	—	—	—	0	3	—	—
Tennessee†	1	1	14	1	—	—	2	6	—	—	—	2	19	—	—
W.S. Central	1	28	113	1	—	—	1	11	—	—	—	1	41	—	—
Arkansas†	—	1	19	—	—	—	0	6	—	—	—	0	14	—	—
Louisiana	—	1	7	—	—	—	0	0	—	—	—	0	1	—	—
Oklahoma	—	0	21	—	—	—	0	10	—	—	—	0	26	—	—
Texas†	1	26	108	1	—	—	0	1	—	—	—	1	6	—	—
Mountain	2	15	34	2	8	—	1	8	—	2	—	1	3	—	1
Arizona	—	4	10	—	1	N	0	0	N	N	—	0	2	—	—
Colorado	—	3	7	—	6	—	0	0	—	—	—	0	1	—	—
Idaho†	1	0	5	1	—	—	0	0	—	—	—	0	1	—	—
Montana†	—	1	11	—	—	—	0	2	—	—	—	0	1	—	—
Nevada†	—	0	7	—	1	—	0	4	—	—	—	0	2	—	—
New Mexico†	—	1	8	—	—	—	0	3	—	2	—	0	1	—	1
Utah	1	4	17	1	—	—	0	6	—	—	—	0	1	—	—
Wyoming†	—	0	2	—	—	—	0	3	—	—	—	0	2	—	—
Pacific	3	25	83	3	4	3	3	13	3	1	—	0	1	—	—
Alaska	3	3	21	3	—	2	0	4	2	—	N	0	0	N	N
California	—	8	23	—	—	1	3	12	1	1	—	0	1	—	—
Hawaii	—	0	2	—	—	—	0	0	—	—	N	0	0	N	N
Oregon†	—	3	10	—	4	—	0	4	—	—	—	0	1	—	—
Washington	—	6	63	—	—	—	0	0	—	—	N	0	0	N	N
American Samoa	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	0	—	—	—	1	5	—	—	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 10, 2009, and January 5, 2008 (1st week)*

Reporting area	Salmonellosis					Shiga toxin-producing E. coli (STEC)†					Shigellosis				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	336	839	1,493	336	883	28	82	251	28	72	187	421	609	187	244
New England	1	19	63	1	513	—	3	14	—	47	—	2	7	—	39
Connecticut	—	0	0	—	484	—	0	0	—	44	—	0	0	—	38
Maine§	—	3	8	—	—	—	0	3	—	1	—	0	6	—	—
Massachusetts	—	14	52	—	23	—	1	11	—	2	—	1	5	—	1
New Hampshire	—	2	10	—	4	—	1	3	—	—	—	0	1	—	—
Rhode Island§	—	2	9	—	1	—	0	3	—	—	—	0	1	—	—
Vermont§	1	1	7	1	1	—	0	3	—	—	—	0	2	—	—
Mid. Atlantic	13	88	177	13	48	1	6	192	1	2	6	44	96	6	24
New Jersey	—	13	30	—	15	—	0	3	—	1	—	12	38	—	14
New York (Upstate)	5	26	60	5	3	1	3	188	1	—	—	10	35	—	—
New York City	—	23	53	—	10	—	1	5	—	—	—	13	35	—	5
Pennsylvania	8	27	78	8	20	—	1	8	—	1	6	3	23	6	5
E.N. Central	31	91	193	31	76	1	11	74	1	9	41	78	121	41	44
Illinois	—	26	72	—	25	—	1	10	—	—	—	19	34	—	16
Indiana	—	9	53	—	—	—	1	14	—	—	1	10	39	1	5
Michigan	3	17	38	3	12	—	2	43	—	4	—	3	20	—	1
Ohio	28	26	65	28	24	1	3	17	1	—	40	40	80	40	17
Wisconsin	—	14	50	—	15	—	4	20	—	5	—	8	33	—	5
W.N. Central	19	49	151	19	13	2	12	59	2	3	2	16	39	2	5
Iowa	—	8	16	—	4	—	2	21	—	3	—	3	11	—	—
Kansas	3	7	31	3	1	1	1	7	1	—	1	1	5	1	—
Minnesota	—	13	70	—	—	—	3	21	—	—	—	5	25	—	—
Missouri	13	14	48	13	7	1	2	11	1	—	1	3	14	1	4
Nebraska§	2	4	13	2	1	—	2	29	—	—	—	0	3	—	—
North Dakota	—	0	7	—	—	—	0	1	—	—	—	0	5	—	—
South Dakota	1	2	9	1	—	—	1	4	—	—	—	0	9	—	1
S. Atlantic	191	241	457	191	113	19	13	50	19	7	54	58	100	54	48
Delaware	—	2	9	—	—	—	0	2	—	1	—	0	1	—	—
District of Columbia	—	1	4	—	1	—	0	1	—	1	—	0	3	—	—
Florida	68	100	174	68	68	7	2	11	7	4	12	14	34	12	26
Georgia	18	42	86	18	13	—	1	7	—	—	10	20	48	10	14
Maryland§	8	13	36	8	10	3	2	10	3	—	5	2	8	5	1
North Carolina	92	23	106	92	—	9	1	19	9	—	26	3	27	26	—
South Carolina§	5	18	55	5	6	—	1	4	—	—	1	9	32	1	6
Virginia§	—	18	42	—	3	—	3	25	—	—	—	4	26	—	1
West Virginia	—	3	6	—	12	—	0	3	—	1	—	0	3	—	—
E.S. Central	14	58	138	14	34	—	5	21	—	4	6	35	67	6	47
Alabama§	—	14	47	—	15	—	1	17	—	2	—	7	18	—	14
Kentucky	8	9	18	8	7	—	1	7	—	1	1	3	24	1	7
Mississippi	—	14	57	—	7	—	0	2	—	—	—	5	18	—	17
Tennessee§	6	14	60	6	5	—	2	7	—	1	5	17	44	5	9
W.S. Central	1	128	265	1	9	—	6	27	—	—	51	92	215	51	5
Arkansas§	—	11	40	—	—	—	1	3	—	—	—	11	27	—	—
Louisiana	—	17	50	—	6	—	0	1	—	—	—	11	25	—	4
Oklahoma	1	14	36	1	—	—	1	19	—	—	—	3	11	—	—
Texas§	—	91	179	—	3	—	5	12	—	—	51	62	188	51	1
Mountain	11	59	110	11	34	—	10	39	—	—	18	20	53	18	13
Arizona	6	19	45	6	12	—	1	5	—	—	14	10	34	14	9
Colorado	—	12	43	—	5	—	3	18	—	—	—	2	11	—	1
Idaho§	2	3	14	2	2	—	2	15	—	—	—	0	2	—	—
Montana§	—	2	8	—	—	—	0	3	—	—	—	0	1	—	—
Nevada§	3	3	9	3	5	—	0	2	—	—	4	4	13	4	—
New Mexico§	—	6	33	—	7	—	1	6	—	—	—	1	10	—	2
Utah	—	6	19	—	—	—	1	9	—	—	—	1	3	—	—
Wyoming§	—	1	4	—	3	—	0	1	—	—	—	0	1	—	1
Pacific	55	112	523	55	43	5	10	48	5	—	9	29	82	9	19
Alaska	1	1	4	1	1	—	0	1	—	—	—	0	1	—	—
California	44	81	507	44	28	5	6	39	5	—	7	26	74	7	14
Hawaii	8	4	15	8	5	—	0	2	—	—	—	1	3	—	2
Oregon§	2	7	20	2	9	—	1	8	—	—	2	1	10	2	3
Washington	—	12	71	—	—	—	2	15	—	—	—	2	9	—	—
American Samoa	—	0	1	—	—	—	0	0	—	—	—	0	0	—	1
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	2	—	—	—	0	0	—	—	—	0	3	—	—
Puerto Rico	—	10	29	—	6	—	0	1	—	—	—	0	4	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 10, 2009, and January 5, 2008 (1st week)*

Reporting area	Streptococcal diseases, invasive, group A					*Streptococcus pneumoniae*, invasive disease, nondrug resistant† Age <5 years				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max		
United States	63	87	181	63	89	15	33	55	15	33
New England	—	5	31	—	9	—	1	11	—	2
Connecticut	—	0	26	—	—	—	0	11	—	—
Maine§	—	0	3	—	—	—	0	1	—	—
Massachusetts	—	2	8	—	7	—	0	5	—	1
New Hampshire	—	0	2	—	2	—	0	1	—	1
Rhode Island§	—	0	9	—	—	—	0	2	—	—
Vermont§	—	0	3	—	—	—	0	1	—	—
Mid. Atlantic	4	18	43	4	14	1	3	12	1	6
New Jersey	—	2	11	—	3	—	1	4	—	3
New York (Upstate)	1	6	17	1	1	1	2	11	1	—
New York City	—	4	10	—	4	—	0	6	—	3
Pennsylvania	3	7	16	3	6	N	0	0	N	N
E.N. Central	9	15	42	9	10	5	5	15	5	9
Illinois	—	4	16	—	4	—	1	5	—	3
Indiana	—	2	9	—	1	—	0	5	—	—
Michigan	—	3	10	—	2	1	1	5	1	4
Ohio	9	5	14	9	3	4	1	4	4	1
Wisconsin	—	1	10	—	—	—	1	4	—	1
W.N. Central	5	5	39	5	2	2	2	11	2	4
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	1	0	5	1	—	1	0	3	1	—
Minnesota	—	0	35	—	—	—	0	9	—	—
Missouri	2	2	10	2	2	1	1	2	1	2
Nebraska§	2	1	3	2	—	—	0	1	—	2
North Dakota	—	0	3	—	—	—	0	2	—	—
South Dakota	—	0	2	—	—	—	0	1	—	—
S. Atlantic	28	21	37	28	28	7	6	16	7	4
Delaware	—	0	2	—	—	—	0	0	—	—
District of Columbia	—	0	4	—	2	—	0	1	—	—
Florida	9	5	10	9	5	2	1	4	2	—
Georgia	9	4	14	9	8	2	1	4	2	—
Maryland§	5	4	8	5	6	3	1	5	3	2
North Carolina	3	2	10	3	—	N	0	0	N	N
South Carolina§	1	1	4	1	5	—	1	5	—	2
Virginia§	1	3	9	1	1	—	0	6	—	—
West Virginia	—	0	3	—	1	—	0	1	—	—
E.S. Central	2	3	9	2	1	—	2	6	—	—
Alabama§	N	0	0	N	N	N	0	0	N	N
Kentucky	—	1	3	—	—	N	0	0	N	N
Mississippi	N	0	0	N	N	—	0	3	—	—
Tennessee§	2	3	6	2	1	—	1	5	—	—
W.S. Central	8	9	27	8	2	—	5	13	—	1
Arkansas§	—	0	2	—	—	—	0	2	—	—
Louisiana	—	0	2	—	1	—	0	2	—	1
Oklahoma	7	2	8	7	1	—	1	3	—	—
Texas§	1	6	20	1	—	—	3	13	—	—
Mountain	2	10	20	2	22	—	4	13	—	7
Arizona	2	3	9	2	7	—	2	8	—	4
Colorado	—	2	8	—	6	—	1	4	—	3
Idaho§	—	0	2	—	—	—	0	1	—	—
Montana§	N	0	0	N	N	—	0	1	—	—
Nevada§	—	0	1	—	1	N	0	0	N	N
New Mexico§	—	1	8	—	7	—	0	3	—	—
Utah	—	1	4	—	1	—	0	4	—	—
Wyoming§	—	0	2	—	—	—	0	1	—	—
Pacific	5	3	8	5	1	—	0	2	—	—
Alaska	1	1	4	1	—	N	0	0	N	N
California	—	0	0	—	—	N	0	0	N	N
Hawaii	4	2	8	4	1	—	0	2	—	—
Oregon§	N	0	0	N	N	N	0	0	N	N
Washington	N	0	0	N	N	N	0	0	N	N
American Samoa	—	0	12	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Includes cases of invasive pneumococcal disease, in children aged <5 years, caused by *S. pneumoniae*, which is susceptible or for which susceptibility testing is not available (NNDSS event code 11717).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 10, 2009, and January 5, 2008 (1st week)*

Reporting area	*Streptococcus pneumoniae*, invasive disease, drug resistant†										Syphilis, primary and secondary				
	All ages					Aged <5 years									
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	64	54	105	64	89	4	8	23	4	10	97	238	300	97	164
New England	1	1	48	1	2	—	0	5	—	—	3	5	14	3	4
Connecticut	—	0	48	—	—	—	0	5	—	—	—	0	3	—	—
Maine§	—	0	2	—	1	—	0	1	—	—	—	0	2	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—	3	4	11	3	2
New Hampshire	—	0	0	—	—	—	0	0	—	—	—	0	2	—	1
Rhode Island§	—	0	2	—	—	—	0	1	—	—	—	0	5	—	1
Vermont§	1	0	2	1	1	—	0	1	—	—	—	0	2	—	—
Mid. Atlantic	—	4	13	—	7	—	0	2	—	—	4	33	53	4	21
New Jersey	—	0	0	—	—	—	0	0	—	—	—	4	10	—	1
New York (Upstate)	—	1	4	—	—	—	0	1	—	—	—	3	7	—	—
New York City	—	1	6	—	1	—	0	0	—	—	—	20	36	—	17
Pennsylvania	—	1	9	—	6	—	0	2	—	—	4	5	12	4	3
E.N. Central	18	12	41	18	25	1	2	7	1	3	17	22	37	17	33
Illinois	—	0	10	—	16	—	0	2	—	3	1	7	17	1	13
Indiana	—	2	31	—	—	—	0	5	—	—	1	3	10	1	1
Michigan	1	0	3	1	1	—	0	1	—	—	4	2	21	4	10
Ohio	17	7	17	17	8	1	1	4	1	—	10	6	15	10	8
Wisconsin	—	0	0	—	—	—	0	0	—	—	1	1	4	1	1
W.N. Central	3	2	9	3	10	—	0	2	—	1	—	8	14	—	7
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	—	—
Kansas	—	1	5	—	5	—	0	1	—	1	—	0	5	—	—
Minnesota	—	0	0	—	—	—	0	0	—	—	—	2	5	—	1
Missouri	3	1	8	3	5	—	0	1	—	—	—	4	10	—	6
Nebraska§	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	1	—	—	—	0	1	—	—	—	0	1	—	—
S. Atlantic	30	21	53	30	35	2	3	13	2	4	47	52	104	47	12
Delaware	—	0	1	—	—	—	0	0	—	—	—	0	4	—	—
District of Columbia	—	0	3	—	—	—	0	1	—	—	8	2	9	8	—
Florida	23	13	30	23	20	2	3	12	2	2	13	19	37	13	9
Georgia	6	6	23	6	12	—	1	5	—	2	—	12	33	—	1
Maryland§	1	0	2	1	—	—	0	1	—	—	4	6	14	4	1
North Carolina	N	0	0	N	N	N	0	0	N	N	18	5	19	18	—
South Carolina§	—	0	0	—	—	—	0	0	—	—	1	2	6	1	—
Virginia§	N	0	0	N	N	N	0	0	N	N	3	5	16	3	1
West Virginia	—	1	9	—	3	—	0	2	—	—	—	0	1	—	—
E.S. Central	10	5	19	10	8	1	1	4	1	—	13	21	37	13	16
Alabama§	N	0	0	N	N	N	0	0	N	N	—	8	17	—	7
Kentucky	5	1	6	5	3	1	0	2	1	—	1	1	10	1	3
Mississippi	—	0	2	—	—	—	0	1	—	—	—	3	19	—	—
Tennessee§	5	3	17	5	5	—	1	3	—	—	12	8	19	12	6
W.S. Central	2	2	7	2	2	—	0	2	—	2	5	41	63	5	31
Arkansas§	2	0	4	2	—	—	0	1	—	—	5	2	19	5	1
Louisiana	—	1	6	—	2	—	0	1	—	2	—	10	31	—	2
Oklahoma	N	0	0	N	N	N	0	0	N	N	—	1	5	—	5
Texas§	—	0	0	—	—	—	0	0	—	—	—	26	47	—	23
Mountain	—	2	14	—	—	—	0	4	—	—	3	9	16	3	6
Arizona	—	0	0	—	—	—	0	0	—	—	—	5	13	—	2
Colorado	—	0	0	—	—	—	0	0	—	—	1	2	7	1	—
Idaho§	N	0	1	N	N	N	0	1	N	N	—	0	2	—	—
Montana§	—	0	1	—	—	—	0	0	—	—	—	0	7	—	—
Nevada§	N	0	1	N	N	N	0	0	N	N	—	1	6	—	1
New Mexico§	—	0	1	—	—	—	0	0	—	—	2	1	4	2	3
Utah	—	2	13	—	—	—	0	4	—	—	—	0	2	—	—
Wyoming§	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
Pacific	—	0	1	—	—	—	0	1	—	—	5	44	64	5	34
Alaska	N	0	0	N	N	N	0	0	N	N	—	0	1	—	—
California	N	0	0	N	N	N	0	0	N	N	3	40	58	3	26
Hawaii	—	0	1	—	—	—	0	1	—	—	—	0	2	—	1
Oregon§	N	0	0	N	N	N	0	0	N	N	—	0	3	—	2
Washington	N	0	0	N	N	N	0	0	N	N	2	3	9	2	5
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	—	3	11	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Includes cases of invasive pneumococcal disease caused by drug-resistant *S. pneumoniae* (DRSP) (NNDSS event code 11720).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 10, 2009, and January 5, 2008 (1st week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
						Neuroinvasive					Nonneuroinvasive§				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	173	508	1,001	173	310	—	1	76	—	—	—	1	73	—	—
New England	8	11	22	8	11	—	0	2	—	—	—	0	1	—	—
Connecticut	—	0	0	—	—	—	0	2	—	—	—	0	1	—	—
Maine¶	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
New Hampshire	6	5	13	6	7	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Vermont¶	2	5	17	2	4	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	2	45	81	2	51	—	0	8	—	—	—	0	5	—	—
New Jersey	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
New York (Upstate)	N	0	0	N	N	—	0	5	—	—	—	0	2	—	—
New York City	N	0	0	N	N	—	0	2	—	—	—	0	2	—	—
Pennsylvania	2	45	81	2	51	—	0	2	—	—	—	0	1	—	—
E.N. Central	62	138	312	62	95	—	0	8	—	—	—	0	3	—	—
Illinois	4	23	64	4	7	—	0	4	—	—	—	0	2	—	—
Indiana	—	0	0	—	—	—	0	1	—	—	—	0	1	—	—
Michigan	9	58	116	9	30	—	0	4	—	—	—	0	2	—	—
Ohio	48	46	106	48	58	—	0	3	—	—	—	0	1	—	—
Wisconsin	1	4	50	1	—	—	0	2	—	—	—	0	1	—	—
W.N. Central	22	21	71	22	11	—	0	6	—	—	—	0	21	—	—
Iowa	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
Kansas	2	6	40	2	3	—	0	2	—	—	—	0	5	—	—
Minnesota	—	0	0	—	—	—	0	2	—	—	—	0	4	—	—
Missouri	20	10	51	20	8	—	0	3	—	—	—	0	1	—	—
Nebraska¶	N	0	0	N	N	—	0	1	—	—	—	0	8	—	—
North Dakota	—	0	39	—	—	—	0	2	—	—	—	0	11	—	—
South Dakota	—	0	5	—	—	—	0	5	—	—	—	0	6	—	—
S. Atlantic	24	86	173	24	89	—	0	3	—	—	—	0	3	—	—
Delaware	—	1	5	—	—	—	0	0	—	—	—	0	1	—	—
District of Columbia	—	0	3	—	2	—	0	0	—	—	—	0	0	—	—
Florida	21	29	87	21	17	—	0	2	—	—	—	0	0	—	—
Georgia	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Maryland¶	N	0	0	N	N	—	0	2	—	—	—	0	2	—	—
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
South Carolina¶	1	14	67	1	9	—	0	0	—	—	—	0	1	—	—
Virginia¶	—	21	81	—	25	—	0	0	—	—	—	0	1	—	—
West Virginia	2	12	33	2	36	—	0	1	—	—	—	0	0	—	—
E.S. Central	4	17	101	4	13	—	0	7	—	—	—	0	8	—	—
Alabama¶	4	17	101	4	13	—	0	3	—	—	—	0	3	—	—
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	2	—	—	—	0	4	—	—	—	0	7	—	—
Tennessee¶	N	0	0	N	N	—	0	1	—	—	—	0	3	—	—
W.S. Central	47	113	435	47	10	—	0	8	—	—	—	0	7	—	—
Arkansas¶	—	9	52	—	—	—	0	1	—	—	—	0	1	—	—
Louisiana	1	1	10	1	1	—	0	3	—	—	—	0	5	—	—
Oklahoma	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Texas¶	46	99	422	46	9	—	0	6	—	—	—	0	4	—	—
Mountain	—	40	90	—	28	—	0	12	—	—	—	0	22	—	—
Arizona	—	0	0	—	—	—	0	10	—	—	—	0	8	—	—
Colorado	—	14	44	—	7	—	0	4	—	—	—	0	10	—	—
Idaho¶	N	0	0	N	N	—	0	1	—	—	—	0	6	—	—
Montana¶	—	5	27	—	6	—	0	0	—	—	—	0	2	—	—
Nevada¶	N	0	0	N	N	—	0	2	—	—	—	0	3	—	—
New Mexico¶	—	3	18	—	5	—	0	2	—	—	—	0	1	—	—
Utah	—	12	55	—	9	—	0	2	—	—	—	0	5	—	—
Wyoming¶	—	0	4	—	1	—	0	0	—	—	—	0	2	—	—
Pacific	4	2	8	4	2	—	0	38	—	—	—	0	24	—	—
Alaska	4	1	6	4	1	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	37	—	—	—	0	19	—	—
Hawaii	—	1	5	—	1	—	0	0	—	—	—	0	0	—	—
Oregon¶	N	0	0	N	N	—	0	2	—	—	—	0	4	—	—
Washington	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	1	17	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	7	20	—	4	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.
§ Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except starting in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.
¶ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deaths in 122 U.S. cities,* week ending January 10, 2009 (1st week)

Reporting area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45–64	25–44	1–24	<1	
New England	614	452	118	28	6	10	67
Boston, MA	171	116	43	5	3	4	19
Bridgeport, CT	11	9	1	1	—	—	1
Cambridge, MA	16	12	3	—	1	—	2
Fall River, MA	50	42	6	1	—	1	5
Hartford, CT	57	38	14	4	—	1	6
Lowell, MA	31	27	4	—	—	—	5
Lynn, MA	12	7	5	—	—	—	3
New Bedford, MA	31	28	1	1	—	1	2
New Haven, CT	U	U	U	U	U	U	U
Providence, RI	72	52	13	5	1	1	6
Somerville, MA	4	1	1	2	—	—	—
Springfield, MA	43	31	7	4	—	1	6
Waterbury, CT	40	27	8	4	1	—	5
Worcester, MA	76	62	12	1	—	1	7
Mid. Atlantic	2,639	1,832	586	145	45	31	152
Albany, NY	51	32	15	4	—	—	3
Allentown, PA	34	25	9	—	—	—	—
Buffalo, NY	97	61	29	4	2	1	12
Camden, NJ	26	9	12	2	1	2	1
Elizabeth, NJ	19	14	3	2	—	—	—
Erie, PA	69	55	11	2	1	—	3
Jersey City, NJ	35	26	8	1	—	—	2
New York City, NY	1,416	987	308	86	23	12	63
Newark, NJ	38	19	10	6	2	1	1
Paterson, NJ	10	4	5	1	—	—	3
Philadelphia, PA	315	191	81	27	10	6	15
Pittsburgh, PA§	44	32	11	—	—	1	7
Reading, PA	37	27	7	2	—	1	4
Rochester, NY	163	132	23	4	1	3	18
Schenectady, NY	26	24	2	—	—	—	3
Scranton, PA	32	28	4	—	—	—	1
Syracuse, NY	151	108	34	2	4	3	14
Trenton, NJ	36	28	5	2	—	1	1
Utica, NY	21	16	5	—	—	—	—
Yonkers, NY	19	14	4	—	1	—	1
E.N. Central	2,820	1,882	649	164	63	62	181
Akron, OH	84	53	23	7	1	—	5
Canton, OH	35	26	8	1	—	—	4
Chicago, IL	341	196	100	30	13	2	24
Cincinnati, OH	125	83	22	8	1	11	7
Cleveland, OH	301	219	57	14	4	7	9
Columbus, OH	313	202	80	17	6	8	29
Dayton, OH	190	136	37	13	3	1	12
Detroit, MI	259	133	77	28	12	9	15
Evansville, IN	75	49	18	6	2	—	5
Fort Wayne, IN	92	66	22	1	1	2	5
Gary, IN	22	12	7	1	2	—	1
Grand Rapids, MI	73	54	11	4	1	3	7
Indianapolis, IN	270	180	60	11	10	9	20
Lansing, MI	71	54	11	3	—	3	5
Milwaukee, WI	147	102	37	8	—	—	10
Peoria, IL	60	50	10	—	—	—	9
Rockford, IL	59	44	9	3	1	2	2
South Bend, IN	97	68	19	3	4	3	3
Toledo, OH	116	84	24	5	1	2	9
Youngstown, OH	90	71	17	1	1	—	—
W.N. Central	663	440	151	33	19	20	51
Des Moines, IA	44	32	12	—	—	—	3
Duluth, MN	41	33	6	1	1	—	3
Kansas City, KS	34	18	11	2	2	1	3
Kansas City, MO	95	65	16	5	4	5	7
Lincoln, NE	54	41	9	3	—	1	5
Minneapolis, MN	79	48	19	4	2	6	3
Omaha, NE	105	74	20	6	5	—	11
St. Louis, MO	69	36	23	5	2	3	5
St. Paul, MN	70	49	15	3	1	2	6
Wichita, KS	72	44	20	4	2	2	5
S. Atlantic	1,534	992	382	96	29	33	102
Atlanta, GA	119	73	29	14	2	1	8
Baltimore, MD	140	92	34	8	3	3	25
Charlotte, NC	140	104	25	8	2	1	5
Jacksonville, FL	260	166	59	17	9	8	16
Miami, FL	95	53	28	5	3	5	9
Norfolk, VA	75	51	17	4	2	1	1
Richmond, VA	69	43	23	1	1	1	6
Savannah, GA	74	43	23	6	2	—	8
St. Petersburg, FL	78	49	21	7	—	1	6
Tampa, FL	360	252	78	18	5	7	14
Washington, D.C.	103	55	37	7	—	4	2
Wilmington, DE	21	11	8	1	—	1	2
E.S. Central	978	662	215	53	26	22	69
Birmingham, AL	151	105	34	5	3	4	17
Chattanooga, TN	117	86	23	3	1	4	6
Knoxville, TN	140	104	31	5	—	—	10
Lexington, KY	65	39	18	7	—	1	4
Memphis, TN	136	81	33	10	7	5	7
Mobile, AL	71	52	10	4	5	—	5
Montgomery, AL	73	42	21	7	2	1	5
Nashville, TN	225	153	45	12	8	7	15
W.S. Central	1,847	1,158	485	136	33	34	88
Austin, TX	137	82	40	6	5	4	8
Baton Rouge, LA	35	27	5	3	—	—	—
Corpus Christi, TX	U	U	U	U	U	U	U
Dallas, TX	238	152	50	21	3	11	16
El Paso, TX	169	114	41	14	—	—	10
Fort Worth, TX	209	140	57	5	2	5	3
Houston, TX	440	252	128	39	13	8	15
Little Rock, AR	118	66	34	14	2	2	2
New Orleans, LA	U	U	U	U	U	U	U
San Antonio, TX	263	179	63	17	3	1	24
Shreveport, LA	60	38	18	4	—	—	3
Tulsa, OK	178	108	49	13	5	3	7
Mountain	1,092	732	215	100	27	18	81
Albuquerque, NM	U	U	U	U	U	U	U
Boise, ID	56	38	10	4	1	3	3
Colorado Springs, CO	43	26	11	4	1	1	2
Denver, CO	84	57	18	7	2	—	6
Las Vegas, NV	298	189	66	31	9	3	22
Ogden, UT	51	41	7	2	1	—	2
Phoenix, AZ	166	100	31	25	6	4	14
Pueblo, CO	46	31	10	3	1	1	2
Salt Lake City, UT	147	105	23	13	3	3	7
Tucson, AZ	201	145	39	11	3	3	23
Pacific	2,146	1,534	434	108	49	21	196
Berkeley, CA	22	15	6	—	—	1	4
Fresno, CA	69	51	12	4	1	1	4
Glendale, CA	54	44	7	2	—	1	10
Honolulu, HI	105	83	18	4	—	—	11
Long Beach, CA	91	60	17	9	3	2	9
Los Angeles, CA	313	209	71	22	7	4	34
Pasadena, CA	24	14	8	—	—	2	2
Portland, OR	179	122	41	9	4	3	11
Sacramento, CA	132	101	25	4	2	—	14
San Diego, CA	242	169	49	14	8	2	17
San Francisco, CA	156	111	35	5	3	2	15
San Jose, CA	252	183	47	15	6	1	31
Santa Cruz, CA	49	36	10	2	1	—	6
Seattle, WA	202	147	36	12	6	1	10
Spokane, WA	81	64	12	2	2	1	10
Tacoma, WA	175	125	40	4	6	—	8
Total¶	**14,333**	**9,684**	**3,235**	**863**	**297**	**251**	**987**

U: Unavailable. —:No reported cases.

* Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of >100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

† Pneumonia and influenza.

§ Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶ Total includes unknown ages.

TABLE IV. Provisional cases of selected notifiable disease,* United States, quarter ending January 3, 2009 (53rd week)

Reporting area	Tuberculosis				
	Current quarter	Previous 4 quarters		Cum 2008	Cum 2007
		Min	Max		
United States	2,218	2,096	2,797	9,795	12,859
New England	19	19	46	144	186
Connecticut	9	9	33	90	108
Maine	2	1	3	8	19
Massachusetts	—	0	0	—	—
New Hampshire	5	2	5	16	11
Rhode Island	3	3	8	26	45
Vermont	—	0	2	4	3
Mid. Atlantic	544	410	544	1,976	1,918
New Jersey	106	69	106	380	467
New York (Upstate)	64	54	89	271	261
New York City	243	196	253	938	914
Pennsylvania	131	66	131	387	276
E.N. Central	223	154	228	806	1,196
Illinois	136	46	136	363	521
Indiana	26	26	37	118	128
Michigan	—	0	20	52	226
Ohio	49	49	58	212	251
Wisconsin	12	10	20	61	70
W.N. Central	88	86	101	376	498
Iowa	—	0	15	34	43
Kansas	—	0	0	—	53
Minnesota	62	35	62	189	238
Missouri	16	16	40	105	119
Nebraska	8	3	14	32	25
North Dakota	—	0	0	—	7
South Dakota	2	2	9	16	13
S. Atlantic	311	311	473	1,576	2,621
Delaware	—	0	7	12	20
District of Columbia	6	6	16	49	60
Florida	130	130	229	723	989
Georgia	9	9	98	247	385
Maryland	68	50	73	263	271
North Carolina	—	0	0	—	345
South Carolina	—	0	0	—	218
Virginia	87	34	87	254	309
West Virginia	11	4	11	28	24
E.S. Central	151	97	189	606	666
Alabama	45	32	46	169	175
Kentucky	18	4	30	80	120
Mississippi	32	17	32	99	137
Tennessee	56	44	85	258	234
W.S. Central	185	185	416	1,341	1,982
Arkansas	22	8	22	72	106
Louisiana	—	0	0	—	218
Oklahoma	24	18	28	94	148
Texas	139	139	376	1,175	1,510
Mountain	80	80	94	348	603
Arizona	53	43	61	212	301
Colorado	1	0	1	3	109
Idaho	—	0	0	—	—
Montana	—	0	0	—	—
Nevada	—	0	29	50	101
New Mexico	19	10	19	58	51
Utah	7	5	8	25	41
Wyoming	—	0	0	—	—
Pacific	617	485	779	2,622	3,189
Alaska	12	9	13	44	51
California	564	449	730	2,378	2,725
Hawaii	27	22	39	118	122
Oregon	—	0	0	—	—
Washington	14	1	58	82	291
American Samoa	—	0	0	—	3
C.N.M.I.	—	—	—	—	—
Guam	—	0	0	—	—
Puerto Rico	9	8	18	51	98
U.S. Virgin Islands	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not notifiable.
Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* AIDS and HIV/AIDS data are not updated for this quarter because of upgrading of the national HIV/AIDS surveillance data management system.

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