Centers for Disease Control and Prevention

Characteristics Associated with HIV Infection Among Heterosexuals in Urban Areas with High AIDS Prevalence — 24 Cities, United States, 2006–2007

In the United States, approximately one in three new human immunodeficiency virus (HIV) infections are transmitted via heterosexual contact (1). To monitor HIV risk behaviors and HIV prevalence among heterosexuals and other populations, CDC surveys persons in selected metropolitan statistical areas (MSAs), using the National HIV Behavioral Surveillance System (NHBS). This report summarizes data collected from heterosexuals in 24 MSAs with a high prevalence of acquired immunodeficiency syndrome (AIDS) that participated in NHBS during 2006-2007. Of 14,837 heterosexuals aged 18-50 years who were interviewed and tested, 2.0% were HIV infected. HIV prevalence was higher among those with lower socioeconomic status (SES). For example, HIV prevalence was 2.8% among participants with less than a high school education compared with 1.2% among those with more than a high school education, 2.6% among participants who were unemployed compared with 1.0% among those who were employed, and 2.3% among participants with annual household incomes at or below the poverty level compared with 1.0% among those with incomes above the poverty level. This association between HIV prevalence and SES could not be attributed to factors commonly associated with HIV infection risk in heterosexuals, such as using crack cocaine, exchanging sex for things such as money or drugs, or being diagnosed with a sexually transmitted disease (STD). Based on the association observed between HIV prevalence and SES, HIV prevention activities targeted at heterosexuals in urban areas with high AIDS prevalence should be focused on those with lower SES.

NHBS is an annual cross-sectional survey of three populations at high risk for HIV infection: men who have sex with men (MSM), injection-drug users (IDUs), and heterosexuals at increased risk for HIV infection. Data are collected in annual cycles from one risk group per year, with each population surveyed once every 3 years. This report describes the first NHBS survey among heterosexuals, conducted from September 2006 to October 2007. Twenty-five MSAs with high AIDS prevalence were selected for the survey. In each MSA, NHBS project staff members recruited participants using either respondent-driven sampling (15 MSAs) or venuebased sampling (10 MSAs) (2).* Recruitment efforts targeted residents of census tracts with high rates of poverty and HIV diagnoses, referred to as high-risk areas. For respondentdriven sampling, a small number of initial participants were recruited by project staff members or referred by communitybased organizations. Initial and subsequent participants who lived in high-risk areas were then asked to recruit up to five other persons using a coded coupon to track their referrals. Recruitment continued for multiple waves of peer referral.

For venue-based sampling, project staff members from each MSA selected five to 10 high-risk areas in which they identified venues (e.g., retail businesses, social organizations, restaurants, bars, and parks) attended by local residents, as well as the days and times when the venues were frequented. Project staff members then randomly chose venues where they would recruit participants and the days and times when recruitment would occur. At the venues, persons who entered a designated area were approached and invited to participate in the survey. For both recruitment methods, persons were eligible

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^{*} Respondent-driven sampling: Boston, Massachusetts; Dallas, Texas; Denver, Colorado; Detroit, Michigan; Houston, Texas; Los Angeles, California; Nassau/ Suffolk Counties, New York; New Haven, Connecticut; New Orleans, Louisiana; New York, New York; Norfolk, Virginia; St. Louis, Missouri; San Diego, California; San Francisco, California; and Washington, DC. Venue-based sampling: Atlanta, Georgia; Baltimore, Maryland; Chicago, Illinois; Fort Lauderdale, Florida; Las Vegas, Nevada; Miami, Florida; Newark, New Jersey; Philadelphia, Pennsylvania; San Juan, Puerto Rico; and Seattle, Washington.

to participate if they were aged 18-50 years, residents of the MSA, able to complete the survey in English or Spanish, and had sex with an opposite-sex partner during the 12 months before interview. Residency in a high-risk area was not an eligibility criterion. After participants provided informed consent, interviewers administered an anonymous survey using a handheld computer. All participants were offered anonymous HIV testing in accordance with CDC and local testing guidelines. Participants were compensated for their time taking the survey (\$20-\$30) and, when applicable, for taking the HIV test (\$10–\$25).

Final data were available from 24 MSAs.[†] Because outcomes did not differ between respondent-driven and venue-based sampling, data were combined and analyzed as a single sample for this report. Univariable and multivariable regression models[§] were used to test associations with HIV prevalence and to calculate prevalence ratios, adjusted prevalence ratios, and 95% confidence intervals.

Of 22,169 persons recruited to participate, 18,377 (83%) were eligible and completed the survey. To limit the analysis to non-IDU heterosexuals, persons were excluded if they acknowledged ever injecting drugs (2,224 persons), having male-male sex (413), both injecting drugs and having male-male sex (309), or if they refused to provide this risk information (five). Persons also were excluded if they did not consent to HIV testing (374), did not have a negative or confirmed positive HIV test result (210), or reported being HIV-positive but, when tested, were HIV-negative (five).

Of the 14,837 survey participants who met the analysis criteria, 57% were women, and 48% were aged ≤29 years (Table). The majority of participants were black (72%) or Hispanic** (18%); the remainder were white (5%) or of other races (4%). SES among participants was low; 31% had less than a high school education, 36% were unemployed, 73% had annual household incomes at or below the poverty level,^{††} and 19% were homeless. In the 12 months before their interview, 11% had used crack cocaine, 12% had exchanged sex for things such as money or drugs, and 14% had received an STD diagnosis.

Overall, 294 (2.0%) of the 14,387 participants tested positive for HIV infection, and HIV prevalence was similar among men (1.9%) and women (2.1%) (Table). HIV prevalence was higher in the Northeast (3.1%) and South (2.7%) compared with

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[†]Data from Norfolk, Virginia could not be analyzed because of a malfunction in the project area's data collection software.

[§] Models used marginal Poisson regression and generalized estimating equations. In addition, a variance correction was employed to account for the small number of MSAs in the sample (3).

Controlling for MSA, sex, race/ethnicity, age group, education level, employment status, annual household income, homeless status, crack cocaine use, exchange sex partner, and STD diagnosis.

^{**} All persons who reported Hispanic ethnicity were classified as Hispanic and might be of any race.

^{††} Additional information available at http://www.census.gov/hhes/www/poverty/ data/threshld/thresh07.html.

TABLE. Prevalence of human immunodeficiency virus (HIV) infection among heterosexuals aged 18–50 years, by selected characteristics —
National HIV Behavioral Surveillance System, 24 cities, United States, 2006–2007

	Partici	bants	HIV prev	alence	Prev	alence ratio	Adjusted prevalence ratio		
Characteristic	No.	(%)	No.	(%)	No.	(95% CI)	No.	(95% CI)	
Sex									
Women	8,490	(57)	175	(2.1)	Referent	_	Referent	_	
Men	6,347	(43)	119	(1.9)	0.9	(0.73-1.13)	1.0	(0.80-1.17)	
Race/Ethnicity									
Black	10,755	(72)	227	(2.1)	Referent	_	Referent	_	
Hispanic [†]	2,703	(18)	50	(1.8)	0.9	(0.44-1.75)	1.3	(0.78–2.15)	
White	793	(5)	9	(1.1)	0.5	(0.29-0.99)	0.6	(0.32–1.17)	
Other [§]	577	(4)	8	(1.4)	0.7	(0.34-1.26)	0.9	(0.44–1.78)	
Age group (yrs)									
18–29	7,097	(48)	40	(0.6)	Referent	—	Referent	_	
30–39	3,438	(23)	75	(2.2)	3.9	(2.45-6.12)	3.8	(2.32–6.27)	
40–50	4,302	(29)	179	(4.2)	7.4	(4.51–12.08)	6.2	(3.55–10.90)	
Region [¶]									
Northeast	3,408	(23)	105	(3.1)	Referent	_	**	_	
South	5,105	(34)	138	(2.7)	0.9	(0.30-2.58)			
Midwest	2,163	(15)	20	(0.9)	0.3	(0.10-0.91)			
West	3,551	(24)	27	(0.8)	0.2	(0.06-1.01)			
Territories	610	(4)	4	(0.7)	0.2	(0.05-0.94)			
Education level									
Less than high school graduate	4,624	(31)	128	(2.8)	Referent	—	Referent	—	
High school graduate or equivalent	6,274	(42)	117	(1.9)	0.7	(0.55–0.83)	0.9	(0.71–1.02)	
More than high school graduate	3,939	(27)	49	(1.2)	0.4	(0.31-0.66)	0.7	(0.46–0.95)	
Employment status									
Employed	6,619	(45)	65	(1.0)	Referent	_	Referent		
Unemployed	5,374	(36)	138	(2.6)	2.6	(1.50–4.57)	1.8	(1.06–2.96)	
Disabled	884	(6)	63	(7.1)	7.3	(4.63–11.38)	3.4	(2.30–5.15)	
Other ^{††}	1,959	(13)	28	(1.4)	1.5	(0.94–2.26)	1.6	(0.99–2.45)	
Annual household income (\$)									
≤9,999	7,426	(50)	205	(2.8)	Referent	—	Referent	—	
10,000–19,999	3,490	(24)	49	(1.4)	0.5	(0.39–0.67)	0.7	(0.52–0.89)	
20,000–49,999	3,024	(20)	33	(1.1)	0.4	(0.26–0.61)	0.6	(0.43–0.93)	
≥50,000	649	(4)	3	(0.5)	0.2	(0.05–0.59)	0.3	(0.08–1.10)	
Annual household income at or below poverty level ^{§§}									
No	3,734	(25)	39	(1.0)	Referent	—	11	_	
Yes	10,846	(73)	251	(2.3)	2.2	(1.37–3.59)			
Homeless status***									
No	11,984	(81)	206	(1.7)	Referent	—	Referent	—	
Yes	2,853	(19)	88	(3.1)	1.8	(1.26-2.56)	1.0	(0.62 –1.56)	
Crack cocaine use***									
No	13,246	(89)	223	(1.7)	Referent	—	Referent	—	
Yes	1,583	(11)	71	(4.5)	2.7	(2.01-3.54)	1.1	(0.81–1.59)	
Exchange sex partner*** ^{†††}									
No	13,059	(88)	234	(1.8)	Referent	_	Referent	_	
Yes	1,728	(12)	58	(3.4)	1.9	(1.09-3.20)	1.1	(0.61-1.82)	
STD diagnosis***									
No	12,808	(86)	214	(1.7)	Referent	_	Referent	_	
Yes	2,006	(14)	80	(4.0)	2.4	(1.80-3.17)	2.1	(1.65–2.79)	
Total ^{§§§}	14,837	(100)	294	(2.0)	_				

Abbreviations: CI = confidence interval, STD = sexually transmitted disease.

* Controlling for metropolitan statistical area (MSA), sex, race/ethnicity, age group, education level, employment status, annual household income, homeless status, crack cocaine use, exchange sex partner, and STD diagnosis.

[†] All persons who reported Hispanic ethnicity were classified as Hispanic and might be of any race.

[§] Includes Alaska Native, American Indian, Asian, Pacific Islander, and multiracial.

In Northeast: Boston, Massachusetts; Nassau/Suffolk counties, New York; New Haven, Connecticut; New York; New York; Newark, New Jersey; and Philadelphia, Pennsylvania. South: Atlanta, Georgia; Baltimore, Maryland; Dallas, Texas; Fort Lauderdale, Florida; Houston, Texas; Miami, Florida; New Orleans, Louisiana; and Washington, DC. Midwest: Chicago, Illinios; Detroit, Michigan; and St. Louis, Missouri. West: Denver, Colorado; Las Vegas, Nevada; Los Angeles, California; San Diego, California; San Francisco, California; and Seattle, Washington. Territories: San Juan, Puerto Rico.

** Excluded because of colinearity with MSA.

⁺⁺ Includes homemaker, retired, and student.

§§ Information available at http://www.census.gov/hhes/www/poverty/data/threshld/thresh07.html.

^{¶¶} Excluded because of colinearity with annual household income.

*** During the 12 months before interview.

⁺⁺⁺ Exchanged sex for things like money or drugs.

^{\$§§} Numbers might not add to column totals because of missing data and responses of "don't know" or "refused."

the Midwest (0.9%), West (0.8%), and Territories (0.7%). By race/ethnicity, HIV prevalence was highest among blacks (2.1%), followed by Hispanics (1.8%), persons of other races (1.4%), and whites (1.1%). Only the difference between blacks and whites was statistically significant, but after controlling for all other characteristics in the analysis, this difference was no longer significant. Moreover, among the 10,451 (73%) participants who lived in high-poverty areas (i.e., census tracts in which \geq 20% of residents had an annual household income below the U.S. poverty level), no significant differences in HIV prevalence by race/ethnicity were observed: Hispanics (2.4%), persons of other races (2.4%), blacks (2.3%), and whites (1.8%) (chi-square, p=0.89).

HIV prevalence was associated with SES. For example, HIV prevalence was higher among participants with less than a high school education (2.8%) compared with high school graduates (1.9%) and those with more than a high school education (1.2%), higher among participants who were unemployed (2.6%) than those who were employed (1.0%), higher among participants with annual household incomes at or below the poverty level (2.3%) compared with those with incomes above the poverty level (1.0%), and higher among participants who were homeless (3.1%) than those who were not (1.7%) (Table). After controlling for the other characteristics in the analysis, HIV prevalence was significantly higher among persons who had less than a high school education (compared with those who had more than a high school education), were unemployed (compared with those who were employed), and had annual household incomes ≤\$9,999 (compared with those with incomes of \$10,000-\$49,999).

By HIV risk factor, HIV prevalence was higher among participants who used crack cocaine (4.5%) compared with those who did not (1.7%), participants who exchanged sex for things such as money or drugs (3.4%) compared with those who did not (1.8%), and participants who had received an STD diagnosis (4.0%) compared with those who had not (1.7%) (Table). However, among these three common HIV risk factors, only an STD diagnosis was associated with higher HIV prevalence after controlling for the other characteristics in the analysis.

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What is already known on this topic?

Although the human immunodeficiency virus (HIV) epidemic has not greatly affected the overall heterosexual population in the United States, HIV prevalence has been notably higher among heterosexuals in many low-income communities.

What is added by this report?

Data from a large sample of heterosexuals from 24 U.S. metropolitan statistical areas with high prevalence of acquired immunodeficiency syndrome (AIDS) showed that HIV prevalence was higher among persons with lower socioeconomic status. For example, HIV prevalence among participants with annual household incomes at or below the poverty level (2.3%) was significantly greater than that among participants with incomes above the poverty level (1.0%).

What are the implications for public health practice?

In urban areas with high AIDS prevalence, HIV prevention activities aimed at heterosexuals should focus on low-income communities. In addition, structural interventions to improve socioeconomic conditions in low-income communities could potentially reduce the rate of new HIV infections in these areas.

Editorial Note

For the first NHBS survey of heterosexuals, described in this report, a high percentage of participants with low SES and high HIV prevalence were enrolled from 24 MSAs. The overall 2.0% HIV prevalence among survey participants is 10 to 20 times the 0.1%–0.2% estimated for all non-IDU heterosexuals in the United States (CDC, unpublished data, 2011). HIV prevalence was higher among those participants with lower SES. Low SES and other adverse social conditions can increase the risk for HIV infection through sexual exploitation, marital instability, unstable sexual partnerships, poor mental health, substance abuse, and limited access to health care and preventive services (4,5). In addition, socioeconomic segregation confines low-SES persons to sexual networks with high underlying rates of HIV and other STDs, thereby further increasing their risk for HIV infection (6).

Among participants in this NHBS survey, racial/ethnic disparities in HIV prevalence were not as great as those found in the overall U.S. population. Nationally, HIV prevalence among blacks (1.7%) is more than eight times that among whites (0.2%), and HIV prevalence among Hispanics (0.6%) is three times that among whites (7). The findings in this report suggest that poverty-related factors might account for some of the racial/ethnic disparities in HIV prevalence observed nationally. Compared with whites, blacks and Hispanics are approximately four times as likely to live in low-income areas such as the ones in the NHBS survey that

were shown to have high HIV prevalence (8). When whites live in low-income communities and are exposed to the same socioeconomic conditions and sexual networks as blacks and Hispanics, their risk for HIV infection might be similar to that of blacks and Hispanics.

The findings in this report are subject to at least three limitations. First, because NHBS participants were recruited from 24 urban MSAs with high AIDS prevalence, participants likely are not representative of all low-income heterosexuals in the United States. Second, because the survey targeted census tracts with high rates of HIV diagnoses in addition to high rates of poverty, the former might have led to an overestimation of HIV prevalence in the 24 MSAs. Finally, because of fear of stigma, some participants who said they had not engaged in injection-drug use or male-male sex might actually have done so. Inclusion of IDUs and MSM, who are known to have high HIV prevalence, could have resulted in an overestimation of HIV prevalence. However, of the 18,377 persons who were initially eligible and completed the survey, a large proportion were excluded after acknowledging injection-drug use (14%) or male-male sex (9% of men), making it unlikely that these stigmatized behaviors were markedly underreported.

Based on the association observed between HIV prevalence and SES in the NHBS survey, HIV prevention activities targeted at heterosexuals in urban areas with high AIDS prevalence should focus on those in low-income communities. To reduce new HIV infections, the National HIV/AIDS Strategy^{§§} calls for intensifying HIV prevention efforts in communities where HIV is most heavily concentrated. The strategy also advocates adopting community-level approaches to prevention in high-risk communities. Structural interventions, which address adverse social, economic, policy, and environmental conditions within communities, have been shown to be effective public health interventions (9,10). The association between HIV prevalence and low SES in the NHBS survey suggests that improvements in educational and employment opportunities in low-income communities, along with concomitant reductions in poverty, could reduce new HIV infections. Without effective approaches to HIV prevention in low-income communities, new HIV infections will continue among these most vulnerable populations.

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References

- CDC. Subpopulation estimates from the HIV incidence surveillance system—United States, 2006. MMWR 2008;57:985–9.
- DiNenno EA, Oster AM, Sionean C, et al. Piloting a system for behavioral surveillance among heterosexuals at increased risk of HIV in the United States. Open AIDS J. In press.
- Mancl LA, DeRouen TA. A covariance estimator for GEE with improved small-sample properties. Biometrics 2001;57:126–34.
- Adimora AA, Schoenbach VJ. Social context, sexual networks, and racial disparities in rates of sexually transmitted infections. J Infect Dis 2005; 191(Suppl 1):S115–22.
- Silver E, Mulvey EP, Swanson JW. Neighborhood structural characteristics and mental disorder: Faris and Dunham revisited. Soc Sci Med 2002; 55:1457–70.
- Poundstone KE, Strathdee SA, Celentano DD. The social epidemiology of human immunodeficiency virus/acquired immunodeficiency syndrome. Epidemiol Rev 2004;26:22–35.
- CDC. HIV prevalence estimates—United States, 2006. MMWR 2008; 57:1073–6.
- US Census Bureau. Areas with concentrated poverty: 1999. Census 2000 special reports. Washington, DC: US Census Bureau; 2005. Available at http://www.census.gov/prod/2005pubs/censr-16.pdf. Accessed August 5, 2011.
- 9. Sumartojo E. Structural factors in HIV prevention: concepts, examples, and implications for research. AIDS 2000;14(Suppl 1):S3–10.
- 10. Blankenship KM, Bray SJ, Merson MH. Structural interventions in public health. AIDS 2000;14(Suppl 1):S11-21.

^{\$} Available at http://www.whitehouse.gov/administration/eop/onap/nhas.

Human Rabies from Exposure to a Vampire Bat in Mexico — Louisiana, 2010

In August 2010, CDC confirmed a case of rabies in a migrant farm worker, aged 19 years, hospitalized in Louisiana with encephalitis. The man developed acute neurologic symptoms at the end of July, shortly after arriving in the United States from Michoacán, Mexico. Despite supportive care, his condition deteriorated, and he died on August 21. Antemortem diagnostic testing confirmed the diagnosis of rabies, and samples collected at autopsy were positive for a vampire bat rabies virus variant. The patient's mother reported that he had been bitten by a bat in July in Mexico but had not sought medical care. Postexposure prophylaxis (PEP) was offered to 27 of the patient's contacts in Louisiana and to 68 health-care workers involved in his care. Although bats have become the primary source of human rabies in the United States, this is the first reported death from a vampire bat rabies virus variant in the United States. Clinicians caring for patients with acute progressive encephalitis should consider rabies in the differential diagnosis and implement early infection control measures.

Case Report

On July 29, 2010, a previously healthy male, aged 19 years, from Michoacán, Mexico, arrived at a sugarcane plantation in Louisiana. After 1 day of work in the fields, the patient sought medical attention on July 30 for generalized fatigue, left shoulder pain, and left hand numbness attributed to overexertion. The patient's symptoms continued, and he was evaluated at a local clinic and transferred to a referral hospital in New Orleans for further evaluation and management on August 3.

Physical examination at the referral hospital revealed hyperesthesia of the left shoulder, weakness of the left hand, generalized areflexia, and drooping of the left upper eyelid. A lumbar puncture produced cerebrospinal fluid (CSF) with a mildly elevated white blood cell count of 8 cells/mm³ (normal: 0–5 cells/mm³) with 67% lymphocytes and 12% neutrophils, a normal glucose, and no organisms on staining. The patient was admitted to the intensive-care unit for suspected Miller-Fisher variant of acute inflammatory demyelinating polyneuropathy (also referred to as Guillain-Barré syndrome), with viral encephalitis and early meningitis among the alternative diagnoses considered.

The next day, the patient developed a fever of 101.1°F (38.4°C) and signs of respiratory distress that prompted elective intubation. Computerized tomography and magnetic resonance imaging of the head revealed only a developing sinusitis. During the next several days, the patient became gradually less responsive to external stimuli, developed fixed

and dilated pupils, and began having episodes of bradycardia and hypothermia. Further evaluation included a repeat lumbar puncture revealing an elevation of the white blood cell count to 87 cells/mm³ with 97% lymphocytes and an elevated protein of 233 mg/dL (normal: 15–45 mg/dL). An electroencephalogram was consistent with encephalitis. Bacterial, viral, and fungal cultures of blood and CSF were negative. Additionally, laboratory tests for human immunodeficiency virus, syphilis, herpes simplex virus, arboviruses, Lyme disease, and autoimmune neuropathies all were negative.

Although no history of animal exposures was known at that time, a diagnosis of rabies was suspected based on the clinical history and available data. The Louisiana Office of Public Health was informed of the potential case of rabies, and infection control precautions were instituted on August 13, the 11th hospital day. On August 20, rabies virus-specific immunoglobulin G and immunoglobulin M detected in the patient's CSF and serum confirmed the diagnosis of rabies. After discussion with the family about the patient's prognosis and a subsequent electroencephalogram showing severe cortical impairment, the patient was extubated on August 21 in accordance with the family's wishes and died shortly thereafter. Rabies virus antigen was detected in postmortem brain tissues collected on August 22, and antigenic typing determined the variant to be a vampire bat rabies virus variant, which was subsequently confirmed by nucleic acid amplification and sequencing.

Public Health Investigation

Public health authorities in Louisiana and Mexico interviewed the patient's family members, friends, and coworkers to identify potential rabies virus exposures. The patient's mother stated that the patient was bitten by a vampire bat on the heel of his left foot while he was sleeping. The bite occurred on July 15 in his home state of Michoacán, Mexico, 10 days before his departure for the United States. He did not seek medical attention for this bite and had no history of vaccination against rabies. No other exposures to bats, dogs, or other mammals were identified.

Mexican health authorities identified five close contacts of the patient in his home state of Michoacán but determined that none of these contacts had exposures requiring PEP. However, animals in this area were frequently observed with bites from vampire bats, and officials conducted a vaccination campaign of cats and dogs in the local community. In addition, officials attempted to reduce the local vampire bat population by capturing 120 vampire bats and applying a warfarin-containing jelly to their backs. After being released, the bats and their roostmates ingest the anticoagulant through communal grooming. Diagnostic rabies testing performed on one of the captured bats was negative.

The Louisiana Office of Public Health with the assistance of hospital infection control staff interviewed clinic, hospital, and prehospital health-care providers to determine risks for exposure and provide PEP recommendations. Additionally, migrant workers who either accompanied the patient from Mexico or lived and worked with him in Louisiana were interviewed, and exposed contacts were offered PEP. In total, 95 of 204 (46.5%) patient contacts received PEP. Of these, 27 were coworkers who reported sharing a drinking vessel with the patient, and 68 were health-care workers with various exposures. To date, no known human contacts of this patient have developed rabies.

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Editorial Note

This case represents the first report of human rabies in the United States associated with a vampire bat rabies virus variant and highlights the growing importance of bats in public health. Bat rabies virus variants have been associated with the majority of indigenously acquired human rabies cases in the United States for approximately 2 decades. Similarly, vampire bats have become the leading cause of human rabies in Latin America during the last decade (1). This further highlights the importance of a global perspective for human rabies prevention and the changing epizootiology of rabies. Since 2000, eight (25%) of the 32 human rabies cases reported in the United States (including the case described in this report) were acquired from exposures abroad. Of these, two cases originated in Mexico and were the only imported cases not associated with a canine rabies virus variant; this finding might reflect improved control of canine rabies in Mexico. International coordination among public health officials remains a crucial component in investigating cases of infectious diseases and improving prevention and control efforts.

The incubation period of 15 days observed in this report is shorter than the median of 85 days seen in other cases of

What is already known on this topic?

Rabies virus causes an acute progressive viral encephalitis that is almost always fatal if postexposure prophylaxis is not administered before the onset of signs or symptoms.

What is added by this report?

In August 2010, a man aged 19 years died of rabies in Louisiana after being bitten by a vampire bat in his home in Michoacán, Mexico; this case represents the first reported human death from a vampire bat rabies virus variant in the United States.

What are the implications for public health practice?

Public health officials should increase awareness of the risk for rabies after bat and other wildlife exposures. Furthermore, clinicians caring for patients with acute progressive encephalitis should consider rabies in the differential diagnosis and implement early infection control measures.

human rabies reported in the United States (2). The incubation period for rabies associated with vampire bats might be shorter than that of other rabies virus variants, as suggested by one case series reporting an average incubation period of 22 days (3). Alternatively, the patient might have experienced an earlier exposure that went unrecognized or unreported. A second unidentified exposure resulting in infection also would explain the upper extremity symptoms observed given that symptoms often occur at the site of viral entry.

Health-care providers should recognize a history of travel to or immigration from a country with enzootic rabies as a risk factor and consider rabies in the differential of any case of acute progressive encephalitis. International travelers to areas with enzootic canine rabies should be counseled about the risk for exposure to rabies virus, educated in animal bite prevention techniques, including not touching or feeding any animals, and instructed to seek medical evaluation if an exposure to a suspected rabid animal occurs (4). Preexposure vaccination may be recommended if traveling to areas with limited access to appropriate medical care (4, 5). Appropriate infection control practices can decrease the risk for virus transmission in suspected or confirmed cases of human rabies. In such cases, caregivers should wear gowns, goggles, masks, and gloves, particularly during intubation and suctioning (5). If rabies is confirmed, a standardized risk assessment of patient contacts with strict application of the exposure definitions detailed by the Advisory Committee on Immunization Practices (ACIP) in combination with educational outreach might minimize unnecessary PEP in those who do not meet criteria (5). Active participation of public health officials and close supervision of hospital infection control staff during this process are recommended.

Although vampire bats currently are found only in Latin America, research suggests that the range of these bats might be expanding as a result of changes in climate (6). Expansion of vampire bats into the United States likely would lead to increased bat exposures to both humans and animals (including domestic livestock and wildlife species) and substantially alter rabies virus dynamics and ecology in the southern United States. In addition to rabies and other lyssaviruses, accumulating evidence implicates bats as reservoirs and potential vectors of a number of emerging infectious diseases (7). These discoveries raise further questions about the health risks to human populations with direct or indirect contact with bats, particularly given the high disease severity and fatality rates associated with these zoonoses. Further research should be directed toward better defining the nature and magnitude of the risks to human health posed by bats.

To mitigate the known risk for rabies, public education should increase awareness of the risk for rabies transmitted from bats and encourage avoidance of contact with bats and wildlife in general. Although commonly practiced, the elimination of vampire bats to prevent human or animal rabies remains controversial. Any potential human exposure to a bat should be investigated thoroughly to determine whether PEP is indicated, and bats involved in exposures should be safely collected and submitted for rabies testing when possible (5).

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References

- Schneider MC, Romijn PC, Uieda W, et al. Rabies transmitted by vampire bats to humans: an emerging zoonotic disease in Latin America? Rev Panam Salud Publica 2009;25:260–9.
- 2. Noah DL, Drenzek CL, Smith JS, et al. Epidemiology of human rabies in the United States, 1980 to 1996. Ann Intern Med 1998;128: 922–30.
- Lopez A, Miranda P, Tejada E, Fishbein DB. Outbreak of human rabies in the Peruvian jungle. Lancet 1992;339:408–11.
- Blanton JD, Rupprecht CE. Travel vaccination for rabies. Expert Rev Vaccines 2008;7:613–20.
- CDC. Human rabies prevention—United States, 2008: recommendations of the Advisory Committee on Immunization Practices. MMWR 2008; 57(No. RR-3).
- 6. Mistry S, Moreno A. Modeling changes in vampire bat distributions in response to climate change: implications for rabies in North America. Presented at the 19th International Conference on Rabies in the Americas, Atlanta, GA, September 28–October 3, 2008.
- 7. Calisher CH, Childs JE, Field HE, Holmes KV, Schountz T. Bats: important reservoir hosts of emerging viruses. Clin Microbiol Rev 2006;19:531–45.

Progress Toward Poliomyelitis Eradication — Nigeria, January 2010–June 2011

The Global Polio Eradication Initiative (GPEI) was launched by the World Health Assembly in 1988. By 2006, transmission of indigenous wild poliovirus (WPV) was interrupted in all countries except Nigeria, Afghanistan, Pakistan, and India (1). Among the 36 states and Federal Capital Territory of Nigeria, WPV transmission has persisted in eight northern states considered at high risk; in addition, four other northern states have been considered at high risk for WPV transmission (2). In these 12 high-risk states, type 2 circulating vaccinederived poliovirus (cVDPV2) transmission also was observed during 2005–2011 (3,4). This report updates GPEI progress in Nigeria during January 2010–June 2011 (1,2) and describes activities required to interrupt transmission. In Nigeria, confirmed WPV cases decreased 95%, from 388 in 2009 to 21 in 2010; cVDPV2 cases decreased 82%, from 154 in 2009 to 27 in 2010. However, as of July 26, 2011, Nigeria had reported 24 WPV cases (including one WPV/cVDPV2 coinfection) and 11 cVDPV2 cases during January-June 2011, compared with six WPV cases and 10 cVDPV2 cases during January-June 2010. Despite substantial progress, immunization activities and surveillance sensitivity will need to be enhanced further to interrupt WPV transmission in Nigeria by the end of 2011.

Immunization Activities

The Nigeria routine immunization schedule recommends doses of trivalent OPV types 1, 2, and 3 (tOPV) at birth and, together with diphtheria-tetanus-pertussis vaccine (DTP), at ages 6, 10, and 14 weeks. Because reported OPV coverage can include doses administered during supplementary immunization activities (SIAs), coverage with DTP is a more accurate indicator of OPV administered through routine immunization. Nationally, the proportion of children aged 1 year who had received 3 doses of DTP (DTP3) was 40% in 2006 and 69% in 2010 as estimated by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF)* using administrative data and multiple surveys. DTP3 coverage in National Immunization Coverage Surveys (NICS) in the eight states[†] with persistent WPV transmission in 2006 and 2010 was 30% (range: 9%-52%) and 47% (range: 26%–89%), respectively, compared with national coverage of 54% in 2006 and 68% in 2010.

Bivalent OPV types 1 and 3 (bOPV) became available in 2010 and has largely replaced monovalent OPV type 1 (mOPV1) and type 3 (mOPV3) use in SIAs during 2010–2011. Three national SIAs were conducted in 2010 and two during January–June 2011. In the northern states, five subnational SIAs were conducted in 2010 and three during January–June 2011. Various combinations of mOPV1, mOPV3, bOPV, or tOPV were used during these SIAs (Figure 1).

The effectiveness of SIA implementation in the 12 high-risk states[§] is monitored by surveys to look for children missed by SIAs in high-risk wards (i.e., subdistricts). The proportion of wards with >10% children missed by SIAs during January 2011–June 2011 was consistently >15% in six states (Kaduna, Kano, Katsina, Kebbi, Niger, and Yobe). The majority of children missed by SIAs lived in households not visited by SIA teams or were not present during vaccination team visits.

Vaccination recall histories of children with nonpolio acute flaccid paralysis (NPAFP) are used to estimate OPV coverage from routine immunization and SIAs among children aged 6-35 months. The proportion of children with NPAFP reported to have never received an OPV dose (i.e., zero-dose children) declined from 30.9% in early 2006 to 10.8% in early 2009 in the eight states with persistent transmission (5). During 2010–2011, downward trends continued (Table), but the overall proportion has not fallen below 5% and ranges as high as 16.7% in Borno. The proportion of children aged 6-35 months with NPAFP who have received ≥ 3 doses of OPV increased from 24% in early 2006 to 82% in early 2011(5). The targets for the 12 high-risk states are <10% zero-dose children and >80% children with NPAFP with \geq 3 OPV doses. In 2011, nine states (Bauchi, Gombe, Jigawa, Kaduna, Katsina, Kebbi, Niger, Sokoto, and Zamfara) met both targets; Kano and Yobe met only the <10% zero-dose target; Borno met neither target.

AFP Surveillance

Polio eradication relies on acute flaccid paralysis (AFP) surveillance to identify and confirm poliomyelitis cases by viral isolation. Surveillance performance is monitored using WHO targets for case detection and adequate stool specimen collection (6). NPAFP detection rates meeting the target of at least two cases per 100,000 were achieved in all states during January 2010–June 2011. The national NPAFP detection rate among children aged <15 years was 7.8 per 100,000 during 2010 and an annualized 7.7 per 100,000 during January–June 2011.

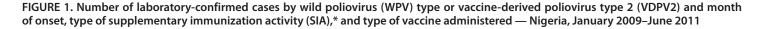
The adequate stool specimen target of ≥80% was attained in all states during January 2010–June 2011. Among AFP cases reported nationally, adequate stool specimens were collected

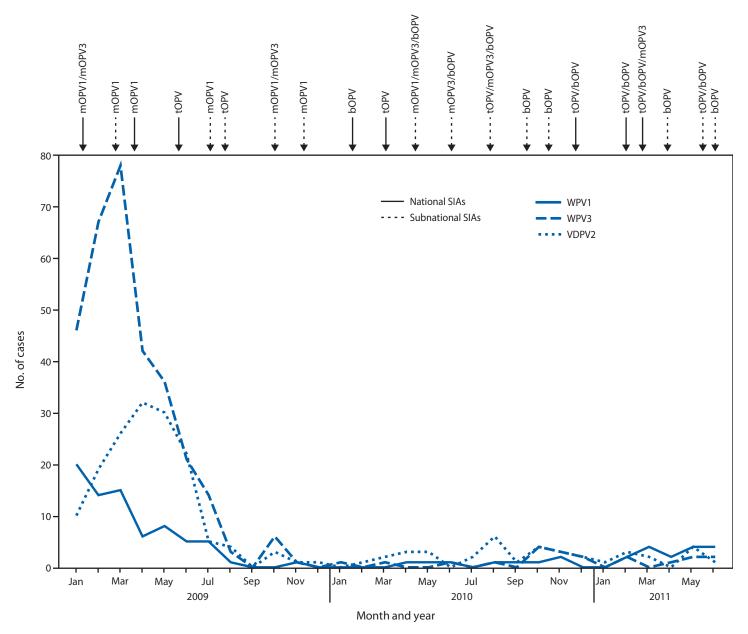
^{*} Available at http://www.who.int/immunization_monitoring/data/nga.pdf.

[†]Borno, Jigawa, Kano, Katsina, Kebbi, Sokoto, Yobe, and Zamfara.

[®]The other four states are Bauchi, Gombe, Kaduna, and Niger.

⁹ Reports on progress in the 2010–2012 GPEI Strategic Plan are available at http:// www.polioeradication.org/dataandmonitoring/polioeradicationtargets.aspx.





Abbreviations: mOPV1 = monovalent oral polio vaccine (OPV) type 1; mOPV3 = monovalent OPV type 3; tOPV = trivalent OPV; bOPV = bivalent OPV. * Mass campaign conducted in a short period (days to weeks) during which a dose of OPV is administered to all children aged <5 years, regardless of previous vaccination history. Campaigns can be conducted nationally or in portions of the country.

from 5,560 (93%) of 6,000 cases during 2010 and 2,788 (93%) of 2,998 cases during January–June 2011. The proportion of districts, or local government areas (LGAs), in the 12 highrisk states meeting both surveillance targets decreased from 89% (254 of 286) in 2009 to 83% (236 of 286) in 2010, to 75% (215 of 286, provisional data) during January–June 2011; many LGAs not meeting both indicators in the highrisk states are contiguous. To supplement laboratory testing of

specimens obtained through AFP surveillance, environmental testing of sewage samples for poliovirus began in Kano state in July 2011 (6).

WPV and cVDPV2 Incidence

Eight WPV type 1 (WPV1) cases and 13 WPV type 3 (WPV3) cases were reported during January–December 2010; 16 WPV1 cases (including one WPV1/ cVDPV2 coinfection)

			200)9					20	2011						
January–June					July-December			January–.	June		July–D	December	January–June			
Region	No. of NPAFP cases	<u>Zero dose</u> No. (%)	<u>≥3 doses</u> No. (%)	No. of NPAFP cases	<u>Zero dose</u> No. (%)	<u>≥3 doses</u> No. (%)	No. of NPAFP cases	<u>Zero dose</u> No. (%)	<u>≥3 doses</u> No. (%)	No. of NPAFP cases	Zero d No.	lose <u>≥3 doses</u> (%) No. (%)	No. of NPAFP cases	Zero dose No. (%)	<u>≥3 doses</u> No. (%)	
Persistent transmission states [†]	538	58 (10.8)	301 (55.9)	376	42 (11.2)	238 (63.3)	518	36 (6.9)	370 (71.4)	430	31	(7.2) 316 (73.5)	432	23 (5.3)	355 (82.2)	
Other high-risk northern states [§]	192	14 (7.3)	150 (78.1)	141	1 (0.7)	124 (87.9)	177	0 (0)	160 (90.4)	179	5	(2.8) 157 (87.7)	237	3 (1.3)	219 (92.4)	
Other northern states¶	303	6 (2.0)	256 (84.5)	228	3 (1.3)	200 (87.7)	280	5 (1.8)	255 (91.1)	246	1	(0.4) 232 (94.3)	262	5 (1.9)	244 (93.1)	
Southern states**	591	12 (2.0)	516 (87.3)	474	8 (1.7)	414 (87.3)	662	11 (1.7)	608 (91.8)	748	13	(1.7) 652 (87.2)	706	8 (1.1)	645 (91.4)	
Total	1,624	90 (5.5)	1,223 (75.3)	1,219	54 (4.4)	976 (80.1)	1,637	52 (3.2)	1,393 (85.1)	1,603	50 (3.1) 1,357 (84.7)	1,637	39 (2.4)	1,463 (89.4)	

TABLE. Number and percentage of reported nonpolio acute flaccid paralysis (NPAFP) cases among children aged 6–35 months with zero doses* and ≥3 doses of oral polio vaccine — Nigeria, January 2009–June 2011

* Children who have never received an oral polio vaccine dose, as reported by caregiver.

⁺ Persistent transmission states have continuously detected polio cases since the start of polio eradication in Nigeria in 1999 or had sustained circulation >12 months: Borno, Jigawa, Kano, Katsina, Kebbi, Sokoto, Yobe, and Zamfara.

[§] High-risk northern states that generally had a higher incidence of polio cases than other states: Bauchi, Gombe, Kaduna, and Niger.

[¶]Adamawa, Benue, Federal Capital Territory, Kogi, Kwara, Nasarawa, Plateau, and Taraba.

** Abia, Akwa Ibom, Anambra, Bayelsa, Cross River, Delta, Ebonyi, Edo, Ekiti, Enugu, Imo, Lagos, Ogun, Ondo, Osun, Oyo, and Rivers.

and eight WPV3 cases were reported during January–June 2011 (compared with three each during January–June 2010) (Figure 1, Figure 2). During January–June 2011, the WPV1 cases occurred in six persistent-transmission states and the WPV3 cases occurred in three persistent-transmission states (Figure 2). Of 45 WPV cases reported with onset during January 2010–June 2011, 70% occurred in children aged <3 years; 32% were in children reported to have received ≥3 doses OPV, and 27% were in zero-dose children.

Concurrent outbreaks of cVDPV2, which began in Nigeria in 2005 with the use of alternate OPV formulations and were identified with enhanced poliovirus surveillance sensitivity and laboratory screening, resulted in 361 cases reported as of July 26, 2011 (*3,4*). During January–December 2010, 27 cVDPV2 cases were reported, and during January–June 2011, 10 cVDPV2 cases, one ambiguous VDPV2, and one WPV1/ cVDPV2 coinfection were reported (occurring in eight of the 12 high-risk states) (Figure 2). Of 38 cVDPV2 cases with onset during January 2010–June 2011, 69% occurred in children aged <3 years; 36% were in children reported to have received ≥3 doses OPV, and 13% were in zero-dose children.

WPV and VDPV Genomic Sequence Analysis

Analysis of the nucleotide sequence of the VP1 region of each WPV and VDPV isolate is used to investigate transmission links, track international spread, and estimate duration of circulation (6).** The genetic diversity of WPV1 (reflected by the number of virus chains of transmission and genetic clusters) decreased substantially during 2010–2011 in Nigeria. In 2010, four WPV1 genetic clusters were observed, compared with 19 in 2009. However, 13 (68%) of 19 WPV1 isolates tested had <98.5% identity (much less genetic linkage than expected with sensitive AFP surveillance), and two of the five WPV1 clusters observed in 2011 were not detected by AFP surveillance in 2010. In 2010, four WPV3 clusters were observed compared with 20 in 2009. However, eight (44%) of 18 WPV3 isolates tested during 2010–2011 had <98.5% similarity. Among 36 cVDPV2 isolates tested during 2010–2011, 23 (64%) had <98.5% identity.

Reported by

National Primary Health Care Development Agency and Federal Ministry of Health; Country Office of the World Health Organization, Abuja; Poliovirus Laboratory, Univ of Ibadan, Ibadan; Poliovirus Laboratory, Univ of Maiduguri Teaching Hospital, Maiduguri, Nigeria. African Regional Polio Reference Laboratory, National Institute for Communicable Diseases, Johannesburg, South Africa. Vaccine Preventable Diseases, World Health Organization Regional Office for Africa, Brazzaville, Congo; Polio Eradication Dept, World Health Organization, Geneva, Switzerland. Div of Viral Diseases and Global Immunization Div, National Center for Immunization and Respiratory Diseases, CDC. Corresponding contributor: Margaret Hercules, mhercules@cdc.gov, 404-639-8248.

Editorial Note

Northern Nigeria has had ongoing WPV transmission (and more recently, cVDPV2 transmission) because of a weak

^{**} All isolates are sequenced across the interval encoding the major capsid protein (VP1) (approximately 900 nucleotides) and results are analyzed to determine the likely origin (by state and local government area) of the virus. Isolates within a cluster share >95% VPI nucleotide sequence identity.

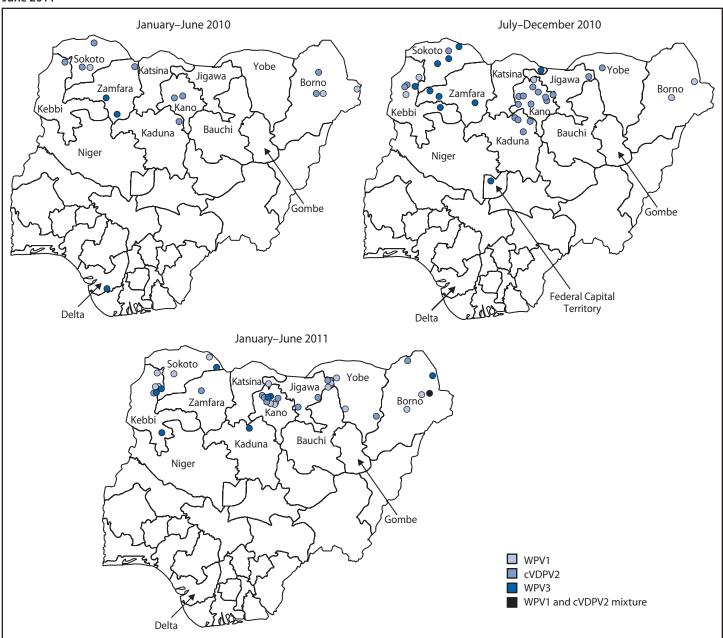


FIGURE 2. Wild poliovirus (WPV) types and circulating vaccine-derived poliovirus type 2 (cVDVP2) cases, by period — Nigeria, January 2010–June 2011

health-system infrastructure and programmatic limitations such as poor implementation of SIAs, compounded by a loss of public confidence in OPV during 2003 (2,5,7). Beginning in 2009, Nigeria has shown substantial progress in implementation of GPEI activities. Enhanced collaboration with traditional, religious, and political leaders has furthered community acceptance of SIAs; OPV coverage has increased in routine immunization services, and the implementation of SIAs has improved; AFP surveillance indicators have continued to be met in all states; and the number of WPV cases and cVDPV2 cases has markedly decreased (1,2,5-7). However, despite this progress, virologic data indicate that surveillance is not sufficiently sensitive to detect all chains of WPV transmission in a timely manner. The number of WPV cases has increased in 2011; multiple foci of WPV transmission remain endemic, and cVDPV2 transmission persists (1-4).

Nigeria has been a major reservoir for WPV transmission in other countries. Since 2003, WPV of Nigerian origin has been imported into 25 countries, and many countries of West and Central Africa have had repeated importations (*8,9*). Currently,

six countries have WPV3 circulation of Nigerian origin, and cVDPV2 importation into two countries (Chad and Niger) occurred in 2010.

The 2010–2012 GPEI strategic plan set goals of interrupting WPV transmission in two of the remaining four countries with indigenous WPV transmission (Nigeria and India) by the end of 2011 and ending all WPV transmission by the end 2012 (*10*). Currently, India is on track to meet the 2011 target (*1*).

For Nigeria, NPAFP dose history provides the major indicators for tracking strategic plan progress in each of the 12 high-risk states (10). During 2011, the NPAFP dose targets have been met in only nine of these states. Additionally, SIA monitoring surveys reveal weaknesses in implementation in some states that are not suggested by the statewide NPAFP dose history indicators. Limitations exist in the NPAFP and SIA indicators: 1) the NPAFP dose history is by parental recall, which might be biased by collection during AFP surveillance; 2) type-specific dose histories vary because of multiple OPV preparations used in SIAs; 3) state NPAFP dose averages might mask substantial variability within states; and 4) SIA monitoring surveys (directed toward the highest-risk areas within LGAs) are not fully standardized in implementation. Although NPAFP dose history and SIA monitoring indicators have been fully met in Jigawa and Sokoto, WPV and cVDPV2 circulation have continued in those states.

Genomic sequence analysis indicates surveillance gaps with some chains of WPV transmission during 2010–2011 not detected for more than a year. State AFP surveillance indicators might mask surveillance gaps occurring among individual LGAs; additionally, surveillance might overlook subpopulations, such as nomads and migrant workers in northern Nigeria, who have limited access to immunization activities and health-care providers. Despite ongoing progress, the continued circulation of WPV and cVDPV2 during 2011 in six states and evidence of limitations in AFP surveillance indicate that substantial further improvements are needed in the quality of implementation of both surveillance and immunization activities to interrupt transmission by the end of 2011. A revised emergency action plan for June– December 2011 is being implemented in Nigeria to enhance AFP surveillance by identifying and improving activities in LGAs not meeting performance criteria, target activities in migrant populations, and better address limitations in SIA implementation by further enhancing training, supervision, monitoring, community engagement, and social mobilization.

References

- CDC. Progress toward interruption of wild poliovirus transmission worldwide, January 2010–March 2011. MMWR 2011;60:582–6.
- CDC. Progress toward poliomyelitis eradication—Nigeria, January 2009–June 2010. MMWR 2010;59:802–7.
- 3. Wassilak S, Pate MA, Wannamuehler K, et al. Outbreak of type 2 vaccine-derived poliovirus in Nigeria: emergence and widespread circulation in an underimmunized population. J Infect Dis 2011;203: 898–909.
- CDC. Update on vaccine-derived polioviruses—worldwide, July 2009– March 2011. MMWR 2011;60:846–50.
- CDC. Progress toward poliomyelitis eradication—Nigeria, 2005–2006. MMWR 2007;56:278–81.
- CDC. Tracking progress toward global polio eradication—worldwide, 2009–2010. MMWR 2011;60:441–5.
- CDC. Progress toward poliomyelitis eradication—Nigeria, January 2004–July 2005. MMWR 2005;54:873–7.
- 8. CDC. Outbreaks following wild poliovirus importations—Europe, Africa, and Asia, January 2009–September 2010. MMWR 2010;59: 1393–9.
- CDC. Progress toward interrupting wild poliovirus circulation in countries with reestablished transmission—Africa, 2009–2010. MMWR 2011;60:306–11.
- World Health Organization. Global Polio Eradication Initiative: strategic plan 2010–2012. Geneva, Switzerland: World Health Organization; 2010. Available at http://www.polioeradication.org/ content/publications/gpei.strategicplan.2010-2012.eng.may.2010.pdf. Accessed August 2, 2011.

Notifiable Diseases and Mortality Tables

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending August 6, 2011 (31st week)*

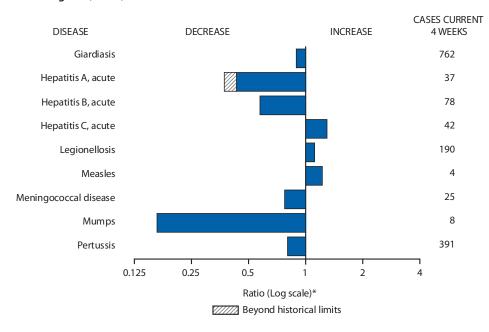
	. .	~	5-year	Total	cases repo	orted for	previous	years	States reporting cases		
Disease	Current week	Cum 2011	weekly average [†]	2010	2009	2008	2007	2006	States reporting cases during current week (No.)		
Anthrax				_	1	_	1	1	3		
Arboviral diseases [§] , [¶] :											
California serogroup virus disease	_	8	5	75	55	62	55	67			
Eastern equine encephalitis virus disease	_	_	0	10	4	4	4	8			
Powassan virus disease	_	5	0	8	6	2	7	1			
St. Louis encephalitis virus disease	_	_	0	10	12	13	9	10			
Western equine encephalitis virus disease	_	_	_	_	_	_	_	_			
abesiosis	50	228	2	NN	NN	NN	NN	NN	NY (48), PA (2)		
otulism, total	_	52	3	112	118	145	144	165			
foodborne	_	6	0	7	10	17	32	20			
infant	—	40	2	80	83	109	85	97			
other (wound and unspecified)	—	6	1	25	25	19	27	48			
rucellosis	2	44	3	115	115	80	131	121	MO (1), CA (1)		
hancroid	—	11	0	24	28	25	23	33			
holera	—	21	0	13	10	5	7	9			
yclosporiasis [§]	7	100	5	179	141	139	93	137	MO (1), DC (1), FL (2), TX (3)		
Diphtheria	_	_	-	_	—	—	_	—			
<i>laemophilus influenzae</i> , ^{**} invasive disease (age <5 yrs):											
serotype b	—	5	0	23	35	30	22	29			
nonserotype b	—	69	3	200	236	244	199	175			
unknown serotype	2	154	3	223	178	163	180	179	MO (1), HI (1)		
lansen disease [§]	_	26	2	98	103	80	101	66			
lantavirus pulmonary syndrome [§]	_	15	1	20	20	18	32	40			
emolytic uremic syndrome, postdiarrheal ⁸	5	77	7	266	242	330	292	288	VT (1), NY (2), FL (1), OK (1)		
nfluenza-associated pediatric mortality [§] , ^{††}		110	1	61	358	90	77	43			
isteriosis	11	270	22	821	851	759	808	884	NY (3), PA (1), MD (2), VA (1), WA (1),		
1easles ^{§§}	1	160	1	63	71	140	43	55	CA (2), HI (1) NYC (1)		
leasies Ieningococcal disease, invasive ^{¶¶} :	1	100		05	71	140	43	22			
A, C, Y, and W-135	1	120	3	280	301	330	325	318	TX (1)		
serogroup B	_	56	3	135	174	188	167	193			
other serogroup		7	0	135	23	38	35	32			
unknown serogroup	7	, 270	7	406	482	616	550	651	NY (2), OH (1), MO (1), NC (1), TX (1), CA (1		
lovel influenza A virus infections***	_	2/0	0	400	43,774	2	4	NN			
lague	_	1	0	2	8	3	7	17			
oliomyelitis, paralytic	_		_	_	1	_	_				
Polio virus Infection, nonparalytic [§]	_	_	_	_	_	_	_	NN			
sittacosis [§]	_	1	0	4	9	8	12	21			
e fever, total [§]	1	43	3	131	113	120	171	169			
acute	1	30	1	106	93	106	_	_	OR (1)		
chronic	_	13	0	25	20	14	_	_			
labies, human	_	1	0	2	4	2	1	3			
ubella ^{†††}	_	4	0	5	3	16	12	11			
ubella, congenital syndrome	_	_	_	_	2	_	_	1			
ARS-CoV [§]	_	_	_	_	_	_	_	_			
mallpox [§]	_	_	_	_	_	_	_	_			
treptococcal toxic-shock syndrome [§]	1	80	2	148	161	157	132	125	VT (1)		
yphilis, congenital (age <1 yr) ^{§§§}	_	100	9	378	423	431	430	349			
etanus	_	6	0	10	18	19	28	41			
oxic-shock syndrome (staphylococcal) [§]	2	46	1	82	74	71	92	101	GA (1), CA (1)		
richinellosis	_	7	0	7	13	39	5	15			
ularemia	2	62	5	124	93	123	137	95	NE (1), AR (1)		
yphoid fever	3	202	9	468	397	449	434	353	PA (1), KS (1), CA (1)		
ancomycin-intermediate Staphylococcus aureus [§]	1	34	1	91	78	63	37	6	FL (1)		
ancomycin-resistant Staphylococcus aureus	_	_	_	2	1	_	2	1			
'ibriosis (noncholera <i>Vibrio</i> species infections) [§]	13	298	24	848	789	588	549	NN	PA (1), MD (1), VA (1), FL (3), TN (1), WA (5), CA (1)		
iral hemorrhagic fever ^{¶¶¶}	_	—	—	1	NN	NN	NN	NN			
/ellow fever	_	_	_	_	_	_	_	_			

See Table 1 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 August 6, 2011 (31st week)*

- ---: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts.
- * Case counts for reporting years 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/ nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf.
- † 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/osels/ph_surveillance/nndss/phs/files/5yearweeklyaverage.pdf.
- ⁵ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table except starting in 2007 for the arboviral diseases, STD data, TB data, and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/osels/ph_surveillance/nndss/phs/infdis.htm.
- ¹ 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.
- ** Data for H. influenzae (all ages, all serotypes) are available in Table II.
- ⁺⁺ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since October 3, 2010, 114 influenza-associated pediatric deaths occurring during the 2010-11 influenza season have been reported.
- ^{§§} The one measles case reported for the current week was imported.
- ^{¶¶} Data for meningococcal disease (all serogroups) are available in Table II.
- *** CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. During 2009, four cases of human infection with novel influenza A viruses, different from the 2009 pandemic influenza A (H1N1) strain, were reported to CDC. The four cases of novel influenza A virus infection reported to CDC during 2010, and the two cases reported during 2011, were identified as swine influenza A (H3N2) virus and are unrelated to the 2009 pandemic influenza A (H1N1) virus. Total case counts for 2009 were provided by the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD).
- ^{†††} No rubella cases were reported for the current week.
- ^{\$55} Updated weekly from reports to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.
- 1911 There was one case of viral hemorrhagic fever reported during week 12 of 2010. The one case report was confirmed as lassa fever. See Table II for dengue hemorrhagic fever.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals August 6, 2011, 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 TeamJennifer WardDeborah A. AdamsRosaline DharaWillie J. AndersonPearl C. SharpLenee BlantonMichael S. Wodajo

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending August 6, 2011, and August 7, 2010 (31st weeks and a second	ek)*
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		Chlamydia	trachomat	is infection			Cocci	dioidomy	cosis		Cryptosporidiosis					
	Current	Previous	Previous 52 weeks		Cum	Current	Previous 5	52 weeks	Cum	Cum	Current	Previous	52 weeks	Cum	Cum	
Reporting area	week	Med	Max	Cum 2011	2010	week	Med	Max	2011	2010	week	Med	Max	2011	2010	
United States	11,464	25,954	31,142	751,389	764,128	63	113	567	9,925	NN	134	133	417	3,883	4,596	
New England	724	847	2,043	25,282	23,982	_	0	1	1	NN	1	6	45	208	322	
Connecticut	241	224	1,557	5,614	6,185	—	0	0	—	NN	—	0	39	39	77	
Maine [†]	440	58 406	100 860	1,732 13,130	1,477 12,184	_	0	0	_	NN NN	_	1 3	8 9	28 89	61 90	
Massachusetts New Hampshire	440	400	81	1,636	1,364	_	0	1	1	NN	_	5	9 4	26	90 40	
Rhode Island [†]	_	70	154	2,308	2,028	_	Ő	0	_	NN	_	0	2	1	14	
Vermont [†]	36	26	84	862	744	_	0	0	_	NN	1	1	5	25	40	
Mid. Atlantic	1,918	3,374	5,069	94,915	99,337	_	0	1	3	NN	22	17	38	499	453	
New Jersey	65	519	905	15,688	15,470	_	0	0	_	NN		1	4	20	18	
New York (Upstate) New York City	824 233	710 1,140	2,099 2,612	21,113 27,997	19,332 36,830	_	0 0	0	_	NN NN	10	4 2	13 6	99 38	95 45	
Pennsylvania	796	957	1,238	30,117	27,705	_	0 0	1	3	NN	12	9	25	342	295	
E.N. Central	895	3,971	7,039	111,401	120,749	1	0	3	33	NN	44	31	141	889	1,285	
Illinois	_	1,076	1,320	25,923	35,615	_	0	0	_	NN	_	3	25	70	182	
Indiana	218	459	3,376	15,460	11,593	—	0	0		NN	_	4	15	118	173	
Michigan	504	948	1,397	27,894	29,629	1	0	3 3	19	NN	5	5 9	18 31	169	193	
Ohio Wisconsin	173	1,000 463	1,134 559	29,475 12,649	30,306 13,606		0	3 0	14	NN NN	39	9 7	65	359 173	245 492	
W.N. Central	620	1,431	1,642	41,486	42,678	1	0	2	5	NN	12	, 19	132	589	896	
lowa	22	210	241	6,143	6,213	_	0	0	_	NN	3	7	30	214	196	
Kansas	_	191	288	5,847	5,774	_	0	0	_	NN	_	0	6	4	66	
Minnesota		286	364	6,637	9,182	—	0	0	—	NN	_	0	22		230	
Missouri Nebraska [†]	442	525	759	16,541 3,698	15,321	1	0	0 2		NN NN	7	4 4	57 26	140	223 92	
Nebraska [†] North Dakota	130	105 36	218 90	5,098 664	2,990 1,362	1	0	2	5	NN	2	4	20	121 16	92 14	
South Dakota	26	64	93	1,956	1,836	_	Ő	0	_	NN	_	2	13	94	75	
S. Atlantic	4,123	5,110	6,535	161,805	154,739	_	0	2	3	NN	29	21	57	686	613	
Delaware	103	83	220	2,555	2,548	_	0	0	_	NN	_	0	1	5	4	
District of Columbia	_	105	180	2,844	3,156	—	0	0	—	NN		0	1	5	2	
Florida	682 899	1,490 943	1,706 2,384	45,015 31,075	44,872 26,289	_	0	0	_	NN NN	12 10	8 5	23 11	263 173	223 171	
Georgia Maryland†	427	451	1,125	12,910	14,195	_	0	2	3	NN	2	1	6	39	23	
North Carolina	684	756	1,477	27,533	27,694	_	0	0	_	NN	_	0	17	36	47	
South Carolina [†]	594	528	946	17,070	15,330	—	0	0	—	NN	2	2	19	77	61	
Virginia [†]	663	663	966	20,337	18,462	_	0	0	_	NN	3	2	8	72	71	
West Virginia	71 518	78 1,794	121 3,314	2,466 54,787	2,193 54,606	_	0 0	0 0	_	NN NN	4	0 7	5 24	16 179	11 134	
E.S. Central Alabama [†]	516	543	3,314 1,564	54,787 16,443	15,373	_	0	0	_	NN	4	3	15	83	52	
Kentucky	248	264	2,352	9,326	9,434	_	0	0	_	NN		1	4	26	44	
Mississippi	_	395	614	11,476	13,160	_	0	0	_	NN	_	0	2	16	7	
Tennessee [†]	270	581	795	17,542	16,639	—	0	0	—	NN	2	1	5	54	31	
W.S. Central	800	3,315	4,723	99,840	106,873	—	0	1	1	NN	7	7	62	202	209	
Arkansas [†]	333	306	440	9,808	9,247	_	0	0		NN	2	0	3	10	20	
Louisiana Oklahoma	443	526 224	1,052 1,371	13,302 6,164	15,955 8,876	_	0	1 0	1	NN NN	2	0 2	9 34	28 51	27 43	
Texas [†]	24	2,365	3,107	70,566	72,795	_	0	0	_	NN	3	4	28	113	119	
Mountain	962	1,650	2,155	47,635	49,421	53	73	432	7,861	NN	8	12	30	332	321	
Arizona	158	509	697	12,797	16,109	52	70	427	7,762	NN	3	1	4	25	18	
Colorado	383	408	847	13,921	11,524	_	0	0	_	NN	1	3	11	91	77	
Idaho†		61	179	1,630	2,459	_	0	0		NN	3	2	7	66	55	
Montana [†] Nevada [†]	51 236	62 197	83 380	1,959 6,447	1,790 6,018	1	0 1	1 4	2 55	NN NN	1	1 0	5 7	39 3	30 16	
New Mexico [†]	230 64	197	1,183	5,885	6,408	_	0	4	31	NN	_	2	12	68	63	
Utah	70	130	175	3,905	3,867	_	0	2	8	NN	_	1	5	24	44	
Wyoming [†]	—	38	90	1,091	1,246	—	0	2	3	NN	_	0	5	16	18	
Pacific	904	3,847	6,559	114,238	111,743	8	37	142	2,018	NN	7	12	29	299	363	
Alaska	221	112	157	3,235	3,661		0	0	2 015	NN		0	3	7	2	
California Hawaii	331	2,922 108	5,763 138	87,517 2,936	85,150 3,674	8	37 0	142 0	2,015	NN NN	5	6 0	19 0	178	206 1	
Oregon	245	263	524	8,143	6,771	_	0	1	3	NN	_	3	20	72	106	
Washington	328	430	522	12,407	12,487	_	Ő	0	_	NN	2	1	9	42	48	
Territories																
American Samoa	_	0	0	_	_	_	0	0	_	NN	Ν	0	0	Ν	Ν	
C.N.M.I.	—	_				—		_	—	NN	—	_	_	—	—	
Guam Puerto Rico	1	5 104	81 349	189 3,400	545 3,783	_	0 0	0 0	_	NN NN	N	0 0	0 0	N	N	
U.S. Virgin Islands	1	104	27	3,400	348	_	0	0	_	NN		0	0	IN	IN	

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

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/ nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

[†] Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

		Dengue Virus Infection [†]													
		D	engue Fever [§]			Dengue Hemorrhagic Fever [¶]									
	Current	Previous	52 weeks	Cum	Cum	Current	Previous	52 weeks	Cum	Cum					
Reporting area	week	Med	Max	2011	2010	week	Med	Max	2011	2010					
United States		3	55	53	362		0	2	_	5					
New England	_	0	3	1	4	_	0	0	_	_					
Connecticut	_	0	0	—	_	—	0	0	_	_					
Maine**	—	0	2	_	3	—	0	0	—	_					
Massachusetts	_	0	0	_	-	-	0	0	_	_					
New Hampshire Rhode Island**	—	0 0	0 1	—	—	—	0	0 0	—	—					
Vermont**	_	0	1	1	1	_	0	0	_	_					
Mid. Atlantic		1	25	19	112		0	1		3					
New Jersey	_	0	3		15	_	0	0							
New York (Upstate)	_	Ő	5	_	15	_	Ő	1	_	1					
New York City	_	1	17	10	67	_	0	1	_	2					
Pennsylvania	—	0	2	9	15	—	0	0	_	—					
E.N. Central	_	0	7	4	29	_	0	1	_	_					
Illinois	_	0	2	1	8	—	0	0	_	_					
Indiana	—	0	2	1	7	_	0	0	—	—					
Michigan	—	0	2	—	4	_	0	0	_	_					
Ohio Wisconsin	_	0 0	2 2	2	7 3	_	0 0	0 1		_					
	_					_				_					
N.N. Central	—	0	6 1	—	21	—	0	1	—	—					
lowa Kansas	_	0 0	1	_	1 3	_	0	0 0	_	_					
Minnesota	_	0	1	_	12	_	0	0	_	_					
Missouri	_	Ő	1	_	4	_	Ő	Ő	_	_					
Nebraska**	_	0	6	_	_	_	0	0	_	_					
North Dakota	—	0	0	_	1	—	0	0	_	—					
South Dakota	_	0	0	_	_	_	0	1	_	_					
5. Atlantic	—	1	19	14	135	—	0	1	_	1					
Delaware	—	0	0		—	—	0	0	—	—					
District of Columbia	—	0	0			-	0	0	_						
Florida	_	1 0	13 2	11	106	—	0	1 0	_	1					
Georgia Maryland**	_	0	2	2	8	_	0	0	_	_					
North Carolina	_	0	2	1	3	_	0	0	_	_					
South Carolina**	_	Ő	3	_	10	_	Ő	Ő	_	_					
Virginia**	_	0	3	_	6	_	0	0	_	_					
West Virginia	—	0	0	—	2	—	0	0	—	—					
E.S. Central	—	0	1	—	4	—	0	0	_	_					
Alabama**	—	0	1	—	2	—	0	0	—	—					
Kentucky	—	0	1	—	1	_	0	0	_	_					
Mississippi Tennessee**	_	0 0	0 0	_	1	_	0 0	0 0	_	_					
N.S. Central		0	4		16		0	0		1					
Arkansas**	_	0	4	1	10	_	0	0	_	1					
Louisiana	_	õ	2	1	2	_	õ	Ő	_	_					
Oklahoma	_	0	1	_	2	_	0	0	_	_					
Texas**	_	0	2	_	12	_	0	0	_	_					
Mountain	_	0	2	3	12	_	0	0	_	_					
Arizona	_	0	2	2	4	_	0	0	_	_					
Colorado	—	0	0	—	_	—	0	0	—	—					
Idaho**	_	0	1	_	1	-	0	0	_	_					
Montana** Nevada**	—	0 0	1	_	3 3	_	0 0	0 0	_						
New Mexico**	_	0	0	_	1	_	0	0	_	_					
Utah	_	0	1	1	_	_	0	0	_	_					
Wyoming**	_	Ő	0	_	_	_	Ő	0	_	_					
Pacific	_	0	7	11	29	_	0	0	_	_					
Alaska	_	0	0	_	1	_	õ	0	_	_					
California	—	0	5	2	21	—	0	0	—	—					
Hawaii	_	0	4	5	_	_	0	0	_	_					
Oregon	—	0	0	_		—	0	0	—	—					
Washington		0	2	4	7	_	0	0		_					
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	_					
C.N.M.I. Guam		0	0	_	_	_	0	0	_	_					
Guam Puerto Rico	_	25	550	364	5,796	_	0	20	2	121					
U.S. Virgin Islands	_	23	0			_	0	20							
o.o. virgin isidilus	_	U	0		_	_	U	U		_					

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 6, 2011, and August 7, 2010 (31st week)*

C.N.M.I. Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/ nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly. [†] Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance).

§ Dengue Fever includes cases that meet criteria for Dengue Fever with hemorrhage, other clinical and unknown case classifications.

[¶] DHF includes cases that meet criteria for dengue shock syndrome (DSS), a more severe form of DHF.

** Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 6, 2011, and August 7, 2010 (31st week)*

							Ehrlichio	sis/Anapla	smosis†						
		Ehrli	ichia chaffe	ensis			Anaplasm	na phagocy	tophilum	Undetermined					
	Current	Previous	52 weeks	Cum	Cum	Current	Previous	52 weeks	Cum	Cum	Current	Previous	52 weeks	Cum	Cum
Reporting area	week	Med	Max	2011	2010	week	Med	Max	2011	2010	week	Med	Max	2011	2010
United States	23	7	109	406	432	12	16	45	285	1,251	2	1	13	52	69
New England	_	0	2	3	3	_	2	16	81	63	_	0	1	1	2
Connecticut Maine [§]	_	0 0	0 1		2	_	0 0	6 2	 10	25 13	_	0	0	_	_
Massachusetts	_	0	0	_		_	0	10	49	—		0	0	_	_
New Hampshire Rhode Island [§]	_	0 0	1 1	1 1	1	_	0	3 6	7 12	9 15	_	0	1 0	1	2
Vermont [§]	_	0	0	_	_	_	0	1	3	1	_	0	0	_	_
Mid. Atlantic	4	1	7	36	63	10	4	27	141	148	_	0	2	5	8
New Jersey	_	0	2		43		0	3		51	—	0	0	_	1
New York (Upstate) New York City	4	0 0	7 1	32 4	15 4	10	3 0	25 5	123 18	89 8	_	0	2 0	5	5
Pennsylvania	—	0	1	_	1	_	0	1	_	_	_	0	1	—	2
E.N. Central	—	0	3	14	30	—	1	13	7	392	—	0	4	22	38
Illinois Indiana	_	0 0	2 0	7	10	_	0	2 0	2	2	_	0	1 3	2 17	3 14
Michigan	_	0	1	3	1	_	0	1	_	2	_	0	1	1	_
Ohio	_	0 0	1	4	5 14	_	0 0	1 13	2 3	1 387	_	0	1 3	1 1	
Wisconsin W.N. Central	3	1	1 17	114	14	_	1	20	5 18	594	1	0	5 11	13	21 8
lowa	N	0	0	N	N	Ν	0	0	N	N	N	0	0	N	N
Kansas	_	0	1	2	6	—	0	0	_	1	_	0	0	—	—
Minnesota Missouri	3	0 0	12 17	111	94	_	0	20 5	1 17	584 9	1	0	11 7	— 12	8
Nebraska [§]	_	0	1	_	1	_	0	0	_	_	_	0	1	1	—
North Dakota South Dakota	N	0 0	0 1	N 1	N	N	0	0	N	N	N	0	0	N	N
S. Atlantic	5	3	30	137	158	1	1	7	29	40	_	0	1	3	2
Delaware	_	0	2	12	14	_	0	1	1	4	_	0	0	_	_
District of Columbia	Ν	0	0	N	N	Ν	0	0 1	N	N	Ν	0	0	Ν	Ν
Florida Georgia	1	0 0	3 3	13 12	6 18	_	0 0	1	3 6	2 1	_	0 0	0 1	1	1
Maryland [§]	1	0	3	17	16	1	0	1	2	12	_	0	1	_	1
North Carolina South Carolina [§]	2	0 0	17 1	38	46 3	_	0 0	6 1	14	13	_	0	0	_	_
Virginia [§]	1	1	8	45	53	_	0	1	3	8	_	0	1	1	—
West Virginia		0	1		2		0	0	_			0	1	1	_
E.S. Central Alabama [§]	3	0 0	7 3	43	61 10	1	0 0	2 1	9 3	14 6	1 N	0	1 0	5 N	8 N
Kentucky	_	0	2	9	10	_	Ő	0	_	_	_	0	Ő	_	1
Mississippi Tennessee [§]		0	1		3	1	0	1 1	_	1	1	0	0 1	5	1
W.S. Central	3 8	0 0	5 87	34 59	38 15	1	0	9	6	7	1	0	0	د 	6 1
Arkansas [§]	4	0	10	26	1	_	0	2	_	_	_	0	0	_	_
Louisiana	_	0	0		1	_	0	0	_	_	_	0	0	_	_
Oklahoma Texas [§]	4	0 0	82 1	32 1	11 2	_	0	7 1	_	_	_	0	0	_	1
Mountain	_	0	0	_	_	_	0	0	_	_	_	0	1	2	_
Arizona		0	0				0	0				0	1	2	
Colorado Idaho [§]	N N	0 0	0 0	N N	N N	N N	0 0	0 0	N N	N N	N N	0	0	N N	N N
Montana [§]	N	0	0	N	N	N	Ő	0	N	N	N	0	Ő	N	N
Nevada [§] New Mexico [§]	N N	0	0	N N	N N	N N	0	0	N	N N	N N	0	0	N	N
Utah		0	0				0	0	N			0	0	N	N
Wyoming [§]	_	0	0	_	_	_	0	0	_	_	_	0	0	_	_
Pacific		0	1		1		0	0	— 			0	1	1	2
Alaska California	N	0 0	0 1	N	N 1	N	0 0	0	N	N	N	0	0 1	N 1	N 2
Hawaii	Ν	0	0	Ν	Ν	Ν	0	0	Ν	Ν	Ν	0	0	N	Ν
Oregon Washington	_	0	0	_	_	_	0	0 0	_	_	_	0	0 0	_	_
							U						0		
Territories American Samoa C.N.M.I.		0	0			<u>N</u>	0	0				0	0	N	N
Guam	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Puerto Rico U.S. Virgin Islands	N	0 0	0 0	N	N	N	0	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 reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/ nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

⁺ Cumulative total *E. ewingii* cases reported for year 2010 = 10, and 7 cases reported for 2011. [§] Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

	Giardiasis							Gonorrhe	a		Haemophilus influenzae, invasive [†] All ages, all serotypes					
	Current	Previous	52 weeks	Cum	Cum	Current	Previous 5	2 weeks	Cum	Cum	Current	Previous 5	52 weeks	Cum	Cum	
Reporting area	week	Med	Max	2011	2010	week	Med	Max	2011	2010	week	Med	Max	2011	2010	
United States	236	285	549	7,851	10,937	2,651	5,803	7,484	168,313	178,885	26	63	141	1,998	1,903	
New England	5	25 4	50 12	693 104	956 169	85 33	101 43	206 150	3,029	3,187 1,477	_	4 1	12 6	131 33	108	
Connecticut Maine [§]	3	4	12	92	112		43	7	1,297 102	1,477	_	0	2	55 14	23 9	
Massachusetts	_	12	23	343	409	52	48	80	1,349	1,333	—	2	6	62	56	
New Hampshire Rhode Island [§]	_	2 1	6 7	49 29	114 43	_	2 6	7 16	76 176	85 142	_	0 0	2 2	9 9	7 8	
Vermont [§]	2	2	10	76	109	_	0	8	29	42	_	0	3	4	5	
Mid. Atlantic	53	57	106	1,559	1,822	384	730	1,121	20,816	20,225	11	12	32	430	361	
New Jersey		7	22	131	267	13	123	198	4,005	3,307		2	7	68	62	
New York (Upstate) New York City	31 7	20 17	72 30	538 481	610 516	123 46	113 237	271 497	3,282 5,923	3,051 6,965	10 1	3 2	18 6	115 89	95 60	
Pennsylvania	15	16	27	409	429	202	257	364	7,606	6,902		4	11	158	144	
E.N. Central	17	47	99	1,215	1,893	253	1,035	2,091	28,978	32,926	_	11	21	355	307	
Illinois	—	9	31	204	425		272	369	6,376	9,008	—	3	9	104	104	
Indiana Michigan	3	6 10	14 25	123 263	241 395	61 140	111 238	1,018 490	3,733 7,101	3,292 8,231	_	2 1	7 4	65 40	64 22	
Ohio	14	16	29	449	488	52	322	383	9,200	9,561	_	3	7	102	74	
Wisconsin	—	8	35	176	344	—	96	130	2,568	2,834	—	1	5	44	43	
W.N. Central	35	25	73	583	1,152	160	293	363	8,645	8,453	5	4	10	98	132	
lowa Kansas	8	5 2	12 10	143 45	166 135	5	39 39	57 57	1,096 1,150	990 1,228	_	0	0 2	14	1 13	
Minnesota	_	0	33		433	_	37	62	905	1,259	_	Ő	5	_	47	
Missouri	16	8	26	226	223	125	145	181	4,408	3,959	4	1	5	52	50	
Nebraska [§] North Dakota	11	4	9 12	111 21	125 13	30	23 3	49 9	712 61	687 120	1	0 0	3 6	22 9	13 8	
South Dakota	_	1	5	37	57	_	11	20	313	210	_	Ő	1	1	_	
S. Atlantic	54	57	127	1,530	2,195	1,139	1,467	1,862	43,253	45,917	6	15	30	483	491	
Delaware	—	1	5	18	17	17	17	48	497	590	—	0	2	3	5	
District of Columbia Florida	30	1 24	5 75	20 660	38 1,164	 196	38 379	70 486	1,048 11,421	1,227 12,025	3	0	1 12	1 158	3 119	
Georgia	22	14	51	466	438	269	315	874	9,442	9,065	_	3	7	94	112	
Maryland [§]	1	4	10	133	174	121	118	246	3,186	4,101	1	2	4	50	39	
North Carolina South Carolina [§]	N	0 2	0 9	N 61	N 78	217 154	257 151	468 257	9,025 4,768	9,237 4,683	1	2 1	8 5	52 45	84 61	
Virginia [§]	1	8	32	150	266	147	114	185	3,382	4,700	_	1	8	66	55	
West Virginia	_	0	8	22	20	18	15	29	484	289	1	0	9	14	13	
E.S. Central	1 1	4 4	11 11	104 104	102 102	123	495 161	1,007 410	14,598 4,956	14,773 4,492	_	3 1	11 4	129 40	117 20	
Alabama ^s Kentucky	N	4	0	104 N	102 N	67	70	712	2,499	2,415	_	0	4	40 18	20	
Mississippi	Ν	0	0	N	Ν	_	116	197	3,037	3,680	_	0	3	11	9	
Tennessee [§]	N	0	0	N	N	56	139	186	4,106	4,186	_	2	5	60	64	
W.S. Central Arkansas [§]	8 8	5 2	17 9	124 70	226 63	208 84	905 101	1,664 138	25,466 2,966	29,127 2,770	_	2 0	26 3	82 19	90 14	
Louisiana		2	12	54	101		144	509	3,735	4,954	_	0	4	29	20	
Oklahoma	—	0	0	—	62	113	62	332	1,776	2,559	—	1	19	33	49	
Texas [§]	N	0	0	N	N	11	591	867	16,989	18,844		0	4	1	7	
Mountain Arizona	28 1	25 3	58 8	685 72	996 89	125 39	185 63	255 95	5,542 1,808	5,659 1,927	1	5 2	12 6	173 65	210 79	
Colorado	19	12	23	339	415	33	46	87	1,298	1,527	_	1	5	43	61	
Idaho [§]	4	4	9	80	121	—	2	14	75	67	1	0	2	13	12	
Montana [§] Nevada [§]	2 1	2	6 11	37 29	67 34	 51	1 33	5 103	42 1,208	68 1,085	_	0	1 2	2 12	2 5	
New Mexico [§]	_	1	5	39	62	2	28	98	949	687	_	1	4	25	24	
Utah		3	13	73	180	—	4	9	139	209	—	0	3	12	22	
Wyoming [§]	1 35	0 49	5 129	16 1,358	28 1,595	 174	0 621	3 791	23 17,986	24 18,618	3	0	1 10	1 117	5 87	
Pacific Alaska	35	49	129	1,358	58	174	20	34	562	795		3 0	2	117	87 15	
California	23	32	68	946	976	126	505	695	14,777	15,204	1	Ő	6	22	15	
Hawaii	1	0	4	22	37	16	14	26	389	421	1	0	3	17	14	
Oregon Washington	2 9	7 8	20 57	169 172	277 247	16 32	23 57	40 86	734 1,524	598 1,600	1	2 0	6 2	60 3	38 5	
Territories	-								.,521	.,			-		5	
American Samoa	_	0	0	_	_	_	0	0	_	_	_	0	0	_	_	
C.N.M.I.	—	0	1	_	2	—	0	 17	6		—	0	0	—	_	
Guam Puerto Rico	_	0	1 7	25	2 51	_	0	17 12	6 195	49 170	_	0	0	_	1	
U.S. Virgin Islands		0	0			_	2	5	52	87		õ	õ			

C.N.M.I: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/ nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly. [†] 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).

	Hepatitis (viral, acute), by type														
			А					В			с				
	Current	Previous	52 weeks	Cum	Cum	Current	Previous	52 weeks	Cum	Cum	Current	Previous 5	2 weeks	Cum	Cum
Reporting area	week	Med	Max	2011	2010	week	Med	Max	2011	2010	week	Med	Max	2011	2010
United States	5	22	74	613	915	20	53	167	1,334	1,890	15	17	39	555	486
New England Connecticut	_	1 0	6 4	30 5	72 16	_	1 0	8 4	44 9	37 12	_	1 1	4 3	40 25	36 22
Maine [†]	_	0	1	1	6	_	0	2	5	11	_	0	2	6	2
Massachusetts New Hampshire	_	0	5 1	16	41	_	0 0	6 1	29 1	8 4	N	0	2 0	5 N	12 N
Rhode Island [†]	_	0	1	3	9	U	0	0	U	U	U	0	0	U	U
Vermont [†]	1	0 5	2 12	5 117	 149	3	0 5	0 12	 159	2 187	1	0	1 6	4 46	 67
Mid. Atlantic New Jersey	_	1	4	15	44	_	1	4	30	52	_	0	4		15
New York (Upstate) New York City	1	1 1	4	29	30 43	1	1 1	9	26	30 57	_	1 0	4 1	27	31
Pennsylvania	_	1	6 3	40 33	45 32	2	2	5 4	47 56	48	1	0	2	 19	2 19
E.N. Central	1	4	9	106	106	2	5	35	189	309	1	3	12	110	59
Illinois Indiana	_	1 0	3 3	22 10	29 10	_	1	6 6	36 24	80 42	_	0	1 5	3 40	22
Michigan	_	2	5	46	37	_	2	6	53	81	1	1	7	62	26
Ohio Wisconsin	1	1 0	5 2	25 3	18 12	2	1 0	30 3	61 15	71 35	_	0	1 1	4 1	6 5
W.N. Central	_	1	25	21	32	_	2	16	73	71	_	0	6	3	11
lowa Kansas	_	0 0	3 2	3 3	6 8	_	0 0	1 2	6 8	10 4	_	0	0 1	2	_
Minnesota	_	0	22	2	1	_	0	15	2	6	_	0	6		6
Missouri Nebraska†	_	0	1 4	8 3	12 4	_	2 0	5 3	46 10	41 9	_	0	1 1	1	3 2
North Dakota	_	0	3	_	—	_	0	0	—	_	_	0	0	_	_
South Dakota	_	0 5	2 13	2 128	1 213	8	0 13	1 33	1 350	1 509	3	0 4	0 11	130	 108
S. Atlantic Delaware	_	0	1	128	5		0	1		18	U	4	0	130 U	U
District of Columbia Florida	_	0 2	0 7	40	1 80	6	0 4	0 11	123	3 175	1	0 1	0 5	 31	2 31
Georgia	_	1	4	30	24	—	2	8	50	175	_	0	3	17	13
Maryland [†] North Carolina	_	0	3 3	15 14	14 36	2	1 2	4 16	31 70	37 37	1	0 1	2 7	22 39	15 25
South Carolina [†]	_	0	2	5	21	_	1	4	18	35	_	0	1	1	_
Virginia [†] West Virginia	_	1 0	4 5	16 7	31 1	_	1 0	7 18	39 19	57 36	1	0 0	2 6	9 11	8 14
E.S. Central	_	0	6	29	24	2	8	14	237	203	2	3	8	97	85
Alabama [†] Kentucky	—	0 0	2 6	1 7	5 11	1 1	2 2	4 8	61 64	39 66	1	0 2	1 6	7 40	3 59
Mississippi	_	0	1	5	1	_	1	3	23	20	Ů	0	0	40 U	U
Tennessee [†]	_	0	5	16	7	_	3	7	89	78	1	1	5	50	23
W.S. Central Arkansas [†]	1	3 0	15 1	61	74	3	7 1	67 4	158 24	302 39	4	2 0	11 0	53	44 1
Louisiana	—	0	1	2	5	_	1	4	22	36	_	0	2	5	1
Oklahoma Texas [†]	1	0 2	4 11	3 56	1 68	1 2	1 4	16 45	37 75	53 174	4	1 0	10 3	28 20	14 28
Mountain	_	2	5	42	102	2	2	5	48	86	_	1	4	34	36
Arizona Colorado	_	0	2 2	9 16	45 24	2	0 0	3 3	11 15	16 27	U	0	0 3	U 12	U 8
Idaho [†]	_	0	1	5	6		0	1	2	5	_	0	2	6	7
Montana [†] Nevada [†]	_	0	1 3	2 5	4 10	_	0	0 3	14	28	_	0	1 1	2 5	3
New Mexico [†]	—	0	1	3	3	—	0	2	5	3	—	0	1	6	10
Utah Wyoming [†]	_	0 0	2 1	2	7 3	_	0 0	1 1	1	7	_	0 0	2 1	1 2	8
Pacific	2	3	15	79	143	_	3	25	76	186	4	1	12	42	40
Alaska California	2	0 2	1 15	2 52	1 111	_	0 2	1 22	4 30	2 128	U 1	0	1 4	U 14	U 18
Hawaii	—	0	2	6	5	_	0	1	5	3	U	0	0	U	U
Oregon Washington	_	0	2 4	5 14	13 13	_	0 1	4 4	22 15	29 24	3	0	3 5	12 15	9 13
Territories									15					15	
American Samoa C.N.M.I.	_	0	0	_	_	_	0	0	_	_	_	0	0	_	_
Guam	_	0	5	8	4	_	0	8	28	48	_	0	8	10	40
Puerto Rico U.S. Virgin Islands	_	0 0	2 0	4	11	_	0 0	3 0	6	14	N	0	0 0	N	N
5.5. Virgin Islanus			0					<u> </u>					0		

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 6, 2011, and August 7, 2010 (31st week)*

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

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
 * Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/ nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
 [†] Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

		L	egionellos	is			Ly	me disease	2			Ν	Aalaria		
	Current	Previous	52 weeks	6	6	<u> </u>	Previous	52 weeks	6	6	<u> </u>	Previous 5	52 weeks	6	6
Reporting area	week	Med	Max	Cum 2011	Cum 2010	Current week	Med	Max	Cum 2011	Cum 2010	Current week	Med	Max	Cum 2011	Cum 2010
Jnited States	35	49	128	1,429	1,750	461	361	1,323	13,971	20,126	22	27	114	681	897
New England	_	4	16	92	133	4	83	302	2,063	6,058	_	1	20	45	69
Connecticut	—	1	6	17	18	—	32	123	763	2,105	—	0	20	1	2
Maine [†] Massachusetts	_	0 2	3 10	4 58	6 78	_	10 20	62 103	207 494	300 2,476	—	0 1	1 5	2 33	5 52
New Hampshire	_	2	5	50 4	/o 9	_	13	45	295	2,476 902	_	0	2	2	2
Rhode Island [†]	_	Ő	4	5	16	_	1	40	60	58	_	Ő	4	2	6
Vermont [†]	_	0	1	4	6	4	5	50	244	217	_	0	1	5	2
Mid. Atlantic	9	14	53	377	416	402	149	1,073	9,301	7,007	3	8	22	142	278
New Jersey		2	18	48	67	57	49	514	3,848	2,589	_	0	6	8	66
New York (Upstate) New York City	5	5 3	19 17	133 62	128 74	197	35 2	214 30	1,715 26	1,449 441	1	1	6 13	23 79	38 139
Pennsylvania	4	5	19	134	147	148	61	401	3,712	2,528	2	1	4	32	35
E.N. Central	9	10	47	335	384	3	23	127	630	2,939	2	3	7	81	98
Illinois	_	1	12	28	98	_	1	13	55	102	_	1	6	29	35
Indiana	—	1	5	40	32	—	0	10	46	66	—	0	2	5	8
Michigan Ohio	9	2 4	20 34	71 195	84 129	3	1	8 9	38 29	64 19	2	0 1	4 4	14 29	17 31
Wisconsin	9	4	54	195	41		17	113	462	2,688		0	2	29 4	7
W.N. Central	_	2	9	44	71	_	4	79	56	1,657	2	1	45	15	37
lowa	_	0	2	5	9	_	0	8	45	70	_	0	2	9	8
Kansas	—	0	2	4	7	—	0	1	5	10	2	0	2	4	6
Minnesota	_	0	8		21	_	0	76	_	1,563	_	0	45	_	3
Missouri Nebraska [†]	_	1 0	5 1	32 1	22 6	_	0 0	1 2	6	2 7	_	0 0	3 1	2	8 10
North Dakota	_	0	1	1	2	_	0	10		4	_	0	1		
South Dakota	_	0	2	1	4	_	0	0	_	1	_	0	1	_	2
5. Atlantic	9	9	22	228	315	45	57	148	1,758	2,243	5	8	41	223	216
Delaware	_	0	1	5	10	_	10	38	471	469	—	0	1	3	2
District of Columbia	_	0	3	8	13	_	0	5	11	25	_	0	1	5	10
Florida Georgia	2 2	3 1	9 4	84 17	93 39	6 2	2 0	8 2	56 11	41 9	1 2	2	7 7	56 49	70 37
Maryland [†]	3	1	6	37	69	18	18	103	566	984	2	1	21	50	33
North Carolina	2	1	6	36	36	1	0	9	28	44	—	0	13	17	18
South Carolina [†]	_	0	2	5	8		0	3	7	21	_	0	1	1	3
Virginia [†] West Virginia	_	1 0	9 2	31 5	38 9	14 4	19 0	76 16	572 36	599 51	_	1 0	8 1	42	42 1
-	3	2	10	86	84	2	0	3	23	31	1	0	2	16	19
E.S. Central Alabama [†]	_	0	2	10	9	_	0	2	7		_	0	1	3	4
Kentucky	2	Ő	4	21	15	_	Ő	1	_	2	1	Ő	1	5	4
Mississippi	_	0	3	9	10	_	0	0	_	_	—	0	1	1	2
Tennessee [†]	1	1	8	46	50	2	0	3	16	29	—	0	2	7	9
W.S. Central	3	3	13	62	83	—	1	29	20	64	—	1	18	21	59
Arkansas [†] Louisiana	_	0	2 3	5 9	14 4	_	0 0	0 1	_	2	_	0 0	1 1	2	4 2
Oklahoma	3	0	2	7	8	_	0	0	_		_	0	1	2	3
Texas [†]	—	2	11	41	57	_	1	29	20	62	—	1	17	17	50
Mountain	_	2	6	49	107	2	0	3	11	17	3	1	4	40	37
Arizona	—	1	3	17	35	—	0	1	3	2	_	0	4	16	17
Colorado Idaho†	_	0 0	2 1	4	21 3	1	0 0	1 2	1	1	3	0 0	3 1	15 2	11 1
Montana [†]	_	0	1	4	5 4		0	1	1	6 1	_	0	1		1
Nevada [†]	_	Ő	2	8	17	1	Ő	1	2	_	_	Ő	2	4	3
New Mexico [†]	_	0	1	5	5	—	0	1	1	4	_	0	1	2	1
Utah	—	0	2	9	17	—	0	1	1	3	—	0	1	1	3
Wyoming [†]	2	0 5	2 21	2 156	5 157	3	0 4	0 11	109	110	6	0 4	0 10	 98	 84
Pacific Alaska		5	21	150	2		4	1	109	5	0	4	2	98 4	84 2
California	2	4	15	141	133	3	3	9	84	68	1	3	10	70	55
Hawaii	_	0	1	1	1	N	0	0	N	N	1	0	1	4	2
Oregon	_	0	2	4	9	_	0	3	18	32	2	0	3	8	7
Washington	—	0	6	10	12	—	0	4	4	5	2	0	5	12	18
Territories		_						_					_		
American Samoa	N	0	0	N	Ν	N	0	0	N	N	—	0	0	_	_
C.N.M.I. Guam	_	0	1	_	_	_	0	0	_	_	_	0	0	_	_
Puerto Rico	_	0	1	_	1	N	0	0	N	N	_	0	1	_	4
U.S. Virgin Islands		0	0	_	_	_	0	0	_	_	_	0	0	_	_

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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 6, 2011, and August 7, 2010 (31st week)*

		Meningoco Al	ccal diseas		2 [†]			Mumps				F	Pertussis		
	Current	Previous	52 weeks	Cum	Cum	Current	Previous	52 weeks	Cum	Cum	Current	Previous	52 weeks	Cum	Cum
Reporting area	week	Med	Max	2011	2010	week	Med	Max	2011	2010	week	Med	Max	2011	2010
United States	8	14	53	453	507	4	9	47	168	2,306	122	329	2,925	7,358	10,730
New England	_	0 0	3	23	11	_	0	2 0	4	21	1	9	24	248	260
Connecticut Maine [§]	_	0	1	3 3	1 3	_	0	1	_	11 1	1	1 2	8 8	22 79	55 22
Massachusetts	_	0	2	11	2	_	0	2	3	6	_	4	13	99	154
New Hampshire Rhode Island [§]	_	0	1	1	—	_	0	0 1	1	3	_	1 0	6 4	31 10	8 18
Vermont [§]	_	0	3	5	5	_	0	0	_	_	_	0	4	7	3
Mid. Atlantic	2	1	6	52	53	1	1	23	22	2,017	42	32	125	774	652
New Jersey	_	0	1	3	16	_	1	6	9	328	_	2	10	55	95
New York (Upstate) New York City	2	0	4 3	18 18	9 13	1	0	3 22	4 9	649 1,023	22 11	12 0	81 19	278 38	242 41
Pennsylvania	_	0	2	13	15	_	0	16		1,025	9	16	70	403	274
E.N. Central	1	2	7	58	88	_	1	7	43	40	18	83	198	1,551	2,480
Illinois	—	0	3	16	18	_	1	3	28	12	_	16	50	355	450
Indiana Michigan	_	0	2 4	8 5	21 13	_	0	1 1	6	3 16	1	8 26	26 57	110 430	381 690
Ohio	1	1	2	20	21	_	0	5	9	8	17	25	80	478	773
Wisconsin	—	0	2	9	15	_	0	1	_	1	_	10	26	178	186
W.N. Central	1	1	4	30	35	1	0	4	24	77	7	26	501	584	817
lowa Kansas	_	0	1	6 2	8 4	_	0	1 1	4 4	36 4	_	6 2	36 9	100 57	282 100
Minnesota	_	0	2		3	_	0	4	1	4	_	0	469	184	78
Missouri	1	0	2	12	14	_	0	3	7	8	7	6	43	171	245
Nebraska [§] North Dakota	_	0	2 1	7 1	5 1	1	0	1 3	4	23	_	2 0	13 30	38 30	86
South Dakota	_	0	1	2	_	_	0	0	- -	2	_	0	1	4	26
S. Atlantic	1	2	8	89	92	2	0	4	12	40	17	33	106	810	956
Delaware	_	0	1	1	_	—	0	0	_		—	0	5	19	7
District of Columbia Florida	_	0 1	1 5	1 36	 44	_	0	0 2	2	3 8	6	0 6	2 17	3 188	4 178
Georgia	_	0	2	9	8	2	0	2	3	2	1	4	13	108	139
Maryland [§]	_	0	1	8	4	_	0	1	1	8	_	2	6	43	73
North Carolina South Carolina [§]	1	0	3 1	13 7	9 9	_	0	2 1	4	5 3	1	3 4	35 25	113 87	204 215
Virginia [§]	_	Ő	2	9	16	_	Ő	2	2	9	1	7	41	197	111
West Virginia	_	0	3	5	2	—	0	0	—	2	7	0	41	52	25
E.S. Central	_	1	3	20	24	_	0	1	3	9	3	9	35	219	445
Alabama ^s Kentucky	_	0	2 2	9 2	4 10	_	0	1 0	1	6 1	_	3 2	11 16	87 51	132 146
Mississippi	_	Ő	1	2	3	_	0	1	2	_	_	1	10	13	42
Tennessee [§]	—	0	2	7	7	—	0	1	—	2	3	3	11	68	125
W.S. Central	2	1	12	35	56	—	1	15	45	57	6	26	297	534	1,753
Arkansas [§] Louisiana	_	0	1 2	7 6	5 12	_	0	1 2	1	5 4	_	2 0	18 3	36 11	128 25
Oklahoma	_	Ő	2	6	14	_	0	1	1	_	_	Ő	92	18	23
Texas [§]	2	0	10	16	25	—	1	14	43	48	6	22	187	469	1,577
Mountain	_	1	4	32	41	_	0	4	5	13	8	43	100	1,040	759
Arizona Colorado	_	0	1 2	8 8	11 13	_	0	1 1	3	4 7	2	14 9	29 63	370 266	240 110
ldaho [§]	_	0	1	4	5	_	0	1	_	_	5	2	15	74	102
Montana [§] Nevada [§]	_	0	2 1	3 1	1	_	0 0	0 1	_	_	1	2 0	16	74 14	33
New Mexico [§]	_	0	1	1	7 3	_	0	2	2	_	1	3	5 11	74	18 52
Utah	_	0	2	7	1	_	0	1	_	2	_	7	16	164	197
Wyoming [§]	_	0	1	_		—	0	1	_	_	_	0	2	4	7
Pacific	1	3 0	26	114	107	_	0 0	3 1	10	32	20	78	1,710	1,598	2,608
Alaska California	1	2	1 17	2 80	1 64	_	0	3	1 3	1 22	_	0 67	6 1,569	18 1,170	23 2,202
Hawaii	_	0	1	4	1	_	0	1	2	2	1	1	9	57	50
Oregon Washington	_	0	3 8	16 12	24 17	_	0	1 1	4	1 6	 19	4 11	11 131	143 210	183 150
		0	0	12	17		U	1		0	19		151	210	150
Territories American Samoa	_	0	0	_	_	_	0	0	_	_	_	0	0	_	_
C.N.M.I.	_	—	_	—	—	_	—	_			—	—	—		
Guam Puerto Rico	_	0	0 1	_	1	_	2 0	9 1	12 1	416	_	0 0	14 1	31 2	1 1
F UPITO RICO		0	0	_	1	—	0	0	1	_	_	0	0	2	1

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/ nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly. † 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 State	es, weeks ending August 6, 2011, and August 7, 2010 (31st week)*
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		Ra	abies, anim	nal			Sa	Imonellosi	s		Shig	ga toxin-pro	oducing E. (coli (STEC)	t
	Current	Previous	52 weeks	Cum	Cum	Current	Previous	52 weeks	Cum	Cum	Current	Previous	52 weeks	Cum	Cum
Reporting area	week	Med	Max	2011	2010	week	Med	Max	2011	2010	week	Med	Max	2011	2010
United States	14	52	172	1,350	2,632	1,067	906	1,812	22,317	26,525	87	96	264	2,353	2,800
New England	2	3	18	73	177	7	30	310	1,155	1,594	2	2	32	114	150
Connecticut		0	8		83	_	0	289	289	491	_	0	32	32	60
Maine ^s Massachusetts	1	1 0	3 0	35	36	2	2 18	8 52	74 554	69 755	_	0 1	3 10	16 44	10 55
New Hampshire	_	Ő	6	11	10	_	3	7	93	120	_	0	3	13	17
Rhode Island [§]	1	0	3	11	16	3	1	62	111	122	_	0	1	1	2
Vermont [§]	_	1	3	16	32	2	1	5	34	37	2	0	3	8	6
Mid. Atlantic New Jersev	9	13 0	31 0	365	678	73	93 13	207 44	2,583 316	3,252 687	15	9 1	30 6	281 35	307 70
New York (Upstate)	9	7	19	189	315	39	25	65	710	746	12	4	13	108	100
New York City	_	0	4	7	132	3	21	53	601	729	_	2	6	46	37
Pennsylvania	_	7	17	169	231	31	32	73	956	1,090	3	3	10	92	100
E.N. Central Illinois	3	2 1	27 11	75 22	138 70	53	82 27	184 57	2,213 702	3,560 1,225	8	10 2	37 7	303 46	488 101
Indiana	_	0	3	4		_	27	28	195	471	_	2	7	40	84
Michigan	1	1	5	26	44	7	13	49	392	544	2	2	7	70	92
Ohio	2	0	12	23 N	24	46	21	44	665 259	802	6	2	10	90 51	85
Wisconsin	N	2	0 40	48	N 168	47	11 45	50 121	259 1,195	518 1,662	 10	2 13	16 38	51 376	126 526
W.N. Central lowa	_	2	40	48	168	47	45 9	22	251	313	10	2	38 13	376 91	526 109
Kansas		1	4	20	43	11	7	18	202	241	1	1	8	57	45
Minnesota	—	0	34	—	17		0	30		450	_	0	14		167
Missouri Nebraska [§]	_	0 1	4 3	20	48 34	25 7	16 4	42 13	500 127	426 131	3 6	4	14 7	132 67	145 42
North Dakota	_	0	6	8	10	_	0	15	22	15	_	0	10	6	3
South Dakota	_	0	0	_	_	_	3	17	93	86	_	1	4	23	15
S. Atlantic	—	19	53	639	715	574	271	624	6,638	6,581	15	14	31	358	381
Delaware District of Columbia	—	0 0	0 0	_	—	4 2	3 1	11 7	81 33	81 63	_	0	2 1	8 3	4 7
Florida	_	0	29	64	121	198	107	226	2,672	2,787	3	3	15	71	119
Georgia	_	0	0	—	_	66	41	142	1,120	1,242	—	2	7	62	59
Maryland [§]	_	6	14	163	222	27	18	53	476	578	1	1	8	32	53
North Carolina South Carolina [§]	N	0	0 0	N	N	245 21	33 30	241 99	1,041 632	593 613	10 1	2 0	10 4	69 11	30 15
Virginia§	_	11	27	357	327	11	21	68	547	514	_	3	9	99	82
West Virginia	—	0	30	55	45		0	14	36	110	—	0	4	3	12
E.S. Central	_	2	7	74	121	61	60	175	1,709	1,697	7	5	22	165	146
Alabama ^s Kentucky	_	1 0	7 2	51 9	52 13	34	18 9	52 32	512 203	436 291	5	1	15 6	61 22	30 32
Mississippi	_	0	1	1		10	21	65	542	491	_	0	12	14	10
Tennessee§	_	0	4	13	56	17	17	53	452	479	2	2	11	68	74
W.S. Central	—	4	54	53	492	149	130	515	2,761	3,096	11	8	151	174	158
Arkansas ^s Louisiana	—	0	10 0	41	22	37	14 15	43 52	362 366	317 699	1	0	3 2	22 6	33 11
Oklahoma	_	0	30	12	8	20	11	95	286	291	10	1	55	30	14
Texas§	_	0	30	_	462	92	87	381	1,747	1,789	_	6	95	116	100
Mountain	—	0	5	10	33	33	47	113	1,313	1,611	7	11	33	280	330
Arizona	Ν	0	0	N	Ν	5	14	43	388	514	_	2	14	49	36
Colorado Idaho [§]	_	0	0 2	1	3	16 3	10 3	24 9	315 97	345 96	3	3	14 7	72 57	127 34
Montana [§]	Ν	Ő	0	Ň	Ň	8	2	6	75	64	_	0	4	19	25
Nevada§	_	0	2	1	2	1	3	21	80	167	2	0	6	18	15
New Mexico [§] Utah	_	0	1 3	5 3	9 3	_	6 6	19 15	142 178	172 217	_	1	6 8	21 34	25 53
Wyoming [§]	_	0	4		16	_	1	8	38	36	_	0	3	10	15
Pacific	_	1	15	13	110	70	103	288	2,750	3,472	12	13	46	302	314
Alaska	_	0	2	9	11	_	1	6	36	50	_	0	1	_	1
California	—	0	10	—	88	44	75	232	2,087	2,485	4	8	36	199	132
Hawaii Oregon	_	0	0 2	4	 11	7 1	6 6	14 20	195 133	201 347	_	0 2	3 11	5 36	21 49
Washington	_	0	14	—	—	18	13	42	299	389	8	2	16	62	111
Territories															
American Samoa	Ν	0	0	Ν	Ν	—	0	0	—	2	—	0	0	—	_
C.N.M.I. Guam	_	0	0	_	—	_	0	3	6	6	—	0	0	_	—
Guam Puerto Rico	_	0	0 6	21	28	_	0 6	3 25	100	6 329	_	0	0	_	_
U.S. Virgin Islands		Ő	Ő			_	0	0			_	Ő	0	_	_

C.N.M.I.: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/ nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly. † Includes E. coli 0157:H7; Shiga toxin-positive, serogroup non-0157; 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 August 6, 2011, and August 7, 2010 (31st week)*

						Spotted Fever Rickettsiosis (including RMSF) [†]									
			Shigellosis				C	onfirmed				Pi	robable		
	Current	Previous	52 weeks	Cum	Cum	Current	Previous	52 weeks	Cum	Cum	Current	Previous 5	52 weeks	Cum	Cum
Reporting area	week	Med	Max	2011	2010	week	Med	Max	2011	2010	week	Med	Max	2011	2010
United States	175	249	742	5,923	8,152	2	2	13	78	89	40	25	245	746	803
New England	_	3	27	127	237	_	0	0	_	_	_	0	1	3	2
Connecticut	_	0	26	26	69	—	0	0	_	—	—	0	0	—	_
Maine [§] Massachusetts	_	0 2	4 13	17 76	3 147	_	0	0 0	_	_	_	0 0	1 1	1	1
New Hampshire	_	2	2	1	6	_	0	0	_	_	_	0	1	1	1
Rhode Island [§]	_	0	4	4	11	_	0	0	_	_	_	0	1	1	_
Vermont [§]	_	0	1	3	1	_	0	0	_	_	_	0	0	_	_
Mid. Atlantic	5	14	74	359	1,106	_	0	2	9	2	3	1	5	19	60
New Jersey New York (Upstate)	5	3 3	11 18	42 124	262 116	_	0	0 1	2	1 1	1	0	3 3	4	39 5
New York City		5	14	132	187	_	0	0		_	_	0	2	7	7
Pennsylvania	_	4	56	61	541	_	Ō	2	7	_	2	0	2	8	9
E.N. Central	10	16	37	404	1,116	_	0	2	3	2	_	1	5	45	54
Illinois	_	5	18	85	659	_	0	1	_	1	_	0	2	18	24
Indiana [§] Michigan	3	1 3	4 9	32 92	38 157	_	0	0 0	_	1	_	0	4	20	16 1
Ohio	5 7	5	27	192	208	_	0	2	3	_	_	0	2	7	9
Wisconsin	_	0	4		54	_	Ő	0	_	_	_	0 0	1		4
W.N. Central	3	11	41	198	1,614	—	0	6	14	8	4	4	27	192	166
lowa	1	0	4	11	35	_	0	0	_	_	—	0	2	3	5
Kansas [§] Minnesota	_	3 0	12 4	35	176 31	_	0	0 0	_	_	_	0 0	0 2	_	_
Minnesota Missouri	2	6	29	141	1,345	_	0	3	10	6	4	4	27	187	159
Nebraska [§]		Ő	10	7	23	_	Ő	3	4	2	_	0	1	2	1
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	1
South Dakota		0	2	4	4	_	0	0				0	0		
S. Atlantic Delaware [§]	70 1	67 0	133 1	2,192 2	1,279 35	2	1 0	6 1	41 1	57 1	17	6 0	59 4	195 12	209 14
District of Columbia	_	0	3	2 8	21	_	0	1	1	_	_	0	4	12	14
Florida [§]	50	38	98	1,586	525	_	0 0	1	3	2	_	0	2	4	7
Georgia	10	12	26	319	425	1	0	5	24	44	_	0	0	_	_
Maryland [§]	1	2	7	50	76	_	0	1	2	_	2	0	3	17	31
North Carolina South Carolina [§]	7 1	4	36 4	142 32	83 43	1	0	4 1	6 3	7	13	1 0	47 2	90 11	76 8
Virginia [§]	_	2	8	52 49	45 70	_	0	2	5 1	3	2	2	12	58	73
West Virginia	_	0	66	4	1	_	0	0	_	_	_	0	1	3	
E.S. Central	10	13	29	339	447	—	0	3	5	13	5	5	26	157	250
Alabama [§]	4	4	15	113	93	—	0	1	—	2	—	1	6	28	49
Kentucky Mississippi	1	1 2	6 9	34 85	174 29	_	0	0 1		6 1	_	0 0	0 4	2	 14
Tennessee [§]	5	4	14	107	151	_	0	2	4	4	5	4	20	127	187
W.S. Central	58	59	503	1,382	1,384	_	Ő	8	1	1	11	2	235	106	55
Arkansas [§]	4	2	7	43	32	—	0	2	1	—	10	0	35	95	25
Louisiana		5	14	110	151	_	0	0	_	_	_	0	1	2	2
Oklahoma Texas [§]	11 43	2 49	161 338	57 1,172	166 1,035	_	0	5 1	_	1	1	0 0	202 5	6 3	15 13
Mountain	43	16	32	389	412	_	0	5	5	2	_	0	6	29	6
Arizona	6	6	19	121	226	_	Ő	4	5	_	_	Ő	6	20	_
Colorado [§]	1	2	7	47	51	_	0	1	_	—	—	0	1	2	_
Idaho [§]		0	3	13	16	_	0	0	_		—	0	1	1	2
Montana [§] Nevada [§]	1	1 0	15 6	107 12	4 19	_	0 0	0 0	_	2	_	0 0	0 0	_	1
New Mexico [§]	_	3	10	63	72	_	0	0	_	_	_	0	1	1	1
Utah	_	1	4	25	24	_	Ő	Ő	_	_	_	Ő	1	1	2
Wyoming [§]	_	0	1	1	—	—	0	0	—	—	—	0	1	4	_
Pacific	11	23	63	533	557		0	2		4		0	0		1
Alaska California	6	0 19	2 59	3 419	429	N	0 0	0 2	N	N 4	N	0	0	N	N
Hawaii	2	19	3	36	33	N	0	2	N	4 N	N	0	0	N	N
Oregon	1	1	4	27	36	_	0	0	_	_	_	0	0	_	1
Washington	2	1	8	48	59	—	0	1	_	_	—	0	0	—	_
Territories															
American Samoa	—	1	1	1	1	Ν	0	0	Ν	Ν	Ν	0	0	N	N
C.N.M.I.	—		_					_				_			
Guam Puerto Rico	_	0 0	1	1	5 4	N N	0	0 0	N N	N	N	0 0	0	N	N
F UPI LO RICO	_	0	1 0	_	4	IN	0 0	0	N	N	N	0	0 0	N	N

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

C.N.M.: Commonwealth of Northern Marina Islands.
 U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
 * Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/ nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.
 † Illnesses with similar clinical presentation that result from Spotted fever group rickettsia infections are reported as Spotted fever rickettsioses. Rocky Mountain spotted fever (RMSF) caused by Rickettsia rickettsii, is the most common and well-known spotted fever.
 © constried data used to the weat to the Neuronal Displayed Competition (NEDEC).

[§] Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 6, 2011, and August 7, 2010 (31st week)*

			1	Streptococ												
			All ages					Age <5			Syphilis, primary and secondary					
	Current	Previous	52 weeks	Cum	Cum	Current	Previous	52 weeks	Cum	Cum	Current	Previous 5	52 weeks	Cum	Cum	
Reporting area	week	Med	Max	2011	2010	week	Med	Max	2011	2010	week	Med	Max	2011	2010	
United States	122	298	937	9,048	10,138	10	23	101	668	1,248	85	258	363	7,030	7,878	
New England	_	11	79	368	578	_	1	5	28	74	_	8	18	221	276	
Connecticut Maine [§]	_	0	49 13	94 87	236 83	_	0	3 1	6 3	21 6	_	1 0	8 3	32 10	50 14	
Massachusetts	_	2 0	3	21	63 52	_	0	3	8	36	_	5	11	137	174	
New Hampshire	_	2	8	69	76	_	0	1	5	4	_	0	3	13	13	
Rhode Island [§] Vermont [§]	_	1	8 6	46 51	73 58	_	0	1 2	1 5	4 3	_	0 0	7	24 5	23	
Mid. Atlantic	2	32	81	932	1,047		3	27	82	5 162	10	31	2 46	5 844	2 1,014	
New Jersey		13	35	439	468	_	1	4	28	40		5	12	132	146	
New York (Upstate)	_	2	10	57	104	—	1	9	32	80	3	3	20	108	78	
New York City Pennsylvania	2 N	14 0	42 0	436 N	475 N	N	0	14 0	22 N	42 N	2 5	15 7	31 13	400 204	569 221	
E.N. Central	8	66	113	2,017	2,056		4	10	114	186	1	31	53	844	1,160	
Illinois	Ň	0	0	2,017 N	2,050 N	Ν	0 0	0	N	N	_	13	23	335	555	
Indiana	_	15	32	438	465	—	0	4	19	37	1	3	14	96	100	
Michigan Ohio	1 7	15 26	29 45	455 831	475 798	_	1 2	4 7	25 58	58 65	_	4	10 21	125 259	159 315	
Wisconsin	_	20	24	293	318	_	2	3	12	26	_	1	4	239	313	
W.N. Central	2	5	35	95	531	2	0	5	6	72	_	7	18	169	185	
lowa	N	0	0	N	N	N	0	0	N	N	_	0	2	12	15	
Kansas Minnesota	N	0	0 24	N	N 400	N	0	0	N	N 59	_	0 3	3 10	13 69	11 65	
Missouri	Ν	0	0	Ν	N	Ν	0	0	Ν	N	_	2	9	70	88	
Nebraska [§]	2	2	9	77	90	2	0	1	6	11	_	0	2	5	5	
North Dakota South Dakota	N	0	18 0	18 N	41 N	N	0	1 0	N	2 N	_	0	1 1	_	- 1	
S. Atlantic	86	71	170	2,511	2,744	5	7	22	187	343	50	63	178	1,848	1,783	
Delaware		1	6	34	2,744		Ó	1				0	4	13	4	
District of Columbia	_	1	3	28	52	_	0	1	4	7	_	3	8	106	88	
Florida Georgia	7 18	23 22	68 54	927 644	1,019 866	1	3 2	13 7	85 43	139 103	1 11	22 12	44 130	656 333	641 369	
Maryland [§]	19	10	32	376	348	2	1	4	25	39	13	8	17	263	164	
North Carolina	Ν	0	0	N	Ν	N	0	0	Ν	Ν	13	7	19	217	257	
South Carolina [§] Virginia [§]	N	8 0	25 0	304 N	349 N	N	1 0	3 0	18 N	39 N	9 3	3 4	10	129 129	82 175	
West Virginia	42	0	48	198	86	2	0	6	12	16		4	16 2	2	3	
E.S. Central	6	19	36	613	694	_	1	4	38	68	5	15	34	412	510	
Alabama [§]	N	0	0	N	N	N	0	0	Ν	N	_	4	11	108	144	
Kentucky	N N	0	0 0	N N	N N	N N	0	0	N N	N N	5	2 3	16 16	67 91	78 125	
Mississippi Tennessee [§]	6	19	36	613	694		1	4	38	68	_	5	12	146	123	
W.S. Central	11	31	368	1,226	1,232	3	4	30	114	165	4	35	71	955	1,200	
Arkansas [§]	_	3	26	152	116	_	0	3	12	11	3	3	10	116	145	
Louisiana Oklahoma	N	3 0	11 0	107 N	65 N	N	0	2 0	9 N	16 N		7 1	36 6	190 30	265 56	
Texas [§]	11	26	333	967	1,051	3	3	27	93	138	_	23	33	619	734	
Mountain	7	32	72	1,180	1,185	_	3	8	90	162	3	12	23	301	346	
Arizona	4	11	45	560	581	—	1	5	41	76	3	4	9	104	131	
Colorado Idaho [§]	2 N	11 0	23 0	364 N	347 N	N	1 0	4	26 N	46 N	_	2 0	8 2	67 5	76 2	
Montana [§]	N	0	0	N	N	N	0	0	N	N	_	0	1	3	3	
Nevada [§]	N	0	0	N	N	Ν	0	0	Ν	N	_	3	9	82	57	
New Mexico [§]	1	3	13	163	113	_	0	2	11	14	—	1	4	35	29	
Utah Wyoming [§]	_	3 0	8 15	74 19	134 10	_	0	3 1	12	24 2	_	0 0	4 0	5	48	
Pacific	_	3	11	106	71	_	0	2	9	16	12	51	66	1,436	1,404	
Alaska	_	2	11	105	71		0	2	9	16	_	0	1	· 1	3	
California	N	0	0	N	N	N	0	0	N	N	8	41	57	1,193	1,195	
Hawaii Oregon	N	0	3 0	1 N	N	N	0	0 0	N	N	2	0 1	5 7	8 55	24 34	
Washington	N	0	0	N	N	N	0	0	N	N	2	5	13	179	148	
Territories																
American Samoa	Ν	0	0	Ν	Ν	Ν	0	0	Ν	Ν	—	0	0	_	_	
C.N.M.I. Guam	_	0	0	—	—	—	0	0	_		—	0		_	_	
Guam Puerto Rico	_	0	0	_	_	_	0	0	_	_	_	0 4	13	139	134	
U.S. Virgin Islands	_	Ő	Ő	_	_	_	Ő	Ő	_	_	_	0	0	_	_	

C.N.M.L: Commonwealth of Northern Mariana Islands. U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. * Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/ nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly. † Includes drug resistant and susceptible cases of invasive Streptococcus pneumoniae disease among children <5 years and among all ages. Case definition: Isolation of S. pneumoniae from a normally sterile body site (e.g., blood or cerebrospinal fluid). § Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 6, 2011, and August 7, 2010 (31st week)*

		11-12	lla (al. ? -1			West Nile virus disease [†] Neuroinvasive Nonneuroinvasive [§]										
			ella (chicke	npox)					e							
	Current		52 weeks	Cum	Cum	Current	Previous		Cum	Cum	Current	Previous 5		Cum	Cum	
Reporting area	week	Med	Max	2011	2010	week	Med	Max	2011	2010	week	Med	Max	2011	2010	
Jnited States	57	259	367	7,111	9,784	—	1	71	24	130		0	53	17	132	
New England Connecticut	_	22 5	46 16	646 149	678 204	_	0	3 2	_	_	_	0	2 2	_	1	
Maine [¶]	_	5	16	135	121	_	0	0	_	_	_	0	0	_	_	
Massachusetts	_	6	18	260	185	_	Ō	2	_	_	_	0	1	_		
New Hampshire	—	0	9	9	84	_	0	1	—	—	—	0	0	_		
Rhode Island [¶]	—	1	6	28	19	—	0	0	—	—	—	0	0	—	_	
Vermont [¶] Mid. Atlantic	_	2	10	65	65	—	0	0	_		_	0	0			
New Jersey	9 6	34 10	67 52	1,192 618	1,075 388	_	0	19 3	_	26 2	—	0	13 6	1 1	14	
New York (Upstate)	N	0	0	N	566 N	_	0	9	_	15	_	0	7	_	13	
New York City	_	Ő	Õ	_	_	_	0	7		5	_	Ő	4	_	1	
Pennsylvania	3	19	41	574	687	_	0	3	_	4	_	0	3	_		
E.N. Central	14	68	118	1,776	3,222	—	0	15	_	4	—	0	7	_	3	
Illinois		17	31	442	817	—	0	10	—	1	—	0	4	_		
Indiana [¶]	4	4	18	140	238	—	0	2	—		—	0	2	—	2	
Michigan Ohio	4 6	20 20	38 58	582 611	973 858	_	0	6 1	_	2 1	_	0	1 1	_	_	
Wisconsin		20	22	1	336	_	0	0	_		_	0	1	_	1	
W.N. Central	1	11	42	220	521	_	0	7	1	6	_	0	11	1	31	
lowa	Ν	0	0	N	N	_	0	1	_	_	_	0	2	_	1	
Kansas [¶]	_	4	15	69	224	_	0	1	_	1	—	0	3	—	5	
Minnesota	_	0	0			—	0	1	—	2	—	0	3	_		
Missouri	_	5	24	102	240	_	0	1	_	1	-	0	0	—		
Nebraska¶ North Dakota	_	0	5 10	3 25	7 29	_	0	3	_	2	_	0	7 2	1	10 5	
South Dakota	1	1	7	25	29	_	0	2 2	1	_	_	0	2	_	10	
S. Atlantic	16	36	64	1,142	1,429	_	0	6	8	8	_	0	4	1	5	
Delaware¶		0	3	6	20	_	Ő	Õ	_	_	_	0 0	0	_	_	
District of Columbia	_	0	2	12	15	_	0	1	_	_	_	0	1	_	1	
Florida [¶]	16	15	38	568	694	—	0	4	7	2	—	0	1	_	_	
Georgia	N	0	0	N	N	—	0	1	—	2	—	0	3	1	4	
Maryland [¶]	N	0	0	N	N	—	0	3	—	3	—	0	2	—	_	
North Carolina South Carolina¶	N	0 0	0 8	N 11	N 74	_	0	0 1	_	_	_	0	0 0	_		
Virginia [¶]	_	8	25	266	350	_	0	1	1	1	_	0	1	_	_	
West Virginia		8	32	279	276	_	0	0			_	Ő	0	_	_	
E.S. Central	_	5	15	172	187	_	0	2	6	2	_	0	3	5	3	
Alabama¶	—	5	14	163	180	_	0	0	—	1	—	0	0	_	2	
Kentucky	N	0	0	N	N	—	0	1			—	0	1			
Mississippi Tennessee [¶]		0	3 0	9 N	7	—	0	2	6	1	_	0	2 2	5	1	
W.S. Central	N 16	0 43	0 258	N 1,490	N 1,880	_	0	1 16	1	 15	—	0	2	3	7	
Arkansas [¶]		3	17	130	133	_	0	3	_	3	_	0	1	_		
Louisiana	_	2	5	48	48	_	Ő	3	_	6	_	Ő	1	2	3	
Oklahoma	Ν	0	0	Ν	N	_	0	1	_	_	_	0	0	_	_	
Texas [¶]	16	37	247	1,312	1,699	—	0	15	1	6	_	0	2	1	4	
Mountain	1	13	50	404	716	_	0	18	2	48	-	0	15	4	50	
Arizona Colorado [¶]	_	0 5	0 31	155	259	_	0	13 5	2	45	_	0	5 11	2 1	30	
Idaho¶	N	5	31 0	155 N	259 N	_	0	5	_	2	_	0	1	1	18	
Montana¶		2	28	100	151	_	0	0	_	_	_	0	0	_	_	
Nevada¶	Ν	0	0	N	N	_	Ő	Õ	_	_	_	Ő	1	_	1	
New Mexico [¶]	_	1	8	23	72	_	0	6	_	_	_	0	2	_		
Utah	1	4	26	119	221	_	0	1	_	—	—	0	1	—		
Wyoming [¶]	—	0	3	7	13	—	0	1	_	1	—	0	1	1	1	
Pacific	_	2	6	69	76	_	0	8	6	21	—	0	6	2	18	
Alaska California	_	1 0	4 3	33 7	29 25	_	0 0	0 8	6	21	_	0	0 6	2	18	
Hawaii	_	1	3 4	29	25	_	0	8 0	0	21	_	0	0		18	
Oregon	N	0	4	29 N	N	_	0	0	_	_	_	0	0	_		
Washington	N	0	0	N	N	_	0	1	_	_	_	0	1	_	_	
Territories			-													
American Samoa	Ν	0	0	Ν	Ν	_	0	0	_	_	_	0	0	_		
C.N.M.I.		_	_	_		_	_	_	_	_	_	_	_	_	_	
Guam	_	0	4	16	17	_	0	0	_	_	_	0	0	_	_	
Puerto Rico	_	6	21	100	391	_	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 reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/ nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly. [†] 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 reportable in all states. Data from states where the condition is not reportable 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/osels/ph_surveillance/nndss/phs/infdis.htm. [¶] Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deaths in 122 U.S. cities,* week ending August 6, 2011 (31st week)

		All ca	uses, by a	ige (years)					56 624 294 71 36 31 39 74 49 10 6 — 11 58 36 8 5 4 02 64 26 7 3 2 01 66 19 11 3 2 34 91 24 12 5 2 31 17 10 2 1 1 50 32 14 1 — 3 47 33 7 2 3 2 59 99 41 9 3 7 9 6 3 — — — 46 540 228 50 15 13 69 98 48 11 5 7 19 63 19 8 1 — 69 47 16 5 1 —					
Reporting area	All Ages	≥65	45-64	25–44	1–24	<1	P&I [†] Total	Reporting area (Continued)	All Ages	≥65	45-64	25-44	1–24	<1	P&I [†] Total
New England	487	323	110	30	14	10	34	S. Atlantic	1,056	624	294	71	36	31	47
Boston, MA	144	90	34	10	6	4	7	Atlanta, GA	139						1
Bridgeport, CT	20	16	3	_	1	_	2	Baltimore, MD	111						8
Cambridge, MA	12	7	5	_	_	_	3	Charlotte, NC							6
Fall River, MA	19 49	15 30	4 8	5	4	2	1 5	Jacksonville, FL Miami, FL							7 5
Hartford, CT Lowell, MA	49 18	15	3		4		1	Norfolk, VA							1
Lvnn, MA	5	3	2	_	_	_	_	Richmond, VA							2
New Bedford, MA	23	16	7	_	_	_	_	Savannah, GA							5
New Haven, CT	16	10	4	1	1	_	1	St. Petersburg, FL	47						2
Providence, RI	63	38	15	7	1	2	3	Tampa, FL	159	99	41	9	3	7	5
Somerville, MA	2	2	_	_	_	_	_	Washington, D.C.	92	43	37	2	3	7	3
Springfield, MA	39	26	9	3	—	1	3	Wilmington, DE	9	6	3		_		2
Waterbury, CT	25	18	5	_	1	1	2	E.S. Central	846						59
Worcester, MA	52	37	11	4	—	—	6	Birmingham, AL	169				5		9
Mid. Atlantic	1,710	1,189	373	87	36	24	83	Chattanooga, TN	115				_		9
Albany, NY	40	30	4	2	2	2	2	Knoxville, TN						_	5
Allentown, PA	21	20	1			1		Lexington, KY							6
Buffalo, NY Camden, NJ	93 28	67 14	19 10	4 1	2 2	1 1	12 2	Memphis, TN Mobile, AL							17 3
Elizabeth, NJ	28 29	14	8	4		2		Montgomery, AL							5
Erie, PA	38	28	7	1	2		2	Nashville, TN	128					_	4
Jersey City, NJ	17	14	2	_	1	_	1	W.S. Central	1,114						50
New York City, NY	955	665	219	45	15	10	43	Austin, TX	86						5
Newark, NJ	37	19	9	7	2	_	1	Baton Rouge, LA	58				5	2	_
Paterson, NJ	24	17	2	4	_	1	_	Corpus Christi, TX	57	38	18	_	1	_	6
Philadelphia, PA	138	83	41	9	3	2	6	Dallas, TX	180	99	41	27	6	5	9
Pittsburgh, PA [§]	42	32	6	2	2	_	2	El Paso, TX	59						2
Reading, PA	27	22	4	1	—	—	1	Fort Worth, TX							U
Rochester, NY	77	54	15	2	3	3	4	Houston, TX	160						11
Schenectady, NY	18	13	4	_	_	1	—	Little Rock, AR							
Scranton, PA	13	10	1	1	1	1		New Orleans, LA							U 12
Syracuse, NY	56 17	41 12	12 5	2	1	_	3 2	San Antonio, TX							12
Trenton, NJ Utica, NY	20	12	3	_	_	_	2	Shreveport, LA Tulsa, OK	135					_	3 2
Yonkers, NY	20	16	1	2	1	_	1	Mountain	1,155					17	73
E.N. Central	1,874	1,238	447	119	39	31	115	Albuguergue, NM	1,135						5
Akron, OH	43	30	11	1	1	_	8	Boise, ID	59					_	3
Canton, OH	40	25	11	3	1	_	3	Colorado Springs, CO	54	35	8	4	7		1
Chicago, IL	214	138	47	22	4	3	8	Denver, CO	69	43	15	9	2	_	5
Cincinnati, OH	85	49	19	4	5	8	10	Las Vegas, NV	338	217	92	19	6	4	31
Cleveland, OH	239	158	64	12	3	2	10	Ogden, UT	30	21	5	1	3	_	3
Columbus, OH	216	138	48	20	4	6	9	Phoenix, AZ	184	99	52	19	8	6	9
Dayton, OH	128	95	24	6	3	_	5	Pueblo, CO	31	19	10	1	1		1
Detroit, MI	130	70	48	8	4	—	9	Salt Lake City, UT	123	82	29	9	2	1	10
Evansville, IN	36	26	7	3				Tucson, AZ	146	105	33	5	2	1	5
Fort Wayne, IN Gary, IN	74 9	50 4	14 3	4 2	3	3	4 1	Pacific Berkeley, CA	1,536 12	1,028 6	351 5	99	26	32 1	116
Grand Rapids, MI	9 60	4	5 11	2 5	1	2	7	Fresno, CA	12	75	32	12	4	3	11
Indianapolis, IN	176	111	47	12	4	2	12	Glendale, CA	29	21	6	2		_	3
Lansing, MI	40	29	10	1	_	_	3	Honolulu, HI	52	32	14	4	_	2	2
Milwaukee, WI	98	56	31	6	2	3	6	Long Beach, CA	81	53	24	3	1	_	8
Peoria, IL	44	30	13	_	_	1	9	Los Angeles, CA	216	138	49	20	5	4	25
Rockford, IL	41	33	6	2	_	_	3	Pasadena, CA	22	13	7	1	_	1	4
South Bend, IN	51	34	10	5	2	_	1	Portland, OR	96	66	27	1	_	2	5
Toledo, OH	97	71	20	3	2	1	5	Sacramento, CA	208	152	36	13	4	3	13
Youngstown, OH	53	50	3	_	_	_	2	San Diego, CA	144	96	29	11	2	6	10
W.N. Central	604	394	146	33	16	15	39	San Francisco, CA	93	60	22	6	3	2	14
Des Moines, IA	78	51	19	2	2	4	10	San Jose, CA	157	111	34	6	3	3	8
Duluth, MN	21	13	6	1	1	—	2	Santa Cruz, CA	36	24	8	3	1	_	3
Kansas City, KS	24	18	6	_		_	1	Seattle, WA	127	78	34	12	1	2	4
Kansas City, MO	110	72	24	6	5	3	4	Spokane, WA	52	37	10	2		3	3
Lincoln, NE Minneapolis MN	35	31	4				1	Tacoma, WA	85	66	14	3	2	_	3
Minneapolis, MN	71	38	19	7 4	2	5	5 4	Total [¶]	10,382	6,782	2,502	658	240	197	616
Omaha, NE	85 32	56 17	21 13	4	2 1	2	4								
			15		1	_	2	1							
St. Louis, MO St. Paul, MN	63	38	15	6	3	1	3								

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.

⁹ 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.
⁹ Total includes unknown ages.

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