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## Imported Human Rabies – California, 2008

Compared with rabies in developing countries, human rabies is rare in the United States, but animal rabies is common (1,2). In the United States, most human rabies cases are associated with rabid bats, whereas in developing countries, dogs are the most common reservoir and vector species. In March 2008, a case of imported human rabies in a recently arrived, undocumented Mexican immigrant was laboratory confirmed by public health officials in California. The rabies virus isolated from the patient was a previously uncharacterized variant most closely related to viruses found in Mexican free-tailed bats (Tadarida brasiliensis). The molecular and phylogenetic characterizations of this rabies virus variant have been described previously (3). This report summarizes the epidemiologic investigation and the ensuing public health response. A total of 20 persons, mostly household contacts, received postexposure prophylaxis (PEP) because of potential exposure to rabies virus from the patient. The findings underscore the difficulties encountered in the diagnosis and epidemiologic investigations of imported human rabies cases and the importance of a coordinated public health response across multiple international jurisdictions.

## **Case Report**

Weekly

On March 17, 2008, a male aged 16 years who had recently entered the United States from Oaxaca, Mexico, was brought by his family to an emergency department (ED) in Santa Barbara County, California, with sore throat and a recent history of not eating or drinking. The ED physician obtained a history with assistance from a translator. The patient's vital signs were remarkable for a mild temperature elevation (100.6°F [38.1°C]) and tachycardia (140 beats per minute). He was awake and alert but agitated and crying. His examination was notable for mild abdominal tenderness. Laboratory studies included a complete blood count, electrolytes, liver function tests, and urinalysis. Results were normal except an elevated blood urea nitrogen value of 20 mg/dL (normal range: 7–18 mg/dL). The patient was given intravenous fluids and discharged with the diagnosis of pharyngitis and abdominal pain.

Several hours later, the patient was brought by his family to the same ED with nausea, vomiting, fever, and sore throat. He was mildly febrile (99.1°F [37.3°C]) with tachycardia (164 beats per minute) and was noted to be agitated and uncooperative. He refused to take fluids and was observed to spit frequently. Because of the patient's agitated behavior and his refusal to take oral fluids, the ED physician suggested that psychiatric consultation might be needed. The patient was again given intravenous fluids for dehydration. He was discharged to his aunt's home with the diagnosis of viral pharyngitis, depression, and anorexia.

The next day, on March 18, the patient experienced vomiting and shaking and then collapsed at his aunt's home. When paramedics arrived, the patient was not breathing and was unresponsive. Resuscitation efforts were not successful.

After the patient's death, the possibility of rabies as a cause of his illness was considered by the ED physician because 1) the patient exhibited hydrophobia and aggressive behavior, and 2) the patient had come to the United States from a canine rabies enzootic region in Mexico only the day before his presentation at the ED.

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## **Public Health Investigation**

The Santa Barbara County Public Health Department and health officials in Mexico interviewed family members and friends of the patient regarding potential rabies exposures. Through these interviews, two potential animal bite exposures were identified. Both occurred in Oaxaca, Mexico. In December 2007, the patient was bitten by a dog while tending sheep. In the same month, he was bitten by a fox. Several other persons who were bitten by the fox received rabies PEP, but the patient did not.

Brain tissue obtained from the patient postmortem was sent to the Santa Barbara Public Health Laboratory. On March 21, rabies virus antigen was identified in the brain tissue by the direct fluorescent antibody test. Brain tissue was forwarded to the California Viral and Rickettsial Disease Laboratory (VRDL) and CDC for viral characterization. After antigenic typing and genetic sequencing on March 27, VRDL and CDC identified a rabies virus variant most closely related to viruses found in Mexican free-tailed bats, rather than a canine rabies virus variant (*3*).

On March 21, by request of the California Department of Public Health, CDC's San Diego Quarantine Station assisted in contacting Mexican federal and local public health authorities to notify them of the case and seek further information regarding the patient's exposures in Mexico. In addition, an investigation was begun by the Santa Barbara County Public Health Department in conjunction with the local hospital's infection control staff and the Ventura County Public Health Department. The investigation was complicated by the patient's undocumented status in the United States, his long-distance travel, and linguistic and cultural barriers.

Investigation determined that the patient had departed Oaxaca, Mexico, on March 10 and traveled through Mexico with others by foot and car before making unauthorized entry into the United States on or shortly before March 16. One of his traveling companions was his brother-in-law, who traveled with him from Oaxaca to the United States. After the patient's arrival in the United States on March 16, he remained at a family residence in Santa Barbara County, California, until the onset of his illness the following day.

Mexican health officials interviewed contacts and family members in the patient's home town; none received PEP because the patient was not considered to be infectious before his departure for California. Intensive efforts to locate the brother-in-law and other traveling companions were not successful. Because the patient had remained at one family residence after his arrival in the United States, contact exposures in the United States were limited to household members, ED staff, and health department personnel. **MMWR** 

Assessments of potential exposure were made in accordance with Advisory Committee on Immunization Practices recommendations (2). Of 29 possible contacts identified, 20 were deemed to be potentially exposed and received PEP. Sixteen of those 20 were household members. All received PEP because of exposure of mucous membranes or nonintact skin to the patient's saliva as a result of the patient's frequent spitting and excessive salivation while at the family residence. Four persons who received PEP were health-care providers. Two ED physicians reported exposures to the patient's saliva. A microbiologist and veterinarian technician, who were previously vaccinated and assisted with the specimen preparation, received booster doses of rabies vaccine. To date, all known contacts of the patient in the United States have no evidence of rabies.

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Editorial Note: The case described in this report is the first case of human rabies imported into the United States that has not been associated with a canine rabies virus variant. The patient described in this report was infected with a variant most closely related to rabies viruses found in Mexican free-tailed bats (3). During 2000–2008, a total of 27 cases of human rabies were reported in the United States (1). Of these, six were imported cases, including the case described in this report. With the exception of the case described in this report, all were associated with either 1) a history of dog exposure in a canine rabies enzootic country, or 2) a canine rabies virus variant that was enzootic in the patient's country of origin. How the patient described in this report was infected with rabies virus remains unclear. Transmission might have occurred either through a bat bite directly or by secondary infection through the bite of a rabid carnivore infected with a bat rabies virus variant (i.e., the dog or fox bites identified in the investigation). Travelers should be aware of the local status and epidemiology of rabies at their destination and how to prevent exposures by avoiding stray animals and wildlife (4). Patients who have potential exposures to rabies virus should seek medical evaluation immediately.

The patient's mode of travel to the United States likely hindered more immediate prevention efforts by local health officials in his home jurisdiction. The undocumented status of the patient might have led to the patient and his family not readily disclosing complete information to health-care providers or officials, thereby delaying consideration of a rabies diagnosis. Nevertheless, a disoriented, salivating, and dehydrated patient who avoids water should prompt a consideration of rabies in the differential diagnosis, irrespective of a documented history of animal exposure. Health-care providers should consider rabies in patients with acute progressive encephalitis. In particular, rabies should be included in the differential diagnosis where a travel history or immigration status has indicated time spent in a canine rabies endemic country.

The investigation described in this report highlights the importance of cooperation between the United States and Mexican public health agencies for the complete investigation of infectious disease cases that cross international borders (5). Sharing information about the rabies death in this Mexican national enabled officials from Mexico and the United States to conduct timely and coordinated disease surveillance, assess prevention efforts, and accurately document consequent mortality.

This case also demonstrates the need for improved international coordination in the control of infectious disease. CDC, the Mexico Secretariat of Health, and state epidemiology officials from both countries have drafted Guidelines for U.S.-Mexico Coordination on Epidemiologic Events of Mutual Interest (6), which addresses the issue of such binational cases and disease outbreaks to ensure systematic communication for public health purposes. The guidelines were drafted because such binational public health situations between the United States and Mexico are relatively frequent, particularly in border regions. The 2005 International Health Regulations (7) encourage such bilateral agreements to address common disease control issues and public health events in border regions and beyond, because most issues, such as this imported rabies case, do not meet the World Health Organization's definition of a public health emergency of international concern (PHEIC).\* Pilot implementation of operation protocols for the proposed U.S.-Mexico guidelines is ongoing.

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<sup>\*</sup> PHEIC must meet two of the following four criteria: 1) seriousness of the public health impact of the event, 2) unusual or unexpected nature of the event, 3) potential for the event to spread internationally, and/or 4) the risk that restrictions to travel or trade might result because of the event.

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# Clinic-Based Testing for Rectal and Pharyngeal Neisseria gonorrhoeae and Chlamydia trachomatis Infections by Community-Based Organizations – Five Cities, United States, 2007

CDC recommends screening of at-risk men who have sex with men (MSM) at least annually for urethral and rectal gonorrhea and chlamydia, and for pharyngeal gonorrhea (1). Although the standard method for diagnosis is culture, nucleic acid amplification (NAA) testing is generally more sensitive and favored by most experts (2). NAA tests have not been cleared by the Food and Drug Administration (FDA) for the diagnosis of extragenital chlamydia or gonorrhea and may not be marketed for that purpose. However, under U.S. law, laboratories may offer NAA testing for diagnosis of extragenital chlamydia or gonorrhea after internal validation of the method by a verification study.\* To determine sexually transmitted disease (STD) testing practices among community-based organizations serving MSM, CDC and the San Francisco Department of Public Health gathered data on rectal and pharyngeal gonorrhea and chlamydia testing at screening sites managed by six gay-focused community-based organizations in five U.S. cities during 2007. This report summarizes the results of the study, which found that three organizations collected samples for NAA testing and three for culture. In total, approximately 30,000 tests were performed; 5.4% of rectal gonorrhea, 8.9% of rectal chlamydia, 5.3% of pharyngeal gonorrhea, and 1.6% of pharyngeal chlamydia tests were positive. These results demonstrate that gay-focused community-based organizations can detect large numbers of gonorrhea and chlamydia cases and might reach MSM not being tested elsewhere. Public health officials could consider providing support to certain community-based organizations to facilitate testing and treatment of gonorrhea and chlamydia.

Gay-focused community-based organizations provide medical and social services and are guided and staffed by paid or unpaid community residents with various skill levels, including some who might have medical, nursing, or counseling backgrounds (4). Funding and other resources are provided by private and public sources. Many gay-focused community-based organizations in cities with large MSM, lesbian, and bisexual populations offer alternative venues to traditional public STD clinics and private physicians by providing onsite STD screening and treatment services. Gay-focused communitybased organizations typically do not require health insurance for access, are located in neighborhoods with many MSM, and provide culturally competent services for a historically stigmatized population.

For this survey, gay-focused community-based organizations were defined as nongovernmental organizations that stated in published materials that they principally serve MSM. During April 2008, the 10 U.S. cities with the highest estimated number of gay, lesbian, or bisexual residents were identified (5). Gay-focused community-based organizations in each city that provide rectal and pharyngeal gonorrhea and chlamydia testing to MSM were identified through community leaders and Internet searches. Organizations were excluded if they did not provide rectal or pharyngeal gonorrhea or chlamydia testing services, or were unable to provide data on types of test used, number of tests performed, or percentage of positive tests during 2007.

Among 11 gay-focused community-based organizations identified in the 10 cities, 10 provided rectal or pharyngeal gonorrhea or chlamydia testing services. Among those 10 organizations, data were available from six in five cities, including Howard Brown Health Center (Chicago, Illinois), Callen-Lorde Community Health Center (New York, New York), AIDS Health Foundation (Los Angeles, California),

<sup>\*</sup> Verification studies permit the use of tests for an indication that does not have formal clearance by FDA. Verification studies can be performed at a single laboratory or in collaboration with a second laboratory. The second laboratory might be able to provide a panel of previously tested positive and negative specimens for comparative purposes. A typical verification protocol involves testing of at least 20 positive and 20 negative specimens compared to the reference standard or to results obtained from a second laboratory. The test performance (i.e., sensitivity and specificity) should be equivalent or better than the reference standard or to those obtained by the second laboratory (*3*).

Los Angeles Gay and Lesbian Center (Los Angeles, California), Magnet (San Francisco, California), and Gay City Health Project (Seattle, Washington). Data for 2007 were collected during April–July 2008. Overall, staff from six organizations collected samples for 6,499 rectal gonorrhea tests and 5,258 rectal chlamydia tests; staff from five organizations collected 14,189 samples for pharyngeal gonorrhea tests; and staff from four organizations collected samples for 3,410 pharyngeal chlamydia tests (Table). Medical oversight at each organization assured proper specimen collection, transport, results disclosure, treatment, and partner notification. Organizations that used NAA testing generally had higher rates of positivity than those that used culture. Pharyngeal and rectal test positivity generally was high compared with urethral testing.

Four of the six organizations sent the specimens to public health laboratories for testing; costs for that testing were funded by local public health jurisdictions. The other two organizations used commercial laboratories for testing; costs for that testing were funded by patient insurance or self-pay. All laboratories had completed verification studies demonstrating adequate NAA testing performance in extragenital specimens.

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Editorial Note: In 2007, chlamydia and gonorrhea were the first and second most commonly reported notifiable diseases in the United States, respectively, with 1,108,374 chlamydia cases (370.2 per 100,000 population) and 355,991 gonorrhea cases (118.9 per 100,000 population) (6). Most chlamydia and gonorrhea testing is performed in traditional medical settings and is indicated for screening, diagnosis, or test-of-cure. During 2007, the six gay-focused community-based organizations in this report collected samples for approximately 30,000 rectal and pharyngeal gonorrhea and chlamydia tests from community members attending each facility and detected approximately 1,600 infections. Tests on samples collected by four of the six organizations surveyed were performed by public health laboratories and funded by local health jurisdictions, illustrating the role that partnerships between government and community-based organizations can play in prevention and control of rectal and pharyngeal gonorrhea and chlamydia.

The percentages of positive NAA tests for rectal and pharyngeal gonorrhea and chlamydia were similar to those reported for NAA testing in a previous study from a publicly funded municipal STD clinic (7). As expected, NAA test positivity for rectal gonorrhea and chlamydia infections and pharyngeal gonorrhea was generally higher than culture test positivity (7).

TABLE. Number of tests performed by gay-focused community-based organizations,* by test type, laboratory, and funding source,
to detect rectal and pharyngeal Neisseria gonorrhoeae and Chlamydia trachomatis infections — five U.S. cities, <sup>†</sup> 2007

			Ree	ctal					Phary	ngeal		
	N. gond	orrhoeae in	fections	C. trac	homatis in	fections	N. gond	orrhoeae inf	ections	C. track	nomatis inf	ections
Tests performed, by organization (city)	No. tests	No. positive	(%)	No. tests	No. positive	(%)	No. tests	No. positive	(%)	No. tests	No. positive	(%)
NAA <sup>§</sup> tests only												
Los Angeles Gay and Lesbian Center (Los Angeles)**	1,845	206	(11.2)	1,841	248	(13.5)	7,214	471	(6.5)	1		
AIDS Healthcare Foundation (Los Angeles)**	670	30	(4.5)	658	66	(10.0)	1,410	60	(4.3)	—		
Magnet (San Francisco)**	2,307	107	(4.6)	2,307	151	(6.5)	3,397	194	(5.7)	3,397	54	(1.6)
Culture only												
Howard Brown Health Center (Chicago) <sup>††</sup>	40	3	(7.5)	34	0	(0)	41	0	(0)	13	0	(0)
Callen-Lorde (New York City) <sup>††</sup>	1,176	5	(0.4)	_			1,456	4	(0.3)	_		
Gay City Health Project (Seattle)**	461	2	(0.4)	418	3	(0.7)	671	30	(4.5)	—		
Total	6,499	353	(5.4)	5,258	468	(8.9)	14,189	759	(5.3)	3,410	54	(1.6)

\* Includes nongovernmental organizations providing sexually transmitted diseases clinics and testing, primarily for men who have sex with men, but might include persons identified as lesbian or bisexual.

<sup>†</sup> Chicago, Illinois; Los Angeles, California; New York, New York; San Francisco, California; and Seattle, Washington.

§ Nucleic acid amplification. All NAA tests were APTIMA Combo 2 assays (Gen-Probe, Inc., San Diego, California).

<sup>¶</sup> Did not test for *C. trachomatis*.

\*\* Testing funded by local health jurisdiction and conducted at local public health laboratory.

<sup>††</sup> Testing funded by insurance or patient out-of-pocket expenses and conducted at commercial laboratory.

Compared with cultures, NAA tests have numerous advantages in detecting gonorrhea and chlamydia. NAA tests might perform better than cultures in nontraditional medical settings, where specimens for culture could be vulnerable to suboptimal handling, compared with more traditional medical clinics. NAA tests are more sensitive than culture for diagnosis of rectal or pharyngeal chlamydia or gonorrhea among MSM, while preserving specificity >99% (7).<sup>†</sup> Furthermore, NAA tests can detect gonorrhea and chlamydia simultaneously with a single test and can detect infection in self-collected specimens, including rectal and pharyngeal specimens (3). NAA test results can be available within 48 hours, whereas most culture results are not available for at least 48 hours. Unlike cultures, NAA tests do not require specialized equipment for specimen collection (e.g., a carbon dioxide-enriched atmosphere for storage and transport for Neisseria gonorrhoea cultures).

CDC recommends at least yearly screening for rectal gonorrhea and chlamydia for MSM who have had receptive anal intercourse during the preceding year and for pharyngeal gonorrhea for MSM who have participated in receptive oral intercourse during the preceding year. CDC recommends screening at 3-6 month intervals for MSM who have multiple or anonymous partners, have sex in conjunction with illicit drug use, use methamphetamine, or have sex partners who participate in those activities (1). CDC does not recommend routine screening for pharyngeal chlamydia (1). Nonurethral gonorrhea and chlamydia frequently are asymptomatic and often can be present in the absence of urethral gonorrhea or chlamydia, reinforcing the need to screen persons at the relevant exposed anatomic sites (4).

Currently, a low percentage of sexually active MSM at risk for STDs are screened at the minimum frequency recommended by CDC, at least for gonorrhea. In a 2003–2005 national study, 36% of MSM reported being tested for gonorrhea at any anatomic site in the previous year (8). Screening for pharyngeal and rectal gonorrhea among MSM is less common than for urethral gonorrhea, impeding efforts to control gonorrhea transmission among MSM (9).

The findings in this report are subject to at least four limitations. First, data on indication for testing (e.g., diagnostic screening or test of cure) were available only from the Gay City Health Project, which tested only asymptomatic persons using culture; all other community-based organizations tested symptomatic and asymptomatic persons, resulting in a higher prevalence than what is found in reports limited to screening in asymptomatic persons. Second, the unknown, underlying prevalence of infections, which might have varied in the populations tested using NAA tests compared with cultures, was not considered. Third, information regarding the sex of persons tested at the community-based organizations and of the sex partners was not available, so that results could not be limited exclusively to MSM. Finally, this study described the use of only one type of NAA test; other NAA tests might perform differently.

Two large commercial laboratory service vendors, Laboratory Corporation of America and Quest Diagnostics, recently have verified and begun offering NAA tests for diagnosis of rectal and pharyngeal gonorrhea and chlamydia. As more laboratories verify NAA tests to detect gonorrhea and chlamydia, community-based organizations increasingly can be effective partners in the STD prevention efforts to control rectal and pharyngeal gonorrhea and chlamydia, and possibly reduce HIV transmission in MSM. More widespread use of NAA tests likely would allow the detection of infections that might be missed by culture, either because of the relatively lower sensitivity of culture or because persons collecting samples might lack the experience necessary to ensure proper collection and handling. Manufacturers of NAA tests can pursue FDA clearance of those tests for the diagnosis of rectal and pharyngeal gonorrhea and chlamydia by gathering and submitting to FDA sufficient data on test performance for those indications. In the interim, CDC and the Association of Public Health Laboratories can help support increases in NAA testing by providing technical assistance and specimens to laboratories for use in verification studies (2).

Rectal and pharyngeal gonorrhea and chlamydia among MSM remain a public health concern. The feasibility and utility of integrating testing for extragenital gonorrhea and chlamydia into existing services at gay-focused community based organizations likely will depend on many factors (e.g., funding availability, staff training, and regional disease burden). Local health jurisdictions might increase chlamydia and gonorrhea testing among MSM by providing financial and technical support to gay-focused community-based organizations and collaborating with them on activities related to the prevention and control of rectal and pharyngeal gonorrhea and chlamydia.

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# Progress Toward Poliomyelitis Eradication – India, January 2007–May 2009

India is the most populous of the four remaining countries (including Afghanistan, Nigeria, and Pakistan) where transmission of wild poliovirus (WPV) has never been interrupted. The last cases of WPV type 2 worldwide were reported in October 1999 in India (1). However, transmission of WPV type 1 (WPV1) and WPV type 3 (WPV3) persists in India in the northern states of Uttar Pradesh and Bihar. Transmission of indigenous WPV in all of India's other states was successfully interrupted in 2002, and all WPV cases reported since then in the country have resulted from WPV circulating in Uttar Pradesh and Bihar. This report updates previous reports (1,2) and summarizes India's progress toward polio eradication since January 2007, as of May 29, 2009. In 2005, the government of India introduced the use of monovalent oral polio vaccine type 1 (mOPV1), which has higher efficacy against WPV1 than does trivalent oral polio vaccine (tOPV) (1-3), in supplementary immunization activities.\* After a multistate WPV1 outbreak in 2006, preferential use of mOPV1 was accelerated and WPV1 cases decreased from 83<sup>†</sup> in 2007 to 18 during January–May 2009. A resurgence of WPV3 cases in Uttar Pradesh in 2007 led to an outbreak in Bihar. SIAs using monovalent type 3 OPV (mOPV3) were expanded in 2007 (2), and the number of WPV3 cases declined from 794 in 2007 to 41 during January–May 2009. Simultaneously interrupting transmission in high-risk areas of western Uttar Pradesh and Bihar is the key to successful interruption of all WPV transmission in India.

## **Immunization Activities**

The routine vaccination schedule in India includes doses of tOPV at birth, 6 weeks, 10 weeks, 14 weeks, and 16–24 months. Nationally, estimated routine coverage with 3 or more doses of tOPV by age 12 months was 66% in children aged 12–23 months in 2007–2008 (4). Estimated routine coverage was 53% in Bihar and 40% in Uttar Pradesh (5).

The government of India conducted two national SIA rounds each year in 2007, 2008, and 2009, which used tOPV, mOPV1, or mOPV3 in different areas depending on serotype-specific risk assessment. Additional subnational SIAs with tOPV, mOPV1, or mOPV3 were conducted in areas with ongoing transmission and mop-up activities<sup>§</sup> with either mOPV1 or mOPV3 were conducted in areas with newly identified WPV transmission (Figure 1). Surveys conducted to assess coverage at the end of SIA activity during 2008-2009 have shown that 2%-3% of children in Uttar Pradesh and <1% of children in Bihar were missed during SIAs. SIA quality in both areas has improved from earlier periods (2). Similar surveys in the difficult to access Kosi River basin of Bihar have demonstrated that 6%–13% of children have been missed during SIAs (World Health Organization [WHO], unpublished data, 2009).

## Acute Flaccid Paralysis (AFP) Surveillance

The polio eradication initiative relies on surveillance for AFP to identify poliomyelitis cases; AFP surveillance is monitored according to WHO targets for case detection and adequate stool specimen collection.<sup>¶</sup> The national nonpolio AFP rate among children aged <15 years was 9.4 per 100,000 in 2007,

<sup>\*</sup> Mass campaigns conducted for a brief period (days to weeks) in which 1 dose of OPV is administered to all children aged <5 years, regardless of vaccination history. Immunization campaigns can be conducted nationally or in portions of the country. The geographic extent of campaigns (national or subnational) is determined by analysis of surveillance data.

<sup>&</sup>lt;sup>†</sup> Three cases with simultaneous WPV1 and WPV3 infection occurred in 2007. These cases are included in both the WPV1 total and the WPV3 total.

<sup>&</sup>lt;sup>§</sup> Mop-up rounds are intensive house-to-house SIAs conducted in a limited area (district or subdistrict) with evidence of recent transmission.

<sup>&</sup>lt;sup>9</sup> The WHO target for countries at high risk of polio transmission is a nonpolio AFP rate of at least two cases per 100,000 population aged <15 years, with adequate stool specimen collection from ≥80% AFP cases. Adequate specimens, as defined by WHO, are two specimens collected ≥24 hours apart, both specimens collected within 14 days of paralysis onset and shipped on ice or frozen ice packs to a WHO-accredited laboratory, arriving in good condition.

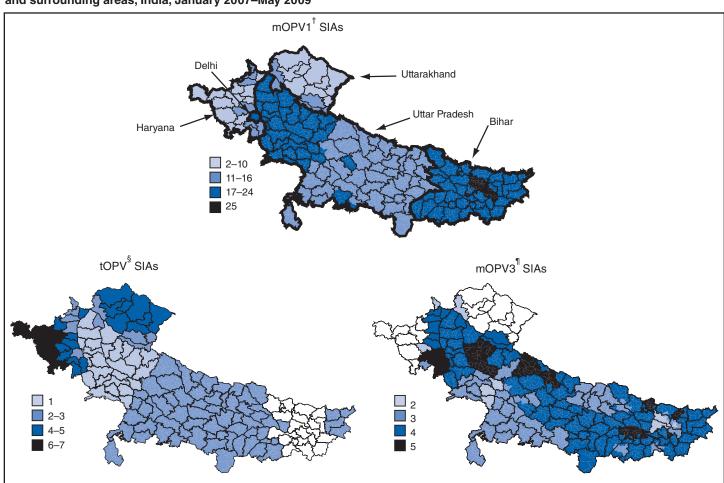


FIGURE 1. Number of supplementary immunization activity (SIA)\* rounds, by vaccine used and district — Uttar Pradesh, Bihar, and surrounding areas, India, January 2007–May 2009

\* Mass campaign conducted during a brief period (days to weeks) in which 1 dose of oral poliovirus vaccine is administered to all children aged <5 years, regardless of vaccination history. The geographic extent of campaigns (national or subnational) is determined by analysis of surveillance data. † Monovalent oral poliovirus vaccine type 1.

§ Trivalent oral poliovirus vaccine.

<sup>¶</sup> Monovalent oral poliovirus vaccine type 3.

10.2 per 100,000 in 2008, and 6.6 per 100,000 during January–May 2009. In Bihar and Uttar Pradesh, 12.9–28.4 nonpolio AFP cases per 100,000 were identified during this period. Nationally, adequate stool specimens were collected from 84% of AFP cases during 2007–2008, and 86% of AFP cases from January through May 2009.

Stool specimens from AFP cases undergo virologic testing in one of the eight WHO-accredited national Global Polio Laboratory Network laboratories.\*\* The national reference laboratory in Mumbai performs genomic sequence analysis of all WPV isolates.

## WPV Epidemiology

A total of 874 WPV cases were reported from 13 states in 2007 and 559 WPV cases were reported in 13 states in 2008 (Figures 2 and 3). During January–May 2009, 59 WPV cases were reported from four states; 279 cases were reported during the same period in 2008. Among cases reported during 2007–2008, 867 (61%) occurred in children aged <24 months and 44 (3%) occurred in children aged >5 years. Among cases reported during 2007–2008, 1,108 (77%) of the children received >7 doses of OPV, 265 (18%) received 4–7 doses, 40 (3%) received 1–3 doses, and 20 (1%) received zero doses or the number of doses received was unknown.

<sup>\*\*</sup> These laboratories processed 80,614 specimens in 2007 and 91,222 specimens in 2008 (2). After implementation of a new laboratory algorithm in mid-2007 (6), >80% of intratypic differentiation (i.e., wild or vaccine-related) results are available <21 days after specimen receipt in the laboratory, compared with only 17% in 2006. The mean interval between AFP paralysis onset to confirmation decreased from 58 days in the first quarter of 2007 to 22 days during the second half of 2008.

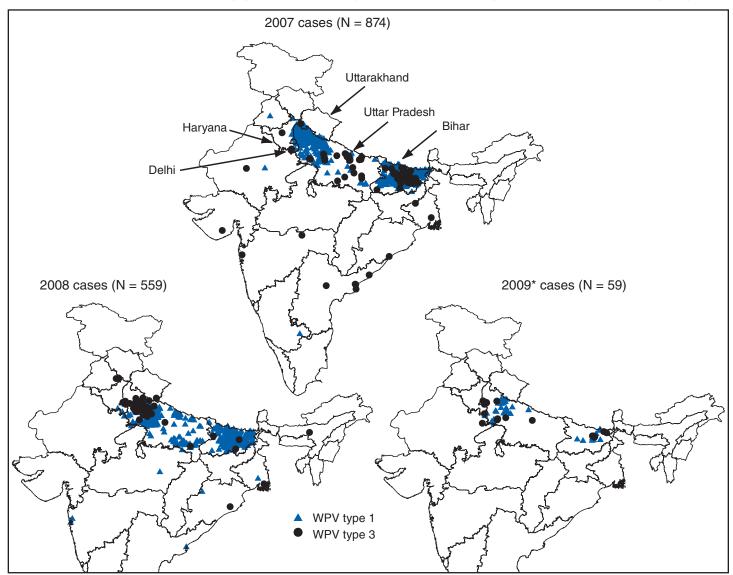


FIGURE 2. Wild poliovirus (WPV) cases, by type — India, January–December 2007, January–December 2008, and January–May 2009\*

\* As of May 29, 2009

**WPV1.** A total of 83 WPV1 cases were reported in 45 districts in 2007, including 46 (55%) cases in Bihar and 22 (27%) in Uttar Pradesh. In 2008, 75 WPV1 cases were reported in 22 districts; among those cases, three (4%) were identified in two districts in Bihar and 62 (83%) were identified in 13 districts in an outbreak in Uttar Pradesh (which included 50 cases in five districts within western Uttar Pradesh). During January–May 2009, India reported 18 WPV1 cases in 11 districts; six cases (33%) were reported from two districts in Bihar and eight (44%) from seven districts in Uttar Pradesh.

The current outbreak in Uttar Pradesh, totaling 70 cases to date, began when a WPV1 case genetically linked to WPV circulating in Bihar was detected in western Uttar Pradesh in May 2008. Until then, no WPV1 cases had been reported in Uttar Pradesh since November 2007, and in the previously highest-risk districts of western Uttar Pradesh since September 2006. All 70 WPV1 cases in Uttar Pradesh are linked genetically to this introduction, and in November 2008; a case genetically linked to this outbreak was conversely detected in Bihar. Among the nine WPV1 cases in Bihar in 2008–2009 to date, at least two genetically distinct chains of transmission were identified, primarily localized in difficult-to-reach populations in the flood-prone areas of the Kosi River basin.

**WPV3.** In all of India, 794 WPV3 cases were reported in 78 districts in 2007 and 484 cases were reported in 85 districts in 2008; 779 (98%) and 473 (98%) of cases in 2007 and 2008, respectively, occurred in Bihar and Uttar Pradesh. During January–May 2009, 41 WPV3 cases were reported,

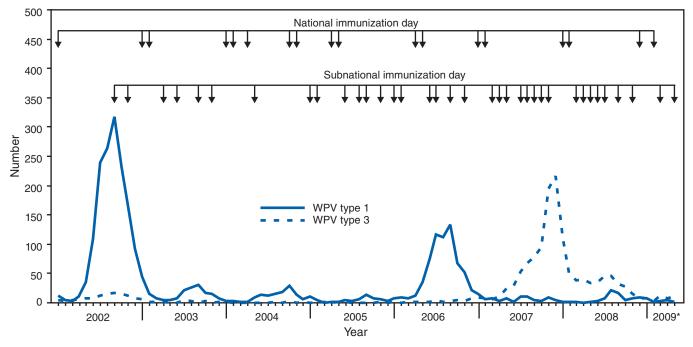


FIGURE 3. Number of wild poliovirus (WPV) cases, by type, month, and year of onset and type of supplementary immunization activity\* — India, January 2002–May 2009<sup>†</sup>

\* Mass campaign conducted during a brief period (days to weeks) in which 1 dose of oral polio vaccine is administered to all children aged <5 years, regardless of vaccination history. The geographic extent of campaigns (national or subnational) is determined by analysis of surveillance data.</li>
 † As of May 29, 2009. WPV cases totaled 1,600 in 2002, 225 in 2003, 134 in 2004, 66 in 2005, 676 in 2006, 874 in 2007, 559 in 2008, and 59 to date in 2009.

versus 274 WPV3 cases reported during the same period in 2008. All 41 cases reported in 2009 have been in Bihar and Uttar Pradesh.

**Reported by:** Ministry of Health and Family Welfare, Government of India; National Polio Surveillance Project, WHO, New Delhi; Immunization and Vaccine Development Dept, WHO Regional Office for South-East Asia, New Delhi; UNICEF, New Delhi; Poliovirus Laboratory Network, Ahmedabad, Bangalore, Chennai, Coonoor, Kasauli, Kolkata, Lucknow, and Mumbai, India. Polio Eradication Dept, WHO, Geneva, Switzerland. Div of Viral Diseases and Global Immunization Div, National Center for Immunization and Respiratory Diseases; SE Kidd, MD, EIS Officer, CDC.

Editorial Note: Overall, WPV1 incidence in India declined during 2007–2009 following implementation of the recommendations of the Global Advisory Committee on Polio Eradication and the India Expert Advisory Group for Polio Eradication to prioritize the elimination of WPV1; this involved conducting SIA rounds using mOPV1 as often as every 6–8 weeks in high-risk areas. In contrast to other polioendemic countries, WPV transmission in the northern Indian states of western Uttar Pradesh and Bihar persists despite  $\geq$ 95% of WPV cases reporting receipt of at least four OPV doses. Persistent transmission in these areas despite high vaccination coverage has been attributed to relatively lower vaccine effectiveness of OPV in northern India than in other populations, possibly resulting from a combination of a high incidence of diarrheal diseases, malnutrition, and a high force of WPV infection<sup>††</sup> resulting from crowding (*1*,*7*,*8*). Among WPV case children, a very high proportion are vaccinated rather than unvaccinated, which reflects the frequency and high coverage of polio vaccination campaigns.

The interruption of WPV1 transmission in Uttar Pradesh during 2007-2008 indicates that frequent mOPV1 rounds of consistently high coverage with enhanced technical support can be successful, even in areas with the most persistent transmission. Western Uttar Pradesh districts have high population density, poor sanitation, and low socioeconomic status and have been the main reservoir for WPV1 transmission in India in previous years. The 2008–2009 Uttar Pradesh outbreak, caused by WPV1 introduced from Bihar, appears to be diminishing, although the risk for continued transmission or reintroduction persists. In Bihar, the intense focus on vaccinating populations in the Kosi River area has resulted in only three WPV1 cases being reported in 2008 and six cases through May 2009, despite severe floods in Bihar in 2008; these floods displaced high-risk populations, worsened sanitary conditions, and interfered with scheduled SIAs. Genetic data from WPV

<sup>&</sup>lt;sup>††</sup> Force of infection is the rate at which susceptible persons acquire infection, often varying by age.

isolated from cases indicate that low-grade WPV1 transmission has continued during 2008–2009 in Bihar in districts of the Kosi River basin. This transmission, often undetected for several months, has resulted occasionally in WPV1 cases in several other states.

The number of reported WPV3 cases in India has declined steadily since the peak of the 2007 outbreak. Most WPV3 cases in 2008 occurred in districts in Uttar Pradesh and Bihar in which less than three SIA rounds of mOPV3 had been administered during 2007. The mOPV3 rounds conducted at the end of 2007 and during 2008 appear to have substantially reduced WPV3 transmission and limited transmission to Bihar and Uttar Pradesh in 2009. Although multiple importations of WPV1 and WPV3 were detected in areas outside Uttar Pradesh and Bihar during 2007–2008, no outbreaks of polio occurred in those other areas, in which prompt and large scale mop-up vaccination rounds, higher vaccine effectiveness, higher routine vaccination coverage, and continued national SIAs have produced higher levels of immunity and lower risk for transmission.

India plans to conduct additional mOPV3 SIA rounds as needed to prevent further WPV3 outbreaks while continuing to use mOPV1 for most SIAs. Based on preliminary data from a clinical trial, the Advisory Committee on Polio Eradication and the India Expert Advisory Group for Polio Eradication have recommended the use of bivalent type 1 and type 3 OPV to substitute for mOPV3 in future SIAs when available. The recently developed bivalent formulation is anticipated to be licensed for use in India later in 2009.

Reaching the goal of polio eradication in India is dependent on ongoing efforts to interrupt remaining WPV transmission simultaneously in high-risk areas of western Uttar Pradesh and Bihar, first WPV1, then WPV3. Strategies to accomplish that include reaching all children during SIAs in the Kosi River area and improving the effectiveness of polio vaccines. Potential interventions to improve the effectiveness of poliovirus vaccines under investigation include the use of inactivated poliovirus vaccine as a supplement to OPV, high-titer mOPV1, and zinc supplementation (9). Surveillance also has been expanded in high-risk areas to examine the potential contribution of older age groups to poliovirus transmission to inform a possible expansion of the target age group in these areas. Continued vigilance, sustained commitment, ongoing research and aggressive responses to new cases will be required to interrupt remaining WPV1 transmission and to eliminate polio in India. Polio eradication activities in India have provided successful operational models for elimination of transmission in many other areas of the world. Elimination of WPV circulation in India would further serve as a stimulus for the remaining countries with WPV transmission, and ultimately lead to global eradication.

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 TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending July 4, 2009 (26th week)\*</td>

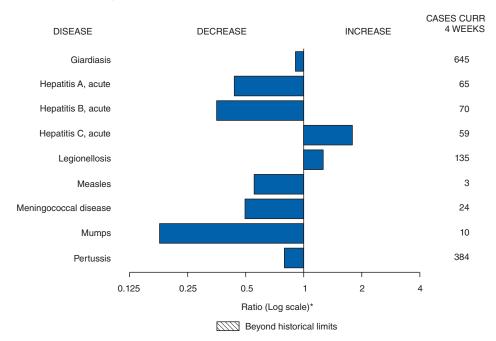
	0	0	5-year			ases re evious	eported vears		
Disease	Current week	Cum 2009	weekly average <sup>†</sup>	2008			2005	2004	States reporting cases during current week (No.)
Anthrax	_	_	_	_	1	1	_	_	
Botulism:									
foodborne	_	9	0	17	32	20	19	16	
infant	—	26	2	109	85	97	85	87	
other (wound and unspecified)	1	13	1	19	27	48	31	30	CA (1)
Brucellosis	_	43	2	80	131	121	120	114	
Chancroid	1	19	1	25	23	33	17	30	WA (1)
Cholera Cyclosporiasis <sup>§</sup>		2	0	3	7	9	8	6 160	FL (0)
Diphtheria	2	44	12	139	93	137	543	100	FL (2)
Domestic arboviral diseases <sup>§,1</sup> :									
California serogroup	_	_	3	62	55	67	80	112	
eastern equine	_	_	0	4	4	8	21	6	
Powassan	_	_	0	2	7	1	1	1	
St. Louis	_	_	0	13	9	10	13	12	
western equine	_	_	_	_	_	_	_	—	
Ehrlichiosis/Anaplasmosis <sup>§</sup> ,**:									
Ehrlichia chaffeensis	23	174	24	1,137	828	578	506	338	NY (2), MD (2), VA (2), NC (3), FL (1), KY (1), TN (2), AL (1), AR (1), OK (8)
Ehrlichia ewingii	_	_	0	9	_	_	_	_	
Anaplasma phagocytophilum	6	106	28	1,026	834	646	786	537	NY (5), OK (1)
undetermined	_	32	11	180	337	231	112	59	
Haemophilus influenzae, <sup>††</sup>									
invasive disease (age <5 yrs):									
serotype b	—	13	0	30	22	29	9	19	
nonserotype b	2	102	3	244	199	175	135	135	GA (1), FL (1)
unknown serotype	7	119	3	163	180	179	217	177	PA (2), OH (2), MD (1), FL (1), OK (1)
lansen disease§	1	32	2	80	101	66	87	105	OH (1)
Hantavirus pulmonary syndrome <sup>§</sup>	5	4	1	18	32	40	26	24	
Hemolytic uremic syndrome, postdiarrheal <sup>§</sup> Hepatitis C viral, acute	э 15	73 433	7 15	330 878	292 845	288 766	221 652	200 720	OH (4), OK (1)
nepatitis C virai, acute	15	433	15	8/8	845	700	652	720	NY (2), OH (4), IA (3), WV (1), NC (1), GA (1), FL (1), CO (1), CA (1)
HIV infection, pediatric (age <13 years)§§	_	_	3		_	_	380	436	TE (1), OO (1), OA (1)
nfluenza-associated pediatric mortality <sup>§,</sup> <sup>¶</sup>	5	90	1	85	77	43	45		NY (1), NYC (2), NJ (1), AZ (1)
Listeriosis	12	249	17	759	808	884	896	753	NY (4), OH (1), FL (1), CO (1), WA (3), CA (2)
Measles***	_	34	4	140	43	55	66	37	(n - (n))
Meningococcal disease, invasive <sup>+++</sup> :									
A, C, Y, and W-135	2	147	5	330	325	318	297	—	NC (1), CO (1)
serogroup B	—	79	4	188	167	193	156	—	
other serogroup	—	13	1	38	35	32	27	—	
unknown serogroup	5	239	11	616	550	651	765	_	GA (1), CA (4)
Numps	3	173	21	454		6,584	314	258	NY (1), CA (2)
Novel influenza A virus infections <sup>§§§</sup>		33,902	_	2	4	N	N	N	
Plague	_	_	0	1	7	17	8	3	
Poliomyelitis, paralytic Polio virus infection, nonparalytic§	_	_	_	_	_	N	1 N	N	
Psittacosis <sup>§</sup>	_	6	0	8	12	21	16	12	
Q fever total <sup>§</sup> , <sup>¶</sup>	2	38	4	124	171	169	136	70	
acute	2	34	2	110		103	150		OH (1), NE (1)
chronic		4	0	14	_	_	_	_	
Rabies, human	_	_	0	1	1	3	2	7	
Rubella****	_	1	0	16	12	11	11	10	
Rubella, congenital syndrome	_	1	_	_	_	1	1	_	
SARS-CoV <sup>§,††††</sup>	_	_	_	_	_	_	_	_	
Smallpox§	—	_	—	_	_	_	_	_	
Streptococcal toxic-shock syndrome§	1	82	2	157	132	125	129	132	WV (1)
Syphilis, congenital (age <1 yr)	—	81	8	420	430	349	329	353	
Tetanus		5	1	19	28	41	27	34	
Toxic-shock syndrome (staphylococcal)§	1	40	2	71	92	101	90	95	CA (1)
Trichinellosis	_	10	1	39	5	15	16	5	
Fularemia	_	19	5	123	137	95	154	134	
Typhoid fever	3	162	7	447	434	353	324	322	PA (1), NC (1), AZ (1)
/ancomycin-intermediate Staphylococcus aureus		29	0	63	37	6 1	2 3		
Vancomycin-resistant <i>Staphylococcus aureus</i> § Vibriosis (noncholera <i>Vibrio</i> species infections)§	5	124	6	492	2 549	N	N N	1 N	MN (1) GA (1) EL (2) AZ (1)
fellow fever	5	124	0	492	049	IN	IN	IN	MN (1), GA (1), FL (2), AZ (1)

See Table I footnotes on next page.

# TABLE I. (Continued) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending July 4, 2009 (26th week)\*

- -: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts.
- \* Incidence data for reporting year 2008 and 2009 are provisional, whereas data for 2004, 2005, 2006, and 2007 are finalized.
- <sup>†</sup> 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. The total sum of incident cases is then divided by 25 weeks. Additional information is available at http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf.
  <sup>§</sup> 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 information is provided to the provided to the provided information.
- influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm. Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.
- \*\* The names of the reporting categories changed in 2008 as a result of revisions to the case definitions. Cases reported prior to 2008 were reported in the categories: Ehrlichiosis, human monocytic (analogous to *E. chaffeensis*); Ehrlichiosis, human granulocytic (analogous to *Anaplasma phagocytophilum*), and Ehrlichiosis, unspecified, or other agent (which included cases unable to be clearly placed in other categories, as well as possible cases of *E. ewingii*).
- <sup>++</sup> Data for *H. influenzae* (all ages, all serotypes) are available in Table II.
- <sup>§§</sup> Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly.
- 11 Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Eighty-nine influenza-associated pediatric deaths occurring during the 2008-09 influenza season have been reported.
- \*\*\* No measles cases were reported for the current week.
- <sup>+++</sup> Data for meningococcal disease (all serogroups) are available in Table II.
- SSS These cases were obtained from state and territorial health departments in response to the pandemic influenza A (H1N1) virus infections and include both confirmed and probable cases in addition to those reported to the National Notifiable Diseases Surveillance System (NNDSS). Because of the volume of cases and the method by which they are being collected, a 5-year weekly average for this disease is not calculated.
- In 2008, Q fever acute and chronic reporting categories were recognized as a result of revisions to the Q fever case definition. Prior to that time, case counts were not differentiated with respect to acute and chronic Q fever cases.
- \*\*\*\* No rubella cases were reported for the current week.
- titt Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.

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



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

Notifiable Disease Data Team and	l 122 Cities Mortality Data Team
Patsy A. I	Hall
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Lenee Blanton	Pearl C. Sharp

(26th week)*			Chlamydi	ia <sup>†</sup>			Cocc	idiodomy	cosis			Crvi	otosporidi	osis	
		Prev					Prev						ious		
	Current			Cum	Cum	Current	52 w		Cum	Cum	Current		veek	Cum	Cum
Reporting area	week	Med	Max	2009	2008	week	Med 140	465	2009	2008		Med 109	482	2009	2008
United States New England	10,176 494	22,758 761	25,700 1,655	537,944 19,618	584,378 17,810	80	140 0	465	4,403 1	3,352 1	46 3	109 5	482 23	2,263 116	2,137 164
Connecticut	206	232	1,306	5,874	4,981	N	0	0	Ň	N	_	0	16	16	41
Maine <sup>§</sup> Massachusetts	263	48 323	72 947	1,224 9,659	1,242 8,562	N N	0 0	0 0	N N	N N	_	0 2	6 13	13 35	12 48
New Hampshire Rhode Island <sup>§</sup>	1	32 55	63 244	659 1,617	1,008 1,445	_	0 0	1 0	1	1	2	1 0	4 3	18 4	35 4
Vermont§	24	21	53	585	572	Ν	0	õ	Ν	Ν	1	1	7	30	24
Mid. Atlantic New Jersey	1,454	2,852 422	6,734 879	75,543 10.184	74,414 11,382	N	0	0 0	N	N	7	13 0	35 4	262 1	256 17
New York (Úpstate)	544	566	4,563	14,659	13,396	N	0	0	N	N	2	4	17	65	73
New York City Pennsylvania	508 402	1,111 808	3,130 1,072	29,754 20,946	28,774 20,862	N N	0 0	0 0	N N	N N	5	1 7	8 15	29 167	48 118
E.N. Central Illinois	360	3,439 1,104	4,382 1,356	78,504 24,317	96,814 28,982	N	0	3 0	17 N	28 N	7	24 2	126 13	524 38	531 51
Indiana	260	405	713	11,224	10,818	N	0	0	N	N	—	3	17	84	69
Michigan Ohio	16	833 761	1,321 1,300	21,906 12,918	23,207 22,964	_	0	3 2	7 10	21 7	6	5 8	13 59	101 178	101 113
Wisconsin	84	387	494	8,139	10,843	Ν	0	0	N	Ν	1	8	46	123	197
W.N. Central lowa	586 137	1,325 192	1,547 257	31,822 4,814	33,106 4,312	N	0 0	1 0	2 N	N	7 1	17 4	68 30	338 77	310 73
Kansas Minnesota	77 2	178 267	401 330	4,278 5,649	4,505 7,248	N	0 0	0	N	N	1	1 4	8 14	38 80	25 76
Missouri	304	497	583	12,864	12,140	_	0	1	2	_	_	3	13	53	70
Nebraska <sup>ş</sup> North Dakota	27	97 26	219 60	2,249 471	2,626 895	N N	0 0	0 0	N N	N N	4	2 0	8 10	34 6	43 1
South Dakota	39	58	85	1,497	1,380	Ν	0	0	Ν	Ν	1	2	9	50	22
S. Atlantic Delaware	1,923 109	4,386 74	5,730 180	92,492 2,417	115,456 1,855	_	0 0	1 1	5 1	_2	4	21 0	49 1	425 1	368 7
District of Columbia Florida	116 427	129 1,386	227 1,597	3,479 34,836	3,440 36,007	N	0 0	0 0	N	N	3	0 8	2 35	135	7 155
Georgia	_	740	1,909	12,221	20,141	Ν	0	0	Ν	N	1	6	20	175	107
Maryland <sup>§</sup> North Carolina	234	435 388	772 1,457	10,478	11,506 12,615	N	0 0	1 0	4 N	2 N	_	1 1	5 16	19 47	14 11
South Carolina <sup>§</sup> Virginia <sup>§</sup>	576 446	534 614	1,455 903	11,776 15,441	13,170 15.132	N N	0 0	0 0	N N	N N	_	1 1	6 4	20 23	22 34
West Virginia	15	69	101	1,844	1,590	Ň	ŏ	ŏ	Ň	Ň	_	ò	3	5	11
E.S. Central Alabama <sup>§</sup>	1,275	1,672 464	2,165 600	42,551 9,862	40,982 12,627	N	0	0	N	N	1 1	3 1	9 6	66 19	56 20
Kentucky	451	243	458	5,677	5,506	N	0	Ō	N	Ν		1	4	18	12
Mississippi Tennessee§	313 511	440 565	841 796	12,056 14,956	9,418 13,431	N N	0 0	0 0	N N	N N	_	0 1	2 5	4 25	6 18
W.S. Central	2,106	2,914	4,999 418	77,191	74,805	 N	0 0	1 0	N	2 N	_	8	271 10	75 15	99
Arkansas <sup>§</sup> Louisiana	272 117	278 439	1,134	7,304 12,422	7,089 10,572	_	0	1	—	2	_	1 1	5	10	16 21
Oklahoma Texas <sup>§</sup>	549 1,168	181 1,963	2,732 2,526	6,009 51,456	6,506 50,638	N N	0 0	0 0	N N	N N	_	2 3	16 258	36 14	20 42
Mountain	295	1,314	2,145	29,458	36,775	48	94	360	3,170	2,239	4	9	38	172	178
Arizona Colorado	37	414 354	627 1,021	6,895 8,924	12,186 8,974	48 N	91 0	358 0	3,130 N	2,176 N	3	1 2	10 12	16 55	22 36
Idaho <sup>§</sup> Montana <sup>§</sup>	_	68 58	314 88	1,766 1,472	1,897 1,521	N N	0 0	0 0	N N	N N	1	1 0	5 4	24 14	31 24
Nevada§	151	174	365	4,756	4,992	_	1	3	33	32	_	0	4	7	6
New Mexico§ Utah	67	159 85	540 251	3,362 1,250	3,551 2,936	_	0 0	2 1	2 5	20 9	_	2 0	23 6	39 4	34 15
Wyoming§	40	32	97	1,033	718	_	0	1	_	2		0	2	13	10
Pacific Alaska	1,683	3,619 90	4,615 199	90,765 2,138	94,216 2,334	32 N	39 0	172 0	1,208 N	1,080 N	13	11 0	20 1	285 2	175 1
California Hawaii	1,288	2,866 114	3,591 247	72,118 2,805	73,127 2,922	32 N	39 0	172 0	1,208 N	1,080 N	11	6 0	14 1	160 1	96 1
Oregon§	187	198	631	4,792	5,082	N	Ŭ O	Ŭ 0	Ν	Ν	2	2	8 7	86	39
Washington American Samoa	208	393 0	557 3	8,912	10,751 70	N N	0	0	N N	N N	2 N	2 0	0	36 N	38 N
C.N.M.I.	—	- 2		_	102	_		0	_	_		0	0	_	_
Guam Puerto Rico	334	126	8 269	3,812	3,597	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands		8	17	173	354		0	0			_	0	0		

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

			Giardiasi	s				Gonorrhe	a				s <i>in fluenz</i> s, all sero		
			vious veeks		•	-		vious veeks					/ious /eeks		
Reporting area	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008
United States	189	320	641	7,060	7,525	2,584	5,659	7,164	126,996	163,474	22	50	124	1,389	1,589
New England	1	26	64	471	644	59	97	301	2,415	2,485	_	3	16	85	87
Connecticut Maine <sup>§</sup>	1	6 4	14 12	113 89	153 60	47	49 2	275 9	1,126 70	1,089 47	_	0	12 2	29 12	18 8
Massachusetts	—	10	27	150	274	12	37	112	984	1,097	—	1	5	32	45
New Hampshire Rhode Island <sup>§</sup>	_	2 1	10 8	42 23	57 40	_	1 5	6 16	53 159	63 170	_	0	2 7	6 3	6 4
Vermont§	_	3	15	54	60	_	1	4	23	19	_	0	1	3	6
Mid. Atlantic New Jersey	40	59 7	116 21	1,293 85	1,469 235	277	592 92	1,138 127	14,690 2,056	16,182 2,643	5	11 1	25 7	296 31	292 47
New York (Upstate)	33	24	81	555	482	100	111	664	2,030	3,013	1	2	20	71	84
New York City	2 5	15 16	30 46	334 319	413 339	92 85	210 185	577 267	5,516	4,975	2 2	2 4	11 10	73 121	50
Pennsylvania E.N. Central	17	45	40 90	988	1.162	111	1.115	1.627	4,542 24,254	5,551 34,313	4	4	27	121	111 257
Illinois	_	9	32	171	315	1	360	499	7,332	9,880	_	2	9	63	78
Indiana Michigan	N	0 12	11 22	N 263	N 256	77	153 294	256 493	3,683 7,193	4,366 8,513	_	1 0	22 3	36 12	45 15
Ohio	15	16	31	377	381	8	245	482	3,962	8,363	4	1	6	57	80
Wisconsin	2	9	19	177	210	25	101	149	2,084	3,191	—	0	4	9	39
W.N. Central lowa	12 5	25 6	143 18	627 134	728 132	129 19	295 32	393 53	6,847 811	8,307 761	_	3 0	15 0	79	115 2
Kansas	1	3	11	57	56	26	39	83	1,026	1,091	_	0	2	11	14
Minnesota Missouri	_	0 7	106 22	137 183	191 204	 78	46 140	78 184	923 3,232	1,611 3,974	_	0 1	10 4	18 31	27 49
Nebraska§	6	3	10	74	97	4	25	51	640	689	_	0	2	14	15
North Dakota South Dakota	_	0 2	16 11	8 34	10 38	2	2 8	7 20	26 189	56 125	_	0 0	4 0	5	8
S. Atlantic	54	66	108	1,696	1,253	563	1,292	2,142	25,990	39,750	8	14	28	408	399
Delaware	_	0	3	14	20	25	16	35	434	575	_	0	2	3	4
District of Columbia Florida	40	0 31	5 57	843	27 560	35 153	51 416	89 507	1,403 10,059	1,244 12,122	3	0 5	2 10	144	3 97
Georgia	6	14	67	490	284	_	266	876	4,067	7,297	3	2	9	81	84
Maryland <sup>§</sup> North Carolina	4 N	5 0	10 0	109 N	115 N	55	119 141	212 647	2,740	3,039 5,527	1	1	6 17	51 48	65 40
South Carolina§	_	2	8	43	59	163	169	421	3,636	4,802	1	1	5	28	36
Virginia <sup>§</sup> West Virginia	4	8 1	31 5	177 20	155 33	131 1	155 11	308 26	3,390 261	4,767 377	_	1 0	6 3	35 18	56 14
E.S. Central	2	8	22	156	202	379	515	771	12,270	14,807	_	3	6	85	88
Alabama§	1	4	12	69	112	110	151	216	2,794	4,997	—	0	4	23	14
Kentucky Mississippi	N N	0	0 0	N N	N N	119 121	80 143	153 253	1,655 3,733	2,135 3,478	_	0 0	4 1	14	6 11
Tennessee§	1	4	13	87	90	139	162	301	4,088	4,197	_	2	5	48	57
W.S. Central Arkansas <sup>§</sup>	7 2	8 2	22 8	169 56	149 56	794 83	924 86	1,294 134	22,444 2,204	25,644 2,264	3 1	2 0	22 2	67 12	75 7
Louisiana	_	2	10	55	56	39	165	420	4,019	4,736	1	ŏ	1	11	8
Oklahoma Texas <sup>§</sup>	5 N	3 0	18 0	58 N	37 N	381 291	69 568	610 725	2,314 13,907	2,410 16,234	1	1 0	20 1	44	54 6
Mountain	18	27	62	521	592	48	182	333	3.755	6,033	2	4	11	132	188
Arizona	1	3	10	90	53	2	51	82	814	1,779	2	1	7	51	78
Colorado Idaho <sup>§</sup>	9 4	9 3	27 14	180 56	217 68	_	59 3	252 13	1,425 46	1,857 82	_	1 0	5 2	41 2	35 8
Montana§		2	9	40	32		2	6	40	56	—	0	1	1	2
Nevada <sup>§</sup> New Mexico <sup>§</sup>	4	2 2	8 8	41 38	54 43	18 28	32 22	86 52	847 480	1,232 704	_	0 1	2 3	10 15	11 28
Utah	_	7	18	56	107	_	5	15	66	275	_	0	2	12	26
Wyoming <sup>§</sup> Pacific		1	4	20	18		2	8	37	48	—	0	2		
Alaska	38	54 2	130 10	1,139 33	1,326 34	224	559 14	755 24	14,331 338	15,953 248	_	2 0	7 3	60 8	88 11
California	29	34	59	815	922	185	472	657	12,221	13,140	_	0	3	12	31
Hawaii Oregon <sup>§</sup>	_	0 7	4 17	5 147	19 210	12	12 21	19 48	295 505	298 617	_	0 1	2 3	13 24	10 34
Washington	9	7	74	139	141	27	48	81	972	1,650	—	0	2	3	2
American Samoa C.N.M.I.	_	0	0	_	_	_	0	0	_	3	_	0	0	_	_
Guam	_	0	0	_	_	_	1	15	_	43	_	0	0	_	_
Puerto Rico	—	2	15	27	82	8	4	16	109	140		0	1		
U.S. Virgin Islands		0	0	_	_		2	7	54	65	N	0	0	N	N

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

### **MMWR**

(zoth week)*				Hepat											
			Α					В				Le	gionellosi	s	
	Current		ious eeks	Cum	Cum	Current		vious veeks	Cum	Cum	Current		vious veeks	Cum	Cum
Reporting area	week	Med	Max	2009	2008	week	Med	Max	2009	2008	week	Med	Max	2009	2008
United States	16	37	89	822	1,325	16	71	197	1,492	1,840	45	48	152	840	1,047
New England Connecticut	_	2 0	8 4	34 12	62 11	_	1 0	4 3	17 7	41 14	3 2	2 0	18 5	31 19	57 12
Maine <sup>§</sup> Massachusetts	_	0 1	5 3	1 14	4 31	_	0 0	2 2	7 1	8 12	_	0 1	2 7	6	1 24
New Hampshire Rhode Island <sup>§</sup>	_	0	2 2	3	5 10	_	0	2	2	3	1	0	5 14	3	7
Vermont§	_	0	1	1	10	_	0	1	_	1	_	0	14	1	9 4
Mid. Atlantic New Jersev	3	5 0	13 5	93 5	143 33	2	6 1	17 5	142 22	234 67	16	14 1	60 14	233 11	254 31
New York (Upstate)	2	1	4	26	31	—	1	11	33	34	11	5	24	85	65
New York City Pennsylvania	1	2 1	6 4	28 34	44 35	2	1 2	4 8	29 58	50 83	5	2 5	12 35	35 102	32 126
E.N. Central Illinois	_	4 1	12 4	90 21	195 75	1	9 2	21 7	195 24	247 89	9	8 1	41 13	134 8	227 32
Indiana	_	Ó	3	7	10	—	1	18	36	18	_	0	6	8	20
Michigan Ohio	_	1 1	5 4	33 24	70 22	1	3 2	8 13	60 57	71 57	9	2 4	16 18	27 86	63 100
Wisconsin	—	0	3	5	18	—	0	4	18	12	_	0	6	5	12
W.N. Central Iowa	_	2 0	16 5	57 13	166 78	_	2 0	16 3	69 11	39 11	_	2 0	8 2	30 10	48 8
Kansas Minnesota	_	0 0	1 12	6 12	10 18	_	0 0	2 11	4 11	6 4	_	0 0	1 4	2 5	1 4
Missouri Nebraska <sup>§</sup>	_	0 0	3 2	14 10	21 37	_	1 0	5 2	33 9	15 3	_	1 0	7 3	9 3	25 9
North Dakota	_	0	2	_	_	_	0	1	—	_	_	0	3	1	_
South Dakota S. Atlantic	4	0 7	1 15	2 199	2 171	7	0 18	1 31	1 470	463		0 9	1 22	 197	1 206
Delaware District of Columbia	 U	0	1 0	3 U	4 U	Ŭ U	0	1	Ŭ	Ŭ	3	0 0	2	6	5
Florida	1	4	8	96	71	5	6	11	156	164	3	3	7	71	69
Georgia Maryland <sup>§</sup>	2	1 0	4 4	31 19	26 18	_2	3 2	9 6	72 41	85 43	2	1 2	5 9	26 44	17 54
North Carolina South Carolina <sup>§</sup>	1	1 0	7 3	22 13	26 6	_	1 1	19 5	119 21	47 36	1	0	7 1	30 2	11 4
Virginia <sup>§</sup> West Virginia	_	1 0	6 1	15	17 3	_	2 1	10 6	38 23	49 39	3	1 0	5 3	18	26 13
E.S. Central	1	1	5	21	39	_	8	13	147	179	2	2	5	45	65
Alabama <sup>§</sup> Kentucky	1	0	2 2	6 4	5 15	_	2 2	7 7	46 40	49 50		0 1	2 3	5 21	7 31
Mississippi Tennessee§	_	0	2 4	5	2 17	_	1	3	6 55	17 63	-	0	1 4	1 18	1 26
W.S. Central	_	3	43	73	131	2	11	99	214	378	_	2	21	40	35
Arkansas <sup>§</sup> Louisiana	_	0 0	1 2	4 2	4 7	1	1 1	5 4	14 21	26 52	_	0 0	2 2	2 1	5 5
Oklahoma Texas <sup>§</sup>	—	0 3	6 37	1 66	3 117	1	2	17 76	50 129	43 257	_	0 1	6 19	3 34	3 22
Mountain	_	3	37	74	102	2	3	10	66	257 90	1	2	8	34 41	38
Arizona Colorado	_	1	28	36 20	42 21	_	1	5	25 12	34 14	1	0 0	3	21 4	10 3
Idaho <sup>§</sup>	_	Ō	1	1	14	2	Ō	2	4	3	_	Õ	1	_	2
Montana <sup>§</sup> Nevada <sup>§</sup>	_	0	1 3	3 6	3	_	0 0	1 3	 15	21	_	0	2 2	4 6	3 6
New Mexico§ Utah	_	0 0	1 2	5 3	14 5	_	0 0	2 3	5 3	7 7	_	0 0	2 2	5	3 11
Wyoming§	_	0	0	_	3	_	0	1	2	4	_	0	1	1	
<b>Pacific</b> Alaska	8	8 0	25 1	181 3	316 2	_2	7 0	36 1	172 3	169 6		3 0	12 1	89 2	117 1
California Hawaii	7	6 0	25 2	138 4	255 6	2	5 0	28 1	127 3	118 3	1	3 0	9 1	69 1	88 4
Oregon§ Washington	1	0 1	2	10 26	20 33	_	1	4	23 16	23 19	1	Ö O	2	6 11	11 13
American Samoa	_	0	0	_	_	_	0	0	_	_	Ν	0	0	N	Ν
C.N.M.I. Guam	_	0	0	_	_	_	0	0	_	_	_	0	0	_	_
Puerto Rico U.S. Virgin Islands	_	0 0	2 0	7	16	_	0 0	5 0	3	26	_	0 0	0 0	_	_
0.0. Virgin Islanus	_	0	0	_	_		0	0		_	_	0	0		_

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending July 4, 2009, and June 28, 2008 (26th week)\*

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

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	Lyme disease							Malaria			Me		cal diseas All groups	e, invasiv	/e <sup>†</sup>
			vious veeks				Prev 52 w						vious veeks		
Reporting area	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008
United States	431	437	1,915	5,407	9,776	8	22	46	432	467	7	17	48	478	714
New England	45	55 12	837 264	611	3,868		1 0	5	15 4	24 5	_	0 0	4 1	15	19
Connecticut Maine <sup>§</sup>	34	6	264 73	156	1,594 70	_	0	4	4	э 1	_	0	1	1 2	1 3
Massachusetts	—	14	403	117	1,592	—	0	4	6	13	—	0	3 1	9 1	13
New Hampshire Rhode Island <sup>§</sup>	_	13 0	145 78	218 33	462 105	_	0 0	1	1 1	2 1	_	0 0	1	1	1 1
Vermont§	11	5	41	87	45	—	0	1	2	2	—	0	1	1	—
Mid. Atlantic New Jersey	333	218 27	1,401 231	3,276 509	3,620 1.643	3	5 0	17 4	102	118 23	_	2 0	5 1	49 2	75 10
New York (Upstate)	185	87	1,368	1,155	786	3	0	10	23	13	_	0	2	11	19
New York City Pennsylvania	148	3 53	54 338	1,612	198 993	_	3 1	11 3	61 18	65 17	_	0 1	2 4	9 27	13 33
E.N. Central	2	9	205	166	695	_	3	6	54	76	_	3	8	81	121
Illinois	—	0	13	4	42	—	1	5	20	36	_	1	6	17	44
Indiana Michigan	_	0 1	8 10	9 12	8 5	_	0	1 3	8 9	3 9	_	0	4 3	21 14	16 15
Ohio	_	Ó	6	10	8	_	Ō	2	14	18	—	Ō	3	23	29
Wisconsin	2	9	187	131	632	_	0	2	3	10	_	0	1	6	17
W.N. Central lowa	_	7 1	336 9	71 29	143 53		1 0	10 3	27 5	21 2	_	1 0	9 1	39 4	65 12
Kansas	—	0	4	8	5	_	0	2	2	3	_	0	2	8	3
Minnesota Missouri	_	2 0	326 1	28 2	81 1	2	0 0	8 2	12 5	6 5	_	0 0	4 2	8 13	18 21
Nebraska§	—	0	2	3	2	—	0	1	2	5	—	0	1	4	9
North Dakota South Dakota	_	0 0	10 1	1	1	_	0 0	0 1	1	_	_	0 0	3 1	2	1
S. Atlantic	49	65	223	1,155	1,335	1	6	15	148	125	2	2	9	91	98
Delaware District of Columbia	8	12 0	36 5	312	390 24	_	0 0	1 2	1	1	_	0	1 0	2	1
Florida	4	1	6	19	15	1	1	7	38	22	_	1	4	31	34
Georgia Maryland <sup>§</sup>	2 27	0 27	6 163	20 547	16 620	_	1	4 8	33 39	29 37	1	0 0	2 1	18 4	12 12
North Carolina	4	1	7	34	2	_	Ö	5	18	11	1	0	5	16	8
South Carolina <sup>§</sup> Virginia <sup>§</sup>	1 3	0 12	3 61	13 176	11 197	_	0 1	1	1 17	4 20	_	0	1 2	7 9	15 13
West Virginia	_	1	17	34	60	—	0	1	1	1	—	Õ	2	4	3
E.S. Central Alabama <sup>§</sup>	_	0	5	10 1	19	_	0	2	12 3	8 3	_	0 0	3 1	16	37
Kentucky	_	0	1 2	1	8 1	_	0	1 2	3 5	3	_	0	1	4 3	4 7
Mississippi Tennessee <sup>§</sup>	_	0 0	0 3	8	1 9	_	0 0	1 2	4	2	_	0 0	1	1 8	9 17
W.S. Central	_	2	21	8 18	9 40	_	1	2 10	4 11	23	_	1	12	o 42	75
Arkansas§	_	0	0		40	_	Ó	1	—	—	_	Ó	2	5	10
Louisiana Oklahoma	_	0 0	1 2	_	_	_	0 0	1 2	1	2 2	_	0	3 3	9 3	17 10
Texas§	_	2	21	18	40	_	1	10	9	19	_	1	9	25	38
Mountain	1	1	13	15	15	—	0	3	6	13	1	1	4	41	39
Arizona Colorado	_	0 0	2 1	2 1	2 2	_	0 0	2 1	2 2	5 3	1	0 0	2 2	8 13	5 8
Idaho <sup>§</sup> Montana <sup>§</sup>	—	0	2	5	3	—	0	1	1	—	—	0	1	5	4
Nevada§	1	0 0	13 2	1 6	2 2	_	0 0	0 1	_	4	_	0 0	2 2	4 3	4 7
New Mexico <sup>§</sup> Utah	_	0 0	2 1	_	3	_	0 0	1	1	1	_	0 0	1	3 1	4 5
Wyoming§	_	0	1	_	1	_	0	0	_	_	_	0	2	4	2
Pacific	1	3	13	85	41	2	3	10	57	59	4	4	14	104	185
Alaska California	1	0 2	2 6	1 75	1 27	2	0 2	1 8	1 45	3 46	4	0 2	2 8	2 69	3 143
Hawaii	Ň	0	0	N	N	_	0	1	1	2		0	1	3	2
Oregon <sup>§</sup> Washington	_	0 0	3 12	6 3	13	_	0 0	2 3	5 5	4 4	_	1 0	7 6	21 9	21 16
American Samoa	Ν	0	0	N	N	_	0	0	_	_	_	0	0	_	_
C.N.M.I. Guam	_	0	0	_	_	_		2	_	1	_	0		_	_
Puerto Rico	N	0	0	N	N	_	0	2	1	2	_	0	1	_	2
U.S. Virgin Islands	Ν	0	0	Ν	Ν	_	0	0	—	—	_	0	0	—	_

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

(26th week)*															
			Pertussis	;				abies, anin	nal		R		untain spo	tted fever	
			vious veeks	-	-	_		vious veeks	_		_		vious veeks	_	_
Reporting area	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008	Current week	Med	Max	Cum 2009	Cum 2008
United States	74	242	1,697	5,426	3,827	40	69	122	1,624	1,974	33	28	179	516	551
New England	_	17	35	232	439	4	8	15	166	186	_	0	2	4	3
Connecticut Maine <sup>†</sup>	_	0 1	4 10	13 57	32 14	3	3 1	10 5	73 26	92 28	_	0 0	0 2	4	_
Massachusetts New Hampshire	_	11 1	30 6	105 38	346 13	_	0 1	0 7	19		_	0 0	1 0	_	1 1
Rhode Island <sup>†</sup>	_	1	6	11	28	1	0	3	20	16	_	0	2	_	1
Vermont <sup>†</sup>		0	2	8	6		1	6	28	33	_	0	0	_	_
Mid. Atlantic New Jersey	13	24 3	64 12	486 56	437 85	15	16 0	30 0	310	407	1	1 0	29 6	21	50 34
New York (Upstate) New York Citv	6	6 0	41 21	95 47	135 45	15	8 0	20 2	192	207 10	1	0 0	29 4	2 12	4 6
Pennsylvania	7	11	33	288	172	_	7	17	118	190	_	0	2	7	6
E.N. Central	12	44	238	1,170	698	4	2	28	69	71	—	1	15	21	38
Illinois Indiana	_	14 3	45 158	234 104	82 22	4	1 0	20 6	26 6	27 1	_	1 0	10 3	9 1	27 1
Michigan Ohio	12	9 15	21 57	242 535	95 453	_	1 0	9 7	22 15	26 17	_	0 0	1 3	3 8	2 8
Wisconsin		4	10	55	40	N	0	0	N	N	_	0	0	_	_
W.N. Central Iowa	_	32 5	872 21	917 81	336 48	_1	5 0	17 5	126 9	124 10	_	3 0	33 1	58 1	135 5
Kansas Minnesota	_	3 0	12 808	94 165	30 95	_	1 0	6 11	49 20	39 18	_	0 0	1 0	1	_
Missouri	_	14	51	479	121	_	1	8	17	14	_	3	32	52	125
Nebraska† North Dakota	_	4 0	32 24	86 1	30 1	_	0	2 9	4	18 13	_	0 0	4 1	4	2
South Dakota	—	Ő	10	11	11	1	ŏ	4	27	12	—	ŏ	ò	—	3
S. Atlantic Delaware	31	26 0	71 3	758 6	366 5	13	25 0	95 0	714	929	16	15 0	72 5	271 3	138 7
District of Columbia	_	0	2	_	1	_	0	0	_	_	_	0	1	_	3
Florida Georgia	6	8 3	33 9	256 79	87 33	_	0 5	79 52	79 154	138 201	_	0 1	3 5	4 16	3 31
Maryland <sup>†</sup>	2	3	10	49	50		6 4	13	146	234	1	1	7	23	22
North Carolina South Carolina <sup>†</sup>	21 1	0 3	65 14	199 93	76 51	<u>N</u>	4	4 0	N	N	13	10 1	55 9	188 12	22 14
Virginia† West Virginia	1	3 0	24 2	70 6	57 6	10 3	11 1	24 6	276 59	298 58	1	2 0	15 1	23 2	31 5
E.S. Central	5	12	33	344	131	_	3	7	63	88	2	4	23	87	91
Alabama <sup>†</sup> Kentucky	1	3 4	19 15	124 106	19 25	_	0 1	0 4	 29	 16	1	1 0	7 0	18	25 1
Mississippi	—	1	5	23	56	_	0	2	_	2	_	0	3	4	4
Tennessee <sup>†</sup>	4	2	14	91 764	31	_	2 0	6 9	34 27	70	1	3 2	19	65	61
W.S. Central Arkansas <sup>†</sup>	_	40 2	389 38	34	432 40	_	0	9 5	27	52 34	13 8	0	161 61	45 22	80 8
Louisiana Oklahoma	_	2 0	7 45	43 15	24 13	_	0	0 9	4	16	5	0	2 98	2 10	3 54
Texas <sup>†</sup>	—	33	304	672	355	_	0	1	1	2	_	1	6	11	15
Mountain Arizona	11	15 3	31 8	402 93	463 134	N	2 0	9 0	48 N	32 N	_	1 0	3 2	7 2	14 5
Colorado	10	4	12	148	74	_	0	0	_	_	—	0	1	_	_
Idaho† Montana†	_	1 0	5 4	39 9	20 60	_	0 0	2 4	13	2 1	_	0 0	1	3	2
Nevada† New Mexico†	1	0 1	3 10	7 30	18 25	—	0 0	5 2	1 15	3 18	_	0 0	2 1	1	1
Utah	_	4	19	75	124	_	0	6	2	2	_	0	1	1	2
Wyoming <sup>†</sup>	_	0	2	1	8	_	0	4	17	6	_	0	2	_	4
Pacific Alaska	_2	21 3	98 21	353 28	525 44	3	4 0	13 2	101 9	85 12	1 N	0 0	1 0	2 N	2 N
California Hawaii	_	5 0	19 3	58 16	278 6	3	4 0	12 0	92	71	1 N	0 0	1 0	2 N	N
Oregon <sup>†</sup>	_	3	14	110	81	_	0	2	_	2	—	0	1		2
Washington American Samoa	2	6 0	76 0	141	116	N	0 0	0 0	N	N	N	0 0	0 0	N	N
C.N.M.I.	_	—	_	_	_	_	_	_	_	_	_	_	_	_	_
Guam Puerto Rico	_	0 0	0 1	1	_	1	0 1	0 5	17	 29	N N	0 0	0 0	N N	N N
U.S. Virgin Islands	_	0	0	_	_	N	0	0	N	N	N	0	0	N	N

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

	Salmonellosis						ja toxin-pi	oducing	E. coli (ST	EC)†		5	Shigellosis	;	
			vious				Prev						vious		
Reporting area	Current week	Med	weeks Max	Cum 2009	Cum 2008	Current week	52 w Med	eeks Max	Cum 2009	Cum 2008	Current week	Med	veeks Max	Cum 2009	Cum 2008
United States	570	786	2,318	15,857	17,824	53	75	255	1,399	1,703	167	411	1,268	7,057	8,571
New England Connecticut	5	26 0	209 183	727 183	1,164 491	_	3 0	43 43	88 43	114 47	_	3 0	19 14	67 14	110
Maine <sup>§</sup>	_	2	8	51	66	_	0	3	9	3	_	0	6	2	40 _3
Massachusetts New Hampshire	1	18 3	51 33	263 139	470 63	_	1 1	11 3	15 16	40 12	_	2 0	9 1	40 1	57 2
Rhode Island§ Vermont§	3 1	2 1	9 7	63 28	36 38	_	0 0	1 6	5	7 5	_	0 0	1 2	7 3	7 1
Mid. Atlantic	36	84	201	1,769	2,232	5	6	27	96	179	10	54	93	1,268	1,089
New Jersey New York (Upstate)	22	13 26	55 65	122 490	535 529	5	1 3	12 12	14 44	61 46	3	18 6	38 23	249 100	290 319
New York City Pennsylvania	2 12	19 29	49 78	453 704	517 651	_	1 0	5 8	32 6	24 48	7	10 18	23 40	209 710	420 60
E.N. Central	53	87	194	1,952	2,176	4	12	74	221	259	25	86	132	1,358	1,497
Illinois Indiana	_	25 7	50 53	460 127	661 187	_	1 1	10 14	34 23	39 18	_	15 2	34 39	284 27	491 362
Michigan Ohio	 52	18 27	38 49	405 684	396 592	4	3 3	43 15	57 56	56 65	24	5 42	24 80	118 701	49 430
Wisconsin	1	13	30	276	340	—	3	16	51	81	1	11	42	228	165
W.N. Central lowa	33 7	50 7	148 15	1,183 188	1,158 203	14 10	12 3	58 21	231 69	271 64	_2	14 3	49 12	363 42	430 75
Kansas Minnesota	5 2	7 12	29 69	163 280	176 278	1	1 2	7 21	19 64	22 53	2	3 3	11 25	122 34	8 113
Missouri Nebraska <sup>§</sup>	4	11 5	48 41	209 192	303 113	2	2 2	11 30	41 31	78 32	_	3	33 3	151 9	132
North Dakota South Dakota	15	0 3	30 22	32 119	21 64	1	0	28 4	3	1 21	_	0	9 1	3	28 74
Soull Dakola S. Atlantic	239	236	457	4,303	4,236	12	13	48	4 291	296	38	47	85	ے 1,117	1,713
Delaware District of Columbia	_	2 0	9 2	33	62 37	1	0 0	2 1	7	7 4	_	0 0	8 2	40	6 8
Florida Georgia	122 28	100 39	174 96	1,849 746	1,828 759	2 2	2 1	10 8	81 32	74 35	8 7	10 13	26 30	215 307	467 692
Maryland§	17	16	35	300	347	1	2	11	40	45	7	5	12	162	31
North Carolina South Carolina§	27 9	28 17	106 57	684 263	378 360	3	2 0	21 3	66 9	28 19	14	6 4	27 17	233 65	51 354
Virginia <sup>§</sup> West Virginia	15 21	19 3	88 10	336 92	363 102	2 1	3 0	27 3	47 9	63 21	_2	4 0	59 3	90 5	84 20
E.S. Central Alabama§	29 6	49 16	140 49	949 264	1,119 288	3	5 1	12 4	92 23	114 38	6	23 4	58 12	477 80	1,047 251
Kentucky	13	10	18	204	183	_	2	7	25	23	1	2	25	125	186
Mississippi Tennessee <sup>§</sup>	1 9	12 14	57 62	204 277	343 305	3	0 2	1 6	6 38	3 50	5	1 14	6 48	14 258	235 375
W.S. Central Arkansas <sup>§</sup>	35 16	83 12	1,328 39	1,171 224	2,151 211	1 1	5 0	139 5	53 9	151 26	45 7	89 10	967 27	1,335 177	1,747 195
Louisiana	8	16	54	236	373	_	0	1	 9	4	4	6	26	72	324
Oklahoma Texas <sup>§</sup>	11	14 57	102 1,199	243 468	246 1,321	_	0 3	82 55	9 35	14 107	12 22	4 61	61 889	110 976	47 1,181
Mountain Arizona	32 6	55 19	109 43	1,149 423	1,454 402	_2	10 1	40 4	172 21	195 29	22 21	27 17	54 35	531 395	339 152
Colorado Idaho§	22 3	12 3	23 12	280	382	2	3 2	18	77 27	55 38	1	2	11 2	41 3	38
Montana§	—	2	7	73 49	77 47		0	15 3	6	19	_	0	5	11	2
Nevada <sup>§</sup> New Mexico <sup>§</sup>	1	4 6	12 25	111 102	110 260	_	0 1	3 4	11 16	9 20	_	2 3	13 12	31 46	103 26
Utah Wyoming <sup>§</sup>	_	6 1	19 5	89 22	138 38	_	1 0	9 2	13 1	18 7	_	1 0	3 1	4	10 3
Pacific	108	121	537	2,654	2,134	12	9	31	155	124	19	29	82	541	599
Alaska California	96	1 93	4 516	25 2,057	21 1,553	6	0 5	1 15	94	3 68	15	0 25	1 75	2 431	520
Hawaii Oregon <sup>§</sup>	4	5 7	15 20	113 181	107 188	_	0 1	2 7	2 12	5 16	1	1 1	3 10	13 17	20 25
Washington	8	11	85	278	265	6	3	16	47	32	3	2 0	13	78	34
American Samoa C.N.M.I.	_	0	1	_	1	_	0	0	_	_	_	_	2	3	1
Guam Puerto Rico	1	0 9	2 40	89	8 290	_	0 0	0 0	_	_	_	0 0	1 4	2	13 10
U.S. Virgin Islands	_	0	0	_	_	_	0	0	_	_	_	0	0	_	_

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	5	Streptococcal	diseases, inv	asive, group A		Streptococc		ae, invasive di Age <5 years	sease, nondru	ig resistant†
	Current	Prev 52 w	ious	Cum	Cum	Current	Prev 52 w	ious	Cum	Cum
Reporting area	week	Med	Max	2009	2008	week	Med	Max	2009	2008
United States	44	96	239	3,029	3,402	6	33	122	920	1,044
New England	2	5	28	169	249	_	1	12	24	53
Connecticut Maine <sup>§</sup>	_	0 0	21 3	49 10	66 17	_	0 0	11	2	1
Massachusetts	_	2	10	60	121	_	1	2	15	41
New Hampshire		1	4	28	16	_	0	1	5	7
Rhode Island <sup>§</sup> Vermont <sup>§</sup>	1	0 0	2 3	9 13	19 10	_	0 0	2 1	2	4
Mid. Atlantic	11	18	38	588	713	1	4	33	137	135
New Jersey	—	1	6	5	129	_	1	4	14	39
New York (Upstate)	8	6	25	223	225	1	2	17	71	60
New York City Pennsylvania	3	4 6	12 18	124 236	133 226	N	0 0	31 2	52 N	36 N
E.N. Central	1	16	42	601	680	1	5	18	134	191
Illinois	_	4	12	163	188		1	5	15	54
Indiana	_	3	23	103	86	_	0	13	16	20
Michigan	1	3 4	11	100	116	1	1	5	42 44	53
Ohio Wisconsin		4	13 10	159 76	185 105		1	6 4	44 17	35 29
W.N. Central	13	6	37	272	256	_	2	11	69	49
Iowa		0	0	_	_	_	0	0	_	_
Kansas		1	5	37	28	N	0	1	N	N
Minnesota Missouri	13	0 2	34 8	118 61	122 62	_	0 1	7 4	31 26	11 22
Nebraska§	_	1	3	29	23	_	0	1	4	6
North Dakota	_	0	4	10	8	_	0	3	4	5
South Dakota		0	3	17	13		0	2	4	5
S. Atlantic Delaware	10	22 0	47 1	669 8	669 6	2	6 0	16 0	193	202
District of Columbia	_	0	2		7	N	0	0	N	N
Florida	2	6	12	162	147		1	6	46	39
Georgia Manuland <sup>®</sup>	3 3	5	13	154	151	1	2	6	49	54
Maryland <sup>§</sup> North Carolina	3	3 2	10 12	100 73	122 86	N N	0	3 0	40 N	39 N
South Carolina§		1	5	41	40	1	1	6	32	32
Virginia§	_	3	9	103	85	—	0	4	18	33
West Virginia	1	1	4	28	25	—	0	2	8	5
E.S. Central Alabama§	1 N	4 0	10 0	124 N	114 N	N	1 0	6 0	35 N	56 N
Kentucky		1	5	23	24	N	Õ	0	N	N
Mississippi	N	0	0	N	N		0	2		7
Tennessee§	1	3	9	101	90	_	1	6	35	49
W.S. Central Arkansas <sup>§</sup>	3 1	9 0	79 2	262 10	281 7		6 0	46 4	172 17	154 9
Louisiana	_	õ	3	9	11	_	Ő	3	13	8
Oklahoma	2	2	20	92	66	1	1	7	33	46
Texas <sup>§</sup>	_	6	59	151	197	1	4	34	109	91
Mountain Arizona	2	9 3	22 7	265 90	368 125	_	4 2	16 10	138 78	172 79
Colorado	<u> </u>	3	9	96	93	_	1	4	28	39
Idaho§		0	2	3	12		0	2	6	3
Montana <sup>§</sup> Nevada <sup>§</sup>	N	0 0	0 1	N 5	N 6	<u>N</u>	0 0	0 1	N	N 2
New Mexico§	_	2	7	47	93	_	0	4	15	25
Utah	—	1	6	23	34		0	4	11	23
Wyoming§	—	0	1	1	5	—	0	1	—	1
Pacific Alaska	1	3	9	79	72	—	0	3	18	32
California	N	0 0	4	10 N	16 N	N	0 0	2 0	13 N	21 N
Hawaii	1	3	8	69	56	—	ő	2	5	11
Oregon <sup>§</sup>	N	0	0	N	N	N	0	0	N	N
Washington	N	0	0	N	N	N	0	0	N	N
American Samoa C.N.M.I.	—	0	0	—	30	<u>N</u>	0	0	N	N
Guam	_	0	0	_	_	_	0	0	_	_
Puerto Rico	Ν	0	Ő	Ν	Ν	Ν	0	0	Ν	Ν
U.S. Virgin Islands	_	0	0	_	_	N	0	0	N	N

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

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

	Streptococcus pneumoniae, invasive disease, drug resistant <sup>†</sup>														
			All ages				Ą	ged <5 yea	irs		Sy	vphilis, pr	imary and	d seconda	ry
	Current	Prev 52 w		Cum	Cum	Current		vious veeks	Cum	Cum	Current		ious eeks	Cum	Cum
Reporting area	week	Med	Max	2009	2008	week	Med	Max	2009	2008	week	Med	Max	2009	2008
United States	14	56	276	1,693	1,955	3	9	21	259	285	77	263	452	6,157	6,098
New England Connecticut	_	1 0	48 48	30	41	_	0	5 5	1	5	6	5 1	15 5	155 32	155 10
Maine <sup>§</sup> Massachusetts	_	0	2 1	8 1	13	_	0 0	1	1	_	6	0 3	2 11	1 108	6 121
New Hampshire Rhode Island <sup>§</sup>	—	0	3	5 7	15	—	Ö O	0	_	3	—	0 0	2	10	7
Vermont <sup>§</sup>	_	0 0	6 1	9	15 13	_	0	0	_	2	_	0	5	4	6 5
Mid. Atlantic New Jersey	2	4 0	14 0	101	199	—	0 0	3 0	19	16	22	32 4	51 13	901 101	850 102
New York (Upstate)	1	1	10	43	38	_	0	2	10	5	2	2	8	55	69
New York City Pennsylvania	1	0 1	4 8	2 56	84 77	_	0 0	2 2	9	11	15 5	22 6	36 12	567 178	531 148
E.N. Central	6	9	41	376	431	1	1	7	52	58	1	24	44	462	543
Illinois Indiana		0 2	0 32	N 118	N 149		0 0	0 6	N 17	N 18	1	9 2	19 10	126 75	206 68
Michigan Ohio	6	0 7	2 18	16 242	15 267	1	0 1	1 4	2 33	2 38	_	4 6	18 15	116 121	102 143
Wisconsin	_	0	0			_	Ó	0	_	_		1	4	24	24
W.N. Central lowa	_	3 0	161 0	87	142	_	1 0	3 0	20	28	_	6 0	14 2	148 12	203 10
Kansas Minnesota	—	1 0	5 156	38	57 20	—	0	2 3	13	3 20	_	0	3	13 29	17 47
Missouri	_	1	5	37	60	_	0	1	5	20	_	3	10	76	123
Nebraska <sup>§</sup> North Dakota	_	0 0	0 3	10	2	_	0 0	0 0	_	_	_	0 0	2 1	14 3	6
South Dakota	_	0	2	2	3	_	0	2	2	3	_	0	1	1	_
S. Atlantic Delaware	6	25 0	53 2	804 10	768 2		4 0	14 0	119	116	16	63 0	262 3	1,481 17	1,291 8
District of Columbia Florida	N 3	0 15	0 36	N 490	N 414	N	0 3	0 13	N 79	N 72	2 1	3 20	9 32	88 475	64 496
Georgia	2	8	25	226	269	2	1	5	33	37	_	14	227	292	231
Maryland <sup>§</sup> North Carolina	N	0 0	1 0	4 N	4 N	N	0 0	0 0	N	1 N	4 7	6 8	16 19	143 264	165 145
South Carolina§ Virginia§	N	0 0	0 0	N	N	N	0 0	0 0	N	N	2	2 5	6 16	56 143	44 133
West Virginia	1	2	13	74	79	—	0	3	7	6	_	0	1	3	5
E.S. Central Alabama <sup>§</sup>	N	5 0	25 0	181 N	221 N	N	1 0	3 0	26 N	40 N	10	22 8	36 15	516 179	517 227
Kentucky Mississippi	_	1 0	5 3	51	54 26	_	0 0	2 1	7	9 8	1 3	1 3	10 18	26 98	45 70
Tennessee§	—	3	22	130	141	_	ŏ	3	19	23	6	8	19	213	175
W.S. Central Arkansas <sup>§</sup>	_	1 0	6 5	56 33	71 13	_	0	3 3	10 7	12 3	17 2	51 4	80 35	1,243 99	1,014 73
Louisiana Oklahoma	N	1 0	5 0	23 N	58 N	N	Ö O	1 0	3 N	9 N	2	14 1	40 7	291 29	249 41
Texas <sup>§</sup>		0	0				0	0			13	31	46	824	651
<b>Mountain</b> Arizona	_	2 0	7 0	56	81	_	0 0	3 0	11	9	4	8 3	18 11	148 21	322 164
Colorado		0	0				0	0			_	1	5	45	89
Idaho <sup>§</sup> Montana <sup>§</sup>	N	0 0	1	<u>N</u>		<u>N</u>	0 0	1 0	<u>N</u>	<u>N</u>	_	0 0	2 7	3	1
Nevada <sup>§</sup> New Mexico <sup>§</sup>	_	1 0	4 0	27	40	_	0 0	2 0	6	4	3 1	1	7 5	55 23	38 15
Utah Wyoming <sup>§</sup>	_	1	6 2	22 7	41	_	0	3	4 1	5	_	0 0	2	-	13 2
Pacific	_	0	1	2	1	_	0	1	1	1	1	46	67	1,103	1,203
Alaska California	N	0 0	0	N	N	N	0 0	0	N	N	_	0 42	1 60	1,011	1,088
Hawaii	_	0	1	2	1		0	1	1	1	_	0	3	16	12
Oregon <sup>§</sup> Washington	N N	0 0	0 0	N N	N N	N N	0 0	0 0	N N	N N	1	0 2	4 9	21 55	6 97
American Samoa C.N.M.I.	N	0	0	N	N	N	0	0	Ν	N	_	0	0	_	_
Guam	_	0	0	_	_	_	0	0	_	_	_	0	0		_
Puerto Rico U.S. Virgin Islands	_	0 0	0 0	_	_	_	0 0	0 0	_	_	3	3 0	11 0	107	88
		,	-				-	-				-	-		

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

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

(20th week)	West Nile virus disease <sup>†</sup>														
		ella (chick	Neuroinvasive Nonneuroinvasive <sup>§</sup>												
	Previous				Previous					Previous					
Reporting area	Current week	Med	weeks Max	Cum 2009	Cum 2008	Current week	Med	eeks Max	Cum 2009	Cum 2008	Current week	Med	eeks Max	Cum 2009	Cum 2008
United States	101	449	1,035	10,936	18,764		1	75	4	21		0	77	2000	43
New England	1	14	46	161	978	_	0	2	_	_	_	0	1	_	2
Connecticut Maine <sup>¶</sup>	_	3 0	21 11	_	484 157	_	0 0	2 0	_	_	_	0	1 0	_	2
Massachusetts	_	0	0		_	—	0	1	—	—	—	0	0	—	—
New Hampshire Rhode Island <sup>¶</sup>	1	4 0	11 1	114 4	163	_	0	0 1	_	_	_	0 0	0	_	_
Vermont <sup>¶</sup>		3	17	43	174	—	0	Ó	—	—	—	0	0	—	—
Mid. Atlantic New Jersev	9 N	38 0	58 0	925 N	1,475 N	_	0 0	8 2	_	_	_	0 0	4	_	_
New York (Upstate)	Ν	0	0	Ν	N	_	0	5	—	_	_	0	2	—	—
New York City Pennsylvania	9	0 38	0 58	925	1,475	_	0 0	2 2	_	_	_	0 0	2 1	_	_
E.N. Central	10	151	254	3,896	4,587	_	0	8	_	_	_	0	3	_	_
Illinois Indiana	_	33 0	73 19	822 168	635	_	0	4	_	_	_	0	2 1	_	_
Michigan	_	48	90	1,219	1,954	—	0	4	—	—	—	0	2	—	—
Ohio Wisconsin	8 2	42 14	91 53	1,342 345	1,490 508	_	0	3 2	_	_	_	0 0	1	_	_
W.N. Central	2	22	114	626	737	_	0	6	_	2	_	0	21	1	9
lowa Kansas	N	0 6	0 22	N 172	N 295	_	0	2 2	_	2	_	0	1 3	_	4
Minnesota	_	0	0	_	—	_	0	2	_	_	_	0	4	_	_
Missouri Nebraska <sup>¶</sup>	N	11 0	51 0	400 N	414 N	_	0 0	3 1	_	_	_	0 0	1 6	_	_
North Dakota	2	0	108	54	_	_	0	2	—	—	_	0	11		4
South Dakota S. Atlantic	 16	0 57	4 146	1,278	28 2,971	_	0 0	5 4	_	2	_	0 0	6 4	1	1
Delaware		0	4	1,270	21	_	0	0	_		_	Ō	1	_	_
District of Columbia Florida		0 28	3 67	846	17 1,077	_	0	2 2	_	_	_	0	1	_	_
Georgia	N	0	0	N	N	_	0	1	—	_	_	0	1	_	_
Maryland <sup>¶</sup> North Carolina	N N	0 0	0	N N	N N	_	0 0	2	_	1	_	0	3 1	_	_
South Carolina <sup>¶</sup>	_	5	54	154	555	_	0	Ö	_	—	_	0	1	_	_
Virginia <sup>¶</sup> West Virginia	5	7 10	119 32	28 248	877 424	_	0	0 0	_	1	_	0	1	_	_
E.S. Central	2	14	28	364	810	_	0	7	_	3	_	0	9	_	8
Alabama <sup>¶</sup> Kentucky	2 N	14 0	28 0	363 N	800 N	_	0 0	3 1	_	_	_	0 0	2 0	_	1
Mississippi	—	0	1	1	10	_	0	4	_	1	_	0	8	—	5
Tennessee <sup>1</sup> W.S. Central	N 60	0 93	0 747	N 2,890	N 5,770	_	0 0	2 8	2	2 8	_	0 0	3	_	2 8
Arkansas <sup>¶</sup>		4	47	96	420	_	0	1	1	3	_	Ō	1	_	_
Louisiana Oklahoma	2 N	1 0	5 0	43 N	50 N	_	0 0	3 1	_	2	_	0	5 1	_	1 3
Texas <sup>¶</sup>	58	85	721	2,751	5,300	_	Ö	6	1	3	_	0	4	_	4
Mountain Arizona	1	29 0	83 0	735	1,366	_	0 0	12 10	2 1	2 1	_	0 0	22 8	1	11
Colorado	1	13	44	327	553	_	0	4	_	_	_	0	10	_	8
Idaho <sup>¶</sup> Montana <sup>¶</sup>	N	0 3	0 27	N 105	N 186	_	0	1 0	1	1	_	0 0	6 2	_	1
Nevada¶	Ν	0	0	N	N	—	õ	2	_	_	_	0	3	1	_
New Mexico <sup>¶</sup> Utah	_	4 10	20 31	114 189	138 480	_	0 0	1 2	_	_	_	0 0	1 5	_	1
Wyoming <sup>¶</sup>	—	0	1		9	—	0	0	—	—	—	0	2	—	1
Pacific Alaska	_	2 1	7 6	61 40	70 30	_	0 0	38 0	_	4	_	0 0	23 0	_	5
California	_	0	0	—	_	_	0	37	_	4	_	0	20	_	5
Hawaii Oregon <sup>¶</sup>	N	1 0	4 0	21 N	40 N	_	0	0 2	_	_	_	0	0 4	_	_
Washington	N	0	0	N	N	_	0	1	_	_	_	0	1	_	_
American Samoa C.N.M.I.	Ν	0	0	N	N	_	0	0	—	_	_	0	0	—	_
Guam	_	1	3	_	55	_	0	0	_	_	_	0	0	_	_
Puerto Rico	1	7	17	130	341	—	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. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum. \* Incidence data for reporting year 2008 and 2009 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly. † 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/epo/dphsi/phs/infdis.htm. <sup>1</sup> Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

#### TABLE III. Deaths in 122 U.S. cities,\* week ending July 4, 2009 (26th week)

All         Fail         Papering area         Alge         268         45-44         2-4         1           New England         434         209         108         24         9         3         38         S.Atlantic         1.008         75         35         299         90         34         32           Gardmeidge, MA         18         9         0         -         -         0         Chaiton, GA         108         75         35         18         4         6           Garneridge, MA         12         5         -         -         0         Chaiton, GA         185         58         62         11         -         5           Hardroy CT         5         18         4         -         -         1         Nortic, VA         36         22         9         1         -         3         1         -         4         1         -         4         1         -         4         1         -         4         1         -         1         1         1         -         1         -         1         -         1         -         3         1         1         -         1         -         <		All causes, by age (years)						All causes, by age (years)								
Boston, MA         108         70         28         7         2         1         6         Islamine, GA         138         75         35         18         4         6           Cambridge, MA         12         9         3         -         -         -         1         Chriotte, NC         89         51         26         17         -         5           Lovell, MA         12         8         4         -         -         -         1         Richmont, VA         51         22         11         -         -         4           Wind FL         10         3         1         -         -         -         1         Richmont, VA         51         32         11         -         -         4         Norle, VA         53         32         11         -         -         4         Norle, VA         33         11         -         -         -         -         Norle, VA         33         11         -         -         -         Summan, GA         45         33         11         -         -         -         -         Summan, GA         45         35         -         1         -         -         - <th>Reporting area</th> <th></th> <th><u>≥</u>65</th> <th>45–64</th> <th>25–44</th> <th>1–24</th> <th>&lt;1</th> <th></th> <th>Reporting area</th> <th></th> <th>≥65</th> <th>45–64</th> <th>25–44</th> <th>1–24</th> <th>&lt;1</th> <th>P&amp;I<sup>†</sup> Total</th>	Reporting area		<u>≥</u> 65	45–64	25–44	1–24	<1		Reporting area		≥65	45–64	25–44	1–24	<1	P&I <sup>†</sup> Total
Bridgeport, CT       U	New England	434	290	108		9	3	38	S. Atlantic	1,068	613	299	90	34	32	57
Cambridge, MA         12         9         3         -         -         -         1         Charlote, NC         89         51         26         7         -         5           Hardrot, CT         58         38         12         5         5         -         6         Masc, RL, I         12         76         28         9         6         2         -         -         -         -         Masc, RL, I         17         76         28         9         6         2         -																8
Fail Roef, MA         25         19         5         1         -         -         3         Jacksonville, PL         96         58         24         11         2         -         3           Lowell, MA         12         8         4         -         -         -         1         Nortisk, VA         36         12         28         9         1         -         3         1         -         3         1         -         3         1         -         3         1         -         3         1         -         3         1         -         3         1         -         -         2         1         Nortik, VA         36         31         1         -         -         -         2         1         Nortik, VA         36         31         1         -         -         -         11         Nortik, VA         30         31         1         -         -         1         Nortik, VA         30         31         1         -         -         -         Nortik, VA         30         1         1         6         6         1         1         1         1         Nortik, VA         1         1         1<						U										15
Hardrod, CT         58         36         12         5         5         -         6         Miami, FL         12         76         28         9         6         2           Lyme, MA         12         5         5         -         -         -         1         Nordit, VA         36         23         1         -         -         3         1         -         -         3         1         -         -         3         1         -         -         4         32         14         1         -         -         -         4         Nordit, VA         33         11         -         -         1         -         -         -         -         -         -         -         -         -         -         -         -         -         -         1         Standard         -         1         5         - </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td>—</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>5</td> <td>6</td>						_	—								5	6
Lowell, MA12841Nordik, VA362391-3New Bedror, MA231931223141-4New Bedror, MA2319312223111-4New Bedror, MA11431166Spinopliel, MA4330124Wishington, D.C.111 <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>4</td>						_	_									4
$ \begin{array}{c} \mbox{Lim}, \ MA}^{A}, \ \ 5 \ \ 5 \ \ 5 \ \ 7 \ \ \ \ \ 7 \ \ 7 \ \ 7 \ \ 7 \ \ 7 \ \ 7 \ \ 7$						Э										11
New Eldron, MA         23         19         3         1         -         -         2         1         Sinvarian, GA         50         32         11         3         3         1           Providence, RI         52         28         20         3         1         -				-		_						-				_
New Haven, CT         15         10         3         -         -         2         1         St. Petersburg, FL         45         28         10         7         -	, ,					_										5
Providence, RI         52         28         20         3         1         -						_	2								_	2
Somewile, MA         1         1         - <t< td=""><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>5</td><td>3</td><td>5</td></t<>						1								5	3	5
Water bury, CT         20         15         3         2         -         -         1         Es. Central         680         415         177         41         23         24           Mid. Altanti, W         500         38         9         1         -         2         3         3         1         1         1         1         3         1         1         1         -         -         2         3         Allanti, NV         750         3         1         1         -         -         2         3         3         1         1         1         -         4         4         5         3         1         1         - </td <td>Somerville, MA</td> <td>1</td> <td>1</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>Washington, D.C.</td> <td>112</td> <td>46</td> <td>43</td> <td>11</td> <td>6</td> <td>6</td> <td>_</td>	Somerville, MA	1	1	_	_	_	_	_	Washington, D.C.	112	46	43	11	6	6	_
Workester, MA         60         40         15         4         1         -         10           Mid. Attantic         1,672         1,124         401         90         31         -         2         3           Albary, NY         50         38         9         1         -         2         3           Albary, NY         50         38         9         1         -         2         3           Albary, NY         25         17         7         1         -         -         2         3           Buffalo, NY         25         18         9         1         -         -         -         Memphs; TN         110         65         28         7         6         4           Gamma, NJ         25         11         10         1         1         1         1         4000 kie, AL         7         15         82         16         4         1	Springfield, MA	43	30	12	1	_	—	4	Wilmington, DE	9	4	4	1	_	—	1
Mid. Alamic       1.672       1,672       1,72       1,72       1,7       7       1       -       2       3         Allentown, PA       25       17       7       1       -       -       2       3       1       1       -       4       5       3       1       1       -       4       5       3       1       1       -       4       5       3       1       1       -       4       5       3       1       1       -       4       4       5       3       1       1       -       4       4       5       1       1       -       4       4       1       -       -       -       -       Mobile, AL       79       60       9       8       2       -       -       -       Mobile, AL       71       1       2       1       -       -       -       Mobile, AL       71       1       1       - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>—</td> <td></td> <td></td> <td>680</td> <td>415</td> <td></td> <td></td> <td>23</td> <td></td> <td>51</td>							—			680	415			23		51
Albary, NY         66         88         9         1         -         2         3         Knoxvile, TM         76         42         24         4         5         3           Burfab, NY         72         46         16         6         4         -         5         Lexington, KY         54         35         14         1         -         4           Burfab, NY         72         46         16         6         4         -         5         Memphis, TM         110         65         28         7         6         4         2         1         -         4         Monigomey, AL         41         27         11         2         1         -         -         -         Naskille, TM         157         82         6         11         8         10         Niskille, TM         157         82         6         11         8         10         -         -         -         Corpus Chrish, TX         40         28         7         5         -         -         -         -         -         -         Corpus Chrish, TX         40         28         10         0         0         0         0         0         0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>10</td></t<>																10
Allentiown, PA       25       17       7       1       -       -       2       Lexington, KY       54       35       14       1       -       4         Buffalo, NV       72       46       16       6       4       -       -       -       Mobile, AL       79       60       9       8       2       -       -       -       Allention       Mobile, AL       79       60       9       8       2       -       -       -       Allention       Mobile, AL       79       60       9       8       2       -       -       -       Allention       Mobile, AL       79       60       9       8       2       -       -       -       1       1       1       1       1       1       1       1       1       1       1       Allention       Nasiville, NX       70       52       12       2       3       1       Nasiville, NX       174       90       59       12       7       5       1       1       1       -       -       Fort Worth, TX       10       10       10       10       10       10       10       10       10       10       10       10						31										4
Buttalo, NY       72       46       16       6       4        5       Memphis, TN       110       65       28       7       6       4         Carnder, NJ       7       4       2       1          Montgomer, AL       41       27       11       2       1         Montgomer, AL       41       27       11       2       1         Montgomer, AL       41       27       11       2       1          Montgomer, AL       41       27       13       9          1       Montgomer, AL       41       10       1       1       2       1       Baton Rouge, LA       40       28       7       6       3       16          Corpus Christi, TX       40       28       6       2          Dalas, TX       174       90       59       16       0       1       1         1       Litten NT       10       10       10       10       10       10       10       10       10       10       10       10						_										4
Camader, NJ       29       19       9       1         Mobile, ÅL       79       60       9       8       2          Erikabeth, NJ       7       4       21       1         Nashville, TI       17       11       21       1          Erik, PA       54       41       10       1       1       1       8       Nashville, TN       157       82       46       11       8       10         Jersey City, NJ       22       13       9       -       -       -       1       Austin, TX       70       52       12       2       3       1         Paterson, NJ       6       5       -       1       -       -       6       Corpus Christ, TX       40       28       6       2       -       -       -       Fort Work, TX       U						_										_
Elizabeth, NJ 7 4 2 1 $-$ - 3 Ene, PA 54 41 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	,					4	—									9
Erie, PA       54       41       10       1       1       1       8       Nashville, IN       157       82       46       11       8       10         New ork, City, NV       753       501       191       43       7       11       34       Austin, TX       70       52       12       2       3       1         Newark, NV       25       11       10       1       2       1       34       Austin, TX       70       52       12       2       3       1         Paterson, NU       6       5       -       1       -       -       3       0       Dallas, TX       174       90       59       16       9       -       -       -       Corpus Christi, X       40       32       6       2       -       -       -       Corpus Christi, X       40       32       6       2       -       -       -       -       Corpus Christi, X       40       32       6       5       -       -       -       -       -       New Orleans, LA       U       U       U       U       U       U       U       U       U       U       U       U       U       U						_	_								_	6 6
Jersey City, NJ         22         13         9         -         -         -         1         W.S. Central         B52         515         218         67         35         10           New York City, NV         755         501         10         1         1         2         1         Baton Rouge, LA         40         28         7         5         -         -         -         -         -         -         Baton Rouge, LA         40         28         7         5         -			-			-									10	12
New York City, NY         753         501         191         443         7         11         34         Austin, TX         70         52         12         2         3         1           Paterson, NJ         6         5         -         1         -         -         3         Baton Rouge, LA         40         32         6         2         -         -         -         -         Corpus Christi, TX         40         32         6         2         -         -         -         Corpus Christi, TX         40         32         6         2         -         -         -         -         Corpus Christi, TX         40         32         6         2         -         -         -         Corpus Christi, TX         40         32         6         2         -         -         -         -         Corpus Christi, TX         40						1			1 1							47
Newark, NJ         25         11         10         1         1         2         1         Bator Rouge, LA         40         28         7         5            3         Corpus Christ, IX         40         28         7         5            3         Corpus Christ, IX         40         28         7         5            3         Corpus Christ, IX         40         28         7         5            Corpus Christ, IX         174         90         59         12         7         5           Bochester, NY         20         16         3         1           1         Houston, TX         304         160         9         12         3         1           1         Hueston, TX         10         U						7										47
Paterson, NJ         6         5         -         1         -         -         3         Corpus Christi, TX         40         32         6         2         - <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>_</td><td></td></t<>															_	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $															_	1
Pittsburgh, PA       26       21       4       1       -       -       6       El Pas/G, TX       99       71       18       6       3       1         Reading, PA       26       18       5       2       -       1       -																9
Reaching, PA       26       18       5       2       -       1       -         Rochester, NY       105       76       24       1       3       1       13       13       13         Schenetiday, NY       20       16       3       1       -       -       1       Houston, TX       304       160       91       28       16       9         Schenetiday, NY       20       16       3       1       -       -       1       Houston, TX       304       160       91       28       16       9         Syracuse, NY       59       46       10       1       1       3       3       -       -       1       Schereport, LA       22       17       2       -       3       -       -       Tulsa, OK       103       65       23       12       3       -       -       -       1       Tulsa, OK       103       65       23       12       5       -       -       -       1       16       1       -       1       Colorado Springs, CO       75       45       21       5       3       1       2       -       -       Detotot, MI       10       1																2
Rochester, NY105762413113Huttle Rock, ARUUU <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td>Ū</td></t<>															-	Ū
Scratuon, PÅ       21       16       5                 San Antonio, TX       U						3		13		304	160	91	28	16	9	21
	Schenectady, NY	20	16	3	1	_	_	1	Little Rock, AR	U	U	U	U	U	U	U
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Scranton, PA	21	16	5	_	_			New Orleans, LA	U	-	U			-	U
Ulica, NY1614111Tuisa, OK1036523123-Yonkers, NY1172114Mountain924585234503420Akron, OH5234123124Boise, ID4234611Canton, OH532451124Colorado Springs, CO754521531Chicago, IL233133641810826Denver, CO673918244Cincinnati, OH704316617Ogden, UT3626433-Columbus, OHUUUUUUUUU00003227787Dayton, OH9971214125Pueblo, CO31246-1Detroit, MIUUUUUUUUUU10164252732Fort Wayne, IN8161133224Pacific1,341891328753017Gary, IN732-11-3						1	1						U		U	U
Vorkers, NY117211-4Mountain924585234503420E.N. Central1,36591530567384089Albuquerque, NM1136134125-Akron, OH5234123124Boise, IDColorado Springs, CO754521531Chicago, IL23313641810826Derver, CO673918244Cleveland, OH194135401261773626433-Columbus, OHUUUUUUUUVPhoenix, AZ1337237987Dayton, OH99712141255111-3227373227379873Evansville, IN503212242Pacific1,3418913287530177Gard, Rapids, MI5237103111-561932278Indianapolis, IN732-11-5619355	,				1	—	—									2
E.N. Central       1,365       915       305       67       38       40       89       Albuquerque, NM       113       61       34       12       5          Akron, OH       52       34       12       3       1       2       4       Boise, ID       42       34       6       1        1         Canton, OH       33       24       5       1       1       2       1       Boise, ID       42       34       6       1        1         Chicago, IL       233       133       64       18       10       8       26       Denver, CO       67       39       18       2       4       4         Cleveland, OH       194       135       40       12       6       1       7       Ogden, UT       36       26       4       3       3          Columbus, OH       U       U       U       U       U       U       U       Sattake City, UT       101       64       25       2       7       3         Dayton, OH       9       7       13       3       2       2       4       2       2       7 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>5</td></t<>																5
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Columbus, OH       U <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>3</td></t<>																3
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Fort Wayne, IN       81       61       13       3       2       2       4       Pacific       1,341       891       328       75       30       17         Gary, IN       7       3       2       -       1       1       -       Berkeley, CA       11       6       5       -																4
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Grand Rapids, MI       52       37       10       3       1	· · ·	7	3	2	_	1	1	_	Berkeley, CA	11	6	5	_		_	2
Lansing, MI       46       36       10         3       Honolulu, HI       56       41       13       2           Milwaukee, WI       55       35       15       4       1        3       Long Beach, CA       62       39       15       5        3         Peoria, IL       53       40       8       1       1       3       5       Los Angeles, CA       211       136       41       21       8       5         Rockford, IL       46       30       11       3       -       2       2       Pasadena, CA       15       12       2        -1       1 <t< td=""><td>Grand Rapids, MI</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Fresno, CA</td><td></td><td></td><td>29</td><td></td><td>8</td><td>—</td><td>11</td></t<>	Grand Rapids, MI								Fresno, CA			29		8	—	11
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Peoria, IL       53       40       8       1       1       3       5       Los Angeles, CA       211       136       41       21       8       5         Rockford, IL       46       30       11       3       -       2       2       Pasadena, CA       15       12       2       -       -       1         South Bend, IN       28       22       5       1       -       -       2       Pasadena, CA       15       12       2       -       -       1 <td></td> <td></td> <td></td> <td></td> <td>—</td> <td>—</td> <td>—</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td>—</td> <td>8</td>					—	—	—							_	—	8
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South Bend, IN       28       22       5       1       -       -       2       Portland, OR       78       54       19       2       2       1         Toledo, OH       83       63       18       1       1       -       3       Sacramento, CA       137       89       35       11       1       1         Youngstown, OH       31       27       3       -       -       1       2       Sacramento, CA       137       89       35       11       1       1         Youngstown, OH       31       27       3       -       -       1       2       Sacramento, CA       137       89       35       11       1       1         W.N. Central       356       239       76       28       6       7       18       San Diego, CA       145       95       38       7       3       2         Duluth, MN       19       13       6       -       -       -       -       Sant Jose, CA       145       95       38       7       3       2         Duluth, MN       19       13       6       -       -       1       Seattle, WA       89       57						1							21	8		24
Toledo, OH       83       63       18       1       1        3       Sacramento, CA       137       89       35       11       1       1         Youngstown, OH       31       27       3        -       1       2       San Diego, CA       117       85       29       1       2          W.N. Central       356       239       76       28       6       7       18       San Diego, CA       117       85       29       1       2          Bes Moines, IA       U       U       U       U       U       U       U       U       San Jose, CA       145       95       38       7       3       2        San Jose, CA       145       95       38       7       3       2        San Jose, CA       145       95       38       7       3       2       San Jose, CA       145       95       38       7       3       2       San Jose, CA       145       95       38       7       3       2       1       Kansas City, KS       13       7       6         1       Seattle, WA       89       57       23 <td></td> <td></td> <td></td> <td></td> <td></td> <td>—</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td>_</td> <td></td> <td>1</td>						—							_	_		1
Youngstown, OH       31       27       3        1       2       San Diego, CA       117       85       29       1       2          W.N. Central       356       239       76       28       6       7       18       San Francisco, CA       85       55       23       3       1       3         Des Moines, IA       U       U       U       U       U       U       U       U       U       U       U       San Francisco, CA       85       55       23       3       1       3         Des Moines, IA       U						_										4
W.N. Central       356       239       76       28       6       7       18       San Francisco, CA       85       55       23       3       1       3         Des Moines, IA       U       U       U       U       U       U       U       U       U       U       U       U       U       San Jose, CA       145       95       38       7       3       2         Duluth, MN       19       13       6       -       -       -       -       San Jose, CA       145       95       38       7       3       2         Kansas City, KS       13       7       6       -       -       -       1       Seattle, WA       89       57       23       6       2       1         Kansas City, MO       63       42       15       3       -       3       2       Spokane, WA       47       31       12       3       1       -       -       -       Tacoma, WA       111       72       33       4       2       -         Lincoln, NE       37       29       3       4       1       -       3       -       Tacoma, WA       111       72						I									I	8
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Duluth, MN         19         13         6         —         …         Santa Cruz, CA         22         14         7         1         —         —         …         …         …         …         …         …         …         …         …         …         …         …         …         …         …         …         …         …         …<																
Kansas City, KS       13       7       6       —       —       1       Seattle, WA       89       57       23       6       2       1         Kansas City, MO       63       42       15       3       —       3       2       Spokane, WA       47       31       12       3       1       —       3       Eincoln, NE       37       29       3       4       1       —       3       Tacoma, WA       111       72       33       4       2       —         Minneapolis, MN       55       31       15       6       1       2       3       Total <sup>¶</sup> 8,692       5,587       2,146       532       240       183         Omaha, NE       52       39       10       3       —       4 </td <td></td> <td></td> <td></td> <td></td> <td>0</td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>14</td>					0	0										14
Kansas City, MO       63       42       15       3       —       3       2       Spokane, WA       47       31       12       3       1       —       3         Lincoln, NE       37       29       3       4       1       —       3       Tacoma, WA       111       72       33       4       2       —         Minneapolis, MN       55       31       15       6       1       2       3       Total <sup>11</sup> 8,692       5,587       2,146       532       240       183         Omaha, NE       52       39       10       3       —       4					_	_									1	6
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St. Paul, MN 35 27 7 1 — 2						_										
Wichita, KS 49 29 10 6 3 1 1						3			1							

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.

<sup>5</sup> 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. <sup>1</sup> Total includes unknown ages.

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