

## HIV Transmitted from a Living Organ Donor — New York City, 2009

Routine screening of organ donors for human immunodeficiency virus (HIV) infection has made transmission of HIV through organ transplantation rare in the United States. However, despite routine screening, transmission of HIV can be an uncommon complication of organ transplantation and is a public health concern. In 2010, the New York City (NYC) Department of Health and Mental Hygiene (NYC DOHMH) was notified of a potential transplant-related HIV infection. This report summarizes the results of the subsequent public health investigation, which confirmed HIV transmission through transplantation of an organ from a living donor. To reduce the risk for transmission of HIV through living-donor organ transplantation, transplant centers should screen living donors for HIV as close to the time of organ recovery and transplantation as possible, using sensitive tests for both chronic and acute infections, namely, serology and nucleic acid testing (NAT). Furthermore, clinicians should inform transplant candidates of the potential risks for disease transmission and advise donors during evaluation of their obligation to avoid behaviors that would put them at risk for acquiring HIV before organ donation.

### Recipient Illness

An adult with hemodialysis-dependent renal failure received a kidney transplant from a living donor at hospital A in NYC in 2009. The recipient did not have any history of sexually transmitted infections (STIs), injection drug use, sex with injection drug users, or other high-risk sexual activity. The recipient received blood transfusions in 2006, but none previously. The recipient tested negative for HIV infection by enzyme immunoassay (EIA) 12 days before the transplant (Figure). The posttransplant clinical course was complicated by multiple hospitalizations for febrile illness, episodes of renal insufficiency, and evaluation for possible rejection of the transplanted kidney. During the year after kidney transplantation, the recipient did not engage in any behaviors that would increase the risk for acquiring HIV. One year after

transplant, the recipient was hospitalized with refractory oral and esophageal candidiasis; screening for HIV infection by EIA was positive, and HIV infection was confirmed with a positive Western blot. The recipient's initial CD4 cell count was  $<100$  cells/ $\mu$ L. The advanced immunosuppression was attributed, in part, to the recipient's induction with antithymocyte globulins (an immunomodulator that depletes T-lymphocytes to prevent graft-versus-host disease) and use of mycophenolic acid (a drug that suppresses lymphocyte proliferation, prescribed to prevent rejection of a transplanted kidney).

### Donor Illness

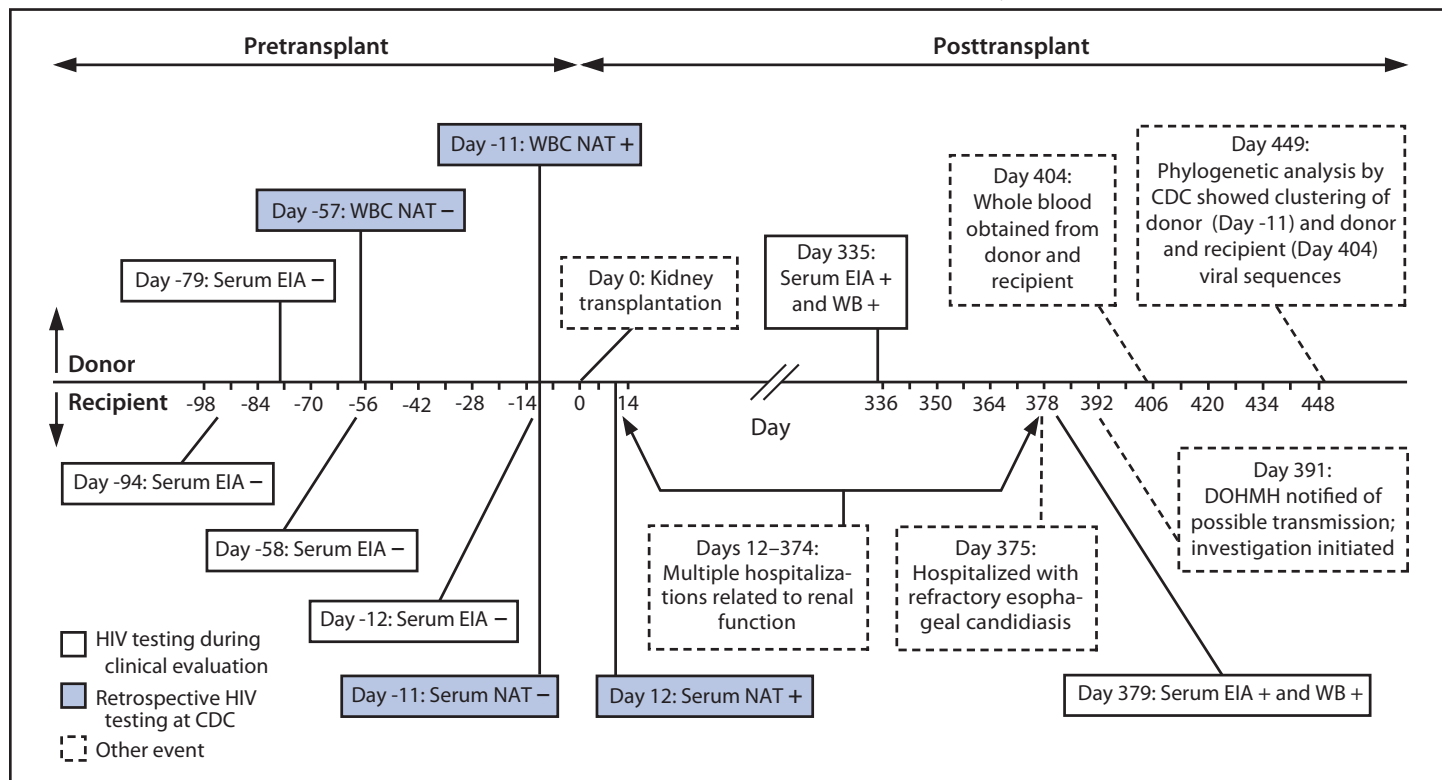
The donor was an adult male who underwent evaluation as a potential living donor for kidney transplantation at hospital A in 2009. Consistent with the hospital's protocol, a multidisciplinary team (consisting of a living donor coordinator, nephrologist, transplant surgeon, psychiatrist, social worker, and nutritionist) determined the donor's eligibility by assessing his immunologic compatibility with the recipient, his general health, his psychosocial status, and his willingness to donate. His evaluation revealed a previous diagnosis of syphilis and a history of sex with male partners. Laboratory testing conducted during the initial evaluation 79 days before transplant showed no evidence of infection with HIV by EIA, hepatitis B virus

### INSIDE

- 302 Raccoon Roundworms in Pet Kinkajous — Three States, 1999 and 2010
- 306 Progress Toward Interrupting Wild Poliovirus Circulation in Countries With Reestablished Transmission — Africa, 2009–2010
- 312 Notes from the Field: Poliomyelitis Outbreak — Republic of the Congo, September 2010–February 2011
- 314 Announcement
- 316 QuickStats



FIGURE. Timeline of events involving HIV transmission from a living organ donor — New York City, 2009



**Abbreviations:** HIV = human immunodeficiency virus; EIA = HIV enzyme immunoassay; HIV = human immunodeficiency virus; NAT = nucleic acid test; WB = HIV Western blot; WBC = white blood cell; DOHMH = New York City Department of Health and Mental Hygiene.

The *MMWR* series of publications is published by the Office of Surveillance, Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

**Suggested citation:** Centers for Disease Control and Prevention. [Article title]. *MMWR* 2011;60:[inclusive page numbers].

**Centers for Disease Control and Prevention**

Thomas R. Frieden, MD, MPH, *Director*  
 Harold W. Jaffe, MD, MA, *Associate Director for Science*  
 James W. Stephens, PhD, *Office of the Associate Director for Science*  
 Stephen B. Thacker, MD, MSc, *Deputy Director for Surveillance, Epidemiology, and Laboratory Services*  
 Stephanie Zaza, MD, MPH, *Director, Epidemiology and Analysis Program Office*

**MMWR Editorial and Production Staff**

Ronald L. Moolenaar, MD, MPH, *Editor, MMWR Series*

John S. Moran, MD, MPH, <i>Deputy Editor, MMWR Series</i>	Martha F. Boyd, <i>Lead Visual Information Specialist</i>
Robert A. Gunn, MD, MPH, <i>Associate Editor, MMWR Series</i>	Malbea A. LaPete, Julia C. Martinroe,
Teresa F. Rutledge, <i>Managing Editor, MMWR Series</i>	Stephen R. Spriggs, Terraye M. Starr
Douglas W. Weatherwax, <i>Lead Technical Writer-Editor</i>	<i>Visual Information Specialists</i>
Donald G. Meadows, MA, Jude C. Rutledge, <i>Writer-Editors</i>	Quang M. Doan, MBA, Phyllis H. King
	<i>Information Technology Specialists</i>

**MMWR Editorial Board**

William L. Roper, MD, MPH, Chapel Hill, NC, *Chairman*

Virginia A. Caine, MD, Indianapolis, IN	Patricia Quinlisk, MD, MPH, Des Moines, IA
Jonathan E. Fielding, MD, MPH, MBA, Los Angeles, CA	Patrick L. Remington, MD, MPH, Madison, WI
David W. Fleming, MD, Seattle, WA	Barbara K. Rimer, DrPH, Chapel Hill, NC
William E. Halperin, MD, DrPH, MPH, Newark, NJ	John V. Rullan, MD, MPH, San Juan, PR
King K. Holmes, MD, PhD, Seattle, WA	William Schaffner, MD, Nashville, TN
Deborah Holtzman, PhD, Atlanta, GA	Anne Schuchat, MD, Atlanta, GA
John K. Iglehart, Bethesda, MD	Dixie E. Snider, MD, MPH, Atlanta, GA
Dennis G. Maki, MD, Madison, WI	John W. Ward, MD, Atlanta, GA

(HBV) by HBV surface antigen testing, or hepatitis C virus (HCV) by anti-HCV serology; a rapid plasma reagin test for syphilis was reactive undiluted (1:1) with a fluorescent treponemal antibody absorption test, also positive, consistent with previously treated syphilis. The donor's kidney was removed without complication; no blood products were administered around the time of transplant. Routine medical evaluation by the transplant team 6 months after the transplant was unremarkable. Approximately 1 year after the transplant, the donor visited his primary-care physician requesting repeat screening for STIs. Serologic testing for HIV antibody by EIA with confirmatory Western blot was positive. The transplant team learned of the living donor's new HIV diagnosis during his follow-up visit 1 year after the transplant.

The diagnosis of HIV in both the donor and recipient raised the possibility of transplant-transmitted HIV infection. NYC DOHMH was notified of the possible transmission, and a public health investigation was initiated.

## Public Health Investigation

The donor and recipient each were interviewed in person using a standardized case interview form. Medical records were reviewed, focusing on relevant medical history before and after kidney transplantation, history of HIV testing and evidence of infection, pretransplant evaluation, posttransplant course, blood product transfusion history, other past medical history, history of substance use, sexual history, and other risk factors for HIV infection. The recipient's transplant coordinator, nephrologist, and HIV physician were interviewed separately to review the transplant evaluation and medical course. The donor's primary-care physician and transplant nephrologist also were interviewed.

During the public health investigation, the donor reported unprotected sex with one male partner during the 1 year before the transplant, including the time between his initial evaluation and organ recovery. He did not know his partner's HIV status. He did not report any history of injection drug use, tattoos, or blood transfusions.

Two samples of frozen leukocyte specimens collected from the organ donor 57 and 11 days pretransplant and two frozen serum specimens collected from the recipient 11 days pretransplant and 12 days posttransplant were sent to CDC for HIV testing. HIV NAT on the donor leukocytes collected 57 days pretransplant was negative; however, DNA sequences for three HIV genes (envelope gp41, polymerase, and group-specific antigen p17) were amplified from donor leukocytes collected 11 days pretransplant and sequenced at CDC. Recipient serum collected 11 days pretransplant was nonreactive for HIV-1 RNA by Aptima (Gen-Probe). Recipient serum collected 12 days post transplant was reactive for HIV RNA by Aptima.

### What is already known on this topic?

Routine laboratory screening of organ donors for human immunodeficiency virus (HIV) infection, introduced in 1985, has made transmission of HIV through organ transplantation rare in the United States. However, no national policy exists for the type or timing of HIV screening tests used for living donors.

### What is added by this report?

This report describes the first documented case in the United States of HIV transmission through transplantation of an organ from a living donor, despite screening using serologic testing.

### What are the implications for public health practice?

All prospective living organ donors should have their initial serologic tests for HIV supplemented with repeat testing with a combination of an HIV serologic test and a nucleic acid test as close to the time of organ donation as possible, but no longer than 7 days before organ donation. Clinicians should advise living donors of their obligation to avoid behaviors that would put them at risk for acquiring HIV before organ donation.

On posttransplant day 404, whole blood specimens were obtained from the donor and recipient for phylogenetic analysis at CDC (Figure). The donor had initiated antiretroviral therapy 2 weeks before the specimen was obtained, whereas the recipient had not yet initiated antiretroviral therapy. HIV DNA sequences from donor and recipient peripheral blood lymphocytes collected on day 404 were amplified and sequenced. Sequences from these two specimens were analyzed phylogenetically together with HIV sequences obtained from the donor's frozen leukocyte specimen collected 11 days pretransplant. The gp41, polymerase, and p17 sequences from the donor and recipient were nearly identical, with greater than 98% identity and tight phylogenetic clustering, suggesting that the two viruses are highly related.

### Reported by

*MA Bernard, MD, J Eavey, MSPH, HW Gortakowski, MPH, C Sabharwal, MD, C Shepard, MD, L Torian, PhD, New York City Dept of Health and Mental Hygiene; L McMurdo, LC Smith, MD, K Valente, New York State Dept of Health. JT Brooks, MD, WM Heneine, PhD, MP Joyce, MD, SM Owen, PhD, A Shankar, MS, W Switzer, MPH, Div of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention; E Farnon, MD, M Kuehnert, MD, D Seem, Div of Healthcare Quality Promotion, National Center for Emerging and Zoonotic Infections; T Al-Samarrai, MD, P Gounder, MD, CK Kwan, MD, EIS officers, CDC.*

### Editorial Note

This report describes the first confirmed case of HIV transmission through organ transplantation from a living donor reported since 1989 (1) and the first such transmission documented in the United States since laboratory screening for HIV infection became available in 1985. The time sequence in which HIV was isolated from frozen specimens, tight phylogenetic clustering of HIV sequences from the donor and recipient, and lack of other HIV exposure risk in the recipient confirmed that HIV was transmitted by transplantation of a kidney from a living donor who was infected after screening negative for HIV infection during his initial evaluation. This case highlights the need for repeat HIV screening for all living donors using a combination of HIV serology and NAT, as close to the time of organ donation as logistically feasible, to rule out acute or recent HIV infection in living donors before organ donation.

Reports of confirmed, donor-derived HIV transmission are rare but notable and have important implications for public health when they occur despite screening. The annual number of living donors increased from 1,829 to 6,609 during 1988–2009.\* Although the Organ Procurement and Transplantation Network (OPTN) sets national policies for organ allocation, including screening potential donors for HIV and other infections, current OPTN policies do not address screening and counseling for HIV infection in living potential donors.

Deceased organ donors typically are screened for HIV infection at the time of the donor's cardiac death or brain death, which occurs within hours of organ recovery. In contrast, living donors undergo a longer and more comprehensive physical and psychological evaluation (2). In the case described in this report, the time between initial donor evaluation and transplant surgery was 10 weeks. This longer evaluation process for prospective living donors allows potential for acquisition of infections after initial evaluation, emphasizing the need for repeat testing before organ recovery to rule out recently acquired infections. Prospective living donors and transplant candidates frequently have a personal relationship (e.g., they are relatives or friends), which might make a donor less likely to disclose potential risk factors for HIV infection. Therefore, all living donors should be informed about modes of transmission and risk factors for HIV infection and should be counseled to avoid behaviors that would place them at risk for acquiring HIV infection before organ recovery (3). For persons with a history of previous high-risk behavior (e.g., high-risk sexual

activity or injection drug use) identified during evaluation (3), individualized counseling and a detailed discussion of specific strategies to avoid risk behaviors should be provided.

The availability of NAT now permits detection of HIV infection before antibodies develop and are detectable by serology. The window between time of HIV infection and time of development of detectable HIV-specific antibodies ranges from 3 to 8 weeks, whereas with NAT, the window (i.e., the "eclipse period" for the time from infection to detection of virus in blood) is estimated to be 8–10 days (4,5). For blood and tissue donation, the combination of HIV NAT and serology is used to screen all donors. However, HIV NAT is not consistently used for organ donor screening. A recent survey of organ procurement organizations (OPO) found that 52% of OPOs report always performing HIV NAT on deceased donors, whereas 24% of OPOs never perform HIV NAT (6). For deceased potential donors who screen negative by HIV serology, NAT can reduce the risk for HIV transmission from an undetected infection during the window period by approximately 68% (7,8). This reduction reflects differences in the timeframe of detection between the two tests. U.S. Public Health Service guidelines have recommended serologic screening for HIV infection in potential organ donors since 1994 (3). A forthcoming updated revision to those guidelines, currently in draft form, likely will include consideration of NAT in addition to serology to screen for HIV infection in all potential organ donors, living and deceased.

In the case described in this report, the donor was screened for HIV infection by EIA 10 weeks before organ procurement but was not rescreened closer to the date of transplant surgery. Despite an initial negative EIA screening and counseling for behavioral risk reduction, living donors can acquire HIV infection between the initial evaluation and organ recovery. To reduce the risk for transplant-transmitted HIV infection, living donors should be rescreened with both HIV serologic tests and NAT as close to the time of organ recovery as logistically feasible, but no longer than 7 days before organ donation (Box). In addition, clinicians should advise living donors of their obligation to avoid behaviors that would put them at risk for acquiring HIV before organ donation. Because NAT cannot detect HIV infections during the eclipse period, all transplant candidates should be informed during the evaluation process that despite donor screening, a very small risk remains that they could acquire HIV or other infections as a result of transplantation. All suspected cases of transplant-associated HIV transmission should be reported to appropriate public health authorities and to OPTN.

\*Based on Organ Procurement and Transplantation Network data as of January 14, 2011.

**BOX. CDC recommendations for prevention and screening of HIV infection in prospective living organ donors**

- All prospective living organ donors should have their initial serologic tests for HIV supplemented with repeat testing with a combination of an HIV serologic test and HIV NAT as close to the time of organ donation as feasible logistically, but no longer than 7 days preceding organ donation.
- All living donors should be advised of their obligation to avoid behaviors that would place them at risk for acquiring HIV infection before transplant surgery.
- For living donors with a history of high-risk behaviors (e.g., high-risk sexual activity or injection drug use) identified during evaluation, individualized counseling and a detailed discussion of specific strategies to avoid high-risk behaviors should be provided.
- Consistent with current policy, documents and counseling information used in the recipient consent process should explain that organ transplantation carries a risk for transmission of HIV and other pathogens because no available testing can completely eliminate the risk for transmission of all pathogens.

**Abbreviations:** HIV = human immunodeficiency virus; NAT = nucleic acid testing.

**References**

1. Quarto M, Germinario C, Fontana A, Barbuti S. HIV transmission through kidney transplantation from a living related donor. *N Engl J Med* 1989;320:1754.
2. Fischer SA, Avery RK. Screening of donor and recipient prior to solid organ transplantation. *Am J Transplant* 2009;9 Suppl 4:S7–18.
3. CDC. Guidelines for preventing transmission of human immunodeficiency virus through transplantation of human tissue and organs. *MMWR* 1994; 43(No. RR-8).
4. Fiebig EW, Wright DJ, Rawal BD, et al. Dynamics of HIV viremia and antibody seroconversion in plasma donors: implications for diagnosis and staging of primary HIV infection. *AIDS* 2003;17:1871–9.
5. Keele BF, Giorgi EE, Salazar-Gonzalez JF, et al. Identification and characterization of transmitted and early founder virus envelopes in primary HIV-1 infection. *Proc Natl Acad Sci USA* 2008;105:7552–7.
6. Kucirka LM, Alexander C, Namuyinga R, Hanrahan C, Montgomery RA, Segev DL. Viral nucleic acid testing (NAT) and OPO-level disposition of high-risk donor organs. *Am J Transplant* 2009;9:620–8.
7. Ellingson K, Seem D, Nowicki M, et al. Estimated risk of human immunodeficiency virus and hepatitis C virus infection among potential organ donors from 17 organ procurement organizations in the United States. *Am J Transplant* 2011. In press.
8. Kucirka LM, Sarathy H, Govindan P, et al. Risk of window period HIV infection in high infectious risk donors: systematic review and meta-analysis. *Am J Transplant* 2011; March 2 [Epub ahead of print].

## Raccoon Roundworms in Pet Kinkajous — Three States, 1999 and 2010

*Baylisascaris procyonis* (BP) is the common roundworm of raccoons (*Procyon lotor*). Adult BP live in the small intestine of this host, where they produce eggs that are passed in the feces. BP eggs ingested by nondefinitive host species hatch in the intestine, producing larvae that can migrate widely, causing visceral, ocular, or neural larva migrans (1). Cases of neural larva migrans in humans caused by BP likely acquired from raccoons have resulted in severe encephalitis with permanent deficits and in death (1–3). Although raccoons are the most common definitive host of BP in North America, some other carnivores, including domestic dogs, can serve as definitive hosts, making them a potential source of human disease (1). Less well-documented is infection in procyonids other than raccoons (e.g., kinkajous [*Potos flavus*] [Figure 1], coatis [*Nasua* spp.], olingos [*Bassaricyon* spp.], and ringtails [*Bassariscus astutus*]) and the potential for transmission from these species to humans. This report describes cases of BP infection in pet kinkajous that placed humans at risk for infection. Avoiding contact with feces from potentially infected animals and routine deworming of pets, including dogs and exotic species that might host this parasite, will prevent infection with BP.

FIGURE 1. A kinkajou (*Potos flavus*)



Photo/Thinkstock

### Tennessee

In early April 2010, a pet kinkajou aged 10 weeks was seen by a veterinarian in rural, northeast Tennessee for a routine health examination. The fecal examination revealed numerous ascarid eggs tentatively identified as BP and later confirmed as BP by a commercial laboratory. The veterinarian treated the kinkajou with albendazole, discussed risks and precautionary measures with the owner, and alerted the Tennessee Department of Health (TDH) to the potential human exposures.

The kinkajou had been purchased at a storefront exotic pet shop in eastern Tennessee on March 18, 2010. A TDH state public health veterinarian encouraged the store owners to consult with their veterinarian and treat the remaining kinkajous in the store. The kinkajou in question had been imported to Tennessee from a south Florida facility. Personnel from TDH and the Animal Care division of the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (USDA-AC) jointly visited the store to obtain information on recent purchases and to pursue testing of the other exotic animals.

The USDA-AC inspector collected acquisition and disposition records for 13 kinkajous that had been available for sale by the pet store during the preceding 2 years. Twelve kinkajous had been purchased by the store, and one was the offspring of the pet store's resident breeding pair. Eleven of 13 had been sold, and two were awaiting sale. TDH collected fecal samples from the cage floors of various exotic mammals and birds. Recommendations were made to the store owner concerning BP, including regular fecal cleanup and disposal, decontamination of cages and enclosures, and regular fecal examination and deworming of the animals. Although kinkajou fecal samples were not available at the time of the store visit, on April 12 and 13, samples were obtained from a littermate of the index positive animal and a breeding female that was a pet of the store owners. No parasites were detected in either animal.

The family that purchased the kinkajou included children aged 2 and 5 years. They had minimal contact with the animal and its cage and were judged to have a low risk for infection. Additionally, the family reported good hand hygiene practices. Papers lining the cage were changed on a daily basis, and feces outside the cage were disposed of immediately. As an additional precaution, the family physician prescribed treatment of family members with a single dose of mebendazole, and later prescribed for each a 10-day course of albendazole. The family remained free of clinical illness. During the pet store investigation, regional epidemiologists learned that animal care duties were shared by the two store owners and their two children aged 8 and 12 years. None reported illness, and none were treated.

A Tennessee public health veterinarian contacted the five residents who had purchased kinkajous from the pet store during the preceding year to notify them of the positive case and to offer information on free testing (conducted by Purdue University [West Lafayette, Indiana]), treatment, and cleaning. The remaining six kinkajous were purchased by residents of Michigan, Kentucky, North Carolina, and Florida; this information was shared with the respective state veterinary public health officials. The offer of free testing was extended to the two other Tennessee breeders from whom the pet store had purchased kinkajous during the preceding year. One of these submitted samples from three additional kinkajous (the breeding pair and one offspring). No parasite eggs were detected in pooled fecal samples.

### Florida

The positive juvenile kinkajou in Tennessee had been purchased from a breeder in Miami-Dade County. Notification from TDH to the Florida Department of Health (FDOH) prompted a joint site visit by USDA-AC and Miami-Dade County Health Department (MDCHD) personnel to the breeder's facility on April 12, 2010. The purpose of the visit was to conduct employee interviews using a risk assessment questionnaire, assess sanitary conditions, monitor kinkajou handling, and learn about the facility's deworming practices.

The breeding operation was fenced and maintained by the owner and one employee. The breeder raised exotic birds and kinkajous (a total of 44 kinkajous in 21 enclosures); the kinkajous were obtained from Guyana (on the northern coast of South America), with no new additions since 2008. The kinkajous were kept in their own compound in raised wire cages with nest boxes; their feces fell directly to unprotected ground below. The housing area was cleaned daily, and animals received regular veterinary care, including fecal examinations and treatment of parasitic infections, general biannual deworming, and preshipment deworming of any purchased offspring. According to the breeder's veterinarian, no BP infections had ever been identified.

Fecal samples from animals in each of the 21 enclosures were examined, and no BP eggs were found. During a subsequent USDA-AC visit, soil samples were collected from under the breeding cages of the two juveniles sent to Tennessee. Samples (weighing 40–50 g) from each of the two bags of soil were processed and examined for eggs. Infective (larvated) BP eggs (Figure 2) were found in both samples, with one being heavily contaminated.

Both the owner and employee reported regularly using good hand hygiene while working with the animals. Neither reported any illness, and they were not treated.

**FIGURE 2.** Infective (larvated) *Baylisascaris procyonis* egg uncovered from the soil under a kinkajou cage — Florida, April 2010



Photo/K. Kazacos

Two other kinkajous had been sold by the Florida breeder to the Tennessee pet store and then purchased by a wildlife rehabilitation facility in Hernando County, Florida. These kinkajous were part of a public exhibit and were housed in an area accessible to domestic animals and wildlife. Hernando County Health Department officials made a site visit with USDA-AC personnel and sent the facility owner an informational letter describing infection control and prevention measures. The owner provided fecal samples from the facility's kinkajous, which tested negative for BP. All animal and environmental samples from Florida were tested at Purdue University.

### Indiana

In an unrelated event in January 1999, a veterinarian in southern Indiana examined two pet kinkajous acquired 5 weeks earlier that were ill and subsequently died from bacterial infections. They were from a small, private, exotic animal collection that included kinkajous, coatis, spider monkeys, and various other species. The two kinkajous were necropsied and found to have approximately 20–25 BP adults in their small intestine. One animal had passed an ascarid in its feces shortly after acquisition. Based on the developmental period of the parasite (approximately 2.0–2.5 months)(1), the BP infection was present before the owner took possession of the animals.

**What is already known on this topic?**

Persons who accidentally ingest *Baylisascaris procyonis* (BP) eggs, which are shed in the feces of infected raccoons, can develop serious neurologic disease.

**What is added by this report?**

This report documents that kinkajous, exotic species often kept as pets, also can be infected with BP and can be a potential source of infection to persons in contact with these animals.

**What are the implications for public health practice?**

Increased awareness among pet owners, veterinarians, and health professionals will help reduce the risk for infection with BP by promotion of appropriate hygiene practices, including prompt removal of fecal material, and routine testing and deworming of potentially infected animals kept as pets.

The veterinarian reported that the premises were clean and the animals well cared for, including regular feces removal and disposal. Recommendations were made for deworming existing animals, increased sanitation, and environmental decontamination of the kinkajou and coati enclosures. No associated human illnesses were reported.

**Reported by**

KR Kazacos, DVM, Purdue Univ, West Lafayette; TP Kilbane, DVM, Evansville, Indiana. KD Zimmerman, DVM, Bluff City; T Chavez-Lindell, MPH, B Parman, T Lane, LR Carpenter, DVM, AL Green, DVM, Tennessee Dept of Health. PM Mann, MPH, TW Murphy, Miami-Dade County Health Dept, Miami; B Bertucci, AC Gray, MPH, Hernando County Health Dept, Brooksville; TL Goldsmith, DVM, Coconut Grove; M Cunningham, DVM, Florida Fish and Wildlife Conservation Commission; DR Stanek, DVM, C Blackmore, DVM, Florida Dept of Health. MJ Yabsley, PhD, Univ of Georgia. SP Montgomery, DVM, E Bosserman, MPH, Div of Parasitic Diseases and Malaria, Center for Global Health, CDC.

**Editorial Note**

This report describes the potential for human exposure to the raccoon roundworm from pet kinkajous. As part of the exotic pet trade, kinkajous are imported from South America and bred in captivity; the offspring are sold as exotic pets. In addition to raccoons, adult BP have been described in a kinkajou from Colombia and in another procyonid, the bushy-tailed olingo (*Bassaricyon gabbii*) (4).

Based on raccoon studies, infected animals can shed thousands to millions of BP eggs in their feces daily (1). These eggs become infective in a minimum of 11–14 days under optimal conditions and, given adequate moisture, can remain infective for years (1). After ingesting infective eggs from

fecal-contaminated articles or environments, larvae hatch in the intestinal tract and undergo a somatic migration, entering various organs and tissues. Although the incubation period in humans is undefined, severe neurologic disease can develop as soon as 2–4 weeks after ingestions of infective eggs. Severe disease occurs when larvae enter the brain or eyes causing neurologic or ocular manifestations (1–3). Although a single larva in the eye can result in ocular problems, the severity of neurologic disease is dependent upon the number of larvae migrating to the brain. Fatal human cases have been documented in children who had ingested very large numbers of eggs (5).

Prevention of disease is based on aborting migration of BP larvae to organs and tissues by postexposure treatment. The sensitivity of diagnostic tests, including tests for antibody to BP, are limited during the period after infection and before clinical signs develop, and treatment decisions must be based on risk assessment. If likelihood of infection is high, treatment with albendazole at 25–50 mg/kg per day by mouth for 10–20 days might prevent disease. However, the efficacy of postexposure treatment has not been studied extensively. The likelihood of infection might depend on factors such as known oral exposure to raccoon or other parasite host feces, presence of *Baylisascaris* eggs in the feces of the implicated animal or animals, and suspected oral exposure to raccoon feces in an area where the prevalence of raccoon infection is known to be high. Timing of postexposure treatment also is important because BP larvae can cause neurologic disease as soon as 2 weeks after ingestion of infective eggs; treatment should be initiated as soon as possible, ideally within 3 days.

The results of this investigation extend the list of potential sources of BP egg contamination to include pet kinkajous. Considering the difficulty of diagnosing and treating BP infection in humans, prevention of infection is of paramount importance. Pet dogs, kinkajous and other procyonids, and skunks (host of a related *Baylisascaris* species) (1), which might be kept as exotic pets, should receive routine veterinary care, including regular dewormings and periodic fecal examinations. Feces from potentially infected animals should be carefully disposed of at least weekly, and contaminated areas should be treated with steam or scalding/boiling water to kill residual eggs (1,3,6). Additional information about raccoon roundworm is available at <http://www.cdc.gov/parasites/baylisascaris>.

**Acknowledgments**

The findings in this report are based, in part, on contributions by G Gaj, DVM, RA Willems, DVM, ME Moore, DVM, Animal Care; MP Milleson, Wildlife Svcs, Animal and Plant Health Inspection Svc, US Dept of Agriculture.



### References

1. Kazacos KR. *Baylisascaris procyonis* and related species. In: Samuel WM, Pybus MJ, Kocan AA, eds. Parasitic diseases of wild mammals, 2nd ed. Ames, Iowa: Iowa State University Press; 2001:301–41.
2. Murray WJ, Kazacos KR. Raccoon roundworm encephalitis. Clin Infect Dis 2004;39:1484–92.
3. Gavin PJ, Kazacos KR, Shulman ST. Baylisascariasis. Clin Microbiol Rev 2005;18:703–18.
4. Overstreet RM. *Baylisascaris procyonis* (Stefanski and Zarnowski, 1951) from the kinkajou, *Potos flavus*, in Colombia. Proc Helminthol Soc Wash 1970;37:192–5.
5. Fox AS, Kazacos KR, Gould NS, et al. Fatal eosinophilic meningoencephalitis and visceral larva migrans caused by the raccoon ascarid *Baylisascaris procyonis*. N Engl J Med 1985;312:1619–23.
6. Shafir SC, Wang W, Sorvillo FJ, et al. Thermal death point of *Baylisascaris procyonis* eggs. Emerg Infect Dis 2007;13:172–3.

## Progress Toward Interrupting Wild Poliovirus Circulation in Countries With Reestablished Transmission — Africa, 2009–2010

Through efforts of the Global Polio Eradication Initiative (GPEI), begun in 1988, indigenous transmission of wild poliovirus (WPV) had been interrupted in all but four countries (Afghanistan, Pakistan, India, and Nigeria) by 2006 (1). Since 2002, a total of 39 previously polio-free countries experienced outbreaks following importation of WPV of Indian or Nigerian origin (2–4). Most outbreaks were stopped <6 months after confirmation. However, circulation in Angola, Chad, Democratic Republic of the Congo (DRC), and Sudan persisted >12 months following importation before 2009 (3,4). A key milestone of the GPEI 2010–2012 strategic plan (5) was to interrupt WPV transmission in these African countries with reestablished transmission by the end of 2010. As of March 8, 2011, the milestone appeared to be on track only in Sudan. In Sudan, WPV type 1 (WPV1) was introduced in 2004, but no cases were detected for a 31-month period during 2005–2008. When resurgence occurred in 2008, surveillance and eradication efforts were enhanced, and no case has been detected since June 2009. In Chad, WPV type 3 (WPV3) transmission has persisted since 2007, although undetected for 7 months in 2010. In Angola, WPV1 circulation has persisted following importation in 2007, and became more widespread in 2010, with subsequent importations into DRC and Republic of the Congo (ROC). In DRC, WPV1 circulation has persisted since introduction in 2006. Achieving polio eradication depends on stopping WPV transmission in the four endemic countries and overcoming substantial, ongoing programmatic weaknesses in Chad, Angola, and DRC.

### Methods of Tracking Progress

The 2010–2012 GPEI strategic plan set several milestones. These included 1) stopping WPV transmission following importation in countries with outbreaks in 2009 by mid-2010, 2) stopping WPV transmission in subsequent outbreaks <6 months after confirmation, 3) stopping WPV transmission in countries with reestablished transmission by the end of 2010, 4) stopping WPV transmission in at least two of the four WPV-endemic countries by the end of 2011, and 5) stopping WPV transmission in all countries by the end of 2012.

The World Health Organization (WHO) and UNICEF provide annual estimates of routine coverage with 3 doses of oral poliovirus vaccine (OPV) by age 12 months (OPV3) for each country.\* WPV cases are identified through acute flaccid

paralysis (AFP) surveillance and testing of stool specimens for polioviruses in WHO-accredited laboratories. Quality standards for AFP surveillance include detection of  $\geq 2$  cases of nonpolio AFP (NPAPF) (AFP with no WPV isolated from adequate specimens) per 100,000 population aged <15 years in all provinces or states and adequate stool specimen collection from  $\geq 80\%$  of AFP cases.<sup>†</sup> Vaccination recall histories collected on children aged 6–35 months with onset of NPAPF in 2010 are used to assess target population vaccination status (the proportion with  $\geq 4$  OPV doses and the proportion with no OPV doses) at the time of AFP onset. Independent monitors assess the quality of implementation of supplementary immunization activities (SIAs)<sup>§</sup> in areas considered at high risk by surveying the proportion of children missed in the SIA. Monitoring activities are variable; they are intended to provide a crude assessment of SIA quality and to identify areas needing improvement.

The Global Polio Laboratory Network provides comprehensive genomic sequencing of WPV isolates (6), enabling tracing of the origins of virus importations into previously polio-free areas<sup>¶</sup> and estimation of the duration of circulation in chains of transmission. Angola, Chad, DRC, and southern Sudan were identified in 2009 as having reestablished WPV transmission (7) because genomic sequence analysis had shown the persistence of one or more chains of WPV transmission for >12 months.

### WPV Status by Country

**Chad.** WPV3 transmission persisted in Chad after importation from Nigeria in 2007 (1,3) resulting in 79 cases in Chad during 2009–2010 in 17 of 18 provinces (Table, Figures 1 and 2) and further spread to Cameroon and Central African

<sup>†</sup> AFP surveillance quality is monitored by performance indicators. Certification standard WHO targets are a NPAPF detection rate of  $\geq 1$  case per 100,000 population aged <15 years and adequate stool specimen collection from  $\geq 80\%$  of AFP cases, in which two specimens are collected  $\geq 24$  hours apart, both within 14 days of paralysis onset, shipped on ice or frozen ice packs, and arriving in good condition (without leakage or desiccation) at a WHO-accredited laboratory. National data might mask surveillance system weaknesses at subnational levels. The GPEI strategic plan operational target in countries with current or recent WPV transmission is NPAPF  $\geq 2$ , both nationally and in each province/state. Data reported are for AFP cases with onset during December 2009–November 2010.

<sup>§</sup> Mass campaigns conducted for a brief period (days to weeks), during which 1 dose of OPV is administered to all children aged <5 years, regardless of vaccination history.

<sup>¶</sup> Countries with no evidence of indigenous WPV transmission for >12 months and subsequent cases determined to be of external origin by genomic sequencing analysis.

\* Reported coverage data and WHO/UNICEF estimates are available at [http://www.who.int/immunization\\_monitoring/en/globalsummary/countryprofile-select.cfm](http://www.who.int/immunization_monitoring/en/globalsummary/countryprofile-select.cfm).

**TABLE. Status of reported wild poliovirus (WPV) type 1 and type 3 importations and subsequent related cases in previously polio-free countries with reestablished transmission,\* by importation and outbreak characteristics, country surveillance indicators, and outbreak response immunization since original introduction — Africa, 2009–2010**

Country	Importation <sup>†</sup> by WPV type	WPV importation/outbreak characteristics				Country surveillance indicators				Outbreak response immunization
		Onset date of first polio case with imported WPV	Onset date of most recent polio case during 2009–2010	WPV source by genomic sequencing	No. of related WPV cases confirmed to date (2009–2010 cases)	NPAFP rate per 100,000 population aged <15 years, 2010 <sup>§</sup>	No. (%) of provinces <sup>¶</sup> with NPAFP ≥2 per 100,000 population aged <15 years, 2010	% adequate specimen collection, 2010 <sup>**</sup>	Longest period (months) between detected WPV cases to date since introduction	No. of SIAs <sup>††</sup> conducted since onset of first confirmed import-related WPV
Angola	WPV1	4/25/2007	12/12/2010	India	73 (62)	3.3	18 (94)	87	6	22
Chad	WPV3	11/27/2007	5/10/2010	Nigeria	84 (75)	4.3	17 (94)	65	15	20
	WPV3	8/9/2009		Nigeria	1 (1)					
	WPV3	10/30/2009		Nigeria	1 (1)					
	WPV3	1/6/2010		Nigeria	1 (1)					
	WPV1	9/17/2010	12/24/2010	Nigeria	11 (11)					
DRC <sup>§§</sup>	WPV1	2/27/2006	10/27/2010	Angola	68 (8)	5.0	11 (100)	75	27	29
	WPV1	5/25/2010	12/1/2010	Angola	89 (89)					
	WPV1	11/10/2010		Angola	1 (1)					
	WPV1	11/18/2010		Angola	1 (1)					
	WPV3	10/18/2008	2/10/2009	Angola	2 (1)					
	WPV3	4/18/2009	6/24/2009	Angola	2 (2)					
	WPV1	5/20/2004	6/27/2009	Chad	226 (45)					
Sudan	WPV1	5/20/2004	6/27/2009	Chad	226 (45)	2.8	25 (100)	96	31	38

**Abbreviations:** DRC = Democratic Republic of the Congo; NPAFP = nonpolio acute flaccid paralysis; SIAs = supplementary immunization activities; WHO = World Health Organization.

\* Countries with no evidence of indigenous WPV transmission for >12 months after 2000–2001 and subsequent cases determined to be of external origin by genomic sequencing analysis. Subsequently, circulation of imported WPV continued for >12 months as of 2009.

<sup>†</sup> Detection of one or more polio cases resulting from WPV determined to be of external origin. Data as of March 8, 2011.

<sup>§</sup> The current WHO operational target rate for countries with current or recent WPV cases is ≥2 cases per 100,000 population aged <15 years; these national data might mask vaccination coverage weaknesses at subnational levels.

<sup>¶</sup> Provinces/states with population ≥100,000 children aged <15 years.

<sup>\*\*</sup> The WHO target is adequate stool specimen collection from ≥80% of NPAFP cases, in which two specimens are collected ≥24 hours apart, both within 14 days of paralysis onset, and shipped on ice or frozen ice packs to a WHO-accredited laboratory, arriving in good condition; these national data might mask vaccination coverage weaknesses at subnational levels.

<sup>††</sup> Mass campaigns conducted for a brief period (days to weeks), during which 1 dose of oral poliovirus vaccine is administered to all children aged <5 years, regardless of vaccination history. The number here indicates type-specific vaccine used in the SIA and in areas of transmission.

<sup>§§</sup> WPV1 circulating in the eastern portion of the country has persisted since introduction from Angola in 2006, where it was originally imported from India in 2005. WPV1 circulating in the western portion of the country was introduced from Angola in 2010, originally imported from India in 2007.

Republic in 2009 (1,4). The monthly case count decreased after improvements in SIA implementation in 2010 (Figure 2). No WPV3 case was detected during May 10–December 23, 2010, but a related WPV3 case was detected in December 2010 and genetic sequencing for an additional WPV3 case detected in January 2011 is being conducted. A new WPV 1 importation from Nigeria in September 2010 resulted in 11 cases during 2010 (and five cases in 2011, as of March 8).

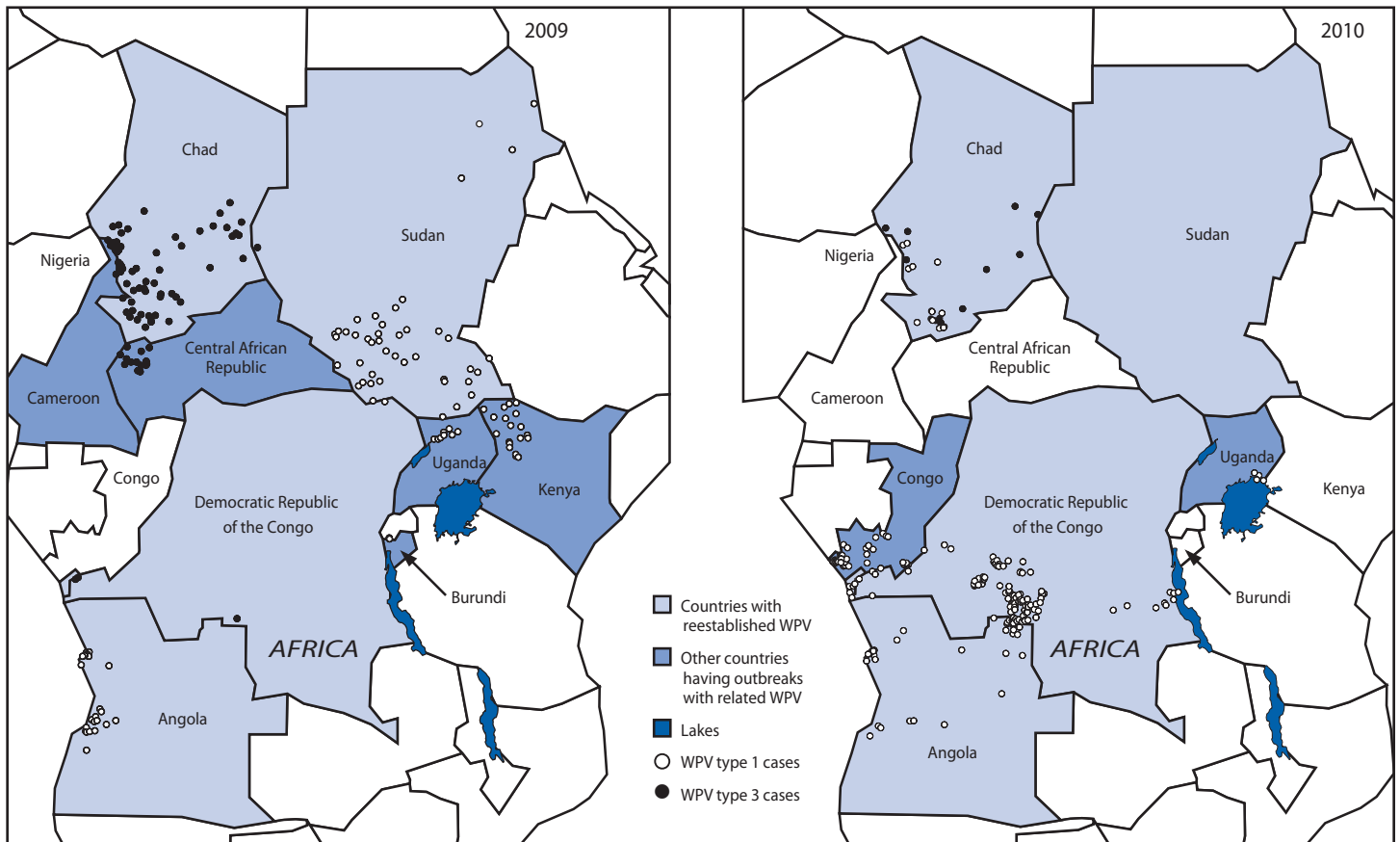
Estimated OPV3 coverage in Chad was 36%; 52% of NPAFP patients had ≥4 doses of OPV and 11% had no doses. Independent monitoring of SIA coverage indicated that 26% of children were missed in the February 2010 SIA. Following an initiative in March 2010, monitoring showed some SIA improvements in Chad; the percentage of children missed decreased to ≤20% during eight of the 10 SIAs implemented during March–December 2010.

AFP surveillance met standards for case detection but not for specimen collection (Table). Only 65% of AFP cases had adequate stool specimens. Difficulties in international shipment of specimens to an accredited Global Poliovirus Network Laboratory contributed to >20% of the specimens arriving at the laboratory in poor condition.

**Sudan.** WPV1 of Nigerian origin was imported into Sudan via Chad in 2004, resulting in transmission in northern and southern Sudan during 2004–2005 and importation into eight other countries (2). Ongoing transmission of WPV1 from this importation was not detected during August 2005–March 2008. Subsequently, a total of 70 WPV1 cases were reported in Sudan through June 2009, and associated WPV1 outbreaks occurred in 2009 in Ethiopia, Kenya, and Uganda (1,3) (Figures 1 and 2). Since the 2004 importation, 226 related WPV1 cases have been reported in Sudan, including 82 in southern Sudan (Table). Following the 2008–2009 resurgence, extensive assistance was provided to improve SIA implementation and AFP surveillance in southern Sudan.

Overall, 78% of children with NPAFP in Sudan were reported to have received ≥4 doses of OPV; estimated OPV3 coverage was 84%; 3.8% of NPAFP cases nationwide had no OPV doses. Among children with NPAFP residing in the 10 states of southern Sudan, 7.3% had received no OPV doses. Limited independent SIA monitoring data indicated <15% of children were missed in all but one state in November 2010 and <10% in all states in December.

**FIGURE 1. Cases of wild poliovirus (WPV), types 1 and 3, in countries with reestablished transmission and related cases in other countries\* — Africa, 2009 and 2010**



\* Angola, Chad, Democratic Republic of the Congo, and Sudan were designated in 2009 as having reestablished WPV transmission, defined as countries with no evidence of indigenous WPV transmission for >12 months after 2000–2001 and subsequent cases determined to be of external origin by genomic sequencing analysis, and where, subsequently, circulation of imported WPV continued for >12 months as of 2009. Related cases are subsequent to WPV importation into other countries, confirmed by sequence analysis.

Surveillance indicators did not meet standards in early 2009. In 2010, however, all 25 states met surveillance quality targets, including the 10 states of southern Sudan, which had a NPAFP rate of 4.2 per 100,000 population aged <15 years and an adequate stool collection rate of 94%.

**Angola.** In less than a decade, Angola has had three separate WPV importations related to WPV last isolated from cases in India. A 2005 WPV1 importation resulted in an outbreak that lasted until 2007 and led to outbreaks in Namibia, DRC, Central African Republic, and Burundi (3,4). A second WPV1 importation was associated with 74 polio cases in Angola during 2007–2010 (Table), and this reestablished transmission has continued into 2011. A WPV3 importation in 2008 was followed by transmission in Angola in 2008 and cases in DRC during 2008–2009 (1,3). Of the 29 WPV1 cases in Angola with onset during 2009, a total of 14 (48%) were reported from the capital, Luanda, and 14 (48%) from the western provinces. During 2010, a total of 18 of 32 (56%) WPV1 cases

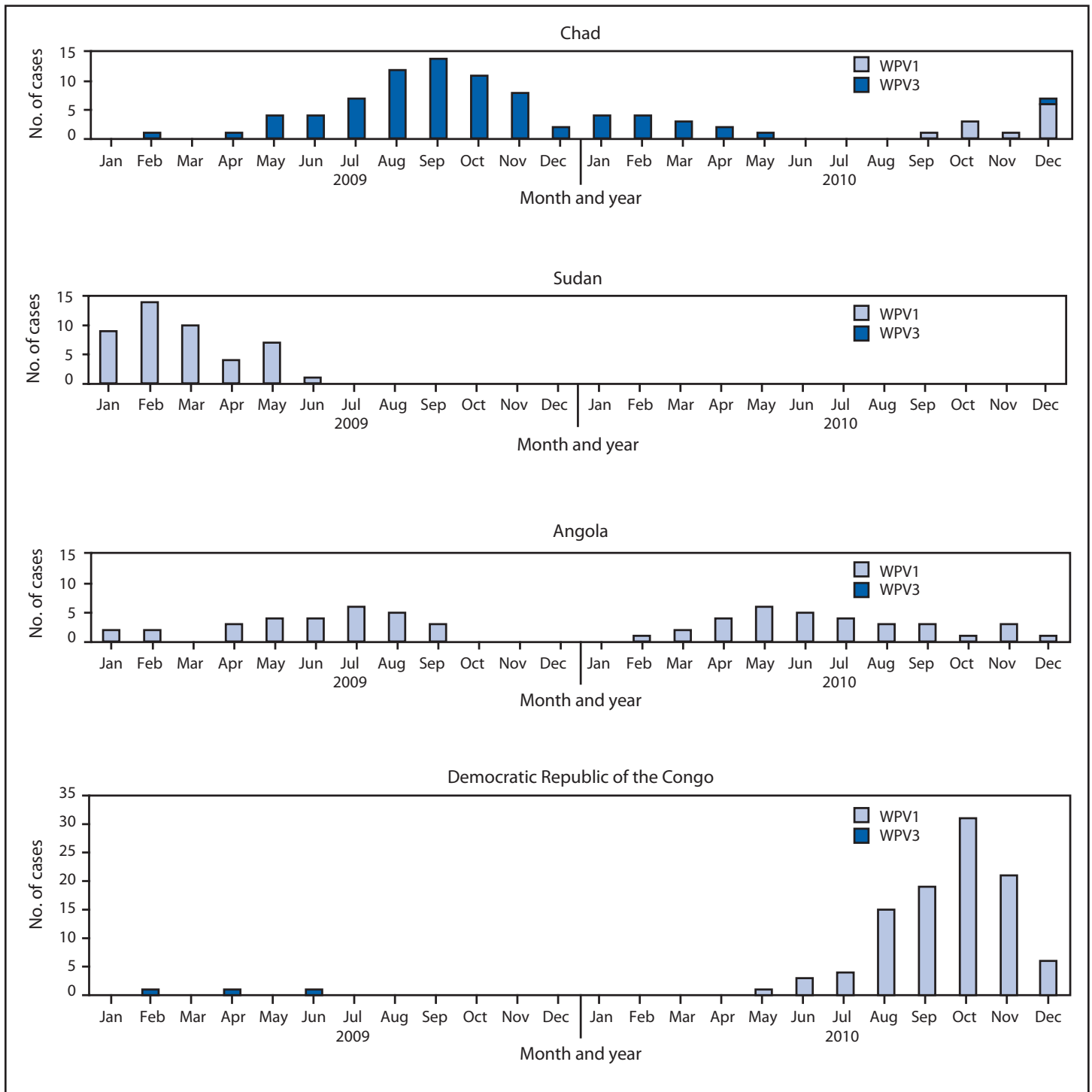
were detected in central Angola and at the eastern border with DRC, leading to spread to DRC (Table, Figures 1 and 2) and into ROC (387 provisionally confirmed cases) in 2010 (8).

Estimated OPV3 coverage in Angola was 73%\*\*; 30% of NPAFP patients reported having received  $\geq 4$  doses and 13% of NPAFP patients reported no doses. Independent monitoring after SIAs in 2010 indicated that 7%–17% of children were missed in SIAs, overall; >33% of provinces consistently have  $\geq 10\%$  children missed.

AFP surveillance indicators met performance targets in 2009 and 2010 (Table). However, genomic sequence analysis of WPV1 isolates suggested multiple instances of undetected transmission in Angola.

\*\* Surveys to corroborate reported administrative infant coverage have not been conducted recently in Angola and DRC and reported administrative data might not be accurate.

FIGURE 2. Cases of wild poliovirus (WPV), types 1 and 3 detected in countries with reestablished transmission, by type and month\* — Chad, Sudan, Angola, and Democratic Republic of the Congo, 2009–2010



\* Countries with no evidence of indigenous WPV transmission for >12 months after 2000–2001 and subsequent cases determined to be of external origin by genomic sequencing analysis. Subsequently, circulation of imported WPV continued for >12 months as of 2009.

**What is already known on this topic?**

Four previously polio-free countries (Angola, Chad, Democratic Republic of the Congo [DRC], and Sudan) were designated in 2009 as having reestablished wild poliovirus (WPV) transmission (lasting >12 months). Routine vaccination coverage and polio eradication campaigns were not able to stop the outbreaks following importation in 2009.

**What is added by this report?**

Because of strengthened immunization campaign and surveillance activities, no further WPV cases related to a 2004 WPV importation have been identified in Sudan since mid-2009. WPV transmission has continued in Chad since a 2007 importation, but decreased during 2010 as a result of somewhat strengthened immunization campaign and surveillance activities. Angola has not interrupted or limited the transmission of imported WPV since introduction in 2007 and WPV from Angola has spread in 2010, causing major outbreaks in neighboring countries. DRC has had transmission of imported WPV since introduction in 2006 with extended periods without detection. Chad and the DRC are at high risk for reestablished transmission continuing.

**What are the implications for public health practice?**

Achieving polio eradication depends on stopping WPV transmission in the countries that have never interrupted WPV transmission and in those that have reestablished WPV transmission. To interrupt reestablished transmission, current efforts in Chad must be reinforced and those in Angola and DRC must be improved markedly to overcome ongoing programmatic weaknesses.

**DRC.** WPV1 cases occurred during 2006–2008 after being introduced from Angola, with no WPV1 case detected in 2009. During 2010, six WPV1 cases were identified in Katanga Province in southeastern DRC, where Tanzania and DRC are separated by Lake Tanganyika. The cases were genetically most closely related to WPV1 detected in DRC in 2008 and two related WPV1 cases reported from Burundi in 2009 (Figure 1) (1,4). This indicates periods of undetected transmission in eastern DRC and bordering areas. No further related cases have been identified since October 2010. Early in 2010, a new importation of WPV1 from Angola resulted in an outbreak that started in a southern border province of DRC and spread to neighboring provinces. Two additional WPV1 importations from Angola were identified in Bas-Congo Province in 2010. Four WPV3 cases linked to two 2008 importations from Angola occurred during October 2008–June 2009 (Table, Figure 1).

Estimated OPV3 coverage in DRC was 73%; 28% of patients with NPAFP reported having received  $\geq 4$  doses of OPV, and 12% of NPAFP patients reported having received no doses. Subnational SIAs implemented in 2010 covered 20%–65% of the national age <5 years target population; independent

monitoring data for the two most recent targeted 2010 SIAs in Bandundu and Kasai-Occidental provinces indicated 11%–16% of children were missed. Independent monitoring of the two most recent 2010 subnational SIAs indicated that 8% of children were missed.

AFP surveillance met standard detection targets in 2010 throughout DRC, and 75% of AFP cases had adequate specimen collection. However, genomic sequence analysis of WPV isolated from patients in Katanga Province substantiate that AFP surveillance missed chains of transmission in the eastern provinces.

**Reported by**

*Polio Eradication Dept, World Health Organization, Geneva, Switzerland. Div of Viral Diseases, Global Immunization Div, National Center for Immunization and Respiratory Diseases, CDC.*

**Editorial Note**

The 2010 GPEI 2010–2012 strategic plan milestone of ending reestablished transmission by the end of 2010 appears to be on track in Sudan.<sup>††</sup> The milestone was missed in Angola and is at high risk for being missed in Chad and DRC. Persistent WPV transmission in Angola, Chad, DRC, and Sudan has led to outbreaks in eight polio-free countries, some resulting in substantial morbidity and mortality, as in ROC (3,4,8), and outbreak response activities have diverted limited resources. Achieving the GPEI milestone of ending all WPV transmission by the end of 2012 depends on progress being made in Angola, Chad, DRC, and the four WPV-endemic countries during 2011. Progress toward other milestones of the strategic plan is broadly on track. Among the four endemic countries, India and Nigeria made notable progress during 2010.<sup>§§</sup>

Among countries with outbreaks following importation, all 15 countries affected by outbreaks in 2009 had their last WPV case before mid-2010. Of the 11 countries with new importations in 2010, seven appear to have stopped transmission within 6 months of confirmation, and the others with more recent transmission also appear to be on track to meet the milestone. One importation has been reported to date in 2011; a WPV1 case was recently confirmed in Gabon, with onset in January 2011, related to the outbreak in ROC (8).

In Chad, southern Sudan, Angola, and DRC, the health infrastructure is weak, routine vaccination coverage in multiple areas is very low, and SIAs repeatedly have failed to reach a sufficient proportion of children in critical areas. SIA quality improvements during 2009–2010 in southern Sudan were the result of more effective governmental engagement and

<sup>††</sup> At least 12 months must pass without confirmed WPV cases and with AFP indicators meeting performance targets before WPV transmission can be considered provisionally interrupted.

<sup>§§</sup> Current progress is reported at <http://www.polioeradication.org>.

increased external support. All four countries with reestablished WPV transmission have experienced civil war in the recent past. Southern Sudan continued to have civil unrest, but security has improved within the last 2 years. In January 2011, voters in southern Sudan passed a referendum for independence. The security situation in southern Sudan will require close monitoring as the anticipated transition progresses.

Areas of insecurity and civil unrest remain in eastern Chad and in eastern DRC and resources are scarce. Angola, however, has had both the stability and resources to improve the quality of SIA implementation and AFP surveillance. Angola recently served as the WPV source for active outbreaks in three countries. Continued WPV transmission during 2010–2011 in Angola, Chad, and DRC indicates that sufficient improvements in polio eradication activities have not occurred. Virologic evidence of undetected transmission has demonstrated deficiencies in surveillance, sometimes even when performance indicators meet international standards. These deficiencies signify ongoing weaknesses in AFP detection, investigation, specimen collection, and/or transport in major areas of the country. Urgent, coordinated efforts by governmental and external partners are needed to immediately address the substantial, ongoing weaknesses in SIAs and surveillance in Angola and DRC, and to redouble efforts in Chad to continue the progress toward eliminating WPV. Sustaining polio-free

status also requires strengthening routine immunization. At the outset of 2011, GPEI partner agency leaders visited heads of state of Angola and DRC to emphasize the urgency of the situation, advocate for increased efforts, and extend offers of further support. To achieve measurable operational improvements and interrupt WPV transmission in these countries, these renewed efforts must begin immediately.

## References

1. CDC. Progress toward interruption of wild poliovirus transmission—worldwide, 2009. *MMWR* 2010;59:545–50.
2. CDC. Resurgence of wild poliovirus type 1 transmission and consequences of importation—21 countries, 2002–2005. *MMWR* 2006;55:145–50.
3. CDC. Wild poliovirus type 1 and type 3 importations—15 countries, Africa, 2008–2009. *MMWR* 2009;58:357–62.
4. CDC. Outbreaks following wild poliovirus importations—Europe, Africa, and Asia, January 2009–September 2010. *MMWR* 2010;59:1393–9.
5. World Health Organization. Global Polio Eradication Initiative: strategic plan 2010–2012. Geneva, Switzerland: World Health Organization; 2010. Available at [http://www.polioeradication.org/content/publications/gpei\\_strategicplan.2010-2012.eng.may.2010.pdf](http://www.polioeradication.org/content/publications/gpei_strategicplan.2010-2012.eng.may.2010.pdf). Accessed March 8, 2011.
6. CDC. Laboratory surveillance for wild and vaccine-derived polioviruses—worldwide, January 2008–June 2009. *MMWR* 2009;58:950–4.
7. World Health Organization. Conclusions and recommendations of the Advisory Committee on Poliomyelitis Eradication, November 2009. *Wkly Epidemiol Rec* 2010;85:1–11.
8. CDC. Poliomyelitis outbreak—Republic of the Congo, 2010. *MMWR* 2011; 60:312–3.

## Notes from the Field

### Poliomyelitis Outbreak — Republic of the Congo, September 2010–February 2011

On November 4, 2010, a case of wild poliovirus type 1 (WPV1) was confirmed in a resident of the port city, Pointe Noire, the first WPV case in Republic of the Congo (ROC) in 10 years. The WPV1 isolate from this resident was genetically most closely related to WPV1 isolated in Angola in 2010. Subsequent investigation, including active case finding, revealed increased acute flaccid paralysis (AFP) hospital admissions beginning in September. Weekly admissions rose from approximately 10 AFP patients in early October to approximately 80 by the end of October and November. With response immunization activities, weekly AFP admissions fell to fewer than five by the end of December. A provisional total of 554 AFP cases were identified nationally, with paralysis onset from September 20, 2010, to February 27, 2011; 374 (68%) of the AFP cases were among males. Overall, 465 (84%) AFP cases were among residents of the neighboring departments of Kouilou and Pointe Noire, where the outbreak apparently began and where approximately 21% of ROC's 4.2 million persons reside. The case-fatality rate (CFR) in Kouilou and Pointe Noire was 40% (187 deaths of 465 cases), compared with 11% (10 of 89) elsewhere in ROC. Additionally, the median age of patients with AFP in Kouilou and Pointe Noire was 20 years (range: 0–63 years), compared with 7.5 years (range: 1–68 years) elsewhere in ROC.

Vaccination status was unknown for all but 149 of the 554 AFP patients. Among those with known vaccination status, 107 (72%) reported having received at least 1 oral polio vaccine (OPV) dose, and 73 of those patients reported receiving at least 3 doses of OPV.

As of March 8, 2011, WPV1 had been confirmed virologically in specimens from 70 AFP patients. Adequate stool specimens were not available for 468 (84%) patients, of whom 190 died; nonetheless, 32 (46%) of the 70 WPV cases were confirmed among those 468 patients. Because investigation of the outbreak was compromised by the collection of adequate specimens from only 16% of patients, the clinical classification algorithm of AFP cases was used. Patients without adequate specimens who died, were lost to follow-up, or had residual paralysis on follow-up were considered to have clinically confirmed polio. This algorithm was applicable when adequate stool specimens were collected for fewer than 65% of cases (4) and was last used in countries of the World Health Organization African Region in 2000. Provisionally,

317 additional patients have been classified as having clinically confirmed polio. Thus, as of March 8, 2011, the total number of confirmed polio cases was 387, pending further laboratory investigation, follow-up, and review.

Outbreak control efforts have included four rounds of national supplementary immunization activities (SIAs) targeting the entire population of ROC, beginning November 12–16 with a round of monovalent type 1 OPV. Subsequent SIA rounds were conducted December 3–7, 2010, using monovalent type 1 OPV; January 11–15, 2011, using bivalent (types 1 and 3) OPV; and February 22–26, 2011, using bivalent OPV. The first three SIA rounds were coordinated with areas of other countries neighboring Kouilou (Cabinda in Angola and Bas-Congo in Democratic Republic of the Congo), where outbreak cases subsequently were reported; the fourth round was synchronized with neighboring Gabon, where a WPV confirmed case occurred in January.

This outbreak appears nearly controlled, with onset of the most recent confirmed WPV case on January 22, 2011. Only 14 AFP cases have been reported provisionally in 2011, approximating the expected background frequency in ROC. Preliminary results suggest that several factors contributed to this outbreak 10 years after the last confirmed WPV1 case in ROC. These include a low rate of childhood polio vaccination among young adults and a protracted period without WPV1 transmission in the area. Vaccination coverage has been low over the last 2 decades,\* secondary to weaknesses in the delivery of health-care and routine vaccination services, complicated by civil war and conflict during 1997–1999. The last national SIA was in 2006. Other possible contributing factors are crowding of residents and severe limitations in water supply and sanitation. The high proportion of cases among adolescents and adults (who are known to be at higher risk for bulbar paralysis than children) might have contributed to the high CFR, which might have been accentuated by suboptimal medical care and delays in seeking care. CFRs of 12%–32% have been observed in previous WPV1 outbreaks involving adults (1–3). An investigation is ongoing to determine reasons for the elevated CFR in Kouilou and Pointe Noire.

All international travelers are advised to have completed a primary series of polio vaccinations before travel (5,6). Travelers from the United States to countries with recent WPV transmission or countries neighboring them also should receive a

\* Information available at [http://apps.who.int/immunization\\_monitoring/en/global\\_summary/timeseries/tswucoveragebycountry.cfm?country=cod](http://apps.who.int/immunization_monitoring/en/global_summary/timeseries/tswucoveragebycountry.cfm?country=cod).



single adult booster inactivated poliovirus vaccine dose before departure.<sup>†</sup> Travelers who are inadequately vaccinated against polio or whose past vaccination history is uncertain should contact their physician to discuss polio vaccination options before traveling. The World Health Organization recommends that all travelers who reside in countries with WPV transmission not only complete a course of vaccination against polio, preferably with OPV, before leaving the country of residence, but also receive an additional dose of OPV within 12 months before each international trip (6). However, whether many travelers from countries with WPV transmission follow these recommendations, except when required (e.g., pilgrimage to Mecca), is uncertain (7).

<sup>†</sup> Information available at <http://wwwnc.cdc.gov/travel/content/in-the-news/polio-outbreaks.aspx>.

#### Reported by

*Ministry of Health, Republic of the Congo; World Health Organization Republic of the Congo Country Office, World Health Organization Regional Office for Africa, Brazzaville; Republic of*

*the Congo. Dept of Polio Eradication, World Health Organization, Geneva, Switzerland. Div of Viral Diseases and Global Immunization Div, National Center for Immunization and Respiratory Diseases, CDC.*

#### References

1. Prevots DR, Ciofi Degli Atti M, Sallabanda A, et al. Outbreak of paralytic poliomyelitis in Albania, 1996. *Clin Infect Dis* 1998;26:419–25.
2. CDC. Outbreak of poliomyelitis—Cape Verde, 2000. *MMWR* 2000; 49:1070.
3. CDC. Outbreak of polio in adults—Namibia, 2006. *MMWR* 2006; 55:1198–201.
4. World Health Organization. Field guide for supplementary activities aimed at achieving polio eradication. Geneva, Switzerland: World Health Organization; 1997. Available at [http://www.who.int/immunization\\_monitoring/resources/Field\\_guide\\_polio\\_96.pdf](http://www.who.int/immunization_monitoring/resources/Field_guide_polio_96.pdf). Accessed March 14, 2011.
5. CDC. Travelers' health. Atlanta, GA: US Dept of Health and Human Services, CDC. Available at <http://wwwnc.cdc.gov/travel>. Accessed March 14, 2011.
6. World Health Organization. International travel and health 2010. Geneva, Switzerland: World Health Organization Press; 2010. Available at <http://www.who.int/ith/chapters/en/index.html>. Accessed March 14, 2011.
7. World Health Organization. Health conditions for travellers to Saudi Arabia for the pilgrimage to Mecca (Hajj). *Wkly Epidemiol Rec* 2010; 85:425–36.

## Announcement

---

### World Water Day — March 22, 2011

Bringing clean water to cities is critical to achieving a healthier and more prosperous world. Globally, residents of rural areas are moving into cities in record numbers. By the year 2050, an estimated 70% of the world's population will be living in urban areas (1). To highlight the water-related needs of these fast-growing cities and the subsequent challenges faced by governments and utility companies, the theme for this year's World Water Day, March 22, 2011, is Water for Cities: Responding to the Urban Challenge.

Many of the world's water systems are poorly maintained. More than half of the water might be lost to leakages and construction of illegal connections by nonpaying users (2). Even in cities with well-developed public water networks, the water might not always be safe to drink because of poor disinfection practices or because the water becomes contaminated once it is in the distribution network (3).

Water plays a key role in many goals of international development programs (2,4). Recent cholera outbreaks in Zimbabwe and Haiti highlight the potentially devastating consequences of deficiencies in urban water supplies (5,6). In addition to the physical health of the population, water availability and quality is fundamental for agricultural production,

food safety, economic growth, educational opportunities, and environmental management. Additional information about World Water Day activities and CDC's efforts to improve water quality and prevent disease is available at <http://www.unwater.org/worldwaterday/index.html> and <http://www.cdc.gov/healthywater/global>.

### References

1. United Nations Human Settlements Programme (UN-HABITAT). State of the world's cities 2008/2009: harmonious cities. Nairobi, Kenya: UN-HABITAT; 2008. Available at <http://www.unhabitat.org/pmss/listitemdetails.aspx?publicationid=2562>. Accessed March 14, 2011.
2. World Water Assessment Program. The 3rd United Nations world water development report: demographic, economic and social drivers. Paris, France: United Nations Educational, Scientific and Cultural Organization (UNESCO), and London, England: Earthscan; 2009. Available at [http://www.unesco.org/water/wwap/wwdr/wwdr3/pdf/12\\_wwdr3\\_ch\\_2.pdf](http://www.unesco.org/water/wwap/wwdr/wwdr3/pdf/12_wwdr3_ch_2.pdf). Accessed March 14, 2011.
3. Lee EJ, Schwab KJ. Deficiencies in drinking water distribution systems in developing countries. *J Water Health* 2005;3:109–27.
4. United Nations. United Nations millennium declaration. Presented at the United Nations General Assembly, 8th Plenary Meeting. New York, NY; September 8, 2000. Available at <http://www.un.org/millennium/declaration/ares552e.htm>. Accessed March 14, 2011.
5. World Health Organization. Cholera: global surveillance summary, 2008. *Wkly Epidemiol Rec* 2009;84:309–24.
6. CDC. Update on cholera — Haiti, Dominican Republic, and Florida, 2010. *MMWR* 2010;59:1637–41.

## Errata

### Vol. 60, No. 5

In “Recommended Immunization Schedules for Persons Aged 0 Through 18 Years — United States, 2011,” an error occurred on page 3, in Figure 2, “Recommended immunization schedule for persons aged 7 through 18 years — United

States, 2011.” In that figure, the green bar indicating the range of recommended ages for catch-up immunization with the “MMR Series” should have extended across all three age ranges: 7–10 years, 11–12 years, and 13–18 years. The corrected figure is below.

FIGURE 2. Recommended immunization schedule for persons aged 7 through 18 years — United States, 2011 (for those who fall behind or start late, see the schedule below and the catch-up schedule [Table])

Vaccine ▼	Age ►	7–10 years	11–12 years	13–18 years	
Tetanus, Diphtheria, Pertussis <sup>1</sup>			Tdap	Tdap	Range of recommended ages for all children
Human Papillomavirus <sup>2</sup>	see footnote <sup>2</sup>		HPV (3 doses)(females)	HPV series	
Meningococcal <sup>3</sup>		MCV4	MCV4	MCV4	Range of recommended ages for catch-up immunization
Influenza <sup>4</sup>		Influenza (Yearly)			
Pneumococcal <sup>5</sup>		Pneumococcal			Range of recommended ages for certain high-risk groups
Hepatitis A <sup>6</sup>		HepA Series			
Hepatitis B <sup>7</sup>		Hep B Series			
Inactivated Poliovirus <sup>8</sup>		IPV Series			
Measles, Mumps, Rubella <sup>9</sup>		MMR Series			
Varicella <sup>10</sup>		Varicella Series			

This schedule includes recommendations in effect as of December 21, 2010. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Considerations should include provider assessment, patient preference, and the potential for adverse events. Providers should

consult the relevant Advisory Committee on Immunization Practices statement for detailed recommendations: <http://www.cdc.gov/vaccines/pubs/acip-list.htm>. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS) at <http://www.vaers.hhs.gov> or by telephone, 800-822-7967.

### Vol. 60, No. SS-1

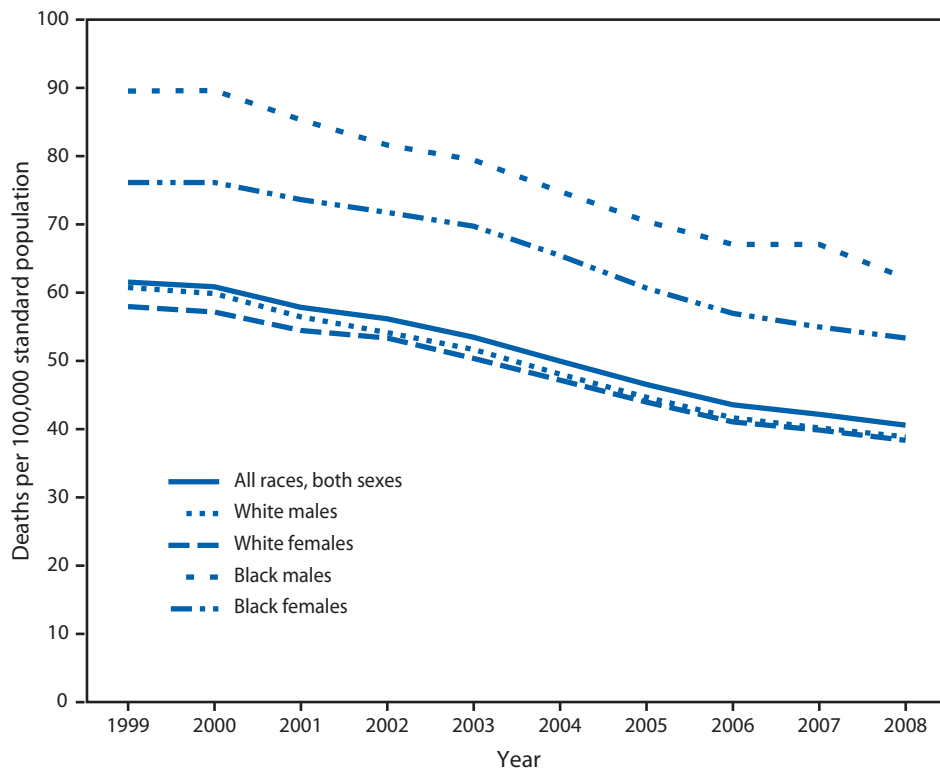
In the report “Abortion Surveillance — United States, 2007,” two errors occurred in the tables. In Table 9 on page 22, the total percentages for New York (including New York City and New York State) should read **30.8, 19.7, 15.8, 11.8, 8.1, 6.1, 4.7, and 3.0** for abortions obtained at ≤6 weeks’, 7 weeks’, 8 weeks’, 9 weeks’, 10 weeks’, 11 weeks’, 12 weeks’, and 13 weeks’ gestation, respectively. In Table 18 on page 31, the †† footnote symbol was placed in error by South Dakota.

One error occurred in the text. In the first paragraph of the Discussion on page 8, reference 39 was cited in error. The correct reference is as follows: **Martin JA, Hamilton BE, Sutton PD, et al. Births: final data for 2006. Natl Vital Stat Rep 2010;57(7).**

## QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

### Age-Adjusted Death Rate from Stroke,\* by All Races, White or Black Race, and Sex — United States, 1999–2008†



\* Deaths from stroke are those listed as cerebrovascular diseases, codes I60–I69, in *International Classification of Diseases, 10th Revision*.

† Data for 2008 are preliminary.

From 1999 to 2008, the overall death rate in the United States from stroke declined 34%, from 61.6 per 100,000 population to 40.6. Throughout that period, the death rate for black males and black females was higher than the rate for white males and white females. The smallest decline (30%) occurred among black females. In 2008, the death rate from stroke for black males was 62.2 per 100,000, followed by 53.4 for black females, 38.9 for white males, and 38.4 for white females.

Source: National Vital Statistics System. Mortality public use data files, 1999–2007, and preliminary data for 2008.

## Notifiable Diseases and Mortality Tables

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending March 12, 2011 (10th week)\*

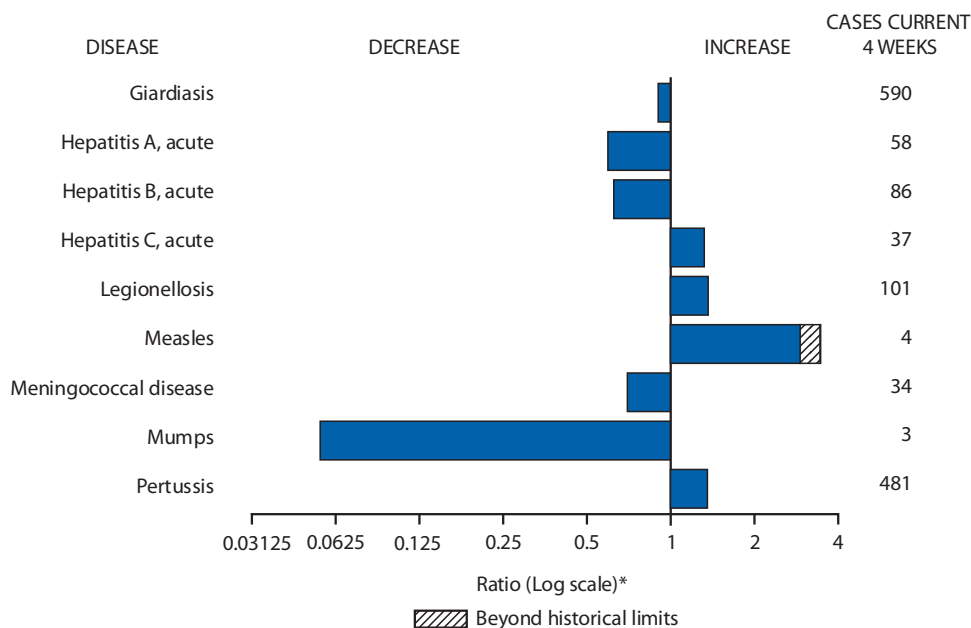
Disease	Current week	Cum 2011	5-year weekly average <sup>†</sup>	Total cases reported for previous years					States reporting cases during current week (No.)
				2010	2009	2008	2007	2006	
Anthrax	—	—	0	—	1	—	1	1	
Arboviral diseases <sup>§, ¶</sup> :									
California serogroup virus disease	—	—	0	74	55	62	55	67	
Eastern equine encephalitis virus disease	—	—	—	10	4	4	4	8	
Powassan virus disease	—	—	—	9	6	2	7	1	
St. Louis encephalitis virus disease	—	—	0	10	12	13	9	10	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Babesiosis	—	4	1	NN	NN	NN	NN	NN	
Botulism, total	—	14	2	110	118	145	144	165	
foodborne	—	2	0	7	10	17	32	20	
infant	—	10	2	78	83	109	85	97	
other (wound and unspecified)	—	2	0	25	25	19	27	48	
Brucellosis	—	7	2	127	115	80	131	121	
Chancroid	—	5	1	32	28	25	23	33	
Cholera	—	11	0	12	10	5	7	9	
Cyclosporiasis <sup>§</sup>	3	21	1	173	141	139	93	137	FL (3)
Diphtheria	—	—	—	—	—	—	—	—	
<i>Haemophilus influenzae</i> , ** invasive disease (age <5 yrs):									
serotype b	—	1	1	20	35	30	22	29	
nonserotype b	—	12	5	179	236	244	199	175	
unknown serotype	2	44	3	224	178	163	180	179	PA (1), GA (1)
Hansen disease <sup>§</sup>	—	6	2	66	103	80	101	66	
Hantavirus pulmonary syndrome <sup>§</sup>	—	3	0	18	20	18	32	40	
Hemolytic uremic syndrome, postdiarrheal <sup>§</sup>	—	7	2	230	242	330	292	288	
Influenza-associated pediatric mortality <sup>§, ††</sup>	11	67	4	61	358	90	77	43	IL (1), PA (1), FL (1), NC (1), OK (1), TX (4), OR (1), CA (1)
Listeriosis	6	70	10	764	851	759	808	884	FL (1), TX (1), CA (4)
Measles <sup>§§</sup>	—	21	1	34	71	140	43	55	
Meningococcal disease, invasive <sup>¶¶</sup> :									
A, C, Y, and W-135	1	26	10	248	301	330	325	318	OK (1)
serogroup B	—	16	5	115	174	188	167	193	
other serogroup	—	1	1	10	23	38	35	32	
unknown serogroup	6	66	15	415	482	616	550	651	NY (1), PA (1), OH (1), FL (1), OR (1), HI (1)
Novel influenza A virus infections <sup>***</sup>	—	1	0	4	43,774	2	4	NN	
Plague	—	—	0	2	8	3	7	17	
Poliomyelitis, paralytic	—	—	—	—	1	—	—	—	
Polio virus Infection, nonparalytic <sup>§</sup>	—	—	—	—	—	—	—	NN	
Psittacosis <sup>§</sup>	—	1	0	4	9	8	12	21	
Q fever, total <sup>§</sup>	1	10	3	116	113	120	171	169	
acute	—	6	1	92	93	106	—	—	
chronic	1	4	0	24	20	14	—	—	MO (1)
Rabies, human	—	—	—	1	4	2	1	3	
Rubella <sup>†††</sup>	—	1	0	5	3	16	12	11	
Rubella, congenital syndrome	—	—	—	—	2	—	—	1	
SARS-CoV <sup>§</sup>	—	—	—	—	—	—	—	—	
Smallpox <sup>§</sup>	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome <sup>§</sup>	1	23	5	168	161	157	132	125	NC (1)
Syphilis, congenital (age <1 yr) <sup>§§§</sup>	—	17	7	262	423	431	430	349	
Tetanus	—	—	0	11	18	19	28	41	
Toxic-shock syndrome (staphylococcal) <sup>§</sup>	—	12	2	75	74	71	92	101	
Trichinellosis	—	3	0	6	13	39	5	15	
Tularemia	—	1	0	112	93	123	137	95	
Typhoid fever	5	46	7	417	397	449	434	353	MD (2), AZ (1), CA (2)
Vancomycin-intermediate <i>Staphylococcus aureus</i> <sup>§</sup>	1	10	1	100	78	63	37	6	NY (1)
Vancomycin-resistant <i>Staphylococcus aureus</i> <sup>§</sup>	—	—	0	1	1	—	2	1	
Vibriosis (noncholera <i>Vibrio</i> species infections) <sup>§</sup>	—	30	3	783	789	588	549	NN	
Viral hemorrhagic fever <sup>¶¶¶</sup>	—	—	—	1	NN	NN	NN	NN	
Yellow fever	—	—	—	—	—	—	—	—	

See Table 1 footnotes on next page.

**TABLE I. (Continued) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending March 12, 2011 (10th week)\***

—: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts.  
 \* Case counts for reporting years 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see <http://www.cdc.gov/ncphi/diss/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf>.  
 † Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at <http://www.cdc.gov/ncphi/diss/nndss/phs/files/5yearweeklyaverage.pdf>.  
 ‡ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table except starting in 2007 for the arboviral diseases, STD data, TB data, and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at <http://www.cdc.gov/ncphi/diss/nndss/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.  
 \*\* Data for H. influenzae (all ages, all serotypes) are available in Table II.  
 †† Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since October 3, 2010, 71 influenza-associated pediatric deaths occurring during the 2010-11 influenza season have been reported.  
 ‡‡ No measles cases were reported for the current week.  
 ¶¶ Data for meningococcal disease (all serogroups) are available in Table II.  
 \*\*\* CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. During 2009, four cases of human infection with novel influenza A viruses, different from the 2009 pandemic influenza A (H1N1) strain, were reported to CDC. The four cases of novel influenza A virus infection reported to CDC during 2010 and the one case reported in 2011 were identified as swine influenza A (H3N2) virus and are unrelated to the 2009 pandemic influenza A (H1N1) virus. Total case counts for 2009 were provided by the Influenza Division, National Center for Immunization and Respiratory Diseases (NCIRD).  
 ††† No rubella cases were reported for the current week.  
 §§§ Updated weekly from reports to the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.  
 ¶¶¶ There was one case of viral hemorrhagic fever reported during week 12 of 2010. The one case report was confirmed as lassa fever. See Table II for dengue hemorrhagic fever.

**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals March 12, 2011, with historical data**



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

**Notifiable Disease Data Team and 122 Cities Mortality Data Team**  
 Patsy A. Hall-Baker  
 Deborah A. Adams      Rosaline Dhara  
 Willie J. Anderson      Pearl C. Sharp  
 Michael S. Wodajo      Lenee Blanton

Morbidity and Mortality Weekly Report

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 12, 2011, and March 13, 2010 (10th week)\*

Reporting area	<i>Chlamydia trachomatis</i> infection					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	14,855	24,171	27,006	216,665	239,244	68	0	403	1,874	NN	62	118	352	658	1,023
<b>New England</b>	1,591	803	2,046	7,528	6,849	—	0	0	—	NN	—	7	19	32	122
Connecticut	474	171	1,558	796	1,331	N	0	0	N	NN	—	0	8	8	71
Maine†	52	54	100	578	492	N	0	0	N	NN	—	1	7	1	10
Massachusetts	890	402	694	4,296	3,814	N	0	0	N	NN	—	3	9	16	20
New Hampshire	40	52	113	589	355	—	0	0	—	NN	—	1	5	3	9
Rhode Island†	121	69	154	983	626	—	0	0	—	NN	—	0	2	1	4
Vermont†	14	23	84	286	231	N	0	0	N	NN	—	1	5	3	8
<b>Mid. Atlantic</b>	1,822	3,361	5,197	29,354	31,219	—	0	0	—	NN	11	15	38	98	86
New Jersey	479	514	701	4,921	5,000	N	0	0	N	NN	—	0	4	—	4
New York (Upstate)	687	706	2,028	6,332	5,169	N	0	0	N	NN	5	4	13	29	10
New York City	—	1,212	2,772	8,672	12,150	N	0	0	N	NN	—	2	6	10	8
Pennsylvania	656	954	1,189	9,429	8,900	N	0	0	N	NN	6	8	26	59	64
<b>E.N. Central</b>	945	3,653	4,381	29,729	37,418	—	0	3	5	NN	5	29	130	155	260
Illinois	22	900	1,046	5,802	10,093	N	0	0	N	NN	—	3	21	5	43
Indiana	—	400	1,042	3,182	2,593	N	0	0	N	NN	—	4	10	22	41
Michigan	600	941	1,370	9,082	10,360	—	0	1	1	NN	1	5	18	32	56
Ohio	130	997	1,131	7,829	9,955	—	0	3	4	NN	2	8	24	62	53
Wisconsin	193	425	518	3,834	4,417	N	0	0	N	NN	2	9	65	34	67
<b>W.N. Central</b>	310	1,366	1,600	10,894	14,225	—	0	0	—	NN	4	19	83	54	128
Iowa	18	200	237	1,734	2,149	N	0	0	N	NN	—	4	24	6	33
Kansas	41	183	286	1,687	1,927	N	0	0	N	NN	2	2	9	11	12
Minnesota	—	291	354	1,450	3,050	—	0	0	—	NN	—	0	16	—	35
Missouri	136	505	619	4,243	5,039	—	0	0	—	NN	2	4	30	18	23
Nebraska†	96	92	185	985	1,027	N	0	0	N	NN	—	3	26	18	15
North Dakota	—	40	88	188	407	N	0	0	N	NN	—	0	9	—	—
South Dakota	19	61	91	607	626	N	0	0	N	NN	—	1	6	1	10
<b>S. Atlantic</b>	3,037	4,782	5,792	45,676	47,849	—	0	0	—	NN	19	19	39	153	158
Delaware	117	84	220	850	809	—	0	0	—	NN	—	0	1	2	1
District of Columbia	35	98	161	772	933	—	0	0	—	NN	—	0	1	2	1
Florida	573	1,459	1,705	13,067	14,053	N	0	0	N	NN	3	7	19	50	63
Georgia	280	661	1,020	5,945	7,138	N	0	0	N	NN	3	5	11	41	52
Maryland†	—	489	1,101	2,908	3,858	—	0	0	—	NN	—	1	3	9	7
North Carolina	1,099	750	1,436	9,376	9,609	N	0	0	N	NN	12	0	12	21	13
South Carolina†	—	530	847	4,415	5,068	N	0	0	N	NN	—	2	8	22	6
Virginia†	815	649	970	7,446	5,714	N	0	0	N	NN	1	2	8	6	11
West Virginia	118	75	124	897	667	N	0	0	N	NN	—	0	3	—	4
<b>E.S. Central</b>	853	1,769	2,413	14,969	16,202	—	0	0	—	NN	4	4	19	17	38
Alabama†	—	538	780	4,049	4,565	N	0	0	N	NN	—	2	13	5	11
Kentucky	—	266	614	1,725	2,391	N	0	0	N	NN	1	1	6	7	12
Mississippi	612	384	780	3,964	3,820	N	0	0	N	NN	—	0	2	—	4
Tennessee†	241	581	799	5,231	5,426	N	0	0	N	NN	3	1	5	5	11
<b>W.S. Central</b>	1,926	3,096	4,243	29,995	33,794	—	0	1	1	NN	2	7	30	23	46
Arkansas†	439	275	436	3,018	2,114	N	0	0	N	NN	1	0	3	2	9
Louisiana	257	373	757	3,645	5,555	—	0	1	1	NN	1	1	6	4	9
Oklahoma	—	258	1,374	1,686	2,313	N	0	0	N	NN	—	1	8	—	6
Texas†	1,230	2,297	3,112	21,646	23,812	N	0	0	N	NN	—	5	23	17	22
<b>Mountain</b>	779	1,431	1,918	12,887	14,656	47	0	326	1,489	NN	7	10	30	71	92
Arizona	—	479	706	2,205	4,849	47	0	321	1,459	NN	—	1	3	4	5
Colorado	641	339	684	4,908	3,912	N	0	0	N	NN	4	3	6	26	20
Idaho†	69	66	199	567	862	N	0	0	N	NN	1	2	7	9	19
Montana†	—	63	81	585	548	N	0	0	N	NN	1	1	4	7	12
Nevada†	—	175	372	1,867	1,705	—	0	4	15	NN	—	0	7	2	2
New Mexico†	—	162	386	1,249	1,113	—	0	4	11	NN	1	2	12	15	17
Utah	54	122	157	1,177	1,264	—	0	2	2	NN	—	1	5	6	11
Wyoming†	15	38	90	329	403	—	0	2	2	NN	—	0	2	2	6
<b>Pacific</b>	3,592	3,762	5,414	35,633	37,032	21	0	77	379	NN	10	11	25	55	93
Alaska	—	112	156	1,035	1,162	N	0	0	N	NN	—	0	3	3	2
California	3,103	2,927	4,739	28,479	27,949	21	0	77	379	NN	5	6	16	27	52
Hawaii	—	107	158	726	1,219	N	0	0	N	NN	—	0	0	—	1
Oregon	190	212	496	2,257	2,595	N	0	0	N	NN	5	3	13	24	28
Washington	299	398	505	3,136	4,107	N	0	0	N	NN	—	1	7	1	10
<b>Territories</b>															
American Samoa	—	0	0	—	—	N	0	0	N	NN	N	0	0	N	NN
C.N.M.I.	—	—	—	—	—	—	—	—	—	NN	—	—	—	—	—
Guam	—	9	31	71	4	—	0	0	—	NN	—	0	0	—	—
Puerto Rico	112	102	252	1,081	1,093	N	0	0	N	NN	N	0	0	N	NN
U.S. Virgin Islands	—	12	29	—	108	—	0	0	—	NN	—	0	0	—	—

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

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see <http://www.cdc.gov/ncphi/diss/nndss/pubs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf>. Data for TB are displayed in Table IV, which appears quarterly.

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 12, 2011, and March 13, 2010 (10th week)\*

Reporting area	Dengue Virus Infection									
	Dengue Fever <sup>†</sup>					Dengue Hemorrhagic Fever <sup>§</sup>				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
	Med	Max				Med	Max			
<b>United States</b>	—	6	51	5	53	—	0	2	—	—
<b>New England</b>	—	0	3	—	3	—	0	0	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine <sup>¶</sup>	—	0	2	—	3	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	0	—	—	—	0	0	—	—
Rhode Island <sup>¶</sup>	—	0	1	—	—	—	0	0	—	—
Vermont <sup>¶</sup>	—	0	1	—	—	—	0	0	—	—
<b>Mid. Atlantic</b>	—	2	25	2	21	—	0	1	—	—
New Jersey	—	0	5	—	2	—	0	0	—	—
New York (Upstate)	—	0	5	—	1	—	0	1	—	—
New York City	—	1	17	—	13	—	0	1	—	—
Pennsylvania	—	0	3	2	5	—	0	0	—	—
<b>E.N. Central</b>	—	1	7	2	8	—	0	1	—	—
Illinois	—	0	2	—	2	—	0	0	—	—
Indiana	—	0	2	1	1	—	0	0	—	—
Michigan	—	0	2	—	—	—	0	0	—	—
Ohio	—	0	2	—	5	—	0	0	—	—
Wisconsin	—	0	2	1	—	—	0	1	—	—
<b>W.N. Central</b>	—	0	6	—	4	—	0	1	—	—
Iowa	—	0	1	—	—	—	0	0	—	—
Kansas	—	0	1	—	—	—	0	0	—	—
Minnesota	—	0	2	—	4	—	0	0	—	—
Missouri	—	0	0	—	—	—	0	0	—	—
Nebraska <sup>¶</sup>	—	0	6	—	—	—	0	0	—	—
North Dakota	—	0	1	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	1	—	—
<b>S. Atlantic</b>	—	2	19	—	10	—	0	1	—	—
Delaware	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	—	2	14	—	8	—	0	1	—	—
Georgia	—	0	2	—	1	—	0	0	—	—
Maryland <sup>¶</sup>	—	0	0	—	—	—	0	0	—	—
North Carolina	—	0	2	—	—	—	0	0	—	—
South Carolina <sup>¶</sup>	—	0	3	—	—	—	0	0	—	—
Virginia <sup>¶</sup>	—	0	3	—	1	—	0	0	—	—
West Virginia	—	0	1	—	—	—	0	0	—	—
<b>E.S. Central</b>	—	0	2	—	—	—	0	0	—	—
Alabama <sup>¶</sup>	—	0	2	—	—	—	0	0	—	—
Kentucky	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—
Tennessee <sup>¶</sup>	—	0	1	—	—	—	0	0	—	—
<b>W.S. Central</b>	—	0	1	—	—	—	0	1	—	—
Arkansas <sup>¶</sup>	—	0	0	—	—	—	0	1	—	—
Louisiana	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	1	—	—	—	0	0	—	—
Texas <sup>¶</sup>	—	0	1	—	—	—	0	0	—	—
<b>Mountain</b>	—	0	2	—	2	—	0	0	—	—
Arizona	—	0	1	—	—	—	0	0	—	—
Colorado	—	0	0	—	—	—	0	0	—	—
Idaho <sup>¶</sup>	—	0	1	—	—	—	0	0	—	—
Montana <sup>¶</sup>	—	0	1	—	—	—	0	0	—	—
Nevada <sup>¶</sup>	—	0	1	—	1	—	0	0	—	—
New Mexico <sup>¶</sup>	—	0	0	—	1	—	0	0	—	—
Utah	—	0	0	—	—	—	0	0	—	—
Wyoming <sup>¶</sup>	—	0	0	—	—	—	0	0	—	—
<b>Pacific</b>	—	0	6	1	5	—	0	0	—	—
Alaska	—	0	1	—	—	—	0	0	—	—
California	—	0	5	—	2	—	0	0	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—
Washington	—	0	2	1	3	—	0	0	—	—
<b>Territories</b>										
American Samoa	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	105	523	136	906	—	1	18	—	21
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

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

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see <http://www.cdc.gov/ncphi/diss/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf>. Data for TB are displayed in Table IV, which appears quarterly.

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

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

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



Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 12, 2011, and March 13, 2010 (10th week)\*

Reporting area	Ehrlichiosis/Anaplasmosis†														
	<i>Ehrlichia chaffeensis</i>				<i>Anaplasma phagocytophilum</i>				Undetermined						
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
	Med	Max				Med	Max				Med	Max			
<b>United States</b>	—	8	49	7	33	—	13	59	5	14	—	1	10	1	—
<b>New England</b>	—	0	2	—	1	—	1	8	1	6	—	0	2	—	—
Connecticut	—	0	0	—	—	—	0	5	—	—	—	0	2	—	—
Maine <sup>§</sup>	—	0	1	—	1	—	0	2	1	3	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	1	—	—	—	0	3	—	—	—	0	1	—	—
Rhode Island <sup>§</sup>	—	0	1	—	—	—	0	6	—	3	—	0	0	—	—
Vermont <sup>§</sup>	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
<b>Mid. Atlantic</b>	—	1	10	—	5	—	4	15	2	1	—	0	1	—	—
New Jersey	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
New York (Upstate)	—	0	10	—	2	—	4	15	2	1	—	0	1	—	—
New York City	—	0	3	—	2	—	0	1	—	—	—	0	0	—	—
Pennsylvania	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
<b>E.N. Central</b>	—	0	4	1	2	—	4	41	—	3	—	1	7	1	—
Illinois	—	0	2	—	—	—	0	2	—	—	—	0	2	—	—
Indiana	—	0	0	—	—	—	0	0	—	—	—	0	3	1	—
Michigan	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
Ohio	—	0	3	1	—	—	0	1	—	—	—	0	0	—	—
Wisconsin	—	0	1	—	2	—	4	41	—	3	—	0	4	—	—
<b>W.N. Central</b>	—	1	13	—	1	—	0	3	—	—	—	0	3	—	—
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Minnesota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Missouri	—	1	13	—	1	—	0	3	—	—	—	0	3	—	—
Nebraska <sup>§</sup>	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
<b>S. Atlantic</b>	—	3	17	6	22	—	1	7	1	4	—	0	1	—	—
Delaware	—	0	3	1	1	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Florida	—	0	2	1	1	—	0	1	—	—	—	0	0	—	—
Georgia	—	0	4	1	2	—	0	1	—	—	—	0	1	—	—
Maryland <sup>§</sup>	—	0	3	2	4	—	0	2	—	2	—	0	1	—	—
North Carolina	—	1	13	1	14	—	0	4	1	2	—	0	0	—	—
South Carolina <sup>§</sup>	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
Virginia <sup>§</sup>	—	1	8	—	—	—	0	2	—	—	—	0	1	—	—
West Virginia	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
<b>E.S. Central</b>	—	1	11	—	—	—	0	2	1	—	—	0	1	—	—
Alabama <sup>§</sup>	—	0	3	—	—	—	0	2	1	—	—	0	0	—	—
Kentucky	—	0	2	—	—	—	0	0	—	—	—	0	0	—	—
Mississippi	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
Tennessee <sup>§</sup>	—	0	7	—	—	—	0	2	—	—	—	0	1	—	—
<b>W.S. Central</b>	—	0	11	—	1	—	0	4	—	—	—	0	1	—	—
Arkansas <sup>§</sup>	—	0	5	—	—	—	0	2	—	—	—	0	0	—	—
Louisiana	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	6	—	—	—	0	2	—	—	—	0	0	—	—
Texas <sup>§</sup>	—	0	1	—	1	—	0	1	—	—	—	0	1	—	—
<b>Mountain</b>	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Colorado	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Idaho <sup>§</sup>	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Montana <sup>§</sup>	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Nevada <sup>§</sup>	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Mexico <sup>§</sup>	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Utah	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Wyoming <sup>§</sup>	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
<b>Pacific</b>	—	0	1	—	1	—	0	0	—	—	—	0	1	—	—
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
California	—	0	1	—	1	—	0	0	—	—	—	0	1	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
<b>Territories</b>															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see <http://www.cdc.gov/ncphi/diss/nndss/pubs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf>. Data for TB are displayed in Table IV, which appears quarterly.

† Cumulative total *E. ewingii* cases reported for year 2010 = 11 and 1 case report for 2011.

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 12, 2011, and March 13, 2010 (10th week)\*

Reporting area	Giardiasis					Gonorrhea					Haemophilus influenzae, invasive† All ages, all serotypes				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	168	327	486	2,127	3,154	2,630	5,707	6,572	49,326	55,407	24	56	105	537	648
<b>New England</b>	3	28	54	151	288	129	102	206	916	901	—	3	9	28	30
Connecticut	—	4	12	—	73	33	42	169	360	383	—	0	6	—	—
Maine <sup>§</sup>	1	4	11	17	33	5	3	7	32	46	—	0	2	5	1
Massachusetts	—	14	25	95	112	80	47	80	432	383	—	2	6	18	22
New Hampshire	—	2	8	7	29	3	3	7	21	31	—	0	1	1	4
Rhode Island <sup>§</sup>	—	1	7	7	11	8	5	15	66	49	—	0	2	3	2
Vermont <sup>§</sup>	2	3	10	25	30	—	0	17	5	9	—	0	3	1	1
<b>Mid. Atlantic</b>	37	60	106	445	536	340	710	1,169	6,415	6,277	5	11	26	108	150
New Jersey	—	4	18	—	74	110	116	174	1,281	1,051	—	2	5	17	22
New York (Upstate)	30	21	58	159	187	83	110	260	940	768	1	3	15	23	39
New York City	2	17	33	152	139	—	232	534	1,835	2,363	1	2	6	21	26
Pennsylvania	5	16	27	134	136	147	262	366	2,359	2,095	3	4	11	47	63
<b>E.N. Central</b>	24	55	90	308	593	259	1,002	1,278	7,892	10,089	3	10	20	79	106
Illinois	—	11	32	34	139	5	224	287	1,475	2,323	—	3	7	2	29
Indiana	—	5	11	27	84	—	105	321	854	768	—	2	7	10	17
Michigan	3	12	25	68	127	152	250	482	2,407	2,953	—	1	3	16	5
Ohio	21	16	29	131	158	51	318	383	2,416	3,174	3	2	6	36	23
Wisconsin	—	8	33	48	85	51	93	156	740	871	—	2	5	15	32
<b>W.N. Central</b>	8	24	101	175	208	76	288	367	2,272	2,643	1	3	14	22	24
Iowa	—	5	11	37	52	4	34	57	298	319	—	0	1	—	—
Kansas	2	3	10	28	44	8	40	62	303	351	—	0	2	1	4
Minnesota	—	0	75	—	—	—	38	62	182	453	—	0	9	—	3
Missouri	2	8	26	65	59	46	141	181	1,184	1,221	—	2	4	12	13
Nebraska <sup>§</sup>	4	4	9	35	38	17	22	50	203	195	1	0	3	9	2
North Dakota	—	0	5	—	—	—	3	9	17	29	—	0	2	—	2
South Dakota	—	1	7	10	15	1	8	20	85	75	—	0	0	—	—
<b>S. Atlantic</b>	43	72	114	430	635	709	1,355	1,807	12,206	14,184	12	15	26	156	146
Delaware	—	0	5	5	9	23	19	48	200	180	—	0	1	1	2
District of Columbia	—	1	5	4	9	10	34	66	285	386	—	0	1	—	—
Florida	19	41	75	230	315	163	386	486	3,337	3,831	5	4	9	54	37
Georgia	17	10	25	84	148	96	224	365	1,816	2,197	2	3	7	35	40
Maryland <sup>§</sup>	3	5	11	45	56	—	137	241	818	1,059	1	1	5	12	8
North Carolina	N	0	0	N	N	271	245	596	3,190	3,330	1	2	9	17	19
South Carolina <sup>§</sup>	1	3	9	16	19	—	151	261	1,235	1,525	3	1	5	13	22
Virginia <sup>§</sup>	3	8	30	46	70	126	139	223	1,147	1,588	—	2	6	24	15
West Virginia	—	0	6	—	9	20	13	26	178	88	—	0	3	—	3
<b>E.S. Central</b>	2	4	12	20	50	206	473	697	4,023	4,423	2	3	10	30	38
Alabama <sup>§</sup>	2	4	11	18	23	—	159	236	1,262	1,322	—	1	4	9	4
Kentucky	N	0	0	N	N	—	72	160	461	699	—	1	3	6	7
Mississippi	N	0	0	N	N	157	110	216	1,043	1,063	—	0	2	1	4
Tennessee <sup>§</sup>	—	0	4	2	27	49	145	195	1,257	1,339	2	2	5	14	23
<b>W.S. Central</b>	2	6	14	31	66	474	851	1,188	7,831	9,031	—	3	21	33	32
Arkansas <sup>§</sup>	2	2	7	14	16	137	84	133	910	634	—	0	3	7	3
Louisiana	—	3	8	17	31	72	94	263	1,008	1,607	—	0	4	14	8
Oklahoma	—	0	5	—	19	—	78	332	546	676	—	2	17	12	18
Texas <sup>§</sup>	N	0	0	N	N	265	598	866	5,367	6,114	—	0	1	—	3
<b>Mountain</b>	8	31	51	195	311	44	178	235	1,554	1,706	1	5	11	56	99
Arizona	1	3	8	19	30	—	55	87	383	588	—	2	7	21	41
Colorado	7	12	27	89	129	38	54	93	470	539	—	1	5	16	21
Idaho <sup>§</sup>	—	4	9	31	40	5	2	14	19	26	1	0	2	3	3
Montana <sup>§</sup>	—	2	7	5	21	—	2	5	15	25	—	0	1	2	—
Nevada <sup>§</sup>	—	2	11	16	9	—	30	103	401	309	—	0	1	3	4
New Mexico <sup>§</sup>	—	2	6	4	14	—	23	39	215	151	—	1	3	8	13
Utah	—	4	11	24	53	1	5	15	40	60	—	0	3	3	12
Wyoming <sup>§</sup>	—	0	5	7	15	—	1	4	11	8	—	0	1	—	5
<b>Pacific</b>	41	50	123	372	467	393	656	851	6,217	6,153	—	2	6	25	23
Alaska	—	2	6	11	17	—	21	37	151	279	—	0	2	7	6
California	21	30	52	238	299	333	551	727	5,379	5,032	—	0	0	—	—
Hawaii	—	1	4	3	12	—	13	26	86	159	—	0	2	5	5
Oregon	10	9	20	78	93	15	19	30	206	210	—	1	5	13	10
Washington	10	8	71	42	46	45	53	86	395	473	—	0	2	—	2
<b>Territories</b>															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	—	0	5	1	—	—	0	0	—	—
Puerto Rico	—	1	8	5	10	1	6	14	70	43	—	0	0	—	1
U.S. Virgin Islands	—	0	0	—	—	—	2	7	—	22	—	0	0	—	—

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

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see <http://www.cdc.gov/ncphi/diss/nndss/pubs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf>. Data for TB are displayed in Table IV, which appears quarterly.

† Data for H. influenzae (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 12, 2011, and March 13, 2010 (10th week)\*

Reporting area	Hepatitis (viral, acute), by type														
	A				B				C						
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
	Med	Max				Med	Max				Med	Max			
<b>United States</b>	16	29	43	211	306	24	61	117	367	559	11	15	24	117	126
<b>New England</b>	1	1	6	10	29	—	0	4	2	13	2	0	4	2	14
Connecticut	—	0	4	5	7	—	0	2	—	4	—	0	4	—	8
Maine†	1	0	1	1	1	—	0	1	1	4	1	0	0	1	—
Massachusetts	—	0	5	1	17	—	0	2	—	5	—	0	1	—	6
New Hampshire	—	0	1	—	—	—	0	2	1	—	N	0	0	N	N
Rhode Island†	—	0	4	1	4	U	0	0	U	U	U	0	0	U	U
Vermont†	—	0	1	2	—	—	0	1	—	—	1	0	1	1	—
<b>Mid. Atlantic</b>	2	4	10	33	42	1	5	10	38	49	1	1	5	7	11
New Jersey	—	0	2	—	6	—	1	5	5	15	—	0	2	—	2
New York (Upstate)	—	1	4	6	8	—	1	8	10	4	1	1	4	6	7
New York City	—	1	7	13	17	1	1	3	11	19	—	0	1	—	—
Pennsylvania	2	1	3	14	11	—	2	5	12	11	—	0	3	1	2
<b>E.N. Central</b>	1	4	9	33	50	3	9	22	58	112	1	2	7	22	18
Illinois	—	1	3	2	13	—	2	6	7	20	—	0	1	—	—
Indiana	1	0	3	7	5	—	1	6	4	17	—	0	4	10	5
Michigan	—	1	5	11	9	2	2	5	21	23	1	1	6	12	11
Ohio	—	1	5	12	8	1	1	16	21	22	—	0	1	—	1
Wisconsin	—	0	2	1	15	—	1	5	5	30	—	0	2	—	1
<b>W.N. Central</b>	—	1	13	9	11	2	2	8	21	29	—	0	8	2	—
Iowa	—	0	3	1	4	—	0	1	1	5	—	0	0	—	—
Kansas	—	0	2	1	4	—	0	1	2	2	—	0	1	—	—
Minnesota	—	0	12	—	—	—	0	7	—	—	—	0	6	—	—
Missouri	—	0	2	3	2	2	1	3	13	15	—	0	2	—	—
Nebraska†	—	0	4	2	1	—	0	3	4	7	—	0	1	2	—
North Dakota	—	0	3	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	2	2	—	—	0	1	1	—	—	0	0	—	—
<b>S. Atlantic</b>	5	6	14	45	59	9	17	33	116	148	3	3	6	27	21
Delaware	—	0	1	1	2	—	0	2	—	6	U	0	0	U	U
District of Columbia	—	0	0	—	1	—	0	1	—	1	—	0	1	—	1
Florida	4	2	7	18	24	2	5	11	38	58	1	0	3	8	—
Georgia	1	1	4	12	5	1	3	8	26	40	—	0	2	2	2
Maryland†	—	0	3	4	5	2	1	5	11	14	1	0	3	5	5
North Carolina	—	1	5	3	6	1	2	16	21	11	1	1	3	10	9
South Carolina†	—	0	3	2	10	1	1	4	5	8	—	0	1	—	—
Virginia†	—	1	6	5	5	2	2	7	15	5	—	0	2	2	3
West Virginia	—	0	5	—	1	—	0	12	—	5	—	0	5	—	1
<b>E.S. Central</b>	—	0	5	4	8	5	8	13	75	66	2	3	8	28	21
Alabama†	—	0	2	—	3	—	1	4	12	17	—	0	1	—	1
Kentucky	—	0	5	2	3	1	3	8	27	23	—	2	6	14	19
Mississippi	—	0	1	—	—	—	0	3	2	4	U	0	0	U	U
Tennessee†	—	0	2	2	2	4	2	8	34	22	2	1	5	14	1
<b>W.S. Central</b>	3	2	13	13	23	4	10	51	35	54	1	2	7	16	10
Arkansas†	—	0	1	—	—	—	1	4	2	8	—	0	0	—	—
Louisiana	—	0	2	1	3	—	1	3	9	11	—	0	2	4	—
Oklahoma	—	0	4	—	—	3	2	8	11	8	—	0	6	6	2
Texas†	3	2	9	12	20	1	5	40	13	27	1	0	3	6	8
<b>Mountain</b>	—	2	8	17	34	—	2	8	12	28	1	1	4	7	14
Arizona	—	1	4	7	17	—	0	2	1	7	U	0	0	U	U
Colorado	—	1	2	5	9	—	0	5	1	8	—	0	3	1	4
Idaho†	—	0	2	1	2	—	0	1	2	1	—	0	2	4	3
Montana†	—	0	1	2	1	—	0	0	—	—	—	0	1	—	—
Nevada†	—	0	2	—	2	—	1	3	7	7	—	0	1	—	—
New Mexico†	—	0	1	1	1	—	0	1	—	2	1	0	2	2	5
Utah	—	0	2	—	2	—	0	1	1	3	—	0	2	—	2
Wyoming†	—	0	3	1	—	—	0	1	—	—	—	0	0	—	—
<b>Pacific</b>	4	5	14	47	50	—	5	23	10	60	—	1	8	6	17
Alaska	—	0	1	—	—	—	0	1	—	1	U	0	0	U	U
California	3	4	14	38	40	—	3	18	—	45	—	0	3	1	8
Hawaii	—	0	1	1	4	—	0	1	—	1	U	0	0	U	U
Oregon	1	0	2	4	4	—	1	3	8	10	—	0	3	3	7
Washington	—	0	2	4	2	—	1	5	2	3	—	0	5	2	2
<b>Territories</b>															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	6	1	1	—	1	6	7	8	—	0	7	3	6
Puerto Rico	—	0	2	1	3	—	0	2	—	6	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see <http://www.cdc.gov/ncphi/diss/nndss/pdfs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf>. Data for TB are displayed in Table IV, which appears quarterly.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 12, 2011, and March 13, 2010 (10th week)\*

Reporting area	Legionellosis					Lyme disease					Malaria				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	29	57	122	308	400	49	407	1,672	972	2,364	8	27	81	161	222
<b>New England</b>	2	4	16	19	19	—	126	504	103	729	—	1	5	6	13
Connecticut	—	0	6	—	3	—	47	213	—	303	—	0	1	—	—
Maine†	1	0	3	2	—	—	11	62	26	25	—	0	1	—	—
Massachusetts	—	2	10	13	10	—	40	223	35	246	—	1	4	4	12
New Hampshire	1	0	5	2	1	—	22	68	25	131	—	0	2	—	1
Rhode Island†	—	0	4	1	4	—	1	40	3	13	—	0	4	—	—
Vermont†	—	0	2	1	1	—	4	27	14	11	—	0	1	2	—
<b>Mid. Atlantic</b>	10	14	48	73	84	21	181	734	599	1,124	1	7	18	45	55
New Jersey	—	1	11	1	13	—	47	220	85	328	—	0	1	—	—
New York (Upstate)	5	5	19	28	23	13	36	159	87	113	1	1	6	7	15
New York City	1	2	17	18	21	—	1	8	2	30	—	4	14	30	30
Pennsylvania	4	6	19	26	27	8	92	386	425	653	—	1	3	8	10
<b>E.N. Central</b>	6	12	44	59	101	—	26	326	8	103	1	2	9	13	19
Illinois	—	2	15	1	13	—	1	18	—	5	—	0	7	—	7
Indiana	—	2	7	6	17	—	0	7	—	10	—	0	2	2	2
Michigan	—	3	20	14	12	—	1	14	1	—	—	0	4	2	3
Ohio	6	4	15	38	37	—	0	9	3	5	1	1	5	8	7
Wisconsin	—	1	5	—	22	—	22	298	4	83	—	0	2	1	—
<b>W.N. Central</b>	—	2	9	4	12	—	1	11	—	3	—	1	4	2	15
Iowa	—	0	2	—	1	—	0	10	—	2	—	0	2	—	3
Kansas	—	0	2	—	2	—	0	1	—	1	—	0	2	1	3
Minnesota	—	0	8	—	3	—	0	0	—	—	—	0	0	—	3
Missouri	—	1	4	3	3	—	0	1	—	—	—	0	3	—	2
Nebraska†	—	0	2	—	2	—	0	2	—	—	—	0	1	1	4
North Dakota	—	0	1	—	—	—	0	5	—	—	—	0	1	—	—
South Dakota	—	0	2	1	1	—	0	1	—	—	—	0	2	—	—
<b>S. Atlantic</b>	2	10	27	48	67	27	57	177	240	362	2	7	44	61	74
Delaware	—	0	3	—	3	3	10	33	57	107	—	0	1	—	1
District of Columbia	—	0	4	—	—	—	0	4	3	1	—	0	2	1	1
Florida	2	3	9	30	27	5	2	10	19	9	—	2	7	17	24
Georgia	—	1	4	1	10	—	0	2	1	1	—	1	7	10	14
Maryland†	—	2	6	7	17	8	22	106	80	166	—	1	24	10	11
North Carolina	—	1	7	5	2	—	1	9	6	25	—	0	13	8	13
South Carolina†	—	0	2	1	1	—	0	3	1	4	—	0	1	—	1
Virginia†	—	1	9	4	6	11	18	82	73	44	2	1	5	15	9
West Virginia	—	0	3	—	1	—	0	29	—	5	—	0	1	—	—
<b>E.S. Central</b>	1	2	10	11	19	—	0	4	1	7	—	0	3	2	3
Alabama†	—	0	2	1	3	—	0	1	—	—	—	0	1	1	1
Kentucky	—	0	4	4	5	—	0	1	—	1	—	0	1	—	2
Mississippi	—	0	3	1	2	—	0	0	—	—	—	0	2	—	—
Tennessee†	1	1	6	5	9	—	0	4	1	6	—	0	2	1	—
<b>W.S. Central</b>	1	3	8	16	11	—	2	19	2	6	—	1	14	4	13
Arkansas†	—	0	2	—	1	—	0	0	—	—	—	0	1	—	1
Louisiana	—	0	3	6	1	—	0	1	—	—	—	0	1	—	1
Oklahoma	—	0	3	1	—	—	0	0	—	—	—	0	1	1	1
Texas†	1	2	7	9	9	—	2	19	2	6	—	1	13	3	10
<b>Mountain</b>	1	3	10	12	28	—	0	3	1	2	—	1	4	9	10
Arizona	1	1	7	6	7	—	0	1	—	—	—	0	3	3	3
Colorado	—	0	2	1	9	—	0	1	—	—	—	0	3	3	2
Idaho†	—	0	1	1	—	—	0	2	—	1	—	0	1	—	—
Montana†	—	0	1	—	1	—	0	1	—	—	—	0	1	—	—
Nevada†	—	0	2	1	5	—	0	1	—	—	—	0	2	2	2
New Mexico†	—	0	2	—	1	—	0	2	1	—	—	0	1	1	—
Utah	—	0	2	3	5	—	0	1	—	1	—	0	0	—	3
Wyoming†	—	0	2	—	—	—	0	0	—	—	—	0	0	—	—
<b>Pacific</b>	6	5	14	66	59	1	3	10	18	28	4	3	10	19	20
Alaska	—	0	2	—	—	—	0	1	—	1	—	0	2	2	—
California	6	4	12	59	58	1	2	7	13	13	4	2	9	11	15
Hawaii	—	0	1	1	—	N	0	0	N	N	—	0	1	—	—
Oregon	—	0	3	1	—	—	1	3	5	14	—	0	3	3	2
Washington	—	0	5	5	1	—	0	3	—	—	—	0	5	3	3
<b>Territories</b>															
American Samoa	—	0	0	—	—	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	N	0	0	N	N	—	0	1	—	3
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see <http://www.cdc.gov/ncphi/diss/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf>. Data for TB are displayed in Table IV, which appears quarterly.

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 12, 2011, and March 13, 2010 (10th week)\*

Reporting area	Meningococcal disease, invasive† All serogroups					Mumps					Pertussis				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	7	14	36	109	176	1	13	220	55	838	154	527	1,943	2,197	2,172
<b>New England</b>	—	0	3	5	2	—	0	2	1	14	1	9	24	64	48
Connecticut	—	0	1	1	—	—	0	1	—	9	—	1	8	—	6
Maine <sup>§</sup>	—	0	1	1	—	—	0	1	—	1	1	1	9	27	3
Massachusetts	—	0	2	3	1	—	0	2	1	4	—	5	13	25	31
New Hampshire	—	0	0	—	—	—	0	1	—	—	—	0	2	8	3
Rhode Island <sup>§</sup>	—	0	1	—	—	—	0	0	—	—	—	0	7	3	3
Vermont <sup>§</sup>	—	0	1	—	1	—	0	0	—	—	—	0	4	1	2
<b>Mid. Atlantic</b>	2	1	5	19	20	—	6	209	5	768	28	38	121	264	122
New Jersey	—	0	2	—	6	—	1	16	4	164	—	2	9	1	27
New York (Upstate)	1	0	4	7	2	—	1	44	1	486	13	11	85	88	37
New York City	—	0	3	6	5	—	0	201	—	115	—	0	12	—	—
Pennsylvania	1	0	2	6	7	—	0	16	—	3	15	18	70	175	58
<b>E.N. Central</b>	1	2	9	13	33	—	1	7	13	23	36	114	194	660	555
Illinois	—	0	3	1	7	—	0	2	5	4	—	22	52	101	71
Indiana	—	0	2	2	9	—	0	1	—	2	—	12	26	44	51
Michigan	—	0	4	2	2	—	0	2	2	10	16	30	57	196	158
Ohio	1	0	2	6	8	—	0	5	6	2	20	34	80	253	207
Wisconsin	—	0	3	2	7	—	0	2	—	5	—	12	24	66	68
<b>W.N. Central</b>	—	1	5	12	9	—	1	14	7	9	5	35	392	149	167
Iowa	—	0	3	2	1	—	0	7	—	3	—	12	34	34	29
Kansas	—	0	2	1	1	—	0	1	2	1	—	2	9	15	30
Minnesota	—	0	1	—	1	—	0	4	—	1	—	0	384	—	—
Missouri	—	0	4	5	5	—	0	3	4	3	1	7	44	71	85
Nebraska <sup>§</sup>	—	0	2	3	1	—	0	10	1	1	4	4	13	24	10
North Dakota	—	0	1	—	—	—	0	1	—	—	—	0	30	3	—
South Dakota	—	0	1	1	—	—	0	1	—	—	—	0	2	2	13
<b>S. Atlantic</b>	1	2	7	21	41	—	0	5	—	12	31	40	77	324	287
Delaware	—	0	1	—	1	—	0	0	—	—	—	0	4	5	—
District of Columbia	—	0	0	—	—	—	0	1	—	1	—	0	2	1	1
Florida	1	1	5	8	17	—	0	3	—	1	15	6	28	66	38
Georgia	—	0	2	1	3	—	0	2	—	—	4	5	13	52	40
Maryland <sup>§</sup>	—	0	1	2	1	—	0	1	—	4	—	2	6	20	34
North Carolina	—	0	2	6	5	—	0	2	—	—	3	3	35	71	123
South Carolina <sup>§</sup>	—	0	1	2	4	—	0	2	—	1	2	6	25	37	30
Virginia <sup>§</sup>	—	0	2	2	9	—	0	2	—	3	7	6	38	72	19
West Virginia	—	0	1	—	1	—	0	0	—	2	—	1	21	—	2
<b>E.S. Central</b>	—	1	3	9	8	—	0	2	3	2	2	15	35	84	159
Alabama <sup>§</sup>	—	0	1	5	1	—	0	2	1	—	—	4	8	23	45
Kentucky	—	0	2	—	3	—	0	1	—	—	—	5	16	36	53
Mississippi	—	0	1	1	2	—	0	1	2	—	—	1	8	1	15
Tennessee <sup>§</sup>	—	0	2	3	2	—	0	1	—	2	2	4	11	24	46
<b>W.S. Central</b>	1	1	10	8	20	1	2	16	21	5	12	54	219	139	495
Arkansas <sup>§</sup>	—	0	1	2	2	—	0	1	—	—	—	2	14	7	23
Louisiana	—	0	2	3	6	—	0	2	—	—	—	1	3	3	8
Oklahoma	1	0	7	2	4	—	0	1	—	—	—	0	63	2	1
Texas <sup>§</sup>	—	1	9	1	8	1	2	15	21	5	12	47	146	127	463
<b>Mountain</b>	—	1	6	9	12	—	0	4	1	2	17	36	98	400	201
Arizona	—	0	2	4	4	—	0	1	—	1	2	10	28	108	72
Colorado	—	0	4	—	3	—	0	1	—	1	13	9	67	181	20
Idaho <sup>§</sup>	—	0	1	3	1	—	0	1	—	—	2	2	15	23	35
Montana <sup>§</sup>	—	0	1	—	1	—	0	0	—	—	—	2	16	38	5
Nevada <sup>§</sup>	—	0	1	—	1	—	0	1	—	—	—	0	7	7	1
New Mexico <sup>§</sup>	—	0	1	—	2	—	0	2	1	—	—	1	11	8	25
Utah	—	0	1	2	—	—	0	1	—	—	—	6	13	35	42
Wyoming <sup>§</sup>	—	0	1	—	—	—	0	1	—	—	—	0	2	—	1
<b>Pacific</b>	2	2	15	13	31	—	0	2	4	3	22	124	986	113	138
Alaska	—	0	1	—	—	—	0	0	—	1	—	0	6	13	5
California	—	1	10	—	19	—	0	0	—	—	—	109	846	—	60
Hawaii	1	0	1	2	—	—	0	1	1	1	1	1	6	6	12
Oregon	1	0	3	8	9	—	0	1	3	1	1	5	12	29	43
Washington	—	0	4	3	3	—	0	2	—	—	20	7	132	65	18
<b>Territories</b>	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
American Samoa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	1	15	4	—	—	0	3	4	—
Puerto Rico	—	0	0	—	—	—	0	1	—	—	—	0	1	1	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see <http://www.cdc.gov/ncphi/diss/nndss/pubs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf>. Data for TB are displayed in Table IV, which appears quarterly.

† Data for meningococcal disease, invasive caused by serogroups A, C, Y, and W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I.

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 12, 2011, and March 13, 2010 (10th week)\*

Reporting area	Rabies, animal					Salmonellosis					Shiga toxin-producing <i>E. coli</i> (STEC) <sup>†</sup>				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	24	62	143	237	522	274	917	1,756	3,965	5,554	32	92	216	427	428
<b>New England</b>	—	3	10	13	47	—	33	73	189	684	—	2	13	15	73
Connecticut	—	0	7	—	19	—	0	51	51	480	—	0	7	7	57
Maine <sup>§</sup>	—	1	3	4	15	—	3	8	22	13	—	0	3	1	—
Massachusetts	—	0	0	—	—	—	23	52	87	148	—	1	9	3	11
New Hampshire	—	0	5	1	3	—	3	12	14	22	—	0	2	4	5
Rhode Island <sup>§</sup>	—	0	4	2	1	—	2	18	9	16	—	0	1	—	—
Vermont <sup>§</sup>	—	1	3	6	9	—	2	5	6	5	—	0	2	—	—
<b>Mid. Atlantic</b>	1	18	41	41	159	26	95	218	393	629	2	9	32	51	39
New Jersey	—	0	0	—	—	—	16	57	35	120	—	1	9	7	7
New York (Upstate)	1	9	19	41	69	14	25	63	98	125	2	4	12	17	11
New York City	—	0	12	—	53	1	23	56	117	162	—	1	7	6	7
Pennsylvania	—	8	24	—	37	11	31	81	143	222	—	3	13	21	14
<b>E.N. Central</b>	—	2	27	7	29	13	45	97	212	282	3	11	39	31	49
Illinois	—	1	11	4	1	—	33	124	81	225	—	2	9	3	15
Indiana	—	0	0	—	—	—	13	62	32	71	—	2	10	12	5
Michigan	—	1	5	2	3	1	16	49	79	120	—	3	16	15	16
Ohio	—	0	12	1	2	17	24	47	140	157	1	3	11	21	7
Wisconsin	—	0	0	—	—	—	10	48	30	66	—	4	17	11	21
<b>W.N. Central</b>	2	4	36	7	29	13	45	97	212	282	3	11	39	31	49
Iowa	—	0	3	—	1	—	9	34	50	36	—	2	16	7	8
Kansas	1	1	4	3	12	—	7	18	34	47	—	1	5	6	5
Minnesota	—	0	34	—	8	—	0	32	—	69	—	0	7	—	14
Missouri	—	1	6	—	1	9	13	44	96	79	3	4	27	10	16
Nebraska <sup>§</sup>	1	1	4	4	7	4	4	13	20	27	—	1	6	8	4
North Dakota	—	0	3	—	—	—	0	13	—	2	—	0	10	—	—
South Dakota	—	0	0	—	—	—	2	17	12	22	—	0	4	—	2
<b>S. Atlantic</b>	15	20	38	142	230	122	262	612	1,269	1,533	16	15	33	131	64
Delaware	—	0	0	—	—	1	3	11	18	12	—	0	2	2	—
District of Columbia	—	0	0	—	—	—	1	6	4	12	—	0	1	1	1
Florida	—	0	9	16	96	44	108	226	511	700	10	5	23	59	23
Georgia	—	0	0	—	—	16	41	144	240	188	—	2	8	11	10
Maryland <sup>§</sup>	6	6	15	36	63	8	18	57	86	118	—	2	9	20	9
North Carolina	—	0	0	—	—	41	29	240	200	318	2	2	10	19	5
South Carolina <sup>§</sup>	—	0	0	—	—	4	25	99	95	86	3	0	2	3	1
Virginia <sup>§</sup>	9	12	25	90	59	8	20	68	115	78	1	2	8	16	15
West Virginia	—	1	7	—	12	—	1	13	—	21	—	0	3	—	—
<b>E.S. Central</b>	1	3	7	12	14	5	55	177	264	262	—	5	22	22	18
Alabama <sup>§</sup>	1	1	4	11	—	—	20	52	84	85	—	1	4	3	6
Kentucky	—	0	4	1	—	2	11	32	48	51	—	1	6	4	2
Mississippi	—	0	1	—	—	—	18	67	42	42	—	0	12	—	3
Tennessee <sup>§</sup>	—	1	4	—	14	3	17	53	90	84	—	2	7	15	7
<b>W.S. Central</b>	4	0	30	4	7	20	127	361	373	410	6	7	77	27	19
Arkansas <sup>§</sup>	1	0	7	1	5	2	12	43	57	27	1	0	5	3	4
Louisiana	—	0	0	—	—	—	20	49	59	103	—	0	2	—	3
Oklahoma	3	0	30	3	2	9	12	39	47	40	—	0	24	4	1
Texas <sup>§</sup>	—	0	0	—	—	9	80	310	210	240	5	5	53	20	11
<b>Mountain</b>	—	1	7	1	9	10	50	111	293	402	3	11	34	32	56
Arizona	—	0	0	—	—	—	15	42	90	139	1	1	13	9	13
Colorado	—	0	0	—	—	8	10	24	88	97	—	3	21	5	15
Idaho <sup>§</sup>	—	0	2	—	1	1	3	9	32	25	1	2	7	6	7
Montana <sup>§</sup>	—	0	3	1	—	—	1	5	6	21	1	1	5	2	4
Nevada <sup>§</sup>	—	0	2	—	—	—	5	22	21	24	—	0	5	2	1
New Mexico <sup>§</sup>	—	0	2	—	3	—	6	19	26	45	—	0	6	3	7
Utah	—	0	2	—	—	—	5	17	24	38	—	1	7	5	8
Wyoming <sup>§</sup>	—	0	4	—	5	1	1	8	6	13	—	0	3	—	1
<b>Pacific</b>	1	2	12	10	21	60	108	280	610	713	1	12	52	56	46
Alaska	—	0	2	6	7	—	1	4	9	18	—	0	1	—	1
California	—	0	12	—	10	46	75	207	450	529	1	6	32	42	29
Hawaii	—	0	0	—	—	5	6	14	59	50	—	0	4	—	9
Oregon	1	0	2	4	4	1	8	48	48	68	—	2	11	6	4
Washington	—	0	0	—	—	8	14	71	44	48	—	3	18	8	3
<b>Territories</b>															
American Samoa	N	0	0	N	N	—	0	1	—	1	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	3	3	—	—	0	0	—	—
Puerto Rico	1	1	3	6	13	1	8	21	11	108	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see <http://www.cdc.gov/ncphi/diss/nndss/pdfs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf>. Data for TB are displayed in Table IV, which appears quarterly.

<sup>†</sup> Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.

<sup>§</sup> Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 12, 2011, and March 13, 2010 (10th week)\*

Reporting area	Shigellosis					Spotted Fever Rickettsiosis (including RMSF) <sup>†</sup>									
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Confirmed					Probable				
		Med	Max			Current week	Previous 52 weeks	Cum 2011	Cum 2010	Current week	Previous 52 weeks	Cum 2011	Cum 2010		
<b>United States</b>	114	272	373	1,424	2,621	—	3	10	9	9	1	27	98	44	65
<b>New England</b>	—	4	17	30	109	—	0	0	—	—	—	0	1	1	—
Connecticut	—	0	3	3	63	—	0	0	—	—	—	0	0	—	—
Maine <sup>§</sup>	—	0	1	1	2	—	0	0	—	—	—	0	1	—	—
Massachusetts	—	3	16	25	39	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	2	—	3	—	0	0	—	—	—	0	1	—	—
Rhode Island <sup>§</sup>	—	0	4	—	1	—	0	0	—	—	—	0	1	1	—
Vermont <sup>§</sup>	—	0	1	1	1	—	0	0	—	—	—	0	0	—	—
<b>Mid. Atlantic</b>	7	25	70	94	396	—	0	1	—	—	—	1	4	2	4
New Jersey	—	4	16	13	69	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	4	3	15	22	32	—	0	1	—	—	—	0	3	—	—
New York City	2	5	14	42	64	—	0	1	—	—	—	0	4	2	4
Pennsylvania	1	10	55	17	231	—	0	0	—	—	—	0	3	—	—
<b>E.N. Central</b>	4	24	45	103	608	—	0	1	—	—	—	1	10	2	1
Illinois	—	8	20	28	451	—	0	1	—	—	—	0	5	—	—
Indiana <sup>§</sup>	—	1	4	8	7	—	0	1	—	—	—	0	5	—	1
Michigan	1	5	10	22	39	—	0	0	—	—	—	0	1	1	—
Ohio	3	5	18	45	56	—	0	0	—	—	—	0	2	1	—
Wisconsin	—	2	21	—	55	—	0	0	—	—	—	0	1	—	—
<b>W.N. Central</b>	6	24	81	79	527	—	0	4	—	—	—	4	21	7	4
Iowa	—	1	4	4	12	—	0	0	—	—	—	0	1	—	—
Kansas <sup>§</sup>	1	5	13	18	33	—	0	1	—	—	—	0	0	—	—
Minnesota	—	0	3	—	8	—	0	0	—	—	—	0	0	—	—
Missouri	5	16	66	54	468	—	0	4	—	—	—	4	20	7	4
Nebraska <sup>§</sup>	—	1	10	2	4	—	0	1	—	—	—	0	1	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	2	1	2	—	0	0	—	—	—	0	0	—	—
<b>S. Atlantic</b>	50	57	122	507	302	—	1	7	4	6	—	7	60	19	47
Delaware <sup>§</sup>	—	0	3	—	23	—	0	1	—	1	—	0	3	1	3
District of Columbia	—	0	4	5	3	—	0	1	—	—	—	0	0	—	—
Florida <sup>§</sup>	26	26	55	324	104	—	0	1	1	—	—	0	2	4	—
Georgia	3	16	26	80	96	—	0	6	1	2	—	0	0	—	—
Maryland <sup>§</sup>	1	2	8	16	19	—	0	1	1	—	—	1	5	1	1
North Carolina	17	3	36	58	28	—	0	3	1	3	—	2	48	9	39
South Carolina <sup>§</sup>	1	1	5	9	19	—	0	1	—	—	—	0	2	1	2
Virginia <sup>§</sup>	2	2	8	15	10	—	0	2	—	—	—	2	12	3	2
West Virginia	—	0	66	—	—	—	0	0	—	—	—	0	0	—	—
<b>E.S. Central</b>	—	14	40	74	86	—	0	3	—	1	1	5	29	4	4
Alabama <sup>§</sup>	—	5	14	38	13	—	0	1	—	—	—	1	8	2	1
Kentucky	—	2	28	8	30	—	0	2	—	—	—	0	0	—	—
Mississippi	—	1	4	9	5	—	0	0	—	—	—	0	3	—	—
Tennessee <sup>§</sup>	—	5	14	19	38	—	0	2	—	1	1	4	20	2	3
<b>W.S. Central</b>	24	53	129	230	301	—	0	4	—	1	—	1	43	1	4
Arkansas <sup>§</sup>	—	1	6	4	10	—	0	2	—	—	—	1	29	—	1
Louisiana	—	6	13	21	28	—	0	0	—	—	—	0	1	—	—
Oklahoma	2	4	13	17	42	—	0	3	—	—	—	0	11	—	—
Texas <sup>§</sup>	22	43	112	188	221	—	0	1	—	1	—	0	3	1	3
<b>Mountain</b>	9	15	32	116	117	—	0	5	5	—	—	0	3	8	1
Arizona	—	8	19	35	73	—	0	5	5	—	—	0	3	8	—
Colorado <sup>§</sup>	1	2	8	21	17	—	0	1	—	—	—	0	1	—	—
Idaho <sup>§</sup>	—	0	3	5	4	—	0	0	—	—	—	0	1	—	—
Montana <sup>§</sup>	7	0	8	24	2	—	0	1	—	—	—	0	1	—	—
Nevada <sup>§</sup>	—	0	6	6	3	—	0	0	—	—	—	0	0	—	—
New Mexico <sup>§</sup>	1	3	10	21	14	—	0	0	—	—	—	0	0	—	1
Utah	—	1	4	4	4	—	0	0	—	—	—	0	1	—	—
Wyoming <sup>§</sup>	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
<b>Pacific</b>	14	22	73	191	175	—	0	2	—	1	—	0	1	—	—
Alaska	—	0	1	1	—	N	0	0	N	N	N	0	0	N	N
California	12	19	58	156	151	—	0	2	—	1	—	0	0	—	—
Hawaii	—	1	4	14	7	N	0	0	N	N	N	0	0	N	N
Oregon	1	1	4	11	10	—	0	0	—	—	—	0	1	—	—
Washington	1	2	17	9	7	—	0	0	—	—	—	0	0	—	—
<b>Territories</b>															
American Samoa	—	1	1	1	—	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	N	0	0	N	N	N	0	0	N	N
Puerto Rico	—	0	1	—	—	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see <http://www.cdc.gov/ncphi/diss/nndss/pdfs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf>. Data for TB are displayed in Table IV, which appears quarterly.

<sup>†</sup> Illnesses with similar clinical presentation that result from Spotted fever group rickettsia infections are reported as Spotted fever rickettsioses. Rocky Mountain spotted fever (RMSF) caused by Rickettsia rickettsii, is the most common and well-known spotted fever.

<sup>§</sup> Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 12, 2011, and March 13, 2010 (10th week)\*

Reporting area	<i>Streptococcus pneumoniae</i> , <sup>†</sup> invasive disease										Syphilis, primary and secondary					
	All ages					Age <5					Current week		Previous 52 weeks		Cum 2011	Cum 2010
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks	Cum 2011	Cum 2010		
		Med	Max				Med	Max				Med			Max	
<b>United States</b>	251	296	752	3,396	3,720	22	32	85	271	614	68	256	343	1,720	2,363	
<b>New England</b>	2	9	99	48	112	—	1	14	4	22	3	9	20	64	79	
Connecticut	—	0	91	—	—	—	0	12	—	—	1	1	8	7	16	
Maine <sup>§</sup>	—	2	13	31	28	—	0	1	1	3	—	0	3	2	6	
Massachusetts	—	1	5	6	23	—	0	3	2	16	2	5	15	40	49	
New Hampshire	—	0	7	—	38	—	0	0	—	3	—	0	2	4	2	
Rhode Island <sup>§</sup>	—	0	36	2	—	—	0	3	—	—	—	1	4	9	4	
Vermont <sup>§</sup>	2	1	5	9	23	—	0	1	1	—	—	0	1	2	2	
<b>Mid. Atlantic</b>	17	30	60	373	259	4	6	19	32	82	12	32	45	177	324	
New Jersey	—	1	8	13	26	—	1	5	8	14	1	4	12	34	46	
New York (Upstate)	2	3	11	17	41	2	1	9	10	32	5	2	18	29	12	
New York City	4	14	33	189	84	—	1	14	—	19	—	16	31	48	194	
Pennsylvania	11	12	22	154	108	2	1	5	14	17	6	7	16	66	72	
<b>E.N. Central</b>	42	62	104	658	779	2	6	13	44	109	—	26	45	103	349	
Illinois	—	2	6	13	35	—	1	4	13	30	—	7	26	15	171	
Indiana	—	10	27	95	170	—	1	6	3	16	—	4	14	19	22	
Michigan	9	13	29	129	159	—	1	4	8	27	—	4	9	20	60	
Ohio	30	25	45	333	316	2	2	5	16	23	—	8	19	46	85	
Wisconsin	3	7	19	88	99	—	0	4	4	13	—	1	3	3	11	
<b>W.N. Central</b>	5	10	61	106	205	—	1	12	19	43	2	7	18	45	48	
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	3	1	2	
Kansas	—	2	7	22	23	—	0	2	2	4	—	0	3	1	1	
Minnesota	—	0	46	—	97	—	0	8	—	17	—	3	10	20	11	
Missouri	1	2	10	48	36	—	0	4	15	14	2	2	9	23	33	
Nebraska <sup>§</sup>	4	2	9	36	40	—	0	2	2	4	—	0	2	—	1	
North Dakota	—	0	11	—	—	—	0	1	—	—	—	0	0	—	—	
South Dakota	—	0	3	—	9	—	0	2	—	4	—	0	1	—	—	
<b>S. Atlantic</b>	73	62	145	923	981	4	8	23	73	158	21	61	112	473	488	
Delaware	—	1	4	21	7	—	0	1	—	—	1	0	4	4	1	
District of Columbia	—	0	2	3	9	—	0	2	—	3	—	3	16	33	24	
Florida	33	26	89	464	452	3	3	18	37	60	—	23	44	176	182	
Georgia	6	11	21	115	178	—	2	6	12	51	3	11	67	46	57	
Maryland <sup>§</sup>	13	9	32	157	127	1	1	6	8	11	—	7	16	66	31	
North Carolina	—	0	0	—	—	—	0	0	—	—	7	5	19	69	109	
South Carolina <sup>§</sup>	21	8	25	152	163	—	1	4	5	19	—	3	10	35	29	
Virginia <sup>§</sup>	—	1	4	11	13	—	1	4	11	11	10	4	22	44	52	
West Virginia	—	1	9	—	32	—	0	4	—	3	—	0	2	—	3	
<b>E.S. Central</b>	25	25	48	308	344	—	2	7	17	34	5	16	39	90	160	
Alabama <sup>§</sup>	—	0	0	—	—	—	0	0	—	—	—	4	11	27	55	
Kentucky	3	4	16	46	25	—	0	3	5	2	—	2	12	18	20	
Mississippi	—	1	8	4	24	—	0	2	—	5	5	4	16	21	28	
Tennessee <sup>§</sup>	22	21	39	258	295	—	2	6	12	27	—	4	17	24	57	
<b>W.S. Central</b>	42	35	327	386	398	10	4	26	40	68	16	37	68	273	346	
Arkansas <sup>§</sup>	5	3	23	61	39	3	0	3	7	8	2	3	10	29	47	
Louisiana	—	2	9	53	35	—	0	2	5	11	—	8	33	40	65	
Oklahoma	3	1	4	9	16	3	1	4	9	16	—	2	6	7	13	
Texas <sup>§</sup>	34	28	298	263	308	4	3	19	19	33	14	23	33	197	221	
<b>Mountain</b>	40	35	76	515	568	2	4	11	38	84	1	10	26	61	79	
Arizona	19	12	40	258	289	1	1	6	18	38	—	2	8	5	30	
Colorado	16	11	23	131	137	—	1	4	5	17	—	2	8	20	26	
Idaho <sup>§</sup>	—	0	2	3	4	—	0	2	2	1	1	0	2	3	1	
Montana <sup>§</sup>	—	0	2	1	4	—	0	1	—	—	—	0	2	1	—	
Nevada <sup>§</sup>	—	2	8	27	25	—	0	1	3	3	—	2	9	21	10	
New Mexico <sup>§</sup>	3	3	13	63	49	1	0	2	5	11	—	1	4	6	6	
Utah	—	3	8	25	57	—	0	3	5	14	—	1	5	5	6	
Wyoming <sup>§</sup>	2	0	15	7	3	—	0	1	—	—	—	0	0	—	—	
<b>Pacific</b>	5	5	24	79	74	—	0	5	4	14	8	53	78	434	490	
Alaska	—	2	11	35	37	—	0	2	3	10	—	0	1	—	—	
California	5	3	23	43	37	—	0	5	1	4	4	48	74	390	427	
Hawaii	—	0	3	1	—	—	0	0	—	—	—	0	5	—	7	
Oregon	—	0	0	—	—	—	0	0	—	—	1	1	7	17	12	
Washington	—	0	0	—	—	—	0	0	—	—	3	4	11	27	44	
<b>Territories</b>																
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—	
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—	
Puerto Rico	—	0	0	—	—	—	0	0	—	—	8	4	15	41	43	
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—	

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

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see <http://www.cdc.gov/ncphi/diss/nndss/pdfs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf>. Data for TB are displayed in Table IV, which appears quarterly.

<sup>†</sup> Includes drug resistant and susceptible cases of invasive *Streptococcus pneumoniae* disease among children <5 years and among all ages. Case definition: Isolation of *S. pneumoniae* from a normally sterile body site (e.g., blood or cerebrospinal fluid).

<sup>§</sup> Contains data reported through the National Electronic Disease Surveillance System (NEDSS).



TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending March 12, 2011, and March 13, 2010 (10th week)\*

Reporting area	Varicella (chickenpox)					West Nile virus disease <sup>†</sup>									
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Neuroinvasive				Nonneuroinvasive <sup>§</sup>					
		Med	Max			Current week	Previous 52 weeks	Cum 2011	Cum 2010	Current week	Previous 52 weeks	Cum 2011	Cum 2010		
<b>United States</b>	188	258	567	2,052	3,182	—	1	71	—	1	—	1	53	—	—
<b>New England</b>	—	21	46	127	196	—	0	3	—	—	—	0	2	—	—
Connecticut	—	5	20	—	48	—	0	2	—	—	—	0	2	—	—
Maine <sup>¶</sup>	—	4	16	28	52	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	5	16	58	48	—	0	2	—	—	—	0	1	—	—
New Hampshire	—	2	9	9	32	—	0	1	—	—	—	0	0	—	—
Rhode Island <sup>¶</sup>	—	1	4	6	2	—	0	0	—	—	—	0	0	—	—
Vermont <sup>¶</sup>	—	2	10	26	14	—	0	0	—	—	—	0	0	—	—
<b>Mid. Atlantic</b>	15	30	62	191	336	—	0	19	—	—	—	0	13	—	—
New Jersey	—	7	30	37	110	—	0	3	—	—	—	0	6	—	—
New York (Upstate)	N	0	0	N	N	—	0	9	—	—	—	0	7	—	—
New York City	—	0	0	—	1	—	0	7	—	—	—	0	4	—	—
Pennsylvania	15	20	41	154	225	—	0	3	—	—	—	0	3	—	—
<b>E.N. Central</b>	69	79	176	697	1,205	—	0	15	—	—	—	0	8	—	—
Illinois	4	18	45	136	309	—	0	10	—	—	—	0	5	—	—
Indiana <sup>¶</sup>	—	5	30	56	124	—	0	2	—	—	—	0	2	—	—
Michigan	19	27	62	224	379	—	0	6	—	—	—	0	1	—	—
Ohio	46	23	58	280	317	—	0	1	—	—	—	0	1	—	—
Wisconsin	—	6	22	1	76	—	0	0	—	—	—	0	1	—	—
<b>W.N. Central</b>	—	14	32	46	169	—	0	7	—	—	—	0	11	—	—
Iowa	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
Kansas <sup>¶</sup>	—	2	22	33	68	—	0	1	—	—	—	0	3	—	—
Minnesota	—	0	0	—	—	—	0	1	—	—	—	0	3	—	—
Missouri	—	7	23	10	90	—	0	1	—	—	—	0	0	—	—
Nebraska <sup>¶</sup>	N	0	0	N	N	—	0	3	—	—	—	0	7	—	—
North Dakota	—	0	10	—	7	—	0	2	—	—	—	0	2	—	—
South Dakota	—	1	7	3	4	—	0	2	—	—	—	0	3	—	—
<b>S. Atlantic</b>	40	33	100	256	398	—	0	5	—	—	—	0	4	—	—
Delaware <sup>¶</sup>	—	0	3	1	2	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	4	2	1	—	0	1	—	—	—	0	1	—	—
Florida <sup>¶</sup>	38	16	57	200	201	—	0	3	—	—	—	0	1	—	—
Georgia	N	0	0	N	N	—	0	1	—	—	—	0	3	—	—
Maryland <sup>¶</sup>	N	0	0	N	N	—	0	3	—	—	—	0	2	—	—
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
South Carolina <sup>¶</sup>	—	0	13	—	44	—	0	1	—	—	—	0	0	—	—
Virginia <sup>¶</sup>	2	10	29	53	77	—	0	1	—	—	—	0	1	—	—
West Virginia	—	6	26	—	73	—	0	0	—	—	—	0	0	—	—
<b>E.S. Central</b>	—	6	22	54	46	—	0	1	—	1	—	0	3	—	—
Alabama <sup>¶</sup>	—	5	22	51	46	—	0	1	—	—	—	0	1	—	—
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Mississippi	—	0	2	3	—	—	0	1	—	1	—	0	2	—	—
Tennessee <sup>¶</sup>	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
<b>W.S. Central</b>	54	43	186	392	515	—	0	16	—	—	—	0	3	—	—
Arkansas <sup>¶</sup>	—	3	32	20	26	—	0	3	—	—	—	0	1	—	—
Louisiana	—	2	4	13	18	—	0	3	—	—	—	0	1	—	—
Oklahoma	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Texas <sup>¶</sup>	54	39	176	359	471	—	0	15	—	—	—	0	2	—	—
<b>Mountain</b>	10	18	49	241	302	—	0	18	—	—	—	0	15	—	—
Arizona	—	0	0	—	—	—	0	13	—	—	—	0	9	—	—
Colorado <sup>¶</sup>	10	7	31	107	99	—	0	5	—	—	—	0	11	—	—
Idaho <sup>¶</sup>	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
Montana <sup>¶</sup>	—	3	28	65	62	—	0	0	—	—	—	0	0	—	—
Nevada <sup>¶</sup>	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
New Mexico <sup>¶</sup>	—	1	8	9	20	—	0	6	—	—	—	0	2	—	—
Utah	—	4	19	60	119	—	0	1	—	—	—	0	1	—	—
Wyoming <sup>¶</sup>	—	0	3	—	2	—	0	1	—	—	—	0	1	—	—
<b>Pacific</b>	—	2	16	48	15	—	0	8	—	—	—	0	6	—	—
Alaska	—	1	5	16	4	—	0	0	—	—	—	0	0	—	—
California	—	0	13	23	2	—	0	8	—	—	—	0	6	—	—
Hawaii	—	1	4	9	9	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
Washington	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
<b>Territories</b>															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	2	1	1	—	0	0	—	—	—	0	0	—	—
Puerto Rico	2	8	30	37	77	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see <http://www.cdc.gov/ncphi/diss/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf>. Data for TB are displayed in Table IV, which appears quarterly.

† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.

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

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

Morbidity and Mortality Weekly Report

TABLE III. Deaths in 122 U.S. cities,\* week ending March 12, 2011 (10th week)

Reporting area	All causes, by age (years)						P&I†	Reporting area (Continued)	All causes, by age (years)						P&I†
	All Ages	≥65	45-64	25-44	1-24	<1			Total	All Ages	≥65	45-64	25-44	1-24	
<b>New England</b>	613	428	131	29	15	10	69	<b>S. Atlantic</b>	1,273	801	352	72	33	15	98
Boston, MA	150	85	43	13	8	1	17	Atlanta, GA	128	83	33	8	4	—	13
Bridgeport, CT	27	19	8	—	—	—	4	Baltimore, MD	173	108	50	10	4	1	17
Cambridge, MA	17	12	3	1	1	—	5	Charlotte, NC	151	100	38	7	2	4	19
Fall River, MA	34	27	4	1	2	—	2	Jacksonville, FL	174	118	45	7	2	2	4
Hartford, CT	69	50	13	4	2	—	10	Miami, FL	83	58	21	3	1	—	6
Lowell, MA	33	25	5	3	—	—	2	Norfolk, VA	64	38	19	2	2	3	—
Lynn, MA	10	8	1	1	—	—	1	Richmond, VA	60	29	26	3	2	—	5
New Bedford, MA	32	27	3	1	—	1	2	Savannah, GA	53	38	10	3	2	—	4
New Haven, CT	44	29	11	2	1	1	5	St. Petersburg, FL	51	29	15	4	3	—	4
Providence, RI	57	47	8	1	—	1	3	Tampa, FL	194	124	47	17	2	4	13
Somerville, MA	3	1	2	—	—	—	—	Washington, D.C.	126	65	45	7	8	1	10
Springfield, MA	45	32	9	1	—	3	5	Wilmington, DE	16	11	3	1	1	—	3
Waterbury, CT	18	14	3	—	1	—	1	<b>E.S. Central</b>	987	654	254	45	17	16	84
Worcester, MA	74	52	18	1	—	3	12	Birmingham, AL	176	122	42	8	2	1	12
<b>Mid. Atlantic</b>	1,980	1,392	422	110	31	24	131	Chattanooga, TN	96	73	12	3	3	5	4
Albany, NY	39	29	9	1	—	—	1	Knoxville, TN	137	87	39	6	4	1	18
Allentown, PA	29	18	8	2	1	—	2	Lexington, KY	80	50	24	5	1	—	6
Buffalo, NY	94	65	23	2	4	—	11	Memphis, TN	189	125	47	10	3	4	19
Camden, NJ	32	18	9	3	1	1	6	Mobile, AL	101	68	24	7	1	1	7
Elizabeth, NJ	23	15	7	1	—	—	3	Montgomery, AL	43	25	15	2	1	—	4
Erie, PA	55	46	4	5	—	—	7	Nashville, TN	165	104	51	4	2	4	14
Jersey City, NJ	15	11	4	—	—	—	3	<b>W.S. Central</b>	1,324	873	321	66	28	36	110
New York City, NY	1,106	770	231	70	17	17	56	Austin, TX	104	63	26	9	4	2	8
Newark, NJ	27	12	8	6	1	—	2	Baton Rouge, LA	67	44	11	5	5	2	—
Paterson, NJ	20	13	6	1	—	—	1	Corpus Christi, TX	62	42	19	1	—	—	10
Philadelphia, PA	146	83	43	12	5	3	6	Dallas, TX	200	123	60	8	4	5	12
Pittsburgh, PA <sup>§</sup>	53	37	14	2	—	—	6	El Paso, TX	144	101	25	12	6	—	2
Reading, PA	30	24	4	—	—	2	2	Fort Worth, TX	U	U	U	U	U	U	U
Rochester, NY	119	93	21	2	2	1	9	Houston, TX	69	43	13	2	2	9	15
Schenectady, NY	20	17	3	—	—	—	—	Little Rock, AR	102	65	27	4	2	4	1
Scranton, PA	31	30	1	—	—	—	3	New Orleans, LA	U	U	U	U	U	U	U
Syracuse, NY	76	64	12	—	—	—	12	San Antonio, TX	325	225	82	9	4	5	33
Trenton, NJ	29	21	8	—	—	—	—	Shreveport, LA	98	66	17	5	1	9	9
Utica, NY	18	11	4	3	—	—	—	Tulsa, OK	153	101	41	11	—	—	20
Yonkers, NY	18	15	3	—	—	—	1	<b>Mountain</b>	1,000	669	240	63	15	13	94
<b>E.N. Central</b>	2,298	1,551	546	124	46	31	209	Albuquerque, NM	166	114	39	9	3	1	28
Akron, OH	48	32	11	2	1	2	11	Boise, ID	47	38	7	2	—	—	8
Canton, OH	57	43	8	6	—	—	6	Colorado Springs, CO	80	52	21	3	2	2	3
Chicago, IL	230	138	64	18	10	—	20	Denver, CO	103	70	22	8	1	2	10
Cincinnati, OH	104	72	20	4	4	4	15	Las Vegas, NV	401	262	107	26	4	2	30
Cleveland, OH	307	233	54	12	4	4	28	Ogden, UT	39	30	7	2	—	—	4
Columbus, OH	307	188	82	23	8	6	39	Phoenix, AZ	U	U	U	U	U	U	U
Dayton, OH	146	102	38	4	1	1	11	Pueblo, CO	35	22	12	1	—	—	2
Detroit, MI	196	111	64	14	4	3	4	Salt Lake City, UT	129	81	25	12	5	6	9
Evansville, IN	51	38	11	2	—	—	4	Tucson, AZ	U	U	U	U	U	U	U
Fort Wayne, IN	70	51	16	3	—	—	4	<b>Pacific</b>	1,910	1,390	384	80	36	20	195
Gary, IN	11	5	5	1	—	—	—	Berkeley, CA	15	12	2	1	—	—	—
Grand Rapids, MI	48	30	14	3	—	1	8	Fresno, CA	141	106	29	4	1	1	18
Indianapolis, IN	210	136	58	7	8	1	27	Glendale, CA	42	36	6	—	—	—	9
Lansing, MI	56	39	10	3	3	1	4	Honolulu, HI	57	40	15	—	1	1	9
Milwaukee, WI	84	58	18	5	—	3	9	Long Beach, CA	62	43	16	2	—	1	5
Peoria, IL	60	38	15	5	1	1	3	Los Angeles, CA	285	184	71	16	10	4	31
Rockford, IL	45	35	8	1	1	—	4	Pasadena, CA	23	15	6	2	—	—	2
South Bend, IN	72	53	14	4	—	1	3	Portland, OR	147	104	35	3	4	1	11
Toledo, OH	138	99	30	6	1	2	7	Sacramento, CA	230	181	30	11	6	2	22
Youngstown, OH	58	50	6	1	—	1	2	San Diego, CA	213	156	40	12	2	3	22
<b>W.N. Central</b>	628	372	160	60	18	17	48	San Francisco, CA	136	96	32	3	4	1	20
Des Moines, IA	47	33	10	4	—	—	4	San Jose, CA	203	160	32	6	3	2	19
Duluth, MN	23	16	5	—	1	1	3	Santa Cruz, CA	37	31	6	—	—	—	7
Kansas City, KS	36	21	10	4	1	—	3	Seattle, WA	121	85	28	3	3	2	9
Kansas City, MO	102	62	32	3	1	4	12	Spokane, WA	52	39	11	2	—	—	4
Lincoln, NE	39	25	9	5	—	—	2	Tacoma, WA	146	102	25	15	2	2	7
Minneapolis, MN	78	45	19	5	3	6	5	<b>Total¶</b>	<b>12,013</b>	<b>8,130</b>	<b>2,810</b>	<b>649</b>	<b>239</b>	<b>182</b>	<b>1,038</b>
Omaha, NE	91	51	24	13	1	2	12								
St. Louis, MO	75	23	25	15	8	3	1								
St. Paul, MN	63	48	7	5	2	1	3								
Wichita, KS	74	48	19	6	1	—	3								

U: Unavailable. —: No reported cases.

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

† Pneumonia and influenza.

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

¶ Total includes unknown ages.



## Morbidity and Mortality Weekly Report

The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format. To receive an electronic copy each week, visit MMWR's free subscription page at <http://www.cdc.gov/mmwr/mmwrsubscribe.html>. Paper copy subscriptions are available through the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone 202-512-1800.

Data presented by the Notifiable Disease Data Team and 122 Cities Mortality Data Team in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. Address all inquiries about the *MMWR* Series, including material to be considered for publication, to Editor, *MMWR* Series, Mailstop E-90, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333 or to [mmwrq@cdc.gov](mailto:mmwrq@cdc.gov).

All material in the *MMWR* Series is in the public domain and may be used and reprinted without permission; citation as to source, however, is appreciated.

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

References to non-CDC sites on the Internet are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of these sites. URL addresses listed in *MMWR* were current as of the date of publication.