

World Hepatitis Day — July 28, 2011

July 28, 2011, marks the first official World Hepatitis Day established by the World Health Organization (WHO). CDC joins with WHO in calling for a renewed commitment against a largely silent but persistent epidemic. Worldwide, nearly 500 million persons are living with chronic hepatitis B virus or hepatitis C virus (HCV) infections, and these infections cause approximately 1 million deaths annually (1); most persons with chronic viral hepatitis are unaware of their infections. Effective tools are available to prevent infection with viral hepatitis, including hepatitis B vaccination, surveillance, education, screening, and treatment; the challenge is to build the capacity to extend these interventions globally. In 2010, the World Health Assembly passed a resolution urging greater control of viral hepatitis (2).

In Europe, HCV infection outbreaks and rising incidence have been observed among men who have sex with men (MSM) with human immunodeficiency virus (HIV) infection. This issue of *MMWR* includes a report on sexual transmission of HCV among HIV-infected MSM in New York City. The findings emphasize the importance of HCV screening among these men, which allows for preventive care and treatment.

In the United States, World Hepatitis Day will be observed July 28 at a White House event. Information regarding the webcast of this event will be available at <http://www.cdc.gov/hepatitis>.

References

1. Hu DJ, Bower WA, Ward JW. Viral hepatitis. In: Morse S, Moreland AA, Holmes KK, eds. Atlas of sexually transmitted diseases and AIDS. London, England: Elsevier; 2010:203–29.
2. World Health Organization. Viral hepatitis. Geneva, Switzerland: World Health Organization; 2010. Available at http://apps.who.int/gb/ebwha/pdf_files/wha63/a63_r18-en.pdf. Accessed July 6, 2011.

Sexual Transmission of Hepatitis C Virus Among HIV-Infected Men Who Have Sex with Men — New York City, 2005–2010

In the United States, an estimated 3.2 million persons are living with hepatitis C virus (HCV) infection (1). HCV transmission occurs primarily through percutaneous exposure to blood, and persons who inject drugs are at greatest risk for infection. The role of sexual transmission of HCV has not been well defined. However, reports over the past decade, mainly from Europe, have implicated sexual transmission of HCV among human immunodeficiency virus (HIV)-infected men who have sex with men (MSM). In late 2005, two HIV-infected MSM, each with acute HCV infection that was suspected to have been acquired sexually, were evaluated at Mount Sinai Medical Center in New York City, prompting Mount Sinai to request referrals of similar patients (2). During 2005–2010, a total of 74 HIV-infected MSM with recently acquired HCV infection and no reported history of injection-drug use were evaluated. To examine the role of sexual transmission, a matched case-control study and viral analysis were conducted. Results from the case-control study showed that high-risk sexual behavior was the most likely mode of transmission among these men. Phylogenetic analyses revealed five clusters of closely related HCV variants, suggesting networks of transmission among these men. The findings underscore the importance of screening HIV-infected MSM for HCV, particularly those engaged in high-risk sexual behavior.

INSIDE

- 951 Chlorine Gas Exposure at a Metal Recycling Facility — California, 2010
- 955 Severe Hearing Impairment Among Military Veterans — United States, 2010
- 959 Announcement
- 960 QuickStats



For this study, a case-patient was defined as an HIV-infected MSM examined at Mount Sinai during October 2005–December 2010 who had 1) a newly elevated alanine transferase (ALT) level, 2) a newly positive HCV-antibody test result, and 3) no other evident cause of the newly elevated ALT level. To the extent possible, positive HCV-antibody results were confirmed by HCV RNA testing. If no record was found of a previous negative HCV-antibody test, a finding of jaundice or an ALT elevation of more than 15-fold above the upper limit of normal (i.e., >450 U/L) also was required. To assess whether patients might have had a previous positive HCV test result unknown to the referring physicians, the date of the first positive HCV-antibody test of a subset of patients (24 men) was confirmed by the New York City Department of Health and Mental Hygiene through review of the hepatitis registry of HCV surveillance data. Providers of primary care to HIV-infected MSM in New York City (who, as part of care, routinely obtain ALT levels on their patients during HIV monitoring visits) were contacted by the lead investigator and asked to refer patients with newly elevated ALT levels to Mount Sinai as soon as possible. Reminders were provided periodically throughout the study period. A total of 35 HIV-care providers contributed information on their patients to this study.

Characteristics of Case-Patients

During October 2005–December 2010, Mount Sinai evaluated 74 HIV-infected MSM who reported no injection-drug

use and had newly elevated ALT levels and a positive HCV antibody test result; 73 of 74 also had documented HCV viremia. Median age of the 74 patients was 39 years; 41 were non-Hispanic white, 14 non-Hispanic black, 18 Hispanic, and one Asian (Table 1). Median CD4+ cell count for the patients was 483 cells/ μ L (range: 66–1,258 cells/ μ L). Sixty patients (81%) were asymptomatic, and new HCV infection was detected solely because of new ALT elevation; 14 (19%) had jaundice at presentation. Median peak ALT level was 665 U/L (range: 72–5,291 U/L). No other cause for the patients' elevated ALT levels was found (e.g., no new infection with hepatitis A or B virus and no new drug therapy). Of the 74 patients, 65 (91%) had a previous negative HCV-antibody test result before detection of hepatitis (median: 12 months; range: 0–110 months).

Case-Control Study

To assess the role of sexual transmission of HCV, a matched case-control study was conducted beginning in July 2007. HIV-infected MSM examined at Mount Sinai during July 2007–December 2010 who were within 12 months of clinical onset of HCV infection and who reported no injection-drug use were recruited as case-patients. For each case-patient, 1–10 controls (i.e., HIV-infected MSM who did not have HCV infection, reported no injection-drug use, and matched by age [± 5 years] and race/ethnicity) were recruited by Mount Sinai staff members from among the practices that referred

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

MMWR Editorial Board

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

TABLE 1. Characteristics of MSM with HIV and recent HCV coinfection (N = 74) — New York City, 2005–2010

Characteristic	Result	
Age (median) (yrs)	39	(23–63)
Race/Ethnicity		
White, non-Hispanic (No. [%])	41	(55)
Black, non-Hispanic (No. [%])	14	(19)
Hispanic (No. [%])	18	(24)
Asian, non-Hispanic (No. [%])	1	(1)
CD4 count (median) (cells/ μ L)	483	(66–1,258)
Duration of HIV infection (median) (yrs)	8	(0–23)
Receipt of antiretroviral drug therapy (No. [%])	55	(74)
HIV viral load <400 copies/mL (No. [%])	50	(68)
No previous HCV-positive serology (No. [%])	9	(12)
Seroconversion interval* (median) (mos) (N = 65)	12	(0–110)
Presence of jaundice on presentation (No. [%])	14	(19)
Peak ALT (median) (U/L)	665	(72–5,291)
Peak HCV viral load (\log_{10} IU/mL)	6.68	(<0.7–8.0)
HCV genotype (N = 72)		
1a (No. [%])	65	(90)
1b (No. [%])	4	(6)
2b (No. [%])	2	(3)
3a (No. [%])	1	(1)

Abbreviations: MSM = men who have sex with men; HIV = human immunodeficiency virus; HCV = hepatitis C virus; ALT: alanine aminotransferase.

* Interval between last negative and first positive HCV antibody test.

case-patients during the enrollment period. In all, 22 case-patients and 53 control subjects were enrolled in the study.

All participants were asked to complete self-administered questionnaires regarding their sexual practices and drug-use behaviors during the 12 months preceding diagnosis (for case-patients) or preceding the questionnaire (for matched controls). To conduct a matched analysis, a conditional logistic regression of each variable (i.e., sexual practice or drug use behavior) was performed. Those variables that had a p value of ≤ 0.20 in the univariable analysis, as well as those previously associated with sexual transmission (3), were entered into a model and analyzed using multivariable conditional logistic regression (i.e., forward, backward, and stepwise) to determine which variables were independently associated with HCV infection.

Univariable results. Univariable analyses indicated that the HIV-infected MSM newly infected with HCV (case-patients) were significantly more likely than the HIV-infected MSM without HCV infection (matched controls) to have had receptive (matched odds ratio [mOR] = 24.87) or insertive (mOR = 2.62) anal intercourse with no condom and with ejaculation, practiced receptive (mOR = 10.08) or insertive (mOR = 7.90) fisting, used sex toys (mOR = 4.38), engaged in group sex (mOR = 19.28), engaged in sex while high on drugs (mOR = 11.37), previously had syphilis (mOR = 8.80) or gonorrhea (mOR = 5.02), and had sex while high

on methamphetamine (mOR = 26.80) (Table 2). Because three variables (receptive anal intercourse, no condom, no ejaculation; sex while high on gamma hydroxybutyrate [GHB]; and sex while high on ketamine) yielded undefined ORs, the data were analyzed further using exact conditional logistic regression. Results showed that case-patients were significantly more likely than controls to report receptive anal intercourse with no condom and no ejaculation (mOR = 24.26) and sex while high on GHB (mOR = 16.34).

Multivariable results. Results from the multivariable analyses showed that receptive anal intercourse with no condom and with ejaculation of the partner (adjusted odds ratio [AOR] = 23.00) and sex while high on methamphetamine (AOR = 28.56) were both significantly related to acquiring HCV infection. Of all the practices and behaviors, having sex while using methamphetamine was most strongly associated with HCV infection (Table 2).

Results of Phylogenetic Analyses

Polymerase chain reaction and sequencing of a 470 base-pair region of NS5B from HCV strains recovered from 50 of the 74 men were conducted using methods described previously (4). Forty-seven of the 50 were genotype 1a, and three were genotype 1b. A maximum-likelihood phylogenetic tree was then created (5).^{*} These analyses identified five clusters of closely related HCV variants from 26 (55%) of the 47 men with genotype 1a infections.

* Available at http://www.cdc.gov/hepatitis/resources/professionals/pdfs/msm_hcv_ns5b-sequence_tree.pdf.

What is already known on this topic?

Infection with hepatitis C virus (HCV) is a major cause of morbidity, and, if left untreated, can lead to chronic liver disease and death. HCV transmission occurs primarily through percutaneous exposure to blood (injection-drug users are at greatest risk), but the role of sexual transmission has not been well defined.

What is added by this report?

Sexual transmission was found to be the most likely mode of transmission of HCV among human immunodeficiency virus (HIV)-infected men who have sex with men (MSM) in this study in New York City.

What are the implications for public health practice?

These findings, and those elsewhere, suggest that sexual transmission of HCV can occur undetected among HIV-infected MSM in the absence of injection-drug use. Health-care providers should consider HCV testing for HIV-infected MSM with high-risk sexual behaviors or concomitant ulcerative sexually transmitted diseases (e.g., syphilis and herpes simplex virus).

TABLE 2. Odds ratios for comparison of case-patients (HIV-infected MSM with HCV infection) and controls (HIV-infected MSM without HCV infection), by sexual practice and drug use behavior, using conditional logistic regression — New York City, 2007–2010

Characteristic	Case-patients (n = 22)		Controls* (n = 53)		Univariable analysis			Multivariable analysis		
	No.	(%)	No.	(%)	OR	(95% CI)	p value	AOR	(95% CI)	p value
Receptive anal intercourse, with condom										
Yes	16	(73)	26	(50)	1.68	(0.57–4.96)	0.35			
No	6	(27)	26	(50)						
Receptive anal intercourse, no condom, no ejaculation										
Yes	22	(100)	21	(40)	ND [†]					
No	0	—	32	(60)						
Receptive anal intercourse, no condom, with ejaculation										
Yes	19	(86)	12	(23)	24.87	(3.18–194.55)	0.002	23.00	(2.17–243.84)	0.009
No	3	(14)	41	(77)						
Insertive anal intercourse, with condom										
Yes	13	(59)	24	(45)	1.34	(0.48–3.78)	0.58			
No	9	(41)	29	(55)						
Insertive anal intercourse, no condom, no ejaculation										
Yes	17	(77)	18	(34)	8.13	(1.76–37.55)	0.007			
No	5	(23)	35	(66)						
Insertive anal intercourse, no condom, with ejaculation										
Yes	13	(59)	14	(26)	2.62	(1.00–6.87)	0.05			
No	9	(41)	39	(74)						
Receptive fisting										
Yes	8	(36)	3	(6)	10.08	(2.03–50.02)	0.005			
No	14	(64)	50	(94)						
Insertive fisting										
Yes	8	(36)	3	(6)	7.90	(1.96–31.84)	0.004			
No	14	(64)	50	(94)						
Use of sex toys										
Yes	12	(55)	13	(25)	4.38	(1.35–14.26)	0.01			
No	10	(45)	40	(75)						
Group sex										
Yes	20	(91)	18	(34)	19.28	(2.51–148.23)	0.005			
No	2	(9)	35	(66)						
Previously had syphilis										
Yes	11	(50)	9	(17)	8.80	(1.88–41.05)	0.006			
No	11	(50)	43	(83)						
Previously had gonorrhea										
Yes	15	(68)	17	(33)	5.02	(1.40–18.05)	0.01			
No	7	(32)	35	(67)						

See table footnotes on page 949.

Reported by

Daniel S. Fierer, MD, Stephanie H. Factor, MD, Alison J. Uriel, MBBS, Damaris C. Carriero, MS, Douglas T. Dieterich, MD, Michael P. Mullen, MD, Arielle Klepper, Wouter van Seggelen, MSc, Kathryn Childs, MBBS, Andrea D. Branch, PhD, Dept of Medicine, Mount Sinai School of Medicine, New York, New York. Deborah Holtzman, PhD, John W. Ward, MD, Yury Khudyakov, PhD, Scott D. Holmberg, MD, Div of Viral Hepatitis, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, CDC. **Corresponding contributor:** Deborah Holtzman, dholtzman@cdc.gov, 404-718-8555.

Editorial Note

This report suggests high-risk sexual behavior as a cause of HCV transmission among HIV-infected MSM in New York City. Unprotected receptive anal intercourse with ejaculation and sex while high on methamphetamine were the

most important predictors of HCV infection. Results from phylogenetic analyses suggest networks of HCV transmission among these men. The findings of high-risk sex, concurrent noninjection-drug use, and phylogenetic clustering are similar to those observed among cohorts of HIV-infected MSM with HCV infection in Northern Europe and Australia (4). A notable finding from this study and those in other countries is the association of noninjection, recreational drug use (e.g., methamphetamine use) with the acquisition of HCV infection.

Sexual transmission of HCV is considered to be an inefficient and rare mode of transmission (6). However, concurrent HIV infection results in increased HCV RNA levels (viral load) (7), which are thought to increase infectiousness of HCV acquired through sexual contact. Of further concern among persons who are coinfecting is that HIV accelerates HCV disease progression, even in its early stages (2). End-stage liver disease and hepatocellular carcinoma, both usually resulting from

TABLE 2. (Continued) Odds ratios for comparison of case-patients (HIV-infected MSM with HCV infection) and controls (HIV-infected MSM without HCV infection), by sexual practice and drug use behavior, using conditional logistic regression — New York City, 2007–2010

Characteristic	Case-patients (n = 22)		Controls* (n = 53)		Univariable analysis			Multivariable analysis		
	No.	(%)	No.	(%)	OR	(95% CI)	p value	AOR	(95% CI)	p value
Sex while high on drugs										
Yes	17	(81)	14	(27)	11.37	(2.51–51.52)	0.002			
No	4	(19)	38	(73)						
Sex while high on cocaine										
Yes	3	(14)	4	(8)	1.32	(0.27–6.50)	0.74			
No	19	(86)	49	(92)						
Sex while high on GHB										
Yes	7	(32)	0	—	ND [†]					
No	15	(68)	53	(100)						
Sex while high on ketamine										
Yes	2	(9)	0	—	ND [†]					
No	20	(91)	53	(100)						
Sex while high on ecstasy										
Yes	4	(18)	2	(4)	2.89	(0.52–16.12)	0.23			
No	18	(82)	51	(96)						
Sex while high on marijuana										
Yes	8	(36)	8	(15)	3.10	(0.84–11.51)	0.09			
No	14	(64)	45	(85)						
Sex while high on methamphetamine										
Yes	13	(59)	2	(4)	26.80	(3.30–217.77)	0.002	28.56	(1.84–443.03)	0.02
No	9	(41)	51	(96)						
Sex while drunk										
Yes	13	(59)	19	(37)	0.18	(0.67–7.04)	0.19			
No	9	(41)	33	(63)						

Abbreviations: HIV = human immunodeficiency virus; MSM = men who have sex with men; HCV = hepatitis C virus; OR = odds ratio; CI = confidence interval; AOR = adjusted odds ratio; ND = not defined; GHB = gamma hydroxybutyrate.

* Controls matched for age (± 5 yrs) and race/ethnicity.

[†] Because each of these variables yielded undefined ORs, the data were further analyzed using exact conditional logistic regression. Univariable results were as follows: receptive anal intercourse, no condom, no ejaculation (OR = 24.26 [95% CI = 4.13– ∞], $p < 0.0001$); sex while high on GHB (OR = 16.34 [95% CI = 2.39– ∞], $p = 0.002$); sex while high on ketamine (OR = 4.38 [95% CI = 0.38– ∞], $p = 0.222$). All variables were further tested in a model using exact conditional logistic regression; however, none of the three variables exhibited significant independent effects on acquiring HCV infection in the multivariable analysis. The multivariable results from the exact conditional procedure were the same as those from the conditional procedure (i.e., only receptive anal intercourse, no condom, with ejaculation and sex while high on methamphetamine exhibited significant independent effects on acquiring HCV infection).

chronic HCV infection, are now leading causes of death not attributable to acquired immunodeficiency syndrome (AIDS) among HIV-infected persons in the United States (8).

The findings in this report are subject to at least three limitations. First, recall of events such as ejaculation by sex partner up to 12 months before HCV diagnosis can be imperfect. For example, the findings should not be interpreted to definitively exclude acquisition of HCV by some men through unprotected receptive anal intercourse without ejaculation, even though this variable did not exert a significant independent effect on HCV infection in the multivariable analysis. Second, refusal to acknowledge injection-drug use is not uncommon, and other types of stigmatizing risk behavior also might be underreported. Such social desirability bias was addressed by using a self-administered questionnaire and assuring each patient that his responses would not be shared with his primary-care provider. Finally, study investigators relied on patient referrals from HIV-care providers outside Mount Sinai, and referral bias might have occurred; however, the number of referring providers was fairly sizable ($n = 35$).

Sexual transmission of HCV among HIV-infected MSM is more widespread than this one study demonstrates. A recent U.S. report described HCV-antibody seroconversions among HIV-infected MSM without a history of injection-drug use (9). A recent European report that examined a group of studies, primarily from Europe, found substantial increases, particularly during 2002–2007, in the incidence of HCV infection among HIV-infected MSM, demonstrating just how serious the epidemic has become among these men (10). Hepatitis C should be added to the list of infections spread among HIV-infected MSM who have sex with HCV-infected partners. HIV-infected patients should be counseled and reminded that unprotected sex between HIV-infected partners can transmit other infections, including HCV. In addition to HCV screening for MSM newly diagnosed with HIV, routine HCV screening using both ALT and antibody testing should be considered for HIV-infected MSM, particularly those with high-risk sexual behaviors or concomitant ulcerative sexually transmitted diseases (e.g., syphilis and herpes simplex virus).[†]

[†] Based on CDC's Sexually Transmitted Diseases Treatment Guidelines, 2010, available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5912a1.htm>.

Finally, newly diagnosed HCV infections among HIV-infected MSM should be reported to state and local health authorities.

References

1. Armstrong GL, Wasley A, Simard EP, McQuillan GM, Kuhnert WL, Alter MJ. The prevalence of hepatitis C virus infection in the United States, 1999 through 2002. *Ann Intern Med* 2006;144:705–14.
2. Fierer DS, Uriel AJ, Carriero DC, et al. Liver fibrosis during an outbreak of acute hepatitis C virus infection in HIV-infected men: a prospective cohort study. *J Infect Dis* 2008;198:683–6.
3. Danta M, Brown D, Bhagani S, et al. Recent epidemic of acute hepatitis C virus in HIV-positive men who have sex with men linked to high-risk sexual behaviours. *AIDS* 2007;21:983–91.
4. van de Laar T, Pybus O, Bruisten S, et al. Evidence of a large, international network of HCV transmission in HIV-positive men who have sex with men. *Gastroenterology* 2009;136:1609–17.
5. Felsenstein J. Evolutionary trees from DNA sequences: a maximum likelihood approach. *J Mol Evol* 1981;17:368–76.
6. Tohme RA, Holmberg SD. Is sexual contact a major mode of hepatitis C virus transmission? *Hepatology* 2010;52:1497–505.
7. Matthews-Greer JM, Cladito GC, Adley SD, et al. Comparison of hepatitis C viral loads in patients with or without human immunodeficiency virus. *Clin Diagn Lab Immunol* 2001;8:690–4.
8. Palella FJ Jr, Baker RK, Moorman AC, et al. Mortality in the highly active antiretroviral therapy era: changing causes of death and disease in the HIV outpatient study. *J Acquir Immune Defic Syndr* 2006;43:35–41.
9. Taylor LE, Holubar M, Wu K, et al. Incident hepatitis C virus infection among US HIV-infected men enrolled in clinical trials. *Clin Infect Dis* 2011;52:812–8.
10. van der Helm JJ, Prins M, del Amo, et al. The hepatitis C epidemic among HIV-positive MSM: incidence estimates from 1990 to 2007. *AIDS* 2011;25:1083–91.

Chlorine Gas Exposure at a Metal Recycling Facility — California, 2010

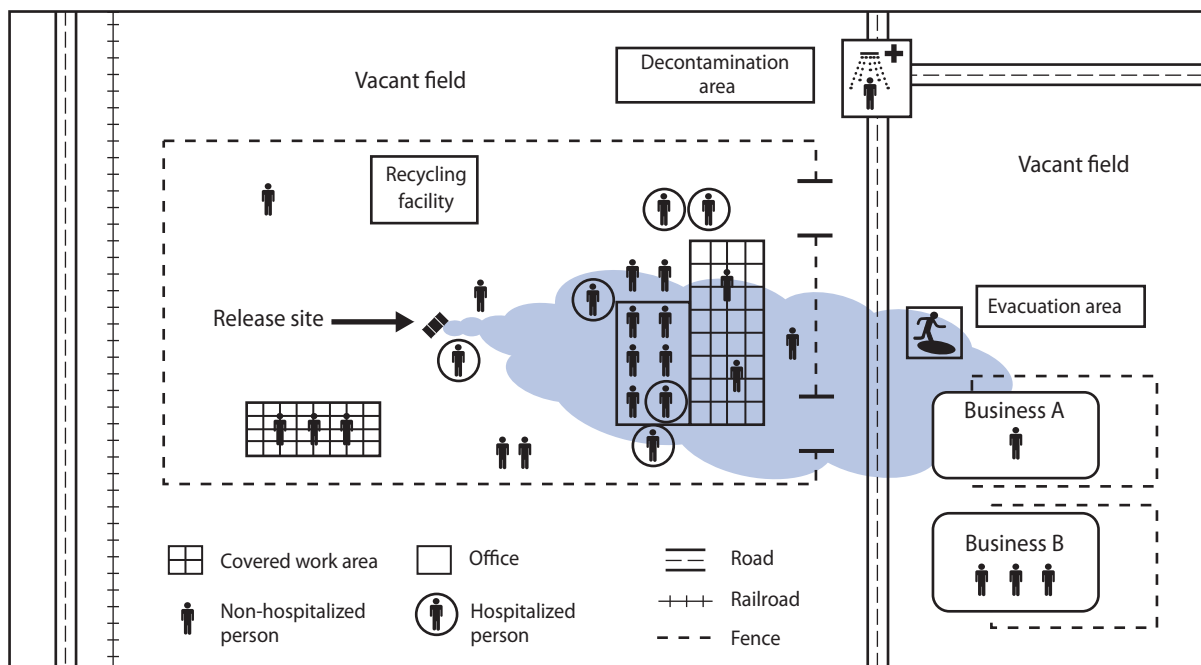
On June 8, 2010, chlorine gas was released from a ruptured, 1-ton, low-pressure tank being recycled at a California metal recycling facility. A total of 23 persons, including employees, customers, and workers at nearby businesses, were treated for the effects of the fumes at seven area hospitals. Chlorine is a corrosive, greenish-yellow gas that is heavier than air and can cause severe respiratory damage; it is used widely in water purification, sewage treatment, and disinfectant washes for foods. Following the incident, the Agency for Toxic Substances and Disease Registry (ATSDR) and CDC collaborated with the California Department of Public Health (CDPH) on an Assessment of Chemical Exposures (ACE) to determine 1) the circumstances surrounding those exposed during the chlorine gas release, 2) health effects associated with exposures, and 3) recommendations for preventing recurrences. This report describes the chlorine gas release in California and summarizes the results of the ACE investigation. Of 29 persons potentially exposed to chlorine gas, 27 were interviewed to collect information regarding their exposures. In addition, information regarding acute health effects and symptoms was abstracted from medical records. At the time of the chlorine gas release, 15 persons were outdoors, and 13 were exposed for >30 minutes before they were decontaminated. Twenty-three persons reported experiencing one or more upper or

lower respiratory tract symptoms within 24 hours of exposure; six persons were hospitalized for 1–11 days. Based on these findings, CDPH issued a statewide alert to all recycling facilities on how to handle containers with potential hazardous waste.

The chlorine gas release occurred at 2:44 p.m. at a metal recycling facility located in an industrial area. A worker used an excavator to cut into a 1-ton, low-pressure tank that was unlabeled, reportedly empty, and sold to the facility as scrap metal. When punctured, the tank produced an explosive release of a greenish-yellow cloud of gas. The release occurred outdoors in an open work area and affected 29 persons who were at or near the recycling facility (Figure). Of the 16 workers at the recycling facility, the majority were outdoors at the time of the release. Most followed a planned evacuation route, exiting the facility through the main gate and meeting in an open field across the street in an evacuation area that was downwind from the tank (Figure).

When emergency medical services and fire department personnel arrived at the scene, they set up a decontamination area 200 yards north of the facility, where the majority of exposed persons were decontaminated by rinsing with water. Twenty-two of those exposed were then transported by ambulance (one person self-transported) to seven local hospitals where some were decontaminated again by removing clothing and washing

FIGURE. Schematic of chlorine gas release at a metal recycling facility, which resulted in 23 persons seeking hospital treatment and six being hospitalized — California, 2010



with soap and water. At 5:58 p.m., local hazardous materials team members identified the gas as chlorine and measured a concentration of 328 ppm near the tank.

ATSDR and CDC arrived in California on June 14 to assist CDPH with the ACE investigation. The ACE program, which is part of the National Toxic Substance Incidents Program, provides assistance to state and local health departments for rapid assessments after large-scale toxic substance releases. Of the 29 persons identified as potentially exposed during the release, 16 were workers at the facility, and 13 were either customers or in businesses located across the street and downwind from the tank. Twenty-seven persons were interviewed (in English and Spanish), and information was collected regarding demographics, exposure characteristics, acute health effects, medical history, occupational history, and health services use. Two persons were not available at the time of interviews. Medical charts were obtained and abstracted for the 23 persons treated at area hospitals, six of whom were admitted. One of the six hospitalized persons was not interviewed.

Twenty-seven (93%) of the 29 potentially exposed persons were aged >18 years; average age was 40 years, with a range of 2–77 years. Of the 27 interviewed, 20 (74%) were Hispanic; 21 (78%) were male, and 18 (67%) had at least a high school education. Fifteen (56%) persons were outdoors at the time of the chlorine gas release, and 24 (89%) reported smelling an odor (Table 1). A total of 22 (82%) had been decontaminated (either by rinsing with water, removing clothing, or washing with soap and water), and 13 (48%) said they were exposed to chlorine gas for >30 minutes before being decontaminated. Five (19%) said they were exposed for <30 minutes, and nine (33%) either did not know how long or did not answer the question.

Twenty-three (85%) of the 27 persons interviewed reported experiencing acute health effects within 24 hours of the chlorine gas release (Table 2). The most common symptoms reported were coughing (22 persons, 82%); difficulty breathing/feeling out of breath (22, 82%); headache (21, 78%); and burning of the nose, throat, or lungs (20, 74%).

Among the 27 interviewed, five persons (19%) reported preexisting high blood pressure, four (15%) reported diabetes, and three (11%) reported allergies (11%); eight (30%) reported current smoking. None of the 27 reported any preexisting respiratory conditions (e.g., asthma or chronic obstructive pulmonary disease) that might have placed them at greater risk from the chlorine exposure.

Of the 23 exposed persons who received care at seven area hospitals, 17 (74%) were treated and discharged from the emergency department, and six (26%) were hospitalized. Five (83%) of the six hospitalized patients worked at the recycling facility. Among those who received medical care,

TABLE 1. Circumstances surrounding chlorine gas exposure reported by 27 persons who were interviewed — California, 2010

Circumstance	No.	(%)
Exposure time*		
<30 min	5	(19)
≥30 min	13	(48)
Don't know/Missing	9	(33)
Location		
Indoors	10	(37)
Outdoors	15	(56)
Don't know/Missing	2	(7)
Distance from release site		
≤100 yards	10	(37)
>100 yards	15	(56)
Don't know/Missing	2	(7)
Smelled odor		
Yes	24	(89)
No	2	(7)
Don't know/Missing	1	(4)
Odor type		
Strong	23	(85)
Mild	—	—
Don't know/Missing	4	(15)
In gas cloud		
Yes	15	(56)
No	9	(33)
Don't know/Missing	3	11
Evacuated area		
Yes	25	(93)
No	1	(4)
Don't know/Missing	1	(4)
Sheltered in place		
Yes	1	(4)
No	25	(93)
Don't know/Missing	1	(4)
Decontaminated		
Yes	22	(82)
No	5	(19)

*Exposure time = (time decontaminated) – (time of chlorine gas release).

TABLE 2. Health effects experienced by 27 persons within 24 hours of chlorine gas exposure — California, 2010

Health effect	No.	(%)
Illness within 24 hrs		
Yes	23	(85)
No	4	(15)
Symptoms within 24 hrs*		
Coughing	22	(82)
Difficulty breathing/feeling out of breath	22	(82)
Headache	21	(78)
Burning nose, throat, or lungs	20	(74)
Increased congestion or mucous	19	(70)
Dizziness/lightheadedness	18	(67)
Eye irritation/pain/burning	18	(67)
Runny nose	18	(67)
Wheezing in chest	17	(63)
Chest tightness or pain/angina	16	(59)
Nausea	16	(59)
Skin irritation/pain/burning	8	(30)

* Affected persons were asked about each symptom separately. The number responding "yes" for each symptom is shown.

What is already known on this topic?

Exposure to chlorine, which is used in numerous industrial processes and for water treatment, can cause severe respiratory damage, depending on the concentration.

What is added by this report?

In June 2010 in California, chlorine gas was released from a tank sold as scrap metal; 23 persons were treated for the effects of the fumes, including six who were hospitalized for 1–11 days.

What are the implications for public health practice?

Health officials should urge metal recycling facilities to 1) only accept containers that are cut open, dry, or without a valve or plug; 2) treat closed containers as potential hazardous waste; and 3) develop and practice a hazardous gas release evacuation plan.

four had an oxygen saturation level <95% recorded in the emergency department. Five persons had an arterial blood gas measurement when they first reached a hospital, and their partial pressure of oxygen values ranged from 62 to 78 mmHg (reference range: 80–100 mmHg) (1).

Among those who were discharged from the emergency department, three received oxygen, and nine were prescribed nebulized β_2 -agonists. All six of those hospitalized were prescribed nebulized β_2 -agonists; five received oxygen, three were given steroids (oral or intravenous), and two were treated with antibiotics. Most of the hospitalized patients were released after 1–4 days. However, one recycling facility worker was hospitalized for 11 days and required mechanical ventilation for 2 days.

Reported by

*Kate Kelsey, MPH, Rachel Roisman, MD, Richard Kreutzer, MD, Barbara Materna, PhD, California Dept of Public Health. Mary Anne Duncan, DVM, Maureen Orr, MS, Ayana Anderson, MPH, Perri Ruckart, MPH, Jeffery Henry, Div of Health Studies, Yulia Iossifova, MD, PhD; Div of Toxicology and Environmental Medicine, Agency for Toxic Substances and Disease Registry. Rizwan Riyaz, MD, Div of Environmental Hazards and Health Effects, National Center for Environmental Health; Ekta Choudhary, PhD, EIS Officer, CDC. **Corresponding contributor:** Ekta Choudhary, echoudhary@cdc.gov.*

Editorial Note

The incident described in this report demonstrates the risk for unintentional release of a hazardous substance at a metal recycling facility. During 2001–2009, ATSDR's Hazardous Substance Emergency Events Surveillance (HSEES) program received reports of 21 incidents in nine participating states involving a tank that contained a hazardous substance.

In 2009, a total of 230 chlorine release events were reported to HSEES, of which 81 resulted in injuries (2). In California, which is not an HSEES participating state, an earlier chlorine gas release occurred in February 2010 at another scrap metal recycling facility. In that incident, a 1-ton tank being moved by a crane was punctured, and chlorine gas released, resulting in hospitalization of five workers for respiratory symptoms (3).

Chlorine, in its various forms, is used in chemical and plastic manufacturing, textile and paper bleaching, and water purification (4). Chlorine is a respiratory irritant and can produce symptoms ranging from mild ocular and upper respiratory irritation to severe inflammation of bronchoalveolar tissues, which can lead to death (5). The symptoms caused by chlorine depend on the concentration to which a person is exposed. In the incident described in this report, the symptoms experienced were consistent with those reported in previous community exposures (6–10). Although the number of exposed persons was smaller in this incident, the proportion hospitalized was higher (21%) than in incidents reported previously in Pennsylvania (8%) (7) and South Carolina (12%) (10). However, unlike those earlier incidents, which occurred near highly populated areas and involved greater amounts of chlorine gas, no fatalities occurred in California.

As a result of the June 2010 incident in California, the CDPH Division of Environmental and Occupational Disease Control, Emergency Planning and Preparedness Team produced a Chemical Release Alert, which was mailed to approximately 1,200 recycling facilities in the state. The alert urged facilities to 1) only accept containers that are cut open, dry, or without a valve or plug; 2) treat all closed containers as potential hazardous waste; and 3) develop and practice an evacuation plan, including training workers to stay upwind when evacuating after a hazardous gas release (3).

Acknowledgments

Tulare County Dept of Public Health; Visalia Fire Dept HAZMAT Team; City of Tulare Fire Rescue; Div of Occupational Safety and Health, California Dept of Industrial Relations; Fresno County Dept of Public Health; Emergency Planning and Preparedness Team, Div of Environmental and Occupational Disease Control, California Dept of Public Health. Norys Guerra, Melissa Smith, D. Kevin Horton, Anne Sowell, Div of Health Studies, Agency for Toxic Substances and Disease Registry; Joshua Schier, Div of Environmental Hazards and Health Effects, National Center for Environmental Health; Outbreak Management System Team, National Center for Public Health Informatics, CDC.

References

1. Fischbach FT, Dunning MB. A manual of laboratory and diagnostic tests. Philadelphia, PA: Lippincott Williams & Wilkins, 2009:973.

2. Agency for Toxic Substance and Disease Registry. Hazardous Substance Emergency Events Surveillance. Atlanta, GA: US Department of Health and Human Services, Agency for Toxic Substances and Disease Registry; 2008–2009. Available at http://www.atsdr.cdc.gov/hs/hsees/public_use_file.html. Accessed July 19, 2011.
3. Emergency Planning and Preparedness Team, Division of Environmental and Occupational Disease Control, California Department of Public Health. Chemical release alert: chlorine gas release at two scrap recycling facilities. Sacramento, California: California Department of Public Health; 2010. Available at <http://www.cdph.ca.gov/programs/ohb/documents/chlorinereleasealert.pdf> or at [Spanish] <http://www.cdph.ca.gov/programs/ohb/documents/chlorinereleasealertspan.pdf>. Accessed July 15, 2011.
4. Winder C. The toxicology of chlorine. *Environ Res* 2001;85:105–14.
5. Agency for Toxic Substances and Disease Registry. Toxicological profile for chlorine. Atlanta, GA: US Department of Health and Human Services, Agency for Toxic Substances and Disease Registry; 2004.
6. Guloglu C, Kara IH, Erten PG. Acute accidental exposure to chlorine gas in the Southeast of Turkey: a study of 106 cases. *Environ Res* 2002; 88:89–93.
7. Hedges JR, Morrissey WL. Acute chlorine gas exposure. *JACEP* 1979;8: 59–63.
8. Jones RN, Hughes JM, Glindmeyer H, Weill H. Lung function after acute chlorine exposure. *Am Rev Respir Dis* 1986;134:1190–5.
9. Mohan A, Kumar SN, Rao MH, Bollineni S, Manohar IC. Acute accidental exposure to chlorine gas: clinical presentation, pulmonary functions and outcomes. *Indian J Chest Dis Allied Sci* 2010;52: 149–52.
10. Wenck MA, Van Sickle D, Drociuk D, et al. Rapid assessment of exposure to chlorine released from a train derailment and resulting health impact. *Public Health Rep* 2007;122:784–92.

Severe Hearing Impairment Among Military Veterans — United States, 2010

A substantial proportion of hearing loss in the United States is attributable to employment-related exposure to noise (1). Among military veterans, the most common service-connected disabilities are hearing impairments (2), suggesting that occupational noise exposure during military service might cause more veterans to have hearing loss than nonveterans. However, a recent analysis of data from the 1993–1995 Epidemiology of Hearing Loss Study did not find significant differences between the two groups (3). To further investigate hearing loss among veterans, specifically the prevalence of severe hearing impairment (SHI), data from the 2010 Annual Social and Economic Supplement (ASEC) to the Current Population Survey (CPS) were analyzed. This report describes the results of those analyses, which indicated that the prevalence of SHI among veterans was significantly greater than among nonveterans. Veterans were 30% more likely to have SHI than nonveterans after adjusting for age and current occupation, and veterans who served in the United States or overseas during September 2001–March 2010, the era of overseas contingency operations (including Operations Enduring Freedom and Iraqi Freedom), were four times more likely than nonveterans to have SHI. These findings suggest a need for increased emphasis on improving military hearing conservation programs (HCPs) and on hearing loss surveillance in military and veterans' health systems.

CPS is a monthly national survey of 57,000 households conducted by the Bureau of the Census for the Bureau of Labor Statistics. CPS obtains information on employment, demographics and other characteristics of the civilian, noninstitutionalized population aged ≥ 16 years. ASEC is conducted each year in conjunction with the March survey to collect additional data on work experience, income, noncash benefits, and migration. Data on all sample household members are collected from a single respondent by trained interviewers using a standardized questionnaire during in-person or telephone interviews. The combined 2010 CPS-ASEC response rate was 85.9% (4). For this report, data on 151,995 persons aged ≥ 17 years were analyzed to produce population-weighted estimates of SHI prevalence for the total population and various demographic and occupational subgroups by veteran status and period of most recent military service (before September 2001 versus September 2001–March 2010). Veteran status was defined as ever having served on active duty in the armed forces. SHI was identified based on self or proxy report of being deaf or having “serious difficulty hearing” (4). Prevalence ratios, adjusted for the effect of

demographic and occupational* factors, were produced using multivariable Poisson regression. Two regression models were used. The first, model A, treated the independent variable, veteran status, as dichotomous, and was used to compare all veterans with nonveterans. The second, model B, included three categories for the independent variable and was used to compare veterans who served before and after September 2001 with nonveterans separately.

In 2010, 8.9% of the U.S. population aged ≥ 17 years were veterans, but only 0.7% of the population had served after September 2001. The prevalence of SHI among nonveterans was 2.5%. Among all veterans, the prevalence was 10.4%; among veterans who served after September 2001, the prevalence was 3.9% (Table 1).[†] The prevalence of SHI increased with age for veterans and nonveterans.

Among nonveterans, men and women reported similar prevalences of SHI (2.3% and 2.5%, respectively). Female veterans, however, had a significantly lower prevalence of SHI than male veterans (4.0% versus 10.9%; $p < 0.05$), but a significantly higher prevalence than either male or female nonveterans. Among nonveterans and veterans alike, non-Hispanic blacks reported the lowest SHI prevalence of all racial/ethnic groups and non-Hispanic whites the highest. The prevalence of SHI was significantly higher for veterans than for nonveterans in all occupational categories ($p < 0.05$) except farming, fishing, and forestry, and in production occupations.[§] Small sample sizes limited the ability to compare subgroups for veterans who served after September 2001.

In the multivariable analysis, increasing age was positively associated with SHI, as was working in certain occupational categories (Table 2) and unemployment or nonparticipation in the labor force, relative to working in management, business, and financial occupations. Female sex and race/ethnicity other than non-Hispanic white were significantly negatively associated with SHI ($p < 0.05$). Controlling for demographic factors and occupation, all veterans were 30% more likely to have SHI than nonveterans in model A (adjusted prevalence ratio = 1.3). In model B, veterans who served after September 2001 were four times more likely than nonveterans to have SHI (adjusted prevalence ratio = 4.0) (Table 2).

* Current occupation was defined based on the 11 major groupings of census occupation codes used in the CPS-ASEC. The CPS-ASEC uses 2002 census occupation codes, which, in turn, are based on the 2000 standard occupational classification (SOC) codes.

[†] Bivariate analyses not age-standardized.

[§] Production occupations include assemblers and fabricators; plant and system operators; machinists and machine operators; and food processing, metal, plastic, printing, textile, apparel, furnishing, and wood workers.

TABLE 1. Percentage of persons aged ≥17 years reporting severe hearing impairment (SHI), by veteran status and selected characteristics — Current Population Survey, United States, 2010

Characteristic	Veterans								
	Nonveterans			All service periods			September 2001–2010 service period		
	No.*	% with SHI†	(95% CI)	No.*	% with SHI†	(95% CI)	No.*	% with SHI†	(95% CI)
Total	212,237	2.5	(2.3–2.6)	20,634	10.4	(9.8–11.0)	1,696	3.9	(2.6–5.8)
Age group (yrs)									
17–24	33,463	0.4	(0.4–0.5)	197	0.8	(0.1–4.9)	197	0.8	(0.1–4.9)
25–34	39,425	0.5	(0.4–0.6)	1,286	2.0	(1.2–3.5)	869	2.8	(1.6–4.9)
35–44	38,142	1.0	(0.8–1.1)	2,051	1.8	(1.1–2.8)	257	3.7	(1.4–9.7)
45–54	41,128	1.5	(1.3–1.7)	3,186	3.9	(3.0–5.0)	257	4.4	(1.7–11.3)
55–64	30,334	3.0	(2.7–3.3)	5,045	8.2	(7.1–9.5)	111	17.8	(8.4–33.7)
≥65	29,745	10.0	(9.4–10.6)	8,869	17.4	(16.2–18.6)	4	0.0	—
Sex									
Male	93,494	2.3	(2.2–2.5)	19,141	10.9	(10.3–11.6)	1,397	4.3	(2.8–6.3)
Female	118,743	2.5	(2.4–2.7)	1,493	4.0	(2.7–5.7)	299	2.5	(0.8–7.1)
Race/Ethnicity									
White, non-Hispanic	141,442	2.9	(2.7–3.0)	16,825	11.3	(10.6–12.0)	1,155	4.8	(3.0–7.5)
Black, non-Hispanic	24,804	1.5	(1.3–1.7)	2,056	4.6	(3.5–5.8)	262	0.8	(0.1–4.8)
Hispanic	31,513	1.6	(1.4–1.8)	1,107	8.3	(6.5–10.7)	203	3.1	(0.9–10.5)
Other, non-Hispanic	14,479	1.8	(1.5–2.1)	645	8.8	(6.7–11.5)	77	4.0	(1.0–14.8)
Current occupation									
Management, business, and financial	20,401	1.0	(0.8–1.2)	1,936	4.7	(3.4–6.5)	212	2.3	(0.7–7.7)
Professional and related	30,665	0.9	(0.8–1.1)	1,911	3.7	(2.6–5.2)	254	2.6	(0.8–8.6)
Service	25,854	1.0	(0.8–1.1)	1,439	4.0	(2.8–5.7)	271	2.3	(0.7–7.2)
Sales and related	16,305	1.1	(0.9–1.4)	935	4.0	(2.5–6.3)	88	0.0	—
Office and administrative support	18,876	1.0	(0.8–1.2)	874	5.2	(3.3–8.2)	146	5.0	(1.8–13.0)
Farming, fishing, and forestry	1,119	1.6	(0.8–3.1)	41	9.0	(1.2–45.1)	4	0.0	—
Construction and extraction	8,394	1.3	(1.0–1.6)	861	5.5	(3.4–8.8)	99	3.4	(0.4–23.7)
Installation, maintenance, and repair	4,682	1.3	(0.9–2.0)	776	5.4	(3.3–8.9)	91	6.1	(2.1–16.4)
Production [§]	8,299	1.7	(1.3–2.2)	790	3.2	(1.9–5.1)	101	4.4	(1.0–17.4)
Transportation and material moving	8,301	1.3	(0.9–1.7)	1,053	5.0	(3.2–7.7)	119	2.7	(0.4–17.5)
Other	11	0.0	—	29	5.1	(0.7–30.4)	27	5.5	(0.7–32.3)
Unemployed or not in labor force	69,328	5.3	(5.0–5.6)	9,989	16.7	(15.6–17.9)	285	8.4	(4.5–15.1)

Abbreviation: CI: confidence interval.

* Estimated population, in thousands.

† Bivariate analyses not age-standardized.

§ Production occupations include assemblers and fabricators; plant and system operators; machinists and machine operators; and food processing, metal, plastic, printing, textile, apparel, furnishing, and wood workers.

Reported by

Matthew R. Groenewold, PhD, Sangwook Tak, ScD, Elizabeth Masterson, MPH, Div of Surveillance, Hazard Evaluations and Field Studies, National Institute for Occupational Safety and Health, CDC. **Corresponding contributor:** Matthew Groenewold, mgroenewold@cdc.gov, 513-841-4329.

Editorial Note

Military service can entail harmful exposure to high-intensity noise from firearms, explosives, jet engines, machinery, and other sources during combat operations, training, or in the course of general job duties. Such exposures can cause or contribute to hearing impairments, including hearing loss, if adequate hearing protection is not available and properly used (2,5). The findings in this report indicate that prior military service is associated with increased prevalence of SHI, independent of demographic factors and current occupation.

For veterans who served after September 2001, the prevalence is even higher than for other veterans.

Noise-induced hearing loss is a permanent disability, although the impairment sometimes can be rehabilitated with hearing aids. Since 1978, the Department of Defense (DoD) policy has required each of the armed services to have in place HCPs incorporating noise hazard identification, safety signs and labels, noise mitigation, education and training, audiometric surveillance, and program evaluation (2). However, a 2005 Institute of Medicine report identified certain shortcomings in military HCPs (5). Between 10% and 18% of service members enrolled in military HCPs had standard threshold shifts in hearing,[¶] a prevalence two to five times higher than would be considered acceptable in a

¶ A standard threshold shift is a change of 10 dB or more in the average hearing thresholds at 2,000, 3,000, and 4,000 Hz in comparison with a baseline audiogram.

TABLE 2. Adjusted prevalence ratios (APRs)* for severe hearing impairment among persons aged ≥17 years — Current Population Survey, United States, 2010

Characteristic	Model A		Model B	
	APR	(95% CI)	APR	(95% CI)
Age [†]	1.1	(1.1–1.1)	1.1	(1.1–1.1)
Sex				
Male	Referent		Referent	
Female	0.6	(0.6–0.7)	0.6	(0.6–0.7)
Race/Ethnicity				
White, non-Hispanic	Referent		Referent	
Black, non-Hispanic	0.6	(0.6–0.7)	0.6	(0.6–0.7)
Hispanic	0.9	(0.8–1.0)	0.9	(0.8–1.0)
Other, non-Hispanic	0.8	(0.7–1.0)	0.8	(0.7–1.0)
Current occupation				
Management, business, and financial	Referent		Referent	
Professional and related	1.0	(0.8–1.3)	1.0	(0.8–1.3)
Service	1.3	(1.1–1.7)	1.3	(1.1–1.7)
Sales and related	1.3	(1.0–1.7)	1.3	(1.0–1.7)
Office and administrative support	1.3	(1.0–1.7)	1.3	(1.0–1.7)
Farming, fishing, and forestry	1.9	(1.0–3.9)	1.9	(1.0–3.9)
Construction and extraction	1.5	(1.2–2.0)	1.5	(1.2–2.0)
Installation, maintenance, and repair	1.5	(1.1–2.2)	1.5	(1.0–2.2)
Production [§]	1.7	(1.3–2.2)	1.7	(1.3–2.2)
Transportation and material moving	1.4	(1.0–2.0)	1.4	(1.0–2.0)
Other	4.9	(0.4–54.4)	2.0	(0.2–21.4)
Unemployed or not in labor force	2.5	(2.1–3.0)	2.5	(2.1–3.0)
Veteran				
Yes	1.3	(1.2–1.5)	—	
No	Referent		—	
Period of military service				
September 2001–2010	—		4.0	(2.7–6.0)
Before September 2001	—		1.3	(1.2–1.4)
None	—		Referent	

Abbreviation: CI = confidence interval.

* Prevalence ratios statistically adjusted for the effects of all other variables in the table.

[†] Prevalence ratio associated with a 1-year increase in age.

[§] Production occupations include assemblers and fabricators; plant and system operators; machinists and machine operators; and food processing, metal, plastic, printing, textile, apparel, furnishing, and wood workers.

What is already known on this topic?

Military service entails hazardous exposure to high-intensity noise. Hearing impairments are the most common types of service-connected disability for which veterans are being compensated by the Department of Veterans Affairs.

What is added by this report?

The prevalence of severe hearing impairment (SHI) among veterans is significantly greater than among nonveterans. After adjusting for age and current occupation, veterans are 30% more likely to have SHI than nonveterans, and veterans who served after September 2001 are four times more likely than nonveterans to have SHI.

What are the implications for public health?

Improvements in military hearing conservation programs and increased emphasis on hearing loss surveillance in military and veterans' health systems will be needed to reduce the prevalence of disability caused by hearing impairments among veterans.

civilian, industrial HCPs (5). A more recent report from the Government Accountability Office (GAO) also concluded that improvements in military HCPs would lead to improved outcomes (2). For its part, DoD has acknowledged the increase in sequelae from auditory injuries among service members and the need for improvements to military HCPs, and has concurred with the GAO's recommendations (2).

Beyond the effect of SHI on the well-being of individual veterans, higher rates of SHI are costly to the nation because of increased use of medical services and disability payments. According to the Department of Veterans Affairs (VA), hearing impairments have been the most common type of service-connected disability since 2005, and the number of veterans being awarded compensation for hearing impairment has continued to grow each year. In fiscal year 2009, the VA paid approximately \$1.1 billion to compensate 1.2 million veterans who filed claims for service-connected hearing impairments (6,7).

The findings in this report are subject to at least six limitations. First, ascertainment of SHI was based on self or proxy report by the survey household respondent and was not validated by audiometric testing. Although self report has been found to have acceptable sensitivity and specificity compared with audiometric measurement of hearing loss in past studies (8), proxy report has not been similarly validated. This could have resulted in some misclassification errors. Second, although physical requirements for military service ensured that SHI

was not present in the exposed group before entering military service, the specific cause of subsequent hearing impairment was not determined. Third, these analyses assume equal incidence of age-related hearing loss and other hearing loss unrelated to noise among veterans and nonveterans. This assumption most likely resulted in underestimation of prevalence ratios. Persons with congenital deafness and hearing loss resulting from childhood infections or other nonservice-related causes were not excluded from the reference group. Fourth, although attempts were made to adjust for current occupation and demographic characteristics, data on past occupations and on recreational and other nonoccupational noise exposures (e.g., hunting or listening to loud music) were not available. To the extent such factors were differentially distributed between veterans and nonveterans, adjustments might have been insufficient to control for all potential confounding factors. Fifth, because data on length of service were unavailable,

adjustments for duration of exposure were not possible. Finally, the cross-sectional nature of these analyses precludes making direct causal inferences.

Noise-induced hearing loss is preventable. The observed association of SHI with military service, and particularly with service in the United States or overseas after September 2001, underscores the need for improved HCPs in the various service branches and the importance of hearing loss surveillance in military and VA health systems. The study results also suggest a need for further research to identify possible causes for the increased prevalence of SHI among veterans with service after September 2001. Increased exposure to combat and its attendant uncontrolled noise hazards is a potential hypothesis, but data on specific exposures during military service were unavailable in the CPS-ASEC. In 2008, serious auditory injuries sustained by service members in Operations Enduring Freedom and Iraqi Freedom led Congress to mandate that DoD create a Hearing Center of Excellence to improve hearing loss prevention and treatment and to establish an electronic registry to track and share information with the VA on military personnel with hearing loss.** DoD is finishing plans for the center and the registry (2). GAO also has made specific recommendations to DoD for improvement of military HCPs (2).

** Duncan Hunter National Defense Authorization Act for Fiscal Year 2009, Pub. L. No. 110-417, Sect. 721, 122 Stat. 4506 (2008).

References

1. Tak S, Calvert GM. Hearing difficulty attributable to employment by industry and occupation: An analysis of the National Health Interview Survey—United States, 1997 to 2003. *J Occup Environ Med* 2008;50:46–56.
2. US Government Accountability Office. Hearing loss prevention: improvements to DOD hearing conservation programs could lead to better outcomes. Washington, DC: US Government Accountability Office; 2011. Available at <http://www.gao.gov/new.items/d11114.pdf>. Accessed July 20, 2011.
3. Wilson RH, Noe CM, Cruickshanks KJ, et al. Prevalence and degree of hearing loss among males in Beaver Dam cohort: comparison of veterans and nonveterans. *J Rehabil Res Dev* 2010;47:505–20.
4. US Census Bureau. Current population survey, 2010 annual social and economic (ASEC) supplement. Washington, DC: US Census Bureau; 2010. Available at <http://www.census.gov/apsd/techdoc/cps/cpsmar10.pdf>. Accessed July 15, 2011.
5. Committee on Noise-Induced Hearing Loss and Tinnitus Associated with Military Service from World War II to the Present. Noise and military service: implications for hearing loss and tinnitus. Humes LE, Joellenbeck LM, Durch JS, eds. Washington, DC: The National Academies Press; 2004.
6. National Center for Rehabilitative Auditory Research. Calendar year 2009 annual report. Portland, OR: Department of Veterans Affairs, Rehabilitation Research and Development; 2010.
7. Veterans Benefits Administration. Annual benefits report, fiscal year 2009. Washington, DC: US Department of Veterans Affairs; 2010. Available at http://www.vba.va.gov/reports/abr/2009_abr.pdf. Accessed July 15, 2011.
8. Sindhusake D, Mitchell P, Smith W, et al. Validation of self-reported hearing loss: the Blue Mountain hearing study. *Int J Audiol* 2006;45:309–17.

Announcement

Epidemic Intelligence Service Application Deadline — September 1, 2011

Applications are now being accepted for CDC's July 2012–June 2014 Epidemic Intelligence Service (EIS) program. EIS is a 2-year, postgraduate program of service and on-the-job training for health professionals interested in the practice of epidemiology. Each year, EIS provides approximately 80 persons from around the world opportunities to gain hands-on experience in epidemiology at CDC or state or local health departments. EIS officers, often called CDC's "disease detectives," have gone on to assume leadership positions at CDC and other public health agencies. The EIS experience also is useful for health professionals who would like to gain a population-based perspective on public health practice.

Persons with a strong interest in applied epidemiology who meet at least one of the following qualifications may apply to EIS: 1) physicians with ≥ 1 year of clinical training; 2) persons with a doctoral degree in epidemiology, biostatistics, social or behavioral sciences, natural sciences, or nutrition sciences; 3) dentists, physician assistants, or nurses with a master of public health (MPH) or equivalent degree; 4) veterinarians with an MPH or equivalent degree or relevant public health experience.

The deadline for submitting applications for the July 2012–June 2014 EIS program is September 1, 2011. Information regarding the new EIS online application and program details is available at <http://www.cdc.gov/eis/applynow.html>; by telephone (404-498-6110); or via e-mail (eis@cdc.gov).

Errata

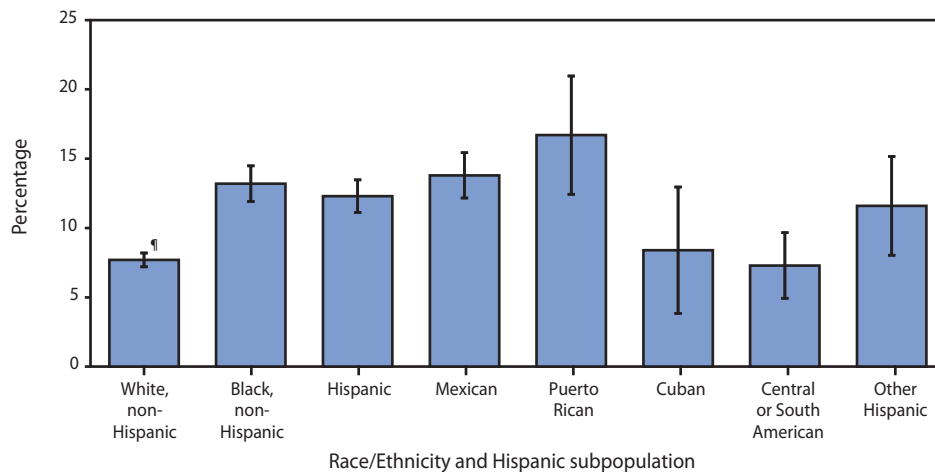
Vol 60, No. 27

In the report, "Illnesses associated with exposure to methyl bromide-fumigated produce—California, 2010," errors occurred on pages 923 and 924. On page 923, in the second full paragraph of the second column, the fifth sentence should read as follows: "Assuming first-order elimination kinetics and a 12-day half-life for inorganic bromide, his serum bromide was estimated to have been **5.87** mg/dL on March 13, his last day working in cold storage." On page 924, first full paragraph of the 1st column, the fourth sentence should read as follows: "After learning that patient A had similar symptoms, a serum bromide test was obtained on March 20, 2010, that showed a bromide level of 1.5 mg/dL, which was estimated to have been a level of **8.5** mg/dL on patient B's last work day (February 18)."

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Percentage of Adults Aged ≥ 18 Years Who Ever Received a Diagnosis of Diabetes,* by Race/Ethnicity and Hispanic Subpopulation[†] — National Health Interview Survey, United States, 2009[§]



* Respondents were asked if they had ever been told by a doctor or other health professional that they had diabetes or sugar diabetes (female respondents were instructed to exclude pregnancy-related diabetes). Responses from persons who said they had "borderline" diabetes were treated as unknown with respect to diabetes. Unknowns were not included in the denominators when calculating percentages.

[†] Persons of Hispanic origin might be of any race or combination of races.

[§] Estimates are age adjusted using the projected 2000 U.S. standard population as the standard population and using four age groups: 18–44 years, 45–64 years, 65–74 years, and ≥ 75 years.

[¶] 95% confidence interval.

During 2009, non-Hispanic black adults (13.2%) were almost twice as likely as non-Hispanic white adults (7.7%) to have been told by a doctor or other health professional that they had diabetes. The prevalence of diagnosed diabetes also was higher among Hispanic adults (12.3%) than among non-Hispanic white adults. Among Hispanic subpopulations, Mexican adults (13.8%) and Puerto Rican adults (16.7%) were more likely to have been told by a doctor or other health professional that they had diabetes compared with Central or South American adults (7.3%).

Source: National Health Interview Survey, 2009 data. Available at <http://www.cdc.gov/nchs/nhis.htm>.

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 July 16, 2011 (28th week)*

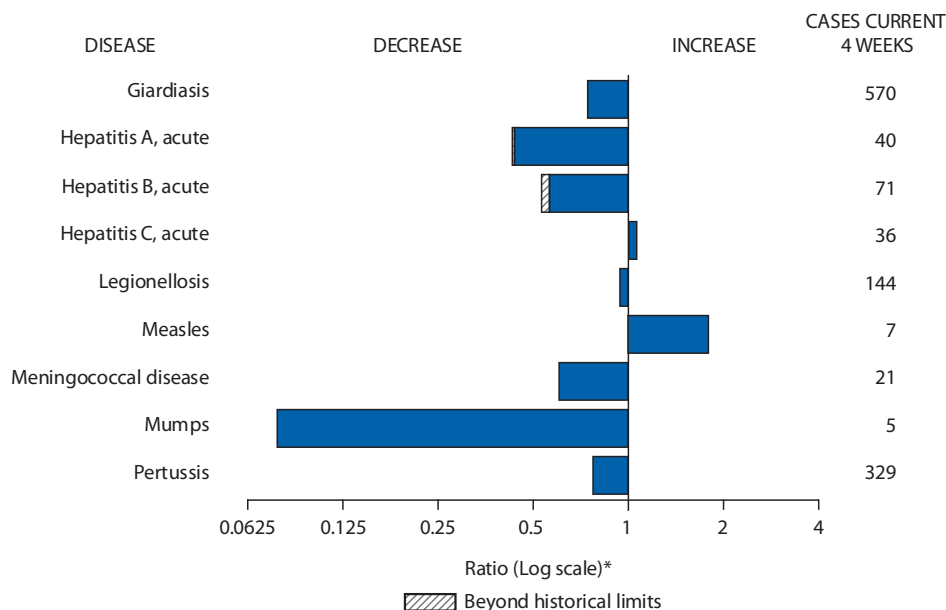
Disease	Current week	Cum 2011	5-year weekly average [†]	Total cases reported for previous years					States reporting cases during current week (No.)
				2010	2009	2008	2007	2006	
Anthrax	—	—	—	—	1	—	1	1	
Arboviral diseases ^{§, ¶} :									
California serogroup virus disease	—	2	3	75	55	62	55	67	
Eastern equine encephalitis virus disease	—	—	0	10	4	4	4	8	
Powassan virus disease	—	2	0	8	6	2	7	1	
St. Louis encephalitis virus disease	—	—	0	10	12	13	9	10	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Babesiosis	21	95	3	NN	NN	NN	NN	NN	RI (2), NY (16), PA (3)
Botulism, total	1	45	3	112	118	145	144	165	
foodborne	—	5	0	7	10	17	32	20	
infant	1	34	2	80	83	109	85	97	TX (1)
other (wound and unspecified)	—	6	0	25	25	19	27	48	
Brucellosis	2	37	2	115	115	80	131	121	CA (2)
Chancroid	—	12	1	24	28	25	23	33	
Cholera	—	24	0	13	10	5	7	9	
Cyclosporiasis [§]	4	67	6	179	141	139	93	137	NY (1), FL (2), TX (1)
Diphtheria	—	—	—	—	—	—	—	—	
<i>Haemophilus influenzae</i> ,** invasive disease (age <5 yrs):									
serotype b	—	4	0	23	35	30	22	29	
nonsertotype b	—	60	4	200	236	244	199	175	
unknown serotype	5	145	3	223	178	163	180	179	OH (2), MD (1), FL (1), HI (1)
Hansen disease [§]	1	23	2	98	103	80	101	66	FL (1)
Hantavirus pulmonary syndrome [§]	—	10	1	20	20	18	32	40	
Hemolytic uremic syndrome, postdiarrheal [§]	2	55	7	266	242	330	292	288	FL (1), TN (1)
Influenza-associated pediatric mortality ^{§, ††}	1	110	1	61	358	90	77	43	VA (1)
Listeriosis	2	231	20	821	851	759	808	884	NY (1), KY (1)
Measles ^{§§}	2	136	1	63	71	140	43	55	NY (1), PA (1)
Meningococcal disease, invasive ^{¶¶} :									
A, C, Y, and W-135	1	110	5	280	301	330	325	318	NY (1)
serogroup B	—	54	3	135	174	188	167	193	
other serogroup	—	5	0	12	23	38	35	32	
unknown serogroup	7	256	9	406	482	616	550	651	NY (2), MD (1), FL (3), CA (1)
Novel influenza A virus infections ^{***}	—	1	0	4	43,774	2	4	NN	
Plague	—	1	0	2	8	3	7	17	
Poliomyelitis, paralytic	—	—	—	—	1	—	—	—	
Polio virus Infection, nonparalytic [§]	—	—	—	—	—	—	—	NN	
Psittacosis [§]	—	1	0	4	9	8	12	21	
Q fever, total [§]	—	35	3	131	113	120	171	169	
acute	—	23	2	106	93	106	—	—	
chronic	—	12	0	25	20	14	—	—	
Rabies, human	—	1	0	2	4	2	1	3	
Rubella ^{†††}	—	3	0	5	3	16	12	11	
Rubella, congenital syndrome	—	—	—	—	2	—	—	1	
SARS-CoV [§]	—	—	—	—	—	—	—	—	
Smallpox [§]	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome [§]	3	74	2	148	161	157	132	125	NY (3)
Syphilis, congenital (age <1 yr) ^{§§§}	—	75	8	377	423	431	430	349	
Tetanus	—	4	0	10	18	19	28	41	
Toxic-shock syndrome (staphylococcal) [§]	—	42	2	82	74	71	92	101	
Trichinellosis	—	7	0	7	13	39	5	15	
Tularemia	—	43	5	124	93	123	137	95	
Typhoid fever	1	185	8	468	397	449	434	353	FL (1)
Vancomycin-intermediate <i>Staphylococcus aureus</i> [§]	—	27	1	91	78	63	37	6	
Vancomycin-resistant <i>Staphylococcus aureus</i> [§]	—	—	—	2	1	—	2	1	
Vibriosis (noncholera <i>Vibrio</i> species infections) [§]	9	222	16	848	789	588	549	NN	GA (1), FL (6), TX (1), CA (1)
Viral hemorrhagic fever ^{¶¶¶}	—	—	—	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 July 16, 2011 (28th week)*

—: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts.
 * Case counts for reporting years 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf.
 † Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/5yearweeklyaverage.pdf.
 ‡ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table except starting in 2007 for the arboviral diseases, STD data, TB data, and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/osels/ph_surveillance/nndss/phs/infdis.htm.
 ¶ Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.
 ** Data for H. influenzae (all ages, all serotypes) are available in Table II.
 †† Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since October 3, 2010, 114 influenza-associated pediatric deaths occurring during the 2010-11 influenza season have been reported.
 ‡‡ The two measles cases reported for the current week were imported.
 ¶¶ Data for meningococcal disease (all serogroups) are available in Table II.
 *** CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. During 2009, four cases of human infection with novel influenza A viruses, different from the 2009 pandemic influenza A (H1N1) strain, were reported to CDC. The four cases of novel influenza A virus infection reported to CDC during 2010 and the 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 July 16, 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

Jennifer Ward, MS

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

Morbidity and Mortality Weekly Report

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending July 16, 2011, and July 17, 2010 (28th 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		
United States	10,304	25,725	31,142	669,718	686,384	83	86	567	8,794	NN	88	95	374	2,275	3,522
New England	794	847	2,043	22,909	21,168	—	0	1	1	NN	—	4	29	96	267
Connecticut	—	228	1,557	4,918	5,199	—	0	0	—	NN	—	0	24	24	77
Maine†	65	57	100	1,659	1,332	—	0	0	—	NN	—	0	7	3	32
Massachusetts	571	403	860	11,815	10,863	—	0	0	—	NN	—	2	9	32	77
New Hampshire	48	53	81	1,528	1,216	—	0	1	1	NN	—	1	3	17	36
Rhode Island†	75	70	154	2,204	1,883	—	0	0	—	NN	—	0	2	1	11
Vermont†	35	26	84	785	675	—	0	0	—	NN	—	1	5	19	34
Mid. Atlantic	1,587	3,321	5,069	84,199	89,591	—	0	1	3	NN	20	14	38	368	356
New Jersey	58	479	684	11,522	14,048	—	0	0	—	NN	—	1	4	18	14
New York (Upstate)	683	712	2,099	18,966	17,195	—	0	0	—	NN	4	4	13	76	69
New York City	200	1,145	2,612	26,724	33,485	—	0	0	—	NN	—	2	6	32	38
Pennsylvania	646	953	1,231	26,987	24,863	—	0	1	3	NN	16	8	26	242	235
E.N. Central	1,122	4,001	7,039	100,850	107,907	—	0	3	26	NN	13	23	137	520	935
Illinois	15	1,110	1,320	23,853	31,968	—	0	0	—	NN	—	1	21	5	106
Indiana	206	455	3,376	13,660	9,985	—	0	0	—	NN	—	4	15	44	142
Michigan	468	946	1,397	25,143	26,617	—	0	3	16	NN	—	5	18	117	165
Ohio	306	1,000	1,134	26,506	27,212	—	0	3	10	NN	13	8	24	206	193
Wisconsin	127	472	559	11,688	12,125	—	0	0	—	NN	—	8	65	148	329
W.N. Central	121	1,437	1,643	35,618	38,414	—	0	1	2	NN	15	10	99	192	598
Iowa	17	208	240	5,424	5,683	—	0	0	—	NN	—	2	25	27	132
Kansas	11	190	287	5,216	5,227	—	0	0	—	NN	—	0	6	3	51
Minnesota	U	289	361	5,596	8,224	U	0	0	—	NN	U	1	22	—	174
Missouri	—	524	766	13,680	13,661	—	0	0	—	NN	6	3	29	66	108
Nebraska†	74	102	218	3,275	2,761	—	0	1	2	NN	6	3	26	69	64
North Dakota	—	39	90	664	1,201	—	0	0	—	NN	3	0	9	16	12
South Dakota	19	65	93	1,763	1,657	—	0	0	—	NN	—	0	4	11	57
S. Atlantic	3,475	5,111	6,539	144,822	139,084	—	0	2	3	NN	14	18	53	422	516
Delaware	69	83	220	2,320	2,287	—	0	0	—	NN	1	0	1	4	4
District of Columbia	—	105	180	2,542	2,847	—	0	0	—	NN	—	0	1	4	2
Florida	657	1,490	1,706	40,265	39,996	—	0	0	—	NN	5	6	19	107	192
Georgia	611	930	2,384	27,505	23,483	—	0	0	—	NN	5	5	11	144	154
Maryland†	421	460	1,125	11,450	12,728	—	0	2	3	NN	—	1	6	33	20
North Carolina	980	756	1,477	25,109	25,437	—	0	0	—	NN	—	0	17	36	47
South Carolina†	—	523	946	14,958	14,034	—	0	0	—	NN	—	2	8	51	34
Virginia†	682	662	970	18,475	16,346	—	0	0	—	NN	3	1	5	31	57
West Virginia	55	78	121	2,198	1,926	—	0	0	—	NN	—	0	5	12	6
E.S. Central	994	1,826	3,314	49,497	49,005	—	0	0	—	NN	3	4	19	83	106
Alabama†	—	542	1,566	14,340	13,651	—	0	0	—	NN	—	1	13	9	40
Kentucky	207	268	2,352	8,568	8,550	—	0	0	—	NN	1	1	6	24	35
Mississippi	568	392	614	10,832	11,922	—	0	0	—	NN	—	0	2	16	7
Tennessee†	219	586	795	15,757	14,882	—	0	0	—	NN	2	1	5	34	24
W.S. Central	—	3,294	4,723	85,240	95,928	—	0	1	1	NN	5	6	33	127	173
Arkansas†	—	311	440	8,494	8,267	—	0	0	—	NN	—	0	3	8	16
Louisiana	—	343	1,052	6,949	15,110	—	0	1	1	NN	1	0	9	23	20
Oklahoma	—	226	1,371	5,319	7,048	—	0	0	—	NN	—	0	8	—	41
Texas†	—	2,369	3,107	64,478	65,503	—	0	0	—	NN	4	4	24	96	96
Mountain	594	1,680	2,155	43,715	44,480	48	60	432	6,931	NN	12	10	30	244	264
Arizona	111	514	697	12,531	14,521	48	58	427	6,841	NN	—	1	3	15	16
Colorado	210	408	848	12,584	10,378	—	0	0	—	NN	7	2	10	73	66
Idaho†	—	61	199	1,403	2,051	—	0	0	—	NN	5	1	7	36	47
Montana†	45	62	83	1,761	1,606	—	0	1	2	NN	—	1	5	32	30
Nevada†	178	197	380	5,763	5,410	—	1	4	48	NN	—	0	7	3	8
New Mexico†	48	194	1,183	5,326	5,887	—	0	4	31	NN	—	3	12	52	49
Utah	—	131	175	3,380	3,524	—	0	2	6	NN	—	1	5	23	34
Wyoming†	2	38	90	967	1,103	—	0	2	3	NN	—	0	3	10	14
Pacific	1,617	3,758	6,559	102,868	100,807	35	20	142	1,827	NN	6	11	27	223	307
Alaska	—	115	157	2,909	3,312	—	0	0	—	NN	—	0	3	7	2
California	1,388	2,884	5,763	78,682	76,658	35	20	142	1,826	NN	6	6	19	144	174
Hawaii	—	109	138	2,521	3,332	—	0	0	—	NN	—	0	0	—	1
Oregon	229	255	524	7,329	6,208	—	0	1	1	NN	—	3	13	68	91
Washington	—	430	522	11,427	11,297	—	0	0	—	NN	—	0	9	4	39
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	NN	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	NN	—	—	—	—	—
Guam	—	4	81	189	545	—	0	0	—	NN	—	0	0	—	—
Puerto Rico	82	105	349	3,351	3,367	—	0	0	—	NN	N	0	0	N	N
U.S. Virgin Islands	—	14	27	328	315	—	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/osels/ph_surveillance/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 July 16, 2011, and July 17, 2010 (28th week)*

Reporting area	Dengue Virus Infection†									
	Dengue Fever§					Dengue Hemorrhagic Fever¶				
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Current week	Previous 52 weeks		Cum 2011	Cum 2010
	Med	Max				Med	Max			
United States	—	3	55	44	248	—	0	2	—	4
New England	—	0	3	1	4	—	0	0	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine**	—	0	2	—	3	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	0	—	—	—	0	0	—	—
Rhode Island**	—	0	1	—	—	—	0	0	—	—
Vermont**	—	0	1	1	1	—	0	0	—	—
Mid. Atlantic	—	1	25	19	71	—	0	1	—	2
New Jersey	—	0	5	—	8	—	0	0	—	—
New York (Upstate)	—	0	5	—	11	—	0	1	—	1
New York City	—	1	17	10	43	—	0	1	—	1
Pennsylvania	—	0	3	9	9	—	0	0	—	—
E.N. Central	—	0	7	4	18	—	0	1	—	—
Illinois	—	0	3	1	4	—	0	0	—	—
Indiana	—	0	2	1	4	—	0	0	—	—
Michigan	—	0	2	—	3	—	0	0	—	—
Ohio	—	0	2	—	5	—	0	0	—	—
Wisconsin	—	0	2	2	2	—	0	1	—	—
W.N. Central	—	0	6	—	16	—	0	1	—	—
Iowa	—	0	1	—	1	—	0	0	—	—
Kansas	—	0	1	—	2	—	0	0	—	—
Minnesota	U	0	1	—	9	U	0	0	—	—
Missouri	—	0	1	—	3	—	0	0	—	—
Nebraska**	—	0	6	—	—	—	0	0	—	—
North Dakota	—	0	0	—	1	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	1	—	—
S. Atlantic	—	1	19	11	96	—	0	1	—	1
Delaware	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	—	1	13	10	78	—	0	1	—	1
Georgia	—	0	2	—	6	—	0	0	—	—
Maryland**	—	0	0	—	—	—	0	0	—	—
North Carolina	—	0	2	1	—	—	0	0	—	—
South Carolina**	—	0	3	—	5	—	0	0	—	—
Virginia**	—	0	3	—	5	—	0	0	—	—
West Virginia	—	0	1	—	2	—	0	0	—	—
E.S. Central	—	0	2	—	1	—	0	0	—	—
Alabama**	—	0	2	—	—	—	0	0	—	—
Kentucky	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—
Tennessee**	—	0	0	—	1	—	0	0	—	—
W.S. Central	—	0	4	—	13	—	0	0	—	1
Arkansas**	—	0	0	—	—	—	0	0	—	1
Louisiana	—	0	2	—	1	—	0	0	—	—
Oklahoma	—	0	1	—	1	—	0	0	—	—
Texas**	—	0	2	—	11	—	0	0	—	—
Mountain	—	0	2	3	7	—	0	0	—	—
Arizona	—	0	2	2	2	—	0	0	—	—
Colorado	—	0	0	—	—	—	0	0	—	—
Idaho**	—	0	1	—	1	—	0	0	—	—
Montana**	—	0	1	—	2	—	0	0	—	—
Nevada**	—	0	1	—	1	—	0	0	—	—
New Mexico**	—	0	0	—	1	—	0	0	—	—
Utah	—	0	1	1	—	—	0	0	—	—
Wyoming**	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	7	6	22	—	0	0	—	—
Alaska	—	0	0	—	1	—	0	0	—	—
California	—	0	5	2	17	—	0	0	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—
Washington	—	0	2	4	4	—	0	0	—	—
Territories										
American Samoa	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	32	550	299	4,308	—	0	20	1	96
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/osels/ph_surveillance/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).

§ 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 July 16, 2011, and July 17, 2010 (28th 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			
United States	21	6	109	232	326	18	15	89	161	1,094	1	1	13	40	52
New England	—	0	2	3	3	5	1	8	27	56	—	0	1	1	2
Connecticut	—	0	0	—	—	—	0	6	—	22	—	0	0	—	—
Maine [§]	—	0	1	1	2	—	0	2	7	12	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	1	1	1	—	0	3	7	8	—	0	1	1	2
Rhode Island [§]	—	0	1	1	—	4	0	6	11	13	—	0	0	—	—
Vermont [§]	—	0	0	—	—	1	0	1	2	1	—	0	0	—	—
Mid. Atlantic	5	1	7	23	51	13	4	20	87	112	—	0	2	3	7
New Jersey	—	0	2	—	37	—	0	3	—	47	—	0	0	—	1
New York (Upstate)	5	0	7	20	10	13	3	18	73	59	—	0	2	3	4
New York City	—	0	1	3	3	—	0	5	14	6	—	0	0	—	—
Pennsylvania	—	0	1	—	1	—	0	1	—	—	—	0	1	—	2
E.N. Central	—	0	4	10	25	—	1	24	7	347	—	0	4	16	28
Illinois	—	0	2	6	10	—	0	2	2	2	—	0	1	2	3
Indiana	—	0	0	—	—	—	0	0	—	—	—	0	3	11	11
Michigan	—	0	1	1	—	—	0	1	—	2	—	0	1	1	—
Ohio	—	0	3	3	2	—	0	1	2	—	—	0	1	1	—
Wisconsin	—	0	1	—	13	—	1	23	3	343	—	0	3	1	14
W.N. Central	4	1	13	75	73	—	2	45	14	534	—	0	11	13	5
Iowa	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Kansas	—	0	1	2	5	—	0	0	—	1	—	0	0	—	—
Minnesota	U	0	12	—	—	U	0	44	1	526	U	0	11	—	—
Missouri	4	0	13	73	68	—	0	3	13	7	—	0	7	11	5
Nebraska [§]	—	0	1	—	—	—	0	0	—	—	—	0	1	1	—
North Dakota	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
South Dakota	—	0	0	—	—	—	0	0	—	—	—	0	1	1	—
S. Atlantic	4	3	18	84	116	—	1	4	19	35	—	0	1	1	1
Delaware	—	0	2	12	11	—	0	1	1	4	—	0	0	—	—
District of Columbia	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Florida	1	0	3	11	6	—	0	1	3	1	—	0	0	—	—
Georgia	—	0	3	8	15	—	0	1	5	1	—	0	1	1	1
Maryland [§]	2	0	2	12	13	—	0	1	1	12	—	0	1	—	—
North Carolina	—	0	13	15	35	—	0	4	7	11	—	0	0	—	—
South Carolina [§]	—	0	1	—	3	—	0	1	—	—	—	0	0	—	—
Virginia [§]	1	1	8	26	32	—	0	1	2	6	—	0	1	—	—
West Virginia	—	0	1	—	1	—	0	0	—	—	—	0	0	—	—
E.S. Central	3	0	11	31	44	—	0	2	7	10	1	0	1	3	7
Alabama [§]	—	0	3	—	6	—	0	2	3	4	N	0	0	N	N
Kentucky	—	0	2	7	8	—	0	0	—	—	—	0	0	—	1
Mississippi	—	0	1	—	1	—	0	1	—	1	—	0	0	—	1
Tennessee [§]	3	0	7	24	29	—	0	2	4	5	1	0	1	3	5
W.S. Central	5	0	87	6	13	—	0	9	—	—	—	0	1	—	—
Arkansas [§]	5	0	5	6	—	—	0	2	—	—	—	0	0	—	—
Louisiana	—	0	0	—	1	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	82	—	10	—	0	7	—	—	—	0	0	—	—
Texas [§]	—	0	1	—	2	—	0	1	—	—	—	0	1	—	—
Mountain	—	0	0	—	—	—	0	0	—	—	—	0	1	2	—
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	1	2	—
Colorado	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Idaho [§]	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Montana [§]	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Nevada [§]	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
New Mexico [§]	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Utah	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Wyoming [§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	1	—	1	—	0	0	—	—	—	0	1	1	2
Alaska	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
California	—	0	1	—	1	—	0	0	—	—	—	0	1	1	2
Hawaii	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Oregon	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Territories															
American Samoa	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Puerto Rico	N	0	0	N	N	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/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

† Cumulative total *E. ewingii* cases reported for year 2010 = 10, and 6 cases reported for 2011.

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending July 16, 2011, and July 17, 2010 (28th week)*

Reporting area	Giardiasis					Gonorrhea					<i>Haemophilus influenzae</i> , 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		
United States	161	291	549	6,757	9,496	2,337	5,805	7,484	148,956	159,638	31	63	141	1,823	1,768
New England	1	24	55	477	820	82	101	206	2,702	2,863	1	4	12	105	101
Connecticut	—	5	12	103	148	—	43	150	1,135	1,334	—	1	6	33	21
Maine [§]	1	3	11	60	93	6	3	7	95	104	—	0	2	14	8
Massachusetts	—	11	25	176	351	55	48	80	1,208	1,185	—	1	6	37	53
New Hampshire	—	2	7	39	99	5	3	7	71	76	—	0	2	9	7
Rhode Island [§]	—	1	7	29	38	16	5	15	167	133	1	0	2	8	8
Vermont [§]	—	3	10	70	91	—	0	8	26	31	—	0	3	4	4
Mid. Atlantic	33	60	106	1,378	1,580	291	716	1,121	18,207	18,062	8	12	32	399	335
New Jersey	—	8	22	128	220	23	116	172	2,925	2,992	—	2	7	65	57
New York (Upstate)	20	21	72	463	533	88	113	271	2,910	2,738	3	3	18	103	89
New York City	3	17	30	433	451	46	238	497	5,643	6,253	3	2	6	80	55
Pennsylvania	10	16	27	354	376	134	263	364	6,729	6,079	2	4	11	151	134
E.N. Central	25	50	99	1,077	1,639	384	1,048	2,091	26,186	29,166	6	11	19	329	287
Illinois	—	9	31	185	368	6	285	369	5,859	8,009	—	3	9	95	97
Indiana	—	6	14	119	203	52	113	1,018	3,292	2,804	—	2	7	57	60
Michigan	1	10	25	220	348	173	244	490	6,369	7,308	—	1	4	35	21
Ohio	23	16	29	393	428	115	321	383	8,286	8,550	6	3	7	100	70
Wisconsin	1	8	35	160	292	38	99	130	2,380	2,495	—	1	5	42	39
W.N. Central	18	26	73	485	983	28	297	363	7,296	7,546	—	4	10	88	123
Iowa	3	5	12	122	145	9	38	57	975	882	—	0	0	—	1
Kansas	—	2	10	40	119	1	39	57	985	1,112	—	0	2	12	13
Minnesota	U	5	33	—	361	U	38	62	744	1,133	U	0	5	—	45
Missouri	8	8	26	178	189	—	144	181	3,614	3,506	—	1	5	45	45
Nebraska [§]	2	4	9	91	108	16	23	49	630	635	—	0	3	21	11
North Dakota	2	0	12	21	11	—	3	9	61	106	—	0	6	9	8
South Dakota	3	1	5	33	50	2	12	20	287	172	—	0	1	1	—
S. Atlantic	33	60	127	1,366	1,914	988	1,471	1,862	38,686	41,344	8	15	30	442	451
Delaware	—	1	5	17	15	9	17	48	455	516	—	0	2	3	5
District of Columbia	—	1	5	16	31	—	37	70	920	1,116	—	0	0	—	—
Florida	16	25	75	577	1,020	202	382	486	10,236	10,687	3	5	12	148	112
Georgia	10	14	51	430	376	190	315	874	8,398	8,098	1	3	7	87	109
Maryland [§]	5	4	10	120	163	83	123	246	2,807	3,629	3	1	4	45	34
North Carolina	N	0	0	N	N	351	257	468	8,228	8,486	1	2	9	49	73
South Carolina [§]	—	2	9	53	66	—	155	257	4,228	4,270	—	1	5	38	56
Virginia [§]	2	8	32	131	227	145	116	185	2,989	4,297	—	2	8	63	50
West Virginia	—	0	8	22	16	8	14	26	425	245	—	0	9	9	12
E.S. Central	1	4	11	85	87	283	495	1,007	13,147	13,206	2	3	11	122	108
Alabama [§]	1	4	11	85	87	—	160	414	4,308	3,999	—	1	4	38	19
Kentucky	N	0	0	N	N	65	71	712	2,305	2,178	—	0	4	17	20
Mississippi	N	0	0	N	N	176	116	197	2,840	3,288	—	0	3	11	9
Tennessee [§]	N	0	0	N	N	42	140	194	3,694	3,741	2	1	5	56	60
W.S. Central	4	5	17	99	191	—	863	1,664	21,514	25,770	—	2	26	73	86
Arkansas [§]	3	2	9	54	55	—	101	138	2,571	2,448	—	0	3	19	14
Louisiana	1	3	12	45	80	—	94	509	1,858	4,331	—	0	4	27	19
Oklahoma	—	0	5	—	56	—	66	332	1,562	2,082	—	1	19	26	47
Texas [§]	N	0	0	N	N	—	596	867	15,523	16,909	—	0	4	1	6
Mountain	13	27	58	594	880	96	185	253	4,972	5,056	3	5	12	162	194
Arizona	1	3	8	63	76	32	64	95	1,742	1,737	—	2	6	62	73
Colorado	10	12	27	285	371	15	46	84	1,089	1,418	1	1	5	40	56
Idaho [§]	—	4	9	69	110	—	2	14	48	55	2	0	2	11	11
Montana [§]	1	1	6	28	60	—	1	5	37	62	—	0	1	2	2
Nevada [§]	—	2	11	35	30	44	33	103	1,080	972	—	0	2	12	5
New Mexico [§]	1	2	5	32	54	5	28	98	833	596	—	1	4	23	22
Utah	—	4	13	68	153	—	4	9	121	195	—	0	3	11	20
Wyoming [§]	—	0	5	14	26	—	0	3	22	21	—	0	1	1	5
Pacific	33	49	129	1,196	1,402	185	626	807	16,246	16,625	3	3	10	103	83
Alaska	—	2	7	39	51	—	20	34	489	732	—	0	2	12	14
California	33	32	68	839	869	176	513	695	13,356	13,551	—	0	6	18	15
Hawaii	—	0	4	14	31	—	13	26	328	373	1	0	3	16	13
Oregon	—	7	20	156	249	9	23	40	646	538	2	1	6	55	37
Washington	—	9	57	148	202	—	59	86	1,427	1,431	—	0	2	2	4
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	2	—	0	17	6	49	—	0	0	—	—
Puerto Rico	—	1	7	13	44	6	6	12	187	154	—	0	0	—	1
U.S. Virgin Islands	—	0	0	—	—	—	2	7	49	73	—	0	0	—	—

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

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

* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.† 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 July 16, 2011, and July 17, 2010 (28th 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			
United States	10	22	74	534	816	12	57	167	1,168	1,676	10	17	39	488	425
New England	2	0	6	15	62	—	0	5	21	34	1	1	4	25	35
Connecticut	—	0	4	5	15	—	0	4	7	10	—	0	3	15	21
Maine†	—	0	1	1	5	—	0	2	5	10	—	0	2	5	2
Massachusetts	—	0	5	3	35	—	0	3	8	8	—	0	1	1	12
New Hampshire	—	0	1	—	—	—	0	1	1	4	N	0	0	N	N
Rhode Island†	—	0	1	2	7	U	0	0	U	U	U	0	0	U	U
Vermont†	2	0	1	4	—	—	0	0	—	2	1	0	1	4	—
Mid. Atlantic	1	4	12	101	134	1	5	11	135	168	2	1	6	40	55
New Jersey	—	1	4	11	40	—	1	4	26	48	—	0	4	—	13
New York (Upstate)	—	1	4	25	27	—	1	9	24	26	1	0	4	25	26
New York City	—	1	6	36	38	—	1	5	43	50	—	0	1	—	2
Pennsylvania	1	1	3	29	29	1	1	4	42	44	1	0	2	15	14
E.N. Central	—	3	9	92	95	1	6	34	170	280	—	3	12	100	52
Illinois	—	1	3	16	26	—	2	6	36	71	—	0	1	2	—
Indiana	—	0	3	10	10	—	1	6	18	37	—	0	5	37	18
Michigan	—	1	5	40	33	1	2	5	48	74	—	1	7	56	25
Ohio	—	1	5	23	17	—	1	30	55	66	—	0	1	4	6
Wisconsin	—	0	2	3	9	—	0	3	13	32	—	0	1	1	3
W.N. Central	—	1	25	17	27	—	2	16	66	65	—	0	6	2	7
Iowa	—	0	3	2	4	—	0	1	6	10	—	0	0	—	—
Kansas	—	0	2	3	8	—	0	2	7	4	—	0	1	2	—
Minnesota	U	0	22	2	1	U	0	15	2	2	U	0	6	—	3
Missouri	—	0	1	5	11	—	2	5	42	39	—	0	1	—	2
Nebraska†	—	0	4	3	3	—	0	3	8	9	—	0	1	—	2
North Dakota	—	0	3	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	2	2	—	—	0	1	1	1	—	0	0	—	—
S. Atlantic	5	5	14	118	182	6	14	33	321	457	3	4	11	117	91
Delaware	—	0	1	1	5	—	0	1	—	18	U	0	0	U	U
District of Columbia	—	0	0	—	1	—	0	0	—	3	—	0	0	—	2
Florida	1	2	7	40	65	2	4	11	110	158	—	1	5	29	25
Georgia	1	1	4	28	21	1	2	8	45	99	—	0	3	16	12
Maryland†	1	0	2	12	13	1	1	4	27	36	—	0	2	19	14
North Carolina	1	0	4	13	31	1	2	16	67	35	1	1	7	34	24
South Carolina†	—	0	2	5	19	—	1	4	18	31	1	0	1	1	—
Virginia†	1	1	4	14	26	1	1	7	35	46	1	0	2	9	8
West Virginia	—	0	5	5	1	—	0	18	19	31	—	0	5	9	6
E.S. Central	—	0	6	25	22	1	8	14	203	180	2	3	8	91	76
Alabama†	—	0	2	1	5	1	1	4	42	35	—	0	1	7	3
Kentucky	—	0	6	5	9	—	3	8	60	56	—	2	6	38	52
Mississippi	—	0	1	3	1	—	1	3	21	19	U	0	0	U	U
Tennessee†	—	0	5	16	7	—	3	8	80	70	2	1	5	46	21
W.S. Central	1	2	15	54	74	1	8	67	138	265	1	2	11	45	40
Arkansas†	—	0	1	—	—	—	1	4	22	37	—	0	0	—	1
Louisiana	—	0	1	2	5	—	1	4	23	28	—	0	2	5	1
Oklahoma	—	0	4	1	1	—	1	16	25	43	—	1	10	21	13
Texas†	1	2	11	51	68	1	4	45	68	157	1	0	3	19	25
Mountain	—	2	5	39	96	2	2	7	49	71	—	1	4	34	32
Arizona	—	0	2	9	44	—	0	3	11	15	U	0	0	U	U
Colorado	—	0	2	14	23	2	0	5	12	19	—	0	3	12	8
Idaho†	—	0	1	5	6	—	0	1	2	4	—	0	2	6	7
Montana†	—	0	1	2	4	—	0	0	—	—	—	0	1	2	—
Nevada†	—	0	3	4	7	—	0	3	18	23	—	0	2	7	3
New Mexico†	—	0	1	3	3	—	0	2	5	3	—	0	1	4	9
Utah	—	0	2	—	6	—	0	1	1	7	—	0	2	1	5
Wyoming†	—	0	1	2	3	—	0	1	—	—	—	0	1	2	—
Pacific	1	4	15	73	124	—	4	25	65	156	1	1	12	34	37
Alaska	—	0	1	2	1	—	0	1	4	1	U	0	1	U	U
California	1	2	15	46	95	—	2	22	23	104	1	0	4	12	17
Hawaii	—	0	2	5	5	—	0	1	5	3	U	0	0	U	U
Oregon	—	0	2	5	11	—	1	3	20	26	—	0	3	10	9
Washington	—	0	5	15	12	—	1	4	13	22	—	0	5	12	11
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	5	8	4	—	0	8	28	48	—	0	8	10	40
Puerto Rico	—	0	2	3	10	—	0	3	6	13	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/osels/ph_surveillance/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 July 16, 2011, and July 17, 2010 (28th 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		
United States	63	49	128	1,168	1,491	697	334	1,575	9,286	16,836	21	26	114	557	746
New England	—	3	16	47	97	43	74	401	1,386	5,270	1	1	20	20	55
Connecticut	—	1	6	15	16	—	34	151	745	1,873	—	0	20	1	2
Maine†	—	0	3	3	4	—	10	62	133	229	—	0	1	2	5
Massachusetts	—	1	10	17	56	—	11	173	94	2,185	—	0	5	9	39
New Hampshire	—	0	5	3	5	—	13	43	260	790	—	0	2	2	1
Rhode Island†	—	0	4	5	12	27	1	40	47	41	—	0	4	2	6
Vermont†	—	0	2	4	4	16	4	28	107	152	1	0	1	4	2
Mid. Atlantic	11	14	53	291	353	576	146	868	6,021	5,690	1	8	22	124	243
New Jersey	—	2	18	24	58	148	43	482	2,236	2,302	—	1	6	8	62
New York (Upstate)	6	5	19	105	104	202	35	168	1,130	1,050	—	1	6	22	35
New York City	—	3	17	49	61	—	1	30	11	366	—	4	13	66	112
Pennsylvania	5	5	19	113	130	226	61	307	2,644	1,972	1	1	4	28	34
E.N. Central	31	9	44	273	314	1	21	224	443	2,476	5	3	9	66	79
Illinois	—	1	12	22	81	—	1	9	37	89	—	1	6	21	31
Indiana	2	1	5	36	27	—	0	7	23	56	—	0	2	5	7
Michigan	2	2	20	51	59	—	1	14	19	37	1	0	4	13	15
Ohio	27	4	34	163	115	1	1	9	19	12	4	1	5	23	21
Wisconsin	—	0	5	1	32	—	17	201	345	2,282	—	0	2	4	5
W.N. Central	2	2	9	39	61	—	3	171	26	1,383	—	1	45	7	28
Iowa	—	0	2	5	5	—	0	5	19	62	—	0	2	3	7
Kansas	—	0	2	4	6	—	0	1	3	9	—	0	2	2	3
Minnesota	U	0	8	—	18	U	2	164	—	1,302	U	0	45	—	3
Missouri	1	1	5	27	21	—	0	1	—	2	—	0	3	—	4
Nebraska†	1	0	1	1	5	—	0	2	4	5	—	0	1	2	9
North Dakota	—	0	1	1	2	—	0	10	—	2	—	0	1	—	—
South Dakota	—	0	2	1	4	—	0	0	—	1	—	0	1	—	2
S. Atlantic	5	9	22	201	287	76	57	178	1,294	1,833	10	7	41	198	191
Delaware	—	0	1	3	10	6	10	32	336	423	—	0	1	4	2
District of Columbia	—	0	3	8	13	—	0	5	9	18	—	0	1	5	9
Florida	4	3	9	76	85	7	1	8	44	31	3	2	7	52	59
Georgia	—	1	4	14	36	—	0	1	5	8	—	1	7	37	34
Maryland†	—	1	6	31	63	19	17	103	430	817	1	1	21	44	31
North Carolina	1	1	6	32	31	—	0	9	23	34	—	0	13	17	18
South Carolina†	—	0	2	5	7	—	0	3	6	21	—	0	1	1	3
Virginia†	—	1	9	27	33	44	19	76	421	466	6	1	4	38	35
West Virginia	—	0	2	5	9	—	0	29	20	15	—	0	1	—	—
E.S. Central	4	2	10	75	71	—	0	3	19	29	1	1	3	14	14
Alabama†	—	0	2	10	7	—	0	2	7	—	—	0	1	3	3
Kentucky	—	0	4	13	13	—	0	1	—	2	1	0	1	5	3
Mississippi	—	0	3	9	9	—	0	0	—	—	—	0	2	1	—
Tennessee†	4	1	8	43	42	—	0	3	12	27	—	0	2	5	8
W.S. Central	3	3	13	50	68	—	1	29	18	49	—	1	18	21	42
Arkansas†	—	0	2	4	11	—	0	0	—	—	—	0	1	2	2
Louisiana	—	0	3	8	4	—	0	1	—	—	—	0	1	—	2
Oklahoma	—	0	2	2	7	—	0	0	—	—	—	0	1	2	3
Texas†	3	2	11	36	46	—	1	29	18	49	—	1	17	17	35
Mountain	—	2	10	45	94	1	0	3	7	13	—	1	4	32	29
Arizona	—	1	7	15	28	—	0	1	3	2	—	0	4	14	13
Colorado	—	0	2	4	18	—	0	1	1	—	—	0	3	12	9
Idaho†	—	0	1	4	2	—	0	2	—	4	—	0	1	1	—
Montana†	—	0	1	—	4	1	0	1	1	1	—	0	1	—	1
Nevada†	—	0	2	8	16	—	0	1	—	—	—	0	2	3	3
New Mexico†	—	0	2	4	5	—	0	1	1	4	—	0	1	2	—
Utah	—	0	2	9	16	—	0	1	1	2	—	0	0	—	3
Wyoming†	—	0	2	1	5	—	0	0	—	—	—	0	0	—	—
Pacific	7	5	21	147	146	—	3	11	72	93	3	4	10	75	65
Alaska	—	0	0	—	2	—	0	1	1	4	—	0	2	3	2
California	7	4	15	133	124	—	2	9	53	58	3	2	10	55	38
Hawaii	—	0	1	1	1	N	0	0	N	N	—	0	1	2	2
Oregon	—	0	2	4	8	—	0	3	18	26	—	0	3	5	6
Washington	—	0	6	9	11	—	0	4	—	5	—	0	5	10	17
Territories															
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	1	—	1	N	0	0	N	N	—	0	1	—	4
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/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 July 16, 2011, and July 17, 2010 (28th 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		
United States	8	14	53	425	482	1	9	47	151	2,263	79	380	2,925	6,434	8,804
New England	—	0	4	20	11	—	0	2	1	20	1	9	24	180	205
Connecticut	—	0	1	3	1	—	0	0	—	11	—	1	8	21	33
Maine [§]	—	0	1	3	3	—	0	1	—	1	—	2	8	67	18
Massachusetts	—	0	2	9	2	—	0	2	1	5	—	4	13	48	129
New Hampshire	—	0	1	1	—	—	0	0	—	3	—	1	5	29	5
Rhode Island [§]	—	0	1	—	—	—	0	0	—	—	1	0	4	9	17
Vermont [§]	—	0	3	4	5	—	0	0	—	—	—	0	4	6	3
Mid. Atlantic	3	1	6	49	48	—	2	23	20	1,997	15	38	125	674	523
New Jersey	—	0	1	3	15	—	1	6	9	316	—	2	10	54	79
New York (Upstate)	3	0	4	16	9	—	0	3	3	649	7	12	81	223	194
New York City	—	0	3	17	12	—	0	22	8	1,015	—	0	19	27	38
Pennsylvania	—	0	2	13	12	—	0	16	—	17	8	18	70	370	212
E.N. Central	—	2	7	54	80	—	1	7	39	37	14	106	198	1,425	2,054
Illinois	—	0	3	16	17	—	1	3	25	12	—	18	50	317	382
Indiana	—	0	2	7	19	—	0	1	—	3	—	10	26	95	333
Michigan	—	0	4	5	11	—	0	1	5	14	1	29	57	408	563
Ohio	—	1	2	18	18	—	0	5	9	7	13	31	80	441	642
Wisconsin	—	0	2	8	15	—	0	1	—	1	—	12	26	164	134
W.N. Central	—	1	4	27	35	1	0	4	21	75	10	34	501	523	653
Iowa	—	0	1	6	8	—	0	1	4	36	—	7	36	83	243
Kansas	—	0	1	2	4	—	0	1	3	4	3	2	9	50	93
Minnesota	U	0	2	—	3	U	0	4	1	3	U	0	469	171	24
Missouri	—	0	2	9	14	—	0	3	6	8	—	6	43	150	205
Nebraska [§]	—	0	2	7	5	1	0	1	3	23	—	3	13	37	64
North Dakota	—	0	1	1	1	—	0	3	4	—	5	0	30	29	—
South Dakota	—	0	1	2	—	—	0	1	—	1	—	0	2	3	24
S. Atlantic	4	2	8	82	86	—	0	4	10	38	18	35	106	711	774
Delaware	—	0	1	1	—	—	0	0	—	—	—	0	2	12	7
District of Columbia	—	0	1	—	—	—	0	1	—	2	—	0	2	3	4
Florida	3	1	5	35	43	—	0	2	2	8	9	6	15	153	146
Georgia	—	0	2	8	6	—	0	2	1	2	2	4	13	91	112
Maryland [§]	1	0	1	8	4	—	0	1	1	8	—	2	6	42	60
North Carolina	—	0	3	12	9	—	0	2	4	5	—	3	35	109	164
South Carolina [§]	—	0	1	7	7	—	0	1	—	3	—	4	25	76	181
Virginia [§]	—	0	2	9	15	—	0	2	2	8	7	7	41	180	89
West Virginia	—	0	1	2	2	—	0	0	—	2	—	1	41	45	11
E.S. Central	—	1	3	19	24	—	0	1	3	9	2	11	35	189	414
Alabama [§]	—	0	2	9	4	—	0	1	1	6	2	3	11	80	120
Kentucky	—	0	1	1	10	—	0	0	—	1	—	3	16	45	139
Mississippi	—	0	1	2	3	—	0	1	2	—	—	1	10	9	38
Tennessee [§]	—	0	2	7	7	—	0	1	—	2	—	3	11	55	117
W.S. Central	—	1	12	32	56	—	1	15	44	45	11	31	297	492	1,568
Arkansas [§]	—	0	1	7	5	—	0	1	1	4	—	2	18	32	93
Louisiana	—	0	2	6	12	—	0	2	—	4	1	0	3	11	23
Oklahoma	—	0	2	5	14	—	0	1	1	—	—	0	92	17	17
Texas [§]	—	0	10	14	25	—	1	14	42	37	10	28	187	432	1,435
Mountain	—	1	4	33	40	—	0	4	4	12	8	42	100	879	648
Arizona	—	0	1	8	10	—	0	1	—	4	—	14	29	359	218
Colorado	—	0	2	8	13	—	0	1	3	6	4	10	63	259	80
Idaho [§]	—	0	1	3	5	—	0	1	—	—	4	2	15	59	87
Montana [§]	—	0	2	3	1	—	0	0	—	—	—	2	16	74	32
Nevada [§]	—	0	1	3	7	—	0	1	—	—	—	0	5	15	17
New Mexico [§]	—	0	1	1	3	—	0	2	1	—	—	3	11	60	39
Utah	—	0	2	7	1	—	0	1	—	2	—	4	16	49	169
Wyoming [§]	—	0	1	—	—	—	0	1	—	—	—	0	2	4	6
Pacific	1	4	26	109	102	—	0	3	9	30	—	103	1,710	1,361	1,965
Alaska	—	0	1	2	1	—	0	1	1	1	—	0	6	16	17
California	1	2	17	76	62	—	0	3	3	20	—	96	1,569	1,030	1,639
Hawaii	—	0	1	3	1	—	0	1	2	2	—	1	7	29	41
Oregon	—	0	3	16	23	—	0	1	3	1	—	5	11	115	163
Washington	—	0	8	12	15	—	0	1	—	6	—	11	131	171	105
Territories															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	3	15	12	392	—	0	14	31	1
Puerto Rico	—	0	1	—	1	—	0	1	1	—	—	0	1	2	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/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

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

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending July 16, 2011, and July 17, 2010 (28th week)*

Reporting area	Rabies, animal					Salmonellosis					Shiga toxin-producing <i>E. coli</i> (STEC) [†]				
	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		
United States	36	60	172	1,242	2,277	703	854	1,812	17,821	21,590	76	93	264	2,131	2,193
New England	1	4	18	63	143	6	25	209	662	1,440	2	2	27	64	130
Connecticut	—	0	8	—	67	—	0	187	187	491	—	0	27	27	60
Maine [§]	1	1	3	30	32	3	2	8	62	64	1	0	3	14	6
Massachusetts	—	0	0	—	—	—	15	52	204	636	—	0	9	5	42
New Hampshire	—	0	6	9	4	1	3	12	75	107	—	0	3	13	14
Rhode Island [§]	—	0	3	9	12	—	2	62	108	111	—	0	1	1	2
Vermont [§]	—	1	3	15	28	2	1	5	26	31	1	0	2	4	6
Mid. Atlantic	10	14	33	337	596	68	92	217	2,119	2,646	9	9	30	221	230
New Jersey	—	0	0	—	—	—	15	57	256	545	—	2	9	33	51
New York (Upstate)	10	7	19	161	262	32	25	63	561	600	8	3	12	77	73
New York City	—	0	4	7	130	2	21	53	509	611	—	1	6	35	25
Pennsylvania	—	8	17	169	204	34	32	80	793	890	1	3	10	76	81
E.N. Central	—	2	27	60	102	34	84	203	1,903	3,035	1	11	48	250	372
Illinois	—	1	11	17	47	—	27	61	624	1,060	—	2	9	46	80
Indiana	—	0	3	4	—	—	10	43	192	388	—	2	10	51	61
Michigan	—	1	4	19	33	2	13	49	315	444	1	2	7	55	76
Ohio	—	0	12	20	22	32	21	42	544	692	—	2	11	73	62
Wisconsin	N	0	0	N	N	—	11	50	228	451	—	1	16	25	93
W.N. Central	2	2	40	45	138	35	46	121	1,012	1,346	14	13	49	292	429
Iowa	—	0	3	—	11	1	9	34	221	254	—	2	16	67	87
Kansas	—	1	4	18	38	6	7	18	161	200	—	1	7	45	40
Minnesota	U	0	34	—	17	U	1	30	—	374	U	1	20	—	131
Missouri	—	0	6	—	36	23	16	43	416	324	10	4	14	109	118
Nebraska [§]	1	1	3	19	30	3	4	13	109	104	4	1	5	48	38
North Dakota	1	0	6	8	6	2	0	15	22	14	—	0	10	6	3
South Dakota	—	0	0	—	—	—	3	17	83	76	—	1	4	17	12
S. Atlantic	23	19	53	597	643	307	262	624	5,168	5,082	18	19	31	476	304
Delaware	—	0	0	—	—	1	3	11	63	62	—	0	2	8	3
District of Columbia	—	0	0	—	—	—	1	7	26	53	—	0	1	3	6
Florida	—	0	29	54	121	160	107	226	2,121	2,244	9	6	15	202	94
Georgia	—	0	0	—	—	40	40	142	883	913	—	2	7	49	44
Maryland [§]	6	6	14	163	195	20	18	54	376	436	1	2	8	46	42
North Carolina	—	0	0	—	—	38	30	241	720	477	3	2	10	56	25
South Carolina [§]	N	0	0	N	N	32	30	99	500	409	1	0	4	15	15
Virginia [§]	17	11	27	325	286	16	20	68	443	395	4	3	9	90	67
West Virginia	—	0	30	55	41	—	0	14	36	93	—	0	5	7	8
E.S. Central	—	2	7	66	107	65	60	175	1,353	1,329	7	5	22	159	117
Alabama [§]	—	1	7	44	44	15	18	52	367	346	2	1	16	47	27
Kentucky	—	0	2	8	11	16	9	32	198	245	—	1	6	17	21
Mississippi	—	0	1	1	—	8	21	65	406	373	—	0	12	11	10
Tennessee [§]	—	1	4	13	52	26	18	53	382	365	5	3	12	84	59
W.S. Central	—	6	54	53	431	123	114	515	2,170	2,442	6	8	151	149	120
Arkansas [§]	—	0	10	41	13	27	14	43	272	237	—	1	4	19	28
Louisiana	—	0	0	—	—	4	16	52	293	572	—	0	2	6	10
Oklahoma	—	0	30	12	7	—	10	95	164	225	—	0	55	12	9
Texas [§]	—	0	30	—	411	92	84	381	1,441	1,408	6	6	95	112	73
Mountain	—	0	5	8	29	18	47	113	1,099	1,338	12	11	33	255	251
Arizona	N	0	0	N	N	4	14	43	328	435	2	2	14	47	31
Colorado	—	0	0	—	—	10	10	24	268	289	6	3	21	61	91
Idaho [§]	—	0	2	—	2	3	3	9	78	80	3	3	7	49	26
Montana [§]	N	0	0	N	N	—	1	6	52	54	—	1	4	19	24
Nevada [§]	—	0	2	2	2	—	4	21	86	127	—	0	6	17	11
New Mexico [§]	—	0	2	4	7	1	6	19	108	138	1	1	6	21	16
Utah	—	0	3	2	2	—	6	17	150	187	—	1	8	30	40
Wyoming [§]	—	0	4	—	16	—	1	8	29	28	—	0	3	11	12
Pacific	—	2	15	13	88	47	103	288	2,335	2,932	7	13	46	265	240
Alaska	—	0	2	9	11	—	1	5	35	44	—	0	1	—	1
California	—	0	10	—	68	39	77	232	1,786	2,065	4	8	36	176	106
Hawaii	—	0	0	—	—	8	6	13	168	169	—	0	3	4	17
Oregon	—	0	2	4	9	—	7	20	115	314	3	2	11	37	37
Washington	—	0	14	—	—	—	13	42	231	340	—	2	20	48	79
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	2	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	3	6	6	—	0	0	—	—
Puerto Rico	—	0	6	20	26	—	6	25	49	301	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

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

[†] Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending July 16, 2011, and July 17, 2010 (28th week)*

Reporting area	Shigellosis					Spotted Fever Rickettsiosis (including RMSF) [†]									
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Confirmed					Probable				
		Med	Max			Current week	Med	Max	Cum 2011	Cum 2010	Current week	Med	Max	Cum 2011	Cum 2010
United States	178	258	742	5,218	7,276	5	2	11	57	77	31	23	245	515	639
New England	—	3	20	83	214	—	0	0	—	—	—	0	1	2	1
Connecticut	—	0	18	18	69	—	0	0	—	—	—	0	0	—	—
Maine [§]	—	0	4	16	3	—	0	0	—	—	—	0	1	—	1
Massachusetts	—	2	14	42	126	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	2	1	5	—	0	0	—	—	—	0	1	1	—
Rhode Island [§]	—	0	4	4	10	—	0	0	—	—	—	0	1	1	—
Vermont [§]	—	0	1	2	1	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	5	14	74	304	985	2	0	1	6	2	—	1	5	12	50
New Jersey	—	3	16	40	232	—	0	0	—	1	—	0	3	—	34
New York (Upstate)	4	3	18	97	89	—	0	0	—	1	—	0	3	2	3
New York City	1	5	14	113	175	—	0	0	—	—	—	0	2	5	7
Pennsylvania	—	4	56	54	489	2	0	1	6	—	—	0	2	5	6
E.N. Central	17	17	37	367	1,018	—	0	1	1	1	2	1	5	34	49
Illinois	—	6	20	77	626	—	0	1	—	—	—	0	2	15	24
Indiana [§]	—	1	4	32	31	—	0	1	—	1	2	0	3	14	15
Michigan	—	4	9	76	137	—	0	0	—	—	—	0	1	—	1
Ohio	17	5	27	182	178	—	0	1	1	—	—	0	2	5	6
Wisconsin	—	0	4	—	46	—	0	0	—	—	—	0	1	—	3
W.N. Central	6	14	52	184	1,538	1	0	4	8	7	10	4	23	136	132
Iowa	—	0	4	8	32	—	0	0	—	—	—	0	1	1	3
Kansas [§]	2	3	12	33	162	—	0	0	—	—	—	0	0	—	—
Minnesota	U	0	4	—	29	U	0	0	—	—	U	0	2	—	—
Missouri	4	7	41	134	1,291	1	0	2	5	5	9	4	23	134	127
Nebraska [§]	—	0	10	5	20	—	0	3	3	2	1	0	1	1	1
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	1	—	1
South Dakota	—	0	2	4	4	—	0	0	—	—	—	0	0	—	—
S. Atlantic	70	66	132	1,958	1,091	—	1	6	31	49	8	6	59	154	173
Delaware [§]	—	0	1	1	35	—	0	1	1	1	—	0	2	9	11
District of Columbia	—	0	3	7	18	—	0	1	1	—	—	0	0	—	—
Florida [§]	57	36	99	1,419	419	—	0	1	3	2	1	0	2	4	6
Georgia	8	13	26	284	385	—	0	3	15	39	—	0	0	—	—
Maryland [§]	—	2	7	46	63	—	0	1	2	—	2	0	5	10	27
North Carolina	4	3	36	123	74	—	0	4	5	6	—	1	47	73	76
South Carolina [§]	1	1	5	27	37	—	0	1	3	—	—	0	2	11	7
Virginia [§]	—	2	8	47	59	—	0	2	1	1	5	2	12	45	46
West Virginia	—	0	66	4	1	—	0	0	—	—	—	0	1	2	—
E.S. Central	7	13	29	290	404	2	0	3	5	11	3	5	26	115	193
Alabama [§]	—	5	15	102	78	—	0	1	—	1	—	1	6	24	36
Kentucky	3	1	6	34	168	—	0	0	—	6	—	0	0	—	—
Mississippi	3	2	7	72	22	—	0	1	1	—	—	0	4	1	13
Tennessee [§]	1	4	14	82	136	2	0	2	4	4	3	4	20	90	144
W.S. Central	51	57	503	1,200	1,223	—	0	8	—	1	7	1	235	36	36
Arkansas [§]	1	2	7	33	25	—	0	2	—	—	7	0	28	28	12
Louisiana	2	5	13	96	137	—	0	0	—	—	—	0	1	2	1
Oklahoma	—	2	161	40	155	—	0	5	—	—	—	0	202	4	13
Texas [§]	48	46	338	1,031	906	—	0	1	—	1	—	0	5	2	10
Mountain	9	17	32	361	337	—	0	5	6	2	1	0	7	26	4
Arizona	6	7	19	112	182	—	0	4	6	—	—	0	7	20	—
Colorado [§]	3	2	7	43	45	—	0	1	—	—	—	0	1	2	—
Idaho [§]	—	0	3	12	12	—	0	0	—	—	1	0	1	1	1
Montana [§]	—	1	15	104	4	—	0	0	—	2	—	0	0	—	1
Nevada [§]	—	0	6	10	17	—	0	0	—	—	—	0	0	—	—
New Mexico [§]	—	3	10	55	59	—	0	0	—	—	—	0	0	—	1
Utah	—	1	4	24	18	—	0	0	—	—	—	0	1	—	1
Wyoming [§]	—	0	1	1	—	—	0	0	—	—	—	0	1	3	—
Pacific	13	23	63	471	466	—	0	2	—	4	—	0	0	—	1
Alaska	—	0	2	3	—	N	0	0	N	N	N	0	0	N	N
California	13	18	59	369	368	—	0	2	—	4	—	0	0	—	—
Hawaii	—	1	3	30	31	N	0	0	N	N	N	0	0	N	N
Oregon	—	1	4	26	33	—	0	0	—	—	—	0	0	—	1
Washington	—	2	22	43	34	—	0	1	—	—	—	0	0	—	—
Territories															
American Samoa	—	1	1	1	1	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	1	5	N	0	0	N	N	N	0	0	N	N
Puerto Rico	—	0	1	—	3	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/osels/ph_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.

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

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

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending July 16, 2011, and July 17, 2010 (28th week)*

Reporting area	<i>Streptococcus pneumoniae</i> , [†] 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
		Med	Max				Med	Max				Med	Max		
United States	92	287	937	8,165	9,744	5	23	101	622	1,192	45	259	363	6,198	6,982
New England	3	11	79	260	530	—	1	5	26	69	3	8	19	207	242
Connecticut	—	0	49	8	232	—	0	3	6	20	—	1	8	32	47
Maine [§]	—	2	13	82	80	—	0	1	3	5	—	0	3	10	14
Massachusetts	—	0	3	14	52	—	0	3	6	36	2	5	14	124	150
New Hampshire	—	2	8	68	75	—	0	1	5	4	—	0	3	12	11
Rhode Island [§]	—	1	36	39	35	—	0	3	1	1	1	0	7	24	18
Vermont [§]	3	1	6	49	56	—	0	2	5	3	—	0	2	5	2
Mid. Atlantic	1	23	81	597	1,013	—	3	27	79	154	7	31	46	730	892
New Jersey	—	6	29	128	451	—	1	4	26	39	—	4	10	101	129
New York (Upstate)	1	2	10	56	101	—	1	9	31	77	2	3	20	98	66
New York City	—	14	42	413	461	—	0	14	22	38	1	15	31	353	492
Pennsylvania	N	0	0	N	N	N	0	0	N	N	4	7	13	178	205
E.N. Central	16	65	110	1,926	1,993	1	4	10	109	177	1	31	56	722	1,030
Illinois	N	0	0	N	N	N	0	0	N	N	—	14	23	305	507
Indiana	—	15	32	399	451	—	1	4	17	35	—	4	14	86	84
Michigan	4	15	29	437	456	—	1	4	24	56	—	4	10	99	143
Ohio	11	26	45	806	771	1	2	7	56	60	1	9	21	209	270
Wisconsin	1	9	24	284	315	—	0	3	12	26	—	1	4	23	26
W.N. Central	1	5	35	93	515	—	1	5	4	70	—	7	18	140	156
Iowa	N	0	0	N	N	N	0	0	N	N	—	0	3	11	12
Kansas	N	0	0	N	N	N	0	0	N	N	—	0	3	9	10
Minnesota	U	1	24	—	387	U	0	5	—	57	U	3	10	56	50
Missouri	N	0	0	N	N	N	0	0	N	N	—	2	9	59	79
Nebraska [§]	1	2	9	75	87	—	0	1	4	11	—	0	2	5	5
North Dakota	—	0	18	18	41	—	0	1	—	2	—	0	1	—	—
South Dakota	N	0	0	N	N	N	0	0	N	N	—	0	1	—	—
S. Atlantic	32	70	170	2,292	2,640	1	6	22	167	328	19	64	178	1,588	1,581
Delaware	—	1	6	33	23	—	0	1	—	—	—	0	4	12	3
District of Columbia	—	1	3	28	52	—	0	1	4	7	—	3	8	99	76
Florida	5	23	68	897	979	—	3	13	80	132	—	22	44	568	560
Georgia	17	20	54	574	838	—	2	7	41	99	—	11	130	258	336
Maryland [§]	10	9	32	337	338	1	1	4	19	38	6	8	17	223	140
North Carolina	N	0	0	N	N	N	0	0	N	N	12	7	19	195	242
South Carolina [§]	—	8	25	298	336	—	1	3	18	37	—	4	10	111	73
Virginia [§]	N	0	0	N	N	N	0	0	N	N	1	4	16	120	148
West Virginia	—	1	48	125	74	—	0	6	5	15	—	0	2	2	3
E.S. Central	7	19	36	586	673	2	1	4	37	65	4	15	34	363	461
Alabama [§]	N	0	0	N	N	N	0	0	N	N	—	4	11	93	133
Kentucky	N	0	0	N	N	N	0	0	N	N	—	2	16	58	71
Mississippi	N	0	0	N	N	N	0	0	N	N	2	3	16	77	103
Tennessee [§]	7	19	36	586	673	2	1	4	37	65	2	5	11	135	154
W.S. Central	22	31	368	1,171	1,163	1	4	30	107	154	—	35	71	867	1,067
Arkansas [§]	—	3	26	146	112	—	0	3	12	11	—	3	10	97	135
Louisiana	1	3	11	104	63	—	0	2	9	16	—	7	36	175	219
Oklahoma	N	0	0	N	N	N	0	0	N	N	—	1	6	25	54
Texas [§]	21	26	333	921	988	1	3	27	86	127	—	23	33	570	659
Mountain	10	32	72	1,140	1,150	—	3	8	85	160	2	12	23	283	315
Arizona	7	12	45	539	566	—	1	5	39	75	—	4	9	101	119
Colorado	2	11	23	352	333	—	1	4	25	46	—	2	8	61	71
Idaho [§]	N	0	0	N	N	N	0	0	N	N	—	0	2	4	2
Montana [§]	N	0	0	N	N	N	0	0	N	N	—	0	1	3	2
Nevada [§]	N	0	0	N	N	N	0	0	N	N	2	3	9	77	53
New Mexico [§]	1	3	13	158	110	—	0	2	10	13	—	1	4	32	23
Utah	—	3	8	72	131	—	0	3	11	24	—	0	4	5	45
Wyoming [§]	—	0	15	19	10	—	0	1	—	2	—	0	0	—	—
Pacific	—	3	11	100	67	—	0	2	8	15	9	52	66	1,298	1,238
Alaska	—	2	11	99	67	—	0	2	8	15	—	0	1	1	3
California	N	0	0	N	N	N	0	0	N	N	8	41	57	1,071	1,053
Hawaii	—	0	3	1	—	—	0	0	—	—	—	0	5	7	22
Oregon	N	0	0	N	N	N	0	0	N	N	1	1	7	49	32
Washington	N	0	0	N	N	N	0	0	N	N	—	6	13	170	128
Territories															
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	4	4	13	134	123
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/nndss/pbs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf. Data for TB are displayed in Table IV, which appears quarterly.[†] Includes drug resistant and susceptible cases of invasive *Streptococcus pneumoniae* disease among children <5 years and among all ages. Case definition: Isolation of *S. pneumoniae* from a normally sterile body site (e.g., blood or cerebrospinal fluid).[§] Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending July 16, 2011, and July 17, 2010 (28th week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease [†]									
	Current week	Previous 52 weeks		Cum 2011	Cum 2010	Neuroinvasive					Nonneuroinvasive [§]				
		Med	Max			Current week	Previous 52 weeks	Cum 2011	Cum 2010	Current week	Previous 52 weeks	Cum 2011	Cum 2010		
United States	74	252	367	6,477	9,379	—	0	71	4	49	—	0	53	5	65
New England	3	17	46	456	642	—	0	3	—	—	—	0	2	—	1
Connecticut	—	5	16	147	195	—	0	2	—	—	—	0	2	—	1
Maine [¶]	—	5	16	115	114	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	3	17	103	174	—	0	2	—	—	—	0	1	—	—
New Hampshire	—	1	9	9	77	—	0	1	—	—	—	0	0	—	—
Rhode Island [¶]	—	0	5	18	18	—	0	0	—	—	—	0	0	—	—
Vermont [¶]	3	2	10	64	64	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	20	31	57	999	1,036	—	0	19	—	2	—	0	13	—	2
New Jersey	5	9	50	457	376	—	0	3	—	—	—	0	6	—	—
New York (Upstate)	N	0	0	N	N	—	0	9	—	1	—	0	7	—	2
New York City	—	0	0	—	—	—	0	7	—	1	—	0	4	—	—
Pennsylvania	15	18	41	542	660	—	0	3	—	—	—	0	3	—	—
E.N. Central	12	68	118	1,719	3,133	—	0	15	—	1	—	0	7	—	1
Illinois	—	18	31	435	778	—	0	10	—	—	—	0	4	—	—
Indiana [¶]	1	4	18	131	234	—	0	2	—	—	—	0	2	—	—
Michigan	2	20	38	558	963	—	0	6	—	—	—	0	1	—	—
Ohio	9	20	58	594	834	—	0	1	—	1	—	0	1	—	—
Wisconsin	—	1	22	1	324	—	0	0	—	—	—	0	1	—	1
W.N. Central	—	12	42	210	489	—	0	7	1	—	—	0	11	—	17
Iowa	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
Kansas [¶]	—	4	15	65	210	—	0	1	—	—	—	0	3	—	4
Minnesota	U	0	0	—	—	U	0	1	—	—	U	0	3	—	—
Missouri	—	5	24	100	230	—	0	1	—	—	—	0	0	—	—
Nebraska [¶]	—	0	5	3	5	—	0	3	—	—	—	0	7	—	6
North Dakota	—	0	10	23	29	—	0	2	—	—	—	0	2	—	2
South Dakota	—	1	7	19	15	—	0	2	1	—	—	0	3	—	5
S. Atlantic	13	36	64	1,056	1,356	—	0	6	—	1	—	0	4	—	3
Delaware [¶]	—	0	3	5	19	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	2	12	15	—	0	1	—	—	—	0	1	—	—
Florida [¶]	10	15	38	530	668	—	0	3	—	—	—	0	1	—	—
Georgia	N	0	0	N	N	—	0	1	—	—	—	0	3	—	3
Maryland [¶]	N	0	0	N	N	—	0	3	—	1	—	0	2	—	—
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
South Carolina [¶]	—	0	8	11	74	—	0	1	—	—	—	0	0	—	—
Virginia [¶]	3	9	25	257	319	—	0	1	—	—	—	0	1	—	—
West Virginia	—	7	32	241	261	—	0	0	—	—	—	0	0	—	—
E.S. Central	—	5	15	167	185	—	0	1	—	2	—	0	3	1	1
Alabama [¶]	—	5	14	158	178	—	0	0	—	1	—	0	1	—	1
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Mississippi	—	0	3	9	7	—	0	1	—	1	—	0	2	1	—
Tennessee [¶]	N	0	0	N	N	—	0	1	—	—	—	0	2	—	—
W.S. Central	24	44	258	1,419	1,775	—	0	16	1	5	—	0	3	1	1
Arkansas [¶]	—	3	17	119	125	—	0	3	—	—	—	0	1	—	—
Louisiana	—	2	5	48	47	—	0	3	—	3	—	0	1	—	—
Oklahoma	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Texas [¶]	24	38	247	1,252	1,603	—	0	15	1	2	—	0	2	1	1
Mountain	1	13	50	388	694	—	0	18	2	31	—	0	15	3	32
Arizona	—	0	0	—	—	—	0	13	2	30	—	0	9	2	21
Colorado [¶]	1	5	31	150	249	—	0	5	—	1	—	0	11	—	9
Idaho [¶]	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
Montana [¶]	—	2	28	92	148	—	0	0	—	—	—	0	0	—	—
Nevada [¶]	N	0	0	N	N	—	0	0	—	—	—	0	1	—	1
New Mexico [¶]	—	1	8	23	68	—	0	6	—	—	—	0	2	—	—
Utah	—	4	26	116	216	—	0	1	—	—	—	0	1	—	—
Wyoming [¶]	—	0	3	7	13	—	0	1	—	—	—	0	1	1	1
Pacific	1	2	6	63	69	—	0	8	—	7	—	0	6	—	7
Alaska	—	1	5	30	27	—	0	0	—	—	—	0	0	—	—
California	—	0	3	6	21	—	0	8	—	7	—	0	6	—	7
Hawaii	1	1	4	27	21	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
Washington	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Territories															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	4	16	17	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	6	28	70	364	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

* Case counts for reporting year 2010 and 2011 are provisional and subject to change. For further information on interpretation of these data, see http://www.cdc.gov/osels/ph_surveillance/ndss/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/osels/ph_surveillance/ndss/phs/infdss.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 July 16, 2011 (28th 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	
New England	530	360	117	33	12	8	41	S. Atlantic	1,126	686	297	85	37	21	60
Boston, MA	139	81	41	10	4	3	14	Atlanta, GA	154	86	46	10	7	5	8
Bridgeport, CT	38	28	7	3	—	—	1	Baltimore, MD	136	74	42	10	8	2	13
Cambridge, MA	25	15	8	2	—	—	4	Charlotte, NC	125	84	30	9	1	1	3
Fall River, MA	27	21	3	3	—	—	1	Jacksonville, FL	101	58	32	6	1	4	8
Hartford, CT	53	34	13	2	4	—	6	Miami, FL	118	83	25	6	1	3	5
Lowell, MA	27	24	3	—	—	—	1	Norfolk, VA	58	33	8	13	3	1	2
Lynn, MA	8	5	3	—	—	—	—	Richmond, VA	69	39	21	5	3	1	3
New Bedford, MA	18	16	2	—	—	—	3	Savannah, GA	65	46	15	2	1	1	6
New Haven, CT	27	16	6	4	1	—	3	St. Petersburg, FL	51	33	12	5	—	1	3
Providence, RI	61	44	12	3	—	2	3	Tampa, FL	152	95	40	10	6	1	8
Somerville, MA	—	—	—	—	—	—	—	Washington, D.C.	88	49	24	8	6	1	1
Springfield, MA	33	22	8	1	1	1	2	Wilmington, DE	9	6	2	1	—	—	—
Waterbury, CT	18	16	1	1	—	—	—	E.S. Central	897	591	208	56	20	22	71
Worcester, MA	56	38	10	4	2	2	3	Birmingham, AL	194	119	46	14	8	7	17
Mid. Atlantic	1,850	1,249	425	114	43	19	86	Chattanooga, TN	97	76	11	8	1	1	10
Albany, NY	44	33	7	—	2	2	1	Knoxville, TN	97	70	15	6	1	5	7
Allentown, PA	26	21	5	—	—	—	—	Lexington, KY	60	40	15	3	1	1	1
Buffalo, NY	69	49	16	1	2	1	6	Memphis, TN	183	108	60	12	2	1	26
Camden, NJ	24	18	3	2	1	—	1	Mobile, AL	73	51	14	4	2	2	—
Elizabeth, NJ	21	13	8	—	—	—	—	Montgomery, AL	37	26	10	—	—	1	—
Erie, PA	42	29	10	2	1	—	6	Nashville, TN	156	101	37	9	5	4	10
Jersey City, NJ	20	16	3	1	—	—	—	W.S. Central	1,299	788	339	108	38	25	62
New York City, NY	1,008	693	228	57	21	9	48	Austin, TX	72	43	20	7	1	1	7
Newark, NJ	39	8	11	13	6	1	—	Baton Rouge, LA	65	42	10	9	3	1	—
Paterson, NJ	23	18	2	2	—	1	—	Corpus Christi, TX	64	37	22	2	—	3	5
Philadelphia, PA	221	124	66	21	7	3	11	Dallas, TX	220	125	67	14	7	6	6
Pittsburgh, PA [§]	26	19	6	1	—	—	1	El Paso, TX	133	95	28	5	4	1	3
Reading, PA	34	23	8	2	1	—	—	Fort Worth, TX	U	U	U	U	U	U	U
Rochester, NY	91	64	20	5	1	1	5	Houston, TX	212	102	51	35	13	11	15
Schenectady, NY	30	22	6	1	—	1	2	Little Rock, AR	77	46	24	5	2	—	—
Scranton, PA	28	21	5	1	1	—	1	New Orleans, LA	U	U	U	U	U	U	U
Syracuse, NY	48	38	9	1	—	—	3	San Antonio, TX	245	162	60	16	6	1	15
Trenton, NJ	25	18	6	1	—	—	—	Shreveport, LA	34	22	6	6	—	—	—
Utica, NY	14	11	2	1	—	—	1	Tulsa, OK	177	114	51	9	2	1	11
Yonkers, NY	17	11	4	2	—	—	—	Mountain	1,159	749	276	78	37	14	56
E.N. Central	2,049	1,382	467	123	36	41	132	Albuquerque, NM	134	78	37	14	3	2	6
Akron, OH	61	43	12	3	3	—	4	Boise, ID	71	48	15	4	3	1	5
Canton, OH	34	25	7	2	—	—	4	Colorado Springs, CO	74	53	13	7	1	—	5
Chicago, IL	205	146	45	8	6	—	11	Denver, CO	74	43	21	6	3	1	3
Cincinnati, OH	73	37	26	7	1	2	2	Las Vegas, NV	278	177	77	11	8	5	15
Cleveland, OH	275	205	54	10	4	2	13	Ogden, UT	40	30	5	2	2	1	5
Columbus, OH	216	152	45	14	1	4	18	Phoenix, AZ	156	99	37	9	6	3	8
Dayton, OH	147	108	25	9	5	—	5	Pueblo, CO	36	22	10	2	2	—	2
Detroit, MI	161	82	48	16	6	9	8	Salt Lake City, UT	124	82	20	16	5	1	4
Evansville, IN	64	42	19	3	—	—	3	Tucson, AZ	172	117	41	7	4	—	3
Fort Wayne, IN	69	38	21	6	2	2	4	Pacific	1,688	1,150	381	85	34	38	140
Gary, IN	8	4	3	1	—	—	—	Berkeley, CA	13	7	3	2	—	1	3
Grand Rapids, MI	72	43	18	8	2	1	5	Fresno, CA	124	83	28	6	3	4	10
Indianapolis, IN	186	125	47	5	2	7	8	Glendale, CA	31	24	7	—	—	—	7
Lansing, MI	42	27	11	2	—	2	3	Honolulu, HI	77	51	16	5	3	2	4
Milwaukee, WI	93	53	25	10	2	3	11	Long Beach, CA	66	47	14	2	—	3	8
Peoria, IL	52	38	8	3	—	3	9	Los Angeles, CA	262	166	59	16	7	14	20
Rockford, IL	62	45	10	4	1	2	2	Pasadena, CA	19	18	—	1	—	—	4
South Bend, IN	51	41	6	2	—	2	5	Portland, OR	126	90	25	7	3	1	4
Toledo, OH	113	77	26	8	1	1	12	Sacramento, CA	190	128	50	8	2	2	16
Youngstown, OH	65	51	11	2	—	1	5	San Diego, CA	167	112	40	6	3	6	11
W.N. Central	392	246	100	31	12	3	37	San Francisco, CA	108	76	27	5	—	—	12
Des Moines, IA	10	7	2	1	—	—	10	San Jose, CA	179	125	40	9	3	2	17
Duluth, MN	U	U	U	U	U	U	U	Santa Cruz, CA	21	16	3	1	1	—	1
Kansas City, KS	19	8	8	2	—	1	4	Seattle, WA	96	64	22	6	3	1	3
Kansas City, MO	115	66	35	8	6	—	9	Spokane, WA	72	48	16	6	—	2	11
Lincoln, NE	54	42	10	2	—	—	1	Tacoma, WA	137	95	31	5	6	—	9
Minneapolis, MN	U	U	U	U	U	U	U	Total¶	10,990	7,201	2,610	713	269	191	685
Omaha, NE	88	54	21	8	4	1	4								
St. Louis, MO	18	10	3	5	—	—	2								
St. Paul, MN	U	U	U	U	U	U	U								
Wichita, KS	88	59	21	5	2	1	7								

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.

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.

U.S. Government Printing Office: 2011-723-011/21061 Region IV ISSN: 0149-2195