

## Postneonatal Mortality Among Alaska Native Infants — Alaska, 1989–2009

Alaska's postneonatal mortality rate of 3.4 deaths per 1,000 live births during 2006–2008 was 48% higher than the 2007 U.S. rate of 2.3 per 1,000 (1,2). Among American Indian/Alaska Native (AI/AN) infants, the Alaska rate of 8.0 per 1,000 was 70% higher than the U.S. rate of 4.7. The Alaska Division of Public Health analyzed a linked birth-infant death file for 1989–2009 to examine temporal trends in postneonatal mortality in Alaska, specifically in the Alaska Native (AN) population. Overall and non-Alaska Native (non-AN) rates declined during the entire period, but no significant trends in AN-specific mortality were apparent. Infant mortality review committee findings indicated a decline during 1992–2007 among all postneonatal deaths attributed to sudden infant death syndrome (SIDS) or sudden unexplained infant death (SUID), but not for other causes. Lack of progress in reducing postneonatal mortality, particularly among AN infants, indicates a need for renewed emphasis within the Alaska health-care community. Current initiatives to reduce preventable causes of postneonatal mortality should be evaluated and successful models more widely implemented.

The Alaska Bureau of Vital Statistics provided an electronic file with linked records for the 222,317 recorded live births and 821 postneonatal deaths among infants aged 28–364 days born to Alaska residents during 1989–2009. Potential risk factors for infant mortality that might be determined from information included on birth certificates were identified through prior research and literature review. Those risk factors included infant birth weight and gestational age; maternal race, years of education, age, and prenatal cigarette, smokeless tobacco, and alcohol use; and a composite variable reflecting maternal marital status and presence of a father's name on the birth certificate (1,3). Race was categorized as AN, which included all indigenous groups, or non-AN, based on mother's race.

For the analysis, logistic regression modeling was conducted, as was joinpoint testing for significance of trends and to detect significant points of change in the slope of linear trends. In joinpoint, the permutation test was used, and log-linear models created

to calculate annual percent change (APC) in the linear trend of mortality rates. Average annual percentage change (AAPC) was calculated to summarize and compare trends in the prevalences of risk factors among births during 2000–2009 (4). Cause of death was obtained from the Alaska Maternal Infant Mortality Review (MIMR), a committee coordinated by the Alaska Division of Public Health and consisting of private physicians, nurses, and other child health experts. At the time of this report, the MIMR committee had reviewed medical records, autopsy reports, police reports, and other records for >99% of Alaskan postneonatal deaths that occurred during 1992–2007 and issued findings regarding causes and contributing factors to the deaths and preventability recommendations.

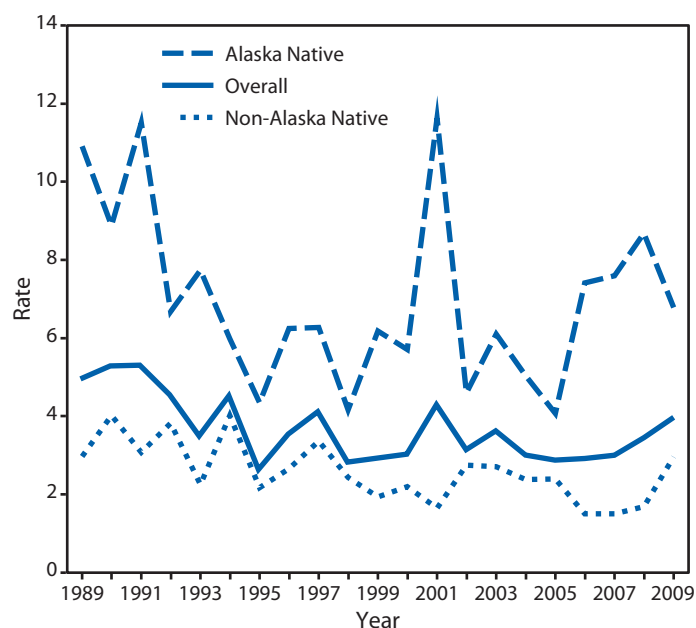
Overall postneonatal mortality declined from 4.9 deaths per 1,000 births in 1989 to 3.9 in 2009 (APC = -2.2; 95% confidence interval [CI] = -3.3 to -1.0). The non-AN rate also declined during the study period (APC = -2.8; CI = -4.5 to -1.1), although annual rates fluctuated (Figure). Among non-AN, 1989 and 2009 rates were identical (3.0 per 1,000 births), yet joinpoint analysis selected a single declining slope as the best fit linear trend for the entire study period. No significant trends in AN mortality rates were apparent (APC = -1.5; CI = -3.6 to 0.6), and no significant changes in slope were identified. The AN rate was higher than the non-AN rate during the first half and the second half of the study period (1989–1999

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**FIGURE. Annual postneonatal mortality rates,\* overall and by Alaska Native status — Alaska 1989–2009**



\* Per 1,000 live births.

rate ratio [RR] = 2.4; CI = 2.0 – 2.9; 2000–2009 RR = 3.1; CI = 2.5 – 3.9).

Among AN infants, significant bivariate risk factors for postneonatal mortality during 2000–2009 included preterm birth (RR for birth at <34 weeks = 4.6; RR for birth at

34–36 weeks = 1.9) and low birth weight (RR = 3.8), unmarried mother with no father indicated (RR = 3.5), maternal prenatal alcohol and cigarette use (RR = 2.2 and 1.9, respectively), and maternal education <12 years (RR = 1.6) (Table 1). In a multivariate logistic regression model containing education, cigarette use, alcohol use, and partner status, education was no longer significant and therefore was dropped from the final model. The prevalence of AN births to unmarried mothers with no father indicated on the birth certificate increased during 2000–2009 (AAPC = 7.3; CI = 4.1 to 10.6).

Cause-specific mortality rates, allowing for multiple causes of death, were calculated for 4-year intervals because of the small numbers of events (Table 2). The overall postneonatal mortality rate for SIDS or SUID declined from 2.2 per 1,000 births during 1992–1995 to 1.4 per 1,000 during 2004–2007 (APC = -13.3; CI = -24.3 to -0.7), but no trends were observed for other causes. Less than five postneonatal deaths during 1992–1995 were attributed to preterm birth or perinatal events, compared with 11 or more deaths related to preterm birth during other 4-year periods and 10 perinatal event-related deaths during 2004–2007. Among AN infants only, no cause-specific trends were significant.

#### Reported by

Margaret B. Young, MPH, Bradford D. Gessner, MD, Alaska Division of Public Health. **Corresponding contributor:** Margaret B. Young, [margaret.young@alaska.gov](mailto:margaret.young@alaska.gov), 907-269-5657.

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TABLE 1. Risk factors listed on birth certificate among Alaska Native births and postneonatal deaths — Alaska, 2000–2009

Risk factor	Births	Post-neonatal deaths	PNM rate*	Rate ratio (95% CI)	AOR† (95% CI)	2009 birth prevalence (%)	AAPC‡ for birth prevalence 2000–2009
<b>Overall</b>	<b>26,386</b>	<b>179</b>	<b>6.8</b>				
<b>Birth weight (gms)</b>							
<2,500	1,498	33	22.0	3.8 (2.6–5.5)		(6.3)	0.6
≥2,500	24,679	143	5.8	Ref		(93.7)	0.0
<b>Gestational age (wks)</b>							
<34	889	23	25.9	4.6 (3.0–7.1)		(3.6)	-0.8
34–36	2,374	26	11.0	1.9 (1.3–3.0)		(10.1)	0.2
≥37	23,123	130	5.6	Ref		(86.3)	-0.1
<b>Maternal education (yrs)</b>							
<12	6,992	65	9.3	1.6 (1.2–2.2)		(27.0)	0.1
≥12	18,640	106	5.7	Ref		(73.0)	0.0
<b>Maternal age (yrs)</b>							
<19	2,796	17	6.1††	1.2 (0.6–2.5)		(9.8)	-1.3¶
19–34	21,024	149	7.1	1.4 (0.8–2.5)		(81.4)	0.8¶
≥35	2,557	13	5.1††	Ref		(8.7)	-3.4¶
<b>Prenatal substance use**</b>							
Cigarette	8,470	84	9.9	1.9 (1.4–2.5)	1.7 (1.2–2.2)	(32.0)	-0.3
Smokeless tobacco	3,539	27	7.6	1.1 (0.8–1.7)		(12.4)	-3.0¶
Alcohol	1,258	18	14.3††	2.2 (1.4–3.6)	1.7 (1.0–2.8)	(5.3)	-0.8
<b>Partner status</b>							
Married	9,515	51	5.4	Ref	Ref	(33.1)	-2.8¶
Unmarried, father listed	14,128	76	5.4	1.0 (0.7–1.4)	0.9 (0.6–1.3)	(50.7)	0.2
Unmarried, no father listed	2,743	52	19.0	3.5 (2.4–5.1)	3.1 (2.1–4.7)	(16.2)	7.3¶

**Abbreviations:** PNM = postneonatal mortality; CI = confidence interval; AOR = adjusted odds ratios; AAPC = average annual percent change; Ref = referent.

\* Number of infants who died after age 27 days and before age 1 year / number of live births during same calendar year × 1,000.

† For final model containing prenatal cigarette, prenatal alcohol, and partner status.

‡ Calculated in joinpoint.

¶ Statistically significant AAPC, based on 95% confidence interval.

\*\* For each substance listed, the reference group for ratios is births with no prenatal use of the substance indicated on the birth certificate.

†† Rates based on fewer than 20 occurrences are statistically unreliable and should be used with caution.

TABLE 2. Cause-specific postneonatal mortality rates (allowing for multiple causes of death), by 4-year periods — Alaska Maternal Infant Mortality Review, 1992–2007

Cause of death*	1992–1995		1996–1999		2000–2003		2004–2007	
	Post-neonatal deaths	Mortality rate	Post-neonatal deaths	Mortality rate	Post-neonatal deaths	Mortality rate	Post-neonatal deaths	Mortality rate
<b>All postneonatal deaths</b>								
SIDS/SUID/asphyxia†	94	2.2	67	1.7	67	1.7	58	1.4
Preterm birth	—	—	11	0.3§	15	0.4§	15	0.4§
Congenital anomalies	26	0.6	34	0.9	23	0.6	27	0.6
Infections	27	0.6	27	0.7	35	0.9	28	0.7
Perinatal events	—	—	—	—	—	—	10	0.2§
Injury	14	0.3§	7	0.2§	17	0.4§	15	0.4§
Unknown	19	0.4§	8	0.2§	15	0.4§	13	0.3§
<b>Alaska Native postneonatal deaths</b>								
SIDS/SUID/asphyxia	37	3.8	29	3.0	35	3.6	29	2.7
Preterm birth	—	—	5	0.5§	10	1.0§	—	—
Congenital anomalies	9	0.9§	10	1.0§	12	1.2§	15	1.4§
Infections	12	1.2§	13	1.4§	19	1.9§	12	1.1§
Perinatal events	—	—	—	—	—	—	—	—
Injury	—	—	—	—	—	—	6	0.6§
Unknown	6	0.6§	—	—	8	0.8§	9	0.8§

**Abbreviations:** SIDS = sudden infant death syndrome; SUID = sudden unexplained infant death.

\* Rates were not calculated for 4-year periods that had fewer than five deaths attributed to a specific cause.

† Significant linear trend based on 95% confidence interval for the average percent change in the rate.

§ Rates based on fewer than 20 occurrences are statistically unreliable and should be used with caution.

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

Compared with postneonatal mortality rates for the United States overall, Alaska has higher rates. Within the state, rates are higher for Alaska Native (AN) infants than non-Alaska Native (non-AN) infants.

**What is added by this report?**

During 1989–2009, postneonatal mortality rates declined for non-AN infants in Alaska, but rates varied greatly and no sustained period of decrease was experienced by AN infants during the period. The disparity between AN and non-AN rates persisted and did not decrease.

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

Although Alaska's postneonatal mortality rates have declined overall during the past 20 years, renewed efforts are needed to reduce rates among the AN population, which continues to experience high rates. To address infant health outcomes among the overall population, including mortality and safe sleep, the Alaska Division of Public Health launched an Infant Safe Sleep Initiative in 2009 and is awarding contracts in early 2012 for the Healthy Start and Maternal, Infant, and Early Childhood Home Visiting programs to Alaskan agencies.

**Editorial Note**

Postneonatal mortality often is related to exposure to environmental risks and family socioeconomic characteristics, and thus, in theory, should be preventable (3). Although mortality rates declined among the non-AN population, AN postneonatal mortality rates did not show a significant trend. Postneonatal mortality for the United States declined from 3.2 deaths per 1,000 live births in 1990 to 2.3 in 2000; however, as in Alaska, no improvements have occurred since, either overall or specifically for AI/AN children (1,5).

The decrease in mortality caused by SIDS and SUID is encouraging because both account for a large proportion of postneonatal deaths among the overall population (1). Some of this decrease might be attributable to the Back to Sleep\* public education campaign, which was initiated in Alaska in 1996. However, this result might have resulted, in part, from a diagnostic shift whereby deaths during later years were assigned to different causes (6). The greater number of deaths attributed to preterm birth and perinatal events during the later years might have resulted from a greater likelihood of survival outside the neonatal period, combined with a small increase in the prevalence of preterm births at <37 weeks among non-AN (mostly for births at 34–36 weeks). A lack of decline in the overall U.S. infant mortality rate during 2000–2005 has been attributed to increases in preterm births and preterm-related mortality (7).

\*Additional information is available at <http://www.nichd.nih.gov/sids>.

Prior research identified three independent factors that are associated with increased postneonatal mortality among AN compared with non-AN infants in Alaska: low maternal education, any prenatal substance use, and unmarried marital status combined with the lack of a father's name on the birth certificate (3). The prevalence of the latter among AN births increased during 2000–2009, and these infants were three times more likely to die in the postneonatal period than infants with a father listed or a married mother. Maternal substance use, particularly tobacco and alcohol, has been associated with SIDS and SUID, and the high prevalence of these factors combined with the lack of decline among AN births might be one factor in the lack of decline of SIDS and SUID mortality among AN infants. AN infants also might have additional risk factors that were not measured. For example, preliminary evidence suggests that carnitine palmitoyltransferase type 1A deficiency, a fatty acid disorder highly prevalent in AN and other indigenous circumpolar populations, might contribute to infant mortality (8).

The findings in this report are subject to at least three limitations. First, the small annual number of postneonatal deaths in Alaska complicates interpretation and identification of factors influencing yearly changes in rates. Annual rates are presented here to increase the information available for examining trends; however, rates based on fewer than 20 occurrences are statistically unreliable and should be used with caution. Second, information on risk factors and cause of death might be biased and incomplete. Birth certificates might provide unreliable data on prenatal substance use (9). Prenatal care was not included as a risk factor because of suspected misclassification and reporting issues, particularly for rural Alaska. The significance of marital status and presence of a father's name on the birth certificate has limitations related to interpretability and misclassification, and the meaning might vary by cultural group (3). Finally, MIMR data are subject to potential bias resulting from changes in committee membership and the knowledge and expertise of individual members. However, the information available from MIMR on each case was comprehensive and might more accurately indicate cause of death than death certificate data (6,10).

To address Alaska's high overall postneonatal mortality and infant deaths related to SIDS and SUID or unintentional suffocation, the Alaska Division of Public Health launched an Infant Safe Sleep Initiative in 2009, and research is ongoing to support an associated statewide social marketing campaign to begin in 2012. This initiative builds on SIDS and SUID prevention work already begun by the national Healthy Native Babies Project,<sup>†</sup> and ongoing work by tribal health organizations and

<sup>†</sup>Additional information is available at <http://www.nichd.nih.gov/news/resources/spotlight/110811-hnbp-workbook-packet.cfm>.

others in Alaska. The Division also is awarding contracts for the Healthy Start and Maternal, Infant, and Early Childhood Home Visiting programs to Alaskan agencies that will start activities in early 2012 to address infant health outcomes, including mortality and safe sleep. Healthy Start also targets factors that contribute to preterm birth, such as tobacco use. Studies are underway to explore the effect on mortality of modifiable conditions, such as carnitine palmitoyltransferase type 1A deficiency, which might assist in targeting interventions. Future evaluations of these projects, especially in AN communities, could provide further evidence to understand the underlying causes of the persistent disparity between AN and non-AN in postneonatal mortality rates, and reasons for the lack of progress in reducing AN mortality.

### References

1. Mathews TJ, MacDorman MF. Infant mortality statistics from the 2007 period linked birth/infant death data set. *Natl Vital Stat Rep* 2011;59(6).
2. Alaska Bureau of Vital Statistics. 2008 annual report. Juneau, AK: Alaska Department of Health and Social Services, Division of Public Health, Bureau of Vital Statistics; 2009. Available at <http://www.hss.state.ak.us/dph/bvs/data/2008ar.htm>. Accessed January 5, 2012.
3. Blabey MH, Gessner BD. Three maternal risk factors associated with elevated risk of postneonatal mortality among Alaska Native population. *Matern Child Health J* 2009;13:222–30.
4. Clegg LX, Hankey BF, Tiwari R, Feuer EJ, Edwards BK. Estimating average annual per cent change in trend analysis. *Stat Med* 2009;28:3670–82.
5. National Center for Health Statistics. Health, United States, 2010: with special feature on death and dying. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2011. Available at <http://www.cdc.gov/nchs/hs.htm>. Accessed January 6, 2012.
6. Shapiro-Mendoza CK, Tomashek KM, Anderson RN, Wingo J. Recent national trends in sudden, unexpected infant deaths: more evidence supporting a change in classification or reporting. *Am J Epidemiol* 2006;163:762–9.
7. MacDorman MF, Mathews TJ. Recent trends in infant mortality in the United States. NCHS Data Brief No 9. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2008. Available at <http://www.cdc.gov/nchs/data/databriefs/db09.htm>. Accessed January 6, 2012.
8. Gessner BD, Gillingham MB, Birch S, Wood T, Koeller DM. Evidence for an association between infant mortality and a carnitine palmitoyltransferase 1A genetic variant. *Pediatrics* 2010;126:945–51.
9. Northam S, Knapp TR. The reliability and validity of birth certificates. *J Obstet Gynecol Neonatal Nurs* 2006;35:3–12.
10. CDC. Misclassification of infant deaths—Alaska, 1990–1991. *MMWR* 1992;41:584–5,591.

## Surveillance for Chronic Hepatitis B Virus Infection — New York City, June 2008–November 2009

Chronic hepatitis B virus (HBV) infection is a leading cause of cirrhosis and liver cancer worldwide (1); the estimated prevalence in the United States is 0.3%–0.5% (2). Each year, approximately 11,500–13,000 persons are newly reported with a positive HBV test to the New York City (NYC) Department of Health and Mental Hygiene (DOHMH) (3). To characterize chronic HBV patients, DOHMH began ongoing enhanced chronic HBV surveillance, selecting a random sample of newly reported cases and collecting more detailed information from the patients' clinicians. This report summarizes investigations of 180 randomly selected HBV cases reported during June 2008–November 2009. Approximately two thirds (67%) of patients were Asian, and the most commonly reported reason for HBV testing was the patient's birth country or race/ethnicity (27%). In 70% of cases, the clinician did not know of any patient risk factors. Sixty-nine percent of clinicians stated that they counseled their patients about notifying close contacts about their infection, and 75% counseled about transmission and prevention. Sixty-two percent did not know their patient's hepatitis A vaccination status despite recommendations. This surveillance effort provided quantitative data on health disparities useful for identifying opportunities for outreach and education, and it showed that not all patients received recommended prevention and treatment services. In response to these findings, DOHMH now routinely distributes HBV patient education materials to populations in need.

DOHMH requires clinicians and laboratories to report positive results of tests for hepatitis B surface antigen (HBsAg), e antigen (HBeAg), and HBV DNA for all NYC residents. The CDC and Council of State and Territorial Epidemiologists (CSTE) case definition for confirmed chronic HBV infection requires two positive tests at least 6 months apart or one positive test and a negative test for immunoglobulin M (IgM) antibodies to HBV core antigen.\* This project included all patients with a positive HBsAg, HBeAg, or HBV DNA as long as there was no evidence of acute infection (IgM or case reported as acute by clinician). All data from reports were either directly entered into a DOHMH database or imported from DOHMH's electronic laboratory reporting system and deduplicated automatically. In 2009, a total of 84,659 reports were received; for the same year, 11,589 persons were newly reported with chronic HBV infection. As a result of the large volume of reports, investigation of each patient was not feasible.

To learn more about HBV patients in NYC, every 2 months persons newly reported to DOHMH 2–3 months earlier with a positive HBV test were selected from the HBV surveillance database. Patients without a recorded date of birth were excluded (<3% of reports). From this dataset, a simple random sample of 20 patients was created using a SAS survey selection procedure.† Investigators telephoned the clinician who ordered the HBV test, then faxed a standard questionnaire, and followed-up by telephone as needed. If the clinician mentioned another clinician who knew the patient better, staff members contacted this clinician as well. In cases in which clinicians were unable or unwilling to provide information by telephone or fax, DOHMH staff members reviewed medical charts. Data collected included demographics, reasons for HBV testing, hepatitis A vaccination status, and HBV-related risk factors, care, and patient counseling (e.g., modes of transmission and contact notification). Patients' most recent positive HBV test results were obtained to confirm HBV infection status. When clinicians did not report the patient's country of birth, staff members contacted patients directly for that information. Frequency tables were generated using statistical software. Fisher's exact test was used to assess relationships between variables. Statistical significance was defined as  $p < 0.05$ .

From September 2008 to January 2010, a total of 180 patients were selected and investigated for enhanced surveillance; their report dates ranged from June 2008 to November 2009. From these 180 patients selected, completed questionnaires were obtained for 156 (87%) and these 156 were included in this analysis. Among the 24 patients excluded, five questionnaires could not be completed, five were laboratory reporting errors, two had acute HBV, four were not NYC residents, and eight did not have HBV infection confirmed by additional laboratory results. For the 156 included patients, 135 (86%) questionnaires were completed by fax, 15 (10%) by chart review, five (3%) by telephone, and one (1%) by both fax and telephone. Also, 12 patients were contacted by DOHMH staff members to ascertain birth country. Chi-square analysis showed that sampled patients were not statistically significantly different from all patients in the HBV surveillance database for the same surveillance period in terms of age, sex, and borough of residence (3). Sixty-one percent of patients were male, 67% were Asian, and the median age was 38 years (range: 2–91 years) (Table 1). Birth country was China for

\* Additional information available at [http://www.cdc.gov/osels/ph\\_surveillance/ndss/casedef/hepatitisbcurrent.htm](http://www.cdc.gov/osels/ph_surveillance/ndss/casedef/hepatitisbcurrent.htm).

† Additional information available at [http://support.sas.com/documentation/cdl/en/statug/63033/HTML/default/viewer.htm#statug\\_surveyslect\\_sect001.htm](http://support.sas.com/documentation/cdl/en/statug/63033/HTML/default/viewer.htm#statug_surveyslect_sect001.htm).

**TABLE 1. Number and percentage of patients with chronic hepatitis B virus (HBV) infection included in enhanced surveillance, by selected characteristics — New York City, June 2008–November 2009**

Characteristic	No.	(%)*
<b>Total</b>	<b>156</b>	<b>(100)</b>
<b>Sex</b>		
Female	61	(39)
Male	95	(61)
<b>Age group (yrs)</b>		
≤19	10	(6)
20–29	45	(29)
30–39	30	(19)
40–49	33	(21)
≥50	38	(24)
<b>Race/Ethnicity</b>		
Asian	105	(67)
Black, non-Hispanic	24	(15)
Hispanic	11	(7)
White, non-Hispanic	10	(6)
Unknown	6	(4)
<b>Birth country</b>		
China	87	(56)
United States	14	(9)
Bangladesh	4	(3)
Haiti	4	(3)
Russia	4	(3)
Other†	22	(12)
Unknown	21	(14)
<b>Risk factors for HBV infection<sup>§</sup></b>		
Perinatal exposure	11	(7)
Heterosexual contact with someone who has HBV	11	(7)
Household contact with someone who has HBV	10	(6)
Homosexual contact with someone who has HBV	6	(4)
Blood transfusion	4	(3)
Injection drug use	2	(1)
Other	2	(1)
No known risk factors	110	(70)
<b>Hepatitis A status</b>		
Immune because of natural infection	41	(26)
Received hepatitis A vaccine	8	(5)
Susceptible	10	(6)
Unknown	97	(62)
<b>Reason for testing<sup>§</sup></b>		
Routine screening	29	(19)
Born in high-prevalence country	42	(27)
Risk factors	28	(18)
Follow-up to previously detected hepatitis marker	28	(18)
Elevated liver enzymes	19	(12)
Prenatal screening	10	(6)
Symptoms	3	(2)

56% of patients and unknown for 14%. No risk factor was reported by clinicians for 70% of patients; of those with a risk factor reported, perinatal exposure and heterosexual contact were most common.

Reasons for HBV testing were not mutually exclusive. The most commonly reported reason was birthplace in a high-prevalence country (27%). Two percent of patients were tested because of hepatitis signs and symptoms, and 12% because of elevated liver function test results. Seventy-five percent of clinicians reported counseling the patient about transmitting

**TABLE 1. (Continued) Number and percentage of patients with chronic hepatitis B virus (HBV) infection included in enhanced surveillance, by selected characteristics — New York City, June 2008–November 2009**

Characteristic	No.	(%)*
<b>Patient counseled about notifying close contacts</b>		
Yes	107	(69)
No	14	(9)
No; will counsel at next visit	11	(7)
Unknown	24	(15)
<b>Patient counseled about transmission and prevention</b>		
Yes	116	(75)
No	9	(6)
No; will counsel at next visit	8	(5)
Unknown	23	(15)
<b>Seeing a clinician for care for HBV infection</b>		
Yes	90	(58)
No	32	(21)
Unknown	34	(22)
<b>Liver transplant</b>		
Yes	0	(0)
Currently waiting for one	7	(4)
No	140	(90)
Unknown	9	(6)
<b>Hospitalized for HBV infection in the past year</b>		
Yes	0	(0)
No	135	(86)
Unknown	21	(14)
<b>Ever treated with antiviral medication for HBV infection</b>		
Yes	12	(8)
No	103	(66)
No; planning to start soon	9	(6)
Unknown	32	(20)

\* Percentages might not sum to 100 because of rounding.

† Countries representing fewer than three patients: Dominican Republic, Korea, Albania, Nepal, Democratic Republic of Congo, France, Guyana, Laos, Mauritania, Nigeria, Portugal, Puerto Rico, Senegal, Sudan, Vietnam, and Yugoslavia.

§ Not mutually exclusive.

HBV to others, and 69% had counseled the patient on notifying close contacts. Five to seven percent of the clinicians stated that they would counsel about these topics during the next visit. Non-Asian patients were significantly less likely to have been counseled (Table 2). Sixty-two percent of clinicians did not know their patients' hepatitis A vaccination status.

### Reported by

Emily McGibbon, MPH, Erlinda Amoroso, Alice Baptiste-Norville, MPH, Sharon Balter, MD, Jennifer Baumgartner, MPH, Alison Bodenheimer, MPH, Katherine Bornschlegel, MPH, Cherylle N. Brown, MPH, Fazlul Chowdhury, Carolyn Cokes, MPH, Ellen T. Gee, MPH, Yin Ling Leung, MPH, Michelle Middleton, Daniel Osuagwu, Jose Poy, MPH, Meredith M. Rossi, MPH, Sara Sahl, MPH, Rajmohan Sunkara, MPH, Bur of Communicable Diseases, New York City Dept of Health and Mental Hygiene. **Corresponding contributor:** Emily McGibbon, [elumeng@health.nyc.gov](mailto:elumeng@health.nyc.gov), 347-396-2631.

**TABLE 2. Number and percentage of patients with chronic hepatitis B virus (HBV) infection included in enhanced surveillance who received counseling, by race/ethnicity and type of counseling — New York City, June 2008–November 2009**

Characteristic	Race/Ethnicity										
	Asian		Black, non-Hispanic		Hispanic		White, non-Hispanic		Unknown		Total
	No.	(%)*	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.
<b>Patient counseled about avoiding transmitting HBV to others<sup>†</sup></b>											
Yes	93	(89)	9	(38)	5	(45)	6	(60)	3	(50)	<b>116</b>
No	2	(2)	4	(17)	3	(27)	0	—	0	—	<b>9</b>
No; will counsel at next visit	4	(4)	1	(4)	1	(9)	2	(20)	0	—	<b>8</b>
Unknown	6	(6)	10	(42)	2	(18)	2	(20)	3	(50)	<b>23</b>
<b>Patient counseled about notifying close contacts about HBV screening and vaccination<sup>†</sup></b>											
Yes	89	(85)	7	(29)	4	(36)	4	(40)	3	(50)	<b>107</b>
No	4	(4)	5	(21)	5	(45)	0	—	0	—	<b>14</b>
No; will counsel at next visit	6	(6)	2	(8)	0	—	3	(30)	0	—	<b>11</b>
Unknown	6	(6)	10	(42)	2	(18)	3	(30)	3	(50)	<b>24</b>

\* Percentages might not sum to 100 because of rounding.

<sup>†</sup> Asian versus non-Asian chi-square analysis,  $p < 0.05$  (combined “No” and “No; will counsel at next visit” and omitted “Unknown” answers).

### Editorial Note

This investigation showed that the majority of persons reported with chronic HBV in NYC from June 2008 to November 2009 were Asian and male, which is consistent with previous findings (4–6). In 2006, the San Francisco Health Department found that 84% of patients reported with confirmed chronic HBV infection were Asian/Pacific Islanders (5); chart reviews conducted in Olmsted County, Minnesota, indicated that approximately half of chronic HBV patients in that locality were Asian (6). These findings validate the need for continued efforts to educate clinicians and patients in Asian-American communities about HBV screening recommendations (2,7). High-prevalence birth country was the most common reason for HBV testing; 119 (76%) patients were born in countries where HBV prevalence exceeds 2%. CDC recommends HBV screening for persons born in countries with HBV prevalence  $\geq 2\%$  (2). Despite the emphasis on birth country as a screening criterion, 14% of clinicians in this analysis did not know where their patients were born, suggesting that clinicians do not consistently ask patients about birth country.

The small proportion of patients tested because of hepatitis signs and symptoms or elevated liver function test results suggests that most clinicians are considering the screening recommendations and diagnosing HBV before symptoms of chronic infection develop. Consistent with this observation, none of these newly reported patients were hospitalized for HBV during the preceding year, and only 4% were waiting for a liver transplant.

Seventy percent of clinicians did not know their patients' risk factors for HBV infection. Interviewing patients instead of clinicians might have provided more complete information.

Nearly two thirds of clinicians did not know their patient's hepatitis A vaccination status, despite recommendations to vaccinate HBV patients against hepatitis A (infection with hepatitis A can be severe in those with chronic HBV infection) (2). This finding suggests that educational efforts directed to clinicians are warranted.

Most clinicians reported appropriately counseling patients about key issues for patients with HBV infection: transmission and contact notification. Five to seven percent of clinicians indicated that they intended to provide counseling during the patient's next visit, suggesting that the questionnaire might have served to remind clinicians about the importance of such counseling. In a 1997 telephone survey in San Diego, California, only 43% of clinicians reported counseling their HBV-infected patients about transmission, suggesting that many clinicians might be unaware of the need for such counseling (8). The analysis described in this report indicated that Asians were more likely than non-Asians to have been counseled. Asians in NYC might more often be cared for by clinicians who are more familiar with HBV.

The findings in this report are subject to at least two limitations. First, information was collected from clinicians only (with the exception of birth country information for 12 patients). Although more accurate clinical information might be supplied by clinicians, patient interviews might have added information about risk factors and receipt of counseling messages (8). Second, despite efforts to interview all relevant clinicians, investigators might not have identified the clinician most familiar with certain aspects of each patient's care.

These data show the utility of a chronic HBV infection surveillance system. When caseloads are high and staffing is



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

Chronic hepatitis B virus (HBV) infection, a leading cause of cirrhosis and liver cancer nationwide, is highly prevalent in Asian-American communities; however, information from routine surveillance activities about the population affected by HBV is limited.

**What is added by this report?**

Approximately two thirds (67%) of a random sample of HBV patients reported via enhanced surveillance in New York City (NYC) during June 2008–November 2009 were Asian. Clinicians commonly tested patients for HBV because those patients were born in countries with high HBV prevalence, whereas very few tested because of symptoms and elevated liver enzymes, suggesting that a majority of patients have HBV infection diagnosed before the disease progresses. Clinicians commonly counseled their patients about preventing transmission of HBV to others and notifying close contacts, but many were unaware of their patients' hepatitis A vaccination status.

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

By investigating a sample of newly reported chronic HBV patients, health departments can identify unmet needs among their populations. Such findings can be used to develop educational materials for clinicians on topics such as HBV screening guidelines, vaccination recommendations, and counseling. In response to limited knowledge among NYC clinicians regarding their patients' hepatitis A vaccination status, NYC public health officials provided clinicians with a reminder that hepatitis A vaccination is recommended, along with information about locations where hepatitis A vaccination is available free of charge.

limited, investigating all reports of HBV infection might not be possible. In such situations, investigating a representative sample provides useful data to describe the affected population and identify unmet needs. By investigating only a sample of patients, DOHMH was able to achieve a high response rate (97%). This project was conducted, in part, with CDC grant funds for hepatitis surveillance. Some health departments conduct limited hepatitis surveillance or none at all because of limited funding.

This enhanced surveillance effort described NYC's newly reported chronic HBV population, determined whether patients received recommended prevention and treatment services, and identified potential areas for clinician education. Health departments can use these findings to develop educational materials for clinicians on HBV screening guidelines, vaccination recommendations, and counseling. These data also can guide efforts to prevent HBV transmission and prevent disease progression in persons living with chronic HBV infection. Health departments, community-based organizations,

clinicians, and patient educators can consider these findings when developing outreach, advocacy, and educational initiatives.

DOHMH developed multiple initiatives as a result of this surveillance project. Clinicians who had indicated that their patients were not immune to hepatitis A were mailed a reminder that hepatitis A vaccination is recommended, along with information about locations where vaccination is available free of charge. DOHMH developed a booklet for patients called *How to Tell Others You Have Chronic Hepatitis B* (9) for distribution through clinicians and community groups. In addition, DOHMH sends patient health education booklets called *Hepatitis B: the Facts* (10) to all clinicians who participate in enhanced HBV surveillance and to newly-reported HBV patients. These booklets (available in five languages) can be ordered in bulk and free of charge within NYC by calling 311 and also are available online at <http://www.nyc.gov/html/doh/downloads/pdf/cd/cd-hepB-chronic-telling-others.pdf> and <http://www.nyc.gov/html/doh/downloads/pdf/cd/cd-hepb-bro.pdf>.

**References**

1. Custer B, Sullivan SD, Hazlet TK, Iloeje U, Veenstra DL, Kowdley KV. Global epidemiology of hepatitis B virus. *J Clin Gastroenterol* 2004;38(10 Suppl):S158–68.
2. CDC. Recommendations for identification and public health management of persons with chronic hepatitis B virus infection. *MMWR* 2008;57(No. RR-8).
3. New York City Department of Health and Mental Hygiene. Hepatitis A, B, and C surveillance reports. New York, NY: New York City Department of Health and Mental Hygiene; 2012. Available at <http://home2.nyc.gov/html/doh/html/cd/cd-hepabc-reports.shtml>. Accessed January 5, 2012.
4. Ioannou G. Hepatitis B virus in the United States: infection, exposure, and immunity rates in a nationally representative survey. *Ann Intern Med* 2011;154:319–28.
5. CDC. Characteristics of persons with chronic hepatitis B—San Francisco, California, 2006. *MMWR* 2007;56:446–8.
6. Kim WR, Benson JT, Therneau TM, Torgerson HA, Yawn BP, Melton LJ 3rd. Changing epidemiology of hepatitis B in a U.S. community. *Hepatology* 2004;39:811–6.
7. Chao SD, Chang ET, So SK. Eliminating the threat of chronic hepatitis B in the Asian and Pacific Islander community: a call to action. *Asian Pac J Cancer Prev* 2009;10:1–6.
8. Weinberg MS, Gunn RA, Mast EE, Gresham L, Ginsberg M. Preventing transmission of hepatitis B virus from people with chronic infection. *Am J Prev Med* 2001;20:272–6.
9. New York City Department of Health and Mental Hygiene. How to tell others you have chronic hepatitis B. New York, NY: New York City Department of Health and Mental Hygiene; 2011. Available at <http://www.nyc.gov/html/doh/downloads/pdf/cd/cd-hepB-chronic-telling-others.pdf>. Accessed January 5, 2012.
10. New York City Department of Health and Mental Hygiene. Hepatitis B: the facts. New York, NY: New York City Department of Health and Mental Hygiene; 2007. Available at <http://www.nyc.gov/html/doh/downloads/pdf/cd/cd-hepb-bro.pdf>. Accessed January 5, 2012.

## CDC Grand Rounds: Prescription Drug Overdoses — a U.S. Epidemic

In 2007, approximately 27,000 unintentional drug overdose deaths occurred in the United States, one death every 19 minutes. Prescription drug abuse is the fastest growing drug problem in the United States. The increase in unintentional drug overdose death rates in recent years (Figure 1) has been driven by increased use of a class of prescription drugs called opioid analgesics (1). Since 2003, more overdose deaths have involved opioid analgesics than heroin and cocaine combined (Figure 2) (1). In addition, for every unintentional overdose death related to an opioid analgesic, nine persons are admitted for substance abuse treatment (2), 35 visit emergency departments (3), 161 report drug abuse or dependence, and 461 report nonmedical uses of opioid analgesics (4). Implementing strategies that target those persons at greatest risk will require strong coordination and collaboration at the federal, state, local, and tribal levels, as well as engagement of parents, youth influencers, health-care professionals, and policy-makers.

Overall, rates of opioid analgesic misuse and overdose death are highest among men, persons aged 20–64 years, non-Hispanic whites, and poor and rural populations. Persons who have mental illness are overrepresented among both those who are prescribed opioids and those who overdose on them. Further defining populations at greater risk is critical for development and implementation of effective interventions. The two main populations in the United States at risk for prescription drug overdose are the approximately 9 million persons who report long-term medical use of opioids (5), and the roughly 5 million persons who report nonmedical use (i.e., use without a prescription or medical need), in the past month (4). In an attempt to treat patient pain better, practitioners have greatly increased their rate of opioid prescribing over the past decade. Drug distribution through the pharmaceutical supply chain was the equivalent of 96 mg of morphine per person in 1997 and approximately 700 mg per person in 2007, an increase of >600% (6). That 700 mg of morphine per person is enough for everyone in the United States to take a typical 5 mg dose of Vicodin (hydrocodone and acetaminophen) every 4 hours for 3 weeks. Persons who abuse opioids have learned to exploit this new practitioner sensitivity to patient pain, and clinicians struggle to treat patients without overprescribing these drugs.

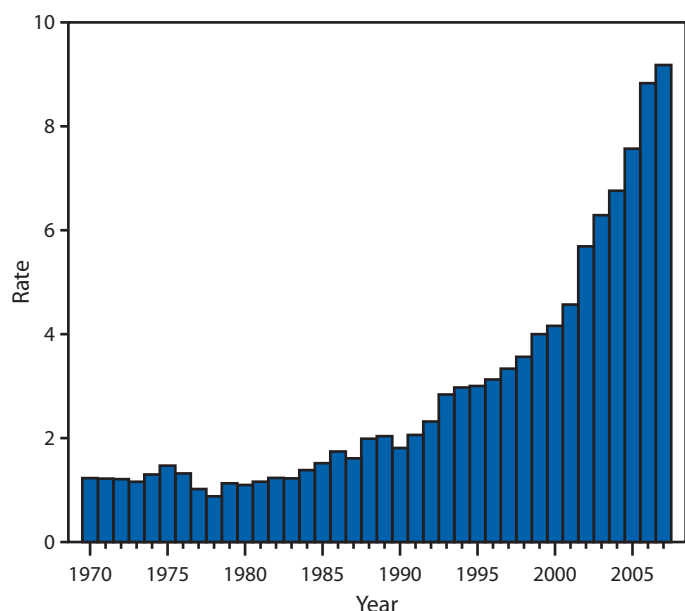
Among patients who are prescribed opioids, an estimated 80% are prescribed low doses (<100 mg morphine equivalent dose per day) by a single practitioner (7,8), and these patients account for an estimated 20% of all prescription drug overdoses (Figure 3). Another 10% of patients are prescribed high doses ( $\geq$ 100 mg morphine equivalent dose per day) of opioids by single prescribers and account for an estimated 40% of prescription opioid overdoses (9,10). The remaining 10% of patients are of greatest concern. These are patients who seek care from multiple doctors and are prescribed high daily doses, and account for another 40% of opioid overdoses (11). Persons in this third group not only are at high risk for overdose themselves but are likely diverting or providing drugs to others who are using them without prescriptions. In fact, 76% of nonmedical users report getting drugs that had been prescribed to someone else, and only 20% report that they acquired the drug from their own doctor (4). Furthermore, among persons who died of opioid overdoses, a significant proportion did not have a prescription in their records for the opioid that killed them; in West Virginia, Utah, and Ohio, 25%–66% of those who died of pharmaceutical overdoses used opioids originally prescribed to someone else (11–13). These data suggest that prevention of opioid overdose deaths should focus on strategies that target 1) high-dosage medical users and 2) persons who seek care from multiple doctors, receive high doses, and likely are involved in drug diversion.

### Prevention Strategies

Some promising strategies exist for addressing these two high-risk groups. The first is use of prescription data combined with insurance restrictions to prevent “doctor shopping” and reduce inappropriate use of opioids. Users of multiple providers for the same drug, people routinely obtaining early refills, and persons engaged in other inappropriate behaviors can be tracked with state prescription drug monitoring programs or insurance claim information. Public and private insurers can limit the reimbursement of claims for opioid prescriptions to a designated doctor and a designated pharmacy. This action is especially important for public insurers because Medicaid recipients and other low-income populations are at high risk for prescription drug overdose. Insurers also can identify inappropriate use of certain opioids for certain diagnoses (e.g., the use of extended-release or long-acting opioids like transdermal fentanyl or methadone for short-term pain).

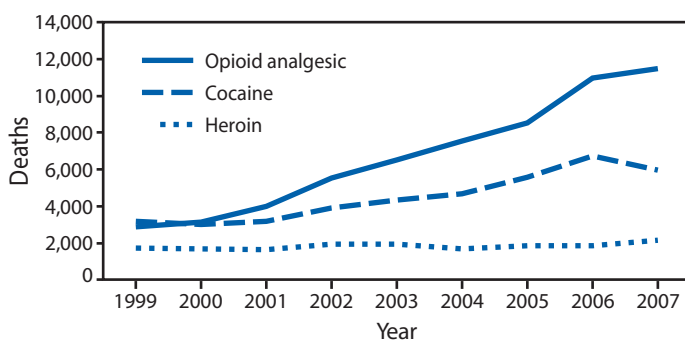
A second strategy is improving legislation and enforcement of existing laws. Most states now have laws against doctor shopping, but they are not enforced uniformly. In contrast, only a few states

*This is another in a series of occasional MMWR reports titled CDC Grand Rounds. These reports are based on grand rounds presentations at CDC on high-profile issues in public health science, practice, and policy. Information about CDC Grand Rounds is available at <http://www.cdc.gov/about/grand-rounds>.*

**FIGURE 1. Rate\* of unintentional drug overdose deaths — United States, 1970–2007**

Source: National Vital Statistics System. Available at <http://www.cdc.gov/nchs/nvss.htm>.

\* Per 100,000 population.

**FIGURE 2. Number of unintentional drug overdose deaths involving opioid analgesics, cocaine, and heroin — United States, 1999–2007**

Source: National Vital Statistics System. Multiple cause of death dataset. Available at <http://www.cdc.gov/nchs/nvss.htm>.

have laws regulating for-profit clinics that distribute controlled prescription drugs with minimal medical evaluation. Laws against such “pill mills” as well as laws that require physical examinations before prescribing might help reduce the diversion of these drugs for nonmedical use. In addition, a variety of other state controls on prescription fraud are being employed. For example, according to the National Alliance for Model State Drug Laws, 15 states required or permitted pharmacists to request identification from persons obtaining controlled substances as of March 2009.\*

\* Additional information available at <http://www.namsdl.org/presdrug.htm>.

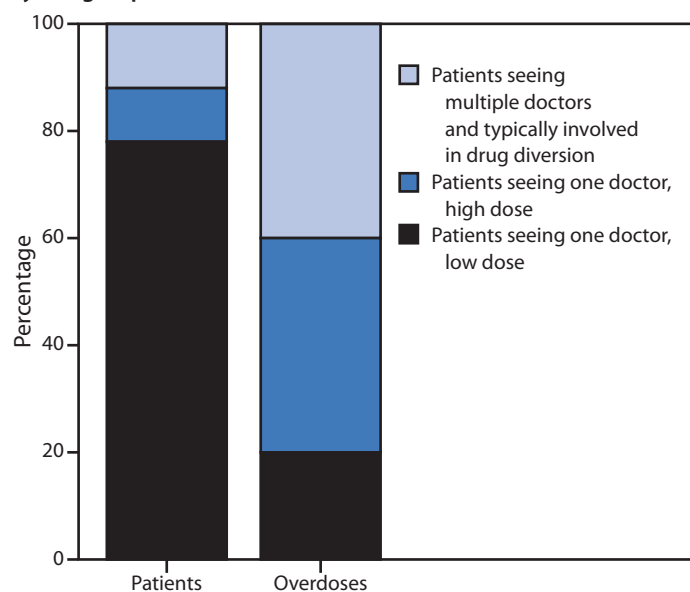
A third strategy is to improve medical practice in prescribing opioids. Care for patients with complex chronic pain problems is challenging, and many prescribers receive little education on this topic. As a result, prescribers too often start patients on opioids and expect unreasonable benefits from the treatment. In a prospective, population-based study of injured workers with compensable low back pain, 38% of the workers received an opioid early in their care, most at the first doctor visit (14). Among the 6% who went on to receive opioids for chronic pain for 1 year, most did not report clinically meaningful improvement in pain and function, even though their opioid dose rose significantly over the year.

Evidence-based guidelines can educate prescribers regarding the under-appreciated risks and frequently exaggerated benefits of high-dose opioid therapy. Such guidelines especially are needed for emergency departments because persons at greater risk for overdose frequently visit emergency departments seeking drugs. Guidelines will be more effective if health system or payer reviews hold prescribers accountable for their behaviors.

A public health approach to the problem of prescription drug overdose also should include secondary and tertiary prevention measures to improve emergency and long-term treatment. Overdose “harm reduction” programs emphasize broader distribution (to nonmedical users) of an opioid antidote, naloxone, that can be used in an emergency by anyone witnessing an overdose. Efforts also are under way to increase the ability of professionals responding to emergencies to administer optimum treatment for overdoses. Substance abuse treatment programs also reduce the risk for overdose death (15). Continued efforts are needed to remove barriers to shifting such programs from methadone clinics to office-based care using buprenorphine. Office-based care can be less stigmatizing and more accessible to all patients, especially those residing in rural areas.

Washington is an example of a state that has moved aggressively to improve medical practice in opioid prescribing by developing interagency opioid-dosing guidelines.† The guidelines emphasize a dosing “yellow flag” at 120 mg/day morphine equivalent dose for new patients with chronic pain. The guidelines were introduced in April 2007 as a web-based tool, including 2 hours of free continuing medical education and specific “best practice” guidance, use of a patient-prescriber agreement, and judicious use of random urine drug screening. Eighteen months after introduction of the guidelines, a survey was conducted of primary-care physicians to assess overall concerns and acceptance of dosing guidance and to identify gaps in knowledge that might be addressed by new guideline tools. A majority of prescribers surveyed were not using all the best practices, likely because they did not have

† Additional information available at <http://www.agencymeddirectors.wa.gov>.

**FIGURE 3. Percentage of patients and prescription drug overdoses, by risk group — United States**

brief, usable tools. For example, only 38% were using random urine screens often or always, and 69% never or almost never tracked physical function. As a result, brief, open source tools such as patient questionnaires were added for ease of incorporation into routine practice. Additionally, Washington has focused on improving practitioner access to pain specialists. Specific methods are under development to offer “pain proficiency” training to primary-care prescribers, who can then become mentors/consultants to their colleagues, particularly in rural areas. In addition, the University of Washington has made twice-weekly pain consultations with a panel of specialists available. In March 2010, the Washington state legislature passed legislation that repealed permissive prescribing rules for opioids and instituted new rules largely reflective of the dosing guidance and other best practices emphasized in the guidelines.

## The National Response

At the national level, the White House Office of National Drug Control Policy establishes policies, priorities, and objectives for the nation’s drug control program to reduce illicit drug use, manufacturing, and trafficking; drug-related crime and violence; and drug-related health consequences. In May 2010, President Obama released the National Drug Control Strategy, which outlined the Administration’s science-based public health approach to drug policy. In 2011, the strategy was expanded to place special focus on certain populations, such as service members and their families, college students, women and children, and persons in the criminal justice system.<sup>§</sup>

<sup>§</sup>Additional information available at <http://www.whitehouse.gov/ondcp/2011-national-drug-control-strategy>.

When developing a national approach to address prescription drug overdose, any policy must balance the desire to minimize abuse with the need to ensure legitimate access to these medications, and its implementation must bring together a variety of federal, state, local, and tribal groups. The Administration’s plan for addressing prescription drug abuse, *Epidemic: Responding to America’s Prescription Drug Abuse Crisis*, which was released in April 2011, includes four components: education, tracking and monitoring, proper medication disposal, and enforcement.<sup>¶</sup>

The majority of health-care providers receive minimal education regarding addiction and might be at risk for prescribing an addictive medication without fully appreciating the potential risks. Therefore, the first component of the plan calls for mandatory prescriber education. This would require prescribers to be trained on appropriate prescribing of opioids before obtaining their controlled substance registration from the Drug Enforcement Administration (DEA). Parents and patients also must be educated about the dangers and prevalence of prescription drug abuse and how to use prescription drugs safely. To achieve this, the plan calls for a public/private partnership to develop an educational campaign directed at parents and patients.

The second component of the plan calls for prescription drug monitoring programs to be operational in all states and mechanisms to be in place for data sharing. As of May 2011, 35 states had operational monitoring programs, and 13 additional states had passed enacting legislation.

The third component, proper medication disposal, is essential because the public lacks a safe, convenient, and environmentally responsible way to dispose of medications that are no longer needed. DEA is drafting rules to provide easier access to drug disposal. In support of medication disposal efforts, DEA held National Prescription Drug Take-Back Events in 2010 and 2011. During the first two such events, approximately 309 tons of drugs were collected at over 5,000 sites across the country.<sup>\*\*</sup>

The fourth component calls on law enforcement agencies to help decrease prescription drug diversion and abuse. The majority of prescribers are responsible, but unscrupulous persons continue to operate outside of legitimate medical practice. These persons must be held accountable, and the plan outlines specific actions the federal government can take to help law enforcement agencies effectively address pill mills and doctor shopping.

<sup>¶</sup> Additional information available at [http://www.whitehouse.gov/sites/default/files/ondcp/issues-content/prescription-drugs/rx\\_abuse\\_plan.pdf](http://www.whitehouse.gov/sites/default/files/ondcp/issues-content/prescription-drugs/rx_abuse_plan.pdf).

<sup>\*\*</sup> Additional information available at [http://www.deadiversion.usdoj.gov/drug\\_disposal/takeback/index.html](http://www.deadiversion.usdoj.gov/drug_disposal/takeback/index.html).

**Reported by**

*Leonard Paulozzi, MD, Grant Baldwin, PhD, Div of Unintentional Injury Prevention, National Center for Injury Prevention and Control, CDC. Gary Franklin, MD, Washington State Agency Medical Directors' Group, Olympia, Washington. R. Gil Kerlikowske, MA, Christopher M. Jones, Pharm D, Office of National Drug Control Policy, Washington, DC. Neelam Gbiya, MPH, Tanja Popovic, MD, PhD, Office of the Director, CDC.*  
**Corresponding contributor:** Leonard Paulozzi, *lbp4@cdc.gov*.

**References**

1. CDC. Policy impact: prescription painkiller overdoses. Atlanta, GA: US Department of Health and Human Services, CDC; 2011. Available at <http://www.cdc.gov/homeandrecrreationalafety/rxbrief/index.html>. Accessed January 9, 2012.
2. Substance Abuse and Mental Health Services Administration, Office of Applied Studies. National admissions to substance abuse treatment services. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2009.
3. Substance Abuse and Mental Health Services Administration. The DAWN report: highlights of the 2009 Drug Abuse Warning Network (DAWN) findings on drug-related emergency department visits. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2010. Available at <http://www.samhsa.gov/data/2k10/dawnsr034edhighlights/edhighlights.htm>. Accessed January 9, 2012.
4. Substance Abuse and Mental Health Services Administration. Results from the 2009 National Survey on Drug Use and Health: volume 1: summary of national findings. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2010.
5. Boudreau D, Von Korff M, Rutter CM, et al. Trends in long-term opioid therapy for chronic non-cancer pain. *Pharmacoepidemiol Drug Saf* 2009; 18:1166–75.
6. US Department of Justice, Drug Enforcement Administration. Automation of Reports and Consolidated Orders System (ARCOS). Available at <http://www.deadiversion.usdoj.gov/arcos/index.html>. Accessed January 9, 2012.
7. Edlund MJ, Martin BC, Fan MY, Braden JB, Devries A, Sullivan MD. An analysis of heavy utilizers of opioids for chronic noncancer pain in the TROUP Study. *J Pain Symptom Manage* 2010;40:279–89.
8. Katz N, Panas L, Kim M, et al. Usefulness of prescription monitoring programs for surveillance—analysis of Schedule II opioid prescription data in Massachusetts, 1996–2006. *Pharmacoepidemiol Drug Safety* 2010;19:115–23.
9. Dunn KM, Saunders KW, Rutter CM, et al. Opioid prescriptions for chronic pain and overdose. *Ann Intern Med* 2010;152:85–92.
10. Bohnert AS, Valenstein M, Bair MJ, et al. Association between opioid prescribing patterns and opioid overdose-related deaths. *JAMA* 2011; 305:1315–21.
11. Hall AJ, Logan JE, Toblin RL, et al. Patterns of abuse among unintentional pharmaceutical overdose fatalities. *JAMA* 2008;300:2613–20.
12. Ohio Department of Health. Ohio drug poisoning fact sheet: epidemic of prescription drug overdoses in Ohio. Available at <http://www.healthyohioprogram.org/diseaseprevention/dpoison/drugdata.aspx>. Accessed January 9, 2012.
13. Lanier WA. Prescription opioid overdose deaths—Utah, 2008–2009. Presented at the 59th Annual Epidemic Intelligence Service Conference. Atlanta, GA, April 19–23, 2010.
14. Franklin GM, Rahman EA, Turner JA, Daniell WE, Fulton-Kehoe D. Opioid use for chronic low back pain: a prospective, population-based study among injured workers in Washington State, 2002–2005. *Clin J Pain* 2009;25:743–51.
15. Yoast R, Williams MA, Deitchman SD, Champion HC. Report of the Council on Scientific Affairs: methadone maintenance and needle-exchange programs to reduce the medical and public health consequences of drug abuse. *J Addict Dis* 2001;20:15–40.

# Vital Signs: Binge Drinking Prevalence, Frequency, and Intensity Among Adults — United States, 2010

On January 10, 2012, this report was posted as an MMWR Early Release on the MMWR website (<http://www.cdc.gov/mmwr>).

## Abstract

**Background:** Binge drinking accounts for more than half of the estimated 80,000 average annual deaths and three quarters of \$223.5 billion in economic costs resulting from excessive alcohol consumption in the United States.

**Methods:** CDC analyzed data collected in 2010 on the prevalence of binge drinking (defined as four or more drinks for women and five or more drinks for men on an occasion during the past 30 days) among U.S. adults aged  $\geq 18$  years in 48 states and the District of Columbia; and on the frequency (average number of episodes per month) and intensity (average largest number of drinks consumed on occasion) among binge drinkers.

**Results:** The overall prevalence of binge drinking was 17.1%. Among binge drinkers, the frequency of binge drinking was 4.4 episodes per month, and the intensity was 7.9 drinks on occasion. Binge drinking prevalence (28.2%) and intensity (9.3 drinks) were highest among persons aged 18–24 years. Frequency was highest among binge drinkers aged  $\geq 65$  years (5.5 episodes per month). Respondents with household incomes  $\geq \$75,000$  had the highest binge drinking prevalence (20.2%), but those with household incomes  $< \$25,000$  had the highest frequency (5.0 episodes per month) and intensity (8.5 drinks on occasion). The age-adjusted prevalence of binge drinking in states ranged from 10.9% to 25.6%, and the age-adjusted intensity ranged from 6.0 to 9.0 drinks on occasion.

**Conclusions:** Binge drinking is reported by one in six U.S. adults, and those who binge drink tend to do so frequently and with high intensity.

**Implications for Public Health Practice:** More widespread implementation of Community Guide–recommended interventions (e.g., measures controlling access to alcohol and increasing prices) could reduce the frequency, intensity, and ultimately the prevalence of binge drinking, as well as the health and social costs related to it.

## Introduction

Excessive alcohol use\* accounted for an estimated average of 80,000 deaths and 2.3 million years of potential life lost (YPLL)<sup>†</sup> in the United States each year during 2001–2005, and an estimated \$223.5 billion in economic costs in 2006 (1). Binge drinking accounted for more than half of those deaths, two thirds of the YPLL (2), and three quarters of the economic costs (1). Binge drinking also is a risk factor for many health and social problems, including motor-vehicle crashes, violence, suicide, hypertension, acute myocardial infarction,

sexually transmitted diseases, unintended pregnancy, fetal alcohol syndrome, and sudden infant death syndrome (3). In 2010, 85% of all alcohol-impaired driving episodes were reported by persons who also reported binge drinking (4). In the United States, binge drinking accounts for more than half of the alcohol consumed by adults (5) and 90% of the alcohol consumed by youths (6). However, most binge drinkers are not alcohol dependent (7).

Reducing the prevalence of binge drinking among adults is a leading health indicator in *Healthy People 2020* (objective SA-14.3) (8). To assess measures of binge drinking nationwide and by state, CDC analyzed developmental data<sup>§</sup> from the 2010 Behavioral Risk Factor Surveillance System (BRFSS) on the prevalence of binge drinking among adults, and on the frequency and intensity of drinking among respondents who reported binge drinking.

\*Excessive alcohol use includes binge drinking (defined by CDC as consuming four or more drinks per occasion for women or five or more drinks per occasion for men), heavy drinking (defined as consuming more than one drink per day on average for women or more than two drinks per day on average for men), any alcohol consumption by pregnant women, and any alcohol consumption by youths aged  $< 21$  years.

<sup>†</sup>YPLL for 2001–2005 were estimated using the Alcohol-Related Disease Impact (ARDI) application using death and life expectancy data from the National Vital Statistics System. Additional information is available at [http://apps.nccd.cdc.gov/dach\\_ardi/default/default.aspx](http://apps.nccd.cdc.gov/dach_ardi/default/default.aspx).

<sup>§</sup>The 2010 BRFSS developmental dataset included combined landline and cellular telephone–only adults and used the raking method for weighting.

## Methods

BRFSS is a state-based, random-digit-dialed telephone survey of noninstitutionalized, civilian U.S. adults that collects information on many health conditions and risk behaviors, including binge drinking. BRFSS surveys are administered to households with landlines in all states and the District of Columbia (DC).

In September 2011, BRFSS released a developmental dataset for 2010<sup>¶</sup> that included combined landline and cellular telephone-only adults and used the raking method\*\* for weighting, known also as iterative proportional fitting (9). A total of 48 states (all except South Dakota and Tennessee) and DC administered the survey to landline and cellular telephone-only adults, and a median of 7.2% of the total surveys in these states were completed by cellular telephone-only adults (range: 2.0% in New Jersey to 32.0% in Minnesota).

Annually, respondents who report consuming any alcoholic beverages are asked how many times they engaged in binge drinking, defined as consuming four or more alcoholic drinks per occasion for women and five or more drinks per occasion for men during the preceding 30 days.<sup>††</sup> In addition, respondents who report alcohol consumption are asked about the largest number of drinks they had on any occasion in the preceding 30 days. The average prevalence of binge drinking was calculated by dividing the total number of respondents who reported at least one binge drinking episode during the preceding 30 days by the total number of BRFSS respondents in the 48 participating states and DC. The average frequency of binge drinking was calculated by dividing the total number of binge drinking episodes by the total number of respondents who reported any binge drinking during the preceding 30 days. The average intensity of binge drinking was calculated by averaging the largest number of drinks reported on an occasion by binge drinkers. Respondents who refused to answer, had a missing answer, or who answered “don't know/not sure” were excluded from the analysis.

In 2010, the median Council of American Survey and Research Organizations (CASRO) response rate for the landline BRFSS was 54.6% (range: 39.1% to 68.8%), and the median CASRO cooperation rate was 76.9% (range: 56.8%–86.1%).<sup>§§</sup> A response rate for the 2010 BRFSS developmental dataset was

<sup>¶</sup> In 2012, BRFSS will release its 2011 BRFSS dataset including larger number of cellular telephone respondents and will be changing its procedures for data weighting.

\*\* With the raking process, BRFSS data are weighted to the age, sex, race, educational, and marital status of each state's adult population and to the respondent's probability of selection. Raking also includes adjustment for cellular telephone only, landline only, and both cellular telephone and landline use based on respondents' telephone ownership.

<sup>††</sup> The BRFSS 2010 questionnaire, which includes five questions about alcohol consumption, is available at <http://www.cdc.gov/brfss/questionnaires/pdf-ques/2010brfss.pdf>.

<sup>§§</sup> The response rate is the percentage of persons who completed interviews among all eligible persons, including those who were not contacted successfully. The cooperation rate is the percentage of persons who completed interviews among all eligible persons who were contacted.

not available. A total of 457,677 respondents (422,039 landline respondents and 35,638 cellular telephone respondents) were included in the analysis. Two-tailed t-tests were used to assess statistical significance ( $p < 0.05$ ). Only statistically significant subgroup differences are reported. State estimates were age-adjusted to the 2000 U.S. Census standard population.

## Results

In 2010, the overall prevalence of binge drinking among adults in the 48 states and DC was 17.1% (Table 1). Binge drinking prevalence among men (23.2%) was twice that of women (11.4%). Men who reported binge drinking reported a higher frequency and intensity (5.0 episodes per month and 9.0 drinks on occasion) than women (3.2 episodes per month and 5.9 drinks on occasion). Binge drinking also was most common among persons aged 18–24 years (28.2%) and 25–34 years (27.9%), and decreased with increasing age. However, the highest frequency of binge drinking by age was reported by persons aged  $\geq 65$  years (5.5 episodes per month). The intensity of binge drinking was highest among persons aged 18–24 years (9.3 drinks on occasion) and 25–34 years (8.4 drinks on occasion) and decreased with age. The prevalence of binge drinking among non-Hispanic whites (18.0%) was similar to the prevalence among Hispanics (17.9%), but significantly higher than the prevalence for non-Hispanic blacks (12.7%) and non-Hispanics from other racial and ethnic groups (including American Indians/Alaska Natives and Asians/Native Hawaiians or other Pacific Islanders) (15.3%). The frequency of binge drinking was similar across racial and ethnic groups, but the highest intensity was reported by binge drinkers who were non-Hispanics from other racial and ethnic groups (8.7 drinks) and by Hispanics (8.4 drinks on occasion). Respondents who did not graduate from high school had the lowest prevalence of binge drinking (13.7%), but those who binge drank had the highest frequency (5.5 episodes per month) and intensity (9.3 drinks on occasion) compared with respondents with higher educational levels. Binge drinking prevalence increased with household income, and was highest among those with annual household incomes  $\geq \$75,000$  (20.2%). However, the highest frequency and intensity of binge drinking by household income was reported by those with incomes  $< \$25,000$  (5.0 episodes per month and 8.5 drinks on occasion, respectively).

The age-adjusted prevalence of binge drinking by state ranged from 10.9% (Utah) to 25.6% (Wisconsin) (Table 2). The age-adjusted frequency of binge drinking ranged from 3.6 episodes per month (New Jersey) to 5.9 episodes per month (Kentucky). The age-adjusted intensity of binge drinking ranged from 6.0 drinks on occasion (DC) to 9.0 drinks on occasion (Wisconsin). Overall, states with the highest age-adjusted prevalence of adult binge

**TABLE 1. Binge drinking prevalence, frequency, and intensity among adults, by sociodemographic characteristics — Behavioral Risk Factor Surveillance System combined landline and cellular telephone developmental dataset, United States,\* 2010**

Characteristic	Prevalence			Frequency <sup>†</sup>			Intensity <sup>§</sup>		
	No.	Weighted %	(95% CI <sup>¶</sup> )	No.	No. of episodes	(95% CI)	No.	No. of drinks	(95% CI)
<b>Total</b>	<b>457,677</b>	<b>17.1</b>	<b>(16.8–17.4)</b>	<b>52,329</b>	<b>4.4</b>	<b>(4.3–4.5)</b>	<b>48,683</b>	<b>7.9</b>	<b>(7.8–8.1)</b>
<b>Sex</b>									
Male	176,911	23.2	(22.6–23.7)	30,511	5.0	(4.8–5.1)	28,192	9.0	(8.8–9.2)
Female	280,766	11.4	(11.1–11.8)	21,818	3.2	(3.1–3.4)	20,491	5.9	(5.8–6.0)
<b>Age group (yrs)</b>									
18–24	18,087	28.2	(26.9–29.5)	4,688	4.2	(4.0–4.5)	4,358	9.3	(8.9–9.7)
25–34	42,767	27.9	(26.9–29.0)	9,900	4.2	(3.9–4.4)	9,290	8.4	(8.1–8.6)
35–44	61,216	19.2	(18.4–19.9)	10,902	4.1	(3.9–4.4)	10,259	7.6	(7.3–8.0)
45–64	187,127	13.3	(12.9–13.6)	21,720	4.7	(4.5–4.9)	20,219	6.8	(6.7–7.0)
≥65	144,645	3.8	(3.5–4.0)	4,925	5.5	(4.8–6.2)	4,403	5.7	(5.5–6.0)
<b>Race/Ethnicity</b>									
White, non-Hispanic	359,123	18.0	(17.7–18.4)	42,258	4.4	(4.3–4.5)	39,514	7.9	(7.7–8.0)
Black, non-Hispanic	36,275	12.7	(11.7–13.6)	2,920	4.7	(4.1–5.3)	2,595	6.8	(6.3–7.4)
Hispanic	31,061	17.9	(16.6–19.1)	3,826	3.8	(3.4–4.2)	3,525	8.4	(7.8–9.0)
Other, non-Hispanic	25,137	15.3	(13.8–16.8)	2,881	4.7	(4.2–5.3)	2,671	8.7	(8.0–9.4)
<b>Education level</b>									
Less than high school diploma	42,359	13.7	(12.8–14.6)	3,574	5.5	(5.0–6.0)	3,177	9.3	(8.7–9.9)
High school diploma	135,634	17.6	(17.0–18.1)	15,111	4.7	(4.5–4.9)	13,864	8.2	(8.0–8.4)
Some college	123,093	19.0	(18.4–19.6)	14,795	4.1	(4.0–4.3)	13,767	7.6	(7.5–7.8)
College graduate	155,652	18.2	(17.7–18.7)	18,805	3.4	(3.3–3.5)	17,843	6.9	(6.7–7.0)
<b>Income</b>									
<\$25,000	119,988	16.2	(15.5–16.9)	10,795	5.0	(4.7–5.3)	9,880	8.5	(8.2–8.9)
\$25,000–\$49,999	108,542	17.9	(17.2–18.5)	12,316	4.2	(4.0–4.4)	11,446	7.9	(7.6–8.1)
\$50,000–\$74,999	62,539	18.9	(18.1–19.7)	8,484	4.4	(4.1–4.7)	8,058	7.9	(7.6–8.2)
≥\$75,000	105,280	20.2	(19.7–20.8)	16,665	3.7	(3.6–3.9)	15,849	7.2	(7.0–7.3)

\* Respondents were from 48 states (excluding South Dakota and Tennessee) and the District of Columbia.

<sup>†</sup> Binge drinkers only; average number of binge-drinking episodes per month.

<sup>§</sup> Average largest number of drinks consumed by binge drinkers on any occasion in the past month.

<sup>¶</sup> CI = confidence interval.

drinking were in the Midwest and New England, and included DC, Alaska, and Hawaii (Figure 1). States with the highest intensity of adult binge drinking were generally located in the southern Mountain states and Midwest, and included some states (e.g., Louisiana, Mississippi, New Mexico, South Carolina, and Utah) that had a lower prevalence of binge drinking (Figure 2).

## Conclusions and Comment

The results in this report indicate that in 2010, binge drinking was common among U.S. adults, and persons who binge drank tended to do so frequently (average of four times per month) and with high intensity (average of eight drinks on occasion), placing themselves and others at a significantly greater risk for alcohol-attributable harms (2,3). Binge drinking prevalence and intensity were highest among persons aged 18–24 years and 25–34 years, but frequency was highest among binge drinkers aged ≥65 years. Those with household incomes ≥\$75,000 had the highest binge drinking prevalence, but binge drinkers with household incomes <\$25,000 reported the highest frequency and intensity of binge drinking. In a number of states with a lower prevalence of binge drinking, those who binge drank did so with high intensity.

The higher prevalence of binge drinking in 2010 (17.1%), compared with 2009 (15.2%) (10), likely resulted from inclusion of cellular telephone respondents in the 2010 developmental BRFSS dataset. Cellular telephone-only users typically are young (aged 18–34 years) and male (11); both groups tend to report a higher prevalence of binge drinking. Even after adjusting for age, cellular telephone respondents have a higher prevalence of binge drinking than landline respondents (10,12). These findings confirm the importance of increasing the number of cellular telephone respondents in the BRFSS to assess binge drinking and related harms more accurately.

The higher prevalence of binge drinking among males, whites, young adults, and persons with higher household incomes has been reported previously (10), and probably reflects differences in state and local laws that affect the price, availability, and marketing of alcoholic beverages (13), as well as other cultural and religious factors (14). Estimates of the frequency and intensity of binge drinking also reveal important disparities in this behavior, including a significantly higher frequency among older adults and a higher intensity among persons with lower household incomes. These differences are



TABLE 2. Age-adjusted\* binge drinking prevalence, frequency, and intensity among adults, by state — Behavioral Risk Factor Surveillance System combined landline and cellular telephone developmental dataset, United States,† 2010

State/Area	Prevalence			Frequency <sup>§</sup>			Intensity <sup>¶</sup>		
	No.	Weighted %	(95% CI**)	No.	No. of episodes	(95% CI)	No.	No. of drinks	(95% CI)
Alabama	7,848	13.3	(11.7–15.0)	537	4.9	(3.7–6.1)	480	6.9	(6.4–7.5)
Alaska	2,009	21.2	(18.1–24.4)	335	4.0	(3.2–4.8)	304	6.8	(6.1–7.5)
Arizona	6,240	18.6	(16.0–21.1)	681	4.2	(3.6–4.8)	640	7.8	(7.0–8.5)
Arkansas	4,201	11.8	(9.7–13.9)	297	5.2	(4.0–6.3)	267	7.7	(6.8–8.5)
California	17,233	16.5	(15.1–17.8)	2,044	4.2	(3.5–4.8)	1,997	7.0	(6.5–7.5)
Colorado	11,417	17.9	(16.2–19.6)	1,311	4.5	(3.7–5.2)	1,229	7.0	(6.5–7.4)
Connecticut	7,608	18.1	(16.5–19.7)	962	3.9	(3.3–4.6)	899	7.1	(6.6–7.5)
Delaware	4,555	19.5	(17.5–21.5)	606	4.4	(3.8–5.1)	569	7.4	(6.8–8.0)
District of Columbia	3,997	21.9	(18.7–25.1)	548	4.1	(3.0–5.3)	517	6.0	(5.6–6.5)
Florida	37,610	16.7	(15.7–17.6)	4,002	4.6	(4.2–4.9)	3,717	7.3	(7.0–7.6)
Georgia	5,840	15.4	(13.4–17.4)	510	4.7	(3.8–5.5)	465	7.3	(6.8–7.9)
Hawaii	7,280	19.1	(17.4–20.9)	1,066	5.3	(4.6–6.0)	1,033	8.7	(7.8–9.6)
Idaho	7,239	15.2	(13.2–17.2)	701	5.2	(4.3–6.2)	645	7.6	(7.0–8.2)
Illinois	5,558	21.4	(19.4–23.4)	856	4.5	(3.9–5.1)	843	6.9	(6.6–7.3)
Indiana	10,452	16.5	(14.9–18.1)	1,081	4.6	(4.0–5.2)	994	8.1	(7.3–8.9)
Iowa	6,562	21.5	(19.7–23.3)	900	5.3	(4.1–6.6)	826	8.0	(7.6–8.4)
Kansas	9,357	17.6	(16.2–19.0)	1,027	4.6	(3.8–5.4)	934	7.0	(6.7–7.4)
Kentucky	8,387	15.0	(13.4–16.7)	684	5.9	(4.8–7.0)	638	8.4	(7.7–9.0)
Louisiana	7,173	16.4	(14.6–18.2)	782	4.6	(4.0–5.3)	719	8.5	(7.2–9.8)
Maine	8,346	19.7	(18.1–21.3)	983	5.4	(4.6–6.1)	935	7.9	(7.4–8.4)
Maryland	9,152	17.1	(15.3–18.9)	1,020	4.7	(3.6–5.9)	945	6.8	(6.4–7.2)
Massachusetts	15,690	21.7	(20.1–23.2)	2,153	5.0	(4.2–5.7)	1,965	7.6	(7.0–8.1)
Michigan	9,361	17.7	(16.3–19.2)	1,128	4.4	(3.8–5.0)	1,082	7.0	(6.7–7.4)
Minnesota	12,649	20.1	(18.8–21.3)	2,135	3.7	(3.3–4.1)	1,973	7.4	(7.1–7.7)
Mississippi	8,850	12.1	(10.8–13.5)	583	4.9	(4.0–5.9)	521	8.1	(7.5–8.7)
Missouri	5,837	17.4	(15.5–19.3)	693	5.2	(4.4–6.0)	650	8.1	(7.5–8.7)
Montana	8,007	21.5	(19.9–23.1)	1,194	3.9	(3.4–4.4)	1,127	7.7	(7.3–8.1)
Nebraska	17,389	22.3	(20.8–23.9)	2,394	4.2	(3.8–4.6)	2,264	7.8	(7.4–8.1)
Nevada	4,274	17.4	(15.0–19.8)	619	4.6	(3.6–5.6)	564	7.8	(7.1–8.6)
New Hampshire	6,195	18.2	(16.4–20.0)	701	5.7	(4.8–6.5)	675	7.4	(6.7–8.1)
New Jersey	11,855	15.7	(14.1–17.2)	1,414	3.6	(3.2–4.1)	1,244	6.8	(6.5–7.2)
New Mexico	7,352	14.2	(12.7–15.8)	627	4.6	(3.8–5.4)	587	7.9	(7.0–8.7)
New York	8,948	18.3	(16.8–19.7)	1,088	4.1	(3.5–4.6)	1,016	7.0	(6.6–7.3)
North Carolina	12,218	14.7	(12.8–16.5)	1,026	4.4	(3.7–5.1)	943	7.4	(6.7–8.0)
North Dakota	4,872	21.9	(19.3–24.4)	713	4.2	(3.5–4.9)	670	8.3	(7.6–9.1)
Ohio	10,705	19.8	(18.4–21.2)	1,359	5.4	(4.3–6.6)	1,244	7.8	(7.4–8.2)
Oklahoma	8,256	14.9	(13.3–16.5)	738	5.6	(4.4–6.9)	676	7.8	(7.2–8.4)
Oregon	5,343	17.9	(16.0–19.8)	606	4.5	(3.8–5.3)	579	6.8	(6.3–7.4)
Pennsylvania	11,768	19.3	(18.0–20.6)	1,467	4.4	(4.0–4.9)	1,346	7.4	(7.1–7.8)
Rhode Island	7,160	18.2	(16.8–19.7)	923	4.9	(4.3–5.6)	878	7.2	(6.6–7.7)
South Carolina	9,818	15.7	(14.1–17.3)	880	5.1	(4.3–6.0)	804	7.9	(7.3–8.4)
Texas	18,257	17.3	(15.6–19.0)	1,859	4.9	(4.3–5.5)	1,706	7.7	(7.2–8.3)
Utah	11,986	10.9	(9.8–12.0)	1,030	4.9	(4.2–5.5)	934	7.9	(7.4–8.4)
Vermont	7,046	20.2	(18.5–21.8)	908	4.7	(4.0–5.4)	854	7.1	(6.7–7.4)
Virginia	5,855	17.7	(16.0–19.4)	702	5.1	(4.1–6.0)	633	7.2	(6.6–7.8)
Washington	19,974	18.2	(17.1–19.3)	2,352	4.1	(3.7–4.6)	2,202	6.9	(6.7–7.2)
West Virginia	4,883	10.9	(9.4–12.5)	327	4.9	(4.0–5.8)	313	8.7	(7.8–9.5)
Wisconsin	4,965	25.6	(22.8–28.4)	882	4.8	(3.8–5.7)	849	9.0	(7.6–10.5)
Wyoming	6,265	16.9	(15.3–18.5)	701	4.4	(3.7–5.0)	634	7.7	(6.8–8.5)

\* Age-adjusted to the 2000 U.S. Census standard population.

† Respondents were from 48 states (excluding South Dakota and Tennessee) and the District of Columbia.

§ Binge drinkers only; average number of binge-drinking episodes per month.

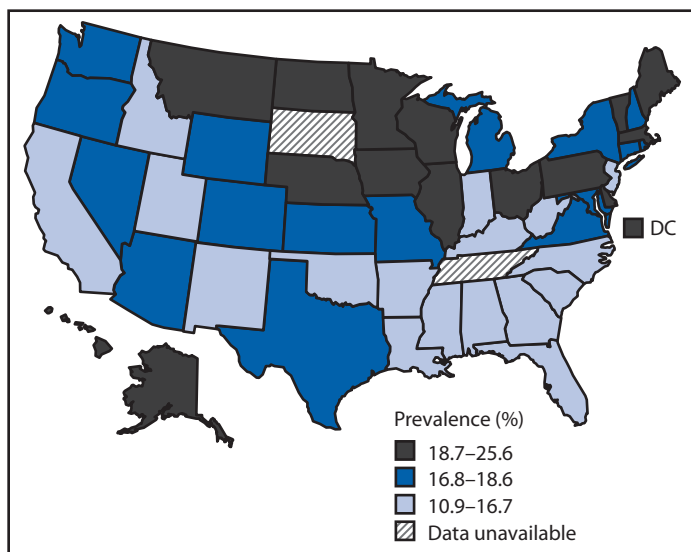
¶ Average largest number of drinks consumed by binge drinkers on any occasion in the past month.

\*\* CI = confidence interval.

reflected in state measures of the prevalence and intensity of binge drinking, and emphasize that states with a lower prevalence of binge drinking might still include subgroups that binge drink frequently and with high intensity. Binge drinking places

those exposed and others at substantially increased risk for alcohol-attributable harms, and contributes disproportionately to productivity losses, health-care expenses, and excess burden on the criminal justice system (1).

**FIGURE 1. Prevalence\* of binge drinking among adults — Behavioral Risk Factor Surveillance System combined landline and cellular telephone developmental dataset, United States, 2010**

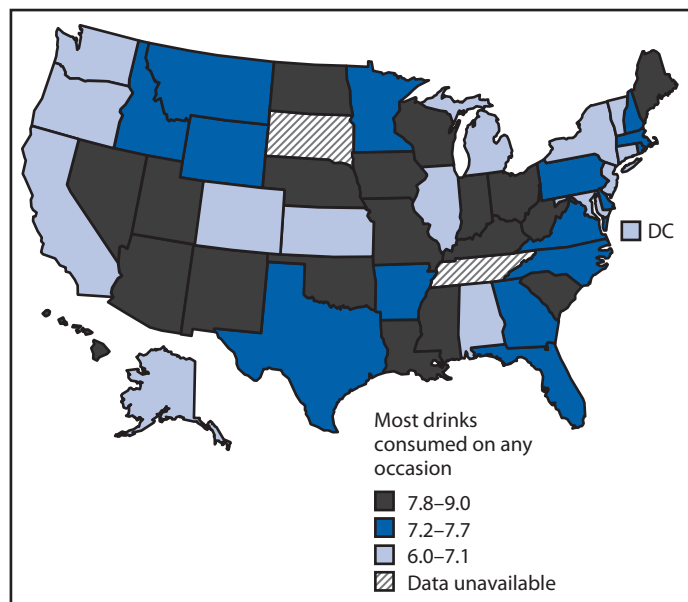


\* Age-adjusted to the 2000 U.S. Census standard population.

The findings in this report are subject to at least three limitations. First, BRFSS data are self-reported. Alcohol consumption generally, and excessive drinking in particular, are underreported in surveys because of recall bias and social desirability bias (15). A recent study using BRFSS data found that self-reports identify only 22%–32% of presumed alcohol consumption in states, based on alcohol sales (16). Second, the dataset used for this analysis is developmental. The data collection and weighting methods used for the dataset are subject to change. In the developmental dataset, cellular telephone surveys accounted for less than 10% of the final BRFSS sample, these surveys were not conducted at all in two states (South Dakota and Tennessee), and the response rate for the developmental dataset was not available. However, the inclusion of cellular telephone respondents in this study substantially increased BRFSS participation among younger age groups (e.g., persons aged 18–24 years) who are known to be at higher risk for binge drinking (10,12). Finally, BRFSS does not collect information from persons living in institutional settings (e.g., on college campuses or in the military), so BRFSS data might not be representative of these populations.

The Community Preventive Services Task Force has recommended several population-level, evidence-based strategies to reduce binge drinking and related harms (17). These include 1) limiting alcohol outlet density, 2) holding alcohol retailers liable for harms related to the sale of alcoholic beverages to minors and intoxicated patrons (dram shop liability), 3) maintaining existing limits on the days and hours when alcohol is sold, 4) measures increasing the price of alcohol, and 5) avoiding further privatization of alcohol sales in states with government-operated or contracted liquor stores. Alcohol

**FIGURE 2. Intensity\* of binge drinking among adults† — Behavioral Risk Factor Surveillance System combined landline and cellular telephone developmental dataset, United States, 2010**



\* Average largest number of drinks consumed by binge drinkers on any occasion in the past month.

† Age-adjusted to the 2000 U.S. Census standard population.

consumption is particularly sensitive to the price of alcoholic beverages. Across alcohol beverage types (i.e., beer, wine, and liquor), the median price elasticity (a measure of the relationship between price and consumption) ranges from -0.50 for beer to -0.79 for spirits, and the overall price elasticity for ethanol is -0.77 (18). Thus, a 10% increase in the price of alcoholic beverages likely would reduce overall consumption by more than 7%. Recent analyses also note a substantial gap between the societal and governmental cost of excessive alcohol consumption (approximately \$1.90 and \$0.80 per drink, respectively) (1) and the total federal and state taxes on alcoholic beverages (approximately \$0.12 per drink) (1). The societal or the governmental costs of excessive drinking include lost productivity, health-care costs, and criminal justice expenses. The findings of this report also support the need to monitor and reduce the prevalence, frequency, and intensity of binge drinking (19), and to evaluate the impact of evidence-based strategies to prevent it.

#### Reported by

*Dafna Kanny, PhD, Yong Liu, MS, Robert D. Brewer, MD, Div of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion; William S. Garvin, Lina Balluz, ScD, Div of Behavioral Surveillance, Office of Surveillance, Epidemiology, and Laboratory Svcs, CDC. Corresponding contributor: Dafna Kanny, dkanny@cdc.gov, 770-488-5411.*

**Key Points**

- Binge drinking causes more than half of the 80,000 deaths and three quarters of the \$223.5 billion in economic costs caused by excessive drinking.
- Approximately one in six (38 million) U.S. adults binge drink, and do so approximately four times a month. On average, the largest number of drinks consumed by binge drinkers is eight drinks per occasion.
- Prevalence and intensity of binge drinking was highest among persons aged 18–34 years, but the frequency of binge drinking was highest among binge drinkers aged ≥65 years. Binge drinkers with annual household incomes ≥\$75,000 had the highest binge drinking prevalence, but binge drinkers with household incomes <\$25,000 had the highest frequency and intensity of binge drinking.
- The Task Force on Community Preventive Services has recommended interventions that could reduce binge drinking in states and the health and social costs related to it. These recommended measures include the following:
  - Limit the number of retail alcohol outlets that sell alcoholic beverages in a given area.
  - Hold alcohol retailers liable for harms related to the sale of alcoholic beverages to minors and intoxicated patrons (dram shop liability).
  - Maintain existing limits on the days and hours when alcohol is sold.
  - Increase the price of alcohol.
  - Avoid further privatization of alcohol sales in states with government operated or contracted liquor stores.
- Additional information is available at <http://www.cdc.gov/vitalsigns>.

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**References**

1. Bouchery EE, Harwood HJ, Sacks JJ, Simon CJ, Brewer RD. Economic costs of excessive alcohol consumption in the United States, 2006. *Am J Prev Med* 2011;41:516–24.
2. CDC. Alcohol-attributable deaths and years of potential life lost, United States, 2001. *MMWR* 2004;53:866–70.
3. National Institute of Alcohol Abuse and Alcoholism. Tenth special report to the U.S. Congress on alcohol and health. Bethesda, MD: National Institute of Health; 2000.
4. CDC. Alcohol-impaired driving among adults—United States, 2010. *MMWR* 2011;60:1351–6.
5. Naimi TS, Brewer RD, Mokdad A, Denny C, Serdula MK, Marks JS. Binge drinking among US adults. *JAMA* 2003;289:70–5.
6. Office of Juvenile Justice and Delinquency Prevention. Drinking in America: myths, realities, and prevention policy. Washington, DC: US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention; 2005. Available at [http://www.udetc.org/documents/drinking\\_in\\_america.pdf](http://www.udetc.org/documents/drinking_in_america.pdf). Accessed November 17, 2011.
7. Woerle S, Roeber J, Landen MG. Prevalence of alcohol dependence among excessive drinkers in New Mexico. *Alcohol Clin Exp Res* 2007;31:293–98.
8. US Department of Health and Human Services. SA–14.3 Reduce the proportion of persons engaging in binge drinking during the past 30 days—adults aged 18 years and older. Healthy People 2020. Washington, DC: US Department of Health and Human Services; 2011. Available at <http://healthypeople.gov/2020/lhi/substanceabuse.aspx>. Accessed November 17, 2011.
9. Battaglia MP, Frankel MR, Link MW. Improving standard poststratification techniques for random-digit-dialing telephone surveys. *Survey Res Methods* 2008;2:11–9.
10. CDC. Vital signs: binge drinking among high school students and adults—United States, 2009. *MMWR* 2010;59:1274–9.
11. Blumberg SJ, Luke JV. Wireless substitution: early release of estimates from the National Health Interview Survey, July–December 2010. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2011. Available at <http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201106.pdf>. Accessed November 17, 2011.
12. Hu SS, Balluz L, Battaglia MP, Frankel MR. Improving public health surveillance using a dual-frame survey of landline and cellular telephone numbers. *Am J Epidemiol*. 2011;173:703–11.
13. National Institute on Alcohol Abuse and Alcoholism. Alcohol Policy Information System. Rockville, MD: US Department of Health and Human Services, National Institutes of Health; 2011. Available at <http://www.alcoholpolicy.niaaa.nih.gov>. Accessed November 17, 2011.
14. Holt JB, Miller JW, Naimi TS, Sui DZ. Religious affiliation and alcohol consumption in the United States. *Geographical Review* 2006;96:523–42.
15. Stockwell T, Donath S, Cooper-Stanbury M, Chikritzhs T, Catalano P, Mateo C. Under-reporting of alcohol consumption in household surveys: a comparison of quantity-frequency, graduated-frequency and recent recall. *Addiction* 2004;99:1024–33.
16. Nelson DE, Naimi TS, Brewer RD, Roeber J. U.S. state alcohol sales compared to survey data, 1993–2006. *Addiction* 2010;105:1589–96.
17. Task Force on Community Prevention Services. Preventing excessive alcohol consumption. In: *The guide to community preventive services*. New York, NY: Oxford University Press; 2005. Available at <http://www.thecommunityguide.org/alcohol/index.html>. Accessed November 22, 2011.
18. Elder RW, Lawrence B, Ferguson A, et al.; Task Force on Community Preventive Services. The effectiveness of tax policy interventions for reducing excessive alcohol consumption and related harms. *Am J Prev Med* 2010;38:217–29.
19. Naimi TS, Nelson DE, Brewer RD. The intensity of binge alcohol consumption among U.S. adults. *Am J Prev Med* 2010;38:201–7.

## ***Notice to Readers***

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### **Discontinuation of Inclusion of Notifiable Diseases and Mortality Tables in Print Copies of the *MMWR* Weekly Publication**

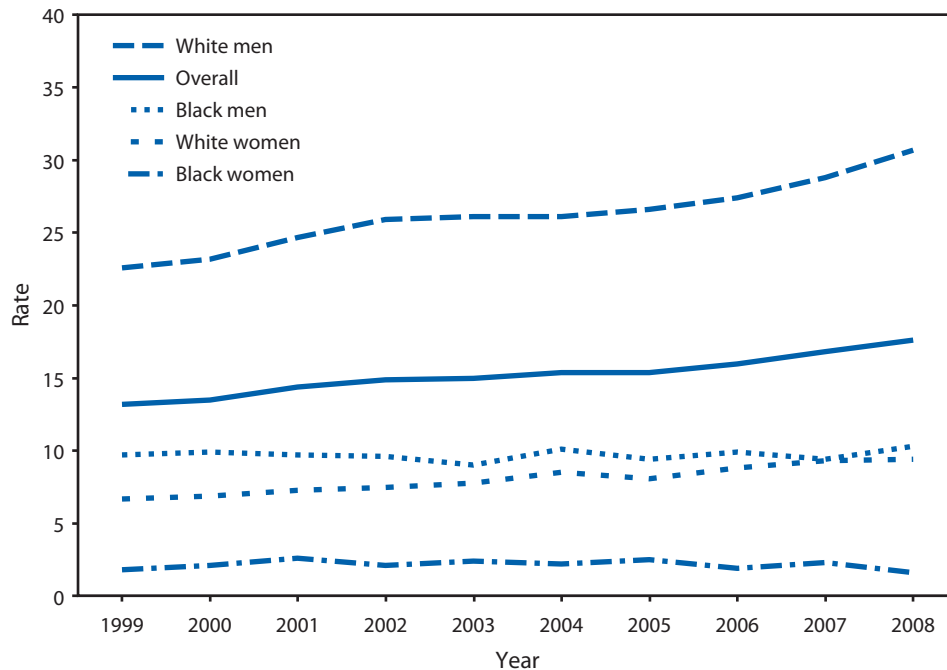
Effective with this issue, the weekly Notifiable Diseases and Mortality Tables (i.e., Figure I and Tables I, II, and III) no longer will be included in print copies of the *MMWR* weekly publication. The tables will continue to be included in the online version of the weekly publication.

All *MMWR* publications remain available at no charge online at <http://www.cdc.gov/mmwr>. Readers who wish to have *MMWR* publications e-mailed to them automatically at no charge can subscribe online at <http://www.cdc.gov/mmwr/mmwrsubscribe.html>. Print copies of *MMWR*'s weekly and serial publications (i.e., Recommendations and Reports, Surveillance Summaries, Supplements, and Summaries of Notifiable Diseases) are available for a subscription fee from Massachusetts Medical Society, and the *MMWR* weekly publication also is available for a subscription fee from the U.S. Government Printing Office at <http://www.cdc.gov/mmwr/order.html>.

## QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

### Death Rates from Suicide\* for Persons Aged 45–64 Years, by Black or White Race and Sex — United States, 1999–2008



\* Per 100,000 population. Deaths from suicide are those coded \*U03, X60-X84, Y87.0 in *International Classification of Diseases, 10th Revision*.

From 1999 to 2008, the suicide death rate for persons aged 45–64 years increased overall (from 13.2 to 17.6 per 100,000 population) and for white men (from 22.6 to 30.7) and white women (from 6.7 to 9.4), whereas the rate did not change significantly for black men and women. Throughout the period, the suicide rate was highest for white men and lowest for black women. In 2008, the suicide rate for white men was 30.7 per 100,000 population, followed by 10.3 for black men, 9.4 for white women, and 1.6 for black women.

**Sources:** National Vital Statistics System. Available at [http://www.cdc.gov/nchs/nvss/mortality\\_public\\_use\\_data.htm](http://www.cdc.gov/nchs/nvss/mortality_public_use_data.htm). CDC. Health Data Interactive. Available at <http://www.cdc.gov/nchs/hdi.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 January 7, 2012 (1st week)\*

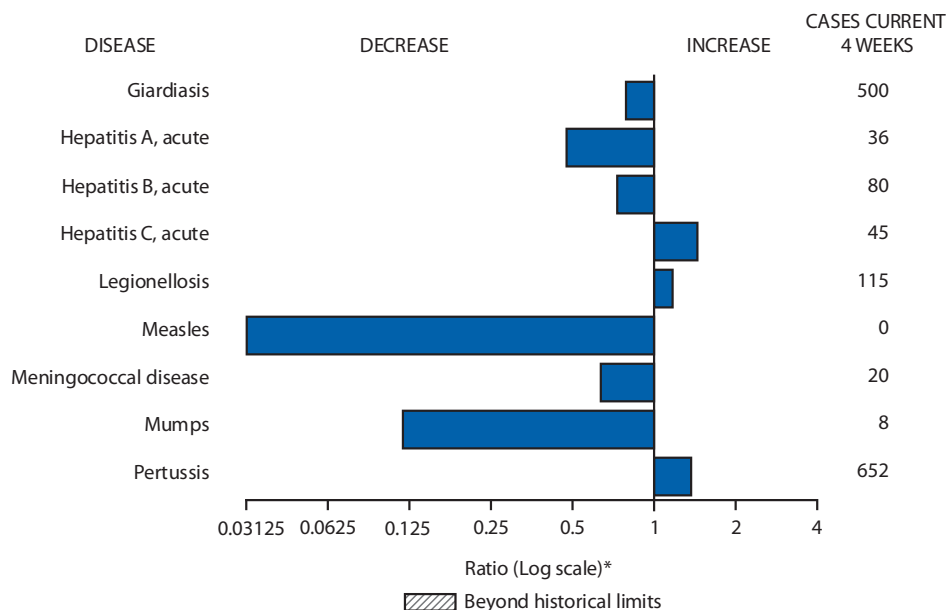
Disease	Current week	Cum 2012	5-year weekly average <sup>†</sup>	Total cases reported for previous years					States reporting cases during current week (No.)
				2011	2010	2009	2008	2007	
Anthrax	—	—	—	1	—	1	—	1	
Arboviral diseases <sup>§, ¶</sup> :									
California serogroup virus disease	—	—	—	125	75	55	62	55	
Eastern equine encephalitis virus disease	—	—	—	4	10	4	4	4	
Powassan virus disease	—	—	0	16	8	6	2	7	
St. Louis encephalitis virus disease	—	—	—	5	10	12	13	9	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
Babesiosis	—	—	1	632	NN	NN	NN	NN	
Botulism, total	—	—	3	114	112	118	145	144	
foodborne	—	—	0	10	7	10	17	32	
infant	—	—	2	74	80	83	109	85	
other (wound and unspecified)	—	—	1	30	25	25	19	27	
Brucellosis	—	—	2	75	115	115	80	131	
Chancroid	—	—	0	29	24	28	25	23	
Cholera	—	—	0	30	13	10	5	7	
Cyclosporiasis <sup>§</sup>	—	—	3	145	179	141	139	93	
Diphtheria	—	—	—	—	—	—	—	—	
<i>Haemophilus influenzae</i> ,** invasive disease (age <5 yrs):									
serotype b	—	—	1	8	23	35	30	22	
nonsensory type b	—	—	5	108	200	236	244	199	
unknown serotype	2	2	6	240	223	178	163	180	NYC (1), OH (1)
Hansen disease <sup>§</sup>	1	1	2	50	98	103	80	101	NYC (1)
Hantavirus pulmonary syndrome <sup>§</sup>	—	—	0	20	20	20	18	32	
Hemolytic uremic syndrome, postdiarrheal <sup>§</sup>	—	—	5	210	266	242	330	292	
Influenza-associated pediatric mortality <sup>§, ††</sup>	—	—	2	118	61	358	90	77	
Listeriosis	1	1	16	767	821	851	759	808	NE (1)
Measles <sup>§§</sup>	—	—	1	213	63	71	140	43	
Meningococcal disease, invasive <sup>¶¶</sup> :									
A, C, Y, and W-135	—	—	6	180	280	301	330	325	
serogroup B	—	—	3	107	135	174	188	167	
other serogroup	—	—	0	14	12	23	38	35	
unknown serogroup	3	3	12	380	406	482	616	550	OH (1), MD (2)
Novel influenza A virus infections***	—	—	0	8	4	43,774	2	4	
Plague	—	—	0	3	2	8	3	7	
Poliomyelitis, paralytic	—	—	0	—	—	1	—	—	
Polio virus Infection, nonparalytic <sup>§</sup>	—	—	—	—	—	—	—	—	
Psittacosis <sup>§</sup>	—	—	0	2	4	9	8	12	
Q fever, total <sup>§</sup>	—	—	3	115	131	113	120	171	
acute	—	—	2	86	106	93	106	—	
chronic	—	—	0	29	25	20	14	—	
Rabies, human	—	—	0	2	2	4	2	1	
Rubella <sup>†††</sup>	—	—	0	4	5	3	16	12	
Rubella, congenital syndrome	—	—	—	—	—	2	—	—	
SARS-CoV <sup>§</sup>	—	—	—	—	—	—	—	—	
Smallpox <sup>§</sup>	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome <sup>§</sup>	—	—	4	117	142	161	157	132	
Syphilis, congenital (age <1 yr) <sup>§§§</sup>	—	—	7	243	377	423	431	430	
Tetanus	—	—	0	9	26	18	19	28	
Toxic-shock syndrome (staphylococcal) <sup>§</sup>	—	—	2	73	82	74	71	92	
Trichinellosis	—	—	0	10	7	13	39	5	
Tularemia	—	—	1	137	124	93	123	137	
Typhoid fever	1	1	9	320	467	397	449	434	OH (1)
Vancomycin-intermediate <i>Staphylococcus aureus</i> <sup>§</sup>	—	—	1	66	91	78	63	37	
Vancomycin-resistant <i>Staphylococcus aureus</i> <sup>§</sup>	—	—	0	—	2	1	—	2	
Vibriosis (noncholera <i>Vibrio</i> species infections) <sup>§</sup>	1	1	10	729	846	789	588	549	FL (1)
Viral hemorrhagic fever <sup>¶¶¶</sup>	—	—	0	—	1	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 January 7, 2012 (1st week)\***

—: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts.  
 \* Case counts for reporting year 2011 and 2012 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](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](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](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 2, 2011, no influenza-associated pediatric deaths occurring during the 2011-12 influenza season have been reported.  
 ‡‡ No measles cases were reported for the current week.  
 ¶¶ Data for meningococcal disease (all serogroups) are available in Table II.  
 \*\*\* CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. During 2009, four cases of human infection with novel influenza A viruses, different from the 2009 pandemic influenza A (H1N1) strain, were reported to CDC. The four cases of novel influenza A virus infection reported to CDC during 2010, and the eight cases reported during 2011, were identified as swine influenza A (H3N2) virus and are unrelated to the 2009 pandemic influenza A (H1N1) virus. Total case counts are 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 were no cases of viral hemorrhagic fever reported during the current week. See Table II for dengue hemorrhagic fever.

**FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals January 7, 2012, with historical data**



\* No measles cases were reported for the current 4-week period yielding a ratio for week 1 of zero (0).  
 † 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	Deborah A. Adams
Willie J. Anderson	Lenee Blanton
Rosaline Dhara	Diana Harris Onweh
Pearl C. Sharp	Michael S. Wodajo

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TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending January 7, 2012, and January 8, 2011 (1st week)\*

Reporting area	<i>Chlamydia trachomatis</i> infection				Coccidioidomycosis				Cryptosporidiosis						
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	6,839	26,636	30,779	6,839	24,829	73	385	585	73	439	35	129	394	35	99
<b>New England</b>	—	868	1,594	—	591	—	0	1	—	—	—	7	22	—	9
Connecticut	—	227	474	—	10	—	0	0	—	—	—	1	9	—	3
Maine	—	59	99	—	62	—	0	0	—	—	—	1	4	—	—
Massachusetts	—	427	860	—	409	—	0	0	—	—	—	3	8	—	5
New Hampshire	—	56	90	—	33	—	0	1	—	—	—	1	5	—	1
Rhode Island	—	79	170	—	48	—	0	0	—	—	—	0	1	—	—
Vermont	—	27	84	—	29	—	0	0	—	—	—	1	5	—	—
<b>Mid. Atlantic</b>	681	3,216	3,954	681	2,575	—	0	1	—	—	2	15	42	2	6
New Jersey	93	540	1,004	93	351	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	171	715	1,058	171	278	—	0	0	—	—	—	4	16	—	—
New York City	—	1,094	1,315	—	1,190	—	0	0	—	—	—	1	6	—	1
Pennsylvania	417	984	1,236	417	756	—	0	1	—	—	2	9	26	2	5
<b>E.N. Central</b>	712	4,093	5,187	712	5,187	—	1	5	—	—	15	32	146	15	36
Illinois	19	1,129	1,343	19	1,237	—	0	0	—	—	—	3	26	—	6
Indiana	147	543	1,405	147	1,405	—	0	0	—	—	—	3	14	—	6
Michigan	300	956	1,429	300	1,048	—	0	3	—	—	1	6	14	1	6
Ohio	127	1,009	1,124	127	1,062	—	0	3	—	—	12	11	95	12	12
Wisconsin	119	468	553	119	435	—	0	0	—	—	2	8	64	2	6
<b>W.N. Central</b>	20	1,494	1,808	20	1,547	—	0	2	—	—	2	16	87	2	10
Iowa	10	212	253	10	238	—	0	0	—	—	—	6	19	—	2
Kansas	—	210	288	—	228	—	0	0	—	—	—	0	11	—	—
Minnesota	—	312	396	—	373	—	0	0	—	—	—	0	0	—	—
Missouri	—	539	759	—	501	—	0	0	—	—	1	5	63	1	2
Nebraska	—	119	215	—	92	—	0	2	—	—	1	2	12	1	4
North Dakota	—	39	64	—	22	—	0	0	—	—	—	0	12	—	—
South Dakota	10	63	93	10	93	—	0	0	—	—	—	2	13	—	2
<b>S. Atlantic</b>	3,688	5,381	7,387	3,688	5,251	—	0	2	—	—	11	21	41	11	22
Delaware	28	86	182	28	83	—	0	0	—	—	—	0	1	—	—
District of Columbia	130	109	190	130	119	—	0	0	—	—	—	0	1	—	—
Florida	618	1,500	1,697	618	1,399	—	0	0	—	—	4	8	17	4	7
Georgia	543	1,013	1,569	543	718	—	0	0	—	—	—	5	11	—	2
Maryland	—	468	790	—	254	—	0	2	—	—	6	1	6	6	—
North Carolina	1,509	997	1,688	1,509	1,369	—	0	0	—	—	—	0	25	—	—
South Carolina	—	530	1,337	—	328	—	0	0	—	—	1	2	8	1	8
Virginia	813	662	1,575	813	860	—	0	1	—	—	—	2	8	—	5
West Virginia	47	82	121	47	121	—	0	0	—	—	—	0	5	—	—
<b>E.S. Central</b>	292	1,881	2,804	292	1,387	—	0	0	—	—	2	7	25	2	2
Alabama	—	549	1,566	—	552	—	0	0	—	—	—	2	7	—	1
Kentucky	98	299	557	98	—	—	0	0	—	—	—	1	17	—	1
Mississippi	—	398	696	—	227	—	0	0	—	—	—	1	4	—	—
Tennessee	194	600	751	194	608	—	0	0	—	—	2	2	6	2	—
<b>W.S. Central</b>	131	3,372	4,327	131	2,812	—	0	1	—	—	—	8	43	—	—
Arkansas	—	309	440	—	335	—	0	0	—	—	—	0	2	—	—
Louisiana	113	377	1,071	113	262	—	0	1	—	—	—	0	9	—	—
Oklahoma	18	153	676	18	29	—	0	0	—	—	—	2	6	—	—
Texas	—	2,419	3,129	—	2,186	—	0	0	—	—	—	5	39	—	—
<b>Mountain</b>	432	1,753	2,344	432	1,347	39	305	459	39	321	1	10	30	1	8
Arizona	409	548	782	409	464	39	300	456	39	315	—	1	4	—	—
Colorado	—	421	847	—	275	—	0	0	—	—	—	3	12	—	1
Idaho	—	82	235	—	53	—	0	0	—	—	—	1	9	—	3
Montana	—	66	88	—	67	—	0	2	—	—	—	1	6	—	1
Nevada	—	205	380	—	203	—	2	5	—	4	1	0	2	1	1
New Mexico	—	199	481	—	141	—	0	4	—	—	—	3	9	—	1
Utah	23	132	190	23	114	—	0	4	—	2	—	1	5	—	1
Wyoming	—	34	67	—	30	—	0	2	—	—	—	0	5	—	—
<b>Pacific</b>	883	3,957	5,412	883	4,132	34	90	145	34	118	2	10	21	2	6
Alaska	71	110	157	71	129	—	0	0	—	—	—	0	3	—	—
California	283	2,983	4,482	283	3,217	34	89	145	34	118	2	6	15	2	2
Hawaii	—	114	141	—	102	—	0	0	—	—	—	0	1	—	—
Oregon	246	273	412	246	268	—	0	1	—	—	—	2	8	—	4
Washington	283	431	672	283	416	—	0	0	—	—	—	1	6	—	—
<b>Territories</b>															
American Samoa	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	14	44	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	108	349	—	113	—	0	0	—	—	N	0	0	N	N
U.S. Virgin Islands	—	17	27	—	—	—	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 2011 and 2012 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](http://www.cdc.gov/osels/ph_surveillance/ndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf). Data for TB are displayed in Table IV, which appears quarterly.



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TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 7, 2012, and January 8, 2011 (1st week)\*

Reporting area	Dengue Virus Infection									
	Dengue Fever <sup>†</sup>					Dengue Hemorrhagic Fever <sup>§</sup>				
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
	Med	Max				Med	Max			
<b>United States</b>	—	2	16	—	7	—	0	1	—	—
<b>New England</b>	—	0	1	—	—	—	0	0	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	0	—	—	—	0	0	—	—
Rhode Island	—	0	0	—	—	—	0	0	—	—
Vermont	—	0	1	—	—	—	0	0	—	—
<b>Mid. Atlantic</b>	—	1	6	—	2	—	0	0	—	—
New Jersey	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	—	0	0	—	—	—	0	0	—	—
New York City	—	0	4	—	1	—	0	0	—	—
Pennsylvania	—	0	2	—	1	—	0	0	—	—
<b>E.N. Central</b>	—	0	2	—	1	—	0	1	—	—
Illinois	—	0	1	—	—	—	0	1	—	—
Indiana	—	0	1	—	1	—	0	0	—	—
Michigan	—	0	1	—	—	—	0	0	—	—
Ohio	—	0	1	—	—	—	0	0	—	—
Wisconsin	—	0	2	—	—	—	0	0	—	—
<b>W.N. Central</b>	—	0	2	—	—	—	0	0	—	—
Iowa	—	0	1	—	—	—	0	0	—	—
Kansas	—	0	1	—	—	—	0	0	—	—
Minnesota	—	0	1	—	—	—	0	0	—	—
Missouri	—	0	1	—	—	—	0	0	—	—
Nebraska	—	0	0	—	—	—	0	0	—	—
North Dakota	—	0	1	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	0	—	—
<b>S. Atlantic</b>	—	1	8	—	2	—	0	1	—	—
Delaware	—	0	2	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	—	1	7	—	1	—	0	0	—	—
Georgia	—	0	1	—	—	—	0	0	—	—
Maryland	—	0	2	—	—	—	0	0	—	—
North Carolina	—	0	1	—	—	—	0	0	—	—
South Carolina	—	0	1	—	—	—	0	0	—	—
Virginia	—	0	1	—	1	—	0	1	—	—
West Virginia	—	0	0	—	—	—	0	0	—	—
<b>E.S. Central</b>	—	0	3	—	—	—	0	0	—	—
Alabama	—	0	1	—	—	—	0	0	—	—
Kentucky	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—
Tennessee	—	0	2	—	—	—	0	0	—	—
<b>W.S. Central</b>	—	0	2	—	—	—	0	0	—	—
Arkansas	—	0	0	—	—	—	0	0	—	—
Louisiana	—	0	1	—	—	—	0	0	—	—
Oklahoma	—	0	0	—	—	—	0	0	—	—
Texas	—	0	1	—	—	—	0	0	—	—
<b>Mountain</b>	—	0	1	—	1	—	0	0	—	—
Arizona	—	0	1	—	1	—	0	0	—	—
Colorado	—	0	0	—	—	—	0	0	—	—
Idaho	—	0	0	—	—	—	0	0	—	—
Montana	—	0	0	—	—	—	0	0	—	—
Nevada	—	0	1	—	—	—	0	0	—	—
New Mexico	—	0	0	—	—	—	0	0	—	—
Utah	—	0	1	—	—	—	0	0	—	—
Wyoming	—	0	0	—	—	—	0	0	—	—
<b>Pacific</b>	—	0	4	—	1	—	0	0	—	—
Alaska	—	0	0	—	—	—	0	0	—	—
California	—	0	2	—	—	—	0	0	—	—
Hawaii	—	0	4	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—
Washington	—	0	1	—	1	—	0	0	—	—
<b>Territories</b>										
American Samoa	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	18	82	—	16	—	0	3	—	1
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 2011 and 2012 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](http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf). Data for TB are displayed in Table IV, which appears quarterly.

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

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 7, 2012, and January 8, 2011 (1st week)\*

Reporting area	Ehrlichiosis/Anaplasmosis <sup>†</sup>														
	<i>Ehrlichia chaffeensis</i>					<i>Anaplasma phagocytophilum</i>					Undetermined				
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
	Med	Max				Med	Max				Med	Max			
<b>United States</b>	1	7	93	1	2	—	17	57	—	3	—	2	9	—	1
<b>New England</b>	—	0	1	—	—	—	3	28	—	1	—	0	1	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Maine	—	0	1	—	—	—	0	3	—	—	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	1	18	—	—	—	0	0	—	—
New Hampshire	—	0	1	—	—	—	0	4	—	—	—	0	1	—	—
Rhode Island	—	0	1	—	—	—	0	15	—	1	—	0	1	—	—
Vermont	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
<b>Mid. Atlantic</b>	—	1	5	—	—	—	6	31	—	1	—	0	2	—	—
New Jersey	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	—	0	4	—	—	—	3	27	—	—	—	0	2	—	—
New York City	—	0	2	—	—	—	1	5	—	1	—	0	0	—	—
Pennsylvania	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
<b>E.N. Central</b>	—	0	5	—	—	—	0	2	—	—	—	1	6	—	1
Illinois	—	0	4	—	—	—	0	2	—	—	—	0	1	—	—
Indiana	—	0	0	—	—	—	0	0	—	—	—	0	4	—	1
Michigan	—	0	2	—	—	—	0	0	—	—	—	0	2	—	—
Ohio	—	0	1	—	—	—	0	1	—	—	—	0	1	—	—
Wisconsin	—	0	0	—	—	—	0	1	—	—	—	0	1	—	—
<b>W.N. Central</b>	1	1	19	1	—	—	0	8	—	—	—	0	7	—	—
Iowa	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Kansas	—	0	2	—	—	—	0	1	—	—	—	0	1	—	—
Minnesota	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Missouri	1	1	19	1	—	—	0	7	—	—	—	0	7	—	—
Nebraska	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
North Dakota	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
South Dakota	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
<b>S. Atlantic</b>	—	2	33	—	2	—	1	8	—	1	—	0	2	—	—
Delaware	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
District of Columbia	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Florida	—	0	3	—	—	—	0	3	—	—	—	0	0	—	—
Georgia	—	0	3	—	1	—	0	2	—	—	—	0	1	—	—
Maryland	—	0	3	—	—	—	0	2	—	—	—	0	1	—	—
North Carolina	—	0	17	—	1	—	0	6	—	1	—	0	0	—	—
South Carolina	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
Virginia	—	1	13	—	—	—	0	3	—	—	—	0	1	—	—
West Virginia	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
<b>E.S. Central</b>	—	0	8	—	—	—	0	2	—	—	—	0	3	—	—
Alabama	—	0	2	—	—	—	0	1	—	—	N	0	0	N	N
Kentucky	—	0	3	—	—	—	0	0	—	—	—	0	0	—	—
Mississippi	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
Tennessee	—	0	5	—	—	—	0	2	—	—	—	0	3	—	—
<b>W.S. Central</b>	—	0	30	—	—	—	0	3	—	—	—	0	0	—	—
Arkansas	—	0	13	—	—	—	0	3	—	—	—	0	0	—	—
Louisiana	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	25	—	—	—	0	1	—	—	—	0	0	—	—
Texas	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
<b>Mountain</b>	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
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	1	—	—
Wyoming	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
<b>Pacific</b>	—	0	0	—	—	—	0	1	—	—	—	0	1	—	—
Alaska	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
California	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Hawaii	N	0	0	N	N	N	0	0	N	N	N	0	0	N	N
Oregon	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
<b>Territories</b>															
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 2011 and 2012 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](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 2011 = 13 and 0 case reports for 2012.

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 7, 2012, and January 8, 2011 (1st week)\*

Reporting area	Giardiasis					Gonorrhea					Haemophilus influenzae, invasive† All ages, all serotypes				
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	67	279	436	67	244	1,792	5,990	6,704	1,792	6,137	32	64	89	32	89
<b>New England</b>	1	27	64	1	21	—	107	178	—	57	—	4	12	—	5
Connecticut	—	4	10	—	4	—	45	101	—	7	—	1	4	—	1
Maine	—	3	10	—	3	—	5	18	—	2	—	0	2	—	1
Massachusetts	—	12	29	—	11	—	47	80	—	42	—	2	6	—	2
New Hampshire	—	2	8	—	3	—	2	7	—	2	—	0	2	—	—
Rhode Island	—	0	10	—	—	—	6	35	—	2	—	0	1	—	—
Vermont	1	3	19	1	—	—	0	6	—	2	—	0	2	—	1
<b>Mid. Atlantic</b>	4	54	92	4	38	175	744	916	175	541	12	15	25	12	18
New Jersey	—	0	0	—	—	28	150	232	28	91	—	2	6	—	4
New York (Upstate)	1	22	51	1	2	41	115	175	41	36	—	3	11	—	—
New York City	1	16	29	1	20	—	242	315	—	237	2	3	10	2	3
Pennsylvania	2	16	29	2	16	106	255	361	106	177	10	5	11	10	11
<b>E.N. Central</b>	16	48	82	16	54	215	1,061	1,483	215	1,483	6	11	22	6	19
Illinois	—	10	19	—	13	9	290	381	9	344	—	3	11	—	4
Indiana	—	6	12	—	5	41	133	419	41	419	—	2	6	—	2
Michigan	—	10	21	—	8	88	237	499	88	276	—	1	4	—	2
Ohio	12	16	31	12	22	36	314	398	36	350	6	4	7	6	6
Wisconsin	4	8	18	4	6	41	90	118	41	94	—	1	5	—	5
<b>W.N. Central</b>	7	20	52	7	22	2	311	375	2	344	1	2	10	1	1
Iowa	2	4	15	2	5	2	37	55	2	48	—	0	1	—	—
Kansas	—	2	9	—	2	—	43	65	—	53	—	0	2	—	—
Minnesota	—	0	0	—	—	—	44	61	—	49	—	0	0	—	—
Missouri	3	8	23	3	10	—	150	204	—	152	—	1	5	—	1
Nebraska	2	3	11	2	5	—	27	51	—	23	1	0	2	1	—
North Dakota	—	0	12	—	—	—	4	8	—	1	—	0	6	—	—
South Dakota	—	1	8	—	—	—	11	20	—	18	—	0	1	—	—
<b>S. Atlantic</b>	15	50	95	15	47	1,083	1,489	1,936	1,083	1,508	9	14	31	9	14
Delaware	—	0	3	—	—	7	15	35	7	23	—	0	2	—	—
District of Columbia	—	1	5	—	—	68	38	98	68	43	—	0	0	—	—
Florida	7	23	69	7	26	181	377	472	181	420	6	5	12	6	5
Georgia	—	9	51	—	5	210	312	461	210	249	—	2	7	—	7
Maryland	3	6	13	3	4	—	117	176	—	83	2	1	5	2	—
North Carolina	N	0	0	N	N	438	331	548	438	427	—	1	7	—	1
South Carolina	2	2	8	2	2	—	162	418	—	82	1	1	5	1	—
Virginia	3	5	12	3	10	175	116	352	175	160	—	2	8	—	1
West Virginia	—	0	8	—	—	4	16	29	4	21	—	0	5	—	—
<b>E.S. Central</b>	1	3	9	1	3	92	514	789	92	416	1	3	12	1	11
Alabama	1	3	9	1	3	—	164	408	—	202	—	1	4	—	4
Kentucky	N	0	0	N	N	38	76	151	38	—	—	1	4	—	2
Mississippi	N	0	0	N	N	—	103	191	—	78	—	0	3	—	1
Tennessee	N	0	0	N	N	54	148	222	54	136	1	2	6	1	4
<b>W.S. Central</b>	—	5	15	—	2	26	881	1,177	26	804	—	2	10	—	4
Arkansas	—	2	8	—	—	—	87	138	—	105	—	0	3	—	—
Louisiana	—	2	10	—	2	23	120	255	23	95	—	0	4	—	4
Oklahoma	—	0	0	—	—	3	36	196	3	17	—	1	9	—	—
Texas	N	0	0	N	N	—	592	837	—	587	—	0	1	—	—
<b>Mountain</b>	1	25	45	1	21	84	204	314	84	219	—	5	10	—	10
Arizona	—	2	6	—	3	84	81	130	84	61	—	1	6	—	3
Colorado	—	11	25	—	8	—	41	89	—	63	—	1	5	—	2
Idaho	1	3	9	1	3	—	3	13	—	2	—	0	2	—	—
Montana	—	2	5	—	2	—	1	4	—	2	—	0	1	—	—
Nevada	—	1	7	—	2	—	39	103	—	54	—	0	2	—	1
New Mexico	—	1	6	—	1	—	33	73	—	34	—	1	4	—	4
Utah	—	2	9	—	1	—	5	10	—	3	—	0	2	—	—
Wyoming	—	0	5	—	1	—	0	3	—	—	—	0	1	—	—
<b>Pacific</b>	22	47	84	22	36	115	631	765	115	765	3	3	9	3	7
Alaska	2	2	7	2	2	15	20	31	15	21	—	0	3	—	1
California	17	31	51	17	21	43	524	658	43	658	—	1	5	—	—
Hawaii	—	0	3	—	—	—	13	24	—	13	—	0	3	—	1
Oregon	3	7	20	3	13	13	27	60	13	30	3	1	6	3	5
Washington	—	6	27	—	—	44	49	79	44	43	—	0	1	—	—
<b>Territories</b>															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	5	—	—	—	0	0	—	—
Puerto Rico	—	0	4	—	—	—	6	14	—	4	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	3	10	—	—	—	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 2011 and 2012 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](http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationalNotifiableDiseasesSurveillanceData20100927.pdf). Data for TB are displayed in Table IV, which appears quarterly.

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

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 7, 2012, and January 8, 2011 (1st week)\*

Reporting area	Hepatitis (viral, acute), by type														
	A				B				C						
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
	Med	Max				Med	Max				Med	Max			
<b>United States</b>	2	21	40	2	20	7	46	95	7	43	6	19	35	6	16
<b>New England</b>	—	1	5	—	4	—	1	8	—	2	—	1	5	—	—
Connecticut	—	0	3	—	2	—	0	4	—	—	—	0	5	—	—
Maine	—	0	2	—	—	—	0	2	—	—	—	0	2	—	—
Massachusetts	—	0	3	—	1	—	1	6	—	1	—	0	2	—	—
New Hampshire	—	0	0	—	—	—	0	1	—	1	N	0	0	N	N
Rhode Island	—	0	1	—	—	U	0	0	U	U	U	0	0	U	U
Vermont	—	0	2	—	1	—	0	0	—	—	—	0	1	—	—
<b>Mid. Atlantic</b>	—	3	7	—	3	1	5	8	1	4	—	1	5	—	1
New Jersey	—	0	0	—	—	—	0	1	—	—	—	0	1	—	—
New York (Upstate)	—	1	4	—	—	—	1	4	—	1	—	1	4	—	1
New York City	—	1	5	—	2	—	1	5	—	1	—	0	1	—	—
Pennsylvania	—	1	3	—	1	1	2	4	1	2	—	0	4	—	—
<b>E.N. Central</b>	—	4	8	—	1	1	6	37	1	5	1	2	8	1	5
Illinois	—	1	4	—	—	—	1	6	—	1	—	0	2	—	1
Indiana	—	0	3	—	—	—	1	4	—	—	—	1	5	—	2
Michigan	—	1	6	—	—	—	1	6	—	3	1	1	4	1	2
Ohio	—	1	3	—	1	1	1	30	1	—	—	0	1	—	—
Wisconsin	—	0	1	—	—	—	0	3	—	1	—	0	1	—	—
<b>W.N. Central</b>	—	1	7	—	1	1	2	9	1	6	—	0	4	—	—
Iowa	—	0	1	—	1	—	0	1	—	—	—	0	0	—	—
Kansas	—	0	1	—	—	—	0	2	—	1	—	0	1	—	—
Minnesota	—	0	7	—	—	—	0	7	—	—	—	0	2	—	—
Missouri	—	0	1	—	—	—	2	5	—	1	—	0	0	—	—
Nebraska	—	0	1	—	—	1	0	3	1	3	—	0	1	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	2	—	—	—	0	1	—	1	—	0	0	—	—
<b>S. Atlantic</b>	1	4	11	1	5	3	12	57	3	8	3	5	12	3	4
Delaware	—	0	1	—	1	—	0	2	—	—	U	0	0	U	U
District of Columbia	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Florida	1	1	8	1	1	2	4	7	2	4	1	1	3	1	—
Georgia	—	1	5	—	2	—	2	7	—	—	—	0	3	—	1
Maryland	—	0	4	—	—	1	1	4	1	1	—	0	3	—	2
North Carolina	—	0	3	—	—	—	2	9	—	—	2	1	7	2	1
South Carolina	—	0	2	—	—	—	1	3	—	1	—	0	1	—	—
Virginia	—	0	3	—	1	—	1	4	—	2	—	0	3	—	—
West Virginia	—	0	2	—	—	—	0	43	—	—	—	0	7	—	—
<b>E.S. Central</b>	—	1	6	—	1	—	10	15	—	10	2	4	10	2	2
Alabama	—	0	2	—	—	—	2	6	—	3	—	0	3	—	—
Kentucky	—	0	2	—	1	—	3	7	—	2	—	2	8	—	1
Mississippi	—	0	1	—	—	—	1	4	—	—	U	0	0	U	U
Tennessee	—	0	5	—	—	—	4	8	—	5	2	1	5	2	1
<b>W.S. Central</b>	—	3	7	—	—	1	5	15	1	—	—	2	5	—	2
Arkansas	—	0	2	—	—	—	1	4	—	—	—	0	0	—	—
Louisiana	—	0	2	—	—	—	1	4	—	—	—	0	2	—	2
Oklahoma	—	0	2	—	—	—	1	9	—	—	—	1	4	—	—
Texas	—	2	7	—	—	1	3	7	1	—	—	0	3	—	—
<b>Mountain</b>	—	1	5	—	2	—	1	4	—	3	—	1	5	—	2
Arizona	—	0	2	—	1	—	0	3	—	—	U	0	0	U	U
Colorado	—	0	2	—	—	—	0	2	—	—	—	0	2	—	1
Idaho	—	0	1	—	—	—	0	1	—	—	—	0	2	—	1
Montana	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
Nevada	—	0	3	—	—	—	0	3	—	3	—	0	2	—	—
New Mexico	—	0	1	—	1	—	0	2	—	—	—	0	2	—	—
Utah	—	0	1	—	—	—	0	1	—	—	—	0	2	—	—
Wyoming	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
<b>Pacific</b>	1	3	11	1	3	—	3	8	—	5	—	1	8	—	—
Alaska	—	0	1	—	—	—	0	1	—	—	U	0	0	U	U
California	1	3	7	1	2	—	2	7	—	4	—	1	4	—	—
Hawaii	—	0	2	—	—	—	0	1	—	—	U	0	0	U	U
Oregon	—	0	2	—	1	—	0	4	—	1	—	0	2	—	—
Washington	—	0	4	—	—	—	0	3	—	—	—	0	4	—	—
<b>Territories</b>															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	5	—	—	—	2	8	—	—	—	0	3	—	—
Puerto Rico	—	0	1	—	—	—	0	2	—	—	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 2011 and 2012 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](http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf). Data for TB are displayed in Table IV, which appears quarterly.

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 7, 2012, and January 8, 2011 (1st week)\*

Reporting area	Legionellosis					Lyme disease					Malaria				
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	21	59	161	21	34	70	338	1,513	70	176	4	25	49	4	22
<b>New England</b>	—	4	39	—	2	—	78	500	—	49	—	1	7	—	3
Connecticut	—	1	10	—	—	—	33	232	—	18	—	0	2	—	1
Maine	—	0	3	—	—	—	12	67	—	—	—	0	2	—	—
Massachusetts	—	3	24	—	1	—	19	106	—	20	—	1	6	—	2
New Hampshire	—	0	3	—	—	—	10	90	—	9	—	0	1	—	—
Rhode Island	—	0	9	—	—	—	1	31	—	—	—	0	2	—	—
Vermont	—	0	2	—	1	—	6	67	—	2	—	0	1	—	—
<b>Mid. Atlantic</b>	1	15	72	1	7	52	172	746	52	75	—	6	13	—	4
New Jersey	—	0	0	—	—	37	1	107	37	—	—	0	0	—	—
New York (Upstate)	1	6	27	1	—	—	56	213	—	3	—	1	4	—	1
New York City	—	3	14	—	5	—	1	13	—	1	—	4	11	—	2
Pennsylvania	—	5	37	—	2	15	102	520	15	71	—	1	5	—	1
<b>E.N. Central</b>	8	11	51	8	6	2	15	211	2	15	1	3	10	1	3
Illinois	—	1	11	—	—	—	1	18	—	2	—	1	5	—	1
Indiana	1	2	7	1	—	—	1	12	—	—	—	0	2	—	—
Michigan	—	3	15	—	3	—	1	12	—	—	1	0	4	1	—
Ohio	7	6	34	7	3	2	0	6	2	—	—	1	4	—	1
Wisconsin	—	0	1	—	—	—	12	172	—	13	—	0	2	—	1
<b>W.N. Central</b>	—	1	8	—	1	—	1	16	—	1	—	1	5	—	—
Iowa	—	0	2	—	—	—	0	13	—	—	—	0	3	—	—
Kansas	—	0	2	—	—	—	0	2	—	—	—	0	2	—	—
Minnesota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Missouri	—	1	5	—	1	—	0	2	—	1	—	0	2	—	—
Nebraska	—	0	2	—	—	—	0	2	—	—	—	0	1	—	—
North Dakota	—	0	1	—	—	—	0	9	—	—	—	0	0	—	—
South Dakota	—	0	1	—	—	—	0	2	—	—	—	0	1	—	—
<b>S. Atlantic</b>	7	10	29	7	5	15	58	177	15	35	3	8	24	3	11
Delaware	—	0	4	—	—	1	12	48	1	13	—	0	3	—	—
District of Columbia	—	0	3	—	—	1	0	3	1	1	—	0	1	—	1
Florida	3	3	13	3	2	3	2	8	3	1	1	2	6	1	2
Georgia	3	1	3	3	1	—	0	5	—	—	—	1	6	—	3
Maryland	—	1	14	—	2	8	20	114	8	12	—	2	14	—	—
North Carolina	—	1	7	—	—	—	0	12	—	1	—	0	6	—	3
South Carolina	—	0	5	—	—	—	0	6	—	—	—	0	1	—	—
Virginia	1	1	7	1	—	2	14	74	2	7	2	1	8	2	2
West Virginia	—	0	5	—	—	—	0	13	—	—	—	0	0	—	—
<b>E.S. Central</b>	—	2	11	—	3	—	1	5	—	—	—	1	4	—	—
Alabama	—	0	2	—	1	—	0	2	—	—	—	0	3	—	—
Kentucky	—	1	4	—	1	—	0	1	—	—	—	0	2	—	—
Mississippi	—	0	3	—	—	—	0	1	—	—	—	0	1	—	—
Tennessee	—	1	8	—	1	—	0	4	—	—	—	0	3	—	—
<b>W.S. Central</b>	1	2	8	1	2	—	1	3	—	—	—	1	4	—	—
Arkansas	—	0	2	—	—	—	0	0	—	—	—	0	1	—	—
Louisiana	—	0	3	—	1	—	0	1	—	—	—	0	1	—	—
Oklahoma	—	0	3	—	—	—	0	0	—	—	—	0	1	—	—
Texas	1	2	7	1	1	—	1	3	—	—	—	0	4	—	—
<b>Mountain</b>	—	2	8	—	1	1	0	5	1	1	—	1	5	—	1
Arizona	—	1	4	—	—	—	0	4	—	—	—	0	4	—	—
Colorado	—	0	1	—	—	—	0	1	—	—	—	0	3	—	—
Idaho	—	0	1	—	—	1	0	2	1	—	—	0	1	—	—
Montana	—	0	1	—	—	—	0	3	—	—	—	0	1	—	—
Nevada	—	0	2	—	1	—	0	1	—	—	—	0	2	—	—
New Mexico	—	0	2	—	—	—	0	2	—	1	—	0	1	—	1
Utah	—	0	2	—	—	—	0	1	—	—	—	0	1	—	—
Wyoming	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
<b>Pacific</b>	4	5	14	4	7	—	2	8	—	—	—	3	12	—	—
Alaska	—	0	0	—	—	—	0	3	—	—	—	0	2	—	—
California	3	4	13	3	7	—	1	5	—	—	—	2	7	—	—
Hawaii	—	0	2	—	—	N	0	0	N	N	—	0	1	—	—
Oregon	1	0	3	1	—	—	0	2	—	—	—	0	4	—	—
Washington	—	0	3	—	—	—	0	6	—	—	—	0	2	—	—
<b>Territories</b>															
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	1	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	N	0	0	N	N	—	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 2011 and 2012 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](http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf). Data for TB are displayed in Table IV, which appears quarterly.

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 7, 2012, and January 8, 2011 (1st week)\*

Reporting area	Meningococcal disease, invasive† All serogroups					Mumps					Pertussis				
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	3	12	30	3	20	—	7	19	—	7	66	308	489	66	340
<b>New England</b>	—	0	3	—	1	—	0	2	—	—	1	14	32	1	6
Connecticut	—	0	1	—	1	—	0	0	—	—	—	1	5	—	—
Maine	—	0	1	—	—	—	0	2	—	—	1	3	19	1	1
Massachusetts	—	0	2	—	—	—	0	1	—	—	—	4	10	—	3
New Hampshire	—	0	1	—	—	—	0	0	—	—	—	2	13	—	1
Rhode Island	—	0	1	—	—	—	0	2	—	—	—	0	4	—	1
Vermont	—	0	3	—	—	—	0	1	—	—	—	0	16	—	—
<b>Mid. Atlantic</b>	—	1	5	—	5	—	1	6	—	1	21	31	84	21	16
New Jersey	—	0	0	—	—	—	0	2	—	1	—	4	10	—	2
New York (Upstate)	—	0	4	—	—	—	0	3	—	—	1	12	63	1	3
New York City	—	0	3	—	3	—	0	6	—	—	—	1	41	—	—
Pennsylvania	—	0	2	—	2	—	0	1	—	—	20	12	40	20	11
<b>E.N. Central</b>	1	2	6	1	2	—	2	12	—	2	18	66	197	18	113
Illinois	—	0	3	—	—	—	1	10	—	—	—	18	120	—	24
Indiana	—	0	2	—	—	—	0	2	—	—	—	4	21	—	11
Michigan	—	0	1	—	—	—	0	2	—	—	3	10	38	3	34
Ohio	1	0	2	1	2	—	0	2	—	2	14	13	37	14	37
Wisconsin	—	0	2	—	—	—	0	1	—	—	1	12	44	1	7
<b>W.N. Central</b>	—	1	3	—	1	—	0	3	—	2	11	21	119	11	28
Iowa	—	0	1	—	—	—	0	2	—	—	—	4	9	—	4
Kansas	—	0	1	—	—	—	0	1	—	1	—	2	10	—	1
Minnesota	—	0	0	—	—	—	0	1	—	—	—	0	110	—	—
Missouri	—	0	3	—	1	—	0	3	—	—	11	7	27	11	17
Nebraska	—	0	2	—	—	—	0	1	—	1	—	1	5	—	5
North Dakota	—	0	1	—	—	—	0	3	—	—	—	0	10	—	—
South Dakota	—	0	1	—	—	—	0	0	—	—	—	0	7	—	1
<b>S. Atlantic</b>	2	2	8	2	2	—	0	4	—	—	11	25	67	11	31
Delaware	—	0	1	—	—	—	0	0	—	—	—	0	5	—	—
District of Columbia	—	0	1	—	—	—	0	1	—	—	—	0	2	—	1
Florida	—	1	5	—	1	—	0	2	—	—	5	6	17	5	3
Georgia	—	0	1	—	—	—	0	2	—	—	—	3	8	—	6
Maryland	2	0	1	2	—	—	0	1	—	—	3	1	8	3	1
North Carolina	—	0	3	—	—	—	0	2	—	—	3	2	35	3	—
South Carolina	—	0	1	—	1	—	0	1	—	—	—	2	11	—	11
Virginia	—	0	2	—	—	—	0	4	—	—	—	6	25	—	9
West Virginia	—	0	3	—	—	—	0	1	—	—	—	0	15	—	—
<b>E.S. Central</b>	—	0	3	—	—	—	0	1	—	—	1	9	25	1	8
Alabama	—	0	2	—	—	—	0	1	—	—	—	2	11	—	1
Kentucky	—	0	2	—	—	—	0	0	—	—	—	3	16	—	4
Mississippi	—	0	1	—	—	—	0	1	—	—	—	0	4	—	—
Tennessee	—	0	2	—	—	—	0	1	—	—	1	2	7	1	3
<b>W.S. Central</b>	—	1	5	—	1	—	1	12	—	—	1	19	38	1	4
Arkansas	—	0	2	—	—	—	0	2	—	—	—	1	5	—	—
Louisiana	—	0	2	—	1	—	0	0	—	—	—	0	3	—	1
Oklahoma	—	0	2	—	—	—	0	2	—	—	—	0	11	—	—
Texas	—	0	2	—	—	—	1	12	—	—	1	17	38	1	3
<b>Mountain</b>	—	1	4	—	3	—	0	2	—	1	1	38	79	1	31
Arizona	—	0	1	—	1	—	0	0	—	—	1	12	28	1	8
Colorado	—	0	1	—	1	—	0	1	—	—	—	8	25	—	15
Idaho	—	0	1	—	1	—	0	2	—	—	—	3	12	—	—
Montana	—	0	2	—	—	—	0	0	—	—	—	1	32	—	1
Nevada	—	0	1	—	—	—	0	0	—	—	—	0	4	—	1
New Mexico	—	0	1	—	—	—	0	1	—	1	—	3	23	—	—
Utah	—	0	2	—	—	—	0	0	—	—	—	6	16	—	6
Wyoming	—	0	0	—	—	—	0	1	—	—	—	0	1	—	—
<b>Pacific</b>	—	2	10	—	5	—	0	11	—	1	1	62	126	1	103
Alaska	—	0	1	—	—	—	0	1	—	—	—	0	4	—	1
California	—	2	9	—	4	—	0	11	—	—	1	37	102	1	98
Hawaii	—	0	1	—	—	—	0	1	—	—	—	1	9	—	—
Oregon	—	0	3	—	1	—	0	1	—	1	—	5	23	—	4
Washington	—	0	2	—	—	—	0	1	—	—	—	11	72	—	—
<b>Territories</b>															
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	1	3	—	—	—	2	14	—	—
Puerto Rico	—	0	0	—	—	—	0	1	—	—	—	0	1	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

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

\* Case counts for reporting year 2011 and 2012 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](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.

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 7, 2012, and January 8, 2011 (1st week)\*

Reporting area	Rabies, animal					Salmonellosis					Shiga toxin-producing <i>E. coli</i> (STEC) <sup>†</sup>				
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
		Med	Max				Med	Max				Med	Max		
<b>United States</b>	6	58	113	6	24	156	835	1,824	156	455	10	84	203	10	52
<b>New England</b>	3	4	16	3	2	3	37	107	3	22	—	3	13	—	1
Connecticut	—	2	10	—	1	—	8	30	—	3	—	1	4	—	1
Maine	3	1	6	3	1	2	2	8	2	—	—	0	3	—	—
Massachusetts	—	0	0	—	—	—	19	44	—	12	—	1	9	—	—
New Hampshire	—	0	3	—	—	—	3	8	—	3	—	0	3	—	—
Rhode Island	—	0	6	—	—	—	1	62	—	1	—	0	2	—	—
Vermont	—	0	2	—	—	1	1	8	1	3	—	0	3	—	—
<b>Mid. Atlantic</b>	1	15	35	1	13	10	71	171	10	35	—	8	30	—	3
New Jersey	—	0	0	—	—	—	0	3	—	—	—	0	0	—	—
New York (Upstate)	1	7	20	1	8	2	26	67	2	3	—	3	13	—	—
New York City	—	0	3	—	—	1	19	42	1	10	—	1	6	—	—
Pennsylvania	—	8	21	—	5	7	31	112	7	22	—	3	18	—	3
<b>E.N. Central</b>	—	2	17	—	1	9	84	162	9	67	—	14	51	—	9
Illinois	—	0	6	—	1	—	27	80	—	32	—	3	14	—	2
Indiana	—	0	7	—	—	—	7	24	—	—	—	1	10	—	4
Michigan	—	1	6	—	—	1	14	42	1	12	—	3	19	—	1
Ohio	—	1	5	—	—	8	21	46	8	18	—	3	10	—	1
Wisconsin	N	0	0	N	N	—	6	45	—	5	—	2	21	—	1
<b>W.N. Central</b>	—	1	7	—	—	6	40	103	6	27	2	11	40	2	3
Iowa	—	0	0	—	—	—	9	19	—	9	—	2	15	—	—
Kansas	—	0	4	—	—	—	8	27	—	3	—	2	8	—	—
Minnesota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Missouri	—	0	1	—	—	4	16	46	4	11	2	5	32	2	—
Nebraska	—	0	3	—	—	2	4	13	2	4	—	1	7	—	3
North Dakota	—	0	3	—	—	—	0	15	—	—	—	0	4	—	—
South Dakota	—	0	0	—	—	—	3	10	—	—	—	1	4	—	—
<b>S. Atlantic</b>	2	19	93	2	8	72	252	724	72	132	6	12	28	6	10
Delaware	—	0	0	—	—	2	3	11	2	2	—	0	2	—	—
District of Columbia	—	0	0	—	—	—	1	6	—	—	—	0	1	—	—
Florida	2	0	84	2	—	46	107	203	46	48	—	3	9	—	2
Georgia	—	0	0	—	—	8	40	128	8	27	—	2	8	—	3
Maryland	—	6	13	—	—	8	18	42	8	8	1	1	3	1	2
North Carolina	—	0	0	—	—	—	30	251	—	22	—	2	11	—	—
South Carolina	N	0	0	N	N	2	26	70	2	7	—	0	4	—	—
Virginia	—	11	27	—	8	6	20	52	6	18	5	3	9	5	3
West Virginia	—	0	30	—	—	—	0	18	—	—	—	0	1	—	—
<b>E.S. Central</b>	—	3	11	—	—	14	64	190	14	45	1	5	18	1	5
Alabama	—	2	7	—	—	7	20	70	7	20	1	0	15	1	2
Kentucky	—	0	2	—	—	—	11	30	—	5	—	1	5	—	—
Mississippi	—	0	1	—	—	6	22	66	6	8	—	0	4	—	—
Tennessee	—	1	6	—	—	1	16	52	1	12	—	1	11	—	3
<b>W.S. Central</b>	—	0	21	—	—	6	120	250	6	23	—	9	33	—	—
Arkansas	—	0	10	—	—	2	13	52	2	2	—	1	6	—	—
Louisiana	—	0	0	—	—	1	14	44	1	13	—	0	1	—	—
Oklahoma	—	0	21	—	—	1	12	31	1	1	—	1	10	—	—
Texas	—	0	0	—	—	2	81	156	2	7	—	6	33	—	—
<b>Mountain</b>	—	0	4	—	—	10	46	93	10	42	1	10	26	1	6
Arizona	N	0	0	N	N	5	15	34	5	11	—	1	7	—	1
Colorado	—	0	0	—	—	—	10	24	—	14	—	2	7	—	3
Idaho	—	0	1	—	—	—	3	8	—	3	1	2	8	1	2
Montana	N	0	0	N	N	3	2	10	3	—	—	0	5	—	—
Nevada	—	0	2	—	—	—	3	7	—	5	—	0	7	—	—
New Mexico	—	0	2	—	—	1	6	22	1	5	—	1	3	—	—
Utah	—	0	2	—	—	1	6	15	1	4	—	1	7	—	—
Wyoming	—	0	0	—	—	—	1	9	—	—	—	0	7	—	—
<b>Pacific</b>	—	4	13	—	—	26	91	175	26	62	—	15	34	—	15
Alaska	—	0	2	—	—	—	1	6	—	1	—	0	1	—	—
California	—	3	12	—	—	22	73	142	22	46	—	9	19	—	13
Hawaii	—	0	0	—	—	2	7	14	2	9	—	0	2	—	—
Oregon	—	0	1	—	—	2	5	12	2	6	—	1	11	—	2
Washington	—	0	0	—	—	—	9	30	—	—	—	2	13	—	—
<b>Territories</b>															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	3	—	—	—	0	0	—	—
Puerto Rico	—	0	6	—	—	—	3	12	—	1	—	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 2011 and 2012 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](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.

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 7, 2012, and January 8, 2011 (1st week)\*

Reporting area	Shigellosis					Spotted Fever Rickettsiosis (including RMSF) <sup>†</sup>									
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Confirmed					Probable				
		Med	Max			Current week	Med	Max	Cum 2012	Cum 2011	Current week	Med	Max	Cum 2012	Cum 2011
<b>United States</b>	81	230	342	81	146	1	3	15	1	1	5	26	140	5	7
<b>New England</b>	—	5	21	—	2	—	0	1	—	—	—	0	1	—	—
Connecticut	—	0	4	—	1	—	0	0	—	—	—	0	0	—	—
Maine	—	0	8	—	—	—	0	0	—	—	—	0	1	—	—
Massachusetts	—	3	20	—	1	—	0	0	—	—	—	0	1	—	—
New Hampshire	—	0	1	—	—	—	0	1	—	—	—	0	1	—	—
Rhode Island	—	0	3	—	—	—	0	0	—	—	—	0	1	—	—
Vermont	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
<b>Mid. Atlantic</b>	4	14	48	4	11	—	0	2	—	—	1	1	4	1	1
New Jersey	—	0	4	—	—	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	2	5	28	2	—	—	0	1	—	—	—	0	2	—	—
New York City	1	7	28	1	7	—	0	0	—	—	—	0	3	—	1
Pennsylvania	1	2	6	1	4	—	0	2	—	—	1	0	3	1	—
<b>E.N. Central</b>	25	12	40	25	12	1	0	2	1	—	—	2	10	—	1
Illinois	—	4	16	—	4	—	0	1	—	—	—	1	4	—	1
Indiana	—	1	4	—	1	1	0	1	1	—	—	0	4	—	—
Michigan	—	3	11	—	3	—	0	1	—	—	—	0	1	—	—
Ohio	25	5	27	25	4	—	0	2	—	—	—	0	2	—	—
Wisconsin	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
<b>W.N. Central</b>	4	5	18	4	14	—	0	4	—	—	1	4	29	1	—
Iowa	—	0	3	—	—	—	0	0	—	—	—	0	2	—	—
Kansas	—	1	5	—	3	—	0	0	—	—	—	0	0	—	—
Minnesota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Missouri	4	3	14	4	11	—	0	3	—	—	1	4	29	1	—
Nebraska	—	0	2	—	—	—	0	3	—	—	—	0	1	—	—
North Dakota	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
South Dakota	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
<b>S. Atlantic</b>	19	73	134	19	44	—	1	8	—	—	3	6	56	3	1
Delaware	—	0	2	—	—	—	0	1	—	—	—	0	4	—	—
District of Columbia	—	0	5	—	—	—	0	1	—	—	—	0	1	—	—
Florida	18	50	98	18	31	—	0	1	—	—	2	0	2	2	—
Georgia	1	10	24	1	8	—	1	6	—	—	—	0	0	—	—
Maryland	—	1	7	—	1	—	0	1	—	—	—	0	2	—	—
North Carolina	—	3	19	—	1	—	0	4	—	—	—	0	49	—	1
South Carolina	—	1	54	—	1	—	0	2	—	—	—	0	2	—	—
Virginia	—	2	7	—	2	—	0	1	—	—	1	3	14	1	—
West Virginia	—	0	2	—	—	—	0	0	—	—	—	0	1	—	—
<b>E.S. Central</b>	18	17	47	18	16	—	0	2	—	—	—	4	25	—	1
Alabama	9	5	21	9	10	—	0	1	—	—	—	1	8	—	—
Kentucky	9	3	22	9	1	—	0	1	—	—	—	0	2	—	—
Mississippi	—	4	24	—	1	—	0	0	—	—	—	0	2	—	—
Tennessee	—	4	11	—	4	—	0	2	—	—	—	3	20	—	1
<b>W.S. Central</b>	—	54	103	—	13	—	0	3	—	—	—	2	51	—	—
Arkansas	—	2	7	—	—	—	0	3	—	—	—	1	51	—	—
Louisiana	—	4	21	—	5	—	0	0	—	—	—	0	2	—	—
Oklahoma	—	2	28	—	—	—	0	1	—	—	—	0	25	—	—
Texas	—	41	98	—	8	—	0	1	—	—	—	0	4	—	—
<b>Mountain</b>	1	14	42	1	17	—	0	2	—	1	—	1	7	—	3
Arizona	1	5	27	1	8	—	0	2	—	1	—	0	6	—	3
Colorado	—	1	8	—	7	—	0	0	—	—	—	0	1	—	—
Idaho	—	0	3	—	1	—	0	0	—	—	—	0	1	—	—
Montana	—	1	15	—	—	—	0	0	—	—	—	0	1	—	—
Nevada	—	0	4	—	—	—	0	0	—	—	—	0	1	—	—
New Mexico	—	2	7	—	1	—	0	0	—	—	—	0	0	—	—
Utah	—	1	4	—	—	—	0	0	—	—	—	0	1	—	—
Wyoming	—	0	1	—	—	—	0	0	—	—	—	0	2	—	—
<b>Pacific</b>	10	20	44	10	17	—	0	2	—	—	—	0	1	—	—
Alaska	1	0	2	1	—	N	0	0	N	N	N	0	0	N	N
California	9	16	41	9	15	—	0	2	—	—	—	0	1	—	—
Hawaii	—	1	3	—	—	N	0	0	N	N	N	0	0	N	N
Oregon	—	1	4	—	2	—	0	0	—	—	—	0	0	—	—
Washington	—	1	9	—	—	—	0	0	—	—	—	0	0	—	—
<b>Territories</b>															
American Samoa	—	0	1	—	—	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	1	—	—	N	0	0	N	N	N	0	0	N	N
Puerto Rico	—	0	0	—	—	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 2011 and 2012 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](http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf). Data for TB are displayed in Table IV, which appears quarterly.

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



Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 7, 2012, and January 8, 2011 (1st week)\*

Reporting area	<i>Streptococcus pneumoniae</i> , <sup>†</sup> invasive disease										Syphilis, primary and secondary				
	All ages				Age <5										
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Current week	Previous 52 weeks		Cum 2012	Cum 2011
	Med	Max				Med	Max				Med	Max			
<b>United States</b>	161	247	464	161	437	11	20	41	11	21	25	263	316	25	240
<b>New England</b>	6	12	31	6	25	—	1	4	—	—	—	7	21	—	13
Connecticut	—	5	20	—	15	—	0	2	—	—	—	0	12	—	—
Maine	4	2	8	4	1	—	0	1	—	—	—	0	2	—	1
Massachusetts	—	0	3	—	1	—	0	2	—	—	—	5	10	—	9
New Hampshire	—	1	8	—	4	—	0	1	—	—	—	0	3	—	—
Rhode Island	—	1	6	—	4	—	0	1	—	—	—	0	7	—	3
Vermont	2	1	6	2	—	—	0	2	—	—	—	0	2	—	—
<b>Mid. Atlantic</b>	14	15	47	14	34	—	1	9	—	—	3	30	53	3	41
New Jersey	2	0	6	2	—	—	0	0	—	—	—	4	13	—	3
New York (Upstate)	5	1	30	5	1	—	1	6	—	—	1	4	9	1	3
New York City	7	12	33	7	33	—	0	9	—	—	—	14	30	—	30
Pennsylvania	N	0	0	N	N	N	0	0	N	N	2	6	16	2	5
<b>E.N. Central</b>	53	61	123	53	100	3	3	10	3	3	—	30	47	—	27
Illinois	N	0	0	N	N	—	0	0	—	—	—	11	24	—	14
Indiana	—	14	36	—	23	—	1	4	—	1	—	3	8	—	3
Michigan	6	13	26	6	22	—	0	3	—	1	—	5	12	—	7
Ohio	41	27	44	41	44	3	2	7	3	1	—	8	17	—	3
Wisconsin	6	8	24	6	11	—	0	3	—	—	—	1	5	—	—
<b>W.N. Central</b>	5	2	28	5	4	—	0	2	—	1	—	6	13	—	9
Iowa	N	0	0	N	N	N	0	0	N	N	—	0	3	—	—
Kansas	N	0	0	N	N	N	0	0	N	N	—	0	4	—	—
Minnesota	—	0	0	—	—	—	0	0	—	—	—	2	8	—	6
Missouri	N	0	0	N	N	—	0	0	—	—	—	2	6	—	3
Nebraska	5	2	9	5	4	—	0	2	—	1	—	0	2	—	—
North Dakota	—	0	25	—	—	—	0	1	—	—	—	0	1	—	—
South Dakota	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
<b>S. Atlantic</b>	58	65	157	58	145	4	6	15	4	8	18	68	100	18	55
Delaware	1	1	5	1	3	—	0	0	—	—	—	0	4	—	—
District of Columbia	—	1	5	—	—	—	0	1	—	—	2	3	8	2	3
Florida	24	21	64	24	64	2	3	8	2	3	1	23	36	1	28
Georgia	14	19	44	14	44	2	2	5	2	3	4	14	31	4	4
Maryland	9	9	33	9	25	—	1	3	—	2	—	8	20	—	3
North Carolina	N	0	0	N	N	N	0	0	N	N	9	8	21	9	9
South Carolina	10	8	25	10	9	—	0	3	—	—	—	4	11	—	4
Virginia	N	0	0	N	N	—	0	0	—	—	2	4	12	2	4
West Virginia	—	0	48	—	—	—	0	4	—	—	—	0	1	—	—
<b>E.S. Central</b>	10	22	45	10	44	2	2	6	2	6	1	13	29	1	10
Alabama	N	0	0	N	N	N	0	0	N	N	—	4	11	—	4
Kentucky	—	4	12	—	11	—	0	3	—	3	—	2	8	—	—
Mississippi	N	0	0	N	N	—	0	0	—	—	—	3	14	—	—
Tennessee	10	18	37	10	33	2	1	4	2	3	1	5	11	1	6
<b>W.S. Central</b>	3	31	79	3	14	—	3	10	—	—	2	36	50	2	31
Arkansas	1	4	14	1	1	—	0	4	—	—	—	4	10	—	2
Louisiana	1	2	11	1	8	—	0	2	—	—	2	7	25	2	—
Oklahoma	N	0	0	N	N	—	0	0	—	—	—	1	6	—	—
Texas	1	24	75	1	5	—	2	9	—	—	—	23	37	—	29
<b>Mountain</b>	11	26	72	11	67	1	2	8	1	3	—	12	20	—	10
Arizona	10	11	45	10	33	—	1	5	—	1	—	4	10	—	4
Colorado	—	8	23	—	21	—	0	4	—	—	—	2	6	—	1
Idaho	N	0	0	N	N	—	0	0	—	—	—	0	4	—	—
Montana	N	0	0	N	N	N	0	0	N	N	—	0	1	—	1
Nevada	N	0	0	N	N	N	0	0	N	N	—	2	9	—	4
New Mexico	1	4	12	1	6	1	0	2	1	—	—	1	4	—	—
Utah	—	1	8	—	6	—	0	3	—	2	—	0	2	—	—
Wyoming	—	0	3	—	1	—	0	0	—	—	—	0	0	—	—
<b>Pacific</b>	1	3	11	1	4	1	0	2	1	—	1	53	74	1	44
Alaska	1	2	11	1	4	1	0	1	1	—	—	0	2	—	—
California	N	0	0	N	N	N	0	0	N	N	—	42	62	—	39
Hawaii	—	0	1	—	—	—	0	1	—	—	—	0	3	—	—
Oregon	N	0	0	N	N	N	0	0	N	N	—	4	14	—	1
Washington	N	0	0	N	N	N	0	0	N	N	1	5	11	1	4
<b>Territories</b>															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	—	4	14	—	2
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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† 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).

Morbidity and Mortality Weekly Report

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 7, 2012, and January 8, 2011 (1st week)\*

Reporting area	Varicella (chickenpox)					West Nile virus disease <sup>†</sup>									
	Current week	Previous 52 weeks		Cum 2012	Cum 2011	Neuroinvasive					Nonneuroinvasive <sup>§</sup>				
		Med	Max			Current week	Previous 52 weeks	Cum 2012	Cum 2011	Current week	Previous 52 weeks	Cum 2012	Cum 2011		
<b>United States</b>	77	253	330	77	258	—	0	59	—	—	—	0	31	—	—
<b>New England</b>	4	23	50	4	39	—	0	3	—	—	—	0	1	—	—
Connecticut	—	5	16	—	7	—	0	2	—	—	—	0	1	—	—
Maine	—	4	11	—	9	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	9	18	—	11	—	0	2	—	—	—	0	1	—	—
New Hampshire	—	1	7	—	4	—	0	0	—	—	—	0	0	—	—
Rhode Island	—	0	6	—	1	—	0	1	—	—	—	0	0	—	—
Vermont	4	1	9	4	7	—	0	1	—	—	—	0	0	—	—
<b>Mid. Atlantic</b>	21	19	42	21	22	—	0	11	—	—	—	0	6	—	—
New Jersey	6	0	22	6	—	—	0	1	—	—	—	0	2	—	—
New York (Upstate)	N	0	0	N	N	—	0	5	—	—	—	0	4	—	—
New York City	—	0	0	—	—	—	0	4	—	—	—	0	1	—	—
Pennsylvania	15	19	39	15	22	—	0	2	—	—	—	0	1	—	—
<b>E.N. Central</b>	34	66	110	34	68	—	0	13	—	—	—	0	6	—	—
Illinois	4	17	33	4	14	—	0	6	—	—	—	0	5	—	—
Indiana	9	5	20	9	6	—	0	2	—	—	—	0	1	—	—
Michigan	2	19	44	2	23	—	0	7	—	—	—	0	1	—	—
Ohio	19	21	58	19	25	—	0	3	—	—	—	0	3	—	—
Wisconsin	—	0	1	—	—	—	0	1	—	—	—	0	1	—	—
<b>W.N. Central</b>	1	12	34	1	34	—	0	9	—	—	—	0	7	—	—
Iowa	N	0	0	N	N	—	0	2	—	—	—	0	2	—	—
Kansas	—	7	21	—	11	—	0	1	—	—	—	0	0	—	—
Minnesota	—	0	1	—	—	—	0	1	—	—	—	0	1	—	—
Missouri	—	3	23	—	23	—	0	2	—	—	—	0	2	—	—
Nebraska	—	0	2	—	—	—	0	4	—	—	—	0	3	—	—
North Dakota	—	0	7	—	—	—	0	1	—	—	—	0	1	—	—
South Dakota	1	1	6	1	—	—	0	0	—	—	—	0	1	—	—
<b>S. Atlantic</b>	8	32	66	8	16	—	0	10	—	—	—	0	5	—	—
Delaware	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	2	—	—	—	0	3	—	—	—	0	3	—	—
Florida	8	17	42	8	4	—	0	5	—	—	—	0	2	—	—
Georgia	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
Maryland	N	0	0	N	N	—	0	5	—	—	—	0	3	—	—
North Carolina	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
South Carolina	—	0	9	—	—	—	0	0	—	—	—	0	0	—	—
Virginia	—	8	26	—	5	—	0	2	—	—	—	0	0	—	—
West Virginia	—	6	32	—	7	—	0	1	—	—	—	0	0	—	—
<b>E.S. Central</b>	2	5	15	2	10	—	0	11	—	—	—	0	5	—	—
Alabama	2	5	14	2	9	—	0	2	—	—	—	0	0	—	—
Kentucky	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
Mississippi	—	0	2	—	1	—	0	5	—	—	—	0	4	—	—
Tennessee	N	0	0	N	N	—	0	3	—	—	—	0	1	—	—
<b>W.S. Central</b>	—	50	136	—	12	—	0	4	—	—	—	0	3	—	—
Arkansas	—	5	20	—	1	—	0	1	—	—	—	0	0	—	—
Louisiana	—	1	6	—	2	—	0	1	—	—	—	0	2	—	—
Oklahoma	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Texas	—	43	131	—	9	—	0	3	—	—	—	0	3	—	—
<b>Mountain</b>	7	18	65	7	52	—	0	10	—	—	—	0	5	—	—
Arizona	—	4	50	—	13	—	0	6	—	—	—	0	4	—	—
Colorado	7	4	31	7	6	—	0	2	—	—	—	0	2	—	—
Idaho	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Montana	—	2	28	—	28	—	0	1	—	—	—	0	0	—	—
Nevada	N	0	0	N	N	—	0	4	—	—	—	0	2	—	—
New Mexico	—	1	4	—	2	—	0	1	—	—	—	0	0	—	—
Utah	—	3	26	—	3	—	0	1	—	—	—	0	1	—	—
Wyoming	—	0	1	—	—	—	0	1	—	—	—	0	1	—	—
<b>Pacific</b>	—	3	9	—	5	—	0	18	—	—	—	0	7	—	—
Alaska	—	1	4	—	3	—	0	0	—	—	—	0	0	—	—
California	—	0	4	—	1	—	0	18	—	—	—	0	7	—	—
Hawaii	—	1	4	—	1	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
Washington	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
<b>Territories</b>															
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	2	4	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	3	10	—	—	—	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 2011 and 2012 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](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). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.

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

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TABLE III. Deaths in 122 U.S. cities,\* week ending January 7, 2012 (1st week)

Reporting area	All causes, by age (years)						P&I†	Reporting area (Continued)	All causes, by age (years)						P&I†
	All Ages	≥65	45-64	25-44	1-24	<1			Total	All Ages	≥65	45-64	25-44	1-24	
<b>New England</b>	501	374	98	18	5	6	46	<b>S. Atlantic</b>	1,040	674	253	60	20	22	68
Boston, MA	137	95	31	3	5	3	10	Atlanta, GA	140	81	40	12	4	3	10
Bridgeport, CT	28	21	5	1	—	1	4	Baltimore, MD	134	80	35	13	3	2	8
Cambridge, MA	16	15	—	1	—	—	2	Charlotte, NC	100	71	19	7	—	3	4
Fall River, MA	23	18	5	—	—	—	2	Jacksonville, FL	13	7	4	2	—	—	2
Hartford, CT	32	25	7	—	—	—	1	Miami, FL	94	60	25	4	3	2	4
Lowell, MA	25	21	4	—	—	—	—	Norfolk, VA	53	30	14	2	5	2	4
Lynn, MA	6	3	3	—	—	—	1	Richmond, VA	68	43	18	5	2	—	6
New Bedford, MA	34	24	5	4	—	1	3	Savannah, GA	66	49	12	3	—	2	6
New Haven, CT	19	12	7	—	—	—	4	St. Petersburg, FL	49	37	2	—	—	—	3
Providence, RI	64	51	9	3	—	1	3	Tampa, FL	199	141	45	9	1	3	14
Somerville, MA	—	—	—	—	—	—	—	Washington, D.C.	109	65	34	3	2	5	6
Springfield, MA	32	23	4	5	—	—	3	Wilmington, DE	15	10	5	—	—	—	1
Waterbury, CT	26	22	4	—	—	—	1	<b>E.S. Central</b>	798	537	200	42	8	11	76
Worcester, MA	59	44	14	1	—	—	12	Birmingham, AL	155	97	45	10	1	2	18
<b>Mid. Atlantic</b>	1,854	1,301	406	94	34	19	83	Chattanooga, TN	72	50	19	2	1	—	6
Albany, NY	54	37	11	4	1	1	1	Knoxville, TN	88	67	19	2	—	—	15
Allentown, PA	16	12	4	—	—	—	1	Lexington, KY	77	48	21	4	—	4	5
Buffalo, NY	90	65	20	4	—	1	9	Memphis, TN	151	99	38	9	2	3	20
Camden, NJ	26	9	12	2	2	1	3	Mobile, AL	79	57	14	5	2	1	2
Elizabeth, NJ	7	4	3	—	—	—	—	Montgomery, AL	41	31	9	1	—	—	5
Erie, PA	48	33	11	4	—	—	2	Nashville, TN	135	88	35	9	2	1	5
Jersey City, NJ	27	18	8	—	1	—	3	<b>W.S. Central</b>	1,224	818	260	86	40	20	80
New York City, NY	1,074	777	222	49	15	11	34	Austin, TX	89	57	20	8	3	1	11
Newark, NJ	26	8	14	1	3	—	—	Baton Rouge, LA	55	37	13	2	3	—	—
Paterson, NJ	21	10	9	2	—	—	—	Corpus Christi, TX	69	48	13	7	1	—	7
Philadelphia, PA	111	66	29	10	4	2	3	Dallas, TX	234	140	63	18	7	6	13
Pittsburgh, PA <sup>§</sup>	27	19	7	—	1	—	1	El Paso, TX	131	95	25	6	2	3	2
Reading, PA	29	24	2	3	—	—	5	Fort Worth, TX	U	U	U	U	U	U	U
Rochester, NY	75	46	20	5	1	3	5	Houston, TX	92	60	7	9	10	6	3
Schenectady, NY	24	20	3	1	—	—	2	Little Rock, AR	70	43	14	5	5	3	3
Scranton, PA	34	26	7	—	1	—	1	New Orleans, LA	U	U	U	U	U	U	U
Syracuse, NY	97	81	14	—	2	—	10	San Antonio, TX	303	209	64	22	8	—	30
Trenton, NJ	37	23	6	5	3	—	1	Shreveport, LA	69	52	13	2	1	1	3
Utica, NY	18	14	3	1	—	—	2	Tulsa, OK	112	77	28	7	—	—	8
Yonkers, NY	13	9	1	3	—	—	—	<b>Mountain</b>	1,132	800	229	59	26	16	67
<b>E.N. Central</b>	1,946	1,325	440	110	37	31	140	Albuquerque, NM	115	82	24	6	2	1	5
Akron, OH	50	37	12	—	—	1	5	Boise, ID	57	44	9	3	—	1	7
Canton, OH	40	31	7	1	—	1	6	Colorado Springs, CO	92	66	15	4	4	3	2
Chicago, IL	241	155	65	12	8	1	19	Denver, CO	82	51	26	3	2	—	9
Cincinnati, OH	80	53	18	5	2	2	6	Las Vegas, NV	269	188	63	12	5	1	15
Cleveland, OH	247	176	57	7	4	3	22	Ogden, UT	30	22	2	4	2	—	1
Columbus, OH	91	64	17	5	1	4	6	Phoenix, AZ	177	117	37	13	6	4	8
Dayton, OH	132	103	20	6	1	2	10	Pueblo, CO	23	19	3	1	—	—	—
Detroit, MI	241	135	70	27	5	4	6	Salt Lake City, UT	121	84	22	7	4	4	10
Evansville, IN	56	42	12	2	—	—	8	Tucson, AZ	166	127	28	6	1	2	10
Fort Wayne, IN	84	57	18	3	3	3	6	<b>Pacific</b>	1,710	1,269	326	68	22	25	167
Gary, IN	8	3	4	—	—	1	—	Berkeley, CA	U	U	U	U	U	U	U
Grand Rapids, MI	66	49	13	3	—	1	4	Fresno, CA	130	97	30	3	—	—	14
Indianapolis, IN	191	113	51	16	8	3	17	Glendale, CA	29	22	4	1	1	1	3
Lansing, MI	49	33	12	2	1	1	2	Honolulu, HI	70	58	6	6	—	—	3
Milwaukee, WI	83	58	17	4	1	3	3	Long Beach, CA	64	54	7	2	—	1	8
Peoria, IL	49	38	8	1	2	—	3	Los Angeles, CA	263	178	58	15	7	5	26
Rockford, IL	53	32	12	8	1	—	2	Pasadena, CA	35	26	7	2	—	—	5
South Bend, IN	32	27	4	1	—	—	6	Portland, OR	106	75	22	4	4	1	9
Toledo, OH	86	67	13	5	—	1	4	Sacramento, CA	224	174	37	7	1	5	30
Youngstown, OH	67	52	10	2	—	—	5	San Diego, CA	184	135	37	9	1	2	15
<b>W.N. Central</b>	603	402	142	29	14	15	54	San Francisco, CA	116	85	27	4	—	—	16
Des Moines, IA	—	—	—	—	—	—	—	San Jose, CA	189	152	25	6	—	6	18
Duluth, MN	45	36	6	2	1	—	4	Santa Cruz, CA	30	22	6	—	2	—	3
Kansas City, KS	12	6	3	2	1	—	1	Seattle, WA	110	73	25	5	5	2	6
Kansas City, MO	52	30	14	4	2	2	9	Spokane, WA	66	48	14	2	—	2	4
Lincoln, NE	46	37	8	—	—	1	3	Tacoma, WA	94	70	21	2	1	—	7
Minneapolis, MN	88	65	20	—	—	3	5	<b>Total¶</b>	<b>10,808</b>	<b>7,500</b>	<b>2,354</b>	<b>566</b>	<b>206</b>	<b>165</b>	<b>781</b>
Omaha, NE	102	77	21	1	2	1	9								
St. Louis, MO	127	65	35	14	7	5	6								
St. Paul, MN	61	38	19	1	1	2	9								
Wichita, KS	70	48	16	5	—	1	8								

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.

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TABLE IV. Provisional cases of selected notifiable disease, United States, 4th quarter ending December 31, 2011 (52nd week)

Reporting area	Tuberculosis*				
	Current quarter	Previous 4 quarters		Cum 2012	Cum 2011
		Min	Max		
<b>United States</b>	1,973	1,973	2,571	8,860	11,025
<b>New England</b>	64	60	81	281	352
Connecticut	—	0	24	40	80
Maine	1	1	3	8	8
Massachusetts	52	41	52	191	223
New Hampshire	1	1	5	10	10
Rhode Island	5	5	8	24	26
Vermont	5	0	5	8	5
<b>Mid. Atlantic</b>	333	305	370	1,357	1,536
New Jersey	89	47	94	320	405
New York (Upstate)	63	43	63	200	243
New York City	154	151	168	625	647
Pennsylvania	27	27	63	212	241
<b>E.N. Central</b>	138	138	205	726	873
Illinois	52	52	97	324	367
Indiana	28	17	28	100	90
Michigan	15	15	39	113	171
Ohio	26	26	35	120	190
Wisconsin	17	10	23	69	55
<b>W.N. Central</b>	44	44	68	215	320
Iowa	—	0	9	21	47
Kansas	—	0	12	19	46
Minnesota	42	19	42	129	135
Missouri	2	2	7	21	38
Nebraska	—	0	6	15	27
North Dakota	—	0	0	—	12
South Dakota	—	0	5	10	15
<b>S. Atlantic</b>	405	405	522	1,828	2,261
Delaware	6	4	6	20	21
District of Columbia	13	11	17	53	43
Florida	126	126	191	663	834
Georgia	77	77	95	338	412
Maryland	62	49	62	230	220
North Carolina	10	10	76	180	295
South Carolina	44	16	44	124	153
Virginia	64	21	66	208	268
West Virginia	3	2	4	12	15
<b>E.S. Central</b>	89	89	135	434	545
Alabama	41	30	46	161	146
Kentucky	11	4	28	48	90
Mississippi	5	5	23	70	116
Tennessee	32	32	44	155	193
<b>W.S. Central</b>	166	166	347	1,083	1,747
Arkansas	29	11	29	82	78
Louisiana	71	13	71	157	200
Oklahoma	10	10	27	74	84
Texas	56	56	269	770	1,385
<b>Mountain</b>	97	54	174	433	565
Arizona	52	6	88	194	282
Colorado	20	10	20	68	71
Idaho	5	1	5	11	15
Montana	—	0	4	6	6
Nevada	4	4	39	75	114
New Mexico	13	9	13	45	50
Utah	3	3	12	31	20
Wyoming	—	0	2	3	7
<b>Pacific</b>	637	553	679	2,503	2,826
Alaska	16	11	16	55	56
California	528	446	553	2,065	2,327
Hawaii	34	25	34	117	115
Oregon	14	13	25	69	87
Washington	45	45	59	197	241
<b>Territories</b>					
American Samoa	—	0	1	1	3
C.N.M.I.	—	0	10	17	32
Guam	—	0	0	—	101
Puerto Rico	8	8	13	44	80
U.S. Virgin Islands	—	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 2011 and 2012 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](http://www.cdc.gov/osels/ph_surveillance/nndss/phs/files/ProvisionalNationa%20NotifiableDiseasesSurveillanceData20100927.pdf). Data for TB are displayed quarterly.

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