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Idiopathic Granulomatous Mastitis in Hispanic Women — Indiana, 2006–2008

Idiopathic granulomatous mastitis (IGM) is a rare inflammatory breast lesion of unknown etiology that occurs in women of childbearing age; only a few hundred cases have been reported worldwide (*1,2*). A breast cancer mimic, IGM also is diagnosed by breast biopsy (*3*). On December 12, 2008, a physician in Indianapolis, Indiana, reported a cluster of seven IGM diagnoses in multigravid Hispanic women, an unusually high number. To evaluate the etiology of the breast masses and characterize associated epidemiologic and clinical features, the Indiana State Department of Health and CDC conducted a multidisciplinary investigation. This report describes the results of that investigation. A total of nine cases of IGM were confirmed during 2006–2008 in Indianapolis, for an annual prevalence of IGM of 2.4 per 100,000 women aged 20–40 years. The prevalence was 12 times higher among Hispanic women. Among IGM patients at the hospital, a median of 5 months elapsed between symptom onset and diagnostic biopsy. Histopathologic evaluations confirmed IGM. In a case-control study of all seven cases and 21 controls from the hospital, case-patients were significantly more likely than controls to have less than a sixth-grade education (odds ratio [OR] = 12.7), a positive tuberculin skin test (OR = undefined), or a medication allergy (OR = 15.0). No other risk factors were significantly associated with case status. Barriers to accessing health care, including low education level, resulted in delayed care for breast masses. Future research could provide more complete descriptions of the epidemiology and etiology of IGM.

The hospital is a university-associated, county medical center that emphasizes care of vulnerable populations.* Before this cluster, the reporting physician had never seen a case of IGM in 15 years of practice. All seven women had sought medical care for painful breast masses and received a diagnosis of IGM based on pathologic findings during biopsies to rule out malignancy. The masses were palpable (ranging from 1 × 1 cm to 6 × 4 cm in size) and unilateral in the left breast in six cases and bilateral in one case. All seven patients reported at least two pregnancies and had breastfed at least one of their children. Symptoms occurred a median of 34 months (range: 10–62 months) after last pregnancy and 26 months (range: 4–46 months) after cessation of breastfeeding. The median time between symptom onset and biopsy was 5 months (range: 3–6 months); the patients attributed the delays to barriers in accessing health care, including concerns about financial implications, occupational repercussions, and/or child care obligations. After symptom onset, case-patients missed or cancelled 23% of their appointments. One patient was deported before completing treatment.

* In 2009, 39% of patients treated at the hospital were uninsured, 32% were covered by Medicaid, and 18% were covered by Medicare. Since 1995, the hospital has operated a Hispanic Health Services office, including language interpretation and scheduling assistance, to serve a growing number of Hispanic immigrants. In 2008, a total of 31,450 women aged 20–40 years had at least one visit to the hospital system; 7,095 (23%) were Hispanic (Regenstrief Institute, Inc., unpublished data, 2009).

INSIDE

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All seven biopsy specimens were sent to CDC for additional histopathologic evaluation.[†] This testing confirmed IGM in all seven patients, each with noncaseating granulomas, acute and chronic inflammation, and absence of foreign body material in breast biopsy tissue. Eosinophilia was noted in specimens from five patients (Figure). Special stains revealed no evidence of mycobacteria, spirochetes, other bacteria, fungi, or trypanosomes. Immunohistochemistry (IHC) on the tissue specimens for mycobacteria and *Trypanosoma cruzi* were negative. IHC using polyclonal antibodies for *Corynebacterium diphtheriae* showed rare epithelial staining in four of seven cases, although this test has unknown specificity. However, polymerase chain reaction (PCR) assays on DNA extracts from the formalin-fixed tissues using broad-range panbacterial 16S rDNA primers were negative.

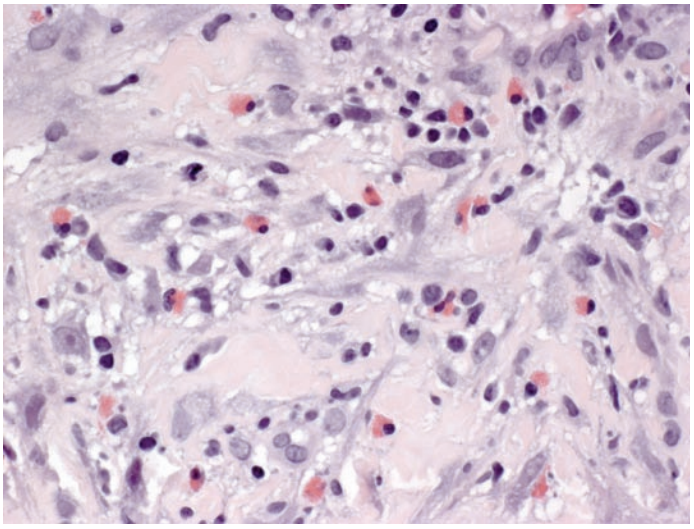
The seven case-patients reported no major commonalities in workplace or type of work; foods or products sent from abroad; vitamins, supplements, diet products, or local herbal medicines (*4*); personal hygiene and grooming products; fertility treatment history or contraception used; schools, churches, grocery stores, or laundromats attended; hobbies and recreational activities; breast trauma; or sexual practices involving the breasts. No patient reported animal exposure or bites, ingesting unpasteurized cheese or milk, tattooing or nipple piercing, or injections or cosmetic treatments of any kind. None currently used alcohol, tobacco, or other drugs.

At the time of interview in January 2008, two case-patients reported that their symptoms had resolved, and five reported ongoing relapses. After receiving a diagnosis of IGM, five patients had received short-duration antibiotics (7–14 days of a penicillin, cephalosporin, clindamycin, sulfonamide, and/or metronidazole). Three had received surgical incision and drainage procedures. None had received steroids. Of the seven, six had received a tuberculin skin test (TST) within 3 years of their IGM diagnosis, and five were positive (10–18 mm); at least four previously had received Bacille Calmette-Guerin (BCG) vaccination. Follow-up testing was nondiagnostic for active tuberculosis,[§] and no patient received antitubercular medications. Routine single-drug tuberculosis prophylaxis would have been recommended for the five case-patients with a positive TST result, but none attended their scheduled follow-up visits.

[†] Histopathologic evaluation included Gram stain, acid-fast bacillus (AFB) smear, Grocott's methenamine silver stain, Warthin-Starry stain, and immunohistochemistry testing.

[§] Five women received chest radiographs; all were clear except for one with a single calcified granuloma. Five had AFB smears, and four had AFB cultures performed on their biopsy specimens, all of which were negative.

FIGURE. Eosinophils observed* in breast biopsy tissue from a patient with idiopathic granulomatous mastitis — Indianapolis, Indiana, 2009



Photo/W-J Shieh
* With use of hematoxylin and eosin stain (original magnification x 40).

Case-Control Study

A case-control study was conducted to identify possible risk factors for disease. A case was defined by a diagnosis at the hospital of an idiopathic granulomatous reaction of the breast by tissue pathology during 2000–2008. Three unmatched controls per case were selected randomly from among all Hispanic women aged 20–40 years treated at the hospital's outpatient clinics during 2008. All case-patients agreed to be interviewed; 39 women were contacted to obtain 21 controls. CDC and Indiana State Department of Health clinicians abstracted data from inpatient and outpatient medical records to clarify demographics, comorbidities, and clinical courses. In-depth ethnographic interviews with cases and controls were conducted by a two-person CDC team of female, bilingual Spanish speakers using a standard questionnaire. Statistical testing was conducted using the Fisher's exact test, two-sided, with statistical significance defined as $p<0.05$. All interviews were conducted in Spanish.

Cases and controls were comparable on most demographic characteristics, including age, birthplace, years residing in the United States, and number of pregnancies and births (Table 1). Case-patients were significantly more likely than controls to report less than a sixth-grade education (OR = 12.7) (Table 2). Case-patients were also significantly more likely than controls to have a known allergy to medication such as sulfa-containing drugs (OR = 15.0) or a positive TST result (OR = undefined), although significantly fewer controls reported any TST result (OR = 12.0). Self-defined breastfeeding difficulties, including engorgement and pain, were common in both groups (OR = 2.1) and not significantly different.

TABLE 1. Characteristics of patients with idiopathic granulomatous mastitis and controls at a hospital — Indianapolis, Indiana, 2009

	Cases (N = 7)		Controls (N = 21)	
Characteristic	**No.**	**(%)**	**No.**	**(%)**
Birthplace				
United States	0	—	0	—
Mexico	6	(86)	19	(90)
Other	1	(14)	2	(10)
Language spoken				
English only	0	—	0	—
Spanish only	6	(86)	20	(95)
Spanish and English	1	(14)	1	(5)
No. of yrs of education				
0–5	4	(57)	2	(10)
6–12	1	(14)	16	(76)
>12	2	(29)	3	(14)
Ever breastfed	7	(100)	19	(90)
Contraceptive use				
Intrauterine device	1	(14)	3	(14)
Oral contraceptive pill	1	(14)	1	(5)
Tubal ligation	1	(14)	1	(5)
Other	1	(14)	6	(29)
None	3	(43)	11	(52)
Median age in yrs (range)	32 (26–35)		29 (22–37)	
Median no. of yrs in United States (range)	7 (2–12)		8 (2–20)	
Median no. of pregnancies (range)	3 (2–4)		3 (1–6)	
Median no. of live births (range)	2 (1–3)		3 (1–6)	

Prevalence of IGM in Indianapolis

The Hispanic population is the fastest growing demographic group in Indianapolis, increasing by an estimated 70% during 2000–2007.[¶] To estimate the overall rate of IGM in the city's population, investigators conducted citywide case finding using standard search terms ("breast" and "granuloma," or "breast" and "granulomatous," followed by individual record review to confirm idiopathic etiology) to query the specimen and diagnostic fields of all three pathology system databases servicing the major medical hospitals in Indianapolis. A total of nine confirmed case-patients from three hospitals, including all seven from the initial cluster, were diagnosed between January 1, 2006, and December 31, 2008; eight were Hispanic women and one was a non-Hispanic white woman. Prevalence was calculated using demographic estimates from the U.S. Census Bureau. The annual prevalence of IGM during 2006–2008 in

[¶] U.S. Census Bureau 2005–2007 American Community Survey 3-year estimates. Available at http://factfinder.census.gov.

TABLE 2. Selected risk factors for idiopathic granulomatous mastitis among cases and controls at a hospital — Indianapolis, Indiana, 2009

	Cases (N = 7)		Controls (N = 21)			
Risk factor	**No.**	**(%)**	**No.**	**(%)**	**Odds ratio (95% CI*)**	**p value**
Less than a 6th-grade education	4	(57)	2	(10)	12.7 (1.6–102.3)	0.02
Medication allergy	3	(43)	1	(5)	15.0 (1.2–183.6)	0.04
Tuberculin skin test result						
Positive result	5	(71)	0	—	Undefined	0.01
Any result	6	(86)	7	(33)	12.0 (1.2–120.1)	0.03
BCG† vaccination	4	(57)	17	81)	0.3 (0.05–2.0)	0.32
Multigravid	7	(100)	16	(76)	Undefined	0.29
Multiparous	6	(86)	15	(71)	2.4 (0.2–24.4)	0.64
Tobacco use						
Current smoker	0	—	0	—	Undefined	Undefined
Past smoker	1	(14)	1	(5)	3.3 (0.2-61.7)	0.44
Spanish-speaking only	6	(86)	20	(95)	0.3 (0.02–5.6)	0.44
Contraceptive use						
Current use	3	(43)	11	(52)	0.7 (0.1–3.8)	1.00
Past use	5	(71)	13	(62)	1.5 (0.2–9.9)	1.00
Breastfeeding difficulties	6	(86)	14	(74)§	2.1 (0.2–22.5)	1.00

* Confidence interval.
† Bacille Calmette-Guerin.
§ Of 19 controls who had ever breastfed.

Indianapolis was 2.4 per 100,000 women aged 20–40 years and 28.3 per 100,000 Hispanic women of the same age range.

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Editorial Note: This is the largest cluster of idiopathic granulomatous mastitis reported in the United States. This is also the first cluster reported among a particular ethnic group residing in the United States. Previous reports from other countries have suggested that IGM is more prevalent among nonwhite women worldwide (*3,5,6*). Based on this investigation, the prevalence of IGM in Indianapolis was 12 times higher among Hispanic women than among all women aged 20–40 years in the city. Like all IGM, the causes for the cases in this cluster are still unclear. The patients described in this report all had in common low education levels, difficulty communicating in English, and substantial barriers to accessing health care, resulting in long delays in receiving medical care for their breast symptoms. Granulomatous scarring of the breast might have resulted as an uncommon late manifestation of one or more separate disease processes (e.g., undiagnosed or untreated allergic reactions or infections) that might have been identifiable if treated earlier.

IGM is an exceedingly rare diagnosis with a variable clinical course and no clear etiology. It is a diagnosis of exclusion, made after malignancy and known granulomatous etiologies (e.g., mycobacterial infections, sarcoidosis, and fungal and other infections) have been ruled out (*5*). Although no evidence-based therapeutic guidelines exist, attempted treatment modalities have included antibiotics, steroids, surgery, and more recently, disease-modifying antirheumatic agents (e.g., methotrexate) (*7,8*). Although IGM is nonmalignant, illness can last years, even with treatment, and symptoms can be debilitating (*5,7,8*).

Previously published reports have proposed possible etiologic contributors to IGM including breastfeeding practices, breast trauma, smoking, oral contraceptive use, hypersensitivity reactions to breast secretions, or *Mycobacterium*, *Corynebacterium*, or other infections (*6–10*). The findings of the investigation described in this report did not clearly support any of these hypotheses. Case-patients were significantly more likely than controls to have a history of allergic reaction to medication, and eosinophilia was present in five of seven biopsies; these findings hint at an immune-mediated reaction, although no clear precipitator of an allergic or hypersensitivity reaction was identified. Because all seven patients were born and raised in countries where tuberculosis is endemic and BCG vaccination is routine, the five positive TST results, with no other signs or symptoms of active tubercular disease, probably represented past exposure to *Mycobacterium* species or residual reaction to

What is already known on this topic?

Idiopathic granulomatous mastitis (IGM) is an exceedingly rare inflammatory breast lesion of unknown etiology.

What is added by this report?

This is the largest cluster of IGM reported in the United States; all affected patients were young Hispanic women who experienced delays in receiving health care.

What are the implications for public health practice?

Future research could provide more complete information about the epidemiology and etiology of IGM, including possible contributions of ethnicity and socioeconomic status.

BCG, rather than active mycobacterial infection isolated to the breast; however this unlikely etiology could not be completely excluded because of the difficulty of laboratory confirmation of fastidious species. Next, the epithelial immunostaining pattern observed with polyclonal antibodies to *C. diphtheriae* suggests that bacteria cross-reacting to these antibodies contribute to pathogenesis (even though polyclonal antibody IHC results often are nonspecific); however, the negative PCR results with panbacterial 16S rDNA did not support this hypothesis. Finally, histopathologic examination found no convincing evidence of other acute infections.

The findings in this report are subject to at least three limitations. First, selecting all Hispanic controls limited the ability to assess the role of ethnicity. Second, higher participation rates among cases than controls (100% versus 54%) might have introduced bias, potentially masking actual differences. Finally, the power of this small study to identify risk factors associated with IGM was low.

Delayed care for breast masses is especially concerning among women with IGM, in part because of the need to rule out other disease promptly (e.g., breast cancer). When an idiopathic condition such as IGM is identified, a thorough clinical history and evaluation should be conducted to exclude known causes of granulomas. Future research could provide more complete information about the etiology and epidemiology of IGM, including possible contributions of ethnicity and socioeconomic status.

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Global Measles Mortality, 2000–2008

The United Nations (UN) Millennium Development Goals include a goal (MDG 4) to achieve a two thirds overall reduction of child deaths by 2015 compared with the 1990 level (*1*). Because many unvaccinated children die from measles, routine measles vaccination coverage is used as an indicator of progress toward this goal. In 2008, all UN member states reaffirmed their commitment to achieving a 90% reduction in measles mortality by 2010 compared with 2000, from an estimated 733,000 deaths in 2000 worldwide to ≤73,300 by 2010 (*2*). The World Health Organization (WHO) and UNICEF have identified 47 priority countries with the highest burden of measles for an accelerated strategy for measles mortality reduction (*3*). The strategy includes 1) achieving and maintaining high coverage (≥90% nationally and ≥80% in each district) with 2 doses of measles-containing vaccine (MCV) delivered through routine services or supplemental immunization activities (SIAs) (*4*), 2) implementing effective laboratory-supported disease surveillance, and 3) providing appropriate clinical management for measles cases. This report updates a previously published report (*5*), provides details on activities implemented during 2008, assesses progress toward

the 2010 goal, and evaluates the potential effects of decreased financial support. During 2000–2008, global measles mortality declined by 78%, from an estimated 733,000 deaths in 2000 to 164,000 in 2008, but the reduction in measles mortality has been leveling off since 2007. To reach the 2010 goal, India should fully implement the recommended strategies, and financial support for sustaining measles control in the other 46 priority countries should be secured.

Immunization Activities

WHO and UNICEF estimate routine first dose MCV coverage (MCV1) among children aged 1 year based on data from administrative records and surveys.* Coverage levels achieved during measles SIAs† are estimated by dividing the reported number of doses administered by the target population. According to WHO and UNICEF estimates, global routine MCV1 coverage increased to 83% in 2008, up 1% from 2007. Coverage varied substantially by geographic region (Table 1); coverage in the WHO African Region (AFR) and the South-East Asia Region (SEAR) in 2008 was still <80%. Of the 22.7 million infants and young children in 2008 who missed receiving their first dose of measles vaccine through routine immunization services,§ approximately 58% reside in six countries: India (7.63 million population), Nigeria (2.04 million), China (1.10 million), Democratic Republic of the Congo (0.84 million), Pakistan (0.75 million), and Ethiopia (0.74 million).

During 2000–2008, a second opportunity for measles immunization was provided in 46 of the 47 priority countries¶ (except India) to approximately 686 million children aged 9 months to ≤20 years through SIAs. In 2008, 16 (34%) of these countries conducted SIAs reaching approximately 109 million children and adolescents; in 13 countries, the measles SIAs were combined with at least one other child-survival intervention (Table 2).

Surveillance Activities

Effective surveillance for measles entails establishing case-based surveillance that includes investigation and laboratory testing of samples from all suspected measles cases.** In 2008, 173 (90%) of 193 WHO member states had implemented case-based surveillance, compared with 120 (63%) countries in 2004 (earlier data are not available). In 2008, the WHO measles and rubella laboratory network provided standardized and quality-controlled measles and rubella testing for 183 countries (95%), compared with 71 countries (37%) in 2000.

In 2008, 180 countries (94%) reported measles surveillance data to WHO and UNICEF through the annual Joint Reporting Form,†† compared with 169 countries (88%) in 2000. Worldwide, the number of reported measles cases declined 67%, from 852,937 in 2000 to 278,358 in 2008. All regions reported a decrease in reported measles cases; the highest percentage reductions occurred in the WHO Region of the Americas (AMR) (99.9%) and AFR (93%), and the lowest in SEAR (3.6%). However, large outbreaks occurred in several AFR countries during 2008, including the Democratic Republic of the Congo (12,461 reported cases), Ethiopia (3,511), Niger (1,317), and Nigeria (9,960).

Mortality Estimates for 2008

Despite progress in measles surveillance and reporting globally, measles incidence remains underreported, and complete and reliable surveillance data on the number of measles deaths are lacking for many countries, particularly those with the highest disease burden. To estimate measles mortality, WHO used 1) the published natural history model (*6*),§§ updated with the most recent population data (*7*), 2) WHO/UNICEF routine MCV1 coverage estimates and reported SIA coverage, and 3) measles incidence as reported to WHO.

In 2008, the majority (77%) of measles deaths occurred in SEAR (Table 1). During 2000–2008, global mortality attributed to measles declined by 78%, from an estimated 733,000 deaths in 2000 to 164,000 in 2008 (Table 1, Figure), but the decline leveled off during 2007–2008 (Figure). The regional

* Available at http://www.who.int/immunization_monitoring/routine/immunization_coverage/en/index4.html.

† SIAs generally are carried out using two approaches. An initial, nationwide catch-up SIA targets all children aged 9 months to 14 years; it has the goal of eliminating susceptibility to measles in the general population. Periodic follow-up SIAs then target all children born since the last SIA. Follow-up SIAs are generally conducted nationwide every 2–4 years and target children aged 9–59 months; their goal is to eliminate any measles susceptibility that has developed in recent birth cohorts and to protect children who did not respond to the first measles vaccination.

§ Measles immunization coverage is the percentage of children aged 1 year who have received at least 1 MCV dose in a given year. For member states recommending the first dose of MCV in children aged >12 months, the indicator is calculated as the proportion of children aged <24 months receiving 1 MCV dose

¶ Afghanistan, Angola, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Ghana, Guinea, Guinea-Bissau, India, Indonesia, Kenya, Lao People's Democratic Republic, Liberia, Madagascar, Mali, Mozambique, Myanmar, Nepal, Niger, Nigeria, Pakistan, Papua New Guinea, Rwanda, Senegal, Sierra Leone, Somalia, Sudan, Timor-Leste, Togo, Uganda, United Republic of Tanzania, Vietnam, Yemen, and Zambia.

** Available at http://www.who.int/vaccines-documents/docspdf01/www617.pdf.

†† Includes aggregated annual case counts as reported by member states. Additional information available at http://www.who.int/immunization_monitoring/routine/joint_reporting/en/index.html.

§§ This method applies age and country-specific case fatality ratios to measles incidence estimates, which are generated by 1) reported measles case data, if reliable, adjusted for reporting efficiency, or 2) a static natural history model driven by vaccination coverage data and rates of measles transmission among unvaccinated children.

TABLE 1. First-dose measles vaccination coverage through routine vaccination services among children aged 1 year* and estimated number of deaths from measles, by World Health Organization (WHO) region and among priority countries† — Worldwide, 2000 and 2008

WHO region/ priority countries	2000		2008		Estimated decrease in measles deaths 2000–2008		Proportion of estimated global decrease in measles deaths attributable to region/priority countries (%)
	First-dose measles vaccination coverage (%)	Estimated no. of measles deaths (uncertainty bounds)§	First-dose measles vaccination coverage (%)	Estimated no. of measles deaths (uncertainty bounds)§	No.	(%)	
Africa	56	371,000 (270,000–483,000)	73	28,000 (19,000–40,000)	343,000	(92)	60
Americas	92	<1,000¶	93	<1,000¶	—	—	—
Eastern Mediterranean	72	101,000 (75,000–131,000)	83	7,000 (5,000–10,000)	94,000	(93)	17
European	91	<1,000¶	94	<1,000¶	—	—	—
South-East Asia	61	234,000 (169,000–309,000)	75	126,000 (90,000–168,000)	108,000	(46)	19
Western Pacific	85	25,000 (17,000–35,000)	93	2,000 (1,000–4,000)	23,000	(92)	4
Total**	**72**	**733,000 (530,000–959,000)**	**83**	**164,000 (115,000–222,000)**	**569,000**	**(78)**	**—**
Priority countries	58	709,000 (517,000–925,000)	74	160,000 (112,000–215,000)	549,000	(81)	96

* Coverage estimates available at http://www.who.int/immunization_monitoring/routine/immunization_coverage/en/index4.html.
† Afghanistan, Angola, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Ghana, Guinea, Guinea-Bissau, India, Indonesia, Kenya, Lao People's Democratic Republic, Liberia, Madagascar, Mali, Mozambique, Myanmar, Nepal, Niger, Nigeria, Pakistan, Papua New Guinea, Rwanda, Senegal, Sierra Leone, Somalia, Sudan, Timor-Leste, Togo, Uganda, United Republic of Tanzania, Vietnam, Yemen, and Zambia.
§ Based on Monte Carlo simulations that account for uncertainty in key input variables (i.e., vaccination coverage and case-fatality ratios).
¶ Because the static natural history model is not sufficiently precise at low incidence levels, mortality rates below 1,000 deaths per year cannot be specified.
** Numbers and percentages in tables do not necessarily add to totals because of rounding.

percentage reduction in estimated measles mortality reached the 2010 target of 90% in the AFR, Eastern Mediterranean Region, and Western Pacific Region, which accounted for 60%, 17%, and 4% of the global reduction in measles mortality, respectively. In 2008, the 47 priority countries accounted for 160,000 (98%) of the estimated 164,000 measles deaths globally.

Cumulatively, an estimated 12.7 million measles deaths were averted during 2000–2008; of these, 8.4 (66%) million deaths were averted by maintaining routine immunization coverage at the 2000 level, and an additional 4.3 million (34%) deaths were averted as a result of measles SIAs and increases in routine vaccination coverage.

Global Mortality Projections, 2010–2013

Since 2008, the funding for measles control activities declined, causing concerns about the possible effect of reduced funding support on global measles mortality (*8*). During 2007–2009, total financial support to the Measles Initiative¶¶ decreased from $150 million annually to approximately $50 million (Measles Initiative, unpublished data, 2009). In addition, many priority countries have not been able to raise the expected 50% of operational costs for SIAs.

The natural history model (*6*) was used to project global measles mortality for the period 2010–2013. Two projections were considered. The first, a "worst case" projection, assumes that routine MCV1 coverage in the 47 priority countries remains at the 2008 levels during 2009–2013, and that none of these countries carry out follow-up SIAs during 2010–2013; assumptions for all other countries are that they continue to increase routine MCV1 coverage at current rates and conduct regular high-quality SIAs as required. The second, a "status quo" projection, assumes that SIAs will be conducted during 2010–2013 in 46 of the 47 priority countries (India will not implement an SIA during 2010–2013, the same as during 2000–2009), and that routine MCV1 coverage remains at the 2008 levels among countries with ≥90% coverage in 2008 and increases 1% per year among lower performing countries.

Results from these projections suggest that, under the worst case scenario, the annual number of measles deaths will rebound, resulting in approximately 1.7 million measles-related deaths during 2010–2013, including approximately 500,000 deaths in 2013 alone (Figure). Even if MCV1 coverage continues to increase at the current rate and if SIAs continue to be implemented in 46 of the 47 priority countries, as assumed

¶¶ Launched in 2001, the Measles Initiative is an international partnership committed to reducing measles deaths worldwide, and led by the American Red Cross, CDC, UNICEF, United Nations Foundation, and WHO. Additional information available at http://www.measlesinitiative.org.

TABLE 2. Measles supplementary immunization activities (SIAs) and other child-health interventions undertaken among World Health Organization (WHO)/UNICEF priority countries,* by WHO region, 2008

WHO region/country	Age group targeted	Extent of SIA	Children reached in targeted age group		Other interventions delivered§				
			No.	(%)†	Oral polio vaccine	Vitamin A	Insecticide-treated bednets	Deworming medication	Tetanus toxoid vaccination
African									
Benin	9–59 mos	National	1,272,621	(102)		Yes		Yes	
Central African Republic	9–59 mos	National	683,302	(102)		Yes	Yes	Yes	
Côte d'Ivoire	9–59 mos	National	3,082,438	(95)		Yes	Yes	Yes	
Democratic Republic of the Congo	9–59 mos	Rollover-national¶	2,811,092	(99)	Yes	Yes	Yes	Yes	
Ethiopia	6–59 mos	National	10,848,474	(92)	Yes	Yes		Yes	Yes
Mozambique	9–59 mos	National	3,342,280	(103)		Yes	Yes	Yes	
Niger	9–59 mos	National	2,942,498	(100)				Yes	
Nigeria	9–59 mos	National	28,363,479	(112)	Yes	Yes	Yes		
Togo	9–59 mos	National	906,692	(98)		Yes		Yes	
United Republic of Tanzania	6 mos–10 yrs	National	10,826,519	(86)	Yes	Yes	Yes	Yes	
Eastern Mediterranean									
Djibouti	9 mos–15 yrs	National	184,638	(86)					
Pakistan	9 mos–13 yrs	Rollover-national	35,315,375	(103)					
Sudan	9–59 mos	Rollover-national	3,021,141	(96)		Yes	Yes	Yes	Yes
South-East Asia									
Nepal	9 mos–5 yrs	National	909,421	(94)	Yes				
	9 mos–5 yrs	National	2,724,856	(93)	Yes				
Western Pacific									
Papua New Guinea	6–83 mos	National	945,582	(84)	Yes	Yes		Yes	Yes
Vietnam	7–20 yrs	Subnational	1,008,690	(97)					
Total			**109,189,098**						

* Afghanistan, Angola, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Ghana, Guinea, Guinea-Bissau, India, Indonesia, Kenya, Lao People's Democratic Republic, Liberia, Madagascar, Mali, Mozambique, Myanmar, Nepal, Niger, Nigeria, Pakistan, Papua New Guinea, Rwanda, Senegal, Sierra Leone, Somalia, Sudan, Timor-Leste, Togo, Uganda, United Republic of Tanzania, Vietnam, Yemen, and Zambia. Countries do not conduct SIAs every year.
† Values >100% indicate that the intervention reached more people than the estimated target population.
§ Anthelminthics used for deworming. Tetanus toxoid vaccinations delivered to women of childbearing age. Other interventions were distributed according to national plans and in some cases targeted only high-risk districts and/or age groups.
¶ Campaigns that were started the previous year or will continue over to the next year.

in the status quo scenario, the projected global mortality during 2010–2013 will continue to level off at approximately 151,000–163,000 deaths annually if India does not implement "catch-up" SIA campaigns (Figure).

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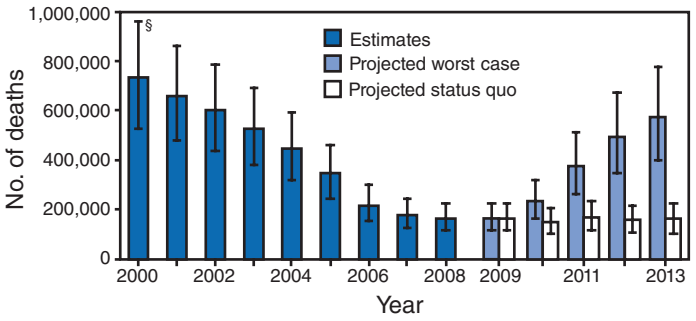
Editorial Note: After a period of rapid progress in reducing global measles mortality during 2000–2006, the reduction in measles mortality has begun to level off, raising the possibility that the 2010 goal might not be reached. Approximately 77% of the estimated global measles mortality in 2008 was concentrated in one region (SEAR). Further progress toward the 90% mortality reduction goal is impeded by two factors: 1) India has not fully implemented the measles mortality strategies recommended by WHO and UNICEF in 2001 (*3, 4*), and 2) political and financial commitment to sustaining measles control in many of the other 46 priority countries has declined.

Efforts to reduce measles-related mortality since 2000 have contributed substantially to the reduction in overall child mortality. During 2000–2008, child mortality decreased by 1.6 million, from an estimated 10.4 million to 8.8 million deaths***; during the same period, estimated measles deaths declined by 569,000, suggesting that the decline in measles-

*** Regional data available at http://www.childinfo.org/mortality_underfive.php.

FIGURE. Estimated number of measles deaths worldwide, 2000–2008,* and worst case/status quo projections† of possible resurgence in measles mortality, 2009–2013



* Based on Monte Carlo stimulations that account for uncertainty in key input variables (i.e. vaccination coverage and case fatality ratios).

† Projected "worst case" scenario assumes that none of 47 priority countries carry out catch-up or follow-up supplemental immunization activities (SIAs) during 2010–2013. Under this assumption, routine first-dose measles-containing vaccine (MCV1) coverage remains at the 2008 levels during 2009–2013 in the 47 priority countries, but continues to increase at current rates in all remaining countries. Projected "status quo" scenario assumes that SIAs will continue to be conducted during 2010–2013 in 46 of the 47 priority countries (excluding India); routine MCV1 coverage remains at the 2008 levels among countries with ≥90% coverage in 2008, and increases 1% per year among lower-performing countries. The 47 priority countries include Afghanistan, Angola, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Ghana, Guinea, Guinea-Bissau, India, Indonesia, Kenya, Lao People's Democratic Republic, Liberia, Madagascar, Mali, Mozambique, Myanmar, Nepal, Niger, Nigeria, Pakistan, Papua New Guinea, Rwanda, Senegal, Sierra Leone, Somalia, Sudan, Timor-Leste, Togo, Uganda, United Republic of Tanzania, Vietnam, Yemen, and Zambia

§ 95% uncertainty intervals.

related deaths played a major role in the overall decline in child mortality. Because measles deaths play a large role in global child mortality, reductions in efforts to further decrease measles deaths (e.g., reductions in regular measles SIAs and laboratory-supported surveillance) could slow progress toward reaching MDG4.

Several related factors influence the measles mortality burden estimates and projections presented in this report. The natural history model used by WHO uses the published age-specific measles case-fatality ratios (CFRs) and keeps them constant; hence, current mortality estimates are primarily determined by changes in the size of the birth cohort and measles vaccination coverage over time (*6*). However, measles CFRs are known to differ within populations over time (*9*). Most notably, increased measles vaccination coverage is thought to be the major factor contributing to declines in overall measles CFRs. As measles vaccination coverage increases, the average age of infection rises, and a larger proportion of measles cases occur among previously vaccinated children (*10*). Because CFRs are one of the key parameters in estimating the global measles mortality burden, additional field studies should be conducted to gather additional CFR data, especially in post-SIA settings. Multiple factors have been associated with increased measles CFRs, including low socioeconomic status, malnutrition, vitamin A deficiency, HIV-infection, young age at infection, and lack of measles immunization. Although an age-appropriate dose of vitamin A is recommended for measles case management (*3*), access to vitamin A treatment often is limited.

The results achieved in 46 of the 47 priority countries suggest that a 90% reduction in global measles mortality can be achieved and sustained if the recommended strategy is implemented fully. Key factors related to a possible delay in achieving the 90% reduction in global measles mortality beyond 2010 and the risk for a measles mortality resurgence include delayed implementation of catch-up SIAs in India and suboptimal routine MCV and SIA coverage in AFR. Routine vaccination is a cornerstone of the WHO/UNICEF recommended strategy (*3*), and increasing MCV coverage must be given high priority to achieve and sustain the global goal.

What is already known on this topic?

In 2008, all World Health Organization (WHO) member states reaffirmed their commitment to achieving a 90% reduction in measles mortality by 2010 compared with 2000 (with a 2010 goal of no more than 73,300 measles deaths worldwide).

What is added by this report?

During 2000–2008, recommended strategies were implemented in 46 or 47 countries (except India) with high measles mortality burden, resulting in a 78% decline in estimated global measles mortality, from an estimated 733,000 deaths in 2000 to 164,000 in 2008.

What are the implications for public health practice?

Two factors are critical for further progress toward the 90% mortality reduction goal: 1) India should fully implement the recommended measles mortality reduction strategies; and 2) financial support to sustaining measles control in the other 46 high-burden countries should be secured.

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Announcement

Recommendations for Improving External-Cause-of-Injury Coding in State-Based Data Systems

Improving external-cause-of-injury coding (E-coding) can provide better data for setting priorities for injury prevention and trauma care programs and evaluating their effectiveness at the federal, state, and local levels. CDC is providing national leadership in an effort to develop and implement strategies and action plans to improve E-coding in state morbidity data systems. In February 2009, CDC conducted a partners meeting to discuss E-coding issues relevant to state morbidity data systems and to make recommendations for improvements.

CDC has released a report summarizing actions recommended by participants in the February meeting aimed at 1) improving communication and collaboration among stakeholders, 2) demonstrating a business case for high-quality E-coding, 3) improving the collection of high-quality E-coded data, and 4) improving and promoting the usefulness of E-coded data for state injury prevention efforts. This report, *Recommended Actions to Improve External-Cause-of-Injury Coding in State-Based Hospital Discharge and Emergency Department Data Systems,* is now available at http://www.cdc.gov/injury/data/ecode_report.html.

Announcement

13th Annual Conference on Vaccine Research

The Thirteenth Annual Conference on Vaccine Research, the largest scientific forum devoted exclusively to the research and development of vaccines and related technologies for prevention and treatment of disease through immunization, will be held April 26–28, 2010, at the Bethesda North Marriott & Conference Center Hotel in Bethesda, Maryland. The conference brings together the diverse fields of human and veterinary vaccinology to encourage collaboration and multidisciplinary approaches among disease-specific and methodologic experts.

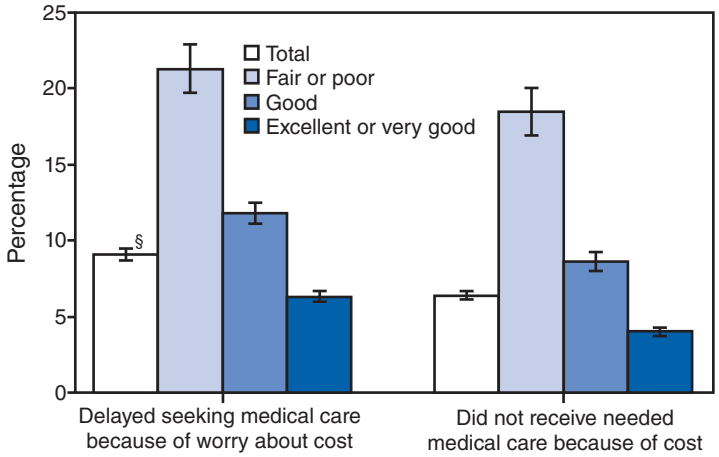
Vaccines, poverty and world hunger, pandemic influenza, live veterinary vaccines, molecular approaches to vaccine delivery, and novel adjuvants are among topics scheduled for discussion during the conference. The deadline for online submission of general abstracts is January 4, 2010. Abstracts from eligible authors may be designated for consideration for the Maurice R. Hilleman Early-Stage Career Investigator Award, which provides $10,000 for research expenses and a travel stipend and registration for the 2011 conference.

The conference is being sponsored by the National Foundation for Infectious Diseases (NFID), in collaboration with CDC and 12 other national and international agencies and organizations. Applications for travel grants to subsidize attendees from countries with limited resources must be submitted by December 7, 2009. Additional information is available at http://www.nfid.org/conferences/vaccine10, or by e-mail (vaccine@nfid.org), fax (301-907-0878), telephone (301-656-0003, ext 19), or mail (NFID, Suite 750, 4733 Bethesda Avenue, Bethesda, MD 20814-5278).

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Estimated Percentage of Persons Who Delayed Seeking or Did Not Receive Medical Care During the Preceding Year Because of Cost, by Respondent-Assessed Health Status* — National Health Interview Survey, United States, 2008†



* Based on responses to the following questions: "During the past 12 months, has [person] delayed seeking medical care because of worry about the cost?" and "During the past 12 months was there any time when [person] needed medical care but did not get it because [person] could not afford it?" Both questions exclude dental care. Respondents were asked to answer regarding themselves and other family members living in the same household. Health status data were obtained by asking respondents to assess their own health and that of family members living in the same household as excellent, very good, good, fair, or poor.

† Estimates are age adjusted using the projected 2000 U.S. population as the standard population and using five age groups: 0–11 years, 12–17 years, 18–44 years, 45–64 years, and ≥65 years. Estimates are based on household interviews of a sample of the civilian, noninstitutionalized U.S. population.

§ 95% confidence interval.

In 2008, an estimated 9.1% of the U.S. population (27.4 million) delayed seeking medical care during the preceding year because of worry about the cost, and 6.4% (19.5 million) did not receive needed medical care because they could not afford it. Persons whose health was assessed as fair or poor were more than three times as likely as persons whose health was excellent or very good to delay seeking or not receive needed medical care because of cost. Persons in each health assessment group also were more likely to delay seeking medical care because of worry about the cost than to not receive needed medical care because of cost.

SOURCE: Provisional report: Adams PF, Heyman KM, Vickerie JL. Summary Health Statistics for the U.S. Population: National Health Interview Survey, 2008. National Center for Health Statistics. Vital Hlth Stat 10(243). 2009. Available at http://www.cdc.gov/nchs/data/series/sr_10/sr10_243.pdf.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending November 28, 2009 (47th week)*

Disease	Current week	Cum 2009	5-year weekly average†	Total cases reported for previous years 2008	2007	2006	2005	2004	States reporting cases during current week (No.)
Anthrax	—	—	—	—	1	1	—	—	
Botulism:									
foodborne	—	12	1	17	32	20	19	16	
infant	2	49	2	109	85	97	85	87	TX (2)
other (wound and unspecified)	—	20	1	19	27	48	31	30	
Brucellosis	—	87	2	80	131	121	120	114	
Chancroid	—	22	1	25	23	33	17	30	
Cholera	—	8	0	5	7	9	8	6	
Cyclosporiasis§	—	117	1	139	93	137	543	160	
Diphtheria	—	—	—	—	—	—	—	—	
Domestic arboviral diseases§,¶:									
California serogroup	—	38	0	62	55	67	80	112	
eastern equine	—	4	0	4	4	8	21	6	
Powassan	—	1	0	2	7	1	1	1	
St. Louis	—	10	0	13	9	10	13	12	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis/Anaplasmosis§,**:									
Ehrlichia chaffeensis	4	728	10	1,137	828	578	506	338	MD (1), VA (1), NC (1), SC (1)
Ehrlichia ewingii	—	6	—	9	—	—	—	—	
Anaplasma phagocytophilum	4	602	13	1,026	834	646	786	537	MN (4)
undetermined	—	105	2	180	337	231	112	59	
Haemophilus influenzae,††									
invasive disease (age <5 yrs):									
serotype b	—	24	1	30	22	29	9	19	
nonserotype b	—	164	3	244	199	175	135	135	
unknown serotype	2	209	3	163	180	179	217	177	DE (1), TN (1)
Hansen disease§	2	56	2	80	101	66	87	105	FL (1), CA (1)
Hantavirus pulmonary syndrome§	—	10	0	18	32	40	26	24	
Hemolytic uremic syndrome, postdiarrheal§	—	184	3	330	292	288	221	200	
Hepatitis C viral, acute	5	1,747	16	878	845	766	652	720	MD (1), WV (1), FL (1), KY (1), WA (1)
HIV infection, pediatric (age <13 years)§§	—	—	3	—	—	—	380	436	
Influenza-associated pediatric mortality§,¶¶	17	318	0	90	77	43	45	—	AZ (2), CA (5), FL (1), IN (2), MI (1), NY (1), OH (1), MN (1), SD (1), TX (2)
Listeriosis	5	677	16	759	808	884	896	753	NY (1), VA (1), WA (2), CA (1)
Measles***	—	61	0	140	43	55	66	37	
Meningococcal disease, invasive†††:									
A, C, Y, and W-135	1	231	5	330	325	318	297	—	FL (1)
serogroup B	1	120	3	188	167	193	156	—	TX (1)
other serogroup	—	23	1	38	35	32	27	—	
unknown serogroup	5	409	10	616	550	651	765	—	NY (2), PA (1), MO (2)
Mumps	86	630	16	454	800	6,584	314	258	NY (29), NYC (56), PA (1)
Novel influenza A virus infections	—	§§§	0	2	4	N	N	N	
Plague	—	7	0	3	7	17	8	3	
Poliomyelitis, paralytic	—	—	—	—	—	—	1	—	
Polio virus infection, nonparalytic§	—	—	—	—	—	N	N	N	
Psittacosis§	—	8	0	8	12	21	16	12	
Q fever total§,¶¶¶:	1	75	2	124	171	169	136	70	
acute	1	64	1	110	—	—	—	—	CA (1)
chronic	—	11	0	14	—	—	—	—	
Rabies, human	—	2	0	2	1	3	2	7	
Rubella****	—	4	0	16	12	11	11	10	
Rubella, congenital syndrome	—	1	—	—	—	1	1	—	
SARS-CoV§,††††	—	—	—	—	—	—	—	—	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	—	117	2	157	132	125	129	132	
Syphilis, congenital (age <1 yr)	—	225	7	434	430	349	329	353	
Tetanus	—	9	1	19	28	41	27	34	
Toxic-shock syndrome (staphylococcal)§	1	75	2	71	92	101	90	95	GA (1)
Trichinellosis	—	12	0	39	5	15	16	5	
Tularemia	—	74	2	123	137	95	154	134	
Typhoid fever	2	308	4	449	434	353	324	322	VA (1), CA (1)
Vancomycin-intermediate *Staphylococcus aureus*§	1	65	1	63	37	6	2	—	MA (1)
Vancomycin-resistant *Staphylococcus aureus*§	—	—	—	—	2	1	3	1	
Vibriosis (noncholera *Vibrio* species infections)§	7	551	5	492	549	N	N	N	MN (1), FL (4), AZ (1), CA (1)
Yellow fever	—	—	—	—	—	—	—	—	

See Table I footnotes on next page.

TABLE I. (*Continued*) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending November 28, 2009 (47th week)*

—: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts.

* Incidence data for reporting year 2009 is provisional, whereas data for 2004 through 2008 are finalized.

† Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. The total sum of incident cases is then divided by 25 weeks. Additional information is available at http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf.

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

¶ Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.

** The names of the reporting categories changed in 2008 as a result of revisions to the case definitions. Cases reported prior to 2008 were reported in the categories: Ehrlichiosis, human monocytic (analogous to *E. chaffeensis*); Ehrlichiosis, human granulocytic (analogous to *Anaplasma phagocytophilum*), and Ehrlichiosis, unspecified, or other agent (which included cases unable to be clearly placed in other categories, as well as possible cases of *E. ewingii*).

†† Data for *H. influenzae* (all ages, all serotypes) are available in Table II.

§§ Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly.

¶¶ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since April 26, 2009, a total of 210 influenza-associated pediatric deaths associated with 2009 pandemic influenza A (H1N1) virus infection have been reported. Since August 30, 2009, a total of 189 influenza-associated pediatric deaths occurring during the 2009–10 influenza season have been reported. A total of 128 influenza-associated pediatric death occurring during the 2008-09 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.

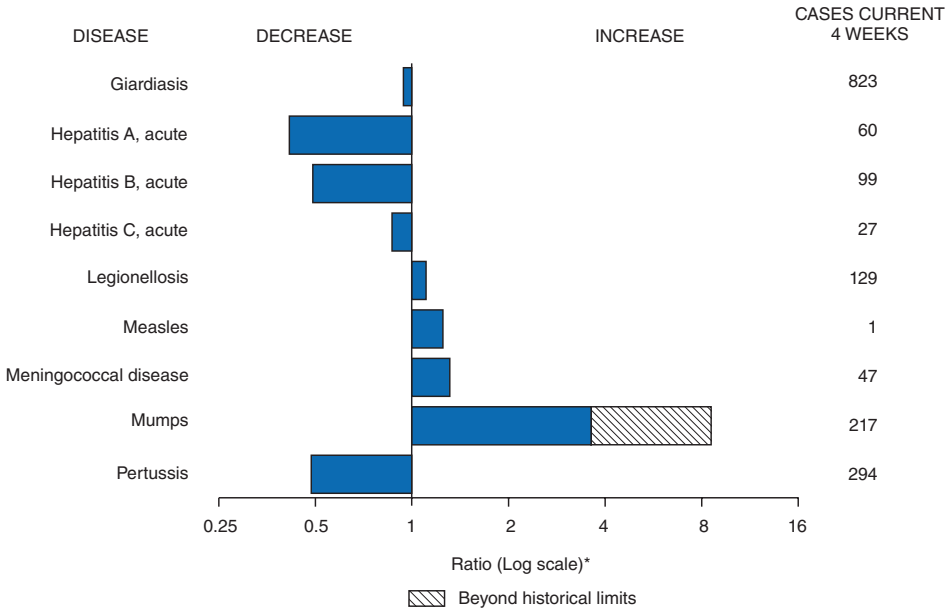
§§§ CDC discontinued reporting of individual confirmed and probable cases of novel influenza A (H1N1) viruses infections on July 24, 2009. CDC will report the total number of novel influenza A (H1N1) hospitalizations and deaths weekly on the CDC H1N1 influenza website (http://www.cdc.gov/h1n1flu).

¶¶¶ In 2008, Q fever acute and chronic reporting categories were recognized as a result of revisions to the Q fever case definition. Prior to that time, case counts were not differentiated with respect to acute and chronic Q fever cases.

**** No rubella cases were reported for the current week.

†††† Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals November 28, 2009, with historical data



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

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TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending November 28, 2009, and November 22, 2008 (47th week)*

Reporting area	Chlamydia†					Coccidiodomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 week		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	6,902	22,331	26,095	1,009,739	1,079,241	75	230	471	10,561	6,045	44	119	369	6,199	8,177
New England	608	756	1,655	36,096	33,889	—	0	1	1	1	1	6	43	400	375
Connecticut	145	225	1,306	10,462	10,178	N	0	0	N	N	—	0	36	36	41
Maine§	34	47	75	2,206	2,341	N	0	0	N	N	—	0	4	41	43
Massachusetts	370	355	944	17,627	15,619	N	0	0	N	N	1	2	16	164	164
New Hampshire	1	34	61	1,381	1,896	—	0	1	1	1	—	1	5	68	56
Rhode Island§	41	68	244	3,342	2,793	—	0	0	—	—	—	0	8	20	10
Vermont§	17	23	63	1,078	1,062	N	0	0	N	N	—	1	9	71	61
Mid. Atlantic	1,615	3,015	6,734	141,092	133,963	—	0	0	—	—	8	13	37	732	686
New Jersey	161	425	838	20,159	20,288	N	0	0	N	N	—	1	5	42	39
New York (Upstate)	467	589	4,563	28,760	25,027	N	0	0	N	N	5	3	12	202	243
New York City	694	1,146	1,982	53,823	50,983	N	0	0	N	N	—	1	8	69	103
Pennsylvania	293	826	1,001	38,350	37,665	N	0	0	N	N	3	8	19	419	301
E.N. Central	437	3,314	4,286	151,021	174,773	—	1	4	33	38	3	27	54	1,356	2,034
Illinois	—	1,047	1,426	44,794	53,589	N	0	0	N	N	—	2	8	132	200
Indiana	—	413	695	19,405	19,530	N	0	0	N	N	—	4	17	183	178
Michigan	353	872	1,332	40,940	40,557	—	0	3	19	29	—	5	11	248	247
Ohio	—	712	1,177	30,004	41,835	—	0	2	14	9	—	7	16	349	658
Wisconsin	84	343	460	15,878	19,262	N	0	0	N	N	3	7	24	444	751
W.N. Central	267	1,346	1,697	60,145	61,178	—	0	1	9	3	4	17	62	957	927
Iowa	—	175	256	8,470	8,361	N	0	0	N	N	—	3	13	186	273
Kansas	2	164	561	8,718	8,390	N	0	0	N	N	—	1	6	61	82
Minnesota	—	260	338	11,310	13,049	—	0	0	—	—	3	5	34	327	209
Missouri	214	509	638	23,397	22,301	—	0	1	9	3	—	3	12	168	169
Nebraska§	51	103	219	4,719	4,819	N	0	0	N	N	1	2	9	108	107
North Dakota	—	30	77	1,386	1,634	N	0	0	N	N	—	0	10	12	6
South Dakota	—	55	80	2,145	2,624	N	0	0	N	N	—	1	10	95	81
S. Atlantic	1,154	3,841	5,448	176,611	220,795	—	0	1	5	4	8	19	45	974	953
Delaware	72	87	180	4,275	3,363	—	0	1	1	1	—	0	2	9	11
District of Columbia	—	128	226	5,916	6,238	—	0	0	—	—	—	0	1	2	15
Florida	265	1,425	1,672	65,457	64,188	N	0	0	N	N	6	8	24	421	422
Georgia	—	726	1,909	27,752	37,111	N	0	0	N	N	—	5	23	308	239
Maryland§	—	422	772	18,628	21,503	—	0	1	4	3	—	1	5	37	46
North Carolina	—	0	1,024	—	33,183	N	0	0	N	N	—	0	9	58	68
South Carolina§	344	537	1,421	22,742	24,039	N	0	0	N	N	2	1	7	53	52
Virginia§	428	602	926	28,528	28,217	N	0	0	N	N	—	1	7	70	76
West Virginia	45	69	136	3,313	2,953	N	0	0	N	N	—	0	2	16	24
E.S. Central	681	1,755	2,208	81,261	77,565	—	0	0	—	—	—	3	10	200	164
Alabama§	30	459	627	21,184	22,499	N	0	0	N	N	—	1	5	55	70
Kentucky	—	243	642	11,857	11,104	N	0	0	N	N	—	1	4	61	32
Mississippi	268	457	840	20,850	18,644	N	0	0	N	N	—	0	3	12	17
Tennessee§	383	579	809	27,370	25,318	N	0	0	N	N	—	1	5	72	45
W.S. Central	333	2,991	5,817	138,063	136,347	—	0	1	1	3	6	9	271	461	2,101
Arkansas§	140	269	417	12,320	12,864	N	0	0	N	N	1	1	5	49	87
Louisiana	145	515	1,130	23,662	20,281	—	0	1	1	3	—	0	6	29	63
Oklahoma	48	174	2,725	12,148	12,020	N	0	0	N	N	—	2	11	116	125
Texas§	—	2,011	2,521	89,933	91,182	N	0	0	N	N	5	6	258	267	1,826
Mountain	492	1,383	2,051	62,856	68,535	38	171	368	8,382	3,965	4	9	26	475	550
Arizona	168	454	736	19,012	22,389	37	170	364	8,290	3,873	—	1	3	33	85
Colorado	—	328	727	14,305	16,638	N	0	0	N	N	2	2	10	132	108
Idaho§	76	68	184	3,382	3,687	N	0	0	N	N	2	1	7	84	64
Montana§	—	56	87	2,680	2,776	N	0	0	N	N	—	1	4	50	42
Nevada§	113	170	477	8,747	8,661	1	1	4	52	49	—	0	2	4	16
New Mexico§	117	180	540	8,219	7,590	—	0	2	9	31	—	2	8	121	168
Utah	18	108	176	4,701	5,382	—	1	2	30	10	—	0	3	31	44
Wyoming§	—	35	97	1,810	1,412	—	0	1	1	2	—	0	2	20	23
Pacific	1,315	3,444	4,682	162,594	172,196	37	40	172	2,130	2,031	10	13	25	644	387
Alaska	—	92	199	3,370	4,249	N	0	0	N	N	—	0	1	6	3
California	959	2,691	3,592	126,971	133,381	37	40	172	2,130	2,031	5	7	20	390	236
Hawaii	—	118	147	5,121	5,363	N	0	0	N	N	—	0	1	1	2
Oregon§	182	198	388	8,887	9,677	N	0	0	N	N	3	3	8	165	60
Washington	174	393	571	18,245	19,526	N	0	0	N	N	2	1	8	82	86
American Samoa	—	0	0	—	73	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	1	1	—	123	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	134	331	6,385	6,437	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	8	17	369	570	—	0	0	—	—	—	0	0	—	—

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 28, 2009, and November 22, 2008 (47th week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive All ages, all serotypes†				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	203	318	498	15,913	16,875	1,453	5,378	6,918	240,930	301,934	17	60	124	2,593	2,457
New England	4	28	64	1,532	1,530	76	95	301	4,535	4,738	2	3	16	178	153
Connecticut	—	5	15	247	311	43	47	275	2,180	2,316	—	0	12	49	39
Maine§	1	3	13	188	167	4	2	9	126	87	—	0	2	17	17
Massachusetts	1	12	36	672	626	27	38	112	1,791	1,917	2	2	5	89	72
New Hampshire	—	3	11	169	149	2	2	6	97	95	—	0	2	11	9
Rhode Island§	—	1	6	58	85	—	6	19	296	293	—	0	7	8	8
Vermont§	2	3	14	198	192	—	1	5	45	30	—	0	1	4	8
Mid. Atlantic	24	62	104	2,889	3,148	306	588	1,138	28,576	29,707	6	12	25	552	467
New Jersey	—	6	17	215	471	48	92	124	4,218	4,782	—	2	7	104	87
New York (Upstate)	22	24	81	1,207	1,107	84	109	664	5,364	5,530	4	3	20	140	135
New York City	—	15	25	727	772	126	213	380	10,114	9,487	—	2	11	108	80
Pennsylvania	2	15	34	740	798	48	191	260	8,880	9,908	2	4	10	200	165
E.N. Central	2	44	71	2,116	2,510	138	1,077	1,436	47,356	62,307	1	12	28	526	403
Illinois	—	9	18	412	649	—	344	524	14,316	18,669	—	3	9	132	135
Indiana	N	0	11	N	N	—	140	223	6,165	7,837	—	1	22	64	66
Michigan	—	12	23	572	565	118	280	498	13,306	15,179	1	0	3	24	23
Ohio	—	15	28	732	815	—	249	431	9,555	15,000	—	2	6	87	120
Wisconsin	2	9	19	400	481	20	85	143	4,014	5,622	—	3	20	219	59
W.N. Central	75	24	141	1,485	1,835	65	274	373	12,847	15,301	—	3	15	144	183
Iowa	1	6	15	273	298	—	32	53	1,418	1,487	—	0	0	—	2
Kansas	—	2	11	96	151	1	44	83	2,117	2,075	—	0	2	13	19
Minnesota	66	0	104	409	612	—	40	65	1,869	2,770	—	0	10	50	54
Missouri	5	8	30	455	435	45	126	173	5,862	7,254	—	1	4	52	68
Nebraska§	2	3	9	160	190	19	24	55	1,236	1,279	—	0	4	23	28
North Dakota	1	0	16	27	19	—	2	14	87	121	—	0	4	6	12
South Dakota	—	1	5	65	130	—	6	20	258	315	—	0	0	—	—
S. Atlantic	41	69	109	3,338	2,744	268	1,148	1,956	51,089	77,046	4	13	31	634	622
Delaware	—	0	3	23	41	11	18	37	871	935	1	0	1	4	7
District of Columbia	—	0	5	22	60	—	50	88	2,334	2,345	—	0	1	2	8
Florida	30	38	59	1,768	1,195	72	410	486	18,810	21,149	1	4	10	204	164
Georgia	—	11	67	750	632	—	241	876	9,414	13,936	—	3	9	140	125
Maryland§	7	5	11	251	257	—	114	197	5,095	5,771	1	1	6	82	87
North Carolina	N	0	0	N	N	—	0	428	—	14,239	—	0	17	62	69
South Carolina§	—	2	8	95	122	108	162	412	7,187	8,688	1	1	5	62	54
Virginia§	4	8	31	380	369	75	147	308	6,938	9,302	—	1	6	50	83
West Virginia	—	1	5	49	68	2	9	20	440	681	—	0	3	28	25
E.S. Central	—	7	22	353	461	212	510	687	23,356	27,718	3	3	9	140	127
Alabama§	—	3	11	163	263	10	137	178	6,127	8,863	—	0	4	33	22
Kentucky	N	0	0	N	N	—	67	156	3,424	4,208	—	0	5	19	6
Mississippi	N	0	0	N	N	98	143	252	6,504	6,612	—	0	1	5	13
Tennessee§	—	4	18	190	198	104	156	230	7,301	8,035	3	2	6	83	86
W.S. Central	6	7	22	388	418	119	886	1,556	40,457	46,317	—	2	22	101	104
Arkansas§	—	2	9	138	132	50	82	134	3,796	4,185	—	0	3	16	13
Louisiana	—	2	8	96	137	55	167	418	7,698	8,610	—	0	1	12	10
Oklahoma	6	3	18	154	149	14	63	612	4,087	4,374	—	1	20	69	71
Texas§	N	0	0	N	N	—	558	696	24,876	29,148	—	0	1	4	10
Mountain	13	28	59	1,415	1,492	85	170	234	7,265	10,560	—	5	11	209	266
Arizona	1	4	7	181	124	39	50	88	2,277	3,097	—	1	7	70	97
Colorado	6	8	26	444	523	—	46	106	1,978	3,420	—	1	6	62	52
Idaho§	6	3	10	192	182	—	2	8	91	166	—	0	1	4	12
Montana§	—	2	11	120	83	—	1	5	70	113	—	0	1	1	4
Nevada§	—	1	10	68	113	21	28	93	1,524	1,967	—	0	2	15	16
New Mexico§	—	2	8	104	100	24	23	52	1,026	1,237	—	0	3	25	44
Utah	—	5	12	251	323	1	5	12	230	444	—	1	2	29	37
Wyoming§	—	1	4	55	44	—	1	5	69	116	—	0	1	3	4
Pacific	38	50	130	2,397	2,737	184	540	764	25,449	28,240	1	2	8	109	132
Alaska	—	2	7	100	97	—	15	24	578	492	—	0	3	17	19
California	30	33	55	1,563	1,802	147	450	657	21,484	23,200	—	0	4	25	42
Hawaii	—	0	2	17	40	—	11	24	547	559	—	0	3	24	18
Oregon§	1	7	18	362	426	21	20	44	906	1,113	1	1	3	40	51
Washington	7	7	74	355	372	16	40	71	1,934	2,876	—	0	2	3	2
American Samoa	—	0	0	—	—	—	0	0	—	3	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	73	—	0	0	—	—
Puerto Rico	—	2	10	102	204	—	4	24	206	257	—	0	1	3	1
U.S. Virgin Islands	—	0	0	—	—	—	2	7	93	112	N	0	0	N	N

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 28, 2009, and November 22, 2008 (47th week)*

Reporting area	Hepatitis (viral, acute), by type† A: Current week	A: Previous 52 weeks Med	A: Previous 52 weeks Max	A: Cum 2009	A: Cum 2008	B: Current week	B: Previous 52 weeks Med	B: Previous 52 weeks Max	B: Cum 2009	B: Cum 2008	Legionellosis: Current week	Legionellosis: Previous 52 weeks Med	Legionellosis: Previous 52 weeks Max	Legionellosis: Cum 2009	Legionellosis: Cum 2008
United States	10	36	89	1,674	2,340	14	63	197	2,736	3,424	21	55	157	2,832	2,821
New England	—	2	5	92	122	—	1	4	40	72	1	3	17	168	189
Connecticut	—	0	2	18	26	—	0	3	12	25	1	1	5	51	38
Maine§	—	0	2	1	16	—	0	2	13	11	—	0	3	8	10
Massachusetts	—	1	4	56	55	—	0	2	12	21	—	1	9	73	78
New Hampshire	—	0	1	7	11	—	0	1	3	8	—	0	2	10	27
Rhode Island§	—	0	1	8	12	—	0	0	—	4	—	0	12	19	31
Vermont§	—	0	1	2	2	—	0	0	—	3	—	0	1	7	5
Mid. Atlantic	—	5	10	225	299	1	5	17	271	406	7	15	69	1,027	947
New Jersey	—	1	5	48	73	—	1	6	63	112	—	2	13	143	134
New York (Upstate)	—	1	3	44	60	—	1	11	47	58	7	5	29	327	319
New York City	—	2	5	73	102	—	1	4	62	95	—	3	20	203	124
Pennsylvania	—	1	6	60	64	1	2	7	99	141	—	6	25	354	370
E.N. Central	—	4	18	225	316	—	7	21	335	471	1	9	34	531	619
Illinois	—	1	12	95	105	—	1	6	69	173	—	1	10	87	112
Indiana	—	0	4	15	19	—	1	18	54	42	—	1	4	33	53
Michigan	—	1	4	64	115	—	2	8	108	130	1	2	11	135	166
Ohio	—	0	3	35	45	—	1	13	77	109	—	4	17	266	251
Wisconsin	—	0	4	16	32	—	0	4	27	17	—	0	2	10	37
W.N. Central	—	2	16	111	234	—	3	16	152	78	—	2	7	90	133
Iowa	—	0	3	32	106	—	0	3	28	20	—	0	2	19	20
Kansas	—	0	1	7	15	—	0	2	5	8	—	0	1	3	2
Minnesota	—	0	12	19	36	—	0	11	25	10	—	0	4	12	21
Missouri	—	0	3	29	32	—	1	5	73	31	—	1	5	43	67
Nebraska§	—	0	3	20	41	—	0	2	19	8	—	0	2	11	20
North Dakota	—	0	2	1	—	—	0	1	—	1	—	0	3	1	—
South Dakota	—	0	1	3	4	—	0	1	2	—	—	0	1	1	3
S. Atlantic	4	7	14	375	363	6	17	32	803	847	7	10	20	490	448
Delaware	—	0	1	3	7	U	0	1	U	U	—	0	5	18	12
District of Columbia	U	0	0	U	U	U	0	0	U	U	—	0	2	9	16
Florida	—	4	9	163	134	5	6	11	266	294	3	3	10	174	129
Georgia	—	1	3	51	53	—	3	9	129	162	—	1	5	49	38
Maryland§	1	0	4	39	41	1	1	5	66	77	2	2	12	125	124
North Carolina	—	0	3	25	60	—	1	19	148	72	—	0	6	39	36
South Carolina§	2	1	4	52	17	—	1	4	49	61	1	0	2	12	11
Virginia§	1	1	3	37	46	—	1	10	84	102	1	1	5	55	54
West Virginia	—	0	2	5	5	—	0	19	61	79	—	0	2	9	28
E.S. Central	—	1	4	39	77	2	7	11	288	359	1	2	12	122	108
Alabama§	—	0	2	10	12	—	1	7	74	98	—	0	2	15	16
Kentucky	—	0	1	9	30	—	2	7	80	84	1	1	3	47	52
Mississippi	—	0	2	11	5	—	1	2	30	45	—	0	2	4	1
Tennessee§	—	0	2	9	30	2	2	6	104	132	—	1	9	56	39
W.S. Central	—	3	43	157	224	3	10	99	436	664	1	2	21	100	90
Arkansas§	—	0	1	8	9	—	1	5	46	58	1	0	1	8	13
Louisiana	—	0	1	3	11	—	0	4	33	85	—	0	2	4	9
Oklahoma	—	0	6	3	7	—	2	17	90	103	—	0	2	6	10
Texas§	—	3	37	143	197	3	6	76	267	418	—	1	19	82	58
Mountain	2	3	8	146	200	—	2	6	108	187	—	2	7	122	89
Arizona	1	2	6	68	101	—	1	3	39	72	—	1	4	49	22
Colorado	—	1	5	46	36	—	0	2	20	32	—	0	2	18	13
Idaho§	1	0	1	4	17	—	0	2	11	8	—	0	2	5	3
Montana§	—	0	1	6	1	—	0	0	—	2	—	0	2	6	4
Nevada§	—	0	2	8	12	—	0	3	24	42	—	0	1	9	11
New Mexico§	—	0	1	6	17	—	0	2	5	11	—	0	2	8	10
Utah	—	0	2	6	13	—	0	1	5	14	—	0	4	23	26
Wyoming§	—	0	1	2	3	—	0	2	4	6	—	0	2	4	—
Pacific	4	6	17	304	505	2	6	36	303	340	3	4	12	182	198
Alaska	—	0	1	3	5	—	0	1	3	10	—	0	1	1	2
California	3	5	16	242	412	2	4	28	218	242	3	3	10	144	155
Hawaii	—	0	2	6	17	—	0	1	5	7	—	0	1	1	8
Oregon§	—	0	2	15	25	—	1	4	39	39	—	0	2	13	17
Washington	1	0	4	38	46	—	1	8	38	42	—	0	4	23	16
American Samoa	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	2	18	23	—	0	5	22	46	—	0	1	1	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 28, 2009, and November 22, 2008 (47th week)*

Reporting area	Lyme disease					Malaria					Meningococcal disease, invasive† All groups				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	153	431	1,899	27,342	31,044	7	22	45	1,048	1,107	7	16	48	783	1,047
New England	3	62	455	5,606	11,102	—	1	5	47	52	—	1	4	31	32
Connecticut	—	0	40	—	3,768	—	0	4	5	10	—	0	1	3	1
Maine§	—	9	76	833	822	—	0	1	2	1	—	0	1	4	6
Massachusetts	1	22	306	3,229	4,468	—	0	3	30	31	—	0	3	16	20
New Hampshire	—	10	87	972	1,540	—	0	1	3	4	—	0	1	3	4
Rhode Island§	—	1	78	205	123	—	0	1	5	2	—	0	1	4	1
Vermont§	2	4	39	367	381	—	0	1	2	4	—	0	1	1	—
Mid. Atlantic	110	210	1,401	15,624	12,402	1	6	13	267	300	3	2	6	88	117
New Jersey	—	37	375	3,985	3,334	—	0	1	1	64	—	0	2	8	15
New York (Upstate)	38	62	1,368	3,859	4,658	1	1	10	45	28	2	0	2	23	30
New York City	—	2	23	201	769	—	3	11	173	169	—	0	2	15	24
Pennsylvania	72	63	630	7,579	3,641	—	1	4	48	39	1	1	4	42	48
E.N. Central	—	15	209	2,090	2,263	—	3	10	135	144	—	3	9	133	187
Illinois	—	1	11	117	107	—	1	4	53	73	—	1	6	34	73
Indiana	—	1	6	57	40	—	0	3	15	5	—	0	3	32	24
Michigan	—	1	10	109	84	—	0	3	26	17	—	0	5	18	32
Ohio	—	0	5	51	45	—	1	6	34	29	—	1	3	39	38
Wisconsin	—	11	191	1,756	1,987	—	0	1	7	20	—	0	2	10	20
W.N. Central	21	4	336	254	961	1	1	8	61	66	2	1	9	65	90
Iowa	—	1	14	89	105	—	0	1	10	11	—	0	1	8	18
Kansas	—	0	2	14	16	—	0	1	4	9	—	0	2	8	6
Minnesota	21	0	326	121	820	—	0	8	24	24	—	0	4	11	23
Missouri	—	0	2	10	6	—	0	2	13	14	2	0	3	26	25
Nebraska§	—	0	3	19	11	—	0	1	8	8	—	0	1	9	12
North Dakota	—	0	10	—	—	1	0	0	1	—	—	0	3	1	3
South Dakota	—	0	1	1	3	—	0	1	1	—	—	0	1	2	3
S. Atlantic	16	60	233	3,469	3,991	2	6	17	300	268	1	2	9	141	145
Delaware	3	12	64	907	726	—	0	1	5	2	—	0	1	4	2
District of Columbia	—	0	5	19	71	—	0	2	6	4	—	0	0	—	—
Florida	5	1	12	116	78	1	2	7	84	53	1	1	4	50	48
Georgia	—	0	6	49	35	—	1	5	65	53	—	0	2	29	17
Maryland§	6	25	123	1,626	2,085	—	1	5	60	77	—	0	1	10	17
North Carolina	—	0	14	58	39	—	0	5	21	27	—	0	5	19	12
South Carolina§	—	0	3	31	26	—	0	1	4	9	—	0	1	11	22
Virginia§	2	10	61	498	803	1	1	5	53	41	—	0	2	12	22
West Virginia	—	0	33	165	128	—	0	1	2	2	—	0	2	6	5
E.S. Central	1	0	2	29	45	—	0	3	27	21	—	0	4	31	51
Alabama§	—	0	1	2	9	—	0	3	8	5	—	0	1	8	10
Kentucky	—	0	1	1	5	—	0	2	9	5	—	0	1	6	8
Mississippi	—	0	0	—	1	—	0	1	1	1	—	0	1	3	11
Tennessee§	1	0	2	26	30	—	0	3	9	10	—	0	2	14	22
W.S. Central	—	1	21	40	112	—	1	10	41	76	1	1	12	76	109
Arkansas§	—	0	0	—	—	—	0	1	4	1	—	0	2	9	13
Louisiana	—	0	0	—	3	—	0	1	3	3	—	0	3	11	23
Oklahoma	—	0	2	—	—	—	0	2	1	2	—	0	2	12	17
Texas§	—	1	21	40	109	—	0	9	33	70	1	1	9	44	56
Mountain	—	1	13	40	49	1	0	5	28	33	—	1	4	54	57
Arizona	—	0	2	6	8	1	0	2	9	14	—	0	2	13	9
Colorado	—	0	1	4	3	—	0	3	8	5	—	0	2	18	14
Idaho§	—	0	2	12	9	—	0	1	2	3	—	0	1	7	5
Montana§	—	0	13	3	4	—	0	3	5	—	—	0	2	4	4
Nevada§	—	0	1	4	11	—	0	1	—	4	—	0	1	2	7
New Mexico§	—	0	1	5	8	—	0	0	—	3	—	0	1	3	8
Utah	—	0	1	4	4	—	0	2	4	4	—	0	1	2	8
Wyoming§	—	0	1	2	2	—	0	0	—	—	—	0	2	5	2
Pacific	2	4	13	190	119	2	3	9	142	147	—	3	14	164	259
Alaska	—	0	1	2	6	—	0	1	2	6	—	0	2	6	8
California	1	2	10	140	67	2	2	6	107	109	—	2	8	104	186
Hawaii	N	0	0	N	N	—	0	1	1	3	—	0	1	4	5
Oregon§	—	0	4	33	36	—	0	2	11	4	—	0	6	37	36
Washington	1	0	12	15	10	—	0	3	21	25	—	0	6	13	24
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	3	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	1	3	2	—	0	0	—	3
U.S. Virgin Islands	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 28, 2009, and November 22, 2008 (47th week)*

Reporting area	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	38	274	1,697	12,345	9,593	72	63	140	3,395	3,916	7	24	179	1,305	2,226
New England	—	12	27	549	931	3	6	24	317	392	—	0	2	11	7
Connecticut	—	0	4	37	52	—	2	22	132	187	—	0	0	—	—
Maine†	—	1	10	74	39	—	1	4	49	54	—	0	2	5	1
Massachusetts	—	7	19	327	715	—	0	0	—	—	—	0	1	5	2
New Hampshire	—	1	7	71	38	1	0	3	29	53	—	0	0	—	1
Rhode Island†	—	0	7	30	75	—	1	6	47	32	—	0	0	—	3
Vermont†	—	0	1	10	12	2	1	5	60	66	—	0	1	1	—
Mid. Atlantic	12	22	64	1,015	1,062	6	11	23	549	872	—	1	29	64	119
New Jersey	—	3	12	151	195	—	0	0	—	—	—	0	2	—	79
New York (Upstate)	3	4	41	219	392	6	7	22	410	464	—	0	29	12	14
New York City	—	1	21	86	67	—	0	3	21	19	—	0	4	30	11
Pennsylvania	9	12	33	559	408	—	0	16	118	389	—	0	2	22	15
E.N. Central	6	59	238	2,683	1,639	—	2	19	215	252	—	1	6	87	147
Illinois	—	13	40	547	448	—	1	9	87	103	—	0	6	49	109
Indiana	—	6	158	285	95	—	0	6	21	10	—	0	3	13	6
Michigan	6	12	40	737	258	—	1	6	62	77	—	0	2	6	3
Ohio	—	19	57	983	675	—	0	5	45	62	—	0	4	18	29
Wisconsin	—	3	12	131	163	N	0	0	N	N	—	0	1	1	—
W.N. Central	—	32	872	1,539	1,162	—	6	18	318	288	—	4	27	315	432
Iowa	—	4	12	179	201	—	0	3	24	27	—	0	2	5	8
Kansas	—	3	9	142	75	—	1	6	60	61	—	0	1	2	—
Minnesota	—	0	808	165	226	—	0	11	61	60	—	0	1	2	—
Missouri	—	19	51	858	388	—	1	5	65	62	—	3	26	294	401
Nebraska†	—	3	18	136	207	—	1	6	77	32	—	0	2	12	20
North Dakota	—	0	24	29	1	—	0	9	4	25	—	0	1	—	—
South Dakota	—	0	6	30	64	—	0	4	27	21	—	0	0	—	3
S. Atlantic	11	32	71	1,468	871	63	25	111	1,542	1,548	7	9	40	434	858
Delaware	—	0	2	13	17	—	0	0	—	—	—	0	3	17	32
District of Columbia	—	0	2	3	5	—	0	0	—	—	—	0	0	—	6
Florida	6	9	31	493	266	—	0	95	146	138	—	0	2	9	14
Georgia	1	3	11	186	97	63	0	72	409	360	—	0	7	44	77
Maryland†	—	2	8	114	140	—	7	15	363	402	—	1	3	34	88
North Carolina	—	0	65	223	79	N	2	4	N	N	7	4	36	257	438
South Carolina†	3	4	18	233	116	—	0	0	—	—	—	0	5	18	54
Virginia†	—	3	24	172	140	—	10	26	513	576	—	1	8	51	141
West Virginia	1	0	5	31	11	—	3	6	111	72	—	0	1	4	8
E.S. Central	3	14	33	687	368	—	1	6	83	177	—	4	16	246	326
Alabama†	—	4	19	261	55	—	0	0	—	—	—	1	7	59	89
Kentucky	—	4	15	206	126	—	1	4	45	45	—	0	1	1	1
Mississippi	—	1	4	53	98	—	0	1	4	7	—	0	1	7	10
Tennessee†	3	3	14	167	89	—	0	4	34	125	—	3	14	179	226
W.S. Central	4	64	389	2,692	1,546	—	0	13	66	82	—	1	161	127	290
Arkansas†	3	5	38	263	132	—	0	10	33	44	—	0	61	59	65
Louisiana	—	1	8	90	81	—	0	0	—	—	—	0	1	2	6
Oklahoma	1	0	45	75	53	—	0	13	32	36	—	0	98	53	168
Texas†	—	55	304	2,264	1,280	—	0	1	1	2	—	0	6	13	51
Mountain	—	17	32	768	764	—	1	6	82	105	—	0	3	20	44
Arizona	—	3	10	180	206	N	0	0	N	N	—	0	1	5	16
Colorado	—	5	12	220	138	—	0	0	—	—	—	0	1	1	1
Idaho†	—	1	5	66	29	—	0	0	—	11	—	0	1	1	1
Montana†	—	0	6	52	83	—	0	4	25	13	—	0	2	8	3
Nevada†	—	0	3	9	27	—	0	1	1	12	—	0	0	—	3
New Mexico†	—	1	10	58	66	—	0	2	24	29	—	0	1	1	4
Utah	—	4	19	163	198	—	0	2	11	14	—	0	1	1	6
Wyoming†	—	0	5	20	17	—	0	4	21	26	—	0	1	3	10
Pacific	2	24	67	944	1,250	—	4	12	223	200	—	0	1	1	3
Alaska	—	1	21	38	225	—	0	2	12	14	N	0	0	N	N
California	—	8	22	389	476	—	4	12	196	173	—	0	1	1	—
Hawaii	—	0	3	26	16	—	0	0	—	—	N	0	0	N	N
Oregon†	1	4	16	241	161	—	0	3	15	13	—	0	0	—	3
Washington	1	6	58	250	372	—	0	0	—	—	—	0	0	—	—
American Samoa	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	1	1	—	—	1	3	38	58	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N	N	0	0	N	N

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U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2009 is provisional.
† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 28, 2009, and November 22, 2008 (47th week)*

Reporting area	Salmonellosis					Shiga toxin-producing *E. coli* (STEC)†					Shigellosis				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	412	879	2,323	40,744	44,078	30	82	255	4,005	4,688	90	288	1,268	13,197	18,948
New England	1	32	409	1,951	2,079	—	4	67	257	241	—	4	42	315	225
Connecticut	—	0	384	384	491	—	0	67	67	47	—	0	37	37	40
Maine§	—	2	7	112	143	—	0	3	17	22	—	0	2	5	20
Massachusetts	1	22	50	1,045	1,117	—	2	6	89	106	—	3	27	226	145
New Hampshire	—	3	42	230	140	—	1	3	35	27	—	0	4	19	5
Rhode Island§	—	2	11	122	101	—	0	13	25	9	—	0	7	23	12
Vermont§	—	1	5	58	87	—	0	3	24	30	—	0	2	5	3
Mid. Atlantic	30	93	196	4,650	5,301	3	6	21	320	436	10	57	87	2,462	2,278
New Jersey	—	14	46	794	1,208	—	1	4	32	126	—	11	27	501	823
New York (Upstate)	22	23	66	1,199	1,280	3	3	9	138	167	5	4	23	201	546
New York City	1	21	42	1,089	1,193	—	1	5	55	52	—	9	15	406	693
Pennsylvania	7	30	64	1,568	1,620	—	1	8	95	91	5	27	63	1,354	216
E.N. Central	—	93	151	4,259	4,729	1	15	31	715	820	—	50	132	2,135	3,710
Illinois	—	25	51	1,166	1,384	—	2	10	129	132	—	10	25	454	899
Indiana	—	6	50	341	572	—	1	7	71	86	—	1	21	56	561
Michigan	—	18	34	845	875	1	3	8	146	206	—	5	24	194	157
Ohio	—	28	52	1,314	1,190	—	2	11	122	185	—	23	68	1,025	1,565
Wisconsin	—	12	29	593	708	—	4	17	247	211	—	7	25	406	528
W.N. Central	9	47	109	2,327	2,577	4	11	37	662	764	21	20	64	1,023	824
Iowa	—	7	16	356	391	—	2	14	146	200	—	1	12	50	163
Kansas	—	6	18	269	433	—	0	4	33	50	—	3	11	159	57
Minnesota	3	12	51	540	654	3	2	19	211	175	—	2	10	77	277
Missouri	4	13	34	611	699	1	2	10	124	145	21	9	58	700	205
Nebraska§	1	6	41	325	217	—	1	6	81	143	—	0	3	28	13
North Dakota	1	0	30	70	40	—	0	28	7	2	—	0	9	5	33
South Dakota	—	2	22	156	143	—	0	12	60	49	—	0	1	4	76
S. Atlantic	252	266	447	12,215	11,403	3	12	30	583	747	15	45	79	2,097	2,906
Delaware	2	2	9	126	143	—	0	2	13	11	—	2	9	132	9
District of Columbia	—	0	5	23	58	—	0	1	1	6	—	0	2	6	21
Florida	140	115	278	5,967	4,740	—	4	7	158	133	3	9	24	425	749
Georgia	23	41	98	2,198	2,128	—	1	4	65	83	4	13	29	603	1,050
Maryland§	13	15	29	714	794	—	2	5	85	121	1	6	19	343	102
North Carolina	19	17	92	997	1,279	2	2	21	84	101	3	5	27	291	212
South Carolina§	48	16	64	1,050	1,090	1	0	3	28	42	2	3	9	108	526
Virginia§	5	21	88	939	979	—	2	16	120	218	2	4	59	181	204
West Virginia	2	4	23	201	192	—	0	5	29	32	—	0	3	8	33
E.S. Central	18	49	113	2,652	3,280	3	4	12	199	268	1	14	47	715	1,799
Alabama§	3	14	32	710	940	—	1	4	41	60	—	3	11	120	391
Kentucky	4	8	18	419	446	1	1	4	66	97	1	2	25	199	254
Mississippi	—	14	45	784	1,015	—	0	1	6	5	—	1	4	43	292
Tennessee§	11	14	33	739	879	2	2	10	86	106	—	7	36	353	862
W.S. Central	42	99	1,333	4,385	6,496	1	5	139	244	350	27	51	967	2,287	4,453
Arkansas§	5	12	25	572	729	—	1	4	40	54	4	6	16	287	526
Louisiana	—	9	43	599	1,063	—	0	1	—	8	—	2	9	108	609
Oklahoma	6	13	102	581	755	1	0	82	30	50	3	5	61	260	161
Texas§	31	57	1,204	2,633	3,949	—	4	55	174	238	20	33	889	1,632	3,157
Mountain	9	53	128	2,583	3,096	—	10	26	501	589	2	21	49	1,045	1,099
Arizona	2	20	50	944	1,033	—	1	4	67	62	2	16	42	767	557
Colorado	3	12	33	566	654	—	3	13	153	194	—	2	11	92	116
Idaho§	1	3	10	160	176	—	1	7	88	137	—	0	2	9	14
Montana§	—	2	7	96	115	—	0	7	34	32	—	0	5	13	8
Nevada§	3	3	11	161	216	—	0	3	14	18	—	1	7	58	220
New Mexico§	—	5	29	304	497	—	1	3	33	49	—	1	11	88	141
Utah	—	6	15	273	328	—	1	10	98	84	—	0	3	16	36
Wyoming§	—	1	8	79	77	—	0	2	14	13	—	0	1	2	7
Pacific	51	127	537	5,722	5,117	15	9	31	524	473	14	24	66	1,118	1,654
Alaska	—	1	7	66	50	—	0	0	—	6	—	0	1	2	1
California	41	95	516	4,319	3,745	6	5	15	245	227	12	19	65	909	1,430
Hawaii	2	5	27	255	243	—	0	2	8	13	—	0	4	34	40
Oregon§	—	8	18	383	400	—	1	11	77	62	—	1	3	34	91
Washington	8	12	85	699	679	9	2	17	194	165	2	3	11	139	92
American Samoa	—	0	1	—	2	—	0	0	—	—	—	1	2	3	1
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	13	—	0	0	—	—	—	0	0	—	15
Puerto Rico	—	8	40	376	708	—	0	0	—	—	—	0	2	10	31
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2009 is provisional.
† Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 28, 2009, and November 22, 2008 (47th week)*

Reporting area	Streptococcal diseases, invasive, group A					*Streptococcus pneumoniae*, invasive disease, nondrug resistant† Age <5 years				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max		
United States	30	102	239	4,494	4,907	10	32	122	1,527	1,639
New England	—	5	28	272	340	—	1	6	56	90
Connecticut	—	0	21	72	92	—	0	4	—	11
Maine§	—	0	2	17	26	—	0	1	5	2
Massachusetts	—	3	10	120	160	—	1	4	35	56
New Hampshire	—	0	4	34	24	—	0	2	11	11
Rhode Island§	—	0	2	11	25	—	0	1	1	10
Vermont§	—	0	3	18	13	—	0	1	4	—
Mid. Atlantic	8	20	43	895	971	1	4	33	217	203
New Jersey	—	3	7	124	174	—	0	4	38	69
New York (Upstate)	5	7	25	294	298	1	2	17	109	90
New York City	1	4	12	167	185	—	0	31	70	44
Pennsylvania	2	6	18	310	314	N	0	2	N	N
E.N. Central	2	17	42	801	898	—	5	18	228	300
Illinois	—	5	12	228	240	—	0	5	23	86
Indiana	—	2	23	125	119	—	0	13	32	31
Michigan	1	3	11	130	165	—	1	4	59	77
Ohio	—	4	13	193	242	—	1	6	69	55
Wisconsin	1	2	11	125	132	—	1	3	45	51
W.N. Central	—	6	37	356	356	2	2	11	137	95
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	5	37	36	N	0	1	N	N
Minnesota	—	0	34	161	166	—	0	10	79	34
Missouri	—	2	8	80	85	—	0	4	32	34
Nebraska§	—	1	3	41	37	2	0	1	14	8
North Dakota	—	0	4	16	10	—	0	3	5	9
South Dakota	—	0	3	21	22	—	0	2	7	10
S. Atlantic	13	21	49	1,039	1,035	5	6	18	293	319
Delaware	1	0	1	11	8	—	0	0	—	—
District of Columbia	—	0	3	12	14	N	0	0	N	N
Florida	5	5	12	256	245	2	1	6	65	61
Georgia	—	5	13	245	235	—	2	6	78	90
Maryland§	4	3	12	177	176	3	1	7	71	53
North Carolina	2	2	12	88	126	N	0	0	N	N
South Carolina§	1	1	5	66	68	—	1	6	44	62
Virginia§	—	3	9	147	127	—	0	4	23	42
West Virginia	—	1	4	37	36	—	0	3	12	11
E.S. Central	1	3	10	178	174	—	2	7	91	86
Alabama§	N	0	0	N	N	N	0	0	N	N
Kentucky	—	1	5	35	38	N	0	0	N	N
Mississippi	N	0	0	N	N	—	0	2	19	9
Tennessee§	1	3	9	143	136	—	1	6	72	77
W.S. Central	2	8	79	397	450	2	5	46	264	261
Arkansas§	1	0	3	18	11	—	0	4	26	13
Louisiana	—	0	3	11	17	—	0	3	13	13
Oklahoma	—	3	20	123	103	—	1	7	52	62
Texas§	1	5	59	245	319	2	3	34	173	173
Mountain	4	10	22	406	526	—	4	16	210	240
Arizona	1	3	9	141	181	—	2	10	102	106
Colorado	2	2	7	117	133	—	1	4	44	55
Idaho§	—	0	2	10	16	—	0	2	8	5
Montana§	N	0	0	N	N	N	0	0	N	N
Nevada§	1	0	1	5	13	—	0	1	—	3
New Mexico§	—	1	7	75	126	—	0	4	24	34
Utah	—	1	6	57	50	—	0	5	32	35
Wyoming§	—	0	1	1	7	—	0	0	—	2
Pacific	—	3	9	150	157	—	0	4	31	45
Alaska	—	1	4	34	34	—	0	3	23	28
California	N	0	0	N	N	N	0	0	N	N
Hawaii	—	2	8	116	123	—	0	2	8	17
Oregon§	N	0	0	N	N	N	0	0	N	N
Washington	N	0	0	N	N	N	0	0	N	N
American Samoa	—	0	0	—	30	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 28, 2009, and November 22, 2008 (47th week)*

Reporting area	*Streptococcus pneumoniae*, invasive disease, drug resistant†										Syphilis, primary and secondary				
	All ages					Aged <5 years									
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	15	54	276	2,414	2,791	7	8	20	388	455	81	269	452	11,915	11,821
New England	1	1	16	50	108	—	0	2	3	15	4	5	15	289	289
Connecticut	—	0	15	—	55	—	0	2	—	5	1	1	5	52	30
Maine§	—	0	2	16	17	—	0	1	1	2	—	0	1	3	10
Massachusetts	—	0	1	3	—	—	0	1	2	—	2	4	10	207	202
New Hampshire	—	0	3	5	—	—	0	0	—	—	1	0	2	14	19
Rhode Island§	—	0	6	13	22	—	0	1	—	6	—	0	5	13	18
Vermont§	1	0	2	13	14	—	0	0	—	2	—	0	1	—	10
Mid. Atlantic	1	3	14	158	281	—	0	3	24	28	32	35	50	1,645	1,525
New Jersey	—	0	0	—	—	—	0	0	—	—	—	4	13	200	196
New York (Upstate)	1	1	10	71	63	—	0	2	13	8	4	2	8	110	121
New York City	—	0	4	6	116	—	0	2	—	4	27	22	39	1,016	960
Pennsylvania	—	1	8	81	102	—	0	2	11	16	1	7	13	319	248
E.N. Central	—	10	41	536	562	—	1	7	76	75	4	23	45	1,051	1,165
Illinois	N	0	0	N	N	N	0	0	N	N	—	10	18	402	481
Indiana	—	3	32	177	189	—	0	6	25	23	—	2	10	132	124
Michigan	—	0	2	24	20	—	0	1	3	2	4	3	18	216	185
Ohio	—	7	18	335	353	—	1	4	48	50	—	6	19	269	314
Wisconsin	—	0	0	—	—	—	0	0	—	—	—	1	3	32	61
W.N. Central	—	2	161	106	192	—	0	3	21	38	—	6	12	277	377
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	19	15
Kansas	—	0	5	38	74	—	0	2	13	6	—	0	3	26	26
Minnesota	—	0	156	—	26	—	0	3	—	26	—	1	4	67	106
Missouri	—	1	5	54	82	—	0	1	6	3	—	3	8	144	214
Nebraska§	—	0	1	2	—	—	0	0	—	—	—	0	3	16	15
North Dakota	—	0	3	10	2	—	0	0	—	—	—	0	1	4	—
South Dakota	—	0	2	2	8	—	0	2	2	3	—	0	1	1	1
S. Atlantic	12	26	53	1,168	1,155	7	4	14	196	213	24	64	262	2,906	2,584
Delaware	—	0	2	18	3	—	0	2	3	—	—	0	3	27	15
District of Columbia	N	0	0	N	N	N	0	0	N	N	—	3	8	159	134
Florida	11	15	36	684	647	6	2	13	117	128	—	19	32	888	949
Georgia	1	8	25	368	399	1	1	5	68	72	—	14	227	685	599
Maryland§	—	0	1	4	5	—	0	0	—	1	—	6	16	257	303
North Carolina	N	0	0	N	N	N	0	0	N	N	13	9	31	501	256
South Carolina§	—	0	0	—	—	—	0	0	—	—	1	2	6	105	86
Virginia§	N	0	0	N	N	N	0	0	N	N	10	7	15	280	230
West Virginia	—	1	13	94	101	—	0	2	8	12	—	0	2	4	12
E.S. Central	—	4	25	225	290	—	0	3	32	56	4	22	36	1,005	1,017
Alabama§	N	0	0	N	N	N	0	0	N	N	1	8	18	379	407
Kentucky	—	1	5	68	71	—	0	2	8	11	—	1	10	59	78
Mississippi	—	0	3	4	39	—	0	1	3	14	1	4	16	190	154
Tennessee§	—	2	23	153	180	—	0	3	21	31	2	8	15	377	378
W.S. Central	—	1	6	81	85	—	0	3	16	12	7	54	79	2,357	2,117
Arkansas§	—	1	5	49	15	—	0	3	11	3	6	5	35	236	157
Louisiana	—	1	5	32	70	—	0	1	5	9	—	13	41	595	631
Oklahoma	N	0	0	N	N	N	0	0	N	N	1	1	5	64	79
Texas§	—	0	0	—	—	—	0	0	—	—	—	31	49	1,462	1,250
Mountain	1	1	7	87	116	—	0	2	18	16	4	8	18	377	546
Arizona	—	0	0	—	—	—	0	0	—	—	—	3	9	145	285
Colorado	—	0	0	—	—	—	0	0	—	—	—	1	4	70	124
Idaho§	N	0	1	N	N	N	0	1	N	N	—	0	1	3	7
Montana§	—	0	0	—	1	—	0	0	—	—	—	0	7	1	—
Nevada§	1	0	4	29	52	—	0	2	6	6	1	1	10	88	70
New Mexico§	—	0	1	1	—	—	0	0	—	—	3	1	5	51	35
Utah	—	1	5	46	61	—	0	2	10	10	—	0	2	16	22
Wyoming§	—	0	2	11	2	—	0	1	2	—	—	0	1	3	3
Pacific	—	0	1	3	2	—	0	1	2	2	2	44	68	2,008	2,201
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	0	—	1
California	N	0	0	N	N	N	0	0	N	N	2	40	61	1,824	1,984
Hawaii	—	0	1	3	2	—	0	1	2	2	—	0	3	27	26
Oregon§	N	0	0	N	N	N	0	0	N	N	—	0	4	38	23
Washington	N	0	0	N	N	N	0	0	N	N	—	2	7	119	167
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	—	3	17	195	148
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2009 is provisional.
† Includes cases of invasive pneumococcal disease caused by drug-resistant *S. pneumoniae* (DRSP) (NNDSS event code 11720).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending November 28, 2009, and November 22, 2008 (47th week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
						Neuroinvasive					Nonneuroinvasive§				
	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008	Current week	Previous 52 weeks		Cum 2009	Cum 2008
		Med	Max				Med	Max				Med	Max		
United States	65	385	1,035	15,330	26,536	—	0	43	337	687	—	0	45	299	667
New England	—	7	45	299	1,552	—	0	0	—	7	—	0	0	—	3
Connecticut	—	0	18	—	792	—	0	0	—	5	—	0	0	—	3
Maine¶	—	0	12	69	245	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	2	2	—	—	0	0	—	1	—	0	0	—	—
New Hampshire	—	4	11	181	235	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	1	4	—	—	0	0	—	1	—	0	0	—	—
Vermont¶	—	0	16	43	280	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	7	34	57	1,407	2,173	—	0	2	7	49	—	0	1	1	20
New Jersey	N	0	0	N	N	—	0	1	2	5	—	0	0	—	4
New York (Upstate)	N	0	0	N	N	—	0	1	3	24	—	0	1	1	7
New York City	—	0	0	—	—	—	0	1	2	8	—	0	0	—	7
Pennsylvania	7	34	57	1,407	2,173	—	0	0	—	12	—	0	0	—	2
E.N. Central	9	139	254	5,632	6,878	—	0	3	7	44	—	0	3	4	20
Illinois	—	32	73	1,385	1,276	—	0	2	4	12	—	0	0	—	8
Indiana	—	5	30	348	—	—	0	1	2	3	—	0	1	2	1
Michigan	7	41	87	1,689	2,739	—	0	0	—	11	—	0	0	—	6
Ohio	—	38	88	1,766	2,093	—	0	0	—	14	—	0	2	2	1
Wisconsin	2	9	55	444	770	—	0	1	1	4	—	0	0	—	4
W.N. Central	30	15	114	805	1,152	—	0	5	25	51	—	0	11	70	134
Iowa	N	0	0	N	N	—	0	0	—	3	—	0	1	5	3
Kansas	—	3	19	183	423	—	0	1	4	14	—	0	2	6	17
Minnesota	—	0	0	—	—	—	0	1	1	2	—	0	1	3	8
Missouri	4	8	51	522	678	—	0	2	3	12	—	0	0	—	3
Nebraska¶	N	0	0	N	N	—	0	2	11	7	—	0	6	40	40
North Dakota	26	0	108	83	—	—	0	0	—	2	—	0	1	1	35
South Dakota	—	0	2	17	51	—	0	3	6	11	—	0	2	15	28
S. Atlantic	15	36	146	1,753	4,282	—	0	3	9	20	—	0	1	3	20
Delaware	—	0	2	12	44	—	0	0	—	—	—	0	0	—	1
District of Columbia	—	0	3	12	21	—	0	0	—	4	—	0	0	—	4
Florida	13	22	67	1,080	1,485	—	0	1	2	3	—	0	1	1	—
Georgia	N	0	0	N	N	—	0	1	4	4	—	0	0	—	4
Maryland¶	N	0	0	N	N	—	0	0	—	6	—	0	1	2	8
North Carolina	N	0	0	N	N	—	0	0	—	2	—	0	0	—	1
South Carolina¶	—	0	54	154	797	—	0	2	3	—	—	0	0	—	1
Virginia¶	—	0	119	28	1,307	—	0	0	—	—	—	0	0	—	1
West Virginia	2	9	32	467	628	—	0	0	—	1	—	0	0	—	—
E.S. Central	—	6	26	377	1,073	—	0	6	35	48	—	0	4	25	57
Alabama¶	—	6	26	372	1,060	—	0	0	—	11	—	0	0	—	7
Kentucky	N	0	0	N	N	—	0	1	3	3	—	0	0	—	—
Mississippi	—	0	2	5	13	—	0	5	29	22	—	0	4	21	43
Tennessee¶	N	0	0	N	N	—	0	1	3	12	—	0	1	4	7
W.S. Central	—	82	747	3,822	7,343	—	0	16	99	69	—	0	6	29	62
Arkansas¶	—	1	30	115	683	—	0	1	4	7	—	0	0	—	2
Louisiana	—	1	7	76	69	—	0	2	7	18	—	0	4	6	31
Oklahoma	N	0	0	N	N	—	0	2	6	4	—	0	2	2	5
Texas¶	—	76	721	3,631	6,591	—	0	13	82	40	—	0	4	21	24
Mountain	4	23	71	1,147	1,957	—	0	10	72	103	—	0	16	106	184
Arizona	—	0	0	—	—	—	0	4	12	62	—	0	2	6	52
Colorado	4	10	33	476	796	—	0	7	35	17	—	0	14	66	54
Idaho¶	N	0	0	N	N	—	0	3	6	4	—	0	5	16	35
Montana¶	—	0	20	105	282	—	0	1	2	—	—	0	1	3	5
Nevada¶	N	0	0	N	N	—	0	2	7	9	—	0	1	5	7
New Mexico¶	—	0	20	134	206	—	0	2	6	5	—	0	1	2	3
Utah	—	9	32	432	663	—	0	0	—	6	—	0	0	—	20
Wyoming¶	—	0	1	—	10	—	0	1	4	—	—	0	2	8	8
Pacific	—	2	7	88	126	—	0	12	83	296	—	0	11	61	167
Alaska	—	1	6	53	65	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	7	57	291	—	0	6	44	153
Hawaii	—	1	4	35	61	—	0	0	—	—	—	0	0	—	—
Oregon¶	N	0	0	N	N	—	0	1	1	3	—	0	3	6	13
Washington	N	0	0	N	N	—	0	6	25	2	—	0	3	11	1
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	1	1	—	62	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	6	26	404	542	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.
U: Unavailable. —: No reported cases. N: Not reportable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2009 is provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.
† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.
§ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table, except starting in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at http://www.cdc.gov/epo/dphsi/phs/infdis.htm.
¶ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deaths in 122 U.S. cities,* week ending November 28, 2009 (47th week)

Reporting area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45–64	25–44	1–24	<1	
New England	415	279	92	32	3	9	38
Boston, MA	114	60	30	17	1	6	12
Bridgeport, CT	31	25	5	—	—	1	5
Cambridge, MA	13	10	2	1	—	—	1
Fall River, MA	26	20	5	1	—	—	2
Hartford, CT	24	18	5	1	—	—	4
Lowell, MA	24	20	—	3	—	1	1
Lynn, MA	10	7	2	—	1	—	—
New Bedford, MA	16	11	5	—	—	—	2
New Haven, CT	18	11	4	2	1	—	2
Providence, RI	32	28	2	2	—	—	2
Somerville, MA	—	—	—	—	—	—	—
Springfield, MA	36	20	13	2	—	1	2
Waterbury, CT	22	15	6	1	—	—	—
Worcester, MA	49	34	13	2	—	—	5
Mid. Atlantic	1,786	1,199	423	110	25	29	84
Albany, NY	56	35	15	4	1	1	2
Allentown, PA	26	17	4	3	—	2	2
Buffalo, NY	90	62	21	5	1	1	7
Camden, NJ	38	23	13	2	—	—	—
Elizabeth, NJ	9	6	2	1	—	—	—
Erie, PA	28	21	4	2	1	—	2
Jersey City, NJ	50	31	15	2	2	—	4
New York City, NY	1,066	737	239	59	15	16	43
Newark, NJ	37	16	14	3	2	2	3
Paterson, NJ	4	1	3	—	—	—	—
Philadelphia, PA	130	63	42	18	2	5	5
Pittsburgh, PA§	28	19	7	2	—	—	2
Reading, PA	27	22	4	1	—	—	1
Rochester, NY	55	33	16	4	1	1	1
Schenectady, NY	22	19	3	—	—	—	3
Scranton, PA	14	10	4	—	—	—	3
Syracuse, NY	53	45	6	2	—	—	5
Trenton, NJ	18	11	6	—	—	1	—
Utica, NY	17	14	1	2	—	—	—
Yonkers, NY	18	14	4	—	—	—	1
E.N. Central	1,345	882	336	63	37	27	98
Akron, OH	32	20	9	3	—	—	3
Canton, OH	32	24	7	1	—	—	1
Chicago, IL	U	U	U	U	U	U	U
Cincinnati, OH	59	27	20	5	3	4	4
Cleveland, OH	207	150	49	4	2	2	21
Columbus, OH	135	92	23	10	6	4	6
Dayton, OH	76	53	14	3	4	2	8
Detroit, MI	128	70	39	9	5	5	6
Evansville, IN	46	32	14	—	—	—	4
Fort Wayne, IN	67	40	18	6	2	1	3
Gary, IN	10	8	2	—	—	—	—
Grand Rapids, MI	40	24	16	—	—	—	3
Indianapolis, IN	183	116	47	7	8	5	9
Lansing, MI	51	36	10	2	3	—	6
Milwaukee, WI	54	32	18	3	1	—	5
Peoria, IL	37	25	10	2	—	—	6
Rockford, IL	43	28	9	4	—	2	1
South Bend, IN	36	28	7	—	1	—	—
Toledo, OH	75	50	19	3	2	1	9
Youngstown, OH	34	27	5	1	—	1	3
W.N. Central	360	224	92	30	8	6	29
Des Moines, IA	—	—	—	—	—	—	—
Duluth, MN	26	14	6	5	1	—	4
Kansas City, KS	18	9	6	2	1	—	—
Kansas City, MO	84	56	20	6	1	1	5
Lincoln, NE	26	18	4	4	—	—	2
Minneapolis, MN	37	21	12	1	1	2	5
Omaha, NE	68	43	21	3	—	1	7
St. Louis, MO	34	18	8	6	1	1	2
St. Paul, MN	34	23	7	2	2	—	2
Wichita, KS	33	22	8	1	1	1	2
S. Atlantic	837	525	233	48	17	14	60
Atlanta, GA	145	103	33	8	—	1	9
Baltimore, MD	108	58	31	11	6	2	10
Charlotte, NC	62	38	20	2	2	—	2
Jacksonville, FL	102	66	31	2	1	2	11
Miami, FL	85	54	24	6	—	1	7
Norfolk, VA	42	24	13	5	—	—	2
Richmond, VA	60	30	26	3	1	—	4
Savannah, GA	33	24	6	1	1	1	1
St. Petersburg, FL	30	19	7	2	1	1	4
Tampa, FL	122	79	31	7	3	2	9
Washington, D.C.	40	26	7	1	2	4	1
Wilmington, DE	8	4	4	—	—	—	—
E.S. Central	535	356	135	21	15	8	44
Birmingham, AL	101	63	33	2	2	1	13
Chattanooga, TN	51	29	12	6	3	1	1
Knoxville, TN	61	46	12	2	1	—	7
Lexington, KY	39	23	13	1	1	1	2
Memphis, TN	82	54	17	4	4	3	9
Mobile, AL	82	60	18	2	1	1	6
Montgomery, AL	20	15	3	2	—	—	2
Nashville, TN	99	66	27	2	3	1	4
W.S. Central	898	546	240	66	26	20	57
Austin, TX	67	39	18	5	3	2	7
Baton Rouge, LA	85	61	15	4	5	—	—
Corpus Christi, TX	30	17	8	4	1	—	4
Dallas, TX	108	64	23	12	4	5	5
El Paso, TX	49	38	1	5	4	1	2
Fort Worth, TX	U	U	U	U	U	U	U
Houston, TX	262	139	97	15	6	5	18
Little Rock, AR	42	18	21	1	—	2	2
New Orleans, LA	U	U	U	U	U	U	U
San Antonio, TX	150	103	34	10	1	2	8
Shreveport, LA	42	23	12	4	1	2	6
Tulsa, OK	63	44	11	6	1	1	5
Mountain	958	654	217	54	16	16	63
Albuquerque, NM	83	46	22	13	1	1	9
Boise, ID	54	38	14	2	—	—	2
Colorado Springs, CO	79	51	23	3	—	2	7
Denver, CO	98	61	25	6	4	2	3
Las Vegas, NV	272	192	63	9	4	4	20
Ogden, UT	13	10	1	1	1	—	—
Phoenix, AZ	118	82	26	6	1	2	6
Pueblo, CO	24	13	7	4	—	—	3
Salt Lake City, UT	70	48	16	2	2	2	8
Tucson, AZ	147	113	20	8	3	3	5
Pacific	1,217	840	288	46	24	19	127
Berkeley, CA	1	1	—	—	—	—	—
Fresno, CA	93	61	24	4	3	1	14
Glendale, CA	23	20	3	—	—	—	3
Honolulu, HI	47	33	12	1	1	—	6
Long Beach, CA	44	31	9	1	2	1	3
Los Angeles, CA	196	133	44	11	4	4	32
Pasadena, CA	17	12	4	—	—	1	2
Portland, OR	98	70	20	4	4	—	7
Sacramento, CA	131	95	29	3	3	1	9
San Diego, CA	93	65	25	1	—	2	3
San Francisco, CA	86	63	16	5	—	2	11
San Jose, CA	165	115	38	4	4	4	20
Santa Cruz, CA	24	13	8	3	—	—	1
Seattle, WA	49	25	18	4	—	2	7
Spokane, WA	41	31	9	1	—	—	4
Tacoma, WA	109	72	29	4	3	1	5
Total¶	**8,351**	**5,505**	**2,056**	**470**	**171**	**148**	**600**

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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