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Update: Novel Influenza A (H1N1) Virus Infections — Worldwide, May 6, 2009

Since mid-April 2009, CDC, state and local health authorities in the United States, the World Health Organization (WHO), and health ministries in several countries have been responding to an outbreak of influenza caused by a novel influenza A (H1N1) virus (*1*). In March and early April 2009, Mexico experienced outbreaks of respiratory illness subsequently confirmed by CDC and Canada to be caused by the novel virus. The influenza strain identified in U.S. patients was genetically similar to viruses isolated from patients in Mexico (*2*). Since recognition of the novel influenza A (H1N1) virus in Mexico and the United States, as of May 6, a total of 21 additional countries had reported cases, with a total of 1,882 confirmed cases worldwide. Several WHO member states are conducting ongoing investigations of this worldwide outbreak, and WHO is monitoring and compiling surveillance data and case reports. On April 29, WHO raised the level of pandemic alert from phase 4 to phase 5, indicating that human-to-human spread of the virus had occurred in at least two countries in one WHO region. This report provides an update of the initial investigations and spread of novel influenza A (H1N1) virus worldwide.

Mexico

Since implementing enhanced surveillance on April 17, the number of suspected cases has increased rapidly, along with hospitalizations for severe acute respiratory illness (Figure 1). As of May 5, using an updated case definition of fever plus cough or sore throat for a suspected case and real-time reverse transcription–polymerase chain reaction (rRT-PCR) or viral culture for a laboratory-confirmed case, Mexico had identified 11,932 suspected cases and 949* cases of laboratory-confirmed novel influenza A (H1N1) virus infection, including 42 patients who died. Cases with laboratory-confirmed infection have been identified in 27 of 31 Mexican states and the Federal District. Confirmed cases in Mexico and in the United States have a similar age distribution (Table). Information is available on the clinical course of illness for 22 patients with laboratory-confirmed illness who were hospitalized, including seven patients who died. Five of the 15 surviving patients and one of the seven patients who died had underlying chronic medical conditions. Additional details on the clinical signs and symptoms of these and other patients are being collected. Among patients with confirmed cases for whom information was available, 56 (98%) of 57 reported fever, 49 (94%) of 52 reported cough, 23 (79%) of 29 reported dyspnea, 35 (80%) of 44 reported headache, and 34 of (83%) 41 reported rhinorrhea. The government of Mexico has instituted several measures to slow disease transmission and reduce mortality, including closure of all schools and avoidance of large public gatherings, distribution of oseltamivir to all health-care units,

*As of May 6, 2009, the number of laboratory-confirmed cases had increased to 1,112.

INSIDE

458 False-Positive Results with a Commercially Available West Nile Virus Immunoglobulin M Assay — United States, 2008
460 Assessment of Body Mass Index Screening of Elementary School Children — Florida, 2007–2008
463 Primary and Secondary Syphilis — Jefferson County, Alabama, 2002–2007
467 Outbreak of Swine-Origin Influenza A (H1N1) Virus Infection — Mexico, March–April 2009
470 Swine-Origin Influenza A (H1N1) Virus Infections in a School — New York City, April 2009
473 QuickStats

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publication of specific clinical guidelines, and establishment of a call center to educate members of the public who are seeking health-care information.

United States

After recognition of the first cases of infection with the novel influenza A (H1N1) virus, CDC and state health departments initiated enhanced surveillance measures to identify additional cases. As of May 6, a total of 1,487 confirmed[†] and probable cases had been reported from 43 states, including 642 confirmed cases (reported from 41 states) and 845 probable cases (reported from 42 states). Current experience with laboratory testing results indicates that the probability of laboratory confirmation for probable cases is >99%. States with the most confirmed cases are Illinois (122 cases), New York (97), California (67), Texas (61), and Arizona (48). Dates of illness onset for patients with confirmed or probable illness range from March 28 to May 4 (Figure 2), although the most recent case counts do not account for testing and reporting delays. Among persons with laboratory-confirmed illness, 35 hospitalized patients have been reported from 16 states, including two patients from Texas who died, both with underlying medical conditions. The age distribution of persons with laboratory-confirmed disease ranged from 3 months to 81 years (Table). A total of 18 patients were aged <2 years, and 31 were aged 2–4 years.

The age distribution of the 35 laboratory-confirmed hospitalized patients ranged from 6 months to 53 years (median: 15 years). Among patients with confirmed disease for whom data were available, 262 (90%) of 292 reported fever, 249 (84%) of 296 reported cough, 176 (61%) of 290 reported sore throat, 65 (26%) of 249 reported diarrhea, and 54 (24%) of 221 reported vomiting.

Other Countries

On April 26, the first cases of novel influenza A (H1N1) virus infection outside of the United States and Mexico were reported in Canada. As of May 6, WHO had reported that 309 persons with laboratory-confirmed disease had been identified in 21 countries other than Mexico and the United States. Confirmed cases have been reported from Asia (Hong Kong S.A.R. and Korea), the Pacific region (New Zealand), the Middle East (Israel), Europe, and Central and South America (El Salvador, Costa Rica, Colombia, and Guatemala) (Figure 3).

Of 178 patients for whom travel history was available, 145 (82%) reported recent travel to Mexico, and four (2%)

[†] Case definition available at http://www.cdc.gov/h1n1flu/casedef.htm.

FIGURE 1. Number of confirmed (N = 822) and suspected (N = 11,356) cases of novel influenza A (H1N1) virus infection, by date of illness onset — Mexico, March 11–May 3, 2009

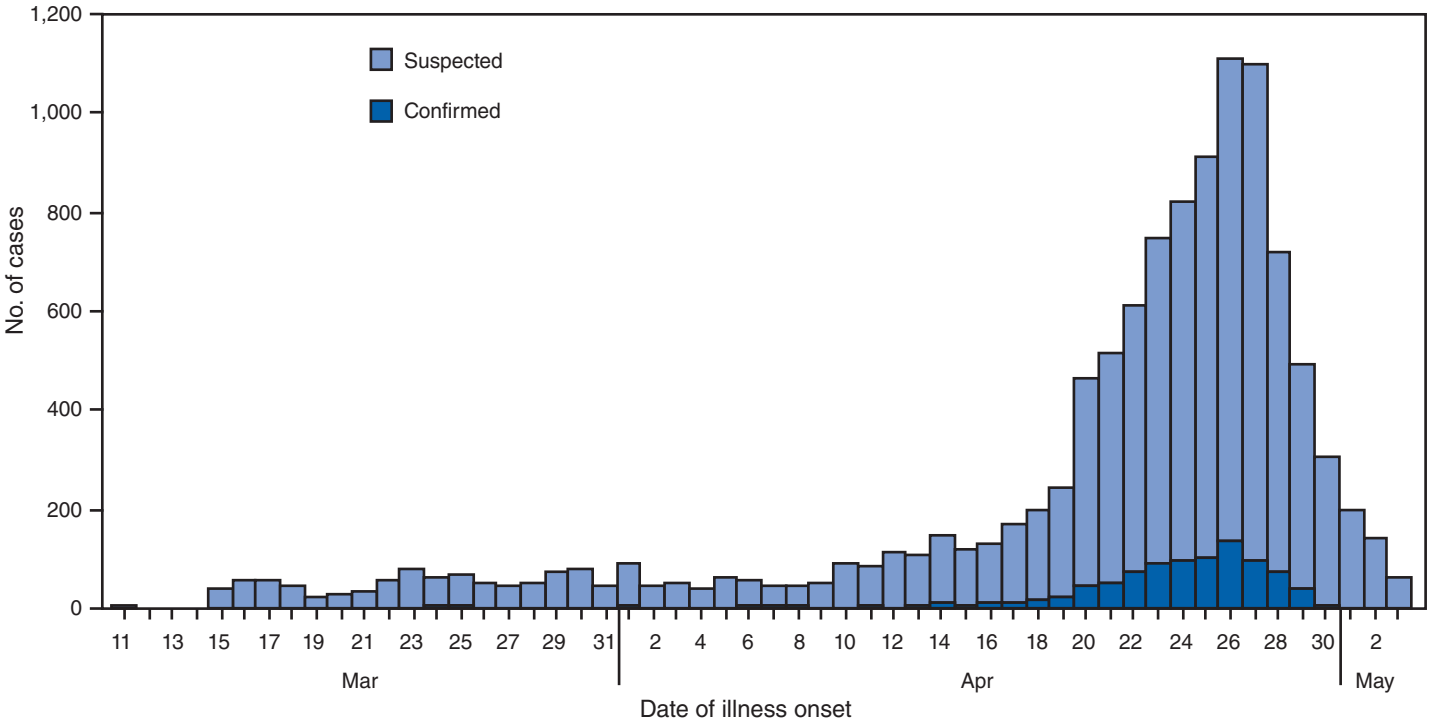

TABLE. Number and percentage of confirmed cases of novel influenza A (H1N1) virus infection, by patient age group and hospitalization status — United States and Mexico, March 1–May 5, 2009

	United States			Mexico		
		Hospitalized			Hospitalized	
Age (yrs)	Total	No.	(%)	Total	No.	(%)
<5	**51**	7	(14)	**115**	6	(5)
5–14	**204**	9	(4)	**248**	4	(2)
15–29	**250**	9	(4)	**313**	13	(4)
30–44	**68**	9	(13)	**154**	16	(10)
45–59	**36**	1	(3)	**94**	7	(7)
≥60	**10**	0	(0)	**21**	2	(10)
Not available	**23**	0	(0)	**4**	4	(100)
Total	**642**	**35**	**(5)**	**949**	**52**	**(6)**

reported travel to the United States. Among those who had not traveled to Mexico, 17 (52%) reported contact with a returning traveler from Mexico. Canada, Germany, Spain, and the United Kingdom all have reported evidence of in-country, second-generation, human-to-human transmission (e.g., a health-care worker in Germany who had cared for a patient with a confirmed infection). No reports have been made of sustained, community-wide transmission in affected countries. Consistent with cases in North America, most of the cases reported from other countries have been among young adults, with a median age of 27.1 years (range: 2–62 years, N = 45). The majority of cases in other countries have been uncomplicated, and no deaths have been reported; four patients have been hospitalized.[§]

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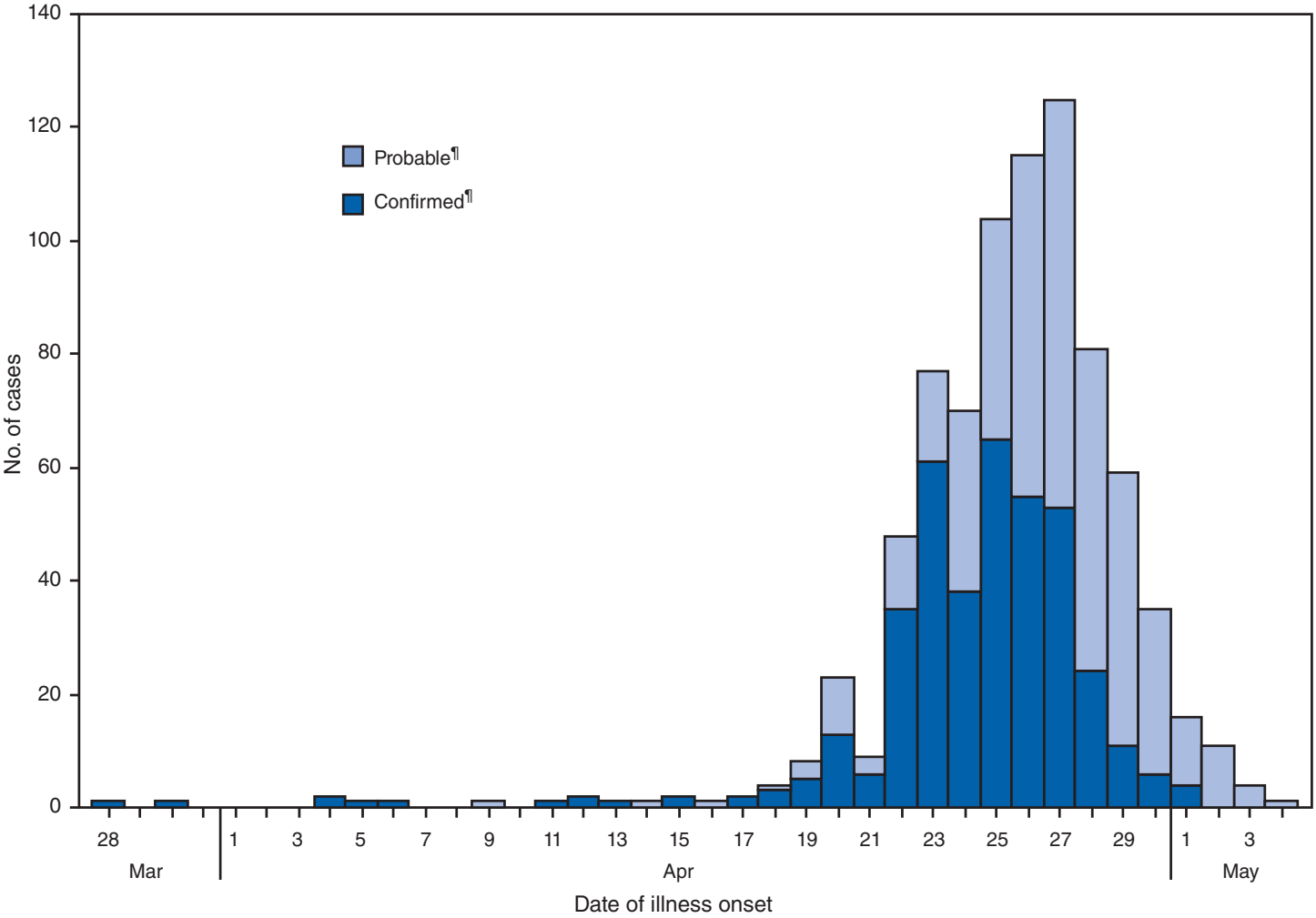
Editorial Note: Early surveillance data from this outbreak suggest that the novel influenza A (H1N1) virus has the potential for efficient, rapid spread among countries. Although the ill-

[§] Additional information is available at http://www.who.int/csr/don/2009_05_06.

FIGURE 2. Number of confirmed (N = 394)* and probable (N = 414)† cases of novel influenza A (H1N1) virus infection with known dates of illness onset — United States, March 28–May 4, 2009§



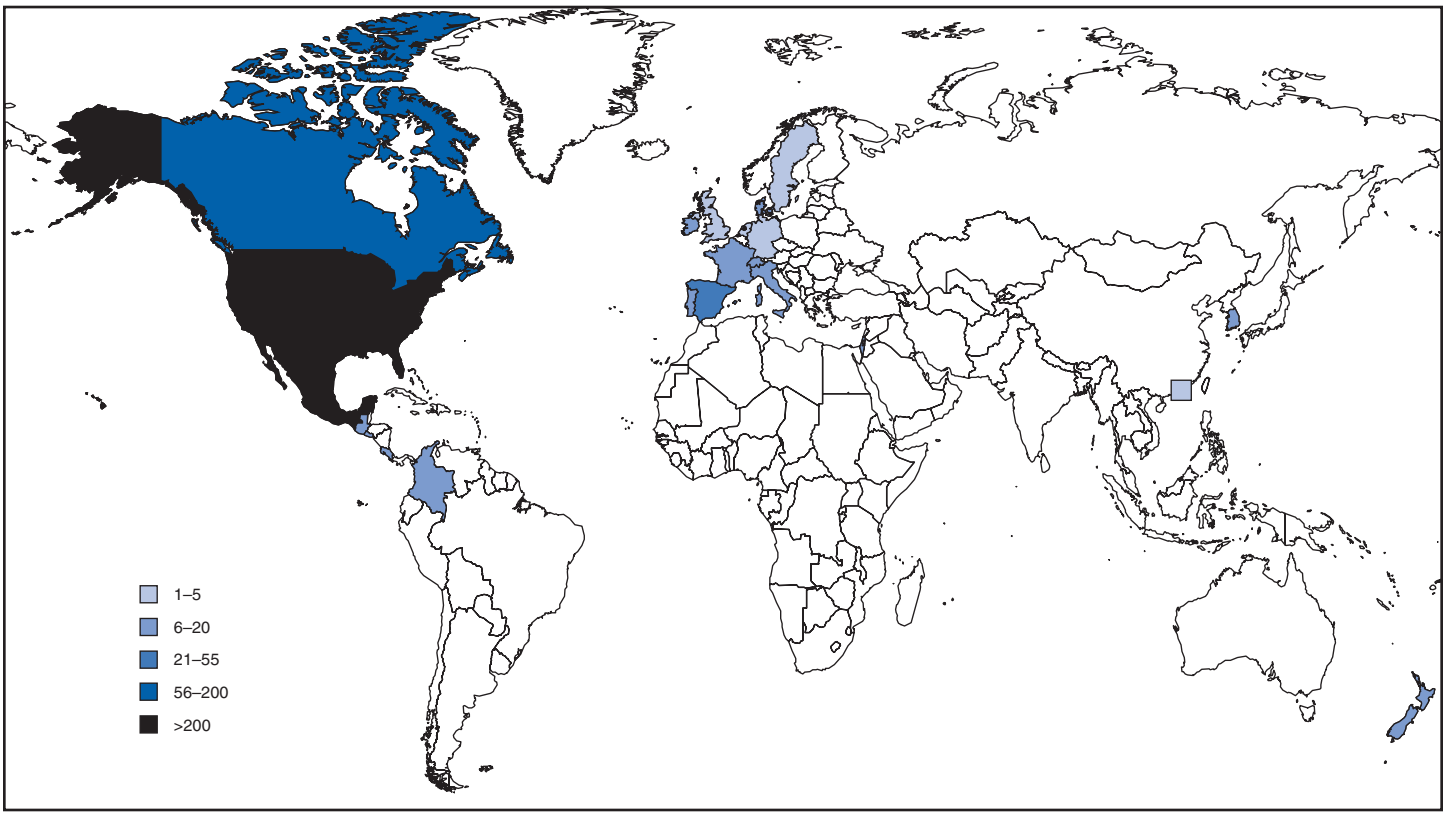
* Onset dates available for 394 of 642 confirmed cases.
† Onset dates available for 414 of 845 probable cases.
§ Data reported by CDC as of May 6, 2009.
¶ Case definition available at http://www.cdc.gov/h1n1flu/casedef.htm.

ness associated with infection generally seems self-limited and uncomplicated, a substantial number of cases of severe disease and death has been reported in previously healthy young adults and children. Several characteristics of this outbreak appear unusual compared with a typical influenza seasonal outbreak. First, the percentage of patients requiring hospitalization appears to be higher than would be expected during a typical influenza season (*3*). Second, the age distribution of hospitalizations for novel influenza A (H1N1) virus infection is different than that of hospitalizations for seasonal influenza, which typically occur among children aged <2 years, adults aged ≥65 years, and persons with chronic health conditions (*3*). In Mexico and the United States, the percentage of patients requiring hospitalization has been particularly high among persons aged 30–44 years.

Two deaths have been reported in the United States, resulting in a preliminary case-fatality rate of 0.2% among patients with laboratory-confirmed disease. However, such case-fatality rates should be viewed with caution. The actual case-fatality rate is difficult to ascertain in a rapidly evolving outbreak because an unknown proportion of currently infected patients might die, denominators might be uncertain because of unreported cases, and groups at high risk for death from seasonal influenza (e.g., older adults and patients with chronic disease) might not yet have been exposed to the novel influenza A (H1N1) virus.

Summertime influenza outbreaks in temperate climates have been reported in closed communities such as prisons, nursing homes, cruise ships, and other settings with close contact (*4–8*). Such outbreaks typically do not result in community-wide transmission, but they can be important indicators of

FIGURE 3. Number of confirmed cases (N = 1,882) of novel influenza A (H1N1) virus infection — worldwide, May 6, 2009*



* Data reported by the World Health Organization as of May 6, 2009.

viruses likely to circulate in the upcoming influenza season (*8*). The novel influenza A (H1N1) virus has been circulating in North America largely after the peak influenza transmission season. For that reason, the epidemiology and severity of the upcoming influenza season in the southern hemisphere or in the northern hemisphere cannot be predicted. The imminent onset of the season for influenza virus transmission in the southern hemisphere, coupled with detection of confirmed cases in several countries in the southern zone, raise concern that spread of novel influenza A (H1N1) virus might result in large-scale outbreaks during upcoming months. Countries in the southern hemisphere that are entering the influenza season should anticipate outbreaks and enhance surveillance accordingly. Influenza virus can circulate year round in tropical regions; therefore, these countries should maintain enhanced surveillance for novel influenza A (H1N1) virus.

Studies in countries affected by the novel influenza A (H1N1) virus should help guide surveillance, case management, and prevention strategies in countries not yet affected. Key concerns that should be addressed in these studies include assessment of the potential impact on public health; clinical progression of disease, including rates and types of complications for different age and risk groups; and information on virus transmissibility. Assessment of potential disease severity associated with this novel virus will help inform decisions on prevention strategies to slow the spread of infection. Effective control measures will depend on the ability of national governments to quickly gather and share virologic, epidemiologic, and clinical information from multiple sources as new cases appear.

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False-Positive Results with a Commercially Available West Nile Virus Immunoglobulin M Assay — United States, 2008

In September 2008, CDC, the Food and Drug Administration (FDA), and state health departments began a nationwide investigation into an increase in false-positive test results obtained with a commercially available West Nile virus (WNV) immunoglobulin M (IgM) capture enzyme-linked immunosorbent assay (ELISA). The investigation revealed that, in the United States, one lot of the commercially available test kits was the source of the false-positive results (*1*). That lot was recalled, and a second lot distributed outside the United States also was recalled (*1*). During July 1–September 30, 2008, the kit lot implicated in the United States resulted in positive tests on 568 specimens collected from 518 patients in 42 states and the District of Columbia (DC). A total of 166 (29%) specimens were retested at CDC, and 119 (72%) had false-positive results. A higher false-positive percentage were found among patients without evidence of neuroinvasive disease (77%) than patients with evidence of neuroinvasive disease (47%). Of the 518 patients, 249 (48%) had been reported to CDC as persons with WNV disease; however, only 45 (18%) had confirmatory testing that supported their inclusion in national surveillance data. Commercially available WNV test kits should be used to determine a presumptive diagnosis of WNV neuroinvasive disease. These kits should not be used to test specimens from persons without compatible illness, and any positive result should be confirmed by additional testing at a state health department or CDC.

WNV infection is a nationally notifiable disease. Cases of WNV disease are reported by state health departments to CDC through ArboNET, an Internet-based, passive surveillance system.* Cases reported to ArboNET must have clinical evidence of compatible illness and laboratory evidence of recent WNV infection (*2*). Based on patients' clinical signs and symptoms, WNV cases are classified as neuroinvasive disease (i.e., encephalitis, meningitis, or acute flaccid paralysis) or nonneuroinvasive disease (i.e., other febrile illness). Four FDA-cleared WNV serologic assays are commercially available for use in the United States. These assays are labeled for use on serum to aid in a presumptive diagnosis of WNV infection in patients who have clinical symptoms consistent with neuroinvasive disease. According to product inserts (*3–6*), all positive results obtained with these assays should be confirmed by plaque reduction neutralization test (PRNT) or by using current CDC guidelines for laboratory diagnosis of this disease (*7*).

Initial Investigation

In summer 2008, three state health departments independently contacted CDC regarding positive WNV IgM antibody test results in patients who lacked clinical or epidemiologic evidence of WNV infection. All of these tests results originated from one large commercial laboratory that was using the PanBio WNV IgM ELISA test kit manufactured by Inverness Medical (Princeton, New Jersey). On September 5, 2008, the New York State Department of Health's Wadsworth Center laboratory reported that 13 (86%) of 15 specimens testing positive for WNV IgM antibodies at the commercial laboratory in August were negative upon retesting at the state laboratory. On September 10, CDC notified all state health departments of the potential problem and initiated an investigation into the cause of the false-positive test results (*1*).

In late September, one of the affected commercial laboratories sent a convenience sample of 64 specimens that had yielded positive or negative WNV IgM antibodies results to CDC and the kit's manufacturer for retesting. This evaluation identified two lots of the kit with higher false-positive rates (20% and 56%) than the expected rate calculated from data in the package insert (2% [95% confidence interval = 0%–9%]). On October 8, these two lots were recalled voluntarily by the manufacturer. The lot with the 56% false-positive rate had been distributed to four laboratories in the United States and was used for testing specimens during July–September (Figure 1). The other lot was distributed outside the United States (*1*). On October 14, a CDC health advisory was distributed (*1*), and the investigation was expanded to determine the scope and impact of the problem in the United States.

Expanded Investigation

In September, CDC, along with state and local health departments, surveyed the four laboratories that had received the recalled kit lot to determine the number of positive specimens obtained using the lot and to collect corresponding demographic information regarding these patients. State health departments provided additional information regarding WNV confirmatory testing performed in state laboratories, patient clinical syndromes (e.g., neuroinvasive or nonneuroinvasive), and case status as reported to ArboNET.

* Available at http://www.cdc.gov/ncidod/dvbid/westnile/index.htm.

FIGURE 1. Number of specimens (N = 568) testing positive for West Nile virus immunoglobulin M antibodies, using one lot from a commercially available test kit that was later recalled, by week — United States, July–September 2008

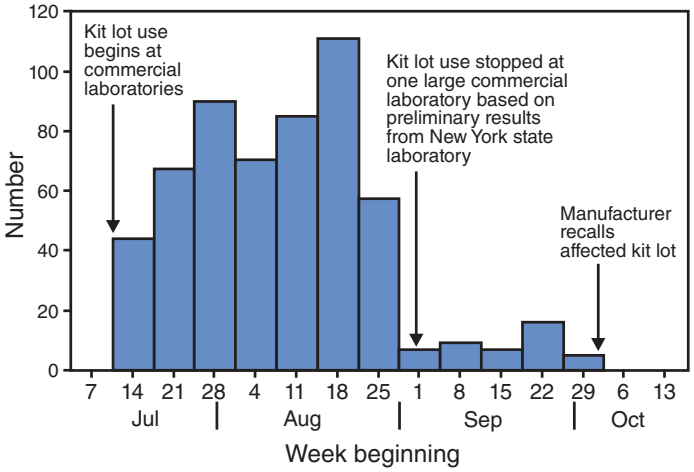
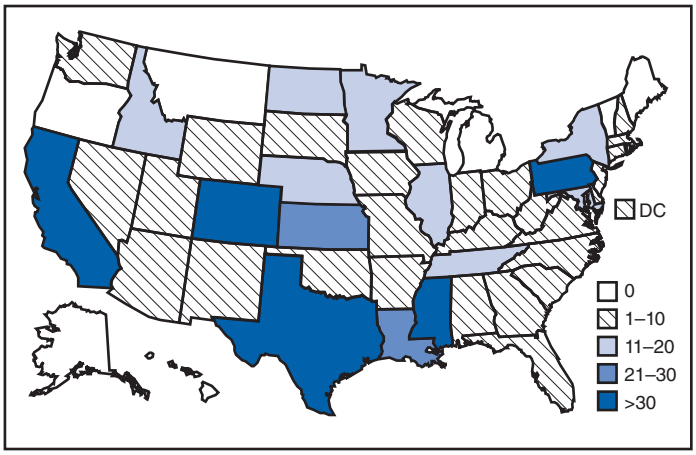


FIGURE 2. Number of persons (N = 518) testing positive for West Nile virus immunoglobulin M antibodies using one lot from a commercially available test kit that was later recalled — United States, July–September 2008



The recalled WNV ELISA kit lot had produced positive results for 568 specimens obtained from 518 patients in 42 states and DC (Figure 2). Of the 488 patients for whom clinical information was known, 83 (17%) had symptoms consistent with WNV neuroinvasive disease, 242 (50%) had symptoms consistent with nonneuroinvasive disease, and 163 (33%) had no symptoms consistent with WNV disease.

During October–December, 166 (29%) available specimens of the 568 that tested positive with the implicated kit lot were identified and sent to CDC to be retested using WNV IgM microsphere immunofluorescence assay (MIA) and IgM capture ELISA.[†] Based on retesting, specimens were classified as false-positive, true-positive, or indeterminate. Of the 166 retested, 45 (27%) were classified as true-positive and 119 (72%) as false-positive results; two specimens had an indeterminate result. The retested specimens came from 160 patients; clinical syndrome was known for 157 of these patients. Of the 157, a higher percentage of false-positives was found among patients without evidence of neuroinvasive disease (77% [98 of 127]) than among patients with evidence of neuroinvasive disease (47% [14 of 30)]) ($p<0.001$ by chi-square test).

Of the 518 patients testing positive for WNV with the implicated kit lot, 249 (48%) had been reported to ArboNET as having WNV disease. However, only 45 (18%) of these 249 cases had confirmatory testing supporting their inclusion as WNV disease cases; 77 (31%) cases did not have evidence of WNV infection based on subsequent laboratory testing, and 127 (51%) cases had no further testing performed. For the remaining 269 (52%) of the 518 patients, case investigation by state health departments found no illness clinically compatible with WNV disease; therefore, these patients were not reported to ArboNET.

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Editorial Note: After detection of WNV in the United States in 1999, diagnostic testing initially was performed only at CDC and later at state public health laboratories. In recent years, commercially available WNV diagnostic assays have been offered at an increasing number of commercial laboratories (*8*). Positive test results obtained using these assays help provide a presumptive diagnosis of WNV infection in patients with neuroinvasive disease; however, all positive assay results should be confirmed by further laboratory testing (*3–6*).

This investigation determined that use of one WNV IgM ELISA kit lot at four laboratories in the United States produced a substantial number of false-positive test results and inflated the number of WNV disease cases initially reported to ArboNET for 2008. The manufacturer voluntarily recalled the implicated lot and is working with FDA to improve the quality control and batch release procedures for its WNV IgM ELISA kits. In accordance with Clinical Laboratory Improvement

[†] An additional 58 (10%) of the 568 positive specimens were retested at state public health laboratories. Various assays were used; therefore, the results are not directly comparable to those from CDC. Nonetheless, of the 58 retested, a percentage similar to that found at CDC (64%) had false-positive results. In addition, false-positive percentages similar to those found at CDC were detected in persons without evidence of neuroinvasive disease (88%) and with evidence of neuroinvasive disease (33%) ($p<0.001$ by chi-square).

Amendments (CLIA) regulations, commercial laboratories that perform diagnostic testing, including for WNV, also should monitor the ongoing performance of the kits they use (*9,10*). Before this investigation, confirmatory testing had been performed on <10% of the 568 specimens that had tested positive with the recalled kit lot. Health-care providers should consider that commercially available WNV IgM kits are only intended to help provide a presumptive diagnosis of WNV neuroinvasive disease when requesting testing and interpreting the results. In addition, commercial laboratories should work with public health laboratories to ensure that confirmatory testing is performed on all presumptive positive results.

The findings in this report are subject to at least two limitations. First, only 29% of the specimens that tested positive at CDC were available for retesting, limiting the precision with which the actual number and proportion of false-positive tests could be determined. Second, the impact of false-positive results on patient diagnosis and management was not assessed.

This multistate investigation required a considerable public health response to notify health-care providers, retest specimens, and reevaluate WNV cases reported to ArboNET. Applying the 72% false-positive proportion to all 568 specimens testing positive with the recalled kit lot, an estimated 400 specimens were incorrectly identified as positive for WNV IgM antibodies. Given that large proportion of false-positives, CDC recommended that state health departments not classify patients as having WNV disease if the only laboratory evidence was from the recalled kit lot. States have since reevaluated affected cases to arrive at the final WNV disease totals for 2008 (available at http://www.cdc.gov/westnile).

Acknowledgments

This report is based, in part, on contributions of members of the WNV False-Positive IgM ELISA Investigation Team, which includes state and local vector-borne disease coordinators and state public health laboratory workers.

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Assessment of Body Mass Index Screening of Elementary School Children — Florida, 2007–2008

The prevalence of childhood obesity has increased substantially in the United States and is associated with chronic diseases (*1*). State level surveillance is needed to monitor trends and investigate risk factors. In addition, data that identify at-risk communities can be used to inform those communities regarding childhood obesity. Body mass index (BMI) screening of Florida school children has been performed since 2001 as part of growth and development screening services and conducted by school districts and county health departments. Aggregated BMI data, by grade and county, are reported annually to the Florida Department of Health (FDOH). In 2008, FDOH considered establishing a more extensive statewide BMI surveillance system. To begin planning for such a system, during February–March 2008, FDOH surveyed school health coordinators in Florida's 67 counties to assess qualities of BMI screening activities. Among 66 counties that provided complete surveys, 58 (88%) screened ≥75% of children in the first, third, and sixth grades, and 51 (77%) had written protocols or guidelines for measuring weight, height, or BMI. Nineteen counties (29%) were training ≥90% of their screeners, and 21 (32%) consistently used appropriate equipment for measuring height and weight. Thirty-one counties (47%) used appropriate electronic systems to calculate BMI percentile-for-age. BMI screening activities need improvement in policy and guideline development, training procedures, appropriate

selection and use of equipment, and use of electronic data systems before Florida establishes a more extensive statewide surveillance system.

Since 1974, Florida statutes* have required that county school health programs provide growth and development screening services. Florida's administrative code† specifies that growth and development screenings be performed for students in the first, third, sixth, and optionally, ninth grades. In 2000, CDC released new growth charts§ based on BMI and recommended their use to identify underweight (<5th percentile BMI), overweight (85th to <95th percentile), or obese (≥95th percentile) children. Based on this recommendation, the Florida School Health Service Program (FSHSP) has been using the CDC growth charts with BMI percentile for age and sex as the reference to determine BMI categories (underweight, normal, overweight, and obese) since 2001. Currently, the state is allowed only to collect aggregated numbers of students and prevalence for each BMI category by grade and county; aggregated data are reported annually to FSHSP as required by FDOH policy. FSHSP provides oversight of school health policies and procedures, quality assurance, and training to counties regarding school health issues. FSHSP also provides recommended BMI screening procedures for county school health programs by way of the state administrative guidelines. Most county school health programs inform parents of the BMI results.

FDOH developed a survey for school health coordinators in all of the 67 school districts and county health departments. The survey was conducted by e-mailing an electronic survey link to identified coordinators during February and March 2008. The survey included questions about BMI screening activities, including existence of policies and guidelines (having a written policy or guidelines for measuring student height, weight, or BMI); screening rates (percentage range of students receiving height and weight measurements for each grade); types of equipment used to measure height and weight; use of electronic data collection systems; organizational priority of childhood obesity ("Is childhood obesity a priority for your school district? …county health department?"); and staff training requirements (percentage of screeners who received training in measurement methods).

To measure the quality of policies and guidelines, 13 components were assessed: staff qualification, staff training requirements, staff supervision, screening environment, appropriate equipment, recalibration of equipment, screening methodology, removal of student's shoes or heavy clothing before measurement, BMI calculation, confidentiality of screening records, and follow-up specifications for children with unhealthy weight (underweight or overweight/obese).

For the analysis, county population size was defined as small (<150,000 persons), medium (≥150,000 to <500,000 persons), and large (≥500,000 persons). Chi-square test was used to test differences within categories. A p-value ≤0.05 was considered as statistically significant.

All 67 Florida counties responded to the survey. One county was excluded because of incomplete responses. Of the 66 counties included in the analysis, all reported screening of first and third graders, and 64 counties screened sixth graders. Reasons for not screening all students in grades specified by the Florida administrative code generally related to lack of resources. Among the 66 counties, 58 (88%) screened ≥75% of students in first, third, and sixth grades (Table). Screening completion rates varied by county population size. Almost all small counties (36 of 37 counties, 97%) screened ≥75% of students for BMI in first grade, compared with 89% (16 of 18 counties) of medium counties and 73% (eight of 11 counties) of large counties (chi-square test, p=0.04). All 37 (100%) small counties screened ≥75% of students in third grade compared with 89% (16 of 18 counties) of medium counties and 73% (eight of 11 counties) of large counties (p=0.009).

Fifty-one of 66 counties (77%) had policies or guidelines for measuring students' weight, height, or BMI percentile. Of those 51 counties, 36 (71%) reported completing ≥90% of BMI screening activities in compliance with the policies or guidelines. Smaller counties were more likely to follow their policies or guidelines than were larger counties (p=0.03).

Nineteen of 66 counties (29%) trained ≥90% of screeners before student screening by demonstrating how to conduct measurements and by directly observing trainees in screening activities. Twenty-eight counties (42%) used stadiometers appropriate for measuring height for all children, 43 counties (65%) used a professional-grade digital scale or a triple balance beam scale appropriate for measuring weight for all children, and 21 counties (32%) used appropriate equipment for measuring height and weight. Smaller counties were more likely to use an appropriate stadiometer or weight scale than were larger counties (p<0.01).

Thirty-one counties (47%) used an acceptable electronic data system, defined as using School Health Information Program, Health Master, Epi-Info/Nutstat, or bmi4kidz, to calculate BMI percentile. Smaller counties were more likely to use an acceptable electronic data system to calculate BMI percentile

*The 2008 Florida Statues, 381.0056. School health services program. Available at http://www.leg.state.fl.us/statutes/index.cfm?app_mode=display_statute&search_string=&url=ch0381/sec0056.htm&title=-%3e2005-%3ech0381-%3eSection%200056#0381.0056.

† Florida Administrative Code. Rule: 64F-6.003. Screening. Available at https://www.flrules.org/gateway/ruleno.asp?id=64f-6.003.

§ Available at http://www.cdc.gov/growthcharts.

TABLE. Number and percentage of 66 counties with selected body mass index (BMI) screening activities/measures among elementary school children, by county population size — Florida, 2007–2008

	Total (N = 66)		County population size*					
			Small (n = 37)		Medium (n = 18)		Large (n = 11)	
Activity/Measure	**No.**	**(%)**	**No.**	**(%)**	**No.**	**(%)**	**No.**	**(%)**
Screening rate ≥75%								
1st graders	**60**	**(91)**	36	(97)†	16	(89)†	8	(73)†
3rd graders	**61**	**(92)**	37	(100)†	16	(89)†	8	(73)†
6th graders	**59**	**(89)**	35	(95)	16	(89)	8	(73)
All 1st, 3rd, and 6th graders	**58**	**(88)**	34	(92)	16	(89)	8	(73)
Quality measures								
Policy/Protocol/Guideline								
No	**15**	**(23)**	11	(30)	1	(6)	3	(27)
Yes	**51**	**(77)**	26	(70)	17	(94)	8	(73)
Used for ≥90% of students	**36**	**(71)**	22	(85)†	11	(65)†	3	(38)†
Had 10 of 13 quality elements	**20**	**(39)**	11	(42)	5	(29)	4	(50)
Training								
Trained ≥90% of screeners by demonstration and direct observation	**19**	**(29)**	11	(30)	7	(39)	1	(9)
Equipment								
Appropriate stadiometer	**28**	**(42)**	15	(41)†	12	(67)†	1	(9)†
Appropriate weight scale	**43**	**(65)**	31	(84)†	9	(50)†	3	(27)†
Both appropriate	**21**	**(32)**	13	(35)	7	(39)	1	(9)
Electronic data entry and data quality								
Electronically calculated BMI percentile	**31**	**(47)**	17	(46)†	12	(67)†	2	(18)†
Potential surveillance data source§	**28**	**(42)**	17	(46)†	10	(56)†	1	(9)†
Obesity								
School district and health department priority	**22**	**(33)**	10	(27)	6	(33)	6	(55)
Community concern	**48**	**(73)**	28	(76)	11	(61)	9	(82)
Future surveillance participation¶								
Willing to participate	**32**	**(49)**	18	(49)†	12	(67)†	2	(18)†

* County population size was defined as small = <150,000 persons, medium = 150,000 to <500,000 persons, and large = >500,000 persons.
† P-value ≤0.05, two-tailed based on chi-square test.
§ Potential surveillance data sources were counties using one of the following data systems to calculate BMI percentile-for-age: School Health Information Program, Health Master, Epi-Info/NutStat, or bmi4kidz.
¶ Survey respondents were asked whether their school health system would be interested in participating in a future statewide BMI surveillance system.

than were larger counties (p=0.04). Only 22 counties (33%) identified obesity as a high priority for both their school district and county health department.

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Editorial Note: The prevalence in the United States of children being overweight or obese (BMI ≥85th percentile for age and sex) increased from 30% in 1999–2000 to 33% in 2003–2006 among children aged 6–11 years (*1*). BMI percentile is widely used to monitor obesity status among children because of its simplicity and low cost, and because BMI is an indicator of body fat in children (*2*). Childhood obesity has been associated with adverse physical and mental health risks among children (*3*) and is a predictor of adulthood obesity (*4,5*). Current effective prevention strategies focus on multiple levels, including community, school, and family (*6*). Monitoring childhood obesity trends at the state and local level provides important information for developing and implementing successful strategies and interventions. Intervention strategies include policy and environmental changes that promote healthy dietary habits and increased physical activity to reduce the high prevalence of childhood obesity. Accurate measurements of height and weight and correct calculation for BMI percentile among school-aged children are necessary to provide quality BMI data, ensure appropriate screening and referral, and ultimately initiate a high quality BMI surveillance system for use locally and statewide. Accurate surveillance data can be used for identifying obesity trends in populations and monitoring the outcomes of interventions (*7*).

The findings of this report indicate that BMI screening activities among school-aged children in Florida did not meet sufficient quality measures regarding policies and guidelines, screening practices, staff training, equipment, and data management. In general, the quality of BMI screening activities

was higher in counties with lower population size than in those with larger populations. The reasons for this are not fully clear, but one factor might be the increased complexity of performing appropriate BMI screening in counties with larger school systems compared to counties with smaller systems.

Based on the survey findings in this report, FSHSP is addressing quality and performance issues in several ways. FSHSP reviewed and strengthened the school health policy on BMI screening, revised BMI reporting requirements to better monitor performance, and worked with county school health programs to address identified issues.

The findings in this report are subject to at least two limitations. First, survey results were obtained from the lead school health coordinator in each county and might not reflect actual practice at the schools. In addition, actual student BMI data were not verified for quality and reliability.

Ultimately, to further understand the epidemiology of obesity in Florida, a more extensive BMI surveillance system will be needed, including a statewide repository of de-identified individual BMI screenings. To do this, additional controls and resources will be needed to ensure the accuracy and reliability of BMI screenings. Additional evaluations of the appropriateness of BMI screening activities in Florida school districts can help ensure the accuracy of statewide data.

Acknowledgment

This report is based, in part, on contributions of Florida school health coordinators in each of Florida's 67 counties who completed the survey.

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Primary and Secondary Syphilis — Jefferson County, Alabama, 2002–2007

In June 2006, the Alabama Department of Public Health (ADPH) requested assistance from CDC to investigate and control a multiyear epidemic of syphilis in Jefferson County. The county had experienced a decrease in primary and secondary (P&S) syphilis cases, from 279 in 1995 to nine in 2002. By 2005, the incidence had begun to rise substantially, culminating with 238 cases in 2006 and 166 in 2007. Beginning in August 2006, CDC assisted the Jefferson County Department of Health (JCDH) in investigating the increase in cases and in planning control measures. This report summarizes the results of that investigation, which found that the characteristics of cases during 2002–2004 differed substantially from cases during 2005–2007. Declines in U.S. syphilis rates, which reached their lowest point in 2000, led to optimism that syphilis elimination (defined as the absence of sustained syphilis transmission) in the United States was possible, and CDC's National Syphilis Elimination Plan was launched in 1999 (*1*). Although increased U.S. syphilis rates in the early 2000s have been reported to be associated primarily with transmission among men who have sex with men (MSM) (*2*), the findings from this investigation indicate reemergence of syphilis among women and heterosexual men in Jefferson County. Public health officials in other areas should remain alert for similar epidemiologic shifts. Public health departments should facilitate access to effective treatment in sexually transmitted disease (STD) clinics or other settings, consider selective screening in high-prevalence populations (e.g., in correctional settings), and ensure adequate partner notification and treatment.

Outbreak Investigation

Jefferson County includes the city of Birmingham, and in 2007 was the county of residence for 658,779 persons (*3*), 14.2% of the state population. Most of the population is white (56.3%), black (41.2%), or Asian (1.3%), and 2.9% are of Hispanic ethnicity.* The county is served by one public STD clinic. During 2002–2007, 60.2% of all P&S syphilis cases in the county were reported from this clinic. By Alabama state law, clinicians and laboratories must report syphilis cases and positive syphilis laboratory tests within 7 days of diagnosis or identification.

This report focuses on P&S syphilis because these cases represent the earliest stages of infection and approximate syphilis

* U.S. Census Bureau. State and county quickfacts. Available at http://quickfacts.census.gov/qfd/states/01/01073.html.

incidence. For STD investigations, the interview period is defined as the interval during which sexual contact might have resulted in syphilis transmission; for primary syphilis this interval includes the 3 months before symptom onset as well as the time with symptoms, and for secondary syphilis this includes the 6 months before symptom onset as well as time with symptoms (*4*).

For this analysis, MSM were defined as men who reported sex with men only or sex with men and women; men who had sex with women (MSW) were defined as men who reported sex with women only. Based on the assumption that nearly all syphilis among women is acquired through heterosexual transmission, heterosexuals were defined as all women and MSW.

Sources of data for this investigation included local case reports, interview data, and data from the National Electronic Telecommunications System for Surveillance (NETSS). Syphilis patients were interviewed by JCDH staff members using the standard CDC interview form,† which includes questions on demographic variables, methods of detection, information source, treatment date, sex and number of partners, intravenous drug use, symptoms, laboratory results, and contact tracing information. Beginning in 2003, these interviewers also used a supplemental expanded interview form developed by ADPH that requested additional behavioral information, including information on noninjection drug use during the past 12 months and whether the patients reported any anonymous sex partners during the past 3 months. Investigators reviewed 1) all reports of P&S syphilis among Jefferson County residents whose first positive laboratory specimens were collected during January 2002–April 2006 and 2) data from expanded supplemental interviews conducted during January 2003–April 2006. Although original case reports and supplemental interview data were available to CDC investigators only for cases reported through April 2006, for this report, NETSS provided local case report data through 2007 for Jefferson County, including data on sex, race, ethnicity, age group, information source, and syphilis stage; sex of partner data on these cases through 2007 were provided by JCDH. Proportions were compared statistically using chi-square tests with a two-sided significance level of $p<0.05$. Medians were compared using Kruskal-Wallis tests with a significance level of $p<0.05$.

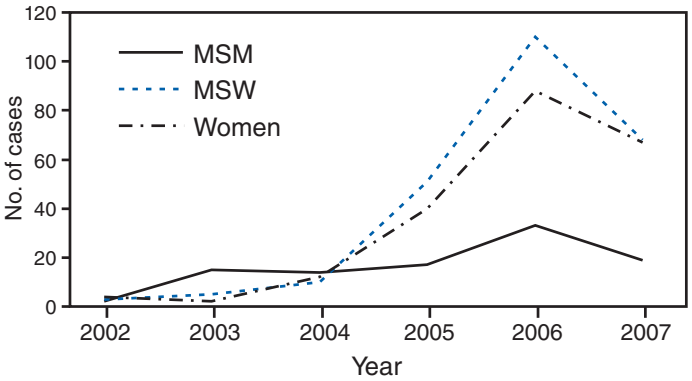
During 2002–2007, 580 P&S syphilis cases were reported, including 197 cases (34.0%) of primary syphilis and 383 cases (66.0%) of secondary syphilis. Of the 568 cases for which data on race/ethnicity were available, 494 cases (87.0%) were in blacks, 69 (12.1%) were in whites, four (0.7%) were in Asians, and one was in a Hispanic (0.2). Of the 529 cases for which sex of partners data were available, 88 cases (16.6%) were in MSM, 223 cases (42.2%) were in MSW, and 218 cases (41.2%) were in women. Reported P&S rates (per 100,000 population) increased from 1.4 in 2002 to a peak of 36.2 in 2006, and then decreased to 25.2 in 2007 (Figure 1). The proportion of cases in persons aged <30 years increased from 22.4% during 2002–2004 to 37.4% during 2005–2007 ($p=0.016$). No significant changes by race and ethnicity were observed from the period 2002–2004 to 2005–2007. The proportion of cases occurring among heterosexuals increased from 53.8% during 2002–2004 to 87.7% during 2005–2007 ($p<0.001$). The proportion of cases with primary syphilis increased from 25.4% during 2002–2004 to 35.1% during 2005–2007 ($p=0.114$). During 2002–April 2006, MSW were more likely than women (57.0% versus 19.2%, $p<0.001$) or MSM (22.0%, $p<0.001$) to have primary syphilis (Table).

During 2002–2007, most cases were detected in the county STD clinic (60.2%), other public clinics (9.1%), health maintenance organization (HMO) or private physician offices (9.5%), hospitals or emergency departments (8.2%), and correctional facilities (6.5%). Cases were more likely to be reported from other public clinics during 2002–2004 (19.4%) than during 2005–2007 (7.8%, $p=0.002$); differences for other provider types were not significant. During 2002–April 2006, median time from laboratory specimen to treatment was 0 days in the STD clinic, 4.5 days in HMOs and private physician offices, 6.5 days in correctional facilities, 11.5 days in hospitals, and 20 days in emergency departments ($p<0.001$).

Risk Factor Analysis

Of 580 cases reported during 2002–2007, 240 (41.4%) were reported during January 2002–April 2006 and had case

FIGURE 1. Number of primary and secondary syphilis cases among men who have sex with men (MSM), among men who have sex with women only (MSW), and among women — Jefferson County, Alabama, 2002–2007*



* Data from Jefferson County Department of Health (JCDH)/CDC investigation January 2002–April 2006 supplemented with 2006–2007 data provided by JCDH.

† CDC form 73.54 8-91.

TABLE. Number and percentage of primary and secondary syphilis cases overall, among men who have sex with men (MSM), among men who have sex with women only (MSW), and among women, by selected characteristics — Jefferson County, Alabama, January 2002–April 2006

	Overall (N = 240)			MSM (N = 59)			MSW (N = 103)			Women (N = 78)			
Characteristic	**No. of cases with data**	**No.**	**(%)**	**No. of cases with data**	**No.**	**(%)**	**No. of cases with data**	**No.**	**(%)**	**No. of cases with data**	**No.**	**(%)**	**p value***
Race/Ethnicity	**240**			59			103			78			0.002†
Asian/Pacific Islander		**1**	**(0)**		0	(0)		1	(1)		0	(0)	
Black, non-Hispanic		**211**	**(88)**		45	(76)		99	(96)		67	(85)	
Hispanic		**1**	**(0)**		0	(0)		1	(1)		0	(0)	
White, non-Hispanic		**27**	**(11)**		14	(24)		2	(2)		11	(14)	
Age group (yrs)	**240**			59			103			78			0.02†
≤19		**12**	**(5)**		1	(2)		5	(5)		6	(8)	
20–29		**74**	**(31)**		24	(41)		25	(24)		25	(32)	
30–39		**52**	**(22)**		18	(31)		18	(18)		16	(21)	
40–54		**87**	**(36)**		14	(24)		44	(43)		29	(37)	
≥55		**15**	**(6)**		2	(3)		11	(11)		2	(3)	
Drug use§ ¶	**136**			26			60			50			
Crack		**37**	**(27)**		3	(12)		14	(23)		20	(40)	0.02
Other cocaine		**6**	**(4)**		2	(8)		2	(3)		2	(4)	NS**
Methamphetamines		**3**	**(2)**		3	(12)		0	(0)		0	(0)	0.002
Heroin		**0**	**(0)**		0	(0)		0	(0)		0	(0)	—
Exchange of drugs or money for sex††	**240**	**53**	**(22)**	59	4	(7)	103	23	(22)	78	26	(33)	0.001
Condom use¶ §§	**128**	**15**	**(12)**	26	4	(15)	56	6	(11)	46	5	(11)	NS
Anonymous sex¶ ¶¶	**85**	**25**	**(29)**	26	8	(31)	29	6	(21)	30	11	(37)	NS
Median no. of sex partners* **	**240**	**2**	**—**	59	2	—	103	2	—	78	2	—	NS
Stage of syphilis	**240**												
Primary		**87**	**(36)**		13	(22)		59	(57)		15	(19)	<0.001
Secondary		**153**	**(64)**		46	(78)		44	(43)		63	(81)	
Place of detection	**240**			59			103			78			0.001†
STD††† clinic		**140**	**(58)**		23	(39)		74	(72)		43	(55)	
Other public clinic		**35**	**(15)**		15	(25)		6	(6)		14	(18)	
Correctional facility		**20**	**(8)**		3	(5)		9	(9)		8	(10)	
HMO§§§ or private physician office		**17**	**(7)**		10	(17)		3	(3)		4	(5)	
Hospital		**12**	**(5)**		4	(7)		5	(5)		3	(4)	
Emergency department		**4**	**(2)**		1	(2)		2	(2)		1	(1)	
Other		**12**	**(5)**		3	(5)		4	(4)		5	(6)	
Median no. of days to treatment¶¶¶	**236**	**0**	**—**	56	3		102	0	—	78	0	—	0.003

* For difference between MSM, MSW, and women; chi-square test used for proportions and Kruskal-Wallis for medians.
† Chi-square for the overall distribution.
§ Within the preceding 12 months.
¶ Only available for cases reported January 2003–April 2006.
** Not significant.
†† Since 1978.
§§ During most recent vaginal or anal sex.
¶¶ During the preceding 3 months.
*** During interview period, defined as duration of symptoms plus 3 months for primary syphilis and duration of symptoms plus 6 months for secondary syphilis.
††† Sexually transmitted disease.
§§§ Health maintenance organization.
¶¶¶ From date first positive specimen obtained.

reports available at the time CDC investigative assistance began in August 2006. A total of 169 of these had supplemental interview data available, permitting risk factor analyses. Heterosexuals were more likely than MSM to report exchange of money or drugs for sex (27.1% vs. 6.8%, p=0.001). (Table) Heterosexuals were more likely to use crack cocaine (30.9% versus 11.5%, p=0.046), whereas MSM were more likely to use methamphetamines (11.5% versus 0.0%, p<0.001). Two patients (both women) reported intravenous drug use, and 60% of cases identified in corrections were in patients who reported exchange of money or drugs for sex. The median

number of sex partners during the interview period was 2.0 and did not vary by sex or sex of partners.

Public Health Response

In response to the epidemic, JCDH 1) extended its STD clinic hours beyond regular business hours, staying open until 6:00 p.m. four evenings a week; 2) increased from five to seven the number of staff dedicated to interviewing and providing partner services for syphilis patients; 3) collaborated with a community-based organization, AIDS in Minorities, to provide education and referral for screening in postal code areas with high-morbidity; and 4) launched a media campaign using advertisements on buses, billboards, radio, and television.

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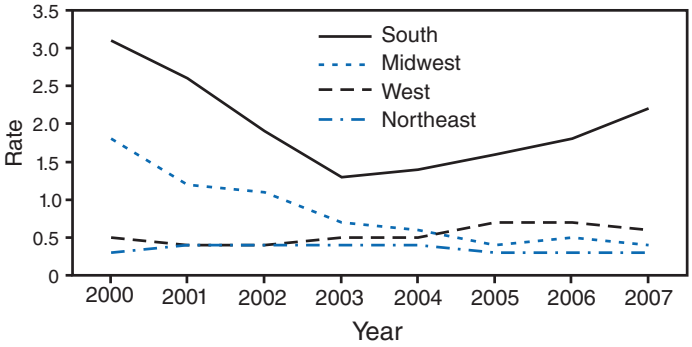
Editorial Note: National data on the sex of the partners of syphilis patients have only become available since 2005, when CDC requested this information with national case reports (*5*). Therefore, before 2007, trends in heterosexual and same-sex transmission of syphilis can only be estimated using male-to-female rate ratios. Male-to-female ratios close to 1 are assumed to indicate predominantly heterosexual transmission, whereas higher male-to-female ratios are thought to indicate transmission among MSM (*2*). After 2000, when syphilis rates in the United States reached their lowest point since reporting began (*6*), male-to-female rate ratios increased, suggesting increasing transmission among MSM. This conclusion was consistent with local epidemiologic reports (*2*). Although P&S syphilis rates increased disproportionately among men, they also increased among women every year during 2004–2007 (*5*), suggesting that although rate increases were proportionally greater among MSM, increasing heterosexual transmission also occurred. Most of the increase in P&S syphilis among women in the United States during 2004–2007 was in the South, where syphilis rates remained higher than in other regions[§] (*5*). During 2003–2007, rates among women increased 69% in South, increased 22% in the West, and decreased in other regions (Figure 2).

FIGURE 2. Rates* of primary and secondary syphilis among women, by region† — United States, 2000–2007



* Per 100,000.

† *South:* Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. *Midwest:* Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. *West:* Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. *Northeast:* Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

This investigation in Jefferson County, Alabama, found that increases in syphilis incidence during 2002–2007 occurred mainly among heterosexuals. Compared with MSM, heterosexuals with syphilis were more likely to report drug use, particularly cocaine, and exchange of sex for money or drugs. These findings are reminiscent of syphilis epidemiology in the late 1980s and early 1990s, when transmission occurred predominantly among heterosexuals and was associated with crack cocaine and exchange of drugs for sex (*7*). In the past, these epidemiologic associations were used to support the screening of populations in detention (*1*), because arrestees often were detained for commercial sex work and for drug-related charges. For example, in two cities with heterosexual syphilis outbreaks that were brought under control (during 1996–2002 and 1997–2002), 40% of cases in females that were likely to contribute to ongoing transmission were identified in detention (*8*). Screening in correctional facilities has been shown to be feasible and effective in limiting syphilis transmission, especially in communities with predominantly heterosexual transmission (*1*).

Timely treatment of syphilis prevents complications and limits transmission. In Jefferson County, women and MSM were less likely than heterosexual men to present with primary syphilis. This also has been observed nationally (*9*) and might be related to the anatomic location of primary syphilis lesions (which are often painless and of unappreciated significance); in women and MSM, these lesions might more often occur on the vagina or cervix, or anus, respectively, sites that are difficult to notice. Encouraging women and MSM at risk for syphilis to examine themselves for lesions might help decrease time

§ *South:* Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. *Northeast:* Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. *West:* Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. *Midwest:* Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

to treatment, although relevant evaluations of this approach are just beginning. Increasing the use of STD clinics, which were associated with shorter time to treatment than other settings, especially emergency departments, might decrease time to treatment. All health-care providers who suspect primary syphilis in a patient should presumptively treat for it at the time of examination (*4*).

The findings in this report are subject to at least three limitations. First, underreporting was likely because reporting depends on patients seeking care, health-care providers diagnosing syphilis, and reporting to the health department. An estimated 20% of syphilis infections are never diagnosed or reported (*10*). Second, although JCDH attempted to conduct supplemental interviews for all patients with reported cases starting in 2003, supplemental interview data were not available for all reported cases. Interviewed patients might have represented those who were easier to contact, and the analysis might have underrepresented persons with certain risk factors, such as drug use. Finally, responses to interviews might be subject to recall and information bias given the sensitive nature of some questions (e.g., regarding the number of sex partners and drug use).

With the epidemic now growing in different populations and requiring different prevention approaches, adequate containment will be a challenge. Public health officials should include data on sex of partners with case reporting, as recommended by CDC (*1*). STD programs should employ methods that have been successful in the past, including serologic screening in high-prevalence populations such as in corrections settings, facilitating access to effective treatment, and accessing and treating partners, particularly those most likely to sustain transmission (*8*).

Acknowledgment

The findings in this report are based, in part, on contributions by S Yu, MPH, Jefferson County Dept of Health.

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Outbreak of Swine-Origin Influenza A (H1N1) Virus Infection — Mexico, March–April 2009

On April 30, this report was posted as an MMWR *Dispatch on the* MMWR *website* (http://www.cdc.gov/mmwr).

In March and early April 2009, Mexico experienced outbreaks of respiratory illness and increased reports of patients with influenza-like illness (ILI) in several areas of the country. On April 12, the General Directorate of Epidemiology (DGE) reported an outbreak of ILI in a small community in the state of Veracruz to the Pan American Health Organization (PAHO) in accordance with International Health Regulations. On April 17, a case of atypical pneumonia in Oaxaca State prompted enhanced surveillance throughout Mexico. On April 23, several cases of severe respiratory illness laboratory confirmed as swine-origin influenza A (H1N1) virus (S-OIV) infection were communicated to the PAHO. Sequence analysis revealed that the patients were infected with the same S-OIV strain detected in two children residing in California (*1*). This report describes the initial and ongoing investigation of the S-OIV outbreak in Mexico.

Enhanced Surveillance

On April 17, in response to the increase in reports of respiratory illness, DGE issued a national epidemiologic alert to all influenza-monitoring units and hospitals (Table 1). The alert asked hospitals to report all patients with severe respiratory illness and recommended collection of diagnostic respiratory specimens from these patients within 72 hours of illness onset. On April 18, DGE staff visited 21 hospitals throughout the country to confirm the apparent increase in illness incidence.

After laboratory confirmation of S-OIV infection on April 23, DGE developed case definitions. A suspected case was defined as severe respiratory illness with fever, cough, and difficulty breathing. A probable case was defined as a suspected case in a patient from whom a specimen had been

TABLE 1. Timeline of key events in detection and response to outbreak of swine-origin influenza A (H1N1) virus (S-OIV) infection — Mexico, April 12–30, 2009

Date	Event
April 12	Respiratory illness outbreak reported to the Pan American Health Organization (PAHO).
April 17	A case of atypical pneumonia leads to an alert to enhance surveillance.
April 17–22	Field investigation of respiratory illness undertaken.
April 23	Public Health Agency Canada confirms cases of S-OIV infection.
April 23	Cluster of S-OIV illness reported to PAHO.
April 24	Health authorities implement public health measures for all airport passengers and vaccination of health-care workers with seasonal influenza vaccine.
April 25	National decree allows for house isolation of persons with suspected cases.
April 26	National laboratory capacity to diagnose S-OIV infection established in Mexico.
April 27	School closure is mandated throughout the country.
April 30	Status: 97 laboratory-confirmed cases of S-OIV infection in Mexico.

collected and tested positive for influenza A. A confirmed case was defined as a probable case that tested positive for S-OIV by real-time reverse–transcription polymerase chain reaction (RT-PCR). Health-care officials were contacted and asked to provide retrospective and ongoing data for persons having illness consistent with these case definitions and seeking care on or after March 1.

During March 1–April 30, a total of 1,918 suspected* cases were reported, including 286 probable and 97 confirmed cases (Figure). A total of 84 deaths were reported. A majority of case-reports were for hospitalized patients, reflecting the concentration of surveillance efforts within hospitals. However, DGE also received reports from sites conducting routine seasonal influenza surveillance of patients with ILI. Of 1,069 patients with suspected and probable cases for whom information was available, 755 were hospitalized, and the remaining 314 were examined in outpatient settings or emergency departments. Suspected or probable cases were reported from all 31 states and from the Federal District of Mexico. The four areas with the most cases were Federal District (213 cases), Guanajuato (141), Aguascalientes (93), and Durango (77). In other states, the number of suspected or probable cases ranged from two to 46. Suspected and probable cases were identified in all age groups. Mexico routinely monitors seasonal influenza in a network of outpatient facilities throughout the country. Fifty-one influenza A positive specimens from six states were collected during January 4–March 11 in this surveillance network. All of these specimens tested negative for S-OIV at CDC.

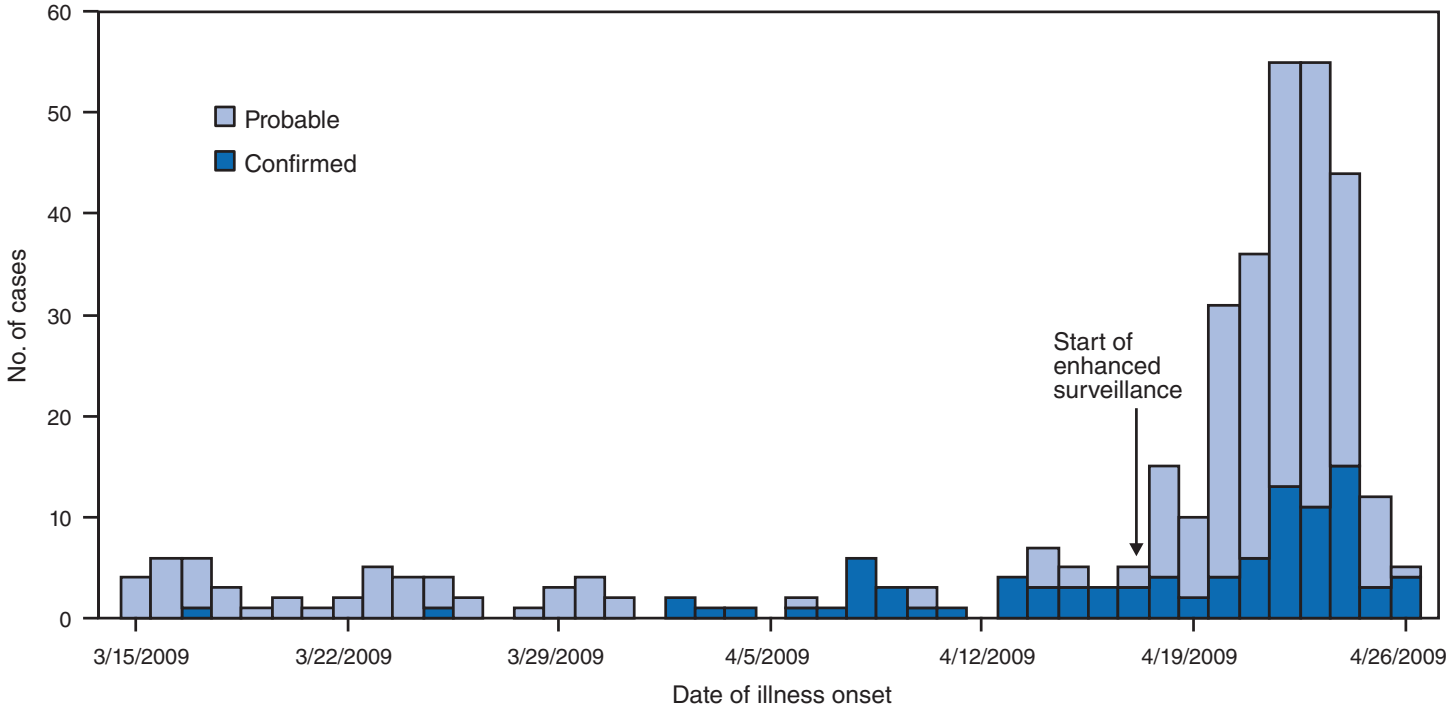
* The number of suspected cases includes the 286 probable and 97 laboratory-confirmed cases. After the alert on April 17, reports of patients with ILI from the seasonal influenza surveillance network also were classified as suspected cases.

Confirmed Cases of S-OIV Infection

As of April 30, DGE surveillance activities, focusing on patients with severe respiratory disease, had identified 97 patients with laboratory-confirmed S-OIV infection, including seven persons who had died. The first of the 97 patients reported onset of illness (any symptom) on March 17, and the most recent patients reported onset on April 26. Laboratory confirmation of S-OIV infection for the most recent 73 of these 97 cases was reported on the evening of April 29. Collection of additional information on these 73 cases is ongoing. Of the 24 patients for whom demographic and clinical information is available, 20 (83%) were hospitalized, three were examined in outpatient settings, and one had illness that was not medically attended. Patients ranged in age from <1 to 59 years, with 79% aged 5 to 59 years (Table 2); 15 (62%) patients were female. Patients with confirmed S-OIV infection were identified in four states: Federal District (15 cases), Mexico State (seven), Veracruz (one), Oaxaca (one). Of the seven deaths, six occurred in Federal District, and one occurred in Oaxaca.

Among the 16 patients with complete clinical records, 15 reported fever, 13 reported cough, 10 reported tachypnea, and nine reported dyspnea. In addition, seven of 16 patients reported either vomiting or diarrhea. Of these seven patients, two reported vomiting only, two reported diarrhea only, and three reported both. Eight of 16 patients were admitted to intensive-care units; of these, seven required mechanical ventilation, and six subsequently died after developing acute respiratory distress syndrome. Twelve of 15 patients with radiography records available had confirmed pneumonia. Three of the 16 patients had underlying health conditions. Information on the duration of hospitalization before death was available for six patients and ranged from 1 to 18 days (median: 9 days).

FIGURE. Number of confirmed (N = 97) and probable (N = 260)* cases of swine-origin influenza A (H1N1) virus (S-OIV) infection, by date of illness onset — Mexico, March 15–April 26, 2009



* Probable cases for which dates of illness onset are known.

TABLE 2. Number of patients and deaths from laboratory-confirmed infection with swine-origin influenza A (H1N1) virus (S-OIV), by age group — Mexico, April 1–27, 2009*

Age group (yrs)	No.	Deaths
<5	5	0
5–19	4	2
20–39	9	3
40–59	6	2
≥60	0	0
Total	**24**	**7**

* Does not include 73 laboratory-confirmed cases of S-OIV infection (reported on April 29) for which no demographic data are available.

Prevention and Control Measures

On April 24, the Council for General Hygiene convened with the President of the Mexican Republic and decreed the closure of all schools in the Federal District and metropolitan area of Mexico City. Incoming and outgoing airport passengers were informed of the outbreak and advised to seek care immediately should they experience symptoms of ILI. Other measures included 1) disseminating educational messages regarding respiratory hygiene through mass media; 2) distributing masks and alcohol hand-sanitizer to the public; and 3) discouraging large public gatherings, including church services, theater events, and soccer games. On April 25, a national decree allowed for house-isolation of any person with a suspected case, and on April 27, school closures were mandated throughout the country.

Reported by: *General Directorate of Epidemiology, Ministry of Health, Mexico; Pan American Health Organization; World Health Organization; Public Health Agency of Canada; CDC (United States).*

Editorial Note: Understanding the epidemiology and clinical profiles of recent cases of S-OIV infection in Mexico can help inform regional, national, and global control measures in response to the emergence of S-OIV infection. Important areas for investigation worldwide include evidence of person-to-person transmission, the geographic distribution of disease, the clinical spectrum of disease, and the effectiveness of mitigation strategies.

Previous instances of human-to-human transmission of other swine viruses have been reported to result in small clusters of disease and limited generations of disease transmission (2,3). Several findings indicate that transmission in Mexico involves person-to-person spread with multiple generations of transmission. Patients with probable and laboratory-confirmed disease have presented over a period of 4 weeks. Limited contact tracing of patients with laboratory-confirmed disease also has identified secondary cases of ILI.

The clinical spectrum of S-OIV illness is not yet well characterized in Mexico. However, evidence suggests that S-OIV

transmission is widespread and that less severe (uncomplicated) illness is common. Patients with confirmed disease have been identified in several states, and suspected cases have been identified in all states, which suggests that S-OIV transmission is widespread. In addition, several countries are reporting S-OIV infection among persons who have travel histories involving different parts of Mexico in the 7 days before illness onset. To date, case-finding in Mexico has focused on patients seeking care in hospitals, and the selection of cases for laboratory testing has focused on patients with more severe disease. Therefore, a large number of undetected cases of illness might exist in persons seeking care in primary-care settings or not seeking care at all. Additional investigations are needed urgently to evaluate the full clinical spectrum of disease in Mexico, the proportion of patients who have severe illness, and the extent of disease transmission.

To expedite confirmation of disease in additional patients, the World Health Organization (WHO) Influenza Collaborating Center in Atlanta, Georgia, has placed the genetic sequence of S-OIV from California in GenBank.[†] Specific primers for S-OIV have been developed and will be distributed through the WHO Global Influenza Surveillance Network to reference laboratories throughout the world. As of April 26, the National Laboratory for Public Health in Mexico has capacity to perform PCR for S-OIV.

The epidemiologic characteristics of this outbreak underscore the importance of monitoring the effectiveness of community mitigation efforts, nonpharmaceutical interventions, and clinical management practices in anticipation of a possible pandemic.

[†] Available at http://www.ncbi.nlm.nih.gov/genomes/FLU/SwineFlu.html.

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Swine-Origin Influenza A (H1N1) Virus Infections in a School — New York City, April 2009

On April 30, this report was posted as an MMWR *Dispatch on the* MMWR *website* (http://www.cdc.gov/mmwr).

On April 24, 2009, CDC reported eight confirmed cases of swine-origin influenza A (H1N1) virus (S-OIV) infection in Texas and California (*1*). The strain identified in U.S. patients was confirmed by CDC as genetically similar to viruses subsequently isolated from patients in Mexico (*1*). Since April 24, the number of cases in the United States* and elsewhere† has continued to rise. As of April 28, approximately half (45) of all U.S. cases of S-OIV infection had been confirmed among students and staff members at a New York City (NYC) high school. This report describes the initial outbreak investigation by the NYC Department of Health and Mental Hygiene (DOHMH) and provides preliminary details about 44 of the 45 patients (the remaining patient resides outside of NYC and was not included in the analysis). The preliminary findings from this investigation indicate that symptoms in these patients appear to be similar to those of seasonal influenza. DOHMH will continue monitoring for changes in the epidemiology and/or clinical severity of S-OIV infection.

Epidemiologic and Laboratory Investigations

On April 23, DOHMH was notified of approximately 100 cases of mild (uncomplicated) respiratory illness among students at an NYC school (high school A) with 2,686 students and 228 staff members. During April 23–24, a total of 222 students visited the school nursing office and left school because of illness. Given initial reports on April 24 of what was later determined to be a large S-OIV outbreak in Mexico, DOHMH decided to rapidly mobilize staff members to go to high school A to collect nasopharyngeal swabs from any symptomatic students. On April 24 (a Friday), DOHMH staff members collected nasopharyngeal swabs from five newly symptomatic students identified by the school nurse and four newly symptomatic students identified at a nearby physician's office. A decision was made over the weekend not to open the school on Monday. Because of suspicion that the respiratory disease cases might be caused by S-OIV, beginning April 24, DOHMH attempted to contact the remaining 213 students reported by the nursing office to have left school because of respiratory illness. Some of the most recently symptomatic at the time of telephone contact were advised to visit a specified emergency department for nasopharyngeal swab collection.

* In the United States, as of April 29, a total of 91 confirmed cases had been reported, including one death (in Texas). By state, the following numbers of cases had been reported: New York (51); Texas (16); California (14); Kansas, Massachusetts, and Michigan (two each); Arizona, Indiana, Nevada, and Ohio (one each). Additional information available at http://www.cdc.gov/swineflu.

† Outside of the United States, as of April 29, a total of 57 confirmed cases had been reported, including seven deaths (in Mexico). By country, the following numbers of cases had been reported: Mexico (26); Canada (13); United Kingdom (five); Spain (four); Germany and New Zealand (three each); Israel (two); and Austria (one). Additional information available at http://www.who.int/csr/don/2009_04_29/en/index.html.

DOHMH also provided nasopharyngeal test kits to selected physicians' offices in the vicinity of high school A for collection of specimens from symptomatic staff members or students. On April 26, seven of the nine specimens collected on April 24 by DOHMH were identified by CDC as S-OIV. During April 26–28, 37 (88%) of 42 specimens collected in the emergency department and local physicians' offices tested positive at CDC for S-OIV, bringing the total number of confirmed cases to 44.

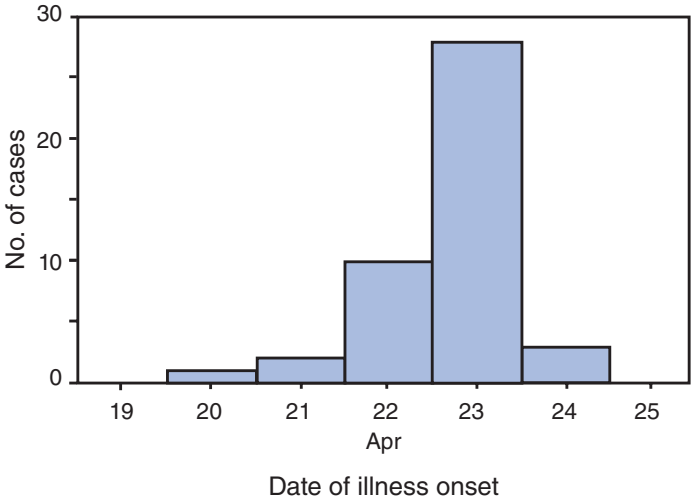
DOHMH conducted telephone interviews with the 44 patients with confirmed S-OIV on April 27. Median age of the patients was 15 years (range: 14–21 years). All were students, with the exception of one student teacher aged 21 years. Thirty-one (70%) of the 44 were female. Thirty (68%) were non-Hispanic white; seven (16%) were Hispanic; two (5%) were non-Hispanic black; and five (11%) were of other races. Four patients reported travel outside NYC within the United States in the week before symptom onset, and an additional patient traveled to Aruba in the 7 days before symptom onset. None of the 44 patients reported recent travel to California, Texas, or Mexico.

Illness onset dates ranged from April 20 to April 24; 10 (23%) of the patients had illness onset on April 22, and 28 (64%) had illness onset on April 23 (Figure). The most frequently reported symptoms were cough (in 43 patients [98%]), subjective fever (42 [96%]), fatigue (39 [89%]), headache (36 [82%]), sore throat (36 [82%]), runny nose (36 [82%]), chills (35 [80%]), and muscle aches (35 [80%]). Nausea (24 [55%]), stomach ache (22 [50%]), diarrhea (21 [48%]), shortness of breath (21 [48%]), and joint pain (20 [46%]) were less frequently reported but still common. Among 35 patients who reported a maximum temperature, the mean was 102.2°F (39.0°C) (range: 99.0–104.0°F [37.2–40.0°C]). In total, 42 (95%) patients reported subjective fever plus cough and/or sore throat, meeting the CDC definition for influenza-like illness (ILI) (*2*). At the time of interview on April 27, 37 patients (84%) reported that their symptoms were stable or improving, three (7%) reported worsening symptoms (two of whom later reported improvement), and four (9%) reported complete resolution of symptoms. Only one reported having been hospitalized for syncope and released after overnight observation.

Enhanced Surveillance

On April 26, DOHMH launched enhanced surveillance for self-reported ILI among all students, staff members, and family members of persons at high school A via an online survey. Students and staff members were recruited via e-mail messages with a link to the survey, followed by daily reminder e-mails.

FIGURE. Number of confirmed cases (N = 44) of swine-origin influenza A (H1N1) virus infection in a school, by date of illness onset — New York City, April 2009



Active surveillance at the school was impractical because a decision was made by DOHMH and the school principal not to reopen the school for the start of the new school week, April 27. Complete data from this ongoing survey are not yet available, but preliminary results indicate widespread influenza-like symptoms, with hundreds of students and many staff members reporting symptoms that met the case definition for ILI. Several students participating in the on-line survey (none of whom had confirmed S-OIV) reported travel to Mexico during the week before April 20; an undetermined number were symptomatic at the time of survey participation.

DOHMH also initiated active surveillance for severe, hospitalized febrile respiratory ILI among NYC residents, and this surveillance is currently ongoing. On April 26, DOHMH staff members began contacting all 61 NYC hospitals with medical and/or pediatric intensive care units by telephone on a daily basis to identify possible severe cases of S-OIV, defined by the presence of fever ≥100.4°F (≥38°C) and at least one of the following: acute respiratory distress syndrome, pneumonia, or respiratory distress. DOHMH physicians review all possible cases; nasopharyngeal swabs are recommended for cases with no identified etiology. Specimens are tested for influenza A at the NYC Public Health Laboratory, and isolates that cannot be subtyped are sent to CDC for further characterization. Active surveillance identified one to two cases of severe hospitalized ILI per day for which further testing was recommended. Results of the testing are not yet available.

Enhanced passive surveillance also is ongoing. Doctors are asked via daily reminders on the Health Alert Network to report any hospitalized patients with fever and unexplained pneumonia or respiratory distress to DOHMH. All case reports

are reviewed by DOHMH physicians, who contact providers reporting cases of severe illness consistent with possible swine influenza and arrange nasopharyngeal testing if warranted. In addition, DOHMH conducts syndromic surveillance for the following: emergency department visits for fever or influenza-like illness; drug sales for oseltamivir and other prescription drugs for influenza; and school absenteeism.

Reported by: *HT Jordan, MD, MC Mosquera, MD; Swine Flu Investigation Team, New York City Dept of Health and Mental Hygiene, New York. H Nair, PhD, AM France PhD, EIS officers, CDC.*

Editorial Note: To date, this school-based outbreak is the largest cluster of S-OIV cases reported in the United States (*2*). The findings from this investigation (in a population known to be at low risk for severe disease from seasonal influenza) indicate that symptoms appear to be similar to those of seasonal influenza (*3*). The risk for severe disease among higher risk groups is not yet known. Additional assessment of the extent of illness in NYC is ongoing.

In crafting a local response to S-OIV, DOHMH has relied upon several years of pandemic preparedness planning, adapted to the specific characteristics of the current outbreak in NYC. Given the spectrum of disease observed thus far in NYC, DOHMH has given highest priority to active surveillance for severe illness in order to assure DOHMH's ability to rapidly detect any change in the virulence or epidemiology of the virus that would prompt consideration of changes in current policy regarding use of antivirals and community control measures. This decision also was influenced by the need to prioritize use of the public health laboratory's resources on testing those cases with clinical or epidemiologic characteristics that, if confirmed to be S-OIV, might influence a change in the DOHMH's recommendations for public health control measures. DOHMH's current primary goals are to assess the severity of disease in infected persons and to maintain the ability to detect changes in the epidemiology and clinical presentation of the virus. Aggressive containment in NYC is not a feasible strategy because the virus originated outside NYC and has been reported in multiple other locales.

At this time, NYC health-care providers have been advised by DOHMH to report all patients with severe, unexplained febrile respiratory illness, and to report patients with mild (uncomplicated) cases of ILI only if they are associated with a cluster of illness (i.e., three or more cases of ILI) in an institution. NYC providers have been advised to test patients with severe, unexplained febrile respiratory illnesses for influenza A but not to test patients with mild (uncomplicated) ILI unless they have conditions that increase their risk for more severe illness (*3*). DOHMH is recommending treatment with oseltamivir or zanamivir for 1) hospitalized persons with suspected, probable, or confirmed illness, or with severe febrile unexplained respiratory illness pending testing for swine influenza, or 2) patients with mild (uncomplicated) ILI and underlying conditions (e.g., chronic cardiovascular or renal disorders or immunosuppression) that increase the risk for more severe illness because of influenza. DOHMH is recommending treatment for any patient with mild (uncomplicated) ILI permissively only if started within 48 hours of symptom onset. Antiviral prophylaxis is being recommended for 1) health-care workers who provided care to patients with suspected, probable or confirmed swine influenza without using appropriate personal protection or 2) asymptomatic household or other close contacts of ill persons of suspected, probable, or confirmed swine influenza who are at higher risk for complications of influenza or are health-care workers themselves. Persons with mild (uncomplicated) ILI are being advised to stay home for 7 days after symptom onset or 24–48 hours after symptom resolution, whichever is longer, and to cover their coughs and sneezes and wash their hands frequently. But neither testing nor presumptive antiviral therapy are currently recommended for these persons. Guidance for health-care providers is available via the DOHMH Health Alert Network at http://www.nyc.gov/health/nycmed. Additional information from DOHMH on swine influenza is available at http://www.nyc.gov/health and http://www.nyc.gov/html/doh/downloads/pdf/cd/swine_flu_faq.pdf.

Interim guidance from CDC on treatment and chemoprophylaxis for swine influenza is available at http://www.cdc.gov/flu/swine/recommendations.htm. Interim guidance on infection control for swine influenza is available at http://www.cdc.gov/swineflu/guidelines_infection_control.htm. Additional information about swine influenza is available at http://www.cdc.gov/flu/swine/index.htm.

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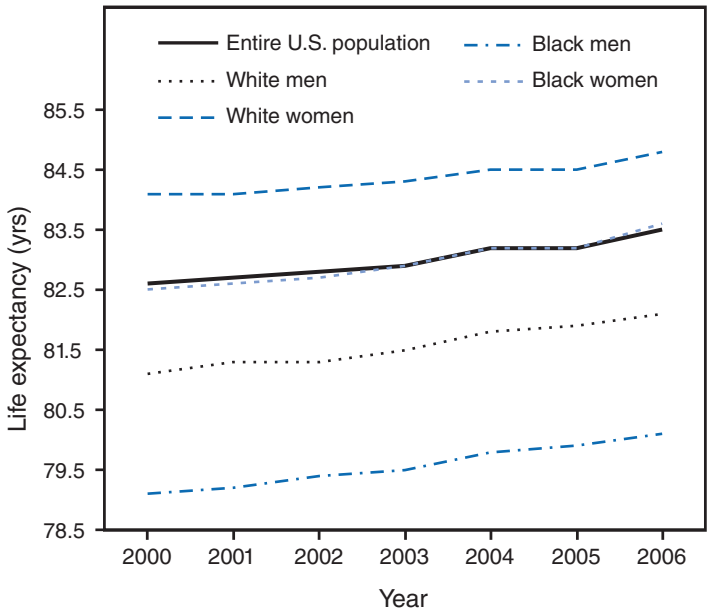
QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Life Expectancy at Age 65 Years, by Sex and Race — United States, 2000–2006*



* Data for 2000–2006 are based on a newly revised methodology and might differ from figures previously published. More information on the revised method is available at http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_14.pdf.

From 2000 to 2006, the most recent years for which data are available, life expectancy at age 65 years increased by 0.9 year for the overall U.S. population, 1.0 year for white men, 0.7 year for white women, 1.0 year for black men, and 1.1 years for black women.

SOURCE: Heron MP, Hoyert DL, Murphy SL, Xu JQ, Kochanek KD, Tejada-Vera B. Deaths: final data for 2006. Natl Vital Stat Rep 2009;57(14). Available at http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_14.pdf.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending May 2, 2009 (17th 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	—	6	0	17	32	20	19	16	
infant	1	17	1	107	85	97	85	87	PA (1)
other (wound and unspecified)	—	11	0	19	27	48	31	30	
Brucellosis	—	25	3	79	131	121	120	114	
Chancroid	—	14	1	29	23	33	17	30	
Cholera	—	1	0	3	7	9	8	6	
Cyclosporiasis§	—	28	12	137	93	137	543	160	
Diphtheria	—	—	—	—	—	—	—	—	
Domestic arboviral diseases§,¶:									
California serogroup	—	—	0	62	55	67	80	112	
eastern equine	—	—	—	4	4	8	21	6	
Powassan	—	—	—	2	7	1	1	1	
St. Louis	—	—	0	13	9	10	13	12	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis/Anaplasmosis§,**:									
Ehrlichia chaffeensis	1	44	4	951	828	578	506	338	NY (1)
Ehrlichia ewingii	—	—	—	8	—	—	—	—	
Anaplasma phagocytophilum	3	18	4	707	834	646	786	537	NY (3)
undetermined	—	5	2	115	337	231	112	59	
Haemophilus influenzae,††									
invasive disease (age <5 yrs):									
serotype b	—	11	0	28	22	29	9	19	
nonserotype b	1	72	3	208	199	175	135	135	CT (1)
unknown serotype	1	62	4	172	180	179	217	177	MO (1)
Hansen disease§	—	16	2	80	101	66	87	105	
Hantavirus pulmonary syndrome§	—	1	0	18	32	40	26	24	
Hemolytic uremic syndrome, postdiarrheal§	—	34	3	276	292	288	221	200	
Hepatitis C viral, acute	4	249	14	861	845	766	652	720	IA (2), MO (1), CA (1)
HIV infection, pediatric (age <13 years)§§	—	—	2	—	—	—	380	436	
Influenza-associated pediatric mortality§,¶¶	—	57	2	88	77	43	45	—	
Listeriosis	7	152	10	755	808	884	896	753	PA (1), OH (1), OK (1), CO (1), WA (2), CA (1)
Measles***	—	16	2	137	43	55	66	37	
Meningococcal disease, invasive†††:									
A, C, Y, and W-135	1	107	6	334	325	318	297	—	TX (1)
serogroup B	—	50	2	185	167	193	156	—	
other serogroup	1	8	1	33	35	32	27	—	HI (1)
unknown serogroup	8	171	15	604	550	651	765	—	MA (1), PA (2), OH (1), MO (1), KY (1), TX (1), OR (1)
Mumps	2	105	131	438	800	6,584	314	258	NC (1), AZ (1)
Novel influenza A virus infections	—	1	—	2	4	N	N	N	
Plague	—	—	0	1	7	17	8	3	
Poliomyelitis, paralytic	—	—	—	—	—	—	1	—	
Polio virus infection, nonparalytic§	—	—	—	—	—	N	N	N	
Psittacosis§	—	5	0	9	12	21	16	12	
Q fever total§,§§§:	—	18	2	106	171	169	136	70	
acute	—	15	0	94	—	—	—	—	
chronic	—	3	0	12	—	—	—	—	
Rabies, human	—	—	—	1	1	3	2	7	
Rubella¶¶¶	—	1	0	18	12	11	11	10	
Rubella, congenital syndrome	—	1	0	—	—	1	1	—	
SARS-CoV§,****	—	—	—	—	—	—	—	—	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	—	60	4	151	132	125	129	132	
Syphilis, congenital (age <1 yr)	—	51	7	353	430	349	329	353	
Tetanus	—	4	0	19	28	41	27	34	
Toxic-shock syndrome (staphylococcal)§	1	27	1	73	92	101	90	95	IA (1)
Trichinellosis	—	9	0	37	5	15	16	5	
Tularemia	—	6	1	117	137	95	154	134	
Typhoid fever	—	109	6	448	434	353	324	322	
Vancomycin-intermediate *Staphylococcus aureus*§	—	18	0	46	37	6	2	—	
Vancomycin-resistant *Staphylococcus aureus*§	—	—	0	—	2	1	3	1	
Vibriosis (noncholera *Vibrio* species infections)§	3	49	2	490	549	N	N	N	AL (1), CA (1), HI (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 May 2, 2009 (17th week)*

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

* Incidence data for reporting year 2008 and 2009 are provisional, whereas data for 2004, 2005, 2006, and 2007 are finalized.

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

§ Not notifiable in all states. Data from states where the condition is not notifiable 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. Fifty-six influenza-associated pediatric deaths occurring during the 2008-09 influenza season have been reported.

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

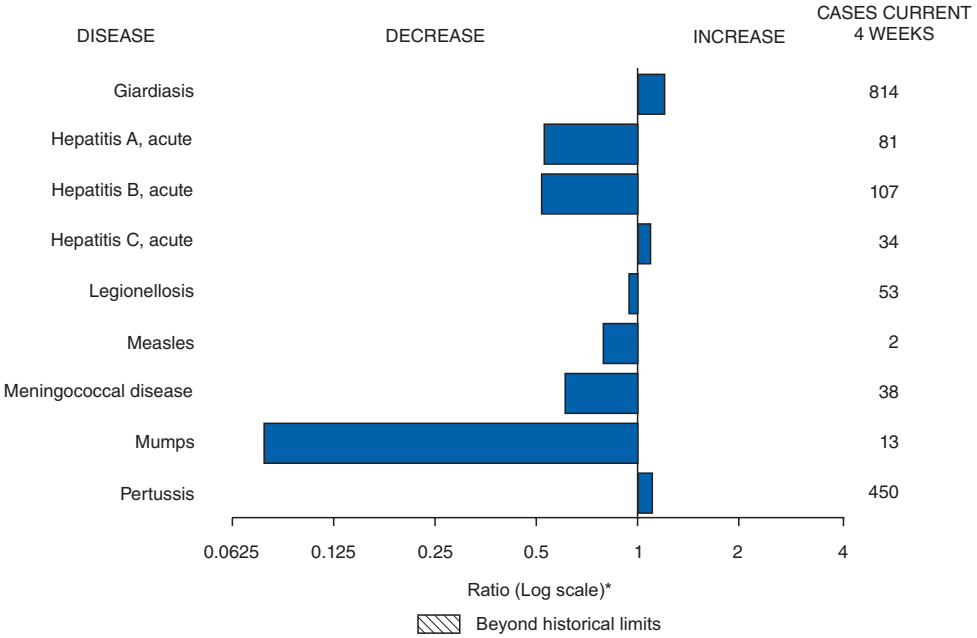
††† Data for meningococcal disease (all serogroups) are available in Table II.

§§§ 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 May 2, 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 May 2, 2009, and April 26, 2008 (17th week)*

Reporting area	Chlamydia†					Coccidiodomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 week Med	Previous 52 week Max	Cum 2009	Cum 2008
United States	8,836	21,859	24,543	328,894	372,778	94	129	334	2,363	2,171	37	104	479	1,248	1,275
New England	698	746	1,656	13,012	11,602	—	0	0	—	1	2	5	23	78	115
Connecticut	332	226	1,306	3,780	2,815	N	0	0	N	N	—	0	8	8	41
Maine§	48	48	72	825	837	N	0	0	N	N	—	1	6	8	6
Massachusetts	305	326	950	6,597	5,858	N	0	0	N	N	2	2	13	35	33
New Hampshire	1	35	63	330	687	—	0	0	—	1	—	1	4	14	19
Rhode Island§	—	52	244	1,100	1,026	—	0	0	—	—	—	0	3	1	3
Vermont§	12	21	53	380	379	N	0	0	N	N	—	1	7	12	13
Mid. Atlantic	1,654	2,883	6,825	48,901	49,230	—	0	0	—	—	5	13	35	149	164
New Jersey	—	390	774	5,314	7,696	N	0	0	N	N	—	0	4	—	15
New York (Upstate)	586	571	4,554	10,066	8,392	N	0	0	N	N	1	4	17	44	37
New York City	613	1,103	3,389	20,000	19,173	N	0	0	N	N	—	1	8	23	33
Pennsylvania	455	799	1,074	13,521	13,969	N	0	0	N	N	4	5	15	82	79
E.N. Central	1,035	3,346	4,278	46,723	63,315	1	1	3	12	17	4	25	125	276	288
Illinois	—	1,098	1,356	12,286	19,207	N	0	0	N	N	—	2	13	17	30
Indiana	337	402	713	7,493	7,123	N	0	0	N	N	—	3	13	33	34
Michigan	440	829	1,220	14,624	15,359	1	0	3	4	13	—	5	13	63	60
Ohio	49	797	1,300	6,855	14,728	—	0	2	8	4	4	6	59	93	69
Wisconsin	209	294	439	5,465	6,898	N	0	0	N	N	—	8	46	70	95
W.N. Central	855	1,318	1,550	21,332	21,827	—	0	1	1	—	7	16	68	162	197
Iowa	151	187	256	3,207	2,860	N	0	0	N	N	1	4	30	32	44
Kansas	296	182	401	3,288	2,948	N	0	0	N	N	—	1	8	18	18
Minnesota	—	266	313	3,501	4,878	—	0	0	—	—	5	4	14	40	45
Missouri	316	494	579	8,663	7,964	—	0	1	1	—	—	3	13	32	46
Nebraska§	33	99	254	1,518	1,638	N	0	0	N	N	1	2	8	19	26
North Dakota	—	26	60	156	625	N	0	0	N	N	—	0	2	1	1
South Dakota	59	56	85	999	914	N	0	0	N	N	—	1	9	20	17
S. Atlantic	1,213	3,933	4,975	55,764	66,838	—	0	1	4	2	2	21	49	259	234
Delaware	77	68	180	1,624	1,230	—	0	1	1	—	—	0	1	—	5
District of Columbia	—	127	229	2,235	2,219	—	0	0	—	—	—	0	2	—	2
Florida	—	1,404	1,906	22,684	21,952	N	0	0	N	N	—	8	35	83	102
Georgia	2	738	1,772	4,575	12,391	N	0	0	N	N	1	6	13	105	76
Maryland§	451	434	692	6,885	7,235	—	0	1	3	2	—	1	5	9	6
North Carolina	—	0	460	—	2,718	N	0	0	N	N	—	0	16	35	9
South Carolina§	—	563	917	6,954	8,869	N	0	0	N	N	—	1	6	14	11
Virginia§	672	620	907	9,547	9,079	N	0	0	N	N	—	1	4	8	15
West Virginia	11	66	102	1,260	1,145	N	0	0	N	N	1	0	3	5	8
E.S. Central	1,085	1,681	2,161	28,908	26,612	—	0	0	—	—	—	3	9	36	38
Alabama§	—	473	553	6,937	8,282	N	0	0	N	N	—	1	6	10	18
Kentucky	135	245	380	3,685	3,449	N	0	0	N	N	—	1	4	9	6
Mississippi	476	419	841	8,288	5,849	N	0	0	N	N	—	0	2	4	3
Tennessee§	474	559	797	9,998	9,032	N	0	0	N	N	—	1	5	13	11
W.S. Central	460	2,849	4,001	37,537	47,783	—	0	1	—	1	5	8	264	54	56
Arkansas§	229	276	394	5,008	4,734	N	0	0	N	N	1	1	7	10	7
Louisiana	154	431	1,090	4,736	6,058	—	0	1	—	1	—	1	5	6	12
Oklahoma	77	175	407	2,025	4,225	N	0	0	N	N	4	2	16	18	12
Texas§	—	1,913	2,532	25,768	32,766	N	0	0	N	N	—	5	258	20	25
Mountain	454	1,263	2,047	17,869	23,163	35	90	212	1,605	1,483	2	9	38	86	101
Arizona	177	468	646	5,889	7,790	35	88	210	1,575	1,448	—	1	10	9	11
Colorado	—	159	588	2,334	5,178	N	0	0	N	N	1	2	12	27	20
Idaho§	71	67	314	1,217	1,246	N	0	0	N	N	—	1	5	9	21
Montana§	—	58	87	926	1,020	N	0	0	N	N	1	0	4	10	12
Nevada§	161	178	415	3,434	3,101	—	1	7	23	16	—	0	4	6	5
New Mexico§	—	141	455	2,270	2,446	—	0	2	2	11	—	2	23	18	16
Utah	28	96	251	1,099	1,939	—	0	1	5	8	—	0	6	1	10
Wyoming§	17	33	97	700	443	—	0	1	—	—	—	0	2	6	6
Pacific	1,382	3,660	4,469	58,848	62,408	58	38	172	741	667	10	7	112	148	82
Alaska	86	87	200	1,507	1,528	N	0	0	N	N	—	0	1	1	1
California	981	2,873	3,330	45,706	48,231	58	38	172	741	667	6	5	14	78	62
Hawaii	17	112	247	1,789	1,912	N	0	0	N	N	—	0	1	1	1
Oregon§	298	186	631	3,147	3,494	N	0	0	N	N	1	1	30	52	18
Washington	—	405	557	6,699	7,243	N	0	0	N	N	3	0	99	16	—
American Samoa	—	0	8	—	56	N	0	0	N	N	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	4	24	—	46	—	0	0	—	—	—	0	0	—	—
Puerto Rico	141	140	269	2,490	2,101	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	9	22	41	226	—	0	0	—	—	—	0	0	—	—

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 2, 2009, and April 26, 2008 (17th week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive All ages, all serotypes†				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008
United States	146	308	844	4,543	4,651	1,956	5,896	6,666	75,886	104,434	19	51	112	871	1,060
New England	10	28	65	366	409	94	98	301	1,611	1,569	6	3	17	60	51
Connecticut	—	6	14	73	97	59	52	275	725	601	5	0	11	15	2
Maine§	1	4	12	63	36	3	2	9	53	32	—	0	2	7	5
Massachusetts	8	11	27	150	179	29	38	112	676	778	1	2	5	32	35
New Hampshire	1	3	11	26	33	1	2	6	35	38	—	0	2	2	5
Rhode Island§	—	1	8	14	24	—	6	16	101	110	—	0	7	2	1
Vermont§	—	3	15	40	40	2	1	4	21	10	—	0	3	2	3
Mid. Atlantic	28	60	119	777	938	337	608	1,149	9,513	10,638	3	10	25	165	190
New Jersey	—	8	21	—	156	—	83	144	1,081	1,880	—	1	7	11	33
New York (Upstate)	21	23	76	346	296	117	117	666	1,852	1,888	3	3	20	46	49
New York City	2	15	30	237	272	107	208	584	3,577	3,262	—	2	4	30	33
Pennsylvania	5	16	46	194	214	113	200	267	3,003	3,608	—	4	10	78	75
E.N. Central	20	47	88	627	719	328	1,190	1,580	14,436	22,896	—	7	18	100	168
Illinois	—	10	32	94	193	—	376	499	3,549	6,463	—	2	9	31	54
Indiana	N	0	7	N	N	122	156	256	2,473	2,912	—	1	13	17	35
Michigan	1	12	22	165	160	123	293	493	4,839	5,948	—	1	3	10	9
Ohio	15	17	31	249	255	16	254	531	2,106	5,524	—	2	6	35	56
Wisconsin	4	8	20	119	111	67	78	141	1,469	2,049	—	0	2	7	14
W.N. Central	6	27	143	456	470	176	312	393	4,607	5,476	2	3	14	61	72
Iowa	1	6	18	69	84	21	29	53	505	503	—	0	0	—	2
Kansas	—	3	11	41	32	73	41	83	787	728	—	0	4	8	6
Minnesota	3	0	106	137	135	—	51	78	550	1,097	—	0	10	13	14
Missouri	1	8	22	147	135	64	145	193	2,189	2,558	2	1	4	27	35
Nebraska§	1	3	10	38	54	7	27	50	434	463	—	0	2	10	10
North Dakota	—	0	4	3	10	—	2	7	6	42	—	0	3	3	5
South Dakota	—	2	11	21	20	11	8	20	136	85	—	0	0	—	—
S. Atlantic	36	65	108	1,104	736	296	1,277	1,723	15,447	23,253	—	12	23	253	279
Delaware	—	1	3	8	12	11	16	35	265	410	—	0	2	2	2
District of Columbia	—	1	5	—	13	—	55	101	923	750	—	0	1	—	2
Florida	—	31	57	580	326	—	431	592	6,511	7,613	—	4	9	95	68
Georgia	33	11	63	282	175	—	271	801	1,520	4,574	—	2	9	56	65
Maryland§	1	6	10	75	67	130	114	210	1,795	1,989	—	1	6	34	48
North Carolina	N	0	0	N	N	—	0	203	—	1,493	—	1	6	20	25
South Carolina§	—	2	8	32	33	—	172	325	2,037	3,209	—	1	5	21	25
Virginia§	—	9	31	112	82	152	179	321	2,219	2,940	—	1	5	12	35
West Virginia	2	1	5	15	28	3	11	26	177	275	—	0	3	13	9
E.S. Central	1	8	22	94	132	309	547	771	8,347	9,631	1	3	6	48	64
Alabama§	—	4	12	46	68	—	168	216	2,027	3,324	—	0	2	11	8
Kentucky	N	0	0	N	N	47	87	153	1,076	1,313	—	0	2	5	5
Mississippi	N	0	0	N	N	144	140	253	2,521	2,234	—	0	1	—	9
Tennessee§	1	4	13	48	64	118	163	301	2,723	2,760	1	2	5	32	42
W.S. Central	3	7	21	91	79	143	941	1,300	11,060	16,551	4	2	17	44	48
Arkansas§	—	2	8	33	34	72	84	167	1,461	1,526	—	0	2	6	2
Louisiana	1	3	10	34	27	40	162	410	1,563	2,989	—	0	1	8	4
Oklahoma	2	3	11	24	18	31	69	423	1,071	1,575	4	1	16	30	37
Texas§	N	0	0	N	N	—	599	725	6,965	10,461	—	0	1	—	5
Mountain	13	27	62	319	383	61	194	343	2,176	3,674	3	5	11	97	139
Arizona	—	3	10	50	35	23	60	84	673	1,190	2	1	7	37	60
Colorado	10	9	27	105	141	—	53	221	446	956	1	1	5	24	26
Idaho§	—	3	14	30	40	4	3	13	36	58	—	0	4	2	1
Montana§	3	2	9	30	22	—	2	6	24	38	—	0	1	1	1
Nevada§	—	2	8	19	33	33	35	129	632	792	—	0	2	9	8
New Mexico§	—	1	8	22	33	—	23	48	282	417	—	1	4	13	22
Utah	—	7	18	47	66	1	6	16	61	194	—	1	2	11	21
Wyoming§	—	1	4	16	13	—	2	8	22	29	—	0	2	—	—
Pacific	29	46	539	709	785	212	573	673	8,689	10,746	—	2	11	43	49
Alaska	1	2	10	21	24	19	13	24	249	163	—	0	2	3	7
California	20	35	59	503	599	161	466	575	7,149	8,806	—	0	3	7	13
Hawaii	—	0	4	4	10	4	12	21	189	182	—	0	2	12	7
Oregon§	2	7	58	106	152	28	21	48	352	454	—	1	10	18	22
Washington	6	0	486	75	—	—	52	81	750	1,141	—	0	2	3	—
American Samoa	—	0	0	—	—	—	0	1	—	2	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	1	15	—	18	—	0	0	—	—
Puerto Rico	—	3	15	25	47	10	5	22	70	77	—	0	1	—	—
U.S. Virgin Islands	—	0	0	—	—	—	2	6	12	39	N	0	0	N	N

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 2, 2009, and April 26, 2008 (17th week)*

Reporting area	Hepatitis (viral, acute), by type† A					Hepatitis (viral, acute), by type† B					Legionellosis				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008
United States	9	40	134	547	846	19	72	218	1,013	1,170	12	51	151	449	579
New England	2	2	8	28	47	—	1	4	9	28	—	2	18	14	31
Connecticut	1	0	4	8	9	—	0	2	4	12	—	0	5	6	6
Maine§	—	0	5	1	3	—	0	2	3	4	—	0	2	—	1
Massachusetts	1	1	3	14	25	—	0	2	1	8	—	1	7	6	11
New Hampshire	—	0	2	2	3	—	0	2	1	2	—	0	5	—	4
Rhode Island§	—	0	2	3	7	—	0	1	—	1	—	0	14	1	5
Vermont§	—	0	1	—	—	—	0	1	—	1	—	0	1	1	4
Mid. Atlantic	—	5	13	60	110	—	7	17	80	161	6	15	59	112	118
New Jersey	—	1	5	5	25	—	1	5	2	51	—	2	14	6	14
New York (Upstate)	—	1	4	15	22	—	1	11	21	20	3	5	24	42	31
New York City	—	2	6	17	32	—	1	5	20	33	—	2	12	11	14
Pennsylvania	—	1	4	23	31	—	3	8	37	57	3	6	33	53	59
E.N. Central	1	5	13	69	128	—	8	19	132	150	3	8	41	84	142
Illinois	—	2	6	14	47	—	2	7	17	45	—	2	13	8	22
Indiana	—	0	4	5	6	—	1	7	15	9	—	1	6	7	9
Michigan	—	2	5	25	54	—	2	8	41	51	—	2	16	17	42
Ohio	1	1	4	20	10	—	2	13	44	39	3	3	18	47	64
Wisconsin	—	0	3	5	11	—	0	3	15	6	—	0	3	5	5
W.N. Central	—	2	15	33	108	—	2	15	54	19	—	2	8	13	29
Iowa	—	1	7	4	47	—	0	3	6	7	—	0	2	6	7
Kansas	—	0	1	2	8	—	0	3	1	3	—	0	1	1	1
Minnesota	—	0	12	7	9	—	0	11	7	—	—	0	4	—	3
Missouri	—	0	3	13	12	—	1	5	29	8	—	1	7	3	9
Nebraska§	—	0	4	6	30	—	0	3	10	1	—	0	3	2	8
North Dakota	—	0	1	—	—	—	0	1	—	—	—	0	1	1	—
South Dakota	—	0	1	1	2	—	0	1	1	—	—	0	1	—	1
S. Atlantic	—	7	15	137	105	16	20	34	351	304	—	9	23	109	115
Delaware	—	0	1	1	2	—	0	2	10	8	—	0	2	—	2
District of Columbia	U	0	0	U	U	U	0	0	U	U	—	0	2	—	4
Florida	—	4	8	71	45	—	7	11	106	110	—	3	7	46	46
Georgia	—	1	4	20	19	—	3	9	49	48	—	1	5	17	10
Maryland§	—	1	4	13	13	—	2	5	33	30	—	2	9	21	23
North Carolina	—	0	9	14	9	12	0	19	105	25	—	0	7	17	7
South Carolina§	—	0	3	10	4	—	1	4	7	26	—	0	2	1	2
Virginia§	—	1	6	8	10	—	2	10	21	26	—	1	5	7	14
West Virginia	—	0	1	—	3	4	1	6	20	31	—	0	3	—	7
E.S. Central	—	1	9	10	15	—	8	13	96	123	1	2	10	21	26
Alabama§	—	0	2	1	4	—	2	7	30	32	—	0	2	2	3
Kentucky	—	0	3	1	5	—	2	7	25	34	—	1	4	10	14
Mississippi	—	0	2	5	—	—	1	3	5	12	—	0	1	—	—
Tennessee§	—	0	6	3	6	—	3	8	36	45	1	0	5	9	9
W.S. Central	—	4	42	47	80	2	12	85	159	238	—	2	20	20	12
Arkansas§	—	0	1	4	2	—	0	4	11	12	—	0	2	1	—
Louisiana	—	0	2	2	6	—	1	4	16	28	—	0	2	1	1
Oklahoma	—	0	5	1	3	—	2	10	31	21	—	0	6	1	—
Texas§	—	3	37	40	69	2	7	74	101	177	—	1	19	17	11
Mountain	2	3	31	48	69	—	4	10	37	56	—	2	8	23	28
Arizona	2	1	28	26	24	—	1	5	15	21	—	0	2	8	7
Colorado	—	0	2	7	15	—	0	3	8	9	—	0	2	1	3
Idaho§	—	0	1	—	10	—	0	2	1	3	—	0	1	—	1
Montana§	—	0	1	2	—	—	0	1	—	—	—	0	2	4	3
Nevada§	—	0	3	6	2	—	0	3	6	15	—	0	2	5	4
New Mexico§	—	0	1	4	13	—	0	2	4	6	—	0	2	—	3
Utah	—	0	2	3	2	—	0	3	3	1	—	0	2	5	7
Wyoming§	—	0	0	—	3	—	0	1	—	1	—	0	0	—	—
Pacific	4	8	59	115	184	1	6	84	95	91	2	3	25	53	78
Alaska	—	0	1	3	2	—	0	1	1	3	—	0	1	2	—
California	2	6	25	89	164	—	5	28	74	72	2	3	8	44	68
Hawaii	—	0	2	3	3	—	0	1	1	3	—	0	1	1	4
Oregon§	—	0	2	6	15	—	0	5	9	13	—	0	2	3	6
Washington	2	0	51	14	—	1	0	56	10	—	—	0	19	3	—
American Samoa	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	1	0	4	7	9	—	0	5	2	16	—	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 notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Data for acute hepatitis C, viral are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 2, 2009, and April 26, 2008 (17th week)*

Reporting area	Lyme disease					Malaria					Meningococcal disease, invasive† All serotypes				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008
United States	101	530	1,679	2,169	2,837	2	24	57	258	247	10	18	69	336	491
New England	5	89	550	255	587	—	1	6	8	9	1	0	4	15	14
Connecticut	—	0	0	—	—	—	0	3	1	—	—	0	1	1	1
Maine§	5	5	73	39	37	—	0	0	—	1	—	0	1	2	1
Massachusetts	—	39	375	117	344	—	0	4	6	6	1	0	3	9	12
New Hampshire	—	17	143	69	97	—	0	2	—	1	—	0	1	1	—
Rhode Island§	—	0	74	5	97	—	0	1	—	1	—	0	1	1	—
Vermont§	—	4	41	25	12	—	0	1	1	—	—	0	1	1	—
Mid. Atlantic	81	271	1,395	1,124	1,425	—	5	16	56	60	2	2	5	31	54
New Jersey	—	34	220	205	422	—	0	4	—	10	—	0	1	1	9
New York (Upstate)	42	99	1,332	459	178	—	1	10	15	6	—	0	2	8	15
New York City	—	4	36	—	51	—	3	10	33	36	—	0	2	4	7
Pennsylvania	39	97	519	460	774	—	1	3	8	8	2	1	4	18	23
E.N. Central	—	11	147	76	99	1	2	7	29	45	1	3	8	57	88
Illinois	—	0	13	—	3	—	1	5	9	24	—	1	6	12	34
Indiana	—	0	8	1	1	—	0	2	5	1	—	0	4	11	12
Michigan	—	1	10	6	6	—	0	2	4	6	—	0	3	10	13
Ohio	—	0	6	6	5	1	0	2	11	12	1	0	3	18	20
Wisconsin	—	10	129	63	84	—	0	3	—	2	—	0	2	6	9
W.N. Central	—	8	212	36	57	—	1	10	8	16	1	2	7	27	47
Iowa	—	1	9	5	11	—	0	3	3	2	—	0	1	1	11
Kansas	—	0	4	2	2	—	0	2	1	1	—	0	2	6	2
Minnesota	—	5	202	28	44	—	0	8	1	4	—	0	4	6	15
Missouri	—	0	1	—	—	—	0	2	3	5	1	0	2	9	12
Nebraska§	—	0	2	—	—	—	0	1	—	4	—	0	1	3	5
North Dakota	—	0	10	—	—	—	0	0	—	—	—	0	1	—	1
South Dakota	—	0	1	1	—	—	0	0	—	—	—	0	1	2	1
S. Atlantic	11	76	225	600	589	—	7	16	106	62	—	3	9	62	63
Delaware	8	11	36	120	158	—	0	1	1	1	—	0	1	1	—
District of Columbia	—	1	7	—	7	—	0	2	—	—	—	0	0	—	—
Florida	—	1	6	12	8	—	1	7	29	15	—	1	4	27	24
Georgia	—	0	6	14	3	—	1	4	20	15	—	0	2	10	8
Maryland§	2	33	165	312	332	—	2	8	28	21	—	0	3	1	4
North Carolina	—	1	6	16	2	—	0	7	16	2	—	0	3	9	3
South Carolina§	—	0	2	5	4	—	0	1	1	1	—	0	2	5	11
Virginia§	1	15	61	104	58	—	1	3	10	6	—	0	2	7	11
West Virginia	—	2	11	17	17	—	0	1	1	1	—	0	1	2	2
E.S. Central	—	0	5	4	6	—	0	2	7	3	1	0	6	14	25
Alabama§	—	0	2	—	1	—	0	1	2	2	—	0	2	2	1
Kentucky	—	0	2	—	1	—	0	1	1	1	1	0	1	3	5
Mississippi	—	0	1	—	—	—	0	1	—	—	—	0	2	1	7
Tennessee§	—	0	3	4	4	—	0	2	4	—	—	0	3	8	12
W.S. Central	—	2	21	7	16	—	1	10	5	11	2	2	10	28	49
Arkansas§	—	0	0	—	—	—	0	0	—	—	—	0	2	5	7
Louisiana	—	0	1	—	—	—	0	1	—	—	—	0	3	9	15
Oklahoma	—	0	1	—	—	—	0	2	—	1	—	0	3	2	8
Texas§	—	2	21	7	16	—	1	10	5	10	2	1	9	12	19
Mountain	1	1	13	7	6	—	0	3	3	10	—	1	4	28	28
Arizona	—	0	2	—	2	—	0	2	1	3	—	0	2	7	2
Colorado	—	0	1	1	2	—	0	1	1	3	—	0	2	9	5
Idaho§	1	0	1	3	1	—	0	1	—	—	—	0	1	4	3
Montana§	—	0	13	1	—	—	0	0	—	—	—	0	1	2	3
Nevada§	—	0	2	2	—	—	0	0	—	4	—	0	2	3	5
New Mexico§	—	0	2	—	1	—	0	1	—	—	—	0	1	1	4
Utah	—	0	1	—	—	—	0	1	1	—	—	0	1	1	4
Wyoming§	—	0	1	—	—	—	0	0	—	—	—	0	1	1	2
Pacific	3	4	30	60	52	1	2	36	36	31	2	4	39	74	123
Alaska	—	0	2	1	—	—	0	2	1	—	—	0	2	2	2
California	3	3	8	54	45	—	2	8	26	27	—	2	8	40	106
Hawaii	N	0	0	N	N	—	0	1	1	1	1	0	1	2	1
Oregon§	—	0	3	5	7	—	0	2	4	3	1	1	10	22	14
Washington	—	0	23	—	—	1	0	32	4	—	—	0	31	8	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	2	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	1	1	1	—	0	1	—	2
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 notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Data for meningococcal disease, invasive caused by serogroups A, C, Y, and W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I.
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 2, 2009, and April 26, 2008 (17th week)*

Reporting area	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008
United States	60	232	1,953	3,274	2,350	24	90	152	815	1,329	8	40	149	233	110
New England	—	18	36	160	315	7	8	21	93	107	—	0	2	2	1
Connecticut	—	1	4	5	22	5	3	17	41	53	—	0	0	—	—
Maine†	—	1	7	26	12	—	1	5	15	19	—	0	1	2	—
Massachusetts	—	12	30	105	247	—	0	0	—	—	—	0	1	—	1
New Hampshire	—	1	4	15	10	2	1	8	9	10	—	0	1	—	—
Rhode Island†	—	1	6	3	19	—	0	3	7	9	—	0	2	—	—
Vermont†	—	0	2	6	5	—	1	6	21	16	—	0	0	—	—
Mid. Atlantic	18	23	64	266	287	8	29	67	123	387	—	2	30	5	23
New Jersey	—	3	12	20	45	—	0	0	—	—	—	1	6	—	11
New York (Upstate)	3	7	41	60	77	8	9	20	103	112	—	0	29	1	—
New York City	—	0	20	23	34	—	0	2	—	7	—	0	2	4	8
Pennsylvania	15	10	34	163	131	—	19	52	20	268	—	0	2	—	4
E.N. Central	9	37	174	720	549	—	3	29	15	12	—	2	15	9	6
Illinois	—	13	45	161	50	—	1	21	5	4	—	1	11	5	6
Indiana	—	2	96	63	15	—	0	2	—	1	—	0	3	—	—
Michigan	2	8	21	165	63	—	1	9	10	5	—	0	1	1	—
Ohio	7	11	57	311	401	—	1	7	—	2	—	0	4	3	—
Wisconsin	—	2	7	20	20	N	0	0	N	N	—	0	1	—	—
W.N. Central	7	30	839	714	193	1	5	17	64	60	1	4	33	13	7
Iowa	—	4	21	39	29	—	0	5	6	3	—	0	2	—	—
Kansas	—	2	12	50	24	—	1	6	34	28	—	0	0	—	—
Minnesota	3	1	781	155	31	—	0	10	7	13	—	0	0	—	—
Missouri	2	12	51	398	90	1	1	8	9	1	1	4	32	13	7
Nebraska†	2	4	32	64	15	—	0	0	—	—	—	0	4	—	—
North Dakota	—	0	18	2	—	—	0	9	3	8	—	0	0	—	—
South Dakota	—	0	10	6	4	—	0	2	5	7	—	0	1	—	—
S. Atlantic	3	24	71	444	232	—	28	66	378	621	6	16	72	167	42
Delaware	—	0	3	4	2	—	0	0	—	—	—	0	5	1	2
District of Columbia	—	0	2	—	1	—	0	0	—	—	—	0	1	—	1
Florida	—	7	20	129	51	—	0	18	45	138	—	0	3	1	2
Georgia	—	3	7	50	14	—	6	47	88	124	—	1	9	6	7
Maryland†	1	3	10	31	36	—	7	17	93	147	—	1	7	11	10
North Carolina	2	0	65	134	59	N	2	4	N	N	5	9	55	129	11
South Carolina†	—	2	10	50	28	—	0	0	—	—	—	1	9	7	2
Virginia†	—	3	24	41	36	—	10	24	122	182	1	2	15	11	5
West Virginia	—	0	2	5	5	—	1	6	30	30	—	0	1	1	2
E.S. Central	4	10	33	188	77	—	3	7	33	52	1	4	23	22	16
Alabama†	—	2	7	45	17	—	0	0	—	—	—	1	8	7	7
Kentucky	2	4	15	85	11	—	1	4	21	8	—	0	1	—	—
Mississippi	—	2	5	17	33	—	0	1	—	1	—	0	3	1	2
Tennessee†	2	2	14	41	16	—	2	6	12	43	1	3	19	14	7
W.S. Central	5	34	347	311	173	1	1	9	16	25	—	2	41	11	10
Arkansas†	5	2	20	27	21	1	0	6	12	13	—	0	14	3	1
Louisiana	—	2	7	29	4	—	0	0	—	—	—	0	1	—	2
Oklahoma	—	0	29	9	2	—	0	9	4	11	—	0	26	2	2
Texas†	—	29	303	246	146	—	0	1	—	1	—	1	6	6	5
Mountain	11	15	31	271	340	—	2	9	32	18	—	1	3	4	4
Arizona	2	3	10	50	89	N	0	0	N	N	—	0	2	1	2
Colorado	8	3	12	84	59	—	0	0	—	—	—	0	1	—	—
Idaho†	1	1	5	24	14	—	0	2	—	—	—	0	1	—	—
Montana†	—	0	4	9	56	—	0	4	10	—	—	0	1	1	—
Nevada†	—	0	3	6	12	—	0	5	—	—	—	0	2	—	—
New Mexico†	—	1	10	26	21	—	0	2	12	14	—	0	1	1	1
Utah	—	4	19	71	85	—	0	6	—	—	—	0	1	1	1
Wyoming†	—	0	2	1	4	—	0	4	10	4	—	0	2	—	—
Pacific	3	18	463	200	184	7	4	13	61	47	—	0	1	—	1
Alaska	1	3	21	27	27	—	0	2	8	10	N	0	0	N	N
California	—	4	23	13	106	7	3	12	53	36	—	0	1	—	—
Hawaii	—	0	3	8	4	—	0	0	—	—	N	0	0	N	N
Oregon†	—	3	18	58	47	—	0	2	—	1	—	0	1	—	1
Washington	2	0	459	94	—	—	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	—	3	1	5	15	18	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 notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 2, 2009, and April 26, 2008 (17th week)*

Reporting area	Salmonellosis					Shiga toxin-producing *E. coli* (STEC)†					Shigellosis				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008
United States	246	949	2,977	9,008	9,141	21	79	331	720	1,061	118	440	1,343	4,343	4,620
New England	10	32	142	502	822	1	4	21	48	82	—	3	11	56	82
Connecticut	—	0	116	116	491	—	0	21	21	47	—	0	6	6	40
Maine§	1	2	8	30	38	—	0	3	—	2	—	0	6	2	1
Massachusetts	9	23	51	263	234	1	1	11	15	22	—	2	9	40	36
New Hampshire	—	3	10	50	27	—	1	3	9	8	—	0	1	1	1
Rhode Island§	—	2	9	29	18	—	0	3	—	1	—	0	1	4	3
Vermont§	—	1	7	14	14	—	0	6	3	2	—	0	2	3	1
Mid. Atlantic	30	105	203	985	1,132	—	7	27	51	322	18	55	96	776	545
New Jersey	—	21	55	72	266	—	1	12	5	40	—	19	38	206	116
New York (Upstate)	19	29	65	280	246	—	3	12	26	255	3	8	31	54	156
New York City	—	23	54	257	285	—	1	5	17	10	—	11	31	144	238
Pennsylvania	11	28	78	376	335	—	0	8	3	17	15	9	32	372	35
E.N. Central	31	98	194	1,110	1,093	4	12	75	109	115	25	83	128	915	889
Illinois	—	27	72	264	317	—	1	10	29	23	—	17	35	162	291
Indiana	1	8	53	65	91	—	1	14	11	6	—	5	39	21	256
Michigan	3	18	38	241	228	2	2	43	26	24	—	5	24	86	23
Ohio	27	27	65	380	272	2	3	17	26	24	22	42	80	534	237
Wisconsin	—	13	50	160	185	—	3	20	17	38	3	8	33	112	82
W.N. Central	21	52	148	730	619	7	11	59	100	96	8	14	39	152	280
Iowa	3	8	16	97	99	1	3	21	25	22	—	4	12	34	28
Kansas	—	7	29	75	63	—	0	7	5	8	—	2	6	48	3
Minnesota	12	12	69	184	171	1	2	21	29	12	1	3	25	17	62
Missouri	5	13	48	130	166	2	2	11	25	37	6	2	14	45	104
Nebraska§	1	5	41	157	75	3	1	30	14	10	1	0	3	6	—
North Dakota	—	0	10	9	12	—	0	1	—	1	—	0	3	1	21
South Dakota	—	3	22	78	33	—	0	4	2	6	—	0	5	1	62
S. Atlantic	48	260	458	2,341	2,298	4	13	49	162	168	15	51	98	648	1,019
Delaware	1	2	9	11	32	—	0	2	2	4	1	0	2	9	3
District of Columbia	—	0	4	—	12	—	0	1	—	2	—	0	2	—	5
Florida	—	97	174	966	1,079	—	2	10	49	51	—	12	34	138	308
Georgia	17	40	96	390	331	—	1	8	15	12	6	14	47	161	400
Maryland§	3	17	36	171	164	2	2	11	24	24	—	4	12	91	21
North Carolina	18	25	106	425	240	2	2	21	44	17	5	5	27	128	34
South Carolina§	4	17	54	162	198	—	1	3	5	12	—	6	31	52	185
Virginia§	1	20	88	170	177	—	3	27	17	33	3	4	59	64	47
West Virginia	4	3	10	46	65	—	0	3	6	13	—	0	3	5	16
E.S. Central	11	60	140	489	541	—	5	12	44	61	9	29	67	254	604
Alabama§	—	16	49	145	169	—	1	3	7	25	—	5	18	55	160
Kentucky	4	10	18	107	93	—	1	7	12	12	2	2	20	36	83
Mississippi	—	14	57	98	117	—	0	2	2	2	—	2	18	9	166
Tennessee§	7	15	62	139	162	—	2	6	23	22	7	16	48	154	195
W.S. Central	21	140	1,262	590	743	3	6	61	42	86	26	99	948	876	688
Arkansas§	7	11	40	104	86	—	1	3	6	13	7	11	27	82	75
Louisiana	—	17	50	91	136	—	0	0	—	2	—	9	26	54	146
Oklahoma	14	15	36	127	88	—	1	19	4	3	9	3	43	51	31
Texas§	—	95	1,201	268	433	3	5	55	32	68	10	68	888	689	436
Mountain	14	61	109	679	804	—	11	40	83	86	4	25	54	306	193
Arizona	6	23	43	258	218	—	1	4	8	19	3	15	35	217	81
Colorado	5	12	20	147	266	—	4	18	47	25	1	3	11	30	23
Idaho§	2	3	12	42	37	—	2	15	7	6	—	0	2	—	3
Montana§	—	2	7	38	24	—	0	3	4	13	—	0	5	8	—
Nevada§	—	4	14	64	67	—	0	3	2	4	—	3	13	24	64
New Mexico§	—	7	32	51	82	—	1	6	8	10	—	2	12	23	14
Utah	1	6	19	67	85	—	1	9	6	6	—	1	3	4	5
Wyoming§	—	1	5	12	25	—	0	2	1	3	—	0	1	—	3
Pacific	60	103	1,174	1,582	1,089	2	8	205	81	45	13	30	162	360	320
Alaska	—	1	4	14	13	—	0	1	—	2	—	0	1	2	—
California	41	86	516	1,204	929	—	6	39	56	36	12	27	75	282	287
Hawaii	6	5	15	80	57	—	0	2	1	2	—	1	3	5	13
Oregon§	1	7	46	110	90	—	1	8	5	5	1	1	10	14	20
Washington	12	0	843	174	—	2	0	189	19	—	—	0	116	57	—
American Samoa	—	0	1	—	1	—	0	0	—	—	—	0	2	3	1
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	2	—	4	—	0	0	—	—	—	0	3	—	5
Puerto Rico	—	14	40	76	153	—	0	0	—	—	—	0	4	1	7
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 notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are 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 May 2, 2009, and April 26, 2008 (17th week)*

Reporting area	Streptococcal diseases, invasive, group A					*Streptococcus pneumoniae*, invasive disease, nondrug resistant† Age <5 years				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008
United States	55	101	226	2,131	2,343	9	35	102	641	729
New England	14	5	31	138	147	—	1	12	21	39
Connecticut	13	0	26	36	12	—	0	11	—	—
Maine§	—	0	3	8	12	—	0	1	—	1
Massachusetts	1	3	10	60	92	—	1	3	15	31
New Hampshire	—	0	4	21	16	—	0	1	4	7
Rhode Island§	—	0	8	4	8	—	0	2	—	—
Vermont§	—	0	3	9	7	—	0	1	2	—
Mid. Atlantic	15	18	36	398	494	2	4	25	91	87
New Jersey	—	1	9	2	91	—	1	4	11	28
New York (Upstate)	9	6	24	148	144	2	2	19	53	36
New York City	—	4	12	88	98	—	0	23	27	23
Pennsylvania	6	6	18	160	161	N	0	2	N	N
E.N. Central	7	18	39	426	479	1	6	10	89	140
Illinois	—	5	11	102	141	—	1	5	9	41
Indiana	—	3	19	65	62	—	0	5	11	19
Michigan	2	3	9	71	83	—	1	5	26	37
Ohio	3	4	13	126	130	1	1	5	31	21
Wisconsin	2	1	10	62	63	—	0	3	12	22
W.N. Central	2	5	37	174	188	—	2	14	55	40
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	8	23	24	N	0	1	N	N
Minnesota	—	0	34	65	83	—	0	9	22	15
Missouri	1	1	8	49	48	—	1	3	24	17
Nebraska§	1	1	3	25	16	—	0	1	2	3
North Dakota	—	0	2	2	7	—	0	3	3	1
South Dakota	—	0	2	10	10	—	0	2	4	4
S. Atlantic	8	22	46	464	457	1	6	14	130	145
Delaware	—	0	1	7	6	—	0	0	—	—
District of Columbia	—	0	2	—	1	N	0	0	N	N
Florida	—	6	12	114	102	—	1	6	30	24
Georgia	3	5	13	111	97	1	2	6	38	40
Maryland§	1	3	10	70	87	—	1	3	28	32
North Carolina	—	2	12	48	54	N	0	0	N	N
South Carolina§	—	1	5	34	30	—	1	6	24	23
Virginia§	2	3	9	62	62	—	0	3	3	22
West Virginia	2	1	4	18	18	—	0	2	7	4
E.S. Central	1	4	9	88	75	2	2	6	26	40
Alabama§	N	0	0	N	N	N	0	0	N	N
Kentucky	—	1	5	15	17	N	0	0	N	N
Mississippi	N	0	0	N	N	—	0	2	—	12
Tennessee§	1	3	8	73	58	2	1	6	26	28
W.S. Central	5	9	72	192	191	1	6	43	118	95
Arkansas§	—	0	2	9	4	—	0	3	11	4
Louisiana	—	0	2	6	8	—	0	3	12	3
Oklahoma	4	2	13	74	52	1	1	7	25	34
Texas§	1	6	59	103	127	—	4	34	70	54
Mountain	3	10	22	193	264	2	4	16	98	126
Arizona	1	3	8	56	86	2	2	10	58	58
Colorado	2	3	8	72	65	—	1	4	20	25
Idaho§	—	0	2	3	10	—	0	1	2	2
Montana§	N	0	0	N	N	N	0	0	N	N
Nevada§	—	0	1	3	5	—	0	1	—	2
New Mexico§	—	2	7	37	70	—	0	3	7	19
Utah	—	1	6	21	25	—	0	4	11	20
Wyoming§	—	0	1	1	3	—	0	1	—	—
Pacific	—	3	9	58	48	—	1	5	13	17
Alaska	—	0	4	8	12	—	0	4	8	10
California	N	0	0	N	N	N	0	0	N	N
Hawaii	—	3	8	50	36	—	0	2	5	7
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	8	—	16	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

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 2, 2009, and April 26, 2008 (17th week)*

Reporting area	*Streptococcus pneumoniae*, invasive disease, drug resistant†														
	All ages					Aged <5 years					Syphilis, primary and secondary				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008
United States	29	58	109	1,215	1,422	3	8	19	179	178	89	254	439	3,631	3,919
New England	—	1	48	22	25	—	0	5	1	2	5	5	15	112	103
Connecticut	—	0	48	—	—	—	0	5	—	—	1	1	5	25	7
Maine§	—	0	2	4	9	—	0	1	—	—	—	0	2	1	3
Massachusetts	—	0	1	1	—	—	0	1	1	—	4	4	11	74	78
New Hampshire	—	0	3	5	—	—	0	0	—	—	—	0	2	8	6
Rhode Island§	—	0	6	5	8	—	0	1	—	1	—	0	5	4	4
Vermont§	—	0	2	7	8	—	0	1	—	1	—	0	2	—	5
Mid. Atlantic	7	3	10	66	144	—	0	3	10	12	35	33	51	605	566
New Jersey	—	0	0	—	—	—	0	0	—	—	—	4	12	77	76
New York (Upstate)	2	1	8	27	27	—	0	2	6	4	3	2	8	32	42
New York City	—	1	3	2	56	—	0	0	—	—	24	23	37	397	346
Pennsylvania	5	1	8	37	61	—	0	1	4	8	8	5	11	99	102
E.N. Central	7	9	28	222	315	—	1	5	33	40	5	24	44	290	389
Illinois	N	0	0	N	N	N	0	0	N	N	—	8	19	48	149
Indiana	—	2	19	40	113	—	0	3	7	13	1	2	10	55	48
Michigan	—	0	2	11	11	—	0	1	1	2	4	4	18	80	61
Ohio	7	7	18	171	191	—	1	4	25	25	—	6	28	89	111
Wisconsin	—	0	0	—	—	—	0	0	—	—	—	1	4	18	20
W.N. Central	—	2	8	46	99	—	0	3	13	6	1	7	14	91	145
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	10	7
Kansas	—	1	4	14	45	—	0	2	8	2	1	0	3	7	9
Minnesota	—	0	0	—	—	—	0	0	—	—	—	2	6	16	35
Missouri	—	1	4	28	51	—	0	1	5	1	—	3	10	55	89
Nebraska§	—	0	0	—	—	—	0	0	—	—	—	0	2	3	5
North Dakota	—	0	2	4	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	2	—	3	—	0	0	—	3	—	0	1	—	—
S. Atlantic	11	24	53	615	582	2	4	14	83	81	22	60	248	868	734
Delaware	—	0	1	8	2	—	0	0	—	—	—	0	4	11	1
District of Columbia	N	0	0	N	N	N	0	0	N	N	—	3	9	55	37
Florida	—	14	36	380	299	—	3	13	57	46	—	20	38	329	284
Georgia	9	8	25	169	214	2	1	5	24	30	—	13	220	94	100
Maryland§	—	0	1	4	4	—	0	0	—	1	7	8	16	107	107
North Carolina	N	0	0	N	N	N	0	0	N	N	9	6	19	158	89
South Carolina§	—	0	0	—	—	—	0	0	—	—	—	2	6	20	28
Virginia§	N	0	0	N	N	N	0	0	N	N	6	5	16	93	86
West Virginia	2	1	13	54	63	—	0	3	2	4	—	0	1	1	2
E.S. Central	3	5	25	147	150	1	1	4	20	21	12	22	36	384	331
Alabama§	N	0	0	N	N	N	0	0	N	N	—	8	17	139	144
Kentucky	—	1	5	40	38	—	0	2	6	6	—	1	10	22	27
Mississippi	—	0	2	—	1	—	0	1	—	—	5	3	18	73	37
Tennessee§	3	3	22	107	111	1	0	3	14	15	7	8	19	150	123
W.S. Central	1	2	7	43	51	—	0	3	8	10	1	44	74	610	662
Arkansas§	1	0	5	24	7	—	0	3	5	3	—	3	35	53	31
Louisiana	—	1	6	19	44	—	0	1	3	7	1	11	33	129	161
Oklahoma	N	0	0	N	N	N	0	0	N	N	—	1	7	20	28
Texas§	—	0	0	—	—	—	0	0	—	—	—	28	40	408	442
Mountain	—	2	7	52	55	—	0	3	10	5	1	9	19	75	185
Arizona	—	0	0	—	—	—	0	0	—	—	—	5	13	20	103
Colorado	—	0	0	—	—	—	0	0	—	—	—	1	5	4	35
Idaho§	N	0	1	N	N	N	0	1	N	N	—	0	2	2	1
Montana§	—	0	1	—	—	—	0	0	—	—	—	0	7	—	—
Nevada§	—	1	4	24	25	—	0	2	6	1	1	1	7	33	26
New Mexico§	—	0	1	—	—	—	0	0	—	—	—	1	5	16	8
Utah	—	1	6	22	30	—	0	3	4	4	—	0	2	—	11
Wyoming§	—	0	2	6	—	—	0	0	—	—	—	0	1	—	1
Pacific	—	0	1	2	1	—	0	1	1	1	7	46	71	596	804
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
California	N	0	0	N	N	N	0	0	N	N	5	41	65	531	725
Hawaii	—	0	1	2	1	—	0	1	1	1	—	0	3	11	10
Oregon§	N	0	0	N	N	N	0	0	N	N	2	0	3	11	6
Washington	N	0	0	N	N	N	0	0	N	N	—	3	9	43	63
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	—	—	11	2	11	60	45
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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* Incidence data for reporting year 2008 and 2009 are provisional.
† Includes cases of invasive pneumococcal disease caused by drug-resistant *S. pneumoniae* (DRSP) (NNDSS event code 11720).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending May 2, 2009, and April 26, 2008 (17th week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease†									
						Neuroinvasive					Nonneuroinvasive§				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2009	Cum 2008
United States	122	414	1,016	5,889	12,031	—	1	75	—	3	—	1	77	—	6
New England	—	11	29	110	335	—	0	2	—	—	—	0	1	—	1
Connecticut	—	0	0	—	—	—	0	2	—	—	—	0	1	—	1
Maine¶	—	2	11	—	114	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
New Hampshire	—	4	12	72	121	—	0	0	—	—	—	0	0	—	—
Rhode Island¶	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Vermont¶	—	4	17	38	100	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	26	38	83	608	968	—	0	8	—	—	—	0	4	—	—
New Jersey	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
New York (Upstate)	N	0	0	N	N	—	0	5	—	—	—	0	2	—	—
New York City	—	0	0	—	—	—	0	2	—	—	—	0	2	—	—
Pennsylvania	26	38	83	608	968	—	0	2	—	—	—	0	1	—	—
E.N. Central	77	147	312	2,718	2,829	—	0	8	—	—	—	0	3	—	—
Illinois	9	37	73	729	340	—	0	4	—	—	—	0	2	—	—
Indiana	—	0	9	64	—	—	0	1	—	—	—	0	1	—	—
Michigan	17	52	116	821	1,210	—	0	4	—	—	—	0	2	—	—
Ohio	46	42	106	986	1,085	—	0	3	—	—	—	0	1	—	—
Wisconsin	5	5	50	118	194	—	0	2	—	—	—	0	1	—	—
W.N. Central	2	22	67	485	573	—	0	6	—	1	—	0	21	—	—
Iowa	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
Kansas	—	5	22	115	249	—	0	2	—	1	—	0	3	—	—
Minnesota	—	0	0	—	—	—	0	2	—	—	—	0	4	—	—
Missouri	2	12	51	334	263	—	0	3	—	—	—	0	1	—	—
Nebraska¶	N	0	0	N	N	—	0	1	—	—	—	0	6	—	—
North Dakota	—	0	38	36	43	—	0	2	—	—	—	0	11	—	—
South Dakota	—	0	4	—	18	—	0	5	—	—	—	0	6	—	—
S. Atlantic	8	64	163	894	2,032	—	0	4	—	—	—	0	4	—	—
Delaware	—	0	5	2	10	—	0	0	—	—	—	0	1	—	—
District of Columbia	—	0	2	—	13	—	0	2	—	—	—	0	1	—	—
Florida	—	29	68	606	739	—	0	2	—	—	—	0	0	—	—
Georgia	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Maryland¶	N	0	0	N	N	—	0	2	—	—	—	0	3	—	—
North Carolina	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
South Carolina¶	1	7	67	72	349	—	0	0	—	—	—	0	1	—	—
Virginia¶	—	13	60	28	627	—	0	0	—	—	—	0	1	—	—
West Virginia	7	11	32	186	294	—	0	1	—	—	—	0	0	—	—
E.S. Central	—	6	101	17	510	—	0	7	—	—	—	0	9	—	2
Alabama¶	—	6	101	16	502	—	0	3	—	—	—	0	2	—	—
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	1	1	8	—	0	4	—	—	—	0	8	—	1
Tennessee¶	N	0	0	N	N	—	0	2	—	—	—	0	3	—	1
W.S. Central	3	73	355	502	3,712	—	0	8	—	—	—	0	7	—	2
Arkansas¶	—	3	61	19	279	—	0	1	—	—	—	0	1	—	—
Louisiana	3	1	5	25	36	—	0	3	—	—	—	0	5	—	—
Oklahoma	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
Texas¶	—	61	345	458	3,397	—	0	6	—	—	—	0	4	—	2
Mountain	4	30	83	507	1,031	—	0	12	—	2	—	0	22	—	1
Arizona	—	0	0	—	—	—	0	10	—	1	—	0	8	—	—
Colorado	4	12	44	224	416	—	0	4	—	—	—	0	10	—	—
Idaho¶	N	0	0	N	N	—	0	1	—	1	—	0	6	—	1
Montana¶	—	4	27	70	137	—	0	0	—	—	—	0	2	—	—
Nevada¶	N	0	0	N	N	—	0	2	—	—	—	0	3	—	—
New Mexico¶	—	3	10	51	111	—	0	1	—	—	—	0	1	—	—
Utah	—	11	31	162	358	—	0	2	—	—	—	0	5	—	—
Wyoming¶	—	0	1	—	9	—	0	0	—	—	—	0	2	—	—
Pacific	2	3	8	48	41	—	0	38	—	—	—	0	23	—	—
Alaska	2	1	6	29	13	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	37	—	—	—	0	20	—	—
Hawaii	—	1	4	19	28	—	0	0	—	—	—	0	0	—	—
Oregon¶	N	0	0	N	N	—	0	2	—	—	—	0	4	—	—
Washington	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	2	17	—	22	—	0	0	—	—	—	0	0	—	—
Puerto Rico	4	9	26	114	221	—	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 notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.
* Incidence data for reporting year 2008 and 2009 are provisional.
† 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 notifiable in all states. Data from states where the condition is not notifiable 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 May 2, 2009 (17th week)

Reporting area	All causes, by age (years)						P&I†
	All Ages	≥65	45–64	25–44	1–24	<1	Total
New England	507	349	99	30	13	15	60
Boston, MA	146	92	31	12	6	5	15
Bridgeport, CT	16	15	1	—	—	—	3
Cambridge, MA	14	11	3	—	—	—	—
Fall River, MA	28	24	3	1	—	—	2
Hartford, CT	56	36	12	5	1	2	4
Lowell, MA	22	18	3	1	—	—	2
Lynn, MA	7	5	1	1	—	—	—
New Bedford, MA	14	10	4	—	—	—	1
New Haven, CT	36	23	8	—	3	2	8
Providence, RI	61	40	17	1	2	1	4
Somerville, MA	3	3	—	—	—	—	—
Springfield, MA	30	18	6	3	—	3	3
Waterbury, CT	32	24	2	3	1	1	5
Worcester, MA	42	30	8	3	—	1	13
Mid. Atlantic	2,036	1,430	427	104	43	32	73
Albany, NY	50	33	10	1	1	5	—
Allentown, PA	25	20	3	2	—	—	—
Buffalo, NY	53	34	13	4	—	2	1
Camden, NJ	27	15	5	5	1	1	1
Elizabeth, NJ	14	9	4	—	1	—	3
Erie, PA	49	37	8	2	—	2	2
Jersey City, NJ	24	16	4	1	3	—	1
New York City, NY	1,124	792	243	59	19	11	32
Newark, NJ	29	16	6	3	2	2	1
Paterson, NJ	8	2	4	1	1	—	—
Philadelphia, PA	202	123	52	15	8	4	7
Pittsburgh, PA§	41	28	9	2	—	2	4
Reading, PA	29	27	2	—	—	—	3
Rochester, NY	155	124	24	2	3	2	4
Schenectady, NY	22	18	2	2	—	—	3
Scranton, PA	41	29	11	1	—	—	2
Syracuse, NY	95	74	16	2	2	1	6
Trenton, NJ	22	15	4	1	2	—	—
Utica, NY	10	8	2	—	—	—	—
Yonkers, NY	16	10	5	1	—	—	3
E.N. Central	1,823	1,218	410	105	40	44	131
Akron, OH	56	27	22	5	1	1	4
Canton, OH	29	17	10	2	—	—	4
Chicago, IL	308	176	83	26	10	8	15
Cincinnati, OH	79	52	19	4	—	4	13
Cleveland, OH	221	160	43	8	6	4	6
Columbus, OH	155	102	38	12	1	2	11
Dayton, OH	128	102	18	6	2	—	9
Detroit, MI	U	U	U	U	U	U	U
Evansville, IN	41	28	9	3	—	1	7
Fort Wayne, IN	69	52	9	3	2	3	4
Gary, IN	12	6	4	1	1	—	1
Grand Rapids, MI	67	49	11	3	1	3	12
Indianapolis, IN	191	123	48	10	5	5	16
Lansing, MI	52	37	12	1	2	—	4
Milwaukee, WI	73	54	12	3	2	2	7
Peoria, IL	47	30	10	3	—	4	4
Rockford, IL	48	34	11	1	2	—	4
South Bend, IN	75	48	13	7	3	3	6
Toledo, OH	100	65	23	7	2	3	2
Youngstown, OH	72	56	15	—	—	1	2
W.N. Central	610	401	125	43	22	19	32
Des Moines, IA	51	40	7	4	—	—	3
Duluth, MN	27	19	7	1	—	—	1
Kansas City, KS	36	19	10	3	4	—	5
Kansas City, MO	125	71	30	15	4	5	4
Lincoln, NE	52	38	10	2	—	2	2
Minneapolis, MN	71	40	14	8	5	4	2
Omaha, NE	80	56	19	2	2	1	8
St. Louis, MO	28	14	7	2	2	3	—
St. Paul, MN	52	39	9	2	—	2	3
Wichita, KS	88	65	12	4	5	2	4
S. Atlantic	1,232	753	329	89	30	31	80
Atlanta, GA	158	92	49	12	2	3	8
Baltimore, MD	154	98	37	9	7	3	18
Charlotte, NC	120	86	22	10	1	1	17
Jacksonville, FL	160	97	40	15	3	5	10
Miami, FL	92	60	22	5	5	—	8
Norfolk, VA	43	19	18	4	2	—	—
Richmond, VA	60	31	21	3	2	3	1
Savannah, GA	55	36	14	5	—	—	3
St. Petersburg, FL	51	31	12	6	—	2	2
Tampa, FL	197	122	51	13	5	6	11
Washington, D.C.	128	69	41	7	3	8	2
Wilmington, DE	14	12	2	—	—	—	—
E.S. Central	868	549	219	67	21	12	72
Birmingham, AL	156	99	42	10	2	3	18
Chattanooga, TN	88	59	18	11	—	—	6
Knoxville, TN	83	57	20	4	2	—	10
Lexington, KY	69	36	20	9	4	—	3
Memphis, TN	135	91	26	12	2	4	12
Mobile, AL	121	79	32	5	3	2	4
Montgomery, AL	51	27	17	6	1	—	6
Nashville, TN	165	101	44	10	7	3	13
W.S. Central	1,473	905	373	98	52	45	88
Austin, TX	83	49	23	6	2	3	7
Baton Rouge, LA	71	49	15	4	—	3	—
Corpus Christi, TX	58	42	7	5	2	2	3
Dallas, TX	192	124	43	12	7	6	15
El Paso, TX	104	61	27	8	3	5	8
Fort Worth, TX	U	U	U	U	U	U	U
Houston, TX	418	228	119	32	24	15	17
Little Rock, AR	83	46	27	6	2	2	1
New Orleans, LA	U	U	U	U	U	U	U
San Antonio, TX	281	180	68	19	10	4	26
Shreveport, LA	56	30	20	2	—	4	4
Tulsa, OK	127	96	24	4	2	1	7
Mountain	1,194	778	301	67	21	27	84
Albuquerque, NM	117	80	25	7	2	3	11
Boise, ID	58	50	5	3	—	—	6
Colorado Springs, CO	67	37	23	4	2	1	3
Denver, CO	105	62	34	5	2	2	9
Las Vegas, NV	275	166	85	17	4	3	17
Ogden, UT	38	28	4	3	3	—	2
Phoenix, AZ	271	188	54	15	5	9	16
Pueblo, CO	30	19	10	1	—	—	3
Salt Lake City, UT	122	71	36	7	2	6	11
Tucson, AZ	111	77	25	5	1	3	6
Pacific	1,710	1,210	366	74	33	25	179
Berkeley, CA	17	13	3	1	—	—	4
Fresno, CA	94	65	21	5	2	1	10
Glendale, CA	39	34	4	1	—	—	8
Honolulu, HI	66	39	22	2	3	—	5
Long Beach, CA	61	38	18	4	1	—	12
Los Angeles, CA	242	164	61	11	2	4	25
Pasadena, CA	31	23	4	2	1	1	1
Portland, OR	134	96	29	4	4	1	11
Sacramento, CA	192	132	47	9	4	—	25
San Diego, CA	176	135	26	11	1	3	22
San Francisco, CA	109	69	26	4	3	5	13
San Jose, CA	199	147	32	12	5	3	19
Santa Cruz, CA	41	29	11	1	—	—	4
Seattle, WA	119	85	24	3	1	6	7
Spokane, WA	80	63	14	2	1	—	9
Tacoma, WA	110	78	24	2	5	1	4
Total¶	**11,453**	**7,593**	**2,649**	**677**	**275**	**250**	**799**

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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