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Botulism from Home-Canned Bamboo Shoots — Nan Province, Thailand, March 2006

On March 15, 2006, multiple persons with symptoms of nausea, vomiting, abdominal pain, and dyspnea visited the emergency department at Baan Luang district hospital in Nan province, Thailand; one person required mechanical ventilation. A team from the Bureau of Epidemiology, Department of Disease Control, Thailand Ministry of Public Health (MOPH) initiated an investigation, in collaboration with the Surveillance and Rapid Response Team from Baan Luang district. This report summarizes the investigation conducted during March 15–26, which determined that the outbreak was caused by foodborne botulism from home-canned bamboo shoots and affected 163 rural villagers who shared a common meal. The last case was identified March 21; no further cases of foodborne botulism have been identified in the region.

On March 14, an annual religious rite was observed in Nawaimai village, Pakaluang subdistrict, Baan Luang district, Nan province. Villagers from Pakaluang and neighboring subdistricts joined the event. That day, several persons who attended the festival visited local health-care providers with symptoms of gastroenteritis. Personnel from the MOPH Field Epidemiology Training Program (FETP) were notified of a possible foodborne outbreak on March 15. Illnesses progressed to include bulbar muscle paralysis, with respiratory depression requiring ventilatory support in three patients, at which time a botulism outbreak was suspected. A quick door-to-door survey conducted by village volunteers identified 354 villagers who had attended the event, of whom 200 (56%) ate food served at the event.

A case was defined as one or more symptoms* of food poisoning in a person who attended the religious rite. Active case finding among health facilities and communities in the affected districts was initiated; all provinces were asked to report patients with similar symptoms. During March 15–26, a total of 163 persons (82% of the 200 persons who ate at the festival) had illness consistent with the case definition. The median age of ill persons was 45 years (range: 13–75 years); 113 (69%) were female. The first patient had illness onset at 2:00 p.m. on March 14, and 87 (53%) patients had illness onset on March 15 (Figure 1). The last patient had illness onset on March 18.

Of the 163 persons with illness, 141 (86.5%) were admitted to area hospitals. All 141 hospitalized patients and 10 patients treated as outpatients were systematically queried about their symptoms (Figure 2). The majority of those patients experienced abdominal pain (116; 76.8%), dry mouth (76; 50.3%), and nausea (76; 50.3%); some had dysphagia (52; 37.7%), vomiting (53; 35.1%), diplopia (26; 17.2%), ptosis (16; 10.6%), and weakness of extremities (14; 9.3%). Forty-two (29.8%) of the hospitalized patients required mechanical ventilation.

*Abdominal pain, colicky pain, nausea, vomiting, diarrhea, headache, sweating, dry mouth, dysphagia, diplopia, ptosis, weakness of extremities, and dyspnea.

INSIDE

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

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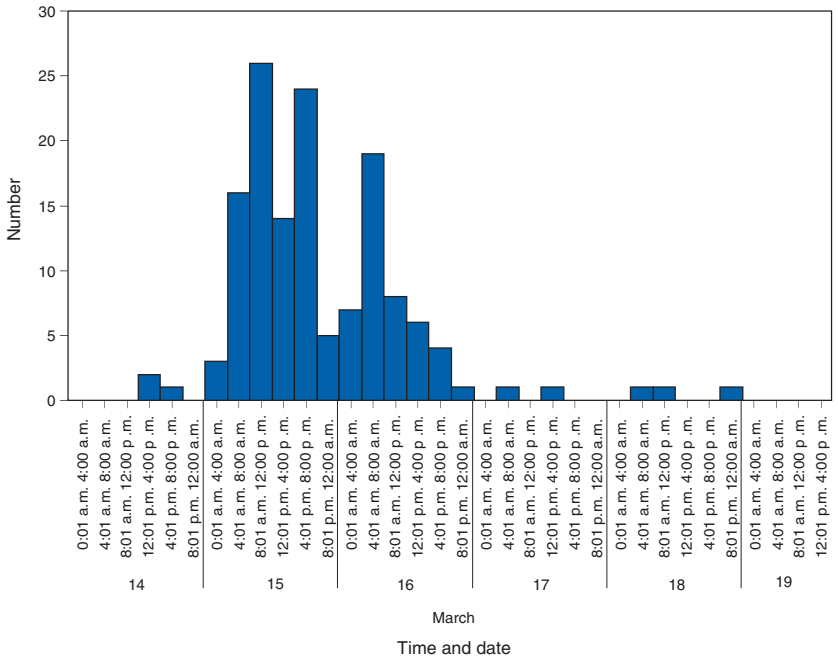
Local public health officials and FETP epidemiologists interviewed 145 of 200 persons who attended the festival by using a standard questionnaire to assess food consumed and possible illness. Food served at the religious rite included home-canned bamboo shoots eaten with chili and shrimp paste, wax gourds, chicken curry, sticky rice, water, and ice. Home-canned bamboo shoots were the only item eaten by 100% of affected persons, although bamboo shoots were routinely consumed with the chili and shrimp paste. The bamboo shoots had been produced locally by a women's group in the village. The shoots had been processed in 20-liter cans with approximately 13 kg of shoots per can. A total of 53 cans were produced during September 2005; 46 cans were sold during September 2005–February 2006, primarily in the district where they were made. No other recent reports of similar illness in the area occurred before this outbreak. The morning of the day of the festival, bamboo shoots from two cans had been combined, washed and sliced into pieces, and placed into plastic bags before being distributed at lunch. One food preparer reported that one of the two cans of bamboo shoots appeared turbid before mixing, but the bamboo shoots were not discarded.

On the basis of clinical manifestations of the patients and results of the epidemiologic investigation, the most probable cause of illness was botulinum toxin from *Clostridium botulinum*. Samples of the leftover canned bamboo shoots were cultured by the MOPH Department of Medical Sciences on March 20 and grew *C. botulinum* on March 24. On April 10, multiplex polymerase chain reaction identified toxin type A. Thai and CDC scientists are collaborating to test patient specimens, including serum, vomitus, and gastric fluid.

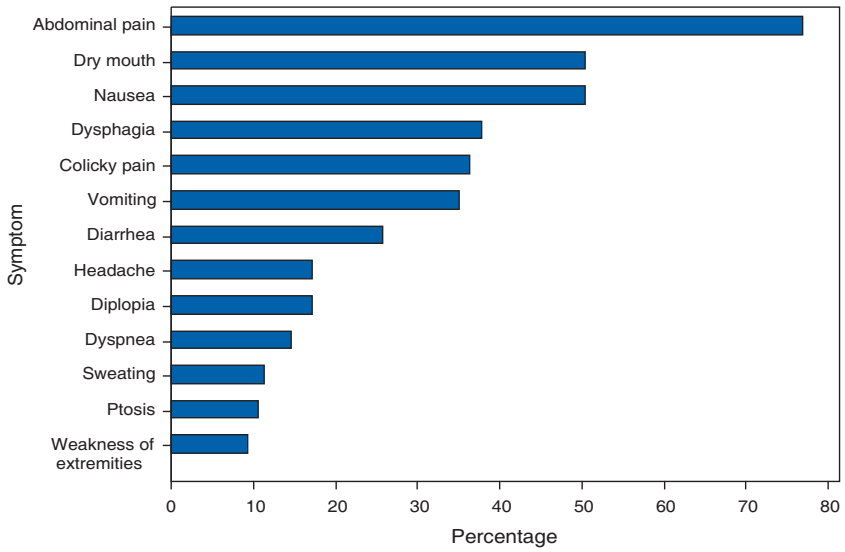
Because of the cluster of patients with symptoms consistent with botulism, the number of patients requiring mechanical ventilation, and the progression of disease in several villagers, MOPH requested assistance from international partners in obtaining botulism antitoxin; no local source of antitoxin was available. Twenty vials of heptavalent antitoxin (A–G) were provided by the United Kingdom Department of Health with assistance from the World Health Organization, 50 vials of bivalent antitoxin (A, B) were donated by CDC, and 23 vials of trivalent antitoxin (A, B, E) were donated by the National Institute of Infectious Diseases in Japan. Thailand purchased an additional 10 vials of bivalent antitoxin (A, B) from a Canadian company. Antitoxin was administered to patients with the most severe symptoms; 70 vials were administered on March 19 and 20, and the last of the 93 vials used was administered on March 23. Although published data suggest that antitoxin is most effective if administered within the first 24 hours of illness onset (*1*), botulism antitoxin was administered to patients later in the course of illness to halt the progression of paralysis and potentially shorten the duration of

FIGURE 1. Epidemic curve of botulism outbreak, by time and date of symptom onset* — Nan province, Thailand, March 2006



*Among patients for whom data regarding time of symptom onset were available (n = 145).

FIGURE 2. Percentage of patients* with symptoms of food poisoning caused by botulism, by symptom — Nan province, Thailand, March 2006



*Includes 141 hospitalized patients and 10 persons treated as outpatients who were queried about their symptoms (n = 151).

illness. A study to assess the short- and long-term outcomes of a subset of patients is under way.

On March 21, a team of critical care specialists (pulmonologists, a neurologist, and a toxicologist) from Bangkok traveled to Nan province to assess the respiratory care capabilities in the province. Because patients with severe botulism might remain on a ventilator for a month or longer requiring round-the-clock care, 26 patients were transferred on March 22 by the Thai Air Force to neighboring provincial hospitals and to tertiary care hospitals in Bangkok for long-term respiratory care. As of April 10, a total of 25 patients remained hospitalized, and 9 (36%) were still on respirators; no patients had died.

Reported by: *Surveillance and Rapid Response Teams from Baan Luang district and Nan Provincial Health Office; Nan Provincial Hospital; Office of Disease Prevention and Control 10, Dept of Disease Control (DDC), Ministry of Public Health (MOPH), Chiang Mai; Field Epidemiology Training Program, Bur of Epidemiology, DDC, MOPH; Thailand MOPH–U.S. CDC Collaboration; World Health Organization representative to Thailand, Nonthaburi, Thailand. Div of Foodborne, Bacterial and Mycotic Diseases, National Center for Zoonotic, Vector-Borne and Enteric Diseases, CDC.*

Editorial Note: In 1998, a smaller outbreak of botulism associated with home-canned bamboo shoots was reported in the same Thai province (*2*). Recommendations for home-canned food production were disseminated widely to all provinces. However, this recurrence 8 years later indicates the importance of long-term follow up and continuous inspection and assurance of the quality of food canning.

As a result of this investigation, MOPH recommended increasing control of home-canned food production in all provinces and strengthening surveillance for foodborne botulism. The provincial government prohibited sale of all leftover cans and advised the population to buy only Thai Food and Drug Administration–approved, commercially canned food products, to boil home-canned bamboo shoots for 10 minutes before eating, and to discard cans with defects (e.g., dents, swelling, discoloration, rust, or foul

smell). Warnings about the outbreak were issued through local radio stations and the Internet, with educational messages about proper preparation of bamboo shoots for home canning. On March 20, health officials collected 21 leftover cans and approximately 550 plastic bags of bamboo shoots from three producers in Baan Luang district. In addition, provincial health officials are strengthening surveillance activities for botulism; a notice was sent to all hospitals and district health centers to urge clinicians and public health professionals to report any persons with signs or symptoms consistent with botulism. Local health authorities will continue to monitor persons who ate the shared meal until all signs of associated illness have resolved.

The current outbreak tested the rapid response capabilities of several countries. Surveillance and Rapid Response Teams in Thailand, who are trained to detect and respond to public health emergencies, were rapidly deployed. A quick assessment identified a large foodborne outbreak, with no malicious intent suspected (*3*). In addition, the World Health Organization and CDC rapidly identified and procured sources of antitoxin. This outbreak response highlights the importance of communication and collaboration between local health authorities and international health agencies.

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Preliminary FoodNet Data on the Incidence of Infection with Pathogens Transmitted Commonly Through Food — 10 States, United States, 2005

Foodborne illnesses are a substantial health burden in the United States (*1*). The Foodborne Diseases Active Surveillance Network (FoodNet) of CDC's Emerging Infections Program collects data from 10 U.S. states* regarding diseases caused by enteric pathogens transmitted commonly through food. FoodNet quantifies and monitors the incidence of these infections by conducting active, population-based surveillance for laboratory-confirmed illness (*2*). This report describes preliminary surveillance data for 2005 and compares them with baseline data from the period 1996–1998. Incidence of infections caused by *Campylobacter*, *Listeria, Salmonella,* Shiga toxin–producing *Escherichia coli* O157 (STEC O157), *Shigella,* and *Yersinia* has declined, and *Campylobacter* and *Listeria* incidence are approaching levels targeted by national health objectives (*3*) (Table). However, most of those declines occurred before 2005, and *Vibrio* infections have increased, indicating that further measures are needed to prevent foodborne illness.

In 1996, FoodNet began active, population-based surveillance for laboratory-confirmed cases of infection from *Campylobacter*, *Listeria*, *Salmonella*, STEC O157, *Shigella*, *Vibrio*, and *Yersinia*. In 1997, FoodNet added surveillance for cases of *Cryptosporidium* and *Cyclospora* infection. In 2000, FoodNet began collecting data on STEC non-O157 and comprehensive information on hemolytic uremic syndrome (HUS). FoodNet personnel ascertain cases through contact with all clinical laboratories in their surveillance areas. HUS surveillance is conducted through a network of pediatric nephrologists and infection-control practitioners. In addition, eight states review hospital discharge data to ascertain HUS cases. Because of the time required for review of hospital records, this report contains preliminary 2004 HUS data.

During 1996–2005, the FoodNet surveillance population increased from 14.2 million persons (5% of the U.S. population) in five states to 44.5 million persons (15% of the U.S. population) in 10 states. Preliminary incidence for 2005 was calculated using the number of laboratory-confirmed infections and dividing by 2004 population estimates. Final incidence for 2005 will be reported when 2005 population estimates are available from the U.S. Census Bureau.

2005 Surveillance

In 2005, a total of 16,614 laboratory-confirmed cases of infections in FoodNet surveillance areas were identified, as follows: *Salmonella* (6,471 cases), *Campylobacter* (5,655), *Shigella* (2,078), *Cryptosporidium* (1,313), STEC O157 (473), *Yersinia* (159), STEC non-O157 (146), *Listeria* (135), *Vibrio* (119), and *Cyclospora* (65). Overall incidence per 100,000 population was 14.55 for *Salmonella,* 12.72 for *Campylobacter,* 4.67 for *Shigella,* 2.95 for *Cryptosporidium,* 1.06 for STEC O157, 0.36 for *Yersinia,* 0.33 for STEC non-O157, 0.30 for *Listeria,* 0.27 for *Vibrio*, and 0.15 for *Cyclospora*. Substantial variation occurred across surveillance sites (Table). In 2004, FoodNet identified 44 cases of HUS in children aged <15 years (rate: 0.49 per 100,000 children); 30 (68%) of these cases occurred in children aged <5 years (rate: 0.94).

* Connecticut, Georgia, Maryland, Minnesota, New Mexico, Oregon, Tennessee, and selected counties in California, Colorado, and New York.

TABLE. Incidence* of cases of bacterial and parasitic infection and postdiarrheal hemolytic uremic syndrome (HUS), by site and pathogen, compared with national health objectives† — Foodborne Diseases Active Surveillance Network, United States, 2005§

Pathogen	California	Colorado	Connecticut	Georgia	Maryland	Minnesota	New Mexico	New York	Oregon	Tennessee	Overall 2005	National health objective†
Bacteria												
Campylobacter	27.96	19.37	15.47	6.52	7.23	16.51	18.28	11.70	17.69	6.98	12.72	12.30
Listeria	0.31	0.08	0.57	0.28	0.34	0.29	0.21	0.42	0.31	0.19	0.30	0.25
Salmonella	13.99	13.30	13.36	21.75	14.14	11.33	13.45	11.29	10.46	13.74	14.55	6.80
Shigella	8.70	3.95	1.66	7.48	1.78	1.90	6.94	1.53	2.36	8.49	4.67	N/A¶
STEC** O157	0.87	1.02	1.23	0.39	0.47	2.35	0.53	1.71	1.84	0.78	1.06	1.00
STEC non-O157	0.16	0.12	0.57	0.09	0.68	0.80	0.53	0.25	0.22	0.03	0.33	N/A
Vibrio	0.69	0.31	0.34	0.24	0.49	0.12	0.05	0.19	0.25	0.08	0.27	N/A
Yersinia	0.87	0.27	0.43	0.29	0.13	0.35	0.11	0.51	0.45	0.31	0.36	N/A
Parasites												
Cryptosporidium	1.43	0.94	2.34	1.64	0.61	3.22	1.05	16.38	1.34	0.73	2.95	N/A
Cyclospora	0.06	0.00	1.00	0.15	0.05	0.00	0.21	0.02	0.11	0.05	0.15	N/A
HUS††	0.94	1.02	0.47	0.44	0.80	1.51	0.00	0.83	1.33	2.34	0.94§	0.9
Surveillance population (millions)	3.21	2.56	3.50	8.83	5.56	5.10	1.90	4.32	3.59	5.90	44.47	—

* Per 100,000 population.
† *Healthy People 2010* objectives for incidence of *Campylobacter*, *Salmonella,* and Shiga toxin–producing *Escherichia coli* O157 infections for year 2010 and for incidence of *Listeria* infections for year 2005.
§ 2004 data reported for HUS incidence.
¶ Not applicable because no national health objective exists regarding infection with this pathogen.
** Shiga toxin–producing *Escherichia coli.*
†† Incidence rate of postdiarrheal HUS in children aged <5 years; rate calculation is based on surveillance population aged <5 years.

Of the 5,869 (91%) *Salmonella* isolates serotyped, six serotypes accounted for 61% of infections, as follows: Typhimurium, 1,139 (19%); Enteritidis, 1,080 (18%); Newport, 560 (10%); Heidelberg, 367 (6%); Javiana, 304 (5%); and a monophasic serotype identified as *Salmonella* I 4,[5],12:i:-, 154 (3%). Among 109 (92%) *Vibrio* isolates identified to species level, 59 (54%) were *V. parahaemolyticus,* and 15 (14%) were *V. vulnificus*. FoodNet also collected data on 145 STEC non-O157 isolates that were tested for O-antigen determination; 117 (81%) had an identifiable O antigen, including O26 (37 [32%]), O103 (36 [31%]), and O111 (23 [20%]); 28 isolates did not react with the typing antisera used.

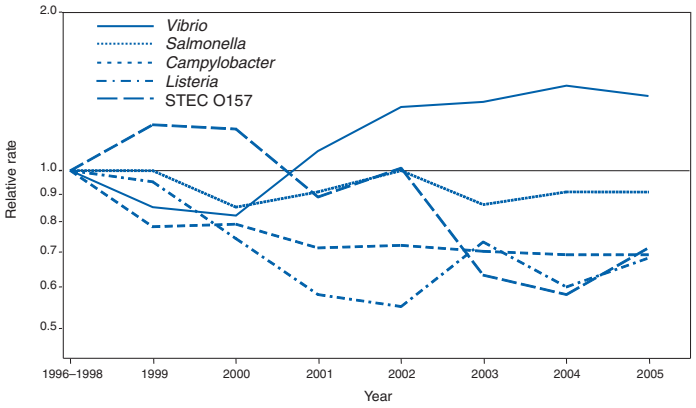
In 2005, FoodNet sites reported 205 foodborne disease outbreaks to the national Electronic Foodborne Outbreak Reporting System; 121 (59%) were associated with restaurants. Etiology was reported for 159 (78%) outbreaks; the most common etiologies were norovirus (49%) and *Salmonella* (18%).

Comparison of 2005 Data with 1996–1998

A main-effects, log-linear Poisson regression model (negative binomial) was used to estimate statistically significant changes in the incidence of pathogens. This model accounts for the increase in the number of FoodNet sites and its surveillance population since 1996 and for variation in the incidence of infections among sites (*2*). The average annual incidence for 1996–1998 (1997–1998 for *Cryptosporidium*), the first 3 years of FoodNet surveillance, was used as the baseline period. For HUS surveillance, 2000–2001 was used as the baseline. The estimated change in incidence (relative rate) between the baseline period and 2005 was calculated, along with a 95% confidence interval (CI).

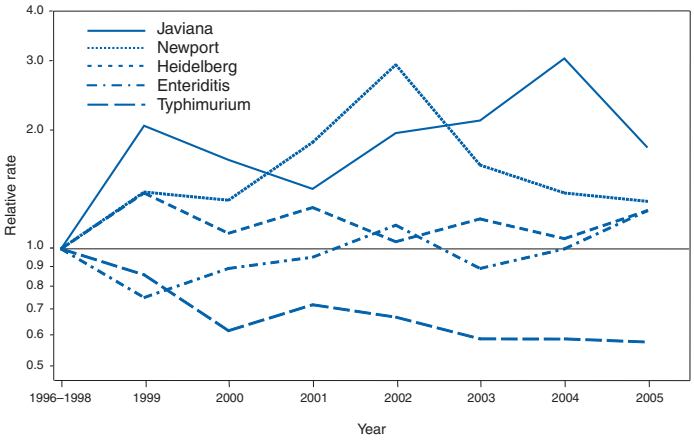
The estimated annual incidence of several infections declined significantly from 1996–1998 to 2005 (Figure 1). The estimated incidence of infection with *Yersinia* decreased 49% (CI = 36%–59%), *Shigella* decreased 43% (CI = 18%–60%), *Listeria* decreased 32% (CI = 16%–45%), *Campylobacter* decreased 30% (CI = 25%–35%), STEC O157 decreased 29% (CI = 12%–42%), and *Salmonella* decreased 9% (CI = 2%–15%). Although *Salmonella* incidence decreased overall, of the five most common *Salmonella* serotypes, only the incidence of *S.* Typhimurium decreased significantly (42% [CI = 34%–48%]). The estimated incidence of *S.* Enteritidis increased 25% (CI = 1%–55%), *S.* Heidelberg increased 25% (CI = 1%–54%) and *S.* Javiana increased 82% (CI = 14%–191%). The estimated incidence of *S.* Newport increased compared with the baseline, but the increase was not statistically significant (Figure 2). The estimated incidence of postdiarrheal HUS in children aged <5 years decreased 45% in 2004 compared with 2000–2001; whether this trend is significant could not be determined, partly because the limited time span does not provide enough data to evaluate a Poisson regression model. The estimated incidence of *Vibrio* increased 41% (CI = 3%–92%) compared with the baseline, whereas the estimated incidence of *Cryptosporidium* infections did not change significantly.

FIGURE 1. Relative rates compared with 1996–1998 baseline period of laboratory-diagnosed cases of infection with *Campylobacter*, STEC* O157, *Listeria*, *Salmonella*, and *Vibrio*, by year — Foodborne Diseases Active Surveillance Network, United States, 1996–2005



* Shiga toxin–producing *Escherichia coli*.

FIGURE 2. Relative rates compared with 1996–1998 baseline period of laboratory-diagnosed cases of infection with the five most commonly isolated *Salmonella* serotypes, by year — Foodborne Diseases Active Surveillance Network, United States, 1996–2005



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Editorial Note: In 2005, compared with the 1996–1998 baseline period, significant declines occurred in the estimated incidence of *Campylobacter*, *Listeria*, *Salmonella*, *Shigella*, STEC O157, and *Yersinia* infections. Several important food safety initiatives (*1*) might have contributed to the declines, indicating progress toward meeting the national health objectives (Table) (*3*). However, most progress occurred before 2005. Most of the decline in *Campylobacter* incidence occurred by 2001, with continued small decreases since then. The incidence of *Listeria* infections in 2005 is higher than its lowest point in 2002. Of the five most common *Salmonella* serotypes, only Typhimurium has declined, with most of the decline occurring by 2001. Most of the decline in STEC O157 incidence occurred during 2003 and 2004. The observed sustained increase in *Vibrio* incidence indicates that additional efforts are needed to prevent *Vibrio* infections. Oysters are the most important source of human *Vibrio* infections, and most human infections can be prevented by not eating raw or undercooked oysters. Measures that reduce *Vibrio* contamination of oysters also prevent illness.

Food animals are the most important source of human *Salmonella* infections. Transmission of *Salmonella* to humans can occur via various food vehicles, including eggs, meat, poultry, and produce, and via direct contact with animals and their environments. Testing by the U.S. Department of Agriculture, Food Safety and Inspection Service (FSIS) at slaughter and processing plants has demonstrated declines in *Salmonella* contamination of ground beef since 1998 (*4*). However FSIS recently announced a sustained increase in chicken-broiler carcasses testing positive for *Salmonella* during 2002–2005 and subsequently launched an initiative to reduce *Salmonella* in raw meat and poultry products (*4,5*). Although sources of infection with the most common *Salmonella* serotypes have been identified (e.g., food animals), further investigation is needed to identify sources for emerging *Salmonella* serotypes, such as Javiana and I 4,[5],12:i:-, a monophasic serotype that resembles *S.* Typhimurium except that it has no phase 2 flagellar antigen and has previously been misclassified as Group B *Salmonella* or *S.* Typhimurium (*6*).

Large outbreaks with multiple laboratory-confirmed cases can distort underlying trends in incidence. For example, the incidence of *Cryptosporidium* infections increased substantially from 2004 to 2005 because of a large outbreak associated with visits to a recreational water park in New York (P Smith, MD, New York State Department of Health, personal communication, 2006).

The findings in this report are subject to at least four limitations. First, FoodNet relies on laboratory diagnoses, but

many foodborne illnesses are not diagnosed by clinical laboratories. Second, protocols for isolation of certain enteric pathogens (e.g., STEC non-O157) in clinical laboratories vary and are not uniform within and among FoodNet sites (*7*); others (e.g., norovirus) cannot readily be identified by clinical laboratories. Third, reported illnesses might have been acquired through nonfoodborne sources, and reported incidence rates do not reflect foodborne transmission exclusively. Finally, although the FoodNet surveillance population is similar to the U.S. population (*2*), the findings might not be generalizable to the entire U.S. population.

Much remains to be done to reach the national health objectives for foodborne illnesses. Enhanced measures are needed to understand and control pathogens in animals and plants, to reduce or prevent contamination during processing, and to educate consumers about risks and prevention measures. Such measures can be particularly focused when the source of human infections (i.e., animal reservoir species and transmission route) are known. The declines in the incidence of STEC O157 infections observed in recent years suggest that coordinated efforts by regulators and industry have been effective in reducing contamination and illness related to ground beef (*8,9*).

Consumers can reduce their risk for foodborne illness by following safe food-handling recommendations and by avoiding consumption of unpasteurized milk and unpasteurized milk products, raw or undercooked oysters, raw or undercooked eggs, raw or undercooked ground beef, and undercooked poultry (additional information on food safety for consumers is available at http://www.fightbac.org). Other effective prevention measures, such as pasteurization of in-shell eggs, irradiation of ground meat, and pressure treatment of oysters, can also decrease the risk for foodborne illness.

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Multisite Outbreak of Norovirus Associated with a Franchise Restaurant — Kent County, Michigan, May 2005

The majority of cases of foodborne gastroenteritis in the United States are caused by noroviruses (*1*). This report summarizes an investigation by the Kent County Health Department (KCHD) in Michigan into three norovirus outbreaks and a cluster of community cases that were associated with a national submarine sandwich franchise restaurant during May 3–9, 2005. The investigation identified a potential source, a food handler who had returned to work within a few hours of having symptoms of gastrointestinal illness while he was still excreting norovirus in his stools. To prevent norovirus outbreaks, food service workers should be educated regarding norovirus transmission and control. In 2005, new guidelines for state health departments regarding norovirus containment were published by the Food and Drug Administration (FDA) (*2*); guidelines for local health departments in Michigan were issued by the state's Department of Community Health and Department of Agriculture (*3*). The new guidelines for Michigan recommend that food service workers with suspected norovirus not return to work until they are asymptomatic for 48–72 hours.

Norovirus Cases

Outbreak 1. On May 5, the KCHD was notified of a gastroenteritis outbreak among employees who had attended a school staff luncheon on May 3. Staff members were served a party-sized submarine sandwich catered by a national franchise restaurant. A case was defined as illness in a person who ate the suspect meal during May 3–8 and became ill 8–56 hours later with vomiting or diarrhea and two of the following: fever (documented), abdominal cramps, or nausea. A total of 23 (80%) of 29 school staff members reported illness.

Among the 23, predominant symptoms were diarrhea (87%) and vomiting (74%). Of the six stool specimens collected, all tested positive for norovirus by polymerase chain reaction (PCR). A retrospective cohort study was conducted, and exposures to 26 food items were analyzed. Twenty-two of 23 ill persons reported eating lettuce; however, no specific food item was significantly associated with illness.

Outbreak 2. On May 6, KCHD was notified of a gastroenteritis outbreak at a publishing company staff luncheon that had occurred on May 5. Party-sized submarine sandwiches were served by the same restaurant that catered the luncheon in outbreak 1. Among 95 persons who could be interviewed and who ate the suspect meal, 55 (58%) had become ill. Predominant symptoms were diarrhea (94%) and vomiting (83%). Because the entire cohort of exposed persons could not be interviewed, a case-control study was conducted, and exposures to 16 food items were analyzed. Results indicated that eating lettuce was significantly associated with illness (odds ratio [OR] = 11.24; 95% confidence interval [CI] = 1.30–95.2). Fifty-three of 54 ill persons who responded to the question reported eating lettuce. Two other food items were significantly associated with illness: jalapeno peppers (OR = 3.45; CI = 1.04–11.40) and onions (OR = 3.09; CI = 1.27–7.80). Fifteen of 52 ill persons for whom data were available reported eating jalapenos, and 21 of 50 reported eating onions. Of two stool specimens that were tested during this outbreak, one was positive by PCR for norovirus. The owner of the restaurant was contacted, and a log of other catered events was requested.

Outbreak 3. On May 6, KCHD learned of another outbreak through inquiries to groups identified in the same restaurant's catered event log. A social service organization that held a luncheon on May 4 reported that employees became sick after eating a party-sized submarine sandwich. Of 18 persons who attended the luncheon, nine (50%) became ill and met the case definition. Predominant symptoms were vomiting and diarrhea (both 78%). A cohort study was conducted, but no specific food item was significantly associated with illness. Norovirus was detected by PCR in both of the two stool specimens tested.

Community cases. Reports from the community identified an additional 28 persons with illness onset dates of May 4–9, including 25 (90%) who reported being ill after eating sandwiches from the same franchise restaurant that catered the events in the three outbreaks. Major symptoms included diarrhea (92%) and vomiting (80%). A case-control study was conducted, but no specific food item was associated with illness. All three stool specimens tested were positive by PCR for norovirus.

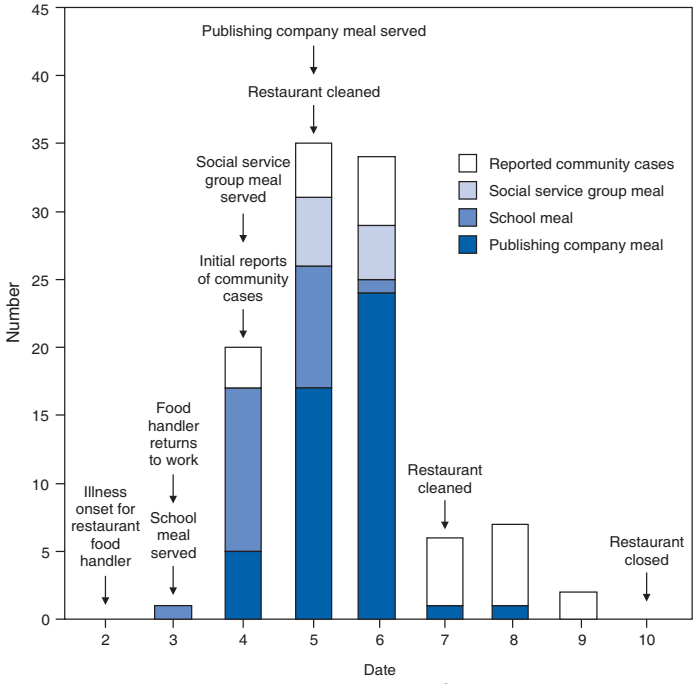
Epidemiologic and Laboratory Investigation

The three outbreaks and community cases all appeared to have been linked to sandwiches prepared by the same restaurant (Figure). Sequence analysis was performed on 21 stool specimens from the three outbreaks. Results demonstrated 100% sequence homology for the 21 specimens.

Investigators learned that a food handler employed by the restaurant had vomiting and diarrhea on May 2. The food handler believed he had acquired illness from his child, who had vomited on May 1. The child's illness was traced to an ill cousin who had been exposed to norovirus at a child care center. The food handler's vomiting ended by the early morning of May 3, and he returned to work at the restaurant later that morning. A stool specimen from the food handler was collected on May 10 and tested positive by PCR for norovirus on May 16. Sequence analysis was performed on strains from the food handler and eight customers who had illness consistent with the case definition. All nine matched the strains identified in the previous outbreaks.

An environmental health inspection on May 6 revealed that the restaurant had been thoroughly cleaned on May 5 in advance of a visit by corporate supervisors on May 6. During the inspection, investigators learned that the food prepara-

FIGURE. Number* of cases of norovirus infection associated with meals served by a national franchise restaurant, by setting and date of illness onset — Kent County, Michigan, May 2–10, 2005



* N = 170.

tion sink was being used for hand washing; a copy of the Michigan guidelines for disinfection of norovirus (*3*) was provided to the restaurant owner. The restaurant again was cleaned on May 7. On May 10, after the health department received new complaints of illness from the public, the health department recommended that the restaurant be closed temporarily, and the restaurant owner complied.

On May 16, a meeting was held with members of the health department staff and the food handler who had tested positive for norovirus. Because of the association with eating lettuce in outbreak 2, questions were asked about lettuce-handling procedures. Investigators learned that lettuce was sliced each morning by the food handler who had been ill. In addition, heads of lettuce were washed in the same sink in which employees washed their hands; the sink was not sanitized before and after the lettuce was washed. On May 17, a professional cleaning company was hired to clean the restaurant, and it was reopened the next day. No further cases of illness were reported as of May 18.

Reported by: *J Kettlehut Payne, MPH, M Hall, MD, M Lutzke, MPH, C Armstrong, J King, Kent County Health Dept, Grand Rapids, Michigan.*

Editorial Note: The outbreak investigation described in this report underscores the challenges associated with preventing norovirus transmission. Small restaurants might have difficulty operating when an employee is absent and might not be able to afford paying leave for illness. However, employees who become ill and continue to work can place the public's health at risk.

The results of these investigations suggest that the illness of one food handler might have been linked to the illnesses of at least 100 persons in multiple settings. Illnesses at a publishing company, school, social service group, and among members of the public resulted in closure of a warehouse, employee absences, pay for substitute teachers, loss of wages, and loss of revenue to the restaurant during a week-long closure.

These outbreaks demonstrate a general lack of education regarding norovirus. Restaurant owners in Michigan are required to review the state food code; however, no free training was offered to them to interpret this lengthy legal document. To facilitate education, online training programs for food handlers and managers are being developed by Kent County public health sanitarians.

Previously, no work exclusion requirements in the Michigan food code specifically targeted norovirus. An employee was required to report *Salmonella*, *Shigella*, *Escherichia coli* 0157:H7, and hepatitis A infections or illnesses such as diarrhea, vomiting, fever, jaundice, or sore throat with fever. Employees were required to provide written medical documentation that they were free from the four specified infectious agents via stool testing (*3*); no such requirement existed for norovirus. However, the 2005 FDA Food Code included norovirus containment recommendations for states requiring food service employees to be excluded from work if symptomatic with vomiting or diarrhea and, if they have been ill with suspected norovirus, not to return to work until they have been asymptomatic for 24 hours (*2*). In one study, viral shedding began approximately 15 hours after exposure to norovirus and peaked 25–72 hours after exposure (*4*). However, in this outbreak, one specimen tested positive for norovirus 14 days after exposure. The new Michigan guidelines, issued in 2005, recommend that employees who have been ill with suspected norovirus not return to work for 48–72 hours after symptoms have ended.

Specific education on norovirus containment for food handlers should be provided, even when not documented in a state food code. The Michigan guidelines offer recommendations for cleaning and disinfection that are based on recent studies and go beyond previous guidelines (*5*), indicating the concentration of bleach required for cleaning various porous and nonporous surfaces. The Michigan guidelines also supply a list of other effective and ineffective disinfectants. The restaurant described in this report was not cleaned appropriately until after it had been closed for nearly 1 week. Whether containment of norovirus resulted from the final restaurant cleaning or whether the virus was no longer viable could not be determined and offers an opportunity for future study.

Acknowledgments

This report is based, in part, on data provided by D Kraker, A Kramer, S Green, D Smith, Kent County Health Dept; and JP Massey, PhD, Michigan Dept of Community Health.

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Survey of Lymphocytic Choriomeningitis Virus Diagnosis and Testing — Connecticut, 2005

Lymphocytic choriomeningitis virus (LCMV) is a rodent-borne virus that can be transmitted to humans through exposure to rodent urine, feces, saliva, or blood. LCMV infection is often asymptomatic or mild but can cause aseptic meningitis, encephalitis, life-threatening infections in immunosuppressed persons, and severe congenital defects (*1,2*). In May 2005, LCMV was implicated in the deaths of three organ-transplant recipients who had received organs from a common donor who had likely been infected from a pet rodent (*3*). In August 2005, the Connecticut Department of Public Health conducted surveys of hospital laboratories and infectious disease (ID) physicians in Connecticut to determine recent incidence of confirmed LCMV infection, the level of awareness of LCMV, and the frequency of LCMV testing. This report summarizes the results of those surveys, which indicate that awareness of LCMV is high among ID physicians; however, testing for LCMV is infrequent, and ID physicians might not be aware of the need to consider LCMV among the most susceptible populations even when a history of rodent contact is not initially evident. In part because of these findings, LCMV infection is now a physician- and laboratory-reportable disease in Connecticut. More systematic efforts are needed to determine the frequency of LCMV infection and to monitor for pet rodent infection.

All acute care hospital laboratories in Connecticut were surveyed by telephone and asked 1) whether LCMV testing is available on site, 2) whether specimens are sent to another laboratory for testing, 3) which tests are offered to detect the virus, 4) the number of test requests made during the preceding 5 years, and 5) the results of testing. A second survey of a group of sentinel ID physicians in the state was performed via e-mail. This group consists of mostly hospital-based ID physicians who regularly receive information via e-mail from the Connecticut Department of Public Health through the Connecticut Health Alert Network. They were asked how often in the preceding 5 years they had considered a diagnosis of LCMV and tested for the virus. They were also asked if they would consider LCMV in the differential diagnosis of ill patients described in specific epidemiologic and clinical scenarios. Physicians were sent a second e-mail message if they did not return the survey within a few weeks of the initial request.

Of the 30 acute care hospital laboratories in Connecticut, none perform LCMV testing on site; 29 (97%) reported referring samples to either the state public health laboratory or another referral laboratory. During the preceding 5 years, two laboratories received requests. Only the state laboratory and one other referral laboratory performed LCMV testing for Connecticut hospitals. Testing was performed on approximately 29 serum or cerebrospinal fluid (CSF) samples using a complement fixation test at the state public health laboratory and one CSF sample using an immunoflorescent antibody assay at another referral laboratory; none were positive.

Among the 35 ID physicians contacted, 28 (80%) responded to the e-mail questionnaire. Among the respondents, 17 (61%) reported considering a diagnosis of LCMV during the preceding 5 years; of these, nine (53%) ordered a test. None confirmed a diagnosis of LCMV. Among the 24 physicians who answered questions based on the scenarios, most would consider LCMV in the differential diagnosis among patients exposed to wild mice (92%), healthy pet rodents (96%), or sick pet rodents (96%). However, only six (25%) would consider LCMV in an immunocompromised patient with an unexplained febrile illness and no known exposure history.

Reported by: *JL Hadler, MD, R Nelson, DVM, P Mshar, MPH, Connecticut Dept of Public Health. LE Sosa, MD, EIS Officer, CDC.*

Editorial Note: Outbreaks of LCMV in humans were first reported in the 1960s. Initial reports documented disease mostly in laboratory personnel working with mice and hamsters (*4*). The largest outbreak of LCMV occurred in 1973–1974 and resulted in 181 human cases in 12 states; this outbreak was associated with pet hamsters supplied by a single distributor (*4*). The likely source of LCMV in a transplant-associated outbreak in May 2005 was also determined to be a pet hamster (*3*). Although the wild house mouse (*Mus musculus*) is the natural reservoir for the virus, hamsters and other pet rodents can acquire the virus through exposure to infected mice and become an important source of human exposure. Given the association of recent outbreaks with pet rodents, control and monitoring of LCMV among rodent populations in breeding and retail facilities is needed. Until this can be achieved by the pet industry, other measures (e.g., human surveillance) need to be instituted to monitor for pet rodent infection and to minimize transmission of LCMV to humans.

The current incidence of clinically significant LCMV infection among humans is unknown. Two separate studies have demonstrated the prevalence of LCMV-specific antibodies in urban human populations exposed to wild rodents to range

from 1% to 5% (*5,6*). During a 1974 outbreak in New York associated with pet hamsters, enhanced case finding identified 60 persons with serologically confirmed LCMV, 12 (20%) of whom had severe central nervous system disease (e.g., meningitis or meningoencephalitis) (*2*). Given these reports, morbidity associated with LCMV infections might be substantially higher than generally believed, and even severe LCMV infection is likely underdiagnosed, as evidenced by the infrequent testing for LCMV detailed in these surveys. Based in part on the findings in this report, beginning in 2006, LCMV infection became health-care provider and laboratory reportable in Connecticut, with supportive diagnostic testing offered at no charge by the state laboratory. The objectives of this reporting are to 1) ensure that patients with suspect cases, especially those with pet rodent exposure, get optimum testing for LCMV infection, 2) determine the epidemiology of and trends in LCMV infection, and 3) raise physician awareness. Optimum serologic testing includes paired acute and convalescent serum specimens, the latter obtained approximately 21 days after symptom onset.

The findings in this report suggest that hospital-based ID physicians in Connecticut are aware of the association of LCMV with exposure to mice and other rodents but not likely to consider LCMV-related illness in the most susceptible populations without a clear rodent exposure history. Although disease is rarely reported, infection can be particularly severe in immunocompromised persons (e.g., organ recipients) and can cause developmental defects in fetuses (*1,3*). Physicians in specialties likely to evaluate patients with illness associated with LCMV infection should know how the infection might manifest in immunocompromised persons; clinical disease in these patients might not include symptoms of meningitis or encephalitis but might be more generalized (*3*). These physicians should also be knowledgeable about risk factors for infection so they can counsel susceptible patients. CDC previously published guidance on minimizing risk for LCMV infection and recently issued an update on LCMV infection in pregnancy and newborns intended for physicians (*7,8*).

The findings in this report are subject to at least four limitations. First, although all of the acute care hospital laboratories in Connecticut participated, the questions were posed to multiple persons in each laboratory. Thus, the person with the most knowledge regarding LCMV might not have been contacted at each location. Second, these surveys focused on inpatient diagnoses and might have missed outpatient if physicians sent specimens directly to a referral laboratory. Third, only ID physicians were surveyed, which might have neglected diagnoses made by other groups of physicians. Finally, this survey is not representative of the knowledge and awareness of all ID physicians in Connecticut or physicians in other specialties who might evaluate patients with LCMV-related illness.

Monitoring for LCMV infection should continue to minimize the potential for outbreaks and to determine the effectiveness of personal and industry-level prevention measures. In the absence of regular testing for LCMV in the pet industry, surveillance for human infection, as has begun in Connecticut, is an alternative method of monitoring for LCMV disease both in humans and pet rodent populations. If human surveillance is conducted, it should occur in a setting of physician education and active encouragement for testing, especially for persons with a clinically compatible illness (e.g., encephalitis and aseptic meningitis) and epidemiologic risk factors.

Acknowledgments

The findings in this report are based, in part, on contributions by L Lobianco, MPH, A Morrison, MPH, D Mylnarski, MPH, A Nepaul, MS, K Purviance, MPH, T Rabatsky-Ehr, MPH, Connecticut Dept of Public Health.

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Fusarium Keratitis — Multiple States, 2006

On April 10, this report was posted as an MMWR Dispatch *on the* MMWR *website* (http://www.cdc.gov/mmwr).

On March 8, 2006, CDC received a report from an ophthalmologist in New Jersey regarding three patients with contact lens–associated *Fusarium* keratitis during the preceding 3 months. Initial contact with several corneal disease specialty centers in the United States revealed that other centers also have seen recent increases in *Fusarium* keratitis. This report summarizes the public health response to date in the United States and provides important prevention messages for contact lens users.

Microbial keratitis is a severe infection of the cornea. Risk factors for infection include trauma (generally with plant material), chronic ocular surface diseases, immunodeficiencies, and rarely, contact lens use (*1–3*). An estimated 30 million persons in the United States wear soft contact lenses; the annual incidence of microbial keratitis is estimated to be 4–21 per 10,000 soft contact lens users, depending on whether users wear lenses overnight (*4*). Fungal keratitis is a condition more prevalent in warm climates; in the southernmost United States, up to 35% of microbial keratitis cases are fungal keratitis, compared with 1% in New York (*5,6*). The proportion of fungal keratitis attributable to *Fusarium* spp. also varies by region, from 25% to 62% (*1,2,5*). First-line treatment includes topical and oral antifungal medications; patients who do not respond to medical treatment usually require surgical intervention, including corneal transplantation (*3*). *Fusarium* keratitis is not transmitted from person to person.

As of April 9, 2006, a total of 109 patients with suspected *Fusarium* keratitis were under investigation in multiple states. Case finding was conducted through postings on the *Epidemic Information Exchange* (*Epi-X*) and ophthalmology listservs and through queries of clinical microbiology laboratories. CDC is coordinating an investigation with public health authorities in California, Connecticut, Florida, Georgia, Iowa, Maryland, Massachusetts, Michigan, Missouri, New Jersey, New York, North Dakota, Ohio, Pennsylvania, Tennessee, Texas, and Vermont. The majority of patients have yet to be interviewed; however, of 30 patients for whom complete data were available, the median age was 48 years (range: 13–83 years), and 21 (70%) were female; infection onset occurred during June 15, 2005–March 18, 2006.

Twenty-eight patients (93%) wore soft contact lenses, and two (7%) reported no contact lens use. Among contact lens users, 26 (93%) remembered which solution they used during the month before infection onset or had retained the actual bottle. Of these, 26 (100%) reported using a Bausch & Lomb (Rochester, New York) ReNu® brand contact lens solution or a generic-brand solution manufactured by Bausch & Lomb. Patients reported using various ReNu product types from multiple product lots. Five (18%) patients reported using other solutions in addition to the ReNu solution, including solutions made by Advanced Medical Optics, Inc. (Santa Ana, California) and Alcon (Fort Worth, Texas). Nine (32%) patients reported wearing contact lenses overnight, a known risk factor for microbial keratitis. Eight (29%) required corneal transplantation. Laboratory testing to evaluate product contamination, including typing of *Fusarium* spp. isolates, is ongoing.

Clusters of *Fusarium* keratitis were reported among contact lens users in Asia beginning in February 2006. At that time, Bausch & Lomb voluntarily suspended sales of its ReNu multipurpose solutions in Singapore and Hong Kong, pending investigation, after multiple reports of *Fusarium* keratitis among contact lens users there (*7*).

An ongoing investigation by CDC, state and local health departments, and the Food and Drug Administration is under way to determine whether this cluster represents an increase of *Fusarium* keratitis infections and to determine the association, if any, of these cases with any product. Epidemiologic and laboratory studies will help define specific activities, hygiene practices, or products that place persons at increased risk for *Fusarium* keratitis.

Measures to reduce the risk for microbial keratitis can be instituted immediately by contact lens users and include the safe handling, storage, and cleaning of contact lenses. Specifically, contact lens users should wash their hands with soap and water and dry them before handling lenses, wear lenses according to the schedule prescribed by eye-care practitioners and solution manufacturers, and follow guidelines for cleaning and storing lenses provided by eye-care practitioners and solution manufacturers. Contact lens users with questions about which solutions are best for them should consult their eye-care professionals and carefully weigh risks and benefits.

Clinicians evaluating contact lens users with signs or symptoms of keratitis, such as unusual redness, eye pain, tearing, discharge, or sensitivity to light, should consider fungal keratitis and refer the patient to an ophthalmologist, if appropriate. Clinicians should consider obtaining clinical specimens (e.g., corneal scrapings) for culture before initiating treatment. Clinicians or microbiology laboratories should report cases of *Fusarium* keratitis to state and local health departments or directly to CDC at telephone, 800-893-0485. *Fusarium* isolates should be submitted to state laboratories according to instructions provided by local and state public health laboratories.

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Exposure to Mumps During Air Travel — United States, April 2006

On April 11, this report was posted as an MMWR Dispatch *on the* MMWR *website* (http://www.cdc.gov/mmwr).

The state of Iowa has been experiencing a large mumps outbreak that began in December 2005 (*1*). As of April 10, 2006, a total of 515 possible mumps cases have been reported to the Iowa Department of Public Health (IDPH) during 2006 (*2*). This outbreak has spread across Iowa, and mumps activity, possibly linked to the Iowa outbreak, is under investigation in six neighboring states, including Illinois (n = four), Kansas (n = 33), Minnesota (n = one), Missouri (n = four), Nebraska (n = 43), and Wisconsin (n = four) (CDC, unpublished data, April 10, 2006). The reasons for this outbreak are under investigation.

Mumps is an acute viral infection characterized by a nonspecific prodrome, including myalgia, anorexia, malaise, headache, and fever, followed by acute onset of unilateral or bilateral tender swelling of parotid or other salivary glands (*2*). An estimated 60%–70% of mumps infections produce typical acute parotitis (*3*). Approximately 20% of infections are asymptomatic, and nearly 50% are associated with nonspecific or primarily respiratory symptoms. Complications include orchitis, oophoritis, or mastitis (inflammation of the testicles, ovaries, or breasts, respectively), meningitis/encephalitis, spontaneous abortion, and deafness. Transmission occurs by direct contact with respiratory droplets or saliva. The incubation period is 14–18 days (range: 14–25 days) from exposure to onset of symptoms. The infectious period is from 3 days before symptom onset until 9 days after onset of symptoms.

IDPH has identified two persons who had mumps diagnosed and were potentially infectious during travel on nine different commercial flights involving two airlines during March 26–April 2, 2006. The commercial airline flights identified with a potentially infectious traveler are listed below by date, carrier, and flight number:

Northwest Airline (NWA) flights:

- March 26 NWA (Mesaba) #3025 from Waterloo, Iowa to Minneapolis, Minnesota
- March 26 NWA #760 from Minneapolis, Minnesota, to Detroit, Michigan
- March 27 NWA #0260 from Detroit, Michigan, to Washington, DC–Reagan National
- March 29 NWA #1705 from Washington, DC–Reagan National to Minneapolis, Minnesota
- March 29 NWA (Mesaba) #3026 from Minneapolis, Minnesota, to Waterloo, Iowa

American Airline (AA) flights:

- April 2 AA #1216 from Tucson, Arizona, to Dallas, Texas (DFW)
- April 2 AA #3617 from DFW to Lafayette, Arkansas (Northwest Arkansas Regional [NAR])
- April 2 AA #5399 from NAR to St. Louis, Missouri
- April 2 AA #5498 from St. Louis, Missouri, to Cedar Rapids, Iowa

Persons on these flights who have symptoms consistent with mumps within 21 days of travel should be evaluated for mumps by a health-care provider. Health-care providers should remain vigilant for mumps among persons with parotitis or other salivary gland inflammation. Cases of suspected mumps should be reported immediately to public health officials.

A multistate investigation has been initiated by CDC and the state health departments in affected states to notify potentially exposed passengers (i.e., those seated in close proximity to the index cases). This investigation is using a new software application, eManifest, developed by the CDC Division of Global Migration and Quarantine (DGMQ) to securely

import, sort, and assign passenger-locating information to jurisdictions to facilitate timely identification of exposed persons. These data are securely transmitted to state and territorial health departments via the *Epidemic Information Exchange* (*Epi-X*) Forum (available at http://www.cdc.gov/mmwr/epix/epix.html) for notification of potentially exposed passengers.

Incidence of mumps in the United States began to decrease after vaccine introduction in 1967 and recommendations for routine vaccination of children in 1977. Since the 1990s, a further decrease in the reported incidence of mumps has occurred, which is thought to be attributable to the implementation of the second dose of measles, mumps, and rubella vaccine (*3*). The risk for transmission of respiratory infectious diseases during air travel might depend on several factors, including 1) immunity of passengers; 2) infectiousness of the organism; 3) degree of shedding of the pathogen by infected passengers; 4) hygienic practices of infectious passengers; 5) proximity of others to infectious passengers; 6) hygienic practices of the other passengers/crew; 7) flight duration; and 8) cabin environment of the aircraft (*4*). Transmission of other respiratory pathogens during air travel has been reported (*5–9*). Exposure and transmission of mumps during commercial air travel has not been described previously.

Reported by: *P Quinlisk, MD, Iowa Dept of Public Health. S Redd, G Dayan, MD, National Center for Immunization and Respiratory Diseases; N Gallagher, Geographic Medicine and Health Promotion Br, P Lutz, K Marienau, MD, F Averhoff, MD, Quarantine and Border Health Svcs Br, Div of Global Migration and Quarantine, National Center for Infectious Diseases, CDC.*

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Update: Influenza Activity — United States, March 26–April 1, 2006

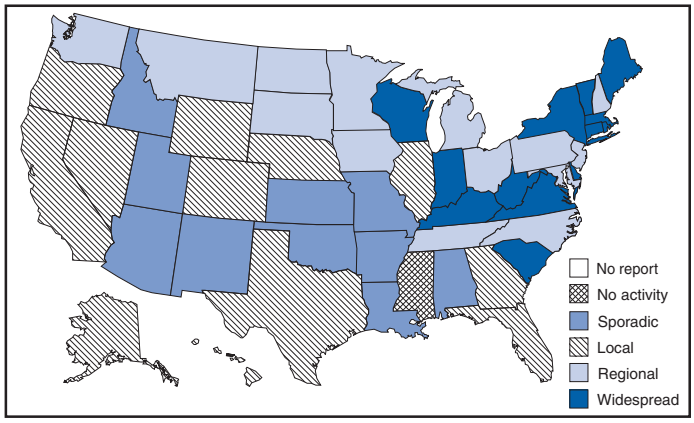
During March 26–April 1, 2006,* the number of states reporting widespread influenza activity† decreased to 13. Fourteen states reported regional activity, 12 reported local activity, 10 reported sporadic activity, and one reported no activity (Figure 1).§

* Provisional data reported as of April 7. Additional information about influenza activity is updated each Friday and is available from CDC at http://www.cdc.gov/flu.

† Levels of activity are 1) *widespread:* outbreaks of influenza or increases in influenza-like illness (ILI) cases and recent laboratory-confirmed influenza in at least half the regions of a state; 2) *regional:* outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in at least two but less than half the regions of a state; 3) *local:* outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in a single region of a state; 4) *sporadic:* small numbers of laboratory-confirmed influenza cases or a single influenza outbreak reported but no increase in cases of ILI; and 5) *no activity*.

§ *Widespread:* Connecticut, Delaware, Indiana, Kentucky, Maine, Massachusetts, New York, Rhode Island, South Carolina, Vermont, Virginia, West Virginia, and Wisconsin; *regional:* Iowa, Maryland, Michigan, Minnesota, Montana, New Hampshire, New Jersey, North Carolina, North Dakota, Ohio, Pennsylvania, South Dakota, Tennessee, and Washington; *local:* Alaska, California, Colorado, Florida, Georgia, Hawaii, Illinois, Nebraska, Nevada, Oregon, Texas, and Wyoming; *sporadic:* Alabama, Arizona, Arkansas, Idaho, Kansas, Louisiana, Missouri, New Mexico, Oklahoma, and Utah; *no activity:* Mississippi; *no report:* none.

FIGURE 1. Estimated influenza activity levels reported by state epidemiologists, by state and level of activity* — United States, March 26–April 1, 2006



* Levels of activity are 1) *widespread:* outbreaks of influenza or increases in influenza-like illness (ILI) cases and recent laboratory-confirmed influenza in at least half the regions of a state; 2) *regional:* outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in at least two but less than half the regions of a state; 3) *local:* outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in a single region of a state; 4) *sporadic:* small numbers of laboratory-confirmed influenza cases or a single influenza outbreak reported but no increase in cases of ILI; and 5) *no activity*.

The percentage of specimens testing positive for influenza decreased in the United States. During the preceding 3 weeks (weeks 11–13), the percentage of specimens testing positive for influenza ranged from 26.6% and 25.7% in the East South Central and South Atlantic regions, respectively, to 12.7% in the Pacific region. During this period, 62.8% of isolates from the Mountain region have been influenza B. Other regions reporting more than 30.0% of recent isolates as influenza B include the East North Central, West North Central, West South Central, and Pacific regions. The percentage of outpatient visits for influenza-like illness (ILI)[¶] during the week ending April 1 remains above the national baseline.** The percentage of deaths attributed to pneumonia and influenza (P&I) was below the epidemic threshold for the week ending April 1.

Laboratory Surveillance

During March 26–April 1, World Health Organization (WHO) collaborating laboratories and National Respiratory and Enteric Virus Surveillance System (NREVSS) laboratories in the United States reported testing 2,790 specimens for influenza viruses, of which 464 (16.6%) were positive. Of these, 47 were influenza A (H3N2) viruses, three were influenza A (H1N1) viruses, 198 were influenza A viruses that were not subtyped, and 216 were influenza B viruses.

Since October 2, 2005, WHO and NREVSS laboratories have tested 114,891 specimens for influenza viruses, of which 14,377 (12.5%) were positive. Of these, 12,500 (86.9%) were influenza A viruses, and 1,877 (13.1%) were influenza B viruses. Of the 12,500 influenza A viruses, 5,096 (40.8%) have been subtyped; 4,837 (94.9%) were influenza A (H3N2) viruses, and 259 (5.1%) were influenza A (H1N1) viruses.

P&I Mortality and ILI Surveillance

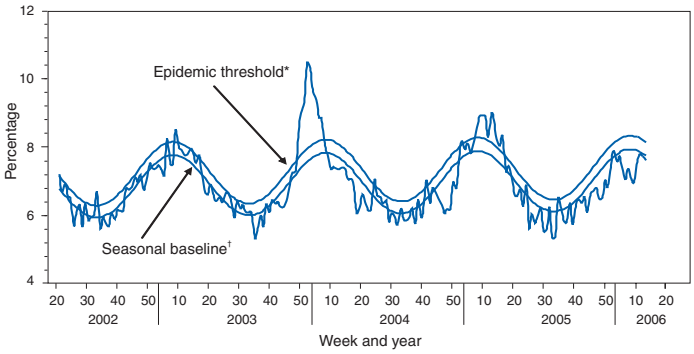
During the week ending April 1, P&I accounted for 7.6% of all deaths reported through the 122 Cities Mortality Reporting System. This percentage is below the epidemic threshold[††] of 8.1% (Figure 2).

[¶] Temperature of ≥100.0°F (≥37.8°C) and cough and/or sore throat in the absence of a known cause other than influenza.

** The national baseline was calculated as the mean percentage of visits for ILI during noninfluenza weeks for the preceding three seasons, plus two standard deviations. Noninfluenza weeks are those in which <10% of laboratory specimens are positive for influenza. Wide variability in regional data precludes calculating region-specific baselines; therefore, applying the national baseline to regional data is inappropriate.

[††] The expected seasonal baseline proportion of P&I deaths reported by the 122 Cities Mortality Reporting System is projected using a robust regression procedure in which a periodic regression model is applied to the observed percentage of deaths from P&I that occurred during the preceding 5 years. The epidemic threshold is 1.645 standard deviations above the seasonal baseline.

FIGURE 2. Percentage of deaths attributed to pneumonia and influenza (P&I) reported by the 122 Cities Mortality Reporting System, by week and year — United States, 2002–2006



* The epidemic threshold is 1.645 standard deviations above the seasonal baseline.

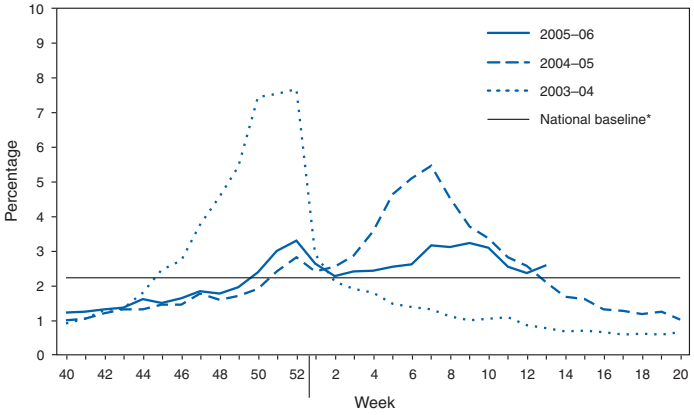
† The seasonal baseline is projected using a robust regression procedure that applies a periodic regression model to the observed percentage of deaths from P&I during the preceding 5 years.

The percentage of patient visits for ILI was 2.6%, which is above the national baseline of 2.2% (Figure 3). The percentage of patient visits for ILI ranged from 1.4% in the East South Central region to 3.3% in the West South Central region.

Pediatric Deaths and Hospitalizations

During October 2, 2005–April 1, 2006, CDC received reports of 21 influenza-associated deaths in U.S. residents aged <18 years. Eighteen of the deaths occurred during the current

FIGURE 3. Percentage of visits for influenza-like illness (ILI) reported by the Sentinel Provider Surveillance Network, by week — United States, 2003–04, 2004–05, and 2005–06 influenza seasons



* The national baseline was calculated as the mean percentage of visits for ILI during noninfluenza weeks for the preceding three seasons, plus two standard deviations. Noninfluenza weeks are those in which <10% of laboratory specimens are positive for influenza. Wide variability in regional data precludes calculating region-specific baselines; therefore, applying the national baseline to regional data is inappropriate.

influenza season, and three occurred during the 2004–05 influenza season.

During October 1, 2005–March 18, 2006, the preliminary laboratory-confirmed influenza-associated hospitalization rate reported by the Emerging Infections Program[§§] for children aged 0–17 years was 0.79 per 10,000. For children aged 0–4 years and 5–17 years, the rate was 1.88 per 10,000 and 0.22 per 10,000, respectively. During October 30, 2005–March 18, 2006, the preliminary laboratory-confirmed influenza-associated hospitalization rate for children aged 0–4 years in the New Vaccine Surveillance Network[¶¶] was 3.0 per 10,000.

[§§] The Emerging Infections Program Influenza Project conducts surveillance in 60 counties associated with 12 metropolitan areas: San Francisco, California; Denver, Colorado; New Haven, Connecticut; Atlanta, Georgia; Baltimore, Maryland; Minneapolis/St. Paul, Minnesota; Albuquerque, New Mexico; Las Cruces, New Mexico; Albany, New York; Rochester, New York; Portland, Oregon; and Nashville, Tennessee.

[¶¶] The New Vaccine Surveillance Network conducts surveillance in Monroe County, New York; Hamilton County, Ohio; and Davidson County, Tennessee.

Human Avian Influenza A (H5N1)

No human avian influenza A (H5N1) virus infection has ever been identified in the United States. From December 2003 through April 11, 2006, a total of 193 laboratory-confirmed human avian influenza A (H5N1) infections were reported to WHO from Azerbaijan, Cambodia, China, Egypt, Indonesia, Iraq, Thailand, Turkey, and Vietnam.*** Of these, 109 (56%) were fatal (Table). This represents an increase of one case in Azerbaijan and one case and one death in Cambodia. The majority of infections appear to have been acquired from direct contact with infected poultry. No evidence of sustained human-to-human transmission of H5N1 has been detected, although rare instances of human-to-human transmission likely have occurred (*1*).

Reference

1. Ungchusak K, Auewarakul P, Dowell SF, et al. Probable person-to-person transmission of avian influenza A (H5N1). N Engl J Med 2005;352:333–40.

*** Available at http://www.who.int/csr/disease/avian_influenza/en.

TABLE. Number of laboratory-confirmed human cases and deaths from avian influenza A (H5N1) infection reported to the World Health Organization, by country — worldwide, 2003–2006*

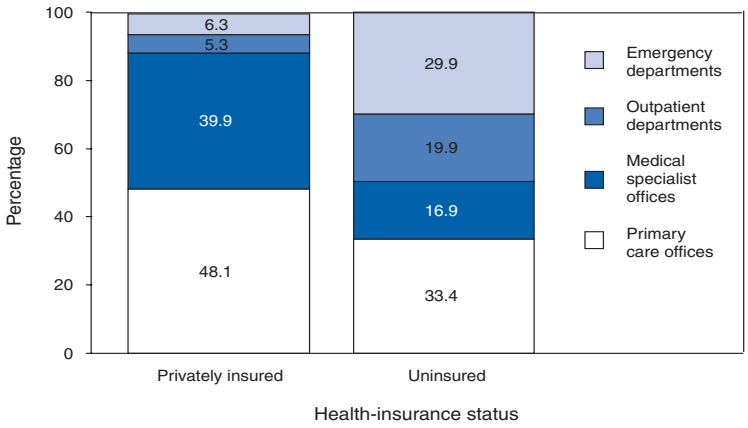
	Year of onset									
	2003		2004		2005		2006		Total	
Country	No. of cases	Deaths	No. of cases	Deaths	No. of cases	Deaths	No. of cases	Deaths	No. of cases	Deaths
Azerbaijan	0	0	0	0	0	0	8	5	**8**	**5**
Cambodia	0	0	0	0	4	4	2	2	**6**	**6**
China	0	0	0	0	8	5	8	6	**16**	**11**
Egypt	0	0	0	0	0	0	4	2	**4**	**2**
Indonesia	0	0	0	0	17	11	13	12	**30**	**23**
Iraq	0	0	0	0	0	0	2	2	**2**	**2**
Thailand	0	0	17	12	5	2	0	0	**22**	**14**
Turkey	0	0	0	0	0	0	12	4	**12**	**4**
Vietnam	3	3	29	20	61	19	0	0	**93**	**42**
Total	**3**	**3**	**46**	**32**	**95**	**41**	**49**	**33**	**193**	**109**

* As of April 11, 2006.

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Health-Care Visits for Asthma, by Medical Setting and Health-Insurance Status — United States, 2003



The type of medical setting in which persons receive health care for asthma differs for those with private health insurance and those without health insurance. Approximately 30% of medical visits for asthma by persons without health insurance occurred in emergency departments, compared with only 6% of visits by those with private insurance. Asthma is a condition considered to be sensitive to effective primary care and, if controlled, would result in fewer visits to the emergency department.

SOURCE: National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey 2003 public use files. Available at http://www.cdc.gov/nchs/about/major/ahcd/ahcd1.htm.

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending April 8, 2006 (14th Week)*

Disease	Current week	Cum 2006	5-year weekly average†	Total cases reported for previous years 2005	2004	2003	2002	2001	States reporting cases during current week (No.)
Anthrax	—	1	—	—	—	—	2	23	
Botulism:									
foodborne	—	—	0	18	16	20	28	39	
infant	—	19	1	90	87	76	69	97	
other (wound & unspecified)	—	11	0	24	30	33	21	19	
Brucellosis	—	19	2	121	114	104	125	136	
Chancroid	2	11	1	27	30	54	67	38	NY (1), SC (1)
Cholera	—	—	0	6	5	2	2	3	
Cyclosporiasis§	—	11	2	737	171	75	156	147	
Diphtheria	—	—	—	—	—	1	1	2	
Domestic arboviral diseases§¶:									
California serogroup	—	—	0	78	112	108	164	128	
eastern equine	—	—	—	21	6	14	10	9	
Powassan	—	—	—	1	1	—	1	N	
St. Louis	—	—	0	10	12	41	28	79	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis§:									
human granulocytic	1	10	2	733	537	362	511	261	NY (1)
human monocytic	1	42	1	459	338	321	216	142	NC (1)
human (other & unspecified)	—	2	0	122	59	44	23	6	
Haemophilus influenzae,**									
invasive disease (age <5 yrs):									
serotype b	—	2	0	8	19	32	34	—	
nonserotype b	—	22	3	118	135	117	144	—	
unknown serotype	3	57	4	218	177	227	153	—	NY (1), AZ (1), UT (1)
Hansen disease§	2	12	2	86	105	95	96	79	FL (1), TX (1)
Hantavirus pulmonary syndrome§	—	5	0	22	24	26	19	8	
Hemolytic uremic syndrome, postdiarrheal§	—	13	2	206	200	178	216	202	
Hepatitis C viral, acute	4	194	35	795	713	1,102	1,835	3,976	NY (2), FL (1), TX (1)
HIV infection, pediatric (age <13 yrs)§††	—	52	4	380	436	504	420	543	
Influenza-associated pediatric mortality§,§§,¶¶	3	17	1	50	—	N	N	N	NM (1), NYC (1), WY (1)
Listeriosis	9	125	9	871	753	696	665	613	NY (3), OH (1), DC (1), FL (2), TX (1), CA (1)
Measles	—	4***	2	64	37	56	44	116	
Meningococcal disease,††† invasive:									
A, C, Y, & W-135	2	67	6	301	—	—	—	—	NC (2)
serogroup B	—	43	3	179	—	—	—	—	
other serogroup	—	7	1	25	—	—	—	—	
Mumps	34	407	5	298	258	231	270	266	NY (1), PA (1), IN (1), MN (2), IA (4), MO (1), KS (24)
Plague	—	1	—	7	3	1	2	2	
Poliomyelitis, paralytic	—	—	—	1	—	—	—	—	
Psittacosis§	—	1	0	23	12	12	18	25	
Q fever§	—	29	1	127	70	71	61	26	
Rabies, human	—	—	0	2	7	2	3	1	
Rubella	—	1	0	10	10	7	18	23	
Rubella, congenital syndrome	—	—	0	1	—	1	1	3	
SARS-CoV§,§§	—	—	0	—	—	8	N	N	
Smallpox§	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome§	1	36	4	104	132	161	118	77	OH (1)
Streptococcus pneumoniae,§									
invasive disease (age <5 yrs)	19	292	16	1,123	1,162	845	513	498	NY (8), OH (1), IN (5), MI (2), MN (3)
Syphilis, congenital (age <1 yr)	—	49	8	341	353	413	412	441	
Tetanus	—	3	0	20	34	20	25	37	
Toxic-shock syndrome (other than streptococcal)§	—	32	2	90	95	133	109	127	
Trichinellosis	—	2	0	21	5	6	14	22	
Tularemia§	—	3	0	137	134	129	90	129	
Typhoid fever	3	52	5	306	322	356	321	368	MI (1), CA (2)
Vancomycin-intermediate *Staphylococcus aureus*§	—	—	—	2	—	N	N	N	
Vancomycin-resistant *Staphylococcus aureus*§	—	—	—	—	1	N	N	N	
Yellow fever	—	—	—	—	—	—	1	—	

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

* Incidence data for reporting years 2004, 2005, and 2006 are provisional, whereas data for 2001, 2002, and 2003 are finalized.

† Calculated by summing the incidence counts for the current week, the two weeks preceding the current week, and the two 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.

¶ Includes both neuroinvasive and non-neuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNET Surveillance).

** 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, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Data for HIV/AIDS are available in Table IV quarterly.

§§ Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases.

¶¶ Of the 22 cases reported since October 2, 2005 (week 40), only 20 occurred during the current 2005–06 season.

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

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

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending April 8, 2006, and April 9, 2005 (14th Week)*

Reporting area	Chlamydia†					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005
		Med	Max				Med	Max				Med	Max		
United States	11,670	18,459	25,273	226,078	254,670	89	109	1,203	2,316	1,163	42	70	852	603	491
New England	648	630	1,536	7,641	7,123	—	0	0	—	—	1	4	34	35	26
Connecticut	64	161	1,199	1,293	946	N	0	0	N	N	—	0	14	4	4
Maine	61	41	74	557	617	N	0	0	N	N	—	0	3	8	4
Massachusetts	418	277	441	4,126	3,832	—	0	0	—	—	1	2	15	16	7
New Hampshire	—	34	64	415	520	—	0	0	—	—	—	0	3	5	4
Rhode Island	79	65	99	907	923	—	0	0	—	—	—	0	6	—	1
Vermont§	26	18	43	343	285	N	0	0	N	N	—	0	5	2	6
Mid. Atlantic	1,387	2,179	3,712	21,954	30,178	—	0	0	—	—	7	10	598	84	74
New Jersey	—	355	526	3,016	4,789	N	0	0	N	N	—	0	8	—	6
New York (Upstate)	593	498	1,728	5,546	5,433	N	0	0	N	N	5	3	562	26	17
New York City	314	620	1,136	3,363	10,082	N	0	0	N	N	—	2	15	7	23
Pennsylvania	480	716	1,084	10,029	9,874	N	0	0	N	N	2	4	21	51	28
E.N. Central	1,937	3,219	4,140	43,888	41,875	1	0	3	10	2	2	14	162	123	99
Illinois	610	964	1,784	10,869	10,835	—	0	0	—	—	—	1	16	8	15
Indiana	177	390	553	5,330	5,490	N	0	0	N	N	—	1	13	9	5
Michigan	1,024	585	1,959	13,925	6,778	1	0	3	6	2	1	2	7	25	13
Ohio	—	815	1,445	8,521	13,256	—	0	1	4	—	1	5	109	57	29
Wisconsin	126	399	531	5,243	5,516	N	0	0	N	N	—	4	38	24	37
W.N. Central	524	1,116	1,449	14,500	15,938	—	0	1	—	3	16	8	51	88	65
Iowa	115	143	225	2,211	1,856	N	0	0	N	N	—	1	11	5	14
Kansas	172	151	269	2,268	2,055	N	0	0	N	N	—	0	5	14	7
Minnesota	—	226	294	2,301	3,444	—	0	0	—	3	11	2	10	41	16
Missouri	202	434	525	5,374	6,066	—	0	1	—	—	5	2	37	21	26
Nebraska§	—	97	175	1,290	1,404	N	0	1	N	N	—	0	2	3	—
North Dakota	—	31	50	362	366	N	0	0	N	N	—	0	1	—	—
South Dakota	35	52	118	694	747	N	0	0	N	N	—	0	4	4	2
S. Atlantic	2,688	3,245	4,942	43,168	48,298	—	0	1	2	—	8	14	53	176	93
Delaware	60	70	92	1,008	868	N	0	0	N	N	—	0	2	—	—
District of Columbia	35	63	102	547	1,061	—	0	0	—	—	—	0	3	5	1
Florida	579	867	1,037	12,024	11,899	N	0	0	N	N	3	6	28	65	32
Georgia	21	571	2,062	3,899	7,789	—	0	0	—	—	3	3	12	58	26
Maryland§	344	358	525	4,833	4,627	—	0	1	2	—	—	0	4	7	4
North Carolina	655	557	1,743	9,444	9,095	N	0	0	N	N	2	1	10	25	12
South Carolina§	541	312	1,418	4,554	5,922	—	0	0	—	—	—	0	4	4	5
Virginia§	387	425	841	5,673	6,439	N	0	0	N	N	—	1	8	11	9
West Virginia	66	49	353	1,186	598	N	0	0	N	N	—	0	3	1	4
E.S. Central	697	1,376	2,188	18,230	18,444	—	0	0	—	—	1	3	21	14	8
Alabama§	—	352	1,048	4,925	2,817	N	0	0	N	N	1	0	3	7	4
Kentucky	214	153	323	2,557	3,410	N	0	0	N	N	—	1	20	3	1
Mississippi	—	379	801	3,902	5,995	—	0	0	—	—	—	0	1	—	1
Tennessee§	483	466	624	6,846	6,222	N	0	0	N	N	—	1	4	4	2
W.S. Central	1,437	1,979	3,374	24,506	31,328	—	0	1	—	—	4	3	30	44	18
Arkansas	—	168	340	1,967	2,370	—	0	0	—	—	—	0	1	2	—
Louisiana	104	221	760	1,521	4,946	N	0	1	N	N	—	0	21	4	3
Oklahoma	203	226	2,160	2,730	2,809	N	0	0	N	N	—	0	10	11	6
Texas§	1,130	1,329	1,699	18,288	21,203	N	0	0	N	N	4	1	20	27	9
Mountain	634	1,088	1,705	11,589	16,734	68	80	229	1,853	693	3	2	9	21	34
Arizona	345	311	536	4,417	5,977	68	78	225	1,829	662	—	0	1	2	3
Colorado	132	273	482	1,741	4,062	N	0	0	N	N	1	1	3	5	10
Idaho§	—	45	235	450	502	N	0	0	N	N	1	0	2	2	3
Montana	35	42	181	435	627	N	0	0	N	N	1	0	3	5	—
Nevada§	—	134	448	1,102	1,991	—	1	4	14	24	—	0	1	1	5
New Mexico§	122	159	337	2,533	2,090	—	0	2	—	5	—	0	3	—	7
Utah	—	86	138	639	1,183	—	0	3	8	2	—	0	3	6	4
Wyoming	—	23	43	272	302	—	0	2	2	—	—	0	1	—	2
Pacific	1,718	3,179	4,915	40,602	44,752	20	27	1,114	451	465	—	6	50	18	74
Alaska	41	77	121	901	1,023	—	0	0	—	—	—	0	2	—	—
California	1,142	2,470	4,149	31,123	34,614	20	27	1,114	451	465	—	3	14	—	58
Hawaii	—	106	135	1,378	1,436	N	0	0	N	N	—	0	1	—	—
Oregon§	121	174	315	2,196	2,410	N	0	0	N	N	—	1	20	18	11
Washington	414	356	604	5,004	5,269	N	0	0	N	N	—	0	36	—	5
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
Guam	—	0	0	—	64	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	77	141	1,185	1,114	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	—	4	8	—	108	—	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 years 2005 and 2006 are provisional.
† 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 April 8, 2006, and April 9, 2005 (14th Week)*

Reporting area	Giardiasis					Gonorrhea					*Haemophilus influenzae*, invasive All ages, all serotypes				
	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005
		Med	Max				Med	Max				Med	Max		
United States	187	318	786	3,350	4,188	3,562	6,313	8,261	78,824	85,101	27	36	101	541	711
New England	5	29	90	235	363	86	105	285	1,248	1,320	—	3	12	34	47
Connecticut	—	2	65	46	86	15	40	238	342	326	—	0	8	8	15
Maine	—	3	11	16	41	6	2	6	38	39	—	0	1	4	2
Massachusetts	3	11	34	116	164	53	48	78	664	765	—	2	5	17	20
New Hampshire	2	0	7	8	13	2	4	9	61	34	—	0	3	2	—
Rhode Island	—	0	25	13	21	10	7	25	128	145	—	0	5	1	6
Vermont†	—	3	9	36	38	—	1	4	15	11	—	0	1	2	4
Mid. Atlantic	37	64	255	500	794	325	621	1,022	6,405	8,710	6	7	30	95	119
New Jersey	—	7	18	3	139	—	105	150	1,012	1,511	—	1	4	1	19
New York (Upstate)	26	22	228	219	225	137	123	455	1,515	1,669	5	2	27	34	34
New York City	—	16	33	103	233	64	161	402	843	2,597	—	1	4	10	22
Pennsylvania	11	16	29	175	197	124	217	390	3,035	2,933	1	3	8	50	44
E.N. Central	23	55	102	474	664	575	1,358	1,901	19,116	15,915	5	6	14	71	117
Illinois	—	13	32	24	177	196	393	761	4,193	4,072	—	1	5	14	34
Indiana	N	0	0	N	N	59	161	229	2,327	2,120	2	1	6	14	19
Michigan	6	14	29	163	182	282	260	824	6,862	2,252	—	0	3	13	8
Ohio	17	16	34	206	148	—	380	681	3,949	5,972	3	2	6	24	44
Wisconsin	—	12	33	81	157	38	120	171	1,785	1,499	—	1	3	6	12
W.N. Central	5	34	142	319	493	145	362	461	4,460	4,994	—	1	9	26	31
Iowa	—	5	14	54	61	19	31	54	439	405	—	0	0	—	1
Kansas	1	4	9	39	43	41	48	124	645	686	—	0	2	3	1
Minnesota	—	13	113	77	226	—	63	89	557	944	—	0	9	10	13
Missouri	2	10	32	108	111	84	181	240	2,400	2,516	—	0	7	11	12
Nebraska†	1	1	6	20	29	—	22	55	307	329	—	0	1	2	3
North Dakota	1	0	3	3	1	—	2	6	20	22	—	0	2	—	1
South Dakota	—	2	7	18	22	1	6	15	92	92	—	0	0	—	—
S. Atlantic	48	50	111	693	636	1,038	1,451	2,285	18,100	20,816	7	9	25	143	184
Delaware	—	1	3	6	14	27	19	44	401	198	—	0	0	—	—
District of Columbia	1	1	5	16	12	28	40	67	400	556	—	0	0	—	—
Florida	11	19	40	241	222	266	399	513	5,468	5,148	1	3	12	47	46
Georgia	36	10	70	258	163	13	262	913	1,724	3,448	4	1	6	31	48
Maryland†	—	4	11	46	44	118	134	242	1,912	1,815	—	1	5	17	29
North Carolina	N	0	0	N	N	269	274	766	4,376	4,612	1	0	11	15	24
South Carolina†	—	1	9	21	29	222	131	783	1,974	2,561	—	1	3	11	6
Virginia†	—	11	50	103	144	78	149	289	1,583	2,303	—	1	8	15	18
West Virginia	—	0	6	2	8	17	14	34	262	175	1	0	4	7	13
E.S. Central	5	8	19	95	99	268	541	868	7,104	6,956	1	2	8	36	33
Alabama†	5	3	13	47	49	—	183	491	2,249	1,789	—	0	4	10	6
Kentucky	N	0	0	N	N	71	53	107	895	1,049	—	0	3	—	1
Mississippi	—	0	0	—	—	—	129	225	1,472	1,813	—	0	0	—	—
Tennessee†	—	4	11	48	50	197	173	284	2,488	2,305	1	2	5	26	26
W.S. Central	1	6	23	55	59	570	791	1,304	9,741	12,291	1	2	6	28	42
Arkansas	—	2	5	18	20	—	86	187	1,136	1,201	—	0	2	2	—
Louisiana	—	1	6	15	8	61	129	461	1,006	2,628	—	0	3	4	22
Oklahoma	1	3	16	22	31	91	81	763	924	1,252	1	1	4	22	20
Texas†	N	0	0	N	N	418	494	630	6,675	7,210	—	0	1	—	—
Mountain	17	27	58	309	311	126	226	519	2,648	3,488	6	4	10	77	87
Arizona	2	2	12	38	51	84	69	166	1,026	1,260	4	1	9	33	36
Colorado	7	9	33	118	106	32	61	90	516	821	—	0	5	22	20
Idaho†	1	2	12	20	32	—	1	10	25	21	—	0	1	1	2
Montana	1	1	7	18	9	1	2	13	23	41	—	0	0	—	—
Nevada†	—	2	6	9	21	—	53	195	433	760	—	0	1	—	10
New Mexico†	—	1	6	7	14	9	29	64	440	380	—	0	3	10	11
Utah	6	7	20	94	74	—	14	22	144	189	2	0	4	10	7
Wyoming	—	1	2	5	4	—	2	6	41	16	—	0	2	1	1
Pacific	46	60	189	670	769	429	792	941	10,002	10,611	1	3	20	31	51
Alaska	1	2	6	6	16	11	10	23	118	136	1	0	19	3	2
California	35	42	95	501	613	288	646	807	8,203	8,862	—	1	7	3	13
Hawaii	—	1	6	13	21	—	19	36	251	262	—	0	2	3	2
Oregon†	1	8	21	97	78	17	28	58	297	436	—	2	8	21	34
Washington	9	6	88	53	41	113	72	142	1,133	915	—	0	4	1	—
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
Guam	—	0	0	—	—	—	0	0	—	1	—	0	0	—	—
Puerto Rico	—	3	14	3	38	—	6	16	92	116	—	0	1	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	4	—	35	—	0	0	—	—

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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 8, 2006, and April 9, 2005 (14th Week)*

Reporting area	Hepatitis (viral, acute), by type										Legionellosis				
	A					B									
	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005
		Med	Max				Med	Max				Med	Max		
United States	44	79	216	918	1,103	36	95	496	1,010	1,439	18	41	114	293	283
New England	—	7	23	58	138	—	4	11	39	72	—	2	11	13	15
Connecticut	—	1	3	9	19	—	0	5	—	15	—	0	8	4	3
Maine	—	0	2	3	—	—	0	2	2	4	—	0	1	1	1
Massachusetts	—	5	14	28	98	—	3	10	32	48	—	1	5	6	8
New Hampshire	—	1	12	12	16	—	0	3	4	4	—	0	1	1	2
Rhode Island	—	0	4	1	5	—	0	2	1	—	—	0	10	—	1
Vermont†	—	0	2	5	—	—	0	1	—	1	—	0	3	1	—
Mid. Atlantic	4	12	23	42	197	4	10	34	85	188	2	11	53	78	80
New Jersey	—	3	11	10	39	—	2	7	24	43	—	1	12	5	11
New York (Upstate)	1	1	22	12	25	3	1	23	15	25	2	4	30	33	20
New York City	—	4	12	5	99	—	2	7	5	45	—	2	20	4	8
Pennsylvania	3	1	6	15	34	1	3	9	41	75	—	5	17	36	41
E.N. Central	3	6	17	70	115	3	9	25	78	151	7	7	26	50	68
Illinois	—	1	9	11	41	—	2	7	—	43	—	1	5	7	11
Indiana	1	1	10	4	5	2	0	15	7	5	—	0	6	2	4
Michigan	1	2	11	33	30	—	3	7	40	52	—	2	6	13	18
Ohio	1	1	4	21	23	1	2	8	29	44	7	3	19	28	28
Wisconsin	—	0	5	1	16	—	0	6	2	7	—	0	2	—	7
W.N. Central	2	2	31	33	36	—	5	13	26	59	—	1	12	7	9
Iowa	—	0	2	3	7	—	0	2	1	3	—	0	1	—	—
Kansas	—	0	5	15	4	—	0	3	2	7	—	0	1	—	1
Minnesota	—	0	31	1	3	—	0	6	1	—	—	0	10	—	1
Missouri	2	0	2	9	20	—	3	8	22	38	—	0	3	5	6
Nebraska†	—	0	3	3	2	—	0	2	—	10	—	0	2	2	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	1	—	1
South Dakota	—	0	1	2	—	—	0	1	—	1	—	0	6	—	—
S. Atlantic	7	13	33	155	153	13	22	61	268	417	7	9	21	83	59
Delaware	—	0	1	4	2	—	0	4	6	11	—	0	4	1	1
District of Columbia	—	0	2	1	2	—	0	4	4	—	2	0	2	3	1
Florida	3	5	18	57	60	9	9	21	114	146	3	2	8	38	21
Georgia	—	1	6	11	26	4	2	7	24	70	—	0	3	3	4
Maryland†	—	2	7	23	12	—	2	8	39	49	—	2	9	18	17
North Carolina	4	0	20	38	24	—	0	23	49	42	2	0	3	11	7
South Carolina†	—	1	3	6	5	—	2	9	13	39	—	0	2	1	1
Virginia†	—	1	11	14	22	—	2	18	8	53	—	1	8	7	4
West Virginia	—	0	2	1	—	—	0	14	11	7	—	0	3	1	3
E.S. Central	—	4	16	31	47	1	6	20	71	113	—	1	6	7	7
Alabama†	—	0	6	2	6	—	1	7	22	22	—	0	2	1	5
Kentucky	—	0	4	13	3	—	1	5	18	25	—	0	4	—	1
Mississippi	—	0	2	1	10	—	1	4	4	24	—	0	1	—	—
Tennessee†	—	2	13	15	28	1	2	12	27	42	—	1	4	6	1
W.S. Central	—	9	52	60	84	—	14	283	264	126	—	1	26	8	2
Arkansas	—	0	7	15	2	—	1	3	4	19	—	0	1	—	1
Louisiana	—	1	5	2	18	—	1	6	6	23	—	0	2	4	—
Oklahoma	—	0	2	4	1	—	0	5	1	13	—	0	3	1	—
Texas†	—	6	49	39	63	—	11	281	253	71	—	0	26	3	1
Mountain	—	6	21	88	107	2	8	39	67	139	1	1	8	15	23
Arizona	—	3	20	58	58	2	5	34	41	92	—	0	3	7	5
Colorado	—	1	4	15	8	—	1	5	9	10	—	0	3	1	4
Idaho†	—	0	3	3	10	—	0	2	4	3	—	0	2	—	1
Montana	—	0	1	1	6	—	0	7	—	—	—	0	1	—	1
Nevada†	—	0	2	3	6	—	1	4	9	10	—	0	2	3	5
New Mexico†	—	0	3	5	6	—	0	3	1	8	—	0	1	—	2
Utah	—	0	3	3	12	—	0	5	3	15	1	0	2	4	3
Wyoming	—	0	0	—	1	—	0	1	—	1	—	0	1	—	2
Pacific	28	15	150	381	226	13	10	56	112	174	1	1	9	32	20
Alaska	—	0	1	—	3	—	0	2	1	1	—	0	1	—	—
California	27	14	149	356	191	12	6	39	88	126	1	1	9	32	20
Hawaii	—	0	2	5	6	—	0	1	1	1	—	0	1	—	—
Oregon†	—	1	5	11	11	1	2	6	14	33	N	0	0	N	N
Washington	1	1	11	9	15	—	0	13	8	13	—	0	0	—	—
American Samoa	U	0	1	U	—	U	0	0	U	—	U	0	0	U	U
C.N.M.I.	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	6	3	17	—	1	6	3	5	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 8, 2006, and April 9, 2005 (14th Week)*

Reporting area	Lyme disease					Malaria				
	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005
		Med	Max				Med	Max		
United States	147	299	1,337	1,227	1,757	11	24	64	229	297
New England	3	50	232	64	149	—	1	12	8	11
Connecticut	3	9	154	41	6	—	0	10	1	—
Maine	—	2	26	7	10	—	0	1	1	—
Massachusetts	—	18	164	1	115	—	0	4	5	8
New Hampshire	—	3	17	14	16	—	0	1	—	2
Rhode Island	—	0	12	—	1	—	0	2	—	1
Vermont†	—	0	5	1	1	—	0	2	1	—
Mid. Atlantic	135	170	915	833	1,136	—	5	15	29	74
New Jersey	—	25	309	109	377	—	0	7	—	18
New York (Upstate)	132	66	859	472	190	—	1	10	7	14
New York City	—	0	0	—	—	—	3	8	14	35
Pennsylvania	3	61	464	252	569	—	1	2	8	7
E.N. Central	—	13	157	32	75	2	2	6	31	24
Illinois	—	0	6	—	1	—	0	2	7	7
Indiana	—	0	4	—	2	—	0	3	5	3
Michigan	—	1	7	6	1	—	0	2	4	7
Ohio	—	1	5	5	14	2	0	3	11	3
Wisconsin	—	10	148	21	57	—	0	3	4	4
W.N. Central	5	12	99	31	41	—	0	5	5	9
Iowa	—	1	8	1	5	—	0	1	1	2
Kansas	—	0	3	—	2	—	0	1	—	1
Minnesota	5	8	96	28	34	—	0	3	2	1
Missouri	—	0	2	1	—	—	0	3	1	5
Nebraska†	—	0	2	1	—	—	0	2	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	1	—	—	—	0	1	1	—
S. Atlantic	—	34	125	195	313	—	6	15	79	63
Delaware	—	9	37	71	112	—	0	1	1	1
District of Columbia	—	0	2	5	1	—	0	2	—	1
Florida	—	1	8	11	9	—	1	6	10	13
Georgia	—	0	1	—	1	—	1	6	22	9
Maryland†	—	16	87	97	150	—	1	9	21	20
North Carolina	—	0	5	8	14	—	0	8	9	8
South Carolina†	—	0	3	2	4	—	0	2	3	3
Virginia†	—	3	21	1	22	—	0	9	12	7
West Virginia	—	0	42	—	—	—	0	2	1	1
E.S. Central	—	0	4	—	5	1	1	2	6	7
Alabama†	—	0	1	—	—	1	0	1	3	2
Kentucky	—	0	1	—	1	—	0	2	1	2
Mississippi	—	0	0	—	—	—	0	0	—	—
Tennessee†	—	0	4	—	4	—	0	2	2	3
W.S. Central	—	1	7	1	18	1	1	21	9	31
Arkansas	—	0	2	—	—	—	0	2	—	2
Louisiana	—	0	1	—	2	—	0	1	—	1
Oklahoma	—	0	0	—	—	—	0	6	1	2
Texas†	—	1	7	1	16	1	1	20	8	26
Mountain	—	0	4	2	2	—	1	6	13	16
Arizona	—	0	4	2	—	—	0	4	1	2
Colorado	—	0	1	—	—	—	0	3	4	8
Idaho†	—	0	1	—	—	—	0	0	—	—
Montana	—	0	0	—	—	—	0	1	1	—
Nevada†	—	0	2	—	—	—	0	2	—	—
New Mexico†	—	0	1	—	—	—	0	1	—	1
Utah	—	0	1	—	1	—	0	2	7	4
Wyoming	—	0	1	—	1	—	0	1	—	1
Pacific	4	4	19	69	18	7	4	12	49	62
Alaska	—	0	1	—	1	—	0	1	3	2
California	4	2	19	69	15	4	3	10	35	52
Hawaii	N	0	0	N	N	—	0	4	—	4
Oregon†	—	0	3	—	2	—	0	2	4	2
Washington	—	0	3	—	—	3	0	5	7	2
American Samoa	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	0	0	U	U	U	0	0	U	U
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	1	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 8, 2006, and April 9, 2005 (14th Week)*

Reporting area	Meningococcal disease, invasive: All serogroups: Current week	Previous 52 weeks: Med	Previous 52 weeks: Max	Cum 2006	Cum 2005	Meningococcal disease, invasive: Serogroup unknown: Current week	Previous 52 weeks: Med	Previous 52 weeks: Max	Cum 2006	Cum 2005	Pertussis: Current week	Previous 52 weeks: Med	Previous 52 weeks: Max	Cum 2006	Cum 2005
United States	13	23	83	365	451	11	14	59	248	254	142	429	1,843	3,037	5,362
New England	1	1	5	16	29	1	1	3	16	10	1	27	55	303	345
Connecticut	—	0	2	3	8	—	0	2	3	2	—	0	3	—	23
Maine	—	0	1	2	1	—	0	1	2	1	—	1	5	12	14
Massachusetts	1	0	3	9	13	1	0	3	9	3	—	22	44	257	262
New Hampshire	—	0	2	2	3	—	0	2	2	3	1	2	15	12	—
Rhode Island	—	0	1	—	2	—	0	0	—	—	—	0	12	—	5
Vermont†	—	0	1	—	2	—	0	1	—	1	—	1	6	22	41
Mid. Atlantic	3	2	15	35	58	3	2	13	30	41	29	22	133	370	440
New Jersey	—	0	2	—	14	—	0	2	—	14	—	3	9	25	58
New York (Upstate)	2	0	7	11	16	2	0	5	9	4	18	9	122	140	153
New York City	—	0	5	3	8	—	0	5	3	8	—	2	6	16	26
Pennsylvania	1	1	4	21	20	1	1	4	18	15	11	8	21	189	203
E.N. Central	1	2	9	38	45	1	1	6	26	37	16	59	125	400	1,434
Illinois	—	0	4	8	9	—	0	4	8	9	—	13	31	10	261
Indiana	—	0	5	7	5	—	0	2	2	2	6	4	75	49	85
Michigan	—	1	3	8	11	—	0	3	4	6	4	5	23	110	89
Ohio	1	1	5	15	12	1	0	4	12	12	6	17	30	203	535
Wisconsin	—	0	1	—	8	—	0	1	—	8	—	19	41	28	464
W.N. Central	—	1	4	17	26	—	0	3	8	10	7	59	205	361	744
Iowa	—	0	2	2	9	—	0	2	2	1	—	11	55	75	247
Kansas	—	0	1	—	3	—	0	1	—	3	5	11	29	128	91
Minnesota	—	0	2	2	5	—	0	1	1	1	—	0	148	—	95
Missouri	—	0	3	9	6	—	0	2	3	3	—	10	43	114	131
Nebraska†	—	0	1	4	2	—	0	1	2	2	2	3	14	35	72
North Dakota	—	0	1	—	—	—	0	1	—	—	—	0	28	4	46
South Dakota	—	0	1	—	1	—	0	0	—	—	—	2	7	5	62
S. Atlantic	3	4	14	66	70	1	2	8	26	30	6	23	90	263	375
Delaware	—	0	1	2	2	—	0	1	2	2	—	0	1	1	11
District of Columbia	—	0	0	—	—	—	0	0	—	—	—	0	3	3	—
Florida	1	1	7	26	28	1	0	6	10	10	6	4	14	70	43
Georgia	—	0	2	3	8	—	0	2	3	8	—	1	3	5	12
Maryland†	—	0	2	6	7	—	0	2	3	—	—	4	8	56	71
North Carolina	2	0	11	13	6	—	0	3	3	—	—	0	21	52	21
South Carolina†	—	0	2	6	10	—	0	1	2	7	—	5	22	30	145
Virginia†	—	1	4	9	7	—	0	3	3	2	—	4	72	42	53
West Virginia	—	0	1	1	2	—	0	1	—	1	—	0	5	4	19
E.S. Central	—	1	4	13	21	—	1	4	10	15	2	8	25	66	147
Alabama†	—	0	1	3	—	—	0	1	3	—	1	1	9	19	27
Kentucky	—	0	2	3	8	—	0	2	3	8	—	2	10	6	49
Mississippi	—	0	1	1	4	—	0	1	1	4	—	1	4	9	20
Tennessee†	—	0	2	6	9	—	0	2	3	3	1	3	17	32	51
W.S. Central	—	2	21	38	41	—	1	8	16	10	2	45	209	187	211
Arkansas	—	0	3	3	7	—	0	2	3	1	—	4	19	18	41
Louisiana	—	0	4	21	14	—	0	3	11	2	—	0	3	4	12
Oklahoma	—	0	3	6	5	—	0	3	—	1	—	0	1	3	—
Texas†	—	1	15	8	15	—	0	3	2	6	2	39	204	162	158
Mountain	2	2	7	30	30	2	1	5	22	5	79	74	144	916	1,124
Arizona	2	0	5	16	11	2	0	5	16	2	27	16	86	164	97
Colorado	—	0	2	11	10	—	0	1	4	—	14	24	41	369	504
Idaho†	—	0	2	1	1	—	0	2	1	1	2	3	13	17	95
Montana	—	0	0	—	—	—	0	0	—	—	2	7	29	33	229
Nevada†	—	0	2	—	3	—	0	1	—	—	—	0	5	8	14
New Mexico†	—	0	1	—	3	—	0	1	—	2	—	2	9	8	71
Utah	—	0	2	2	2	—	0	1	1	—	34	15	38	304	107
Wyoming	—	0	0	—	—	—	0	0	—	—	—	1	4	13	7
Pacific	3	6	30	112	131	3	4	22	94	96	—	70	1,192	171	542
Alaska	—	0	1	—	1	—	0	1	—	1	—	2	15	24	11
California	2	2	11	63	61	2	2	11	63	61	—	40	1,000	1	148
Hawaii	—	0	1	3	7	—	0	1	3	2	—	3	10	22	40
Oregon†	—	2	8	29	44	—	1	6	21	24	—	5	33	46	247
Washington	1	0	25	17	18	1	0	11	7	8	—	11	189	78	96
American Samoa	U	0	1	—	—	U	0	1	U	U	U	0	0	U	U
C.N.M.I.	U	0	0	—	—	U	0	0	U	U	U	0	0	U	U
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	1	2	4	—	0	1	2	4	—	0	2	—	1
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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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 years 2005 and 2006 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 April 8, 2006, and April 9, 2005 (14th Week)*

Reporting area	Rabies, animal					Rocky Mountain spotted fever					Salmonellosis				
	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005
		Med	Max				Med	Max				Med	Max		
United States	61	103	190	1,008	1,547	2	35	99	282	151	241	866	2,095	6,252	6,571
New England	13	12	33	132	198	—	0	1	—	1	11	40	80	323	358
Connecticut	6	3	13	32	28	—	0	0	—	—	—	8	73	73	83
Maine	2	1	4	18	13	N	0	0	N	N	—	3	8	11	25
Massachusetts	4	4	22	64	137	—	0	1	—	—	10	20	41	206	191
New Hampshire	1	0	3	5	2	—	0	1	—	—	1	2	12	19	23
Rhode Island	—	0	4	1	3	—	0	0	—	1	—	0	17	11	15
Vermont†	—	1	7	12	15	—	0	0	—	—	—	1	10	3	21
Mid. Atlantic	5	19	40	192	191	—	1	8	5	10	28	93	271	601	810
New Jersey	N	0	0	N	N	—	0	2	—	1	—	16	41	45	158
New York (Upstate)	5	12	24	99	84	—	0	2	—	—	19	21	230	164	182
New York City	—	0	3	—	8	—	0	2	2	1	2	24	43	137	235
Pennsylvania	—	7	22	93	99	—	1	6	3	8	7	31	61	255	235
E.N. Central	—	2	69	4	11	—	0	6	2	3	29	97	206	769	851
Illinois	—	1	4	—	3	—	0	3	1	1	—	30	124	115	269
Indiana	—	0	3	—	1	—	0	1	—	—	12	11	71	113	62
Michigan	—	0	4	3	3	—	0	1	—	1	2	17	35	151	176
Ohio	—	0	66	1	4	—	0	3	1	1	15	23	52	269	172
Wisconsin	N	0	3	N	N	—	0	1	—	—	—	15	45	121	172
W.N. Central	6	6	23	52	75	—	2	17	5	5	17	43	92	412	443
Iowa	—	1	10	13	15	—	0	2	—	—	—	7	18	58	79
Kansas	3	1	5	17	23	—	0	2	—	—	4	7	17	65	46
Minnesota	2	1	5	4	12	—	0	1	—	—	—	10	31	97	121
Missouri	1	1	7	4	7	—	2	15	5	4	10	15	40	135	119
Nebraska†	—	0	0	—	—	—	0	2	—	—	2	2	10	32	38
North Dakota	—	0	4	2	4	—	0	0	—	—	1	0	5	2	9
South Dakota	—	1	6	12	14	—	0	2	—	1	—	2	11	23	31
S. Atlantic	34	34	54	394	674	1	17	95	261	106	65	257	506	1,727	1,687
Delaware	—	0	0	—	—	—	0	2	2	1	—	2	9	13	14
District of Columbia	—	0	0	—	—	—	0	1	—	—	4	1	7	19	11
Florida	—	0	16	47	201	—	0	3	6	6	46	99	230	758	650
Georgia	27	4	15	43	77	—	1	9	15	4	14	34	73	276	229
Maryland†	—	6	16	59	82	—	2	7	13	6	—	14	39	110	134
North Carolina	7	8	19	84	117	1	4	87	219	80	—	30	114	333	313
South Carolina†	—	4	11	—	42	—	1	6	4	6	1	21	146	69	140
Virginia†	—	10	26	142	150	—	1	10	2	2	—	20	66	134	175
West Virginia	—	0	13	19	5	—	0	2	—	1	—	3	13	15	21
E.S. Central	1	2	9	39	32	—	5	24	4	6	3	56	134	328	368
Alabama†	1	1	5	16	19	—	0	9	1	1	—	13	39	127	107
Kentucky	—	0	3	4	2	—	0	1	—	—	—	7	26	65	43
Mississippi	—	0	1	—	—	—	0	3	—	—	—	13	66	39	54
Tennessee†	—	1	4	19	11	—	3	18	3	5	3	14	40	97	164
W.S. Central	1	13	42	145	283	1	2	34	4	1	16	85	880	710	490
Arkansas	—	0	3	3	10	—	0	32	3	—	—	16	67	222	64
Louisiana	—	0	0	—	—	—	0	2	—	1	—	15	42	62	118
Oklahoma	1	1	7	13	29	—	0	23	—	—	—	6	26	53	56
Texas†	—	12	39	129	244	1	0	8	1	—	16	45	847	373	252
Mountain	—	4	19	19	51	—	0	4	1	19	25	50	112	452	414
Arizona	—	2	11	19	44	—	0	4	1	13	2	13	28	137	132
Colorado	—	0	2	—	—	—	0	1	—	—	14	11	45	141	102
Idaho†	—	0	12	—	—	—	0	2	—	—	—	2	17	16	23
Montana	—	0	3	—	—	—	0	1	—	1	3	2	16	26	19
Nevada†	—	0	2	—	—	—	0	0	—	—	—	3	8	23	44
New Mexico†	—	0	1	—	1	—	0	1	—	1	—	4	13	33	41
Utah	—	0	5	—	—	—	0	1	—	3	6	5	31	62	45
Wyoming	—	0	2	—	6	—	0	1	—	1	—	1	12	14	8
Pacific	1	4	15	31	32	—	0	2	—	—	47	99	416	930	1,150
Alaska	—	0	3	5	1	—	0	0	—	—	3	1	5	24	13
California	1	3	15	26	31	—	0	1	—	—	39	76	286	705	900
Hawaii	—	0	0	—	—	—	0	0	—	—	—	5	15	47	77
Oregon†	—	0	1	—	—	—	0	1	—	—	1	8	25	80	81
Washington	U	0	0	U	U	N	0	0	N	N	4	8	121	74	79
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	2	U	1
C.N.M.I.	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	1
Puerto Rico	2	2	4	28	23	N	0	0	N	N	1	7	23	15	91
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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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 years 2005 and 2006 are provisional.
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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 8, 2006, and April 9, 2005 (14th Week)*

Reporting area	Shiga toxin-producing *E. coli* (STEC)†					Shigellosis					Streptococcal disease, invasive, group A				
	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005
		Med	Max				Med	Max				Med	Max		
United States	5	49	244	213	357	90	293	608	2,096	2,779	86	80	198	1,513	1,445
New England	—	4	13	14	32	1	5	17	60	54	2	3	8	51	57
Connecticut	—	0	4	—	12	—	1	7	7	12	U	0	0	U	U
Maine	—	0	5	—	3	—	0	3	—	2	—	0	2	3	2
Massachusetts	—	2	7	12	13	—	4	11	45	31	—	2	7	33	39
New Hampshire	—	0	2	2	2	1	0	4	4	4	2	0	3	10	3
Rhode Island	—	0	2	—	1	—	0	6	3	2	—	0	3	3	6
Vermont§	—	0	2	1	1	—	0	4	1	3	—	0	2	2	7
Mid. Atlantic	—	6	100	1	37	5	19	70	144	305	21	13	43	243	316
New Jersey	—	1	7	—	13	—	5	18	35	80	—	2	8	9	53
New York (Upstate)	4	2	97	13	14	3	4	58	59	77	19	4	33	108	109
New York City	—	0	2	1	1	—	6	22	25	131	—	3	9	15	61
Pennsylvania	—	2	8	—	9	2	2	48	25	17	2	6	13	111	93
E.N. Central	4	9	34	60	80	8	17	79	188	219	18	14	39	292	316
Illinois	—	1	7	—	19	—	6	25	32	56	—	3	9	56	91
Indiana	—	1	7	9	7	2	1	56	33	27	—	2	12	43	33
Michigan	—	1	8	16	13	—	4	10	54	84	5	4	10	78	78
Ohio	4	2	14	22	25	6	3	11	49	15	13	4	19	99	75
Wisconsin	—	2	15	13	16	—	3	9	20	37	—	1	8	16	39
W.N. Central	—	7	39	40	47	3	39	64	200	182	2	5	57	121	90
Iowa	—	1	10	11	9	1	1	7	8	35	N	0	0	N	N
Kansas	—	0	4	—	7	1	4	20	21	7	2	1	5	30	13
Minnesota	—	3	23	28	8	—	2	6	20	12	—	0	52	52	31
Missouri	—	2	7	16	12	1	22	45	117	98	—	1	5	22	30
Nebraska§	1	1	4	4	8	—	1	9	18	20	—	0	4	12	7
North Dakota	—	0	2	—	1	—	0	2	2	2	—	0	3	3	2
South Dakota	—	0	5	1	2	—	1	17	14	8	—	0	2	2	7
S. Atlantic	—	7	41	32	72	43	47	116	590	417	26	19	39	370	273
Delaware	—	0	2	—	—	—	0	2	—	4	—	0	2	1	—
District of Columbia	—	0	1	—	—	—	0	2	3	4	—	0	2	4	2
Florida	—	1	31	14	40	12	21	66	243	174	2	5	12	88	76
Georgia	—	0	6	—	8	25	12	37	205	114	3	4	9	84	60
Maryland§	—	1	5	—	7	—	2	8	33	17	—	3	12	78	63
North Carolina	—	1	11	13	9	6	2	22	62	50	21	1	13	55	35
South Carolina§	—	0	2	2	1	—	2	9	33	34	—	0	6	24	16
Virginia§	—	2	9	—	7	—	2	9	11	20	—	2	11	29	18
West Virginia	—	0	2	—	—	—	0	1	—	—	—	0	5	7	3
E.S. Central	—	2	12	11	15	3	17	50	128	358	2	4	10	76	62
Alabama§	—	0	3	—	3	1	3	20	32	71	N	0	0	N	N
Kentucky	—	1	9	8	4	1	6	31	52	26	1	1	6	20	16
Mississippi	—	0	2	—	—	—	2	7	20	28	—	0	0	—	—
Tennessee§	—	1	4	19	8	1	3	46	24	233	1	3	9	56	46
W.S. Central	—	2	37	2	15	—	65	244	226	616	1	6	49	83	83
Arkansas	—	0	2	1	3	—	1	9	24	14	—	0	2	3	6
Louisiana	—	0	2	—	6	—	2	11	28	37	—	0	2	5	4
Oklahoma	—	0	3	1	1	—	9	41	25	133	1	2	10	54	46
Texas§	3	1	37	11	5	—	50	237	149	432	—	3	42	21	27
Mountain	—	5	16	25	45	7	17	48	172	147	12	12	43	252	219
Arizona	—	0	4	10	4	2	9	29	90	63	4	4	28	130	85
Colorado	—	1	6	11	12	4	3	18	32	24	4	3	10	67	79
Idaho§	—	1	8	4	7	—	0	4	4	—	—	0	2	3	1
Montana	—	0	2	—	1	1	0	1	1	1	—	0	0	—	—
Nevada§	—	0	3	—	9	—	1	6	12	24	—	0	6	—	—
New Mexico§	—	0	3	2	2	—	2	9	19	24	—	1	6	22	24
Utah	—	1	7	2	9	—	1	4	13	11	4	2	6	28	29
Wyoming	—	0	3	—	1	—	0	1	1	—	—	0	1	2	1
Pacific	1	4	50	28	14	20	39	145	388	481	2	2	8	25	29
Alaska	—	0	2	—	2	1	0	1	3	6	—	0	0	—	—
California	—	0	5	19	1	15	32	103	284	432	—	0	0	—	—
Hawaii	1	0	4	3	3	—	1	4	10	8	2	2	8	25	29
Oregon§	—	2	47	14	3	2	1	28	54	23	N	0	0	N	N
Washington	—	1	41	6	5	2	2	41	37	12	N	0	0	N	N
American Samoa	U	0	0	U	U	U	0	2	U	2	U	0	0	U	U
C.N.M.I.	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
Guam	—	0	0	—	—	—	0	0	—	1	—	0	0	—	—
Puerto Rico	—	0	1	—	1	—	0	1	1	—	N	0	0	N	N
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

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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 years 2005 and 2006 are provisional.
† Includes *E. coli* O157:H7; Shiga toxin positive, serogroup non-0157; 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 April 8, 2006, and April 9, 2005 (14th Week)*

Reporting area	*Streptococcus pneumoniae*, invasive disease Drug resistant, all ages					Syphilis, primary and secondary					Varicella (chickenpox)				
	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2006	Cum 2005	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2006	Cum 2005	Current week	Previous 52 weeks Med	Previous 52 weeks Max	Cum 2006	Cum 2005
United States	54	49	124	904	944	76	172	311	1,862	2,012	811	643	2,999	13,707	7,496
New England	—	1	14	7	55	4	4	17	57	49	7	34	1,130	364	915
Connecticut	U	0	0	U	U	—	0	11	12	1	U	0	0	U	U
Maine	N	0	0	N	N	—	0	2	3	1	—	6	20	85	102
Massachusetts	—	1	6	—	46	3	2	5	34	41	—	17	86	2	795
New Hampshire	—	0	0	—	—	—	0	2	4	3	7	6	1,110	109	—
Rhode Island	—	0	9	1	6	—	0	6	3	3	—	0	0	—	—
Vermont†	—	0	2	6	3	1	0	1	1	—	—	4	25	168	18
Mid. Atlantic	3	2	14	40	96	9	20	34	186	271	118	116	182	1,763	1,433
New Jersey	N	0	0	N	N	—	2	7	38	37	—	0	0	—	—
New York (Upstate)	1	1	10	10	36	6	2	15	37	18	—	0	0	—	—
New York City	U	0	0	U	U	1	10	21	59	175	—	0	0	—	—
Pennsylvania	2	2	9	30	60	2	4	8	52	41	118	116	182	1,763	1,433
E.N. Central	18	12	37	234	218	1	19	42	217	136	293	148	537	5,609	2,045
Illinois	—	0	2	7	—	—	9	32	85	36	—	1	5	4	24
Indiana	3	3	19	53	65	—	1	5	19	15	N	0	347	N	N
Michigan	—	1	4	9	16	—	2	8	39	20	61	88	231	1,574	1,274
Ohio	15	7	32	165	137	—	4	11	61	58	232	33	380	3,758	562
Wisconsin	N	0	0	N	N	1	1	3	13	7	—	9	41	273	185
W.N. Central	2	1	15	18	14	2	5	9	43	63	29	15	73	586	64
Iowa	N	0	0	N	N	—	0	1	2	3	N	0	0	N	N
Kansas	N	0	0	N	N	1	0	2	8	6	—	0	0	—	—
Minnesota	—	0	15	—	—	—	1	5	6	15	—	0	0	—	—
Missouri	2	1	3	18	13	1	2	8	26	38	29	12	72	557	2
Nebraska†	—	0	1	—	—	—	0	1	1	1	—	0	1	—	—
North Dakota	—	0	1	—	—	—	0	1	—	—	—	0	25	13	9
South Dakota	—	0	1	—	1	—	0	1	—	—	—	1	23	16	53
S. Atlantic	31	21	42	472	396	30	43	182	475	466	83	53	815	1,379	700
Delaware	—	0	2	—	1	—	0	2	8	4	1	1	5	27	8
District of Columbia	3	0	3	17	11	3	2	9	29	29	5	0	6	11	5
Florida	17	11	34	263	205	11	15	29	188	193	—	0	0	—	—
Georgia	9	5	19	156	148	—	8	141	33	53	—	0	0	—	—
Maryland†	—	0	0	—	—	8	5	19	79	78	—	0	0	—	—
North Carolina	N	0	0	N	N	6	5	17	81	64	—	0	0	—	—
South Carolina†	—	0	0	—	—	—	1	7	18	19	3	13	43	293	163
Virginia†	N	0	0	N	N	2	3	12	39	25	31	13	795	483	93
West Virginia	2	2	10	36	31	—	0	1	—	1	43	19	70	565	431
E.S. Central	—	4	14	73	58	6	10	20	147	119	—	0	0	—	—
Alabama†	N	0	0	N	N	—	3	12	76	53	—	0	0	—	—
Kentucky	—	0	5	9	9	—	1	5	11	6	N	0	0	N	N
Mississippi	—	0	0	—	—	—	0	5	11	16	—	0	0	—	—
Tennessee†	—	3	13	64	49	6	4	11	49	44	N	0	0	N	N
W.S. Central	—	1	7	31	72	14	24	37	337	326	210	153	1,674	2,935	1,231
Arkansas	—	0	3	6	6	—	1	6	25	12	—	0	39	155	—
Louisiana	—	1	5	25	66	2	3	17	20	50	—	1	19	80	84
Oklahoma	N	0	0	N	N	1	1	6	21	12	—	0	0	—	—
Texas†	N	0	0	N	N	11	17	29	271	252	210	150	1,642	2,700	1,147
Mountain	—	1	27	29	35	—	8	17	93	118	71	48	130	1,071	1,108
Arizona	N	0	0	N	N	—	3	13	52	37	—	0	0	—	—
Colorado	N	0	0	N	N	—	1	3	8	18	36	35	74	618	758
Idaho†	N	0	0	N	N	—	0	3	1	6	—	0	0	—	—
Montana	—	0	1	—	—	—	0	1	—	5	—	0	0	—	—
Nevada†	—	0	27	1	1	—	2	7	19	32	—	0	2	—	—
New Mexico†	—	0	0	—	—	—	1	4	12	17	—	3	24	139	89
Utah	—	0	6	15	21	—	0	1	1	3	35	8	55	306	222
Wyoming	—	0	3	13	13	—	0	0	—	—	—	0	3	8	39
Pacific	—	0	0	—	—	10	34	56	307	464	—	0	0	—	—
Alaska	—	0	0	—	—	—	0	4	4	3	—	0	0	—	—
California	N	0	0	N	N	4	29	54	231	408	—	0	0	—	—
Hawaii	—	0	0	—	—	—	0	2	7	1	N	0	0	N	N
Oregon†	N	0	0	N	N	—	0	6	4	8	N	0	0	N	N
Washington	N	0	0	N	N	6	2	11	61	44	N	0	0	N	N
American Samoa	—	0	0	—	—	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	—	0	0	—	—	U	0	0	U	U	U	0	0	U	U
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	26
Puerto Rico	N	0	0	N	N	—	4	16	37	35	21	6	47	77	192
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 years 2005 and 2006 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 April 8, 2006, and April 9, 2005 (14th Week)*

Reporting area	West Nile virus disease†									
	Neuroinvasive					Non-neuroinvasive				
	Current week	Previous 52 weeks		Cum 2006	Cum 2005	Current week	Previous 52 weeks		Cum 2006	Cum 2005
		Med	Max				Med	Max		
United States	—	1	154	1	1	—	1	202	—	3
New England	—	0	3	—	—	—	0	2	—	—
Connecticut	—	0	2	—	—	—	0	1	—	—
Maine	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	3	—	—	—	0	1	—	—
New Hampshire	—	0	0	—	—	—	0	0	—	—
Rhode Island	—	0	1	—	—	—	0	0	—	—
Vermont§	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	—	0	9	—	—	—	0	3	—	—
New Jersey	—	0	1	—	—	—	0	2	—	—
New York (Upstate)	—	0	6	—	—	—	0	1	—	—
New York City	—	0	2	—	—	—	0	2	—	—
Pennsylvania	—	0	3	—	—	—	0	2	—	—
E.N. Central	—	0	39	—	—	—	0	18	—	—
Illinois	—	0	25	—	—	—	0	16	—	—
Indiana	—	0	2	—	—	—	0	1	—	—
Michigan	—	0	14	—	—	—	0	3	—	—
Ohio	—	0	9	—	—	—	0	4	—	—
Wisconsin	—	0	3	—	—	—	0	2	—	—
W.N. Central	—	0	26	—	—	—	0	80	—	—
Iowa	—	0	3	—	—	—	0	5	—	—
Kansas	—	0	3	—	—	N	0	3	N	N
Minnesota	—	0	5	—	—	—	0	5	—	—
Missouri	—	0	4	—	—	—	0	3	—	—
Nebraska§	—	0	9	—	—	—	0	24	—	—
North Dakota	—	0	4	—	—	—	0	15	—	—
South Dakota	—	0	7	—	—	—	0	33	—	—
S. Atlantic	—	0	6	—	—	—	0	4	—	—
Delaware	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	1	—	—	—	0	1	—	—
Florida	—	0	2	—	—	—	0	4	—	—
Georgia	—	0	3	—	—	—	0	3	—	—
Maryland§	—	0	2	—	—	—	0	1	—	—
North Carolina	—	0	1	—	—	—	0	1	—	—
South Carolina§	—	0	1	—	—	—	0	0	—	—
Virginia§	—	0	0	—	—	—	0	1	—	—
West Virginia	—	0	0	—	—	N	0	0	N	N
E.S. Central	—	0	10	1	—	—	0	5	—	—
Alabama§	—	0	1	—	—	—	0	2	—	—
Kentucky	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	9	1	—	—	0	5	—	—
Tennessee§	—	0	3	—	—	—	0	1	—	—
W.S. Central	—	0	32	—	—	—	0	21	—	2
Arkansas	—	0	3	—	—	—	0	2	—	—
Louisiana	—	0	20	—	—	—	0	8	—	2
Oklahoma	—	0	6	—	—	—	0	3	—	—
Texas§	—	0	16	—	—	—	0	13	—	—
Mountain	—	0	16	—	1	—	0	39	—	—
Arizona	—	0	8	—	1	—	0	8	—	—
Colorado	—	0	5	—	—	—	0	13	—	—
Idaho§	—	0	2	—	—	—	0	3	—	—
Montana	—	0	3	—	—	—	0	9	—	—
Nevada§	—	0	3	—	—	—	0	8	—	—
New Mexico§	—	0	3	—	—	—	0	4	—	—
Utah	—	0	6	—	—	—	0	8	—	—
Wyoming	—	0	2	—	—	—	0	1	—	—
Pacific	—	0	50	—	—	—	0	90	—	1
Alaska	—	0	0	—	—	—	0	0	—	—
California	—	0	50	—	—	—	0	89	—	1
Hawaii	—	0	0	—	—	—	0	0	—	—
Oregon§	—	0	1	—	—	—	0	2	—	—
Washington	—	0	0	—	—	—	0	0	—	—
American Samoa	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	0	0	U	U	U	0	0	U	U
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	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 years 2005 and 2006 are provisional.
† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).
§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deaths in 122 U.S. cities,* week ending April 8, 2006 (14th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
New England	612	445	116	35	8	8	61
Boston, MA	157	101	38	10	3	5	12
Bridgeport, CT	39	27	7	4	1	—	5
Cambridge, MA	14	13	1	—	—	—	3
Fall River, MA	32	20	8	4	—	—	4
Hartford, CT	65	53	6	4	2	—	10
Lowell, MA	31	23	5	3	—	—	4
Lynn, MA	12	10	2	—	—	—	2
New Bedford, MA	23	19	4	—	—	—	6
New Haven, CT	U	U	U	U	U	U	U
Providence, RI	85	67	13	3	1	1	6
Somerville, MA	10	8	2	—	—	—	—
Springfield, MA	42	30	8	2	—	2	2
Waterbury, CT	28	22	4	1	1	—	—
Worcester, MA	74	52	18	4	—	—	7
Mid. Atlantic	2,132	1,548	423	115	19	26	135
Albany, NY	40	32	6	1	1	—	3
Allentown, PA	31	26	4	1	—	—	5
Buffalo, NY	70	49	16	4	—	1	10
Camden, NJ	24	19	2	2	—	1	3
Elizabeth, NJ	15	13	2	—	—	—	2
Erie, PA	34	31	2	—	—	1	4
Jersey City, NJ	40	27	13	—	—	—	—
New York City, NY	1,102	782	224	70	10	15	60
Newark, NJ	51	27	18	4	2	—	6
Paterson, NJ	19	14	1	2	1	1	—
Philadelphia, PA	284	207	59	15	2	1	8
Pittsburgh, PA§	26	19	5	1	—	1	1
Reading, PA	26	21	5	—	—	—	—
Rochester, NY	134	103	22	6	2	1	12
Schenectady, NY	15	11	4	—	—	—	1
Scranton, PA	42	31	8	3	—	—	4
Syracuse, NY	124	99	21	4	—	—	15
Trenton, NJ	28	14	9	—	1	4	—
Utica, NY	12	11	1	—	—	—	—
Yonkers, NY	15	12	1	2	—	—	1
E.N. Central	2,067	1,414	452	119	49	31	177
Akron, OH	44	29	11	1	3	—	4
Canton, OH	42	26	13	2	—	1	2
Chicago, IL	340	209	80	33	12	5	25
Cincinnati, OH	40	25	8	3	3	1	4
Cleveland, OH	252	196	45	6	1	4	11
Columbus, OH	267	182	56	18	9	2	35
Dayton, OH	121	91	22	4	2	2	13
Detroit, MI	177	97	53	18	7	1	18
Evansville, IN	48	35	12	—	—	1	4
Fort Wayne, IN	62	51	7	2	1	1	2
Gary, IN	19	8	7	4	—	—	—
Grand Rapids, MI	75	51	16	3	4	1	7
Indianapolis, IN	175	105	51	12	5	2	13
Lansing, MI	21	14	6	—	—	1	1
Milwaukee, WI	102	74	20	6	—	2	11
Peoria, IL	42	35	4	1	—	2	2
Rockford, IL	57	45	6	3	2	1	11
South Bend, IN	46	36	9	—	—	1	2
Toledo, OH	92	69	19	1	—	3	10
Youngstown, OH	45	36	7	2	—	—	2
W.N. Central	686	447	152	41	27	18	49
Des Moines, IA	—	—	—	—	—	—	—
Duluth, MN	38	30	6	1	—	1	3
Kansas City, KS	33	17	9	2	4	1	2
Kansas City, MO	107	68	29	5	3	2	6
Lincoln, NE	40	31	4	3	2	—	5
Minneapolis, MN	65	45	12	4	2	2	5
Omaha, NE	105	71	23	6	5	—	11
St. Louis, MO	171	92	43	18	8	9	13
St. Paul, MN	52	42	6	—	1	3	2
Wichita, KS	75	51	20	2	2	—	2
S. Atlantic	1,384	888	330	105	34	27	70
Atlanta, GA	232	138	63	22	4	5	9
Baltimore, MD	167	98	43	16	8	2	14
Charlotte, NC	122	86	19	10	5	2	11
Jacksonville, FL	151	98	38	9	6	—	2
Miami, FL	120	71	33	13	3	—	3
Norfolk, VA	57	43	10	1	—	3	1
Richmond, VA	68	35	24	5	3	1	6
Savannah, GA	48	29	12	4	—	3	2
St. Petersburg, FL	69	47	16	2	—	4	12
Tampa, FL	211	160	35	13	—	3	6
Washington, D.C.	121	67	35	10	5	4	3
Wilmington, DE	18	16	2	—	—	—	1
E.S. Central	877	567	212	66	11	21	83
Birmingham, AL	171	107	38	19	3	4	26
Chattanooga, TN	72	53	17	1	—	1	7
Knoxville, TN	119	81	29	5	1	3	1
Lexington, KY	80	55	22	3	—	—	15
Memphis, TN	153	96	41	13	1	2	7
Mobile, AL	100	57	22	15	3	3	5
Montgomery, AL	41	34	5	1	—	1	8
Nashville, TN	141	84	38	9	3	7	14
W.S. Central	1,410	903	340	101	30	36	57
Austin, TX	94	59	24	9	1	1	3
Baton Rouge, LA	40	28	6	4	1	1	—
Corpus Christi, TX	U	U	U	U	U	U	U
Dallas, TX	205	115	60	12	6	12	8
El Paso, TX	94	64	19	5	4	2	5
Fort Worth, TX	99	75	18	3	—	3	5
Houston, TX	388	231	102	38	7	10	14
Little Rock, AR	70	46	16	5	1	2	3
New Orleans, LA¶	U	U	U	U	U	U	U
San Antonio, TX	226	151	52	14	5	4	14
Shreveport, LA	72	48	17	5	1	1	5
Tulsa, OK	122	86	26	6	4	—	—
Mountain	918	599	199	68	30	22	90
Albuquerque, NM	113	63	34	12	2	2	10
Boise, ID	48	33	10	3	2	—	4
Colorado Springs, CO	54	43	8	2	1	—	2
Denver, CO	103	62	25	7	4	5	7
Las Vegas, NV	279	183	61	22	11	2	30
Ogden, UT	36	29	2	3	1	1	5
Phoenix, AZ	148	87	35	11	8	7	15
Pueblo, CO	30	21	5	3	—	1	3
Salt Lake City, UT	107	78	19	5	1	4	14
Tucson, AZ	U	U	U	U	U	U	U
Pacific	1,934	1,348	406	100	43	36	171
Berkeley, CA	19	15	2	—	—	2	2
Fresno, CA	123	74	34	9	6	—	7
Glendale, CA	25	21	4	—	—	—	6
Honolulu, HI	61	46	10	5	—	—	—
Long Beach, CA	63	37	19	4	1	2	9
Los Angeles, CA	427	313	82	22	4	6	48
Pasadena, CA	20	12	6	—	—	2	5
Portland, OR	111	78	25	7	—	1	8
Sacramento, CA	195	141	40	7	3	4	14
San Diego, CA	211	144	40	14	7	5	16
San Francisco, CA	184	124	43	9	3	5	26
San Jose, CA	160	120	30	5	3	2	15
Santa Cruz, CA	28	25	2	1	—	—	—
Seattle, WA	137	75	41	9	9	3	5
Spokane, WA	60	39	11	4	4	2	7
Tacoma, WA	110	84	17	4	3	2	3
Total	12,020**	8,159	2,630	750	251	225	893

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.

¶ Because of Hurricane Katrina, weekly reporting of deaths has been temporarily disrupted.

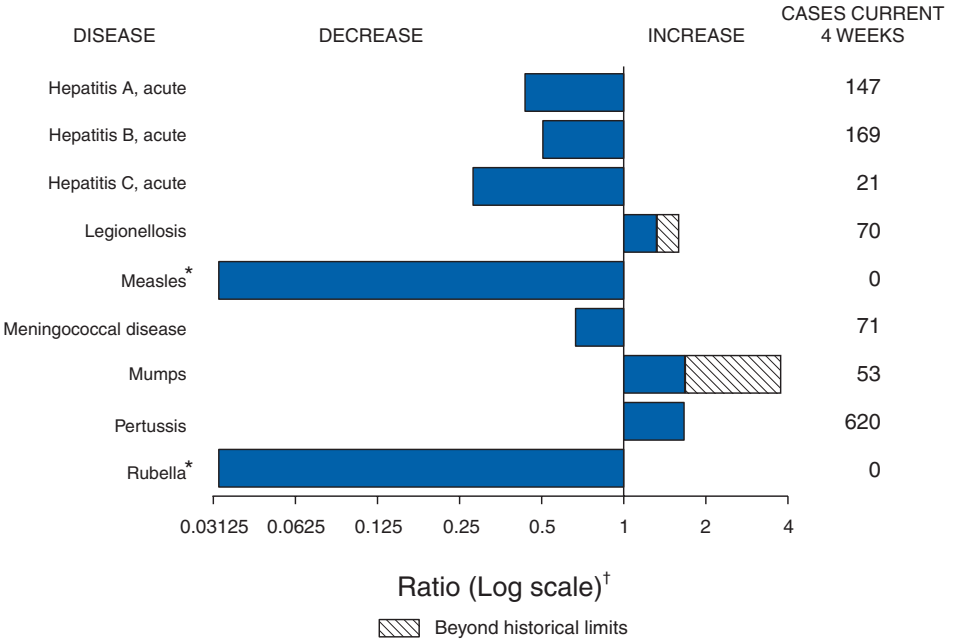
** Total includes unknown ages.

TABLE IV. Provisional cases of selected notifiable diseases, United States, quarter ending April 1, 2006 (13th week)

Reporting area	AIDS*					HIV/AIDS*					Tuberculosis†				
	Current quarter	Previous 4 quarters		Cum 2006	Cum 2005	Current quarter	Previous 4 quarters		Cum 2006	Cum 2005	Current week	Previous 4 quarters		Cum 2006	Cum 2005
		Min	Max				Min	Max				Min	Max		
United States	9,922	9,922	11,012	9,922	10,082	14,655	14,655	17,264	14,655	16,092	1,641	1,641	3,389	1,641	2,759
New England	274	274	452	274	402	387	387	735	387	1,762	52	52	165	52	86
Connecticut	62	62	250	62	154	162	162	514	162	1,109	10	10	34	10	20
Maine†	23	3	23	23	3	23	3	23	23	6	3	3	6	3	5
Massachusetts†	121	121	182	121	206	128	128	189	128	230	32	32	113	32	43
New Hampshire	19	6	19	19	3	26	8	26	26	380	2	0	2	2	3
Rhode Island†	44	2	44	44	35	43	2	43	43	36	3	3	14	3	13
Vermont†	5	0	5	5	1	5	0	5	5	1	2	0	3	2	2
Mid. Atlantic	1,245	1,245	2,605	1,245	1,973	2,486	2,486	4,243	2,486	3,196	461	461	607	461	443
New Jersey	59	59	381	59	358	202	202	501	202	626	86	86	135	86	106
New York (Upstate)	59	59	628	59	195	107	107	726	107	254	45	45	110	45	46
New York City	935	935	1,345	935	1,105	1,370	1,370	1,743	1,370	1,823	245	223	271	245	230
Pennsylvania	192	192	566	192	315	807	466	1,284	807	493	85	63	102	85	61
E.N. Central	896	896	1,198	896	893	1,228	1,228	1,477	1,228	1,114	207	207	353	207	282
Illinois†	242	242	525	242	473	273	273	604	273	473	91	91	159	91	140
Indiana	96	75	113	96	112	132	126	170	132	134	18	18	40	18	28
Michigan	197	118	386	197	135	243	89	488	243	259	30	30	92	30	40
Ohio	273	176	278	273	130	406	379	406	406	185	52	51	83	52	57
Wisconsin	88	5	88	88	43	174	4	174	174	63	16	16	23	16	17
W.N. Central	218	200	237	218	227	386	344	421	386	338	87	87	126	87	99
Iowa	19	19	32	19	18	32	20	49	32	23	7	7	13	7	11
Kansas	57	16	57	57	31	82	19	82	82	46	29	11	29	29	18
Minnesota	70	49	70	70	69	117	87	117	117	104	32	32	56	32	40
Missouri	50	50	103	50	97	141	118	208	141	147	14	14	29	14	23
Nebraska	19	13	22	19	2	6	6	50	6	1	1	1	17	1	2
North Dakota	—	0	4	—	5	1	1	3	1	3	—	0	1	—	1
South Dakota	3	3	5	3	5	7	4	11	7	14	4	3	4	4	4
S. Atlantic	3,742	2,874	3,742	3,742	3,314	5,093	4,877	5,599	5,093	4,855	312	312	824	312	597
Delaware†	17	17	48	17	51	22	22	47	22	53	—	0	8	—	8
District of Columbia†	267	6	292	267	176	273	9	304	273	188	18	7	18	18	21
Florida	1,561	1,084	1,561	1,561	1,543	2,095	1,731	2,095	2,095	2,285	132	132	354	132	221
Georgia	520	520	751	520	517	1,007	1,007	2,352	1,007	1,021	11	11	150	11	159
Maryland†	493	229	559	493	406	485	233	559	485	398	42	42	79	42	56
North Carolina	543	113	543	543	292	724	357	724	724	436	55	55	126	55	37
South Carolina	205	116	205	205	139	220	143	269	220	195	2	2	68	2	38
Virginia	112	112	209	112	172	245	245	344	245	256	47	47	131	47	49
West Virginia	24	15	24	24	18	22	22	27	22	23	5	4	7	5	8
E.S. Central	450	450	507	450	561	707	677	863	707	709	126	126	175	126	107
Alabama	116	99	138	116	163	185	173	209	185	145	52	45	72	52	20
Kentucky	52	52	69	52	63	150	150	192	150	172	13	13	43	13	25
Mississippi	87	54	122	87	108	111	101	177	111	109	—	0	0	—	—
Tennessee	195	181	239	195	227	261	243	289	261	283	61	58	87	61	62
W.S. Central	904	904	1,341	904	1,006	1,767	1,767	2,122	1,767	1,863	202	202	453	202	434
Arkansas	45	3	99	45	71	90	3	182	90	119	19	19	34	19	21
Louisiana	82	82	326	82	169	218	218	342	218	286	—	0	0	—	—
Oklahoma	44	44	94	44	73	51	51	103	51	99	45	30	45	45	34
Texas	733	667	967	733	693	1,408	1,261	1,587	1,408	1,359	138	138	392	138	379
Mountain	389	386	401	389	385	619	606	692	619	595	52	52	162	52	79
Arizona	141	141	183	141	157	282	253	338	282	249	25	25	76	25	28
Colorado	111	79	111	111	82	115	115	144	115	134	14	9	24	14	21
Idaho	10	5	10	10	3	22	4	22	22	6	—	0	7	—	6
Montana†	—	0	14	—	3	—	0	14	—	4	—	0	6	—	—
Nevada	80	60	95	80	81	119	91	144	119	112	—	0	38	—	18
New Mexico	31	25	43	31	40	43	35	53	43	54	6	4	18	6	3
Utah	15	11	22	15	19	34	26	49	34	30	6	4	10	6	3
Wyoming	1	1	3	1	0	4	1	4	4	6	1	0	1	1	—
Pacific	1,579	1,196	1,579	1,579	1,068	1,487	1,125	1,487	1,487	1,029	142	142	831	142	632
Alaska	9	3	11	9	7	10	9	15	10	11	16	9	16	16	13
California†	1,353	963	1,353	1,353	868	1,284	931	1,284	1,284	838	63	63	705	63	505
Hawaii†	25	19	34	25	26	26	19	34	26	27	18	18	33	18	29
Oregon†	89	29	89	89	64	88	31	88	88	64	—	0	24	—	29
Washington†	103	103	139	103	103	79	79	116	79	89	45	45	77	45	56
American Samoa	—	—	—	—	—	—	—	—	—	—	U	0	2	U	U
C.N.M.I.	2	0	2	2	—	—	—	—	—	—	—	0	0	—	U
Guam	1	0	1	1	—	—	0	2	—	1	—	0	0	—	—
Puerto Rico	219	219	283	219	246	493	478	755	493	621	—	0	0	—	—
U.S. Virgin Islands	3	0	7	3	7	2	0	14	2	9	—	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. Min: Minimum. Max: Maximum.
* AIDS and HIV/AIDS are not mutually exclusive. Persons with AIDS have met the case definition for AIDS regardless of whether they received an HIV diagnosis before the onset of AIDS. HIV/AIDS includes persons with an HIV infection and includes persons with a diagnosis of HIV infection only, a diagnosis of HIV and later developed AIDS, or concurrent diagnoses of HIV and AIDS. Updated quarterly from reports to the Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention. Last update was March 31, 2006.
† Methods other than confidential, name-based reporting for HIV diagnoses without AIDS are used in these areas.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals April 8, 2006, with historical data



* No measles or rubella cases were reported for the current 4-week period yielding a ratio for week 14 of zero (0).
† Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

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