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Inadvertent Use of Bicillin® C-R to Treat Syphilis Infection — Los Angeles, California, 1999–2004

In March 2004, the Los Angeles County Department of Health Services (LACDHS) was notified that a large nonprofit clinic serving the gay and lesbian community in Los Angeles used a nonrecommended preparation of penicillin to treat syphilis patients during January 1999–March 2004. The clinic had inadvertently used Bicillin® C-R, a mixture of 1.2 million units (MU) benzathine penicillin G (BPG) and 1.2 MU procaine penicillin G, rather than Bicillin® L-A, a preparation that contains the 2.4 MU BPG per dose recommended by CDC (*1*). Bicillin L-A is recommended for treating syphilis and upper respiratory tract infections caused by susceptible streptococci (*2*). Bicillin C-R is indicated for streptococcal infections of the skin and respiratory tract; however, its efficacy in treating syphilis is unknown. The inadvertent use of Bicillin C-R, which contains only half the recommended dose of BPG for syphilis, was discovered after a patient treated for syphilis read the product insert, which stated that the medication was not indicated for treatment of syphilis. Review of clinic pharmacy records revealed that it received a shipment of Bicillin C-R in lieu of an unfilled order for Bicillin L-A in late 1998 and that the pharmacy subsequently ordered Bicillin C-R until March 2004. The clinic used Bicillin C-R as its exclusive formulation of injectable penicillin during January 1999–March 2004. This report summarizes the investigation of the misuse of Bicillin C-R at the Los Angeles clinic, which represents the largest occurrence of inadvertent treatment with Bicillin C-R to date. The investigation led to discussions among CDC, the Food and Drug Administration (FDA), and King Pharmaceuticals, Inc. (Bristol, Tennessee), whose Monarch Pharmaceuticals subsidiary markets Bicillin products. As a result, King Pharmaceuticals agreed to institute packaging and labeling changes to Bicillin products to prevent inadvertent treatment of syphilis with Bicillin C-R.

Five BPG-containing products are marketed by Monarch: Bicillin L-A, Bicillin® L-A Pediatric (0.6 MU BPG), Bicillin C-R, Bicillin® C-R Pediatric (a mixture of 0.3 MU BPG and 0.3 MU procaine penicillin G), and Bicillin® C-R 900/300 (a mixture of 0.9 MU BPG and 0.3 MU procaine penicillin G). Despite a change in package color in 2002 to distinguish Bicillin C-R from Bicillin L-A (*3*), the proprietary names and package appearances remained similar for the two formulations (Figure). The product insert sheet included a warning against the use of Bicillin C-R for treatment of syphilis.

Investigators reviewed databases from the clinic and from the LACDHS Sexually Transmitted Disease (STD) Program to identify patients who were treated during January 1999–March 2004 for confirmed syphilis infection or because of contact with a person known or suspected to have syphilis. All available data on treatment were evaluated.

During January 1999–March 2004, a total of 429 patients were treated with Bicillin C-R for confirmed syphilis infection at the clinic. An additional 234 patients were treated with Bicillin C-R at the clinic for reported sexual contact with someone who was known or suspected to be infected with syphilis

INSIDE

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FIGURE. Labeling of Bicillin® C-R and Bicillin® L-A products before changes implemented in 2004

Photo/R Bolan, Los Angeles Gay and Lesbian Center

(contacts). Of persons with confirmed syphilis, none were female, and 215 (50%) were known to be infected with human immunodeficiency virus (HIV). Five (2%) contacts were female, and 10 (4%) contacts were known to be infected with HIV. No female patients were pregnant during or after treatment with Bicillin C-R.

Clinic staff attempted to reach syphilis patients and contacts treated with Bicillin C-R by letter, up to three telephone calls, and, if necessary, telephone calls to emergency contacts listed on medical records. In addition, the clinic and LACDHS issued press releases to inform potentially affected patients and local health-care providers. LACDHS public health investigators attempted to reach patients whom the clinic was unable to locate or contact.

A standard protocol was developed to retest and retreat all patients and contacts who had been treated with Bicillin C-R for syphilis. All patients were offered retreatment regardless of retesting results. Patients with a confirmed syphilis diagnosis were evaluated by clinic medical staff, retested with quantitative rapid plasma reagin (RPR) tests, and advised to undergo lumbar puncture for cerebrospinal fluid analysis if they had either clinical manifestations suggestive of neurosyphilis or evidence of treatment failure (e.g., less than a fourfold decline in RPR titer since initial treatment). Contacts were tested with a specific treponemal test, and those with a reactive test were managed in the same way as those with a confirmed syphilis diagnosis. Patients were offered retreatment with a CDC-recommended regimen appropriate for their stage of infection.

As of January 26, 2005, of the 429 patients with confirmed syphilis, 282 (66%) were successfully contacted; 255 (59%) were retreated, 19 (4%) refused retreatment, and eight (2%)

are pending evaluation. Of those who were retreated, 19 (4%) underwent lumbar puncture for suspected treatment failure. One patient treated for syphilis with Bicillin C-R subsequently had neurosyphilis diagnosed. Of the 234 contacts, 116 (50%) were successfully contacted, 98 (42%) were retested, and 15 (6%) are pending evaluation. Of the 98 contacts who were retested, 22 (22%) had serologic evidence of previous syphilis infection, and 19 (19%) were retreated; three (3%) refused retreatment.

Operations at the clinic were disrupted for approximately 6 months. The clinic reassigned professional and clerical staff to the evaluation and retreatment effort, and some clinic activities were postponed or canceled. In addition, LACDHS dedicated two public health investigators to this effort for nearly 4 months.

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Editorial Note: Inadvertent use of Bicillin C-R for treatment of syphilis was documented in several STD programs during 1993–1998 (*4*). However, its misuse in treating approximately 660 persons in a Los Angeles clinic during January 1999–March 2004 is the largest reported occurrence to date and posed considerable clinical and programmatic challenges.

Compared with procaine penicillin G, use of BPG results in detectable serum concentrations that are prolonged (up to 30 days for BPG, compared with up to 7 days for procaine penicillin G). Prolonged serum concentration is considered essential for treating syphilis effectively because sustained spirocheticidal levels are required to treat the slowly reproducing agent of syphilis, *Treponema pallidum*. Treatment of syphilis with half the recommended dose of BPG might have increased the risk for syphilis treatment failure and neurosyphilis, particularly among those infected with HIV (*5*–*7*). However, treatment failure and neurosyphilis can occur even with recommended penicillin regimens in persons with and without HIV infection (*8*). Therefore, whether treatment failures that occurred among those treated with Bicillin C-R represent an excess over what would be expected had they been treated with Bicillin L-A cannot be determined without additional data. An investigation by CDC and state and local health departments is assessing whether treatment failure was more common in patients treated with Bicillin C-R than in a similar population treated with Bicillin L-A. Such inadvertent use entails discomfort and inconvenience to patients because it requires retesting and possible retreatment for syphilis. In addition, inadequate treatment of syphilis might have contributed to an increase in the local transmission of the disease.

In May 2004, CDC contacted FDA about the inadvertent use of Bicillin C-R. FDA worked with CDC and King Pharmaceuticals to design and implement changes to the product labeling, including more easily visible carton-color changes to distinguish L-A and C-R formulations, and the warning, "not for the treatment of syphilis," printed directly on syringes and cartons of Bicillin C-R. In November 2004, King Pharmaceuticals distributed a letter to clinicians, professional societies, and STD programs throughout the United States, alerting them to the potential for confusing Bicillin C-R with Bicillin L-A, the appropriate use of each formulation, changes in product labels, and mechanisms for reporting inadvertent use of Bicillin C-R for treatment of syphilis.

Education of clinic managers, pharmacists, and providers in the proper use of different penicillin preparations might help reduce the inappropriate use of Bicillin products. Providers, STD clinics, and pharmacies should review their product records and tracking systems for ordering and delivering penicillin treatments for syphilis.

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Transmission of Hepatitis B Virus Among Persons Undergoing Blood Glucose Monitoring in Long-Term–Care Facilities — Mississippi, North Carolina, and Los Angeles County, California, 2003–2004

Regular monitoring of blood glucose levels is an important component of routine diabetes care (*1*). Capillary blood is typically sampled with the use of a fingerstick device and tested with a portable glucometer. Because of outbreaks of hepatitis B virus (HBV) infections associated with glucose monitoring, CDC and the Food and Drug Administration (FDA) have recommended since 1990 that fingerstick devices be restricted to individual use (*2,3*). This report describes three recent outbreaks of HBV infection among residents in long-term–care (LTC) facilities that were attributed to shared devices and other breaks in infection-control practices related to blood glucose monitoring. Findings from these investigations and previous reports suggest that recommendations concerning standard precautions and the reuse of fingerstick devices have not been adhered to or enforced consistently in LTC settings (*2–5*). The findings underscore the need for education, training, adherence to standard precautions, and specific infection-control recommendations targeting diabetes-care procedures in LTC settings (*4–6*) (Box 1).

The three outbreaks described in this report were all reported by state or local health departments to CDC, which provided epidemiologic and laboratory assistance. In each of the three LTC settings, residents were tested for serologic markers for HBV infection. Under the case definitions used in these investigations, residents who tested positive for IgM antibody to hepatitis B core antigen (anti-HBc) were defined as having acute HBV infection. Residents who tested positive for hepatitis B surface antigen (HBsAg) and total anti-HBc, but who tested negative for IgM anti-HBc, were considered to have chronic HBV infection. Residents who tested positive for total anti-HBc, but who tested negative for HBsAg, or those who had antibody to HBsAg (anti-HBs) ≥10 milli-International Units (mIU) per milliliter were considered immune to HBV infection. Residents were considered susceptible to HBV if they had no HBV markers. A retrospective cohort study was performed as part of each investigation; the study was restricted to acutely infected and susceptible residents to identify risk factors. In all three investigations, staff members were evaluated; none were identified as sources of infection. Medical records were reviewed and infection-control procedures were assessed through direct observation and by interviews with nursing staff members.

BOX 1. Recommended practices for preventing patient-to-patient transmission of hepatitis viruses from diabetes-care procedures in long-term–care settings

Diabetes-care procedures and techniques

- Prepare medications such as insulin in a centralized medication area; multidose insulin vials should be assigned to individual patients and labeled appropriately.
- Never reuse needles, syringes, or lancets.
- Restrict use of fingerstick capillary blood sampling devices to individual patients.
- Consider using single-use lancets that permanently retract upon puncture.
- Dispose of used fingerstick devices and lancets at the point of use in approved sharps containers.
- Assign separate glucometers to individual patients. If a glucometer used for one patient must be reused for another patient, the device must be cleaned and disinfected. Glucometers and other environmental surfaces should be cleaned regularly and whenever contamination with blood or body fluids occurs or is suspected.
- Store individual patient supplies and equipment, such as fingerstick devices and glucometers, within patient rooms when possible.
- Keep trays or carts used to deliver medications or supplies to individual patients outside patient rooms. Do not carry supplies and medications in pockets.
- Because of possible inadvertent contamination, unused supplies and medications taken to a patient's bedside during fingerstick monitoring or insulin administration should not be used for another patient.

Hand hygiene and gloves

- Wear gloves during fingerstick blood glucose monitoring, administration of insulin, and any other procedure involving potential exposure to blood or body fluids.
- Change gloves between patient contacts and after every procedure that involves potential exposure to blood or body fluids, including fingerstick blood sampling. Discard gloves in appropriate receptacles.
- Perform hand hygiene (i.e., hand washing with soap and water or use of an alcohol-based hand rub) immediately after removal of gloves and before touching other medical supplies intended for use on other patients.

Nursing Home A, Mississippi

During November–December 2003, the Mississippi Department of Health received reports of two fatal cases of acute HBV infection among residents of nursing home A. The first patient with recognized symptoms of HBV infection had received serologic testing for viral hepatitis infection in June 2003 as part of a hospital emergency department evaluation

for abdominal pain. Although this patient was found to have a positive test for IgM anti-HBc, indicating acute HBV infection, and the finding was noted in the patient's chart in September 2003, nursing home A did not contact the state health department or initiate an internal investigation. Subsequently, the patient died.

In December 2003, after a second patient with acute HBV infection had died, and after a third with acute HBV infection was reported, serologic testing was performed on specimens from all 158 residents. Test results were available for 160 residents, including the two decedents; 15 (9%) had acute HBV infection, one was chronically infected, 15 (9%) were immune, and 129 (81%) were susceptible. Percutaneous and other possible exposures among residents were evaluated. Among 38 residents who routinely received fingersticks for glucose monitoring, 14 had acute HBV infection, compared with one of 106 residents who did not receive fingersticks (relative risk [RR] = 39.0; 95% confidence interval [CI] = 5.3–290.0).

Glucose monitoring of 14 residents with acute HBV infection and the resident with chronic HBV infection was performed by staff members based at the same nursing station. Reviews of infection-control practices and site inspections indicated that each of the four nursing stations in nursing home A was equipped with one glucometer and one spring-loaded, pen-like fingerstick device. Staff members reported that a new end cap and lancet assembly was used for each fingerstick procedure; however, the spring-loaded barrel and glucometer were not routinely cleaned between patients. Investigators also observed that insulin and other multidose medication vials were not labeled with patient names or the dates the vials were opened. In an anonymous survey, several staff members reported observing other workers reuse a needle or lancet or fail to change gloves between patients. No other percutaneous exposures were associated with illness.

Assisted Living Center B, Los Angeles County, California

During January–February 2004, the Los Angeles County Department of Health Services received reports of four residents with diabetes in assisted living center B who had acute HBV infection during November 2003–January 2004. Because these initial reports were among residents with diabetes, serologic testing was performed in January 2004 on residents who had received fingersticks for blood glucose monitoring during May–December 2003. Of 22 residents tested (three declined), eight (36%) had acute HBV infection, including the four residents previously identified; six (27%) were immune (and excluded from the analysis), and none had chronic infection. Reviews of patient records indicated that one of the acutely infected residents had been repeatedly tested at a separate hemodialysis center and had seroconverted to HBsAg-positive in July 2003. Of the nine patients who had daily exposure to fingerstick procedures performed by nursing staff, eight had acute HBV infection, compared with none among the seven residents who performed their own fingersticks (RR = undefined; CI = 2.8–undefined). Although receipt of insulin was also significantly associated with infection, two residents with acute HBV infection had not received insulin. Other percutaneous exposures (e.g., podiatric or dental care) were not associated with HBV infection.

Fingerstick procedures were often performed by nursing staff members in a central living area, with diabetes patients seated at a common table. Although residents had their own fingerstick devices, nurses reported occasionally using a pen-like fingerstick device barrel from their own kits to collect consecutive blood samples; a single glucometer was typically used for all residents. Nurses reported that they were discouraged from wearing gloves to decrease the sense of a clinical environment, and hand hygiene was not performed between procedures.

Nursing Home C, North Carolina

In May 2003, a case of HBV infection in a resident of nursing home C was reported to the North Carolina Department of Health. During June–July 2003, serologic testing was performed on specimens from all 192 residents; 11 (6%) had acute HBV infection, 16 (8%) were immune, and 165 (86%) were susceptible. No resident had chronic HBV infection. Of 45 residents who received fingersticks for glucose monitoring, eight (18%) had acute HBV infection, compared with three (3%) of 117 residents without this exposure (RR = 6.9; CI = 1.9–25.0). After data were controlled for fingerstick exposures, acute HBV infection was not associated with other percutaneous exposures (e.g., insulin injections, podiatry procedures, or phlebotomy). Two diabetes patients at nursing home C who were potential sources of the outbreak were identified retrospectively; one had clinical symptoms of hepatitis B and serologic markers of acute infection during 2002, whereas the other had chronic HBV infection and died in February 2002.

Interviews with staff and direct observation of glucose-monitoring practices revealed that only single-use lancets were used, and insulin vials were not shared among patients. However, on each wing of the facility, a single glucometer was used for all patients receiving fingersticks; glucometers were not routinely cleaned between patients. On some days, a single health-care worker performed approximately 20 fingerstick

procedures during a single work shift. In an anonymous survey, nursing staff members indicated that some health-care workers did not always change gloves between patients when performing fingerstick procedures.

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Editorial Note: Lack of adherence to standard precautions and failure to implement long-standing recommendations against sharing fingerstick devices place LTC residents at risk for acquiring infections from bloodborne pathogens such as HBV (*2,3,7*). In nursing home A, the spring-loaded barrel of a fingerstick device was used for multiple patients. Previous outbreaks have been linked to such devices when the platform or barrel supporting the disposable lancet was reused for multiple patients, when used lancets were stored with unused lancets, or when lancet caps were reused (*2,3*; CDC, unpublished data, 1999). In assisted living center B, nursing staff members routinely administered fingersticks without wearing gloves or performing hand hygiene between patients, and spring-loaded fingerstick devices were also occasionally shared.

In nursing home C, as with other recent outbreaks (*8*; CDC, unpublished data, 2002), transmission of HBV among residents with diabetes occurred despite use of single-use fingerstick devices or insulin medication vials that were dedicated for individual patient use. In these settings, glucose monitors, insulin vials, or other surfaces contaminated with blood from an HBV-infected person might have resulted in transfer of infectious virus to a health-care worker's gloves and to the fingerstick wound or subcutaneous injection site of a susceptible resident. Similar indirect transmission of HBV in health-care settings through contaminated environmental surfaces or inadequately disinfected equipment has been reported with other health-care procedures, such as dialysis (*6,9*). HBV is stable at ambient temperatures; infected patients, who often lack clinical symptoms of hepatitis, can have high concentrations of HBV in their blood or body fluids (*6*). To prevent patient-to-patient transmission of infections through cross-contamination, health-care providers should avoid carrying supplies from resident to resident and avoid sharing devices, including glucometers, among residents.

The risk for patient-to-patient transmission of HBV infection can be reduced by implementing specific prevention measures (Boxes 1 and 2). LTC staff often perform numerous percutaneous procedures; frequent blood glucose monitoring increases opportunities for bloodborne pathogen transmission. The outbreak investigations reported here identified residents with diabetes who received fingersticks from nursing staff members as often as four times per day, according to their physician's routine orders, despite having consistently normal glucose levels. Expert panels have concluded that approximately 8 years are needed before the benefits of glycemic control result in reductions in microvascular complications (*1,10*). In LTC settings, schedules for fingerstick blood sampling of individual patients should be reviewed regularly to reduce the number of percutaneous procedures to the minimum necessary for their appropriate medical management. In each of the investigations described in this report, implementation of

BOX 2. Recommended medical management, training, and oversight measures to prevent patient-to-patient transmission of hepatitis viruses from diabetes-care procedures in long-term–care settings

- Regularly review patient schedules for fingerstick blood glucose sampling and insulin administration and reduce the number of percutaneous procedures to the minimum necessary for appropriate medical management of diabetes and its complications.
- Ensure that adequate staffing levels are maintained to perform all scheduled diabetes-care procedures, including fingerstick blood glucose monitoring.
- Consider diagnosis of acute viral hepatitis infection in patients with illness that includes hepatic dysfunction or elevated liver transaminases (serum alanine aminotransferase and aspartate aminotransferase).
- Provide a full hepatitis B vaccination series to all previously unvaccinated staff members with exposure to blood or body fluids. Check and document postvaccination titers 1–2 months after completion of the vaccination series.
- Establish responsibility for oversight of infection-control activities. Investigate and report any suspected case of newly acquired bloodborne infection.
- Require staff members to know standard precautions and demonstrate proficiency in taking these precautions with procedures involving potential blood or body fluid exposures.
- Provide staff members who perform percutaneous procedures with infection-control training that includes practical demonstration of aseptic techniques and instruction regarding reporting exposures or breaches. Conduct annual retraining of all staff members who perform procedures with exposure to blood or body fluids.
- Assess compliance with infection-control recommendations (e.g., hand hygiene or glove changes) by periodic observation of staff and tracking use of supplies.

infection-control measures (Boxes 1 and 2) was recommended, along with follow-up serologic testing for markers of HBV.

An estimated 70,000–80,000 HBV infections occur each year in the United States. Most of these infections occur among young adults with behavioral risk factors (i.e., sexual contact and injection-drug use); these adults should receive hepatitis B vaccine. Preventing transmission of HBV among patients in long-term–care settings requires adherence to recommended infection-control practices and prompt response to identified instances of transmission. Routine hepatitis B vaccination or screening of LTC residents is not recommended. In the outbreaks described in this report, initial cases were not identified or investigated in a timely fashion, resulting in missed opportunities to correct deficient practices and interrupt transmission. Evidence of acute viral hepatitis in any LTC resident should prompt a thorough investigation. For a case involving a resident with diabetes, fingerstick blood sampling procedures and insulin administration should receive particular scrutiny. Health departments should encourage reporting of such cases and offer assistance in identifying the source of infection. CDC continues to support investigations in LTC and other health-care settings and is working toward improved implementation of the infection-control recommendations described in this report.

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Salmonellosis Associated with Pet Turtles — Wisconsin and Wyoming, 2004

Salmonellosis associated with small pet turtles in the United States was a major public health concern in the 1970s (*1*). In 1975, the Food and Drug Administration (FDA) banned commercial distribution of small turtles (i.e., those with a carapace of <4 inches) (*2*). The FDA ban prevents an estimated 100,000 cases of salmonellosis among children each year (*3*). However, a recent resurgence in the sale of small turtles has generated concern. In Wisconsin and Wyoming, at least six human cases of salmonellosis have been linked to such turtles. This report describes the investigation into those cases. The findings underscore the need for health and environmental officials to prevent illegal distribution of small turtles and consider patient contact with turtles when investigating salmonellosis cases.

Wisconsin

Case 1. While vacationing with her family in Wisconsin in late July 2004, a Kansas girl aged 4 years was taken to an emergency department with diarrhea and fever of 4 days' duration. Her mother was instructed to keep the child on a clear liquid diet until the diarrhea ceased, and the child was released. The next day, the patient was taken to an urgent-care clinic for treatment of bloody diarrhea, cramps, and fever. Stool cultures yielded *Salmonella enterica* serotype Pomona, a rare serotype. The child was placed on a 3-day course of trimethoprim/sulfamethoxazole, and the illness resolved after 5 days.

Epidemiologic investigation by the Wisconsin Division of Public Health (WDPH) determined that the family had purchased a small turtle at a souvenir shop (store A) in northwest Wisconsin. Warned by the public health nurse of the possible link between the turtle and the child's illness, the family removed the turtle, so the animal was not available for testing.

Cases 2 and 3. In July 2004, a boy aged 2 years was taken to his physician with watery diarrhea and fever of 4 days'

duration. Twelve days later, his mother had onset of diarrhea and fever. The physician counseled the patients; neither patient was treated and both recovered completely.

Cultures of stool samples from both patients yielded *S.* Pomona. Epidemiologic investigation by WDPH determined that the family had recently purchased small turtles at a souvenir shop (store B) in south-central Wisconsin. The family provided water specimens obtained from the turtle habitat; these were cultured and yielded *S.* Pomona. The three patient isolates from cases 1, 2, and 3 and water from the turtle habitat were tested by pulsed-field gel electrophoresis (PFGE) at the Wisconsin State Laboratory of Hygiene and produced indistinguishable PFGE patterns with two different restriction enzymes.

Case 4. In August 2004, a boy aged 10 years was taken to an urgent-care clinic with a 3-day history of diarrhea and vomiting. He was hospitalized for 3 days and treated with antibiotics, after which a stool specimen was obtained for culture; no pathogenic organisms could be isolated. He subsequently had no symptoms for several months. In November 2004, he was taken to an urgent-care facility after a 2-day history of diarrhea and vomiting and was hospitalized for 3 days.

Stool specimens for culture yielded *S.* Pomona, with a PFGE pattern indistinguishable from those of the three patient isolates and turtle water obtained in cases 1, 2, and 3 when using one enzyme (*Xba*I) and with a two-band difference when using a second enzyme (*Bln*I). Despite negative cultures of stool specimens obtained 1 month after hospital discharge, the child continued to have occasional loose, mucoid stools as of January 2005.

An epidemiologic investigation by WDPH determined that the family had purchased a small turtle from a souvenir shop during a vacation to south-central Wisconsin in late July 2004; the mother could not recall the name of the store. A week after the first hospitalization, the boy heard media coverage about a link between a pet turtle and an ill child. Consequently, the boy released the turtle into a neighborhood creek. Thus, neither the turtle nor its habitat were available for testing.

Public Health Response. In July 2004, WDPH began receiving reports that small turtles were being sold or given away with purchase in several tourist destinations in Wisconsin. WDPH sent a letter to all local health departments on August 5 to alert them to this potential health threat and asked local public health officials to stop the distribution of turtles in their jurisdictions. Local health officers were also asked to determine whether patients with salmonellosis had any contact with reptiles, specifically turtles, and to provide education for reptile owners. WDPH subsequently learned that at least six souvenir shops in four Wisconsin counties were distributing turtles. The public health alert and subsequent media coverage yielded at least three cases (including case 4) of *Salmonella* infection reported in young children who had recently purchased small turtles at Wisconsin tourist destinations. The two most recent cases had onset dates in February 2005 and are under investigation.

When PFGE analysis indicated that patterns from the patient and turtle isolates associated with the first three Wisconsin cases were indistinguishable, WDPH issued a press release on August 18, 2004, that identified the link between human cases of disease and contact with pet turtles. The release also provided information on safe handling of these animals and suggested options for surrendering the turtles if owners chose not to keep them.

Once informed of the FDA ban by local health departments, most Wisconsin retailers immediately discontinued selling small turtles, including stores A and B. One retailer refused to comply, stating that his turtles were free of *Salmonella* and that he was distributing them for educational purposes only, which was permissible under the FDA ban. The retailer produced a report from a private laboratory indicating that cultures of cloacal swabs obtained from 60 of a source batch of 10,000 turtles were negative for *Salmonella;* the retailer claimed to be distributing turtles that originated solely from this batch. Local health officials informed the retailer that, because of the intermittent nature of bacterial shedding, the results did not ensure that all of the turtles were free of *Salmonella* and that their distribution was illegal, regardless of their carrier status. The retailer refused to comply with the order from the local health department and continued to distribute the animals. WDPH issued an emergency order on August 19 directing him to terminate any public distribution of small turtles.

The retailer contacted a laboratory that agreed to test the turtles and submitted samples from six of his turtles. Cloacal swabs from one turtle yielded a mixture of *S.* Pomona and *S. enterica* serotype IIIb 60:r:z (subspecies *diarizonae*); only *S.* IIIb 60:r:z was isolated from the other five turtles. PFGE analysis of the *S.* Pomona isolate yielded a one-band difference using the first enzyme (*Xba*I) and was indistinguishable from the second enzyme (*Bln*I) pattern of cases 1, 2, and 3. The retailer stopped distributing turtles on August 24 and returned the remaining animals to the supplier.

When specimens from the patient in case 4 were tested in November 2004, the banding pattern of the PFGE supported an epidemiologic link among all four patients. Although slight differences existed in the banding pattern between this last patient and the cloacal sample from the turtle, epidemiologic and laboratory evidence supported the conclusion that the illnesses in all four cases were the result of contact with turtles.

Wyoming

Case 1. In July 2004, a woman aged 80 years from central Wyoming visited her health-care provider with a 5-day history of fever, severe diarrhea, and increased urinary frequency. Cultures of urine, feces, and blood all yielded *S. enterica* serotype Typhimurium. The patient was hospitalized for 5 days, then discharged to a transitional care unit for an additional 9 days. She received intravenous (IV) antibiotics for 10 days during her stay in the hospital and transitional care unit. At the time of discharge, her condition had improved.

Investigation by the Casper-Natrona County Health Department (CNCHD) determined that the woman lived with her daughter and the extended family owned a turtle, but the woman had no known direct contact with the turtle. However, the turtle bowl was cleaned in the family kitchen sink. Cultures of environmental samples obtained from the turtle habitat grew *S.* Typhimurium. PFGE patterns of environmental and patient isolates tested at the Wyoming Public Health Laboratory were indistinguishable.

Case 2. In August 2004, a boy aged 6 years from west-central Wyoming visited his health-care provider with a 3-day history of nausea, diarrhea, and vomiting. On clinical examination, he had a temperature of 102.8°F (39.3°C) and pain in the upper right abdominal quadrant. He was admitted to a community hospital, where IV fluids and antibiotics were administered. Blood cultures were negative, but a stool sample yielded *S.* Typhimurium.

Wyoming Department of Health staff visited the boy's home 7 days after illness onset. His mother reported that the family owned two pet turtles. The boy was allowed to handle the turtles, but his mother fed them and cleaned their aquarium because she was aware of the risk for *Salmonella* infection.

Specimens for culture were obtained from the turtles and their living environment. All samples yielded *S.* Typhimurium and were indistinguishable from the patient's sample by PFGE. The samples did not match the patterns of those from case 1.

Both turtles had been purchased from the same pet store (store C), which had been contacted by CNCHD on two previous occasions regarding its illegal sale of turtles. The pet store informed CNCHD that the turtles were being used solely for educational purposes. After investigating the two cases of human salmonellosis, CNCHD confiscated the remaining turtles from store C. CNCHD publicized this event to discourage future sales of small turtles and to inform the public about the risk for salmonellosis. The Wyoming Department of Health plans to mail an informational packet about reptiles and *Salmonella* to all pet stores in the state in summer 2005.

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Editorial Note: *Salmonella* infections usually result in a mild, self-limiting gastroenteritis but can also lead to severe invasive illness, such as septicemia or meningitis, especially in infants and immunocompromised persons (*4*). Reptiles are a well-recognized source of human salmonellosis, maintaining fecal carriage rates of *Salmonella* of >90% (*5*). Contact with reptiles and amphibians accounts for an estimated 74,000 (6%) of the approximately 1.2 million sporadic human *Salmonella* infections that occur annually in the United States (*6*).

These cases highlight the need for local health and environmental officers to be aware that illegal distribution of small turtles might be widespread. Additional sales of small turtles were reported in South Carolina and Texas in recent years. Investigators in both Wisconsin and Wyoming discovered that many retailers were aware of the FDA ban but attempted to circumvent it by giving turtles away with purchase of a turtle habitat or by claiming that turtles were being distributed for educational purposes only. Although the FDA ban does have an exemption for bona fide scientific, educational (i.e., sale to an educational institute or organization, not to a family for a child's educational benefit), or exhibitional purposes, other than use as pets, verifiable documentation of such use must be associated with the sale. Furthermore, the auction or raffle of turtles over the Internet or free distribution of turtles with purchase of a turtle habitat constitute instances of sale, offering for sale, or offering for public distribution. Such practices are banned under 21 CFR 1240.62 (*2*).

Successful management of turtle-associated salmonellosis requires public health investigations to incorporate laboratory, epidemiologic, environmental health, and policymaking components. When investigating cases of salmonellosis, health officials should consider patient contact with reptiles and take action to ensure that vendors and stores do not distribute small turtles illegally. Additional information about safe ownership of reptiles is available at http://www.cdc.gov/healthypets/animals/reptiles.

Acknowledgments

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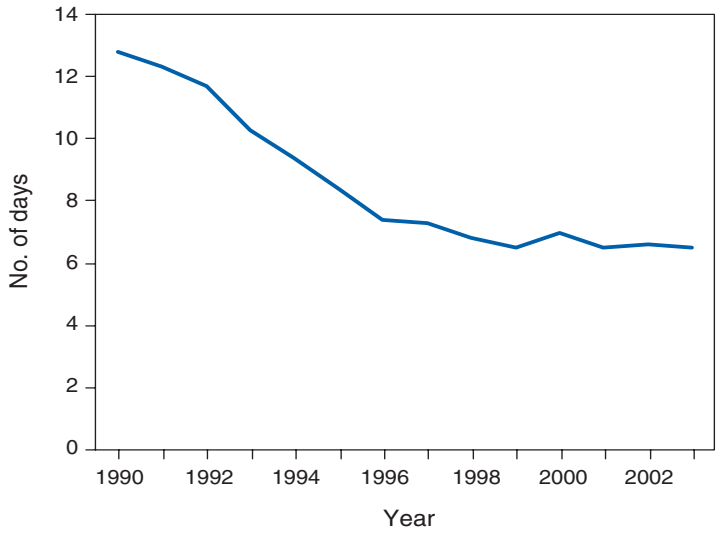
QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Average Length of Hospital Stay for Persons with Hip Fractures*, by Year — United States, 1990–2003



* Defined as fracture of the head of the femur, according to *International Classification of Diseases, Ninth Revision, Clinical Modification* code 820 (excluding fractures coded as 733.1, pathologic fracture).

During 1990–2003, the average length of stay in the hospital for hip fractures declined 49%. In 1990, the estimated 281,000 patients hospitalized for hip fractures had an average hospital stay of 12.8 days. In 2003, the estimated 304,000 patients with hip fractures had an average hospital stay of 6.5 days.

SOURCE: National Hospital Discharge Survey (NHDS), annual files, 1990–2003. Available at http://www.cdc.gov/nchs/about/major/hdasd/nhds.htm.

Lead Poisoning Associated with Use of Litargirio — Rhode Island, 2003

Lead can damage the neurologic, hematologic, and renal systems (*1*). Deteriorated leaded paint in older housing remains the most common source of lead exposure for children in the United States; however, other lead sources increasingly are recognized, particularly among certain racial/ethnic populations (*2*). In 2003, the Rhode Island Department of Health (RIDOH) recognized litargirio (also known as litharge or lead monoxide), a yellow or peach-colored powder used as an antiperspirant/deodorant and a folk remedy in the Hispanic community, as a potential source of lead exposure for Hispanic children. This report summarizes a case investigation of elevated blood lead levels (BLLs ≥10 µg/dL) associated with litargirio use among two siblings in Rhode Island, the public health action taken, and a survey of parents/guardians in three pediatric clinics in Providence, Rhode Island, to assess litargirio use. Findings underscore the importance of follow-up of elevated BLLs and thorough investigation to identify all lead sources.

Case Report

In May 2003, RIDOH and the Health & Education Leadership for Providence (HELP) Lead Safe Center investigated unexplained increases in BLLs in twin Hispanic boys aged 7 years (twins A and B). Annual BLL screenings for the twins since age 9 months were not elevated until June 2001, when twins A and B had elevated BLLs of 14 µg/dL and 15 µg/dL, respectively. Twin A's BLL increased to 42 µg/dL in May 2003, despite completed remediation of interior lead paint hazards in their home in June 2002 and of exterior lead hazards in May 2003, and provision of parental education about lead poisoning. Similarly, twin B's BLL increased to 26 µg/dL during the same period. In contrast, their younger brother's initial elevated BLL of 17 µg/dL in August 2001, at age 9 months, decreased to 8 µg/dL by November 2002.

In May 2003, RIDOH and HELP Lead Safe Center staff conducted a home inspection, which detected litargirio in a small glass jar in the bedroom of the twins, who used the substance as an antiperspirant/deodorant. The youngest brother did not use litargirio and had a separate bedroom. After the litargirio tested positive for lead by a sodium rhodizonate field test, all litargirio was removed from the home, and a sample was sent to the state laboratory for confirmatory lead testing. The litargirio sample contained 790,000 parts per million (ppm) (79%) lead. Follow-up BLLs decreased for twin A (27 µg/dL in June, 22 µg/dL in August, and 13 µg/dL in November) and twin B (22 µg/dL in June, 17 µg/dL in August, and 9 µg/dL in November).

The twins' visiting grandmother from the Dominican Republic had introduced litargirio into their home and also had given it to the family of their two female cousins, aged 1 and 5 years. In June 2002, the older girl had a BLL of 24 µg/dL, and the younger girl had a BLL of 32 µg/dL. Previous annual BLL screenings for the older girl were not elevated. In July 2002, after a home inspection revealed lead paint hazards, their parents implemented lead hazard control measures. However, the girls BLLs increased to 29 µg/dL and 44 µg/dL, respectively, by January 2003. The older sister used litargirio sporadically until the family ran out of the product in January 2003, after which her BLLs decreased to 20 µg/dL in March, 15 µg/dL in April, and 7 µg/dL in November. Although the younger girl had not used litargirio, she shared a bedroom with her older sister and likely ingested litargirio residue on various surfaces through hand-to-mouth activity. Her BLLs also decreased to 33 µg/dL in March, 29 µg/dL in April, and 16 µg/dL in November after her sister discontinued using litargirio.

Public Health Action

Litargirio is available locally in botanicas (i.e., shops selling herbs) and bodegas (i.e., grocery stores) located in Hispanic communities. It is manufactured and/or packaged by laboratories in the Dominican Republic and sold in small, clear, plastic packets labeled "litargirio" (Figure). A litargirio sample purchased by RIDOH staff from a local botanica contained 360,000 ppm (36%) lead.

RIDOH issued a statewide health alert on June 30, 2003, warning the public to stop using litargirio and advising pregnant and nursing women and children who used this product to obtain a BLL test. The media provided coverage in both English and Spanish. RIDOH notified CDC and the Food and Drug Administration (FDA) about the litargirio cases and,

FIGURE. Packages of litargirio, a yellow or peach-colored powder, used as an antiperspirant/deodorant and a folk remedy in the Hispanic community

Photo/New York City Department of Health and Mental Hygiene

on October 2, FDA issued a warning to consumers about litargirio. RIDOH notified the Dominican Republic Secretary of Public Health about the high levels of lead in litargirio imported from the Dominican Republic.

Survey

To assess litargirio use in the Hispanic community in Providence, RIDOH and CDC conducted a convenience survey of parents/guardians in three hospital-based pediatric clinics over a 2-week period (weekdays) during January–February 2004. Hospital A (a pediatric clinic and pediatric dental clinic) was surveyed during January 5–9 and 12–16. Hospital B (a pediatric clinic) was surveyed during February 9–13 and 17–20. All parents/guardians were approached to determine whether they were eligible for the survey (i.e., considered themselves Hispanic, were a parent/guardian, lived with a child, and were aged ≥18 years). A screening questionnaire was administered to 1,025 persons; 599 (58%) were deemed eligible. Of those eligible, 584 (98%) participated in the survey. Among participants, 157 (27%) had heard about litargirio; of those, 134 (85%) were Dominicans. Among the 134 Dominican participants who had heard about litargirio, the majority (104 [78%]) heard about it as a tradition from their country of origin. Of the 40 participants with a personal or family history of litargirio use, 38 (95%) were Dominicans who typically used the substance while growing up in the Dominican Republic.

No Dominican participants reported current or recent personal use of litargirio. Furthermore, no study participant reported using litargirio before or after the health alert. No additional cases of litargirio-associated lead poisoning have been reported to RIDOH or CDC.

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Editorial Note: Litargirio is used in the manufacture of batteries, glass, and ceramics; in the vulcanizing of rubber; and as a paint pigment (*3–5*). Dominicans, particularly those from rural areas, use it as an antiperspirant/deodorant and as a traditional remedy for burns and fungal infections of the feet. This report, the first to describe lead poisoning associated with use of litargirio, demonstrates how a thorough investigation of elevated BLLs led to the discovery of litargirio, a previously unreported source of lead exposure.

Although deteriorated leaded paint in older housing remains the main source of childhood lead exposures, other sources should be considered, particularly when a child's elevated BLL does not respond to remediation of residential lead paint hazards. As described in this report, the BLLs of the twins' youngest brother decreased after residential lead paint hazards were remediated, but the twins' BLLs continued to increase, suggesting exposure to a different lead source. BLL elevations during or immediately after remediation or abatement are uncommon in Rhode Island because of strict control of the process.

Certain racial/ethnic populations at risk for lead exposure through use of traditional or folk remedies (*6–9*) might fail to disclose use of these products when asked about use of "traditional or folk remedies," rather than by product name. In this report, the twins' mother repeatedly denied use of "traditional or folk remedies" because she considered litargirio an ordinary product (i.e., deodorant), not a remedy. RIDOH now inquires specifically about use of litargirio when visiting Hispanic families of children with elevated BLLs.

Data regarding dermal absorption of inorganic lead compounds in humans is limited but reportedly substantially lower than absorption through inhalation or ingestion (*1*). Although litargirio was applied to the skin of these children, most of the product probably was ingested through hand-to-mouth behavior after contact with the product or with contaminated surfaces. Twin A, who had the higher BLL, sucked his thumb, supporting this premise.

The findings from the convenience survey are subject to at least two limitations. First, the survey sampled only persons seeking pediatric care at the three pediatric clinics; therefore, the results might not be generalizable to all Hispanic communities in Rhode Island. Second, health warnings about the use of litargirio might have biased participant responses and underestimated the prevalence of litargirio use. However, to minimize participant bias, Hispanic interviewers conducted the survey and collected no identifiers.

The survey results suggest that the prevalence of litargirio use in Rhode Island was minimal. Later attempts by RIDOH staff to purchase litargirio from botanicas or bodegas failed to locate any litargirio. Because of these findings, RIDOH took no further action. Conversely, in New York City (NYC), the NYC Department of Health and Mental Hygiene was able to purchase litargirio from five of eight botanicas visited in NYC after learning about the Rhode Island litargirio cases. One of the five litargirio samples tested contained lead (430,000 ppm [43%] lead). A public warning was issued, and botanica owners were required to remove all litargirio from their stores.

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Notice to Readers

Surgeon General's Advisory on Alcohol Use in Pregnancy

In February 2005, the U.S. Surgeon General issued an Advisory on Alcohol Use in Pregnancy to raise public awareness about this important health concern. Research demonstrates that prenatal alcohol exposure can result in a spectrum of birth defects that can affect a child's growth, appearance, cognitive development, and behavior (*1,2*). Fetal alcohol spectrum disorders are preventable if a woman abstains from drinking alcohol while pregnant.

In 2003, approximately 10% of pregnant women reported alcohol use, with 4% of them reporting binge drinking (*3*). In addition, nearly 55% of women who might become pregnant report drinking alcohol, and more than 12% report binge drinking (*4*). Because approximately 50% of pregnancies are unplanned, prevention efforts should target not only pregnant women and women planning a pregnancy but also women of childbearing age who are sexually active and not using an effective form of birth control. This new advisory reaches out to this broader group of women and urges them to abstain from alcohol.

The Surgeon General's Advisory on Alcohol Use in Pregnancy is available at http://www.hhs.gov/surgeongeneral/pressreleases/sg02222005.html. Additional information about alcohol use and pregnancy is available from CDC at http://www.cdc.gov/ncbddd/fas, the National Institute on Alcohol Abuse and Alcoholism at http://www.niaaa.nih.gov, and the Substance Abuse and Mental Health Services Administration at http://www.fascenter.samhsa.gov.

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Notice to Readers

Ground Water Awareness Week, March 13–19, 2005

Ground Water Awareness Week, held each year by the National Ground Water Association (NGWA), highlights ground water as a valuable resource and emphasizes to private well owners the importance of routine water quality testing and well maintenance (*1*).

Ground water is used for approximately half the U.S. drinking water supply (*2*). Most of that water is used by community water systems, which serve approximately 85% of the population (*3*). Under the Safe Drinking Water Act (SDWA), the U.S. Environmental Protection Agency (EPA) sets maximum levels for contaminants in drinking water and requires community systems to routinely test for contaminants of public health concern.

An estimated 15% of the population (43.5 million persons) rely on private ground-water wells as their primary source of water (*3*). Unlike community water systems, private water wells are not regulated by EPA, and the quality of the water source for many of these wells has not been assessed. Ground-water quality can be affected by local land uses, geologic factors, and characteristics of the aquifer from which water is extracted. Possible contaminants can include manufactured contaminants (e.g., pesticides, fertilizers, and industrial chemicals), natural contaminants (e.g., arsenic, fluoride, and radionuclides) and pathogens (e.g., coliform bacteria and viruses).

Because private wells are not protected by SDWA, NGWA recommends annual well maintenance checks and water tests for coliform bacteria, nitrates, and other contaminants or water constituents of local concern (*1,2*). Additional information about Ground Water Awareness Week, well maintenance, and water testing is available at http://www.ngwa.org/education/aware.html.

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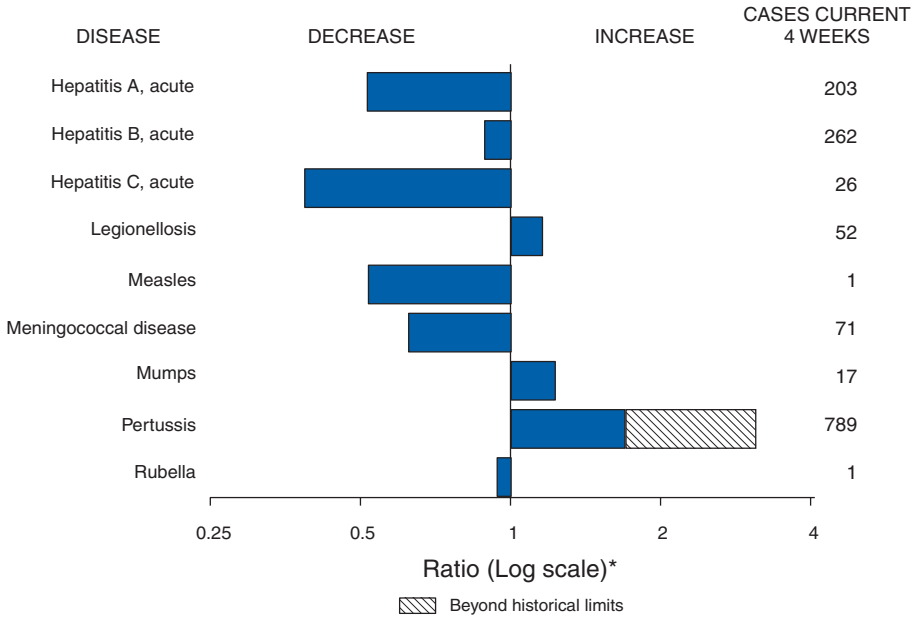
FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals March 5, 2005, with historical data



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

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending March 5, 2005 (9th Week)*

Disease	Cum. 2005	Cum. 2004	Disease	Cum. 2005	Cum. 2004
Anthrax	—	—	Hemolytic uremic syndrome, postdiarrheal†	10	10
Botulism:			HIV infection, pediatric†¶	31	49
foodborne	3	1	Influenza-associated pediatric mortality†**	15	—
infant	8	14	Measles	5††	6§§
other (wound & unspecified)	3	—	Mumps	47	35
Brucellosis	15	14	Plague	—	—
Chancroid	5	7	Poliomyelitis, paralytic	—	—
Cholera	—	2	Psittacosis†	2	2
Cyclosporiasis†	3	19	Q fever†	7	9
Diphtheria	—	—	Rabies, human	1	—
Domestic arboviral diseases			Rubella	4	7
(neuroinvasive & non-neuroinvasive):	—	—	Rubella, congenital syndrome	1	—
California serogroup†§	—	—	SARS†**	—	—
eastern equine†§	—	—	Smallpox†	—	—
Powassan†§	—	—	*Staphylococcus aureus*:		
St. Louis†§	—	—	Vancomycin-intermediate (VISA)†	—	—
western equine†§	—	—	Vancomycin-resistant (VRSA)†	—	—
Ehrlichiosis:	—	—	Streptococcal toxic-shock syndrome†	12	32
human granulocytic (HGE)†	10	9	Tetanus	1	1
human monocytic (HME)†	10	10	Toxic-shock syndrome	19	26
human, other and unspecified †	4	1	Trichinellosis¶¶	5	—
Hansen disease†	5	11	Tularemia†	2	4
Hantavirus pulmonary syndrome†	1	2	Yellow fever	—	—

—: No reported cases.
* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).
† Not notifiable in all states.
§ Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).
¶ Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention. Last update January 30, 2005.
** Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases.
†† Of five cases reported, three were indigenous and two were imported from another country.
§§ Of six case reported, none were indigenous and six were imported from another country.
¶¶ Formerly Trichinosis.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 5, 2005, and March 6, 2004 (9th Week)*

Reporting area	AIDS		Chlamydia†		Coccidioidomycosis		Cryptosporidiosis	
	Cum. 2005§	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	2,989	5,431	129,721	152,544	747	895	244	476
NEW ENGLAND	133	180	4,416	5,283	—	—	16	27
Maine	3	5	377	329	N	N	1	5
N.H.	2	5	295	309	—	—	4	6
Vt.¶	—	7	173	210	—	—	5	3
Mass.	47	49	2,432	2,412	—	—	3	10
R.I.	14	22	590	668	—	—	—	—
Conn.	67	92	549	1,355	N	N	3	3
MID. ATLANTIC	447	626	15,547	18,599	—	—	39	83
Upstate N.Y.	39	78	3,024	3,078	N	N	13	13
N.Y. City	221	300	4,582	6,281	—	—	8	24
N.J.	87	186	1,774	2,931	N	N	1	7
Pa.	100	62	6,167	6,309	N	N	17	39
E.N. CENTRAL	275	614	17,015	28,494	—	—	37	114
Ohio	59	155	2,286	7,452	N	N	20	28
Ind.	37	83	3,482	3,235	N	N	3	15
Ill.	147	278	5,704	8,000	—	—	—	20
Mich.	26	61	3,255	6,744	—	—	5	21
Wis.	6	37	2,288	3,063	N	N	9	30
W.N. CENTRAL	85	176	7,092	9,851	—	1	33	44
Minn.	35	33	1,194	2,041	N	N	6	13
Iowa	16	9	643	1,242	N	N	8	7
Mo.	17	82	3,158	3,649	—	—	12	13
N. Dak.	—	8	206	271	N	N	—	—
S. Dak.	3	—	491	400	—	—	2	4
Nebr.¶	—	8	404	913	—	1	—	—
Kans.	14	36	996	1,335	N	N	5	7
S. ATLANTIC	1,108	1,966	27,932	28,150	—	—	57	91
Del.	—	29	519	513	N	N	—	—
Md.	82	193	2,793	3,285	—	—	5	6
D.C.	28	96	615	623	—	—	1	2
Va.	58	76	4,329	3,807	—	—	6	7
W. Va.	12	23	439	516	N	N	4	—
N.C.	127	173	6,372	4,350	N	N	8	20
S.C.¶	42	135	3,690	2,806	—	—	—	2
Ga.	231	324	1,908	5,763	—	—	15	37
Fla.	528	917	7,267	6,487	N	N	18	17
E.S. CENTRAL	141	266	9,421	8,871	—	1	7	25
Ky.	25	39	2,262	978	N	N	1	5
Tenn.¶	59	109	3,503	3,660	N	N	2	11
Ala.¶	54	75	371	2,279	—	—	3	6
Miss.	3	43	3,285	1,954	—	1	1	3
W.S. CENTRAL	331	788	16,840	19,479	—	—	6	21
Ark.	35	42	1,419	1,306	—	—	—	7
La.	39	147	1,034	4,403	—	—	—	—
Okla.	43	27	1,622	1,547	N	N	4	6
Tex.¶	214	572	12,765	12,223	N	N	2	8
MOUNTAIN	112	191	8,463	8,878	488	604	15	20
Mont.	—	—	366	26	N	N	—	—
Idaho¶	1	2	275	620	N	N	—	—
Wyo.	—	—	180	174	—	—	—	2
Colo.	12	28	1,867	2,027	N	N	5	12
N. Mex.	17	19	537	1,283	1	6	2	1
Ariz.	57	104	3,717	3,203	472	581	3	4
Utah	8	9	553	538	2	4	2	—
Nev.¶	17	29	968	1,007	13	13	3	1
PACIFIC	357	624	22,995	24,939	259	289	34	51
Wash.	28	63	3,265	2,835	N	N	—	—
Oreg.¶	32	17	1,537	1,315	—	—	2	6
Calif.	291	514	17,005	19,196	259	289	32	44
Alaska	5	5	546	548	—	—	—	—
Hawaii	1	25	642	1,045	—	—	—	1
Guam	1	—	—	173	—	—	—	—
P.R.	1	141	585	348	N	N	N	N
V.I.	3	2	32	83	—	—	—	—
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	—	U	—	U	—	U

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

† Chlamydia refers to genital infections caused by *C. trachomatis*.

§ Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention. Last update January 30, 2005.

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending March 5, 2005, and March 6, 2004 (9th Week)*

Reporting area	*Escherichia coli*, Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped					
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	144	139	17	29	24	19	2,197	2,625	43,948	55,503
NEW ENGLAND	11	7	1	8	4	2	155	219	829	1,243
Maine	—	—	—	—	—	—	22	22	21	52
N.H.	—	1	—	—	—	—	6	5	22	20
Vt.	1	—	—	—	—	—	22	14	3	10
Mass.	4	2	—	3	4	2	92	114	498	522
R.I.	—	—	—	—	—	—	12	9	79	166
Conn.	6	4	1	5	—	—	1	55	206	473
MID. ATLANTIC	18	16	1	—	1	4	396	587	4,587	6,281
Upstate N.Y.	9	3	1	—	—	2	128	140	946	1,110
N.Y. City	1	5	—	—	—	—	92	210	1,224	2,077
N.J.	4	—	—	—	—	1	54	73	617	1,160
Pa.	4	8	—	—	1	1	122	164	1,800	1,934
E.N. CENTRAL	36	37	3	8	3	3	272	432	6,665	11,945
Ohio	16	11	1	—	2	3	97	130	1,141	3,955
Ind.	3	8	—	—	—	—	N	N	1,380	1,165
Ill.	5	6	1	—	—	—	20	154	2,365	3,464
Mich.	7	7	—	1	1	—	99	91	1,104	2,582
Wis.	5	5	1	7	—	—	56	57	675	779
W.N. CENTRAL	23	17	4	6	3	6	250	236	2,283	3,261
Minn.	3	9	1	2	—	—	102	75	368	792
Iowa	5	—	—	—	—	—	39	35	116	212
Mo.	9	3	2	4	1	1	53	81	1,296	1,502
N. Dak.	—	1	—	—	—	3	—	2	13	23
S. Dak.	2	—	—	—	—	—	15	8	58	35
Nebr.	3	1	1	—	1	—	20	16	106	219
Kans.	1	3	—	—	1	2	21	19	326	478
S. ATLANTIC	20	8	2	3	13	3	416	402	12,309	13,186
Del.	—	—	N	N	N	N	3	11	126	183
Md.	4	2	1	—	—	—	29	16	1,155	1,411
D.C.	—	—	—	—	—	—	10	13	382	404
Va.	1	—	—	2	2	—	80	50	1,585	1,670
W. Va.	—	—	—	—	—	—	4	1	133	154
N.C.	—	—	—	—	9	3	N	N	3,324	2,736
S.C.	—	—	—	—	—	—	7	6	1,627	1,409
Ga.	5	2	—	—	—	—	138	127	837	2,519
Fla.	10	4	1	1	2	—	145	178	3,140	2,700
E.S. CENTRAL	7	4	—	—	—	1	51	49	3,313	4,239
Ky.	—	1	—	—	—	1	N	N	675	447
Tenn.	4	1	—	—	—	—	21	23	1,282	1,402
Ala.	3	1	—	—	—	—	30	26	331	1,378
Miss.	—	1	—	—	—	—	—	—	1,025	1,012
W.S. CENTRAL	4	12	—	—	—	—	37	47	6,575	7,465
Ark.	1	—	—	—	—	—	16	22	742	609
La.	—	—	—	—	—	—	5	8	643	2,118
Okla.	1	3	—	—	—	—	16	17	770	716
Tex.	2	9	—	—	—	—	N	N	4,420	4,022
MOUNTAIN	7	16	6	3	—	—	180	233	1,906	2,118
Mont.	1	1	—	—	—	—	8	5	17	7
Idaho	1	3	4	—	—	—	19	36	14	12
Wyo.	—	—	1	—	—	—	1	1	8	9
Colo.	1	3	1	1	—	—	55	76	476	538
N. Mex.	—	2	—	1	—	—	8	9	100	160
Ariz.	2	2	N	N	N	N	36	45	776	897
Utah	2	2	—	—	—	—	45	44	94	54
Nev.	—	3	—	1	—	—	8	17	421	441
PACIFIC	18	22	—	1	—	—	440	420	5,481	5,765
Wash.	5	2	—	—	—	—	24	23	593	495
Oreg.	—	2	—	1	—	—	40	73	261	161
Calif.	9	15	—	—	—	—	354	305	4,412	4,758
Alaska	2	—	—	—	—	—	6	7	77	99
Hawaii	2	3	—	—	—	—	16	12	138	252
Guam	N	N	—	—	—	—	—	—	—	41
P.R.	—	—	—	—	—	—	6	4	58	27
V.I.	—	—	—	—	—	—	—	—	2	24
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	—	U	—	U	—	U	—	U	—	U

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending March 5, 2005, and March 6, 2004 (9th Week)*

Reporting area	*Haemophilus influenzae*, invasive							
	All ages		Age <5 years					
	All serotypes		Serotype b		Non-serotype b		Unknown serotype	
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	362	413	—	3	13	19	24	43
NEW ENGLAND	27	42	—	1	1	3	2	—
Maine	1	3	—	—	—	—	—	—
N.H.	—	9	—	—	—	1	—	—
Vt.	5	3	—	—	—	—	2	—
Mass.	11	20	—	1	—	1	—	—
R.I.	2	1	—	—	—	—	—	—
Conn.	8	6	—	—	1	1	—	—
MID. ATLANTIC	75	79	—	—	—	1	7	10
Upstate N.Y.	20	25	—	—	—	1	1	1
N.Y. City	13	14	—	—	—	—	1	3
N.J.	14	15	—	—	—	—	2	2
Pa.	28	25	—	—	—	—	3	4
E.N. CENTRAL	48	82	—	—	—	6	2	14
Ohio	29	27	—	—	—	2	2	4
Ind.	10	10	—	—	—	3	—	1
Ill.	2	22	—	—	—	—	—	5
Mich.	7	7	—	—	—	1	—	3
Wis.	—	16	—	—	—	—	—	1
W.N. CENTRAL	20	16	—	1	1	1	2	2
Minn.	7	6	—	—	1	1	—	—
Iowa	—	1	—	1	—	—	—	—
Mo.	11	5	—	—	—	—	2	2
N. Dak.	—	—	—	—	—	—	—	—
S. Dak.	—	—	—	—	—	—	—	—
Nebr.	1	4	—	—	—	—	—	—
Kans.	1	—	—	—	—	—	—	—
S. ATLANTIC	107	88	—	—	3	1	6	6
Del.	—	—	—	—	—	—	—	—
Md.	18	22	—	—	1	1	1	—
D.C.	—	—	—	—	—	—	—	—
Va.	6	9	—	—	—	—	—	—
W. Va.	2	4	—	—	—	—	—	2
N.C.	19	6	—	—	2	—	—	—
S.C.	2	2	—	—	—	—	—	—
Ga.	40	22	—	—	—	—	4	4
Fla.	20	23	—	—	—	—	1	—
E.S. CENTRAL	16	16	—	—	—	—	1	3
Ky.	—	—	—	—	—	—	—	—
Tenn.	14	9	—	—	—	—	—	2
Ala.	2	7	—	—	—	—	1	1
Miss.	—	—	—	—	—	—	—	—
W.S. CENTRAL	15	21	—	—	1	3	2	—
Ark.	—	—	—	—	—	—	—	—
La.	4	6	—	—	—	—	2	—
Okla.	11	15	—	—	1	3	—	—
Tex.	—	—	—	—	—	—	—	—
MOUNTAIN	42	52	—	1	7	3	1	6
Mont.	—	—	—	—	—	—	—	—
Idaho	1	2	—	—	—	—	—	1
Wyo.	1	—	—	—	—	—	—	—
Colo.	9	11	—	—	—	—	—	1
N. Mex.	6	14	—	—	2	1	—	3
Ariz.	17	24	—	—	3	2	1	1
Utah	3	1	—	1	—	—	—	—
Nev.	5	—	—	—	2	—	—	—
PACIFIC	12	17	—	—	—	1	1	2
Wash.	—	1	—	—	—	—	—	1
Oreg.	7	10	—	—	—	—	1	—
Calif.	2	5	—	—	—	1	—	1
Alaska	1	—	—	—	—	—	—	—
Hawaii	2	1	—	—	—	—	—	—
Guam	—	—	—	—	—	—	—	—
P.R.	—	—	—	—	—	—	—	—
V.I.	—	—	—	—	—	—	—	—
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	—	U	—	U	—	U	—	U

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending March 5, 2005, and March 6, 2004 (9th Week)*

Reporting area	Hepatitis (viral, acute), by type					
	A		B		C	
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	601	1,107	837	965	79	155
NEW ENGLAND	88	182	41	65	—	2
Maine	—	4	1	1	—	—
N.H.	5	2	2	6	—	—
Vt.	—	4	—	1	—	1
Mass.	70	154	34	31	—	1
R.I.	1	—	—	—	—	—
Conn.	12	18	4	26	—	—
MID. ATLANTIC	79	144	164	170	11	25
Upstate N.Y.	17	11	13	7	1	—
N.Y. City	30	52	8	33	—	—
N.J.	10	32	103	75	—	—
Pa.	22	49	40	55	10	25
E.N. CENTRAL	42	104	57	75	18	9
Ohio	16	12	29	31	—	1
Ind.	8	12	3	2	—	—
Ill.	4	42	—	—	—	1
Mich.	12	28	25	32	18	7
Wis.	2	10	—	10	—	—
W.N. CENTRAL	16	20	37	57	5	15
Minn.	—	—	—	5	—	—
Iowa	3	5	1	1	—	—
Mo.	9	4	25	43	5	15
N. Dak.	—	—	—	1	—	—
S. Dak.	—	2	—	—	—	—
Nebr.	2	6	7	5	—	—
Kans.	2	3	4	2	—	—
S. ATLANTIC	115	194	286	287	25	32
Del.	—	2	—	3	—	2
Md.	11	38	33	28	8	2
D.C.	—	2	—	4	—	1
Va.	15	10	37	17	—	3
W. Va.	1	1	3	—	—	1
N.C.	21	12	34	24	4	1
S.C.	2	3	6	10	—	—
Ga.	30	80	74	100	—	5
Fla.	35	46	99	101	13	17
E.S. CENTRAL	26	30	42	68	7	18
Ky.	2	2	13	6	—	7
Tenn.	18	19	15	22	4	5
Ala.	3	2	13	13	2	—
Miss.	3	7	1	27	1	6
W.S. CENTRAL	16	157	24	39	1	41
Ark.	1	21	9	17	—	—
La.	4	6	3	18	1	25
Okla.	1	8	—	3	—	—
Tex.	10	122	12	1	—	16
MOUNTAIN	74	73	91	64	5	4
Mont.	5	—	—	—	—	—
Idaho	4	3	3	2	—	—
Wyo.	—	—	—	1	—	—
Colo.	7	4	7	8	—	—
N. Mex.	4	3	3	3	—	1
Ariz.	47	52	67	33	—	2
Utah	5	10	9	9	4	—
Nev.	2	1	2	8	1	1
PACIFIC	145	203	95	140	7	9
Wash.	12	11	8	10	1	—
Oreg.	8	14	18	27	2	3
Calif.	120	173	68	100	4	4
Alaska	1	2	—	2	—	—
Hawaii	4	3	1	1	—	2
Guam	—	1	—	—	—	—
P.R.	—	4	1	5	—	—
V.I.	—	—	—	—	—	—
Amer. Samoa	U	U	U	U	U	U
C.N.M.I.	—	U	—	U	—	U

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
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TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending March 5, 2005, and March 6, 2004 (9th Week)*

Reporting area	Legionellosis		Listeriosis		Lyme disease		Malaria	
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	179	206	72	67	734	1,311	155	208
NEW ENGLAND	4	4	2	1	21	81	3	17
Maine	—	—	—	—	4	5	—	—
N.H.	—	—	1	—	8	—	1	—
Vt.	—	—	—	—	—	1	—	—
Mass.	4	3	—	—	5	68	2	13
R.I.	—	—	—	—	1	—	—	1
Conn.	—	1	1	1	3	7	—	3
MID. ATLANTIC	54	46	14	17	538	1,050	33	43
Upstate N.Y.	14	7	2	3	55	218	5	6
N.Y. City	—	—	3	2	—	—	12	20
N.J.	10	19	3	7	222	304	11	10
Pa.	30	20	6	5	261	528	5	7
E.N. CENTRAL	38	59	13	8	24	30	11	16
Ohio	21	29	4	3	22	8	3	3
Ind.	8	7	—	2	1	—	—	3
Ill.	—	11	—	—	—	—	1	2
Mich.	8	10	4	2	1	—	6	4
Wis.	1	2	5	1	U	22	1	4
W.N. CENTRAL	8	4	6	1	24	11	7	12
Minn.	—	—	1	—	22	3	1	6
Iowa	—	—	2	—	1	2	2	1
Mo.	7	3	2	1	1	6	3	3
N. Dak.	1	—	1	—	—	—	—	—
S. Dak.	—	1	—	—	—	—	—	—
Nebr.	—	—	—	—	—	—	—	—
Kans.	—	—	—	—	—	—	1	2
S. ATLANTIC	44	40	19	13	113	106	39	64
Del.	—	1	N	N	15	9	—	—
Md.	12	6	3	2	65	66	11	19
D.C.	1	2	—	—	1	1	—	3
Va.	3	3	2	—	3	1	5	4
W. Va.	1	1	—	1	—	—	1	—
N.C.	6	6	5	4	11	19	5	3
S.C.	—	1	—	—	3	1	—	3
Ga.	6	3	2	2	—	2	11	8
Fla.	15	17	7	4	15	7	6	24
E.S. CENTRAL	1	8	4	3	3	3	6	6
Ky.	—	2	—	1	—	—	1	1
Tenn.	—	3	2	2	3	1	4	—
Ala.	1	3	2	—	—	—	1	4
Miss.	—	—	—	—	—	2	—	1
W.S. CENTRAL	—	19	1	6	1	12	11	20
Ark.	—	—	—	—	—	—	1	1
La.	—	1	1	—	—	—	—	2
Okla.	—	2	—	—	—	—	—	1
Tex.	—	16	—	6	1	12	10	16
MOUNTAIN	13	12	—	1	—	4	11	6
Mont.	—	—	—	—	—	—	—	—
Idaho	—	1	—	—	—	1	—	—
Wyo.	2	2	—	—	—	1	1	—
Colo.	2	1	—	1	—	—	6	3
N. Mex.	1	—	—	—	—	—	—	1
Ariz.	3	2	—	—	—	1	2	—
Utah	2	5	—	—	—	1	2	1
Nev.	3	1	—	—	—	—	—	1
PACIFIC	17	14	13	17	10	14	34	24
Wash.	1	2	2	3	—	—	—	1
Oreg.	N	N	—	4	1	7	1	3
Calif.	16	12	11	10	8	7	32	20
Alaska	—	—	—	—	1	—	1	—
Hawaii	—	—	—	—	N	N	—	—
Guam	—	—	—	—	—	—	—	—
P.R.	—	—	—	—	N	N	—	—
V.I.	—	—	—	—	—	—	—	—
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	—	U	—	U	—	U	—	U

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending March 5, 2005, and March 6, 2004 (9th Week)*

Reporting area	Meningococcal disease									
	All serogroups		Serogroup A, C, Y, and W-135		Serogroup B		Other serogroup		Serogroup unknown	
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	203	336	17	23	13	11	—	—	173	302
NEW ENGLAND	22	12	1	2	—	—	—	—	21	10
Maine	1	2	—	—	—	—	—	—	1	2
N.H.	1	—	—	—	—	—	—	—	1	—
Vt.	3	1	—	—	—	—	—	—	3	1
Mass.	9	9	—	2	—	—	—	—	9	7
R.I.	2	—	—	—	—	—	—	—	2	—
Conn.	6	—	1	—	—	—	—	—	5	—
MID. ATLANTIC	29	50	7	14	2	4	—	—	20	32
Upstate N.Y.	8	17	1	3	1	2	—	—	6	12
N.Y. City	3	11	—	—	—	—	—	—	3	11
N.J.	8	5	—	—	—	—	—	—	8	5
Pa.	10	17	6	11	1	2	—	—	3	4
E.N. CENTRAL	16	33	5	5	3	2	—	—	8	26
Ohio	5	18	—	3	2	2	—	—	3	13
Ind.	4	5	—	—	1	—	—	—	3	5
Ill.	—	1	—	—	—	—	—	—	—	1
Mich.	5	2	5	2	—	—	—	—	—	—
Wis.	2	7	—	—	—	—	—	—	2	7
W.N. CENTRAL	16	14	1	—	—	1	—	—	15	13
Minn.	3	3	1	—	—	—	—	—	2	3
Iowa	4	2	—	—	—	1	—	—	4	1
Mo.	6	6	—	—	—	—	—	—	6	6
N. Dak.	—	—	—	—	—	—	—	—	—	—
S. Dak.	—	1	—	—	—	—	—	—	—	1
Nebr.	1	1	—	—	—	—	—	—	1	1
Kans.	2	1	—	—	—	—	—	—	2	1
S. ATLANTIC	31	58	2	1	3	1	—	—	26	56
Del.	—	1	—	—	—	—	—	—	—	1
Md.	5	4	1	—	2	—	—	—	2	4
D.C.	—	3	—	1	—	—	—	—	—	2
Va.	1	2	—	—	—	—	—	—	1	2
W. Va.	—	3	—	—	—	—	—	—	—	3
N.C.	4	7	1	—	1	1	—	—	2	6
S.C.	4	4	—	—	—	—	—	—	4	4
Ga.	6	5	—	—	—	—	—	—	6	5
Fla.	11	29	—	—	—	—	—	—	11	29
E.S. CENTRAL	11	15	—	—	1	—	—	—	10	15
Ky.	5	2	—	—	1	—	—	—	4	2
Tenn.	5	6	—	—	—	—	—	—	5	6
Ala.	—	3	—	—	—	—	—	—	—	3
Miss.	1	4	—	—	—	—	—	—	1	4
W.S. CENTRAL	14	36	1	1	1	—	—	—	12	35
Ark.	4	4	—	—	—	—	—	—	4	4
La.	6	11	—	1	1	—	—	—	5	10
Okla.	3	1	1	—	—	—	—	—	2	1
Tex.	1	20	—	—	—	—	—	—	1	20
MOUNTAIN	14	22	—	—	1	2	—	—	13	20
Mont.	—	1	—	—	—	—	—	—	—	1
Idaho	—	2	—	—	—	—	—	—	—	2
Wyo.	—	2	—	—	—	—	—	—	—	2
Colo.	6	7	—	—	—	—	—	—	6	7
N. Mex.	—	3	—	—	—	1	—	—	—	2
Ariz.	5	4	—	—	1	—	—	—	4	4
Utah	1	1	—	—	—	—	—	—	1	1
Nev.	2	2	—	—	—	1	—	—	2	1
PACIFIC	50	96	—	—	2	1	—	—	48	95
Wash.	9	3	—	—	2	1	—	—	7	2
Oreg.	10	23	—	—	—	—	—	—	10	23
Calif.	28	66	—	—	—	—	—	—	28	66
Alaska	—	1	—	—	—	—	—	—	—	1
Hawaii	3	3	—	—	—	—	—	—	3	3
Guam	—	—	—	—	—	—	—	—	—	—
P.R.	—	1	—	—	—	—	—	—	—	1
V.I.	—	—	—	—	—	—	—	—	—	—
Amer. Samoa	—	—	—	—	—	—	—	—	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending March 5, 2005, and March 6, 2004 (9th Week)*

Reporting area	Pertussis		Rabies, animal		Rocky Mountain spotted fever		Salmonellosis		Shigellosis	
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	2,552	1,428	534	915	97	83	3,409	4,221	1,288	1,938
NEW ENGLAND	124	312	95	38	—	3	171	186	33	38
Maine	7	—	6	2	N	N	10	8	—	—
N.H.	—	6	2	4	—	—	12	8	3	2
Vt.	35	12	—	4	—	—	13	5	2	—
Mass.	82	284	69	17	—	3	96	119	22	28
R.I.	—	—	2	—	—	—	4	7	1	—
Conn.	—	10	16	11	—	—	36	39	5	8
MID. ATLANTIC	320	387	86	89	1	8	351	576	117	198
Upstate N.Y.	100	228	38	42	—	—	87	94	27	64
N.Y. City	5	26	5	1	—	3	89	193	50	62
N.J.	29	55	N	N	—	—	57	131	33	46
Pa.	186	78	43	46	1	5	118	158	7	26
E.N. CENTRAL	674	236	4	3	2	—	310	680	79	186
Ohio	411	86	2	2	2	—	116	158	11	38
Ind.	42	6	1	1	—	—	36	43	12	13
Ill.	3	2	1	—	—	—	17	242	4	87
Mich.	34	20	—	—	—	—	73	110	42	25
Wis.	184	122	—	—	—	—	68	127	10	23
W.N. CENTRAL	318	73	35	62	2	2	250	222	115	51
Minn.	92	8	11	7	—	—	55	50	4	11
Iowa	9	21	9	8	—	—	54	39	15	3
Mo.	92	37	4	2	2	2	75	64	67	16
N. Dak.	12	1	1	9	—	—	3	5	1	1
S. Dak.	1	—	5	10	—	—	20	11	6	1
Nebr.	54	—	—	12	—	—	22	20	18	3
Kans.	58	6	5	14	—	—	21	33	4	16
S. ATLANTIC	177	80	152	500	74	58	1,112	957	258	533
Del.	—	—	—	1	—	—	1	6	—	2
Md.	33	27	17	55	4	1	86	65	13	21
D.C.	—	4	—	—	—	—	5	4	1	9
Va.	40	13	54	65	—	—	100	98	15	16
W. Va.	3	—	2	11	—	—	9	6	—	—
N.C.	19	16	71	90	57	52	225	137	26	89
S.C.	57	5	5	16	2	2	57	58	14	45
Ga.	3	3	—	55	9	3	200	156	81	115
Fla.	22	12	3	207	2	—	429	427	108	236
E.S. CENTRAL	69	22	14	53	2	10	159	230	98	100
Ky.	17	2	—	2	—	—	25	25	7	8
Tenn.	30	13	—	36	2	3	64	68	57	45
Ala.	17	3	14	11	—	1	61	91	30	31
Miss.	5	4	—	4	—	6	9	46	4	16
W.S. CENTRAL	12	10	108	149	—	1	204	380	222	441
Ark.	2	7	7	7	—	—	41	34	13	11
La.	1	2	—	—	—	1	45	41	13	42
Okla.	—	1	12	11	—	—	33	40	69	67
Tex.	9	—	89	131	—	—	85	265	127	321
MOUNTAIN	614	144	31	13	14	—	248	325	91	154
Mont.	169	4	—	—	—	—	13	11	—	3
Idaho	25	13	—	—	—	—	11	29	—	—
Wyo.	5	2	2	—	—	—	6	5	—	1
Colo.	280	77	—	—	—	—	67	77	11	28
N. Mex.	18	18	—	—	—	—	16	35	9	35
Ariz.	47	13	29	13	12	—	98	120	47	67
Utah	67	17	—	—	2	—	20	30	7	8
Nev.	3	—	—	—	—	—	17	18	17	12
PACIFIC	244	164	9	8	2	1	604	665	275	237
Wash.	48	42	—	—	—	—	47	33	9	10
Oreg.	149	33	—	—	—	—	25	53	12	11
Calif.	19	85	9	8	2	1	484	512	247	203
Alaska	9	1	—	—	—	—	11	19	3	3
Hawaii	19	3	—	—	—	—	37	48	4	10
Guam	—	—	—	—	—	—	—	5	—	9
P.R.	—	1	13	11	N	N	10	32	—	1
V.I.	—	—	—	—	—	—	—	—	—	—
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	—	U	—	U	—	U	—	U	—	U

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending March 5, 2005, and March 6, 2004 (9th Week)*

Reporting area	Streptococcal disease, invasive, group A		*Streptococcus pneumoniae*, invasive disease				Syphilis			
			Drug resistant, all ages		Age <5 years		Primary & secondary		Congenital	
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004
UNITED STATES	821	983	451	503	110	142	991	1,213	25	82
NEW ENGLAND	27	53	2	1	10	15	36	19	—	—
Maine	1	1	N	N	—	—	1	—	—	—
N.H.	2	5	—	—	—	N	3	1	—	—
Vt.	4	—	2	—	—	—	—	—	—	—
Mass.	20	45	—	—	10	14	31	8	—	—
R.I.	—	2	—	1	—	1	—	1	—	—
Conn.	—	—	—	—	U	U	1	9	—	—
MID. ATLANTIC	150	162	51	31	26	14	113	159	4	14
Upstate N.Y.	57	49	19	11	16	7	10	7	2	1
N.Y. City	8	34	U	U	U	U	77	100	1	3
N.J.	31	34	N	N	2	—	17	27	—	9
Pa.	54	45	32	20	8	7	9	25	1	1
E.N. CENTRAL	100	212	94	122	29	37	84	128	1	20
Ohio	33	54	69	96	19	19	40	39	—	—
Ind.	16	11	25	26	6	6	9	8	—	5
Ill.	2	65	—	—	1	—	27	56	—	2
Mich.	45	63	—	N	—	N	5	21	—	13
Wis.	4	19	N	N	3	12	3	4	1	—
W.N. CENTRAL	45	81	10	2	11	13	26	34	—	—
Minn.	15	36	—	—	4	7	1	5	—	—
Iowa	N	N	N	N	—	N	—	1	—	—
Mo.	15	15	9	2	—	3	22	20	—	—
N. Dak.	1	3	—	—	1	—	—	—	—	—
S. Dak.	4	5	1	—	—	—	—	—	—	—
Nebr.	7	6	—	—	2	2	1	5	—	—
Kans.	3	16	N	N	4	1	2	3	—	—
S. ATLANTIC	195	175	212	243	13	10	282	305	5	11
Del.	—	—	—	1	—	N	2	1	—	—
Md.	63	43	—	—	12	7	60	47	1	3
D.C.	2	2	2	3	1	3	17	13	—	—
Va.	7	9	N	N	—	N	14	3	2	1
W. Va.	4	6	1	9	—	—	2	2	—	—
N.C.	19	21	N	N	U	U	48	28	1	—
S.C.	—	2	—	17	—	N	12	23	—	2
Ga.	41	44	79	77	—	N	6	51	—	1
Fla.	59	48	130	136	—	N	121	137	1	4
E.S. CENTRAL	25	49	31	37	—	—	67	64	3	3
Ky.	8	20	7	8	N	N	3	12	—	—
Tenn.	17	29	24	29	—	N	23	28	1	1
Ala.	—	—	—	—	—	N	37	15	2	1
Miss.	—	—	—	—	—	—	4	9	—	1
W.S. CENTRAL	29	84	21	23	12	38	180	182	10	20
Ark.	6	2	6	3	—	1	11	11	—	2
La.	3	1	15	20	4	9	12	34	—	—
Okla.	20	13	N	N	8	14	8	5	1	2
Tex.	—	68	N	N	—	14	149	132	9	16
MOUNTAIN	170	62	16	10	9	15	46	66	2	1
Mont.	—	—	—	—	—	—	3	—	—	—
Idaho	1	1	N	N	—	N	6	5	—	—
Wyo.	1	3	2	4	—	—	—	1	—	—
Colo.	69	20	N	N	8	14	1	12	—	—
N. Mex.	13	27	—	4	—	—	6	21	—	1
Ariz.	73	3	N	N	—	N	22	23	2	—
Utah	13	8	13	1	1	1	—	2	—	—
Nev.	—	—	1	1	—	—	8	2	—	—
PACIFIC	80	105	14	34	—	—	157	256	—	13
Wash.	N	N	N	N	N	N	27	12	—	—
Oreg.	N	N	N	N	—	N	1	9	—	—
Calif.	60	80	N	N	—	N	127	232	—	13
Alaska	—	—	—	—	—	N	—	—	—	—
Hawaii	20	25	14	34	—	—	2	3	—	—
Guam	—	—	—	—	—	—	—	—	—	—
P.R.	N	N	N	N	—	N	23	20	3	—
V.I.	—	—	—	—	—	—	—	4	—	—
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	—	U	—	U	—	U	—	U	—	U

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.
* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending March 5, 2005, and March 6, 2004 (9th Week)*

Reporting area	Tuberculosis		Typhoid fever		Varicella (chickenpox)		West Nile virus disease†		
							Neuroinvasive		Non-neuroinvasive§
	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005	Cum. 2004	Cum. 2005
UNITED STATES	931	1,595	24	45	3,388	3,238	—	—	—
NEW ENGLAND	39	46	—	6	71	154	—	—	—
Maine	—	—	—	—	60	7	—	—	—
N.H.	2	—	—	—	—	—	—	—	—
Vt.	—	—	—	—	10	147	—	—	—
Mass.	26	24	—	6	1	—	—	—	—
R.I.	—	9	—	—	—	—	—	—	—
Conn.	11	13	—	—	—	—	—	—	—
MID. ATLANTIC	279	262	6	11	594	9	—	—	—
Upstate N.Y.	25	27	—	—	—	—	—	—	—
N.Y. City	163	159	1	5	—	—	—	—	—
N.J.	53	42	2	4	—	—	—	—	—
Pa.	38	34	3	2	594	9	—	—	—
E.N. CENTRAL	162	137	1	2	1,489	1,377	—	—	—
Ohio	25	24	—	1	250	398	—	—	—
Ind.	17	30	1	—	N	N	—	—	—
Ill.	94	64	—	—	2	—	—	—	—
Mich.	13	10	—	1	1,153	831	—	—	—
Wis.	13	9	—	—	84	148	—	—	—
W.N. CENTRAL	49	46	1	—	22	41	—	—	—
Minn.	18	17	1	—	—	—	—	—	—
Iowa	7	5	—	—	N	N	—	—	—
Mo.	15	16	—	—	1	—	—	—	—
N. Dak.	1	—	—	—	2	22	—	—	—
S. Dak.	—	—	—	—	19	19	—	—	—
Nebr.	1	2	—	—	—	—	—	—	—
Kans.	7	6	—	—	—	—	—	—	N
S. ATLANTIC	178	321	4	7	350	304	—	—	—
Del.	—	3	—	—	1	—	—	—	—
Md.	28	21	1	2	—	—	—	—	—
D.C.	20	4	—	—	—	4	—	—	—
Va.	—	18	—	1	28	23	—	—	—
W. Va.	6	4	—	—	289	233	—	—	N
N.C.	20	17	1	2	—	N	—	—	—
S.C.	20	16	—	—	32	44	—	—	—
Ga.	2	112	1	—	—	—	—	—	—
Fla.	82	126	1	2	—	—	—	—	—
E.S. CENTRAL	58	75	2	—	—	—	—	—	—
Ky.	19	6	1	—	N	N	—	—	—
Tenn.	39	26	1	—	—	—	—	—	—
Ala.	—	30	—	—	—	—	—	—	—
Miss.	—	13	—	—	—	—	—	—	—
W.S. CENTRAL	30	329	—	5	169	885	—	—	—
Ark.	11	13	—	—	—	—	—	—	—
La.	—	—	—	—	4	30	—	—	—
Okla.	19	20	—	—	—	—	—	—	—
Tex.	—	296	—	5	165	855	—	—	—
MOUNTAIN	15	45	1	2	693	468	—	—	—
Mont.	—	—	—	—	—	—	—	—	—
Idaho	—	—	—	—	—	—	—	—	—
Wyo.	—	—	—	—	26	11	—	—	—
Colo.	—	11	—	—	487	309	—	—	—
N. Mex.	1	5	—	—	36	16	—	—	—
Ariz.	12	19	1	1	—	—	—	—	—
Utah	2	9	—	1	144	132	—	—	—
Nev.	—	1	—	—	—	—	—	—	—
PACIFIC	121	334	9	12	—	—	—	—	—
Wash.	36	37	—	1	N	N	—	—	—
Oreg.	12	11	1	—	—	—	—	—	—
Calif.	50	257	5	8	—	—	—	—	—
Alaska	2	7	—	—	—	—	—	—	—
Hawaii	21	22	3	3	—	—	—	—	—
Guam	—	12	—	—	—	16	—	—	—
P.R.	—	5	—	—	22	70	—	—	—
V.I.	—	—	—	—	—	—	—	—	—
Amer. Samoa	U	U	U	U	U	U	U	U	—
C.N.M.I.	—	U	—	U	—	U	—	U	—

N: Not notifiable. U: Unavailable. —: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* Incidence data for reporting years 2004 and 2005 are provisional and cumulative (year-to-date).

† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases (ArboNet Surveillance).

§ Not previously notifiable.

TABLE III. Deaths in 122 U.S. cities,* week ending March 5, 2005 (9th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45–64	25–44	1–24	<1	
NEW ENGLAND	577	408	106	39	10	14	70
Boston, Mass.	138	88	29	13	2	6	24
Bridgeport, Conn.	43	28	7	4	1	3	5
Cambridge, Mass.	16	11	3	2	—	—	—
Fall River, Mass.	34	27	7	—	—	—	2
Hartford, Conn.	76	51	15	5	3	2	10
Lowell, Mass.	26	22	3	1	—	—	6
Lynn, Mass.	9	6	2	—	1	—	—
New Bedford, Mass.	29	24	4	1	—	—	2
New Haven, Conn.	U	U	U	U	U	U	U
Providence, R.I.	47	38	7	1	1	—	4
Somerville, Mass.	1	—	1	—	—	—	—
Springfield, Mass.	51	38	6	5	—	2	6
Waterbury, Conn.	32	21	9	2	—	—	6
Worcester, Mass.	75	54	13	5	2	1	5
MID. ATLANTIC	2,429	1,720	471	157	50	28	157
Albany, N.Y.	49	32	12	4	—	1	5
Allentown, Pa.	37	34	1	1	—	1	3
Buffalo, N.Y.	89	65	15	5	1	3	13
Camden, N.J.	33	19	8	3	2	1	1
Elizabeth, N.J.	14	12	1	1	—	—	1
Erie, Pa.	49	42	4	2	1	—	8
Jersey City, N.J.	60	44	12	2	1	1	—
New York City, N.Y.	1,171	819	251	62	26	10	63
Newark, N.J.	68	41	11	11	3	2	4
Paterson, N.J.	23	14	—	7	—	2	—
Philadelphia, Pa.	388	252	80	40	12	4	10
Pittsburgh, Pa.§	37	29	7	—	—	1	2
Reading, Pa.	32	27	3	2	—	—	4
Rochester, N.Y.	132	108	17	5	2	—	16
Schenectady, N.Y.	26	18	5	2	1	—	6
Scranton, Pa.	28	21	6	1	—	—	2
Syracuse, N.Y.	127	98	21	5	1	2	16
Trenton, N.J.	30	17	11	2	—	—	1
Utica, N.Y.	13	9	3	1	—	—	1
Yonkers, N.Y.	23	19	3	1	—	—	1
E.N. CENTRAL	2,385	1,642	532	118	48	45	236
Akron, Ohio	62	47	11	—	3	1	17
Canton, Ohio	47	34	12	1	—	—	2
Chicago, Ill.	299	184	86	19	7	3	36
Cincinnati, Ohio	93	70	18	4	—	1	7
Cleveland, Ohio	276	206	57	5	2	6	21
Columbus, Ohio	248	168	61	14	3	2	33
Dayton, Ohio	155	116	26	8	3	2	19
Detroit, Mich.	221	125	69	15	8	4	18
Evansville, Ind.	58	43	10	3	1	1	3
Fort Wayne, Ind.	73	54	15	3	—	1	9
Gary, Ind.	11	4	2	3	2	—	—
Grand Rapids, Mich.	63	38	12	5	4	4	11
Indianapolis, Ind.	239	150	55	18	5	11	19
Lansing, Mich.	54	41	11	1	1	—	5
Milwaukee, Wis.	126	97	23	3	3	—	12
Peoria, Ill.	51	42	5	1	—	3	3
Rockford, Ill.	57	41	10	3	3	—	2
South Bend, Ind.	66	46	9	6	2	3	5
Toledo, Ohio	126	88	31	4	1	2	11
Youngstown, Ohio	60	48	9	2	—	1	3
W.N. CENTRAL	618	419	140	30	13	15	57
Des Moines, Iowa	60	31	24	3	1	1	6
Duluth, Minn.	51	43	6	2	—	—	3
Kansas City, Kans.	2	1	1	—	—	—	—
Kansas City, Mo.	96	64	20	7	1	4	2
Lincoln, Nebr.	50	38	10	1	—	1	7
Minneapolis, Minn.	63	46	9	3	2	3	6
Omaha, Nebr.	96	74	17	2	—	3	16
St. Louis, Mo.	141	81	38	11	7	3	9
St. Paul, Minn.	55	41	12	1	1	—	8
Wichita, Kans.	4	—	3	—	1	—	—
S. ATLANTIC	1,241	797	274	106	31	18	98
Atlanta, Ga.	21	9	8	3	1	—	—
Baltimore, Md.	235	142	61	24	5	3	27
Charlotte, N.C.	128	91	23	8	4	2	19
Jacksonville, Fla.	167	104	39	16	4	4	14
Miami, Fla.	95	66	18	9	1	1	2
Norfolk, Va.	50	34	12	4	—	—	4
Richmond, Va.	102	57	18	7	4	1	2
Savannah, Ga.	73	49	17	5	1	1	5
St. Petersburg, Fla.	47	35	9	1	—	2	5
Tampa, Fla.	197	138	34	17	5	3	15
Washington, D.C.	100	54	28	12	5	1	3
Wilmington, Del.	26	18	7	—	1	—	2
E.S. CENTRAL	955	662	198	64	14	17	80
Birmingham, Ala.	213	149	40	17	2	5	19
Chattanooga, Tenn.	106	77	19	5	3	2	6
Knoxville, Tenn.	133	101	22	7	2	1	14
Lexington, Ky.	47	31	10	2	—	4	4
Memphis, Tenn.	165	113	32	15	3	2	10
Mobile, Ala.	82	51	24	5	1	1	4
Montgomery, Ala.	66	49	11	5	1	—	8
Nashville, Tenn.	143	91	40	8	2	2	15
W.S. CENTRAL	1,736	1,179	369	120	34	34	150
Austin, Tex.	104	73	20	5	2	4	21
Baton Rouge, La.	58	42	11	3	1	1	—
Corpus Christi, Tex.	50	37	11	1	—	1	6
Dallas, Tex.	257	160	62	23	7	5	27
El Paso, Tex.	85	59	14	9	3	—	7
Ft. Worth, Tex.	153	106	30	11	5	1	11
Houston, Tex.	437	294	89	33	10	11	32
Little Rock, Ark.	84	50	23	6	1	4	12
New Orleans, La.	37	22	12	3	—	—	—
San Antonio, Tex.	263	193	54	12	3	1	18
Shreveport, La.	77	49	19	4	1	4	4
Tulsa, Okla.	131	94	24	10	1	2	12
MOUNTAIN	1,220	833	250	79	39	16	112
Albuquerque, N.M.	110	83	17	6	3	1	11
Boise, Idaho	64	44	13	3	4	—	8
Colo. Springs, Colo.	66	45	15	4	2	—	5
Denver, Colo.	106	63	20	11	8	4	9
Las Vegas, Nev.	309	201	76	26	6	—	35
Ogden, Utah	35	32	1	1	—	1	2
Phoenix, Ariz.	203	123	52	15	7	4	14
Pueblo, Colo.	32	24	8	—	—	—	6
Salt Lake City, Utah	121	79	23	6	8	4	12
Tucson, Ariz.	174	139	25	7	1	2	10
PACIFIC	2,073	1,471	419	110	47	26	215
Berkeley, Calif.	12	8	3	1	—	—	1
Fresno, Calif.	137	91	33	10	2	1	15
Glendale, Calif.	16	11	5	—	—	—	2
Honolulu, Hawaii	89	67	17	4	1	—	10
Long Beach, Calif.	78	54	17	3	4	—	14
Los Angeles, Calif.	340	236	71	17	9	7	28
Pasadena, Calif.	39	32	4	2	1	—	8
Portland, Oreg.	229	165	44	11	3	6	15
Sacramento, Calif.	226	155	45	17	6	3	28
San Diego, Calif.	190	136	38	7	5	4	19
San Francisco, Calif.	151	101	30	16	3	1	23
San Jose, Calif.	229	172	36	12	7	2	30
Santa Cruz, Calif.	29	22	5	1	1	—	3
Seattle, Wash.	123	89	29	2	3	—	5
Spokane, Wash.	57	41	13	1	1	1	9
Tacoma, Wash.	128	91	29	6	1	1	5
TOTAL	13,234¶	9,131	2,759	823	286	213	1,175

U: Unavailable. —: No reported cases.

* Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

† Pneumonia and influenza.

§ Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶ Total includes unknown ages.

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