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WEEKLY REPORT

Coccidioidomycosis in Workers at an Archeologic Site — Dinosaur National Monument, Utah, June–July 2001

Coccidioidomycosis is a fungal infection caused by inhalation of airborne *Coccidioides immitis* spores that are present in the arid soil of the southwestern United States, California, and parts of Central and South America. Infection with *C. immitis* previously has not been diagnosed in patients outside these areas, except in travelers returning from areas where the disease is endemic (*1*). This report describes an outbreak of coccidioidomycosis in workers at an archeologic site in northeastern Utah during June–July, 2001, and represents the first identification of coccidioidomycosis in northern Utah. Health-care providers should consider coccidioidomycosis in the differential diagnosis for patients with compatible illness who reside in or recently have traveled to this area. Interventions to minimize soil disturbance and dust inhalation can reduce the risk for coccidioidomycosis.

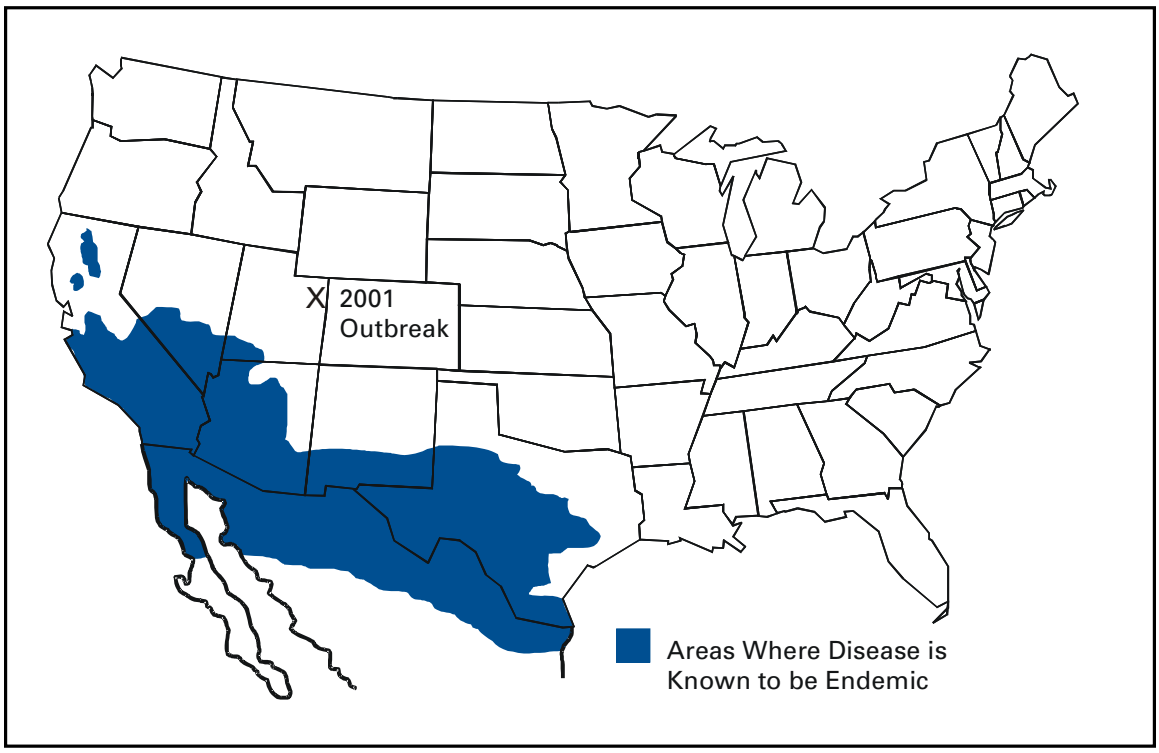
Dinosaur National Monument (DNM) encompasses 320 square miles in northeastern Utah and northwestern Colorado; 397,800 persons visited DNM in 2000 (Figure 1). On June 18, 2001, under the direction of National Park Service (NPS) archeologists, six student volunteers and two leaders began work at an archeologic site in DNM. Work included laying stone steps, building a retaining wall, and sifting dirt for artifacts. Peak dust exposure occurred on June 19, the day most sifting occurred. Workers did not wear protective facemasks. During June 29–July 3, all eight team members and two NPS archeologists who had worked at the site sought medical care at a local hospital emergency department for respiratory and systemic symptoms. All 10 persons had diffuse pulmonary infiltrates on chest radiographs; eight were hospitalized with pneumonia of unknown etiology. Pending investigation, NPS closed the work site to all visitors and staff, and the TriCounty Health Department alerted the public. On July 2, the TriCounty Health Department, the Utah Department of Health, and CDC initiated an investigation to identify the risk factors, cause, and extent of the outbreak.

During July 2–4, a total of 18 persons (the eight team members and 10 archeologists) with potential exposure to dust at the work site in June were interviewed using a standardized questionnaire to determine symptoms and previous activities. Hospital records were reviewed to ascertain clinical information. A case was defined as an illness with onset of at least two selected symptoms (i.e., self-reported fever, difficulty breathing, and cough) after June 18 in a person working at DNM.

Illness in 10 persons, including all eight team members and two NPS archeologists, met the case definition. Median age was 17 years (range: 16–29 years). Illness onset occurred during June 28–July 1. The most common symptoms included difficulty

Coccidioidomycosis — Continued

FIGURE 1. Geographic distribution of *Coccidioides immitis* and location of coccidioidomycosis outbreak — Utah, 2001



Source: U.S. Geological Survey.

breathing (10), fever (10), cough (nine), fatigue (eight), shortness of breath (seven), myalgia (six), and generalized skin rash (six). All 10 persons present at the work site on June 19 had illness that met the case definition, compared with none of the eight who did not work that day (Fisher exact p-value=0.00002). One ill person had visited the work site only on June 19 and had illness onset on June 29.

Results of blood cultures from the hospitalized persons were negative for bacterial pathogens. Initial serologic tests were negative for antibodies to *Francisella tularensis*, *Yersinia pestis*, *Mycoplasma* species, *Histoplasma capsulatum*, and *C. immitis*. On further analysis, using serum specimens concentrated 3–5 fold in an assay that detects IgM antibodies (immunodiffusion tube precipitin), nine of the 10 acute serum specimens from patients contained IgM antibodies to *C. immitis,* confirming the diagnosis of acute coccidioidomycosis (*2*). All hospitalized patients were treated with fluconazole. The average length of hospital stay was 1.5 days.

Because approximately 60% of infections with *C. immitis* are asymptomatic, a serosurvey of park employees was conducted during August 15–17 to identify other infected persons and to guide prevention and control measures (*1,3*). Of the 40 park employees participating in the serosurvey, three (7.5%) reported "flu-like illness" since June. None of the 40 had detectable IgM or IgG antibodies to *C. immitis*. These results suggest that infection with *C. immitis* during the preceding 12 weeks was unlikely (*2,4*).

Investigation of the work site on July 3 revealed a desert environment with the ground covered with bedonite, a fine, alkaline soil that can provide a conducive environment for *C. immitis* spores. NPS is working with the U.S. Geological Survey to conduct mycologic studies of the soil (M. Bultman, personal communication, October 2001).

Coccidioidomycosis — Continued

On August 24, the state and local health departments jointly recommended that employees minimize soil disturbance and dust inhalation (e.g., watering down the soil and wearing National Institute for Occupational Safety and Health [NIOSH]-approved N95 respirators) at the work site to reduce their risk for *C. immitis* infection. During September 24–27, four NPS employees completed work on the retaining wall and steps. Subsequently, one developed respiratory illness consistent with coccidioidomycosis and laboratory evidence of acute infection (IgM and rising titer of IgG to *C. immitis*).

The site reopened on September 28. NPS guidelines advise DNM visitors to stay on maintained trails to avoid raising dust or stepping on native soil. Visitors' risk for infection with *C. immitis* should be minimal because their exposure to inhaled dust is substantially lower than that experienced by the persons in this outbreak. However, additional measures are being considered to minimize risk for visitors, including warnings to avoid the site when wind conditions are conducive to dust exposure. Surveillance is ongoing at area hospitals.

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Editorial Note: DNM is located approximately 200 miles north of the area of Utah where *C. immitis* is endemic. Soil disturbances can aerosolize *C. immitis* spores (arthroconidia) and result in coccidioidomycosis outbreaks (*5*). Other ground-disturbing activities, such as construction or archeology digs, may increase the risk for infection (*3,6*). A similar point-source outbreak of coccidioidomycosis occurred in 1970 among archeology students in an area of northern California where *C. immitis* was not known to be endemic. In both of these outbreaks, a high attack rate of symptomatic infection was reported (*7*).

Symptoms of acute coccidioidomycosis include fever, headache, rash, muscle aches, dry cough, weight loss, and malaise. Most infections are asymptomatic or self-limited and resolve without antimicrobial treatment in patients with healthy immune systems. In rare instances, severe lung disease or disseminated infection can develop in patients; susceptibility is higher in immunocompromised persons, pregnant women, and persons of African or Asian descent (*8*).

Because infection with *C. immitis* results in long-term immunity, the coccidioidin or spherulin skin test, which detects T-cell mediated delayed-type hypersensitivity to *C. immitis*, is the best method to screen for past infection (*3*). However, the coccidioidin skin test is not available in the United States. Therefore, a serosurvey was used to assess for subclinical cases of infection in this outbreak. In previous studies of asymptomatic persons who had positive skin tests, 7% had positive serologies; the time of exposure in those persons was unknown (*4*). The sensitivity of the serologic test is low for remote past infection and unknown for recent asymptomatic infection (*4*). Therefore, this investigation was unable to establish the prevalence of previous infection among tested NPS employees.

In settings where coccidioidomycosis outbreaks have occurred, measures to minimize soil disturbance and dust inhalation reduce the risk for inhalation of *C. immitis* spores (*3,6*). The most recent case indicates an ongoing risk for infection at the site associated with this outbreak and the importance of adherence to recommendations for

Coccidioidomycosis — Continued

respiratory protection (e.g., NIOSH-approved N95 respirators that are properly fitted and consistently worn) when dust exposure is unavoidable.

The outbreak in this location indicates that areas where *C. immitis* is endemic may extend farther north than previously documented. Surveillance should be continued in these areas. In addition, health-care providers should be alert for coccidioidomycosis cases in persons who reside in or have traveled to these areas and who may have been exposed to dust from disturbed soil.

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Update: Investigation of Bioterrorism-Related Anthrax, 2001

This report updates the investigation of bioterrorism-related anthrax and the provision of antimicrobial prophylaxis to exposed persons and highlights CDC assistance to other countries investigating cases of bioterrorism-related anthrax. Since November 7, 2001, CDC and state and local public health agencies have identified no new cases of bioterrorism-related anthrax. As of November 14, a total of 22 cases of anthrax has met the CDC case definition (*1*); 10 were confirmed inhalational anthrax, and 12 (seven confirmed and five suspected) were cutaneous anthrax. Investigation of a case of inhalational anthrax in a hospital stock room worker aged 61 years in New York City (NYC) found no evidence of anthrax contamination at the work site or home; the source of exposure is unknown. Environmental clean-up of contaminated facilities continues, and surveillance for new cases of bioterrorism-related anthrax is ongoing in Delaware (DE), District of Columbia (DC), Florida (FL), Maryland (MD), New Jersey (NJ), NYC, Pennsylvania (PA), Virginia (VA), and other states.

Use of Antimicrobial Prophylaxis

A 60-day course of antibiotics to prevent inhalational anthrax has been recommended for persons potentially exposed to *Bacillus anthracis* aerosols in FL, NJ, NYC, VA, and DC. These recommendations are for persons at risk for inhalational anthrax by 1) the presence of an inhalational case at a facility (e.g., media company in FL),

Update: Investigation of Bioterrorism-Related Anthrax — Continued

2) environmental specimens positive for *B. anthracis* in facilities along the path of a contaminated letter in which aerosolization might have occurred (e.g., postal facilities in NYC), and 3) exposure to an air space known to be contaminated with aerosolized *B. anthracis* from an opened letter (e.g., Senate office building in DC). These persons should receive a full 60-day course of antimicrobial prophylaxis. Specific recommendations by site include:

- Boca Raton, FL—prophylaxis is recommended for employees and visitors who spent >1 hour during August 1–October 6 in the American Media, Inc., building.
- New York City, NY—prophylaxis is recommended for all employees who worked during October 9–26 on the second and third floors of the south section of the Morgan Central Postal Facility in Manhattan.
- Hamilton Township, NJ—prophylaxis is recommended for all employees and business visitors (i.e., temporary postal workers, vendors, contractors, and anyone in nonpublic work sites) who were in the U.S. Postal Service Route 130 Processing and Distribution Center during September 18–October 18.
- Washington, DC (Capitol Hill)—prophylaxis is recommended for persons who were on the fifth and sixth floors of the southeast wing of the Senate Hart Building on October 15, from 9 a.m. to 7 p.m.
- Washington, DC—prophylaxis is recommended for all employees and business visitors to the nonpublic mail room of the U.S. Postal Service Processing and Distribution Center at 900 Brentwood Road during October 12–21.
- Sterling, VA—prophylaxis is recommended for all mail room employees and business visitors who were at the Department of State Annex 32 mail room facility during October 12–22.

In addition, a 60-day course of antimicrobial prophylaxis is recommended for other workers with specified risks for inhalational anthrax. In some areas, local health authorities facilitated access to a 60-day course of antimicrobial prophylaxis for persons who handled mail in facilities from which *B. anthracis* was isolated but did not have exposures for which antimicrobial prophylaxis is recommended (*2*). These persons may choose or may be directed by local health authorities to discontinue antimicrobial prophylaxis before completing a 60-day course.

CDC Assistance to Other Countries

CDC has assisted authorities in other countries investigating cases of bioterrorism-related anthrax. During October 12–November 13, CDC received 111 requests from 66 countries. Of these, 47 (42%) requests were laboratory related; 43 (39%) were general requests for bioterrorism information; 13 (12%) were for environmental or occupational health guidelines; and eight (7%) were about developing bioterrorism preparedness plans. The largest proportion of requests were from Central and South America (26%). Of the 66 countries, 15 (23%) received laboratory assistance, including testing or arrangements for testing of suspected isolates at a CDC-supported laboratory or a reference laboratory in another country. Forty-two (64%) countries received telephone or e-mail consultation regarding specific tests for suspected *B. anthracis* isolates. CDC has confirmed two isolates from outside the United States as *B. anthracis*. These isolates were recovered from the outer surface of letters or packages sent in State Department pouches to the U.S. Embassy in Peru. These items were processed at the U.S. State Department mail sorting facility where a case of inhalational anthrax had occurred (*1*). No cases of bioterrorism-related anthrax have been confirmed in U.S. Embassy

employees or in persons from other countries. Requests for information regarding bioterrorism-related issues outside the United States should be directed to the International Team of CDC's Emergency Operations Center (telephone, [770] 488-7100, e-mail, eocinternational@cdc.gov).

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Editorial Note: Since the previous report, all patients with bioterrorism-related anthrax who were hospitalized have been discharged and continue to recover; no new cases have been reported. The source of these bioterrorist attacks has not been identified, and additional cases might occur. Public health authorities, health-care providers, and laboratorians should remain vigilant for cases of anthrax.

Antimicrobial prophylaxis is indicated to prevent inhalational anthrax after a confirmed or suspected aerosol exposure. Persons recommended to receive prophylaxis should complete the 60-day regimen. Public health programs should work with health-care providers and patients to promote completion of antimicrobial prophylaxis and to monitor the occurrence of adverse events (*1*).

CDC continues to respond to inquiries about anthrax and bioterrorism. The CDC Public Response Hotline was established to provide the public with information about anthrax and other biologic and chemical agents. During November 1–12, CDC received approximately 4,400 calls through the hotline and to the Emergency Operations Center. The hotline is available in English (888-246-2675) and Spanish (888-246-2857). CDC also receives requests for information by e-mail through the Health Alert Network (<healthalert@cdc.gov>), *MMWR* (<http://www.cdc/gov/mmwr/contact.html>), and other public health communications systems.

Additional information about anthrax is available at <http://www.bt.cdc.gov>. A compendium of *MMWR* reports and recommendations related to anthrax and bioterrorism is available at <http://www.cdc.gov/mmwr>.

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n-Hexane–Related Peripheral Neuropathy Among Automotive Technicians — California, 1999–2000

Solvents, glues, spray paints, coatings, silicones, and other products contain normal (n-) hexane, a petroleum distillate and simple aliphatic hydrocarbon. n-Hexane is an isomer of hexane and was identified as a peripheral neurotoxin in 1964 (*1*). Since then, many cases of n-hexane–related neurotoxicity have occurred in printing plants, sandal shops, and furniture factories in Asia, Europe, and the United States (*2*). This report describes an investigation of n-hexane–associated peripheral neuropathy in an automotive technician, an occupation in which this condition has not been reported, and summarizes the results of two other case investigations in the automotive repair industry. The findings suggest that solvent manufacturers should avoid using hexane when producing automotive degreasing products, and automotive technicians should avoid regular contact with hexane-based cleaning solvents.

In December 1998, the California Department of Health Services (CDHS) received a report from an occupational-medicine physician of a patient with peripheral neuropathy associated with occupational exposure to n-hexane at an automotive repair facility. The index patient was a 24-year-old male automotive technician who had worked in the industry during June 1995–April 1997. In January 1997, numbness and tingling developed in his hands and feet then spread proximally to his forearms and waist. In March, a neurologic evaluation revealed bilaterally diminished reflexes of the biceps, patellar, and Achilles' deep tendon. Vibration and pinprick sensations were reduced from the lower third of the forearms and downward from the waist; the result of his Romberg test was positive. Tests evaluating his metabolic and thyroid function; urinary cadmium, arsenic, lead, and mercury levels; and central nervous system imaging were normal; however, nerve conduction velocity studies revealed a subacute progressive mixed motor-sensory neuropathy with distal nerve involvement. He had reported using from one to nine 15-oz. aerosol cans of brake cleaner per day during the 22 months of his employment. This brake cleaner contained 50%–60% hexane (composed of 20%–80% n-hexane), 20%–30% toluene, and 1%–10% each of methyl ethyl ketone (MEK), acetone, isopropanol, methanol, and mixed xylenes. The technician sprayed the product on brakes, tools, small spills, and engine surfaces. He occasionally used a rag. He reported wearing latex gloves daily and drinking alcohol occasionally. His condition improved with cessation of n-hexane exposure; however, he continues to have paresthesias in the hands and feet.

To assess the possible occurrence of n-hexane–related peripheral neuropathy at other automotive repair facilities, during 1999, CDHS screened for n-hexane–related peripheral neuropathy at a local automotive dealership that used an aerosol product containing 1%–5% n-hexane and 2% MEK. This facility was chosen for convenience and the employees' willingness to participate. A case of n-hexane–related peripheral neuropathy was defined as symptoms and results of nerve conduction velocity tests consistent with peripheral neuropathy in an automotive technician who had chronic occupational exposure to hexane-containing solvents and no other explanation for peripheral neuropathy. Screening included a medical history, an exposure questionnaire, physical and neurologic examinations, nerve conduction velocity studies, and neurophysiologic testing for cognitive and motor function, reaction time, and color vision. At CDC's National Institute for Occupational Safety and Health (NIOSH), recent exposure to n-hexane was estimated by measuring 2,5-hexanedione (2,5-HD), a urinary metabolite, in acid-hydrolyzed urine samples. Air samples were not tested because management had removed the hexane-containing solvent from the facility at the onset of the investigation.

n-Hexane-Related Peripheral Neuropathy — Continued

Six (40%) of 15 technicians from this facility participated in the screening. All participants had worked ≥20 years as technicians; one met the case definition for n-hexane–related peripheral neuropathy. Three of the six had detectable 2,5-HD levels, which were 7.0%, 26.0%, and 6.4% of the biologic exposure index (BEI) of 5 mg 2,5-HD/g creatinine. The BEI is a biomarker that correlates to the American Conference of Governmental Industrial Hygienists' 8-hour threshold limit value (ACGIH TLV) of 50 ppm (*3*). The exposure values identified are considered acceptable by this standard.

During August 2000, CDHS surveyed California neurologists* to identify additional cases of n-hexane–related peripheral neuropathy and to determine whether exposure had occurred among persons while working in automotive repair facilities. A total of 58 (20%) of 291 neurologists responded to the survey. One automotive technician was identified with n-hexane–related peripheral neuropathy. CDHS reviewed the medical records and verified that the technician met the case definition for n-hexane–related peripheral neuropathy.

In July 2000, CDHS guidelines were published outlining the diagnosis and management of n-hexane–related peripheral neuropathy (*4*). The guidelines and notification of the identified cases were distributed to the Association of California Neurologists and to members of the Association of Occupational and Environmental Clinics. The northern California district of the International Association of Machinists and the California Motor Car Dealer Association also were notified.

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Editorial Note: The three cases of peripheral neuropathy described in this report are related to occupational exposure to n-hexane among automotive technicians. Hexane-containing degreasing products are used in automotive repair facilities and usually are dispensed in an aerosol spray. Inhalation is the primary exposure route. Dermal exposure also may occur, and latex gloves provide ineffective protection from organic solvents. The neurotoxic effects of n-hexane may be intensified when used with other chemicals found in automotive degreasers (e.g., acetone, MEK, and isopropanol) (*5*). Acid-hydrolyzed urinary levels of 2,5-HD, sampled at the end of a shift, correlate with workplace concentrations of n-hexane. Because 2,5-HD has a half-life of 13–14 hours, accumulation may occur during the workweek (*6*).

Chronic n-hexane exposure produces a gradual sensorimotor neuropathy with demyelinating features. The most common initial complaint is numbness and tingling of the toes and fingers; a progressive loss of motor function may develop. Chronic polyneuropathy with demyelinating features also is associated with other underlying conditions. Other causes of peripheral neuropathy should be considered when evaluating persons with possible n-hexane–related peripheral neuropathy. Removal from n-hexane exposure is the only known treatment for n-hexane–related neurotoxicity.

The prognosis for n-hexane neuropathy generally is favorable, but recovery may take months to years, depending on disease severity. The current Occupational Safety and Health Administration permissible exposure limit (PEL) for n-hexane, adopted in

*List generated by Dun and Bradstreet directory (June–August 2000). Standard Industry Code 8011-6107.

n-Hexane–Related Peripheral Neuropathy — Continued

1971, is 500 ppm in air. NIOSH established a recommended PEL of 50 ppm in 1989; the PEL for ACGIH TLV and California are 50 ppm (*7*).

Other cases of n-hexane–related peripheral neuropathy may be occurring in this industry, but the nature of these exposures and the extent of illness are unknown. The methods used to identify the cases in this report were not intended to represent all automotive repair facilities. An exposure assessment and additional case ascertainment are in progress. Cases of n-hexane–related neuropathy in the automotive repair industry could be prevented through reformulation of hexane-containing products and greater use of aqueous cleaning systems.

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Weekly Update: West Nile Virus Activity — United States, November 7–13, 2001

The following report summarizes West Nile virus (WNV) surveillance data reported to CDC through ArboNET and verified by states and other jurisdictions as of November 13, 2001.

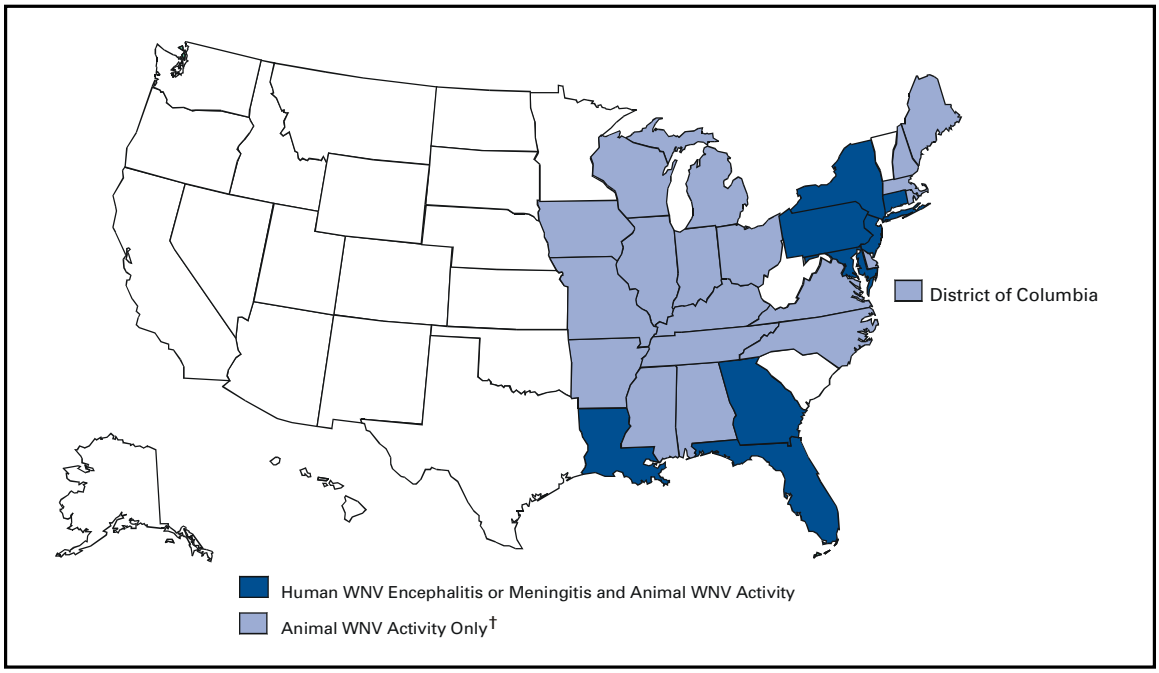
During the week of November 7–13, three human cases of WNV encephalitis or meningitis were reported from New York (two) and Louisiana (one). During the same period, WNV infections were reported in 266 crows, 15 other birds, and six horses. A total of 17 WNV-positive mosquito pools were reported from two jurisdictions (Pennsylvania and District of Columbia).

During 2001, a total of 45 human cases of WNV encephalitis or meningitis has been reported from New York (12), Florida (10), Connecticut (six), Maryland (six), New Jersey (six), Pennsylvania (three), Georgia (one), and Louisiana (one). Among these 45 cases, 24 (53%) were in men; the median age was 70 years (range: 36–90 years); dates of illness onset ranged from July 13 to October 7; three persons died. A total of 4,517 crows and 1,474 other birds with WNV infection was reported from 26 states and the District of Columbia (Figure 1); 176 WNV infections in other animals (all horses) were reported from 14 states (Alabama, Connecticut, Florida, Georgia, Indiana, Kentucky, Louisiana, Massachusetts, Mississippi, New York, North Carolina, Pennsylvania, Tennessee, and Virginia). During 2001, 753 WNV-positive mosquito pools were reported from 15 states (Connecticut, Florida, Georgia, Illinois, Kentucky, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, and Virginia) and the District of Columbia.

Weekly Update: West Nile Virus Activity — Continued

Additional information about WNV activity is available at <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm> and <http://cindi.usgs.gov/hazard/event/west_nile/west_nile.html>.

FIGURE 1. Areas reporting West Nile virus (WNV) activity — United States, 2001*



* As of November 13, 2001.
† Mississippi reported WNV infection only in a horse.

Notice to Readers

Update: Interim Recommendations for Antimicrobial Prophylaxis for Children and Breastfeeding Mothers and Treatment of Children with Anthrax

Ciprofloxacin or doxycycline is recommended for antimicrobial prophylaxis and treatment of adults and children with *Bacillus anthracis* infection associated with the recent bioterrorist attacks in the United States. Amoxicillin is an option for antimicrobial prophylaxis for children and pregnant women and to complete treatment of cutaneous disease when *B. anthracis* is susceptible to penicillin, as is the case in the recent attacks (*1–3*). Use of ciprofloxacin or doxycycline might be associated with adverse effects in children (*4,5*), and liquid formulations of these drugs are not widely available. This notice provides further information about prophylaxis and treatment of children and breastfeeding mothers, including the use of amoxicillin.

Ciprofloxacin, doxycycline, and penicillin G procaine have been effective as antimicrobial prophylaxis for inhalational *B. anthracis* infection in nonhuman primates and are approved for this use in humans by the Food and Drug Administration (FDA) (*5,6*). Amoxicillin has not been studied in animal models and is not approved by FDA for the

Notices to Readers — Continued

prophylaxis or treatment of anthrax. Other data indicate that *B. anthracis* strains produce a cephalosporinase and suggest that the strains contain an inducible beta-lactamase that might decrease the effectiveness of penicillins, especially when a large number of organisms is present (*2*). In addition, penicillin achieves low intracellular concentrations that might be detrimental to its ability to kill germinating spores in macrophages.

Because of these concerns, penicillins (including amoxicillin) are not recommended for initial treatment of anthrax, but are likely to be effective for antimicrobial prophylaxis following exposure to *B. anthracis*, a setting where relatively few organisms are expected to be present. Therefore, amoxicillin* may be used for the 60-day antimicrobial prophylaxis in infants and children when the isolate involved in the exposure is determined to be susceptible to penicillin. Isolates of *B. anthracis* implicated in the recent bioterrorist attacks are susceptible to ciprofloxacin, doxycycline, and penicillin (*2*).

Initial treatment of infants and children with inhalational or systemic (including gastrointestinal or oropharyngeal) anthrax should consist of intravenous ciprofloxacin† or doxycyline§, plus one or two additional antimicrobial¶ agents. If meningitis is suspected, ciprofloxacin might be more effective than doxycycline because of better central nervous system penetration (*2*). Experience with fluoroquinolones other than ciprofloxacin in children is limited.

Ciprofloxacin or doxycycline should be the initial treatment of localized cutaneous anthrax in infants and children. Intravenous therapy with multiple antimicrobial agents is recommended for cutaneous anthrax with systemic involvement, extensive edema, or lesions on the head or neck (*2*). Whether infants and young children are at increased risk for systemic dissemination of cutaneous infection is not known; a 7-month-old patient infected during the recent bioterrorism attacks developed systemic illness after onset of cutaneous anthrax (*7*). For young children (e.g. aged <2 years), initial therapy of cutaneous anthrax should be intravenous, and combination therapy with additional antimicrobials should be considered.

After clinical improvement following intravenous treatment for inhalational or cutaneous anthrax, oral therapy with one or two antimicrobial agents (including either ciprofloxacin or doxycycline) may be used to complete the first 14–21 days of treatment for inhalational anthrax or the first 7–10 days for uncomplicated cutaneous anthrax. The optimal oral treatment regimen is unknown; some adults with inhalational anthrax as a result of the recent bioterrorist attacks are receiving ciprofloxacin and rifampin. For both inhalational and cutaneous anthrax in the setting of this bioterrorist attack, antimicrobial therapy should be continued for 60 days because of the likelihood of exposure to aerosolized *B. anthracis* and the need to protect against persistent spores that might germinate in the respiratory tract. Because of potential adverse effects of prolonged use of ciprofloxacin or doxycycline in children, amoxicillin is an option for completion of the remaining 60 days of therapy for persons infected in these bioterrorist attacks.

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*The recommended dose of amoxicillin is 80 mg/kg/day orally divided every 8 hours (maximum 500 mg/dose).

† The recommended dose of ciprofloxacin is 10 mg/kg/dose every 12 hours intravenously (maximum 400 mg/dose) or 15 mg/kg/dose every 12 hours orally (maximum 500 mg/dose).

§ The recommended dose of doxycycline is 2.2 mg/kg/dose every 12 hours intravenously or orally (maximum 100 mg/dose).

¶ Options for additional drugs, based on in vitro sensitivity testing of isolates in the recent attacks, include rifampin, vancomycin, penicillin, ampicillin, chloramphenicol, imipenem, clindamycin, and clarithromycin (*2*).

Notices to Readers — Continued

Because of its known safety for infants, amoxicillin is an option for antimicrobial prophylaxis in breastfeeding mothers when *B. anthracis* is known to be penicillin-susceptible and no contraindication to maternal amoxicillin use is indicated. The American Academy of Pediatrics also considers ciprofloxacin and tetracyclines (which include doxycycline) to be usually compatible with breastfeeding because the amount of either drug absorbed by infants is small, but little is known about the safety of long-term use (*8*). Mothers concerned about the use of ciprofloxacin or doxycycline for antimicrobial prophylaxis should consider expressing and then discarding breast milk so that breastfeeding can be resumed when antimicrobial prophylaxis is completed. Decisions about antimicrobial choice and continuation of breastfeeding should be made by the mother and her and the infant's health-care providers. Consideration should be given to antimicrobial efficacy, safety for the infant, and the benefits of breastfeeding.

Health-care providers prescribing antimicrobial drugs for the prophylaxis or treatment of anthrax should be aware of their adverse effects and consult with an infectious disease specialist as needed. Additional information about recognition, prophylaxis, and treatment of anthrax infection is available at <http://www.bt.cdc.gov>.

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Notice to Readers

Reducing the Risk for Injury While Traveling for Thanksgiving Holidays

Each year in the United States, motor-vehicle crashes result in approximately 40,000 deaths (*1*) and 3.2 million nonfatal injuries (*2*). In 2000 during the Thanksgiving holiday, motor-vehicle crashes killed approximately 500 persons (US Department of Transportation, National Highway Traffic Safety Administration, unpublished data, 2000), and resulted in >43,000 hospital emergency department visits (*2*). Following are steps that might prevent many of these deaths and injuries:

- **Wear safety belts at all times.** Safety-belt use is the single most effective means of reducing fatal and nonfatal injuries in motor-vehicle crashes. Although safety belts reduce the risk for death by approximately 45%–60%, three out of 10 U.S. adults do not routinely use them. Effective interventions to increase safety-belt

Notices to Readers — Continued

use include safety-belt laws, primary enforcement laws, and enhanced enforcement programs (*3*).

- **Place children in age appropriate restraints.** Infants should be placed in rear-facing child safety seats (CSSs) until they are at least age 1 year and 20–22 lbs. Older children, up to 40 lbs., are safest in forward facing convertible CSSs. School-aged children who have outgrown convertible CSSs should be placed in a booster seat until they fit in a car safety belt alone. Effective interventions to increase CSS use include child safety seat use laws, communitywide information plus enhanced enforcement campaigns, CSS distribution plus education programs, and incentive plus education programs that reward parents or children for correctly using CSSs (*4*).
- **Place all children aged <12 years in the back seat.** This eliminates the injury risk for deployed passenger-side airbags and places the child in the safest part of the vehicle in a crash. It is particularly important not to place infants in the front of an airbag. Riding in the back seat is associated with at least a 30% reduction in the risk for fatal injury (*5*).
- **Never drink and drive.** More than 16,000 (73%) traffic deaths each year are associated with alcohol use (*6*). Effective interventions to reduce alcohol-impaired driving include 0.08% blood alcohol concentration (BAC) laws, lower BAC laws for young or inexperienced drivers, minimum legal drinking age laws, sobriety checkpoints, and server intervention programs that involve face-to-face instruction and management support (*7*).

Additional information is available at <http://www.cdc.gov/ncipc>.

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Notice to Readers

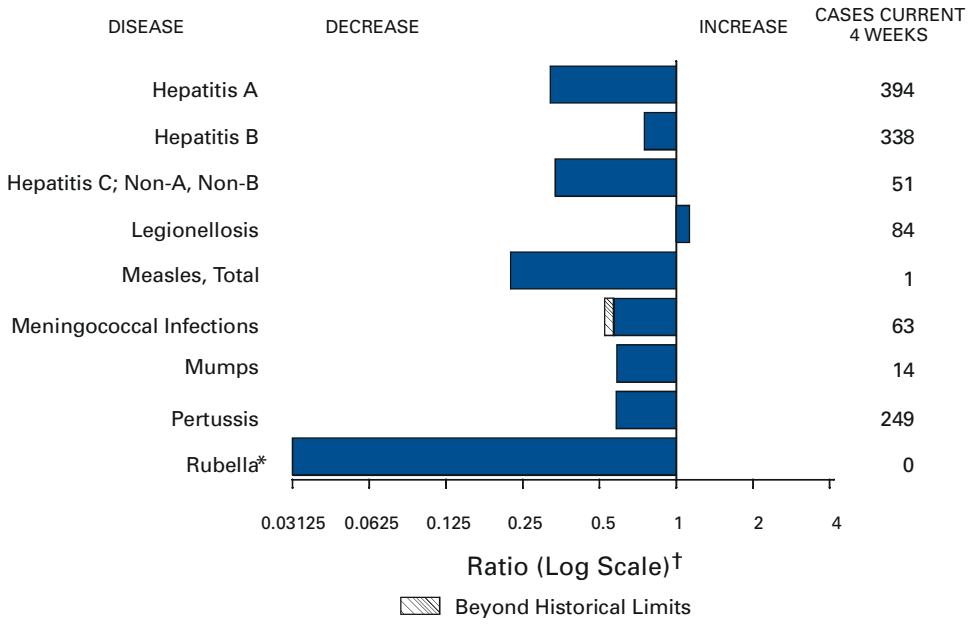
Epidemiology in Action: Intermediate Methods

CDC and Emory University's Rollins School of Public Health will co-sponsor a course, "Epidemiology in Action: Intermediate Methods" during February 25–March 1, 2002, at Emory University. The course is designed for practicing public health professionals who have had training and experience in basic applied epidemiology and would like training in additional quantitative skills related to analysis and interpretation of epidemiologic data.

The course will review the fundamentals of descriptive epidemiology and biostatistics, measures of association, normal and binomial distributions, confounding, statistical tests, stratification, logistic regression, models, and computers as used in epidemiology. Prerequisite is an introductory course in epidemiology, such as Epidemiology in Action, International Course in Applied Epidemiology or any other introductory class. There is a tuition charge.

Deadline for applications is January 15. Additional information and applications are available from Emory University, International Health Dept.(Pia), 1518 Clifton Road, N.E., Room 746, Atlanta, GA 30322; telephone (404) 727-3485; fax (404) 727-4590; or email pvaleri@sph.emory.edu.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending November 10, 2001, with historical data



* No rubella cases were reported for the current 4-week period yielding a ratio for week 45 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.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending November 10, 2001 (45th Week)*

	Cum. 2001		Cum. 2001
Anthrax	15	Poliomyelitis, paralytic	-
Brucellosis†	75	Psittacosis†	19
Cholera	3	Q fever†	18
Cyclosporiasis†	136	Rabies, human	1
Diphtheria	2	Rocky Mountain spotted fever (RMSF)	525
Ehrlichiosis: human granulocytic (HGE)†	176	Rubella, congenital syndrome	-
human monocytic (HME)†	76	Streptococcal disease, invasive, group A	3,208
Encephalitis: California serogroup viral†	93	Streptococcal toxic-shock syndrome†	42
eastern equine†	8	Syphilis, congenital¶	190
St. Louis†	1	Tetanus	22
western equine†	-	Toxic-shock syndrome	101
Hansen disease (leprosy)†	73	Trichinosis	21
Hantavirus pulmonary syndrome†	7	Tularemia†	92
Hemolytic uremic syndrome, postdiarrheal†	131	Typhoid fever	239
HIV infection, pediatric†§	181	Yellow fever	-
Plague	2		

-: No reported cases.
*Incidence data for reporting year 2001 are provisional and cumulative (year-to-date).
† Not notifiable in all states.
§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last updated October 30, 2001.
¶ Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending November 10, 2001, and November 11, 2000 (45th Week)*

Reporting Area	AIDS		Chlamydia§		Cryptosporidiosis		*Escherichia coli* O157:H7†			
							NETSS		PHLIS	
	Cum. 2001¶	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	33,013	32,692	609,880	599,713	2,971	2,716	2,675	4,065	2,053	3,351
NEW ENGLAND	1,276	1,673	20,251	20,315	113	127	211	352	211	361
Maine	40	28	1,172	1,273	18	20	25	29	26	28
N.H.	31	28	1,166	959	15	21	33	34	27	38
Vt.	13	29	525	455	31	26	13	33	8	33
Mass.	661	1,049	8,562	8,781	45	33	112	156	107	162
R.I.	85	81	2,555	2,314	4	3	14	19	11	18
Conn.	446	458	6,271	6,533	-	24	14	81	32	82
MID. ATLANTIC	7,683	7,090	65,855	56,071	235	342	191	404	180	321
Upstate N.Y.	823	665	12,341	2,233	94	112	148	269	136	65
N.Y. City	3,788	3,755	25,456	22,732	79	154	12	22	10	17
N.J.	1,537	1,423	9,798	9,051	10	16	31	113	34	113
Pa.	1,535	1,247	18,260	22,055	52	60	N	N	-	126
E.N. CENTRAL	2,513	3,164	100,896	103,302	1,344	899	704	1,002	473	702
Ohio	482	475	21,230	26,771	149	249	186	244	146	210
Ind.	306	320	12,924	11,547	73	57	78	115	39	83
Ill.	1,115	1,596	29,115	28,831	390	113	152	186	128	150
Mich.	459	601	25,873	21,951	165	87	84	134	73	104
Wis.	151	172	11,754	14,202	567	393	204	323	87	155
W.N. CENTRAL	719	762	30,862	34,075	400	343	494	584	410	558
Minn.	121	153	6,361	7,072	168	123	236	155	186	178
Iowa	78	73	3,944	4,592	78	73	78	171	60	143
Mo.	347	349	11,089	11,595	37	29	51	104	81	96
N. Dak.	2	2	767	757	13	15	18	15	31	21
S. Dak.	23	7	1,571	1,586	6	15	41	53	41	57
Nebr.	63	64	2,175	3,182	96	79	52	60	-	46
Kans.	85	114	4,955	5,291	2	9	18	26	11	17
S. ATLANTIC	10,366	9,072	115,050	113,571	301	420	203	333	129	269
Del.	218	182	2,309	2,457	6	6	4	3	7	1
Md.	1,529	1,127	9,551	12,344	36	9	23	32	1	2
D.C.	738	694	2,605	2,779	10	13	-	1	U	U
Va.	803	580	15,401	13,674	24	17	48	64	39	61
W. Va.	73	54	2,046	1,856	2	3	10	14	8	12
N.C.	807	585	17,228	19,231	27	23	46	82	33	66
S.C.	623	682	9,638	8,367	-	-	10	21	11	16
Ga.	1,239	1,049	25,834	24,086	127	156	30	37	15	37
Fla.	4,336	4,119	30,438	28,777	69	193	32	79	15	74
E.S. CENTRAL	1,554	1,618	41,956	44,056	41	45	117	131	99	103
Ky.	299	168	7,615	6,928	4	5	57	39	47	31
Tenn.	507	684	12,322	12,845	12	11	36	52	39	48
Ala.	378	418	11,939	13,442	13	15	16	8	6	9
Miss.	370	348	10,080	10,841	12	14	8	32	7	15
W.S. CENTRAL	3,488	3,366	90,327	90,911	33	154	86	219	91	270
Ark.	178	158	6,043	5,773	6	14	13	55	-	38
La.	711	587	14,824	15,861	7	12	4	15	26	46
Okla.	203	294	8,850	8,128	13	17	27	19	28	17
Tex.	2,396	2,327	60,610	61,149	7	111	42	130	37	169
MOUNTAIN	1,172	1,211	34,299	33,125	214	164	260	394	128	291
Mont.	15	12	1,542	1,192	33	10	19	30	-	-
Idaho	19	19	1,672	1,582	21	23	64	65	-	39
Wyo.	3	9	713	688	7	5	6	18	1	10
Colo.	248	294	7,022	8,910	35	67	85	151	52	108
N. Mex.	129	126	5,202	4,442	27	19	13	22	10	18
Ariz.	459	386	12,489	10,948	7	10	28	46	22	37
Utah	101	113	1,512	1,951	79	26	30	49	42	69
Nev.	198	252	4,147	3,412	5	4	15	13	1	10
PACIFIC	4,242	4,736	110,384	104,287	290	222	409	646	332	476
Wash.	435	428	11,740	11,245	54	U	116	209	62	198
Oreg.	177	145	6,418	5,862	46	17	61	129	58	111
Calif.	3,552	4,042	86,648	81,922	186	205	211	265	203	151
Alaska	18	22	2,236	2,154	1	-	4	29	1	5
Hawaii	60	99	3,342	3,104	3	-	17	14	8	11
Guam	12	13	-	438	-	-	N	N	U	U
P.R.	1,021	1,133	2,193	U	-	-	1	6	U	U
V.I.	2	31	53	-	-	-	-	-	U	U
Amer. Samoa	1	-	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	111	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 year 2001 are provisional and cumulative (year-to-date). Incidence data for reporting year 2000 are finalized and cumulative (year-to-date).

† Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

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

¶ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last updated October 30, 2001.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending November 10, 2001, and November 11, 2000 (45th Week)*

Reporting Area	Gonorrhea		Hepatitis C; Non-A, Non-B		Legionellosis		Listeriosis	Lyme Disease	
	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2001	Cum. 2000
UNITED STATES	280,825	307,518	2,855	2,753	872	957	395	11,084	14,934
NEW ENGLAND	5,823	5,693	14	27	64	52	37	3,607	4,738
Maine	118	80	-	2	8	2	2	-	-
N.H.	163	95	-	-	10	2	4	136	60
Vt.	57	57	6	4	5	5	3	14	38
Mass.	2,705	2,382	8	16	17	17	22	823	1,119
R.I.	730	561	-	5	10	9	1	449	486
Conn.	2,050	2,518	-	-	14	17	5	2,185	3,035
MID. ATLANTIC	33,798	33,594	1,439	611	170	268	60	5,491	7,803
Upstate N.Y.	7,455	6,379	52	35	61	81	26	3,170	3,366
N.Y. City	10,733	9,934	-	-	19	44	9	2	173
N.J.	6,831	6,120	1,338	535	8	21	10	927	2,382
Pa.	8,779	11,161	49	41	82	122	15	1,392	1,882
E.N. CENTRAL	52,747	61,625	149	205	247	245	51	606	757
Ohio	11,818	16,469	5	11	116	104	13	106	57
Ind.	5,707	5,422	1	-	22	32	8	23	22
Ill.	16,110	18,108	13	19	-	28	1	21	34
Mich.	14,803	15,561	130	175	73	44	22	13	23
Wis.	4,309	6,065	-	-	36	37	7	443	621
W.N. CENTRAL	13,159	15,469	633	517	47	54	15	356	363
Minn.	2,065	2,754	9	5	9	7	-	292	267
Iowa	1,016	1,086	-	2	8	13	2	35	31
Mo.	6,906	7,608	611	499	20	24	8	24	45
N. Dak.	34	61	-	-	1	-	-	-	1
S. Dak.	248	258	-	-	3	2	-	-	-
Nebr.	710	1,285	4	4	5	4	1	3	3
Kans.	2,180	2,417	9	7	1	4	4	2	16
S. ATLANTIC	71,325	80,382	97	95	177	176	65	771	1,028
Del.	1,398	1,474	-	2	12	9	-	49	167
Md.	5,207	8,511	16	12	34	65	13	496	602
D.C.	2,368	2,264	-	3	8	5	-	14	7
Va.	9,210	9,034	-	3	20	31	12	115	137
W. Va.	609	562	9	14	N	N	5	11	29
N.C.	14,468	15,750	19	16	9	15	5	38	43
S.C.	6,422	7,390	6	3	11	4	5	5	9
Ga.	14,223	15,648	1	3	10	7	11	-	-
Fla.	17,420	19,749	46	39	73	40	14	43	34
E.S. CENTRAL	27,210	31,745	170	407	50	36	19	55	47
Ky.	3,045	3,064	8	33	11	19	5	22	11
Tenn.	8,279	10,240	58	88	25	10	8	24	28
Ala.	9,257	10,416	4	10	12	4	6	8	5
Miss.	6,629	8,025	100	276	2	3	-	1	3
W.S. CENTRAL	44,045	48,059	173	663	5	22	18	81	82
Ark.	3,646	3,404	4	8	-	-	1	-	5
La.	10,127	11,709	85	406	2	7	-	2	7
Okla.	4,045	3,620	3	8	3	3	2	-	-
Tex.	26,227	29,326	81	241	-	12	15	79	70
MOUNTAIN	8,542	9,114	61	66	50	37	32	12	12
Mont.	86	42	1	4	-	1	-	-	-
Idaho	68	73	2	3	3	5	1	5	2
Wyo.	72	41	8	2	1	-	1	1	3
Colo.	2,412	2,807	19	12	14	13	7	2	-
N. Mex.	877	979	11	13	3	1	7	-	-
Ariz.	3,378	3,650	9	18	19	7	7	1	-
Utah	119	187	3	1	6	10	2	1	3
Nev.	1,530	1,335	8	13	4	-	7	2	4
PACIFIC	24,176	21,837	119	162	62	67	98	105	104
Wash.	2,608	1,997	20	29	9	16	10	8	9
Oreg.	993	844	12	25	N	N	8	8	12
Calif.	19,708	18,286	87	106	49	50	74	87	81
Alaska	358	301	-	-	-	-	-	2	2
Hawaii	509	409	-	2	4	1	6	N	N
Guam	-	47	-	3	-	-	-	-	-
P.R.	531	445	1	1	2	1	-	N	N
V.I.	6	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	-	U	U
C.N.M.I.	13	U	-	U	-	U	-	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 are provisional and cumulative (year-to-date). Incidence data for reporting year 2000 are finalized and cumulative (year-to-date).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending November 10, 2001, and November 11, 2000 (45th Week)*

Reporting Area	Malaria		Rabies, Animal		Salmonellosis†			
					NETSS		PHLIS	
	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	1,049	1,296	5,791	6,220	31,723	34,223	26,250	28,702
NEW ENGLAND	70	68	650	735	2,132	1,963	2,006	1,995
Maine	4	6	63	121	159	112	150	88
N.H.	2	1	20	21	159	128	144	133
Vt.	1	3	58	55	72	102	63	97
Mass.	31	31	237	243	1,182	1,130	1,055	1,137
R.I.	9	8	64	52	123	123	163	137
Conn.	23	19	208	243	437	368	431	403
MID. ATLANTIC	265	344	1,073	1,170	3,658	4,459	3,483	4,723
Upstate N.Y.	59	68	702	736	1,088	1,086	1,213	1,156
N.Y. City	138	196	24	17	959	1,082	1,192	1,176
N.J.	34	46	173	175	652	1,037	657	910
Pa.	34	34	174	242	959	1,254	421	1,481
E.N. CENTRAL	128	128	132	149	4,256	4,693	3,738	3,204
Ohio	21	18	42	49	1,140	1,285	1,062	1,294
Ind.	16	6	15	-	476	573	439	550
Ill.	33	60	24	22	1,177	1,364	1,049	159
Mich.	38	30	45	67	718	782	734	850
Wis.	20	14	6	11	745	689	454	351
W.N. CENTRAL	31	61	314	491	2,050	2,132	2,173	2,303
Minn.	6	27	43	79	582	482	609	616
Iowa	6	2	73	70	321	323	297	317
Mo.	12	15	40	50	582	639	863	784
N. Dak.	-	2	35	107	56	55	77	72
S. Dak.	-	1	42	88	141	88	118	96
Nebr.	2	8	4	2	128	200	-	137
Kans.	5	6	77	95	240	345	209	281
S. ATLANTIC	266	300	2,006	2,121	7,765	7,145	5,394	5,316
Del.	2	5	30	49	80	106	98	116
Md.	108	105	324	363	728	709	802	629
D.C.	13	15	-	-	72	57	U	U
Va.	45	49	423	507	1,199	902	958	842
W. Va.	1	4	131	107	119	144	125	137
N.C.	17	33	517	512	1,186	991	1,083	1,024
S.C.	6	2	104	142	782	666	660	508
Ga.	30	26	311	302	1,532	1,333	1,210	1,568
Fla.	44	61	166	139	2,067	2,237	458	492
E.S. CENTRAL	33	44	188	191	2,371	2,144	1,679	1,624
Ky.	12	18	26	19	333	340	214	236
Tenn.	11	11	99	97	569	574	720	724
Ala.	6	14	61	74	679	594	474	547
Miss.	4	1	2	1	790	636	271	117
W.S. CENTRAL	12	67	877	816	3,334	4,424	2,537	2,709
Ark.	3	3	20	20	806	647	92	532
La.	5	11	1	4	332	789	952	666
Okla.	3	8	57	52	419	344	375	268
Tex.	1	45	799	740	1,777	2,644	1,118	1,243
MOUNTAIN	51	45	229	254	1,914	2,425	1,574	2,275
Mont.	3	1	36	62	68	82	-	-
Idaho	3	3	28	9	127	107	4	100
Wyo.	-	-	20	52	53	61	52	54
Colo.	20	21	-	-	532	639	544	622
N. Mex.	3	-	14	19	254	211	215	190
Ariz.	10	8	115	93	551	636	547	688
Utah	4	6	15	10	195	446	189	441
Nev.	8	6	1	9	134	243	23	180
PACIFIC	193	239	322	293	4,243	4,838	3,666	4,553
Wash.	9	29	-	-	463	503	491	601
Oreg.	12	36	3	7	214	267	291	327
Calif.	162	164	282	259	3,206	3,805	2,526	3,374
Alaska	1	-	37	27	37	53	28	33
Hawaii	9	10	-	-	323	210	330	218
Guam	-	2	-	-	-	24	U	U
P.R.	4	5	83	71	510	597	U	U
V.I.	-	-	-	-	-	-	U	U
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	14	U	U	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting year 2001 are provisional and cumulative (year-to-date). Incidence data for reporting year 2000 are finalized and cumulative (year-to-date).

† Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending November 10, 2001, and November 11, 2000 (45th Week)*

Reporting Area	Shigellosis† NETSS Cum. 2001	Shigellosis† NETSS Cum. 2000	Shigellosis† PHLIS Cum. 2001	Shigellosis† PHLIS Cum. 2000	Syphilis (Primary & Secondary) Cum. 2001	Syphilis (Primary & Secondary) Cum. 2000	Tuberculosis Cum. 2001	Tuberculosis Cum. 2000
UNITED STATES	15,488	19,606	7,128	11,236	5,012	5,299	10,539	12,186
NEW ENGLAND	232	370	255	347	53	75	355	363
Maine	6	10	2	11	1	1	8	16
N.H.	6	6	3	8	1	2	16	18
Vt.	7	4	5	-	2	-	4	4
Mass.	181	256	176	233	30	53	203	208
R.I.	17	30	24	30	9	4	32	27
Conn.	15	64	45	65	10	15	92	90
MID. ATLANTIC	1,130	2,321	693	1,520	438	244	2,001	1,945
Upstate N.Y.	441	683	113	209	22	9	310	264
N.Y. City	321	883	331	599	237	102	1,010	1,045
N.J.	185	479	184	412	119	62	433	470
Pa.	183	276	65	300	60	71	248	166
E.N. CENTRAL	3,786	3,767	1,643	1,127	886	1,078	1,142	1,229
Ohio	2,589	346	1,086	283	71	64	230	243
Ind.	198	1,431	40	146	145	314	88	122
Ill.	457	1,081	288	93	299	363	527	590
Mich.	277	609	202	552	348	294	228	200
Wis.	265	300	27	53	23	43	69	74
W.N. CENTRAL	1,726	2,212	1,175	1,842	80	60	393	439
Minn.	388	714	384	806	27	15	199	134
Iowa	344	486	286	322	4	11	34	33
Mo.	292	609	196	431	21	26	113	161
N. Dak.	21	42	28	49	-	-	3	2
S. Dak.	543	7	246	4	-	-	12	16
Nebr.	72	132	-	110	5	2	32	22
Kans.	66	222	35	120	23	6	-	71
S. ATLANTIC	2,199	2,650	720	1,047	1,709	1,768	2,180	2,449
Del.	14	22	11	21	9	8	15	14
Md.	138	182	87	102	205	266	182	214
D.C.	51	67	U	U	32	35	51	27
Va.	338	414	175	328	92	119	215	232
W. Va.	8	4	8	3	4	3	26	27
N.C.	312	345	156	244	398	435	291	302
S.C.	235	123	119	84	204	203	153	238
Ga.	366	237	130	168	325	342	409	532
Fla.	737	1,256	34	97	440	357	838	863
E.S. CENTRAL	1,421	1,028	540	525	565	775	701	798
Ky.	651	433	285	104	43	74	103	106
Tenn.	90	328	96	354	278	464	253	302
Ala.	189	77	130	61	118	109	235	259
Miss.	491	190	29	6	126	128	110	131
W.S. CENTRAL	2,009	3,089	1,146	1,006	626	725	763	1,768
Ark.	506	184	155	55	31	94	129	162
La.	128	258	166	166	141	192	-	146
Okla.	71	107	36	41	59	108	122	130
Tex.	1,304	2,540	789	744	395	331	512	1,330
MOUNTAIN	865	1,081	627	785	211	209	422	441
Mont.	8	7	-	-	-	-	6	14
Idaho	39	44	-	25	1	1	8	8
Wyo.	3	5	5	3	1	1	3	3
Colo.	215	236	243	195	36	8	102	72
N. Mex.	113	151	75	105	17	16	24	38
Ariz.	368	448	248	312	140	177	194	181
Utah	53	74	48	79	8	1	33	41
Nev.	66	116	8	66	8	5	52	84
PACIFIC	2,120	3,088	329	3,037	444	365	2,582	2,754
Wash.	186	412	167	380	42	60	207	217
Oreg.	77	154	100	103	13	11	91	86
Calif.	1,793	2,482	-	2,522	379	293	2,113	2,242
Alaska	6	7	6	3	-	-	43	92
Hawaii	58	33	56	29	10	1	128	117
Guam	-	36	U	U	-	3	-	47
P.R.	8	33	U	U	240	141	76	135
V.I.	-	-	U	U	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	7	U	U	U	10	U	31	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Incidence data for reporting year 2001 are provisional and cumulative (year-to-date). Incidence data for reporting year 2000 are finalized and cumulative (year-to-date).

† Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending November 10, 2001, and November 11, 2000 (45th Week)*

Reporting Area	*H. influenzae*, Invasive		Hepatitis (Viral), By Type				Measles (Rubeola)					
			A		B		Indigenous		Imported†		Total	
	Cum. 2001§	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	2001	Cum. 2001	2001	Cum. 2001	Cum. 2001	Cum. 2000
UNITED STATES	1,102	1,118	8,780	11,460	5,677	6,110	-	49	-	44	93	73
NEW ENGLAND	81	94	559	346	88	96	-	4	-	1	5	6
Maine	2	1	10	19	5	5	-	-	-	-	-	-
N.H.	4	12	16	18	14	15	-	-	-	-	-	3
Vt.	3	7	14	10	4	6	-	1	-	-	1	3
Mass.	37	37	247	124	9	13	-	2	-	1	3	-
R.I.	5	4	59	22	25	19	-	-	-	-	-	-
Conn.	30	33	213	153	31	38	-	1	-	-	1	-
MID. ATLANTIC	167	201	834	1,349	885	1,034	-	5	-	11	16	21
Upstate N.Y.	66	86	229	222	113	119	-	1	-	4	5	10
N.Y. City	41	54	262	463	379	502	-	3	-	1	4	10
N.J.	40	36	159	255	169	160	-	-	-	1	1	-
Pa.	20	25	184	409	224	253	-	1	-	5	6	1
E.N. CENTRAL	139	161	1,008	1,483	787	640	-	-	-	10	10	7
Ohio	52	49	186	234	84	93	-	-	-	3	3	2
Ind.	43	27	92	105	45	42	-	-	-	4	4	-
Ill.	10	56	381	635	134	108	-	-	-	3	3	3
Mich.	12	9	291	434	524	359	-	-	-	-	-	2
Wis.	22	20	58	75	-	38	-	-	-	-	-	-
W.N. CENTRAL	58	65	374	606	187	255	-	4	-	1	5	2
Minn.	36	35	39	167	21	34	-	2	-	1	3	1
Iowa	-	-	34	62	24	31	-	-	-	-	-	-
Mo.	13	20	102	244	101	125	-	2	-	-	2	-
N. Dak.	7	2	3	3	1	2	U	-	U	-	-	-
S. Dak.	-	1	3	2	1	1	-	-	-	-	-	-
Nebr.	1	3	30	30	22	38	-	-	-	-	-	-
Kans.	1	4	163	98	17	24	-	-	-	-	-	1
S. ATLANTIC	328	246	2,104	1,287	1,320	1,109	-	4	-	1	5	4
Del.	-	-	-	15	-	14	-	-	-	-	-	-
Md.	76	74	248	182	129	112	-	2	-	1	3	-
D.C.	-	-	47	24	11	29	-	-	-	-	-	-
Va.	27	36	115	142	157	145	-	1	-	-	1	2
W. Va.	14	8	18	53	20	14	-	-	-	-	-	-
N.C.	44	23	202	127	173	213	-	-	-	-	-	-
S.C.	6	7	66	72	28	21	-	-	-	-	-	-
Ga.	88	61	856	269	442	204	-	1	-	-	1	-
Fla.	73	37	552	403	360	357	-	-	-	-	-	2
E.S. CENTRAL	67	42	351	363	371	405	-	2	-	-	2	-
Ky.	2	12	118	47	40	67	-	2	-	-	2	-
Tenn.	37	18	141	128	202	189	-	-	-	-	-	-
Ala.	26	10	68	47	75	51	-	-	-	-	-	-
Miss.	2	2	24	141	54	98	-	-	-	-	-	-
W.S. CENTRAL	44	61	1,159	2,138	605	985	-	-	-	1	1	-
Ark.	1	2	62	125	85	88	U	-	U	-	-	-
La.	6	16	56	82	41	138	-	-	-	-	-	-
Okla.	36	41	107	227	70	140	-	-	-	-	-	-
Tex.	1	2	934	1,704	409	619	-	-	-	1	1	-
MOUNTAIN	124	111	656	809	436	457	-	1	-	1	2	12
Mont.	-	1	11	7	3	6	U	-	U	-	-	-
Idaho	2	4	54	29	11	6	-	-	-	1	1	-
Wyo.	-	1	7	4	2	3	-	-	-	-	-	-
Colo.	32	27	80	183	96	88	-	-	-	-	-	2
N. Mex.	20	22	36	67	126	121	-	-	-	-	-	-
Ariz.	54	41	352	395	130	170	-	1	-	-	1	-
Utah	6	11	64	52	26	20	-	-	-	-	-	3
Nev.	10	4	52	72	42	43	-	-	-	-	-	7
PACIFIC	94	137	1,735	3,079	998	1,129	-	29	-	18	47	21
Wash.	5	6	134	256	127	96	-	13	-	2	15	3
Oreg.	18	31	68	156	95	103	-	4	-	-	4	-
Calif.	43	34	1,516	2,641	751	909	-	10	-	11	21	14
Alaska	6	43	14	13	9	10	U	-	U	-	-	1
Hawaii	22	23	3	13	16	11	-	2	-	5	7	3
Guam	-	1	-	1	-	10	U	-	U	-	-	-
P.R.	1	4	119	228	173	255	-	-	-	-	-	2
V.I.	-	-	-	-	-	-	U	-	U	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	32	U	U	-	U	-	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.

* Incidence data for reporting year 2001 are provisional and cumulative (year-to-date). Incidence data for reporting year 2000 are finalized and cumulative (year-to-date).

† For imported measles, cases include only those resulting from importation from other countries.

§ Of 240 cases among children aged <5 years, serotype was reported for 117, and of those, 20 were type b.

TABLE III. (Cont'd) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending November 10, 2001, and November 11, 2000 (45th Week)*

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000
UNITED STATES	1,871	1,909	1	191	284	30	4,035	6,068	-	21	165
NEW ENGLAND	98	116	-	-	4	-	366	1,584	-	-	12
Maine	4	8	-	-	-	-	21	41	-	-	-
N.H.	13	12	-	-	-	-	28	117	-	-	2
Vt.	5	3	-	-	-	-	28	216	-	-	-
Mass.	50	66	-	-	1	-	267	1,150	-	-	8
R.I.	4	9	-	-	1	-	5	18	-	-	1
Conn.	22	18	-	-	2	-	17	42	-	-	1
MID. ATLANTIC	186	223	-	20	25	3	259	619	-	5	9
Upstate N.Y.	55	64	-	3	10	3	127	302	-	1	1
N.Y. City	34	39	-	10	6	-	44	78	-	3	8
N.J.	43	46	-	3	3	-	18	30	-	1	-
Pa.	54	74	-	4	6	-	70	209	-	-	-
E.N. CENTRAL	223	342	-	18	22	1	556	711	-	3	1
Ohio	67	80	-	1	7	-	219	309	-	-	-
Ind.	35	38	-	3	1	-	78	93	-	1	-
Ill.	22	77	-	11	6	1	67	103	-	2	1
Mich.	57	105	-	3	6	-	125	91	-	-	-
Wis.	42	42	-	-	2	-	67	115	-	-	-
W.N. CENTRAL	134	136	-	7	17	3	297	514	-	3	2
Minn.	20	20	-	3	-	-	146	314	-	-	1
Iowa	28	32	-	-	7	-	26	48	-	1	-
Mo.	47	61	-	-	4	2	92	74	-	1	-
N. Dak.	6	2	U	-	1	U	4	6	U	-	-
S. Dak.	5	5	-	-	-	-	4	7	-	-	-
Nebr.	14	7	-	1	2	-	4	26	-	-	1
Kans.	14	9	-	3	3	1	21	39	-	1	-
S. ATLANTIC	338	260	-	36	41	6	230	443	-	7	112
Del.	4	1	-	-	-	-	-	8	-	1	1
Md.	38	26	-	6	9	1	33	111	-	-	-
D.C.	-	-	-	-	-	-	1	3	-	-	-
Va.	37	38	-	8	9	-	41	98	-	-	-
W. Va.	12	13	-	-	-	-	3	1	-	-	-
N.C.	61	36	-	5	7	5	68	98	-	-	82
S.C.	33	21	-	5	10	-	31	28	-	2	27
Ga.	46	43	-	7	2	-	27	38	-	1	-
Fla.	107	82	-	5	4	-	26	58	-	3	2
E.S. CENTRAL	121	125	-	9	5	-	129	105	-	-	6
Ky.	20	26	-	3	1	-	35	52	-	-	1
Tenn.	56	53	-	1	2	-	55	32	-	-	1
Ala.	30	33	-	-	2	-	35	18	-	-	4
Miss.	15	13	-	5	-	-	4	3	-	-	-
W.S. CENTRAL	282	203	1	12	29	1	422	343	-	1	8
Ark.	18	12	U	1	1	U	43	34	U	-	1
La.	61	43	-	2	5	-	2	19	-	-	1
Okla.	27	26	-	-	-	-	18	47	-	-	-
Tex.	176	122	1	9	23	1	359	243	-	1	6
MOUNTAIN	82	82	-	11	19	7	1,173	697	-	1	2
Mont.	4	4	U	1	1	U	35	35	U	-	-
Idaho	7	7	-	1	-	1	170	57	-	-	-
Wyo.	5	-	-	1	1	-	1	4	-	-	-
Colo.	30	30	-	1	-	4	242	410	-	1	1
N. Mex.	10	9	-	2	1	2	135	85	-	-	-
Ariz.	13	22	-	1	4	-	498	70	-	-	1
Utah	7	7	-	1	6	-	74	24	-	-	-
Nev.	6	3	-	3	6	-	18	12	-	-	-
PACIFIC	407	422	-	78	122	9	603	1,052	-	1	13
Wash.	60	51	-	2	9	6	142	359	-	-	7
Oreg.	40	62	N	N	N	3	48	106	-	-	-
Calif.	292	293	-	39	85	-	374	528	-	-	6
Alaska	2	8	U	1	8	U	8	21	U	-	-
Hawaii	13	8	-	36	20	-	31	38	-	1	-
Guam	-	-	U	-	14	U	-	4	U	-	1
P.R.	4	9	-	-	-	-	2	9	-	-	-
V.I.	-	-	U	-	-	U	-	-	U	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	U	-	U	U	-	U	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 are provisional and cumulative (year-to-date). Incidence data for reporting year 2000 are finalized and cumulative (year-to-date).

TABLE IV. Deaths in 122 U.S. cities,* week ending November 10, 2001 (45th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	532	382	97	38	8	7	43
Boston, Mass.	136	77	38	15	3	3	11
Bridgeport, Conn.	51	41	6	4	-	-	5
Cambridge, Mass.	17	15	1	1	-	-	2
Fall River, Mass.	U	U	U	U	U	U	U
Hartford, Conn.	46	28	10	6	-	2	2
Lowell, Mass.	19	15	4	-	-	-	2
Lynn, Mass.	10	8	-	1	1	-	2
New Bedford, Mass.	29	25	2	2	-	-	2
New Haven, Conn.	35	29	4	1	-	1	5
Providence, R.I.	53	37	13	1	2	-	-
Somerville, Mass.	8	6	-	1	1	-	-
Springfield, Mass.	33	26	5	1	-	1	3
Waterbury, Conn.	39	33	5	1	-	-	6
Worcester, Mass.	56	42	9	4	1	-	3
MID. ATLANTIC	2,292	1,483	454	279	49	24	136
Albany, N.Y.	52	32	14	4	-	2	3
Allentown, Pa.	17	14	2	1	-	-	2
Buffalo, N.Y.	69	54	7	4	2	2	4
Camden, N.J.	17	11	5	1	-	-	1
Elizabeth, N.J.	17	12	2	3	-	-	-
Erie, Pa.§	46	37	6	2	1	-	7
Jersey City, N.J.	53	34	11	5	2	1	-
New York City, N.Y.	1,388	825	302	217	32	9	62
Newark, N.J.	U	U	U	U	U	U	U
Paterson, N.J.	17	9	5	-	-	3	1
Philadelphia, Pa.	233	165	43	15	6	4	20
Pittsburgh, Pa.§	38	28	7	3	-	-	4
Reading, Pa.	24	19	2	3	-	-	1
Rochester, N.Y.	120	85	23	9	2	1	8
Schenectady, N.Y.	25	17	5	2	1	-	4
Scranton, Pa.§	25	23	2	-	-	-	2
Syracuse, N.Y.	97	77	9	6	3	2	12
Trenton, N.J.	30	22	5	3	-	-	2
Utica, N.Y.	24	19	4	1	-	-	3
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	1,514	1,045	305	84	43	37	103
Akron, Ohio	52	36	6	4	4	2	5
Canton, Ohio	41	31	5	1	4	-	9
Chicago, Ill.	U	U	U	U	U	U	U
Cincinnati, Ohio	99	66	19	1	3	10	11
Cleveland, Ohio	130	89	27	10	2	2	6
Columbus, Ohio	U	U	U	U	U	U	U
Dayton, Ohio	131	94	27	4	3	3	8
Detroit, Mich.	202	123	50	18	6	5	9
Evansville, Ind.	52	37	11	2	1	1	1
Fort Wayne, Ind.	51	38	10	2	1	-	3
Gary, Ind.	20	12	4	3	1	-	2
Grand Rapids, Mich.	42	22	10	2	2	6	2
Indianapolis, Ind.	226	152	50	15	6	3	12
Lansing, Mich.	40	35	3	1	1	-	2
Milwaukee, Wis.	105	76	23	5	1	-	6
Peoria, Ill.	51	35	13	2	1	-	2
Rockford, Ill.	55	43	7	4	-	1	8
South Bend, Ind.	59	46	9	2	1	1	6
Toledo, Ohio	106	71	23	5	4	3	8
Youngstown, Ohio	52	39	8	3	2	-	3
W.N. CENTRAL	644	445	126	45	21	7	49
Des Moines, Iowa	U	U	U	U	U	U	U
Duluth, Minn.	U	U	U	U	U	U	U
Kansas City, Kans.	38	25	7	5	1	-	1
Kansas City, Mo.	94	63	17	8	3	3	17
Lincoln, Nebr.	44	30	9	4	1	-	4
Minneapolis, Minn.	170	126	30	7	6	1	17
Omaha, Nebr.	99	72	16	5	4	2	4
St. Louis, Mo.	93	54	23	11	4	1	1
St. Paul, Minn.	U	U	U	U	U	U	U
Wichita, Kans.	106	75	24	5	2	-	5
S. ATLANTIC	1,100	666	271	102	36	23	72
Atlanta, Ga.	149	84	42	15	3	5	3
Baltimore, Md.	212	122	52	26	8	3	26
Charlotte, N.C.	117	76	20	8	5	8	15
Jacksonville, Fla.	120	77	29	10	3	1	9
Miami, Fla.	U	U	U	U	U	U	U
Norfolk, Va.	53	29	15	6	3	-	2
Richmond, Va.	58	33	11	7	2	5	-
Savannah, Ga.	36	26	7	3	-	-	3
St. Petersburg, Fla.	45	28	11	3	3	-	2
Tampa, Fla.	200	130	53	14	2	-	11
Washington, D.C.	100	59	23	10	7	1	1
Wilmington, Del.	10	2	8	-	-	-	-
E.S. CENTRAL	863	573	178	72	24	13	55
Birmingham, Ala.	168	104	41	11	7	2	12
Chattanooga, Tenn.	67	46	13	5	3	-	5
Knoxville, Tenn.	99	77	15	6	-	1	2
Lexington, Ky.	81	54	18	6	2	1	9
Memphis, Tenn.	173	105	38	23	3	4	11
Mobile, Ala.	98	68	17	6	5	2	2
Montgomery, Ala.	35	24	8	3	-	-	3
Nashville, Tenn.	142	95	28	12	4	3	11
W.S. CENTRAL	1,419	956	275	109	39	38	80
Austin, Tex.	89	51	26	7	3	2	4
Baton Rouge, La.	43	38	2	2	-	1	2
Corpus Christi, Tex.	51	37	6	2	1	5	6
Dallas, Tex.	206	133	40	19	10	4	13
El Paso, Tex.	65	51	10	1	2	1	1
Ft. Worth, Tex.	126	93	22	6	2	3	7
Houston, Tex.	406	246	96	43	10	11	18
Little Rock, Ark.	71	46	15	6	1	2	3
New Orleans, La.	U	U	U	U	U	U	U
San Antonio, Tex.	189	138	30	11	3	6	12
Shreveport, La.	57	35	11	5	3	3	6
Tulsa, Okla.	116	88	17	7	4	-	8
MOUNTAIN	875	600	163	71	19	22	64
Albuquerque, N.M.	122	84	22	12	3	1	8
Boise, Idaho	48	39	5	4	-	-	3
Colo. Springs, Colo.	42	22	11	8	1	-	-
Denver, Colo.	117	80	19	9	4	5	11
Las Vegas, Nev.	211	140	44	16	3	8	16
Ogden, Utah	30	19	6	2	1	2	-
Phoenix, Ariz.	U	U	U	U	U	U	U
Pueblo, Colo.	28	19	6	3	-	-	2
Salt Lake City, Utah	141	94	29	10	4	4	15
Tucson, Ariz.	136	103	21	7	3	2	9
PACIFIC	1,543	1,115	279	99	24	25	120
Berkeley, Calif.	20	11	5	4	-	-	1
Fresno, Calif.	137	97	24	11	3	2	12
Glendale, Calif.	27	22	4	1	-	-	1
Honolulu, Hawaii	50	41	7	2	-	-	1
Long Beach, Calif.	80	56	17	2	2	3	9
Los Angeles, Calif.	420	294	85	27	6	8	19
Pasadena, Calif.	31	24	6	1	-	-	7
Portland, Oreg.	151	113	28	7	2	1	11
Sacramento, Calif.	175	115	36	15	7	2	18
San Diego, Calif.	152	115	24	8	2	2	20
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	U	U	U	U	U	U	U
Santa Cruz, Calif.	21	19	1	1	-	-	2
Seattle, Wash.	116	86	16	10	2	2	9
Spokane, Wash.	66	48	14	2	-	2	5
Tacoma, Wash.	97	74	12	8	-	3	5
TOTAL	10,782¶	7,265	2,148	899	263	196	722

U: Unavailable. -:No reported cases.

* Mortality data in this table are reported voluntarily 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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