MMWR™
Morbidity and Mortality Weekly Report
Weekly February 21, 2003 / Vol. 52 / No. 7

Fatal Degenerative Neurologic Illnesses in Men Who Participated in Wild Game Feasts — Wisconsin, 2002

Creutzfeldt-Jakob disease (CJD) is a fatal neurologic disorder in humans. CJD is one of a group of conditions known as transmissible spongiform encephalopathies (TSEs), or prion diseases, that are believed to be caused by abnormally configured, host-encoded prion proteins that accumulate in the central nervous tissue (*1*). CJD has an annual incidence of approximately 1 case per million population in the United States (*1*) and occurs in three forms: sporadic, genetically determined, and acquired by infection. In the latter form, the incubation period is measured typically in years. Recent evidence that prion infection can cross the species barrier between humans and cattle has raised increasing public health concerns about the possible transmission to humans of a TSE among deer and elk known as chronic wasting disease (CWD) (*2*). During 1993–1999, three men who participated in wild game feasts in northern Wisconsin died of degenerative neurologic illnesses. This report documents the investigation of these deaths, which was initiated in August 2002 and which confirmed the death of only one person from CJD. Although no association between CWD and CJD was found, continued surveillance of both diseases remains important to assess the possible risk for CWD transmission to humans.

Case Reports

Case 1. In December 1992, a Wisconsin man aged 66 years with a history of seizures since 1969 sought treatment for recurring seizures, increasing forgetfulness, and worsening hand tremors. Electroencephalographic (EEG) examination demonstrated focal epileptiform activity and nonspecific diffuse abnormalities, but no specific diagnosis was made. In February 1993, he was hospitalized for increasing confusion, ataxia, and movement tremors of his extremities. A magnetic resonance image (MRI) demonstrated mild, nonspecific enhancement along the inferior parasagittal occipital lobe. A repeat EEG showed bifrontal intermittent, short-interval, periodic sharp waves, suggesting a progressive encephalopathy; a diagnosis of CJD was suspected. The man died later that month; neuropathologic examination of brain tissue during autopsy indicated subacute spongiform encephalopathy, compatible with CJD.

The man was a lifelong hunter who ate venison frequently. He hunted primarily in northern Wisconsin but also at least once in Montana. He hosted wild game feasts at his cabin in northern Wisconsin from 1976 until shortly before his death. Fixed brain tissue obtained during the autopsy was sent for analysis to the National Prion Disease Pathology Surveillance Center (NPDPSC) and reexamined at the institution where the autopsy was conducted. Histopathologic examination did not substantiate the diagnosis of prion disease. In addition, 27 brain tissue sections were negative for prions by immunostaining despite positive antibody reactions against other proteins (controls), which indicated that other epitopes in the tissue samples were preserved.

Case 2. In May 1999, a Minnesota man aged 55 years with no previous history of a neurologic disease sought evaluation and treatment following a 3-month history of progressive difficulty in writing and unsteadiness of gait. A computerized

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

The *MMWR* series of publications is published by the Epidemiology Program Office, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

SUGGESTED CITATION
Centers for Disease Control and Prevention. [Article Title]. MMWR 2003;52:[inclusive page numbers].

tomography (CT) scan and MRI examination of his head did not indicate any abnormality. In June 1999, he was hospitalized following onset of dementia, speech abnormalities, and myoclonic jerking. An EEG indicated left-hemispheric periodic sharp waves and moderate generalized background slowing; CJD was diagnosed clinically. In July 1999, following worsening symptoms and development of right upper extremity dystonia, the patient died. Neuropathologic evaluation of brain tissue during autopsy demonstrated widespread subcortical spongiform lesions, consistent with CJD.

The man was not a hunter but had a history of eating venison. He made an estimated 12 visits to the cabin where the wild game feasts were held, but he participated in only one feast during the mid-1980s. Sections of fixed and frozen brain tissue obtained during autopsy were analyzed at NPDPSC, and prion disease was confirmed by immunohistochemical and Western blot testing. The Western blot characteristics and prion disease phenotype in this patient were consistent with the most common form of sporadic CJD, classified as M/M (M/V) 1 (*3*). Subsequent genetic typing confirmed the presence of methionine homozygosity (M/M) at codon 129 of the patient's prion protein gene.

Case 3. In June 1992, a Wisconsin man aged 65 years sought treatment for progressive slowing of speech, worsening memory, and personality changes. By January 1993, his speech was reduced to one-word utterances. Neurologic examination showed a flat affect, decreased reflexes, and apraxia. A CT head scan showed mild atrophy, and an EEG was normal. Pick's disease was diagnosed. By May, he was unable to perform any daily living activities; he died in August 1993. Neuropathologic evaluation of brain tissue during autopsy showed symmetrical frontal lobe cerebral cortical atrophy and mild temporal lobe atrophy. No Pick's bodies or spongiform lesions were observed.

The man had a history of eating venison and participated regularly in wild game feasts held at the cabin owned by patient 1. He was a lifelong hunter and hunted mostly in Wisconsin but also in Wyoming and British Columbia. No game was brought to the wild game feasts from his hunting trips outside of Wisconsin. Examination of fixed brain tissue sent to NPDPSC demonstrated no lesions indicative of CJD, and immunohistochemical testing with antibody to the prion protein did not demonstrate the granular deposits seen in prion diseases.

Epidemiologic Investigation

Wild game feasts consisting of elk, deer, antelope, and other game that occurred at a cabin in northern Wisconsin owned by patient 1 began in 1976 and continued through 2002.

These feasts typically involved 10–15 participants and usually occurred on weekends before or during hunting seasons in the fall and occasionally in the spring. Wild game brought to these feasts usually were harvested in Wisconsin, but three men who attended these feasts reported hunting in the western United States and bringing game back to Wisconsin. These activities took place in Colorado (near the towns of Cortez, Trinidad, Collbran, Durango, and Meeker), Wyoming (near the towns of Gilette and Cody), and Montana (near the town of Malta). CWD was not known to be endemic in these areas at the time that these hunting activities took place.

Information was obtained for 45 (85%) of 53 persons who were identified as possibly participating in the wild game feasts; all were male. Information was obtained by direct interview or from family members of decedents. Of the 45 persons, for whom information was obtained, 34 were reported to have attended wild game feasts. Seven of the 34 feast attendees were deceased, including the three patients. None of the four other decedents had a cause of death attributed to or associated with a degenerative neurologic disorder. None of the living participants had any signs or symptoms consistent with a degenerative neurologic disorder.

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Editorial Note: CWD was first described in the United States in the 1960s and classified as a TSE in 1978. Previously localized to a contiguous endemic area in northeastern Colorado and southeast Wyoming, since 2000, CWD has been found in free-ranging deer or elk in Illinois, Nebraska, New Mexico, South Dakota, Wisconsin, and outside the previously known endemic areas of Colorado and Wyoming. CWD has been identified also in captive deer or elk in Colorado, Kansas, Minnesota, Montana, Nebraska, Oklahoma, South Dakota, and Wisconsin (*4*). Because a variant form of CJD, with specific neuropathologic and molecular characteristics that distinguish it from sporadic CJD, has been associated with eating cattle products infected with a prion that causes bovine spongiform encephalopathy (*5*), concern has been raised about the possibility that the prion associated with CWD might be transmitted to humans in a similar way.

In this investigation, because only one of the three cases in Wisconsin had neuropathologic confirmation of a prion disease, no association could be made between case participation in the wild game feasts and the development of CJD. Although patient 2 had confirmed CJD, he was unlikely to have eaten CWD-infected venison at these feasts because venison and other game from outside Wisconsin that was served at these feasts did not originate from known CWD-endemic areas, and the man participated in the feasts only once. In addition, the prion disease in this case was consistent with the most common form of sporadic CJD, without apparent unusual neuropathologic or molecular characteristics that might occur if the prion related to CWD had been responsible for the disease.

The findings in this report are subject to at least two limitations. First, not all members participating in wild game feasts could be identified, and not all persons listed as participating could be contacted for interviews. Second, interviews that were conducted required recall of events that occurred up to 25 years ago, limiting the detail or accuracy of events. However, the similar responses obtained from different sources support the accuracy of the investigation findings.

A previous investigation of unusually young CJD patients in whom the transmission of CWD was suspected also did not provide convincing evidence for a causal relationship between CWD and CJD (*2*). However, limited epidemiologic investigations cannot rule out the possibility that CWD might play a role in causing human illness. Ongoing surveillance of CJD, particularly in states with CWD, is important to assess the risk, if any, for CWD transmission to humans. Because the confirmation of CJD and the detection of a new prion disease require neuropathologic study of brain tissue, physicians are encouraged to contact NPDPSC (http://www.cjdsurveillance.com; telephone, 216-368-0587) to confirm diagnoses of CJD and to distinguish its various subtypes. Because of the known severity of TSEs in humans and the possibility that the CWD prion can affect humans, animals with evidence of CWD should be excluded from the human food or animal feed chains. Hunters and wild venison consumers should follow precautionary guidelines available from the Wisconsin Department of Agriculture, Trade, and Consumer Protection (http://datcp.state.wi.us/core/consumerinfo) to prevent potential exposures to the CWD agent.

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Public Health and Aging

Atrial Fibrillation as a Contributing Cause of Death and Medicare Hospitalization — United States, 1999

Stroke is the leading cause in the United States of serious long-term disability and the third leading cause of death. One of the major risk factors for stroke is atrial fibrillation (AF), a common cardiac disorder characterized by cardiac arrhythmia and the absence of coordinated contractions, which increases the risk for blood stasis, clot formation, and embolic stroke. AF affects approximately 2.2 million adults in the United States (*1,2*) and is the most common sustained heart rhythm disturbance observed in clinical practice (*3*). The rate of AF increases with age, from <1% among persons aged <60 years to approximately 10% among persons aged ≥80 years (*4*). The frequency with which AF is reported on death certificates as a contributing cause of death has increased since 1980 (*5*). To assess the burden of AF-related deaths and hospitalizations among U.S. residents, CDC analyzed national and state multiple-cause mortality statistics and Medicare hospital claims for persons with AF in 1999 (the latest year for which data were available) for the 50 states and the District of Columbia. The findings indicate that AF as a contributing cause of death and hospitalization affects primarily persons aged ≥75 years and that death and hospitalization rates vary by state. Public and medical education are needed to prevent and reduce AF-related disability and death.

National and state multiple-cause mortality statistics were obtained from death certificates in state vital statistics offices and compiled by CDC. AF-related deaths are those for which the contributing cause of death* (any one of the 20 possible conditions listed on the death certificate) listed by a physician or a coroner is classified as code I48 according to the *International Classification of Diseases, Tenth Revision* (ICD-10). Among decedents who had AF, the proportion of those who had an underlying cause of death listed as AF (ICD-10 I48), coronary heart disease (ICD-10 I20–I25), or stroke (ICD-10 I60–I69) also was assessed. Demographic data (age, sex, and race/ethnicity) on death certificates were reported by funeral directors or provided by family members of the decedent. The denominators for death rates were obtained from 1999 census records and included only U.S. residents.

Medicare (Part A) hospital claims and enrollment records from the Medicare Provider Analysis and Review files were obtained from the Centers for Medicare and Medicaid Services. AF-related hospitalizations among Medicare enrollees aged ≥65 years were classified as code 427.3 according to the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) as one of six diagnoses on the hospital claims during 1999. The denominators for hospitalization rates were obtained from Medicare enrollment records and included enrollees aged ≥65 years who were entitled to Medicare Part A benefits on July 1, 1999 (excluding 15.7% of members with coverage from health maintenance organizations). Among persons hospitalized with AF, the proportion of those who had a primary hospital diagnosis of AF (ICD-9 427.3), coronary heart disease (ICD-9 410–414, 429.2), or stroke (ICD-9 430–434, 436–438) also was assessed.

AF-related death rates for groups defined by age, sex, race/ethnicity, and state were determined by dividing the number of deaths by the population at risk (denominator) in each group. Rates of hospitalizations among Medicare enrollees aged ≥65 years with AF for each group were determined by dividing the number of hospitalizations by the population at risk (denominator) in the group. Age-adjusted death rates (per 100,000 population) and hospitalization rates (per 1,000 Medicare enrollees) were calculated by using the 2000 U.S. standard population (*6*).

In 1999, a total of 66,875 deaths with AF as a contributing cause occurred, resulting in an age-adjusted death rate of 24.7 per 100,000 population. Of these deaths, 56,138 (84.0%) were among persons aged ≥75 years. The greatest proportion of these AF-related deaths occurred among persons aged ≥85 years (47.4%), followed by those aged 75–84 years (36.6%), aged 65–74 years (12.3%), and aged <65 years (3.7%). Age-specific death rates increased for successive age groups (Table 1). Age-adjusted death rates for AF were highest among whites (25.7) and blacks (16.4) and higher for men (34.7) than women (22.8). In 1999, for all decedents who had AF, the most common underlying causes of death were coronary heart disease (28.0%), AF (12.4%), and stroke (10.8%).

In 1999, a total of 1,765,304 hospitalizations (137.1 per 1,000 Medicare enrollees) were reported among persons with AF in the Medicare population (Table 1). Rates increased among successive age groups. The rate of hospitalization among persons with AF was higher among whites (142.7) than among blacks (100.4). Although 55.7% of these hospitalizations were among women, men (162.9) had a higher rate of AF-related hospitalization than women (121.2). The most common diseases listed as the primary diagnosis for persons hospitalized with AF were congestive heart failure (11.8%), followed by AF (10.9%), coronary heart disease (9.9%), and stroke (4.9%).

* Contributing cause of death was defined as the subsequent diagnosis considered with the cause of death, and underlying cause of death was defined as the primary diagnosis associated with the death.

rec•om•men•da•tion: *n*

(rek-ə-mən-'dā-shən) 1 : something, such as a course of action, that is recommended; see also *MMWR*.

know what matters.

MMWR™
Recommendations and Reports

TABLE 1. Number of deaths, age-specific and -adjusted death rates*, and number and rate† of Medicare hospitalizations§ among persons who had atrial fibrillation (AF)¶ listed as a contributing cause/diagnosis, by selected characteristics — United States, 1999

Characteristic	Deaths		Hospitalizations	
	No.	Rate	No.	Rate
Age-specific				
Age group (yrs)				
0–44	162	0.1	—	—
45–64	533	1.5	—	—
55–64	1,816	7.8	—	—
65–74	8,225	45.1	458,835	33.4
75–84	24,464	201.4	788,824	83.7
≥85	31,674	758.6	517,645	149.4
Age-adjusted				
Race				
White	62,415	25.7	1,614,798	142.7
Black	3,565	16.4	98,183	100.4
American Indian/ Alaska Native	135	10.7	—**	—**
Asian/Pacific Islander	760	14.1	—**	—**
Ethnicity				
Hispanic	1,397	10.5	—§§	—§§
Non-Hispanic††	65,324	25.4	—§§	—§§
Sex				
Men	27,179	34.7	782,401	162.9
Women	39,696	22.8	982,903	121.2
Total	**66,875**	**24.7**	**1,765,304**	**137.1**

* Per 100,000 population. Age-specific and -adjusted death rates were standardized to the 2000 U.S. population. One non-Hispanic white female decedent whose age was unknown was excluded.
† Per 1,000 enrollees. Age-adjusted rates were standardized to the 2000 U.S. population.
§ Medicare hospital claims data are for persons aged ≥65 years.
¶ *International Classification of Diseases, Tenth Revision* (ICD-10) code I48 for 1999 mortality data. *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) code 427.3 for 1999 Medicare data.
** Medicare hospital claims data for Asians/Pacific Islanders and American Indians/Alaska Natives were too small for reliable estimates.
†† Excludes 154 AF-related deaths for which ethnicity was not stated.
§§ Ethnicity was not available for Medicare claims.

The state-specific age-adjusted death rates for AF ranged from 13.1 in Arizona to 37.4 in Maryland (Figure). The age-adjusted rate of hospitalizations among persons with AF ranged from 90.2 in New Mexico to 177.5 in West Virginia (Table 2).

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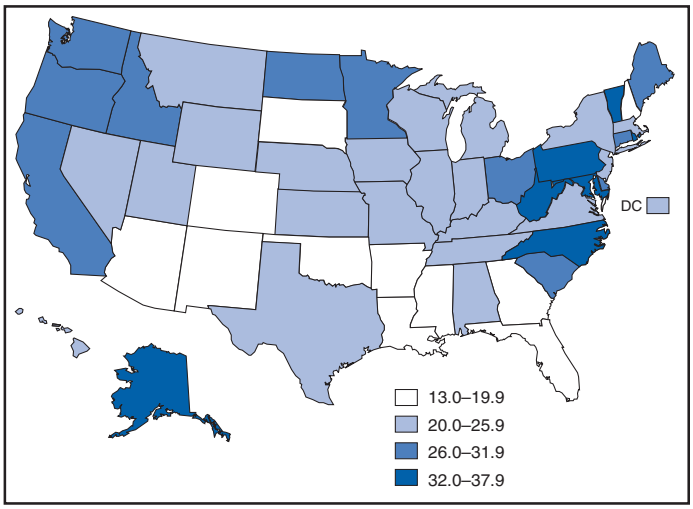
Editorial Note: The findings in this report confirm that AF is a contributing cause of death among older persons, particularly those aged ≥75 years, and that state-specific AF-related death rates vary. These findings are consistent with other trends of AF-related deaths (*5*). Patterns in the rate of AF-related hospitalization among Medicare enrollees are similar to those for death rates. The high proportion of AF-related deaths and hospitalizations occurring among

FIGURE. State-specific age-adjusted death rates* for persons who had atrial fibrillation as a contributing cause listed on death certificates — United States, 1999



* Per 100,000 population. Age adjusted to the 2000 U.S. population. One decedent in Florida whose age was unknown was excluded from number of deaths.
Source: 1999 multiple-cause mortality data from the National Vital Statistics, National Center for Health Statistics, CDC.

TABLE 2. State-specific number and rate* of Medicare hospitalizations† among persons who had atrial fibrillation§ as a contributing diagnosis listed on Medicare claim — United States, 1999

State	No.	Rate	State	No.	Rate
Alabama	38,296	162.9	Montana	6,680	121.9
Alaska	1,708	126.4	Nebraska	12,306	117.0
Arizona	18,337	115.4	Nevada	7,207	129.7
Arkansas	21,090	130.8	New Hampshire	7,706	125.1
California	113,455	131.3	New Jersey	67,169	157.7
Colorado	14,559	127.8	New Mexico	6,200	90.2
Connecticut	24,029	134.8	New York	121,275	139.2
Delaware	5,756	137.9	North Carolina	57,756	144.4
District of Columbia	2,805	99.2	North Dakota	5,753	125.3
Florida	124,846	145.7	Ohio	83,014	146.3
Georgia	41,264	130.0	Oklahoma	23,618	126.7
Hawaii	3,853	94.2	Oregon	16,711	137.9
Idaho	7,325	121.5	Pennsylvania	112,123	169.2
Illinois	87,206	144.2	Rhode Island	7,033	146.8
Indiana	40,929	124.5	South Carolina	26,524	130.1
Iowa	26,086	128.2	South Dakota	6,250	119.3
Kansas	18,981	119.5	Tennessee	39,996	135.4
Kentucky	31,996	152.5	Texas	93,399	125.5
Louisiana	27,031	144.9	Utah	7,855	99.3
Maine	11,595	138.7	Vermont	3,827	110.0
Maryland	32,896	146.6	Virginia	45,262	140.5
Massachusetts	47,445	157.8	Washington	26,954	124.0
Michigan	70,317	132.4	West Virginia	20,198	177.5
Minnesota	33,355	142.8	Wisconsin	42,100	133.2
Mississippi	20,757	135.3	Wyoming	2,817	112.2
Missouri	40,333	134.7	**Total**	**1,765,304**	**137.1**

* Per 1,000 enrollees. Age-adjusted rates were calculated based on beneficiary's state of residence and standardized to the 2000 U.S. population.
† Medicare hospital claims data are for persons aged ≥65 years.
§ *International Classification of Diseases, Tenth Revision* (ICD-10) code I48 for 1999 mortality data. *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) code 427.3 for 1999 Medicare data.

persons aged ≥75 years suggests that as the population ages, AF might be diagnosed more frequently. A cohort study of hospitalized Medicare patients indicated that medical costs were greater for patients with AF than for those without AF (*7*). In addition, effective therapies for AF reduced the risk for stroke by ≥70%. Patients who have coronary heart disease, hypertensive disease, or stroke diagnosed and who live longer might be at risk for AF if effective therapy is not maintained (*8*). Serious complications among patients with uncontrolled AF also can include congestive heart failure, myocardial infarction, and thrombotic stroke.

Initial treatment of AF should be directed at controlling the ventricular rate with a calcium channel blocker, beta-blocker, or digitalis (*3*). Medical or electrical cardioversion to restore sinus rhythm is the next step in patients who remain in AF. Effective therapies in preventing stroke and cardiovascular complications include anticoagulation, heart rate control, conversion of AF to normal heart rhythm, and catheter-based and surgical interventions (*3*).

Educating the public to recognize the signs of cardiac arrhythmia can help identify persons with AF. Persons can identify an irregular heartbeat by monitoring their wrist pulse for 1 minute. The irregularity of these beats is detected and the next beat cannot be predicted. Persons who identify the signs of cardiac arrhythmia should seek medical care to determine the presence of AF or other heart disorders. The Research Center for Stroke and Heart Disease (http://www.strokeheart.org), has initiated the educational campaign, "Take Your Pulse For Life." This initiative recommends that persons, particularly those aged ≥55 years, monitor their pulse for 1 minute the first day of every month. Assessing whether a patient has AF can be easy and inexpensive through using electrocardiography (ECG) (*3*); the availability of more advanced diagnostic tools, such as ECG monitoring, might contribute to AF diagnosis in persons suspected to have cardiac arrhythmia. Delay in diagnosis occurs when the rhythm has not been documented specifically and additional monitoring is necessary (*3*). All persons should know how to take a pulse for themselves or their family members.

The findings in this report are subject to at least two limitations. First, data are subject to misclassification of race/ethnicity both in the population census and on death certificates, possibly resulting in overreporting among blacks and whites and underreporting among other racial/ethnic groups (*9*). Second, it was not possible to determine the accuracy of physician or administrative reporting, the validity of the ICD codes, or multiple hospitalizations on Medicare hospital claims.

Because AF is one of the major treatable risk factors for stroke, prevention of AF through public and medical education for early identification and appropriate treatment should become an important focus of public health efforts to reduce stroke-related deaths and disability. Prevention efforts should include broad-based public health efforts to increase public awareness of AF and to foster timely and appropriate diagnostic evaluation and effective treatment from health-care providers.

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Potential Exposures to Airborne and Settled Surface Dust in Residential Areas of Lower Manhattan Following the Collapse of the World Trade Center — New York City, November 4–December 11, 2001

Following the terrorist attacks of September 11, 2001, which destroyed the World Trade Center (WTC) in lower Manhattan, the New York City (NYC) Department of Health and Mental Hygiene (DOHMH) and the Agency for Toxic Substances and Disease Registry (ATSDR), with assistance from the U.S. Public Health Service (PHS) Commissioned Corps

Readiness Force* and the WTC Environmental Assessment Working Group†, assessed the composition of outdoor and indoor settled surface and airborne dust in residential areas around the WTC and in comparison areas. This report summarizes the results of the investigation, which found 1) similar levels of airborne total fibers in lower and in upper Manhattan, 2) greater percentage levels of synthetic vitreous fibers (SVF) and mineral components of concrete and building wallboard in settled dust of residential areas in lower Manhattan than in upper Manhattan, and 3) low levels of asbestos in some settled surface dust in lower Manhattan residential areas (*1*). Based in part on the results of this investigation, the U.S. Environmental Protection Agency (EPA) is cleaning and sampling residential areas as requested by lower Manhattan residents. In addition, to assess any short- or long-term health effects of smoke, dust, and airborne substances around the WTC site, DOHMH and ATSDR are developing a registry that will track the health of persons who were most highly exposed to these materials.

During November 4–December 11, 2001, air and settled surface dust samples were collected in and around 30 residential buildings within three concentric circles surrounding the WTC site in lower Manhattan, including 59 residential units (*2*). In addition, five residential units in four buildings located north of 59th Street (approximately 5 miles northeast of the WTC site) were sampled for purposes of comparison. Attention was focused on building material constituents 1) that have irritant properties (e.g., SVF, including fiberglass and gypsum) or might have negative long-term health effects (e.g., crystalline silica and asbestos) and 2) that were reasonably presumed to be either in the initial WTC collapse dust cloud or in dust generated by subsequent rescue and recovery activities at the WTC site. All samples collected during the investigation were analyzed for the presence of asbestos, SVF, crystalline mineral components of concrete (e.g., silica, calcite, and portlandite), and crystalline mineral components of building wallboard (e.g., gypsum, mica, and halite).

At each sampling location, time-weighted air sampling was conducted for three or four particulate matter (PM) fractions (i.e., PM 100 microns, 10 microns, 4 microns, and 2.5 microns) (*3*–*5*). Each PM fraction was analyzed for crystalline minerals by using X-ray diffraction (XRD) analysis (*6*). The XRD analysis for crystalline minerals was semiquantitative (i.e., estimated). Air samples for fibers were analyzed first by phase contrast microscopy (PCM) (*5*). If the concentration of total fibers was higher than the maximum concentration of fibers found in the comparison homes (0.003 fibers per cubic centimeter of air [f/cc]), the sample was re-analyzed for asbestos fibers by using transmission electron microscopy (TEM) (*5*). In addition, scanning electron microscopy (SEM) to look for SVF was used for PCM fiber counts >0.003 f/cc if the settled surface dust sample from that area contained SVF.

Settled surface dust samples also were taken at each sampling location and analyzed for crystalline minerals and fibers (Figure). Fiber analysis of settled dust samples for asbestos and SVF was conducted by using polarized light microscopy (PLM) (*7*). If asbestos levels were below the detection limit (i.e., <1%), samples were re-analyzed by using TEM (*7*). The dust samples also were analyzed for crystalline mineral content by using XRD.

Air Sampling Results

For 111 (94.9%) of the 117 air samples, the concentrations of fibers found in lower Manhattan residential areas were similar to the concentration of fibers found in comparison areas (<0.003 f/cc). The six lower Manhattan areas that had elevated total fiber counts were re-examined by TEM and SEM to determine the types of fibers; the results indicated that neither asbestos nor SVF (e.g., fiberglass) contributed to the elevated total fiber counts.

Air sampling results for minerals detected quartz and other building material constituents in lower Manhattan. No other forms of crystalline silica were detected in any air samples except for a one-time detection of cristobalite (15 micrograms per cubic meter [$\mu g/m^3$][§]). The estimated concentrations of these minerals in air were low. In some locations, mineral com-

§ Estimated.

FIGURE. U.S. Public Health Service commissioned officer collecting samples from a previously cleaned interior residential area — New York City, November 2001

Photo/U.S. Public Health Service

* A cadre of PHS Commissioned Corps officers who can be mobilized during disaster, strife, or other public health emergencies and in response to domestic or international requests.

† A group formed on September 15, 2001, that comprises representatives of the U.S. Department of Health and Human Services, Environmental Protection Agency (EPA), Department of Labor, and New York State and NYC government and private organizations to coordinate public health and occupational sampling and data review among the three federal agencies in support of state and city health departments.

ponents of concrete (quartz [not detected (ND)–19 $\mu g/m^3$§], calcite [ND–14 $\mu g/m^3$§], and portlandite [ND–95 $\mu g/m^3$§]) and mineral components of building wallboard (gypsum [ND–15 $\mu g/m^3$§], mica [ND–43 $\mu g/m^3$§], and halite [ND–19 $\mu g/m^3$§]) were detected at higher estimated levels in air samples in lower Manhattan than in samples collected in comparison areas. Gypsum was the only mineral detected in the comparison building air samples (ND–5 $\mu g/m^3$§). No other minerals tested (i.e., quartz, calcite, portlandite, mica, and halite) were detected in comparison building air samples.

Settled Surface Dust Results

In lower Manhattan, asbestos and SVF were found in some indoor settled dust samples from residential units and common areas (Table 1). No asbestos or SVF was detected in the comparison area dust samples. Quartz, calcite, portlandite, and gypsum comprised a higher percentage of the dust in 29 samples from buildings in lower Manhattan compared with eight samples from comparison area buildings (Table 2). Only two (2.1%) of the 97 dust samples collected provided enough bulk material for pH analysis. The samples, which were collected from two outdoor locations in lower Manhattan, had pH values of 8.6 and 9.8, respectively.

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Editorial Note: Exposure to substantial amounts of SVF, mineral components of concrete, and mineral components of building wallboard might cause skin rashes, eye irritation, and upper respiratory irritation, all of which were reported more frequently than expected seasonal rates by community members and first responders after the collapse of the WTC towers (*8–10*). If the reported irritant effects were associated with WTC-related materials, these effects would subside once exposure to SVF, mineral components of concrete, and mineral components of building wallboard ceased. Persons with pre-existing heart or lung diseases (e.g., asthma) or a previous history of occupational exposure to these materials might be more sensitive to their irritant effects.

Settled surface dust might become airborne if disturbed, potentially causing exposures to occur through inhalation. Several worst-case assumptions were made to assess the potential long-term public health risks for inhaling airborne asbestos and quartz. These assumptions included 1) that no

TABLE 1. Number and percentage of locations with asbestos or synthetic vitreous fibers (SVF) found in settled surface dust, by testing method and sampling location/environment — New York City, November 4–December 11, 2001

Sampling location/ Environment	No. and type of analysis*			Locations with asbestos in settled surface dust†		Range of asbestos found§	Locations with SVF in settled surface dust¶		Range of SVF found**
	No.	Material	Test	No.	(%)		No.	(%)	
Lower Manhattan									
Outdoor (n = 14)	14	Asbestos	PLM	6	(43)	<1%–3.4%	11	(79)	1%–72%
	12	Asbestos	TEM						
	14	SVF	PLM						
Common (n = 26)	26	Asbestos	PLM	5	(19)	<1%–1.5%	14	(54)	5%–27%
	25	Asbestos	TEM						
	26	SVF	PLM						
Residential (n = 57)	57	Asbestos	PLM	10	(18)	<1%–1.5%	26	(46)	2%–35%††
	52	Asbestos	TEM						
	57	SVF	PLM						
Whole building (n = 29)	29	Asbestos	PLM	12	(41)	<1%–3.4%	21	(72)	2%–72%
	29	Asbestos	TEM						
	29	SVF	PLM						
Comparison buildings									
Common (n = 3)	3	Asbestos	PLM	0	0	—	0	0	—
	3	Asbestos	TEM						
	3	SVF	PLM						
Residential (n = 5)	5	Asbestos	PLM	0	0	—	0	0	—
	4	Asbestos	TEM						
	5	SVF	PLM						

* All dust samples were analyzed initially by using polarized light microscopy (PLM); transmission electron microscopy (TEM) analysis was performed to confirm the absence of asbestos if not detected by PLM analysis.
† Detected by either PLM or TEM (reported as <1% or more); calculated from the total number of dust samples.
§ The highest value detected at a location (PLM or TEM).
¶ Calculated from the number of SVF PLM samples.
** For some locations, an additional co-located sample was obtained; the range shown considers the highest measured value for each sampling location.
†† One residential unit had an extra settled surface dust sample, taken from a window sill, which contained 40% SVF by PLM.

TABLE 2. Number and percentage of locations in which selected mineral components were found in settled surface dust, by sampling location/environment and amount detected — New York City, November 4–December 11, 2001

Location/Environment	Occurrences* No.	(%)	Minimum detected (% by weight)	Maximum detected (% by weight)	Average of detections (% by weight)	No. above comparison† No.	(%)
Lower Manhattan							
Outdoor settled surface dust (n = 14)							
Quartz	14	(100)	1.00§	27.00§	12.00§	¶	
Calcite	13	(93)	0.80§	19.00§	6.00§	¶	
Portlandite	12	(86)	0.07§	6.00§	2.00§	¶	
Gypsum	11	(79)	0.03§	27.00§	6.00§	¶	
Mica	9	(64)	0.05§	0.30§	0.10§	¶	
Halite	7	(50)	<0.03§	0.10§	0.05§	¶	
Common area settled surface dust (n = 26)							
Quartz	21	(81)	0.03§	25.00§	5.00§	6	(23)
Calcite	15	(58)	0.02§	10.00§	3.00§	9	(35)
Portlandite	13	(50)	0.04§	4.00§	2.00§	9	(35)
Gypsum	23	(88)	0.07§	20.00§	5.00§	6	(23)
Mica	5	(19)	0.06§	0.60§	0.20§	5	(19)
Halite	4	(15)	0.04§	0.06§	0.05§	1	(4)
Residential units settled surface dust (n = 57)							
Quartz	30	(53)	0.05§	31.00§	9.00§	15	(26)
Calcite	20	(35)	0.02§	21.00§	8.00§	13	(23)
Portlandite	21	(37)	0.05§	8.00§	2.00§	17	(30)
Gypsum	45	(79)	0.05§	30.00§	4.00§	9	(16)
Mica	5	(9)	0.03§	0.30§	0.10§	1	(2)
Halite	6	(11)	0.03§	0.10§	0.06§	0	
Comparison areas above 59th Street							
Common areas (n = 3)							
Quartz	2	(67)	1.00§	1.00§	¶		
Calcite	2	(67)	0.03§	0.40§	¶		
Portlandite	1	(33)	0.05§	0.05§	¶		
Gypsum	2	(67)	2.00§	3.00§	¶		
Mica	0	(0)	—	—	—		
Halite	1	(33)	0.04§	0.04§	¶		
Residential units (n = 5)							
Quartz	2	(40)	1.00§	2.00§	¶		
Calcite	1	(20)	0.90§	0.90§	¶		
Portlandite	2	(40)	0.08§	0.08§	¶		
Gypsum	4	(80)	2.00§	4.00§	3.00§		
Mica	1	(20)	0.08§	0.08§	¶		
Halite	1	(20)	0.40§	0.40§	¶		

* Locations where a mineral was detected; percentages based on number of samples obtained from an area. Outdoor samples were not taken from comparison areas above 59th Street because no settled surface dust was visible.
† Shows the number of results and the percentage of samples obtained from this area that had estimated values greater than the maximum levels found at locations above 59th Street.
§ Estimated values to one significant digit; presentation of results as shown does not imply any higher degree of accuracy.
¶ Not applicable.

cleaning of indoor spaces had occurred or would occur, 2) that all airborne fibers were asbestos, and 3) that the highest levels detected during sampling represented long-term air levels. Under these worst-case conditions, prolonged exposure (i.e., decades) to airborne asbestos and quartz might increase the long-term risk for persons developing lung cancer and other adverse lung health effects (approximately one additional case per 10,000 persons exposed). However, persons who clean their residences frequently as recommended (*1*) or who participate in the EPA cleaning and sampling program are unlikely to be exposed to worst-case conditions.

The findings of this investigation are subject to at least two limitations. First, the results do not necessarily reflect conditions found in other buildings, the time period immediately after the collapse, or the time period after December 12, when the sampling was completed. Second, a limited number of samples were obtained from comparison areas to determine NYC background levels of asbestos, SVF, mineral components of concrete, and mineral components of building wallboard. The comparison area results might not reflect NYC background levels.

Following the investigation, DOHMH and ATSDR made three recommendations (*1*). First, because more asbestos, SVF, mineral components of concrete and building wallboard were found in settled surface dust in lower Manhattan residential areas than in comparison residential areas, residents of lower Manhattan were advised to continue cleaning frequently with high-efficiency particulate air (HEPA) filter vacuums and damp cloths/mops to reduce the potential for exposure. Second, to ensure the effectiveness of the recommended cleaning, DOHMH and ATSDR recommended additional monitoring of residential areas in lower Manhattan and an investigation to define background levels specific to NYC for asbestos, SVF, mineral components of concrete, and mineral components of building wallboard. EPA is implementing this recommendation and conducting this investigation. Finally, lower Manhattan residents concerned about possible WTC-related dust in their residential areas were advised to request cleaning and testing from EPA no later than December 31, 2002. EPA is conducting the requested cleaning and testing of lower Manhattan residential areas.

DOHMH and ATSDR are developing a registry of those persons who were most highly exposed, including persons living, working, or attending school in lower Manhattan; persons who responded to the emergency; persons working at the WTC site or the Staten Island landfill following the attacks; and persons working in buildings that were damaged or destroyed in the attacks. The registry will track the health of participants to determine whether their exposures to smoke, dust, and airborne substances around the WTC site might have any short- or long-term impacts on their physical health. Additionally, the registry is intended to track the mental health of the approximately 100,000–200,000 persons who might enroll.

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Smallpox Vaccine Adverse Events Among Civilians — United States, January 24–February 18, 2003

During the civilian smallpox vaccination program, CDC and state health departments are conducting surveillance for vaccine-associated adverse events. In the first stage of the program, active surveillance is being conducted for potentially life-threatening, moderate-to-severe, and other serious adverse events and for vaccinia transmission to contacts of vaccinees (*1*) (Table). Nonserious events are reported via passive surveillance and are expected to be underreported. This report summarizes smallpox vaccine adverse events reported among civilians vaccinated as of February 14, 2003, and received by CDC from the Vaccine Adverse Event Reporting System (VAERS) as of February 18.

Potentially life-threatening and moderate-to-serious events are classified on the basis of evidence in support of the reported diagnoses. For probable cases, other causes are excluded, and supportive information is available. Events are classified as suspected if they have clinical features compatible with the diagnosis but either further investigation is required or additional investigation of the case did not provide supporting evidence for the diagnosis and did not identify an alternative diagnosis. CDC and state health departments also receive reports of other events that are associated temporally with smallpox vaccination. Reported adverse events are not necessarily associated with vaccination, and some or all of these events might be coincidental.

During January 24–February 14, 2003, smallpox vaccine was administered to 4,213 civilian health-care workers in 27 jurisdictions. No potentially life threatening or moderate-to-severe adverse events have been reported. Among seven vaccinees with reported nonserious adverse events, the most common signs and symptoms were fever (n = two), rash (n = two), malaise (n = two), pruritus (n = two), hypertension (n = two), and pharyngitis (n = two).

TABLE. Number of cases* of adverse events after smallpox vaccination among civilians, by type — United States, January 24–February 18, 2003

Adverse events	No. cases Suspected	No. cases Probable
Potentially life-threatening events		
Eczema vaccinatum	—†	—
Erythema multiforme major (Stevens-Johnson syndrome)	—	—
Fetal vaccinia	—	—
Post-vaccinial encephalitis or encephalomyelitis	—	—
Progressive vaccinia	—	—
Moderate-to-severe events		
Generalized vaccinia	—	—
Inadvertent inoculation, non-ocular	—	—
Ocular vaccinia	—	—
Pyogenic infection of vaccination site	—	—
	No. cases	
Other events of concern		
Other serious adverse events§	—	
Other nonserious adverse events¶	7	
Vaccinia immune globulin release	—	
Vaccinia transmission to contacts	—	

* Under investigation or completed as of February 18, 2002; numbers and classifications of adverse events will be updated regularly in *MMWR* as more information becomes available.
† No cases reported.
§ Events that result in hospitalization, permanent disability, life-threatening illness, or death; these events are associated temporally with smallpox vaccination but have not been documented to be associated causally with vaccination.
¶ Include expected self-limited responses to smallpox vaccination (e.g., fatigue, headache, pruritis, local reaction at vaccination site, regional lymphadenopathy, lymphangitis, fever, myalgia and chills, and nausea); additional events are associated temporally with smallpox vaccination but have not been documented to be associated causally with vaccination.

Surveillance for adverse events during the civilian smallpox vaccination program is ongoing. Regular surveillance reports will be published in *MMWR*.

Reference

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Notice to Readers

Release of Atlas Highlighting Burden of Stroke Death

Stroke is the third leading cause of death in the United States and the leading cause of serious, long-term disability. Each year, approximately 700,000 U.S. residents experience a new or recurrent stroke; an estimated 500,000 residents will have their first stroke (*1*). In 1999, a total of 167,000 deaths from stroke occurred; of these, approximately half occurred out of

hospital (*2*). A new CDC report, *The Atlas of Stroke Mortality: Racial, Ethnic, and Geographic Disparities in the United States* (*3*) provides, for the first time, an extensive series of national and state maps that show local disparities in stroke death rates for the five largest racial/ethnic groups in the United States. The maps provide health-care professionals and concerned persons with county-level maps of stroke mortality that are essential for tailoring stroke-prevention policies and programs to the needs of communities.

High blood pressure and atrial fibrillation are important risk factors for stroke that can be prevented and controlled in reducing stroke-related deaths and disability. CDC funds health departments in 29 states and the District of Columbia to develop effective strategies for reducing the burden of cardiovascular diseases (e.g., heart disease and stroke) with an emphasis on policy and systems changes. Through these state-based programs, CDC aims to eliminate disparities in treatment, risk factors, and disease; delay the onset of disease; postpone death from cardiovascular disease; and diminish disabling conditions.

Additional information is available at http://www.cdc.gov/nccdphp/cvd/stateprogram.htm. Detailed maps of stroke and heart disease mortality at state and county levels are available at http://www.cdc.gov/cvh. Additional information about stroke also is available from the National Institute of Neurological Disorders and Stroke at http://www.ninds.nih.gov, the American Stroke Association Division of the American Heart Association at http://www.strokeassociation.org, the Brain Attack Coalition at http://www.stroke-site.org, and the National Stroke Association at http://www.stroke.org.

References

1. American Heart Association. Heart and Stroke Statistics—2003 Update. Dallas, Texas: American Heart Association, 2003. Available at http://www.americanheart.org/statistics.
2. CDC. State-specific mortality from stroke and distribution of place of death—United States, 1999. MMWR 2002;51:429–33.
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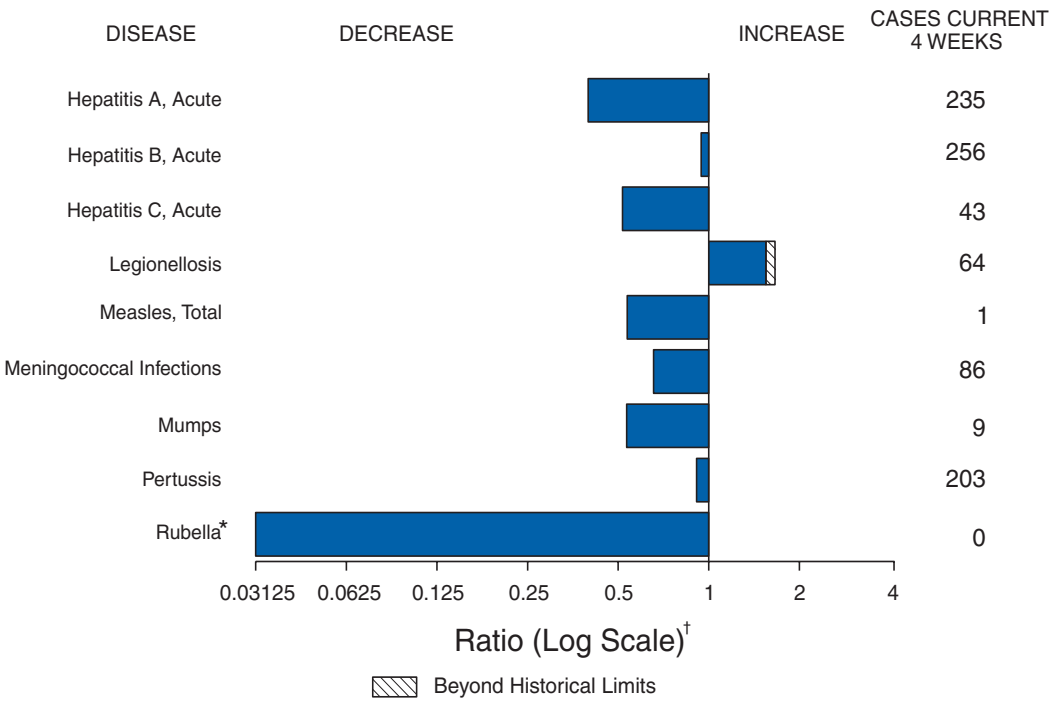
FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending February 15, 2003, with historical data



* No rubella cases were reported for the current 4-week period yielding a ratio for week 7 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 February 15, 2003 (7th Week)*

	Cum. 2003	Cum. 2002		Cum. 2003	Cum. 2002
Anthrax	-	-	Hansen disease (leprosy)†	4	3
Botulism:	-	-	Hantavirus pulmonary syndrome†	3	-
foodborne	-	4	Hemolytic uremic syndrome, postdiarrheal†	9	11
infant	8	9	HIV infection, pediatric†§	-	21
other (wound & unspecified)	3	3	Measles, total¶	2	2
Brucellosis†	6	8	Mumps	21	26
Chancroid	5	3	Plague	-	-
Cholera	-	-	Poliomyelitis, paralytic	-	-
Cyclosporiasis†	2	14	Psittacosis†	3	8
Diphtheria	-	-	Q fever†	6	3
Ehrlichiosis:	-	-	Rabies, human	-	-
human granulocytic (HGE)†	10	7	Rubella	-	1
human monocytic (HME)†	7	2	Rubella, congenital	-	1
other and unspecified	-	-	Streptococcal toxic-shock syndrome†	11	11
Encephalitis/Meningitis:	-	-	Tetanus	2	-
California serogroup viral†	-	-	Toxic-shock syndrome	5	15
eastern equine†	-	-	Trichinosis	1	2
Powassan†	-	-	Tularemia†	2	3
St. Louis†	-	-	Yellow fever	-	-
western equine†	-	-			

-: No reported cases.
* Incidence data for reporting years 2002 and 2003 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 update December 22, 2002.
¶ Of two cases reported in 2002 and two cases reported in 2003, in each year, one was indigenous and one was imported from another country.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending February 15, 2003, and February 16, 2002 (7th Week)*

Reporting area	AIDS		Chlamydia†		Coccidiodomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile	
	Cum. 2003§	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	-	3,410	78,829	101,312	473	332	135	272	-	-
NEW ENGLAND	-	111	2,660	3,472	-	-	10	7	-	-
Maine	-	1	138	181	N	N	1	-	-	-
N.H.	-	2	182	224	-	-	-	2	-	-
Vt.	-	3	160	92	-	-	1	-	-	-
Mass.	-	76	958	1,319	-	-	5	2	-	-
R.I.	-	5	350	358	-	-	1	3	-	-
Conn.	-	24	872	1,298	-	-	2	-	-	-
MID. ATLANTIC	-	835	5,340	10,831	-	-	30	22	-	-
Upstate N.Y.	-	46	1,495	1,079	-	-	4	3	-	-
N.Y. City	-	587	645	3,913	-	-	24	13	-	-
N.J.	-	145	1,187	1,835	-	-	1	1	-	-
Pa.	-	57	2,013	4,004	N	N	1	5	-	-
E.N. CENTRAL	-	370	14,820	18,556	1	2	21	88	-	-
Ohio	-	103	5,665	4,822	-	-	7	18	-	-
Ind.	-	52	1,763	2,156	N	N	2	8	-	-
Ill.	-	176	2,502	5,398	-	-	2	18	-	-
Mich.	-	31	3,520	3,880	1	2	9	14	-	-
Wis.	-	8	1,370	2,300	-	-	1	30	-	-
W.N. CENTRAL	-	48	4,220	5,483	-	-	14	19	-	-
Minn.	-	9	911	1,446	-	-	6	8	-	-
Iowa	-	15	174	408	N	N	3	2	-	-
Mo.	-	22	1,500	1,876	-	-	2	4	-	-
N. Dak.	-	-	41	143	N	N	-	-	-	-
S. Dak.	-	-	340	285	-	-	3	-	-	-
Nebr.	-	-	293	399	-	-	-	3	-	-
Kans.	-	2	961	926	N	N	-	2	-	-
S. ATLANTIC	-	1,093	17,993	18,007	-	-	26	56	-	-
Del.	-	21	422	345	N	N	1	-	-	-
Md.	-	140	2,012	1,924	-	-	5	-	-	-
D.C.	-	19	394	460	-	-	-	1	-	-
Va.	-	107	1,824	1,958	-	-	-	-	-	-
W. Va.	-	6	299	321	N	N	-	-	-	-
N.C.	-	45	3,507	2,558	-	-	3	7	-	-
S.C.	-	102	1,414	1,852	-	-	1	-	-	-
Ga.	-	375	3,400	3,386	-	-	12	39	-	-
Fla.	-	278	4,721	5,203	N	N	4	9	-	-
E.S. CENTRAL	-	136	6,198	6,877	-	-	11	11	-	-
Ky.	-	16	857	1,143	-	-	-	1	-	-
Tenn.	-	66	2,046	2,241	-	-	5	1	-	-
Ala.	-	20	1,736	2,255	-	-	5	8	-	-
Miss.	-	34	1,559	1,238	N	N	1	1	-	-
W.S. CENTRAL	-	379	12,070	14,167	-	-	2	8	-	-
Ark.	-	15	657	852	-	-	1	2	-	-
La.	-	65	2,067	2,329	N	N	-	1	-	-
Okla.	-	7	894	1,162	N	N	1	1	-	-
Tex.	-	292	8,452	9,824	-	-	-	4	-	-
MOUNTAIN	-	106	4,287	6,308	406	236	10	8	-	-
Mont.	-	3	238	362	-	-	-	-	-	-
Idaho	-	1	355	235	-	-	5	2	-	-
Wyo.	-	1	157	98	-	-	-	-	-	-
Colo.	-	20	1,100	1,854	N	N	2	2	-	-
N. Mex.	-	6	43	1,065	-	1	-	-	-	-
Ariz.	-	39	1,878	1,852	404	229	2	1	-	-
Utah	-	7	196	51	1	2	1	2	-	-
Nev.	-	29	320	791	1	4	-	1	-	-
PACIFIC	-	332	11,241	17,611	66	94	11	53	-	-
Wash.	-	39	2,018	1,846	N	N	-	10	-	-
Oreg.	-	75	776	772	-	-	3	7	-	-
Calif.	-	215	7,426	14,025	66	94	8	36	-	-
Alaska	-	-	458	431	-	-	-	-	-	-
Hawaii	-	3	563	537	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	68	104	253	N	N	-	-	-	-
V.I.	-	33	-	28	-	-	-	-	-	-
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 2002 and 2003 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 — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update December 22, 2002.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 15, 2003, and February 16, 2002 (7th Week)*

Reporting area	*Escherichia coli*, Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped					
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	99	165	7	8	7	1	1,758	1,772	34,028	45,885
NEW ENGLAND	9	7	-	1	-	-	64	206	730	1,109
Maine	-	-	-	-	-	-	10	23	5	13
N.H.	2	1	-	-	-	-	5	9	15	12
Vt.	-	-	-	-	-	-	9	18	14	14
Mass.	3	1	-	1	-	-	36	108	269	491
R.I.	-	2	-	-	-	-	4	18	131	118
Conn.	4	3	-	-	-	-	-	30	296	461
MID. ATLANTIC	7	9	-	-	2	-	548	335	2,318	5,096
Upstate N.Y.	4	5	-	-	2	-	65	61	708	590
N.Y. City	1	-	-	-	-	-	465	125	218	1,697
N.J.	2	4	-	-	-	-	11	64	685	1,073
Pa.	N	N	-	-	-	-	7	85	707	1,736
E.N. CENTRAL	25	58	-	-	2	-	238	419	7,888	9,565
Ohio	7	12	-	-	2	-	122	116	3,630	2,706
Ind.	2	4	-	-	-	-	-	-	691	989
Ill.	5	20	-	-	-	-	27	124	1,228	3,010
Mich.	7	9	-	-	-	-	84	109	1,865	2,078
Wis.	4	13	-	-	-	-	5	70	474	782
W.N. CENTRAL	16	25	2	3	2	-	160	153	1,691	2,417
Minn.	8	8	2	3	-	-	43	36	294	444
Iowa	1	7	-	-	-	-	32	35	31	110
Mo.	3	3	N	N	N	N	27	41	912	1,194
N. Dak.	-	-	-	-	1	-	4	-	2	5
S. Dak.	1	-	-	-	-	-	7	8	17	36
Nebr.	3	4	-	-	-	-	27	15	69	172
Kans.	-	3	-	-	1	-	20	18	366	456
S. ATLANTIC	12	25	1	2	-	-	293	349	9,729	11,209
Del.	-	1	-	-	-	-	6	10	201	237
Md.	-	-	-	-	-	-	16	17	1,029	1,129
D.C.	-	-	-	-	-	-	-	8	331	398
Va.	1	2	-	-	-	-	16	9	1,080	1,252
W. Va.	-	-	-	-	-	-	-	2	96	129
N.C.	3	4	-	-	-	-	-	-	2,045	2,087
S.C.	-	-	-	-	-	-	4	1	853	1,049
Ga.	3	17	-	1	-	-	143	103	1,828	2,034
Fla.	5	1	1	1	-	-	108	199	2,266	2,894
E.S. CENTRAL	5	1	-	-	-	-	38	34	3,271	4,208
Ky.	-	-	-	-	-	-	-	-	403	469
Tenn.	3	1	-	-	-	-	14	11	956	1,386
Ala.	2	-	-	-	-	-	24	23	1,121	1,556
Miss.	-	-	-	-	-	-	-	-	791	797
W.S. CENTRAL	1	3	-	-	-	1	23	11	5,248	6,638
Ark.	1	-	-	-	-	-	15	11	441	611
La.	-	-	-	-	-	-	-	-	1,325	1,573
Okla.	-	-	-	-	-	-	8	-	376	484
Tex.	-	3	-	-	-	1	-	-	3,106	3,970
MOUNTAIN	12	12	3	1	1	-	161	137	989	1,523
Mont.	-	1	-	-	-	-	2	5	18	24
Idaho	2	1	2	-	-	-	20	3	12	12
Wyo.	-	-	-	1	-	-	3	1	9	8
Colo.	3	2	-	-	1	-	47	56	298	541
N. Mex.	-	2	1	-	-	-	3	13	23	190
Ariz.	4	1	-	-	-	-	43	12	502	507
Utah	3	3	-	-	-	-	31	25	18	2
Nev.	-	2	-	-	-	-	12	22	109	239
PACIFIC	12	25	1	1	-	-	233	128	2,164	4,120
Wash.	4	4	-	-	-	-	18	23	361	408
Oreg.	1	7	1	1	-	-	44	77	119	121
Calif.	5	14	-	-	-	-	148	-	1,491	3,425
Alaska	-	-	-	-	-	-	10	12	72	95
Hawaii	2	-	-	-	-	-	13	16	121	71
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	11	81
V.I.	-	-	-	-	-	-	-	-	-	12
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.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 15, 2003, and February 16, 2002 (7th Week)*

Reporting area	*Haemophilus influenzae*, invasive								Hepatitis (viral, acute), by type	
	All ages		Age <5 years							
	All serotypes		Serotype B		Non-serotype B		Unknown serotype		A	
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	145	221	2	-	19	41	2	2	537	1,213
NEW ENGLAND	14	19	-	-	-	5	-	-	15	60
Maine	-	1	-	-	-	-	-	-	1	1
N.H.	3	-	-	-	-	-	-	-	-	3
Vt.	4	-	-	-	-	-	-	-	1	-
Mass.	5	12	-	-	-	3	-	-	11	32
R.I.	-	-	-	-	-	-	-	-	-	4
Conn.	2	6	-	-	-	2	-	-	2	20
MID. ATLANTIC	10	38	-	-	3	3	-	-	81	112
Upstate N.Y.	4	16	-	-	1	2	-	-	7	13
N.Y. City	5	11	-	-	2	1	-	-	74	27
N.J.	1	8	-	-	-	-	-	-	-	30
Pa.	-	3	-	-	-	-	-	-	-	42
E.N. CENTRAL	12	40	1	-	3	6	-	-	63	140
Ohio	6	21	-	-	2	3	-	-	22	28
Ind.	2	3	-	-	1	1	-	-	3	2
Ill.	-	15	-	-	-	2	-	-	10	65
Mich.	4	1	1	-	-	-	-	-	25	29
Wis.	-	-	-	-	-	-	-	-	3	16
W.N. CENTRAL	14	3	-	-	1	-	2	1	20	50
Minn.	4	-	-	-	-	-	-	-	1	1
Iowa	-	1	-	-	-	-	-	-	8	12
Mo.	6	2	-	-	-	-	2	1	3	10
N. Dak.	-	-	-	-	-	-	-	-	1	-
S. Dak.	1	-	-	-	-	-	-	-	-	2
Nebr.	-	-	-	-	-	-	-	-	2	3
Kans.	3	-	-	-	1	-	-	-	5	22
S. ATLANTIC	37	54	-	-	3	10	-	-	194	313
Del.	-	-	-	-	-	-	-	-	1	3
Md.	10	16	-	-	1	-	-	-	27	61
D.C.	-	-	-	-	-	-	-	-	-	12
Va.	1	3	-	-	-	1	-	-	1	5
W. Va.	-	-	-	-	-	-	-	-	2	1
N.C.	3	5	-	-	-	-	-	-	5	42
S.C.	1	-	-	-	-	-	-	-	6	7
Ga.	7	19	-	-	1	5	-	-	89	41
Fla.	15	11	-	-	1	4	-	-	63	141
E.S. CENTRAL	16	4	-	-	3	1	-	-	19	50
Ky.	1	-	-	-	-	-	-	-	2	7
Tenn.	7	2	-	-	2	-	-	-	12	19
Ala.	8	1	-	-	1	1	-	-	5	5
Miss.	-	1	-	-	-	-	-	-	-	19
W.S. CENTRAL	10	9	-	-	1	4	-	-	6	125
Ark.	1	-	-	-	-	-	-	-	-	5
La.	3	-	-	-	-	-	-	-	4	4
Okla.	6	9	-	-	1	4	-	-	2	7
Tex.	-	-	-	-	-	-	-	-	-	109
MOUNTAIN	22	31	1	-	4	6	-	-	33	71
Mont.	-	-	-	-	-	-	-	-	-	2
Idaho	-	-	-	-	-	-	-	-	-	7
Wyo.	-	-	-	-	-	-	-	-	-	2
Colo.	4	7	-	-	1	1	-	-	4	13
N. Mex.	2	7	-	-	-	2	-	-	-	3
Ariz.	11	13	1	-	1	2	-	-	21	24
Utah	4	3	-	-	2	-	-	-	5	8
Nev.	1	1	-	-	-	1	-	-	3	12
PACIFIC	10	23	-	-	1	6	-	1	106	292
Wash.	-	-	-	-	-	-	-	-	2	7
Oreg.	8	13	-	-	1	2	-	-	14	20
Calif.	-	4	-	-	-	3	-	1	87	265
Alaska	-	1	-	-	-	1	-	-	1	-
Hawaii	2	5	-	-	-	-	-	-	2	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	-	11
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.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 15, 2003, and February 16, 2002 (7th Week)*

Reporting area	Hepatitis (viral, acute), by type				Legionellosis		Listeriosis		Lyme disease	
	B		C							
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	627	603	102	222	98	97	43	45	354	576
NEW ENGLAND	17	31	-	6	3	5	3	3	4	55
Maine	-	-	-	-	-	-	-	1	-	-
N.H.	-	3	-	-	-	1	1	-	-	7
Vt.	1	2	-	4	1	-	-	-	3	-
Mass.	16	22	-	2	1	2	2	1	-	45
R.I.	-	-	-	-	-	-	-	-	1	3
Conn.	-	4	-	-	1	2	-	1	-	-
MID. ATLANTIC	154	121	7	7	13	19	10	5	285	417
Upstate N.Y.	5	4	3	2	5	4	2	3	194	241
N.Y. City	91	59	-	-	8	-	5	1	55	-
N.J.	55	36	4	3	-	6	2	-	34	89
Pa.	3	22	-	2	-	9	1	1	2	87
E.N. CENTRAL	50	50	14	10	28	37	5	9	6	16
Ohio	24	7	1	-	16	24	2	4	4	2
Ind.	-	2	-	-	-	3	1	-	2	1
Ill.	-	3	1	2	-	-	-	1	-	-
Mich.	26	32	12	8	12	8	2	1	-	-
Wis.	-	6	-	-	-	2	-	3	U	13
W.N. CENTRAL	21	30	27	82	2	2	2	1	-	7
Minn.	2	1	-	-	-	-	1	-	-	2
Iowa	1	6	-	-	1	-	-	-	-	3
Mo.	13	13	25	79	-	1	-	1	-	2
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	-	-
Nebr.	4	5	2	3	-	1	1	-	-	-
Kans.	1	5	-	-	1	-	-	-	-	-
S. ATLANTIC	221	167	22	13	40	13	11	6	43	62
Del.	1	2	-	3	-	3	-	-	-	9
Md.	9	18	2	2	11	5	2	1	31	45
D.C.	-	2	-	-	-	-	-	-	-	3
Va.	1	18	-	-	2	-	-	-	-	-
W. Va.	-	2	-	-	N	N	-	-	-	-
N.C.	17	34	1	3	4	1	1	-	6	-
S.C.	-	3	-	1	-	-	1	2	-	1
Ga.	133	27	3	1	5	3	3	2	1	-
Fla.	60	61	16	3	18	1	4	1	5	4
E.S. CENTRAL	28	48	13	24	1	1	4	2	1	2
Ky.	6	4	2	1	-	-	-	-	-	-
Tenn.	6	17	-	3	1	-	-	1	1	-
Ala.	9	14	1	2	-	1	3	1	-	-
Miss.	7	13	10	18	-	-	1	-	-	2
W.S. CENTRAL	10	21	6	61	2	2	-	4	2	8
Ark.	-	17	-	4	-	-	-	-	-	-
La.	10	3	6	1	-	-	-	-	2	1
Okla.	-	1	-	-	2	-	-	-	-	-
Tex.	-	-	-	56	-	2	-	4	-	7
MOUNTAIN	69	38	7	5	5	4	8	3	1	1
Mont.	2	-	-	-	-	-	1	-	-	-
Idaho	-	-	-	-	1	-	-	-	1	-
Wyo.	1	3	-	2	-	-	-	-	-	-
Colo.	12	10	5	1	1	1	5	1	-	-
N. Mex.	-	10	-	-	-	1	-	-	-	1
Ariz.	49	7	2	-	2	-	2	2	-	-
Utah	4	3	-	-	1	2	-	-	-	-
Nev.	1	5	-	2	-	-	-	-	-	-
PACIFIC	57	97	6	14	4	14	-	12	12	8
Wash.	3	5	1	1	-	-	-	-	-	-
Oreg.	17	20	2	6	N	N	-	1	3	1
Calif.	37	71	3	7	4	14	-	11	9	7
Alaska	-	1	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	4	-	-	-	-	-	1	N	N
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.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 15, 2003, and February 16, 2002 (7th Week)*

Reporting area	Malaria		Meningococcal disease		Pertussis		Rabies, animal		Rocky Mountain spotted fever	
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	93	131	153	254	413	662	363	650	26	33
NEW ENGLAND	2	12	7	19	85	138	50	64	1	-
Maine	1	1	1	2	-	3	4	4	-	-
N.H.	1	4	-	1	-	1	2	1	-	-
Vt.	-	-	-	2	16	19	3	17	-	-
Mass.	-	4	5	11	69	110	18	19	1	-
R.I.	-	-	-	2	-	-	-	4	-	-
Conn.	-	3	1	1	-	5	23	19	-	-
MID. ATLANTIC	34	21	12	28	30	35	37	85	1	4
Upstate N.Y.	4	3	3	6	28	26	34	54	-	-
N.Y. City	28	7	7	5	-	4	1	4	1	-
N.J.	2	9	1	6	2	-	-	14	-	-
Pa.	-	2	1	11	-	5	2	13	-	4
E.N. CENTRAL	6	18	26	39	49	90	4	2	1	2
Ohio	3	7	11	16	44	50	-	1	1	2
Ind.	-	-	4	6	-	3	2	1	-	-
Ill.	1	6	-	5	-	11	-	-	-	-
Mich.	2	4	8	7	4	11	2	-	-	-
Wis.	-	1	3	5	1	15	-	-	-	-
W.N. CENTRAL	4	8	10	14	14	61	52	39	1	1
Minn.	2	-	1	-	-	1	4	3	-	-
Iowa	2	2	4	3	1	22	5	4	1	-
Mo.	-	2	4	6	7	23	-	1	-	1
N. Dak.	-	-	-	-	-	-	8	-	-	-
S. Dak.	-	-	-	2	1	2	-	15	-	-
Nebr.	-	2	-	2	-	2	-	-	-	-
Kans.	-	2	1	1	5	11	35	16	-	-
S. ATLANTIC	27	34	40	35	60	38	184	188	20	23
Del.	-	-	4	1	-	1	-	3	-	-
Md.	12	14	3	1	12	7	2	48	4	5
D.C.	-	2	-	-	-	-	-	-	-	-
Va.	-	-	2	2	1	12	47	54	-	-
W. Va.	1	-	-	-	-	-	7	18	-	-
N.C.	4	4	4	5	27	7	66	54	16	18
S.C.	-	2	-	2	-	10	13	6	-	-
Ga.	3	11	6	7	14	-	36	-	-	-
Fla.	7	1	21	17	6	1	13	5	-	-
E.S. CENTRAL	3	3	9	10	14	23	4	109	1	2
Ky.	-	-	-	-	3	6	3	1	-	-
Tenn.	1	1	3	1	4	10	-	108	1	2
Ala.	2	1	3	8	7	1	1	-	-	-
Miss.	-	1	3	1	-	6	-	-	-	-
W.S. CENTRAL	1	1	11	40	-	111	10	122	-	1
Ark.	-	-	1	5	-	93	-	-	-	-
La.	1	1	7	3	-	-	-	-	-	-
Okla.	-	-	3	4	-	2	10	16	-	-
Tex.	-	-	-	28	-	16	-	106	-	1
MOUNTAIN	3	4	5	19	108	82	10	15	-	-
Mont.	-	-	-	-	-	2	1	-	-	-
Idaho	-	-	-	-	2	5	-	-	-	-
Wyo.	-	-	-	-	-	2	-	1	-	-
Colo.	2	2	1	6	51	45	-	-	-	-
N. Mex.	-	-	1	-	10	13	-	-	-	-
Ariz.	1	-	3	7	35	9	9	14	-	-
Utah	-	1	-	1	7	5	-	-	-	-
Nev.	-	1	-	5	3	1	-	-	-	-
PACIFIC	13	30	33	50	53	84	12	26	1	-
Wash.	4	-	2	7	15	4	-	-	-	-
Oreg.	5	-	9	11	32	11	-	-	-	-
Calif.	4	27	21	30	6	65	12	12	1	-
Alaska	-	1	-	1	-	1	-	14	-	-
Hawaii	-	2	1	1	-	3	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	1	-	-	-	12	-	-
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.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 15, 2003, and February 16, 2002 (7th Week)*

Reporting area	Salmonellosis		Shigellosis		*Streptococcal* disease, invasive, group A		*Streptococcus pneumoniae*, invasive: Drug resistant, all ages		*Streptococcus pneumoniae*, invasive: Age <5 years	
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	2,464	3,513	1,895	1,855	459	582	281	217	50	17
NEW ENGLAND	97	160	31	33	12	24	2	1	-	1
Maine	5	28	1	2	-	4	-	-	-	-
N.H.	4	4	-	1	1	4	-	-	N	N
Vt.	3	7	-	-	2	1	2	1	-	1
Mass.	59	87	19	26	9	15	N	N	N	N
R.I.	5	5	2	-	-	-	-	-	-	-
Conn.	21	29	9	4	-	-	-	-	-	-
MID. ATLANTIC	246	361	119	77	59	87	7	12	12	3
Upstate N.Y.	41	48	26	7	39	30	7	12	12	3
N.Y. City	184	103	79	36	15	27	U	U	U	U
N.J.	11	126	5	18	1	26	N	N	N	N
Pa.	10	84	9	16	4	4	-	-	-	-
E.N. CENTRAL	342	600	127	261	120	150	65	17	28	12
Ohio	152	106	45	132	50	28	56	-	26	-
Ind.	26	33	8	6	7	3	9	15	2	2
Ill.	75	307	39	89	1	44	-	2	-	-
Mich.	64	89	30	20	61	49	-	-	N	N
Wis.	25	65	5	14	1	26	N	N	-	10
W.N. CENTRAL	166	239	106	199	42	25	41	37	5	-
Minn.	50	46	9	21	17	-	-	-	5	-
Iowa	48	35	3	11	-	-	N	N	N	N
Mo.	34	109	25	23	5	12	1	1	-	-
N. Dak.	2	-	-	-	1	-	1	-	-	-
S. Dak.	5	11	8	91	5	-	-	1	-	-
Nebr.	11	12	49	38	8	6	8	9	N	N
Kans.	16	26	12	15	6	7	31	26	N	N
S. ATLANTIC	864	1,023	1,090	707	94	98	141	113	-	1
Del.	2	10	50	2	1	-	-	3	N	N
Md.	78	70	107	52	34	13	-	-	-	-
D.C.	-	9	-	3	-	2	-	3	-	1
Va.	45	71	29	154	-	6	N	N	N	N
W. Va.	1	4	-	1	-	-	7	3	-	-
N.C.	169	118	119	37	17	23	N	N	U	U
S.C.	39	31	14	6	1	2	9	21	N	N
Ga.	219	282	416	307	13	39	35	48	N	N
Fla.	311	428	355	145	28	13	90	35	N	N
E.S. CENTRAL	202	182	101	123	15	16	9	25	-	-
Ky.	35	19	12	30	2	3	-	3	N	N
Tenn.	61	49	26	9	13	13	9	22	N	N
Ala.	73	62	49	36	-	-	-	-	N	N
Miss.	33	52	14	48	-	-	-	-	-	-
W.S. CENTRAL	61	201	86	127	12	44	12	4	5	-
Ark.	25	34	1	18	1	-	1	2	-	-
La.	14	17	15	11	-	-	11	2	3	-
Okla.	22	24	70	27	11	6	N	N	2	-
Tex.	-	126	-	71	-	38	N	N	-	-
MOUNTAIN	162	190	101	46	81	43	4	8	-	-
Mont.	4	3	-	-	-	-	-	-	-	-
Idaho	11	10	1	2	4	1	N	N	N	N
Wyo.	3	5	1	-	-	1	1	5	-	-
Colo.	45	67	17	15	25	19	-	-	-	-
N. Mex.	13	26	13	3	12	19	3	3	-	-
Ariz.	62	33	64	14	38	-	-	-	N	N
Utah	16	16	3	5	2	3	-	-	-	-
Nev.	8	30	2	7	-	-	-	-	-	-
PACIFIC	324	557	134	282	24	95	-	-	-	-
Wash.	30	13	6	3	-	16	-	-	N	N
Oreg.	27	39	8	20	N	N	N	N	N	N
Calif.	235	465	112	250	10	65	N	N	N	N
Alaska	13	10	2	1	-	-	-	-	N	N
Hawaii	19	30	6	8	14	14	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	1	16	-	1	N	N	-	-	N	N
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.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending February 15, 2003, and February 16, 2002 (7th Week)*

Reporting area	Syphilis: Primary & secondary Cum. 2003	Syphilis: Primary & secondary Cum. 2002	Syphilis: Congenital Cum. 2003	Syphilis: Congenital Cum. 2002	Tuberculosis Cum. 2003	Tuberculosis Cum. 2002	Typhoid fever Cum. 2003	Typhoid fever Cum. 2002	Varicella (Chickenpox) Cum. 2003
UNITED STATES	682	728	23	48	474	981	20	32	1,677
NEW ENGLAND	20	9	-	-	14	34	1	4	405
Maine	-	-	-	-	-	2	-	-	211
N.H.	-	-	-	-	-	1	-	-	-
Vt.	-	-	-	-	-	-	-	-	156
Mass.	17	6	-	-	5	4	-	3	38
R.I.	3	-	-	-	3	12	-	-	-
Conn.	-	3	-	-	6	15	1	1	-
MID. ATLANTIC	73	74	5	9	130	165	7	4	-
Upstate N.Y.	3	3	3	1	1	14	-	-	-
N.Y. City	46	42	1	3	117	75	7	2	-
N.J.	23	19	1	5	-	41	-	2	-
Pa.	1	10	-	-	12	35	-	-	-
E.N. CENTRAL	94	141	6	4	76	86	2	4	933
Ohio	26	19	1	-	13	13	-	2	255
Ind.	1	9	1	-	13	12	1	-	-
Ill.	11	43	3	3	33	44	-	-	-
Mich.	54	65	1	1	14	11	1	1	662
Wis.	2	5	-	-	3	6	-	1	16
W.N. CENTRAL	14	11	-	-	39	58	-	1	2
Minn.	4	5	-	-	11	22	-	1	-
Iowa	-	-	-	-	6	-	-	-	-
Mo.	3	3	-	-	8	24	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	2
S. Dak.	-	-	-	-	4	-	-	-	-
Nebr.	-	2	-	-	-	1	-	-	-
Kans.	7	1	-	-	10	11	-	-	-
S. ATLANTIC	192	169	3	11	59	130	1	9	326
Del.	1	2	-	-	-	-	-	-	1
Md.	30	14	-	1	8	10	1	1	-
D.C.	5	3	-	-	-	-	-	-	-
Va.	10	5	-	-	13	19	-	-	65
W. Va.	-	-	-	-	1	5	-	-	255
N.C.	22	48	-	3	13	10	-	-	-
S.C.	14	17	1	2	10	2	-	-	5
Ga.	22	22	-	2	14	17	-	4	-
Fla.	88	58	2	3	-	67	-	4	-
E.S. CENTRAL	43	81	3	3	31	64	-	-	-
Ky.	5	2	-	-	-	13	-	-	-
Tenn.	21	33	3	2	9	29	-	-	-
Ala.	14	31	-	-	22	16	-	-	-
Miss.	3	15	-	1	-	6	-	-	-
W.S. CENTRAL	96	100	2	16	12	206	-	3	1
Ark.	8	1	-	-	5	3	-	-	-
La.	11	20	-	-	-	-	-	-	1
Okla.	6	11	-	-	7	2	-	-	-
Tex.	71	68	2	16	-	201	-	3	-
MOUNTAIN	22	36	4	2	10	31	2	1	10
Mont.	-	-	-	-	-	-	-	-	-
Idaho	-	1	-	-	-	-	-	-	-
Wyo.	-	-	-	-	1	1	-	-	2
Colo.	-	2	-	1	2	7	2	1	-
N. Mex.	3	4	-	-	-	7	-	-	-
Ariz.	19	29	4	1	7	11	-	-	-
Utah	-	-	-	-	-	2	-	-	8
Nev.	-	-	-	-	-	3	-	-	-
PACIFIC	128	107	-	3	103	207	7	6	-
Wash.	7	6	-	-	24	18	-	-	-
Oreg.	5	4	-	-	6	8	2	1	-
Calif.	114	96	-	3	49	154	5	5	-
Alaska	-	-	-	-	9	11	-	-	-
Hawaii	2	1	-	-	15	16	-	-	-
Guam	-	-	-	-	-	-	-	-	-
P.R.	9	23	-	8	-	-	-	-	5
V.I.	-	1	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,* week ending February 15, 2003 (7th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	491	383	76	15	7	10	55
Boston, Mass.	169	124	30	5	2	8	14
Bridgeport, Conn.	43	30	8	3	1	1	2
Cambridge, Mass.	12	9	2	1	-	-	4
Fall River, Mass.	32	29	3	-	-	-	2
Hartford, Conn.	U	U	U	U	U	U	U
Lowell, Mass.	27	25	2	-	-	-	3
Lynn, Mass.	15	11	4	-	-	-	-
New Bedford, Mass.	29	27	2	-	-	-	4
New Haven, Conn.	U	U	U	U	U	U	U
Providence, R.I.	U	U	U	U	U	U	U
Somerville, Mass.	5	4	-	-	1	-	-
Springfield, Mass.	43	33	6	3	1	-	6
Waterbury, Conn.	46	36	8	1	1	-	8
Worcester, Mass.	70	55	11	2	1	1	12
MID. ATLANTIC	2,270	1,582	468	124	38	54	130
Albany, N.Y.	48	37	8	2	-	1	2
Allentown, Pa.	23	19	4	-	-	-	1
Buffalo, N.Y.	111	84	22	4	-	1	12
Camden, N.J.	43	26	9	6	-	2	8
Elizabeth, N.J.	U	U	U	U	U	U	U
Erie, Pa.	58	49	6	1	-	2	2
Jersey City, N.J.	51	40	10	1	-	-	-
New York City, N.Y.	1,050	715	240	61	18	12	44
Newark, N.J.	49	16	15	11	-	7	1
Paterson, N.J.	23	16	5	-	2	-	1
Philadelphia, Pa.	400	263	83	24	10	20	24
Pittsburgh, Pa.§	29	20	6	1	-	2	1
Reading, Pa.	19	17	1	1	-	-	-
Rochester, N.Y.	133	103	24	3	1	2	13
Schenectady, N.Y.	18	15	2	-	1	-	1
Scranton, Pa.	31	25	5	1	-	-	2
Syracuse, N.Y.	101	78	14	4	3	2	12
Trenton, N.J.	37	26	5	2	1	3	-
Utica, N.Y.	15	8	5	1	1	-	1
Yonkers, N.Y.	31	25	4	1	1	-	5
E.N. CENTRAL	1,967	1,321	429	124	55	38	143
Akron, Ohio	58	36	13	5	3	1	10
Canton, Ohio	45	32	10	2	1	-	4
Chicago, Ill.	318	192	89	29	4	4	26
Cincinnati, Ohio	99	71	18	4	1	5	12
Cleveland, Ohio	148	96	37	8	4	3	4
Columbus, Ohio	210	136	48	16	5	5	22
Dayton, Ohio	118	80	23	6	8	1	4
Detroit, Mich.	187	106	49	12	11	9	10
Evansville, Ind.	42	42	-	-	-	-	3
Fort Wayne, Ind.	59	42	8	8	1	-	3
Gary, Ind.	14	8	2	3	1	-	-
Grand Rapids, Mich.	55	41	11	2	-	1	7
Indianapolis, Ind.	241	163	56	13	5	4	12
Lansing, Mich.	U	U	U	U	U	U	U
Milwaukee, Wis.	122	88	21	6	6	1	12
Peoria, Ill.	44	36	6	2	-	-	2
Rockford, Ill.	64	51	9	2	2	-	6
South Bend, Ind.	50	31	13	1	3	2	1
Toledo, Ohio	93	70	16	5	-	2	5
Youngstown, Ohio	U	U	U	U	U	U	U
W.N. CENTRAL	564	395	104	34	19	12	38
Des Moines, Iowa	48	42	4	1	1	-	3
Duluth, Minn.	34	25	8	1	-	-	1
Kansas City, Kans.	47	24	15	4	3	1	3
Kansas City, Mo.	100	66	18	8	6	2	6
Lincoln, Nebr.	35	26	4	3	-	2	5
Minneapolis, Minn.	71	47	13	2	5	4	5
Omaha, Nebr.	98	74	11	7	4	2	6
St. Louis, Mo.	U	U	U	U	U	U	U
St. Paul, Minn.	47	37	8	1	-	1	3
Wichita, Kans.	84	54	23	7	-	-	6
S. ATLANTIC	1,276	820	286	113	26	30	84
Atlanta, Ga.	203	124	50	23	5	1	11
Baltimore, Md.	189	117	47	20	4	1	15
Charlotte, N.C.	119	83	17	13	3	3	7
Jacksonville, Fla.	175	116	33	18	2	6	16
Miami, Fla.	124	76	33	8	2	5	8
Norfolk, Va.	45	26	13	4	1	1	3
Richmond, Va.	49	34	6	5	3	1	3
Savannah, Ga.	49	30	14	3	2	-	3
St. Petersburg, Fla.	77	50	17	6	-	3	3
Tampa, Fla.	221	150	48	11	4	8	14
Washington, D.C.	U	U	U	U	U	U	U
Wilmington, Del.	25	14	8	2	-	1	1
E.S. CENTRAL	888	617	174	58	27	11	73
Birmingham, Ala.	198	140	36	16	3	2	22
Chattanooga, Tenn.	73	50	15	6	2	-	2
Knoxville, Tenn.	106	81	18	4	1	2	5
Lexington, Ky.	69	47	17	3	2	-	9
Memphis, Tenn.	171	117	34	12	5	3	11
Mobile, Ala.	87	59	17	6	3	2	10
Montgomery, Ala.	14	11	3	-	-	-	3
Nashville, Tenn.	170	112	34	11	11	2	11
W.S. CENTRAL	1,130	731	220	83	52	44	79
Austin, Tex.	104	63	27	9	2	3	13
Baton Rouge, La.	66	40	18	4	1	3	1
Corpus Christi, Tex.	59	43	9	3	1	3	4
Dallas, Tex.	90	72	13	1	1	3	9
El Paso, Tex.	110	86	14	4	2	4	1
Ft. Worth, Tex.	125	81	27	12	2	3	12
Houston, Tex.	369	204	74	35	37	19	24
Little Rock, Ark.	67	39	13	8	3	4	-
New Orleans, La.	U	U	U	U	U	U	U
San Antonio, Tex.	U	U	U	U	U	U	U
Shreveport, La.	38	29	7	1	-	1	5
Tulsa, Okla.	102	74	18	6	3	1	10
MOUNTAIN	931	602	159	87	38	26	59
Albuquerque, N.M.	123	73	-	30	18	2	7
Boise, Idaho	42	33	7	-	2	-	6
Colo. Springs, Colo.	64	39	4	2	-	-	1
Denver, Colo.	111	65	21	9	8	8	10
Las Vegas, Nev.	261	159	72	21	5	4	13
Ogden, Utah	26	20	3	3	-	-	2
Phoenix, Ariz.	U	U	U	U	U	U	U
Pueblo, Colo.	23	19	2	2	-	-	3
Salt Lake City, Utah	94	55	20	10	2	7	8
Tucson, Ariz.	187	139	30	10	3	5	9
PACIFIC	1,629	1,134	314	100	42	34	148
Berkeley, Calif.	12	8	4	-	-	-	1
Fresno, Calif.	155	111	28	12	4	-	9
Glendale, Calif.	20	17	2	1	-	-	2
Honolulu, Hawaii	U	U	U	U	U	U	U
Long Beach, Calif.	58	35	13	5	3	2	10
Los Angeles, Calif.	425	285	85	31	16	8	37
Pasadena, Calif.	27	18	2	1	-	1	2
Portland, Oreg.	121	82	28	6	3	2	5
Sacramento, Calif.	155	112	27	11	2	3	20
San Diego, Calif.	166	111	33	11	3	8	17
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	197	142	34	11	4	6	25
Santa Cruz, Calif.	28	22	4	1	1	-	3
Seattle, Wash.	90	61	19	6	3	1	6
Spokane, Wash.	65	51	11	-	1	2	4
Tacoma, Wash.	110	79	24	4	2	1	7
TOTAL	11,146¶	7,585	2,230	738	304	259	809

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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