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## Tick Paralysis — Washington, 1995

Tick paralysis (tick toxicosis)—one of the eight most common tickborne diseases in the United States ( 1 )-is an acute, ascending, flaccid motor paralysis that can be confused with Guillain-Barré syndrome, botulism, and myasthenia gravis. This report summarizes the results of the investigation of a case of tick paralysis in Washington.

On April 10, 1995, a 2-year-old girl who resided in Asotin County, Washington, was taken to the emergency department of a regional hospital because of a 2-day history of unsteady gait, difficulty standing, and reluctance to walk. Other than a recent history of cough, she had been healthy and had not been injured. On physical examination, she was afebrile, alert, and active but could stand only briefly before requiring assistance. Cranial nerve function was intact. However, she exhibited marked extremity and mild truncal ataxia, and deep tendon reflexes were absent. She was admitted with a tentative diagnosis of either Guillain-Barré syndrome or postinfectious polyradiculopathy.

Within several hours of hospitalization, she had onset of drooling and tachypnea. A nurse incidentally detected an engorged tick on the girl's hairline by an ear and removed the tick. Within 7 hours after tick removal, tachypnea subsided and reflexes were present but diminished. The patient recovered fully and was discharged on April 11. The tick species was not identified.
Reported by: E Haas, D Anderson, R Neu, Asotin County Health Dept, Clarkston, Washington. N Berkheiser, MD, Saint Joseph Regional Medical Center, Lewiston, Idaho. J Grendon, DVM, P Shoemaker, J Kobayashi, MD, P Stehr-Green, DrPH, State Epidemiologist, Washington State Dept of Health. Div of Field Epidemiology, Epidemiology Program Office, CDC.
Editorial Note: Tick paralysis occurs worldwide and is caused by the introduction of a neurotoxin elaborated into humans during attachment of and feeding by the female of several tick species. In North America, tick paralysis occurs most commonly in the Rocky Mountain and northwestern regions of the United States and in western Canada. Most cases have been reported among girls aged $<10$ years during April-June, when nymphs and mature wood ticks are most prevalent (2). Although tick paralysis is a reportable disease in Washington, surveillance is passive, and only 10 cases were reported during 1987-1995.

In the United States, this disease is associated with Dermacentor andersoni (Rocky Mountain wood tick), D. variabilis (American dog tick), Amblyomma americanum (Lone Star tick), A. maculatum, Ixodes scapularis (black-legged tick), and I. pacificus

## Tick Paralysis - Continued

(western black-legged tick) (3,4). Onset of symptoms usually occurs after a tick has fed for several days. The pathogenesis of tick paralysis has not been fully elucidated, and pathologic and clinical effects vary depending on the tick species (4). However, motor neurons probably are affected by the toxin, which diminishes release of acetylcholine (5). In addition, experimental studies indicate that the toxin may produce a substantial decrease in maximal motor-nerve conduction velocities while simultaneously increasing the stimulating current potential necessary to elicit a response (5).

If unrecognized, tick paralysis can progress to respiratory failure and may be fatal in approximately $10 \%$ of cases (6). Prompt removal of the feeding tick usually is followed by complete recovery. Ticks can be attached to the scalp or neck and concealed by hair and can be removed using forceps or tweezers to grasp the tick as closely as possible to the point of attachment (7). Removal requires the application of even pressure to avoid breaking off the body and leaving the mouth parts imbedded in the host. Gloves should be worn if a tick must be removed by hand; hands should be promptly washed with soap and hot water after removal of a tick.

The risk for tick paralysis may be greatest for children in rural areas, especially in the Northwest, during the spring and may be reduced by the use of repellants on skin and permethrin-containing acaricides on clothing. Paralysis can be prevented by careful examination of potentially exposed persons for ticks and prompt removal of ticks. Health-care providers should consider tick paralysis in persons who reside or have recently visited tick-endemic areas during the spring or early summer and who present with symmetrical paralysis.

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## Update: Influenza Activity - <br> United States and Worldwide, 1995-96 Season, and Composition of the 1996-97 Influenza Vaccine

To monitor influenza activity and to detect antigenic changes in the circulating strains of influenza viruses, CDC conducts surveillance in collaboration with the World Health Organization (WHO) and its international network of collaborating laboratories and with state and local health departments in the United States. This report summarizes surveillance for influenza in the United States and worldwide during the 1995-96 season and describes the composition of the 1996-97 influenza vaccine.

## Influenza Activity - Continued

## United States

Influenza activity began in November 1995 and peaked during late December 1995 and early January 1996. In many parts of the country, influenza activity declined steadily during January and February; of the 34 states that reported levels of influenza-like illness for the week ending April 13, a total of 16 states reported sporadic* levels of influenza-like illness, and 18 states reported no activity.

Of the 4132 influenza virus isolates reported to CDC from WHO collaborating laboratories in the United States from October 1, 1995, through March 30, 1996, a total of 3786 ( $92 \%$ ) were influenza type A and 346 ( $8 \%$ ) influenza type B. Of the 2416 type A isolates that were subtyped, 1427 ( $59 \%$ ) were type $A(H 1 N 1)$, and 989 ( $41 \%$ ) were type A(H3N2). Influenza type A(H3N2) predominated in the Mountain, New England, and Pacific regions, accounting for $70 \%, 56 \%$, and $55 \%$ of subtyped influenza A isolates, respectively. Influenza type $\mathrm{A}(\mathrm{H} 1 \mathrm{~N} 1)$ predominated in the other six regions, accounting for $55 \%-82 \%$ of subtyped influenza A isolates. During February, although the total number of isolates decreased, the number and proportion of influenza type $B$ isolates began to increase, and during March 1996, 50\%-72\% of all isolates reported were type B.

The proportion of all deaths reported by the vital statistics offices of 121 U.S. cities that were attributed to pneumonia and influenza (P\&l) only slightly exceeded the epidemic threshold ${ }^{\dagger}$ during 3 of the 8 weeks from October 29 through December 23, 1995. During the 6 weeks from December 24, 1995, through February 3, 1996, the proportion of P\&I deaths remained above the epidemic threshold, peaking at $8.2 \%$ of all deaths during the week ending January 20. However, since February 10, percentages of P\&I deaths have been below the epidemic threshold.

## Worldwide

Influenza activity occurred at moderate to severe levels during October 1995March 1996. Epidemics associated with influenza A(H3N2) and A(H1N1) viruses were reported in countries in Europe, Asia, and North America, while influenza B viruses circulated at low levels.

School outbreaks caused by influenza A(H3N2) viruses were reported in England beginning in September and October. During November and December, epidemic activity associated primarily with A(H3N2) viruses was reported by countries throughout Europe, including Belarus, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Latvia, Netherlands, Norway, Slovakia, Spain, Sweden, and the United Kingdom. During January, influenza A(H3N2) viruses were associated with outbreaks in Beijing and with high levels of influenza-like illness in six northern provinces of China. Isolation of influenza A(H3N2) viruses also was reported in North America (Canada and the United States), Europe (Belgium, Iceland, Ireland, Italy, Poland, Portugal, the Russian Federation, and Switzerland), Asia (Guam, Hong Kong, Japan, and Singapore), and Oceania (Australia and New Zealand). For the first time since

[^0]
## Influenza Activity - Continued

the 1991-92 influenza season, $A(H 1 N 1)$ viruses were associated with epidemics in several regions of the world. Epidemic activity associated with influenza $A(H 1 N 1)$ viruses was reported and predominated in Belgium, Canada, Japan, southern France, Switzerland, and the United States. Influenza A(H1N1) viruses were isolated in association with sporadic activity in Europe (Finland, Germany, Italy, Latvia, Netherlands, Poland, Romania, Russian Federation, Spain, Sweden, and the United Kingdom) and Asia (China, Hong Kong, Israel, and Thailand)

In comparison to type A influenza viruses, type B viruses have been isolated later in the season and less frequently worldwide. Influenza $B$ viruses were isolated primarily in association with sporadic activity in North America (Canada and the United States), Asia (China, Hong Kong, Israel, Japan, and Singapore), Europe (Belarus, Finland, France, Germany, Greece, Hungary, Netherlands, Poland, Romania, Russian Federation, Sweden, Switzerland, and the United Kingdom), and Oceania (Australia and New Zealand).

## Composition of the 1996-97 Vaccine

The Food and Drug Administration Vaccines and Related Biological Products Advisory Committee (VRBPAC) has recommended that the 1996-97 trivalent influenza vaccine for the United States contain A/Wuhan/359/95-like(H3N2), A/Texas/36/91-like (H1N1), and B/Beijing/184/93-like viruses. This recommendation was based on the antigenic analysis of recently isolated influenza viruses and the antibody responses of persons vaccinated with the 1995-96 vaccine.

Although most of the influenza type $\mathrm{A}(\mathrm{H} 3 \mathrm{~N} 2)$ viruses that have been antigenically characterized are similar to the A/Johannesburg/33/95 strain, increasing numbers of recently isolated $\mathrm{A}(\mathrm{H} 3 \mathrm{~N} 2)$ strains from Asia, Europe, and North America are more similar to the antigenic variant A/Wuhan/359/95 (Table 1). Vaccines containing the A/Johannesburg/33/94(H3N2)-like virus induced a good antibody response to the vaccine strain but induced lower and less frequent antibody responses to recent type A(H3N2) strains such as A/Wuhan/359/95 (1). Therefore, VRBPAC recommended changing the influenza type $A(H 3 N 2)$ vaccine component to an A/Wuhan/359/95-like

TABLE 1. Hemagglutination-inhibition titers of influenza A(H3N2) viruses with serum specimens from infected ferrets*

|  | Ferret antiserum |  |  |
| :--- | :---: | :---: | :---: |
| Viral antigen | A/Johannesburg/33/94 | A/Alaska/10/95 | A/Wuhan/359/95 |
| Reference antigen |  |  |  |
| A/Johannesburg/33/94 | 1280 | 160 | 80 |
| A/Alaska/10/95 | 320 | 1280 | 640 |
| A/Wuhan/359/95 | 80 | 160 | 640 |
| Recent isolates |  |  |  |
| A/Missouri/017/96 | 1280 | 320 | 40 |
| A/England/409/95 | 1280 | 320 | 80 |
| A/Nanchang/933/95 | 160 | 320 | 1280 |
| A/Japan/368/96 | 80 | 320 | 640 |
| A/New York/09/96 | 160 | 320 | 1280 |
| A/Washington/416/96 | 80 | 320 | 640 |

*A fourfold difference in hemagglutination-inhibition titers with two viruses is usually indicative of antigenic variation between viruses.

Influenza Activity - Continued
strain for the 1996-97 season. The strain that will be used by U.S. vaccine manufacturers because of its growth properties will be the antigenically equivalent $A / N a n c h a n g /$ 933/95 virus.

Virtually all (98\%) influenza $A(H 1 N 1)$ viruses that have been antigenically characterized are similar to the reference strains A/Taiwan/01/86 and A/Texas/36/91. Because vaccines containing the A/Texas/36/91 strain induced antibodies with similar frequency and titer to both the vaccine virus and to recent type $A(H 1 N 1)$ strains (1), VRBPAC recommended retaining an A/Texas/36/91-like strain in the 1996-97 vaccine.

Antigenically characterized influenza B viruses isolated recently in Asia, Europe, and the United States have been similar to the reference strains B/Beijing/184/93 and $\mathrm{B} /$ Harbin/07/94. Vaccines containing the B/Harbin/07/94 strain induced antibodies with similar frequency and titer to the vaccine virus and to recently isolated influenza $B$ strains (1). Therefore, VRBPAC recommended retaining B/Harbin/07/94-like strain in the 1996-97 vaccine.
Reported by: Participating state and territorial health dept epidemiologists and state public health laboratory directors. M Zambon, PhD, Central Public Health Laboratory, A Hay, PhD, National Institute for Medical Research, London; G Schild, DSc, J Wood, PhD, National Institute for Biological Standards and Control, Hertfordshire, England. I Gust, MD, A Hampson, Commonwealth Serum Laboratories, Parkville, Australia. LCanas, Armstrong Laboratory, Brooks Air Force Base, Texas. Y Guo, Institute of Virology, National Center for Preventive Medicine, Beijing, People's Republic of China. World Health Organization National Influenza Centers, Div of Emerging and other Communicable Diseases Surveillance and Control, Geneva. Div of Virology, Center for Biologics Evaluation and Research, Food and Drug Administration. Influenza Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases, CDC.
Editorial Note: During the 1995-96 season, the impact of influenza in many parts of the United States and in some other countries in the Northern Hemisphere was more severe than during the previous season (2). In the United States, influenza type A(H1N1) viruses predominated for the first time since the 1986-87 season; although this subtype has not been associated with excess mortality in recent decades, the incidence of infection with type $\mathrm{A}(\mathrm{H} 1 \mathrm{~N} 1)$ has been high, especially among school-aged children. Influenza type A(H3N2) was not the predominant strain but circulated throughout the season and was associated with outbreaks among all age groups. Continued circulation of influenza type $\mathrm{A}(\mathrm{H} 3 \mathrm{~N} 2)$ and type $\mathrm{A}(\mathrm{H} 1 \mathrm{~N} 1)$ is anticipated during the 1996-97 season. Influenza B activity increased late in the 1995-96 influenza season, suggesting that type $B$ viruses may circulate more widely next winter.

Strains to be included in the influenza vaccine usually are selected during the preceding January through March because of scheduling requirements for production, quality control, packaging, and distribution of vaccine for administration before onset of the next influenza season. Recommendations of the Advisory Committee on Immunization Practices for the use of vaccine and antiviral agents for prevention and control of influenza will be published in an MMWR Recommendations and Reports on May 3, 1996.

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## Multidrug-Resistant Tuberculosis Outbreak on an HIV Ward Madrid, Spain, 1991-1995

Beginning in 1990, outbreaks of multidrug-resistant tuberculosis (MDR-TB) have been reported in hospitals and prisons in the eastern United States (1). During June 1991-January 1995, MDR-TB was diagnosed in 47 patients and one health-care worker at a 120-bed, infectious disease referral hospital in urban Madrid; on April 19, 1995, the Spanish Field Epidemiology Training Program was asked to investigate this outbreak. This report summarizes the findings of this investigation, which suggested that nosocomial transmission of MDR-TB occurred on a hospital ward for patients with human immunodeficiency virus (HIV) infection.

A case of MDR-TB was defined as culture-confirmed TB that was resistant to at least rifampin and isoniazid in a patient hospitalized on the ward for HIV-infected persons during June 1991-January 1995 and with no previous history of TB treatment. Case finding was coordinated by the mycobacteriology laboratory director and an infectious disease specialist, who reviewed medical records and laboratory results for persons with suspected MDR-TB. In addition to drug-susceptibility testing, analysis of resistant strains included DNA fingerprinting with restriction fragment-length polymorphism (RFLP). Because the hospital did not have in place a ventilation system that recirculated or removed air, the acid-fast bacilli (AFB) isolation capacity (negative pressure and number of air interchanges per hour) could not be assessed on the HIV ward.

MDR-TB was identified in 47 HIV-positive patients who had been hospitalized on the HIV ward during June 1991-January 1995. The mean age of case-patients was 34 years (range: $25-54$ years); 39 ( $81 \%$ ) were male, and 32 ( $67 \%$ ) were injecting-drug users. The one health-care worker was HIV-positive and had worked on the HIV ward during 1990-1994. A total of 47 (98\%) patients, including the health-care worker, had died at the time of the investigation; the mean interval from diagnosis of MDR-TB to death was 78 days. An analysis of isolates from TB cases throughout the hospital during 1991-June 1995 identified 104 that were drug-susceptible; 12 that were resistant to one drug; and 66 that were resistant to isoniazid, streptomycin, ethambutol, and rifampin (HSER) (Figure 1). The proportion of Mycobacterium tuberculosis strains identified that were MDR-TB increased from 10\% in 1991 to $53 \%$ in 1993 to 65\% in June 1995.

Beginning in 1993, the resistance pattern identified consistently in isolates was HSER: of the 26 cases diagnosed during October 1993-June 1995, this pattern was present in 24 ( $92 \%$ ). Of the 12 isolates available for DNA fingerprinting, the same band patterns were present in 11 (Figure 2). For comparison, TB isolates were obtained from the two patients with different antibiograms; their RFLP analyses were distinct from those of isolates from the other patients.

A case-control study was conducted to identify potential risk factors for MDR-TB among HIV-infected patients who had been hospitalized on the HIV ward during September 15, 1991-December 31, 1994, and in whom TB was diagnosed in 1994. Cases included patients with isolates with the HSER resistance pattern ( $\mathrm{n}=18$ ); controls were patients with isolates sensitive to rifampin, isoniazid, streptomycin, and ethambutol ( $\mathrm{n}=17$ ). The category "potentially infective" for TB patients was defined as the period from 2 weeks before a positive sputum smear or TB culture confirmation until sputum

Tuberculosis Outbreak - Continued
FIGURE 1. Number of cases of Mycobacterium tuberculosis infection in patients in an infectious diseases hospital, by drug susceptibility and year of diagnosis - Madrid, Spain, January 1991-June 1995

cultures were negative or until death. "Possibly exposed" for patients without TB was defined as hospitalization on the HIV ward concurrent with the hospitalization of a potentially infectious patient during the period until 2 weeks before TB was diagnosed in the potentially infectious patient. Case- and control-patients were similar in age, sex, HIV risk group, interval of time between HIV diagnosis and TB diagnosis, and CD4+ T-lymphocyte count at the time of TB diagnosis. However, before the hospitalization during which MDR-TB was diagnosed, 13 (72\%) of the case-patients had been hospitalized on the HIV ward, compared with five ( $29 \%$ ) control patients (odds ratio $=6.2 ; 95 \%$ confidence interval=1.2-36.7). Of all patients with TB diagnosed in 1994 who were hospitalized on the HIV ward, $5 \%$ had MDR-TB. Case patients were more likely to have been possibly exposed to potentially infective wardmates and to have more days of exposure ( 13 [72\%] for a median of 26 days) than control patients (seven [41\%] for a median of 8 days) (for duration of exposure, chi square for linear trend=7.0; $\mathrm{p}=0.03$ ).
Reported by: D Herrera, R Cano, P Godoy, EF Peiro, J Castell, C Ibanez, F Martinez Navarro, Field Epidemiology Training Program; V Moreno, A Ortega, LSanchez, R Duran, F Pozo, Carlos III Health Institute, Ministry of Health and Consumer Affairs, Spain. Div of Bacterial and Mycotic Diseases, National Center for Infectious Diseases; International Br, Div of Field Epidemiology, Epidemiology Program Office, CDC.
Editorial Note: The findings in this report document the first outbreak of nosocomial MDR-TB to be investigated in Spain. Characteristics of this outbreak that are similar to previously reported outbreaks include MDR-TB among patients hospitalized in an HIVdedicated ward, a high death rate within 3 months of onset, and the role of myco-

## Tuberculosis Outbreak - Continued

FIGURE 2. Dates of hospitalization on an HIV ward in an infectious diseases hospital for 11 patients with multidrug-resistant tuberculosis* (MDR-TB) that had identical DNA fingerprinting with restriction fragment-length polymorphism, by patient and month - Madrid, Spain, 1993-April 1995

*All strains were resistant to isoniazid, streptomycin, ethambutol, and rifampin.
bacteriology laboratory-based surveillance in recognizing similar resistance patterns with confirmation through RFLP fingerprinting (2).

Measures to control this outbreak have included 1) isolating all MDR-TB patients in a separate area of the hospital and the on-site provision of all clinical and diagnostic services; 2) notifying family, community members, and wardmates of patients whose MDR-TB had been diagnosed during January-June 1995 about their exposure, scheduling follow-up evaluation, and offering isoniazid preventive therapy (although isoniazid resistance had been identified in isolates from the outbreak, this resistance was low); 3) informing all hospital staff about the outbreak, and establishing a TB screening clinic that was attended by 565 ( $96 \%$ ) of 591 employees; 4) purchasing personal respiratory protection devices that fulfilled recommended sealage and filtering criteria (3) and distributing these devices to staff exposed to TB patients; and 5) developing plans to improve the capacity of the hospital's mycobacteriology laboratory and to install 11 AFB isolation rooms.

To prevent nosocomial transmission of $M$. tuberculosis, hospital staff should monitor surveillance for and rapidly diagnose, isolate, and treat persons with suspected TB and ensure timely laboratory confirmation with identification of drug-susceptibility patterns. Because immunocompromised persons, such as those on HIV wards, are at increased risk for TB, surveillance and rapid confirmation are especially important to prevent $M$. tuberculosis transmission. In addition, hospitals and other health-care fa-

## Tuberculosis Outbreak - Continued

cilities should conduct regular employee TB screening clinics (graded by occupational risk category) that closely monitor tuberculin skin test conversions; such clinics can assist in surveillance for nosocomial transmission of TB.

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## Adult Blood Lead Epidemiology and Surveillance United States, Fourth Quarter, 1995

CDC's National Institute for Occupational Safety and Health Adult Blood Lead Epidemiology and Surveillance program (ABLES) monitors elevated blood lead levels (BLLs) among adults in the United States (1). This report presents ABLES data for the fourth quarter of 1995.

During October-December 1995, the 6553 reports of BLLs $\geq 25 \mu \mathrm{~g} / \mathrm{dL}$ represented a $4 \%$ decrease from the 6821 reports for the fourth quarter of 1994, which now include previously unpublished data for Maine (2). Compared with the fourth quarter of 1994, reports for the same period of 1995 increased $1 \%$ at the $25-39 \mu \mathrm{~g} / \mathrm{dL}$ level; reports decreased $15 \%$ at the $40-49 \mu \mathrm{~g} / \mathrm{dL}$ level, $27 \%$ at the $50-59 \mu \mathrm{~g} / \mathrm{dL}$ level, and $10 \%$ at the $\geq 60 \mu \mathrm{~g} / \mathrm{dL}$ level. For 1995, cumulative reports of BLLs $\geq 25 \mu \mathrm{~g} / \mathrm{dL}$ decreased $10 \%$ from reports for 1994 (Table 1). The cumulative number of reports decreased at each reporting level.

TABLE 1. Number of reports of elevated blood lead levels (BLLs) among adults, number of adults with elevated BLLs, and percentage change in number of reports 23 states,* fourth quarter, 1995

| Reported BLL ( $\mu \mathrm{g} / \mathrm{dL}$ ) | Fourth quarter, 1995 |  | Cumulative reports, 1995 |  | Cumulative reports, 1994 |  | $\begin{gathered} \text { \% Change } \\ \text { from } \\ 1994 \text { to } 1995 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. reports ${ }^{\dagger}$ | No. persons ${ }^{\text {§ }}$ | No. | (\%) | No. | (\%) |  |
| 25-39 | 5,034 | 3,720 | 18,492 | ( 76) | 19,420 | ( 72) | - 5\% |
| 40-49 | 1,192 | 801 | 4,482 | ( 18) | 5,821 | ( 22) | -23\% |
| 50-59 | 225 | 153 | 885 | $(4)$ | 1,132 | ( 4) | -22\% |
| $\geq 60$ | 102 | 65 | 412 | ( 2) | 459 | ( 2) | -10\% |
| Total | 6,553 | 4,739 | 24,271 | (100) | 26,832 | (100) | -10\% |

*Alabama, Arizona, California, Connecticut, Illinois, Iowa, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, South Carolina, Texas, Utah, Vermont, Washington, and Wisconsin.
${ }^{\dagger}$ Data for Alabama and South Carolina were missing; fourth quarter 1994 data were used as an estimate.
§Individual reports are categorized according to the highest reported BLL for the person during the given quarter. Pennsylvania provides the number of reports but not the number of persons; the number of persons for Pennsylvania in this table are estimates based on the proportions from the other 22 states combined and the number of reports received from Pennsylvania. Data for Alabama and South Carolina were missing; third quarter 1994 data were used as an estimate.

## Adult Blood Lead Epidemiology and Surveillance - Continued

Compared with 1994, the increase in the number of reports at the highest reporting level ( $\geq 60 \mu \mathrm{~g} / \mathrm{dL}$ ) in the second and third quarters of 1995 (3) did not continue into the fourth quarter; the number of BLL reports during the fourth quarter in this category declined from 114 to 102 (2). The percentage of all reported BLLs at the $\geq 60 \mu \mathrm{~g} / \mathrm{dL}$ level was 3\% in 1992 (4) and remained at 2\% in 1993 (2), 1994 (5) and 1995 (Table 1). Reported by: JP Lofgren, MD, Alabama Dept of Public Health. C Fowler, MS, Arizona Dept of Health Svcs. S Payne, MA, Occupational Lead Poisoning Prevention Program, California Dept of Health Svcs. BC Jung, MPH, Connecticut Dept of Public Health. M Lehnherr, Occupational Disease Registry, Div of Epidemiologic Studies, Illinois Dept of Public Health. R Gergely, Iowa Dept of Public Health. A Hawkes, MD, Occupational Health Program, Maine Bur of Health. E Keyvan-Larijani, MD, Lead Poisoning Prevention Program, Maryland Dept of the Environment. R Rabin, MSPH, Div of Occupational Hygiene, Massachusetts Dept of Labor and Industries. M Scoblic, MN, Michigan Dept of Public Health. L Thistle-Elliott, MEd, Div of Public Health Svcs, New Hampshire State Dept of Health and Human Svcs. B Gerwel, MD, Occupational Disease Prevention Project, New Jersey State Dept of Health. R Stone, PhD, New York State Dept of Health. S Randolph, MSN, North Carolina Dept of Environment, Health, and Natural Resources. E Rhoades, MD, Oklahoma State Dept of Health. A Sandoval, MS, State Health Div, Oregon Dept of Human Resources. J Gostin, MS, Occupational Health Program, Div of Environmental Health, Pennsylvania Dept of Health. R Marino, MD, Div of Health Hazard Evaluations, South Carolina Dept of Health and Environmental Control. P Schnitzer, PhD, Bur of Epidemiology, Texas Dept of Health. W Ball, PhD, Bur of Epidemiology, Utah Dept of Health. L Toof, Div of Epidemiology and Health Promotion, Vermont Dept of Health. J Kaufman, MD, Washington State Dept of Labor and Industries. V Ingram-Stewart, MPH, Wisconsin Dept of Health and Social Svcs. Div of Surveillance, Hazard Evaluations, and Field Studies, National Institute for Occupational Safety and Health, CDC.
Editorial Note: Variation in national quarterly reporting totals may result from 1) changes in the number of participating states, 2) timing of receipt of laboratory BLL reports by state-based surveillance programs, 3) changes in staffing and funding of state-based surveillance programs, and 4) interstate differences in worker BLL testing by lead-using industries. Variation from these sources reduces the capability to confidently identify trends in the actual data reported.

The findings in this report document the continuing hazard of work-related lead exposures as an occupational health problem in the United States. ABLES enhances surveillance for this preventable condition by expanding the number of participating states, reducing variability in reporting, and distinguishing between new and recurring elevated BLLs among adults.

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## Notice to Readers

## Courses on Physical Activity and Public Health

CDC, the University of South Carolina Prevention Center, and the South Carolina Department of Health and Environmental Control will cosponsor two courses for biomedical and behavioral researchers and public health professionals. The courses are designed to train health professionals to conduct community physical activity research and interventions and to promote physical activity initiatives and policies in communities. Both courses are scheduled for September 1996 at Seabrook Island, South Carolina.

The first course, "A Postgraduate Course on Research Directions and Strategies," developed primarily for postdoctoral health professionals, is scheduled for September 18-25, 1996. The second course, "A Practitioner's Course on Community Interventions and Strategies," designed for public health practitioners, will be held September 19-23, 1996.

The deadline for applications is May 15, 1996. Participation in each course is limited. Additional information and application forms are available from Sara Corwin, School of Public Health, Department of Exercise Science, University of South Carolina, Columbia, SC 29208; telephone (803) 777-7291; fax (803) 777-8422.

## Erratum: Vol. 45, No. 12

In the report, "Recall of Philip Morris Cigarettes, May 1995-March 1996," on page 254, the year of the Cigarette Labeling and Advertising Act is incorrect; the year should be 1965 instead of 1996.

FIGURE I. Selected notifiable disease reports, comparison of 4-week totals ending April 20, 1996, with historical data - United States

*The large apparent decrease in the number of reported cases of measles (total) reflects dramatic fluctuations in the historical baseline. (Ratio [log scale] for week 16 measles [total] is 0.031228. )
${ }^{\dagger}$ Ratio of current 4 -week total to mean of 154 -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 - cases of selected notifiable diseases, United States, cumulative, week ending April 20, 1996 (16th Week)

|  | Cum. 1996 |  | Cum. 1996 |
| :---: | :---: | :---: | :---: |
| Anthrax | - | HIV infection, pediatric*§ | 76 |
| Brucellosis | 21 | Plague | - |
| Cholera | 1 | Poliomyelitis, paralytic ${ }^{\text {d }}$ | - |
| Congenital rubella syndrome | 2 | Psittacosis | 6 |
| Cryptosporidiosis* | 423 | Rabies, human | - |
| Diphtheria | 1 | Rocky Mountain spotted fever (RMSF) | 26 |
| Encephalitis: California* | - | Streptococcal toxic-shock syndrome* | 9 |
| eastern equine* | 1 | Syphilis, congenital** | - |
| St. Louis* | - | Tetanus | 5 |
| western equine* | - | Toxic-shock syndrome | 41 |
|  | 30 | Trichinosis | 8 |
| Hantavirus pulmonary syndrome* ${ }^{+}$ | 2 | Typhoid fever | 79 |

[^1]TABLE II. Cases of selected notifiable diseases, United States, weeks ending April 20, 1996, and April 22, 1995 (16th Week)

| Reporting Area | AIDS* |  | Chlamydia <br> Cum. <br> 1996 | Escherichia coli 0157:H7 |  | Gonorrhea |  | Hepatitis C/NA,NB |  | Legionellosis |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\text { NETSS }^{\dagger}$ | $\begin{gathered} \hline \text { PHLIS }^{\mathbf{5}} \\ \hline \text { Cum. } \\ 1996 \end{gathered}$ |  |  |  |  |  |  |
|  | $\begin{gathered} \hline \text { Cum. } \\ 1996 \end{gathered}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1995 \end{aligned}$ |  |  | $\begin{aligned} & \hline \text { Cum. } \\ & 1996 \end{aligned}$ | $\begin{gathered} \hline \text { Cum. } \\ 1996 \end{gathered}$ | $\begin{gathered} \hline \text { Cum. } \\ 1995 \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Cum. } \\ 1996 \end{gathered}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1995 \end{aligned}$ | $\begin{gathered} \hline \text { Cum. } \\ 1996 \end{gathered}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1995 \end{aligned}$ |
| UNITED STATES | 16,791 | 23,010 |  | 70,142 | 231 | 102 | 83,770 | 111,738 | 1,002 | 1,236 | 212 | 355 |
| NEW ENGLAND | 657 | 1,249 | 2,890 | 26 | 16 | 2,346 | 1,725 | 27 | 31 | 9 | 4 |
| Maine | 10 | 23 | - | 3 | - | 13 | 20 | - | - | 1 | - |
| N.H. | 23 | 37 | 218 | 1 | 1 | 39 | 32 | 1 | 4 | - |  |
| V t. | 7 | 12 | - | 5 | 5 | 19 | 15 | 15 | 3 | - | - |
| Mass. | 392 | 581 | 2,015 | 11 | 10 | 679 | 937 | 8 | 23 | 3 | 3 |
| R.I. | 38 | 87 | 657 | 2 | - | 173 | 174 | 3 | 1 | 5 | 1 |
| Conn. | 187 | 509 | - | 4 | - | 1,423 | 547 | - | - | N | N |
| MID. ATLANTIC | 4,440 | 5,914 | 9,919 | 34 | 20 | 8,287 | 13,267 | 101 | 113 | 47 | 47 |
| Upstate N.Y. | 538 | 641 | N | 17 | 10 | 1,606 | 2,783 | 91 | 53 | 9 | 11 |
| N.Y. City | 2,443 | 3,053 | 2,288 |  | - | 1,785 | 4,857 | 1 | 1 | - | 1 |
| N.J. | 928 | 1,373 | 1,633 | 10 | 5 | 1,722 | 1,181 |  | 49 | 7 | 10 |
| Pa . | 531 | 847 | 5,998 | N | 5 | 3,174 | 4,446 | 9 | 10 | 31 | 25 |
| E.N. CENTRAL | 1,395 | 1,858 | 11,807 | 36 | 22 | 12,948 | 18,624 | 135 | 99 | 70 | 126 |
| Ohio | 300 | 436 | 2,955 | 19 | 8 | 1,581 | 7,642 | 4 | 4 | 34 | 50 |
| Ind. | 269 | 164 | 2,943 | 11 | 5 | 2,209 | 2,550 | 4 | - | 18 | 33 |
| III. | 518 | 735 | - | 2 | 2 | 5,301 | 6,400 | 9 | 36 | 2 | 14 |
| Mich. | 228 | 421 | 4,101 | 4 | 7 | 2,911 | 6, | 118 | 59 | 15 | 14 |
| Wis. | 80 | 102 | 1,808 | N | - | 946 | 2,032 | - | - | 1 | 15 |
| W.N. CENTRAL | 413 | 529 | 7,635 | 24 | 16 | 4,772 | 6,277 | 110 | 24 | 13 | 22 |
| Minn. | 84 | 118 | - | 3 | 10 | U | 881 | - | 1 | - | - |
| Iowa | 31 | 32 | 1,091 | 5 | 3 | 325 | 468 | 71 | 3 | 3 | 8 |
| Mo. | 175 | 215 | 4,369 | 5 | - | 2,572 | 3,692 | 34 | 10 | 1 | 7 |
| N. Dak. | 1 | 1 | 2 | 1 | 1 | 1 | 10 | - | - | - | 2 |
| S. Dak. | 5 | 7 | 421 | 1 | - | 66 | 65 | - | 1 | 2 | - |
| Nebr. | 32 | 43 | 388 | 4 | - | 57 | 324 | 1 | 6 | 6 | 3 |
| Kans. | 85 | 113 | 1,364 | 5 | 2 | 752 | 837 | 4 | 3 | 1 | 2 |
| S. ATLANTIC | 4,590 | 6,055 | 16,866 | 15 | 2 | 31,439 | 34,897 | 51 | 82 | 27 | 57 |
| Del. | 93 | 114 |  |  | - | 439 | 636 | 1 | - | - |  |
| Md. | 444 | 987 | 1,825 | N | 1 | 4,121 | 4,344 | - | 2 | 5 | 12 |
| D.C. | 225 | 407 | N | - | - | 1,339 | 1,788 | - | - | 1 | 3 |
| Va . | 224 | 441 | 3,688 | N | 1 | 3,006 | 3,553 | 4 | 2 | 9 | 3 |
| W. Va. | 24 | 31 | 3,688 | N | - | 3,99 | , 223 | 4 | 20 | 1 | 3 |
| N.C. | 191 | 309 | - | 4 | - | 5,622 | 7,707 | 14 | 22 | 3 | 10 |
| S.C. | 229 | 315 | - | 1 | - | 3,526 | 3,637 | 11 | 2 | 1 | 11 |
| Ga . | 685 | 729 | 4,078 | 3 | - | 7,447 | 6,399 | - | 10 | - | 8 |
| Fla. | 2,475 | 2,722 | 7,275 | 4 | - | 5,840 | 6,610 | 17 | 24 | 7 | 7 |
| E.S. CENTRAL | 540 | 689 | 8,570 | 9 | 4 | 9,025 | 13,895 | 173 | 465 | 19 | 9 |
| Ky. | 86 | 63 | 2,150 | - | - | 1,252 | 1,463 | 7 | 11 | 2 | 2 |
| Tenn. | 201 | 310 | 3,519 | N | 4 | 3,076 | 3,842 | 165 | 452 | 9 | 4 |
| Ala. | 157 | 159 | 2,754 | 2 | - | 4,241 | 5,598 | 1 | 2 | - | 2 |
| Miss. | 96 | 157 | 147 | 3 | - | 456 | 2,992 | - | - | 8 | 1 |
| W.S. CENTRAL | 1,480 | 2,030 | 3,945 | 11 | 4 | 6,278 | 10,662 | 96 | 55 | 1 | 5 |
| Ark. | 70 | 86 | - | 5 | 2 | 853 | 1,357 | 1 | - | - | 1 |
| La. | 435 | 327 | 2,076 | N | 2 | 2,428 | 3,709 | 33 | 26 | - | 1 |
| Okla. | 54 | 100 | 1,869 | 1 | - | 1,169 | 1,425 | 35 | 21 | 1 | 3 |
| Tex. | 921 | 1,517 | - | 1 | - | 1,828 | 4,171 | 27 | 8 | - | - |
| MOUNTAIN | 469 | 774 | 5,137 | 30 | 9 | 2,277 | 2,761 | 176 | 141 | 7 | 42 |
| Mont. | 4 | 8 | 5, | - | - | 10 | 30 | 8 | 7 | - | 2 |
| Idaho | 7 | 17 | 507 | 11 | 4 | 29 | 41 | 41 | 18 | - | 1 |
| Wyo. | 2 | 4 | 213 | - | - | 10 | 17 | 63 | 56 | 1 | 1 |
| Colo. | 152 | 268 | - | 10 | 5 | 567 | 941 | 4 | 27 | 4 | 19 |
| N. Mex. | 25 | 69 | - | 2 | - | 285 | 326 | 27 | 18 | - | 3 |
| Ariz. | 136 | 200 | 3,500 | N | - | 1,144 | 910 | 23 | 6 | 1 | 5 |
| Utah | 64 | 52 | 254 | 5 | - | 49 | 62 | 7 | 4 | - | 2 |
| Nev. | 79 | 156 | 663 | 2 | - | 183 | 434 | 3 | 5 | 1 | 9 |
| PACIFIC | 2,807 | 3,912 | 3,373 | 46 | 9 | 6,398 | 9,630 | 133 | 226 | 19 | 43 |
| Wash. | 220 | 357 | 2,826 | 8 | 5 | 723 | 793 | 24 | 66 | 1 | 3 |
| Oreg. | 153 | 132 | - | 12 | - | 143 | 163 | 3 | 15 | - | - |
| Calif. | 2,394 | 3,282 | - | 21 | - | 5,281 | 8,183 | 63 | 136 | 18 | 35 |
| Alaska | 3 | 39 | N | 1 | - | 141 | 281 | 2 | 1 | - | - |
| Hawaii | 37 | 102 | 389 | N | 4 | 110 | 210 | 41 | 8 | - | 5 |
| Guam | 3 | - | 59 | N | - | 17 | 29 | $\stackrel{-}{7}$ | $\stackrel{-}{-}$ | - | - |
| P.R. | 420 | 853 | N | N | U | 59 | 167 | 17 | 52 | - | - |
| V.I. | 3 | 19 | N | N | U | - | 11 | - | - | - | - |
| Amer. Samoa | - | - | - | N | U | $\stackrel{-}{-}$ | 8 | - | - | - | - |
| C.N.M.I. | - | - | N | N | U | 11 | 7 | - | - | - | - |
| N : Not notifiable | U: Unavailable -: no reported cases |  |  |  |  | N.M.I.: Commonwealth of Northern Mariana Islands |  |  |  |  |  |
| *Updated monthly to the Division of HIV/AIDS Prevention, National Center for Prevention Services, last update March 26, 1996. <br> ${ }^{\dagger}$ National Electronic Telecommunications System for Surveillance. <br> ${ }^{\S}$ Public Health Laboratory Information System. |  |  |  |  |  |  |  |  |  |  |  |

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending April 20, 1996, and April 22, 1995 (16th Week)

| Reporting Area | Lyme Disease |  | Malaria |  | Meningococcal Disease |  | Syphilis(Primary \& Secondary) |  | Tuberculosis |  | Rabies, Animal |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \hline \text { Cum. } \\ & 1996 \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1995 \end{aligned}$ | $\begin{gathered} \hline \text { Cum. } \\ 1996 \end{gathered}$ | $\begin{gathered} \hline \text { Cum. } \\ 1995 \end{gathered}$ | $\begin{gathered} \hline \text { Cum. } \\ 1996 \end{gathered}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1995 \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1996 \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1995 \end{aligned}$ | $\begin{gathered} \hline \text { Cum. } \\ 1996 \end{gathered}$ | $\begin{gathered} \hline \text { Cum. } \\ 1995 \end{gathered}$ | $\begin{gathered} \hline \text { Cum. } \\ 1996 \end{gathered}$ | $\begin{aligned} & \text { Cum. } \\ & 1995 \end{aligned}$ |
| UNITED STATES | 1,018 | 1,334 | 271 | 285 | 1,170 | 1,105 | 3,326 | 4,851 | 4,361 | 4,696 | 1,437 | 2,021 |
| NEW ENGLAND | 45 | 90 | 8 | 13 | 40 | 56 | 56 | 65 | 116 | 106 | 165 | 565 |
| Maine |  | 1 | 2 | 1 | 6 | 3 | - | 2 | 4 |  |  | - |
| N.H. | 1 | 9 | 1 | 1 | 1 | 12 | 1 | 1 | 3 | 4 | 23 | 72 |
| Vt. | - | 1 | 1 | - | 2 | 6 | - | - |  | 1 | 48 | 76 |
| Mass. | 18 | 11 | 3 | 2 | 15 | 17 | 24 | 21 | 45 | 51 | 31 | 221 |
| R.I. | 21 | 10 | 1 | 2 | - | - |  | 1 | 18 | 12 | 19 | 75 |
| Conn. | 5 | 58 | - | 7 | 16 | 18 | 31 | 40 | 46 | 38 | 44 | 121 |
| MID. ATLANTIC | 851 | 1,017 | 69 | 62 | 93 | 116 | 114 | 296 | 750 | 992 | 227 | 480 |
| Upstate N.Y. | 386 | 512 | 15 | 11 | 28 | 39 | 12 | 26 | 90 | 95 | 120 | 193 |
| N.Y. City | 151 | 31 | 32 | 27 | 14 | 12 | 34 | 160 | 376 | 554 | - | - |
| N.J. | 59 | 134 | 19 | 17 | 26 | 31 | 36 | 57 | 177 | 176 | 46 | 101 |
| Pa . | 255 | 340 | 3 | 7 | 25 | 34 | 32 | 53 | 107 | 167 | 61 | 186 |
| E.N. CENTRAL | 11 | 14 | 27 | 40 | 152 | 159 | 541 | 756 | 558 | 408 | 11 | 2 |
| Ohio | 9 | 5 | 5 | 1 | 54 | 39 | 209 | 295 | 85 | 83 | 2 | 1 |
| Ind. | 2 | 6 | 3 | 3 | 17 | 30 | 77 | 77 | 50 | 27 | 1 | - |
| III. | - | 2 | 7 | 29 | 46 | 41 | 159 | 321 | 368 | 282 | - | 1 |
| Mich. | - | 1 | 8 | 2 | 18 | 27 | 41 | - | 39 | - | 4 | - |
| Wis. | U | U | 4 | 5 | 17 | 22 | 55 | 63 | 16 | 16 | 4 | - |
| W.N. CENTRAL | 37 | 24 | 4 | 7 | 97 | 67 | 144 | 260 | 119 | 170 | 126 | 92 |
| Minn. | 1 | - | 1 | 3 | 10 | 13 | 27 | 15 | 21 | 32 | 8 | 5 |
| Iowa | 16 | 1 | 1 | - | 21 | 11 | 6 | 21 | 15 | 25 | 69 | 30 |
| Mo. | 2 | 10 | 1 | 3 | 41 | 25 | 108 | 210 | 52 | 62 | 9 | 12 |
| N. Dak. | - | - | - | - | 2 | - | - | - | 1 | 1 | 11 | 9 |
| S. Dak. | - | - | - | - | 3 | 3 | - | - | 9 | 8 | 21 | 18 |
| Nebr. | - | - | - | 1 | 9 | 6 | 3 | 5 | 6 | 8 | 2 | - |
| Kans. | 18 | 13 | 1 | - | 11 | 9 | - | 9 | 15 | 34 | 6 | 18 |
| S. ATLANTIC | 37 | 135 | 49 | 62 | 221 | 189 | 1,066 | 1,324 | 611 | 727 | 732 | 602 |
| Del. | 1 | 13 | 2 | 1 | 2 | 2 | 12 | 7 | - | 16 | 17 | 38 |
| Md. | 24 | 94 | 16 | 18 | 21 | 13 | 184 | 117 | 85 | 135 | 184 | 134 |
| D.C. |  |  | 2 | 6 | 4 | 1 | 47 | 42 | 36 | 29 | 2 | 4 |
| Va . | - | 3 | 7 | 11 | 17 | 24 | 144 | 209 | 43 | 29 | 170 | 116 |
| W. Va. | 3 | 7 | - | - | 6 | 3 | 1 | 1 | 19 | 29 | 24 | 29 |
| N.C. | 6 | 8 | 7 | 6 | 29 | 33 | 325 | 354 | 100 | 79 | 178 | 133 |
| S.C. | 1 | 5 | 3 | - | 26 | 25 | 149 | 220 | 40 | 88 | 14 | 45 |
| Ga . | - | 4 | 7 | 9 | 71 | 49 | 97 | 237 | 165 | 2 | 99 | 93 |
| Fla. | 2 | 1 | 5 | 11 | 45 | 39 | 107 | 137 | 123 | 320 | 44 | 10 |
| E.S. CENTRAL | 14 | 9 | 5 | 5 | 84 | 68 | 869 | 1,127 | 350 | 406 | 50 | 89 |
| Ky. | 2 | 1 | - | - | 13 | 20 | 48 | 73 | 66 | 83 | 15 | 7 |
| Tenn. | 5 | 5 | 3 | 2 | 7 | 20 | 329 | 262 | 74 | 133 | 17 | 38 |
| Ala. | - | 1 | 1 | 3 | 33 | 15 | 176 | 195 | 133 | 120 | 18 | 43 |
| Miss. | 7 | 2 | 1 | - | 31 | 13 | 316 | 597 | 77 | 70 | - | 1 |
| W.S. CENTRAL | 4 | 23 | 8 | 5 | 129 | 123 | 394 | 741 | 412 | 556 | 20 | 41 |
| Ark. | 3 | 2 | - | 1 | 18 | 13 | 87 | 155 | 20 | 69 | 3 | 22 |
| La. | - | - | - | 1 | 25 | 14 | 180 | 355 | - | - | 10 | 9 |
| Okla. | 1 | 12 | - | - | 9 | 13 | 53 | 56 | 30 | 46 | 7 | 10 |
| Tex. | - | 9 | 8 | 3 | 77 | 83 | 74 | 175 | 362 | 441 | - | - |
| MOUNTAIN | - | 1 | 18 | 20 | 76 | 93 | 38 | 86 | 155 | 134 | 17 | 28 |
| Mont. | - | - | 1 | 2 | 1 | 2 | - | 3 | - | 3 | - | 13 |
| Idaho | - | - | - | 1 | 10 | 4 | 1 | - | 3 | 5 | - | - |
| Wyo. | - | - | 2 | - | 3 | 4 | 1 | - | 1 | 1 | 10 | 5 |
| Colo. | - | - | 10 | 10 | 11 | 21 | 14 | 53 | 21 | 5 | - | - |
| N. Mex. | - | - | 1 | 3 | 14 | 21 | - | 1 | 20 | 22 | 1 | - |
| Ariz. | - | - | 1 | 2 | 23 | 31 | 19 | 11 | 75 | 87 | 4 | 9 |
| Utah | - | - | 2 | 1 | 8 | 5 | - | 2 | 10 | 10 | - | - |
| Nev. | - | 1 | 1 | 1 | 6 | 5 | 3 | 16 | 25 | 1 | 2 | 1 |
| PACIFIC | 19 | 21 | 83 | 71 | 278 | 234 | 104 | 196 | 1,290 | 1,197 | 89 | 122 |
| Wash. | - | - | 5 | 7 | 35 | 34 | 1 | 6 | 83 | 72 | - | - |
| Oreg. | 5 | 1 | 7 | 5 | 51 | 43 | 3 | 4 | 35 | 19 | - | - |
| Calif. | 13 | 20 | 68 | 52 | 185 | 154 | 100 | 185 | 1,108 | 1,028 | 81 | 116 |
| Alaska |  |  |  | 1 | 5 | 1 |  | 1 | 22 | 25 | 8 | 6 |
| Hawaii | 1 | - | 3 | 6 | 2 | 2 | - | - | 42 | 53 | - | - |
| Guam | - | - | - | - | 1 | 2 | 2 | 1 | - | 4 | - | - |
| P.R. | - | - | - | - | 4 | 10 | 56 | 106 | 20 | 53 | 16 | 21 |
| V.I. | - | - | - | - | - |  |  | 1 |  | - |  | , |
| Amer. Samoa | - | - | - | - | - | - | - | - | - | 2 | - | - |
| C.N.M.I. | - | - | - | - | - | - | 1 | - | - | 11 | - | - |

N : Not notifiable

TABLE III. Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending April 20, 1996, and April 22, 1995 (16th Week)

| Reporting Area | H. influenzae, invasive |  | Hepatitis (viral), by type |  |  |  | Measles (Rubeola) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | A |  | B |  | Indigenous |  | Imported ${ }^{\dagger}$ |  |
|  | $\begin{aligned} & \hline \text { Cum. } \\ & \text { 1996* } \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \text { Cum. } \\ 1995 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1996 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1995 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1996 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1995 \\ & \hline \end{aligned}$ | 1996 | $\begin{gathered} \hline \text { Cum. } \\ 1996 \\ \hline \end{gathered}$ | 1996 | $\begin{gathered} \hline \text { Cum. } \\ 1996 \end{gathered}$ |
| UNITED STATES | 432 | 419 | 7,459 | 7,669 | 2,359 | 2,758 | 3 | 77 | 1 | 5 |
| NEW ENGLAND | 9 | 22 | 86 | 55 | 48 | 68 | - | 5 | - | 1 |
| Maine | - | 1 | 9 | 10 | 2 | 2 | - | - | - | - |
| N.H. | 7 | 3 | 3 | 4 | 2 | 8 | - | - | - | - |
| Vt. | - | 1 | 1 | 3 | 2 | 1 | - | 1 | - | - |
| Mass. | 2 | 6 | 46 | 18 | 11 | 20 | - | 3 | - | 1 |
| R.I. | - | - | 3 | 9 | 4 | 7 | - | - | - | - |
| Conn. | - | 11 | 24 | 11 | 27 | 30 | - | 1 | - | - |
| MID. ATLANTIC | 67 | 43 | 511 | 411 | 402 | 319 | - | 2 | - | 1 |
| Upstate N.Y. | 20 | 14 | 118 | 95 | 97 | 94 | - | - | - | - |
| N.Y. City | 7 | 5 | 230 | 166 | 192 | 69 | - | 2 | - | 1 |
| N.J. | 24 | 8 | 110 | 71 | 80 | 103 | - | - | - | - |
| Pa. | 16 | 16 | 53 | 79 | 33 | 53 | - | - | - | - |
| E.N. CENTRAL | 64 | 77 | 618 | 1,132 | 252 | 356 | - | 2 | 1 | 1 |
| Ohio | 40 | 38 | 302 | 650 | 39 | 31 | - | 2 | - | - |
| Ind. | 2 | 12 | 105 | 52 | 42 | 78 | - | - | - | - |
| III. | 14 | 20 | 78 | 220 | 30 | 101 | - | - | - | - |
| Mich. | 3 | 7 | 102 | 126 | 129 | 122 | - | - | 1 | 1 |
| Wis. | 5 |  | 31 | 84 | 12 | 24 | U | - | U | - |
| W.N. CENTRAL | 19 | 23 | 595 | 387 | 144 | 201 | 3 | 5 | - | - |
| Minn. | 7 | 8 | 23 | 39 | 3 | 13 | 3 | 5 | - | - |
| lowa | 6 | 1 | 156 | 17 | 65 | 14 | - | - | - | - |
| Mo. | 5 | 11 | 269 | 271 | 54 | 141 | - | - | - | - |
| N. Dak. | - | - | 9 | 9 | - | 2 | - | - | - | - |
| S. Dak. | 1 | - | 29 | 6 | - | 1 | - | - | - | - |
| Nebr. | - | 1 | 66 | 16 | 5 | 16 | - | - | - | - |
| Kans. | - | 2 | 43 | 29 | 17 | 14 | - | - | - | - |
| S. ATLANTIC | 105 | 106 | 256 | 330 | 354 | 389 | - | 2 | - | - |
| Del. | 1 | - | 5 | 5 | 1 | 3 | - | 1 | - | - |
| Md. | 24 | 35 | 60 | 65 | 94 | 86 | - | 1 | - | - |
| D.C. | , | - | 9 | 2 | 11 | 8 | - | - | - | - |
| Va . | 3 | 12 | 47 | 59 | 46 | 31 | - | - | - | - |
| W. Va. | 3 | 5 | 6 | 10 | 9 | 21 | - | - | - | - |
| N.C. | 13 | 17 | 36 | 41 | 116 | 97 | - | - | - | - |
| S.C. | 3 | - | 29 | 10 | 28 | 10 | - | - | - | - |
| Ga . | 56 | 23 | 2 | 37 | 5 | 39 | - | - | - | - |
| Fla. | 2 | 14 | 62 | 101 | 44 | 94 | - | - | - | - |
| E.S. CENTRAL | 7 | 4 | 643 | 419 | 212 | 308 | - | - | - | - |
| Ky. | 2 | 1 | 8 | 20 | 21 | 31 | - | - | - | - |
| Tenn. |  | - | 457 | 333 | 174 | 236 | - | - | - | - |
| Ala. | 4 | 3 | 79 | 39 | 17 | 41 | - | - | - | - |
| Miss. | 1 | - | 99 | 27 | - | - | - | - | - | - |
| W.S. CENTRAL | 12 | 19 | 1,190 | 707 | 190 | 245 | - | - | - | 1 |
| Ark. | - | 4 | 178 | 49 | 19 | 6 | - | - | - | - |
| La. | - | 1 | 20 | 19 | 13 | 25 | - | - | - | - |
| Okla. | 12 | 12 | 543 | 155 | 26 | 35 | - | - | - | - |
| Tex. | - | 2 | 449 | 484 | 132 | 179 | - | - | - | 1 |
| MOUNTAIN | 47 | 41 | 995 | 1,331 | 265 | 205 | - | 4 | - | - |
| Mont. | - | - | 41 | 20 | 3 | 7 | - | - | - | - |
| Idaho | 1 | 2 | 109 | 143 | 35 | 26 | - | - | - | - |
| Wyo. | 22 | 2 | 10 | 46 | 8 | 3 | - | - | - | - |
| Colo. | 4 | 6 | 22 | 165 | 8 | 40 | - | 1 | - | - |
| N. Mex. | 7 | 6 | 154 | 263 | 111 | 77 | - | - | - | - |
| Ariz. | 6 | 12 | 314 | 351 | 46 | 27 | - | - | - | - |
| Utah | 5 | 4 | 289 | 300 | 43 | 16 | - | - | - | - |
| Nev. | 2 | 9 | 56 | 43 | 11 | 9 | - | 3 | - | - |
| PACIFIC | 102 | 84 | 2,565 | 2,897 | 492 | 667 | - | 57 | - | 1 |
| Wash. | 1 | 4 | 159 | 166 | 28 | 53 | - | 4 | - | - |
| Oreg. | 12 | 9 | 379 | 605 | 27 | 38 | - | - | - | - |
| Calif. | 87 | 69 | 1,974 | 2,062 | 433 | 567 | - | 1 | - | - |
| Alaska | - | - | 29 | 15 | 2 | 4 | - | 52 | - | - |
| Hawaii | 2 | 2 | 24 | 49 | 2 | 5 | - | - | - | 1 |
|  | - | - | 2 | 2 | - | - | U | - | U | - |
| P.R. | - | 3 | 31 | 11 | 106 | 89 | - | 1 | - | - |
| V.I. | - | - | - | - | , | 1 | U | - | U | - |
| Amer. Samoa | 0 | - | 1 | 5 | 5 | 1 | U | - | U | - |
| C.N.M.I. | 10 | - | 1 | 11 | 5 | 1 | U | - | U | - |

*Of 94 cases among children aged $<5$ years, serotype was reported for 22 and of those, 4 were type B.
${ }^{\dagger}$ For imported measles, cases include only those resulting from importation from other countries.
N : Not notifiable
U: Unavailable
-: no reported cases

TABLE III. (Cont'd.) Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending April 20, 1996, and April 22, 1995 (16th Week)

| Reporting Area | Measles (Rubeola), cont'd. |  | Mumps |  |  | Pertussis |  |  | Rubella |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{gathered} \hline \text { Cum. } \\ 1996 \end{gathered}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1995 \\ & \hline \end{aligned}$ | 1996 | $\begin{aligned} & \hline \text { Cum. } \\ & 1996 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1995 \\ & \hline \end{aligned}$ | 1996 | $\begin{aligned} & \hline \text { Cum. } \\ & 1996 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \text { Cum. } \\ 1995 \\ \hline \end{gathered}$ | 1996 | $\begin{aligned} & \hline \text { Cum. } \\ & 1996 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1995 \\ & \hline \end{aligned}$ |
| UNITED STATES | 82 | 176 | 12 | 180 | 250 | 70 | 776 | 804 | 1 | 56 | 25 |
| NEW ENGLAND | 6 | 3 | - | - | 3 | 7 | 142 | 116 | - | 5 | 2 |
| Maine | - | - | - | - | 2 | - | 8 | 12 | - | - | - |
| N.H. | - | - | - | - | - | - | 17 | 6 | - | - | 1 |
| Vt. | 1 | - | - | - | - | - | 6 | 3 | - | - | - |
| Mass. | 4 | 1 | - | - | - | 7 | 108 | 89 | - | 3 | 1 |
| R.I. | - | 2 | - | - | - | - | - | - | - | - | - |
| Conn. | 1 | - | - | - | 1 | - | 3 | 6 | - | 2 | - |
| MID. ATLANTIC | 3 | 2 | 1 | 21 | 39 | 3 | 76 | 74 | 1 | 4 | 2 |
| Upstate N.Y. | - | - | 1 | 7 | 9 | 3 | 45 | 44 | 1 | 3 | - |
| N.Y. City | 3 | - | - | 4 | 6 | - | 13 | 12 | - | 1 | 1 |
| N.J. | - | 2 | - | - | 6 | - | - | 6 | - | - | 1 |
| Pa. | - | - | - | 10 | 18 | - | 18 | 12 | - | - | - |
| E.N. CENTRAL | 3 | 2 | 5 | 48 | 33 | 3 | 120 | 77 | - | 3 | - |
| Ohio | 2 | - | 2 | 19 | 15 | 1 | 52 | 32 | - | - | - |
| Ind. | - | - | - | 5 | 5 | - | 9 | 7 | - | - | - |
| III. | - | - | 1 | 10 | - | 1 | 46 | - | - | 1 | - |
| Mich. | 1 | 1 | 2 | 14 | 13 | 1 | 11 | 26 | - | 2 | - |
| Wis. | - | 1 | U | - | - | U | 2 | 12 | U | - | - |
| W.N. CENTRAL | 5 | 1 | - | 2 | 19 | 1 | 27 | 60 | - | 1 | - |
| Minn. | 5 | - | - | - | 2 | 1 | 23 | 22 | - | - | - |
| lowa | - | - | - | - | 3 | - | 2 | 1 | - | 1 | - |
| Mo. | - | 1 | - | - | 11 | - | 1 | 13 | - | - | - |
| N. Dak. | - | - | - | 2 |  | - | - | 5 | - | - | - |
| S. Dak. | - | - | - | - | - | - | 1 | 6 | - | - | - |
| Nebr. | - | - | - | - | 3 | - | - | 3 | - | - | - |
| Kans. | - | - | - | - | - | - | - | 10 | - | - | - |
| S. ATLANTIC | 2 | - | - | 17 | 41 | 3 | 68 | 85 | - | 10 | 5 |
| Del. | 1 | - | - | - | - | - | 7 | 5 | - | - | - |
| Md. | 1 | - | - | 8 | 10 | 1 | 28 | 8 | - | - | - |
| D.C. | - | - | - | - | - | - | - | 2 | - | - | - |
| Va . | - | - | - | 3 | 9 | - | 3 | 7 | - | - | - |
| W. Va. | - | - | - | - | - | - | 2 | - | - | - | - |
| N.C. | - | - | - | - | 16 | - | 9 | 49 | - | - | - |
| S.C. | - | - | - | 3 | 3 | 1 | 4 | 10 | - | - | - |
| Ga. | - | - | - | 1 | - | - | 2 | - | - | ${ }^{-}$ | - |
| Fla. | - | - | - | 2 | 3 | 1 | 13 | 4 | - | 10 | 5 |
| E.S. CENTRAL | - | - | 2 | 10 | 8 | - | 16 | 20 | - | 2 | - |
| Ky. | - | - | - | - | - | - | 5 | 1 | - | - | - |
| Tenn. | - | - | - | 1 | - | - | 7 | 4 | - | - | - |
| Ala. | - | - | - | 4 | 3 | - | 1 | 15 | - | - | - |
| Miss. | - | - | 2 | 5 | 5 | - | 3 | - | N | N | N |
| W.S. CENTRAL | 1 | 2 | 1 | 8 | 11 | 5 | 14 | 34 | - | - | 1 |
| Ark. | - | 2 | - | 8 | 2 |  | 2 | 3 | - | - | - |
| La. | - | - | - | 7 | 2 | - | 2 | 1 | - | - | - |
| Okla. | - | - | - | - | - | - | 1 | 2 | - | - | - |
| Tex. | 1 | - | 1 | 1 | 7 | 5 | 9 | 28 | - | - | 1 |
| MOUNTAIN | 4 | 56 | - | 17 | 11 | 4 | 110 | 203 | - | 1 | 3 |
| Mont. | - | - | - | - | - | - | 3 | 3 | - | - | - |
| Idaho | - | - | - | - | 2 | - | 41 | 60 | - | - | - |
| Wyo. | - | ${ }^{-}$ | - | - | - | - | - | - | - | - | - |
| Colo. | 1 | 17 | - | - | - | - | 17 | 32 | - | - | - |
| N. Mex. | - | 28 | N | N | N | 3 | 25 | 18 | - | - | - |
| Ariz. | - | 10 | N | 1 | 1 | - | 4 | 87 | - | 1 | 3 |
| Utah | - | - | - | 1 | 1 | 1 | 3 | 2 | - | - | - |
| Nev. | 3 | 1 | - | 15 | 7 | - | 17 | 1 | - | - | - |
| PACIFIC | 58 | 110 | 3 | 57 | 85 | 44 | 203 | 135 | - | 30 | 12 |
| Wash. | 4 | 14 | 1 | 6 | 4 | 22 | 64 | 21 | - | 1 | 1 |
| Oreg. | - | 1 | N | N | N | 1 | 23 | 11 | - | - | 1 |
| Calif. | 1 | 94 | 2 | 41 | 72 | 21 | 108 | 99 | - | 27 | 9 |
| Alaska | 52 | - |  | 2 | 8 | , | - | - | - | , |  |
| Hawaii | 1 | 1 | - | 8 | 1 | - | 8 | 4 | - | 2 | 1 |
| Guam | - | - | U | 1 | 3 | U | - | - | U | - | - |
| P.R. | 1 | 3 | - | 1 | 1 | - | - | 4 | - | - | - |
| V.I. |  | - | U |  | 1 | U | - | - | U | - | - |
| Amer. Samoa | - | - | U | - | , | U | - | - | U | - | - |
| C.N.M.I. | - | - | U | - | - | U | - | - | U | - | - |

[^2]TABLE IV. Deaths in 121 U.S. cities,* week ending April 20, 1996 (16th Week)

| Reporting Area | All Causes, By Age (Years) |  |  |  |  |  | $\mathbf{P}_{\mathbf{A}} \mathbf{I}^{\dagger}$Total | Reporting Area | All Causes, By Age (Years) |  |  |  |  |  | $\begin{aligned} & \text { P\&I } I^{\dagger} \\ & \text { Total } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { All } \\ \text { Ages } \end{gathered}$ | $\geq 65$ | 45-64 | 25-44 | 1-24 | <1 |  |  | All Ages | $\geq 65$ | 45-64 | 25-44 | 1-24 | <1 |  |
| NEW ENGLAND | 665 | 484 | 99 | 54 | 12 | 14 | 55 | S. ATLANTIC | 1,359 | 845 | 292 | 145 | 51 | 26 | 73 |
| Boston, Mass. | 211 | 138 | 34 | 28 | 8 | 3 | 17 | Atlanta, Ga. | 192 | 107 | 33 | 35 | 11 | 6 | 11 |
| Bridgeport, Conn. | 37 | 31 | 3 | 3 |  |  | 3 | Baltimore, Md. | 258 | 160 | 56 | 33 | 9 |  | 27 |
| Cambridge, Mass. | 27 | 22 | 4 | - | - |  | - | Charlotte, N.C. | 84 | 57 | 21 | 3 | 3 |  | 5 |
| Fall River, Mass. | 24 | 21 | 3 | 7 |  |  | 1 | Jacksonville, Fla. | 149 | 96 | 31 | 16 | 3 | 3 | 2 |
| Hartford, Conn. | 65 | 40 | 15 | 7 | 2 | 1 | 4 | Miami, Fla. | 131 | 59 | 45 | 18 | 8 | 1 | 2 |
| Lowell, Mass. | 29 | 27 | 2 | - | - |  | 5 | Norfolk, Va. | 50 | 34 | 9 | 5 | 2 |  | 1 |
| Lynn, Mass. | 11 | 5 | 6 | - | - |  | 1 | Richmond, Va. | 74 | 53 | 12 | 4 | 3 | 2 | 2 |
| New Bedford, Mass. | 26 | 23 | 1 | 2 | - |  | 2 | Savannah, Ga. | 49 | 29 | 11 | 4 | 1 | 4 | 5 |
| New Haven, Conn. | 45 | 36 | 6 | 2 | $\overline{-}$ | 1 | 7 | St. Petersburg, Fla. | 54 | 42 | 8 | 1 | 1 | 2 | 1 |
| Providence, R.I. | 59 | 40 | 12 | 1 | 1 | 4 | 3 | Tampa, Fla. | 187 | 133 | 32 | 13 | 4 | 5 | 12 |
| Somerville, Mass. | 6 | 5 | 1 | - | - | - | - | Washington, D.C. | 121 | 65 | 34 | 13 | 6 | 3 | 5 |
| Springfield, Mass. | 47 | 33 | 6 | 3 | - | 5 | 4 | Wilmington, Del. | 10 | 10 | - | - | - |  | - |
| Waterbury, Conn. | 24 | 18 | 2 | 4 | $\bar{\square}$ | - | 1 |  |  |  |  |  |  |  |  |
| Worcester, Mass. | 54 | 45 | 4 | 4 | 1 | - | 7 | E.S. CENTRAL <br> Birmingham, Ala. | $\begin{aligned} & 906 \\ & 127 \end{aligned}$ | 592 89 | 187 | $\begin{aligned} & 91 \\ & 17 \end{aligned}$ | 19 | 16 4 | 72 |
| MID. ATLANTIC | 2,446 | 1,624 | 485 | 240 | 50 | 47 | 133 | Chattanooga, Tenn. | 77 | 54 | 16 | 7 | - |  | 11 |
| Albany, N.Y. | 57 | 44 | 5 | 6 | 1 | 1 | 5 | Knoxville, Tenn. | 86 | 53 | 23 | 5 | 4 | 1 | 12 |
| Allentown, Pa. | 19 | 14 | 5 | - | - |  |  | Lexington, Ky. | 95 | 64 | 17 | 7 | 3 | 4 | 10 |
| Buffalo, N.Y. | 92 | 66 | 14 | 10 | 1 | 1 | 3 | Memphis, Tenn. | 185 | 120 | 35 | 23 | 6 | 1 | 16 |
| Camden, N.J. | 22 | 10 | 6 | 4 | - | 2 | - | Mobile, Ala. | 160 | 101 | 45 | 13 | 1 |  | 11 |
| Elizabeth, N.J. | 18 | 11 | 3 | 4 | - | - | - | Montgomery, Ala. | 37 | 27 | 2 | 4 | 2 | 2 | 2 |
| Erie, Pa.§ | 35 | 30 | 4 | - | - | 1 | 3 | Nashville, Tenn. | 139 | 84 | 33 | 15 | 3 | 4 | 5 |
| Jersey City, N.J. | 39 | 29 | 4 | 4 | - | 2 | 3 |  |  |  |  |  |  |  |  |
| New York City, N.Y. | 1,317 | 835 | 276 | 152 | 29 | 25 | 54 | W.S. CENTRAL Austin, Tex. | 1,461 77 | 949 54 | 291 14 | 135 3 | 53 3 | 32 | 82 |
| Newark, N.J. | 69 | 31 | 16 | 14 | 5 | 3 | 4 | Austin, Tex. Baton Rouge, La. | 77 34 | 54 20 | 14 8 | 3 4 | 3 1 | 3 | 6 |
| Paterson, N.J. | 28 | 16 | 6 | 3 | - | 3 |  | Baton Rouge, La. | 34 43 | 29 | 8 | 4 | 2 | 2 | 3 |
| Philadelphia, Pa. | 300 | 189 | 78 | 21 | 7 | 5 | 23 | Corpus Christi, Tex. | +435 | 29 129 | 89 | 17 | 8 | 2 | 3 8 |
| Pittsburgh, Pa.§ | 103 | 73 | 21 | 4 | 3 | 2 | 7 | Dallas, Tex. | 195 81 | 129 61 | 39 | 17 | 8 | 2 | 8 |
| Reading, Pa. | 19 | 15 | 2 | 2 | - | 1 | 5 | El Paso, Tex. Ft. Worth, Tex. | 111 | 81 | 14 | 1 | 2 | 2 | 8 |
| Rochester, N.Y. | 128 | 104 | 18 | 4 | 1 | 1 | 9 | Ft. Worth, Tex. Houston, Tex. | 357 | -829 | 77 | 51 | 13 | 7 | -88 |
| Schenectady, N.Y. Scranton, Pa.§ | 30 | 27 | 1 | 2 | - | - | 3 | Houston, Tex. Little Rock, Ark. | 357 80 | 209 47 | 17 | 51 9 | 13 | 7 | 24 |
| Scranton, Pa.§ Syracuse, $\mathrm{N.Y}$. | 16 | 13 | 15 | - | 2 | 1 | 1 | Lew Orleans, La. | 143 | 87 | 34 | 15 | 6 | 5 | 5 |
| Syracuse, N.Y. | 78 | 55 | 15 6 | 6 3 | 2 | - | 7 4 | San Antonio, Tex. | 182 | 124 | 34 | 13 | 4 | 7 | 14 |
| Trenton, N.J. | 31 16 | 22 | 6 1 | 3 | - | - | 4 | San Antonio, Tex. | 182 61 | 124 45 | 34 7 | 13 5 | 4 | 7 | 14 7 |
| Utica, N.Y. | 16 29 | 15 25 | 1 | 1 | 1 | - | 2 | Tulsa, Okla. | 97 | 62 | 20 | 8 | 5 | 2 | 5 |
| E.N. CENTRAL | 2,092 | 1,372 | 435 | 164 | 52 | 68 | 126 | MOUNTAIN | 927 | 625 | 166 | 77 | 33 | 24 | 80 |
| Akron, Ohio | 71 | 50 | 16 | 2 | 1 | 2 | - | Albuquerque, N.M. | 106 | 74 | 12 | 9 | 7 | 4 | 4 |
| Canton, Ohio | 34 | 22 | 9 | 1 | 1 | 1 | 2 | Colo. Springs, Colo. | 57 | 33 | 16 | 8 | - | - | 3 |
| Chicago, III. | 455 | 251 | 109 | 62 | 19 | 13 | 34 | Denver, Colo. | 122 | 83 | 21 | 8 | 5 | 5 | 14 |
| Cincinnati, Ohio | 103 | 73 | 16 | 9 | 2 | 3 | 7 | Las Vegas, Nev. | 202 | 133 | 42 | 15 | 7 | 5 | 14 |
| Cleveland, Ohio | 145 | 96 | 28 | 8 | 4 | 9 | 3 | Ogden, Utah | 25 | 22 | 10 | , | 1 | 1 | 2 |
| Columbus, Ohio | 165 | 109 | 38 | 10 | 3 | 5 | 11 | Phoenix, Ariz. | 181 | 112 | 40 | 12 | 8 | 7 | 16 |
| Dayton, Ohio | 126 | 91 | 23 | 8 | 1 | 3 | 7 | Pueblo, Colo. | 18 | 11 | 5 | 1 | 1 | - | 3 |
| Detroit, Mich. | 235 | 144 | 50 | 22 | 6 | 13 | 9 | Salt Lake City, Utah | 101 | 74 | 12 | 11 | 4 | - | 13 |
| Evansville, Ind. | 45 | 33 | 8 | 2 |  | 2 | 2 | Tucson, Ariz. | 115 | 83 | 17 | 13 | - | 2 | 11 |
| Fort Wayne, Ind. | 54 | 39 | 10 | 3 | 2 | - | 3 | PACIFIC | 2,218 | 1,533 | 392 | 203 | 46 | 44 | 150 |
| Gary, Ind. | 17 | 10 | 4 | - | 3 | - | 7 | Berkeley, Calif. | 2,22 | 16 | 3 | 2 | - | 1 | - |
| Grand Rapids, Mich. | 67 | 49 | 8 | 3 | 1 | 6 | 7 | Fresno, Calif. | 106 | 80 | 17 | 5 | 1 | 3 | 9 |
| Indianapolis, Ind. | 113 | 66 | 28 | 14 | 3 | 2 | 9 | Glendale, Calif. | 53 | 47 | 2 | 3 | 1 | - | 1 |
| Madison, Wis. | U | U | U | U | U | U | U | Honolulu, Hawaii | 78 | 59 | 17 | 1 | - | 1 | 8 |
| Milwaukee, Wis. | 136 | 103 | 24 | 5 | - | 4 |  | Long Beach, Calif. | 88 | 62 | 14 | 9 | 1 | 2 | 14 |
| Peoria, III. | 34 | 23 | 6 | 1 | 1 | 3 | 4 | Los Angeles, Calif. | 814 | 543 | 147 | 85 | 23 | 16 | 29 |
| Rockford, III. | 35 | 17 | 14 | 3 | 1 | 1 | 5 | Pasadena, Calif. | 34 | 26 | 5 | 1 | - | 2 | 4 |
| South Bend, Ind. | 53 | 42 | 9 | 1 | - | 1 | 8 | Portland, Oreg. | 154 | 111 | 23 | 12 | 4 | 4 | 9 |
| Toledo, Ohio | 128 | 97 | 20 | 6 | 4 | 1 | 13 | Sacramento, Calif. | 173 | 123 | 25 | 16 | 7 | 2 | 12 |
| Youngstown, Ohio | 76 | 57 | 15 | 4 | - | - | 2 | San Diego, Calif. | 163 | 110 | 26 | 19 | 2 | 6 | 15 |
| W.N. CENTRAL | 993 | 729 | 144 | 71 | 21 | 19 | 47 | San Francisco, Calif | 148 | 93 | 29 | 26 | 3 | - | 16 |
| Des Moines, lowa | U | U | U | U | U | U | U | San Jose, Calif. | 193 | 130 | 47 | 10 | 3 | 3 | 18 |
| Duluth, Minn. | 40 | 35 | 3 | 1 | 1 | - | 3 | Santa Cruz, Calif. | 27 118 | 21 79 | 4 24 | 2 | 4 | - | 5 |
| Kansas City, Kans. | 74 | 52 | 8 | 9 | 3 | 2 | 1 | Seattle, Wash. Spokane, Wash. | 118 | 79 |  | 3 | 4 | 2 | 7 |
| Kansas City, Mo. | 114 | 74 | 17 | 10 | 4 | - | 8 | Spokane, Wash. | 47 | U |  | ${ }^{3}$ | U | U |  |
| Lincoln, Nebr. | 47 | 33 | 10 | 2 | 1 | 1 | 2 | Tacoma, Wash. |  |  |  |  |  |  |  |
| Minneapolis, Minn. | 210 | 158 | 35 | 11 | 3 | 3 | 13 | TOTAL | 13,067 ${ }^{\text { }}$ | 8,753 | 2,491 | 1,180 | 337 | 290 | 818 |
| Omaha, Nebr. | 111 | 76 | 20 | 7 | 2 | 6 | 8 |  |  |  |  |  |  |  |  |
| St. Louis, Mo. | 144 | 117 | 13 | 10 | 1 | 3 | 2 |  |  |  |  |  |  |  |  |
| St. Paul, Minn. | 70 | 59 | 6 | 4 | 1 | - | 5 |  |  |  |  |  |  |  |  |
| Wichita, Kans. | 183 | 125 | 32 | 17 | 5 | 4 | 5 |  |  |  |  |  |  |  |  |

[^3]
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[^0]:    * Levels of activity are 1) sporadic-sporadically occurring influenza-like illness (ILI) or cultureconfirmed influenza with no outbreaks detected; 2) regiona-outbreaks of ILI or cultureconfirmed influenza in counties with a combined population of $<50 \%$ of the state's total population; and 3) widespread-outbreaks of ILI or culture-confirmed influenza in counties with a combined population of $\geq 50 \%$ of the state's total population.
    ${ }^{\dagger}$ The epidemic threshold is 1.645 standard deviations above the seasonal baseline calculated using a periodic regression model applied to observed percentages since 1983. The baseline was calculated using a robust regression procedure.

[^1]:    * Not notifiable in all states.
    ${ }^{\dagger}$ Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).
    ${ }^{\S}$ Updated monthly to the Division of HIV/AIDS Prevention, National Center for Prevention Services (NCPS), last update March 26, 1996.
    ๆ No suspected cases of polio reported for 1996.
    **Updated quarterly from reports to the Division of STD Prevention, NCPS. First quarter 1996 is not yet available.
    -: no reported cases

[^2]:    N : Not notifiable

[^3]:    *Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. 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.
    ${ }_{\S}^{\dagger}$ Pneumonia and influenza.
    ${ }^{\S}$ Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete
    counts will be available in 4 to 6 weeks.
    TTotal includes unknown ages.
    U: Unavailable -: no reported cases

