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WEEKLY REPORT



*Achievements in Public Health, 1900–1999*

## Improvements in Workplace Safety — United States, 1900–1999

At the beginning of this century, workers in the United States faced remarkably high health and safety risks on the job. Through efforts by individual workers, unions, employers, government agencies, scientists such as Dr. Alice Hamilton (see box, page 462), and others, considerable progress has been made in improving these conditions. Despite these successes, much work remains, with the goal for all workers being a productive and safe working life and a retirement free from long-term consequences of occupational disease and injury. Using the limited data available, this report documents large declines in fatal occupational injuries during the 1900s, highlights the mining industry as an example of improvements in worker safety, and discusses new challenges in occupational safety and health.

### Decreases in Fatal Occupational Injuries

Data from multiple sources reflect the large decreases in work-related deaths from the high rates and numbers of deaths among workers during the early 20th century. The earliest systematic survey of workplace fatalities in the United States in this century covered Allegheny County, Pennsylvania, from July 1906 through June 1907 (Figure 1) (*1*); that year in the one county, 526 workers died in "work accidents"*; 195 of these were steelworkers. In contrast, in 1997, 17 steelworker fatalities occurred nationwide (*2*). The National Safety Council estimated that in 1912, 18,000–21,000 workers died from work-related injuries (*3*). In 1913, the Bureau of Labor Statistics documented approximately 23,000 industrial deaths among a workforce of 38 million, equivalent to a rate of 61 deaths per 100,000 workers (*4*). Under a different reporting system, data from the National Safety Council from 1933 through 1997 indicate that deaths from unintentional work-related injuries declined 90%, from 37 per 100,000 workers to 4 per 100,000 (*3*). The corresponding annual number of deaths decreased from 14,500 to 5100; during this same period, the workforce more than tripled, from 39 million to approximately 130 million (*3*).

More recent and probably more complete data from death certificates were compiled from CDC's National Institute for Occupational Safety and Health (NIOSH)

*When a death occurs under "accidental" circumstances, the preferred term within the public health community is "unintentional injury."

*Workplace Safety — Continued*

## Alice Hamilton, M.D.

Alice Hamilton (February 27, 1869–September 22, 1970) was the first U.S. physician to devote herself to research in industrial medicine. Born into a prominent family in Indiana (her sister was the well-known classicist Edith Hamilton), Alice graduated from medical school at the University of Michigan in 1893. After accepting a teaching position at the Women's Medical School of Northwestern University in 1897, she moved into Jane Addams' Hull House in Chicago. There she opened a well-baby clinic for poor families in the local settlement house neighborhood. As she acquainted herself with the families in the neighborhood, she learned of their pains, strange deaths, lead palsy, and "wrist drop," and of the high numbers of widows. Encouraged by the reformers of Hull House, she began to apply her medical knowledge to these problems.

Dr. Hamilton realized that little was written or understood about occupational illnesses in the United States. In 1908, she published her first article about occupational diseases in this country and was soon a recognized expert on the topic. Starting in 1910, initially under the aegis of a commission of the State of Illinois, and later the Federal Bureau of Labor Statistics, she explored occupational disorders and their social consequences. Relying primarily on "shoe leather epidemiology" and the emerging laboratory science of toxicology, she pioneered occupational epidemiology and industrial hygiene in the United States. Her findings were so scientifically persuasive that they caused sweeping reforms, both voluntary and regulatory, to improve the health of workers.

Investigations for which she is best known include carbon monoxide poisoning in steelworkers, mercury poisoning in hatters, and "dead fingers" syndrome among laborers using jackhammers. In her field investigations, she applied precepts of scientific integrity and prudent public health practice that continue to influence the discipline of occupational health. These include the necessity for a strict definition of the disease problem, a thorough understanding of the industrial processes involved, and on-the-spot reporting of findings and recommendations.

In 1919, Dr. Hamilton was appointed Assistant Professor of Industrial Medicine at Harvard Medical School, the first woman to be on the faculty of Harvard University. While there, she served two terms on the Health Committee of the League of Nations. When she retired from Harvard at age 66 years, she became a consultant to the U.S. Division of Labor Standards and served as the president of the National Consumers League.

Today, at the laboratory that bears her name in Cincinnati, Ohio, and at other facilities, researchers of CDC's National Institute for Occupational Safety and Health still explore the "dangerous trades." Alice Hamilton was a physician, scientist, humanitarian, and undisputed leader in the social reform movement of the 20th century.

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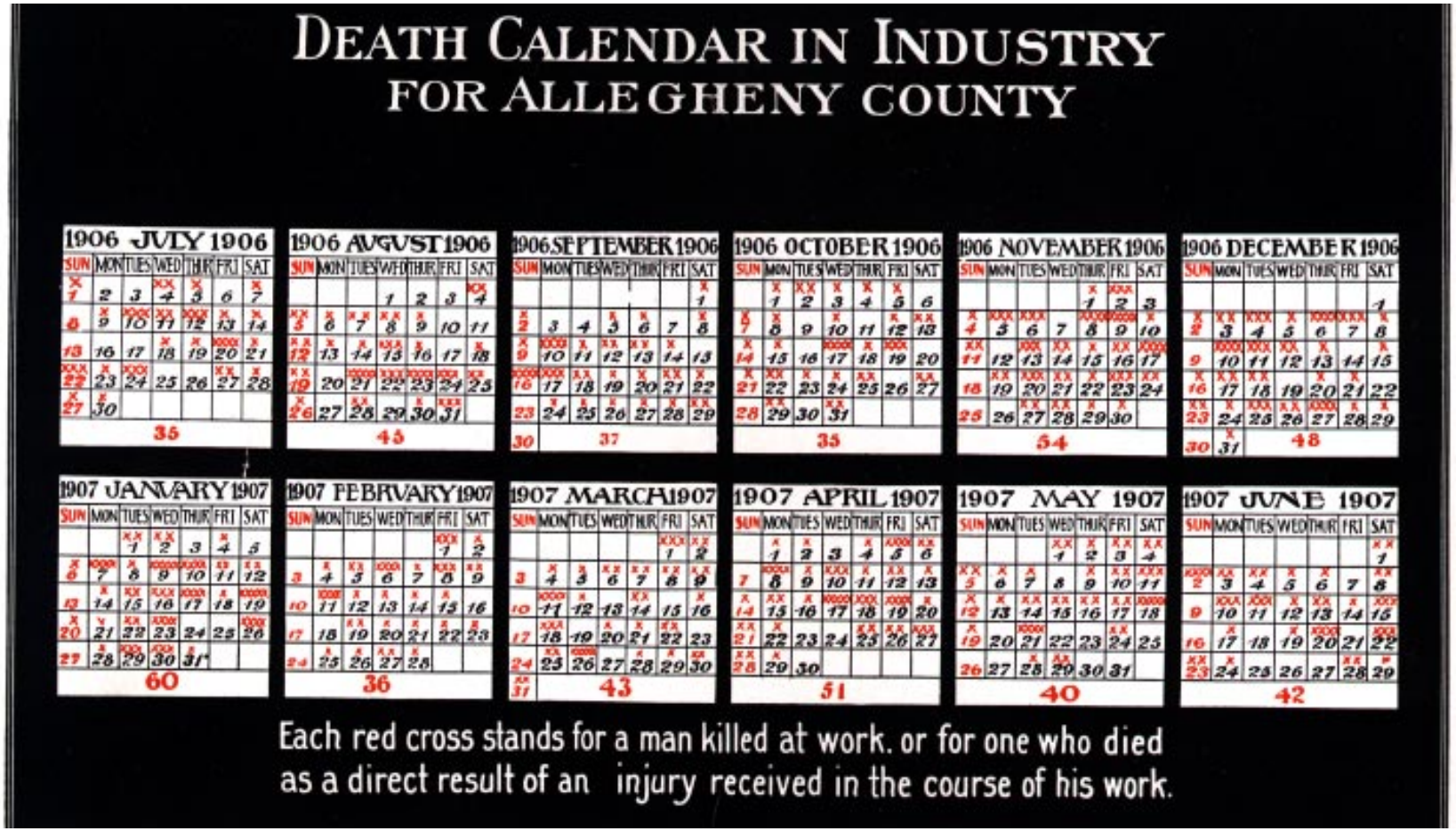
**FIGURE 1. Number of work-related deaths, by day — Allegheny County, Pennsylvania, July 1906–June 1907***




*In the original figure, each X is in red.
Reprinted by permission of the Russell Sage Foundation (*1*).

*Workplace Safety — Continued*

National Traumatic Occupational Fatalities (NTOF) surveillance system (*5*; CDC, unpublished data, 1999). These data indicate that the annual number of deaths declined 28%, from 7405 in 1980 to 5314 in 1995 (the most recent year for which complete NTOF data are available). The average rate of deaths from occupational injuries decreased 43% during the same time, from 7.5 to 4.3 per 100,000 workers. Industries with the highest average rates for fatal occupational injury during 1980–1995 included mining (30.3 deaths per 100,000 workers), agriculture/forestry/fishing (20.1), construction (15.2), and transportation/communications/public utilities (13.4) (Figure 2).[†] Leading causes of fatal occupational injury during the period include motor vehicle-related injuries, workplace homicides, and machine-related injuries (Figure 3).

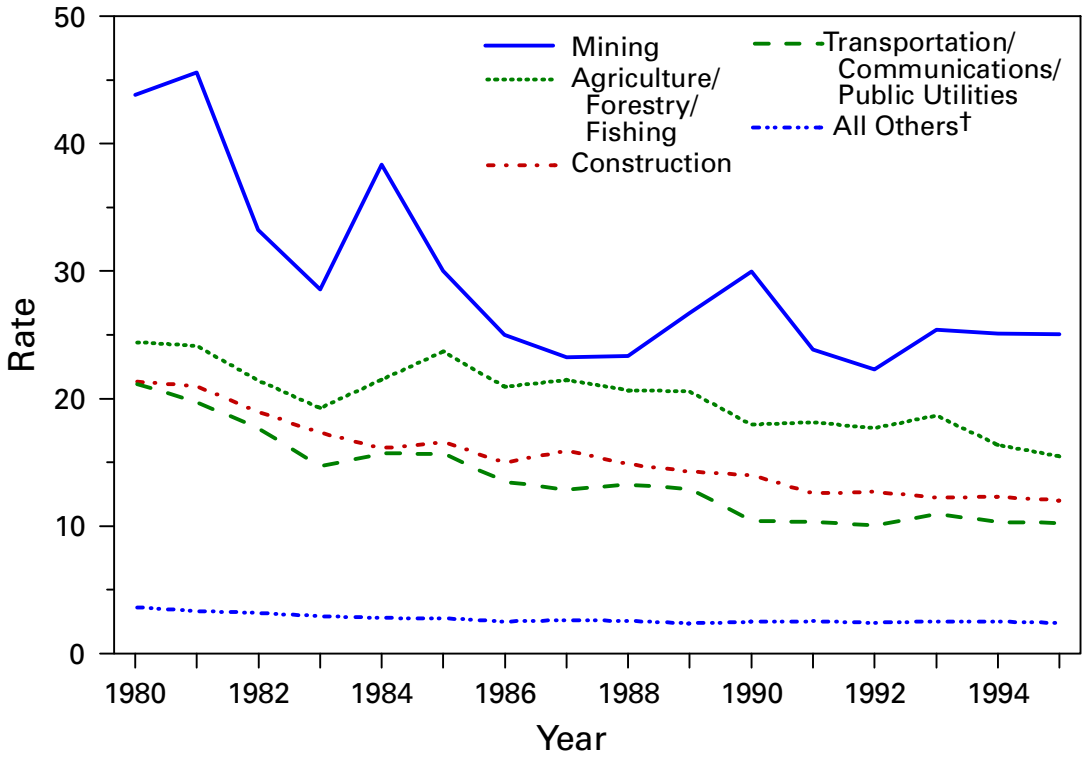
### Improvements in Mining[§] Safety

On December 6, 1907, a coal mine explosion in Monongah, West Virginia, killed a reported 362 men and boys (unofficial estimates exceeded 500 deaths), marking the

[†]The NTOF surveillance system classifies industries according to the Standard Industry Classification Manual, 1987, which, unlike the definition used by the Mine Safety and Health Administration (MSHA), includes the oil and gas sectors of mineral extraction in the mining industry.

[§]MSHA data are used in this section of the report; these data exclude oil and gas extraction, and data collection for mining according to MSHA includes only deaths that occur on mine property. Deaths likely to occur off mine property, such as during operation of a motor vehicle (the overall leading cause of death during 1980–1994 [Figure 3]), are excluded.

**FIGURE 2. Occupational injury death rates*, by industry division and year — United States, 1980–1995**

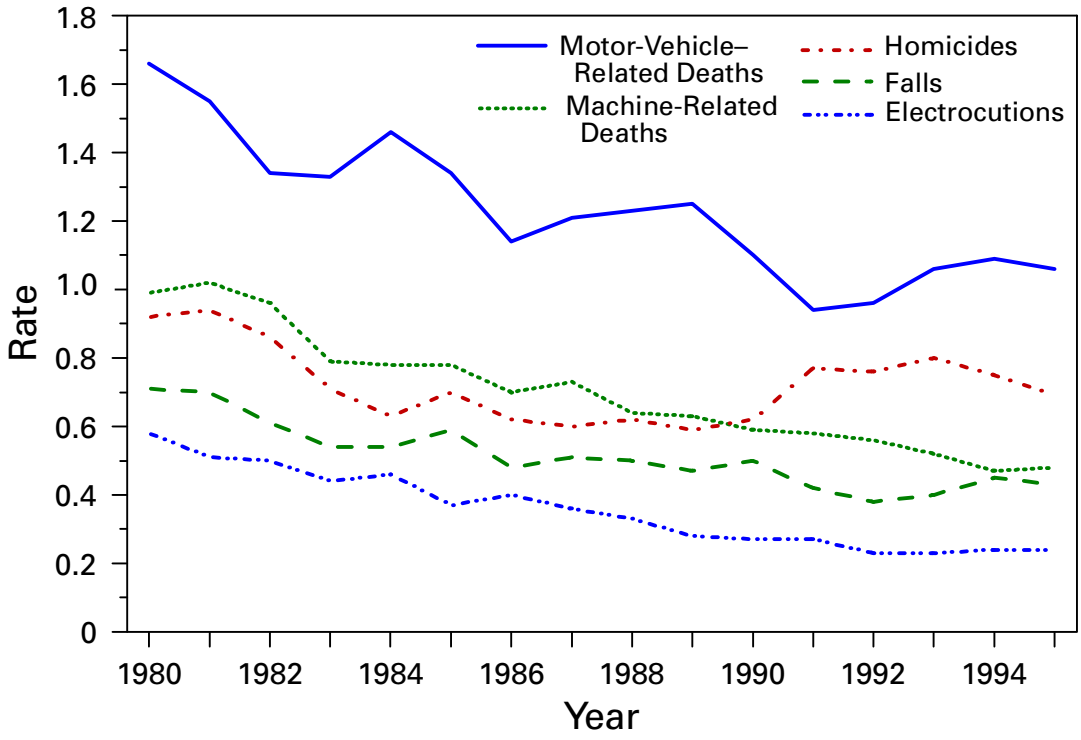



*Per 100,000 workers.

[†]Includes public administration, manufacturing, wholesale trade, retail trade, services, and finance/insurance/real estate.

*Workplace Safety — Continued*

**FIGURE 3. Rates* for leading causes of occupational injury deaths, by cause and year — United States, 1980–1995**




*Per 100,000 workers.

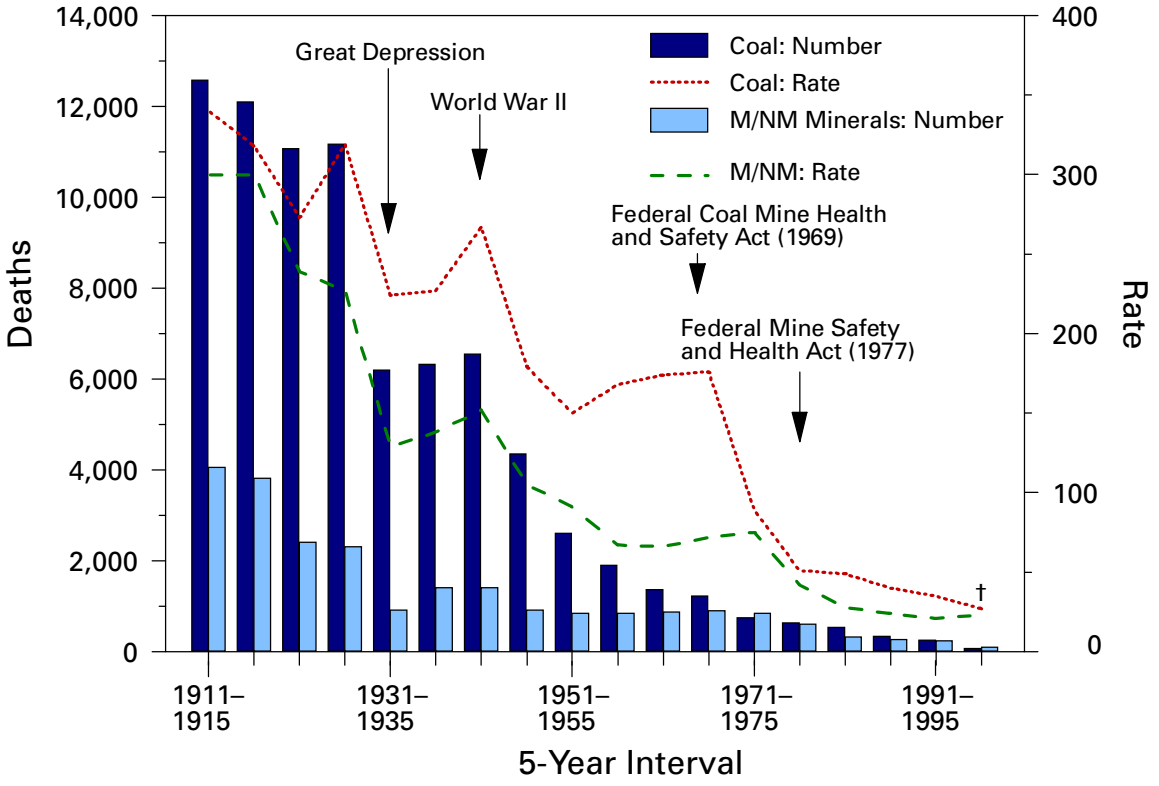
largest coal mining disaster in U.S. history. Of the 2534 mining-related fatalities that occurred in bituminous coal mines that year, 911 (36%) resulted from explosions of gas, coal dust, or a combination; 869 deaths occurred in only 11 incidents. The Monongah catastrophe catalyzed public awareness and led to passage of the Organic Act of 1910, which established the U.S. Bureau of Mines (USBM).

From 1911 through 1997, approximately 103,000 miners died at work (Figure 4). During 1911–1915, an average of 3329 mining-related deaths occurred per year among approximately 1 million miners employed annually, with an average annual fatality rate of 329 per 100,000 miners. During the century, the average annual number of workers (operators and contractors combined) in the mining industry has declined to approximately 356,000, and deaths have dropped approximately 37-fold, from 3329 to 89; injury fatality rates have decreased approximately 13-fold, to 25 per 100,000 during 1996–1997.

Historically, the largest number of miners have been killed by collapsing mine roofs and vertical walls, followed by haulage-related incidents. However, methane gas and coal dust explosions have caused the largest number of deaths from "disasters" (i.e., incidents in which five or more deaths occurred); airborne suspension of dry coal dust and natural liberation of methane (present in all coal beds) create an environment susceptible to explosions. From 1911 through 1920, explosions accounted for approximately 84% of all disaster-related deaths. Workplace interventions (e.g., safer equipment and improved ventilation) during the first half of the century led to a dramatic

*Workplace Safety — Continued*

**FIGURE 4. Number of deaths and fatality rates* in mining coal and metal/nonmetallic (M/NM) minerals, by 5-year interval — United States, 1911–1997**




*Per 100,000 workers.
†Data are for 1996 and 1997.

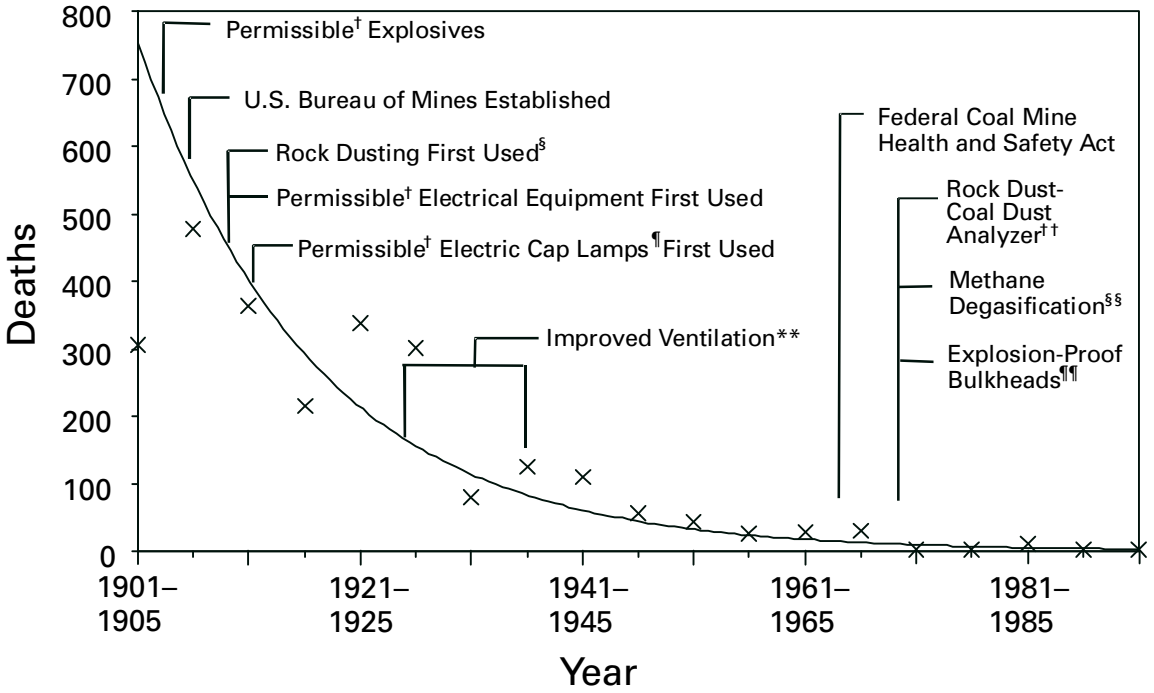
decline in explosion-related fatalities, from an average of 477 per year in 1906–1910 to <3 per year in 1991–1995 (Figure 5). All other causes of death associated with underground coal mines (except machinery) declined similarly from the first to the last 20-year interval of this period.

**Factors Contributing to Worker Safety**

The decline in occupational fatalities in mining and other industries reflects the progress made in all workplaces since the beginning of the century in identifying and correcting the etiologic factors that contribute to occupational health risks. If today's workforce of approximately 130 million had the same risk as workers in 1933 for dying from injuries, then an additional 40,000 workers would have died in 1997 from preventable events (CDC, unpublished data, 1999). The declines can be attributed to multiple, interrelated factors, including efforts by labor and management to improve worker safety and by academic researchers such as Dr. Alice Hamilton. Other efforts to improve safety were developed by state labor and health authorities and through the research, education, and regulatory activities undertaken by government agencies (e.g., USBM, the Mine Safety and Health Administration [established as the Mining Enforcement and Safety Administration in 1973], the Occupational Safety and Health Administration [OSHA] [established in 1970], and NIOSH). Efforts by these groups led to physical changes in the workplace, such as improved ventilation and dust

*Workplace Safety — Continued*

**FIGURE 5. Five-year averages of annual number of deaths related to coal mine explosions — United States, 1901–1995***




*Each X represents the 5-year average of the number of deaths resulting from explosions; the line is a smoothed regression line through the 5-year averages.
†Explosives and equipment that can be used in an explosive methane-rich environment without causing a methane explosion.
§The process of applying a layer of rock dust over the coal dust, which creates an inert mixture and inhibits a coal dust explosion.
¶Lamps worn on minors' caps.
**Ventilation improvements, including the use of reversible fans, reduce the concentration of methane and remove the explosive gas from the mine.
††A hand-held monitor that provides instantaneous readings of the rock-to-coal dust mixture to ensure that it is inert.
§§Techniques to remove methane from the coal bed before mining the coal.
¶¶Explosion-proof walls used to seal abandoned (mined-out) areas to protect workers in active parts of the mine.

suppression in mines; safer equipment; development and introduction of safer work practices; and improved training of health and safety professionals and of workers. The reduction in workplace deaths has occurred in the context of extensive changes in U.S. economic activity, the U.S. industrial mix, and workforce demographics (*6*). Societywide progress in injury control also contributes to safer workplaces—for example, use of safety belts and other safety features in motor vehicles (*6*) and improvements in medical care for trauma victims.

Only in some instances do data permit association of declines in fatalities with specific interventions. Before 1920, using permissible explosives and electrical equipment (which can be operated in an explosive methane-rich environment without igniting the methane), applying a layer of rock dust over the coal dust (which creates an inert mixture and prevents ignition of coal dust), and improved ventilation, such as

*Workplace Safety — Continued*

reversible fans, led to dramatic reductions in fatalities from explosions (Figure 5) (*7*). New technologies in roof support and improved mine design reduced the number of deaths from roof falls. However, technology also introduced new hazards, such as fatalities associated with machinery. An approximately 50% decrease in coal mining fatality rates occurred from 1966–1970 to 1971–1975 (Figure 4); 1971–1975 is the period immediately following passage of the 1969 Federal Coal Mine Health and Safety Act, which greatly expanded enforcement powers of federal inspectors and established mandatory health and safety standards for all mines. The act also served as the model for the 1970 Occupational Safety and Health Act. Following the 1977 Federal Mine Safety and Health Act, a 33% decrease in fatalities occurred in metal and nonmetallic minerals mining (1976–1980 compared with 1981–1985) (Figure 4).

Similarly, the impact of more recent targeted efforts to reduce workplace fatalities can be illustrated by data on work-related electrocutions. During the 1980s, there were concerted research and dissemination efforts by NIOSH, changes to the National Electrical Code and occupational safety and health regulations, and public awareness campaigns by power companies and others. During this decade, work-related electrocution rates declined 54%, from 0.7 per 100,000 workers per year in 1980 to 0.3 in 1989; the number of electrocutions decreased from 577 to 329 (*6*).

Although the decline in injuries in general industry since 1970 seems to have resulted from a variety of factors, some sources point to the Occupational Safety and Health Act of 1970¶, which created NIOSH and OSHA (*6,8*). Since 1971, NIOSH has investigated hazardous work conditions, conducted research to prevent injury, trained health professionals, and developed educational materials and recommendations for worker protection. OSHA's regulatory authority for worksite inspection and development of safety standards has brought about safety regulations, mandatory workplace safety controls, and worker training. During 1980–1996, research findings indicated that training creates safer workplaces through increased worker knowledge of job hazards and safe work practices in a wide array of worksites (*9*).

**Future Directions**

Despite the accomplishments described in this report, workers continue to die from preventable injuries sustained on the job. Ongoing efforts to address important workplace hazards include conducting field investigations of fatalities in high-risk occupations and industries, such as the Fire Fighter Fatality Investigation and Prevention Program, establishing a research center to facilitate childhood agricultural injury prevention (National Children's Center for Rural and Agricultural Health and Safety), and developing educational materials for worker protection, such as Preventing Homicide in the Workplace (*10*). Despite major gains in workplace safety, mining remains the most dangerous industry, and mining safety research remains a national priority.

The National Occupational Research Agenda (NORA), developed by NIOSH and approximately 500 organizations and persons nationwide, identified traumatic injuries as one of its public health priorities. NORA was developed in recognition of the rapidly changing nature of the workplace and workforce and provides the framework for research to improve worker safety in the 21st century. The NORA Traumatic Injuries Team sponsored the first National Occupational Injury Symposium in 1997 and outlined priority needs (*11*). These include the need to identify new sources of surveillance data, to improve identification of work-related injuries and illnesses in existing

¶Public Law 91-596.

*Safer Workplace — Continued*

databases, to link data from existing sources for improved information about injuries, and to better assess injury exposures and intervention outcomes. Increased attention to other NORA priority areas, such as intervention effectiveness research, surveillance research methods, and organization of work, should guide continued national efforts to reduce both occupational illnesses and injuries in the next century.

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## Heat-Related Illnesses and Deaths — Missouri, 1998, and United States, 1979–1996

Although heat-related illness and death* are readily preventable (*5*), exposure to extremely high temperatures caused an annual average of 381 deaths in the United States during 1979–1996 (*6*). Basic behavioral and environmental precautions are essential to preventing adverse health outcomes associated with sustained periods of hot weather (daytime heat index† of ≥105 F [≥40.6 C] and a nighttime minimum temperature of 80 F [26.7 C] persisting for at least 48 hours). This report describes four heat-related deaths that occurred in Missouri during 1998, summarizes heat-related

*The National Association of Medical Examiners' (NAME) definition of heat-related death includes exposure to high ambient temperature either causing the death or substantially contributing to it, cases where the body temperature at the time of collapse was ≥105 F (≥40.6 C), and a history of exposure to high ambient temperature and the reasonable exclusion of other causes of hyperthermia (*1*). Because death rates from other causes (e.g., cardiovascular and respiratory disease) increase during heat waves (*2–4*) (defined by the National Weather Service as ≥3 consecutive days of temperatures ≥90 F [≥32.2 C]), deaths classified as caused by hyperthermia represent only a portion of heat-related mortality.

†Heat index is a measure of the effect of combined elements (e.g., heat and humidity) on the body.

*Heat-Related Illness — Continued*

deaths in the United States during 1979–1996, describes risk factors associated with heat-related illness and death, especially in susceptible populations (young and elderly, chronically ill, and disabled persons), and recommends preventive measures.

## Case Reports

**Case 1**. In June 1998, a 92-year-old man was admitted to a city hospital emergency department. He was unresponsive to stimuli, had a heart rate of 170 beats per minute, a rectal temperature of 105.6 F (40.9 C), and a history of heart disease. The medical examiner's report listed the cause of death as hyperthermia as a result of exposure to high environmental temperature. To conserve electricity, his family had not been running the air conditioner in their residence. The daytime heat index recorded at the local airport during the 5 days preceding his death ranged from 102 F to 109 F (38.9 C to 42.8 C).

**Case 2.** In July 1998 at 4:47 p.m., a 4-year-old girl was found in a locked car in front of a child care center. She had disappeared from the center at approximately 10 a.m. Cardiopulmonary resuscitation was administered on the scene, but rigor mortis already had occurred. Death was attributed to hyperthermia. The temperature inside the car at the time of her death was unknown; however, the estimated heat index in the area that day was 93 F (33.9 C).

**Case 3.** In July 1998, a 70-year-old woman was found dead in a mobile home. When she was discovered, the air conditioner was blowing hot air, and the temperature inside the mobile home was approximately 115 F (46 C). The autopsy report indicated that she suffered from congestive heart failure, arthritis, and chronic obstructive pulmonary disease, and that death was caused by pulmonary insufficiency brought about by exposure to excessive heat.

**Case 4.** In July 1998, a 42-year-old man was found dead in his apartment. His partially decomposed body was discovered by police officers investigating reports of a foul odor. The air conditioner was not on. The heat index at the city airport when the man was last seen alive was 93 F (33.9 C). The man had schizophrenia and was under psychiatric care. He also was a heavy smoker and had emphysema. The medical examiner's report indicated that the cause of death was hyperthermia.

## Missouri

During 1979–1996, the years for which data are available, Missouri had the second highest age-adjusted rate for heat-related deaths "due to weather conditions"[§] (3 per 1 million population) in the United States. During 1998, after reviewing death certificates, the Missouri Department of Health attributed 12 deaths to high temperatures, and the state's heat surveillance system recorded 470 heat-related illnesses: the average age among decedents was 65.6 years (range: 4–92 years; median 73.5 years); seven (58%) decedents were female.

[§] Underlying cause of death attributed to "excessive heat exposure," classified according to the *International Classification of Diseases, Ninth Revision* (ICD-9), as code E900.0, "due to weather conditions" (deaths); code E900.1, "of man-made origin" (deaths); or code E900.9, "of unspecified origin" (deaths). These data were obtained from the Compressed Mortality File (CMF) of CDC's National Center for Health Statistics, which contains information from death certificates filed in 50 states and the District of Columbia. All rates were age-standardized to the 1990 U.S. population.

*Heat-Related Illness — Continued*

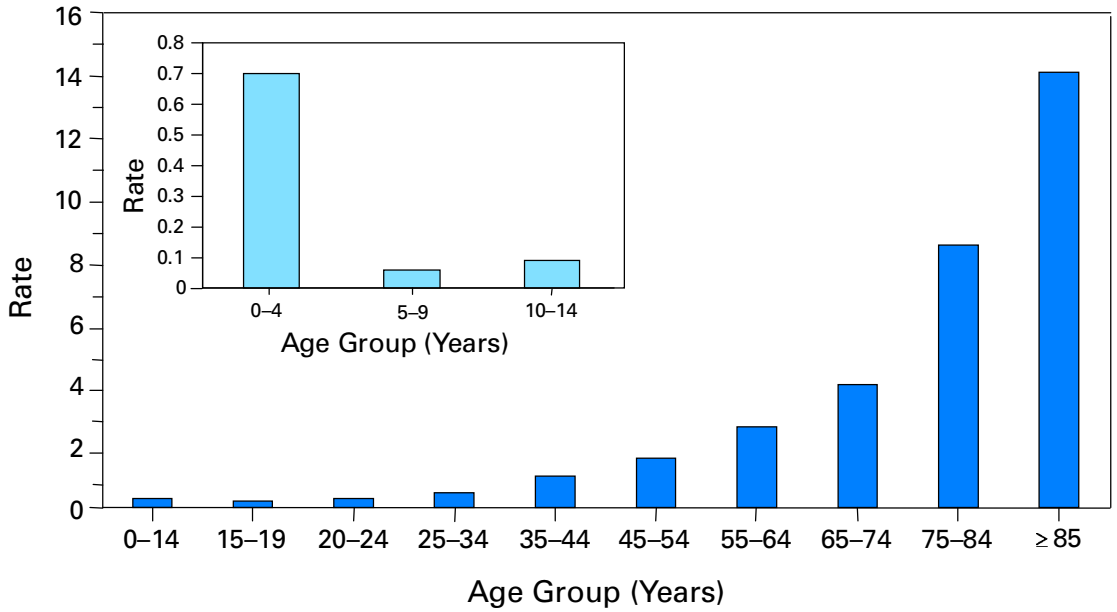
## United States

During 1979–1996, an annual average of 381 deaths in the United States (*6*) were attributable to "excessive heat exposure" (range: 148 in 1979 to 1700 in 1980), for an average age-adjusted rate of 2 deaths per 1 million population. During this 18-year period, 6864 deaths were attributable to excessive heat exposure: 2914 (42%) "due to weather conditions," 343 (5%) "of man-made origin," and 3607 (53%) "of unspecified origin." Of the 2862 persons whose death was caused by weather conditions and for whom age data were available, 1745 (61%) were aged ≥55 years, and 19 (4%) were aged ≤14 years. Approximately half of all heat-related deaths occurred among persons aged ≥65 years (Figure 1). During 1979–1996, the annual age-adjusted death rate for hyperthermia in this age group was 6 per 1 million. Among persons aged ≥35 years, the annual death rate "due to weather conditions" was 1.7 times higher for men (1.5 per 1 million) than for women (0.9 per 1 million), and four times higher for blacks (four per 1 million) than for whites (0.9 per 1 million).

*Reported by: DC Rackers, Office of Epidemiology, H Donnell, MD, State Epidemiologist, Missouri Dept of Health. Health Studies Br, Div of Environmental Hazards and Health Effects, National Center for Environmental Health; and an EIS Officer, CDC.*

**Editorial Note:** All persons are at risk for hyperthermia when exposed to a sustained period of excessive heat (*2*). The cases described in this report illustrate risk factors associated with heat-related mortality, including age (the young and the elderly), medical history (e.g., cardiovascular disease), social circumstances (e.g., living alone), chronic health conditions (e.g., respiratory diseases), and other conditions that might interfere with the ability to care for oneself (*2,3*).

**FIGURE 1. Average annual rate* of heat-related deaths†, by age group — United States, 1979–1996**




*Per 1 million population.

†Underlying cause of death attributed to excess heat exposure classified according to the *International Classification of Diseases, Ninth Revision*, as code E900.0, "due to weather conditions."

*Heat-Related Illness — Continued*

Also contributing to heat-related illness are alcohol consumption (which may cause dehydration), previous heatstroke, physical activity (e.g., exertion in exceptionally hot environments during work or recreation), and the use of medications that interfere with the body's heat regulatory system, such as neuroleptics (antipsychotics or major tranquilizers) and medications with anticholinergic effects (e.g., tricyclic antidepressants, antihistamines, some antiparkinsonian agents, and some over-the-counter sleeping pills [*2–4* ]). Although the annual death rate from hyperthermia is higher for men aged ≥35 years and for black persons than for women aged ≥35 years and white persons, the reasons for these differences have not been identified (*5* ).

Illnesses associated with high environmental temperatures include heatstroke (hyperthermia), heat exhaustion, heat syncope, and heat cramps (*2* ). Heatstroke is a medical emergency characterized by the rapid onset and increase (within minutes) of the core body temperature to ≥105 F (≥40.6 C) and lethargy, disorientation, delirium, and coma (*2* ). Heatstroke is often fatal despite medical care directed at rapidly lowering the body temperature (e.g., ice baths) because in many cases irreparable neurologic damage has occurred (*2* ). Heat exhaustion is characterized by dizziness, weakness, or fatigue often following several days of sustained exposure to hot temperatures and results from dehydration or electrolyte imbalance (*2* ); treatment includes replacing fluids and electrolytes and may require hospitalization (*2* ). Physical exertion during hot weather increases the likelihood of heat syncope and heat cramps caused by peripheral vasodilation (*2* ). Persons who lose consciousness because of heat syncope should be placed in a recumbent position with feet elevated and given fluid and electrolyte replacement (*2* ). For heat cramps, physical exertion should be discontinued and fluids and electrolytes replaced (*2,7* ).

Persons working either indoors or outdoors in high temperatures should take special precautions, including allowing 10–14 days to acclimate to high temperatures. Although adequate salt intake is important, salt tablets are not recommended and may be hazardous to many people (*2* ). Although the use of fans may increase comfort at temperatures <90 F (<32.2 C), they are not protective against heatstroke when temperatures reach ≥90 F (≥32.2 C) and humidity is >35% (*2,4* ).

Measures for preventing heat-related illness and death include spending time in air-conditioned environments, increasing nonalcoholic fluid intake, exercising only during cooler parts of the day, and taking cool-water baths (*2* ). Elderly persons should be encouraged to take advantage of air-conditioned environments (e.g., shopping malls and public libraries), even if only for part of the day (*2–4* ).

Public health information about exceptionally high temperatures should be directed toward susceptible populations. For example, parents should be educated about the heat sensitivity of children aged <5 years (*2* ). When a heat wave is predicted, friends, relatives, and neighbors should make an effort to check on elderly, disabled, and homebound persons, and during periods of high temperatures, prevention messages about avoiding heat-related illness should be disseminated as early as possible to prevent heat-related illness, injury, and death.

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*Heat-Related Illness — Continued*

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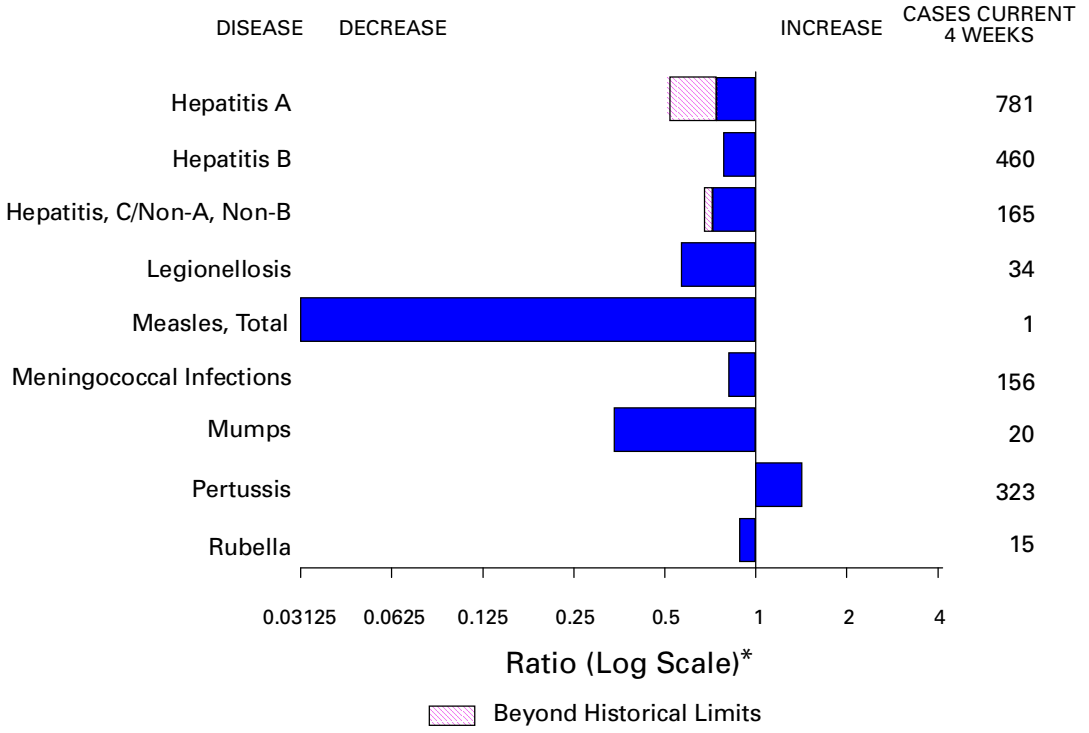
## Erratum — Vol. 48, No. 18

In the article "Motor-Vehicle Safety: A 20th Century Public Health Achievement," on page 369 the denominator for the rate was incorrect in Figure 1. The figure title and the label for the Y axis on the left side should be "per *100* million vehicle miles traveled."

**FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending June 5, 1999, with historical data — United States**




*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 — provisional cases of selected notifiable diseases, United States, cumulative, week ending June 5, 1999 (22nd Week)**

| | Cum. 1999 | | Cum. 1999 |
|---|---|---|---|
| Anthrax | - | HIV-Infection, pediatric*§ | 73 |
| Brucellosis | 14 | Plague | 1 |
| Cholera | - | Poliomyelitis, paralytic | - |
| Congenital rubella syndrome | 2 | Psittacosis | 14 |
| Cyclosporiasis | 7 | Rabies, human | - |
| Diphtheria | - | Rocky Mountain spotted fever (RMSF) | 75 |
| Encephalitis: California* | 2 | Streptococcal disease, invasive Group A | 1,018 |
| eastern equine* | 2 | Streptococcal toxic-shock syndrome* | 20 |
| St. Louis* | - | Syphilis, congenital¶ | 60 |
| western equine* | 1 | Tetanus | 9 |
| Ehrilichiosis human granulocyctic (HGE)* | 27 | Toxic-shock syndrome | 51 |
| human monocyctic (HME)* | 5 | Trichinosis | 5 |
| Hansen disease | 35 | Typhoid fever | 116 |
| Hantavirus pulmonary syndrome*† | 7 | Yellow fever | - |
| Hemolytic uremic syndrome, post-diarrheal* | 12 | | |

-:no reported cases
*Not notifiable in all states.
† Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).
§ 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 May 23, 1999.
¶ Updated from reports to the Division of STD Prevention, NCHSTP.

## TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending June 5, 1999, and June 6, 1998 (22nd Week)

| Reporting Area | AIDS | | Chlamydia | | Cryptosporidiosis | | *Escherichia coli* O157:H7* | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | NETSS | | PHLIS | |
| | Cum. 1999† | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 |
| UNITED STATES | 18,649 | 19,858 | 236,249 | 241,165 | 513 | 831 | 543 | 510 | 275 | 386 |
| NEW ENGLAND | 953 | 620 | 8,181 | 8,629 | 27 | 64 | 84 | 71 | 65 | 64 |
| Maine | 22 | 13 | 193 | 388 | 8 | 14 | 5 | 2 | - | - |
| N.H. | 24 | 13 | 400 | 409 | 5 | 3 | 11 | 10 | 7 | 15 |
| Vt. | 6 | 10 | 213 | 163 | 6 | 7 | 8 | - | 1 | - |
| Mass. | 627 | 264 | 3,679 | 3,541 | 8 | 36 | 35 | 40 | 31 | 36 |
| R.I. | 60 | 60 | 997 | 1,058 | - | 4 | 4 | 3 | 6 | 1 |
| Conn. | 214 | 260 | 2,699 | 3,070 | - | - | 21 | 16 | 20 | 12 |
| MID. ATLANTIC | 4,463 | 5,687 | 30,402 | 25,388 | 87 | 282 | 34 | 46 | 7 | 17 |
| Upstate N.Y. | 531 | 714 | N | N | 46 | 163 | 28 | 33 | - | - |
| N.Y. City | 2,110 | 3,149 | 15,862 | 11,369 | 22 | 88 | - | 6 | 2 | 5 |
| N.J. | 967 | 986 | 4,263 | 4,837 | 9 | 9 | 6 | 7 | 5 | 11 |
| Pa. | 855 | 838 | 10,277 | 9,182 | 10 | 22 | N | N | - | 1 |
| E.N. CENTRAL | 1,289 | 1,510 | 34,849 | 41,631 | 47 | 93 | 89 | 104 | 42 | 70 |
| Ohio | 209 | 287 | 9,140 | 11,357 | 16 | 35 | 33 | 21 | 8 | 14 |
| Ind. | 169 | 292 | 4,444 | 4,460 | 8 | 20 | 15 | 26 | 10 | 20 |
| Ill. | 594 | 598 | 11,813 | 10,819 | 6 | 26 | 21 | 38 | 7 | 7 |
| Mich. | 252 | 251 | 9,452 | 9,364 | 17 | 12 | 20 | 19 | 11 | 13 |
| Wis. | 65 | 82 | U | 5,631 | - | - | N | N | 6 | 16 |
| W.N. CENTRAL | 389 | 345 | 13,328 | 14,581 | 38 | 68 | 98 | 50 | 38 | 46 |
| Minn. | 69 | 55 | 2,755 | 2,968 | 14 | 19 | 30 | 18 | 21 | 21 |
| Iowa | 44 | 20 | 1,213 | 1,818 | 8 | 14 | 11 | 7 | 4 | 6 |
| Mo. | 154 | 175 | 5,099 | 5,027 | 5 | 7 | 12 | 9 | 9 | 16 |
| N. Dak. | 4 | 4 | 325 | 429 | 4 | 7 | 3 | 1 | - | 1 |
| S. Dak. | 11 | 9 | 674 | 702 | 2 | 9 | 3 | 1 | 4 | 1 |
| Nebr. | 34 | 34 | 1,217 | 1,255 | 4 | 11 | 32 | 6 | - | - |
| Kans. | 73 | 48 | 2,045 | 2,382 | 1 | 1 | 7 | 8 | - | 1 |
| S. ATLANTIC | 5,239 | 4,979 | 52,557 | 45,654 | 132 | 71 | 70 | 29 | 34 | 35 |
| Del. | 72 | 57 | 1,201 | 1,074 | - | - | 2 | - | - | 1 |
| Md. | 560 | 572 | 4,374 | 3,512 | 6 | 6 | 4 | 10 | - | 6 |
| D.C. | 208 | 412 | N | N | 4 | 3 | - | - | - | - |
| Va. | 266 | 368 | 5,860 | 4,061 | 6 | 1 | 20 | - | 11 | 17 |
| W. Va. | 26 | 44 | 888 | 1,023 | - | 1 | 3 | 1 | 1 | - |
| N.C. | 356 | 333 | 9,664 | 9,518 | 3 | N | 15 | 9 | 10 | 5 |
| S.C. | 485 | 313 | 7,932 | 7,817 | - | - | 7 | 1 | 3 | - |
| Ga. | 826 | 610 | 12,211 | 10,252 | 74 | 19 | 6 | 2 | - | - |
| Fla. | 2,440 | 2,270 | 10,427 | 8,397 | 39 | 41 | 13 | 6 | 9 | 6 |
| E.S. CENTRAL | 844 | 784 | 16,597 | 16,460 | 8 | 15 | 39 | 37 | 14 | 22 |
| Ky. | 128 | 101 | 2,800 | 2,595 | 2 | 5 | 13 | 10 | - | - |
| Tenn. | 339 | 268 | 6,078 | 5,344 | 4 | 6 | 14 | 19 | 7 | 14 |
| Ala. | 214 | 232 | 3,811 | 4,063 | 1 | N | 9 | 5 | 6 | 7 |
| Miss. | 163 | 183 | 3,908 | 4,458 | 1 | 4 | 3 | 3 | 1 | 1 |
| W.S. CENTRAL | 2,091 | 2,463 | 31,893 | 35,913 | 30 | 13 | 19 | 23 | 11 | 6 |
| Ark. | 70 | 81 | 2,440 | 1,447 | - | 3 | 5 | 1 | 3 | 1 |
| La. | 410 | 412 | 7,084 | 5,239 | 20 | 5 | 3 | - | 3 | 1 |
| Okla. | 54 | 134 | 3,265 | 4,355 | 1 | 3 | 6 | 3 | 5 | 4 |
| Tex. | 1,557 | 1,836 | 19,104 | 24,872 | 9 | 2 | 5 | 19 | - | - |
| MOUNTAIN | 723 | 706 | 13,510 | 13,241 | 30 | 57 | 44 | 50 | 22 | 39 |
| Mont. | 4 | 13 | 559 | 515 | 4 | 1 | 3 | 2 | - | - |
| Idaho | 11 | 14 | 501 | 800 | 2 | 14 | 1 | 3 | 2 | 1 |
| Wyo. | 3 | 1 | 333 | 287 | - | - | 3 | - | 3 | - |
| Colo. | 144 | 126 | 3,233 | 3,439 | 4 | 2 | 16 | 11 | 8 | 9 |
| N. Mex. | 37 | 111 | 1,633 | 1,614 | 11 | 25 | 2 | 9 | 1 | 6 |
| Ariz. | 355 | 283 | 5,409 | 4,549 | 7 | 9 | 9 | 8 | 4 | 9 |
| Utah | 70 | 57 | 769 | 923 | - | - | 8 | 11 | 2 | 8 |
| Nev. | 99 | 101 | 1,073 | 1,114 | 2 | 6 | 2 | 6 | 2 | 6 |
| PACIFIC | 2,658 | 2,764 | 34,932 | 39,668 | 114 | 168 | 66 | 100 | 42 | 87 |
| Wash. | 153 | 196 | 5,131 | 4,663 | - | - | 20 | 20 | 16 | 30 |
| Oreg. | 63 | 87 | 2,445 | 2,127 | 12 | 16 | 17 | 24 | 12 | 22 |
| Calif. | 2,394 | 2,428 | 25,584 | 31,086 | 102 | 151 | 29 | 55 | 13 | 32 |
| Alaska | 6 | 12 | 804 | 821 | - | - | - | 1 | - | - |
| Hawaii | 42 | 41 | 968 | 971 | - | 1 | - | - | 1 | 3 |
| Guam | 1 | - | - | 156 | - | - | N | N | - | - |
| P.R. | 625 | 830 | U | U | - | - | 6 | 4 | U | U |
| V.I. | 13 | 17 | N | N | - | - | N | N | U | U |
| Amer. Samoa | - | - | U | U | - | - | N | N | U | U |
| C.N.M.I. | - | - | N | N | - | - | N | N | U | U |

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

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

†Updated monthly from reports to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention, last update May 23, 1999.

## TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending June 5, 1999, and June 6, 1998 (22nd Week)

| Reporting Area | Gonorrhea | | Hepatitis C/NA,NB | | Legionellosis | | Lyme Disease | |
|---|---|---|---|---|---|---|---|---|
| | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 |
| UNITED STATES | 126,432 | 138,698 | 1,102 | 1,890 | 394 | 469 | 1,919 | 2,109 |
| NEW ENGLAND | 2,468 | 2,385 | 69 | 35 | 24 | 23 | 307 | 546 |
| Maine | 15 | 16 | 1 | - | 3 | 1 | - | 11 |
| N.H. | 32 | 39 | - | - | 3 | 2 | - | 11 |
| Vt. | 24 | 13 | 2 | 2 | 3 | 1 | - | 3 |
| Mass. | 1,036 | 846 | 63 | 32 | 7 | 9 | 153 | 141 |
| R.I. | 244 | 156 | 3 | 1 | 2 | 4 | 16 | 30 |
| Conn. | 1,117 | 1,315 | - | - | 6 | 6 | 138 | 350 |
| MID. ATLANTIC | 16,361 | 14,969 | 73 | 168 | 86 | 102 | 1,205 | 1,212 |
| Upstate N.Y. | 2,508 | 2,818 | 46 | 130 | 25 | 26 | 527 | 557 |
| N.Y. City | 6,561 | 5,041 | - | - | 7 | 23 | 6 | 51 |
| N.J. | 2,315 | 2,962 | - | - | 5 | 4 | 118 | 170 |
| Pa. | 4,977 | 4,148 | 27 | 38 | 49 | 49 | 554 | 434 |
| E.N. CENTRAL | 22,796 | 27,616 | 322 | 228 | 105 | 170 | 42 | 97 |
| Ohio | 5,449 | 6,905 | - | 6 | 29 | 60 | 25 | 18 |
| Ind. | 2,606 | 2,640 | - | 4 | 35 | 31 | 14 | 4 |
| Ill. | 8,289 | 8,797 | 8 | 24 | 10 | 22 | 2 | 4 |
| Mich. | 6,452 | 6,989 | 314 | 194 | 28 | 26 | 1 | 5 |
| Wis. | U | 2,285 | - | - | 3 | 31 | U | 66 |
| W.N. CENTRAL | 5,426 | 6,881 | 56 | 11 | 21 | 25 | 23 | 19 |
| Minn. | 1,045 | 1,020 | 2 | - | 1 | 3 | 13 | 4 |
| Iowa | 280 | 560 | - | 5 | 12 | 4 | 2 | 10 |
| Mo. | 2,625 | 3,692 | 50 | 4 | 7 | 8 | - | 3 |
| N. Dak. | 31 | 37 | - | - | - | - | 1 | - |
| S. Dak. | 67 | 116 | - | - | 1 | - | - | - |
| Nebr. | 549 | 469 | - | 2 | - | 8 | - | - |
| Kans. | 829 | 987 | 4 | - | - | 2 | 7 | 2 |
| S. ATLANTIC | 37,918 | 36,979 | 108 | 49 | 43 | 50 | 223 | 167 |
| Del. | 709 | 576 | - | - | 3 | 7 | 7 | 8 |
| Md. | 3,990 | 3,881 | 24 | 5 | 4 | 10 | 151 | 128 |
| D.C. | 1,042 | 1,507 | - | - | - | 3 | 1 | 4 |
| Va. | 3,914 | 2,579 | 9 | 3 | 11 | 4 | 17 | 11 |
| W. Va. | 230 | 350 | 12 | 3 | N | N | 4 | 4 |
| N.C. | 8,315 | 7,981 | 21 | 11 | 7 | 6 | 28 | 5 |
| S.C. | 4,325 | 5,085 | 12 | 1 | 6 | 5 | 3 | 1 |
| Ga. | 7,967 | 8,379 | 1 | 9 | - | - | - | 2 |
| Fla. | 7,426 | 6,641 | 29 | 17 | 12 | 14 | 12 | 4 |
| E.S. CENTRAL | 13,196 | 15,520 | 115 | 62 | 54 | 22 | 41 | 23 |
| Ky. | 1,276 | 1,419 | 5 | 11 | 44 | 12 | 17 | 8 |
| Tenn. | 4,629 | 4,466 | 42 | 48 | 8 | 4 | 12 | 7 |
| Ala. | 3,648 | 5,342 | 1 | 3 | 2 | 2 | 6 | 8 |
| Miss. | 3,643 | 4,293 | 67 | - | - | 4 | 6 | - |
| W.S. CENTRAL | 17,928 | 21,424 | 119 | 369 | 1 | 13 | 2 | 8 |
| Ark. | 1,150 | 1,668 | 2 | 9 | - | 1 | - | 4 |
| La. | 5,660 | 4,459 | 96 | 6 | 1 | - | - | - |
| Okla. | 1,649 | 2,358 | 2 | 2 | - | 6 | 2 | - |
| Tex. | 9,469 | 12,939 | 19 | 352 | - | 6 | - | 4 |
| MOUNTAIN | 3,711 | 3,495 | 69 | 218 | 23 | 29 | 5 | 1 |
| Mont. | 17 | 22 | 4 | 4 | - | 1 | - | - |
| Idaho | 26 | 72 | 4 | 77 | - | - | 1 | - |
| Wyo. | 11 | 15 | 24 | 53 | - | 1 | 1 | - |
| Colo. | 893 | 951 | 12 | 12 | 4 | 5 | - | - |
| N. Mex. | 280 | 311 | 4 | 40 | 1 | 2 | 1 | - |
| Ariz. | 2,031 | 1,640 | 16 | 2 | 3 | 5 | - | - |
| Utah | 75 | 89 | 2 | 14 | 9 | 13 | 1 | - |
| Nev. | 378 | 395 | 3 | 16 | 6 | 2 | 1 | 1 |
| PACIFIC | 6,628 | 9,429 | 171 | 750 | 37 | 35 | 71 | 36 |
| Wash. | 902 | 790 | 7 | 10 | 7 | 4 | 1 | 1 |
| Oreg. | 338 | 297 | 7 | 10 | 1 | - | 1 | 6 |
| Calif. | 5,126 | 7,999 | 157 | 675 | 28 | 31 | 69 | 29 |
| Alaska | 139 | 143 | - | 1 | 1 | - | - | - |
| Hawaii | 123 | 200 | - | 54 | - | - | - | - |
| Guam | - | 19 | - | - | - | 1 | - | - |
| P.R. | 130 | 170 | - | - | - | - | - | - |
| V.I. | U | U | U | U | U | U | U | U |
| Amer. Samoa | U | U | U | U | U | U | U | U |
| C.N.M.I. | - | 15 | - | - | - | - | - | - |

N: Not notifiable U: Unavailable -: no reported cases

## TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending June 5, 1999, and June 6, 1998 (22nd Week)

| Reporting Area | Malaria | | Rabies, Animal | | Salmonellosis* | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | NETSS | | PHLIS | |
| | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 |
| UNITED STATES | 446 | 484 | 2,225 | 3,082 | 10,325 | 11,749 | 4,735 | 6,955 |
| NEW ENGLAND | 16 | 18 | 364 | 573 | 636 | 791 | 124 | 186 |
| Maine | 1 | - | 67 | 97 | 46 | 60 | 2 | 4 |
| N.H. | - | 3 | 26 | 33 | 35 | 50 | 7 | 6 |
| Vt. | 1 | - | 56 | 30 | 23 | 29 | 4 | 3 |
| Mass. | 6 | 13 | 74 | 183 | 357 | 417 | 73 | 117 |
| R.I. | - | 2 | 45 | 33 | 32 | 48 | 12 | 15 |
| Conn. | 8 | - | 96 | 197 | 143 | 187 | 26 | 41 |
| MID. ATLANTIC | 111 | 146 | 430 | 646 | 1,397 | 2,015 | 349 | 1,101 |
| Upstate N.Y. | 32 | 30 | 286 | 449 | 356 | 443 | 89 | 198 |
| N.Y. City | 36 | 82 | U | U | 324 | 651 | 93 | 364 |
| N.J. | 27 | 19 | 85 | 83 | 307 | 437 | 103 | 366 |
| Pa. | 16 | 15 | 59 | 114 | 410 | 484 | 64 | 173 |
| E.N. CENTRAL | 44 | 47 | 27 | 43 | 1,343 | 2,111 | 726 | 1,104 |
| Ohio | 8 | 2 | 8 | 31 | 309 | 486 | 234 | 265 |
| Ind. | 8 | 2 | - | - | 153 | 206 | 35 | 73 |
| Ill. | 17 | 22 | - | 4 | 473 | 642 | 275 | 583 |
| Mich. | 9 | 18 | 17 | 6 | 370 | 426 | 134 | 105 |
| Wis. | 2 | 3 | 2 | 2 | 38 | 351 | 48 | 78 |
| W.N. CENTRAL | 20 | 23 | 258 | 317 | 633 | 673 | 303 | 346 |
| Minn. | 5 | 8 | 39 | 55 | 185 | 187 | 43 | 70 |
| Iowa | 5 | 3 | 51 | 64 | 84 | 117 | 6 | 22 |
| Mo. | 9 | 9 | 8 | 18 | 198 | 177 | 213 | 44 |
| N. Dak. | - | 1 | 71 | 55 | 15 | 16 | 2 | 3 |
| S. Dak. | - | - | 44 | 72 | 31 | 26 | 8 | 19 |
| Nebr. | - | - | 2 | 2 | 40 | 53 | 14 | 177 |
| Kans. | 1 | 2 | 43 | 51 | 80 | 97 | 17 | 11 |
| S. ATLANTIC | 128 | 103 | 836 | 1,075 | 2,107 | 1,986 | 905 | 1,220 |
| Del. | 1 | 1 | 3 | 17 | 41 | 23 | 5 | 7 |
| Md. | 36 | 37 | 179 | 236 | 269 | 282 | 52 | 86 |
| D.C. | 9 | 7 | - | - | 35 | 40 | 25 | 9 |
| Va. | 21 | 17 | 217 | 280 | 261 | 314 | 32 | 56 |
| W. Va. | 1 | - | 49 | 39 | 36 | 55 | 4 | 7 |
| N.C. | 10 | 8 | 178 | 283 | 348 | 299 | 81 | 112 |
| S.C. | 1 | 3 | 63 | 66 | 115 | 123 | 40 | 66 |
| Ga. | 12 | 13 | 71 | 66 | 356 | 272 | 87 | 283 |
| Fla. | 37 | 17 | 76 | 88 | 646 | 578 | 579 | 594 |
| E.S. CENTRAL | 9 | 13 | 113 | 126 | 583 | 516 | 477 | 373 |
| Ky. | 2 | 1 | 19 | 16 | 128 | 115 | 60 | 71 |
| Tenn. | 4 | 7 | 39 | 72 | 152 | 151 | 331 | 58 |
| Ala. | 2 | 3 | 55 | 36 | 179 | 142 | 47 | 216 |
| Miss. | 1 | 2 | - | 2 | 124 | 108 | 39 | 28 |
| W.S. CENTRAL | 8 | 12 | 44 | 76 | 772 | 802 | 717 | 1,248 |
| Ark. | - | 1 | - | 1 | 119 | 72 | 42 | 63 |
| La. | 6 | 4 | - | - | 136 | 41 | 64 | 71 |
| Okla. | 1 | 1 | 44 | 75 | 108 | 103 | 206 | 86 |
| Tex. | 1 | 6 | - | - | 409 | 586 | 405 | 1,028 |
| MOUNTAIN | 22 | 28 | 78 | 72 | 1,002 | 747 | 287 | 450 |
| Mont. | 3 | - | 29 | 21 | 21 | 32 | 6 | 1 |
| Idaho | 1 | 3 | - | - | 36 | 42 | 5 | 11 |
| Wyo. | 1 | - | 27 | 36 | 11 | 26 | 2 | - |
| Colo. | 8 | 7 | 1 | 1 | 312 | 181 | 47 | 60 |
| N. Mex. | 2 | 8 | 2 | - | 122 | 68 | 36 | 90 |
| Ariz. | 5 | 4 | 19 | 14 | 297 | 219 | 156 | 256 |
| Utah | 1 | 1 | - | - | 137 | 119 | 19 | 14 |
| Nev. | 1 | 5 | - | - | 66 | 60 | 16 | 18 |
| PACIFIC | 88 | 94 | 75 | 154 | 1,852 | 2,108 | 847 | 927 |
| Wash. | 5 | 7 | - | - | 166 | 142 | 39 | 49 |
| Oreg. | 10 | 9 | 1 | - | 139 | 121 | 29 | 52 |
| Calif. | 68 | 77 | 68 | 137 | 1,415 | 1,748 | 758 | 807 |
| Alaska | - | - | 6 | 17 | 16 | 14 | - | 3 |
| Hawaii | 5 | 1 | - | - | 116 | 83 | 21 | 16 |
| Guam | - | 1 | - | - | - | 9 | - | 19 |
| P.R. | - | - | 30 | 24 | 149 | 244 | 17 | 25 |
| V.I. | U | U | U | U | - | - | - | - |
| Amer. Samoa | U | U | U | U | - | - | - | - |
| C.N.M.I. | - | - | - | - | - | 9 | - | 10 |

N: Not notifiable U: Unavailable -: no reported cases

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

## TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending June 5, 1999, and June 6, 1998 (22nd Week)

| Reporting Area | Shigellosis* | | | | Syphilis (Primary & Secondary) | | Tuberculosis | |
|---|---|---|---|---|---|---|---|---|
| | NETSS | | PHLIS | | | | | |
| | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999† | Cum. 1998† |
| UNITED STATES | 7,134 | 10,478 | 1,667 | 3,011 | 2,633 | 2,941 | 2,213 | 3,334 |
| NEW ENGLAND | 594 | 710 | 111 | 173 | 26 | 33 | 149 | 173 |
| Maine | 27 | 25 | - | - | - | 1 | 6 | 3 |
| N.H. | 21 | 69 | 5 | 6 | - | 1 | 1 | 2 |
| Vt. | 23 | 20 | 3 | - | 1 | 2 | - | 1 |
| Mass. | 339 | 405 | 69 | 115 | 16 | 21 | 78 | 94 |
| R.I. | 45 | 36 | 9 | 12 | 1 | - | 17 | 21 |
| Conn. | 139 | 155 | 25 | 40 | 8 | 8 | 47 | 52 |
| MID. ATLANTIC | 821 | 1,945 | 161 | 953 | 109 | 127 | 800 | 907 |
| Upstate N.Y. | 305 | 434 | 25 | 61 | 15 | 16 | 121 | 124 |
| N.Y. City | 304 | 586 | 80 | 384 | 47 | 22 | 507 | 555 |
| N.J. | 212 | 389 | 56 | 356 | 13 | 49 | 172 | 228 |
| Pa. | - | 536 | - | 152 | 34 | 40 | U | U |
| E.N. CENTRAL | 961 | 1,345 | 260 | 231 | 531 | 465 | 136 | 181 |
| Ohio | 117 | 387 | 14 | 63 | 37 | 70 | U | U |
| Ind. | 92 | 220 | 8 | 20 | 136 | 79 | U | U |
| Ill. | 271 | 243 | 172 | 129 | 263 | 193 | U | U |
| Mich. | 322 | 309 | 51 | 4 | 95 | 89 | 101 | 136 |
| Wis. | 159 | 186 | 15 | 15 | U | 34 | 35 | 45 |
| W.N. CENTRAL | 595 | 765 | 237 | 160 | 50 | 71 | 191 | 154 |
| Minn. | 206 | 228 | 45 | 73 | 5 | 5 | 78 | 50 |
| Iowa | 58 | 103 | 8 | 22 | 4 | - | 19 | 2 |
| Mo. | 242 | 266 | 167 | 29 | 34 | 53 | 72 | 68 |
| N. Dak. | - | 35 | - | 2 | - | - | 2 | 3 |
| S. Dak. | 26 | 32 | 4 | 15 | - | 1 | 3 | 9 |
| Nebr. | - | 10 | - | 11 | 4 | 4 | 7 | 5 |
| Kans. | 63 | 91 | 13 | 8 | 3 | 8 | 10 | 17 |
| S. ATLANTIC | 1,461 | 1,554 | 173 | 440 | 848 | 1,136 | 406 | 477 |
| Del. | 47 | 38 | 2 | 1 | 4 | 15 | 12 | 8 |
| Md. | 255 | 294 | 10 | 24 | 182 | 319 | U | U |
| D.C. | - | - | - | - | 14 | 34 | 19 | 48 |
| Va. | 161 | 290 | 5 | 23 | 65 | 74 | 83 | 118 |
| W. Va. | 32 | 51 | 2 | 4 | 2 | 2 | 19 | 21 |
| N.C. | 300 | 322 | 39 | 73 | 224 | 323 | 158 | 160 |
| S.C. | 110 | 109 | 15 | 25 | 108 | 139 | 115 | 122 |
| Ga. | 419 | 308 | 27 | 105 | 128 | 126 | U | U |
| Fla. | 137 | 142 | 73 | 185 | 121 | 104 | U | U |
| E.S. CENTRAL | 253 | 483 | 217 | 218 | 491 | 488 | 188 | 261 |
| Ky. | - | 60 | - | 38 | 43 | 50 | U | U |
| Tenn. | 129 | 267 | 197 | 73 | 273 | 242 | U | U |
| Ala. | 107 | 128 | 19 | 105 | 115 | 105 | 132 | 158 |
| Miss. | 17 | 28 | 1 | 2 | 60 | 91 | 56 | 103 |
| W.S. CENTRAL | 622 | 823 | 299 | 463 | 381 | 368 | 124 | 882 |
| Ark. | 75 | 61 | 21 | 15 | 27 | 53 | 71 | 41 |
| La. | 66 | 209 | 29 | 124 | 108 | 115 | U | U |
| Okla. | 65 | 58 | 60 | 30 | 89 | 22 | 53 | 48 |
| Tex. | 416 | 495 | 189 | 294 | 157 | 178 | - | 793 |
| MOUNTAIN | 697 | 703 | 122 | 254 | 83 | 96 | 61 | 102 |
| Mont. | 1 | 14 | - | 2 | - | - | 5 | 12 |
| Idaho | 34 | 36 | 3 | 6 | - | - | - | 4 |
| Wyo. | 8 | 24 | 1 | - | - | - | 1 | 2 |
| Colo. | 315 | 181 | 35 | 46 | 1 | 5 | U | U |
| N. Mex. | 79 | 61 | 13 | 36 | - | 12 | 22 | 27 |
| Ariz. | 207 | 213 | 64 | 147 | 78 | 71 | U | U |
| Utah | - | 111 | - | 10 | 2 | 3 | 18 | 28 |
| Nev. | 53 | 63 | 6 | 7 | 2 | 5 | 15 | 29 |
| PACIFIC | 1,130 | 2,150 | 87 | 119 | 114 | 157 | 158 | 197 |
| Wash. | 193 | 239 | 40 | 49 | 28 | 9 | 66 | 105 |
| Oreg. | 178 | 158 | 28 | 50 | 1 | 1 | U | U |
| Calif. | 653 | 1,652 | - | - | 82 | 147 | U | U |
| Alaska | 5 | 10 | - | 2 | 1 | - | 28 | 20 |
| Hawaii | 101 | 91 | 19 | 18 | 2 | - | 64 | 72 |
| Guam | - | - | - | - | - | - | - | 37 |
| P.R. | - | - | - | - | 79 | 105 | 41 | 65 |
| V.I. | - | - | - | - | U | U | U | U |
| Amer. Samoa | - | - | - | - | U | U | U | U |
| C.N.M.I. | - | - | - | - | - | 110 | - | 54 |

N: Not notifiable U: Unavailable -: no reported cases

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

†Cumulative reports of provisional tuberculosis cases for 1998 and 1999 are unavailable ("U") for some areas using the Tuberculosis Information System (TIMS)

## TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending June 5, 1999, and June 6, 1998 (22nd Week)

| Reporting Area | *H. influenzae*, invasive | | Hepatitis (Viral), by type | | | | Measles (Rubeola) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | A | | B | | Indigenous | | Imported* | | Total | |
| | Cum. 1999† | Cum. 1998 | Cum. 1999 | Cum. 1998 | Cum. 1999 | Cum. 1998 | 1999 | Cum. 1999 | 1999 | Cum. 1999 | Cum. 1999 | Cum. 1998 |
| UNITED STATES | 518 | 525 | 6,766 | 9,630 | 2,587 | 3,405 | 1 | 27 | - | 13 | 40 | 34 |
| NEW ENGLAND | 35 | 33 | 77 | 133 | 37 | 70 | - | 5 | - | 4 | 9 | 1 |
| Maine | 4 | 2 | 2 | 13 | - | - | - | - | - | - | - | - |
| N.H. | 6 | 1 | 7 | 6 | 6 | 7 | - | - | - | 1 | 1 | - |
| Vt. | 4 | 2 | 3 | 10 | 1 | 2 | - | - | - | - | - | - |
| Mass. | 14 | 26 | 20 | 43 | 18 | 31 | U | 4 | U | 2 | 6 | 1 |
| R.I. | - | 2 | 9 | 9 | 12 | 18 | - | - | - | - | - | - |
| Conn. | 7 | - | 36 | 52 | - | 12 | - | 1 | - | 1 | 2 | - |
| MID. ATLANTIC | 67 | 78 | 444 | 726 | 343 | 555 | - | - | - | 2 | 2 | 11 |
| Upstate N.Y. | 36 | 27 | 102 | 145 | 88 | 131 | - | - | - | 2 | 2 | 2 |
| N.Y. City | 10 | 21 | 71 | 273 | 76 | 174 | - | - | - | - | - | - |
| N.J. | 21 | 26 | 57 | 132 | 40 | 95 | - | - | - | - | - | 8 |
| Pa. | - | 4 | 214 | 176 | 139 | 155 | - | - | - | - | - | 1 |
| E.N. CENTRAL | 69 | 85 | 1,374 | 1,301 | 245 | 407 | - | 1 | - | - | 1 | 11 |
| Ohio | 27 | 32 | 326 | 144 | 42 | 28 | U | - | U | - | - | - |
| Ind. | 12 | 18 | 92 | 80 | 23 | 42 | - | 1 | - | - | 1 | 3 |
| Ill. | 23 | 31 | 207 | 339 | - | 108 | - | - | - | - | - | - |
| Mich. | 7 | - | 723 | 632 | 179 | 188 | - | - | - | - | - | 8 |
| Wis. | - | 4 | 26 | 106 | 1 | 41 | - | - | - | - | - | - |
| W.N. CENTRAL | 45 | 31 | 296 | 741 | 142 | 165 | - | - | - | - | - | - |
| Minn. | 12 | 17 | 25 | 28 | 16 | 11 | - | - | - | - | - | - |
| Iowa | 15 | 1 | 66 | 338 | 23 | 24 | - | - | - | - | - | - |
| Mo. | 12 | 8 | 163 | 304 | 81 | 108 | - | - | - | - | - | - |
| N. Dak. | - | - | 1 | 2 | - | 2 | - | - | - | - | - | - |
| S. Dak. | 1 | - | 8 | 8 | 1 | 1 | U | - | U | - | - | - |
| Nebr. | 3 | - | 16 | 11 | 7 | 7 | - | - | - | - | - | - |
| Kans. | 2 | 5 | 17 | 50 | 14 | 12 | - | - | - | - | - | - |
| S. ATLANTIC | 122 | 98 | 806 | 635 | 487 | 353 | - | 1 | - | 3 | 4 | 6 |
| Del. | - | - | 1 | 3 | - | - | - | - | - | - | - | 1 |
| Md. | 31 | 32 | 142 | 150 | 70 | 75 | - | - | - | - | - | 1 |
| D.C. | 3 | - | 32 | 25 | 11 | 6 | U | - | U | - | - | - |
| Va. | 10 | 12 | 63 | 119 | 41 | 45 | - | 1 | - | 2 | 3 | 2 |
| W. Va. | 4 | 4 | 13 | 1 | 11 | 3 | - | - | - | - | - | - |
| N.C. | 21 | 12 | 52 | 41 | 100 | 81 | - | - | - | - | - | - |
| S.C. | 2 | 3 | 16 | 15 | 38 | 1 | - | - | - | - | - | - |
| Ga. | 24 | 19 | 212 | 127 | 60 | 59 | - | - | - | - | - | 1 |
| Fla. | 27 | 16 | 275 | 154 | 156 | 83 | - | - | - | 1 | 1 | 1 |
| E.S. CENTRAL | 42 | 33 | 207 | 196 | 205 | 176 | - | - | - | - | - | - |
| Ky. | 6 | 5 | 32 | 11 | 24 | 21 | - | - | - | - | - | - |
| Tenn. | 22 | 20 | 102 | 111 | 90 | 124 | - | - | - | - | - | - |
| Ala. | 12 | 7 | 34 | 44 | 46 | 31 | - | - | - | - | - | - |
| Miss. | 2 | 1 | 39 | 30 | 45 | - | - | - | - | - | - | - |
| W.S. CENTRAL | 30 | 27 | 1,260 | 1,733 | 220 | 542 | - | 1 | - | 2 | 3 | - |
| Ark. | 1 | - | 22 | 27 | 21 | 34 | - | - | - | - | - | - |
| La. | 7 | 12 | 52 | 23 | 64 | 32 | - | - | - | - | - | - |
| Okla. | 20 | 13 | 215 | 245 | 49 | 31 | - | - | - | - | - | - |
| Tex. | 2 | 2 | 971 | 1,438 | 86 | 445 | - | 1 | - | 2 | 3 | - |
| MOUNTAIN | 55 | 72 | 674 | 1,497 | 274 | 347 | 1 | 1 | - | - | 1 | - |
| Mont. | 1 | - | 12 | 43 | 15 | 3 | - | - | - | - | - | - |
| Idaho | 1 | - | 26 | 103 | 14 | 15 | - | - | - | - | - | - |
| Wyo. | 1 | - | 4 | 22 | 5 | 2 | - | - | - | - | - | - |
| Colo. | 6 | 13 | 116 | 107 | 41 | 41 | - | - | - | - | - | - |
| N. Mex. | 11 | 3 | 21 | 78 | 100 | 133 | - | - | - | - | - | - |
| Ariz. | 30 | 36 | 418 | 940 | 60 | 88 | 1 | 1 | - | - | 1 | - |
| Utah | 4 | 3 | 25 | 97 | 14 | 30 | - | - | - | - | - | - |
| Nev. | 1 | 17 | 52 | 107 | 25 | 35 | - | - | - | - | - | - |
| PACIFIC | 53 | 68 | 1,628 | 2,668 | 634 | 790 | - | 18 | - | 2 | 20 | 5 |
| Wash. | 1 | 3 | 114 | 512 | 26 | 58 | - | - | - | - | - | 1 |
| Oreg. | 20 | 29 | 123 | 212 | 41 | 79 | - | 8 | - | - | 8 | - |
| Calif. | 26 | 30 | 1,382 | 1,905 | 554 | 640 | - | 10 | - | 2 | 12 | 4 |
| Alaska | 4 | 1 | 3 | 12 | 8 | 7 | - | - | - | - | - | - |
| Hawaii | 2 | 5 | 6 | 27 | 5 | 6 | - | - | - | - | - | - |
| Guam | - | - | - | - | - | 1 | U | - | U | - | - | - |
| P.R. | 1 | 2 | 68 | 24 | 66 | 240 | - | - | - | - | - | - |
| V.I. | U | U | U | U | U | U | U | U | U | U | U | U |
| Amer. Samoa | U | U | U | U | U | U | U | U | U | U | U | U |
| C.N.M.I. | - | - | - | 1 | - | 29 | U | - | U | - | - | - |

N: Not notifiable U: Unavailable -: no reported cases

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

†Of 109 cases among children aged <5 years, serotype was reported for 47 and of those, 11 were type b.

## TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending June 5, 1999, and June 6, 1998 (22nd Week)

| Reporting Area | Meningococcal Disease | | Mumps | | | Pertussis | | | Rubella | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cum. 1999 | Cum. 1998 | 1999 | Cum. 1999 | Cum. 1998 | 1999 | Cum. 1999 | Cum. 1998 | 1999 | Cum. 1999 | Cum. 1998 |
| UNITED STATES | 1,158 | 1,368 | 7 | 156 | 369 | 107 | 2,176 | 1,922 | 8 | 46 | 253 |
| NEW ENGLAND | 46 | 63 | - | 3 | - | - | 169 | 360 | - | 5 | 36 |
| Maine | 4 | 4 | - | - | - | - | - | 5 | - | - | - |
| N.H. | - | 4 | - | 1 | - | - | 51 | 25 | - | - | - |
| Vt. | 4 | 1 | - | - | - | - | 10 | 31 | - | - | - |
| Mass. | 30 | 28 | U | 2 | - | U | 97 | 283 | U | 5 | 8 |
| R.I. | 2 | 3 | - | - | - | - | 3 | 3 | - | - | - |
| Conn. | 6 | 23 | - | - | - | - | 8 | 13 | - | - | 28 |
| MID. ATLANTIC | 102 | 137 | 1 | 19 | 162 | 38 | 544 | 248 | 4 | 12 | 116 |
| Upstate N.Y. | 26 | 33 | 1 | 4 | 3 | 28 | 485 | 114 | 4 | 9 | 101 |
| N.Y. City | 25 | 17 | - | 3 | 153 | - | 10 | 13 | - | - | 9 |
| N.J. | 23 | 35 | - | - | 2 | - | - | 8 | - | - | 5 |
| Pa. | 28 | 52 | - | 12 | 4 | 10 | 49 | 113 | - | 3 | 1 |
| E.N. CENTRAL | 174 | 225 | - | 20 | 42 | - | 160 | 192 | - | - | - |
| Ohio | 77 | 73 | U | 6 | 17 | U | 98 | 63 | U | - | - |
| Ind. | 27 | 41 | - | 2 | 4 | - | 10 | 48 | - | - | - |
| Ill. | 46 | 64 | - | 6 | 6 | - | 33 | 13 | - | - | - |
| Mich. | 23 | 24 | - | 6 | 15 | - | 19 | 30 | - | - | - |
| Wis. | 1 | 23 | - | - | - | - | - | 38 | - | - | - |
| W.N. CENTRAL | 136 | 111 | - | 5 | 20 | 8 | 55 | 146 | 2 | 5 | 17 |
| Minn. | 28 | 16 | - | 1 | 10 | 6 | 24 | 79 | - | - | - |
| Iowa | 29 | 16 | - | 3 | 6 | 1 | 16 | 37 | 2 | 5 | - |
| Mo. | 54 | 48 | - | 1 | 3 | 1 | 12 | 12 | - | - | 2 |
| N. Dak. | 3 | - | - | - | 1 | - | - | - | - | - | - |
| S. Dak. | 5 | 6 | U | - | - | U | 2 | 4 | U | - | - |
| Nebr. | 5 | 4 | - | - | - | - | 1 | 6 | - | - | - |
| Kans. | 12 | 21 | - | - | - | - | - | 8 | - | - | 15 |
| S. ATLANTIC | 202 | 207 | 1 | 31 | 24 | 7 | 123 | 108 | - | 2 | 4 |
| Del. | 3 | 1 | - | - | - | - | - | 1 | - | - | - |
| Md. | 30 | 22 | - | 3 | - | 2 | 35 | 22 | - | 1 | - |
| D.C. | 1 | - | U | 2 | - | U | - | 1 | U | - | - |
| Va. | 24 | 21 | - | 8 | 4 | - | 13 | 6 | - | - | - |
| W. Va. | 4 | 7 | - | - | - | - | 1 | 1 | - | - | - |
| N.C. | 25 | 31 | - | 5 | 7 | - | 27 | 42 | - | 1 | 3 |
| S.C. | 24 | 31 | - | 3 | 4 | - | 8 | 13 | - | - | - |
| Ga. | 30 | 44 | 1 | 1 | 1 | 3 | 15 | 2 | - | - | - |
| Fla. | 61 | 50 | - | 9 | 8 | 2 | 24 | 20 | - | - | 1 |
| E.S. CENTRAL | 96 | 104 | - | 1 | 4 | - | 41 | 48 | - | 1 | - |
| Ky. | 25 | 15 | - | - | - | - | 3 | 18 | - | - | - |
| Tenn. | 32 | 36 | - | - | - | - | 24 | 14 | - | - | - |
| Ala. | 22 | 35 | - | 1 | 1 | - | 10 | 14 | - | 1 | - |
| Miss. | 17 | 18 | - | - | 3 | - | 4 | 2 | - | - | - |
| W.S. CENTRAL | 88 | 152 | 2 | 20 | 30 | 2 | 54 | 123 | - | 5 | 62 |
| Ark. | 19 | 22 | - | - | - | - | 4 | 14 | - | - | - |
| La. | 31 | 25 | - | 2 | 2 | - | 3 | - | - | - | - |
| Okla. | 15 | 25 | - | 1 | - | - | 7 | 15 | - | - | - |
| Tex. | 23 | 80 | 2 | 17 | 28 | 2 | 40 | 94 | - | 5 | 62 |
| MOUNTAIN | 85 | 78 | 1 | 10 | 22 | 11 | 228 | 374 | 2 | 14 | 5 |
| Mont. | 2 | 2 | - | - | - | 1 | 2 | 1 | - | - | - |
| Idaho | 8 | 3 | 1 | 1 | 3 | 2 | 92 | 121 | - | - | - |
| Wyo. | 3 | 3 | - | - | 1 | - | 2 | 7 | - | - | - |
| Colo. | 22 | 17 | - | 3 | 2 | 3 | 54 | 90 | - | - | - |
| N. Mex. | 10 | 13 | N | N | N | - | 19 | 61 | - | - | 1 |
| Ariz. | 28 | 28 | - | - | 4 | 5 | 29 | 62 | 2 | 13 | 1 |
| Utah | 7 | 8 | - | 5 | 3 | - | 28 | 19 | - | - | 2 |
| Nev. | 5 | 4 | - | 1 | 9 | - | 2 | 13 | - | 1 | 1 |
| PACIFIC | 229 | 291 | 2 | 47 | 65 | 41 | 802 | 323 | - | 2 | 13 |
| Wash. | 34 | 34 | - | 1 | 5 | 35 | 474 | 128 | - | - | 9 |
| Oreg. | 40 | 48 | N | N | N | 2 | 15 | 25 | - | - | - |
| Calif. | 147 | 204 | 2 | 40 | 44 | 3 | 303 | 166 | - | 2 | 2 |
| Alaska | 4 | 1 | - | 1 | 2 | - | 3 | - | - | - | - |
| Hawaii | 4 | 4 | - | 5 | 14 | 1 | 7 | 4 | - | - | 2 |
| Guam | - | 2 | U | - | 2 | U | - | - | U | - | - |
| P.R. | 3 | 5 | - | - | 1 | - | 7 | 2 | - | - | - |
| V.I. | U | U | U | U | U | U | U | U | U | U | U |
| Amer. Samoa | U | U | U | U | U | U | U | U | U | U | U |
| C.N.M.I. | - | - | U | - | 2 | U | - | 1 | U | - | - |

N: Not notifiable U: Unavailable -: no reported cases

# TABLE IV. Deaths in 122 U.S. cities,* week ending June 5, 1999 (22nd Week)

| Reporting Area | All Causes, By Age (Years) | | | | | | P&I† Total |
|---|---|---|---|---|---|---|---|
| | All Ages | >65 | 45-64 | 25-44 | 1-24 | <1 | |
| NEW ENGLAND | 566 | 416 | 87 | 40 | 9 | 14 | 39 |
| Boston, Mass. | 147 | 101 | 22 | 14 | 2 | 8 | 10 |
| Bridgeport, Conn. | 50 | 38 | 7 | 2 | 3 | - | 1 |
| Cambridge, Mass. | 15 | 11 | 3 | 1 | - | - | 1 |
| Fall River, Mass. | 39 | 34 | 4 | 1 | - | - | 4 |
| Hartford, Conn. | 57 | 38 | 10 | 6 | 2 | 1 | 6 |
| Lowell, Mass. | 17 | 11 | 5 | 1 | - | - | 2 |
| Lynn, Mass. | 7 | 6 | 1 | - | - | - | - |
| New Bedford, Mass. | 24 | 20 | 2 | 2 | - | - | 1 |
| New Haven, Conn. | 29 | 24 | 4 | - | - | 1 | 2 |
| Providence, R.I. | 58 | 43 | 5 | 4 | 2 | 4 | - |
| Somerville, Mass. | 5 | 3 | 1 | 1 | - | - | - |
| Springfield, Mass. | 25 | 17 | 7 | 1 | - | - | 4 |
| Waterbury, Conn. | 32 | 25 | 5 | 2 | - | - | 3 |
| Worcester, Mass. | 61 | 45 | 11 | 5 | - | - | 5 |
| MID. ATLANTIC | 2,118 | 1,479 | 415 | 142 | 49 | 31 | 93 |
| Albany, N.Y. | 45 | 31 | 9 | 2 | 3 | - | 5 |
| Allentown, Pa. | U | U | U | U | U | U | U |
| Buffalo, N.Y. | 82 | 61 | 14 | 3 | 1 | 3 | 1 |
| Camden, N.J. | 39 | 24 | 6 | 7 | 1 | 1 | - |
| Elizabeth, N.J. | 14 | 9 | 5 | - | - | - | - |
| Erie, Pa. | 41 | 33 | 6 | 1 | 1 | - | 3 |
| Jersey City, N.J. | 40 | 26 | 12 | 2 | - | - | - |
| New York City, N.Y. | 1,126 | 766 | 228 | 93 | 28 | 11 | 25 |
| Newark, N.J. | 49 | 24 | 10 | 10 | 1 | 3 | 4 |
| Paterson, N.J. | 20 | 14 | 4 | 1 | - | 1 | - |
| Philadelphia, Pa. | 298 | 205 | 63 | 14 | 9 | 6 | 26 |
| Pittsburgh, Pa.§ | 54 | 41 | 9 | 3 | 1 | - | 6 |
| Reading, Pa. | 38 | 32 | 6 | - | - | - | 6 |
| Rochester, N.Y. | 135 | 100 | 27 | 2 | 3 | 3 | 7 |
| Schenectady, N.Y. | U | U | U | U | U | U | U |
| Scranton, Pa. | 26 | 25 | 1 | - | - | - | 4 |
| Syracuse, N.Y. | 70 | 52 | 12 | 3 | - | 3 | 5 |
| Trenton, N.J. | 21 | 18 | 2 | - | 1 | - | - |
| Utica, N.Y. | 20 | 18 | 1 | 1 | - | - | 1 |
| Yonkers, N.Y. | U | U | U | U | U | U | U |
| E.N. CENTRAL | 1,783 | 1,156 | 350 | 155 | 48 | 74 | 124 |
| Akron, Ohio | 46 | 35 | 5 | 3 | 3 | - | - |
| Canton, Ohio | 38 | 28 | 8 | 1 | 1 | - | - |
| Chicago, Ill. | 393 | 207 | 90 | 47 | 15 | 34 | 32 |
| Cincinnati, Ohio | 82 | 53 | 15 | 4 | 3 | 7 | 12 |
| Cleveland, Ohio | 91 | 65 | 14 | 8 | 1 | 3 | 5 |
| Columbus, Ohio | 150 | 108 | 23 | 14 | 4 | 1 | 11 |
| Dayton, Ohio | 98 | 70 | 22 | 4 | 1 | 1 | 9 |
| Detroit, Mich. | 158 | 91 | 40 | 16 | 5 | 6 | 4 |
| Evansville, Ind. | 47 | 31 | 11 | 5 | - | - | 2 |
| Fort Wayne, Ind. | 60 | 44 | 8 | 8 | - | - | 2 |
| Gary, Ind. | 11 | 6 | 3 | 2 | - | - | - |
| Grand Rapids, Mich. | 68 | 42 | 13 | 5 | 4 | 4 | 6 |
| Indianapolis, Ind. | 183 | 125 | 37 | 14 | 3 | 4 | 6 |
| Lansing, Mich. | 29 | 20 | 6 | 2 | - | 1 | 4 |
| Milwaukee, Wis. | 116 | 81 | 23 | 7 | 3 | 2 | 12 |
| Peoria, Ill. | 45 | 34 | 5 | 4 | - | 2 | 4 |
| Rockford, Ill. | 56 | 38 | 11 | 4 | - | 3 | 4 |
| South Bend, Ind. | 44 | 31 | 7 | 4 | - | 2 | 6 |
| Toledo, Ohio | 68 | 47 | 9 | 3 | 5 | 4 | 5 |
| Youngstown, Ohio | U | U | U | U | U | U | U |
| W.N. CENTRAL | 635 | 455 | 117 | 33 | 13 | 17 | 41 |
| Des Moines, Iowa | 100 | 73 | 14 | 8 | 1 | 4 | 9 |
| Duluth, Minn. | 14 | 7 | 6 | - | - | 1 | 2 |
| Kansas City, Kans. | U | U | U | U | U | U | U |
| Kansas City, Mo. | 103 | 66 | 24 | 7 | 2 | 4 | 2 |
| Lincoln, Nebr. | 28 | 23 | 4 | - | - | 1 | - |
| Minneapolis, Minn. | 135 | 100 | 23 | 8 | 3 | 1 | 10 |
| Omaha, Nebr. | 79 | 60 | 17 | 1 | 1 | - | 4 |
| St. Louis, Mo. | 90 | 63 | 17 | 4 | 3 | 3 | 4 |
| St. Paul, Minn. | 86 | 63 | 12 | 5 | 3 | 3 | 10 |
| Wichita, Kans. | U | U | U | U | U | U | U |

| Reporting Area | All Causes, By Age (Years) | | | | | | P&I† Total |
|---|---|---|---|---|---|---|---|
| | All Ages | >65 | 45-64 | 25-44 | 1-24 | <1 | |
| S. ATLANTIC | 832 | 547 | 162 | 78 | 18 | 25 | 38 |
| Atlanta, Ga. | U | U | U | U | U | U | U |
| Baltimore, Md. | 134 | 72 | 31 | 21 | 3 | 6 | 6 |
| Charlotte, N.C. | 77 | 47 | 16 | 7 | 4 | 3 | 6 |
| Jacksonville, Fla. | 97 | 71 | 18 | 5 | 1 | 2 | 5 |
| Miami, Fla. | 100 | 68 | 17 | 13 | 1 | 1 | 1 |
| Norfolk, Va. | 27 | 21 | 2 | 1 | 2 | 1 | - |
| Richmond, Va. | 40 | 18 | 14 | 4 | 1 | 3 | 1 |
| Savannah, Ga. | 36 | 24 | 6 | 4 | 1 | 1 | 2 |
| St. Petersburg, Fla. | 63 | 49 | 9 | 3 | - | 2 | 3 |
| Tampa, Fla. | 136 | 96 | 22 | 12 | 2 | 4 | 9 |
| Washington, D.C. | 97 | 60 | 24 | 8 | 3 | 2 | 5 |
| Wilmington, Del. | 25 | 21 | 3 | - | - | - | - |
| E.S. CENTRAL | 729 | 481 | 142 | 74 | 11 | 19 | 49 |
| Birmingham, Ala. | 128 | 89 | 19 | 11 | 1 | 6 | 8 |
| Chattanooga, Tenn. | 70 | 52 | 8 | 6 | 2 | 2 | 5 |
| Knoxville, Tenn. | 60 | 42 | 13 | 4 | - | 1 | 1 |
| Lexington, Ky. | 58 | 43 | 8 | 6 | - | 1 | 6 |
| Memphis, Tenn. | 202 | 119 | 46 | 25 | 6 | 6 | 14 |
| Mobile, Ala. | 59 | 37 | 14 | 7 | 1 | - | - |
| Montgomery, Ala. | 25 | 22 | 2 | 1 | - | - | 9 |
| Nashville, Tenn. | 127 | 77 | 32 | 14 | 1 | 3 | 6 |
| W.S. CENTRAL | 1,024 | 677 | 218 | 76 | 32 | 21 | 73 |
| Austin, Tex. | 81 | 63 | 11 | 3 | 2 | 2 | 6 |
| Baton Rouge, La. | 9 | 5 | 1 | - | 2 | 1 | - |
| Corpus Christi, Tex. | 44 | 34 | 6 | 4 | - | - | 4 |
| Dallas, Tex. | 104 | 68 | 25 | 6 | 4 | 1 | 2 |
| El Paso, Tex. | 54 | 36 | 14 | 3 | - | 1 | 3 |
| Ft. Worth, Tex. | 89 | 61 | 14 | 9 | - | 5 | 10 |
| Houston, Tex. | 302 | 177 | 73 | 29 | 16 | 7 | 22 |
| Little Rock, Ark. | 64 | 41 | 17 | 2 | 4 | - | 2 |
| New Orleans, La. | U | U | U | U | U | U | U |
| San Antonio, Tex. | 159 | 104 | 37 | 13 | 3 | 2 | 12 |
| Shreveport, La. | 44 | 37 | 6 | 1 | - | - | 5 |
| Tulsa, Okla. | 74 | 51 | 14 | 6 | 1 | 2 | 7 |
| MOUNTAIN | 693 | 453 | 143 | 55 | 20 | 22 | 43 |
| Albuquerque, N.M. | 75 | 40 | 20 | 9 | 5 | 1 | 5 |
| Boise, Idaho | 32 | 25 | 3 | 2 | 1 | 1 | 2 |
| Colo. Springs, Colo. | 54 | 29 | 17 | 6 | 2 | - | 1 |
| Denver, Colo. | 56 | 38 | 8 | 5 | 1 | 4 | 8 |
| Las Vegas, Nev. | 172 | 111 | 41 | 13 | 4 | 3 | 14 |
| Ogden, Utah | 29 | 19 | 6 | 2 | 1 | 1 | 2 |
| Phoenix, Ariz. | 67 | 50 | 9 | 5 | 2 | 1 | - |
| Pueblo, Colo. | 20 | 19 | - | - | 1 | - | 1 |
| Salt Lake City, Utah | 80 | 49 | 16 | 5 | 3 | 7 | 6 |
| Tucson, Ariz. | 108 | 73 | 23 | 8 | - | 4 | 4 |
| PACIFIC | 1,448 | 1,011 | 271 | 101 | 31 | 30 | 130 |
| Berkeley, Calif. | 15 | 10 | 5 | - | - | - | - |
| Fresno, Calif. | 134 | 103 | 21 | 7 | 2 | 1 | 12 |
| Glendale, Calif. | 21 | 16 | 5 | - | - | - | 1 |
| Honolulu, Hawaii | 57 | 40 | 12 | 2 | 1 | 2 | 2 |
| Long Beach, Calif. | 68 | 50 | 14 | 3 | - | 1 | 10 |
| Los Angeles, Calif. | 329 | 225 | 63 | 28 | 9 | 4 | 19 |
| Pasadena, Calif. | 34 | 28 | 3 | - | 1 | 2 | 1 |
| Portland, Oreg. | U | U | U | U | U | U | U |
| Sacramento, Calif. | 130 | 82 | 29 | 13 | 2 | 3 | 18 |
| San Diego, Calif. | 118 | 80 | 24 | 6 | 5 | 3 | 15 |
| San Francisco, Calif. | 151 | 104 | 27 | 13 | 2 | 5 | 17 |
| San Jose, Calif. | 122 | 75 | 31 | 12 | 2 | 2 | 12 |
| Santa Cruz, Calif. | 29 | 25 | 1 | 2 | - | 1 | 6 |
| Seattle, Wash. | 96 | 60 | 17 | 11 | 5 | 3 | 3 |
| Spokane, Wash. | 66 | 52 | 9 | 1 | 1 | 3 | 10 |
| Tacoma, Wash. | 78 | 61 | 10 | 3 | 1 | - | 4 |
| TOTAL | 9,828¶ | 6,675 | 1,905 | 754 | 231 | 253 | 630 |

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 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.

†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.

**Contributors to the Production of the *MMWR* (Weekly)**
**Weekly Notifiable Disease Morbidity Data and 122 Cities Mortality Data**

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