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## AIDS Among Persons Aged ≥50 Years — United States, 1991–1996

Early in the human immunodeficiency virus (HIV) epidemic, infection occurred disproportionately among older persons as a result of transmission through receipt of contaminated blood or blood products. Through 1989, receipt of contaminated blood or blood products accounted for only 1% of cases among persons aged 13–49 years; in comparison, this risk factor accounted for 6%, 28%, and 64% of cases among persons aged 50–59 years, 60–69 years, and ≥70 years, respectively (*1*). Because of implementation of voluntary donor deferral and routine screening of blood donations in 1985, the number and proportion of acquired immunodeficiency syndrome (AIDS) cases associated with this risk factor decreased among persons aged ≥50 years (*2*). However, among persons aged ≥50 years, the number and proportion with AIDS associated with other modes of exposure increased. This report describes the characteristics of persons aged ≥50 years with AIDS reported during 1996 and presents trends in the incidence of AIDS-opportunistic illnesses (AIDS-OIs) diagnosed during 1991–1996 by mode of HIV exposure for persons aged ≥50 years. The findings indicate that, even though the incidence of AIDS-OIs during 1996 was higher among persons aged 13–49 years (89%), the proportion of AIDS-OIs accounted for by those aged ≥50 years (11%) was substantial.*

For persons with AIDS reported in 1996, the analysis included only cases reported during January 1–December 31, 1996. Trends in AIDS incidence were based on cumulative AIDS cases among persons aged ≥13 years reported to CDC through June 1997 from the 50 states, the District of Columbia, and the U.S. territories and were analyzed by sex, age, race/ethnicity, mode of exposure, and year of AIDS diagnosis (*3*). Estimates were adjusted for delays in reporting and for the anticipated reclassification of cases initially reported without an HIV risk/exposure (*3*). To adjust for the 1993 expansion of the AIDS reporting criteria†, estimates of the incidence of AIDS-OIs were

*Single copies of this report will be available until January 23, 1999, from the CDC National AIDS Clearinghouse, P.O. Box 6003, Rockville, MD 20849-6003; telephone (800) 458-5231 or (301) 519-0459.

†Conditions in HIV-infected persons that were added to the AIDS case definition in 1993 included laboratory measures of severe immunosuppression (i.e., CD4+ T-lymphocyte count <200 cells/μL or percentage of total lymphocytes <14) and three clinical conditions (pulmonary tuberculosis, recurrent pneumonia, and invasive cervical cancer).

*AIDS Among Persons Aged ≥50 Years — Continued*

calculated from the sum of cases reported with an AIDS-OI and cases with estimated dates of diagnosis of an AIDS-OI that were reported based only on immunologic criteria (*3* ). AIDS-OI incidence was estimated quarterly through December 1996 (the most recent annual period for which reliable estimates were available). To calculate annual AIDS incidence rates, mid-year U.S. population estimates were used based on decennial census data (*4* ).

**Reported AIDS Cases Among Persons Aged ≥50 Years, 1996**

In 1996, of 68,473 persons aged ≥13 years reported with AIDS, 7459 (11%) were aged ≥50 years (Table 1); this proportion has remained stable since 1991. Of those aged ≥50 years, 48% were aged 50–54 years, 26% were aged 55–59 years, 14% were aged 60–64 years, and 12% were aged ≥65 years. Males accounted for 84% of cases, and blacks accounted for the highest proportion (43%) by race/ethnicity. Although men who have sex with men (MSM) accounted for the highest proportion of cases by exposure category (36%), compared with persons aged 13–49 years, a higher proportion of cases among persons aged ≥50 years were reported without risk information (26%) (Table 1). For both age groups, the highest proportions of cases were in the South (35% and 37%, respectively) and Northeast (32% and 30%, respectively).[§]

In 1996, persons aged ≥50 years were more likely than those aged 13–49 years to be reported with an AIDS-OI (e.g., wasting syndrome [7% versus 4%][¶] and HIV encephalopathy [3% versus 1%][¶]) than to be reported with severe immunosuppression and without an AIDS-OI (53% versus 58%)[¶]. In addition, persons aged ≥50 years were more likely to have died within 1 month of their AIDS diagnosis (13% versus 6%)[¶], suggesting late diagnosis of HIV infection.

**Trends in AIDS-OI Incidence, 1991–1996**

From 1991 to 1996, the proportionate increase in incident cases of AIDS-OIs was greater among persons aged ≥50 years (22%; from 5260 cases to 6400 cases)** than among persons aged 13–49 years (9%; from 46,000 cases to 50,300 cases). From 1991 to 1996, among men aged ≥50 years, the number of incident cases of AIDS-OIs among MSM remained stable (2900 cases each for 1991 and 1996), while incident cases among men whose risk was heterosexual contact increased 94% (from 360 cases to 700 cases) and incident cases among men reporting injecting-drug use (IDU) increased 53% (from 850 cases to 1300 cases). Among male recipients of contaminated blood or blood products, incident cases of AIDS-OIs decreased 48% (from 250 cases to 130 cases) (Figure 1). Among women aged ≥50 years, cases attributed to heterosexual contact and IDU increased 106% (from 340 cases to 700 cases) and 75% (from

§ *Northeast*=Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; *Midwest*=Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; *South*=Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; and *West*=Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

¶ $p<0.05$ (Chi-square).

** Estimates are adjusted for delays in reporting AIDS cases, the 1993 expansion of the AIDS case definition, and anticipated redistribution of cases initially reported with no identified risk, but not for incomplete reporting of cases. Adult/adolescent and total estimates of <200, 200–499, 500–999, and ≥1000 are rounded to the nearest 10, 20, 50, and 100, respectively.

*AIDS Among Persons Aged ≥50 Years — Continued*

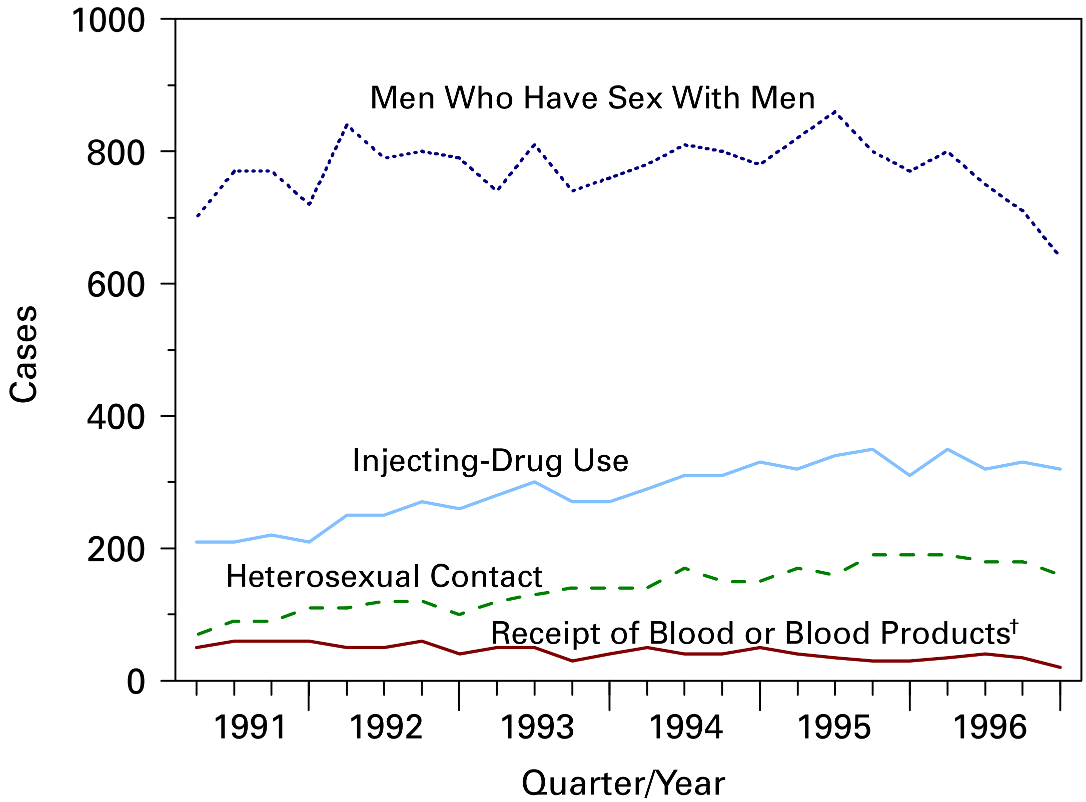
**TABLE 1. Number and percentage of persons reported with AIDS, by age group and selected characteristics — United States, 1996**

| | Age group (yrs) | | | |
|---|---|---|---|---|
| | ≥50 | | 13–49 | |
| **Characteristic** | **No.** | **(%)** | **No.** | **(%)** |
| **Sex** | | | | |
| Men | 6,237 | ( 83.6) | 48,416 | ( 79.4) |
| Women | 1,222 | ( 16.4)* | 12,598 | ( 20.6) |
| **Race/Ethnicity** | | | | |
| White, non-Hispanic | 2,914 | ( 39.1) | 23,315 | ( 38.2) |
| Black, non-Hispanic | 3,200 | ( 42.9) | 25,146 | ( 41.2) |
| Hispanic[†] | 1,260 | ( 16.9)* | 11,706 | ( 19.2) |
| Asian/Pacific Islander | 62 | ( 0.8) | 499 | ( 0.8) |
| American Indian/Alaskan Native | 13 | ( 0.2) | 194 | ( 0.3) |
| **HIV exposure category** | | | | |
| Men who have sex with men | 2,674 | ( 35.9) | 24,642 | ( 40.4) |
| Injecting-drug use | 1,430 | ( 19.2)* | 15,597 | ( 25.6) |
| Men who have sex with men and who are injecting-drug users | 166 | ( 2.2) | 2,801 | ( 4.6) |
| Heterosexual contact | 1,084 | ( 14.5) | 7,737 | ( 12.7) |
| Receipt of blood or blood products[§] | 178 | ( 2.4) | 691 | ( 1.1) |
| No risk reported/Other risk | 1,927 | ( 25.8) | 9,546 | ( 15.6) |
| **AIDS-defining conditions** | | | | |
| HIV encephalopathy | 227 | ( 3.0)* | 859 | ( 1.4) |
| Wasting syndrome | 514 | ( 6.9)* | 2,691 | ( 4.4) |
| Other opportunistic illnesses | 2,802 | ( 37.6) | 22,134 | ( 36.3) |
| Severe HIV immunosuppression | 3,916 | ( 52.5)* | 35,330 | ( 57.9) |
| **Region**[¶] | | | | |
| Northeast | 2,422 | ( 32.4) | 18,409 | ( 30.2) |
| Midwest | 678 | ( 9.1) | 6,094 | ( 10.0) |
| South | 2,645 | ( 35.4) | 22,831 | ( 37.4) |
| West | 1,437 | ( 19.3) | 11,642 | ( 19.1) |
| U.S. territories | 273 | ( 3.7) | 1,975 | ( 3.2) |
| **Total****  | **7,459** | **(100.0)** | **61,014** | **(100.0)** |

* $p<0.05$ (Chi-square).
† Persons of Hispanic origin may be of any race.
§ Includes persons reported with transfusions and hemophilia/coagulation disorders.
¶ *Northeast*=Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; *Midwest*=Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; *South*=Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; and *West*=Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.
** Includes persons for whom race/ethnicity or region are missing.

*AIDS Among Persons Aged ≥50 Years — Continued*

**FIGURE 1. Estimated number of incident cases of AIDS-opportunistic illnesses* among men aged ≥50 years, by mode of HIV exposure — United States, 1991–1996**




*Adjusted for reporting delays, the 1993 expansion of the AIDS case definition, and redistribution of cases reported with no identified risk.
†Includes adults with hemophilia/coagulation disorder.

160 cases to 280 cases), respectively, while cases among recipients of contaminated blood or blood products decreased 33% (from 120 cases to 80 cases) (Figure 2).

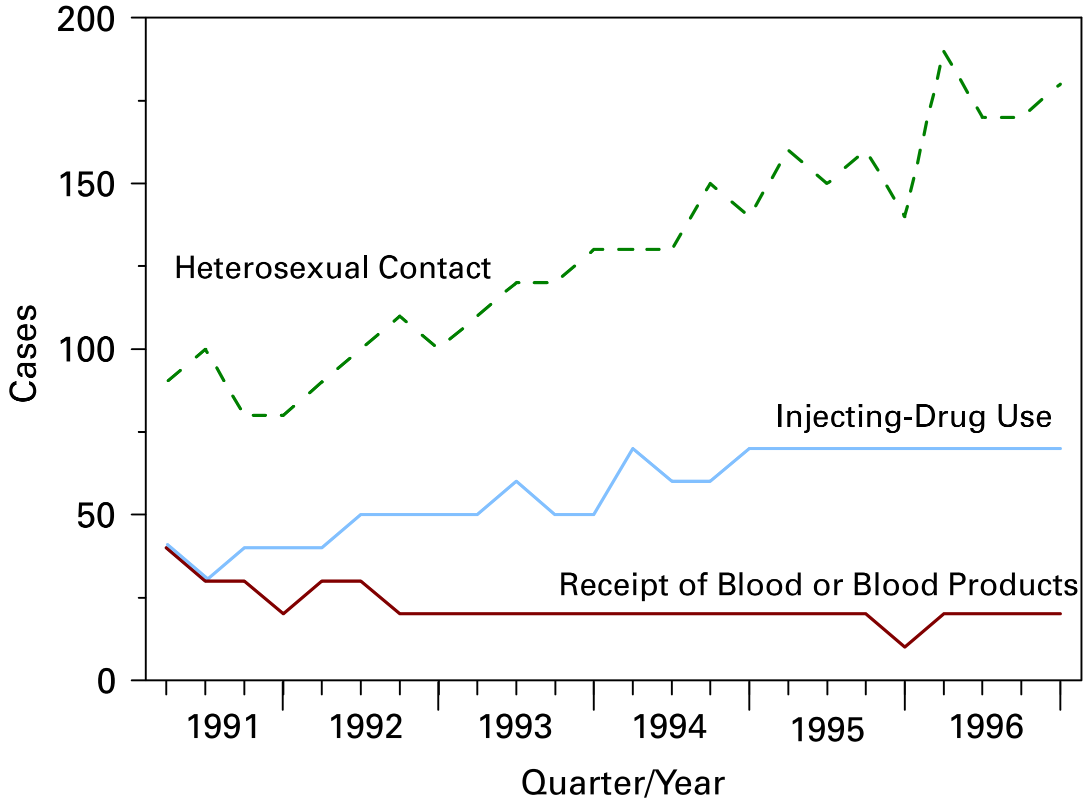
In both 1991 and 1996, the rate of AIDS-OIs was higher for persons aged 13–49 years than for persons aged ≥50 years; rates among men in both age groups were higher than among women (Table 2). The rate ratios of AIDS-OIs for 1996 and 1991 were similar for both age groups of men (1.1, 1.0) and the same for both age groups of women (1.6) (Table 2).

*Reported by: Local, state, and territorial health depts. Div of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention, CDC.*

**Editorial Note:** Even though the incidence of AIDS-OIs during 1996 was higher among persons aged 13–49 years, the proportion accounted for by persons aged ≥50 years (11%) was substantial. The findings in this report suggest that persons aged ≥50 years may not be promptly tested for HIV infection following the onset of HIV-related illnesses. Specifically, the finding that a higher proportion of persons aged ≥50 years were reported with an AIDS-OI and died within 1 month of AIDS diagnosis suggests that persons aged ≥50 years had AIDS diagnosed later during the course of HIV infection than persons aged 13–49 years. Although older HIV-infected patients have a

*AIDS Among Persons Aged ≥50 Years — Continued*

**FIGURE 2. Estimated number of incident cases of AIDS-opportunistic illnesses* among women aged ≥50 years, by mode of HIV exposure — United States, 1991–1996**




*Adjusted for reporting delays, the 1993 expansion of the AIDS case definition, and redistribution of cases reported with no identified risk.

**TABLE 2. Estimated number* of incident cases of AIDS-opportunistic illnesses (OIs), rate† of AIDS-OIs, and rate ratio of AIDS-OI incidence, by sex, age group, and year — United States, 1991 and 1996**

| Sex/ | 1991 | | 1996 | | 1996:1991 |
|---|---|---|---|---|---|
| Age group (yrs) | No. | Rate | No. | Rate | Rate ratio |
| **Men** | | | | | |
| ≥50 | 4,650 | 16.4 | 5,310 | 17.5 | 1.1 |
| 13–49 | 39,720 | 56.8 | 39,930 | 55.3 | 1.0 |
| **Women** | | | | | |
| ≥50 | 660 | 1.8 | 1,080 | 2.8 | 1.6 |
| 13–49 | 6,350 | 9.1 | 10,410 | 14.5 | 1.6 |
| **Total** | | | | | |
| **≥50** | **5,310** | **8.2** | **6,390** | **9.4** | **1.1** |
| **13–49** | **46,070** | **32.9** | **50,340** | **34.9** | **1.1** |

*Estimates are rounded to the nearest tens because they do not represent exact counts of persons with AIDS but are estimates that are within approximately ±3% of the true value.
†Per 100,000 population.

*AIDS Among Persons Aged ≥50 Years — Continued*

shorter observed AIDS-free interval and shorter survival period than younger HIV-infected patients (*5*), one reason for later diagnosis among persons aged ≥50 years is that physicians may be less likely to consider HIV infection among this group. This may result in missed opportunities for timely use of OI prophylaxis or antiretroviral therapies to prevent progression of disease. For example, AIDS-OIs that occur commonly among persons aged ≥50 years (e.g., HIV encephalopathy and wasting syndrome) mimic other diseases associated with aging (e.g., Alzheimer disease, depression, and malignancies). In addition, in 1996, a survey of primary-care physicians reported they were less likely to discuss symptoms suggestive of HIV infection or to counsel older patients for HIV testing than their younger patients (*6*). To increase opportunities for HIV testing of U.S. persons aged ≥50 years, health-care providers should be encouraged to discuss risk factors, obtain sexual and drug histories for patients, and consider HIV infection in the differential diagnosis of clinical illnesses that may represent HIV infection in this age group.

Persons aged ≥50 years also may not be promptly tested for HIV infection because they may not perceive themselves to be at risk for HIV infection. AIDS surveillance data indicate that higher proportions of persons aged ≥50 years with cases of AIDS are reported without an identified risk. In 1994, the prevalence of reported condom use was lower among sexually active persons aged ≥50 years who engaged in high-risk behaviors, and a higher proportion of these persons had never been tested for HIV, compared with younger persons who engaged in the same behaviors (*7*). During June 1990–October 1994, a study in 12 state and local health department clinics indicated that older women with heterosexually acquired AIDS were less likely than younger women to have used a condom before their HIV diagnosis and were less likely to have been tested for HIV before being hospitalized with an AIDS-OI (*8*).

Because of the frequently long incubation period from HIV infection to AIDS diagnosis, many persons who were diagnosed with AIDS at age ≥50 years were probably infected as younger adults; therefore, prevention efforts also must be directed at adults who engage in high-risk sexual and drug-use behaviors. In addition, because of the impact of recent advances in treatment on AIDS incidence, the AIDS surveillance data in this report may underestimate the current impact of the HIV epidemic both in persons in this age group and younger persons (*9*). Therefore, surveillance for HIV infection and AIDS is important for monitoring HIV transmission—particularly among persons aged ≥50 years—and for evaluating the effectiveness of prevention programs. CDC supports HIV surveillance in 31 states and is developing technical guidance to assist all states and territories in conducting HIV and AIDS case surveillance.

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# Fatalities Associated With Large Round Hay Bales — Minnesota, 1994–1996

Agriculture has one of the highest occupational fatality rates of all U.S. industries. Since the mid-1970s, traditional small-bale balers have gradually been replaced by large-bale balers in the agriculture industry. Expanded use of these balers has resulted in worker exposure to new hazards not present during handling of traditional small bales; the larger size of the bales increases the potential for serious injury or death while workers handle them. During 1994–1996, seven persons in Minnesota died in separate incidents that involved large round hay bales (i.e., cylindrical bales approximately 5 feet in length with flat ends, diameters of approximately 6 feet, and weights ranging from 750 to 1500 lbs). The Minnesota Fatality Assessment and Control Evaluation program (MN FACE), a program sponsored by CDC's National Institute for Occupational Safety and Health (NIOSH),* was notified of these incidents by the Minnesota Extension Service, a newspaper clipping service, and/or by death-certificate review. This report describes three incidents that were reported to MN FACE during 1994–1996, summarizes national surveillance for bale-associated deaths during 1980–1995, and provides recommendations to prevent fatalities associated with large bales.

## Case Reports

**Incident 1.** On January 23, 1994, a 38-year-old male farmer died from injuries sustained when a large round hay bale fell on him while the bale was being loaded onto a flatbed trailer. The worker was using a tractor and front-end loader to load hay bales onto the trailer. The loader bucket had been modified to lift hay bales by attaching two removable tines, which cradled the bale as it was lifted; the bucket was not equipped with a bale clamp or other bale-handling device specifically designed to secure the bale during lifting. The farmer was loading the second layer of bales, which required raising the bucket to near its maximum height above the tractor. The unsecured bale tumbled down the loader lift arms and struck the farmer while he was seated in the operator's seat of the tractor. He died 30 days later from severe head injuries.

**Incident 2.** During the evening of November 26, 1996, a 59-year-old male part-time farmer died of injuries sustained when the tractor he was driving overturned. As reconstructed by investigators, he was using a tractor and loader to move a large round hay bale into a cattle lot. The incident occurred after dark, and the farmer may have

*Minnesota is one of 16 states (Alaska, California, Iowa, Kentucky, Maryland, Massachusetts, Minnesota, Missouri, Nebraska, New Jersey, Ohio, Oklahoma, Texas, Washington, West Virginia, and Wisconsin) that receives funding from NIOSH for state FACE programs.

*Hay Bales — Continued*

raised the loader and bale above the tractor hood so that the bale would not interfere with illumination provided by the tractor headlights. As the tractor was driven through the lot, it overturned to the right and came to rest upside down. The farmer was pinned to the ground beneath the loader and the left rear wheel of the tractor. The following morning, a passing motorist discovered the overturned tractor and called emergency medical personnel. The farmer was pronounced dead at the scene. The tractor was not equipped with a rollover protective structure (ROPS) and a seat belt.

**Incident 3.** On November 30, 1996, a 52-year-old man died from injuries sustained at his farm when he was crushed by a large hay bale. The bale fell from a parked trailer that was being loaded to transport bales that had been sold for cattle feed. The man was crushed by the unsecured bale and died at the scene.[†]

**Surveillance for Fatalities Associated with Large Round Hay Bales**

Since 1992, the Minnesota Department of Health has compiled surveillance and field investigation data about selected work-related agricultural fatalities through the FACE program. FACE collects epidemiologic data about occupational fatalities from multiple sources (including local law enforcement reports, on-site fatality investigations, and Minnesota Occupational Safety and Health Administration reports) and develops and disseminates safety recommendations to address identified risks and reduce the potential for the occurrence of similar incidents.

During 1994–1996, all seven persons in Minnesota who died in incidents involving large round hay bales were men; their ages ranged from 38 to 70 years (mean: 55 years). All of the incidents occurred on family-owned farms. Four incidents occurred when tractors being used to transport large bales overturned; two incidents occurred when a hay bale fell off the tractor loader and onto the tractor operator; and one incident occurred when a hay bale fell from a trailer that was being loaded to transport hay bales. The weights of the bales involved in these incidents ranged from 750 to 1500 lbs.

During 1980–1991, NIOSH's National Traumatic Occupational Fatalities (NTOF)[§] surveillance system identified 41 work-related fatalities resulting from hay bale-associated injuries in the United States. The Census of Fatal Occupational Injuries (CFOI)[¶] identified an additional 46 such cases during 1992–1995. Of the 87 persons who died, 86 were male; 37 (38%) were aged ≥65 years; and 72 (74%) were employed in the agriculture/forestry/fishing industries. Forty-two (43%) deaths occurred in the Midwest; 23 (24%), in the West; 20 (21%), in the South; and two (2%), in the Northeast.**

[†] Although this farm work-related incident was reported to the MN FACE program, a detailed FACE report was not completed because local authorities and immediate family members declined to participate in a FACE investigation. General details concerning the incident were obtained from public information published in local news reports of the incident.

[§] NTOF is based on death certificates for the 50 states, the District of Columbia, and New York City for persons aged ≥16 years for whom there was a work-related injury that was the cause of death.

[¶] CFOI is a multiple-source reporting system for occupational fatalities implemented nationwide by the Bureau of Labor Statistics in 1992.

** *Northeast*=Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; *Midwest*=Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; *South*=Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; and *West*=Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

*Hay Bales — Continued*

Of the 46 deaths identified through CFOI, 20 (44%) occurred when a hay bale fell from a piece of equipment and struck a worker. Ten (22%) other deaths involved tractor rollovers. In some rollovers, the bale fell from the tractor, and the rollover occurred as the tractor struck the bale on the ground; in others, the narrative stated only that the tractor overturned as a hay bale was being transported. In eight (17%) incidents, the bale fell on a worker in a storage area or fell from a transport vehicle. Eight (17%) case narratives indicated only that the worker was struck by a falling hay bale. Narratives of cases identified by NTOF and CFOI contained varying levels of information; although some narratives specified shape and weight of the bale, others only stated that a hay bale was involved.

*Reported by: GL Wahl, MS, M Brown, MPH, DL Parker, MD, Minnesota Dept of Health. Div of Safety Research, National Institute for Occupational Safety and Health, CDC.*

**Editorial Note:** The findings in this report indicate that fatalities associated with large bales are a continuing source of preventable work-related deaths among workers in the agricultural industry. Although the cases in Minnesota involved large round bales, large square bales pose similar risks to agricultural workers.

In general, bales can be transported more safely by tractors equipped with rear attachments rather than front-end loaders. The likelihood of tractors rolling over sideways or tipping over backwards is reduced because bales are carried in a lower position than when hauled with front-end loaders. In addition, the rear tractor tires can accommodate the extra weight more effectively (*1*). Bales transported at the rear of a tractor do not block the operator's forward vision and generally do not interfere with rearward vision (*2*). When large bales cannot be transported by means of a rear attachment, front-end loader attachments specifically designed for transporting large bales should be used to prevent crush injuries. The potential for an unsecured bale to roll down the lift arms of a front-end loader and onto the tractor operator increases when the loader is raised (*3*). Loader attachments that securely hold bales include bale forks that have a tri-spear design, bale grapples with support arms that wrap around bales, and bale huggers that secure bales by squeezing them between two arms.

Preventing death and serious injury to tractor operators during tractor rollovers requires the use of a ROPS and a seat belt.[††] A ROPS may be either a roll-bar frame or an enclosed roll-protective cab and is designed to withstand the dynamic forces during a rollover; seat-belt use is necessary to ensure that the operator remains within the "zone of protection" provided by the ROPS.

The risk for a rollover can increase when a tractor is equipped with a front-end loader because a loader changes the tractor's center of gravity. The center of gravity rises as the loader is raised and as the weight of transported items increases. Raising the center of gravity increases the potential of a side rollover, especially if the tractor is driven across inclined terrain. When front-end loaders are used to transport large bales, appropriate counter weights should be added to the rear of the tractor. Counter weights increase tractor stability by counterbalancing items being transported and ensure that the rear tractor wheels remain in contact with the ground. Conversely, when bales are transported with rear attachments, appropriate counter weights

[††] Occupational Safety and Health Administration (OSHA) regulations (*4*) require that all tractors built after October 25, 1976, and used by employees of a farm owner must be equipped with a ROPS and a seat belt. This standard is not actively enforced on farms with <11 employees, and family farms without other employees usually are exempt from enforcement of OSHA regulations.

should be added to the front of the tractor. Front-end counter weights enable the operator to maintain steering control of the tractor by ensuring that the front wheels remain in contact with the ground.

To reduce the risk for injuries and fatalities associated with transporting large bales, the following safety precautions are recommended:

- Workers should ensure that the equipment being used is designed for the task being performed and is capable of transporting the load; workers should always operate equipment according to manufacturer's instructions and recommendations.
- Whenever possible, operators should use tractors with rear attachments to transport large bales.
- When using front-end loaders to transport bales, operators should use attachments specifically designed to securely handle large bales, and loaders should not be raised or lowered while the tractor is in motion.
- Tractors with loaders should be operated at slow speeds and with the loader bucket in the lowest possible position.
- Workers should ensure that tractors are equipped with adequate counter weights before transporting heavy loads such as large bales with either front-end loaders or rear attachments.
- If a front-end loader must be used to transport a bale on sloped terrain, the bale should be kept on the up-slope end of the tractor with the loader bucket maintained in the lowest possible position.
- When unsecured bales are present on a parked transport trailer, workers should avoid areas near and around the trailer unless they are actively engaged in fastening or unfastening devices used to secure the bales.
- All tractors should be equipped with a ROPS and a seat belt.

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# Progress Toward Poliomyelitis Eradication — Bangladesh, 1995–1997

As a member of the World Health Assembly, in 1988 Bangladesh adopted the goal of poliomyelitis eradication by 2000 (*1*). To achieve this goal, Bangladesh has implemented the following strategies recommended by the World Health Organization (WHO): 1) achieving high routine coverage with at least three doses of oral poliovirus vaccine (OPV3) among infants aged <12 months; 2) conducting National Immunization Days (NIDs)* to interrupt widespread circulation of poliovirus; 3) establishing sensitive systems for surveillance of polio cases and poliovirus that rely on acute flaccid paralysis (AFP) reporting; and 4) carrying out "mopping-up" campaigns to eliminate the last foci of poliovirus transmission (*2*). This report describes progress toward polio eradication in Bangladesh during 1995–1997. The findings suggest that polio cases and wild poliovirus circulation are declining rapidly and that polio-eradication activities have effectively assisted in addressing other health priorities in Bangladesh.

**Routine Immunization Program**

The Expanded Program on Immunization (EPI) in Bangladesh was initiated in 1979. Intensification of EPI during 1985–1990 resulted in the establishment of a nationwide cold chain and approximately 120,000 health personnel trained according to WHO guidelines (*3*). From 1985 to 1990, reported coverage with OPV3 among children aged <12 months increased from 2% to virtually 100%. Although routine administrative reports indicate that coverage has been stable (87%–98%) since 1991 (Figure 1), annual independent surveys during 1992–1997 indicate that actual OPV3 coverage ranged from 60%–74% since 1991.

**National Immunization Days**

NIDs were conducted in Bangladesh in March and April 1995, April and May 1996, December 1996 and January 1997, and December 1997 and January 1998. The two most recent NIDs were conducted in coordination with countries near or bordering Bangladesh including Bhutan, India, Myanmar, and Nepal. In each year of NIDs, Bangladesh vaccinated >90% of children aged <5 years with OPV. Independent surveys conducted after the first and third NIDs corroborated the high coverage reported by administrative method (Table 1).

NIDs were successful despite frequent "hartals" (i.e., potentially violent political strikes in which all commercial and transportation facilities must remain closed). During a nationwide hartal on December 7, 1997 (the same day as round 1 of the fourth NIDs), to ensure high coverage, major polio-eradication partners, including WHO, Rotary International, and United Nations Chidren's Fund (UNICEF), jointly asked all persons in Bangladesh to recognize NIDs as National Days of Tranquility, and the government of Bangladesh mandated that the first round of NIDs be held for 2 consecutive days on December 7 and 8. The 99.1% coverage for round 1 was the highest ever reported in Bangladesh.

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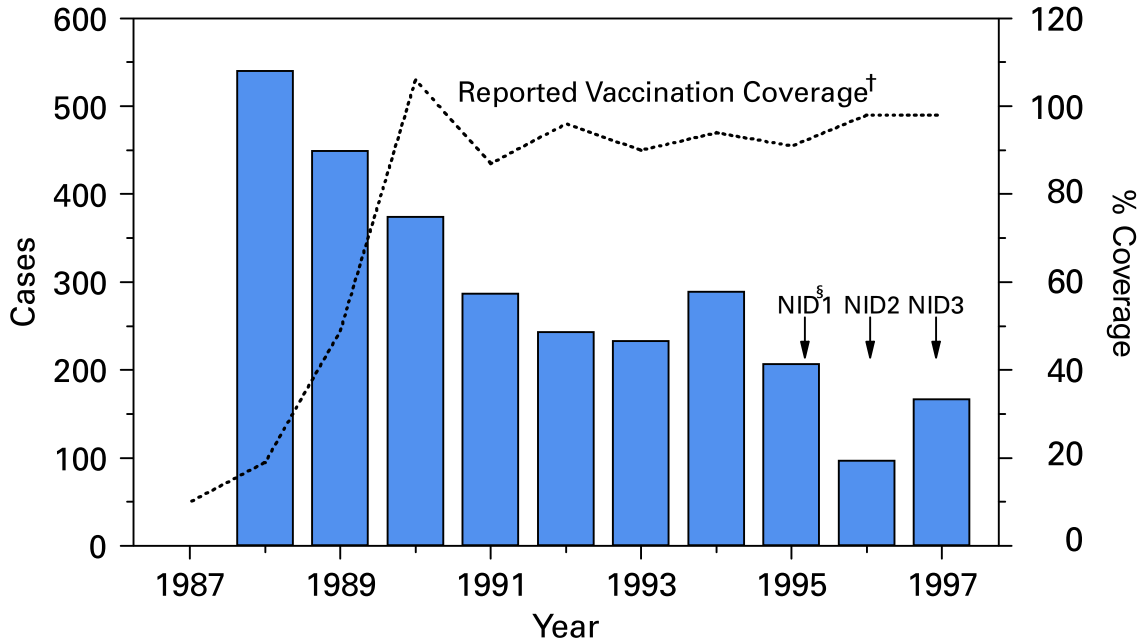
*Mass campaigns over a short period (days to weeks) during which two doses of OPV are administered to all children in the target group (usually aged 0–4 years) regardless of previous vaccination history, with an interval of 4–6 weeks between doses.

*Poliomyelitis Eradication — Continued*

**FIGURE 1. Reported number of poliomyelitis cases and reported coverage with at least three doses of oral poliovirus vaccine among children aged <12 months — Bangladesh, 1987–1997***




*Cases reported through January 7, 1998.
†Reported coverage for 1990 was >100%.
§National Immunization Days (NIDs) are mass campaigns over a short period (days to weeks) during which two doses of OPV are administered to all children in the target group (usually aged 0–4 years) regardless of previous vaccination history, with an interval of 4–6 weeks between doses.

**TABLE 1. Reported coverage with oral poliovirus vaccine (OPV) during each round of National Immunization Days (NIDs)*, by date — Bangladesh, 1995–1997**

| NID dates | Estimated population aged <5 years | OPV coverage: First round, Reported† | First round, Survey | Second round, Reported† | Second round, Survey |
|---|---|---|---|---|---|
| March 1995; April 1995 | 18,937,880 | 83.9% | 90% | 92.3% | 88% |
| April 1996; May 1996 | 19,318,535 | 92.8% | NA§ | 99.9% | NA |
| December 1996; January 1997 | 19,512,685 | 97.2% | 95% | 98.5% | 92% |
| December 1997; January 1998 | 19,904,890 | 99.1% | NA | NA | NA |

*Mass campaigns over a short period (days to weeks) during which two doses of OPV are administered to all children in the target group (usually aged 0–4 years) regardless of previous vaccination history, with an interval of 4–6 weeks between doses.
†Reported by administrative method by the government of Bangladesh.
§Not available.

*Poliomyelitis Eradication — Continued*

### Surveillance

Data about reported cases of polio in Bangladesh have been available since 1988. Virologic testing of stool specimens for poliovirus began in 1992, and national AFP reporting began in 1996. In 1997, Bangladesh began implementation of a comprehensive plan for AFP and EPI Disease Surveillance† that includes development of facility- and community-based surveillance systems. Training has been provided to surveillance medical officers from 80 hospitals and to 1200 disease surveillance focal persons (DSFPs) and local surveillance officers (LSOs) at the municipality, city corporation, thana (i.e., a subdivision of a district), district, and division levels. DSFPs and LSOs conduct active weekly AFP surveillance at major health facilities and investigate any passively reported or actively identified AFP case.

### Incidence of Paralytic Polio

The number of reported polio cases decreased from 520 in 1988 to approximately 230–290 cases per year during 1992–1994. From 1994 to 1995, the number of reported polio cases decreased from 289 to 207. In 1996, a total of 99 AFP cases were identified, of which 97 were confirmed as polio by the clinical classification method§, a 53% decrease compared with 1995 (Figure 1). As of January 7, 1998, Bangladesh has identified 234 cases of AFP with onset of paralysis in 1997, of which 167 (71.4%) have been confirmed, 12 (5.1%) discarded, and 55 (23.5%) are pending final classification as polio. Of the 167 polio cases occurring in 1997, 14 (8.4%) were confirmed by the presence of poliovirus in stool specimens, 34 (20.4%) by residual paralysis or weakness, two (1.2%) by death, and 117 (70.1%) by lack of follow-up examination.

Among the 167 persons with polio in 1997, 26.0% were aged 5–14 years, an increase from 15.1% in 1996 and 7.7% in 1995. Case-patients resided in 49 of 64 districts in Bangladesh. As in previous years, cases occurred more commonly in early spring (March–April) and mid to late summer (July–September).

### Isolation of Poliovirus

During 1997, the number of AFP case-patients for whom stool specimens were submitted substantially increased (Table 2). Intratypic differentiation (ITD) identified wild poliovirus from four poliovirus type 1 (P1) and two P3 isolates from 1994. ITD results from five P1 isolates from 1995 revealed two wild and three vaccine strains. In 1996, all of 15 P1 isolates tested were wild poliovirus, and a P2 isolate was vaccine-type. Three P1 isolates and a P3 isolate are pending ITD. In 1997, one of five P1 isolates was wild poliovirus; the remaining four were vaccine strains. Other isolates from 1997 are pending ITD (Table 2). During 1995–1997, wild poliovirus was isolated from cases in 13 of 64 districts in Bangladesh.

### Acute Flaccid Paralysis Surveillance

In 1997, Bangladesh met three of the WHO-recommended AFP surveillance performance indicator criteria (*1*): 82% of AFP cases were investigated within 48 hours of notification (target 80%), 89% of stool specimens arrived at the polio laboratory within 72 hours of collection (target: 80%), and 85% of stool specimens had culture results

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†External support provided by the government of Japan, Rotary International, U.S. Agency for International Development, UNICEF, WHO, and CDC.

§A confirmed case of polio is defined as AFP and at least one of the following: 1) a laboratory-confirmed wild poliovirus infection, 2) residual paralysis at 60 days, 3) death, or 4) no follow-up investigation at 60 days.

*Poliomyelitis Eradication — Continued*

**TABLE 2. Number and rate of reported poliomyelitis and acute flaccid paralysis (AFP) cases and stool specimen results, by year — Bangladesh, 1992–1997**

| Year* | No. polio or AFP cases reported* | Overall AFP reporting rate† | Nonpolio AFP reporting rate† | No. polio or AFP cases with stool specimens | Serotype distribution of wild poliovirus isolated§ | | |
|---|---|---|---|---|---|---|---|
| | | | | | P1 | P2 | P3 |
| 1992 | 243 | — | — | 11 | — | — | — |
| 1993 | 233 | — | — | 65 | — | — | — |
| 1994 | 289 | — | — | 68 | 4 | 0 | 2 |
| 1995 | 209 | — | — | 37 | 2 | 0 | 0 |
| 1996 | 99 | 0.2 | 0.004 | 72 | 15 | 0 | 0 |
| 1997 | 234 | 0.5 | 0.032 | 226 | 1 | 0 | 0 |

*Polio cases were reported from 1992 to 1995; AFP cases were reported beginning in 1996; year refers to year of report for polio cases and year of paralysis onset for AFP cases.
†Per 100,000 children aged <15 years.
§For 1997, six poliovirus type 1 (P1) isolates, one P2 isolate, and two P3 isolates are pending intratypic diffentiation.

available within 28 days of arrival at the laboratory (target: 80%). From 1996 to 1997, Bangladesh made substantial progress toward meeting three other WHO targets: the number of reported AFP cases increased from 99 to 234, and the nonpolio AFP rate increased from 0.004 to 0.03 per 100,000 children aged <15 years (target: 1 per 100,000); AFP cases with two stool specimens collected within 14 days of onset of paralysis increased from 23% to 44% (target: 80%); and AFP cases with 60-day follow-up examinations increased from 5% to 27% (Table 2). The percentage of AFP cases reported within 7 days of onset of paralysis (46%) remained stable.

*Reported by: Expanded Program on Immunization, Directorate General of Health Svcs, Ministry of Health and Family Welfare; Expanded Program on Immunization, World Health Organization, Dhaka, Bangladesh. World Health Organization Regional Office of South-East Asia, New Delhi, India. Global Program for Vaccines and Immunization, World Health Organization, Geneva, Switzerland. Respiratory and Enteric Viruses Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Vaccine Preventable Disease Eradication Div, National Immunization Program, CDC.*

**Editorial Note:** Despite the substantial progress toward polio eradication in Bangladesh and other countries and regions of WHO (*4–8*), enhanced efforts are needed to ensure that polio is eradicated worldwide by 2000. NIDs in Bangladesh rapidly reduced the incidence of polio in 1995 and 1996 compared with previous years. More clinically confirmed polio cases were identified in 1997 than in 1996 because of a substantial increase in the number of AFP investigations without a 60-day follow-up examination. Ensuring 60-day follow-up examinations should decrease the number of confirmed polio cases and increase the nonpolio AFP rate.

Bangladesh met WHO surveillance performance targets in 1997 for indicators related to case investigation rather than sensitivity and timeliness of AFP notification, reflecting the emphasis on training of hospital surveillance officers, DSFPs, and LSOs. Social mobilization of health facility staff and involvement of key informants for the immediate reporting of AFP cases from the community should improve both timeliness and sensitivity of AFP notification.

Strengthened virologic surveillance in Bangladesh is needed to achieve polio eradication by 2000. However, the National Polio Laboratory has not yet achieved WHO

*Poliomyelitis Eradication — Continued*

accreditation. Intensive laboratory training and additional support for equipment should improve laboratory capability for sensitive and accurate poliovirus and NPEV identification.

Polio-eradication activities in Bangladesh have addressed other health priorities. For example, NIDs have been associated with a dramatic increase in vitamin A coverage among children. Vitamin A coverage among children aged 1–5 years has doubled from 42%–50% before NIDs to 94%–100% during NIDs. In addition, NID orientation materials have included messages for identification and treatment of childhood pneumonia and diarrhea, and AFP and EPI disease surveillance have targeted AFP, neonatal tetanus, and outbreaks of measles for community reporting and all six EPI diseases for facility-based reporting.

The achievements of routine EPI coverage in Bangladesh from 1985 to 1990 reinforced the value of disease prevention efforts. The success of NIDs with the involvement of hundreds of thousands of volunteers transformed EPI from a government program to a program in which community members participated in protecting their children from disease and malnutrition and ensuring the highest sustainable standard of health for children. Ongoing polio eradication priorities for Bangladesh include 1) improving routine coverage with OPV3; 2) enhancing AFP surveillance to meet WHO standards for surveillance performance; 3) achieving accreditation of the national laboratory as part of the WHO polio laboratory network; 4) continuing to conduct high-quality NIDs; and 5) planning for "mopping up" activities in areas with poliovirus circulation or at risk for poliovirus transmission.

*References*

1. World Health Assembly. Global eradication of poliomyelitis by the year 2000. Geneva, Switzerland: World Health Organization, 1988; resolution no. WHA 41.28.
2. Global Programme for Vaccines and Immunization. Field guide for supplementary activities aimed at achieving polio eradication, 1996 Revision. Geneva, Switzerland: Expanded Programme on Immunization, World Health Organization, 1997; report no. WHO/EPI/GEN/95.01 REV.1.
3. Global Programme for Vaccines and Immunization. Immunization policy. Geneva, Switzerland: Expanded Programme on Immunization, World Health Organization, 1995; report no. WHO/EPI/GEN/95.3.
4. CDC. Progress toward global poliomyelitis eradication, 1996. MMWR 1997;46:579–84.
5. CDC. Progress toward poliomyelitis eradication—Southeast Asia Region, 1995–97. MMWR 1997;46:468–73.
6. CDC. Progress toward poliomyelitis eradication—Eastern Mediterranean Region, 1996–97. MMWR 1997;46:793–7.
7. CDC. Progress toward poliomyelitis eradication—Europe and central Asian republics, 1991–September 1997. MMWR 1997;46:994–1000.
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## Update: Influenza Activity — United States, 1997–98 Season

In collaboration with the World Health Organization (WHO), its collaborating laboratories, and state and local health departments, CDC conducts surveillance to monitor influenza activity and to detect antigenic changes in the circulating strains of influenza viruses. This report summarizes influenza surveillance in the United States from September 28, 1997, to January 10, 1998, which indicates that influenza activity, predominantly attributable to influenza A(H3N2) viruses, increased from mid-December through early January, and two antigenically related but distinguishable strains of influenza A(H3N2) viruses, A/Nanchang/933/95-like and A/Sydney/05/97-like, have been identified. Few influenza B isolates have been identified.

The number of influenza isolates identified by WHO collaborating laboratories and the percentage of respiratory specimens positive for influenza increased each week from December through early January. From September 28 through January 10, WHO collaborating laboratories tested 21,770 respiratory specimens, and 985 (4.5%) were positive for influenza. Of the 985 influenza isolates, 981 (99.6%) were influenza A, and four (0.4%) were influenza B. All of the 250 influenza A isolates that have been subtyped are A(H3N2).

Of the 43 influenza A(H3N2) viruses collected since September 28 that have been antigenically characterized by CDC, 26 (60%) are similar to A/Nanchang/933/95, the A/Wuhan/359/95(H3N2)-like strain used by U.S. manufacturers in the 1997–98 influenza vaccine; the remaining 17 (40%) are similar to A/Sydney/05/97, a related but antigenically distinguishable variant. A/Nanchang/933/95-like isolates were identified from 11 states (Alaska, Arizona, California, Hawaii, Louisiana, Missouri, New York, Pennsylvania, Texas, Washington, and Wisconsin), and A/Sydney/05/97-like viruses were identified from eight states (California, Florida, Hawaii, Louisiana, Minnesota, New York, Texas, and Wisconsin). Although the number of isolates characterized is small, the proportion of A/Sydney/05/97-like viruses increased each month since September 28. One influenza B isolate has been submitted to CDC for antigenic characterization, and it is similar to the vaccine strain B/Harbin/07/94.

For the week ending January 10 (week 1), state and territorial epidemiologists reported widespread or regional activity* in 26 states (Figure 1) compared with 15 states for week 53 and 10 states for week 52. Most laboratory-confirmed influenza outbreaks reported by states to CDC have occurred among nursing-home residents, although some reported outbreaks have been among children and young adults.

Although the percentage of patient visits to sentinel physicians for influenza-like illness (ILI) has exceeded baseline levels (0–3%) for at least 1 week in five of nine regions (Mid-Atlantic, South Atlantic, West South Central, Mountain, and Pacific), for the United States as a whole, the level of ILI has not exceeded baseline levels this season.

The percentage of deaths attributed to pneumonia and influenza as reported by the vital statistics offices of 122 cities exceeded the epidemic threshold of 7.2% for the week ending January 10 (week 1) when 8% of deaths were due to pneumonia and influenza.

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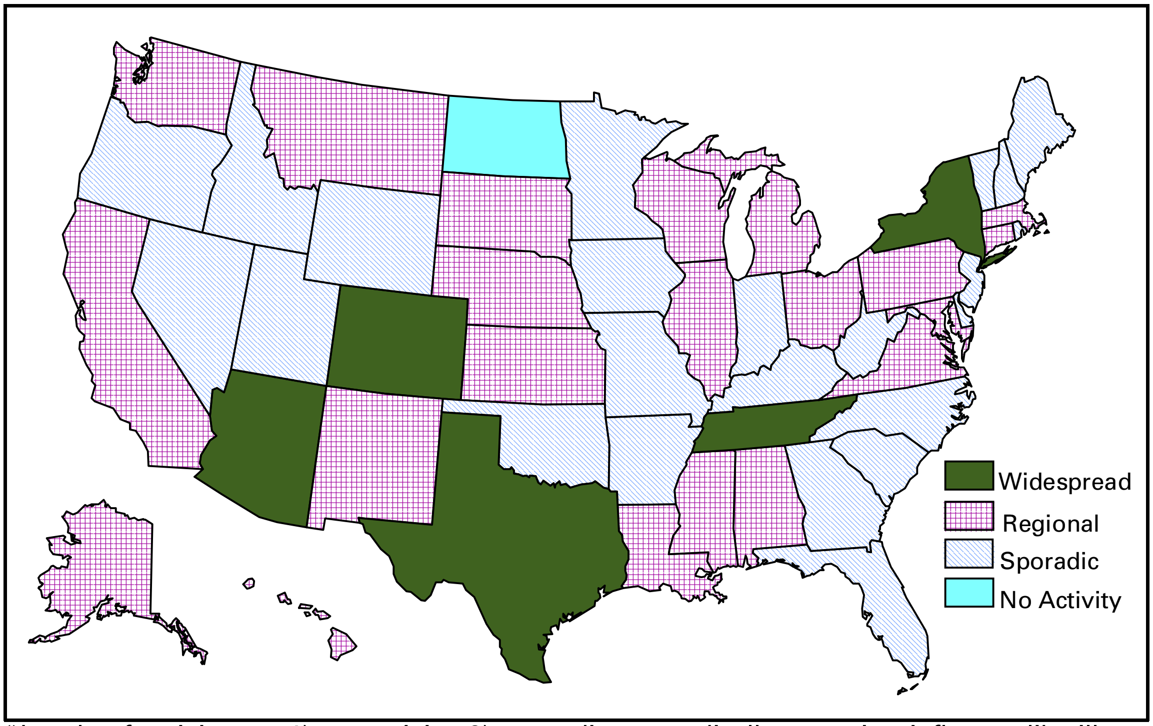
*Levels of activity are 1) *no activity*; 2) *sporadic*—sporadically occurring influenza-like illness (ILI) or culture-confirmed influenza, with no outbreaks detected; 3) *regional*—outbreaks of ILI or culture-confirmed influenza in counties with a combined population of <50% of the state's total population; and 4) *widespread*—outbreaks of ILI or culture-confirmed influenza in counties with a combined population of ≥50% of the state's total population.

*Influenza Activity — Continued*

**FIGURE 1. Levels of influenza activity* reported by state and territorial epidemiologists — United States, week ending January 10, 1998**




*Levels of activity are 1) *no activity*; 2) *sporadic*—sporadically occurring influenza-like illness (ILI) or culture-confirmed influenza, with no outbreaks detected; 3) *regional*—outbreaks of ILI or culture-confirmed influenza in counties with a combined population of <50% of the state's total population; and 4) *widespread*—outbreaks of ILI or culture-confirmed influenza in counties with a combined population of ≥50% of the state's total population.

*Reported by: Participating state and territorial epidemiologists and state public health laboratory directors. World Health Organization collaborating laboratories. WHO Collaborating Center for Surveillance, Epidemiology, and Control of Influenza, Influenza Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases, CDC.*

**Editorial Note:** Influenza activity in the United States increased from December through early January, and influenza A(H3N2) viruses have been most commonly isolated. Since the emergence of influenza A(H3N2) viruses in 1968, seasons during which these viruses predominate typically have been associated with higher morbidity and mortality, particularly among the elderly, than have seasons during which influenza A(H1N1) or influenza type B viruses predominated (*1*).

A/Sydney/05/97(H3N2)-like viruses, which were first identified in New Zealand and Australia during June 1997, are related but antigenically distinguishable from A/Nanchang/933/95, the H3N2 component of the 1997–98 influenza vaccine. Antibodies produced against the A/Nanchang/933/95(H3N2) component of the vaccine do cross-react with A/Sydney/05/97-like viruses (*2*). However, because vaccine effectiveness is dependant, in part, on the match between the vaccine and the circulating strains, vaccine efficacy might be decreased in persons infected with A/Sydney/05/97-like viruses. The current co-circulation of two influenza A(H3N2) strains emphasizes the importance of timely submission of influenza isolates for antigenic characterization by state public health laboratories and WHO collaborating laboratories.

*Influenza Activity — Continued*

Even when the match between circulating strains and the vaccine strain is good, outbreaks of influenza can still occur among vaccinated persons. Therefore, use of the antiviral agents amantadine and rimantadine is an important measure in the prevention and control of influenza type A, particularly for persons at high risk for influenza-related complications. During an institutional outbreak of influenza A, facilities (e.g., nursing homes) that house persons at increased risk for influenza-related complications should consider using amantadine or rimantadine for prophylaxis and/or treatment (*3*). These drugs are 70%–90% effective in preventing influenza A infections and can reduce the severity and duration of symptoms from influenza A when administered within 48 hours of illness onset. Rapid diagnosis of influenza type A infection is valuable for early detection of outbreaks and selection of appropriate treatment because neither drug is effective against influenza type B viruses.

Throughout the season, influenza surveillance data are updated weekly and are available through CDC's fax information system, telephone (888) 232-3299 ([888] CDC-FAXX) by requesting document number 361100 and entering the telephone number to which the document should be transmitted, or through CDC's National Center for Infectious Diseases, Division of Viral and Rickettsial Diseases, Influenza Branch World-Wide Web site http://www.cdc.gov/ncidod/diseases/flu/weekly.htm.

*References*

1. Simonsen L, Clarke MA, Williamson GD, Stroup DF, Arden NH, Schonberger LB. The impact of influenza epidemics on mortality: introducing a severity index. Am J Public Health 1997;87: 1944–50.
2. CDC. Update: influenza activity—United States, 1997–98 season. MMWR 1997;46:1094–8.
3. CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1997;46(no. RR-9).

## *Notice to Readers*

## Course on Vaccine Safety and Risk Communication

*Vaccine Safety and Risk Communication*, a live satellite broadcast, will be held February 26, 1998, from 8 a.m. to 10 a.m. eastern standard time (EST) with a repeat broadcast from noon to 2 p.m. EST. Cosponsors are CDC's National Immunization Program and the Public Health Training Network. This broadcast is designed for physicians, physician assistants, nurses, nurse practitioners, pharmacists, medical students, and others who provide vaccinations, counsel patients about vaccination, or establish immunization policy.

The course will enable health professionals to respond to parents' and patients' questions about vaccines. Toll-free telephone lines will be available for participants to interact with the instructors.

Additional information about the course and registration is available from state health department immunization programs. Continuing education credits will be offered based on 2.0 hours of instruction. Pharmacy and American Academy of Family Physicians' credits will not be offered for this course.

*Notice to Readers*

## Summary of Notifiable Diseases Graphics on the Internet

Graphs and maps for selected notifiable diseases in the United States from the *Summary of Notifiable Diseases, United States, 1996* (*1*) are now available on the World-Wide Web at http://www.cdc.gov/epo/dphsi/annsum/cover.htm. The graphs and maps may be downloaded individually or as an entire set.

*Reference*

1. CDC. Summary of notifiable diseases, United States, 1996. MMWR 1997;45(no. 53).

*Notice to Readers*

## Changes to TB Surveillance Reporting

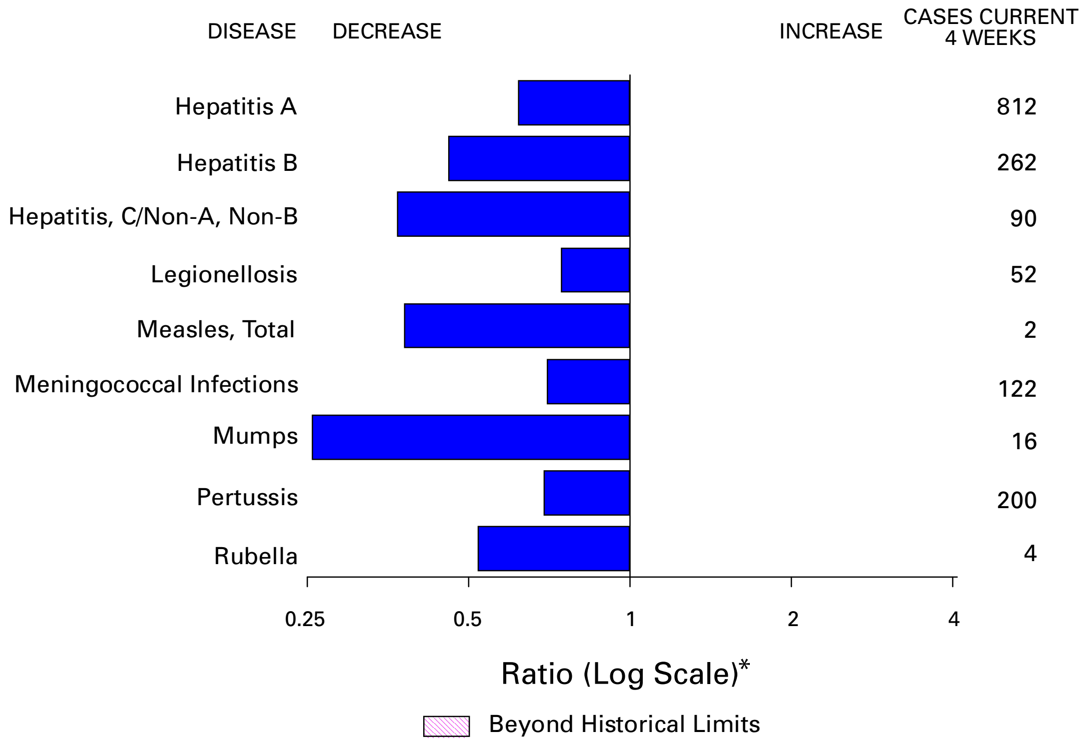
The Tuberculosis Information Management System (TIMS) is a CDC-developed and CDC-distributed software. It is being used in the 59 U.S. reporting areas for national tuberculosis (TB) surveillance. Beginning January 1, 1998, this system replaced the CDC software, Software for Expanded Tuberculosis Surveillance (SURVS-TB) for TB surveillance reporting. TIMS usage is under way and will be distributed to 97% of the reporting areas. However, TIMS data reporting through the National Electronic Telecommunications System for Surveillance will not be available until February. Therefore, for the cumulative reports of provisional TB cases for 1998, some areas will display a "U" for unavailable in Table II, Provisional cases of selected notifiable diseases, United States. Additional information about TIMS is available from the TIMS Help Desk, Computers and Statistics Branch, Division of TB Elimination, National Center for HIV, STD, and TB Prevention, telephone (404) 639-8155.

*Notice to Readers*

## Availability of Public Health Surveillance Slide Set on the Internet

*Overview of Public Health Surveillance*, a slide set created by CDC's Division of Public Health Surveillance and Informatics, Epidemiology Program Office, is now available on the World-Wide Web at http://www.cdc.gov/epo/dphsi/phs/overview.htm. The slide set presents general information on public health surveillance and was developed to promote better understanding of the uses and sources of public health surveillance data. Users can either download the entire slide set or select individual slides. In addition, a bibliography of related books and journal articles with information about public health surveillance is provided on the Internet site.

**FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending January 17, 1998, 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 January 17, 1998 (2nd Week)**

| | Cum. 1998 | | Cum. 1998 |
|---|---|---|---|
| Anthrax | - | Plague | - |
| Brucellosis | - | Poliomyelitis, paralytic | - |
| Cholera | - | Psittacosis | 1 |
| Congenital rubella syndrome | - | Rabies, human | - |
| Cryptosporidiosis* | 23 | Rocky Mountain spotted fever (RMSF) | 2 |
| Diphtheria | - | Streptococcal disease, invasive Group A | 51 |
| Encephalitis: California* | - | Streptococcal toxic-shock syndrome* | 1 |
| eastern equine* | - | Syphilis, congenital¶ | - |
| St. Louis* | - | Tetanus | - |
| western equine* | - | Toxic-shock syndrome | 2 |
| Hansen Disease | 1 | Trichinosis | - |
| Hantavirus pulmonary syndrome*† | - | Typhoid fever | 6 |
| Hemolytic uremic syndrome, post-diarrheal* | - | Yellow fever | - |
| HIV infection, pediatric*§ | - | | |

-: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 to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), last update December 23, 1997.
¶ Updated from reports to the Division of STD Prevention, NCHSTP.

**TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending January 17, 1998, and January 11, 1997 (2nd Week)**

| Reporting Area | AIDS | | Chlamydia | | *Escherichia coli* O157:H7 | | Gonorrhea | | Hepatitis C/NA,NB | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | NETSS† | PHLIS§ | | | | |
| | Cum. 1998* | Cum. 1997 | Cum. 1998 | Cum. 1997 | Cum. 1998 | Cum. 1998 | Cum. 1998 | Cum. 1997 | Cum. 1998 | Cum. 1997 |
| UNITED STATES | - | 603 | 13,937 | 11,573 | 16 | - | 8,659 | 8,241 | 40 | 83 |
| NEW ENGLAND | - | 73 | 543 | 559 | - | - | 136 | 214 | - | - |
| Maine | - | - | - | 20 | - | - | - | 1 | - | - |
| N.H. | - | - | 15 | 22 | - | - | 3 | 8 | - | - |
| Vt. | - | 6 | 13 | 7 | - | - | - | 1 | - | - |
| Mass. | - | 61 | 389 | 297 | - | - | 112 | 103 | - | - |
| R.I. | - | 6 | 115 | 36 | - | - | 18 | 13 | - | - |
| Conn. | - | - | 11 | 177 | - | - | 3 | 88 | - | - |
| MID. ATLANTIC | - | 350 | 1,904 | 1,598 | - | - | 1,200 | 987 | 1 | 2 |
| Upstate N.Y. | - | 91 | N | N | - | - | - | - | 1 | - |
| N.Y. City | - | 4 | 1,203 | 964 | - | - | 655 | 577 | - | - |
| N.J. | - | 59 | 1 | 296 | - | - | 131 | 212 | - | - |
| Pa. | - | 196 | 700 | 338 | N | - | 414 | 198 | - | 2 |
| E.N. CENTRAL | - | 1 | 1,968 | 1,850 | 5 | - | 1,364 | 1,586 | 20 | 30 |
| Ohio | - | - | 495 | 592 | 3 | - | 309 | 506 | 2 | 3 |
| Ind. | - | - | 200 | 269 | 2 | - | 100 | 220 | 1 | 1 |
| Ill. | - | 1 | 62 | 419 | - | - | 57 | 215 | - | 4 |
| Mich. | - | - | 1,161 | 153 | - | - | 865 | 434 | 17 | 22 |
| Wis. | - | - | 50 | 417 | N | - | 33 | 211 | - | - |
| W.N. CENTRAL | - | 24 | 356 | 868 | 1 | - | 162 | 429 | 3 | 1 |
| Minn. | - | - | 16 | 216 | 1 | - | 21 | 89 | - | - |
| Iowa | - | 18 | - | - | - | - | - | - | 3 | - |
| Mo. | - | - | - | 472 | - | - | - | 276 | - | 1 |
| N. Dak. | - | - | - | 12 | - | - | - | 2 | - | - |
| S. Dak. | - | - | 22 | 29 | - | - | 5 | 5 | - | - |
| Nebr. | - | 6 | 11 | 66 | - | - | 1 | 25 | - | - |
| Kans. | - | - | 307 | 73 | - | - | 135 | 32 | - | - |
| S. ATLANTIC | - | 70 | 2,348 | 2,749 | 5 | - | 2,076 | 2,431 | 3 | 2 |
| Del. | - | - | 40 | - | - | - | 63 | 46 | - | - |
| Md. | - | - | 295 | 125 | 4 | - | 177 | 423 | 1 | 2 |
| D.C. | - | 1 | N | N | - | - | 209 | 190 | - | - |
| Va. | - | 47 | 159 | 385 | N | - | 191 | 138 | - | - |
| W. Va. | - | - | 131 | 134 | N | - | 37 | 48 | - | - |
| N.C. | - | 1 | 578 | 914 | - | - | 480 | 516 | 2 | - |
| S.C. | - | 21 | 596 | 226 | - | - | 529 | 262 | - | - |
| Ga. | - | - | 88 | 576 | - | - | 14 | 497 | - | - |
| Fla. | - | - | 461 | 389 | 1 | - | 376 | 311 | - | - |
| E.S. CENTRAL | - | 2 | 976 | 1,104 | 2 | - | 1,140 | 1,261 | 1 | 6 |
| Ky. | - | - | 160 | 222 | 1 | - | 116 | 184 | - | - |
| Tenn. | - | - | 413 | 238 | - | - | 426 | 224 | 1 | 2 |
| Ala. | - | - | 403 | 268 | 1 | - | 598 | 409 | - | 1 |
| Miss. | - | 2 | - | 376 | - | - | - | 444 | - | 3 |
| W.S. CENTRAL | - | 43 | 788 | 534 | - | - | 783 | 618 | - | - |
| Ark. | - | - | 77 | 58 | - | - | 170 | 145 | - | - |
| La. | - | 32 | 399 | 257 | - | - | 423 | 293 | - | - |
| Okla. | - | 11 | 312 | 219 | - | - | 190 | 180 | - | - |
| Tex. | - | - | - | - | - | - | - | - | - | - |
| MOUNTAIN | - | 1 | 345 | 669 | 1 | - | 262 | 229 | 5 | 11 |
| Mont. | - | - | 6 | - | - | - | - | 2 | - | - |
| Idaho | - | - | 11 | 42 | - | - | - | 4 | - | 3 |
| Wyo. | - | - | 9 | 20 | - | - | 1 | 1 | 1 | 4 |
| Colo. | - | - | - | 7 | - | - | 156 | 46 | 1 | 1 |
| N. Mex. | - | - | 87 | 206 | 1 | - | 22 | 38 | 1 | 2 |
| Ariz. | - | 1 | 132 | 274 | N | - | 70 | 96 | - | 1 |
| Utah | - | - | 100 | 30 | - | - | 13 | 1 | 2 | - |
| Nev. | - | - | - | 90 | - | - | - | 41 | - | - |
| PACIFIC | - | 39 | 4,709 | 1,642 | 2 | - | 1,536 | 486 | 7 | 31 |
| Wash. | - | 37 | 390 | 337 | - | - | 61 | 93 | - | - |
| Oreg. | - | - | 279 | 99 | - | - | 48 | 18 | - | - |
| Calif. | - | 2 | 3,972 | 1,155 | 2 | - | 1,414 | 349 | 7 | 29 |
| Alaska | - | - | 43 | 39 | - | - | 7 | 21 | - | - |
| Hawaii | - | - | 25 | 12 | N | - | 6 | 5 | - | 2 |
| Guam | - | - | - | 15 | N | - | - | 2 | - | - |
| P.R. | - | 1 | U | U | - | U | 11 | 9 | - | - |
| V.I. | - | - | N | N | N | U | - | - | - | - |
| Amer. Samoa | - | - | - | - | N | U | - | - | - | - |
| C.N.M.I. | - | - | N | N | N | U | - | 3 | - | - |

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

*Updated monthly to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention, last update December 23, 1997.

†National Electronic Telecommunications System for Surveillance.

§Public Health Laboratory Information System.

**TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending January 17, 1998, and January 11, 1997 (2nd Week)**

| Reporting Area | Legionellosis | | Lyme Disease | | Malaria | | Syphilis (Primary & Secondary) | | Tuberculosis | | Rabies, Animal |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cum. 1998 | Cum. 1997 | Cum. 1998 | Cum. 1997 | Cum. 1998 | Cum. 1997 | Cum. 1998 | Cum. 1997 | Cum. 1998 | Cum. 1997 | Cum. 1998 |
| UNITED STATES | 27 | 16 | 54 | 73 | 18 | 37 | 191 | 242 | 237 | 266 | 172 |
| NEW ENGLAND | - | 1 | - | 40 | - | - | 2 | 1 | - | 5 | 47 |
| Maine | - | - | - | - | - | - | - | - | U | - | - |
| N.H. | - | - | - | - | - | - | - | - | - | - | 8 |
| Vt. | - | - | - | 1 | - | - | - | - | - | - | - |
| Mass. | - | 1 | - | 3 | - | - | 2 | 1 | - | 1 | 18 |
| R.I. | - | - | - | - | - | - | - | - | - | - | 5 |
| Conn. | - | - | - | 36 | - | - | - | - | U | 4 | 16 |
| MID. ATLANTIC | - | 2 | 30 | 24 | 1 | 3 | 13 | 17 | - | 2 | 50 |
| Upstate N.Y. | - | - | 5 | - | - | - | - | - | U | - | 19 |
| N.Y. City | - | - | - | 4 | - | - | - | 4 | U | 1 | U |
| N.J. | - | - | - | 8 | - | 2 | 13 | 10 | U | - | 11 |
| Pa. | - | 2 | 25 | 12 | 1 | 1 | - | 3 | U | 1 | 20 |
| E.N. CENTRAL | 15 | 9 | 4 | 2 | 3 | 7 | 16 | 23 | 3 | 42 | - |
| Ohio | 9 | 5 | 4 | 1 | 1 | - | 10 | 6 | U | 27 | - |
| Ind. | 1 | - | - | - | - | 1 | 5 | 6 | U | 2 | - |
| Ill. | - | 1 | - | 1 | - | 5 | 1 | 4 | 3 | 13 | - |
| Mich. | 5 | 3 | - | - | 2 | 1 | - | - | U | - | - |
| Wis. | - | - | U | U | - | - | - | 7 | U | - | - |
| W.N. CENTRAL | - | 3 | - | - | - | - | 2 | 9 | - | 2 | 8 |
| Minn. | - | - | - | - | - | - | - | 2 | U | 2 | 1 |
| Iowa | - | - | - | - | - | - | - | - | U | - | 5 |
| Mo. | - | 1 | - | - | - | - | - | 5 | - | - | - |
| N. Dak. | - | - | - | - | - | - | - | - | U | - | - |
| S. Dak. | - | - | - | - | - | - | - | - | - | - | - |
| Nebr. | - | 1 | - | - | - | - | - | - | - | - | - |
| Kans. | - | 1 | - | - | - | - | 2 | 2 | U | - | 2 |
| S. ATLANTIC | 6 | - | 16 | 4 | 6 | 3 | 91 | 92 | 17 | 10 | 52 |
| Del. | 1 | - | - | 1 | - | 1 | - | - | - | - | - |
| Md. | 3 | - | 15 | 3 | 5 | 1 | 22 | 33 | - | 2 | 25 |
| D.C. | 1 | - | 1 | - | - | - | 1 | 2 | 5 | 4 | - |
| Va. | - | - | - | - | - | - | 10 | 5 | - | - | 12 |
| W. Va. | N | N | - | - | - | - | - | - | 3 | - | 2 |
| N.C. | - | - | - | - | - | - | 27 | 20 | 9 | - | - |
| S.C. | - | - | - | - | - | 1 | 18 | - | U | - | 1 |
| Ga. | - | - | - | - | - | - | - | 25 | U | - | 5 |
| Fla. | 1 | - | - | - | 1 | - | 13 | 7 | U | 4 | 7 |
| E.S. CENTRAL | - | - | 3 | 1 | - | - | 24 | 57 | - | 17 | 1 |
| Ky. | - | - | - | - | - | - | 7 | 3 | - | 5 | 1 |
| Tenn. | - | - | 3 | 1 | - | - | 10 | 14 | U | 3 | - |
| Ala. | - | - | - | - | - | - | 7 | 24 | U | 9 | - |
| Miss. | - | - | - | - | - | - | - | 16 | U | - | - |
| W.S. CENTRAL | - | - | - | - | - | - | 26 | 29 | - | 24 | 10 |
| Ark. | - | - | - | - | - | - | 7 | 7 | - | - | - |
| La. | - | - | - | - | - | - | 18 | 18 | - | - | - |
| Okla. | - | - | - | - | - | - | 1 | 4 | U | 1 | 10 |
| Tex. | - | - | - | - | - | - | - | - | U | 23 | - |
| MOUNTAIN | 2 | - | - | - | 2 | - | 2 | 7 | 3 | 2 | 3 |
| Mont. | - | - | - | - | - | - | - | - | - | - | 1 |
| Idaho | - | - | - | - | - | - | - | - | - | - | - |
| Wyo. | - | - | - | - | - | - | - | - | - | - | 2 |
| Colo. | 1 | - | - | - | 1 | - | - | - | U | 2 | - |
| N. Mex. | - | - | - | - | 1 | - | - | - | U | - | - |
| Ariz. | - | - | - | - | - | - | - | 6 | 3 | - | - |
| Utah | 1 | - | - | - | - | - | 2 | - | - | - | - |
| Nev. | - | - | - | - | - | - | - | 1 | U | - | - |
| PACIFIC | 4 | 1 | 1 | 2 | 6 | 24 | 15 | 7 | 214 | 162 | 1 |
| Wash. | - | - | - | - | - | - | - | - | U | 4 | - |
| Oreg. | - | - | - | - | 2 | 1 | 1 | - | U | 3 | - |
| Calif. | 4 | 1 | 1 | 2 | 4 | 23 | 14 | 7 | 214 | 143 | 1 |
| Alaska | - | - | - | - | - | - | - | - | - | 4 | - |
| Hawaii | - | - | - | - | - | - | - | - | - | 8 | - |
| Guam | - | - | - | - | - | - | - | - | - | 1 | - |
| P.R. | - | - | - | - | - | - | 7 | 5 | - | - | 1 |
| V.I. | - | - | - | - | - | - | - | - | - | - | - |
| Amer. Samoa | - | - | - | - | - | - | - | - | - | - | - |
| C.N.M.I. | - | - | - | - | - | - | - | - | - | - | - |

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

# TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending January 17, 1998, and January 11, 1997 (2nd Week)

| Reporting Area | *H. influenzae,* invasive | | Hepatitis (Viral), by type | | | | Measles (Rubeola) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | A | | B | | Indigenous | | Imported† | | Total | |
| | Cum. 1998* | Cum. 1997 | Cum. 1998 | Cum. 1997 | Cum. 1998 | Cum. 1997 | 1998 | Cum. 1998 | 1998 | Cum. 1998 | Cum. 1998 | Cum. 1997 |
| UNITED STATES | 24 | 32 | 375 | 604 | 138 | 212 | - | - | - | - | - | 1 |
| NEW ENGLAND | 1 | 4 | 4 | 18 | - | 3 | - | - | - | - | - | - |
| Maine | - | - | - | 1 | - | - | U | - | U | - | - | - |
| N.H. | 1 | - | 1 | - | - | - | - | - | - | - | - | - |
| Vt. | - | - | - | 1 | - | - | - | - | - | - | - | - |
| Mass. | - | 4 | 1 | 6 | - | 2 | - | - | - | - | - | - |
| R.I. | - | - | - | - | - | - | - | - | - | - | - | - |
| Conn. | - | - | 2 | 10 | - | 1 | - | - | - | - | - | - |
| MID. ATLANTIC | 2 | 3 | 5 | 31 | 6 | 32 | - | - | - | - | - | - |
| Upstate N.Y. | 1 | - | 2 | - | 2 | - | - | - | - | - | - | - |
| N.Y. City | - | 1 | 1 | 13 | 3 | 12 | - | - | - | - | - | - |
| N.J. | 1 | 1 | - | 3 | - | 11 | - | - | - | - | - | - |
| Pa. | - | 1 | 2 | 15 | 1 | 9 | - | - | - | - | - | - |
| E.N. CENTRAL | 2 | 6 | 90 | 97 | 37 | 46 | - | - | - | - | - | - |
| Ohio | 2 | 3 | 24 | 20 | 5 | - | - | - | - | - | - | - |
| Ind. | - | - | 7 | 17 | 2 | 6 | - | - | - | - | - | - |
| Ill. | - | 3 | - | 30 | - | 18 | U | - | U | - | - | - |
| Mich. | - | - | 59 | 19 | 30 | 19 | - | - | - | - | - | - |
| Wis. | - | - | - | 11 | - | 3 | - | - | - | - | - | - |
| W.N. CENTRAL | - | 1 | 23 | 36 | - | 10 | - | - | - | - | - | - |
| Minn. | - | - | - | - | - | - | - | - | - | - | - | - |
| Iowa | - | - | 20 | 4 | - | - | - | - | - | - | - | - |
| Mo. | - | 1 | 3 | 16 | - | 9 | - | - | - | - | - | - |
| N. Dak. | - | - | - | - | - | - | U | - | U | - | - | - |
| S. Dak. | - | - | - | - | - | - | - | - | - | - | - | - |
| Nebr. | - | - | - | 3 | - | 1 | - | - | - | - | - | - |
| Kans. | - | - | - | 13 | - | - | - | - | - | - | - | - |
| S. ATLANTIC | 6 | 7 | 13 | 18 | 8 | 14 | - | - | - | - | - | - |
| Del. | - | - | - | - | - | - | - | - | - | - | - | - |
| Md. | 6 | 3 | 8 | 11 | 8 | 6 | - | - | - | - | - | - |
| D.C. | - | - | - | 1 | - | 1 | - | - | - | - | - | - |
| Va. | - | - | - | - | - | - | - | - | - | - | - | - |
| W. Va. | - | 1 | - | 1 | - | - | - | - | - | - | - | - |
| N.C. | - | 3 | 1 | 4 | - | 7 | - | - | - | - | - | - |
| S.C. | - | - | - | 1 | - | - | - | - | - | - | - | - |
| Ga. | - | - | 1 | - | - | - | U | - | U | - | - | - |
| Fla. | - | - | 3 | - | - | - | - | - | - | - | - | - |
| E.S. CENTRAL | - | 1 | 6 | 20 | 10 | 16 | - | - | - | - | - | 1 |
| Ky. | - | - | - | 1 | - | - | - | - | - | - | - | - |
| Tenn. | - | 1 | 2 | 6 | 7 | 12 | - | - | - | - | - | - |
| Ala. | - | - | 4 | 2 | 3 | 1 | - | - | - | - | - | 1 |
| Miss. | - | - | - | 11 | - | 3 | U | - | U | - | - | - |
| W.S. CENTRAL | - | - | 6 | 6 | 2 | 1 | - | - | - | - | - | - |
| Ark. | - | - | 1 | 2 | 2 | 1 | - | - | - | - | - | - |
| La. | - | - | - | - | - | - | - | - | - | - | - | - |
| Okla. | - | - | 5 | 4 | - | - | - | - | - | - | - | - |
| Tex. | - | - | - | - | - | - | U | - | U | - | - | - |
| MOUNTAIN | 4 | 1 | 125 | 98 | 23 | 34 | - | - | - | - | - | - |
| Mont. | - | - | 2 | 2 | - | - | - | - | - | - | - | - |
| Idaho | - | - | 1 | 11 | 1 | - | - | - | - | - | - | - |
| Wyo. | - | - | - | 1 | - | 1 | - | - | - | - | - | - |
| Colo. | 1 | 1 | 11 | 18 | 2 | 5 | - | - | - | - | - | - |
| N. Mex. | - | - | 7 | 11 | 10 | 18 | - | - | - | - | - | - |
| Ariz. | 3 | - | 97 | 33 | 8 | 7 | - | - | - | - | - | - |
| Utah | - | - | 7 | 17 | 2 | 2 | - | - | - | - | - | - |
| Nev. | - | - | - | 5 | - | 1 | U | - | U | - | - | - |
| PACIFIC | 9 | 9 | 103 | 280 | 52 | 56 | - | - | - | - | - | - |
| Wash. | - | - | - | - | - | - | - | - | - | - | - | - |
| Oreg. | 6 | 2 | 8 | 26 | 1 | 8 | - | - | - | - | - | - |
| Calif. | 3 | 7 | 95 | 251 | 51 | 47 | - | - | - | - | - | - |
| Alaska | - | - | - | 2 | - | - | - | - | - | - | - | - |
| Hawaii | - | - | - | 1 | - | 1 | U | - | U | - | - | - |
| Guam | - | - | - | - | - | 1 | U | - | U | - | - | - |
| P.R. | - | - | - | 2 | - | 2 | - | - | - | - | - | - |
| V.I. | - | - | - | - | - | - | U | - | U | - | - | - |
| Amer. Samoa | - | - | - | - | - | - | U | - | U | - | - | - |
| C.N.M.I. | - | - | - | - | - | - | U | - | U | - | - | - |

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

*Of 3 cases among children aged <5 years, serotype was reported for 1 and of those, 0 were type b.

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

**TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending January 17, 1998, and January 11, 1997 (2nd Week)**

| | Meningococcal Disease | | Mumps | | | Pertussis | | | Rubella | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Reporting Area | Cum. 1998 | Cum. 1997 | 1998 | Cum. 1998 | Cum. 1997 | 1998 | Cum. 1998 | Cum. 1997 | 1998 | Cum. 1998 | Cum. 1997 |
| UNITED STATES | 94 | 109 | 5 | 7 | 5 | 45 | 105 | 150 | 1 | 1 | - |
| NEW ENGLAND | 7 | 4 | - | - | - | 3 | 19 | 43 | - | - | - |
| Maine | - | - | U | - | - | U | - | 3 | U | - | - |
| N.H. | 1 | - | - | - | - | - | - | 3 | - | - | - |
| Vt. | - | - | - | - | - | 2 | 3 | 14 | - | - | - |
| Mass. | 4 | 4 | - | - | - | 1 | 16 | 23 | - | - | - |
| R.I. | - | - | - | - | - | - | - | - | - | - | - |
| Conn. | 2 | - | - | - | - | - | - | - | - | - | - |
| MID. ATLANTIC | 10 | 7 | - | - | 1 | - | - | 1 | - | - | - |
| Upstate N.Y. | 1 | - | - | - | - | - | - | - | - | - | - |
| N.Y. City | 1 | - | - | - | - | - | - | - | - | - | - |
| N.J. | 8 | 3 | - | - | 1 | - | - | 1 | - | - | - |
| Pa. | - | 4 | - | - | - | - | - | - | - | - | - |
| E.N. CENTRAL | 10 | 19 | - | - | - | 5 | 11 | 10 | - | - | - |
| Ohio | 9 | 4 | - | - | - | 5 | 10 | 5 | - | - | - |
| Ind. | 1 | 3 | - | - | - | - | - | - | - | - | - |
| Ill. | - | 8 | U | - | - | U | - | - | U | - | - |
| Mich. | - | 2 | - | - | - | - | 1 | 3 | - | - | - |
| Wis. | - | 2 | - | - | - | - | - | 2 | - | - | - |
| W.N. CENTRAL | 1 | 11 | - | - | - | - | - | 1 | - | - | - |
| Minn. | - | - | - | - | - | - | - | - | - | - | - |
| Iowa | - | 3 | - | - | - | - | - | - | - | - | - |
| Mo. | - | 8 | - | - | - | - | - | - | - | - | - |
| N. Dak. | - | - | U | - | - | U | - | - | U | - | - |
| S. Dak. | - | - | - | - | - | - | - | 1 | - | - | - |
| Nebr. | - | - | - | - | - | - | - | - | - | - | - |
| Kans. | 1 | - | - | - | - | - | - | - | - | - | - |
| S. ATLANTIC | 24 | 18 | 5 | 6 | - | 21 | 23 | 2 | 1 | 1 | - |
| Del. | - | 1 | - | - | - | - | - | - | - | - | - |
| Md. | 7 | 1 | - | 1 | - | - | 2 | 2 | - | - | - |
| D.C. | - | 1 | - | - | - | - | - | - | - | - | - |
| Va. | - | - | - | - | - | - | - | - | - | - | - |
| W. Va. | 1 | 1 | - | - | - | - | - | - | - | - | - |
| N.C. | 2 | 4 | 3 | 3 | - | 21 | 21 | - | 1 | 1 | - |
| S.C. | 5 | 7 | 2 | 2 | - | - | - | - | - | - | - |
| Ga. | 3 | 2 | U | - | - | U | - | - | U | - | - |
| Fla. | 6 | 1 | - | - | - | - | - | - | - | - | - |
| E.S. CENTRAL | 2 | 11 | - | - | 2 | - | - | 1 | - | - | - |
| Ky. | - | 2 | - | - | - | - | - | - | - | - | - |
| Tenn. | 2 | 2 | - | - | 1 | - | - | - | - | - | - |
| Ala. | - | 5 | - | - | - | - | - | 1 | - | - | - |
| Miss. | - | 2 | U | - | 1 | U | - | - | U | - | - |
| W.S. CENTRAL | 6 | 3 | - | - | - | 4 | 4 | - | - | - | - |
| Ark. | 1 | 2 | - | - | - | 4 | 4 | - | - | - | - |
| La. | - | - | - | - | - | - | - | - | - | - | - |
| Okla. | 5 | 1 | - | - | - | - | - | - | - | - | - |
| Tex. | - | - | U | - | - | U | - | - | U | - | - |
| MOUNTAIN | 10 | 5 | - | 1 | - | 10 | 39 | 76 | - | - | - |
| Mont. | 1 | 1 | - | - | - | - | - | - | - | - | - |
| Idaho | - | - | - | - | - | - | 17 | 66 | - | - | - |
| Wyo. | 1 | - | - | - | - | - | - | 1 | - | - | - |
| Colo. | 4 | - | - | - | - | 3 | 7 | 5 | - | - | - |
| N. Mex. | 2 | 2 | N | N | N | 4 | 12 | - | - | - | - |
| Ariz. | 1 | 1 | - | 1 | - | - | - | 3 | - | - | - |
| Utah | 1 | 1 | - | - | - | 3 | 3 | - | - | - | - |
| Nev. | - | - | U | - | - | U | - | 1 | U | - | - |
| PACIFIC | 24 | 31 | - | - | 2 | 2 | 9 | 16 | - | - | - |
| Wash. | - | - | - | - | - | - | - | - | - | - | - |
| Oreg. | 13 | 12 | N | N | N | 2 | 2 | 1 | - | - | - |
| Calif. | 11 | 19 | - | - | - | - | 7 | 15 | - | - | - |
| Alaska | - | - | - | - | - | - | - | - | - | - | - |
| Hawaii | - | - | U | - | 2 | U | - | - | U | - | - |
| Guam | - | - | U | - | - | U | - | - | U | - | - |
| P.R. | - | - | - | - | - | - | - | - | - | - | - |
| V.I. | - | - | U | - | - | U | - | - | U | - | - |
| Amer. Samoa | - | - | U | - | - | U | - | - | U | - | - |
| C.N.M.I. | - | - | U | - | - | U | - | - | U | - | - |

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

# TABLE IV. Deaths in 122 U.S. cities,* week ending January 17, 1998 (2nd Week)

| Reporting Area | All Causes, By Age (Years) | | | | | | P&I† Total |
|---|---|---|---|---|---|---|---|
| | All Ages | >65 | 45-64 | 25-44 | 1-24 | <1 | |
| NEW ENGLAND | 716 | 544 | 100 | 42 | 13 | 17 | 80 |
| Boston, Mass. | 199 | 140 | 34 | 11 | 7 | 7 | 33 |
| Bridgeport, Conn. | 52 | 39 | 7 | 5 | 1 | - | 3 |
| Cambridge, Mass. | 23 | 17 | 5 | 1 | - | - | - |
| Fall River, Mass. | 33 | 25 | 7 | 1 | - | - | 3 |
| Hartford, Conn. | 55 | 43 | 6 | 3 | 2 | 1 | 4 |
| Lowell, Mass. | 22 | 17 | 4 | 1 | - | - | - |
| Lynn, Mass. | 7 | 5 | 2 | - | - | - | - |
| New Bedford, Mass. | 29 | 23 | 5 | 1 | - | - | 2 |
| New Haven, Conn. | 60 | 50 | 4 | 4 | - | 2 | 3 |
| Providence, R.I. | 67 | 50 | 7 | 5 | 1 | 4 | 2 |
| Somerville, Mass. | U | U | U | U | U | U | U |
| Springfield, Mass. | 62 | 50 | 5 | 5 | 1 | 1 | 11 |
| Waterbury, Conn. | 40 | 33 | 6 | - | - | 1 | 8 |
| Worcester, Mass. | 67 | 52 | 8 | 5 | 1 | 1 | 11 |
| MID. ATLANTIC | 2,834 | 2,058 | 499 | 188 | 38 | 49 | 197 |
| Albany, N.Y. | 50 | 40 | 7 | 2 | - | 1 | 8 |
| Allentown, Pa. | 18 | 17 | 1 | - | - | - | 2 |
| Buffalo, N.Y. | 63 | 44 | 14 | 3 | 1 | 1 | 5 |
| Camden, N.J. | 46 | 34 | 6 | 3 | - | 3 | 2 |
| Elizabeth, N.J. | 32 | 22 | 8 | 2 | - | - | 1 |
| Erie, Pa. | 53 | 40 | 9 | 3 | 1 | - | 4 |
| Jersey City, N.J. | 54 | 35 | 13 | 6 | - | - | - |
| New York City, N.Y. | 1,554 | 1,140 | 275 | 106 | 15 | 18 | 102 |
| Newark, N.J. | 35 | 13 | 11 | 6 | 3 | 2 | 2 |
| Paterson, N.J. | 43 | 24 | 11 | 3 | 2 | 3 | - |
| Philadelphia, Pa. | 398 | 260 | 77 | 38 | 9 | 12 | 24 |
| Pittsburgh, Pa.§ | 74 | 58 | 8 | 4 | 1 | 3 | 7 |
| Reading, Pa. | 34 | 29 | 3 | 1 | - | 1 | 3 |
| Rochester, N.Y. | 136 | 111 | 17 | 2 | 2 | 4 | 10 |
| Schenectady, N.Y. | 30 | 25 | 3 | 2 | - | - | 1 |
| Scranton, Pa. | 31 | 23 | 6 | 2 | - | - | - |
| Syracuse, N.Y. | 126 | 100 | 19 | 2 | 4 | 1 | 18 |
| Trenton, N.J. | 27 | 19 | 6 | 2 | - | - | 6 |
| Utica, N.Y. | 30 | 24 | 5 | 1 | - | - | 2 |
| Yonkers, N.Y. | U | U | U | U | U | U | U |
| E.N. CENTRAL | 2,444 | 1,721 | 442 | 150 | 62 | 69 | 164 |
| Akron, Ohio | 61 | 45 | 10 | 2 | 2 | 2 | - |
| Canton, Ohio | 58 | 46 | 6 | 2 | 2 | 2 | 10 |
| Chicago, Ill. | 366 | 236 | 66 | 47 | 10 | 7 | 25 |
| Cincinnati, Ohio | U | U | U | U | U | U | U |
| Cleveland, Ohio | 180 | 122 | 42 | 10 | 3 | 3 | 10 |
| Columbus, Ohio | 311 | 208 | 56 | 20 | 14 | 13 | 32 |
| Dayton, Ohio | 178 | 130 | 35 | 7 | 3 | 3 | 11 |
| Detroit, Mich. | 232 | 144 | 55 | 18 | 8 | 7 | 8 |
| Evansville, Ind. | 90 | 72 | 14 | 3 | - | 1 | 6 |
| Fort Wayne, Ind. | 88 | 65 | 16 | 3 | 2 | 2 | 7 |
| Gary, Ind. | 10 | 6 | 3 | - | - | 1 | 1 |
| Grand Rapids, Mich. | 60 | 41 | 12 | 3 | 1 | 3 | 4 |
| Indianapolis, Ind. | 217 | 159 | 34 | 10 | 5 | 9 | - |
| Lansing, Mich. | 58 | 44 | 10 | 2 | - | 2 | 4 |
| Milwaukee, Wis. | 140 | 90 | 28 | 9 | 4 | 9 | 14 |
| Peoria, Ill. | 55 | 43 | 7 | 3 | 1 | 1 | 5 |
| Rockford, Ill. | 60 | 48 | 8 | 2 | 1 | 1 | 6 |
| South Bend, Ind. | 48 | 37 | 9 | 1 | - | 1 | 1 |
| Toledo, Ohio | 134 | 102 | 23 | 6 | 2 | 1 | 11 |
| Youngstown, Ohio | 98 | 83 | 8 | 2 | 4 | 1 | 9 |
| W.N. CENTRAL | 860 | 636 | 121 | 49 | 20 | 19 | 51 |
| Des Moines, Iowa | U | U | U | U | U | U | U |
| Duluth, Minn. | 19 | 14 | 3 | 1 | 1 | - | 1 |
| Kansas City, Kans. | 12 | 9 | 2 | 1 | - | - | 2 |
| Kansas City, Mo. | 154 | 100 | 19 | 12 | 2 | 6 | 8 |
| Lincoln, Nebr. | 54 | 42 | 7 | 2 | 2 | 1 | 4 |
| Minneapolis, Minn. | 204 | 157 | 26 | 10 | 4 | 7 | 18 |
| Omaha, Nebr. | 104 | 77 | 17 | 4 | 4 | 2 | 3 |
| St. Louis, Mo. | 162 | 119 | 25 | 13 | 3 | 2 | - |
| St. Paul, Minn. | 112 | 89 | 13 | 6 | 3 | 1 | 14 |
| Wichita, Kans. | 39 | 29 | 9 | - | 1 | - | 1 |

| Reporting Area | All Causes, By Age (Years) | | | | | | P&I† Total |
|---|---|---|---|---|---|---|---|
| | All Ages | >65 | 45-64 | 25-44 | 1-24 | <1 | |
| S. ATLANTIC | 1,230 | 830 | 245 | 99 | 31 | 24 | 101 |
| Atlanta, Ga. | U | U | U | U | U | U | U |
| Baltimore, Md. | 266 | 178 | 46 | 28 | 9 | 5 | 21 |
| Charlotte, N.C. | 121 | 78 | 32 | 5 | 4 | 2 | 14 |
| Jacksonville, Fla. | 154 | 105 | 27 | 13 | 6 | 3 | 4 |
| Miami, Fla. | U | U | U | U | U | U | U |
| Norfolk, Va. | 55 | 40 | 9 | 4 | 1 | 1 | 5 |
| Richmond, Va. | 94 | 61 | 19 | 7 | 5 | 1 | 8 |
| Savannah, Ga. | 81 | 56 | 20 | 5 | - | - | 10 |
| St. Petersburg, Fla. | 56 | 47 | 4 | 2 | - | 3 | 2 |
| Tampa, Fla. | 282 | 201 | 58 | 19 | 1 | 3 | 31 |
| Washington, D.C. | 101 | 53 | 26 | 11 | 5 | 6 | 6 |
| Wilmington, Del. | 20 | 11 | 4 | 5 | - | - | - |
| E.S. CENTRAL | 1,144 | 783 | 247 | 72 | 18 | 20 | 86 |
| Birmingham, Ala. | 201 | 143 | 39 | 11 | 3 | 1 | 11 |
| Chattanooga, Tenn. | 114 | 80 | 30 | 4 | - | - | 6 |
| Knoxville, Tenn. | 100 | 73 | 20 | 4 | 1 | 2 | 9 |
| Lexington, Ky. | 127 | 91 | 25 | 6 | 3 | 2 | 20 |
| Memphis, Tenn. | 278 | 188 | 67 | 15 | 4 | 4 | 19 |
| Mobile, Ala. | 69 | 46 | 11 | 8 | 2 | 2 | 1 |
| Montgomery, Ala. | 44 | 36 | 6 | 2 | - | - | 8 |
| Nashville, Tenn. | 211 | 126 | 49 | 22 | 5 | 9 | 12 |
| W.S. CENTRAL | 2,038 | 1,360 | 433 | 127 | 67 | 51 | 149 |
| Austin, Tex. | 108 | 69 | 27 | 7 | 4 | 1 | 9 |
| Baton Rouge, La. | 73 | 53 | 12 | 5 | 3 | - | - |
| Corpus Christi, Tex. | 99 | 69 | 15 | 8 | 3 | 4 | 3 |
| Dallas, Tex. | 244 | 154 | 47 | 20 | 13 | 10 | 9 |
| El Paso, Tex. | 152 | 102 | 35 | 9 | 3 | 3 | 9 |
| Ft. Worth, Tex. | 149 | 102 | 31 | 6 | 9 | 1 | 11 |
| Houston, Tex. | 569 | 363 | 129 | 42 | 19 | 16 | 62 |
| Little Rock, Ark. | 81 | 49 | 16 | 7 | 4 | 5 | 5 |
| New Orleans, La. | 55 | 31 | 12 | 5 | 5 | 2 | - |
| San Antonio, Tex. | 295 | 212 | 64 | 13 | 2 | 4 | 21 |
| Shreveport, La. | 77 | 56 | 17 | 3 | - | 1 | 5 |
| Tulsa, Okla. | 136 | 100 | 28 | 2 | 2 | 4 | 15 |
| MOUNTAIN | 1,078 | 741 | 202 | 84 | 29 | 21 | 121 |
| Albuquerque, N.M. | 154 | 110 | 25 | 13 | 4 | 2 | 11 |
| Boise, Idaho | 51 | 41 | 4 | 4 | - | 2 | 7 |
| Colo. Springs, Colo. | 63 | 42 | 16 | 3 | 1 | 1 | 4 |
| Denver, Colo. | 109 | 68 | 21 | 9 | 5 | 6 | 13 |
| Las Vegas, Nev. | 128 | 67 | 37 | 19 | 4 | 1 | 9 |
| Ogden, Utah | 25 | 17 | 3 | 4 | 1 | - | 5 |
| Phoenix, Ariz. | 186 | 120 | 34 | 19 | 7 | 5 | 26 |
| Pueblo, Colo. | 32 | 30 | 1 | 1 | - | - | 3 |
| Salt Lake City, Utah | 122 | 80 | 29 | 6 | 4 | 3 | 16 |
| Tucson, Ariz. | 208 | 166 | 32 | 6 | 3 | 1 | 27 |
| PACIFIC | 1,578 | 1,180 | 265 | 81 | 22 | 30 | 252 |
| Berkeley, Calif. | 29 | 22 | 3 | 2 | - | 2 | 1 |
| Fresno, Calif. | 141 | 114 | 16 | 7 | 1 | 3 | 21 |
| Glendale, Calif. | U | U | U | U | U | U | U |
| Honolulu, Hawaii | 68 | 48 | 13 | 4 | - | 3 | 4 |
| Long Beach, Calif. | 129 | 99 | 21 | 6 | 1 | 2 | 31 |
| Los Angeles, Calif. | U | U | U | U | U | U | U |
| Pasadena, Calif. | 30 | 21 | 8 | - | 1 | - | 3 |
| Portland, Oreg. | U | U | U | U | U | U | U |
| Sacramento, Calif. | 207 | 162 | 34 | 8 | 2 | 1 | 46 |
| San Diego, Calif. | 269 | 200 | 44 | 15 | 5 | 5 | 64 |
| San Francisco, Calif. | 177 | 125 | 34 | 11 | 1 | 6 | 30 |
| San Jose, Calif. | 218 | 164 | 36 | 10 | 5 | 3 | 37 |
| Santa Cruz, Calif. | U | U | U | U | U | U | U |
| Seattle, Wash. | 127 | 86 | 28 | 8 | 4 | 1 | 3 |
| Spokane, Wash. | 66 | 52 | 8 | 5 | - | 1 | 7 |
| Tacoma, Wash. | 117 | 87 | 20 | 5 | 2 | 3 | 5 |
| TOTAL | 13,922¶ | 9,853 | 2,554 | 892 | 300 | 300 | 1,201 |

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.

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