CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

April 17, 1998 / Vol. 47 / No. 14

MMWR™
MORBIDITY AND MORTALITY WEEKLY REPORT



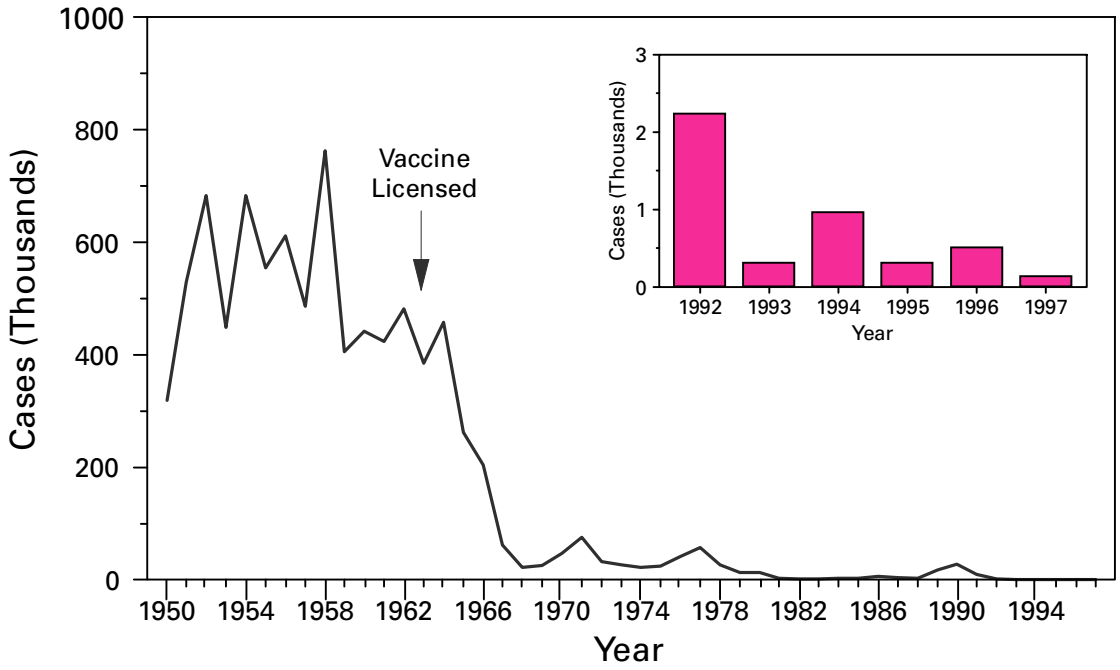
## Measles — United States, 1997

During 1997, a provisional total of 138 confirmed measles cases was reported to CDC by local and state health departments, the lowest number of measles cases ever reported in 1 year and a 55% decrease from the previous record low of 309 cases reported in 1995 (Figure 1). This report describes the epidemiology of measles in the United States in 1997, which suggests that no endemic measles virus is circulating in the United States.

### Case Classification

Reported measles cases are classified as imported or indigenous based on where transmission of measles virus is likely to have occurred. Cases in persons who traveled outside the United States within 18 days before rash onset are classified as international importations. Indigenous measles cases are classified into three groups:

**FIGURE 1. Reported measles cases, by year — United States, 1950–1997**



*Measles — Continued*

1) cases linked epidemiologically to a known international importation, 2) cases in which a measles virus strain is isolated that has been associated with other countries (*1*), and 3) all other cases in which no association to an importation was detected.

Of the 138 cases reported in 1997, a total of 57 (41%) were international importations. Thirty-six (63%) occurred in visitors traveling to the United States from other countries. The remaining 21 imported cases occurred in U.S. residents who were abroad during the exposure period. The countries from which measles was most frequently imported were Germany (nine cases), Italy (nine), Switzerland (five), Brazil (five), and Japan (four).

Of the 81 indigenous cases, 17 (21%) cases were linked epidemiologically to international importations. The maximum number of cases epidemiologically linked to a single imported case was four. The longest reported chain of measles transmission following an imported case lasted 5 weeks. Measles virus was isolated from two chains of transmission that included seven (9%) of the 81 indigenous cases; the isolated measles strains have been associated with disease in other countries (*1*). There was no epidemiologic link or virologic evidence suggesting importation for the remaining 57 (70%) of the 81 indigenous cases. In 1997, there was epidemiologic or virologic evidence of an international source for 81 (59%) of the 138 cases reported to CDC, compared with 15% in 1995 and 28% in 1996.

**Geographic Distribution**

In 21 states, no measles cases were reported for 1997, and in 20 states and the District of Columbia, fewer than five cases were reported. Nine states (Arizona, California, Florida, Massachusetts, Minnesota, New York, Pennsylvania, South Dakota, and Texas) accounted for 64% of total cases and 56% of imported cases.

**Temporal Patterns of Transmission**

The maximum number of reported cases occurring in a single week was 11, and the median number of cases per week was two. In 9 weeks, no reported cases occurred, and in 21 weeks, all reported cases were associated with imported cases (Figure 2).

**Age and Vaccination Status**

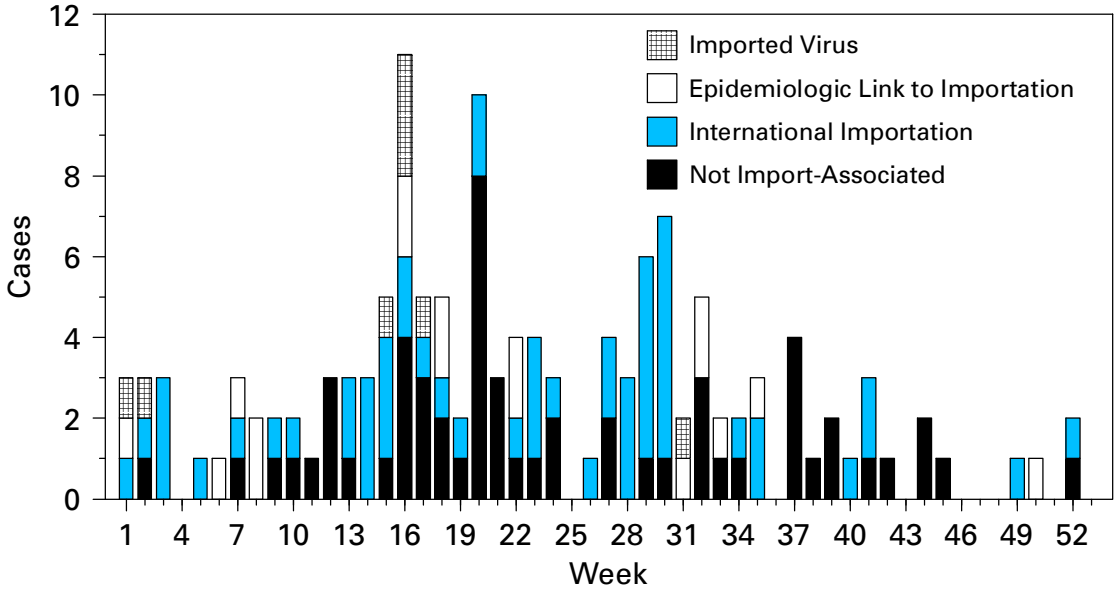
The predominant age groups with confirmed measles were preschool-aged children (1–4 years) (40 [29%] cases), followed by persons aged 5–19 years (39 [28%] cases), and persons aged 20–39 years (36 [26%] cases). Of the 138 patients, 32 (23%) had a documented history of vaccination with measles-containing vaccine (MCV): 25 (18%) patients had received one dose of MCV, and seven (5%) had received two doses of MCV. The remaining 106 (77%) patients reported being unvaccinated. For all persons with reported measles in age groups for which vaccine is recommended, 62% were unvaccinated.

**Outbreaks**

A total of 13 outbreaks, defined as three or more epidemiologically linked cases, were reported to CDC by 11 states. Outbreak-related cases accounted for 44% of all cases. The largest outbreak involved eight cases (median: four; range: three to eight cases). Adult/postschool-related and preschool-related outbreaks were the most common, with four outbreaks each, and three outbreaks involved persons with philosophic or religious objections to vaccination. One school-related and one

*Measles — Continued*

**FIGURE 2. Reported measles cases*, by importation status and week of rash onset — United States, 1997**




*n=138.

college-related outbreak also were reported. Five (38%) of the 13 outbreaks had known international sources.

*Reported by: State and local health depts. Measles Virus Section, Respiratory and Enteric Viruses Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Measles Elimination Activity, Child Vaccine Preventable Disease Br, Epidemiology and Surveillance Div, National Immunization Program, CDC.*

**Editorial Note:** The 138 confirmed measles cases in 1997 represent a record low since measles became a nationally reportable disease in 1912. Since the 1989–1991 measles resurgence, the number of reported measles cases has declined substantially, with record low numbers reported during 1993–1997 and <500 cases reported during 1993, 1995, and 1997.

The isolated geographic distribution of measles cases, the small number of reported measles cases, and the lack of a recurrent viral strain suggest that there is no endemic circulation of measles virus in the United States (*1*). The current pattern of reported measles cases suggests continual importations of measles virus resulting in short chains of secondary transmission in the United States. Some of the indigenous cases that were not associated with importation may have resulted from incomplete reporting and undetected transmission in these chains. Others may have been associated with exposure to undetected importations, or may have been misclassified resulting from false-positive laboratory tests.

Limited secondary transmission following international importation demonstrates the success of vaccination efforts in the United States in increasing population immunity. The measles vaccine coverage rate among children aged 19–35 months was 91% in 1996 (*2*), and second-dose coverage is increasing among school children through expanding implementation of school requirements for two doses of measles vaccine.

*Measles — Continued*

However, there are still groups in the population with low measles immunity. The groups most likely to be vulnerable to measles include those with religious or philosophic objections to vaccination, students in grades not required to have two doses of measles vaccine, health-care workers, and preschool-aged children in areas with low vaccination coverage (*3,4*). The exposure of such groups to an imported case could result in large outbreaks. Continued promotion of vaccination, better implementation of the two-dose vaccination requirement, and improved vaccination of health-care workers should decrease the risk for potential outbreaks among these groups.

Permanent elimination of indigenous transmission of measles in the United States will require strong surveillance and high levels of population immunity. Cooperation with other countries to enhance control of measles can reduce the burden of measles in those countries and the risk for importations to the United States. The decrease in importations to the United States from other countries in the Americas following measles elimination efforts underscores the benefits of coordinated measles elimination efforts in the region (*5*). For example, only five importations from elsewhere in the Americas were detected in 1997 (compared with 242 cases in 1990) after increased efforts in measles control (*6*).

The Pan American Health Organization established the goal of eliminating measles from the Western Hemisphere by 2000, and the Eastern Mediterranean Regional Office of the World Health Organization (WHO) established a regional goal of measles elimination by 2010. The European Regional Office of WHO is considering establishing a measles elimination goal. Elimination of measles from other regions of the world greatly reduces the risk for importation and spread of measles in the United States. The goal of global elimination is being considered but has not yet been established.

*References*

1. Rota JS, Rota PA, Redd SB, Redd SC, Pattamadilok S, Bellini WJ. Genetic analysis of measles viruses isolated in the United States, 1995–1996. J Infect Dis 1998;177:204–8.
2. CDC. Status report on the Childhood Immunization Initiative: national, state, and urban area vaccination coverage levels among children aged 19–35 months—United States, 1996. MMWR 1997;46:657–64.
3. Hutchins S, Markowitz L, Atkinson W, Swint E, Hadler SC. Measles outbreaks in the United States, 1987 through 1990. Pediatr Infect Dis J 1996;15:31–8.
4. CDC. Immunization of health-care workers: recommendations of the Advisory Committee on Immunization Practices (ACIP) and the Hospital Infection Control Practices Advisory Committee (HICPAC). MMWR 1997;46(no. RR-18):1–42.
5. de Quadros CA, Olive JM, Hersh BS, et al. Measles elimination in the Americas: evolving strategies. JAMA 1996;275:224–9.
6. Vitek CR, Redd SC, Redd SB, Hadler SC. Trends in importations of measles to the United States, 1986–1994. JAMA 1997;277:1952–6.

## Demographic Characteristics of Persons Without a Regular Source of Medical Care — Selected States, 1995

Having a regular source of medical care (i.e., a regular provider or site) is one of the strongest predictors of access to health-care services (*1,2*), which has been associated with greater use of preventive health services (*3,4*). This report summarizes state-specific data from the 1995 Behavioral Risk Factor Surveillance System (BRFSS) and examines demographic factors associated with not having a regular source of medical care among adults in the 10 states for which this information was available. The findings indicate that certain demographic characteristics are associated with lack of a regular source of medical care.

The BRFSS is a state-based, random-digit–dialed telephone survey of the noninstitutionalized U.S. population aged ≥18 years (*5*). The 1995 BRFSS collected information about source of medical care from 15,989 survey respondents in 10 states (Alaska, Arizona, Illinois, Kansas, Louisiana, Mississippi, New Jersey, North Carolina, Oklahoma, and Virginia). Participants were asked, "Is there one particular clinic, health center, doctor's office, or other place that you usually go to if you are sick or need advice about your health?" Prevalence estimates were calculated for persons who reported not having a regular source of medical care, and the reasons given for not having a regular source of medical care were examined. Sample estimates were weighted to represent the civilian population of each state, and SUDAAN® (Software for the Statistical Analysis of Correlated Data) was used to calculate 95% confidence intervals (*6*). Response rates ranged from 61.6% in Illinois to 76.2% in Oklahoma (*7*) (overall response rate: 68.4%).

State-specific estimates of persons who lacked a regular source of medical care ranged from 11.0% in Oklahoma to 20.4% in Arizona (median: 14.4%) (Table 1). Among men, the prevalence of not having a regular source of medical care ranged from 13.5% in Oklahoma and New Jersey to 25.1% in Alaska (median: 20.3%). Among women, the prevalence of not having a regular source of medical care was lower and ranged from 8.5% in Illinois and North Carolina to 16.2% in Arizona (median: 9.5%). In most states,

**TABLE 1. Percentage of persons without a regular source of medical care, by state and sex — selected states, Behavioral Risk Factor Surveillance System, 1995**

| | Men | | Women | | Total | |
|---|---|---|---|---|---|---|
| **State** | **%** | **(95% CI*)** | **%** | **(95% CI)** | **%** | **(95% CI)** |
| Alaska | 25.1 | (20.1%–30.1%) | 9.9 | ( 6.9%–12.9%) | **18.0** | **(14.9%–21.1%)** |
| Arizona | 24.7 | (20.3%–29.1%) | 16.2 | (13.4%–19.0%) | **20.4** | **(17.9%–22.9%)** |
| Illinois | 22.4 | (18.5%–26.3%) | 8.5 | ( 6.3%–10.7%) | **15.0** | **(12.7%–17.3%)** |
| Kansas | 20.7 | (17.6%–23.8%) | 8.8 | ( 7.0%–10.6%) | **14.3** | **(12.5%–16.1%)** |
| Louisiana | 19.1 | (15.7%–22.5%) | 10.4 | ( 8.3%–12.5%) | **14.5** | **(12.5%–16.5%)** |
| Mississippi | 19.9 | (16.3%–23.5%) | 9.0 | ( 6.9%–11.1%) | **14.1** | **(12.1%–16.1%)** |
| New Jersey | 13.5 | ( 9.9%–17.1%) | 10.3 | ( 8.1%–12.5%) | **11.9** | **( 9.8%–14.0%)** |
| North Carolina | 15.5 | (12.0%–19.0%) | 8.5 | ( 6.5%–10.5%) | **11.9** | **( 9.9%–13.9%)** |
| Oklahoma | 13.5 | ( 9.8%–17.2%) | 8.6 | ( 6.6%–10.6%) | **11.0** | **( 9.3%–12.7%)** |
| Virginia | 21.9 | (18.5%–25.3%) | 13.0 | (10.8%–15.2%) | **17.3** | **(15.3%–19.3%)** |
| *Median* | *20.3* | | *9.5* | | ***14.4*** | |

*Confidence interval.

*Persons Without Regular Source of Medical Care — Continued*

both white and black adults were more likely than Hispanics to have a regular source of medical care.

In all states, as age increased, the likelihood of having a regular source of medical care also increased. The prevalence of not having a regular source of medical care was highest among persons aged 18–29 years (range: 16.6%–31.4%; median: 25.5%), and lowest among persons aged ≥65 years (range: 2.0%–10.2%; median: 4.1%). In all states except North Carolina, persons with annual household incomes <$15,000 were more likely to not have a regular source of medical care than those with incomes ≥$50,000.

Persons without health-care insurance were more likely to not have a regular source of care than those who did have health-care coverage (Table 2). Among persons who were uninsured, the prevalence of not having a regular source of medical care ranged from 24.7% in Louisiana to 55.4% in Arizona (median: 34.7%); and for those who were insured, from 6.6% in Oklahoma to 14.8% in Virginia (median: 12.0%).

When persons who did not have a regular source of health care were asked why, most (43.2%) reported that they did not need a doctor (range: 38.5% in New Jersey to 55.2% in Mississippi). More than 18% reported that they either had no health-care insurance or could not afford to visit a doctor.

*Reported by the following BRFSS coordinators: P Owen, Alaska; B Bender, Arizona; B Steiner, MS, Illinois; M Perry, Kansas; R Meriwether, MD, Louisiana; P Arbuthnot, Mississippi; G Boeselager, MS, New Jersey; K Passaro, PhD, North Carolina; N Hann, MPH, Oklahoma; L Redman, Virginia. S Bland, MS, TRW Inc., Atlanta, Georgia. Behavioral Surveillance Br, Div of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.*

**Editorial Note:** The findings in this report indicate that persons without a regular source of medical care are more likely to be young, male, Hispanic, and uninsured and to have a low household income. Most persons who did not have a regular source of medical care did not think they needed a regular source. The results suggest the need for education about the health benefits of having a primary source of medical care, including early identification of health problems and increased access to and use of preventive health services. In addition, the results provided information about factors,

**TABLE 2. Percentage of persons without a regular source of medical care, by state and health insurance status — selected states, Behavioral Risk Factor Surveillance System, 1995**

| | Insured | | Uninsured | | Total | |
|---|---|---|---|---|---|---|
| **State** | **%** | **(95% CI*)** | **%** | **(95% CI)** | **%** | **(95% CI)** |
| Alaska | 14.1 | (11.0%–17.2%) | 39.5 | (30.3%–48.7%) | **18.0** | **(14.9%–21.1%)** |
| Arizona | 14.1 | (11.6%–16.6%) | 55.4 | (47.2%–63.6%) | **20.4** | **(17.9%–22.9%)** |
| Illinois | 12.2 | (10.0%–14.4%) | 38.3 | (28.0%–48.6%) | **15.0** | **(12.7%–17.3%)** |
| Kansas | 11.4 | ( 9.7%–13.4%) | 33.2 | (25.8%–40.6%) | **13.9** | **(12.9%–15.7%)** |
| Louisiana | 11.8 | ( 9.9%–13.7%) | 24.7 | (19.1%–30.3%) | **14.5** | **(12.5%–16.5%)** |
| Mississippi | 12.2 | (10.2%–14.2%) | 25.9 | (18.6%–33.2%) | **14.2** | **(12.2%–16.2%)** |
| New Jersey | 9.5 | ( 7.2%–11.5%) | 33.5 | (22.7%–44.3%) | **11.4** | **( 9.4%–13.4%)** |
| North Carolina | 8.6 | ( 6.2%–10.4%) | 35.2 | (26.3%–44.1%) | **11.8** | **( 9.8%–13.8%)** |
| Oklahoma | 6.6 | ( 5.1%– 8.1%) | 35.4 | (28.6%–42.2%) | **10.9** | **( 9.2%–12.6%)** |
| Virginia | 14.8 | (12.8%–16.8%) | 34.1 | (26.7%–41.5%) | **17.1** | **(15.1%–19.1%)** |
| *Median* | *12.0* | | *34.7* | | ***14.3*** | |

*Confidence interval.

*Persons Without Regular Source of Medical Care — Continued*

such as lack of health-care coverage and cost considerations, that might prevent access to preventive care and other appropriate health services.

The findings in this report are subject to at least two limitations. First, because households without telephones were not surveyed, the findings might underrepresent persons who have less education, have a lower annual household income, or are unemployed—all of which have been associated with increased likelihood of not having a regular source of health care (*8*). Second, because the estimates were based on self-reported data, they may be subject to recall bias.

Having a regular source of medical care is one of the strongest predictors of access to health services (*2*). Persons who lack a regular source for medical care have less access to primary care (*2*) and are more likely to experience a delay in seeking preventive health care and services (*4*); such persons, therefore, are at greater risk for chronic health conditions. Identification of subgroups at increased risk (i.e., young adults, males, Hispanics, persons with low incomes, and uninsured persons) is important in targeting prevention strategies to ensure greater access to and use of preventive health services. These results suggest that a policy of promoting a regular source of medical care is likely to facilitate access to health-care services for adults. At the state level, information about regular source of medical care can be used to develop policies promoting better access to health-care services, thereby lowering the prevalence of chronic health problems and associated economic costs.

*References*

1. Andersen R, Aday LA. Access to medical care in the U.S.: realized and potential. Med Care 1978;16:533.
2. Bindman AB, Grumbach K, Osmond D, Vranizan K, Stewart AL. Primary care and receipt of preventive services. J Gen Intern Med 1996;11:269–76.
3. CDC. Health insurance coverage and receipt of preventive health services—Behavioral Risk Factor Surveillance System, 1993. MMWR 1995;44:219–25.
4. Lambrew JM, DeFriese GH, Carey TS, Ricketts TC, Biddle AK. The effects of having a regular doctor on access to primary care. Med Care 1996;34:138–51.
5. CDC. State- and sex-specific prevalence of selected characteristics—Behavioral Risk Factor Surveillance System, 1992 and 1993. In: CDC surveillance summaries (December). MMWR 1996; 45(no. SS-6).
6. Shah BV, Barnwell BG, Bieler GS. SUDAAN user's manual, version 6.4. 2nd ed. Research Triangle Park, North Carolina: Research Triangle Institute, 1996.
7. White AA. Response rate calculation in RDD telephone health surveys: current practices. In: Proceeding of the American Statistical Association, Section on Survey Research Methods. Washington, DC: American Statistical Association, 1983:277–82.
8. Weissman JS, Stern R, Fielding SL, Epstein AM. Delayed access to health care: risk factors, reasons, and consequences. Ann Intern Med 1991;114:325–31.

# Update: Influenza Activity — United States and Worldwide, 1997–98 Season, and Composition of the 1998–99 Influenza Vaccine

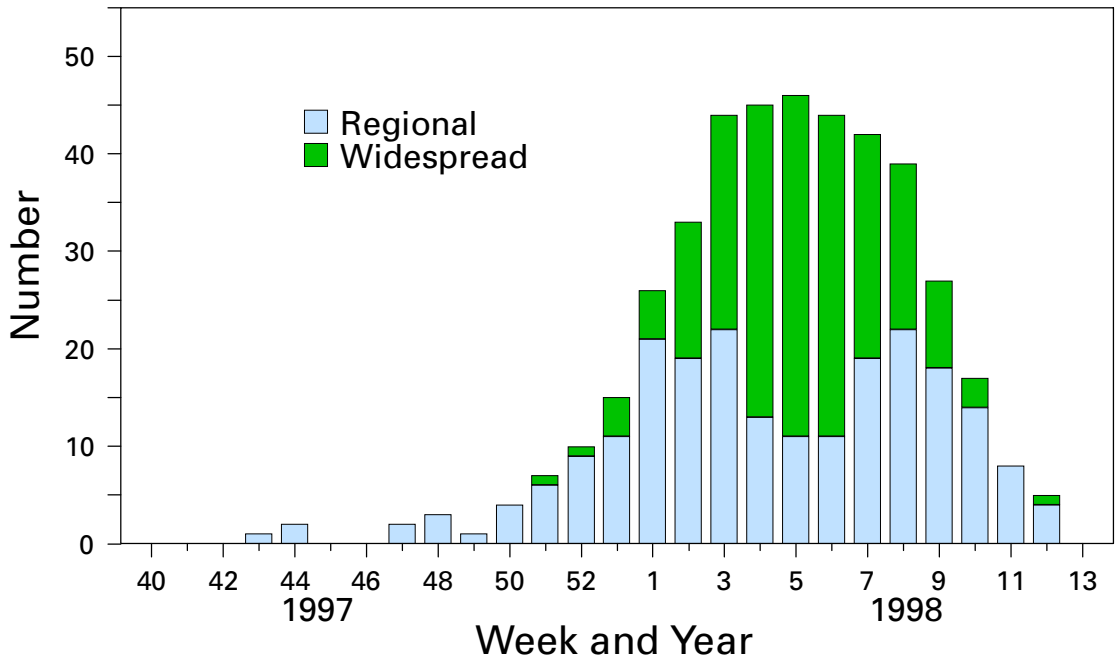
In collaboration with the World Health Organization (WHO), the WHO international network of collaborating laboratories, and state and local health departments, CDC conducts surveillance to monitor influenza activity and to detect antigenic changes in the circulating strains of influenza viruses. This report summarizes surveillance for influenza in the United States and worldwide during the 1997–98 influenza season and describes the composition of the 1998–99 influenza vaccine.

## United States

Influenza activity began to increase in early December 1997 and peaked during late January through early February 1998. The predominant virus was influenza A(H3N2); few influenza type B and influenza A(H1N1) isolates were reported. Each week during the weeks ending January 24 through February 21, 1998, >40 state and territorial epidemiologists reported widespread or regional activity* with peak activity occurring during the week ending February 7 (Figure 1).

*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.

**FIGURE 1. Number of state and territorial epidemiologists reporting widespread or regional influenza activity*, by week and year — United States, September 28, 1997, through March 28, 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.

*Influenza Activity — Continued*

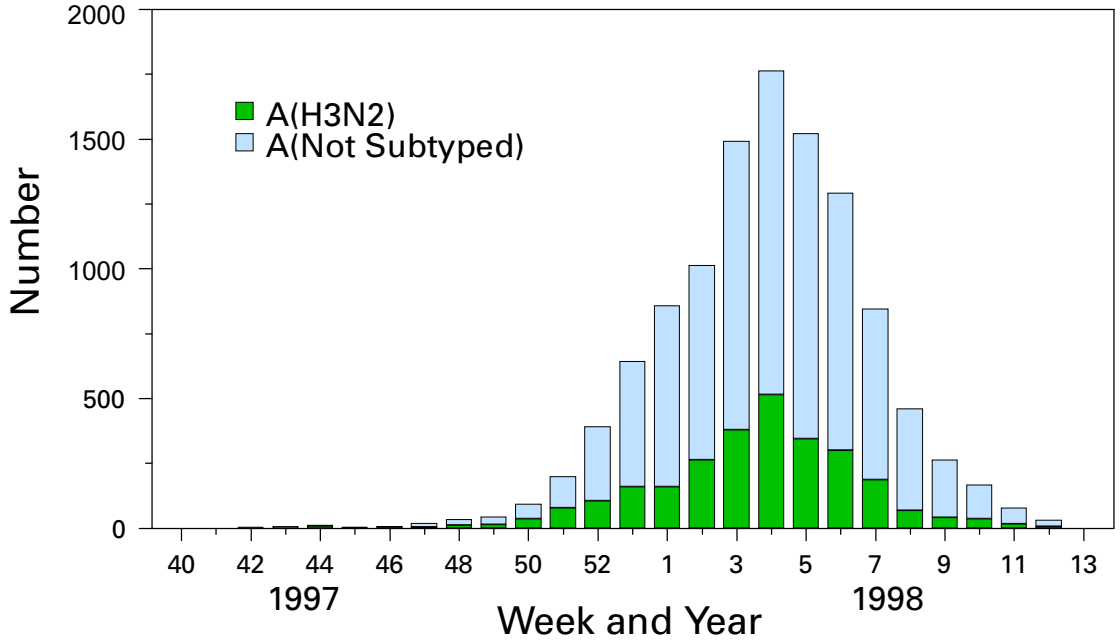
From September 28, 1997, through March 28, 1998, WHO collaborating laboratories in the United States tested 73,940 specimens for respiratory viruses, and 11,439 (15.5%) were positive for influenza (Figure 2). Of these, 11,407 (99.7%) were influenza type A, and 32 (0.3%) were type B. Among 2799 subtyped influenza type A isolates, 2793 (99.8%) were type A(H3N2), and six (0.2%) were type A(H1N1).

Beginning the week ending January 3, the proportion of deaths attributed to pneumonia and influenza (P&I) reported by 122 U.S. cities exceeded the epidemic threshold† for 10 consecutive weeks. During the week ending March 21, the proportion of deaths attributed to P&I decreased below the threshold, but increased slightly above the threshold for the week ending March 28 (Figure 3).

Two related groups of influenza A(H3N2) viruses circulated in the United States this influenza season: A/Wuhan/359/95-like viruses, similar to the strain included in the 1997–98 influenza vaccine, and A/Sydney/5/97-like viruses, a drifted variant of A/Wuhan/359/95. Results from laboratory-confirmed influenza A outbreaks associated with A/Sydney/5/97-like viruses suggest that vaccine containing A/Wuhan/359/95-like virus provided only limited protection (*1*). Of the 272 influenza A(H3N2) isolates antigenically characterized by CDC, 52 (19%) were similar to A/Wuhan/359/95, and 220 (81%) were similar to A/Sydney/5/97. Among influenza A(H3N2) viruses, the proportion that were A/Sydney/5/97-like increased from 20% (three of 15) in October, to 46% (11 of 24) in November, to 86% (97 of 113) in December, and to 91% (101 of 111)

†The epidemic threshold is 1.645 standard deviations above the seasonal baseline. The expected seasonal baseline is projected using a robust regression procedure in which a periodic regression model is applied to observed percentages of deaths from P&I since 1983.

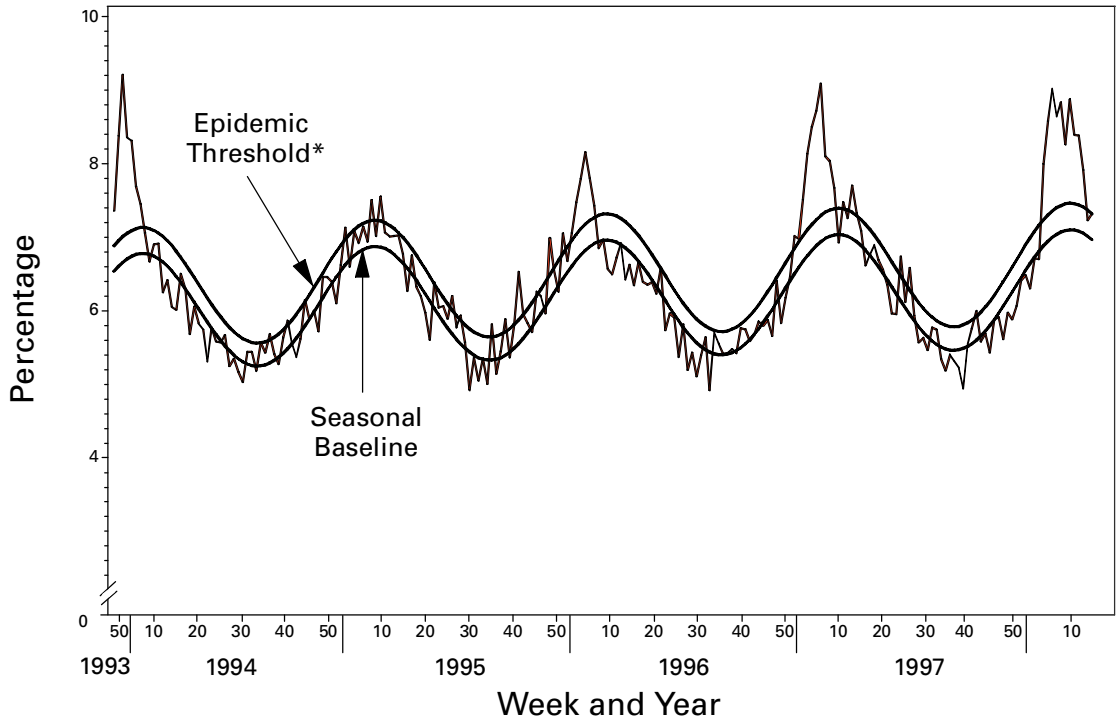
**FIGURE 2. Number of influenza virus isolates* reported by the World Health Organization collaborating laboratories, by week and year — United States, September 28, 1997, through March 28, 1998†**




*n=11,439.
†Six influenza A (H1N1) and 32 influenza type B isolates also were reported, but are not shown in the figure.

*Influenza Activity — Continued*

**FIGURE 3. Weekly pneumonia and influenza (P&I) mortality as a percentage of all deaths in 122 cities — United States, December 7, 1993, through March 28, 1998**




*The epidemic threshold is 1.645 standard deviations above the seasonal baseline. The expected seasonal baseline is projected using a robust regression procedure in which a periodic regression model is applied to observed percentages of deaths from P&I since 1983.

in January. Of the nine characterized influenza A(H3N2) viruses collected in February, eight (78%) were A/Sydney/5/97-like.

Eight influenza type B isolates characterized by CDC were similar to the vaccine strain B/Harbin/7/94 and B/Beijing/184/93, and six of seven influenza A(H1N1) isolates were similar to the vaccine strain A/Johannesburg/82/96 and A/Bayern/7/96. One A(H1N1) isolate was characterized as A/Beijing/262/95-like, which is antigenically different from the vaccine strain.

**Worldwide**

In the northern hemisphere, during October 1997–March 1998, influenza A(H3N2) predominated in Austria, Canada, Croatia, Denmark, Finland, France, Germany, Greece, Iran, Israel, Italy, Japan, Morocco, Russian Federation, Spain, Sweden, Switzerland, United Kingdom, and the Federal Republic of Yugoslavia. Influenza A(H3N2) also was isolated in Czech Republic, Egypt, Hong Kong, Iceland, Korea, Netherlands, Norway, Poland, Portugal, Romania, Saudi Arabia, and Taiwan. Influenza A(H3N2) activity increased in Iran, Israel, and Japan in early January and in Canada and Europe from late January through February. In the southern hemisphere, during October–December, influenza A(H3N2) viruses were isolated from outbreaks in Argentina, Chile, and Fiji and from sporadic cases in Australia, French Polynesia, and South Africa (*2–4* ).

*Influenza Activity — Continued*

Influenza A(H1N1) isolates were reported less often than influenza A(H3N2) isolates. Outbreaks of influenza A(H1N1) were reported from Belarus, Russian Federation, and United Kingdom. Sporadic cases of influenza A(H1N1) were reported in Argentina, Canada, Croatia, Czech Republic, Denmark, Egypt, France, Germany, Hong Kong, Israel, Italy, Japan, Netherlands, Norway, People's Republic of China, Poland, Portugal, Saudi Arabia, South Africa, Sweden, Switzerland, and Taiwan. Russian Federation and United Kingdom reported increases in influenza A(H1N1) isolates in February, and Germany and Italy reported increases in March (*2–4* ).

Outbreaks of influenza B were reported in Japan and People's Republic of China; sporadic cases were reported in Algeria, Argentina, Austria, Belarus, Belgium, Brazil, Canada, Finland, France, Germany, Greece, Hong Kong, Italy, Netherlands, Norway, Portugal, Russian Federation, Senegal, Slovakia, South Africa, Spain, Sweden, Switzerland, United Kingdom, the Federal Republic of Yugoslavia, and Zambia.

In May 1997, the first case of influenza A(H5N1) in a human occurred in Hong Kong (*5* ). Seventeen additional cases occurred in Hong Kong in November and December. Despite enhanced surveillance, no new cases have been detected since the end of December.

**Composition of the 1998–99 Vaccine**

The Food and Drug Administration's Vaccines and Related Biologic Products Advisory Committee (VRBPAC) recommended that the 1998–99 trivalent vaccine for the United States contain A/Sydney/5/97-like(H3N2), A/Beijing/262/95-like(H1N1), and B/Beijing/184/93-like viruses. This recommendation was based on antigenic analyses of recently isolated influenza viruses.

Influenza A(H3N2) isolates were either A/Wuhan/359/95-like or A/Sydney/5/97-like viruses. The proportion of influenza A(H3N2) viruses that were A/Sydney/5/97-like increased from October through March and became predominant in many countries. Vaccine containing an A/Wuhan/359/95-like virus induced a lower antibody response against A/Sydney/5/97 than against A/Wuhan/359/95. Therefore, VRBPAC recommended including A/Sydney/5/97 in the 1998–99 vaccine.

A/Bayern/7/95-like viruses, similar to the 1997–98 influenza A(H1N1) vaccine strain, have been the predominant influenza A(H1N1) viruses isolated during the previous year. However, A/Beijing/262/95-like viruses, which have been detected in Asia during the previous 3 years, were identified recently in France, Senegal, South Africa, and the United States. Persons who were vaccinated in an experimental vaccine trial with A/Beijing/ 262/95 developed equivalent antibody levels against A/Bayern/7/95 and A/Beijing/ 262/95. However, persons vaccinated with A/Bayern/7/95 had lower antibody levels against A/Beijing/262/95 than A/Bayern/7/95. Because A/Beijing/262/95-like viruses were detected on four continents and because the antibody response to this antigen was more heterogeneous than to A/Bayern/7/95, VRBPAC recommended including A/Beijing/262/95 in the 1998–99 vaccine.

Influenza type B isolates from all continents (except Asia) were similar to B/Beijing/184/93 and the 1997–98 vaccine strain B/Harbin/7/94. Viruses antigenically related to the B/Victoria/2/87 reference strain were isolated in Japan and People's Republic of China. Since vaccine containing the B/Harbin/7/94 strain induced antibody to recently isolated B/Beijing/184/93-like strains, VRBPAC recommended retaining B/Harbin/7/94 in the 1998–99 vaccine.

*Influenza Activity — Continued*

*Reported by: Participating state and territorial epidemiologists and state public health laboratory directors. A Hay, PhD, National Institute for Medical Research, London; G Schild, DSc, J Wood, PhD, National Institute for Biologic Standards and Control, Hertfordshire, England. I Gust, MD, A Hampson, Commonwealth Serum Laboratories, Parkville, Australia. K Nerome, National Institute of Infectious Diseases, Tokyo, Japan. L Canas, Armstrong Laboratory, Brooks Air Force Base, San Antonio, Texas. Y Guo, Institute of Virology, National Center for Preventive Medicine, Beijing, People's Republic of China. World Health Organization National Influenza Centers, Div of Emerging and Other Communicable Diseases Surveillance and Control, Geneva, Switzerland. Div of Virology, Center for Biologics Evaluation and Research, Food and Drug Administration. Influenza Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; and an EIS Officer, CDC.*

**Editorial Note:** During the 1997–98 influenza season, influenza A(H3N2) viruses predominated worldwide. This is the second consecutive year in which influenza A(H3N2) viruses have predominated in the United States and the third consecutive year in which the proportion of deaths caused by P&I reported by 122 U.S. cities was elevated for several consecutive weeks. Influenza A(H1N1) and influenza B were isolated only sporadically during the 1997–98 influenza season in most countries, including the United States. However, outbreaks of influenza B were reported in Japan and People's Republic of China. Identification of the A/Sydney/5/97-like(H3N2) and A/Beijing/262/95-like (H1N1) strains and, in Hong Kong, identification of the 18 cases of influenza A(H5N1) illustrate the need for continued international virologic surveillance for influenza and the timely subtyping of influenza A isolates.

The production of a vaccine against influenza A(H5N1) for general use was not recommended. However, efforts continue at several laboratories worldwide to develop a vaccine candidate should the need arise, and plans are being developed to test an experimental influenza A(H5N1) vaccine for safety and immunogenicity.

Strains to be included in the influenza vaccine usually are selected during the preceding January through February because of scheduling requirements for production, quality control, packaging, distribution, and vaccine administration before onset of the next influenza season. Recommendations of the Advisory Committee on Immunization Practices for the use of vaccine and antiviral agents for prevention and control of influenza will be published in an *MMWR Recommendations and Reports* on May 1, 1998 (*6*).

*References*

1. CDC. Update: influenza activity—United States, 1997–98 season. MMWR 1998;47:196–200.
2. World Health Organization. Recommended composition of influenza virus vaccines for use in the 1998–99 season. Wkly Epidemiol Rec 1998;73:56–62.
3. World Health Organization. Influenza. Wkly Epidemiol Rec 1998;73:79–80.
4. World Health Organization. Influenza. Wkly Epidemiol Rec 1998;73:85–6.
5. CDC. Update: isolation of avian influenza A(H5N1) viruses from humans—Hong Kong, 1997–1998. MMWR 1998;46:1245–7.
6. CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1998;47(no. RR-6) (in press).

## Nosocomial *Ralstonia pickettii* Colonization Associated with Intrinsically Contaminated Saline Solution — Los Angeles, California, 1998

From February 24 through March 15, 1998, a total of 22 respiratory tract cultures from 13 patients at Childrens Hospital Los Angeles (CHLA), California, were culture-positive for *Ralstonia pickettii*. Because of this unusual cluster of colonization, on March 16 the Los Angeles County Department of Health Services initiated an investigation. This report summarizes the findings of the investigation, which resulted in a recall of sterile sodium chloride solution that was contaminated with *R. pickettii*.

A case of *R. pickettii* colonization was defined as isolation of *R. pickettii* from any clinical site in a CHLA patient during February 1–March 27, 1998 (epidemic period). To determine the background rate, CHLA microbiology records were reviewed, and all cultures positive for *R. pickettii* from July 1, 1997, through February 1, 1998 (pre-epidemic period), were identified. Colonized patients' medical records, hospital laboratory culture methods, and respiratory therapy procedures were reviewed. Selected opened and unopened vials of solutions used in respiratory therapy were cultured.

*R. pickettii* was isolated significantly more frequently from respiratory specimens submitted to the microbiology laboratory during the epidemic than during the pre-epidemic period (36 [7.2%] of 498 compared with three [0.1%] of 2200; relative risk=53, 95% confidence interval=16–171). Seventeen patients had isolates meeting the case definition. Colonized patients ranged in age from 4 days to 17 years (median: 2 months), nine (53%) were female, all had been hospitalized in an intensive-care unit, and all had received respiratory therapy.

Of the 17 patients, 16 (94%) were mechanically ventilated, and one had a tracheostomy. The endotracheal suctioning protocol in this hospital included the pre-suctioning instillation of sterile saline. All colonized patients received endotracheal suctioning after instillation of 0.9% sterile sodium chloride solution (Modudose®, manufactured by Kendall Corporation, Mainsfield, Massachusetts*); no infections or deaths were attributed to *R. pickettii*.

Cultures of pooled unopened 3-mL vials of Modudose®, lot number 718315, by the Los Angeles County Public Health Laboratory and the Food and Drug Administration (FDA) grew *R. pickettii*. Patient and product *R. pickettii* isolates had closely related pulsed-field gel electrophoresis patterns. Since March 30, 1998, when the use of this product was discontinued at CHLA, no further *R. pickettii* colonization has been detected.

Modudose® is a sterile 0.9% sodium chloride solution for use in respiratory therapy distributed by Kendall Corporation; Umeco Corporation, San Juan, Puerto Rico; and Westmed Corporation, Tucson, Arizona. On con- firmation of Modudose® contamination with *R. pickettii*, the manufacturer voluntarily issued a recall that FDA designated as Class I (defined as having a reasonable probability that the use of, or exposure to, a product will cause serious adverse health consequences or death). All lots of the following Modudose® labels and product codes were recalled: Kendall product codes 5251 (3 mL) and 5257 (5 mL), Umeco product code PR5251 (3 mL), and Westmed product code 0454 (1.5 mL).

*Use of trade names and commercial sources is for identification only and does not imply endorsement by CDC or the Department of Health and Human Services.

Ralstonia pickettii *Colonization — Continued*

*Reported by: J Labarca, MD, C Peterson, MD, N Bendaña, L Mascola, MD, Acute Communicable Diseases Control; L Kilman, S Harvey, PhD, Public Health Microbiology Laboratory, Los Angeles County Dept of Health Svcs, Los Angeles; L Ross, MD, M Meylan, MSPH, P Teitelbaum, Childrens Hospital Los Angeles; S Waterman, MD, State Epidemiologist, California Dept of Health Svcs. Office of Regulatory Affairs, Food and Drug Administration. Hospital Infections Program, National Center for Infectious Diseases, CDC.*

**Editorial Note:** *R. pickettii* is a nonfermentative gram-negative bacillus formerly known as *Pseudomonas pickettii* and *Burkholderia pickettii* (*1*). In 1995, a new genus, *Ralstonia*, was proposed on the basis of phenotypic characterization, cellular lipid and fatty acid analyses, phylogenetic analysis of 16S rDNA nucleotide sequences, and rRNA-DNA hybridization. The type species of the new genus is *R. pickettii*.

Since 1972, *R. pickettii* has been detected as a contaminate of several solutions (e.g., saline, deionized water, "sterile" water, and intravenous ranitidine) (*2–7*). These intrinsically contaminated solutions have been associated with outbreaks of respiratory colonization, bloodstream infections, or catheter-related infections.

Modudose® is filter sterilized. Previous laboratory studies have shown that low numbers (1–10 colony-forming units) of *R. pickettii* inoculated into 0.9% sodium chloride solution can proliferate over a wide range of temperatures (59 F–108 F [15 C–42 C]) (*8*). Although the filter size used to terminally sterilize this product is not known (proprietary information), previous studies have shown that *R. pickettii* can pass through a 0.2 μ filter (*8*).

Clinicians detecting patients with *R. pickettii* colonization or infection associated with use of Modudose® are encouraged to report these episodes through local and state health departments to CDC's Hospital Infections Program, National Center for Infectious Diseases (telephone [404] 639-6413; fax [404] 639-6459) and to MedWatch, the FDA Medical Products Reporting Program, telephone (800) 332-1088.

*References*

1. Yabuuchi E, Kosako Y, Yano I, Hotta H, Nishiuchi Y. Transfer of two *Burkholderia* and an *Alcaligenes* species to *Ralstonia* gen. Nov.: proposal of *Ralstonia pickettii* (Ralston, Palleroni and Doudoroff 1973) comb. Nov., *Ralstonia solanacearum* (Smith 1896) comb. Nov. and *Ralstonia eutropha* (Davis 1969) comb. Nov. Microbiol Immunol 1995;39:897–904.
2. Phillips I, Eykyn S, Laker M. Outbreak of hospital infection caused by contaminated autoclaved fluids. Lancet 1972;1:1258–60.
3. Chetoui H, Melin P, Struelens MJ, et al. Comparison of biotyping, ribotyping, and pulsed-field gel electrophoresis for investigation of a common-source outbreak of *Burkholderia pickettii* bacteremia. J Clin Microbiol 1997;35:1398–403.
4. McNeil MM, Solomon SL, Anderson RL, et al. Nosocomial *Pseudomonas pickettii* colonization associated with a contaminated respiratory therapy solution in a special care nursery. J Clin Microbiol 1985;22:903–7.
5. Lacey S, Want SV. *Pseudomonas pickettii* infections in a paediatric oncology unit. J Hosp Infect 1991;17:45–51.
6. Roberts LA, Collignon PJ, Cramp VB, et al. An Australia-wide epidemic of *Pseudomonas pickettii* bacteraemia due to contaminated "sterile" water for injection. Med J Aust 1990;152:652–5.
7. Fernandez C, Wilhelmi I, Andradas E, et al. Nosocomial outbreak of *Burkholderia pickettii* infection due to a manufactured intravenous product used in three hospitals. Clin Infect Dis 1996;22:1092–5.
8. Anderson RL, Bland LA, Favero MS, et al. Factors associated with *Pseudomonas pickettii* intrinsic contamination of commercial respiratory therapy solutions marketed as sterile. Appl Environ Microbiol 1985;50:1343–8.

*Notice to Readers*

## 1999 CDC and ATSDR Symposium on Statistical Methods

CDC and the Agency for Toxic Substances and Disease Registry (ATSDR) will co-sponsor a statistical methods symposium, "Emerging Statistical Issues in Public Health for the 21st Century," January 28–29, 1999, in Atlanta. A short course, "Privacy, Confidentiality, and the Protection of Health Data—A Statistical Perspective," will be offered January 27, 1999, in conjunction with the symposium. The symposium and course are open to the public.

Abstracts will be considered in the following areas: 1) data collection and storage, including questionnaire and survey design, the use of data registries, and issues related to patients' rights and data privacy and confidentiality; 2) modeling and analysis of complex and/or dependent data structures, including techniques and software for spatial, clustered, longitudinal, survey, and genetic data, hierarchical and causal modeling, and data mining; 3) modeling and analysis of sparse data structures, including issues related to missing values, limits of detection, low dosages or exposures, and rare conditions; 4) design, modeling, and evaluation of public health interventions; and 5) applications of statistical methods in public health arenas including infectious and chronic disease prevention, injury and violence prevention, occupational and environmental exposures, and immunization.

Abstracts should be postmarked no later that July 1, 1998. Authors of papers accepted for presentations or posters will be notified by September 30, 1998. Registration and abstract information and additional information regarding scientific content of the symposium is available from CDC's Epidemiology Program Office, 1999 CDC and ATSDR Symposium on Statistical Methods, 1600 Clifton Road, NE, Mailstop D-01, Atlanta GA 30333; telephone (404) 639-3806; fax (404) 639-4463; or e-mail bam6@cdc.gov.

### Erratum: Vol. 47, No. RR-2

In the *MMWR Recommendations and Reports*, "Public Health Service Task Force Recommendations for the Use of Antiretroviral Drugs in Pregnant Women Infected with HIV-1 for Maternal Health and for Reducing Perinatal HIV-1 Transmission in the United States," on page 10, second paragraph, the correct reference after line nine should be *31* .

### Erratum: Vol. 46, No. 48

In the report, "Use of Clinical Preventive Services by Medicare Beneficiaries Aged ≥65 Years—United States, 1995," on page 1139, the percentages in the first sentence of the first paragraph were incorrect. The sentence should read: "The percentage of women aged ≥65 years who had received a mammogram during the 2 years preceding the survey ranged from *52.8%* (95% CI=*44.2%–61.3%*) (New Jersey) to *80.8%* (95% CI=*69.4%–92.2%*) (Alaska) (median: *65.5%*), and prevalences did not vary by region."

In the same report, in Table 1 on pages 1140–1, the mammography prevalence estimates and confidence intervals were incorrect. Following is the corrected table.

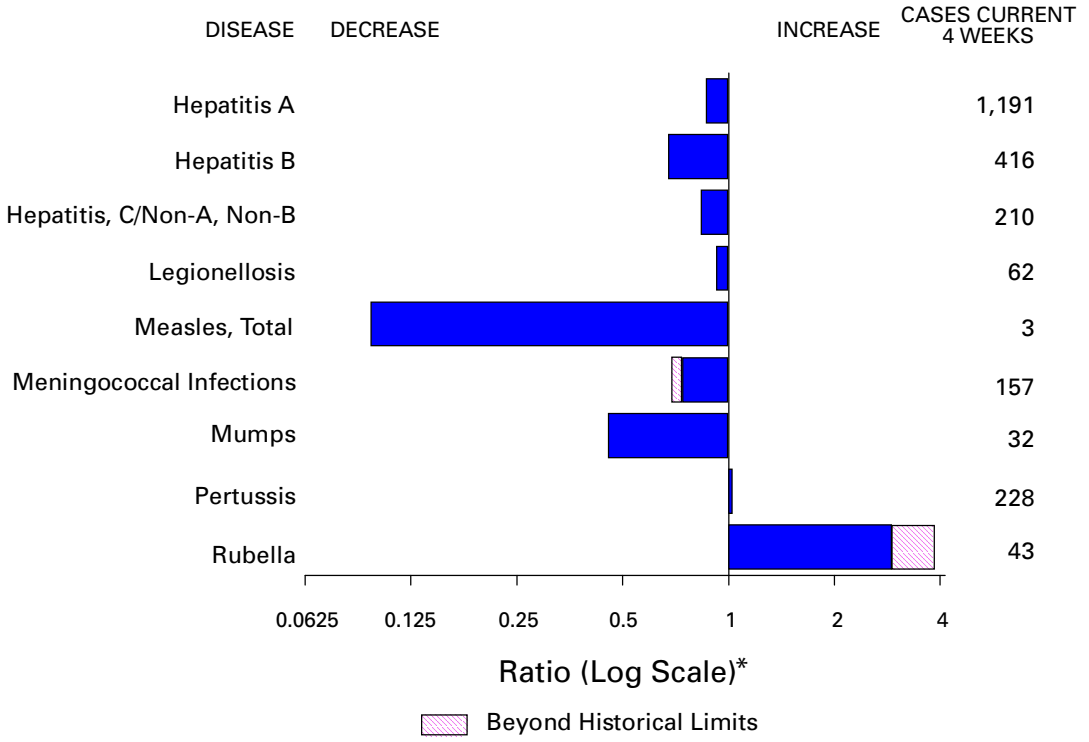
**TABLE 1. Estimated prevalence of use of four clinical preventive services by Medicare beneficiaries* aged ≥65 years, by service and state — United States, Behavioral Risk Factor Surveillance System (BRFSS), 1995**

| State | Influenza vaccination† | | Pneumococcal vaccination§ | | Mammography¶ | | Papanicolaou smear** | |
|---|---|---|---|---|---|---|---|---|
| | % | (95% CI††) | % | (95% CI) | % | (95% CI) | % | (95% CI) |
| Alabama | 46.2 | (40.3%–52.1%) | 33.4 | (27.9%–38.9%) | 66.3 | (59.2%–73.4%) | 64.3 | (55.1%–73.5%) |
| Alaska | 49.8 | (33.9%–65.7%) | 46.3 | (29.8%–62.8%) | 80.8 | (69.4%–92.2%) | 86.5 | (74.3%–98.7%) |
| Arizona | 65.0 | (59.1%–70.9%) | 49.3 | (43.0%–55.6%) | 80.5 | (73.9%–87.1%) | 88.5 | (83.4%–93.6%) |
| Arkansas | 62.1 | (57.0%–67.2%) | 37.6 | (32.1%–43.1%) | 63.7 | (57.3%–70.0%) | 68.7 | (59.9%–77.5%) |
| California | 60.9 | (56.0%–65.8%) | 44.8 | (39.9%–49.7%) | NA§§ | | NA | |
| Colorado | 66.9 | (61.4%–72.4%) | 46.7 | (40.6%–52.8%) | 65.5 | (58.9%–72.0%) | 70.2 | (61.6%–78.8%) |
| Connecticut | 63.2 | (57.5%–68.9%) | 38.3 | (32.6%–44.0%) | 79.0 | (73.2%–84.8%) | 70.0 | (61.8%–78.2%) |
| Delaware | 57.3 | (52.2%–62.4%) | 41.7 | (36.8%–46.6%) | 70.2 | (64.2%–76.2%) | 69.1 | (61.1%–77.1%) |
| Florida | 62.4 | (58.7%–66.1%) | 39.9 | (36.2%–43.6%) | 78.5 | (74.6%–82.4%) | 82.3 | (77.2%–87.4%) |
| Georgia | 47.6 | (42.7%–52.5%) | 40.5 | (35.6%–45.4%) | 75.4 | (69.6%–81.3%) | 73.9 | (65.7%–82.1%) |
| Hawaii | 62.4 | (56.9%–67.9%) | 42.9 | (37.2%–48.6%) | 74.4 | (68.3%–80.4%) | 78.7 | (70.7%–86.7%) |
| Idaho | 64.4 | (59.9%–68.9%) | 40.1 | (35.4%–44.8%) | 64.4 | (58.9%–69.8%) | 67.3 | (59.7%–74.9%) |
| Illinois | 57.7 | (51.4%–64.0%) | 29.0 | (23.3%–34.7%) | 70.4 | (65.5%–75.2%) | 71.7 | (65.6%–77.8%) |
| Indiana | 59.7 | (55.0%–64.4%) | 34.5 | (30.0%–39.0%) | 65.5 | (59.9%–71.1%) | 68.3 | (61.6%–75.0%) |
| Iowa | 63.7 | (60.2%–67.2%) | 44.8 | (40.9%–48.7%) | 63.6 | (59.1%–68.0%) | 67.9 | (62.4%–73.4%) |
| Kansas | 62.3 | (57.0%–67.6%) | 45.1 | (39.8%–50.4%) | 69.4 | (63.4%–75.5%) | 71.6 | (63.8%–79.4%) |
| Kentucky | 53.6 | (49.1%–58.1%) | 25.6 | (21.7%–29.5%) | 59.4 | (54.2%–64.7%) | 52.2 | (44.9%–59.5%) |
| Louisiana | 52.8 | (46.5%–59.1%) | 25.7 | (20.6%–30.8%) | 61.0 | (53.9%–68.1%) | 54.6 | (43.6%–65.6%) |
| Maine | 65.9 | (59.6%–72.2%) | 36.5 | (29.8%–43.2%) | 69.7 | (61.9%–77.5%) | 74.3 | (65.7%–82.9%) |
| Maryland | 58.4 | (54.7%–62.1%) | 33.6 | (30.1%–37.1%) | 76.9 | (73.0%–80.8%) | 69.1 | (63.6%–74.6%) |
| Massachusetts | 60.3 | (54.4%–66.2%) | 33.1 | (27.2%–39.0%) | 77.6 | (71.3%–83.9%) | 75.2 | (67.2%–83.2%) |
| Michigan | 57.2 | (52.3%–62.1%) | 40.0 | (35.1%–44.9%) | 77.4 | (72.5%–82.4%) | 71.4 | (64.3%–78.5%) |
| Minnesota | 63.6 | (59.9%–67.3%) | 40.5 | (36.8%–44.2%) | 69.7 | (65.2%–74.1%) | 73.2 | (68.1%–78.3%) |
| Mississippi | 57.1 | (51.2%–63.0%) | 40.0 | (34.1%–45.9%) | 54.0 | (47.0%–61.0%) | 63.9 | (54.9%–72.9%) |
| Missouri | 66.7 | (60.6%–72.8%) | 32.9 | (26.6%–39.2%) | 69.7 | (62.9%–76.6%) | 66.4 | (56.2%–76.6%) |
| Montana | 64.9 | (58.6%–71.2%) | 35.6 | (29.1%–42.1%) | 62.0 | (53.9%–70.1%) | 69.4 | (58.6%–80.2%) |
| Nebraska | 64.1 | (59.4%–68.8%) | 36.3 | (31.6%–41.0%) | 60.7 | (54.7%–66.6%) | 66.0 | (58.4%–73.6%) |
| Nevada | 52.4 | (46.5%–58.3%) | 40.4 | (34.5%–46.3%) | 63.6 | (56.2%–70.9%) | 70.4 | (60.2%–80.6%) |
| New Hampshire | 56.1 | (49.4%–62.8%) | 40.6 | (33.7%–47.5%) | 75.8 | (68.0%–83.6%) | 74.0 | (63.2%–84.8%) |
| New Jersey | 48.4 | (40.8%–56.0%) | 13.1 | ( 8.0%–18.2%) | 52.8 | (44.2%–61.3%) | 63.2 | (52.2%–74.2%) |
| New Mexico | 69.4 | (62.3%–76.5%) | 40.3 | (32.9%–47.7%) | 68.0 | (58.8%–77.1%) | 80.1 | (69.9%–90.3%) |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| New York | 56.6 | (51.3%–61.9%) | 26.9 | (22.0%–31.8%) | 64.8 | (58.3%–71.3%) | 64.2 | (56.8%–71.6%) |
| North Carolina | 52.9 | (49.0%–56.8%) | 31.7 | (28.2%–35.2%) | 65.5 | (61.0%–70.0%) | 73.2 | (67.7%–78.7%) |
| North Dakota | 57.4 | (52.5%–62.3%) | 33.3 | (28.4%–38.2%) | 62.9 | (57.0%–68.9%) | 66.2 | (58.6%–73.8%) |
| Ohio | 62.7 | (56.0%–69.4%) | 40.4 | (33.3%–47.5%) | 64.6 | (56.9%–72.3%) | 66.4 | (56.2%–76.6%) |
| Oklahoma | 61.0 | (56.3%–65.7%) | 36.9 | (32.2%–41.6%) | 58.5 | (52.3%–64.6%) | 71.4 | (62.0%–80.8%) |
| Oregon | 67.3 | (63.2%–71.4%) | 46.1 | (41.6%–50.6%) | 76.9 | (72.2%–81.6%) | 80.7 | (74.4%–87.0%) |
| Pennsylvania | 58.7 | (54.2%–63.2%) | 38.7 | (33.8%–43.6%) | 60.5 | (55.4%–65.6%) | 61.7 | (55.0%–68.4%) |
| Rhode Island | 66.8 | (61.3%–72.3%) | 31.0 | (25.5%–36.5%) | 70.1 | (63.3%–76.8%) | 59.3 | (50.3%–68.3%) |
| South Carolina | 51.7 | (46.0%–57.4%) | 26.8 | (21.9%–31.7%) | 70.6 | (63.8%–77.4%) | 77.6 | (68.6%–86.6%) |
| South Dakota | 60.1 | (55.2%–65.0%) | 31.2 | (26.3%–36.1%) | 60.7 | (54.1%–67.3%) | 69.1 | (61.3%–76.9%) |
| Tennessee | 63.6 | (58.1%–69.1%) | 29.5 | (24.6%–34.4%) | 64.7 | (58.5%–71.0%) | 66.9 | (58.7%–75.1%) |
| Texas | 57.3 | (50.4%–64.2%) | 45.6 | (38.3%–52.9%) | 63.8 | (56.1%–71.4%) | 64.9 | (54.1%–75.7%) |
| Utah | 70.3 | (65.4%–75.2%) | 42.9 | (37.4%–48.4%) | 67.2 | (61.3%–73.1%) | 72.0 | (64.2%–79.8%) |
| Vermont | 64.0 | (59.1%–68.9%) | 36.0 | (31.1%–40.9%) | 65.9 | (59.7%–72.0%) | 77.5 | (70.8%–84.2%) |
| Virginia | 53.2 | (46.3%–60.1%) | 40.2 | (32.9%–47.5%) | 72.1 | (63.9%–80.4%) | 79.5 | (70.5%–88.5%) |
| Washington | 67.5 | (63.0%–72.0%) | 46.7 | (41.8%–51.6%) | 75.3 | (70.2%–80.4%) | 77.0 | (69.6%–84.4%) |
| West Virginia | 53.6 | (49.3%–57.9%) | 37.1 | (32.6%–41.6%) | 61.7 | (56.6%–66.9%) | 65.7 | (59.2%–72.2%) |
| Wisconsin | 56.7 | (50.8%–62.6%) | 35.8 | (30.1%–41.5%) | 59.6 | (52.2%–67.0%) | 71.7 | (63.1%–80.3%) |
| Wyoming | 66.5 | (61.4%–71.6%) | 44.4 | (39.1%–49.7%) | 59.6 | (52.1%–67.0%) | 63.5 | (54.7%–72.3%) |

* All persons responding to the BRFSS questionnaire were asked "Do you have any kind of health-care coverage, including health insurance, prepaid plans such as HMOs [health-maintenance organizations], or government plans such as Medicare?" A "yes" response was used as a proxy for Medicare coverage.
† Vaccination received during the 12 months preceding the survey.
§ Vaccination received during their lifetime.
¶ Service received during the previous 2 years.
** Service received during the previous 3 years. Excludes women with no uterine cervix.
†† Confidence interval.
§§ Female respondents from California were excluded from these estimates because of the different wording of the survey questions in that state.

**FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending April 11, 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 April 11, 1998 (14th Week)**

| | Cum. 1998 | | Cum. 1998 |
|---|---|---|---|
| Anthrax | - | Plague | - |
| Brucellosis | 4 | Poliomyelitis, paralytic¶ | - |
| Cholera | - | Psittacosis | 11 |
| Congenital rubella syndrome | 1 | Rabies, human | - |
| Cryptosporidiosis* | 474 | Rocky Mountain spotted fever (RMSF) | 15 |
| Diphtheria | - | Streptococcal disease, invasive Group A | 500 |
| Encephalitis: California* | - | Streptococcal toxic-shock syndrome* | 18 |
| eastern equine* | - | Syphilis, congenital** | 10 |
| St. Louis* | - | Tetanus | 3 |
| western equine* | - | Toxic-shock syndrome | 30 |
| Hansen Disease | 28 | Trichinosis | 1 |
| Hantavirus pulmonary syndrome*† | - | Typhoid fever | 75 |
| Hemolytic uremic syndrome, post-diarrheal* | 4 | Yellow fever | - |
| HIV infection, pediatric*§ | 72 | | |

-: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 March 29, 1998.
¶ One suspected case of polio with onset in 1998 has also been reported to date.
**Updated from reports to the Division of STD Prevention, NCHSTP.

# TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending April 11, 1998, and April 5, 1997 (14th 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 | 12,103 | 16,345 | 130,526 | 119,480 | 196 | 82 | 79,081 | 73,891 | 839 | 734 |
| NEW ENGLAND | 320 | 461 | 4,982 | 4,731 | 23 | 11 | 1,277 | 1,630 | 10 | 20 |
| Maine | 8 | 18 | 249 | 252 | 1 | - | 13 | 13 | - | - |
| N.H. | 13 | 4 | 253 | 208 | 5 | 2 | 27 | 43 | - | 2 |
| Vt. | 8 | 10 | 92 | 117 | - | - | 2 | 15 | - | 1 |
| Mass. | 98 | 217 | 2,380 | 1,943 | 9 | 9 | 571 | 630 | 10 | 17 |
| R.I. | 32 | 43 | 662 | 573 | 3 | - | 88 | 145 | - | - |
| Conn. | 161 | 169 | 1,346 | 1,638 | 5 | - | 576 | 784 | - | - |
| MID. ATLANTIC | 3,425 | 5,157 | 16,404 | 15,003 | 14 | 5 | 9,332 | 9,500 | 106 | 68 |
| Upstate N.Y. | 425 | 845 | N | N | 11 | - | 1,271 | 1,625 | 90 | 50 |
| N.Y. City | 1,936 | 2,636 | 8,925 | 8,039 | - | 3 | 4,074 | 3,852 | - | - |
| N.J. | 580 | 1,109 | 1,971 | 2,794 | 3 | 2 | 1,527 | 1,914 | - | - |
| Pa. | 484 | 567 | 5,508 | 4,170 | N | - | 2,460 | 2,109 | 16 | 18 |
| E.N. CENTRAL | 995 | 1,213 | 22,002 | 19,224 | 34 | 9 | 15,446 | 11,304 | 118 | 182 |
| Ohio | 169 | 251 | 6,429 | 6,045 | 12 | - | 3,867 | 3,796 | 5 | 5 |
| Ind. | 261 | 283 | 2,499 | 2,368 | 6 | 3 | 1,630 | 1,660 | 3 | 3 |
| Ill. | 376 | 369 | 6,154 | 2,982 | 10 | - | 5,095 | 1,551 | 5 | 24 |
| Mich. | 143 | 248 | 5,392 | 4,855 | 6 | 2 | 4,294 | 3,091 | 105 | 140 |
| Wis. | 46 | 62 | 1,528 | 2,974 | N | 4 | 560 | 1,206 | - | 10 |
| W.N. CENTRAL | 215 | 367 | 8,411 | 8,343 | 24 | 12 | 3,784 | 3,425 | 83 | 37 |
| Minn. | 32 | 54 | 1,521 | 2,021 | 9 | 6 | 526 | 675 | - | - |
| Iowa | 11 | 51 | 1,088 | 1,245 | 2 | - | 306 | 314 | 8 | 8 |
| Mo. | 101 | 194 | 3,213 | 3,059 | 4 | 5 | 2,023 | 1,750 | 73 | 21 |
| N. Dak. | 3 | 3 | 215 | 264 | 1 | 1 | 18 | 17 | - | 2 |
| S. Dak. | 7 | 2 | 442 | 291 | - | - | 75 | 31 | - | - |
| Nebr. | 26 | 28 | 789 | 441 | 3 | - | 314 | 157 | - | 1 |
| Kans. | 35 | 35 | 1,143 | 1,022 | 5 | - | 522 | 481 | 2 | 5 |
| S. ATLANTIC | 3,235 | 4,175 | 27,813 | 22,196 | 23 | 9 | 22,657 | 22,237 | 44 | 51 |
| Del. | 40 | 51 | 664 | - | - | 1 | 380 | 286 | - | - |
| Md. | 334 | 435 | 2,252 | 1,849 | 9 | 4 | 2,489 | 3,407 | 3 | 5 |
| D.C. | 266 | 244 | N | N | - | - | 958 | 1,234 | - | - |
| Va. | 231 | 325 | 2,945 | 2,988 | N | 4 | 1,947 | 2,317 | 1 | 4 |
| W. Va. | 30 | 21 | 757 | 902 | N | - | 193 | 264 | 2 | 1 |
| N.C. | 217 | 218 | 6,164 | 4,804 | 7 | - | 5,160 | 4,393 | 7 | 17 |
| S.C. | 187 | 211 | 4,876 | 3,331 | 1 | - | 3,142 | 2,961 | - | 12 |
| Ga. | 371 | 529 | 5,768 | 2,070 | 2 | - | 4,919 | 2,939 | 8 | - |
| Fla. | 1,559 | 2,141 | 4,387 | 6,252 | 4 | - | 3,469 | 4,436 | 23 | 12 |
| E.S. CENTRAL | 444 | 472 | 10,706 | 8,695 | 15 | 3 | 10,255 | 8,936 | 28 | 89 |
| Ky. | 65 | 48 | 1,693 | 1,703 | 2 | - | 987 | 1,149 | - | 5 |
| Tenn. | 144 | 200 | 3,488 | 3,145 | 9 | 3 | 2,952 | 2,725 | 25 | 47 |
| Ala. | 119 | 129 | 2,794 | 2,148 | 4 | - | 3,543 | 2,988 | 3 | 5 |
| Miss. | 116 | 95 | 2,731 | 1,699 | - | - | 2,773 | 2,074 | - | 32 |
| W.S. CENTRAL | 1,370 | 1,463 | 15,785 | 14,516 | 2 | - | 10,009 | 9,820 | 9 | 62 |
| Ark. | 52 | 58 | 979 | 648 | 1 | - | 1,087 | 1,151 | - | 1 |
| La. | 212 | 239 | 3,144 | 1,798 | - | - | 2,702 | 1,781 | - | 44 |
| Okla. | 71 | 86 | 2,425 | 2,061 | 1 | - | 1,352 | 1,351 | - | 2 |
| Tex. | 1,035 | 1,080 | 9,237 | 10,009 | - | - | 4,868 | 5,537 | 9 | 15 |
| MOUNTAIN | 389 | 461 | 5,010 | 6,461 | 15 | 9 | 1,884 | 2,058 | 225 | 85 |
| Mont. | 10 | 12 | 256 | 212 | 1 | - | 15 | 13 | 4 | 3 |
| Idaho | 8 | 8 | 486 | 417 | 2 | - | 42 | 33 | 68 | 14 |
| Wyo. | 1 | 9 | 197 | 121 | - | - | 11 | 16 | 101 | 29 |
| Colo. | 65 | 128 | - | 906 | 2 | 1 | 699 | 548 | 10 | 13 |
| N. Mex. | 55 | 35 | 1,095 | 1,051 | 5 | 3 | 192 | 346 | 20 | 14 |
| Ariz. | 128 | 122 | 2,427 | 2,577 | N | 2 | 833 | 832 | - | 7 |
| Utah | 35 | 35 | 409 | 399 | 3 | 1 | 44 | 47 | 11 | 2 |
| Nev. | 87 | 112 | 140 | 778 | 2 | 2 | 48 | 223 | 11 | 3 |
| PACIFIC | 1,710 | 2,576 | 19,413 | 20,311 | 46 | 24 | 4,437 | 4,981 | 216 | 140 |
| Wash. | 137 | 175 | 2,975 | 2,503 | 11 | 11 | 504 | 585 | 5 | 7 |
| Oreg. | 40 | 97 | 1,543 | 1,291 | 10 | 8 | 228 | 183 | 2 | 1 |
| Calif. | 1,499 | 2,269 | 13,961 | 15,741 | 25 | 3 | 3,540 | 3,964 | 174 | 86 |
| Alaska | 11 | 18 | 553 | 364 | - | - | 84 | 131 | 1 | - |
| Hawaii | 23 | 17 | 381 | 412 | N | 2 | 81 | 118 | 34 | 46 |
| Guam | - | 2 | 8 | 123 | N | - | 2 | 15 | - | - |
| P.R. | 460 | 419 | U | U | 1 | U | 85 | 165 | 1 | 20 |
| V.I. | 13 | 16 | N | N | N | U | - | - | - | - |
| Amer. Samoa | - | - | - | - | N | U | - | - | - | - |
| C.N.M.I. | - | - | N | N | N | U | 7 | 10 | - | 2 |

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 March 29, 1998.

†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 April 11, 1998, and April 5, 1997 (14th 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 | 252 | 227 | 884 | 832 | 262 | 327 | 1,805 | 2,338 | 1,419 | 3,854 | 1,840 |
| NEW ENGLAND | 11 | 18 | 140 | 176 | 11 | 12 | 20 | 40 | 58 | 93 | 349 |
| Maine | 1 | 1 | - | 1 | 1 | - | 1 | - | U | 10 | 58 |
| N.H. | 2 | 2 | 5 | 4 | 1 | 1 | - | - | 2 | 1 | 32 |
| Vt. | 1 | 3 | 2 | 2 | - | 1 | - | - | 1 | - | 15 |
| Mass. | 3 | 7 | 40 | 30 | 9 | 9 | 17 | 18 | 43 | 46 | 98 |
| R.I. | 4 | 1 | 16 | 24 | - | 1 | - | - | 12 | 7 | 27 |
| Conn. | - | 4 | 77 | 115 | - | - | 2 | 22 | U | 29 | 119 |
| MID. ATLANTIC | 56 | 37 | 561 | 539 | 71 | 78 | 60 | 106 | 118 | 652 | 420 |
| Upstate N.Y. | 16 | 7 | 328 | 55 | 23 | 11 | 3 | 14 | U | 73 | 283 |
| N.Y. City | 6 | 1 | - | 40 | 32 | 46 | 9 | 18 | U | 356 | U |
| N.J. | 2 | 5 | 3 | 126 | 8 | 15 | 14 | 53 | 118 | 142 | 55 |
| Pa. | 32 | 24 | 230 | 318 | 8 | 6 | 34 | 21 | U | 81 | 82 |
| E.N. CENTRAL | 85 | 96 | 22 | 10 | 16 | 31 | 255 | 203 | 74 | 409 | 14 |
| Ohio | 43 | 47 | 21 | 5 | 1 | 2 | 52 | 69 | 5 | 90 | 14 |
| Ind. | 15 | 12 | 1 | 4 | 1 | 4 | 49 | 47 | U | 37 | - |
| Ill. | 5 | 4 | - | 1 | 5 | 12 | 104 | 18 | 69 | 200 | - |
| Mich. | 17 | 24 | - | - | 8 | 11 | 38 | 22 | U | 56 | - |
| Wis. | 5 | 9 | U | U | 1 | 2 | 12 | 47 | U | 26 | - |
| W.N. CENTRAL | 18 | 17 | 6 | 2 | 15 | 8 | 44 | 54 | 52 | 108 | 147 |
| Minn. | 1 | - | 1 | - | 8 | 3 | - | 13 | U | 34 | 29 |
| Iowa | 1 | 1 | 4 | - | 2 | 2 | - | 2 | U | 10 | 33 |
| Mo. | 8 | 7 | - | 1 | 3 | 3 | 34 | 26 | 47 | 40 | 9 |
| N. Dak. | - | 1 | - | - | - | - | - | - | U | 2 | 39 |
| S. Dak. | - | 1 | - | - | - | - | - | - | 4 | 2 | 14 |
| Nebr. | 6 | 5 | - | 1 | - | - | 4 | - | - | - | - |
| Kans. | 2 | 2 | 1 | - | 2 | - | 6 | 13 | U | 20 | 23 |
| S. ATLANTIC | 44 | 23 | 112 | 74 | 68 | 69 | 746 | 926 | 260 | 612 | 646 |
| Del. | 6 | 3 | - | 13 | 1 | 2 | 7 | 7 | - | 8 | 17 |
| Md. | 8 | 10 | 94 | 51 | 23 | 23 | 174 | 270 | 65 | 57 | 144 |
| D.C. | 3 | 1 | 4 | 4 | 3 | 5 | 26 | 32 | 27 | 21 | - |
| Va. | 3 | 1 | 3 | - | 7 | 16 | 52 | 81 | 53 | 86 | 182 |
| W. Va. | N | N | 2 | - | - | - | - | 2 | 17 | 13 | 25 |
| N.C. | 4 | 3 | 1 | 2 | 7 | 5 | 218 | 194 | 98 | 89 | 136 |
| S.C. | 4 | 2 | - | 1 | - | 3 | 85 | 106 | U | 64 | 34 |
| Ga. | - | - | 2 | 1 | 12 | 9 | 122 | 167 | U | 112 | 43 |
| Fla. | 16 | 3 | 6 | 2 | 15 | 6 | 62 | 67 | U | 162 | 65 |
| E.S. CENTRAL | 4 | 8 | 10 | 17 | 7 | 7 | 335 | 524 | - | 288 | 68 |
| Ky. | 1 | - | - | 1 | - | 1 | 38 | 43 | U | 42 | 12 |
| Tenn. | 3 | 3 | 5 | 3 | 4 | 2 | 163 | 212 | U | 108 | 37 |
| Ala. | - | 2 | 5 | 2 | 3 | 1 | 73 | 134 | U | 89 | 19 |
| Miss. | - | 3 | - | 11 | - | 3 | 61 | 135 | U | 49 | - |
| W.S. CENTRAL | - | 1 | - | 2 | 3 | 5 | 193 | 353 | 22 | 567 | 52 |
| Ark. | - | - | - | - | - | 1 | 38 | 43 | 22 | 45 | 1 |
| La. | - | - | - | 1 | 3 | 3 | 87 | 119 | - | 22 | - |
| Okla. | - | 1 | - | - | - | 1 | 13 | 32 | U | 44 | 51 |
| Tex. | - | - | - | 1 | - | - | 55 | 159 | U | 456 | - |
| MOUNTAIN | 15 | 15 | 1 | - | 15 | 17 | 57 | 40 | 68 | 110 | 41 |
| Mont. | 1 | 1 | - | - | - | 1 | - | - | 2 | 2 | 15 |
| Idaho | - | 1 | - | - | 1 | - | - | - | 2 | 1 | - |
| Wyo. | 1 | 1 | - | - | - | 1 | - | - | 1 | 1 | 25 |
| Colo. | 4 | 4 | - | - | 5 | 9 | 4 | - | U | 20 | - |
| N. Mex. | 1 | - | - | - | 6 | 2 | - | - | 7 | 5 | - |
| Ariz. | 1 | 3 | - | - | 2 | 1 | 50 | 33 | 39 | 49 | 1 |
| Utah | 6 | 4 | - | - | 1 | - | 2 | 1 | 17 | 4 | - |
| Nev. | 1 | 1 | 1 | - | - | 3 | 1 | 6 | U | 28 | - |
| PACIFIC | 19 | 12 | 32 | 12 | 56 | 100 | 95 | 92 | 767 | 1,015 | 103 |
| Wash. | 1 | 2 | 1 | - | 1 | 2 | 4 | 5 | U | 75 | - |
| Oreg. | - | - | 1 | 5 | 6 | 7 | 2 | 1 | U | 31 | - |
| Calif. | 18 | 9 | 30 | 7 | 49 | 90 | 89 | 85 | 715 | 826 | 93 |
| Alaska | - | - | - | - | - | 1 | - | - | 11 | 26 | 10 |
| Hawaii | - | 1 | - | - | - | - | - | 1 | 41 | 57 | - |
| Guam | - | - | - | - | - | - | - | 2 | - | 13 | - |
| P.R. | - | - | - | - | - | 3 | 75 | 59 | - | - | 20 |
| V.I. | - | - | - | - | - | - | - | - | - | - | - |
| Amer. Samoa | - | - | - | - | - | - | - | - | - | - | - |
| C.N.M.I. | - | - | - | - | - | - | 1 | 2 | 8 | - | - |

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

*Additional information about areas displaying "U" for cumulative 1998 Tuberculosis cases can be found in Notice to Readers, *MMWR* Vol. 47, No. 2, p. 39.

# TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending April 11, 1998, and April 5, 1997 (14th 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 | 286 | 322 | 4,566 | 7,147 | 1,686 | 2,301 | - | 1 | - | 7 | 8 | 21 |
| NEW ENGLAND | 15 | 19 | 85 | 170 | 13 | 52 | - | - | - | 1 | 1 | - |
| Maine | 2 | 2 | 10 | 12 | - | 3 | - | - | - | - | - | - |
| N.H. | 1 | 2 | 6 | 8 | 4 | 4 | - | - | - | - | - | - |
| Vt. | 2 | - | 6 | 4 | - | 1 | - | - | - | - | - | - |
| Mass. | 10 | 14 | 17 | 94 | 6 | 29 | - | - | - | 1 | 1 | - |
| R.I. | - | 1 | 6 | 11 | 3 | 4 | - | - | - | - | - | - |
| Conn. | - | - | 40 | 41 | - | 11 | - | - | - | - | - | - |
| MID. ATLANTIC | 39 | 43 | 250 | 643 | 226 | 356 | - | - | - | 1 | 1 | 9 |
| Upstate N.Y. | 16 | 1 | 94 | 50 | 82 | 54 | - | - | - | - | - | 3 |
| N.Y. City | 7 | 18 | 67 | 336 | 51 | 152 | U | - | U | - | - | 4 |
| N.J. | 15 | 14 | 2 | 102 | - | 72 | - | - | - | - | - | 1 |
| Pa. | 1 | 10 | 87 | 155 | 93 | 78 | - | - | - | 1 | 1 | 1 |
| E.N. CENTRAL | 44 | 49 | 650 | 931 | 199 | 469 | - | - | - | 1 | 1 | 4 |
| Ohio | 22 | 24 | 105 | 131 | 22 | 28 | - | - | - | - | - | - |
| Ind. | 5 | 4 | 66 | 82 | 20 | 29 | - | - | - | - | - | - |
| Ill. | 16 | 15 | 92 | 252 | 29 | 94 | - | - | - | - | - | 3 |
| Mich. | - | 6 | 361 | 404 | 124 | 146 | - | - | - | 1 | 1 | 1 |
| Wis. | 1 | - | 26 | 62 | 4 | 172 | - | - | - | - | - | - |
| W.N. CENTRAL | 14 | 9 | 510 | 501 | 101 | 152 | - | - | - | - | - | 1 |
| Minn. | 5 | 2 | 20 | 27 | 7 | 3 | - | - | - | - | - | - |
| Iowa | 1 | 2 | 237 | 70 | 14 | 7 | - | - | - | - | - | - |
| Mo. | 4 | 2 | 199 | 290 | 65 | 126 | - | - | - | - | - | 1 |
| N. Dak. | - | - | 2 | 5 | 1 | - | - | - | - | - | - | - |
| S. Dak. | - | 2 | 2 | 6 | 1 | - | - | - | - | - | - | - |
| Nebr. | - | - | 11 | 17 | 2 | 7 | - | - | - | - | - | - |
| Kans. | 4 | 1 | 39 | 86 | 11 | 9 | U | - | U | - | - | - |
| S. ATLANTIC | 73 | 63 | 493 | 393 | 277 | 259 | - | 1 | - | 4 | 5 | - |
| Del. | - | - | - | 10 | - | 1 | - | - | - | - | - | - |
| Md. | 17 | 24 | 107 | 99 | 38 | 45 | - | - | - | 1 | 1 | - |
| D.C. | - | - | 15 | 11 | 3 | 18 | - | - | - | - | - | - |
| Va. | 9 | 4 | 78 | 47 | 28 | 27 | - | - | - | 2 | 2 | - |
| W. Va. | 2 | 2 | - | 5 | 1 | 6 | - | - | - | - | - | - |
| N.C. | 8 | 10 | 28 | 56 | 69 | 63 | - | - | - | - | - | - |
| S.C. | 1 | 3 | 8 | 31 | - | 20 | - | - | - | - | - | - |
| Ga. | 17 | 15 | 111 | 39 | 59 | 14 | - | - | - | 1 | 1 | - |
| Fla. | 19 | 5 | 146 | 95 | 79 | 65 | - | 1 | - | - | 1 | - |
| E.S. CENTRAL | 15 | 16 | 107 | 168 | 126 | 164 | - | - | - | - | - | 1 |
| Ky. | - | 3 | - | 25 | - | 10 | - | - | - | - | - | - |
| Tenn. | 10 | 10 | 76 | 80 | 101 | 104 | - | - | - | - | - | - |
| Ala. | 5 | 3 | 31 | 35 | 25 | 21 | - | - | - | - | - | 1 |
| Miss. | - | - | - | 28 | - | 29 | - | - | - | - | - | - |
| W.S. CENTRAL | 16 | 15 | 257 | 1,053 | 90 | 149 | - | - | - | - | - | - |
| Ark. | - | 1 | 14 | 62 | 19 | 17 | - | - | - | - | - | - |
| La. | 7 | 1 | 8 | 54 | 8 | 34 | U | - | U | - | - | - |
| Okla. | 8 | 11 | 126 | 460 | 14 | 9 | - | - | - | - | - | - |
| Tex. | 1 | 2 | 109 | 477 | 49 | 89 | - | - | - | - | - | - |
| MOUNTAIN | 48 | 38 | 913 | 1,127 | 225 | 231 | - | - | - | - | - | - |
| Mont. | - | - | 9 | 34 | 2 | 1 | - | - | - | - | - | - |
| Idaho | - | - | 60 | 53 | 9 | 7 | - | - | - | - | - | - |
| Wyo. | - | 1 | 16 | 14 | 5 | 6 | - | - | - | - | - | - |
| Colo. | 10 | 5 | 72 | 136 | 30 | 47 | - | - | - | - | - | - |
| N. Mex. | - | 2 | 50 | 71 | 89 | 79 | - | - | - | - | - | - |
| Ariz. | 30 | 12 | 602 | 492 | 55 | 46 | - | - | - | - | - | - |
| Utah | 4 | 3 | 55 | 238 | 19 | 30 | - | - | - | - | - | - |
| Nev. | 4 | 15 | 49 | 89 | 16 | 15 | U | - | U | - | - | - |
| PACIFIC | 22 | 70 | 1,301 | 2,161 | 429 | 469 | - | - | - | - | - | 6 |
| Wash. | 1 | 1 | 193 | 151 | 35 | 16 | - | - | - | - | - | - |
| Oreg. | 19 | 13 | 103 | 118 | 35 | 35 | - | - | - | - | - | - |
| Calif. | - | 53 | 995 | 1,835 | 354 | 406 | - | - | - | - | - | 3 |
| Alaska | 1 | 1 | 2 | 12 | 2 | 8 | - | - | - | - | - | - |
| Hawaii | 1 | 2 | 8 | 45 | 3 | 4 | U | - | U | - | - | 3 |
| Guam | - | - | - | - | - | 1 | U | - | U | - | - | - |
| P.R. | - | - | 9 | 106 | 156 | 366 | - | - | - | - | - | - |
| V.I. | - | - | - | - | - | - | U | - | U | - | - | - |
| Amer. Samoa | - | - | - | - | - | - | U | - | U | - | - | - |
| C.N.M.I. | - | 4 | - | 1 | 7 | 16 | U | - | U | - | - | 1 |

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

*Of 64 cases among children aged <5 years, serotype was reported for 26 and of those, 14 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 April 11, 1998, and April 5, 1997 (14th Week)

| Reporting Area | Meningococcal Disease | | Mumps | | | Pertussis | | | Rubella | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cum. 1998 | Cum. 1997 | 1998 | Cum. 1998 | Cum. 1997 | 1998 | Cum. 1998 | Cum. 1997 | 1998 | Cum. 1998 | Cum. 1997 |
| UNITED STATES | 855 | 1,183 | 11 | 118 | 155 | 37 | 938 | 1,364 | 4 | 121 | 13 |
| NEW ENGLAND | 51 | 71 | - | - | 6 | 4 | 168 | 376 | - | 21 | - |
| Maine | 4 | 8 | - | - | - | 1 | 5 | 6 | - | - | - |
| N.H. | 1 | 6 | - | - | - | 2 | 18 | 40 | - | - | - |
| Vt. | 1 | 2 | - | - | - | - | 22 | 127 | - | - | - |
| Mass. | 24 | 43 | - | - | 1 | 1 | 118 | 187 | - | 2 | - |
| R.I. | 3 | 2 | - | - | 4 | - | - | 11 | - | - | - |
| Conn. | 18 | 10 | - | - | 1 | - | 5 | 5 | - | 19 | - |
| MID. ATLANTIC | 92 | 115 | - | 5 | 19 | 2 | 137 | 124 | 2 | 66 | 5 |
| Upstate N.Y. | 24 | 24 | - | 2 | 4 | 2 | 80 | 53 | 2 | 66 | 1 |
| N.Y. City | 8 | 20 | U | - | 1 | U | - | 28 | U | - | 4 |
| N.J. | 24 | 22 | - | - | 3 | - | - | 7 | - | - | - |
| Pa. | 36 | 49 | - | 3 | 11 | - | 57 | 36 | - | - | - |
| E.N. CENTRAL | 126 | 161 | 1 | 18 | 23 | 4 | 102 | 158 | - | - | 3 |
| Ohio | 53 | 59 | 1 | 10 | 7 | 2 | 38 | 53 | - | - | - |
| Ind. | 23 | 17 | - | - | 4 | - | 34 | 11 | - | - | - |
| Ill. | 25 | 51 | - | - | 7 | 2 | 7 | 18 | - | - | - |
| Mich. | 12 | 14 | - | 8 | 4 | - | 13 | 24 | - | - | - |
| Wis. | 13 | 20 | - | - | 1 | - | 10 | 52 | - | - | 3 |
| W.N. CENTRAL | 71 | 87 | 5 | 15 | 7 | 9 | 76 | 74 | - | 1 | - |
| Minn. | 6 | 2 | 4 | 8 | 3 | 9 | 50 | 45 | - | - | - |
| Iowa | 11 | 21 | 1 | 5 | 3 | - | 13 | 7 | - | - | - |
| Mo. | 31 | 47 | - | 1 | - | - | 9 | 9 | - | 1 | - |
| N. Dak. | - | - | - | 1 | - | - | - | 1 | - | - | - |
| S. Dak. | 5 | 3 | - | - | - | - | 2 | 1 | - | - | - |
| Nebr. | 3 | 4 | - | - | 1 | - | 2 | 2 | - | - | - |
| Kans. | 15 | 10 | U | - | - | U | - | 9 | U | - | - |
| S. ATLANTIC | 161 | 204 | 2 | 20 | 19 | 2 | 83 | 120 | 1 | 3 | - |
| Del. | 1 | 4 | - | - | - | - | - | - | - | - | - |
| Md. | 16 | 25 | - | 2 | 2 | 1 | 16 | 56 | 1 | 1 | - |
| D.C. | - | 5 | - | - | - | - | - | 2 | - | - | - |
| Va. | 15 | 14 | 1 | 4 | 1 | - | 6 | 17 | - | - | - |
| W. Va. | 4 | 6 | - | - | - | - | 1 | 3 | - | - | - |
| N.C. | 22 | 39 | - | 6 | 5 | - | 38 | 25 | - | 1 | - |
| S.C. | 20 | 31 | - | 3 | 1 | 1 | 7 | 4 | - | 1 | - |
| Ga. | 37 | 34 | - | - | 2 | - | - | 2 | - | - | - |
| Fla. | 46 | 46 | 1 | 5 | 8 | - | 15 | 11 | - | - | - |
| E.S. CENTRAL | 56 | 86 | - | - | 11 | 1 | 16 | 32 | - | - | - |
| Ky. | - | 20 | - | - | - | - | 1 | 9 | - | - | - |
| Tenn. | 29 | 27 | - | - | 3 | 1 | 6 | 10 | - | - | - |
| Ala. | 27 | 27 | - | - | 4 | - | 9 | 7 | - | - | - |
| Miss. | - | 12 | - | - | 4 | - | - | 6 | - | - | - |
| W.S. CENTRAL | 44 | 105 | 1 | 21 | 16 | 4 | 46 | 23 | 1 | 24 | - |
| Ark. | 10 | 19 | - | - | - | - | 5 | 2 | - | - | - |
| La. | 16 | 21 | U | - | 5 | U | - | 6 | U | - | - |
| Okla. | 18 | 13 | - | - | - | - | 6 | - | - | - | - |
| Tex. | - | 52 | 1 | 21 | 11 | 4 | 35 | 15 | 1 | 24 | - |
| MOUNTAIN | 60 | 77 | 1 | 9 | 7 | 6 | 221 | 247 | - | 5 | - |
| Mont. | 2 | 4 | - | - | - | - | 1 | 2 | - | - | - |
| Idaho | 2 | 5 | - | - | 2 | 3 | 113 | 140 | - | - | - |
| Wyo. | 3 | - | - | 1 | - | - | - | 3 | - | - | - |
| Colo. | 14 | 21 | - | 1 | 2 | 1 | 30 | 77 | - | - | - |
| N. Mex. | 12 | 13 | N | N | N | - | 47 | 12 | - | 1 | - |
| Ariz. | 21 | 16 | - | 2 | - | 1 | 18 | 9 | - | 1 | - |
| Utah | 5 | 9 | 1 | 1 | 1 | 1 | 9 | 1 | - | 2 | - |
| Nev. | 1 | 9 | U | 4 | 2 | U | 3 | 3 | U | 1 | - |
| PACIFIC | 194 | 277 | 1 | 30 | 47 | 5 | 89 | 210 | - | 1 | 5 |
| Wash. | 24 | 27 | - | 4 | 3 | 5 | 78 | 98 | - | - | - |
| Oreg. | 41 | 61 | N | N | N | - | 8 | 5 | - | - | - |
| Calif. | 126 | 186 | 1 | 16 | 32 | - | - | 101 | - | - | 1 |
| Alaska | 1 | 1 | - | 2 | 2 | - | - | 2 | - | - | - |
| Hawaii | 2 | 2 | U | 8 | 10 | U | 3 | 4 | U | 1 | 4 |
| Guam | - | 1 | U | - | 1 | U | - | - | U | - | - |
| P.R. | 1 | 6 | - | 2 | 4 | - | 2 | - | - | - | - |
| 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 April 11, 1998 (14th Week)

| Reporting Area | All Causes, By Age (Years) | | | | | | P&I† Total |
|---|---|---|---|---|---|---|---|
| | All Ages | >65 | 45-64 | 25-44 | 1-24 | <1 | |
| NEW ENGLAND | 482 | 378 | 65 | 20 | 4 | 14 | 37 |
| Boston, Mass. | 122 | 85 | 22 | 5 | 2 | 7 | 15 |
| Bridgeport, Conn. | 53 | 40 | 11 | 1 | 1 | - | 2 |
| Cambridge, Mass. | 11 | 8 | 2 | 1 | - | - | 2 |
| Fall River, Mass. | 20 | 20 | - | - | - | - | - |
| Hartford, Conn. | 51 | 45 | 4 | 1 | - | 1 | 2 |
| Lowell, Mass. | 26 | 21 | 3 | 1 | - | 1 | 2 |
| Lynn, Mass. | 13 | 12 | 1 | - | - | - | 1 |
| New Bedford, Mass. | 25 | 22 | 2 | 1 | - | - | - |
| New Haven, Conn. | 41 | 31 | 4 | 1 | 1 | 4 | 3 |
| Providence, R.I. | U | U | U | U | U | U | U |
| Somerville, Mass. | 2 | 1 | 1 | - | - | - | - |
| Springfield, Mass. | 48 | 33 | 8 | 6 | - | 1 | 5 |
| Waterbury, Conn. | 20 | 18 | 2 | - | - | - | 1 |
| Worcester, Mass. | 50 | 42 | 5 | 3 | - | - | 4 |
| MID. ATLANTIC | 2,240 | 1,587 | 430 | 153 | 24 | 36 | 111 |
| Albany, N.Y. | 38 | 31 | 3 | 2 | 1 | 1 | 2 |
| Allentown, Pa. | 27 | 23 | 3 | 1 | - | - | - |
| Buffalo, N.Y. | 62 | 49 | 9 | 2 | 1 | 1 | 1 |
| Camden, N.J. | 27 | 15 | 7 | 2 | 1 | 2 | 1 |
| Elizabeth, N.J. | 20 | 15 | 5 | - | - | - | - |
| Erie, Pa. | 41 | 35 | 5 | 1 | - | - | 5 |
| Jersey City, N.J. | 25 | 14 | 8 | 2 | - | 1 | - |
| New York City, N.Y. | 1,147 | 791 | 243 | 81 | 12 | 20 | 42 |
| Newark, N.J. | 69 | 45 | 11 | 2 | - | 1 | 2 |
| Paterson, N.J. | 10 | 4 | 2 | 4 | - | - | - |
| Philadelphia, Pa. | 400 | 276 | 89 | 30 | 3 | 2 | 24 |
| Pittsburgh, Pa.§ | 45 | 33 | 8 | 2 | - | 2 | 3 |
| Reading, Pa. | 22 | 20 | 2 | - | - | - | 1 |
| Rochester, N.Y. | 112 | 91 | 10 | 7 | 3 | 1 | 8 |
| Schenectady, N.Y. | 29 | 20 | 5 | 4 | - | - | 4 |
| Scranton, Pa. | 32 | 25 | 4 | 2 | 1 | - | - |
| Syracuse, N.Y. | 90 | 67 | 11 | 5 | 2 | 5 | 11 |
| Trenton, N.J. | 27 | 19 | 4 | 4 | - | - | 7 |
| Utica, N.Y. | 17 | 14 | 1 | 2 | - | - | - |
| Yonkers, N.Y. | U | U | U | U | U | U | U |
| E.N. CENTRAL | 2,165 | 1,465 | 399 | 176 | 50 | 59 | 131 |
| Akron, Ohio | 49 | 32 | 11 | 4 | - | 2 | - |
| Canton, Ohio | 37 | 27 | 7 | 3 | - | - | 5 |
| Chicago, Ill. | 513 | 319 | 92 | 54 | 23 | 23 | 52 |
| Cincinnati, Ohio | 101 | 75 | 20 | 3 | 1 | 2 | 1 |
| Cleveland, Ohio | 119 | 74 | 26 | 12 | 2 | 5 | 4 |
| Columbus, Ohio | 185 | 129 | 37 | 14 | 3 | 2 | 18 |
| Dayton, Ohio | 123 | 96 | 21 | 5 | - | 1 | 6 |
| Detroit, Mich. | 201 | 113 | 50 | 26 | 5 | 7 | 7 |
| Evansville, Ind. | 44 | 38 | 5 | 1 | - | - | 1 |
| Fort Wayne, Ind. | 66 | 42 | 13 | 7 | 1 | 3 | - |
| Gary, Ind. | 18 | 13 | 2 | 3 | - | - | 1 |
| Grand Rapids, Mich. | 84 | 64 | 9 | 1 | 3 | 7 | 9 |
| Indianapolis, Ind. | 225 | 147 | 43 | 24 | 7 | 4 | - |
| Lansing, Mich. | 24 | 19 | 3 | 2 | - | - | 3 |
| Milwaukee, Wis. | 90 | 63 | 18 | 6 | 2 | 1 | 8 |
| Peoria, Ill. | 20 | 16 | 3 | - | 1 | - | 1 |
| Rockford, Ill. | 45 | 30 | 9 | 4 | 1 | 1 | 2 |
| South Bend, Ind. | 38 | 33 | 3 | 1 | - | 1 | 4 |
| Toledo, Ohio | 109 | 89 | 16 | 3 | 1 | - | 7 |
| Youngstown, Ohio | 74 | 46 | 11 | 3 | - | - | 2 |
| W.N. CENTRAL | 901 | 630 | 167 | 57 | 18 | 20 | 61 |
| Des Moines, Iowa | 104 | 77 | 17 | 6 | 1 | 3 | 9 |
| Duluth, Minn. | 29 | 22 | 2 | 4 | 1 | - | 3 |
| Kansas City, Kans. | 32 | 19 | 6 | 3 | 3 | 1 | 1 |
| Kansas City, Mo. | 109 | 56 | 28 | 11 | 3 | 2 | 2 |
| Lincoln, Nebr. | 34 | 26 | 8 | - | - | - | 4 |
| Minneapolis, Minn. | 206 | 147 | 37 | 11 | 4 | 7 | 17 |
| Omaha, Nebr. | 126 | 92 | 24 | 6 | 2 | 2 | 9 |
| St. Louis, Mo. | 101 | 72 | 19 | 7 | 1 | 2 | 5 |
| St. Paul, Minn. | 83 | 62 | 16 | 4 | - | 1 | 10 |
| Wichita, Kans. | 77 | 57 | 10 | 5 | 3 | 2 | 1 |
| S. ATLANTIC | 1,304 | 835 | 285 | 127 | 34 | 22 | 60 |
| Atlanta, Ga. | U | U | U | U | U | U | U |
| Baltimore, Md. | 205 | 113 | 57 | 24 | 6 | 5 | 11 |
| Charlotte, N.C. | 66 | 43 | 15 | 6 | 1 | 1 | 1 |
| Jacksonville, Fla. | 136 | 93 | 28 | 11 | 1 | 2 | - |
| Miami, Fla. | 104 | 60 | 25 | 17 | 1 | 1 | - |
| Norfolk, Va. | 61 | 38 | 12 | 5 | 2 | 4 | 6 |
| Richmond, Va. | 77 | 55 | 13 | 7 | 2 | - | 2 |
| Savannah, Ga. | 45 | 35 | 3 | 5 | 1 | 1 | 5 |
| St. Petersburg, Fla. | 61 | 48 | 6 | 3 | 2 | 2 | 3 |
| Tampa, Fla. | 188 | 123 | 37 | 20 | 5 | 3 | 14 |
| Washington, D.C. | 353 | 222 | 86 | 29 | 13 | 3 | 18 |
| Wilmington, Del. | 8 | 5 | 3 | - | - | - | - |
| E.S. CENTRAL | 818 | 562 | 164 | 54 | 21 | 15 | 50 |
| Birmingham, Ala. | 181 | 118 | 35 | 13 | 7 | 6 | 10 |
| Chattanooga, Tenn. | 52 | 33 | 12 | 4 | 1 | 2 | 3 |
| Knoxville, Tenn. | 70 | 48 | 12 | 5 | 3 | 2 | 8 |
| Lexington, Ky. | 57 | 36 | 16 | 2 | 2 | 1 | 2 |
| Memphis, Tenn. | 193 | 137 | 40 | 13 | 1 | 2 | 19 |
| Mobile, Ala. | 111 | 87 | 9 | 11 | 3 | 1 | 2 |
| Montgomery, Ala. | 31 | 25 | 4 | 1 | - | 1 | 4 |
| Nashville, Tenn. | 123 | 78 | 36 | 5 | 4 | - | 2 |
| W.S. CENTRAL | 1,446 | 962 | 280 | 123 | 41 | 40 | 88 |
| Austin, Tex. | 86 | 56 | 13 | 10 | 2 | 5 | 6 |
| Baton Rouge, La. | 22 | 16 | 2 | 2 | 1 | 1 | - |
| Corpus Christi, Tex. | 43 | 21 | 11 | 6 | 3 | 2 | 1 |
| Dallas, Tex. | 209 | 143 | 42 | 17 | 4 | 3 | 3 |
| El Paso, Tex. | 84 | 58 | 18 | 7 | 1 | - | 6 |
| Ft. Worth, Tex. | 113 | 74 | 16 | 14 | 4 | 5 | 10 |
| Houston, Tex. | 378 | 246 | 76 | 31 | 13 | 12 | 26 |
| Little Rock, Ark. | 82 | 49 | 20 | 6 | 2 | 5 | 2 |
| New Orleans, La. | 74 | 47 | 20 | 6 | 1 | - | - |
| San Antonio, Tex. | 210 | 148 | 40 | 16 | 4 | 2 | 24 |
| Shreveport, La. | 58 | 43 | 9 | 2 | 3 | 1 | 5 |
| Tulsa, Okla. | 87 | 61 | 13 | 6 | 3 | 4 | 5 |
| MOUNTAIN | 883 | 619 | 160 | 58 | 19 | 26 | 54 |
| Albuquerque, N.M. | 86 | 62 | 11 | 7 | 4 | 2 | 1 |
| Boise, Idaho | 32 | 20 | 8 | 1 | - | 3 | 2 |
| Colo. Springs, Colo. | 56 | 37 | 10 | 4 | 2 | 3 | 4 |
| Denver, Colo. | U | U | U | U | U | U | U |
| Las Vegas, Nev. | 209 | 147 | 45 | 12 | 4 | 1 | 8 |
| Ogden, Utah | 26 | 18 | 6 | 1 | 1 | - | 4 |
| Phoenix, Ariz. | 202 | 128 | 38 | 20 | 5 | 10 | 13 |
| Pueblo, Colo. | 29 | 22 | 4 | 2 | 1 | - | 2 |
| Salt Lake City, Utah | 99 | 71 | 21 | 3 | - | 4 | 10 |
| Tucson, Ariz. | 144 | 114 | 17 | 8 | 2 | 3 | 10 |
| PACIFIC | 1,451 | 994 | 283 | 106 | 31 | 36 | 131 |
| Berkeley, Calif. | 9 | 6 | 1 | 1 | - | 1 | - |
| Fresno, Calif. | 139 | 101 | 16 | 12 | 3 | 7 | 8 |
| Glendale, Calif. | 18 | 17 | 1 | - | - | - | 2 |
| Honolulu, Hawaii | 65 | 45 | 15 | 3 | 1 | 1 | 4 |
| Long Beach, Calif. | 77 | 56 | 17 | 2 | 1 | 1 | 14 |
| Los Angeles, Calif. | 296 | 196 | 70 | 19 | 5 | 6 | 28 |
| Pasadena, Calif. | 23 | 18 | 3 | 2 | - | - | 3 |
| Portland, Oreg. | 105 | 80 | 14 | 5 | 6 | - | 5 |
| Sacramento, Calif. | U | U | U | U | U | U | U |
| San Diego, Calif. | 116 | 81 | 21 | 7 | 3 | 3 | 12 |
| San Francisco, Calif. | 116 | 67 | 30 | 15 | 2 | 2 | 16 |
| San Jose, Calif. | 221 | 158 | 40 | 16 | 4 | 3 | 22 |
| Santa Cruz, Calif. | 22 | 16 | 3 | 2 | 1 | - | 3 |
| Seattle, Wash. | 140 | 79 | 33 | 19 | 3 | 6 | 6 |
| Spokane, Wash. | 40 | 28 | 7 | 1 | 2 | 2 | 8 |
| Tacoma, Wash. | 64 | 46 | 12 | 2 | - | 4 | - |
| TOTAL | 11,690¶ | 8,032 | 2,233 | 874 | 242 | 268 | 723 |

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.

**The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format and on a paid subscription basis for paper copy. To receive an electronic copy on Friday of each week, send an e-mail message to *listserv@listserv.cdc.gov*. The body content should read *SUBscribe mmwr-toc*. Electronic copy also is available from CDC's World-Wide Web server at *http://www.cdc.gov/* or from CDC's file transfer protocol server at *ftp.cdc.gov*. To subscribe for paper copy, contact Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone (202) 512-1800.**

**Data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the following Friday. Address inquiries about the *MMWR* Series, including material to be considered for publication, to: Editor, *MMWR* Series, Mailstop C-08, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333; telephone (888) 232-3228.**





☆**U.S. Government Printing Office: 1998-633-228/67069 Region IV**