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MORBIDITY AND MORTALITY WEEKLY REPORT

## Maternal Mortality — United States, 1982-1996

Maternal and infant mortality are basic health indicators that reflect a nation's health status. In the United States, infant mortality has declined steadily; however, this is not true for maternal mortality. This report presents data from death certificates compiled by CDC's National Center for Health Statistics, which indicate that in the United States, the annual maternal mortality ratio* remained approximately $7.5 \mathrm{ma}-$ ternal deaths per 100,000 live births during 1982-1996.

Annual maternal mortality ratios were calculated using information contained on death certificates filed in state vital statistics offices and compiled by CDC (1,2). Maternal deaths were defined as those deaths that occurred during a pregnancy or within 42 days of the end of a pregnancy and for which the cause of death was listed as a complication of pregnancy, childbirth, or the puerperium (International Classification of Diseases, Ninth Revision, codes 630-676). Maternal mortality ratios were calculated as the number of maternal deaths per 100,000 live births (1,2).

In 1930, the national maternal mortality ratio was 670 maternal deaths per 100,000 live births (3). The ratio declined substantially during the 1940s and 1950s, and continued to decline until 1982. During 1982-1996, the annual maternal mortality ratio fluctuated between approximately 7 and 8 maternal deaths per 100,000 live births (Figure 1). During that time, trends by race were similar to the overall ratio, and no reductions were observed for either black or white women. Maternal mortality ratios remained higher for black women than for white women. Ratios for black women generally fluctuated between 18 and 22 per 100,000 births and for white women between 5 and 6 per 100,000 live births.
Reported by: Div of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion; Div of Vital Statistics, National Center for Health Statistics, CDC.
Editorial Note: Since 1982 in the United States, no progress has been made toward achieving the Healthy People 2000 goal of 3.3 maternal deaths per 100,000 live births set in 1987 (objective 14.3) (4). The reason for this lack of improvement in maternal mortality is not clear. However, during this same time period, infant mortality has declined steadily because of advances in the survival of low birthweight and preterm infants and in the prevention of some causes of postneonatal mortality, such as sudden infant death syndrome.

[^0]
## U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Maternal Mortality - Continued
FIGURE 1. Maternal mortality ratio*, by year — United States, 1967-1996


* Number of maternal deaths per 100,000 live births The term "ratio" is used instead of rate because the numerator includes some maternal deaths that were not related to live births and thus were not included in the denominator.

The United States has not reached an irreducible minimum in maternal mortality; WHO estimates demonstrate that 20 countries have reduced maternal mortality levels to below those of the United States (5). Primary prevention of maternal deaths, such as those associated with ectopic pregnancy and some cases of infection and hemorrhage, is possible. However, some complications that can occur during pregnancy cannot be prevented (e.g., pregnancy-induced hypertension, placenta previa, retained placenta, and thromboembolism). Nevertheless, more than half of all maternal deaths can be prevented through early diagnosis and appropriate medical care of pregnancy complications ( 6,7 ). Hemorrhage, pregnancy-induced hypertension, infection, and ectopic pregnancy continue to account for most (59\%) maternal deaths.

When compared with white women, black women continue to have four times the risk for dying from complications of pregnancy and childbirth (2), although the risk for developing maternal complications is less than twice that of white women (8). This suggests that access to and use of health-care services for early diagnosis and effective treatment, if complications develop, may be a factor. In 1996, if the maternal mortality ratio for black women were equal to that for white women, the national maternal mortality ratio would have declined by $32 \%$ from 7.6 to 5.1 per 100,000 live births.

In this report, maternal mortality ratios are based solely on vital statistics data and are underestimates because of misclassification. The number of deaths attributed to pregnancy and its complications is estimated to be 1.3 to three times that reported in vital statistics records (6). Misclassification of maternal deaths occurs when the cause of death on the death certificate does not reflect the relation between a woman's pregnancy and her death. In addition, the inclusion of deaths causally related to pregnancy that occur between 43 and 365 days postpregnancy can increase the number of maternal deaths identified by $5 \%-10 \%$ (6).

## Maternal Mortality - Continued

To identify interventions that may have an impact on reducing maternal mortality, approximately 25 states have reestablished maternal mortality review committees. These committees review various factors that may have contributed to maternal deaths, including the quality of medical care and systemic problems in the health-care delivery system. To assess the problem and develop appropriate interventions to reduce the number of maternal deaths, all states should implement active surveillance of maternal mortality, including maternal mortality review committees.

In 1998, the World Health Organization designated Safe Motherhood as the focus for World Health Day (April 7), indicating the importance of this issue globally. In the United States, several measures that need to be implemented include providing all women with access to family planning services, because unintended pregnancies are associated with higher risks for both mother and infant (9). Women should know how to prevent sexually transmitted diseases (STDs), and women with STDs need effective and early treatment to prevent ectopic pregnancies. All women need access to culturally appropriate and quality prenatal, delivery, and postpartum care. The prevention of complications and the early diagnosis and effective treatment of any complication is critical. Although prenatal-care use in the United States has been increasing, in 1996, approximately $10 \%$ of all pregnant women received inadequate or no prenatal care (10).

In the United States, the theme for World Health Day 1998 was "Invest in the Future: Support Safe Motherhood." The proposed Healthy People 2010 goal for maternal mortality remains 3.3 maternal deaths per 100,000 live births. Unless investments are made in improving maternal health for all women, this goal will not be reached.

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## Hepatitis A Vaccination of Men Who Have Sex With Men Atlanta, Georgia, 1996-1997

Outbreaks of hepatitis $A$ among men who have sex with men (MSM) are a recurring problem in many large cities in the industrialized world (1,2). Because MSM are at high risk for acquiring hepatitis A, in 1995 the Advisory Committee on Immunization Practices (ACIP) recommended that MSM be vaccinated against hepatitis A (3). These recommendations have not been implemented widely, even in outbreak settings. This report summarizes the investigation of an ongoing outbreak of hepatitis A among MSM in Atlanta, Georgia, and a public health vaccination campaign in response to the outbreak.

Hepatitis A has been a reportable disease in Georgia since 1978. However, reports are passively collected from laboratories and clinical sites. In March 1996, the state and local health departments noted an increase in hepatitis A cases reported in the Atlanta area. The Georgia Division of Public Health informed local physicians of the outbreak and encouraged them to educate their patients about the risk for hepatitis $A$ transmission and to offer the hepatitis A vaccine to MSM because of anecdotal information linking the outbreak to MSM.

To improve surveillance, a large laboratory, which performs more than $50 \%$ of all hepatitis A testing in Georgia, agreed to report all new cases of hepatitis A (based on IgM anti-hepatitis A virus positivity) to the state. From January through September 1996, 222 cases of hepatitis A were reported in Atlanta residents, a $730 \%$ increase compared with the annual average of 27 cases during 1993-1995. Evidence that the outbreak was confined primarily to the MSM population of Atlanta included that 1) the proportion of cases that occurred in men aged 20-49 years increased from $41 \%$ of cases during 1993-1995 to $74 \%$ of cases during 1996 ( $p<0.01$ ); 2) approximately $75 \%$ of male patients self-identified as MSM; and 3) a large proportion of the cases were being diagnosed at medical practices predominantly serving MSM.

In September 1996, state and county health officials, in collaboration with community leaders, planned a hepatitis A vaccination campaign focused specifically on MSM residing in Atlanta. Because one dose of hepatitis A vaccine provides $94 \%$ of recipients protection for at least 1 year (4), the first of the two-shot series was provided free by the health department. Vaccination sites included public health clinics, community physicians serving predominantly MSM, bars and sports events, and a community health van stationed on Saturdays at a shopping area popular with the MSM community. The vaccine campaign and an associated education campaign were promoted through targeted physicians, articles and advertisements in local newspapers that are aimed at homosexuals, community organizations, and pamphlets and fliers distributed to local businesses serving homosexuals. From November 1996 through November 1997, approximately 3000 MSM received one dose of hepatitis A vaccine directly through the campaign, representing approximately $10 \%$ of the at-risk population in Atlanta.

From January 1996 through November 1997, 735 cases of hepatitis A were identified in the four largest counties (i.e., Cobb, DeKalb, Fulton, and Gwinnett counties) in the metropolitan Atlanta area; 492 occurred in men aged 20-49 years (Figure 1). The number of cases of acute hepatitis A in men aged 20-49 years identified each month did not change substantially after the outbreak began. During December 1996-April

Hepatitis A Vaccination - Continued
FIGURE 1. Number of cases of hepatitis A, by age group - metropolitan Atlanta, Georgia,* November 1995-November 1997


* Cobb, DeKalb, Fulton, and Gwinnett counties.

1997 (the 5-month period following initiation of the vaccine campaign), reported cases of hepatitis A in adult men decreased 16\% compared with June 1996-October 1996 (the 5-month period preceding the campaign). Two hepatitis A outbreaks in May 1997 associated with restaurants serving the general population accounted for the increase in cases.

The demographic characteristics of persons reported with hepatitis A suggest that the outbreak continued in the MSM population of Atlanta through November 1997. From April through November 1997, most (61\%) reported cases in metropolitan Atlanta occurred in men aged 20-49 years, compared with $26 \%$ of cases in Georgia ( $p<0.01$ ). The decline in cases from $74 \%$ to $61 \%$ can be explained by two restaurant outbreaks, in which adult women were as likely to be affected as men.

To better understand the response of the community to this outbreak and vaccination campaign, an anonymous survey of MSM was conducted at various community events and sites during June-August 1997. Sites were selected based on an expected participation rate of at least $50 \%$. A total of 255 men were approached and asked to participate; 210 responded to the survey.

Of the 210 MSM surveyed, 138 ( $66 \%$ ) were aware of the recent hepatitis A outbreak in Atlanta; most ( 73 [53\%] of 138) learned of the outbreak from one of the articles or advertisements in an Atlanta newspaper aimed at homosexuals. Of 178 men who had not been previously vaccinated or had no history of hepatitis A (i.e., nonimmune),

## Hepatitis A Vaccination - Continued

34 (19\%) received the hepatitis A vaccine during the campaign. Most (23 [68\%] of 34) decided to receive the vaccine because of fear of the disease and/or because they felt at risk for acquiring the virus. The most common reasons for not receiving the vaccine included 1) never got around to it ( $26 \%$ ), 2) did not believe they were at risk ( $26 \%$ ), and 3) never heard there was a hepatitis A problem ( $23 \%$ ). Of the 144 nonimmune men who did not receive the vaccine, 81 ( $56 \%$ ) reported high-risk sexual behaviors, and 77 (54\%) reported seeing a nonemergency department physician during the previous year.
Reported by: R Finton, Fulton County Health Dept, Atlanta; S Abernathy, DeKalb County Health Dept, Decatur; B Kaufman, Cobb County Health Dept, Marietta; R Hinton, Gwinnett County Health Dept, Lawrenceville; J Capparella, S Hopkins, J Lillich, J Koehler, DVM, P Blake, MD, Epidemiology and Prevention Br; K Toomey, MD, Div of Public Health, Georgia Dept of Human Resources. Hepatitis Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; and an EIS Officer, CDC.
Editorial Note: The findings in this report underscore the difficulties of vaccinating adults in high-risk groups for vaccine-preventable diseases. Such persons may not recognize their risk for disease and may miss opportunities to be vaccinated. In this program, there was a high awareness of the outbreak and vaccine campaign; however, coverage rates were low, indicating that community awareness is not the only obstacle to improving vaccine coverage among adults. The estimated $10 \%-20 \%$ coverage of the target population in the vaccination campaign in Atlanta is well below that seen in community-wide hepatitis A vaccine programs targeted to children and adolescents in other areas $(5,6)$.

Vaccination programs targeted to persons in age groups other than infants historically have been difficult to implement because many adolescents and adults do not visit health-care providers for preventive health care. Vaccination programs targeting persons with risk behaviors present difficult challenges because persons may not selfidentify as having high-risk behavior or they may not perceive themselves to be at high risk. In addition, health-care providers often do not ask about risk behaviors during health-care visits, resulting in missed opportunities to vaccinate persons in highrisk groups.

Hepatitis A vaccine became commercially available in 1995. The occurrence of outbreaks among MSM and the high prevalence and incidence of hepatitis A among MSM compared with the general population resulted in the ACIP recommending routine hepatitis A vaccination of MSM.

In the vaccine campaign in Atlanta, community-based organizations and local newspapers were effective in raising awareness about the outbreak and the availability of vaccine. In addition to educational efforts, hepatitis A vaccine should be offered at multiple sites that provide health care to MSM, including primary-care clinics, specialty clinics, sexually transmitted diseases clinics, and human immunodeficiency virus testing and counseling sites. In the Atlanta outbreak, most vaccinations were administered through a mobile health van or at bars, suggesting that innovative approaches to reach high-risk adult populations can be effective. Efforts to vaccinate at-risk populations should be maintained at all times to prevent recurring outbreaks among MSM and to protect persons at risk.

Hepatitis A Vaccination - Continued
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## Effectiveness of a Seventh Grade School Entry Vaccination Requirement Statewide and Orange County, Florida, 1997-1998

Vaccine-preventable diseases continue to occur among adolescents (i.e., persons aged 11-21 years) (1). In 1996, the Advisory Committee on Immunization Practices (ACIP), the American Academy of Pediatrics, the American Academy of Family Physicians, and the American Medical Association published joint recommendations emphasizing appropriate vaccination of adolescents aged 11-12 years who have not been vaccinated with hepatitis $B$ vaccine, a second dose of measles, mumps, and rubella vaccine (MMR), varicella vaccine (if indicated), a booster dose of tetanus and diphtheria toxoids (Td), and other vaccines that may be indicated for certain adolescents (2). School entry requirements are an effective mechanism for ensuring high vaccination coverage among children. At the start of the 1997-98 school year, an amendment to the Florida Administrative Code (64D-3.011, F.A.C.) was instituted that requires all persons entering seventh grade to be vaccinated with three doses of hepatitis $B$ vaccine, a second dose of MMR, and a Td booster, or to be on schedule for vaccination (i.e., having received at least one dose of hepatitis $B$ vaccine, one dose of MMR, and a Td booster). To determine vaccination coverage among students entering seventh grade in Florida and in Orange County in 1997, CDC, in collaboration with the Florida Department of Health, analyzed state vaccination coverage data. This report summarizes the results of the analysis and indicates that a vaccination requirement for middle school entry can be effective in ensuring vaccination of adolescents.

## Florida

At the start of the 1997-98 school year, 196,074 students entered the seventh grade in 1286 public and private schools in Florida. By November 30, 1997, 121,219 (61.8\%) of these students were fully vaccinated with three doses of hepatitis B vaccine, a second dose of MMR, and a Td booster. An additional 72,275 (36.9\%) students lacked one or more required vaccinations but were on schedule and therefore in compliance with the requirement, and 763 ( $0.4 \%$ ) were exempted for medical or religious reasons. The percentage of seventh-grade students fully vaccinated varied among the 67 Florida counties (Figure 1), ranging from $36.0 \%$ in Charlotte County to $97.2 \%$ in Franklin County. Coverage varied in the six counties with $\geq 10,000$ seventh graders: Broward

School Entry Vaccination Requirement - Continued
( $74.1 \%$ ), Dade ( $43.1 \%$ ), Duval ( $42.8 \%$ ), Hillsborough (55.5\%), Orange (55.1\%), and Palm Beach ( $77.9 \%$ ) ( $p \leq 0.01$ ). Statewide coverage among the 177,903 Florida seventh graders enrolled in 617 public schools was substantially lower (59.6\%) than that among the 18,171 enrolled in 669 private schools ( $83.8 \%$ ) ( $p \leq 0.01$ ).

From 1995 through 1997, the number of vaccinations administered to children aged 10-14 years by Florida public health facilities (i.e., school-based, county, or city clinics) increased substantially (Figure 2). In Florida, vaccines mandated by law must be made available to children free of charge by the Florida Department of Health regardless of a child's insurance status.

## Orange County, Florida

To ensure vaccination of seventh graders, Orange County Health Department (OCHD) officials teamed with a community coalition consisting of private and public health-care providers, local businesses, nongovernment organizations, and local colleges. The Orange County strategy included the vaccination of adolescents by private providers, public health department clinics, and school-based vaccination programs. At the start of the 1997-98 school year, 11,122 students entered seventh grade in Orange County. Of these students, 10,166 (91.4\%) were enrolled in 33 public schools and 956 ( $8.6 \%$ ) were enrolled in 24 private schools. In anticipation of the law, during the 1996-97 school year, OCHD sent pamphlets home with all sixth graders explaining the new requirement. In January 1997, the "Cool School Shots Campaign" was initiated that included local media announcements and a public school-based vaccination program targeting sixth graders.

FIGURE 1. Percentage of seventh-grade students who were fully vaccinated, by number of counties* - Florida, November 1997


[^1]School Entry Vaccination Requirement - Continued
FIGURE 2. Number of doses of selected vaccines administered by the Florida Department of Health to persons aged 10-14 years, by fiscal year — Florida, 1993-1998

*First quarter of 1997-98 fiscal year.
Three sessions were scheduled to allow students to receive all required vaccinations, including the three doses of hepatitis B vaccine, at school. Overall, 3739 (34\%) students received at least one vaccination during the first of three school-based vaccination events conducted during January 1997 (Table 1). Hepatitis B vaccine accounted for $35.7 \%$ of the vaccine doses administered during the first session, $92.7 \%$ during the second, and $100 \%$ during the third. However, $44 \%$ fewer third doses of hepatitis B vaccine (1886) than first doses (3329) were administered. Based on anecdotal information from OCHD officials, lack of parental knowledge regarding school entry vaccination requirements was a key barrier to achieving higher participation and completion by students in the program.

During July-September 1997, immediately before implementation of the seventh grade entry requirement and after the school-based vaccination campaign, the OCHD administered 9087 total vaccine doses, including 5015 doses of hepatitis B vaccine, 1700 doses of MMR, and 2372 doses of Td booster to children aged 10-14 years, representing a $380 \%$ increase from the 2379 total doses administered during the same period in 1996. By November 30, 1997, 6123 (55.1\%) Orange County seventh graders entering school were fully vaccinated. A total of 4988 ( $44.9 \%$ ) students lacked one or more required vaccinations but were considered in compliance with the requirement, eight were exempted for either medical or religious reasons, and three lacked documentation. Seventh graders enrolled in private schools were more likely to be fully vaccinated than seventh graders enrolled in public schools ( $86.4 \%$ vs. $52.1 \%$ ) ( $p \leq 0.01$ ). Reported by: HT Janowski, MPH, Florida Bur of Immunization, Flordia Dept of Health; D Deloach, CJ Keough, Orange County Health Dept; SF Morrison, PhD, Orange County Public Schools, Orlando, Florida. N Smith, MPH, Council of State and Territorial Epidemiologists, Atlanta, Georgia. Health Svcs Research and Evaluation Br, Immunization Svcs Div, National Immunization Program; and an EIS Officer, CDC.

School Entry Vaccination Requirement - Continued
TABLE 1. Number of vaccine doses administered to persons aged 10-14 years during three school-based vaccination events, by vaccine - Orange County, Florida, 1997

|  | Vaccination session |  |  |
| :--- | :---: | :---: | :---: |
| Vaccine | January | February | May |
| Hepatitis B-dose 1 | 3329 | 92 | 24 |
| Hepatitis B-dose 2 | 70 | 2538 | 348 |
| Hepatitis B-dose 3 | 24 | 19 | 1886 |
| MMR* $^{*}$ dose 2 | 2959 | 106 | $\mathrm{~N} / \mathrm{A}^{\dagger}$ |
| Td booster§ $^{\dagger}$ | 3191 | 103 | $\mathrm{~N} / \mathrm{A}$ |
| Total participants | $\mathbf{3 7 3 9}$ | $\mathbf{2 6 6 5}$ | $\mathbf{2 2 5 8}$ |
| Total vaccine doses | $\mathbf{9 5 7 3}$ | $\mathbf{2 8 5 8}$ | $\mathbf{2 2 5 8}$ |

* Measles, mumps, and rubella vaccine.
${ }^{\dagger}$ Not available.
§Tetanus and diphtheria toxoids booster.
Editorial Note: The findings in this report indicate that a middle school vaccination entry requirement in Florida was effective in ensuring that most seventh-grade students were appropriately vaccinated after the law was enacted. Other successful programs to vaccinate adolescents in schools and in provider settings have been previously described ( 3,4 ).

Many older children and adolescents may require additional doses of vaccine when new vaccines are introduced or recommendations for existing vaccines are revised. For example, hepatitis B vaccine has been recommended for all infants since 1991. However, in 1997, ACIP revised its recommendations to include all persons aged 018 years; vaccine is available through the Vaccines for Children (VFC) program for persons who are eligible for VFC. The lifetime risk for hepatitis B virus (HBV) infection is $4.2 \%$ for persons aged $\geq 6$ years, and approximately $70 \%$ of HBV infections occur in late adolescence and early adulthood (5). In the United States, failure to vaccinate a single cohort of adolescents will result in an estimated 160,000 HBV infections, 10,000 chronic HBV infections, and 1400 deaths (6). Without vaccination, an estimated 8157 cases of hepatitis B infection ( $4.2 \%$ of population lifetime risk for infection for persons aged $\geq 6$ years), 489 chronic HBV infections ( $6 \%$ of HBV infections) and 69 hepatitis-related deaths ( $14 \%$ of chronic HBV infections) will occur among this single cohort of 196,074 Florida adolescents during their lifetimes. Immediate action is needed to ensure that adolescents receive hepatitis $B$ vaccine along with other recommended vaccinations.

The findings in this report are subject to at least three limitations. First, because data collected for Florida consisted of regional reports sent from schools to the department of health during November 1997, no mechanism was in place to determine the total number of fully vaccinated seventh-grade students at the end of the school year. Second, the number of vaccinations and other recommended preventive services received by these adolescents from their primary-care provider or managed-care organization is unknown. Finally, data were not available to determine the rate of vaccine coverage in previous years; however, the increase in vaccine administered by public clinics suggest that vaccination rates in previous years among persons aged 10-14 years was lower.

## School Entry Vaccination Requirement - Continued

In 1997, four states (Colorado, Florida, Oklahoma and Wisconsin) implemented middle school vaccination entry requirements for hepatitis $B$ vaccine. The number of states with vaccination entry requirements for middle school students will increase to 14 by 2006, when an estimated $75 \%$ of adolescents aged 11-12 years in the United States will be subject to hepatitis $B$ vaccination requirements through both elementary and middle school requirements (6). Because of current successes in the infant vaccination program, most adolescents will be appropriately vaccinated against hepatitis B by the year 2010.

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## Notice to Readers

## Recommendations of the Advisory Committee on Immunization Practices, the American Academy of Pediatrics, and the American Academy of Family Physicians: Use of Reminder and Recall by Vaccination Providers to Increase Vaccination Rates

This statement by the Advisory Committee on Immunization Practices (ACIP), the American Academy of Pediatrics (AAP), and the American Academy of Family Physicians (AAFP) presents and recommends a programmatic strategy-the use of a reminder and/or recall ( $R / R$ ) system by vaccination providers-to increase vaccination rates. In 1992, a national survey indicated that $8 \%$ of pediatricians and $5 \%$ of family physicians had implemented a manual vaccination R/R system and $6 \%$ and $5 \%$, respectively, used a computer-based system for vaccination R/R messages (1). In 1993, the National Vaccine Advisory Committee issued the "Standards for Pediatric Immunization Practices," which recommend that all public and private health-care providers use a vaccination R/R system (2). These standards were endorsed by ACIP, AAP, and AAFP. By 1995 a survey indicated that R/R systems were used by $35 \%$ of pediatricians and $23 \%$ of family physicians (R. Zimmerman, University of Pittsburgh School of Medicine, personal communication, 1995).

## Notices to Readers - Continued

The reminder component consists of mail and/or telephone messages to remind parents or guardians of vaccination due dates for their children. Reminder messages can improve parents' awareness that vaccinations are due and the importance of keeping appointments, therefore increasing the up-to-date vaccination status of children. The recall component consists of mail and/or telephone messages to parents or guardians of children who are past due for one or more vaccinations. Recall messages can decrease vaccination drop-out rates and reduce the time children remain at risk for vaccine-preventable diseases. R/R systems can be operated manually (e.g., by monthly tickler file) or can be automated (e.g., by computer-generated mailings or telephone calls). Messages from automated systems can be modified to address special needs (e.g., language).

The implementation of vaccination $R / R$ systems has potential benefits beyond improved vaccination coverage rates. Patients of all ages who are due or overdue for recommended vaccinations also may have fallen behind in health supervision visits and may experience barriers to health care in general. Vaccination R/R systems may help identify patients who are at risk for not receiving comprehensive primary care. $R / R$ systems also can be established independently for improving attendance for child health supervision visits and other recommended preventive health service visits, including adult vaccination (3), cervical cancer screening (4), and lead screening. The cost-effectiveness of $R / R$ systems for a provider can be dependent on the number of patients, the documented level of vaccination coverage, the provider's level of computerization, and the intensity with which the provider uses the R/R system (5,6).

Properly implemented, the R/R strategy contributes to high, sustainable vaccination coverage levels. Studies of the effectiveness of mail or telephone reminder messages generally have demonstrated improvements in patient compliance for a variety of scheduled health-care visits, including vaccinations (7-9). Among patients scheduled for a vaccination visit who received a single autodialer-based reminder call the night before a scheduled visit, attendance was $57 \%$ compared with $20 \%$ in the control group who received no reminder (6); 41\% of patients who received a vaccination R/R message visited the provider within 30 days compared with $28 \%$ of those who did not receive a reminder (10).

The ACIP, AAFP, and AAP recommend the regular use of $R / R$ systems by public and private health-care providers in settings that have not achieved high documented levels of age-appropriate vaccinations. For reminder systems, messages should be delivered close to the due date for vaccinations. In recall systems, messages should be delivered promptly if the scheduled visit is missed. Implementation of these recommendations can contribute substantially to improving vaccination coverage at the provider level.
Reported by: Advisory Committee on Immunization Practices, Atlanta, Georgia. American Academy of Family Physicians, Kansas City, Missouri. American Academy of Pediatrics, Elk Grove Village, Illinois. Immunization Svcs Div, National Immunization Program, CDC.

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## Notice to Readers

## Satellite Broadcast on Immunization Update

Immunization Update 1998, a live satellite broadcast, will be held September 10, 1998, from 9 a.m. to 11:30 a.m. eastern daylight time (EDT) with a repeat broadcast from 1 p.m. to 3:30 p.m. EDT. Cosponsors are CDC and the Public Health Training Network. This broadcast is designed for physicians, nurses, physician assistants, nurse practitioners, pharmacists, medical students, and others who provide vaccinations and counsel patients about vaccination. Topics will include new vaccines for rotavirus and Lyme disease, live attenuated influenza vaccine, and new recommendations for the use of measles-containing vaccine and the vaccination of health-care workers.

Participants will be able to interact with the instructors through toll-free telephone, fax, and TTY lines. Continuing education credits for various professions will be offered based on 2.5 hours of instruction.

Additional information and registration are available from state or county health department immunization programs. A list of state immunization coordinators is available on the World-Wide Web, http://www.cdc.gov/phtn.

## Notice to Readers

## Final 1997 Reports of Notifiable Diseases

The notifiable diseases tables on pages 725-730 summarize final data for 1997. These data, final as of August 10, 1998, will be published in more detail in the Summary of Notifiable Diseases, United States, 1997 (1).

Because no cases of anthrax or yellow fever were reported in the United States during 1997, these nationally notifiable diseases do not appear in these tables.

Notices to Readers - Continued
Population estimates for the states are from the July 1, 1997, estimates by the U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census, Population Division, Population Branch, press release PPL-91. Population numbers for territories are 1997 estimates from Bureau of the Census press releases CB98-54 and CB98-80.

Reference

1. CDC. Summary of notifiable diseases, United States, 1997. MMWR 1997:46(no. 53)(in press).

## Errata: Vol. 47, No. 30

In the article, "Deaths Among Children During an Outbreak of Hand, Foot, and Mouth Disease-Taiwan, Republic of China, April-July 1998," two errors occurred. On page 632, the number of cases in Malaysia during April-June 1997 at the beginning of the seventh line of the first paragraph should read ( 29 cases). On the same page, the name in the personal communication in the last full line of the first paragraph was incorrect. It should read (M. Taha Arif, Sarawak Health Department, Kuching, Sarawak, Malaysia, personal communication, 1997).

## Errata: Vol. 47, No. 33

In the article "Success in Implementing Public Health Service Guidelines to Reduce Perinatal Transmission of HIV-Louisiana, Michigan, New Jersey, and South Carolina, 1992, 1995, and 1996," there were two errors. An incorrect number appeared in Table 1 on page 689; in the first category, number of women tested for human immunodeficiency virus infection before delivery, the number for 1993 should have been 495. On page 690 in the "Reported by" section, the affiliation was incorrect for H Malamud, MPH, L Scott, and E Mokotoff; it should be Michigan Dept of Community Health.

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending August 29, 1998, with historical data - United States

*Ratio of current 4-week total to mean of 154 -week totals (from previous, comparable, and subsequent 4 -week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary - provisional cases of selected notifiable diseases, United States, cumulative, week ending August 29, 1998 (34th Week)

|  | Cum. 1998 |  | Cum. 1998 |
| :---: | :---: | :---: | :---: |
| Anthrax | - | Plague | 6 |
| Brucellosis | 33 | Poliomyelitis, paralytic | 1 |
| Cholera | 6 | Psittacosis | 27 |
| Congenital rubella syndrome | 3 | Rabies, human | - |
| Cryptosporidiosis* | 1,419 | Rocky Mountain spotted fever (RMSF) | 185 |
| Diphtheria | 2 | Streptococcal disease, invasive Group A | 1,557 |
| Encephalitis: California* | 36 | Streptococcal toxic-shock syndrome* | 39 |
| eastern equine* | 2 | Syphilis, congenital ${ }^{\text {¹ }}$ | 185 |
| St. Louis* | 2 | Tetanus | 28 |
| western equine* | - | Toxic-shock syndrome | 84 |
| Hansen Disease | 73 | Trichinosis | 9 |
| Hantavirus pulmonary syndrome* ${ }^{+1}$ | 10 | Typhoid fever | 209 |
| Hemolytic uremic syndrome, post-diarrheal* HIV infection, pediatric*s | 42 145 | Yellow fever | - |

-:no reported cases
Not notifiable in all states.
${ }^{1}$ 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 July 26, 1998.
${ }^{4}$ Updated from reports to the Division of STD' Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending August 29, 1998, and August 23, 1997 (34th Week)

| Reporting Area | AIDS |  | Chlamydia |  | $\begin{gathered} \text { Escherichia } \\ \text { coli 0157:H7 } \end{gathered}$ |  | Gonorrhea |  | Hepatitis C/NA,NB |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | NETSS ${ }^{\dagger}$ | PHLIS ${ }^{\text { }}$ |  |  |  |  |
|  | $\begin{aligned} & \text { Cum. } \\ & \text { 1998* } \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \end{aligned}$ |  |  | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \end{aligned}$ | $\begin{gathered} \hline \text { Cum. } \\ 1998 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \end{aligned}$ | $\begin{gathered} \hline \text { Cum. } \\ 1997 \end{gathered}$ | $\begin{gathered} \hline \text { Cum. } \\ 1998 \end{gathered}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \end{aligned}$ |
| UNITED STATES | 27,399 | 37,890 | 349,491 | 291,935 | 1,688 | 1,019 | 209,733 | 184,041 | 2,337 | 2,302 |
| NEW ENGLAND | 1,025 | 1,711 | 12,857 | 11,312 | 231 | 161 | 3,683 | 3,811 | 32 | 44 |
| Maine | 21 | 36 | 655 | 646 | 25 | - | 44 | 37 | - | - |
| N.H. | 26 | 26 | 592 | 510 | 30 | 34 | 57 | 67 | - | - |
| Vt. | 14 | 24 | 271 | 256 | 10 | 7 | 25 | 36 | - | 2 |
| Mass. | 522 | 598 | 5,478 | 4,654 | 112 | 104 | 1,396 | 1,405 | 29 | 35 |
| R.I. | 78 | 107 | 1,521 | 1,285 | 8 | 1 | 239 | 293 | 3 | 7 |
| Conn. | 364 | 920 | 4,340 | 3,961 | 46 | 15 | 1,922 | 1,973 | - | - |
| MID. ATLANTIC | 7,578 | 11,938 | 42,746 | 36,715 | 177 | 36 | 24,287 | 23,650 | 270 | 212 |
| Upstate N.Y. | 961 | 1,923 | N | N | 127 | - | 3,749 | 4,022 | 207 | 156 |
| N.Y. City | 4,074 | 6,231 | 23,035 | 17,442 | 4 | 7 | 10,052 | 8,704 | - |  |
| N.J. | 1,475 | 2,352 | 7,108 | 6,539 | 46 | 28 | 4,475 | 4,847 | ${ }^{-}$ | 5 |
| Pa. | 1,068 | 1,432 | 12,603 | 12,734 | N | 1 | 6,011 | 6,077 | 63 | 56 |
| E.N. CENTRAL | 2,078 | 2,697 | 57,978 | 39,112 | 263 | 177 | 40,392 | 25,259 | 345 | 403 |
| Ohio | 430 | 640 | 16,554 | 14,207 | 79 | 39 | 10,487 | 9,218 | 7 | 12 |
| Ind. | 355 | 408 | 4,049 | 5,758 | 62 | 31 | 2,629 | 3,853 | 4 | 12 |
| III. | 825 | 893 | 17,302 | U | 61 | 14 | 14,186 | U | 23 | 68 |
| Mich. | 353 | 582 | 13,590 | 12,070 | 61 | 38 | 10,371 | 9,183 | 311 | 290 |
| Wis. | 115 | 174 | 6,483 | 7,077 | N | 55 | 2,719 | 3,005 | - | 21 |
| W.N. CENTRAL | 532 | 758 | 20,235 | 20,350 | 241 | 196 | 9,841 | 8,966 | 115 | 45 |
| Minn. | 104 | 128 | 4,046 | 4,249 | 97 | 91 | 1,493 | 1,486 | 7 | 3 |
| lowa | 49 | 75 | 2,063 | 2,858 | 71 | 35 | 660 | 756 | 7 | 22 |
| Mo. | 244 | 377 | 7,648 | 7,753 | 15 | 40 | 5,441 | 4,808 | 96 | 8 |
| N. Dak. | 4 | 7 | 616 | 534 | 7 | 13 | 51 | 36 | - | 2 |
| S. Dak. | 11 | 7 | 1,034 | 812 | 17 | 10 | 160 | 90 | - | - |
| Nebr. | 48 | 65 | 1,397 | 1,207 | 19 | - | 498 | 448 | 2 | 2 |
| Kans. | 72 | 99 | 3,431 | 2,937 | 15 | 7 | 1,538 | 1,342 | 3 | 8 |
| S. ATLANTIC | 6,869 | 9,143 | 71,632 | 61,517 | 150 | 88 | 59,219 | 60,238 | 128 | 154 |
| Del. | 91 | 159 | 1,655 | 61,517 | - | 1 | 909 | 764 | - | - |
| Md. | 826 | 1,078 | 5,315 | 4,623 | 20 | 10 | 6,108 | 7,587 | 6 | 4 |
| D.C. | 567 | 658 | N | N | 1 | - | 2,318 | 2,873 | - | - |
| Va. | 502 | 767 | 8,014 | 7,690 | N | 28 | 5,296 | 5,297 | 10 | 19 |
| W. Va. | 59 | 61 | 1,747 | 1,898 | 7 | 4 | 518 | 624 | 4 | 13 |
| N.C. | 456 | 597 | 14,696 | 11,075 | 38 | 34 | 12,697 | 10,824 | 17 | 38 |
| S.C. | 452 | 498 | 12,049 | 8,199 | 5 | 3 | 7,587 | 7,526 | 3 | 30 |
| Ga. | 725 | 1,072 | 15,016 | 11,157 | 50 | - | 13,213 | 12,811 | 9 |  |
| Fla. | 3,191 | 4,253 | 13,140 | 16,875 | 29 | 8 | 10,573 | 11,932 | 79 | 50 |
| E.S. CENTRAL | 1,084 | 1,294 | 25,148 | 22,411 | 79 | 27 | 24,525 | 22,389 | 127 | 243 |
| Ky. | 156 | 237 | 4,137 | 4,253 | 21 | - | 2,402 | 2,688 | 16 | 11 |
| Tenn. | 378 | 527 | 8,564 | 8,209 | 35 | 24 | 7,505 | 6,946 | 104 | 160 |
| Ala. | 330 | 333 | 6,610 | 5,485 | 20 | 2 | 8,473 | 7,705 | 5 | 6 |
| Miss. | 220 | 197 | 5,837 | 4,464 | 3 | 1 | 6,145 | 5,050 | 2 | 66 |
| W.S. CENTRAL | 3,328 | 4,105 | 51,641 | 36,745 | 82 | 12 | 30,057 | 24,304 | 460 | 298 |
| Ark. | 123 | 159 | 2,359 | 1,939 | 7 | 6 | 1,233 | 3,152 | 6 | 9 |
| La. | 586 | 665 | 9,710 | 6,132 | 3 | 2 | 8,418 | 5,733 | 21 | 138 |
| Okla. | 183 | 216 | 6,509 | 4,900 | 11 | 4 | 3,563 | 3,085 | 8 | 6 |
| Tex. | 2,436 | 3,065 | 33,063 | 23,774 | 61 | - | 16,843 | 12,334 | 425 | 145 |
| MOUNTAIN | 967 | 1,103 | 13,961 | 19,012 | 223 | 149 | 5,289 | 5,113 | 287 | 198 |
| Mont. | 18 | 33 | 793 | 679 | 11 | - | 29 | 29 | 7 | 15 |
| Idaho | 19 | 34 | 1,124 | 993 | 25 | 7 | 110 | 78 | 86 | 40 |
| Wyo. | 1 | 13 | 399 | 381 | 49 | 53 | 18 | 36 | 69 | 47 |
| Colo. | 186 | 292 | 10 | 4,457 | 46 | 38 | 1,465 | 1,328 | 19 | 22 |
| N. Mex. | 153 | 112 | 2,337 | 2,514 | 17 | 13 | 578 | 580 | 68 | 34 |
| Ariz. | 377 | 247 | 7,184 | 6,959 | 21 | 13 | 2,622 | 2,295 | 3 | 24 |
| Utah | 70 | 93 | 1,471 | 1,081 | 48 | 17 | 157 | 161 | 21 | 3 |
| Nev. | 143 | 279 | 643 | 1,948 | 6 | 8 | 310 | 606 | 14 | 13 |
| PACIFIC | 3,938 | 5,141 | 53,293 | 44,761 | 242 | 173 | 12,440 | 10,311 | 573 | 705 |
| Wash. | 270 | 417 | 7,018 | 5,879 | 41 | 56 | 1,210 | 1,228 | 13 | 20 |
| Oreg. | 116 | 188 | 3,710 | 3,134 | 66 | 72 | 546 | 483 | 4 | 2 |
| Calif. | 3,439 | 4,450 | 39,962 | 33,684 | 132 | 35 | 10,185 | 8,019 | 501 | 569 |
| Alaska | 17 | 42 | 1,238 | 963 | 3 | - | 213 | 254 | 1 | - |
| Hawaii | 96 | 44 | 1,365 | 1,101 | N | 10 | 286 | 327 | 54 | 114 |
| Guam | - | 2 | 8 | 193 | N | - | 2 | 27 | - | - |
| P.R. | 1,141 | 1,199 | U | U | 6 | U | 256 | 400 | - | - |
| V.I. | 18 | 70 | N | N | N | U | U | U | U | U |
| Amer. Samoa | - |  | U | U | N | U | U | U | U | U |
| C.N.M.I. | - | 1 | N | N | N | U | 14 | 17 | - | 2 |

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

[^2]last update July 26, 1998.
${ }^{\dagger}$ National Electronic Telecommunications System for Surveillance.
${ }^{5}$ Public Health Laboratory Information System.

TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States,
weeks ending August 29, 1998, and August 23, 1997 (34th Week)

| Reporting Area | Legionellosis |  | Lyme Disease |  | Malaria |  | Syphilis <br> (Primary \& Secondary) |  | Tuberculosis |  | Rabies, Animal <br> Cum. <br> 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cum. 1998 | Cum. 1997 | Cum. 1998 | Cum. 1997 | Cum. 1998 | Cum. 1997 | Cum. 1998 | Cum. 1997 | Cum. 1998* | Cum. 1997 |  |
| UNITED STATES | 774 | 583 | 7,187 | 6,758 | 796 | 1,171 | 4,695 | 5,481 | 8,888 | 11,435 | 4,607 |
| NEW ENGLAND | 38 | 48 | 1,923 | 1,890 | 40 | 65 | 46 | 104 | 279 | 282 | 933 |
| Maine | 1 | 2 | 6 | 8 | 4 | 1 | 1 | - | 5 | 17 | 134 |
| N.H. | 3 | 5 | 28 | 12 | 3 | 6 | 1 | - | 6 | 10 | 44 |
| Vt. | 4 | 9 | 7 | 6 | - | 2 | 4 | - | 1 | 4 | 42 |
| Mass. | 13 | 14 | 406 | 241 | 13 | 25 | 28 | 49 | 153 | 156 | 334 |
| R.I. | 8 | 5 | 311 | 219 | 2 | 5 | 1 | 2 | 36 | 20 | 60 |
| Conn. | 9 | 13 | 1,165 | 1,404 | 18 | 26 | 11 | 53 | 78 | 75 | 319 |
| MID. ATLANTIC | 197 | 111 | 4,451 | 3,695 | 195 | 356 | 176 | 263 | 1,854 | 2,045 | 1,081 |
| Upstate N.Y. | 64 | 29 | 2,675 | 1,581 | 57 | 52 | 23 | 24 | 232 | 283 | 757 |
| N.Y. City | 23 | 12 | 12 | 139 | 86 | 220 | 41 | 58 | 945 | 1,038 | U |
| N.J. | 11 | 16 | 808 | 1,173 | 30 | 63 | 55 | 107 | 400 | 414 | 133 |
| Pa. | 99 | 54 | 956 | 802 | 22 | 21 | 57 | 74 | 277 | 310 | 191 |
| E.N. CENTRAL | 233 | 191 | 72 | 356 | 78 | 110 | 672 | 416 | 783 | 1,161 | 99 |
| Ohio | 96 | 79 | 50 | 24 | 9 | 13 | 85 | 141 | 63 | 193 | 45 |
| Ind. | 46 | 29 | 16 | 19 | 10 | 10 | 160 | 102 | 76 | 92 | 8 |
| III. | 16 | 15 | 5 | 10 | 22 | 45 | 252 | U | 411 | 605 | 10 |
| Mich. | 51 | 43 | 1 | 21 | 33 | 30 | 130 | 93 | 230 | 192 | 27 |
| Wis. | 24 | 25 | U | 282 | 4 | 12 | 45 | 80 | 3 | 79 | 9 |
| W.N. CENTRAL | 48 | 35 | 123 | 81 | 56 | 32 | 87 | 117 | 256 | 366 | 514 |
| Minn. | 3 | 1 | 98 | 55 | 29 | 10 | 6 | 14 | 98 | 95 | 91 |
| Iowa | 7 | 9 | 18 | 5 | 7 | 8 | - | 6 | 23 | 43 | 115 |
| Mo. | 14 | 5 | 1 | 15 | 10 | 7 | 68 | 71 | 86 | 145 | 19 |
| N. Dak. | - | 2 | - | - | 2 | 2 | - | - | 6 | 8 | 102 |
| S. Dak. | 3 | 2 | - | 1 | - | - | 1 | - | 14 | 7 | 109 |
| Nebr. | 15 | 12 | 3 | 2 | 1 | 1 | 4 | 2 | 11 | 14 | 6 |
| Kans. | 6 | 4 | 3 | 3 | 7 | 4 | 8 | 24 | 18 | 54 | 72 |
| S. ATLANTIC | 97 | 75 | 439 | 508 | 183 | 201 | 1,923 | 2,260 | 1,323 | 2,092 | 1,343 |
| Del. | 8 | 7 | 12 | 103 | 1 | 3 | 17 | 16 | U | 21 | 17 |
| Md. | 20 | 14 | 294 | 323 | 55 | 60 | 419 | 612 | 194 | 204 | 332 |
| D.C. | 6 | 3 | 4 | 7 | 12 | 11 | 49 | 77 | 67 | 66 | - |
| Va . | 16 | 15 | 43 | 31 | 37 | 50 | 104 | 162 | 174 | 194 | 396 |
| W. Va. | N | N | 8 | 3 | 1 | - | 2 | 3 | 29 | 42 | 59 |
| N.C. | 8 | 10 | 41 | 23 | 14 | 12 | 473 | 546 | 271 | 270 | 136 |
| S.C. | 7 | 3 | 3 | 1 | 4 | 10 | 195 | 267 | 195 | 224 | 98 |
| Ga. | 7 | - | 5 | 1 | 22 | 24 | 511 | 361 | 323 | 393 | 165 |
| Fla. | 24 | 23 | 29 | 16 | 37 | 31 | 153 | 216 | 70 | 678 | 140 |
| E.S. CENTRAL | 46 | 40 | 55 | 61 | 20 | 23 | 784 | 1,211 | 742 | 863 | 195 |
| Ky. | 21 | 7 | 13 | 12 | 4 | 6 | 73 | 95 | 115 | 117 | 27 |
| Tenn. | 13 | 24 | 29 | 26 | 10 | 6 | 376 | 522 | 223 | 313 | 106 |
| Ala. | 5 | 2 | 12 | 5 | 4 | 8 | 179 | 303 | 265 | 277 | 60 |
| Miss. | 7 | 7 | 1 | 18 | 2 | 3 | 156 | 291 | 139 | 156 | 2 |
| W.S. CENTRAL | 19 | 12 | 19 | 55 | 17 | 17 | 650 | 771 | 958 | 1,690 | 122 |
| Ark. | - | 1 | 6 | 15 | 1 | 4 | 77 | 116 | 76 | 126 | 27 |
| La. | 2 | 2 | 3 | 2 | 6 | 8 | 276 | 239 | 73 | 148 | 5 |
| Okla. | 8 | 1 | 2 | 11 | 3 | 5 | 44 | 81 | 113 | 148 | 95 |
| Tex. | 9 | 8 | 8 | 27 | 7 | - | 253 | 335 | 696 | 1,268 | - |
| MOUNTAIN | 46 | 38 | 10 | 7 | 38 | 56 | 144 | 108 | 280 | 374 | 128 |
| Mont. | 2 | 1 | - | - | - | 2 | - | - | 16 | 6 | 35 |
| Idaho | 2 | 2 | 3 | 2 | 7 | - | - | - | 8 | 7 | - |
| Wyo. | 1 | 1 | - | 1 | - | 2 | 1 | - | 4 | 2 | 49 |
| Colo. | 12 | 13 | 3 | - | 13 | 26 | 8 | 10 | U | 62 | 19 |
| N. Mex. | 2 | 2 | 2 | 1 | 11 | 7 | 19 | 4 | 37 | 36 | 4 |
| Ariz. | 10 | 8 | - | 1 | 6 | 7 | 110 | 81 | 138 | 169 | 12 |
| Utah | 16 | 7 |  |  | 1 | 3 | 3 | 5 | 43 | 18 | 9 |
| Nev. | 1 | 4 | 2 | 2 | - | 9 | 3 | 8 | 34 | 74 | - |
| PACIFIC | 50 | 33 | 95 | 105 | 169 | 311 | 213 | 231 | 2,413 | 2,562 | 192 |
| Wash. | 9 | 6 | 5 | 5 | 16 | 16 | 23 | 7 | 148 | 206 | - |
| Oreg. | - | - | 11 | 14 | 13 | 15 | 4 | 5 | 84 | 108 | 1 |
| Calif. | 39 | 26 | 78 | 86 | 136 | 272 | 184 | 217 | 2,044 | 2,069 | 169 |
| Alaska | 1 | - | 1 | - | 1 | 3 | 1 | 1 | 31 | 55 | 22 |
| Hawaii | 1 | 1 | - | - | 3 | 5 | 1 | 1 | 106 | 124 | - |
| Guam | - | - | - | - | - | - | - | 3 | - | 13 | - |
| P.R. | - | , | , | - | U | 5 | 131 | 169 | 68 | 129 | 33 |
| V.I. | U | U | U | U | U | U | U | U | U | U | U |
| Amer. Samoa | U | U | U | U | U | U | U | U | U | U | U |
| C.N.M.I. | - | - | - | - | - | - | 98 | 9 | 56 | 2 | - |

N : Not notifiable $\quad \mathrm{U}$ : Unavailable $\quad-$ : no reported cases
*Additional information about areas displaying "U" for cumulative 1998 Tuberculosis cases can be found in Notice to Readers, $M M W R$ Vol. 47, No. 2, p. 39.

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending August 29, 1998, and August 23, 1997 (34th Week)


TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending August 29, 1998, and August 23, 1997 (34th Week)

| Reporting Area | Meningococcal Disease |  | Mumps |  |  | Pertussis |  |  | Rubella |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { Cum. } \\ 1998 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \\ & \hline \end{aligned}$ | 1998 | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \text { Cum. } \\ 1997 \\ \hline \end{gathered}$ | 1998 | $\begin{gathered} \hline \text { Cum. } \\ 1998 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \\ & \hline \end{aligned}$ | 1998 | $\begin{aligned} & \hline \text { Cum. } \\ & 1998 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Cum. } \\ & 1997 \end{aligned}$ |
| UNITED STATES | 1,865 | 2,328 | 8 | 330 | 412 | 161 | 3,254 | 3,469 | 7 | 303 | 129 |
| NEW ENGLAND | 76 | 144 | - | 2 | 8 | 32 | 541 | 648 | - | 36 | 1 |
| Maine | 5 | 16 | - | - | - | - | 5 | 7 | - | - | - |
| N.H. | 4 | 12 | - | - | - | 1 | 46 | 82 | - | - | - |
| Vt. | 1 | 3 | - | - | - | - | 57 | 185 | - | - | - |
| Mass. | 38 | 72 | - | 1 | 2 | 28 | 395 | 348 | - | 6 | 1 |
| R.I. | 3 | 13 | - | - | 5 | - | 7 | 12 | - | 1 | - |
| Conn. | 25 | 28 | - | 1 | 1 | 3 | 31 | 14 | - | 29 | - |
| MID. ATLANTIC | 174 | 245 | 1 | 19 | 46 | 13 | 356 | 253 | - | 124 | 30 |
| Upstate N.Y. | 45 | 68 | 1 | 4 | 10 | 13 | 196 | 99 | - | 110 | 4 |
| N.Y. City | 19 | 42 | - | 4 | 3 | - | 9 | 57 | - | 9 | 26 |
| N.J. | 46 | 45 | - | 2 | 7 | - | 5 | 11 | - | 4 | - |
| Pa . | 64 | 90 | - | 9 | 26 | - | 146 | 86 | - | 1 | - |
| E.N. CENTRAL | 288 | 340 | 1 | 57 | 52 | 36 | 346 | 366 | - | - | 5 |
| Ohio | 108 | 125 | - | 21 | 18 | 32 | 169 | 103 | - | - | - |
| Ind. | 51 | 37 | - | 5 | 7 | 2 | 70 | 38 | - | - | - |
| III. | 69 | 99 | - | 10 | 8 | 2 | 45 | 48 | - | - | 1 |
| Mich. | 35 | 50 | 1 | 21 | 16 | - | 45 | 45 | - | - | - |
| Wis. | 25 | 29 | - | - | 3 | - | 17 | 132 | - | - | 4 |
| W.N. CENTRAL | 153 | 167 | 3 | 24 | 13 | 15 | 272 | 220 | - | 27 | - |
| Minn. | 28 | 29 | 2 | 12 | 5 | 9 | 168 | 142 | - | - | - |
| Iowa | 29 | 38 | 1 | 8 | 6 | - | 52 | 11 | - | - | - |
| Mo. | 53 | 72 | - | 3 | - | 5 | 22 | 40 | - | 2 | - |
| N. Dak. | 3 | 1 | - | 1 | - | - | 2 | 1 | - | - | - |
| S. Dak. | 6 | 4 | - | - | - | 1 | 8 | 3 | - | - | - |
| Nebr. | 7 | 7 | - | - | 1 | - | 8 | 5 | - | - | - |
| Kans. | 27 | 16 | - | - | 1 | - | 12 | 18 | - | 25 | - |
| S. ATLANTIC | 324 | 393 | - | 39 | 48 | 14 | 199 | 302 | 3 | 13 | 59 |
| Del. | 1 | 5 | - | - | - | , | 3 | 1 | - | - | - |
| Md. | 24 | 36 | - | - | 1 | 3 | 34 | 96 | - | 1 | - |
| D.C. | - | 7 | U | - | - | U | 1 | 3 | U | - | - |
| Va . | 26 | 39 | - | 5 | 9 | - | 9 | 34 | - | - | 1 |
| W. Va. | 12 | 14 | - | - | - | - | 1 | 6 | - | - | - |
| N.C. | 47 | 76 | - | 9 | 8 | 5 | 74 | 85 | 3 | 9 | 51 |
| S.C. | 45 | 42 | - | 5 | 10 | - | 22 | 15 | - | - | 6 |
| Ga. | 68 | 77 | - | 1 | 6 | - | 10 | 8 | - | - | - |
| Fla. | 101 | 97 | - | 19 | 14 | 6 | 45 | 54 | - | 3 |  |
| E.S. CENTRAL | 162 | 176 | 1 | 12 | 22 | 5 | 77 | 93 | - | 2 | 1 |
| Ky. | 20 | 38 | - | - | 3 | 2 | 25 | 38 | - | - | - |
| Tenn. | 51 | 61 | - | 1 | 3 | 3 | 27 | 27 | - | 1 | - |
| Ala. | 69 | 55 | 1 | 7 | 6 | - | 22 | 19 | - | 1 | 1 |
| Miss. | 22 | 22 | - | 4 | 10 | - | 3 | 9 | - | - | - |
| W.S. CENTRAL | 212 | 217 | - | 48 | 44 | 6 | 230 | 147 | 4 | 83 | 4 |
| Ark. | 26 | 25 | - | 7 | 1 | 4 | 44 | 13 | - | - |  |
| La. | 46 | 46 | - | 8 | 11 | 1 | 3 | 13 | - | - | - |
| Okla. | 31 | 24 | - | - | - | - | 18 | 19 | - | - | - |
| Tex. | 109 | 122 | - | 33 | 32 | 1 | 165 | 102 | 4 | 83 | 4 |
| MOUNTAIN | 106 | 136 | 1 | 29 | 49 | 7 | 632 | 846 | - | 5 | 6 |
| Mont. | 4 | 7 | - | - | - | 1 | 5 | 15 | - | - | - |
| Idaho | 7 | 8 | - | 4 | 2 | - | 196 | 479 | - | - | 2 |
| Wyo. | 6 | 1 | - | 1 | 1 | - | 8 | 6 | - | - | - |
| Colo. | 23 | 36 | 1 | 8 | 3 | 4 | 138 | 233 | - | - | - |
| N. Mex. | 17 | 23 | N | N | N | 1 | 76 | 64 | - | 1 | - |
| Ariz. | 34 | 36 | - | 5 | 31 | - | 139 | 24 | - | 1 | 4 |
| Utah | 11 | 11 | - | 4 | 6 | 1 | 47 | 12 | - | 2 | - |
| Nev. | 4 | 14 | U | 7 | 6 | U | 23 | 13 | U | 1 | - |
| PACIFIC | 370 | 510 | 1 | 100 | 130 | 33 | 601 | 594 | - | 13 | 23 |
| Wash. | 50 | 64 | - | 7 | 14 | 25 | 221 | 249 | - | 9 | 5 |
| Oreg. | 62 | 98 | N | N | N | 3 | 60 | 25 | - | - | - |
| Calif. | 252 | 341 | 1 | 74 | 91 | 1 | 303 | 289 | - | 2 | 10 |
| Alaska | 2 | 2 | - | 2 | 6 | 4 | 11 | 16 | - | - |  |
| Hawaii | 4 | 5 | - | 17 | 19 | - | 6 | 15 | - | 2 | 8 |
| Guam | - | 1 | U | - | 1 | U | - | - | U | - | - |
| P.R. | 6 | 8 | - | 1 | 5 |  | 3 | - | - | - | - |
| V.I. | U | U | U | U | U | U | U | U | U | U | U |
| Amer. Samoa | U | U | U | U | U | U | U | U | U | U | U |
| C.N.M.I. | - | - | U | 2 | 4 | U | 1 |  | U | U |  |

TABLE IV. Deaths in 122 U.S. cities,* week ending August 29, 1998 (34th Week)

| Reporting Area | All Causes, By Age (Years) |  |  |  |  |  | $\begin{aligned} & \text { P\&I }{ }^{\dagger} \\ & \text { Total } \end{aligned}$ | Reporting Area | All Causes, By Age (Years) |  |  |  |  |  | $\begin{aligned} & \text { P\&I }{ }^{\dagger} \\ & \text { Total } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { All } \\ \text { Ages } \end{gathered}$ | >65 | 45-64 | 25-44 | 1-24 | <1 |  |  | All Ages | >65 | 45-64 | 25-44 | 1-24 | <1 |  |
| NEW ENGLAND | 566 | 407 | 101 | 37 | 13 | 8 | 41 | S. ATLANTIC | 1,201 | 740 | 261 | 121 | 33 | 26 | 55 |
| Boston, Mass. | 168 | 111 | 36 | 12 | 3 | 6 | 7 | Atlanta, Ga. | 131 | 79 | 32 | 12 | 5 | 3 | - |
| Bridgeport, Conn. | 41 | 26 | 8 | 6 | 1 | - | - | Baltimore, Md. | 189 | 104 | 50 | 29 | 6 | $\overline{7}$ | 15 |
| Cambridge, Mass. | 23 | 20 | 3 | - |  | - | 3 | Charlotte, N.C. | 91 | 59 | 15 | 9 | 1 | 7 | 9 |
| Fall River, Mass. | 25 | 22 | 2 | 5 |  | - | 2 | Jacksonville, Fla. | 108 | 72 | 22 | 12 | 1 | 1 | 2 |
| Hartford, Conn. | 54 | 42 | 5 | 5 | 2 | - | 4 | Miami, Fla. | 110 | 69 | 24 | 11 | 2 | 4 |  |
| Lowell, Mass. | 21 | 14 | 5 | 1 | 1 | - | 1 | Norfolk, Va. | 28 | 12 | 10 | 2 | 2 | 2 | 1 |
| Lynn, Mass. | 9 | 8 |  | 1 | - | - | - | Richmond, Va. | 68 | 46 | 9 | 8 | 5 | - | 2 |
| New Bedford, Mass. | 16 | 14 | 1 | 1 |  |  | 1 | Savannah, Ga. | 41 | 25 | 10 | 3 | 2 | 1 | 2 |
| New Haven, Conn. | 36 | 21 | 10 | 2 | 2 | 1 | 2 | St. Petersburg, Fla. | 56 | 29 | 5 |  |  | 2 | 3 |
| Providence, R.I. | 50 | 34 | 9 | 4 | 2 | 1 | 5 | Tampa, Fla. | 169 | 112 | 40 | 13 | 1 | 3 | 17 |
| Somerville, Mass. | 5 | 5 | - | - |  | - | - | Washington, D.C. | 186 | 117 | 39 | 20 | 7 | 3 | 4 |
| Springfield, Mass. | 35 | 28 | 6 | 1 | - | - | 5 | Wilmington, Del. | 24 | 16 | 5 | 2 | 1 | - | - |
| Waterbury, Conn. | 33 | 22 | 7 | 3 | 1 | - | 4 |  |  |  |  |  |  |  |  |
| Worcester, Mass. | 50 | 40 | 9 | - | 1 | - | 7 | E.S. CENTRAL <br> Birmingham, Ala. | $\begin{aligned} & 821 \\ & 190 \end{aligned}$ | 528 | $\begin{array}{r} 174 \\ 35 \end{array}$ | $\begin{aligned} & 69 \\ & 19 \end{aligned}$ | 25 5 | 23 10 | 42 17 |
| MID. ATLANTIC | 2,060 | 1,440 | 389 | 161 | 33 | 37 | 85 | Chattanooga, Tenn. | 62 | 42 | 14 | 4 | 2 | - | 3 |
| Albany, N.Y. | 46 | 34 | 7 | 3 | - | 2 | 3 | Knoxville, Tenn. | 65 | 45 | 12 | 4 | 3 | 1 | 2 |
| Allentown, Pa. | 26 | 26 | - | - |  | - | 1 | Lexington, Ky. | 49 | 32 | 8 | 4 | 4 | 1 | 2 |
| Buffalo, N.Y. | 75 | 53 | 12 | 4 | 2 | 4 | 5 | Memphis, Tenn. | 205 | 125 | 55 | 15 | 5 | 5 | 10 |
| Camden, N.J. | 31 | 17 | 6 | 4 | 1 | 3 | 2 | Mobile, Ala. | 68 | 42 | 14 | 5 | 4 | 3 | 2 |
| Elizabeth, N.J. | 16 | 9 | 4 | 3 |  | - | - | Montgomery, Ala. | 29 | 22 | 4 | 2 | - | 1 | 3 |
| Erie, Pa. | 46 | 38 | 8 | - | - | $\bar{\square}$ | - | Nashville, Tenn. | 153 | 101 | 32 | 16 | 2 | 2 | 3 |
| Jersey City, N.J. | 23 | 14 | 5 | 3 |  | 1 | $\stackrel{-}{-}$ |  |  |  |  |  |  |  |  |
| New York City, N.Y. | 1,044 | 715 | 214 | 86 | 16 | 13 | 51 | W.S. CENTRAL | 1,348 | 864 38 | 272 | 121 7 | 63 | 28 | 58 |
| Newark, N.J. | 61 | 22 | 18 | 16 | 2 | 3 | 1 | Austin, Tex. Baton Rouge, La. | 58 46 | 38 24 | 12 7 | 8 | 1 | 1 | 2 |
| Paterson, N.J. | 25 | 13 | 8 | 4 | - | - |  | Coron Rouge, La. | 46 | 34 | 6 | 8 | 6 | 1 | 2 |
| Philadelphia, Pa. | 300 | 224 | 47 | 18 | 6 | 5 | 12 | Corpus Christi, Tex. Dallas, Tex. | 189 | 104 | 41 | 28 | 10 | 6 | 6 |
| Pittsburgh, Pa.§ | 46 | 33 | 8 | 3 | - | 2 |  | El Paso, Tex. | 189 68 | 104 45 | 10 | 28 6 | 10 | 2 | 2 |
| Reading, Pa. | 28 | 23 | 3 | 1 | 1 | 1 | 1 | Ft. Worth, Tex. | 108 | 64 | 21 | 9 | 5 5 | 4 | 5 |
| Rochester, N.Y. | 98 | 70 | 22 | 5 | 1 | - | 2 | Ft. Worth, Tex. Houston, Tex. | 379 | 255 | 68 | 29 | 20 | 7 | 22 |
| Schenectady, N.Y. | 27 | 23 | 2 | 2 | - | - |  | Little Rock, Ark. | 67 | + 25 | 13 | 4 | 3 | 2 | 22 |
| Scranton, Pa. Syracuse, N.Y. | 27 99 | 21 74 | 4 16 | 2 | 3 | 3 | 1 3 | Little Rock, Ark. | 67 91 | 45 52 | 13 23 | 4 9 | 3 6 | 1 | 3 |
| Trenton, N.J. | 21 | 17 | 1 | 2 | 1 | 3 | 2 | San Antonio, Tex. | 190 | 132 | 41 | 9 | 4 | 4 | 10 |
| Utica, N.Y. | 21 | 14 | 4 | 2 | 1 | - | 1 | Shreveport, La. | U | U | U | U | U | U | U |
| Yonkers, N.Y. | U | U | U | U | U | U | U | Tulsa, Okla. | 109 | 69 | 30 | 7 | 3 |  | 4 |
| E.N. CENTRAL | 1,621 | 1,087 | 320 | 138 | 37 | 39 | 70 | MOUNTAIN | 899 | 559 | 190 | 84 | 36 | 30 | 49 |
| Akron, Ohio | 51 | 33 | 12 | 5 | - | 1 | - | Albuquerque, N.M. | 115 | 74 | 23 | 9 | 6 | 3 | 6 |
| Canton, Ohio | 35 | 25 | 8 | 1 | 1 | - | 3 | Boise, Idaho | 32 | 21 | 5 | 4 | 2 | - | 1 |
| Chicago, III. | U | U | U | U | U | U | U | Colo. Springs, Colo. | 55 | 37 | 13 | 3 | 1 | 1 | 3 |
| Cincinnati, Ohio | 94 | 65 | 18 | 6 | 2 | 3 | 4 | Denver, Colo. | 93 | 53 | 21 | 11 | 3 | 5 | 7 |
| Cleveland, Ohio | 147 | 92 | 28 | 18 | 5 | 4 | 3 | Las Vegas, Nev. | 157 | 99 | 33 | 16 | 7 | 2 | 5 |
| Columbus, Ohio | 167 | 117 | 30 | 12 | 3 | 5 | 18 | Ogden, Utah | 24 | 16 | 4 | 1 | 0 | 3 | 1 |
| Dayton, Ohio | 124 | 85 | 25 | 10 | 3 | 1 | 3 | Phoenix, Ariz. | 181 | 102 | 39 | 22 | 10 | 8 | 10 |
| Detroit, Mich. | 191 | 109 | 47 | 25 | 4 | 6 | 8 | Pueblo, Colo. | 28 | 18 | 3 | 5 | 2 | - | 3 |
| Evansville, Ind. | 53 | 41 | 8 | 1 | 1 | 2 | 2 | Salt Lake City, Utah | 98 | 61 | 25 | 5 | 2 | 5 | 10 |
| Fort Wayne, Ind. | 61 | 44 | 12 | 4 | 1 | - | 2 | Tucson, Ariz. | 116 | 78 | 24 | 8 | 3 | 3 | 3 |
| Gary, Ind. | 12 | 6 | 2 | 3 | 1 | - |  | PACIFIC | 1,836 | 1,289 | 321 | 135 | 43 | 47 | 125 |
| Grand Rapids, Mich. | 45 | 34 | 8 | 2 | 1 | $\overline{-}$ | 4 | Berkeley, Calif. | 1,838 | 11 | 2 | 3 | , | 2 | 12 |
| Indianapolis, Ind. | 171 | 116 | 28 | 16 | 6 | 5 | - | Fresno, Calif. | 69 | 51 | 12 | 2 | 1 | 3 | 3 |
| Lansing, Mich. | 47 | 31 | 11 | 3 |  | 2 | 2 | Glendale, Calif. | 25 | 21 | 3 | 1 | - | - | 2 |
| Milwaukee, Wis. | 136 | 87 | 27 | 14 | 2 | 6 | 11 | Honolulu, Hawaii | 76 | 57 | 15 | 1 | 1 | 2 | 8 |
| Peoria, III. | 57 | 41 | 12 | 1 | 1 | 2 | 2 | Long Beach, Calif. | 62 | 48 | 8 | 4 | 1 | 1 | 10 |
| Rockford, III. | 52 | 34 | 11 | 6 | 1 | 2 | 3 | Los Angeles, Calif. | 518 | 340 | 102 | 45 | 20 | 11 | 27 |
| South Bend, Ind. | 47 | 39 | 3 | 1 | 2 | 2 | 2 | Pasadena, Calif. | 26 | 18 | 4 | 3 | 1 | - | - |
| Toledo, Ohio | 70 | 44 | 19 | 6 | 1 | - | 1 | Portland, Oreg. | 86 | 62 | 8 | 11 | 5 | - | 5 |
| Youngstown, Ohio | 61 | 44 | 11 | 4 | 2 | - | 2 | Sacramento, Calif. | 166 | 125 | 25 | 8 | 1 | 7 | 11 |
| W.N. CENTRAL | 860 | 610 | 148 | 63 | 28 | 11 | 43 | San Diego, Calif. | 163 | 104 | 35 | 14 | 5 | 5 | 20 |
| Des Moines, lowa | 49 | 34 | 11 | 2 | 2 | - |  | San Francisco, Calif. San Jose, Calif. | 128 | 75 170 | 36 22 | 14 | 2 | 1 | 10 |
| Duluth, Minn. | 28 | 23 | 4 | 1 |  | - | - | San Jose, Calif. | 212 | 170 16 | 22 | 12 | 1 | 6 | 18 |
| Kansas City, Kans. | 75 | 49 | 13 | 9 | 4 | - | 1 | Seattle, Wash. | 126 | 84 | 26 | 8 | 3 | 5 | 2 |
| Kansas City, Mo. | 78 | 55 | 13 | 10 | - | - | 1 | Spokane, Wash. | 62 | 46 | 9 | 4 | 3 | 3 | 3 |
| Lincoln, Nebr. | 33 | 24 | 5 | 3 | 1 | - | 3 |  |  |  |  |  |  |  |  |
| Minneapolis, Minn. | 161 | 123 | 25 | 6 | 5 | 2 | 7 | Tacoma, Wash. | 78 | 61 | 11 | 4 | 1 | 1 | 5 |
| Omaha, Nebr. St. Louis, Mo. | 84 112 | 54 77 | 19 | 7 | 2 | 2 | 7 14 | TOTAL | 11,212 | 7,524 | 2,176 | 929 | 311 | 249 | 568 |
| St. Louis, Mo. St. Paul, Minn. | 112 77 | 77 61 | 21 11 | 8 | 5 | 1 | 14 5 |  |  |  |  |  |  |  |  |
| Wichita, Kans. | 163 | 110 | 26 | 13 | 9 | 5 | 4 |  |  |  |  |  |  |  |  |

${ }^{*}$ 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.
${ }^{\dagger}$ Preumonia and influenza.
${ }^{\S}$ 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.
TTotal includes unknown ages.

NOTIFIABLE DISEASES - Reported cases, by geographic division and area, United States, 1997

| Area | Total resident population (in thousands) | AIDS* | Botulism |  | Brucellosis | Chancroid ${ }^{\dagger}$ | Chlamydia trachomatis infection ${ }^{\text {T}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Foodborne | Infant |  |  |  |
| United States | 267,637 | 58,492 | 31 | 79 | 98 | 243 | 526,671 |
| New England | 13,379 | 2,372 | - | - | 1 | 4 | 18,433 |
| Maine | 1,242 | 51 | - | - | - | - | 1,066 |
| N.H. | 1,173 | 55 | - | - | - | - | 816 |
| Vt. | 589 | 29 | - | - | - | NN | 434 |
| Mass. | 6,118 | 863 | - | - | 1 | 4 | 7,984 |
| R.I. | 987 | 152 | - | - | - | - | 2,069 |
| Conn. | 3,270 | 1,222 | - | - | - | - | 6,064 |
| Mid. Atlantic | 38,210 | 18,327 | - | 17 | 3 | 119 | 58,653 |
| N.Y. (excl. NYC) | 10,828 | 3,858 | - | 2 | 1 | - | NN |
| N.Y. City | 7,309 | 9,331 | - | - | - | 119 | 28,468 |
| N.J. | 8,053 | 3,226 | - | 3 | - | - | 10,347 |
| Pa . | 12,020 | 1,912 | - | 12 | 2 | - | 19,838 |
| E.N. Central | 43,890 | 4,350 | 1 | 6 | 12 | 8 | 86,404 |
| Ohio | 11,186 | 848 | - | 3 | 2 | 3 | 22,827 |
| Ind. | 5,864 | 523 | - | - | 7 | - | 9,600 |
| III. | 11,896 | 1,842 | 1 | 1 | 7 | 5 | 23,024 |
| Mich. | 9,774 | 882 | - | - | 3 | - | 21,399 |
| Wis. | 5,170 | 255 | NA | 2 | NA | - | 9,554 |
| W.N. Central | 18,571 | 1,166 | - | - | 7 | - | 32,968 |
| Minn. | 4,686 | 214 | - | - | - | - | 6,631 |
| lowa | 2,852 | 101 | - | NN | 4 | - | 4,907 |
| Mo. | 5,402 | 577 | - | - | 2 | - | 12,308 |
| N. Dak. | 641 | 13 | - | - | NN | NN | 902 |
| S. Dak. | 738 | 11 | - | - | - | , | 1,450 |
| Nebr. | 1,657 | 91 | - | - | 1 | - | 2,767 |
| Kans. | 2,595 | 159 | - | - | - | - | 4,003 |
| S. Atlantic | 48,230 | 13,858 | 1 | 3 | 8 | 30 | 106,486 |
| Del. | 732 | 231 | - | - | - | - | 2,613 |
| Md. | 5,094 | 1,875 | - | - | - | 1 | 13,763 |
| D.C. | 529 | 998 | - | - | 1 | - | 3,069 |
| Va . | 6,734 | 1,175 | - | - | 1 | 1 | 11,615 |
| W. Va. | 1,816 | 130 | - | 2 | - | - | 3,108 |
| N.C. | 7,425 | 850 | 1 | - | 3 | 9 | 17,108 |
| S.C. | 3,760 | 779 | - | - | - | 15 | 12,511 |
| Ga . | 7,486 | 1,722 | - | 1 | 1 | 1 | 15,911 |
| Fla. | 14,654 | 6,098 | - | - | 2 | 3 | 26,788 |
| E.S. Central | 16,326 | 2,062 | - | - | 2 | 2 | 35,437 |
| Kу. | 3,908 | 361 | - | - | 1 | - | 6,332 |
| Tenn. | 5,368 | 784 | - | - | 1 | 1 | 12,502 |
| Ala. | 4,319 | 570 | - | - | - | 1 | 8,704 |
| Miss. | 2,731 | 347 | - | - | - | - | 7,899 |
| W.S. Central | 29,631 | 6,337 | 1 | 11 | 20 | 57 | 72,139 |
| Ark. | 2,523 | 242 | - | 1 | 1 | 1 | 2,503 |
| La. | 4,352 | 1,094 | - | 1 | - | 3 | 11,545 |
| Okla. | 3,317 | 283 | - | - | - | - | 7,416 |
| Tex. | 19,439 | 4,718 | 1 | 9 | 19 | 53 | 50,675 |
| Mountain | 16,483 | 1,850 | 1 | 8 | 8 | 1 | 29,216 |
| Mont. | 879 | 41 | - | - | - | - | 1,146 |
| Idaho | 1,210 | 52 | - | 2 | - | - | 1,709 |
| Wyo. | 480 | 16 | - | - | 2 | 1 | 635 |
| Colo. | 3,893 | 380 | - | - | 2 | - | 7,196 |
| N. Mex. | 1,730 | 169 | - | 1 | 1 | - | 4,021 |
| Ariz. | 4,555 | 448 | 1 | 2 | 3 | - | 10,783 |
| Utah | 2,059 | 152 | - | 2 | - | - | 1,774 |
| Nev. | 1,677 | 592 | - | 1 | - | - | 1,952 |
| Pacific | 42,917 | 8,121 | 27 | 34 | 37 | 22 | 86,935 |
| Wash. | 5,610 | 641 | 3 | - | 3 | 2 | 9,574 |
| Oreg. | 3,243 | 305 | 3 | 2 | 1 | 1 | 5,270 |
| Calif. | 32,268 | 7,029 | 2 | 29 | 30 | 19 | 68,647 |
| Alaska | 609 | 52 | 19 | - | 3 | - | 1,615 |
| Hawaii | 1,187 | 94 | - | 3 | 3 | - | 1,829 |
| Guam | 145 | 2 | - | - | - | - | 368 |
| P.R. | 3,827 | 2,040 | - | - | - | 1 | 2,123 |
| V.I. | 114 | 99 | - | - | - | - | 14 |
| American Samoa | 60 | - | NA | NA | NA | NA | NA |
| C.N.M.I. | 63 | 1 | - | - | - | NA | NA |
| *Totals reported to Division of HIV/AIDS Prevention-Surveillance and Epidemiology, <br> National Center for HIV, STD, and TB Prevention (NCHSTP), through December 31, 1997. <br> Total includes 49 cases in persons with unknown state of residence. <br> ${ }^{\dagger}$ Cases were updated through the Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of July 13, 1998. |  |  |  |  |  | NA: Not NN: Not -: No re | Available Notifiable ported cases |

NOTIFIABLE DISEASES — Reported cases, by geographic division and area, United States, 1997 (continued)

| Area | Cholera | Cryptosporidiosis | Diphtheria | Escherichia coli 0157:H7 |  | Gonorrhea ${ }^{\text {s }}$ | Haemophilus influenzae, invasive |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | NETSS* | PHLIS ${ }^{\dagger}$ |  |  |
| United States | 6 | 2,566 | 4 | 2,555 | 1,658 | 324,907 | 1,162 |
| New England | - | 166 | - | 197 | 133 | 5,889 | 67 |
| Maine | - | 34 | - | 19 | - | 66 | 5 |
| N.H. | - | 6 | - | 15 | 16 | 96 | 13 |
| Vt. | - | 18 | - | 8 | 3 | 53 | 3 |
| Mass. | - | 62 | - | 99 | 95 | 2,225 | 40 |
| R.I. | - | 4 | - | 12 | 1 | 422 | 4 |
| Conn. | - | 42 | - | 44 | 18 | 3,027 | 2 |
| Mid. Atlantic | - | 528 | - | 167 | 56 | 39,947 | 184 |
| N.Y. (excl. NYC) | _ | 328 | _ | 111 |  | 6,801 | 69 |
| N.Y. City | - | 169 | - | 20 | 9 | 15,592 | 42 |
| N.J. | - | 31 | - | 36 | 27 | 7,587 | 53 |
| Pa. | - | NN | - | NN | 20 | 9,967 | 20 |
| E.N. Central | 1 | 523 | - | 574 | 302 | 59,591 | 172 |
| Ohio | - | 38 | - | 108 | 55 | 14,961 | 86 |
| Ind. | - | 46 | - | 82 | 49 | 6,155 | 24 |
| III. | - | 73 | - | 76 | 40 | 18,423 | 42 |
| Mich. | 1 | 46 | - | 152 | 108 | 15,736 | 19 |
| Wis. | NN | 320 | - | 156 | 50 | 4,316 | 1 |
| W.N. Central | 1 | 424 | 1 | 503 | 417 | 14,860 | 75 |
| Minn. | 1 | 242 | - | 199 | 210 | 2,417 | 57 |
| lowa | - | 71 | - | 114 | 76 | 1,311 | 6 |
| Mo. | - | 38 | - | 58 | 69 | 7,941 | 8 |
| N. Dak. | - | 15 | - | 15 | 12 | 68 | - |
| S. Dak. | - | 23 | 1 | 29 | 37 | 173 | 3 |
| Nebr. | - | 21 | - | 58 | - | 1,210 | 1 |
| Kans. | - | 14 | - | 30 | 13 | 1,740 | - |
| S. Atlantic | - | 289 | - | 222 | 151 | 93,011 | 188 |
| Del. | - | 8 | - | 5 | 4 | 1,273 | - |
| Md. | - | 15 | - | 28 | 16 | 11,568 | 66 |
| D.C. | - | - | - | 2 | - | 4,557 | - |
| Va . | - | NN | - | NN | 46 | 8,731 | 15 |
| W. Va. | - | 1 | - | NN | 1 | 957 | 4 |
| N.C. | - | NN | - | 74 | 40 | 16,888 | 21 |
| S.C. | - | - | _ | 13 | 9 | 11,487 | 5 |
| Ga . | - | 74 | - | 45 | - | 18,471 | 42 |
| Fla. | - | 191 | - | 55 | 35 | 19,079 | 35 |
| E.S. Central | - | 47 | - | 101 | 56 | 35,409 | 58 |
| Ky. | - | 20 | - | 30 | - | 4,027 | 8 |
| Tenn. | - | 17 | - | 50 | 40 | 11,023 | 32 |
| Ala. | - | NN | - | 14 | 13 | 12,032 | 15 |
| Miss. | - | 10 | - | 7 | 3 | 8,327 | 3 |
| W.S. Central | 1 | 88 | - | 83 | 33 | 46,532 | 60 |
| Ark. | - | 10 | - | 10 | 11 | 4,382 | 3 |
| La. | - | 23 | - | 18 | 12 | 10,782 | 19 |
| Okla. | - | 12 | - | 13 | 7 | 4,756 | 33 |
| Tex. | 1 | 43 | - | 42 | 3 | 26,612 | 5 |
| Mountain | 1 | 141 | 2 | 275 | 152 | 8,084 | 94 |
| Mont. | - | 5 | - | 21 | 9 | 66 | 1 |
| Idaho | - | NN | - | 38 | 25 | 158 | 1 |
| Wyo. | - | 4 | - | 15 | 13 | 54 | 4 |
| Colo. | - | 25 | - | 83 | 57 | 2,320 | 23 |
| N. Mex. | - | 67 | _ | 7 | 6 | 857 | 9 |
| Ariz. | 1 | 20 | - | 42 | 31 | 3,802 | 35 |
| Utah | - | - | - | 57 | - | 278 | 3 |
| Nev. | - | 20 | 2 | 12 | 11 | 549 | 18 |
| Pacific | 2 | 360 | 1 | 433 | 358 | 21,584 | 264 |
| Wash. | - | NN | - | 150 | 147 | 1,968 | 7 |
| Oreg. | - | 32 | 1 | 87 | 98 | 773 | 38 |
| Calif. | 2 | 328 | - | 184 | 99 | 17,941 | 203 |
| Alaska | 2 | - | - | 12 | 5 | 392 | 8 |
| Hawaii | - | NN | - | NN | 9 | 510 | 8 |
| Guam | - | - | - | NN | - | 47 | - |
| P.R. | - | - | - | 5 | - | 526 | - |
| V.I. | - | - | - | NA | - | 40 | - |
| American Samoa | NA | NA | NA | NA | NA | NA | NA |
| C.N.M.I. | - | - | - | NN | - | NA | 6 |
| *National Electronic Telecommunications System for Surveillance. NA: Not Available <br> $\dagger$ Public Health Laboratory Information System. Cases were updated through NN: Not Notifiable <br> she National Center for Infectious Diseases as of August 10, 1998. : No reported cases <br> § Cases were updated through the Division of Sexually Transmitted Diseases Prevention, NCHSTP,  |  |  |  |  |  |  |  |

NOTIFIABLE DISEASES - Reported cases, by geographic division and area, United States, 1997 (continued)

| Area | Hansen disease (leprosy) | Hepatitis |  |  | $\begin{gathered} \text { Legionel- } \\ \text { losis } \end{gathered}$ | $\begin{aligned} & \text { Lyme } \\ & \text { disease } \end{aligned}$ | Malaria |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | A | B | $\begin{gathered} \hline \text { C/non-A, } \\ \text { non-B } \\ \hline \end{gathered}$ |  |  |  |
| United States | 122 | 30,021 | 10,416 | 3,816 | 1,163 | 12,801 | 2,001 |
| New England | - | 650 | 190 | 58 | 93 | 3,111 | 101 |
| Maine | NN | 66 | 6 | - | 3 | 34 | 1 |
| N.H. | - | 35 | 18 | - | 7 | 39 | 10 |
| Vt. | NN | 15 | 11 | 4 | 13 | 8 | 2 |
| Mass. | - | 254 | 77 | 46 | 32 | 291 | 33 |
| R.I. | - | 131 | 22 | 8 | 18 | 442 | 13 |
| Conn. | - | 149 | 56 | - | 20 | 2,297 | 42 |
| Mid. Atlantic | 14 | 2,124 | 1,417 | 364 | 253 | 7,556 | 519 |
| N.Y. (excl. NYC) | 1 | 395 | 363 | 279 | 79 | 3,149 | 81 |
| N.Y. City | 10 | 907 | 460 | - | 27 | 178 | 310 |
| N.J. | 1 | 316 | 249 | NA | 30 | 2,041 | 88 |
| Pa . | 2 | 506 | 345 | 85 | 117 | 2,188 | 40 |
| E.N. Central | 2 | 3,089 | 1,501 | 536 | 347 | 593 | 169 |
| Ohio | - | 332 | 94 | 20 | 120 | 40 | 19 |
| Ind. | - | 330 | 99 | 12 | 57 | 33 | 18 |
| III. | - | 868 | 284 | 86 | 35 | 13 | 72 |
| Mich. | 2 | 1,372 | 458 | 392 | 91 | 27 | 44 |
| Wis. | NN | 187 | 566 | 26 | 44 | 480 | 16 |
| W.N. Central | - | 2,300 | 532 | 66 | 75 | 299 | 79 |
| Minn. | - | 243 | 62 | 7 | 9 | 256 | 42 |
| lowa | - | 490 | 44 | 29 | 12 | 8 | 10 |
| Mo. | - | 1,151 | 360 | 10 | 26 | 28 | 16 |
| N. Dak. | NN | 14 | 7 | 4 | 2 | - | 3 |
| S. Dak. | - | 27 | 1 | - | 4 | 1 | 3 |
| Nebr. | - | 113 | 26 | 3 | 15 | 2 | 1 |
| Kans. | - | 262 | 32 | 13 | 7 | 4 | 4 |
| S. Atlantic | 7 | 2,413 | 1,603 | 297 | 146 | 792 | 383 |
| Del. | - | 31 | 7 | - | 13 | 109 | 5 |
| Md. | 1 | 187 | 172 | 12 | 23 | 494 | 85 |
| D.C. | - | 36 | 30 | - | 5 | 10 | 20 |
| Va . | 1 | 250 | 137 | 27 | 34 | 67 | 73 |
| W. Va. | - | 12 | 16 | 18 | NN | 10 | 1 |
| N.C. | 1 | 211 | 265 | 51 | 14 | 34 | 21 |
| S.C. | 1 | 110 | 99 | 40 | 8 | 3 | 19 |
| Ga. | - | 764 | 224 | NA | 6 | 9 | 57 |
| Fla. | 3 | 812 | 653 | 149 | 43 | 56 | 102 |
| E.S. Central | 2 | 679 | 759 | 383 | 58 | 103 | 40 |
| Kу. | - | 79 | 44 | 17 | 13 | 20 | 13 |
| Tenn. | 2 | 417 | 454 | 241 | 33 | 45 | 11 |
| Ala. | - | 87 | 80 | 13 | 4 | 11 | 10 |
| Miss. | - | 96 | 181 | 112 | 8 | 27 | 6 |
| W.S. Central | 27 | 6,445 | 1,627 | 680 | 47 | 145 | 146 |
| Ark. | 2 | 223 | 107 | 15 | 2 | 27 | 5 |
| La. | 1 | 266 | 208 | 276 | 9 | 13 | 21 |
| Okla. | - | 1,445 | 67 | 10 | 4 | 45 | 9 |
| Tex. | 24 | 4,511 | 1,245 | 379 | 32 | 60 | 111 |
| Mountain | 3 | 4,326 | 870 | 342 | 69 | 15 | 67 |
| Mont. | - | 71 | 12 | 24 | 1 | - | 2 |
| Idaho | - | 150 | 54 | 86 | 2 | 4 | 1 |
| Wyo. | - | 35 | 25 | 83 | 1 | 3 | 2 |
| Colo. | - | 402 | 147 | 38 | 19 | - | 30 |
| N. Mex. | - | 351 | 257 | 61 | 3 | 1 | 8 |
| Ariz. | - | 2,330 | 202 | 26 | 18 | 4 | 12 |
| Utah | 1 | 550 | 93 | 5 | 18 | 1 | 3 |
| Nev. | 2 | 437 | 80 | 19 | 7 | 2 | 9 |
| Pacific | 67 | 7,995 | 1,917 | 1,090 | 75 | 187 | 497 |
| Wash. | 1 | 1,015 | 115 | 42 | 12 | 11 | 49 |
| Oreg. | - | 376 | 119 | 4 | - | 20 | 25 |
| Calif. | 40 | 6,422 | 1,657 | 862 | 61 | 154 | 405 |
| Alaska | - | 34 | 15 | - | - | 2 | 5 |
| Hawaii | 26 | 148 | 11 | 182 | 2 | - | 13 |
| Guam | - | - | 3 | - | - | - | - |
| P.R. | - | 273 | 843 | - | - | - | 6 |
| V.I. | - | 8 | 25 | 1 | 5 | - | 1 |
| American Samoa | NA | NA | NA | NA | NA | NA | NA |
| C.N.M.I. | 1 | 1 | 48 | 2 | - | - | - |

NOTIFIABLE DISEASES - Reported cases, by geographic division and area, United States, 1997 (continued)

| Area | Measles |  | Meningococcal disease | Mumps | Pertussis | Plague | Poliomyelitis, paralytic |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Indigenous | Imported* |  |  |  |  |  |
| United States | 81 | 57 | 3,308 | 683 | 6,564 | 4 | 3 |
| New England | 11 | 8 | 209 | 14 | 1,096 | - | - |
| Maine | - | 1 | 19 | - | 26 | - | - |
| N.H. | 1 | - | 17 | 1 | 150 | - | - |
| Vt. | - | - | 4 | - | 283 | - | - |
| Mass. | 10 | 6 | 100 | 4 | 582 | - | - |
| R.I. | - | - | 24 | 8 | 19 | - | - |
| Conn. | - | 1 | 45 | 1 | 36 | - | - |
| Mid. Atlantic | 18 | 9 | 357 | 66 | 503 | - | - |
| N.Y. (excl. NYC) | 2 | 3 | 97 | 16 | 214 | - | - |
| N.Y. City | 8 | 3 | 57 | 4 | 78 | - | - |
| N.J. | 3 | - | 75 | 8 | 14 | - | - |
| Pa . | 5 | 3 | 128 | 38 | 197 | - | _ |
| E.N. Central | 6 | 4 | 499 | 99 | 714 | - | - |
| Ohio | - | - | 164 | 35 | 165 | _ | - |
| Ind. | - | - | 60 | 15 | 104 | - | - |
| III. | 6 | 1 | 156 | 17 | 155 | - | - |
| Mich. |  | 2 | 72 | 28 | 71 | - | - |
| Wis. | - | 1 | 47 | 4 | 219 | NN | NN |
| W.N. Central | 14 | 3 | 248 | 19 | 890 | - | - |
| Minn. | 5 | 3 | 41 | 7 | 547 | - | - |
| lowa | - | - | 47 | 10 | 207 | - | - |
| Mo. | 1 | - | 106 | - | 80 | - | - |
| N. Dak. | - | - | 2 | - | 2 | - | - |
| S. Dak. | 8 | - | 6 | - | 5 | - | - |
| Nebr. | - | - | 20 | 1 | 16 | - | - |
| Kans. | - | - | 26 | 1 | 33 | - | - |
| S. Atlantic | 4 | 14 | 578 | 85 | 446 | - | 1 |
| Del. | - | - | 5 | - | 1 | - | - |
| Md. | - | 2 | 42 | 1 | 119 | - | - |
| D.C. | - | 2 | 12 | - | 3 | - | - |
| Va . | - | 1 | 60 | 21 | 59 | - | - |
| W. Va. | 1 | - | 19 | - | 6 | - | - |
| N.C. | - | 2 | 97 | 12 | 118 | - | - |
| S.C. | - | 1 | 64 | 11 | 32 | - | - |
| Ga . | - | 1 | 108 | 11 | 18 | - | - |
| Fla. | 3 | 5 | 171 | 29 | 90 | - | 1 |
| E.S. Central | - | 1 | 242 | 34 | 159 | - | - |
| Ky. | - | - | 50 | 3 | 74 | - | - |
| Tenn. | - | - | 77 | 8 | 40 | - | - |
| Ala. | - | 1 | 85 | 9 | 34 | - | - |
| Miss. | - | - | 30 | 14 | 11 | - | - |
| W.S. Central | 3 | 5 | 335 | 98 | 376 | - | 1 |
| Ark. | - | - | 38 | 3 | 62 | - | - |
| La. | - | - | 57 | 17 | 21 | - | - |
| Okla. | - | 1 | 45 | 3 | 60 | - | - |
| Tex. | 3 | 4 | 195 | 75 | 233 | - | 1 |
| Mountain | 6 | 2 | 189 | 61 | 1,333 | 2 | - |
| Mont. | - | - | 8 | - | 18 | - | - |
| Idaho | - | - | 15 | 6 | 570 | - | - |
| Wyo. | - | - | 3 | 1 | 7 | - | - |
| Colo. | - | - | 51 | 3 | 415 | 1 | - |
| N. Mex. | - | - | 31 | NN | 198 | - | - |
| Ariz. | 5 | - | 44 | 34 | 45 | 1 | - |
| Utah | - | 1 | 17 | 8 | 29 | - | - |
| Nev. | 1 | 1 | 20 | 9 | 51 | - | - |
| Pacific | 19 | 11 | 651 | 207 | 1,047 | 2 | 1 |
| Wash. | 1 | 1 | 115 | 21 | 481 | - | - |
| Oreg. | - | - | 124 | NN | 48 | - | - |
| Calif. | 16 | 8 | 402 | 151 | 483 | 2 | 1 |
| Alaska | $\bar{\square}$ | - | 3 | 8 | 16 |  | - |
| Hawaii | 2 | 2 | 7 | 27 | 19 | - | - |
| Guam | - | - | 1 | 1 | - | - | - |
| P.R. | - | - | 8 | 7 | - | - | - |
| V.I. | - | - | 1 | 1 | - | - | - |
| American Samoa | NA | NA | NA | NA | NA | NA | NA |
| C.N.M.I. | 1 | - | - | 4 | - | - | - |
| *Imported cases include only those resulting from importation from other countries. |  |  |  |  |  | NA: N NN: -: No | ilable <br> ifiable <br> rted cases |

NOTIFIABLE DISEASES - Reported cases, by geographic division and area, United States, 1997 (continued)

| Area | Psittacosis | Rabies |  | RMSF* | Rubella |  | $\underset{\text { Salmonel- }}{\text { losis }}$ | Shigellosis |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Cong |  |  |
|  |  | Animal | Human |  | Rubella | syndrome |  |  |
| United States | 33 | 8,105 | 2 |  | 409 | 181 | 5 | 41,901 | 23,117 |
| New England | 1 | 1,257 | - | 5 | 6 | - | 2,348 | 592 |
| Maine | 1 | 227 | - | - | - | - | 137 | 15 |
| N.H. | - | 49 | - | - | - | - | 151 | 54 |
| Vt. | - | 113 | - | - | - | - | 88 | 11 |
| Mass. | - | 282 | - | 1 | 1 | - | 1,259 | 316 |
| R.I. | - | 42 | - | 1 | - | - | 167 | 95 |
| Conn. | - | 544 | - | 3 | 5 | - | 546 | 101 |
| Mid. Atlantic | 5 | 1,722 | - | 39 | 40 | - | 6,505 | 3,168 |
| N.Y. (excl. NYC) | 3 | 1,264 | - | 8 | 11 | - | 1,649 | 801 |
| N.Y. City | - | NA | - | 6 | 29 | - | 1,796 | 956 |
| N.J. | - | 190 | - | 9 | - | - | 1,501 | 625 |
| Pa . | 2 | 268 | - | 16 | - | - | 1,559 | 786 |
| E.N. Central | 4 | 203 | - | 19 | 6 | - | 6,207 | 2,552 |
| Ohio | - | 116 | - | 12 | - | - | 1,545 | 835 |
| Ind. | - | 13 | - | 3 | - | - | 590 | 88 |
| III. | - | 20 | - | 3 | 2 | - | 1,935 | 1,163 |
| Mich. | 4 | 28 | - | - | - | - | 906 | 346 |
| Wis. | NA | 26 | NA | 1 | 4 | NN | 1,231 | 120 |
| W.N. Central | 2 | 537 | - | 35 | 2 | - | 2,287 | 908 |
| Minn. | 1 | 70 | - | 1 | - | - | 632 | 138 |
| lowa | - | 160 | - | 1 | - | - | 297 | 90 |
| Mo. | 1 | 31 | - | 24 | 2 | - | 568 | 222 |
| N. Dak. | NN | 91 | - | - | - | - | 69 | 10 |
| S. Dak. |  | 94 | - | 2 | - | - | 90 | 31 |
| Nebr. | - | 2 | - | - | - | - | 185 | 284 |
| Kans. | - | 89 | - | 7 | - | - | 446 | 133 |
| S. Atlantic | 7 | 3,109 | - | 136 | 79 | 1 | 8,475 | 4,499 |
| Del. | 1 | 67 | - | - | - | - | 101 | 35 |
| Md. | 1 | 603 | - | 20 | - | - | 1,231 | 423 |
| D.C. | - | 5 | - | - | 1 | - | 115 | 47 |
| Va . | - | 678 | - | 23 | 1 | - | 1,120 | 416 |
| W. Va. | - | 89 | - | 3 | - | - | 133 | 27 |
| N.C. | 1 | 879 | - | 35 | 59 | - | 1,226 | 387 |
| S.C. | 1 | 186 | - | 36 | 15 | - | 603 | 87 |
| Ga . | - | 324 | - | 11 | - | - | 1,356 | 1,131 |
| Fla. | 3 | 278 | - | 8 | 3 | 1 | 2,590 | 1,946 |
| E.S. Central | - | 271 | - | 91 | 1 | - | 1,771 | 1,127 |
| Ky. | - | 29 | - | 5 | - | - | 373 | 449 |
| Tenn. | - | 149 | - | 40 | - | - | 443 | 291 |
| Ala. | - | 88 | - | 9 | 1 | - | 470 | 272 |
| Miss. | - | 5 | - | 37 | NN | - | 485 | 115 |
| W.S. Central | - | 439 | - | 69 | 12 | - | 4,246 | 4,252 |
| Ark. | - | 56 | - | 31 | - | - | 445 | 273 |
| La. | - | 7 | - | 5 | - | - | 617 | 182 |
| Okla. | - | 113 | - | 29 | - | - | 391 | 293 |
| Tex. | - | 263 | - | 4 | 12 | - | 2,793 | 3,504 |
| Mountain | 3 | 197 | 1 | 12 | 7 | 1 | 2,587 | 1,913 |
| Mont. | - | 52 | 1 | 4 | - | - | 63 | 11 |
| Idaho | - | - | - | 5 | 2 | - | 141 | 79 |
| Wyo. | - | 31 | - | 1 | - | - | 49 | 5 |
| Colo. | 3 | 34 | - | - | - | - | 608 | 258 |
| N. Mex. | - | 13 | - | - | - | - | 311 | 331 |
| Ariz. | - | 53 | - | 1 | 5 | 1 | 853 | 1,076 |
| Utah | - | 6 | - | 1 | - | - | 271 | 101 |
| Nev. | - | 8 | - | - | - | - | 291 | 52 |
| Pacific | 11 | 370 | 1 | 3 | 28 | 3 | 7,475 | 4,106 |
| Wash. | 1 | - | 1 | - | 5 | - | 680 | 318 |
| Oreg. | 2 | 14 | - | 1 | - | - | 368 | 189 |
| Calif. | 8 | 327 | - | 2 | 14 | 3 | 5,993 | 3,528 |
| Alaska | - | 29 | - | - | - | NN | 50 | 6 |
| Hawaii | - | - | - | - | 9 | - | 384 | 65 |
| Guam | - | - | - | - | - | - | 24 | 35 |
| P.R. | - | 71 | - | - | - | - | 838 | 70 |
| V.I. | - | - | - | - | - | - | 10 | 2 |
| American Samoa | NA | NA | NA | NA | NA | NA | NA | NA |
| C.N.M.I. | - | - | - | - | - | - | 43 | 34 |
| *Rocky Mountain spotted fever. |  |  |  |  |  |  | NA: Not Available <br> NN: Not Notifiable <br> -: No reported cases |  |

NOTIFIABLE DISEASES - Reported cases, by geographic division and area, United States, 1997 (continued)

| Area | Syphilis* |  |  |  | Toxicshock syndrome | Trichinosis | Tuberculosis ${ }^{\dagger}$ | Typhoid fever |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Cong. } \\ (<1 \mathrm{yr} .)^{\dagger} \end{gathered}$ | Primary \& secondary | $\begin{gathered} \text { All } \\ \text { stages } \end{gathered}$ | Tetanus |  |  |  |  |
| United States | 1,049 | 8,550 | 46,540 | 50 | 157 | 13 | 19,851 | 365 |
| New England | 4 | 144 | 1,172 | - | 5 | - | 478 | 21 |
| Maine | - | 2 | 13 | - | 1 | - | 21 | - |
| N.H. | - | - | 23 | - | 3 | - | 17 | - |
| Vt. | - | - | 1 | - | - | - | 6 | 1 |
| Mass. | 2 | 78 | 731 | - | 1 | - | 268 | 19 |
| R.I. | - | 2 | 84 | - | - | - | 38 | 1 |
| Conn. | 2 | 62 | 320 | - | - | - | 128 | - |
| Mid. Atlantic | 220 | 412 | 7,950 | 6 | 20 | 2 | 3,511 | 101 |
| N.Y. (excl. NYC) | 21 | 41 | 684 | 3 | 10 | - | 535 | 21 |
| N.Y. City | 78 | 97 | 4,955 | - | 4 | - | 1,730 | 49 |
| N.J. | 84 | 151 | 1,129 | 2 | - | 2 | 718 | 29 |
| Pa . | 37 | 123 | 1,182 | 1 | 6 | - | 528 | 2 |
| E.N. Central | 118 | 1,046 | 4,336 | 2 | 46 | 4 | 1,932 | 53 |
| Ohio | 10 | 218 | 761 | - | 2 | 1 | 286 | 5 |
| Ind. | 3 | 151 | 522 | - | 4 | 1 | 168 | 3 |
| III. | 72 | 435 | 1,953 | 2 | 12 | - | 974 | 28 |
| Mich. | 26 | 153 | 785 | - | 20 | 1 | 374 | 7 |
| Wis. | 7 | 89 | 315 | NA | 8 | 1 | 130 | 10 |
| W.N. Central | 12 | 172 | 874 | 2 | 28 | 1 | 614 | 5 |
| Minn. | - | 16 | 124 | 1 | 10 | - | 161 | 1 |
| lowa | - | 7 | 72 | 1 | 3 | - | 74 | - |
| Mo. | 10 | 114 | 494 | - | 8 | 1 | 248 | 1 |
| N. Dak. | - | - | - | - | 1 | - | 12 | - |
| S. Dak. | - | 1 | 7 | - | 1 | - | 19 | - |
| Nebr. | - | 5 | 32 | - | 4 | - | 22 | 1 |
| Kans. | 2 | 29 | 145 | - | 1 | - | 78 | 2 |
| S. Atlantic | 201 | 3,177 | 13,253 | 6 | 15 | - | 3,780 | 48 |
| Del. | 2 | 22 | 113 | - | 1 | - | 39 | - |
| Md. | 56 | 891 | 2,453 | 1 | - | - | 340 | 5 |
| D.C. | 12 | 117 | 645 | 1 | 1 | - | 110 | - |
| Va. | 6 | 236 | 1,103 | - | 1 | - | 350 | 5 |
| W. Va. | - | 1 | 19 | 1 | - | - | 54 | 2 |
| N.C. | 22 | 721 | 2,206 | 1 | 1 | - | 463 | 5 |
| S.C. | 15 | 378 | 1,135 | 1 | 3 | - | 328 | 3 |
| Ga . | 15 | 515 | 2,833 | - | 1 | - | 696 | 8 |
| Fla. | 73 | 296 | 2,746 | 1 | 7 | - | 1,400 | 20 |
| E.S. Central | 104 | 1,682 | 5,689 | 3 | 3 | 1 | 1,315 | 2 |
| Ky. | 5 | 135 | 403 | - | - | - | 198 | - |
| Tenn. | 30 | 747 | 2,366 | 2 | 2 | 1 | 467 | 1 |
| Ala. | 29 | 410 | 1,481 | - | 1 | - | 405 | 1 |
| Miss. | 40 | 390 | 1,439 | 1 | NN | - | 245 | - |
| W.S. Central | 213 | 1,330 | 8,159 | 11 | 1 | - | 2,810 | 25 |
| Ark. | 31 | 173 | 562 | 1 | 1 | NN | 200 | - |
| La. | 22 | 364 | 1,808 | 2 | - | - | 406 | 2 |
| Okla. | 9 | 117 | 405 | 2 | - | - | 212 | 3 |
| Tex. | 151 | 676 | 5,384 | 6 | - | - | 1,992 | 20 |
| Mountain | 12 | 172 | 1,045 | 6 | 18 | 4 | 644 | 9 |
| Mont. | - | - | 5 | 1 | - | 4 | 18 | 1 |
| Idaho | - | 1 | 24 | - | 1 | - | 15 | - |
| Wyo. | - | - | 1 | - | - | - | 2 | - |
| Colo. | - | 15 | 154 | 2 | 9 | - | 94 | 4 |
| N. Mex. | - | 9 | 103 | - | - | - | 71 | - |
| Ariz. | 12 | 132 | 600 | - | 4 | - | 296 | 2 |
| Utah |  | 5 | 56 | 3 | 3 | - | 36 | - |
| Nev. | - | 10 | 102 | - | 1 | - | 112 | 2 |
| Pacific | 165 | 415 | 4,062 | 14 | 21 | 1 | 4,767 | 101 |
| Wash. | 1 | 17 | 132 | 1 | 5 | - | 305 | 7 |
| Oreg. | 1 | 10 | 48 | 2 | - | - | 161 | 3 |
| Calif. | 163 | 386 | 3,823 | 11 | 16 | 1 | 4,056 | 84 |
| Alaska | - | 1 | 12 | - | - | - | 78 | - |
| Hawaii | - | 1 | 47 | - | - | - | 167 | 7 |
| Guam | - | - | 1 | - | - | - | - | 1 |
| P.R. | 7 | 249 | 1,575 | 1 | - | - | 257 | - |
| V.I. | - | 2 | 10 | - | - | - | 1 | - |
| American Samoa | NA | NA | NA | NA | NA | NA | 5 | NA |
| C.N.M.I. | NA | NA | NA | - | - | - | 88 | - |
| *Cases were updated through the Division of Sexually Transmitted Diseases Prevention, NCHSTP, NA: Not Available <br> as of July $13,1998$.  <br> $\dagger$ Cases were updated through the Division of Tuberculosis Elimination, NCHSTP, as of April 15, 1998. NN: Not Notifiable <br> $-:$ No reported cases  |  |  |  |  |  |  |  |  |

## Contributors to the Production of the MMWR (Weekly)

 Weekly Notifiable Disease Morbidity Data and 122 Cities Mortality DataSamuel L. Groseclose, D.V.M., M.P.H.

State Support Team
Robert Fagan
Karl A. Brendel
Harry Holden
Gerald Jones
Felicia Perry
Carol A. Worsham

CDC Operations Team
Carol M. Knowles
Deborah A. Adams
Willie J. Anderson
Patsy A. Hall
Amy K. Henion
Myra A. Montalbano

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| Acting Director, Centers for | Acting Directo | Writers-Editors, MMWR (weekly) |
| :---: | :---: | :---: |
| Disease Control and Prevention | Epidemiology Program Office | David C. Johnson |
| Claire V. Broome, M.D. | Barbara R. Holloway, M.P.H. | Teresa F. Rutledge |
| Acting Deputy Director, Centers for Disease Control and Prevention Stephen B. Thacker, M.D., M.Sc. | Editor, MMWR Series | Desktop Publishing and |
|  | John W. Ward, M.D. | Graphics Support |
|  | Acting Managing Editor, MMWR (weekly) <br> Caran R. Wilbanks | Morie M. Higgins Peter M. Jenkins |

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[^0]:    ${ }^{*}$ CDC's National Center for Health Statistics uses the term maternal mortality rate. In this report, the term "ratio" is used instead of rate because the numerator includes some maternal deaths that were not related to live births and thus were not included in the denominator.

[^1]:    * $\mathrm{n}=67$.

[^2]:    *Updated monthly to the Division of HIV/AIDS Prevention-Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention,

