



- 137 Influenza B Virus Outbreak on a Cruise Ship — Northern Europe, 2000
- 140 Blood and Hair Mercury Levels in Young Children and Women of Childbearing Age — United States, 1999
- Progress Toward Poliomyelitis Eradication — Afghanistan, 1999–2000
- 147 Outbreak of Poliomyelitis Dominican Republic and Haiti, 2000–2001
- 148 Notices to Readers

## Influenza B Virus Outbreak on a Cruise Ship — Northern Europe, 2000

During June 23–July 5, 2000, an outbreak of respiratory illnesses occurred on the MS Rotterdam (Holland America Line & Windstar Cruises) during a 12-day Baltic cruise from the United Kingdom to Germany via Russia. The ship carried 1311 passengers, primarily from the United States, and 506 crew members from many countries. Although results of rapid viral testing for influenza A and B viruses were negative, immunofluorescence staining and viral culture results implicated influenza B virus infection as the cause of the outbreak. This report summarizes the findings of the outbreak investigation conducted by the ship's medical department and describes the measures taken to control the outbreak. Travelers at high risk for complications of influenza who were not vaccinated with influenza vaccine during the preceding fall or winter should consider receiving influenza vaccine before travel with large tourist groups at any time of year or to certain regions of the world.

On June 26, nine crew members presented to the ship's infirmary with cough, sore throat, and fever  $\geq$ 100.0 F ( $\geq$ 37.8 C). All had developed symptoms during the preceding 24 hours. Oropharyngeal specimens from two crew members were tested by a commercial rapid influenza diagnostic test designed to detect both influenza A and B viruses but not to distinguish between them. Although test results were negative, three crew members with high fevers were started on rimantadine therapy for clinically suspected influenza A infection.

To characterize and control the suspected outbreak among crew members, ship's medical staff implemented a respiratory illness protocol that included surveillance for cases of respiratory illness. A case of acute respiratory illness (ARI) was defined as cough or sore throat. Influenza-like illness (ILI), a subset of ARI cases, was defined as ARI with fever ≥100.0 F (≥37.8 C) or self-reported feverishness. Active surveillance was initiated among crew members. Supervisors on each work shift observed and asked crew members about symptoms of influenza and required any crew member with symptoms to report to the ship's infirmary for evaluation. Crew members with confirmed ILI were relieved of duty and placed in cabin isolation either alone or with other ill crew members. Passive surveillance was initiated among passengers and identified any passenger who presented to the ship's infirmary with respiratory illness. A commercial rapid influenza diagnostic test, designed to detect both influenza A and B viruses but not to distinguish between them, was used selectively to assist in diagnosis. Medical and demographic information, including country of residence, cabin number, and crew duties (if applicable), was collected from ill patients.

Influenza B Virus — Continued

By June 29, 38 crew members and 26 passengers had been seen in the infirmary for ARI; of these, 32 (84%) crew members and 11 (42%) passengers had ILI. Eight crew members were tested by rapid influenza diagnostic testing; all had negative results. Because the etiology of crew respiratory illnesses remained uncertain, four symptomatic crew members disembarked in Stockholm, Sweden, for medical evaluation that included testing of nasopharyngeal specimens by immunofluorescence staining and viral culture. Two of four nasopharyngeal specimens tested positive for influenza B virus by immunofluorescence staining; one of the two specimens also was positive by culture. Neither of the two crew members diagnosed with influenza B virus infection had been tested using the rapid influenza diagnostic test. On the basis of immunofluorescence results, crew members on rimantadine therapy, which is effective only against influenza A infection, were advised to discontinue their medication. Oseltamivir, an antiviral agent that is effective against both influenza A and B infection, was sent to the ship for treatment of ill crew members and passengers.

A total of 64 (13%) crew members and 54 (4%) passengers were identified with ARI during the cruise. Of 63 crew members and 54 passengers with ARI for whom clinical information was known, 45 (71%) and 25 (46%), respectively, also had ILI (Figure 1). The median age of ill crew members was 32 years (range: 21–56 years) and of passengers, 68 years (range: 7–85 years). By cross-referencing crew duties, cabin locations of ill crew members and passengers, and dates of illness, medical staff identified the potential index case-patient as a 78-year-old U.S. passenger who boarded the ship ill with unconfirmed ILI after visiting London. She remained in her cabin except for occasional meals and did not seek medical attention until the fifth day of the cruise (June 28). Two of the 13 crew members with ILI, who were seen in the infirmary on June 25 and 26, were her cabin and dining room stewards. Both had worked, socialized, or shared cabins with other crew members who became ill. Surveillance among passengers and crew members was continued during the subsequent cruise and showed a decrease in the number of ARI and ILI cases.

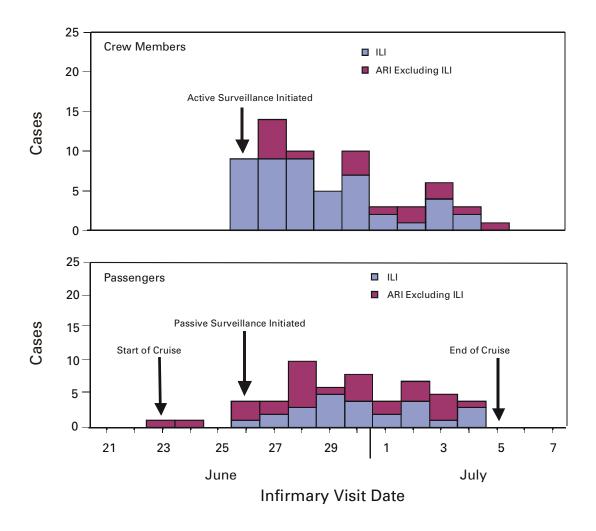
Reported by: SE Christensen, RC Wolfmeyer, SM Suver, CD Hill, MD, Holland America Line & Windstar Cruises, Seattle, Washington. SFF Britton, MD, Karolinska Institute, Stockholm, Sweden. Influenza Br, Div of Viral and Rickettsial Diseases; Surveillance and Epidemiology Br, Div of Quarantine, National Center for Infectious Diseases, CDC.

**Editorial Note:** The findings of this investigation implicated influenza B virus as the cause of a respiratory illness outbreak onboard a cruise ship. Although the results of rapid viral testing for influenza A and B viruses were negative, influenza B infection was confirmed by viral culture and immunofluorescence antibody testing in two crew members. Although these tests were not performed on passengers, epidemiologic evidence suggested that respiratory illness cases among crew members and passengers were related and that an ill passenger might have transmitted infection to crew members.

Rapid viral diagnostic testing for influenza can be useful for patient management and influenza outbreak control. However, these tests are not as accurate in detecting influenza infection as viral culture (1). If an influenza outbreak is suspected, nasopharyngeal specimens should be collected simultaneously for rapid viral tests and viral isolation. Viral isolation is essential for identifying new or unusual strains of influenza and for selecting influenza vaccine strains.

Influenza B Virus — Continued

FIGURE 1. Acute respiratory illness (ARI) and influenza-like illness (ILI) among crew members and passengers, by infirmary visit date — MS Rotterdam, June 23–July 5, 2000



Influenza A outbreaks have been reported on cruise ships sailing in the Northern Hemisphere during the summer, but influenza B outbreaks have not been documented (2–7). Early suspicion of a potential influenza outbreak among crew members and rapid implementation of a respiratory illness control protocol probably limited the size of the outbreak. Key elements of the protocol included 1) implementation of active and passive surveillance using standard case definitions; 2) use of targeted rapid influenza diagnostic testing and viral cultures to confirm cases of influenza virus infection; 3) isolation of all crew members meeting the ILI case definition or those with confirmed influenza; 4) use of antiviral agents for treatment and, if indicated, for prophylaxis; and 5) monitoring of intervention results (8).

Influenza B Virus — Continued

Because influenza viruses usually are spread by droplets and aerosols produced by an infected person who is coughing or sneezing, isolation can limit the spread of infection in semienclosed environments such as cruise ships (2). Although the number of days crew members with ILI were isolated from noninfected crew members and passengers was not reported, isolation measures ideally should have covered the first 5 days of illness, a period based on the duration of influenza virus shedding in adults (8).

Summertime influenza outbreaks among passengers and crew members on cruise ships suggest that traveling in large groups can pose a risk for exposure to influenza viruses, even when the group is traveling in regions where influenza is not in seasonal circulation. Both passengers and crew members can serve as potential reservoirs of influenza infection. Travelers at high risk for complications of influenza (e.g., persons aged ≥50 years, immunocompromised persons, and persons with chronic disorders of the pulmonary or cardiovascular systems) who were not vaccinated with influenza vaccine during the preceding fall or winter should consider receiving influenza vaccine before travel 1) with large organized tourist groups at any time of year; 2) to the tropics; or 3) to the Southern Hemisphere from April through September (the time of increased influenza activity in that hemisphere) (9). Cruise lines should attempt to achieve at least an 80% vaccination rate among crew members on each ship each year (8).

#### References

- 1. Anonymous. Rapid diagnostic tests for influenza. Medical Letter 1999;41:121-2.
- 2. Miller JM, Tam TWS, Maloney S, et al. Cruise ships: high-risk passengers and the global spread of new influenza viruses. Clin Infect Dis 2000;31:433–8.
- 3. CDC. Outbreak of influenza A infection—Alaska and the Yukon Territory, June–July 1998. MMWR 1998;47:638.
- 4. CDC. Update: outbreak of influenza A infection—Alaska and the Yukon Territory, July–August 1998. MMWR 1998;47:685–8.
- 5. Zane S, Uyeki T, Bodnar U, et al. Influenza in travelers, tourism workers, and residents in Alaska and the Yukon Territory, summer 1998 [Poster]. Presented at the 6th Conference of the International Society for Travel Medicine, Montreal, Canada, June 6–10, 1999.
- 6. CDC. Outbreak of influenza A infection among travelers—Alaska and the Yukon Territory, May–June 1999. MMWR 1999;48:545–6.
- 7. Anonymous. Influenza on a cruise ship in the Mediterranean. Commun Dis Rep CDR Wkly 1999;9:209,212.
- 8. Bodnar UR, Maloney SM, Fielding KL, et al. Preliminary guidelines for the prevention and control of influenza-like illness among passengers and crew members on cruise ships. Atlanta, Georgia: US Department of Health and Human Services, CDC, National Center for Infectious Diseases, 1999.
- 9. CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2000;49(no. RR-3).

# Blood and Hair Mercury Levels in Young Children and Women of Childbearing Age — United States, 1999

Mercury (Hg), a heavy metal, is widespread and persistent in the environment. Exposure to hazardous Hg levels can cause permanent neurologic and kidney impairment (1–3). Elemental or inorganic Hg released into the air or water becomes methylated in the environment where it accumulates in animal tissues and increases in concentration

Blood and Hair Mercury Levels — Continued

through the food chain. The U.S. population primarily is exposed to methylmercury by eating fish. Methylmercury exposures to women of childbearing age are of great concern because a fetus is highly susceptible to adverse effects. This report presents preliminary estimates of blood and hair Hg levels from the 1999 National Health and Nutrition Examination Survey (NHANES 1999) and compares them with a recent toxicologic review by the National Research Council (NRC). The findings suggest that Hg levels in young children and women of childbearing age generally are below those considered hazardous. These preliminary estimates show that approximately 10% of women have Hg levels within one tenth of potentially hazardous levels indicating a narrow margin of safety for some women and supporting efforts to reduce methylmercury exposure.

CDC's NHANES is a continuous survey of the health and nutritional status of the U.S. civilian, noninstitutionalized population with each year of data constituting a representative population sample. A household interview and a physical examination were conducted for each survey participant. During the physical examination, blood was collected by venipuncture for all persons aged ≥1 year and hair samples, consisting of approximately 100 strands, were cut from the occipital position of the head of children aged 1-5 years and women aged 16-49 years. Whole blood specimens were analyzed for total Hg and inorganic Hg for children aged 1-5 years and women aged 16-49 years by automated cold vapor atomic absorption spectrophotometry in CDC's trace elements laboratory. The detection limit was 0.2 parts per billion (ppb) for total Hg and 0.4 ppb for inorganic Hg (4). Hairs of 0.6 inches (1.5 cm) closest to the scalp (approximately 1 month's growth) were analyzed for total Hg concentration using cold vapor atomic fluorescence spectroscopy (5). The limit of detection for total Hg in hair varied by analytic batch; the maximum limit of detection (0.1 parts per million [ppm]) was used in these analyses. Blood Hg levels less than the limit of detection were assigned a value equal to the detection limit divided by the square root of two for calculation of geometric mean values.

The geometric mean total blood Hg concentration for all women aged 16–49 years and children aged 1–5 years was 1.2 ppb and 0.3 ppb, respectively; the 90th percentile of blood Hg for women and children was 6.2 ppb and 1.4 ppb, respectively (Table 1). Almost all inorganic Hg levels were undetectable; therefore, these measures indicate blood

TABLE 1. Selected percentiles and geometric means of blood and hair mercury (Hg) concentrations for children aged 1–5 years and women aged 16–49 years — National Health and Nutrition Examination Survey, United States, 1999

	G	eometr	ic		Selected percentiles (95% CI*)									
	No. mean (95% CI)			10th	25th	50th	75th	90th						
Blood Hg <sup>†</sup>														
Children	248	0.3	(0.2-0.4)	<lod<sup>§</lod<sup>	<lod< td=""><td>0.2 (0.2-0.3)</td><td>0.5 (0.4-0.8)</td><td>1.4 (0.7–4.8)</td></lod<>	0.2 (0.2-0.3)	0.5 (0.4-0.8)	1.4 (0.7–4.8)						
Women	679	1.2	(0.9-1.6)	0.2 (0.1-0.3)	0.5 (0.4–0.7)	1.2 (0.8–1.6)	2.7 (1.8-4.5)	6.2 (4.7-7.9)						
Hair Hg <sup>¶</sup>														
Children	338	**	<del>(</del>	<lod< td=""><td><lod< td=""><td><lod< td=""><td>0.2 (0.1-0.4)</td><td>0.4 (0.3-1.8)</td></lod<></td></lod<></td></lod<>	<lod< td=""><td><lod< td=""><td>0.2 (0.1-0.4)</td><td>0.4 (0.3-1.8)</td></lod<></td></lod<>	<lod< td=""><td>0.2 (0.1-0.4)</td><td>0.4 (0.3-1.8)</td></lod<>	0.2 (0.1-0.4)	0.4 (0.3-1.8)						
Women	702			<lod< td=""><td><lod< td=""><td>0.2 (0.2–0.3)</td><td>0.5 (0.4–0.8)</td><td>1.4 (0.9–1.7)</td></lod<></td></lod<>	<lod< td=""><td>0.2 (0.2–0.3)</td><td>0.5 (0.4–0.8)</td><td>1.4 (0.9–1.7)</td></lod<>	0.2 (0.2–0.3)	0.5 (0.4–0.8)	1.4 (0.9–1.7)						

<sup>\*</sup> Confidence interval.

<sup>†</sup> Parts per billion.

<sup>§</sup> Limit of detection.

<sup>¶</sup> Parts per million.

<sup>\*\*</sup> Not calculated. Proportion <LOD too high to be valid.

Blood and Hair Mercury Levels — Continued

methylmercury levels. The 90th percentile of hair Hg for women and children was 1.4 ppm and 0.4 ppm, respectively. Geometric mean values were not calculated for hair Hg values.

Reported by: Center for Food Safety and Applied Nutrition, Food and Drug Administration. US Environmental Protection Agency. National Energy Technology Laboratory, Dept of Energy. National Marine Fisheries Laboratory, National Oceanic and Atmospheric Administration. National Center for Health Statistics; National Center for Environmental Health, CDC.

Editorial Note: The NHANES1999 blood and hair Hg data are the first nationally representative human tissue measures of the U.S. population's exposure to Hg. Previous estimates of methylmercury exposure in the general population were based on exposure models using fish tissue Hg concentrations and dietary recall survey data (1). The NRC review provided guidance to the Environmental Protection Agency (EPA) for developing an exposure reference dose for methylmercury (i.e., an estimated daily exposure that probably is free of risk for adverse effects over the course of a person's life) (3). The NRC report recommended statistical modeling of results from an epidemiologic study conducted in the Faroe Islands near Iceland, where methylmercury exposures are high because of the large amount of seafood eaten by the local population. Results of this study were used to calculate a benchmark dose (BMD), an estimate of a methylmercury exposure in utero associated with an increase in the prevalence of abnormal scores on cognitive function tests in children. The lower 95% confidence limit of the BMD (BMDL\*) was recommended to calculate the EPA reference dose. The NRC committee recommended a BMDL of 58 ppb Hg in cord blood (corresponding to 12 ppm Hg in maternal hair) (3). In the NHANES 1999 sample, there were no measurements of blood values ≥58 ppb or hair values ≥12 ppm. A margin-of-exposure analysis (i.e., an evaluation of the ratio of BMDL to estimated population exposure levels) showed ratios of <10 when comparing BMDL with NHANES 1999 estimates of the 90th percentile for blood and hair Hg levels in women of childbearing age. Margin-of-exposure measures of this magnitude indicate a narrow margin of safety (3) and suggest that efforts aimed at decreasing human exposure to methylmercury should continue.

The findings in this study are subject to at least three limitations. First, the ratio of Hg in cord and maternal blood is uncertain. The NRC committee summarized some studies that suggest that cord blood values may be 20%–30% higher than corresponding maternal blood levels. However, other studies suggest that the ratio is closer to 1:1 (3); therefore, the NHANES values may not be directly comparable to BMDL recommended by NRC. Second, NHANES cannot provide estimates of Hg exposure in certain highly exposed groups (e.g., subsistence fishermen and others who eat large amounts of fish). Published data from studies of highly exposed U.S. populations indicated that some persons attain Hg tissue levels above BMDL (1). Third, the sample size of NHANES 1999 was small and the 1999 survey was conducted in only 12 locations. More data are needed to confirm these findings.

<sup>\*</sup>A BMD of 85 ppb Hg in cord blood or 17 ppm Hg in maternal hair was estimated to result in an increase in the proportion of abnormal scores on the Boston Naming Test for children exposed in utero from an estimated background prevalence of 5% to a prevalence of 10% (6). BMDL recommended by NRC is the lower 95% confidence bound of the BMD.

Blood and Hair Mercury Levels — Continued

The long-term strategy for reducing exposure to Hg is to lower concentrations of Hg in fish by limiting Hg releases into the atmosphere from burning mercury-containing fuel and waste and from other industrial processes. On the basis of data from EPA's National Toxics Inventory, air emissions of Hg decreased approximately 21% during 1990–1996, largely because of regulations for waste incineration (7). EPA expects this trend to continue as regulations are implemented for waste incineration and chlorine production facilities and are developed for electric power utilities (8,9). Fish is high in protein and nutrients and low in saturated fatty acids and cholesterol and should be considered an important part of the diet. The short-term strategy to reduce Hg exposure is to eat fish with low Hq levels and to avoid or to moderate intake of fish with high Hq levels. Statebased fish advisories and bans identify fish species contaminated by Hg and their locations and provide safety advice (http://www.epa.gov/ost/fish<sup>†</sup>). The Food and Drug Administration advises that pregnant women and those who may become pregnant should not eat shark, swordfish, king mackerel, and tile fish known to contain elevated levels of methylmercury. Information is available at http://www.fda.gov/bbs/ topics/ANSWERS/2001/advisory.html<sup>†</sup>.

U.S. population estimates of Hg tissue levels by race/ethnicity, region, and fish consumption will become available after 2 additional years of NHANES data collection. NHANES will provide the opportunity to measure tissue Hg levels and to monitor the effectiveness of continuing efforts to reduce methylmercury exposure in the U.S. population.

#### References

- 1. Environmental Protection Agency. Mercury study report to Congress. Washington, DC: Office of Air Quality Planning and Standards and Office of Research and Development, Environmental Protection Agency, December 1997.
- Agency for Toxic Substances and Disease Registries. Toxicological profile for mercury (update). Atlanta, Georgia: Agency for Toxic Substances and Disease Registries, US Department of Health and Human Services, March 1999.
- 3. National Academy of Sciences. Toxicologic effects of methylmercury. Washington, DC: National Research Council, 2000.
- 4. Chen HP, Paschal DC, Miller DT, Morrow J. Determination of total and inorganic mercury in whole blood by on-line digestion with flow injection. Atomic Spectroscopy 1998;19:176–9.
- 5. Pellizzari ED, Fernando R, Cramer GM, Meaburn GM, Bangerter K. Analysis of mercury in hair of EPA Region V population. J Expo Anal Environ Epidemiol 1999;9:393–401.
- 6. Budtz-Jorgensen E, Grandjean P, Keiding N, White RF, Weihe P. Benchmark dose calculations of methylmercury-associated neurobehavioral deficits. Toxicol Lett 2000;112–113:193–9.
- 7. Environmental Protection Agency. National toxics inventory. Washington, DC: Office of Air Quality Planning and Standards, Environmental Protection Agency, 2000.
- 8. Environmental Protection Agency and Environment Canada. Mercury sources and regulations: draft report, 1999 update. Binational toxics strategy. Environmental Protection Agency and Environment Canada, November 1999.
- 9. Environmental Protection Agency. Regulatory finding on the emissions of hazardous air pollutants from electric utility steam generating units. Federal Register 2000;65:79825–31.

<sup>&</sup>lt;sup>†</sup> References to sites of non-CDC organizations on the World-Wide Web are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of pages found at these sites.

# Progress Toward Poliomyelitis Eradication — Afghanistan, 1999–2000

In 1988, the World Health Assembly of the World Health Organization (WHO) resolved to eradicate poliomyelitis globally by 2000. During the same year, the Eastern Mediterranean Region\* (EMR) of WHO passed a resolution to join the global initiative. Since then, substantial progress has been made worldwide and in EMR member countries (1,2). Afghanistan, with ongoing civil conflict, initiated polio eradication activities in 1994. Since then, a countrywide surveillance system for acute flaccid paralysis (AFP) was established and National Immunization Days (NIDs)† were implemented (3). This report summarizes the achievements toward polio eradication in Afghanistan during 1999–2000.

#### **Routine Vaccination**

In 1996, an estimated 30% of infants aged <1 year had received three doses of oral poliovirus vaccine (OPV) (3). In 1998, a review of the Expanded Program on Immunization (EPI) documented wide variations in vaccination coverage by geographic area; levels were particularly low in the north as a result of civil conflict. In 1999, EPI acceleration campaigns provided vaccinations to 82,000 unvaccinated children aged <2 years. In 2000, a comprehensive 5-year plan was drafted to set targets and strategies for the coming years.

## **Supplemental OPV Vaccination**

During 1994–1996, supplemental vaccination activities against polio began with multivaccine subnational campaigns that delivered diphtheria and tetanus toxoids and pertussis vaccine, OPV, and measles vaccine to children aged <5 years. NIDs using OPV were initiated during April–May 1997, and since have been conducted annually. High coverage was achieved during four NID rounds in 1999 and another four in 2000 (Table 1). Of 330 districts in Afghanistan, 325 were reached during the fall 1999 NIDs. During the spring 2000 NIDs, all districts were reached except two north of the capital (Kabul) where most of the population had left the area because of ongoing civil conflict. Supplemental vaccination activities in Afghanistan have been coordinated with neighboring countries, particularly Iran and Pakistan. Because surveillance data indicate that Afghanistan and Pakistan are one epidemiologic block, supplemental campaigns have been conducted simultaneously in both countries when possible. Since the fall of 1999, careful district level NID planning and well-supervised house-to-house vaccination have led to incremental improvements in the quality and coverage of each NID.

## **AFP Surveillance**

In 1997, 37 AFP sentinel reporting sites were established. Since then, surveillance has expanded to 234 sites with emphasis on areas with high population density. In 2000, Afghanistan exceeded the WHO established target for a nonpolio AFP rate indicative of sensitive surveillance (i.e., ≥1.0 per 100,000 population aged <15 years) with a rate of 1.2 (Table 1). During 1999–2000, the number of AFP cases increased from 230 to 253, and the number of wild polioviruses isolated from AFP cases decreased from 63 to 28 (Figure 1). The

<sup>\*</sup>Djibouti, Egypt, Libya, Morocco, Somalia, Sudan, and Tunisia in northern and eastern Africa; Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Yemen in the Arabian peninsula; Iraq, Jordan, Lebanon, Syria, and the Palestinian National Authority in the Middle East; Afghanistan, Iran, and Pakistan in Asia; and Cyprus.

<sup>&</sup>lt;sup>†</sup>Mass campaigns over a short period (days to weeks) in which two doses of OPV are administered to all children in the target group (usually aged 0–4 years), regardless of vaccination history, with an interval of 4–6 weeks between doses.

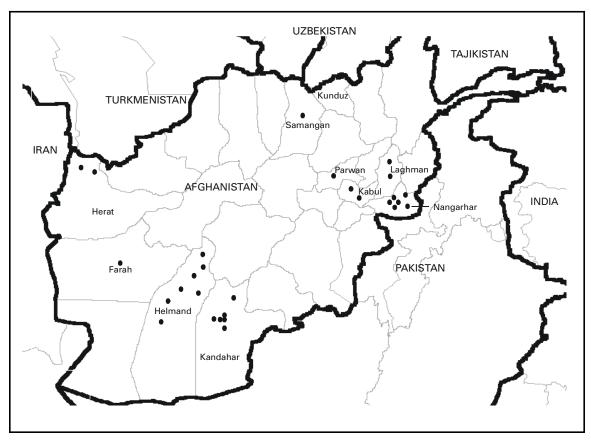
Poliomyelitis Eradication — Continued

TABLE 1. Acute flaccid paralysis (AFP) surveillance and National Immunization Day (NID)\* coverage — Afghanistan, 1999 and 2000

Surveillance indicators	NID round	1999	2000
AFP cases		230	253
Nonpolio AFP rate <sup>†</sup>		0.66	1.22
Confirmed poliomyelitis cases		150	103
Confirmed wild poliovirus cases		63	28
Percentage of persons with AFP			
with adequate stool samples§		53%	50%
No. children vaccinated	1	4,026,094	5,155,049
	2	4,293,368	5,250,648
	3	4,610,861	5,704,009
	4	4,220,681	5,761,400

<sup>\*</sup> Mass campaigns over a short period (days to weeks) in which two doses of oral poliovirus vaccine are administered to all children in the target group (usually aged 0–4 years), regardless of vaccination history, with an interval of 4–6 weeks between doses.

FIGURE 1. Location of poliomyelitis cases\* confirmed through wild poliovirus isolation — Afghanistan, 2000<sup>†</sup>



<sup>\*</sup> n=28.

<sup>&</sup>lt;sup>†</sup> Number of nonpolio AFP case-patients per 100,000 population aged <15 years.

<sup>&</sup>lt;sup>§</sup> Two stool specimens, collected 24 to 48 hours apart within 14 days of onset of paralysis, that arrive in the laboratory in good condition.

<sup>&</sup>lt;sup>†</sup> As of February 26, 2001.

Poliomyelitis Eradication — Continued

National Institute of Health (NIH), Islamabad, Pakistan, has provided laboratory support for the Afghanistan program. All stool specimens are flown from Afghanistan to Islamabad on United Nations' flights and transported to the NIH laboratory.

A remaining challenge is the timely collection of adequate stool specimens<sup>§</sup> from AFP case-patients. In 2000, 50% of AFP cases reported nationally had adequate stool specimens, which was substantially short of the WHO target of 80%. This low level is partly the result of AFP being identified late in patients' illness, which precludes the collection of stool specimens soon after paralysis onset. Intensified efforts are being made to improve surveillance quality by the immediate investigation of all AFP cases and weekly active surveillance visits to major hospitals and shrines.

Reported by: Afghanistan Country Office, World Health Organization, Islamabad, Pakistan. Eastern Mediterranean Regional Office, World Health Organization, Cairo, Egypt. Vaccines and Biologicals Dept, World Health Organization, Geneva, Switzerland. Respiratory and Enteric Viruses Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Vaccine Preventable Disease Eradication Div, National Immunization Program, CDC.

Editorial Note: Although polio remains endemic in Afghanistan, progress during 1999–2000 demonstrates that key strategies can be implemented successfully in countries experiencing internal strife. During 1999–2000, the nonpolio AFP rate almost doubled and the number of districts reached by NIDs increased steadily. Careful planning and supervision of house-to-house vaccination and support from an increasing number of local partners resulted in the largest number of children ever being reached. Monitoring by nongovernment organizations, United Nations' agencies, and local authorities has increased the quality of NIDs. During the spring 2000, the days of tranquility were respected by all warring factions and their local commanders, greatly facilitating the implementation of NIDs.

Civil conflict, massive population shifts (returning refugees and traditional nomadic movements), a drought, rebuilding the public health infrastructure, geographic barriers, extreme climate, and the need to access areas that can be reached only by several days' travel on muleback are some of the obstacles facing eradication efforts in Afghanistan. Until 2000, negotiated cease-fires and days of tranquility agreements during NIDs had been only partly successful. Cessation of polio vaccination activities in mid-1997 in northern Afghanistan as a result of ongoing conflict may have facilitated the large polio outbreak that occurred in Kunduz province in 1999 (4).

Innovative measures and local peace initiatives will continue to be needed to create opportunities for reaching and vaccinating isolated populations. Afghanistan is preparing the implementation of five NID rounds in 2001. Plans are being developed to conduct focal mass campaigns in large, high-risk areas during the summer of 2001. Improved and timely stool specimen collection from AFP case-patients will be necessary to obtain data for targeting these campaigns and eliminating the last reservoirs of poliovirus circulation. Meeting these challenges will require the continued support of polio eradication partners<sup>¶</sup>.

<sup>&</sup>lt;sup>§</sup> Two stool specimens collected 24 to 48 hours apart within 14 days of onset of paralysis that arrive in the laboratory in good condition.

<sup>&</sup>lt;sup>1</sup> Polio eradication in Afghanistan is supported by the national government. External support is provided by global polio eradication partners, including Rotary International, United Nations Children's Fund (UNICEF), WHO, the governments of the United States, Great Britain, Denmark, Norway, Netherlands, Sweden, Luxemburg, Germany, and the European Community.

Poliomyelitis Eradication — Continued

#### References

- 1. CDC. Progress toward global poliomyelitis eradication, 1999. MMWR 1999;49:349-54.
- 2. CDC. Progress toward poliomyelitis eradication—Eastern Mediterranean Region, 1999–September 2000. MMWR 2000;49:1024–8.
- 3. CDC. Progress toward poliomyelitis eradication—Afghanistan, 1994–1999. MMWR 1999;48:825–8.
- 4. CDC. Outbreak of poliomyelitis—Kunduz, Afghanistan, 1999. MMWR 1999;48:761-2.

# Public Health Dispatch

# Outbreak of Poliomyelitis — Dominican Republic and Haiti, 2000–2001

During July 12, 2000–February 8, 2001, 12 laboratory-confirmed poliomyelitis cases attributed to vaccine-derived poliovirus type 1 were identified in the Dominican Republic (1). Of these, 11 (92%) case-patients were aged ≤6 years (range: 9 months–14 years), and the date of paralysis onset of the last case was January 2, 2001. All case-patients were inadequately vaccinated or unvaccinated. In Haiti, one confirmed polio case attributed to vaccine-derived type 1 poliovirus was reported in an unvaccinated child aged 2 years with paralysis onset on August 30, 2000. As of February 21, 33 acute flaccid paralysis (AFP) cases from the Dominican Republic and three AFP cases from Haiti were pending final classification.

Extensive control efforts are under way. The Dominican Republic held nationwide mass vaccination campaigns with oral poliovirus vaccine (OPV) in December 2000 and February 2001, with a third round planned for April 2001. All children aged <5 years are being targeted, with approximately 1.2 million OPV doses given in the first campaign. AFP surveillance has been strengthened with intensification of active case-finding and weekly reporting. Haiti has initiated regional OPV campaigns to be conducted approximately every 2 months.

Travelers to the Dominican Republic and Haiti who are not vaccinated adequately are at risk for polio. All travelers should be vaccinated against polio according to national vaccination policies (2)\*.

Reported by: Ministry of Health, Pan American Health Organization, Santo Domingo, Dominican Republic. Ministry of Health, Pan American Health Organization, Port-au-Prince, Haiti. Caribbean Epidemiology Center Laboratory, Pan American Health Organization, Trinidad and Tobago. Div of Vaccines and Immunization, Pan American Health Organization, Washington, DC. Respiratory and Enteric Viruses Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Vaccine Preventable Disease Eradication Div, National Immunization Program, CDC.

<sup>\*</sup>Recommendations for children in the United States include a 4-dose vaccination series with inactivated poliovirus vaccine (IPV) at ages 2, 4, 6–18 months, and 4–6 years. Unvaccinated adults should receive three doses of IPV, the first two doses at intervals of 4–8 weeks and the third dose 6–12 months after the second. If three doses cannot be administered within the recommended intervals before protection is needed, alternative schedules are proposed. For incompletely vaccinated persons, additional IPV doses are recommended to complete a series. Booster doses of IPV may be considered for persons who previously have completed a primary series of polio vaccination and who may be traveling to areas where polio is endemic.

Public Health Dispatch — Continued

#### References

- 1. CDC. Outbreak of poliomyelitis—Dominican Republic and Haiti, 2000. MMWR 2000;49:1094–103.
- 2. CDC. Poliomyelitis prevention in the United States: updated recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2000;49(no. RR-5).

# Notice to Readers

# **International Course in Applied Epidemiology**

CDC and Emory University's Rollins School of Public Health will co-sponsor a course, "International Course in Applied Epidemiology" during September 24–October 19, 2001, in Atlanta, Georgia. This basic course in epidemiology is directed at public health professionals from countries other than the United States.

The course's content includes presentations and discussions of epidemiologic principles, basic statistical analysis, public health surveillance, field investigations, surveys and sampling, and discussions of the epidemiologic aspects of current major public health problems in international health. Included are small group discussions of epidemiologic case exercises based on field investigations. Participants are encouraged to give a short presentation reviewing some epidemiologic data from their own country. Computer training using Epi Info 2000 (Windows® version), a software program developed at CDC and the World Health Organization for epidemiologists, is included. Prerequisites are familiarity with the vocabulary and principles of basic epidemiology or completion of CDC's "Principles of Epidemiology" home-study course (SS3030) or equivalent. Preference will be given to applicants whose work involves priority public health problems in international health. Early registration deadline is June 1, 2001; late registration deadline is September 1, 2001. There is a tuition charge.

Additional information and applications are available from Emory University, Rollins School of Public Health, International Health Dept.(PIA), 1518 Clifton Road N.E., Room 746, Atlanta, GA 30322; telephone (404) 727-3485; fax (404) 727-4590; World-Wide Web site, http://www.sph.emory.edu/EPICOURSES\*; or e-mail pvaleri@sph.emory.edu.

<sup>\*</sup>References to sites of non-CDC organizations on the World-Wide Web are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of pages found at these sites.

Notices to Readers — Continued

Notice to Readers

## **Introduction to Public Health Surveillance Course**

CDC and Emory University's Rollins School of Public Health will co-sponsor a course, "Introduction to Public Health Surveillance" during June 18–22, 2001, in Atlanta, Georgia. The course is designed for state and local public health professionals.

The course will provide practicing public health professionals with the theoretical and practical tools necessary to design, implement, and evaluate effective surveillance programs. Topics include overview and history of surveillance systems; planning considerations; sources and collection of data; analysis, interpretation, and communication of data; surveillance systems technology; ethics and legalities; state and local concerns; and future considerations. There is a tuition charge.

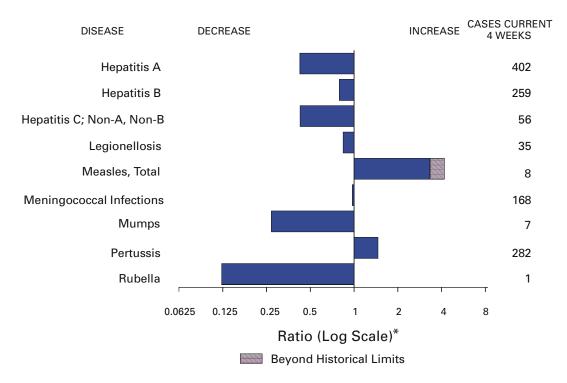
Deadline for application is May 4. Additional information and applications are available from Emory University, International Health Dept.(PIA), 1518 Clifton Road N.E., Room 746, Atlanta, GA 30322; telephone (404) 727-3485; fax (404) 727-4590; or World-Wide Web site, http://www.sph.emory.edu/EPICOURSES\*; or e-mail pvaleri@sph.emory.edu.

#### Erratum: Vol. 50, No. 7

In the article, "Prevalence of Disabilities and Associated Health Conditions Among Adults—United States, 1999," in the first full paragraph on page 121 in the sentence that begins "Of the total percentage of disabilities, 63% occurred among working adults," the age range should read "aged 18–64" years.

<sup>\*</sup>References to sites of non-CDC organizations on the World-Wide Web are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of pages found at these sites.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending February 24, 2001, with historical data



<sup>\*</sup> 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 of provisional cases of selected notifiable diseases, United States, cumulative, week ending February 24, 2001 (8th Week)

	Cum. 2001		Cum. 2001
Anthrax Brucellosis*		Poliomyelitis, paralytic Psittacosis*	2
Cholera	-	Q fever*	1
Cyclosporiasis* Diphtheria	4 -	Rabies, human Rocky Mountain spotted fever (RMSF)	9
Ehrlichiosis: human granulocytic (HGE)*	3	Rubella, congenital syndrome	-
human monocytic (HME)*	1	Streptococcal disease, invasive, group A	365
Encephalitis: California serogroup viral*	-	Streptococcal toxic-shock syndrome*	13
eastern equine*	-	Syphilis, congenital <sup>¶</sup>	1
St. Louis*	-	Tetanus	1
western equine*	-	Toxic-shock syndrome	14
Hansen disease (leprosy)*	2	Trichinosis	2
Hantavirus pulmonary syndrome*†	1	Tularemia*	1
Hemolytic uremic syndrome, postdiarrheal*	5	Typhoid fever	15
HIV infection, pediatric* <sup>§</sup> Plague	10 -	Yellow fever	-

<sup>-:</sup> 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 weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).

Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update January 30, 2001.

Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending February 24, 2001, and February 26, 2000 (8th Week)

	All	20	Oblem		0		NE <sup>1</sup>		coli O157:H7	* LIS
	Cum.	Cum.	Chlan Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.	Cum.
Reporting Area UNITED STATES	2001 <sup>§</sup> 2,792	<b>2000</b> 4,895	<b>2001</b> 77,539	<b>2000</b> 95,997	<b>2001</b> 132	<b>2000</b> 156	<b>2001</b> 115	<b>2000</b> 193	<b>2001</b> 56	<b>2000</b> 162
NEW ENGLAND Maine N.H. Vt. Mass. R.I. Conn.	91 3 5 5 51 11	497 3 6 - 360 17 111	2,976 151 96 1,405 471 853	3,510 209 162 88 1,489 370 1,192	5 - - 2 - 1 2	7 1 - 4 2 -	13 - 4 - 9 -	15 1 3 1 5	7 - 2 - 5 -	18 1 4 2 4 - 7
MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	555 4 360 157 34	1,283 60 770 300 153	3,613 N 1,870 308 1,435	7,556 N 3,826 2,020 1,710	9 3 6 -	15 8 4 - 3	9 9 - - N	23 21 1 1 N	6 6 - -	38 31 - 2 5
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	224 46 26 121 23 8	545 85 28 352 67 13	9,867 214 1,898 2,576 4,051 1,128	17,380 4,696 1,975 5,179 3,027 2,503	43 17 9 - 17	36 6 3 5 3 19	23 11 4 4 2 2	31 5 1 14 6 5	11 6 - 3 - 2	8 3 1 - 2 2
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. Nebr. Kans.	44 12 9 7 - 6 10	96 31 7 23 - 1 4 30	3,847 805 442 1,185 109 279 201 826	5,562 1,286 403 2,066 159 267 475 906	4 - 2 - - - 2	4 - - 1 1 2	14 3 2 6 - 1 - 2	39 5 8 19 2 - 3 2	9 4 - 2 - 1 - 2	32 12 4 8 2 - 4 2
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	734 15 41 62 48 6 57 61 104 340	1,220 15 136 24 75 5 71 107 98 689	16,080 437 1,697 446 2,176 321 2,383 1,260 3,105 4,255	18,317 450 1,603 448 1,971 308 2,757 2,726 3,776 4,278	21 - 2 2 2 2 - 4 - 11	17 - 1 - - - 3 - 7 6	19 - - 2 - 13 1 1 2	17 - 5 - 3 1 5 - 1 2	4 - - U 3 - 1 -	16 - 1 U 5 1 2 - 3 4
E.S. CENTRAL Ky. Tenn. Ala. Miss.	148 18 80 25 25	168 36 35 50 47	6,780 1,324 2,232 1,533 1,691	6,409 1,177 1,816 1,920 1,496	3 - - 2 1	5 - - 5 -	5 - 2 3 -	10 4 3 1 2	3 2 1 -	7 2 5 -
W.S. CENTRAL Ark. La. Okla. Tex.	409 19 130 20 240	524 20 83 17 404	14,364 1,387 2,707 1,599 8,671	15,087 605 2,748 1,393 10,341	4 2 1 1	11 1 - 1 9	2 - - 2 -	11 2 - 3 6	8 - 5 2 1	19 3 5 3 8
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	145 1 - - 38 7 52 11 36	178 3 3 1 52 25 22 28 44	3,631 148 292 117 247 604 1,718 67 438	5,438 185 296 129 1,356 709 1,816 344 603	14 - 2 - 6 3 1 2	11 - 1 1 3 1 2 3	12 - 2 - 6 - 4 -	23 5 3 2 8 - 3 1 1	5 - - 2 2 - 2 1	7 - 2 2 - 2 1
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	442 26 17 398 1	384 46 11 303 - 24	16,381 2,123 675 12,862 299 422	16,738 1,921 454 13,480 339 544	29 N 6 23	50 U 1 49	18 3 3 12 -	24 1 4 15 - 4	3 - 1 - - 2	17 7 4 3 - 3
Guam P.R. V.I. Amer. Samoa C.N.M.I.	2 48 1 - -	6 116 - - -	436 U U U	U U U	- U U U	- U U U	N U U U	N - U U U	U U U U U	U U U U

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

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

† Chlamydia refers to genital infections caused by *C. trachomatis*. Totals reported to the Division of STD Prevention, NCHSTP.

† Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update January 30, 2001.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending February 24, 2001, and February 26, 2000 (8th Week)

	Gono	rrhea	Hepati Non-A,	tis C:	Legionel		Listeriosis	Lyı Dise	
Reporting Area	Cum. 2001 <sup>§</sup>	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2001	Cum. 2000
UNITED STATES	37,055	49,703	186	532	73	96	39	252	547
NEW ENGLAND Maine	855 -	1,057 10	2	2	1 -	7 2	5	84	95 -
N.H. Vt.	15 14	16 4	2	-	- 1	-	-	42	12 -
Mass. R.I.	430 123	423 87	-	2	-	4	3	7	14 -
Conn.	273	517	-	-	-	1	2	35	69
MID. ATLANTIC Upstate N.Y. N.Y. City N.J.	2,351 594 925 207	3,865 443 1,599 1,119	10 7 - -	78 1 - 72	2 1 -	11 3 -	1 1 - -	90 65 -	356 65 14 47
Pa.	625	704	3	5	1	8	-	25	230
E.N. CENTRAL Ohio	5,084 168	10,333 2,751	26 1	50 -	26 15	36 15	5 2	9 9	14 2
Ind. III.	871 1,238	911 3,577	-	- 5	3	4 3	-	-	- 1
Mich. Wis.	2,380 427	1,964 1,130	25	45	8 -	3 7 7	3	Ū	11
W.N. CENTRAL Minn.	1,715 271	2,268 488	37	73	7	4 1	2	5 3	8 2
lowa	130	111	-	- - 70	2	1	-	-	-
Mo. N. Dak.	844 4	1,102 6	36 -	70 -	3 -	2	1 -	2	2
S. Dak. Nebr.	32 43	36 149		1	1	-	-	-	-
Kans. S. ATLANTIC	391	376	1 6	2 9	1	-	1	-	4
Del.	10,411 251	14,300 239	-	-	13 _	20 1	6	49 -	61 .8
Md. D.C.	1,016 480	1,093 376	2	2	5 -	7 -	1 -	44 1	45 -
Va. W. Va.	1,231 57	1,445 87	-	- 1	2 N	3 N	1 1	2	1 3
N.C. S.C.	1,968 1,338	1,901 3,529	2	5	2	1 2		2	4
Ga.	1,626	2,502	-	-	-	-	1	-	-
Fla. E.S. CENTRAL	2,444 4,514	3,128 4,753	2 23	1 79	4 3	6 2	2 4	2	-
Ky.	566	505	-	5	2	-	1	2	-
Tenn. Ala.	1,582 1,275	1,477 1,583	7	17 3	1	1 1	2 1	-	-
Miss.	1,091	1,188 8,071	16 53	54 173	-	-	-	-	-
W.S. CENTRAL Ark.	7,435 935	332	1	-	1	4	-	-	2
La. Okla.	1,894 791	2,130 639	5 -	97 -	1 -	2	-	-	2
Tex.	3,815	4,970	47	76	-	2	-	-	-
MOUNTAIN Mont.	1,103 5	1,498 -	13 -	39	4	5 -	3 -	-	-
ldaho Wyo.	18 12	17 12	1 3	- 25	-	1 -	-	-	-
Colo. N. Mex.	318 117	537 135	4 5	6 4	3	2	1 1	-	-
Ariz.	472	541	-	4	1	-	1	-	-
Utah Nev.	9 152	51 205	-	-	-	2	-	-	-
PACIFIC	3,587	3,558	16	29 2	16	7	13	13	11
Wash. Oreg.	485 135	369 56	2 3	8	3 N	2 <u>N</u>	1	2	1
Caliř. Alaska	2,862 33	3,031 34	11 -	19 -	13	5 -	12 -	11 -	10
Hawaii	33 72	68	-	-	-	-	-	N	N
Guam P.R.	126	- 76	-	- 1	2 U	-	-	N	- N
V.I. Amer. Samoa	Ü	Ü	U U	U U	U U	U U	-	U U	U U
C.N.M.I.	Ŭ	ŭ	ŭ	ŭ	Ŭ	ŭ	-	ŭ	ŭ

N: Not notifiable.

U: Unavailable.

-: No reported cases.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending February 24, 2001, and February 26, 2000 (8th Week)

	oks chan	ing i corde	11 <b>y</b> 2-1, 20	o i, and i			nellosis*	
		aria		, Animal		TSS		LIS
Reporting Area	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	106	127	492	622	2,394	3,410	1,646	3,193
NEW ENGLAND	10	3	66	64	198	205	141	225
Maine N.H.	-	-	11 2	14 1	9 16	17 12	7 10	10 12
Vt. Mass.	3	3	13 16	4 23	10 121	5 133	9 64	5 138
R.I. Conn.	7	-	8 16	4 18	11 31	3 35	18 33	14 46
MID. ATLANTIC	6	23	84	106	160	482	221	557
Upstate N.Y.	4 2	7 10	66 1	80 U	58 77	59 141	64 96	130 166
N.Y. City N.J.	-	3	17	13	-	175	27	98
Pa.	-	3	-	13	25	107	34	163
E.N. CENTRAL Ohio	22 4	16 2	3 -	5 1	391 153	526 139	301 74	263 90
Ind. III.	7	9	1	-	31 88	36 183	19 100	55 1
Mich. Wis.	11	5	2	- 4	82 37	74 94	77 31	78 39
W.N. CENTRAL	3	- 7	- 44	62	159	155	135	184
Minn.	1	2	11	18	31	27	53	62
lowa Mo.	1 1	1	11 2	6 2	23 53	12 54	1 59	13 49
N. Dak. S. Dak.	-	-	8 <b>6</b>	8 16	1 13	2 6	2 7	13 12
Nebr. Kans.	-	1 3	6	12	9 29	20 34	- 13	14 21
S. ATLANTIC	26	30	213	202	660	514	366	512
Del. Md.	1 11	17	43	7 42	12 90	8 97	8 78	11 89
D.C.	2	-	-	-	13	-	U	U
Va. W. Va.	8 -	7 -	43 15	55 15	76 3	48 17	48 11	63 11
N.C. S.C.	1 -	4	56 7	57 13	152 56	115 55	45 50	80 47
Ga. Fla.	- 3	2	24 25	13	106 152	55 119	126	159 52
E.S. CENTRAL	5	4	4	25	182	178	63	126
Ky. Tenn.	3	i	2 2	5 17	36 41	29 42	21 39	19 59
Ala.	2	3	-	3	83	63	-	40
Miss. W.S. CENTRAL	2	-	- 10	105	22 74	44 310	3 139	8
Ark.	-	1	10	105 -	30	<b>2</b> 8	13	369 22
La. Okla.	1 -	1 -	10	8	9 14	38 22	40 15	61 26
Tex.	1	-	-	97	21	222	71	260
MOUNTAIN Mont.	8 1	8 -	27 4	27 9	200 7	296 11	128 -	250 -
ldaho Wyo.	1 -	-	- 9	13	6 7	21 5	4 1	13 3
Colo. N. Mex.	3 1	4	- 1	1	53 28	69	34 10	59 30 96
Ariz.	1	2	13	4	67	28 89 45 28	59	96 96
Utah Nev.	1 -	2	-	-	21 11	45 28	20	49
PACIFIC	24	35 2	41	26	370	744 23	152	707
Wash. Oreg.	1 4	5	-	-	18 35	45	31	88 56
Calif. Alaska	18 1	27	24 17	21 5	313 4	625 11	85 -	520 10
Hawaii	-	1	-	-	-	40	36	33
Guam P.R.	-	2	- 11	- 7	- 5	- -	U U	U U
V.I. Amer. Samoa	U U	Ú	Ü	Ú U	5 U U	36 U U	Ŭ	Ŭ
C.N.M.I.	Ü	Ü	Ü	Ü	Ü	Ü	Ü	Ü

N: Not notifiable. U: Unavailable. -: No reported cases.

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

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending February 24, 2001, and February 26, 2000 (8th Week)

we	eks enam	<u>I<b>g rebru</b>a</u> Shige		ou i, and r		26, 2000 (8	tn week)	
	NET:			HLIS	(Primary 8	k Secondary)	Tube	culosis
Reporting Area	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	1,175	2,043	561	1,181	584	910	688	1,294
NEW ENGLAND	20	55	15	43	6	9	40	37
Maine N.H.	-	2 1	-	- 1	-	-	- 1	1 1
Vt. Mass.	16	1 42	9	29	4	7	- 25	- 21
R.I. Conn.	- 4	3 6	- 6	6 7	2	1 1	3 11	2 12
MID. ATLANTIC	93	120	65	123	32	37	159	174
Upstate N.Y. N.Y. City	56 29	19 49	2 39	21 47	3 20	1 20	20 56	12 108
N.J. Pa.	- 8	37 15	8 16	26 29	6	7 9	57 26	47 7
E.N. CENTRAL	216	358	104	123	60	182	98	113
Ohio Ind.	70 37	18 22	20 5	8 9	5 17	12 64	17 10	19
III.	53	146	48	2	11	71	57	83
Mich. Wis.	52 4	140 32	29 2	101 3	25 2	23 12	14	3 5
W.N. CENTRAL Minn.	180 66	102 21	127 85	85 40	5 4	20 3	39 25	48 23 3
lowa	25	15	-	16	-	5	-	3
Mo. N. Dak.	48 8	52 -	34 1	20 -	1 -	10 -	8	17
S. Dak. Nebr.	2 9	1 8	-	6	-	- 1	1 5	2 1
Kans.	22	5	7	3	-	1	-	2
S. ATLANTIC Del.	176 2	158 -	53 -	70 1	228 1	277 1	112	202
Md. D.C.	17 8	16 -	3 U	5 U	31 4	53 11	11 9	16 -
Va. W. Va.	12 2	10 1	5 5	12 1	15	20 1	13 5	5 5
N.C.	51	12	19	5 1	ස	78	10	17
S.C. Ga.	12 7	3	7 13	24	31 21	23 38	8 48	18 44
Fla. E.S. CENTRAL	65 105	110 96	1 31	21 70	<b>62</b> 87	52 126	8 50	97 84
Ky.	47	19 43	13	13	7	7	3	5
Tenn. Ala.	13 26	5	15 -	51 4	43 21	88 18	36	21 39
Miss. W.S. CENTRAL	19 66	29 356	3 97	2 373	16 98	13 146	11 19	19 258
Ark.	31	33	10	3	10	9	15	8
La. Okla.	8 1	50 5	25	20 4	18 12	36 37	4	6 7
Tex. MOUNTAIN	26 107	268 179	62 52	346 66	58 26	64 28	- 21	237 58
Mont.	-	-	-	-	-	-	-	-
ldaho Wyo. Colo.	4	21 1	-	15 1	<del>-</del> -	<del>-</del> -	-	-
Colo. N. Mex.	20 23	31 18	12 7	13 13	1 1	1 2	9 1	8 7
Ariz. Utah	20 23 52 3 5	65 5	28 5	19 5	19 4	23	10 1	15 4
Nev.		38	-	-	1	2	-	24
PACIFIC Wash.	212 25	619 126	17 -	228 178	42 13	85 8	150 25	320 24
Oreg. Calif.	17 170	72	15 -	44	2 25	1 76	119	1 281
Alaska Hawaii	-	412 2 7	2	1 5	2	-	6	3 11
Guam	-	-	U	U	-	-	-	-
P.R. V.I.	Ū	7 U	Ü	Ü	32 U	29 U	Ū	17 U
Amer. Samoa C.N.M.I.	Ŭ	Ŭ	Ŭ	Ü	Ŭ U	Ŭ	Ŭ U	Ŭ

N: Not notifiable. U: Unavailable. -: No reported cases.

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

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending February 24, 2001, and February 26, 2000 (8th Week)

	11 : 41		1		y ZO, Z	T VV	Measles (Rubeola)							
		<i>ienzae,</i> isive	A	epatitis (Vi	ral), By Typ B	ре	Indige	nous	Impo		Tota	<u> </u>		
Reporting Area	Cum. 2001 <sup>†</sup>	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	2001	Cum. 2001	2001	Cum. 2001	Cum. 2001	Cum. 2000		
UNITED STATES	176	190	980	1,948	552	827	- 1 2001	8	2	5	13	10		
NEW ENGLAND	8	18	50	46	9	15	_	3	-	1	4	-		
Maine N.H.	-	2	1 3	1 6	1 2	1 3	-	-	-	-	-	-		
Vt.	-	2	1	1	1	2	-	1	-	- 1	1	-		
Mass. R.I.	8 -	14 -	11 3	17 -	1 4	1 -	-	2	-	-	3	-		
Conn.	-	-	31	21	-	8	-	-	-	-	-	-		
MID. ATLANTIC Upstate N.Y.	17 6	28 12	41 16	110 32	44 9	133 7	-	-	-	-	-	3		
N.Y. City	6	9	22	60	27	75	-	-	-	-	-	3		
N.J. Pa.	4 1	5 2	3	5 13	- 8	7 44	-	-	-	-	-	-		
E.N. CENTRAL	22	27	135	298	84	87	-	-	2	2	2	3		
Ohio Ind.	16 5	9 2	40 4	61 5	17 2	17 1	-	-	-	-	-	2		
III.	-	13	24	128	2	2	-	-	2	2	2	-		
Mich. Wis.	1 -	3	67 -	92 12	63	66 1	-	-	-	-	-	1 -		
W.N. CENTRAL	2	4	71	178	34	53	_	1	-	_	1	_		
Minn. Iowa	-	-	1 6	18 17	1 3	- 9	-	-	-	-	-	-		
Mo.	2	3	17	116	24	37	-	-	-	-	-	-		
N. Dak. S. Dak.	-	1	-	-	- 1	-	-	-	-	-	-	-		
Nebr. Kans.	-	-	17 30	4 23	4 1	4 3	-	- 1	-	-	- 1	-		
S. ATLANTIC	- 67	42	135	23 161	1 87	123	-	2	-	1	3	-		
Del.	-	-	-	-	-	-	-	-	-	-	-	-		
Md. D.C.	15 -	20	47 3	25	16 2	<b>2</b> 5	-	2	-	1 -	3	-		
Va. W. Va.	5 3	10 1	20	28 19	1 <u>1</u> 1	21	-	-	-	-	-	-		
N.C.	14	3	10	45	29	55	-	-	-	-	-	-		
S.C. Ga.	1 10	1 6	9 1	3 14	- 1	1 2	-	-	-	-	-	-		
Fla.	19	1	45	27	27	19	-	-	-	-	-	-		
E.S. CENTRAL	9	10 7	40 6	84 4	54 3	65 8	-	-	-	-	-	-		
Ky. Tenn.	- 5	3	20	23	23	30	-	-	-	-	-	-		
Ala. Miss.	4	-	14	15 42	20 8	5 22	- U	-	- U	-	-	-		
W.S. CENTRAL	2	15	127	381	30	86	-	_	-	_	_	_		
Ark. La.	-	6	16 10	27 18	14 4	10 29	-	-	-	-	-	-		
Okla.	2	9	26	55	11	8	-	-	-	-	-	-		
Tex.	-	-	75	281	1	39	-	-	-	-	-	-		
MOUNTAIN Mont.	40 -	25	152 2	123 1	67 -	ස 2	-	-	-	1 -	1 -	-		
ldaho	1	1	17	5	2	3	-	-	-	1	1	-		
Wyo. Colo.	8 7	7	1 23 5	1 33	17	16	-	-	-	-	-	-		
N. Mex. Ariz.	7 23	9 6	5 75	16 49	16 25	18 19	-	-	-	-	-	-		
Utah	-	1	10	10	-	3	-	-	-	-	-	-		
Nev. PACIFIC	1 9	1 21	19 229	8 567	7	2	-	2	-	-	2	-		
Wash.	-	2	7	19	143 11	202 6	-	-	-	-	-	4 2		
Oreg. Calif.	8	4 5	20 194	39 502	17 114	17 175	-	2	-	-	2	2		
Alaska	1	1	8	3 4	1	2	-	-	-	-	-	-		
Hawaii	-	9	-	4	-	2	- U	-	U	-	-	-		
Guam P.R.	-			53	3	26	-	-	-	-	-	-		
V.I. Amer. Samoa	U	U U	U U	U U	U	U U	U U	U U	U U	U	U U	U U		
C.N.M.I.	ŭ	ŭ	ŭ	ŭ	ŭ	ŭ	ŭ	ŭ	ŭ	ŭ	ŭ	ŭ		

N: Not notifiable. U: Unavailable. -: No reported cases.
\*For imported measles, cases include only those resulting from importation from other countries.
† Of 32 cases among children aged <5 years, serotype was reported for 10 and of those, 1 was type b.

TABLE III. (Cont'd) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending February 24, 2001, and February 26, 2000 (8th Week)

		gococcal ease		Mumps			Pertussis		Rubella				
Reporting Area	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000		
UNITED STATES	386	430	3	16	73	77	656	760	-	2	7		
NEW ENGLAND	36	23	_	_	_	7	148	207	_	-	4		
Maine N.H.	- 4	2 2	-	-	-	- 5	- 11	7 29	-	-	- 1		
Vt.	2	1	-	-	-	-	16	41	-	-	-		
Mass. R.I.	20	13 1	-	-	-	-	117	127 2	-	-	3		
Conn.	10	4	-	-	-	2	4	1	-	-	-		
MID. ATLANTIC	34	33	-	-	4	9	21	54	-	-	2		
Upstate N.Y. N.Y. City	11 8	7 10	-	-	1 1	9	21 -	25 19	-	-	2		
N.J. Pa.	14 1	8 8	-	-	2	-	-	10	-	-	-		
E.N. CENTRAL	26	72	1	2	8	15	- 85	146	-	2	-		
Ohio	26 16	11	-	1	4	12	70	102	-	-	-		
Ind. III.	-	7 24	- 1	- 1	- 1	3	1 3	3 7	-	- 1	-		
Mich.	10	20	-	-	3	-	10	5	-	i	-		
Wis.	-	10	-	-	-	-	1	29	-	-	-		
W.N. CENTRAL Minn.	30	31 1	1	3	5 -	1	26	19 6	-	-	-		
lowa	11	7	-	-	3	-	2	6	-	-	-		
Mo. N. Dak.	10	18 1	-	-	1 -	-	13 -	2	-	-	-		
S. Dak. Nebr.	1 3	2 1	-	-	- 1	-	2	1	-	-	-		
Kans.	5	1	1	3	-	1	9	4	-	-	-		
S. ATLANTIC	80	62	-	1	8	1	25	41	-	-	-		
Del. Md.	15	4	-	- 1	- 1	- 1	- 11	- 14	-	-	-		
D.C.	-	-	-	-	-	-	-	-	-	-	-		
Va. W. Va.	10	11 1	-	-	1 -	-	-	1 -	-	-	-		
N.C. S.C.	20 5	11 6	-	-	2 3	-	10 4	15 9	-	-	-		
Ga.	9	11	-	-	-	-	-	-	-	-	-		
Fla.	21	18	-	-	1	-	-	2	-	-	-		
E.S. CENTRAL Ky.	31 4	21 4	_	-	1 -	6 3	22 4	25 18	-	-	-		
Tenn.	11 13	9 7	-	-	- 1	3	16 2	2	-	-	-		
Ala. Miss.	3	1	Ū	-	-	Ū	-	1	Ū	-	-		
W.S. CENTRAL	39	58	-	-	10	-	3	6	-	-	1		
Ark. La.	6 14	1 17	-	-	2	-	2	3 1	-	-	-		
Okla.	6	6	-	-	-	-	1	-	-	-	-		
Tex.	13	34	-	-	8	-	-	2	-	-	1		
MOUNTAIN Mont.	<b>25</b>	20	1 -	3	3	37 -	315	150 1	-	-	-		
ldaho	3	2	-	- 1	-	4	49	23	-	-	-		
Wyo. Colo.	11	5	-	1 -	-	5	91	91	-	-	-		
N. Mex. Ariz.	4	5 3 6	1	2	N -	2 26	10 161	20 9	-	-	-		
Utah	3	3 1	-	-	-	-	4	4	-	-	-		
Nev.	2		-	-	2	-	-	2	-	-	-		
PACIFIC Wash.	85 13	110 5	-	7 -	34	1 1	11 8	112 13	-	-	-		
Oreg. Calif.	14 58	13	N -	N 7	N 32	-	3	13	-	-	-		
Alaska	-	88 1	-	-	-	-	-	79 2 5	-	-	-		
Hawaii	-	3	-	-	2	-	-		-	-	-		
Guam P.R.	- 1	2	U	-	-	U	-	-	U	-	-		
V.I.	U	2 U	Ü	U	U	U	Ü	Ü	U	Ü	Ü		
Amer. Samoa C.N.M.I.	U U	U U	U U	U	U	U	U	U U	U U	U U	U U		

N: Not notifiable.

U: Unavailable.

-: No reported cases.

TABLE IV. Deaths in 122 U.S. cities,\* week ending February 24, 2001 (8th Week)

All Causes, By Age (Years)  All Causes, By Age (Years)															
		All Caι	ıses, By	Age (Yo	ears)	_	P&I⁺			All Cau	ises, By	Age (Y	ears)		P&I⁺
Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	Total	Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	Total
NEW ENGLAND Boston, Mass.	562 169	414 119		32 11	10 3	9	58 23	S. ATLANTIC Atlanta, Ga.	1,274 179	874 111	243 44	109 15	28 6	19 3	98 4
Bridgeport, Conn	. 48	40	5	3	-	-	5	Baltimore, Md.	172	118	26	23	2	2	20
Cambridge, Mass Fall River, Mass.	. 14	12 28		- 1	-	-	- 1	Charlotte, N.C.	131	86 91	30	11 10	2	2	18
Hartford, Conn.	38	26 26	8	4	-	-	4	Jacksonville, Fla Miami, Fla.	. 131 89	63	24 14	10	3 1	3	12 12
Lowell, Mass.	34	29	4	1	-	-	2	Norfolk, Va.	71	47	13	6	3	2	1
Lynn, Mass. New Bedford, Ma	ss. 32	12 23		1	-	-	3	Richmond, Va. Savannah, Ga.	61 46	37 36	17 6	4 2	2	1	6 3
New Haven, Conn	. 38	21	9	4	2	2	6	St. Petersburg, F	la. 58	48	4	3	2	1	4
Providence, R.I. Somerville, Mass	. U	U 5		U 1	U	U	U 1	Tampa, Fla. Washington, D.0	210 C. 101	139 73	49 16	17 7	2	3 2	17 1
Springfield, Mass	s. 41	29	9	-	2	1	3	Wilmington, De		25	-	-	-	-	-
Waterbury, Conn. Worcester, Mass.	. 36 59	27 43	4 9	2 4	2 1	1 2	4 6	E.S. CENTRAL	880	578	182	79	16	24	70
				-	-			Birmingham, Al	a. 156	104	30	10	3	8	15
MID. ATLANTIC Albany, N.Y.	2,348 39	1,650 26	460 7	167 6	35	34	145 4	Chattanooga, Te Knoxville, Tenn.	nn. 80 71	54 47	18 11	6 11	1	1 2	6 6
Allentown, Pa.	17	15	2	-	-	-	-	Lexington, Ky.	53	33	9	7	1	3	2
Buffalo, N.Y. Camden, N.J.	119 30	91 15	15 8	7	4 4	2	15 -	Memphis, Tenn. Mobile, Ala.	. 205 102	136 66	45 21	20 8	2	2 4	12 5
Elizabeth, N.J.	23	15	5	3	-	-	-	Montgomery, A	la. 64	38	14	9	2	1	8
Erie, Pa.§ Jersey City, N.J.	36 49	32 41	2 6	2 2	-	-	1	Nashville, Tenn.	149	100	34	8	4	3	16
New York City, N.	Y. 1,216	843	249	92	17	14	65	W.S. CENTRAL	1,607	1,063	318	129	56	41	110
Newark, N.J. Paterson, N.J.	73 24	38 11	15 11	15 1	1 1	3	5 1	Austin, Tex. Baton Rouge, La	. 93 . 87	61 53	17 22	12 7	1 3	2	7 3
Philadelphia, Pa.	294	191	69	23	6	5	20	Corpus Christi, 7	Гех. 66	48	13	4	1	-	1
Pittsburgh, Pa.§	87	60		2	-	1	5	Dallas, Tex. El Paso, Tex.	265 <i>7</i> 5	177 49	40 16	27 7	10 2	11 1	20 5
Reading, Pa. Rochester, N.Y.	25 136	20 107	3 19	1 8	1	1 1	4 9	Ft. Worth, Tex.	118	82	18	7	3	8	5
Schenectady, N.Y		18	5	-	-	-	1	Houston, Tex. Little Rock, Ark.	360 64	205 43	82 14	44 2	24 3	5 2	31 2
Scranton, Pa.§ Syracuse, N.Y.	25 69	21 54	2 8	1 4	1	1 2	2 7	New Orleans, La		U	U	U	Ú	U	U
Trenton, N.J.	31	24	6	-	-	1	3	San Antonio, Te   Shreveport, La.	x. 251 122	176 94	50 20	16 2	4 3	5 3	16 12
Utica, N.Y. Yonkers, N.Y.	32 U	28 U		Ū	Ū	Ū	3 U	Tulsa, Okla.	106	75	26	1	2	2	8
E.N. CENTRAL	1,777	1,257	328	116	35	41	119	MOUNTAIN	1,045	724	192	82	22	25	82
Akron, Ohio	58	47	6	3	-	2	6	Albuquerque, N   Boise, Idaho	.M. 109 40	76 32	21 5	10 1	2 1	- 1	8 4
Canton, Ohio Chicago, III.	41 U	33 U	5 U	Ū	1 U	2 U	4 U	Colo. Springs, C		34	7	9	-	2	3
Cincinnati, Ohio	110	80	19	4	1	6	10	Denver, Colo.	121	76	27	11	3	4 5	9
Cleveland, Ohio Columbus, Ohio	123 220	85 156	24 35	8 14	4 10	2 5	4 12	Las Vegas, Nev. Ogden, Utah	206 30	147 22	35 4	14 2	5 -	2	10
Dayton, Ohio	126	92	25	6	1	2	10	Phoenix, Ariz.	159	109	24	16	6	4	17
Detroit, Mich. Evansville, Ind.	224 54	115 41	70 8	25 3	11	3 2	16 2	Pueblo, Colo.   Salt Lake City, U	42 tah 120	31 79	7 29	4 7	1	4	5 15
Fort Wayne, Ind.	53	38	13	1	-	1	4	Tucson, Ariz.	166	118	33	8	4	3	11
Gary, Ind. Grand Rapids, Mi	17 ch. 34	13 27	2	3	2 1	- 1	- 5	PACIFIC	1,529	1,130	276	69	35	16	160
Indianapolis, Ind.		135		14	1	2	11	Berkeley, Calif. Fresno, Calif.	25 141	18 112	4 23	3 5	- 1	-	2 10
Lansing, Mich.	40	33		1	-	-	4	Glendale, Calif.	11	7	23	2	-		-
Milwaukee, Wis. Peoria, III.	162 55	118 43		11 3	1	4 3	15 5	Honolulu, Hawa		60	10	2	2	-	5 16
Rockford, III.	64	46	11	4	1	2	1	Long Beach, Cal Los Angeles, Cal		73 246	21 68	3 23	9	1 3	16 27
South Bend, Ind. Toledo, Ohio	64 111	45 79		6 9	1	1 2	4 6	Pasadena, Calif.	24	16	3	3	2		4
Youngstown, Ohi		31	6	1	-	1	-	Portland, Oreg. Sacramento, Cal	U lif. 172	U 133	U 26	U 10	U 2	U 1	U 21
W.N. CENTRAL	673	482		38	9	22	61	San Diego, Calif	. 174	133	31	2	6	2	25 U
Des Moines, Iowa	83	57 24	19	3 1	1	3	8 6	San Francisco, C San Jose, Calif.		U 118	U 30	U 7	U 4	U 2	U 15
Duluth, Minn. Kansas City, Kans	. 28 . 39	24 30		1	-	-	4	Santa Cruz, Cali	f. 27	19	5	2	-	1	15 2
Kansas City, Mo.	U	U	U	U	Ú	U	Ú	Seattle, Wash. Spokane, Wash.	113 56	75 46	24 9	4	4 1	6	15 5
Lincoln, Nebr. Minneapolis, Min	n. 120	48 91	8 20	3 3	2 1	5	6 13	Tacoma, Wash.	102	74	20	3	2	-	13
Omaha, Nebr.	<b>9</b> 8	68	17	6	-	7	5	TOTAL	11,695¶	8,172	2,218	821	246	231	903
St. Louis, Mo. St. Paul, Minn.	70 90	43 65		11 6	2 1	2	6 8	-	,	-,	,				
Wichita, Kans.	84	56		4	2	2	5								

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. 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.

¹Pneumonia and influenza.

<sup>\*</sup>Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

\*Total includes unknown ages.

# Contributors to the Production of the MMWR (Weekly)

## Weekly Notifiable Disease Morbidity Data and 122 Cities Mortality Data

Samuel L. Groseclose, D.V.M., M.P.H.

**State Support Team** Robert Fagan Jose Aponte Gerald Jones David Nitschke Scott Noldy Carol A. Worsham

CDC Operations Team

Carol M. Knowles Deborah A. Adams Willie J. Anderson Patsy A. Hall Suzette A. Park Felicia J. Perry Pearl Sharp

## Informatics

T. Demetri Vacalis, Ph.D.

Michele D. Renshaw Erica R. Shaver 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/mmwr or from CDC's file transfer protocol server at ftp://ftp.cdc.gov/pub/Publications/mmwr. 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.

All material in the MMWR Series is in the public domain and may be used and reprinted without permission; citation as to source, however, is appreciated.

Director, Epidemiology Program Office Writers-Editors, MMWR (Weekly) Director, Centers for Disease Control and Prevention Jill Crane Jeffrey P. Koplan, M.D., M.P.H. Stephen B. Thacker, M.D., M.Sc. David C. Johnson Deputy Director for Science and Editor, MMWR Series Desktop Publishing Public Health, Centers for Disease John W. Ward, M.D. Control and Prevention Lynda G. Cupell Acting Managing Editor, MMWR David W. Fleming, M.D. Morie M. Higgins (Weekly) Teresa F. Rutledge

**☆U.S. Government Printing Office: 2001-633-173/48211 Region IV**