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Update: Fatal and Severe Liver Injuries Associated With Rifampin and Pyrazinamide for Latent Tuberculosis Infection, and Revisions in American Thoracic Society/CDC Recommendations — United States, 2001

During February 12–August 24, 2001, a total of 21 cases of liver injury associated with a 2-month rifampin-pyrazinamide (RIF-PZA) regimen for the treatment of latent tuberculosis infection (LTBI) was reported to CDC. These 21 cases are in addition to two previously reported RIF-PZA–associated cases (1). Cases of liver injury have occurred each year since 1999. CDC also received reports of 10 cases associated with other LTBI treatment regimens; however, risk for liver injury cannot be compared among treatment regimen is unknown. This report provides preliminary information about the 21 cases associated with RIF-PZA and the revised recommendations on selecting appropriate LTBI therapy for patients and monitoring the use of RIF-PZA to treat LTBI (2). In most instances, the 9-month isoniazid (INH) regimen is preferred for the treatment of patients with LTBI. RIF-PZA may be used in selected cases and requires more intensive clinical and laboratory monitoring than previously recommended.

A case was defined as liver injury (i.e., clinical and laboratory findings consistent with hepatitis) leading to hospital admission or death of a patient being treated for LTBI with RIF-PZA. The median age of the 21 patients was 44 years (range: 28–73 years) and 12 were men. For patients in which the information was known, jaundice was reported in 15 of 18, and human immunodeficiency virus (HIV) test results were negative for all 11 who were tested. One patient had been diagnosed with hepatitis C disease at the start of RIF-PZA treatment. Three of the 21 RIF-PZA-associated cases occurred when patients received this regimen after recovering from INH-associated liver injury. One case was associated with a patient who received RIF-PZA after taking INH without problems.

Of the 21 patients with RIF-PZA–associated liver injury, 16 recovered and five died of liver failure. No patient received a liver transplant. The five patients who died had LTBI diagnosed under the current recommendations, and each had indications for RIF-PZA treatment (2). Patient 1 was a 68-year-old man who had diabetes and a positive tuberculin skin test (TST) result, patient 2 was a 62-year-old woman who had a TST conversion detected by employee screening, and patient 3 was a 36-year-old man who had a TST conversion during incarceration. Patient 4 was a 32-year-old woman who had emigrated from a high-prevalence country to the United States in 2000 and had a positive TST result of 20 mm induration, and patient 5 was a 34-year-old man who had emigrated from a high-prevalence country to the United States in 1988 and had a positive TST result of 22 mm induration. Patient 3 had HIV risk factors but a negative serology result; the other

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Liver Injuries — *Continued*

four did not have HIV risk factors. Patients 2, 4, and 5 were tested and had negative serology results. Patients 2 and 3 received RIF-PZA after recovering from INH-associated liver injury.

PZA dosages for the five patients were 19, 18, 23, 20, and 16 mg/kg/d (recommended dose: 15-20 mg/kg/d). After liver injury was diagnosed, all patients were tested for hepatitis A (acute), B (acute and chronic), and C. Patients 2 and 5 had serologic evidence of previous hepatitis A. Patient 5 had serologic evidence of past hepatitis B. Patient 1 had idiopathic nonalcoholic steatotic hepatitis confirmed by biopsy in 1997, and patient 3 used injection drugs and alcohol, although reportedly not during RIF-PZA treatment. Patient 2 had no risks for chronic liver disease and had neither a liver biopsy nor an autopsy. Patients 4 and 5 had autopsies; microscopic examination of the liver of patient 5 revealed acute hepatic necrosis, and results are pending for patient 4. Patients 1 and 2 were taking other medicines* that have been associated with idiosyncratic liver injury. All five patients had onset of liver injury during the second month of the 2-month course of treatment. Patients 1 and 3 continued RIF-PZA an estimated 3 days and 14 days, respectively, after symptom onset; the exact duration of RIF-PZA treatment could not be determined for patients 2 and 4. Patient 5 developed symptoms at the completion of treatment. Patients 1, 2, 4, and 5 received 30-day supplies of RIF-PZA. Patient 3 received directly observed therapy daily, but a language barrier possibly hampered patient education and communication about symptoms. Patient 4 also may have faced a language barrier.

Reported by: State and territorial health depts. Div of Tuberculosis Elimination, National Center for HIV, STD, and TB Prevention, CDC.

Editorial Note: During June, tuberculosis (TB) and liver disease specialists consulted by CDC analyzed case reports and assessed current guidelines on the use of RIF-PZA and noted that the 2-month RIF-PZA regimen was well tolerated in LTBI treatment trials among HIV-infected persons (*3–5*). Although clinical trials of RIF-PZA did not include HIV-uninfected persons, the number of reports of severe liver injury among persons presumed or known not to be infected with HIV was unexpected. CDC continues to investigate the rate and risk factors for liver injury. To reduce the risk for liver injury associated with RIF-PZA therapy, the American Thoracic Society and CDC, with the endorsement of the Infectious Diseases Society of America, have prepared recommendations that supercede previous guidelines (*2*).

1. The 2-month RIF-PZA treatment regimen for LTBI should be used with caution, especially in patients concurrently taking other medications associated with liver injury, and those with alcoholism, even if alcohol use is discontinued during treatment. RIF-PZA is not recommended for persons with underlying liver disease or for those who have had INH-associated liver injury. Persons being considered for treatment with RIF-PZA should be informed of potential hepatotoxicity and asked whether they have had liver disease or adverse effects from INH.

2. For persons not infected with HIV, 9 months of daily INH remains the preferred treatment for LTBI; 4 months of daily RIF is an acceptable alternative. Two months of daily RIF-PZA may be useful when completion of longer treatment courses is unlikely and when the patient can be monitored closely.

3. Available data do not suggest excessive risk for severe hepatitis associated with RIF-PZA treatment among HIV-infected persons. In a large multinational trial, HIV-infected patients treated with RIF-PZA had lower rates of serum aminotransferase (AT)

^{*}One patient was taking hydrochlorothiazide; and the other was taking lisinopril, metformin, and aspirin.

Liver Injuries — Continued

elevations than those given INH alone (3). The RIF-PZA regimen also was well tolerated when given twice weekly to HIV-infected persons in Zambia and Haiti (4,5). However, experience from trials may not translate to all clinical practice settings, and it may be prudent to use 9 months of daily INH for treatment of HIV-infected persons with LTBI when completion of treatment can be assured.

4. No more than a 2-weeks supply of RIF-PZA (with a PZA dose ≤20 mg/kg/d and a maximum of 2 gm/d) should be dispensed at a time to facilitate periodic clinical assessments. Patients should be reassessed in person by a health-care provider at 2, 4, and 6 weeks of treatment for adherence, tolerance, and adverse effects, and at 8 weeks to document treatment completion. At each visit, health-care providers conversant in the patients' language should instruct patients to stop taking RIF-PZA immediately and seek medical consultation if abdominal pain, emesis, jaundice, or other hepatitis symptoms develop. Provider continuity is recommended for monitoring.

5. A serum AT and bilirubin should be measured at baseline and at 2, 4, and 6 weeks of treatment in patients taking RIF-PZA. Because some side effects may occur in the second month of treatment, patients should be monitored throughout the entire course of treatment. Asymptomatic serum AT increases are expected and usually do not require that treatment be stopped (2,3). However, treatment should be stopped and not resumed for any of these findings: AT greater than five times the upper limit of normal range in an asymptomatic person, AT greater than normal range when accompanied by symptoms of hepatitis, or a serum bilirubin greater than normal range.

The following considerations are crucial in deciding whom to test and treat for LTBI:

1. The purpose of targeted testing is to find and treat persons who have both LTBI and high risk for TB disease (e.g., recent exposure to a contagious case) (2). Persons at low risk for developing TB and who have had a TST for other reasons, such as baseline TST of health-care workers, are not necessarily candidates for treatment if found to be infected (2).

2. Treatment is recommended for foreign-born persons from countries with a high prevalence of TB who have LTBI and who have been in the United States <5 years (2). After 5 years, treatment decisions should be made on the same basis as other patients.

3. Because sporadic severe INH-associated liver injury still occurs, patients taking INH should be monitored as recommended (2).

CDC is collecting reports of severe liver injury (i.e., leading to hospital admission or death) in persons receiving any regimen for LTBI. Reports are being analyzed to assess contributing factors. Report possible cases to the Division of Tuberculosis Elimination; telephone (404) 639-8125.

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⁺ All *MMWR* references are available on the Internet at <http://www.cdc.gov/mmwr>. Use the search function to find specific articles.

Impact of Targeted, School-Based Dental Sealant Programs in Reducing Racial and Economic Disparities in Sealant Prevalence Among Schoolchildren — Ohio, 1998–1999

Despite the availability of highly effective measures for primary prevention, dental caries (tooth decay) remains one of the most common childhood chronic diseases (1). When properly placed, dental sealants are almost 100% effective in preventing caries on the chewing surfaces of first and second permanent molar teeth (2). However, sealants remain underused, particularly among children from low-income families and from racial/ethnic minority groups (3). Schools traditionally have been a setting for both dental disease prevention programs and for oral health status assessment. To determine the prevalence of dental sealant use among third grade students from schools with and without sealant programs, during the 1998–99 school year, the Ohio Department of Health conducted an oral health survey among schoolchildren. This report summarizes the results of this survey, which indicate that targeted, school-based dental sealant programs in all eligible, high-risk schools could reduce or eliminate racial and economic disparities in the prevalence of dental sealants.

The study population was derived from a sample of elementary schools in Ohio. Eligible schools included those with complete data on enrollment and that participated in the free or reduced-cost lunch program. Of 1857 public schools with complete data, 335 (representing 87 of 88 Ohio counties) were selected randomly using the probability-proportional-to-size approach. The prevalence of dental sealant use was compared among students attending schools with a program (69 schools) to that of students attending schools with a program (69 schools) to that of students attending schools without a program (266 schools). On the basis of a student census in randomly selected classrooms (grades 1–3), 34,668 students were eligible for the survey; 19,471 of these were from the third grade. Parental consent was obtained and oral screenings performed on 11,191 third graders (57.5% of those eligible). Using mouth mirrors, artificial lighting, and dental explorers, 12 dental professionals completed the clinical screening. Weighted data were analyzed using Stata software (4). The Design-Based Pearson Statistic was used to test for association. Weighting was based on the relation between the number of children screened and the number in the underlying eligible population.

Among third grade students surveyed in Ohio, 34.2% (95% confidence interval [CI]=32.1%–36.4%) had at least one dental sealant on a permanent molar tooth. At schools with dental sealant programs, 56.7% of third grade students had a sealant, compared with 28.2% of students at schools without sealant programs (Table 1). By race, 61.6% of white third grade students in schools with sealant programs had sealants, compared with 30.0% of white third grade students in schools with sealant programs. For black third grade students, 50.8% in schools with sealant programs had a sealant, compared with 17.7% of black third grade students in schools without programs.

Using eligibility for free or reduced-cost lunch programs as a proxy for low income, 54.4% of eligible third grade students in schools with sealant programs had a sealant, compared with 64.8% of third grade students not eligible for the program in the same schools; 19.0% of eligible third grade students in schools without programs had a sealant. Among third grade students in schools with sealant programs, the prevalence of sealants was similar for students with and without health insurance.

Dental Sealant Programs — Continued

			School with sealant program			School without sealant program					
Characteristic	All <u>schools</u> No.*	No. children with sealants	(%)	(95% Cl⁺)	No. children with sealants	(%)	(95% CI)				
Race											
White	10,003	1,052	(61.6)	(56.0–67.0)	2,398	(30.0)	(28.4–31.7)				
Black	1,035	257	(50.8)	(42.3–59.2)	121	(17.7)	(14.0–22.1)				
Sex											
Male	5,495	611	(57.3)	(52.5–62.0)	1,259	(28.0)	(25.0–31.1)				
Female	5,690	709	(56.3)	(48.6–63.6)	1,300	(28.5)	(26.6–30.4)				
Lunch program [®]											
Eligible	3,709	675	(54.4)	(47.7–60.9)	546	(19.0)	(15.2–23.6)				
Not eligible	6,343	506	(64.8)	(55.7–72.9)	1,812	(33.7)	(31.7–35.9)				
Insurance											
Uninsured	3,780	394	(55.0)	(43.7–65.7)	728	(23.5)	(21.6–25.5)				
Medicaid	1,844	389	(58.3)	(53.2–63.2)	314	(22.2)	(16.8–28.7)				
Private											
insurance	4,964	450	(58.4)	(47.4–68.6)	1,418	(34.4)	(32.4–36.5)				
Total	11,191	1,321	(56.7)	(51.7–61.6)	2,559	(28.2)	(26.4–30.2)				

TABLE 1. Dental sealant prevalence among third grade students, by race, sex, free or reduced-cost lunch program eligibility, health insurance status, and attendance at a school with or without a sealant program — Ohio, 1998–1999

* Numbers may not add to total because of missing data.

[†] Confidence interval.

 $^{\text{s}}$ Students were eligible for the free or reduced-cost lunch program if their family income was \leq 185% the federal poverty level.

Among students who attended schools with sealant programs and had sealants on their teeth, 70.2% (95% Cl=62.8–76.7) received them at school. Students who received sealants at school represented 22.6% of all Ohio students with sealants.

Reported by: MD Siegal, DDS, DL Miller, MBA, D Moffat, MPA, Ohio Dept of Health; S Kim, PhD, P Goodman, MS, Center for Biostatistics, Ohio State Univ, Columbus. Surveillance, Investigations and Research Br, Div of Oral Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: The findings in this report indicate that school-based dental sealant programs in Ohio that are targeted to groups at high risk for dental caries and least likely to receive regular dental care can substantially increase sealant prevalence. Third grade students in schools with dental sealants programs have two to three times greater prevalence of sealants compared with students in schools without sealant programs. One of the national health objectives for 2010 is to increase to 50% the proportion of children aged 8 years that have received dental sealants on their first permanent molar teeth (*3*). Periodic surveys in Ohio have documented steady increases in the overall prevalence of dental sealants among children aged 8 years, from 11% during 1987–1988 to 26% during 1992–1993 to 30% during 1998–1999 (*5*). Although the overall prevalence still falls short of the 2010 objective, among targeted schools, all racial and income groups have achieved or exceeded the objective. Providing programs in all eligible, high-risk schools would accelerate progress toward both achieving the 2010 objective and eliminating racial and income disparities.

Dental Sealant Programs — Continued

School-based sealant programs began in Ohio during the mid-1980s, expanding from a single demonstration program in one city in 1984 to 18 programs in 34 of 88 counties in 2000. During 1997–1998, approximately 12,000 second grade students received seal-ants through Ohio school-based programs.

The findings in this report are subject to at least two limitations. First, it is not known to what extent the 42% of third grade students who did not return parental consent forms were similar to the students who did. In addition, it is unknown whether those without consent were equally distributed according to other factors that could influence the findings (e.g., receipt of regular dental care). Second, parental recall about whether children received sealants at school was subject to error. As a result, for this analysis, only children who attended a school with a sealant program, had a sealant on at least one tooth, and had a consent form indicating that they had received sealants at school were counted in that category.

The findings of this survey indicate that, among students who participated, the use of appropriately targeted school-based programs increases the prevalence of dental sealants among children from low-income families and reduces the racial and income disparity in sealant prevalence among elementary school students. The extent to which sealant programs can eliminate the disparity in sealant prevalence in a population will be influenced by the manner in which the programs are targeted and by their penetration in the targeted population. Sealant programs provide additional benefits when they are linked to programs that ensure access to primary dental care for those in need of restorative services.

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Progress Toward Poliomyelitis Eradication — South-East Asia, January 2000–June 2001

Since the World Health Assembly resolved in 1988 to eradicate poliomyelitis globally (1), the estimated number of polio cases worldwide has declined 99%. During 1994, member countries of the South-East Asia Region (SEAR)* of the World Health Organization (WHO) began accelerating efforts to eradicate polio. By 2000 (2), wild poliovirus was detected in only four of the 10 countries: Bangladesh, India, Nepal, and Myanmar. This report summarizes polio eradication activities during January 2000–June 2001 in SEAR, where wild poliovirus transmission has declined rapidly and is occurring primarily in northern India.

^{*}Bangladesh, Bhutan, Democratic People's Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Sri Lanka, and Thailand.

Routine Vaccination

During 2000, the Indian government reported that the routine administrative coverage rate with three doses of oral poliovirus vaccine (OPV3) among children aged 1 year was 95%; however, Multiple Indicator Cluster Survey data suggested that coverage was approximately 59% in India (United Nations Children's Fund [UNICEF], unpublished data, 2000)[†]. Similar surveys found coverage rates of approximately 67% in Bangladesh and 60% in Nepal. Routine administrative OPV3 coverage rates were reported from Bangladesh (90%), Bhutan (90%), Democratic People's Republic (DPR) of Korea (91%), Indonesia (66%), Maldives (98%), Myanmar (86%), Nepal (80%), Sri Lanka (102%), and Thailand (89%).

Supplementary Vaccination

During the second half of 2000 and the first half of 2001, all countries in the region implemented at least two rounds of national immunization days (NIDs) (mass campaigns over a period of days to weeks in which two doses of OPV are administered to all children usually aged <5 years regardless of previous vaccination history with an interval of 4–6 weeks between doses). On the basis of May 1999 recommendations (*3*), India conducted four NID rounds (October 1999–January 2000) followed 1 month later by two rounds of subnational immunization days (SNIDs) (same procedure as NIDs but in a smaller area) in eight high-risk northern states. Two additional SNID rounds and two NID rounds were conducted in fall and winter 2000–2001. In addition to the use of fixed vaccination posts, the NID and SNID rounds in Bangladesh, India, and Nepal were intensified through door-to-door and boat-to-boat vaccine delivery. NIDs and SNIDs in Bangladesh, Myanmar, and Nepal were synchronized to coincide with India.

During 2000, in response to the detection of wild poliovirus, mop-up campaigns began in India, Myanmar, and Nepal. In India, eight mop-up campaigns were conducted targeting 22.7 million children. During spring (low transmission season) 2001, two OPV doses were administered in high-risk areas to children aged <5 years, including 20.2 million in 40 districts of Uttar Pradesh, 9.5 million in 18 districts of Bihar, and 3.7 million in five districts of West Bengal. Eleven additional mop-up campaigns were completed or were planned by June.

Acute Flaccid Paralysis (AFP) Surveillance

The goal of AFP surveillance is to detect circulating polioviruses and provide data for developing appropriate supplementary vaccination strategies. AFP surveillance is evaluated by two key indicators: sensitivity of reporting (target: nonpolio AFP rate of \geq 1 case per 100,000 children aged <15 years) and completeness of specimen collection (target: two adequate stool specimens from \geq 80% of all persons with AFP cases).

In Bangladesh, India, Myanmar, and Nepal, AFP detection is facilitated through surveillance medical officers (SMOs) who receive training and are responsible for a defined area. Myanmar had nine officers and Nepal had six. By June 2001, Bangladesh had 32 and India had 207. Surveillance in Bangladesh, India, and Nepal was strengthened by the Stop the Transmission of Polio (STOP) teams[§].

[†] Vaccination coverage determined by the administrative method (in which the doses administered is the numerator and the estimated number of target children is the denominator) is often higher than coverage determined through surveys because of overestimates in the number of doses of vaccine administered and underestimates of the size of the target population.

[§] Groups of international health-care professionals deployed to a local area for 3 months to assist ministry of health staff with polio eradication activities.

Poliomyelitis Eradication — Continued

The reported number of AFP cases during 1999–2000 increased in Bangladesh (from 767 to 1133) and Myanmar (from 183 to 294); both countries had a nonpolio AFP rate >1.0 for the first time (Table 1). India, Nepal, Sri Lanka, and Thailand maintained nonpolio AFP rates >1.0. In Indonesia, the rate decreased from 0.99 in 1999 to 0.85 in 2000. During 2001, the nonpolio AFP rate continued to be >1.0 in Bangladesh, India, Nepal, Sri Lanka, and Thailand; however, the rate decreased to 0.46 in Indonesia. During 2000, the percentage of adequate stool specimens[¶] collected from persons with AFP was >80% in India, Indonesia, Sri Lanka, and Thailand. Specimen collection increased during 1999–2000 in Bangladesh (from 48% to 68%), DPR Korea (from 33% to 74%), Myanmar (from 66% to 74%), and Nepal (from 76% to 79%). During 2001, sewage sampling in Mumbai, Maharashtra, India, detected wild poliovirus type 1 that was linked genetically to poliovirus previously isolated in Uttar Pradesh.

Polio Incidence

During 1999–2000, the incidence of wild virus-confirmed polio cases decreased in SEAR from 1161 to 272, primarily reflecting the decreases in India (from 1126 to 265). In India, the greatest decline occurred in central and southern states.

Of 265 virus-confirmed cases in India in 2000, 138 (52%) were poliovirus type 1 (P1), 126 (48%) were poliovirus type 3 (P3), and one case was a mixture of P1 and P3 (Figure 1). The last reported case of wild poliovirus type 2 in the world was isolated from an AFP case from India in October 1999 (Aligarh District, Uttar Pradesh). The number of polio cases reported from Bangladesh decreased from 393 (29 virus-confirmed) in 1999 to

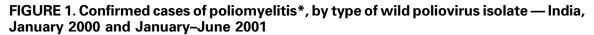
[¶] Two stool specimens collected at least 24 hours apart within 14 days from onset of paralysis and shipped adequately to the laboratory.

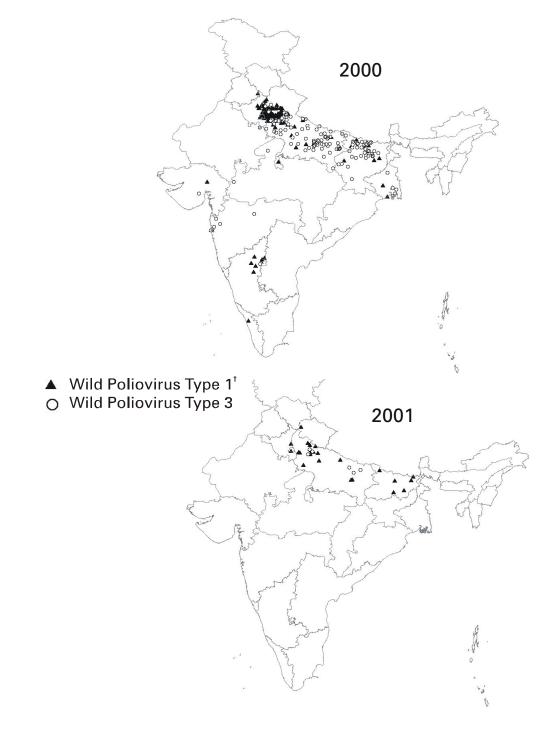
	rep	AFP reported Nonpolio cases AFP rate				with AFP lequate lens (%)	Polio cases (wild virus- confirmed)			
Country	2000	2001	2000	2001	2000	2001	2000	2001		
Bangladesh	1,133	576	1.85	1.14	68	78	197 (1)	0 (0)		
Bhutan	4	1	1.54	0.77	25	100	0 (0)	0 (0)		
Democratic										
People's										
Republic (D	PR)									
of Korea	65	24	0	0	74	79	0 (0)†	0 (0)		
India	8,104	2,913	2.03	1.20	82	84	265 (265)†	31 (31)		
Indonesia	593	216	0.85	0.46	85	84	37 (0)	0 (0)		
Maldives	0	0	0	0	0	0	0 (0)	0 (0)		
Myanmar	294	107	1.55	0.98	74	90	44 (2)	0 (0)		
Nepal	211	77	1.90	1.15	79	84	29 (4)	0 (0)		
Sri Lanka	97	61	1.75	1.08	86	82	0 (0)†	0 (0)		
Thailand	261	109	1.45	1.24	90	92	20 (0)	0 (0)		
Total	10,762	4,084	1.81	1.08	81	84	592 (272)	31 (31)		

TABLE 1. Number of reported cases of acute flaccid paralysis (AFP), nonpolio AFP
rates, and confirmed poliomyelitis cases, by country — South-East Asia Region,
January 2000–June 2001*

* Data up to June 30, 2001.

[†] During 2000, only India and Sri Lanka used the virologic classification scheme. As of January 2001, all countries are using the virologic classification scheme except DPR Korea, which uses the clinical classification scheme. Poliomyelitis Eradication — Continued





* n=265 for 2000 and n=31 for January–June 2001. ⁺ Included one wild poliovirus mixture (P1 and P3).

Poliomyelitis Eradication — Continued

197 (one virus-confirmed) in 2000. During that year, wild viruses also were isolated from two cases in Myanmar (along the border with Bangladesh) and from four cases in Nepal (along the border with India). By June 30, 2001, 31 virus-confirmed polio cases had been detected in the four northern states of Bihar, Delhi, Haryana, and Uttar Pradesh in India; and no virus had been found elsewhere in SEAR.

Laboratory Network

The Polio Laboratory Network for SEAR consists of 17 laboratories (nine in India, three in Indonesia, and one each in Bangladesh, DPR Korea, Myanmar, Sri Lanka, and Thailand). The network includes 14 national polio laboratories, two regional reference laboratories, and one global specialized laboratory that conducts genetic sequencing. As of June, 16 laboratories were fully accredited.

Reported by: Vaccines and Biologicals Dept, World Health Organization, Regional Office for South-East Asia, New Delhi, India. Vaccines and Biologicals Dept, World Health Organization, Geneva, Switzerland. Respiratory and Enterovirus Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Vaccine Preventable Disease Eradication Div, National Immunization Program, CDC.

Editorial Note: The increase in SEAR polio eradication activities during the past 18 months has resulted in a dramatic reduction in polio cases. This progress has been accompanied by enhanced surveillance that improves the completeness of reporting. During January–June 2001, wild poliovirus circulated in only four states in India, with intense transmission in western Uttar Pradesh. Interrupting the remaining chains of transmission through supplementary vaccination activities is the highest priority in SEAR. Viruses isolated from AFP cases in Myanmar and Nepal along the border with India in 2000 were genetically similar to those from Bangladesh and India during 1999, underscoring the importance of border areas in virus transmission. Continuous cooperation among neighboring countries both in AFP surveillance and synchronization of supplementary vaccination activity is needed (*4*).

The immediate concern in India is improvement in supplementary vaccination activities in the four contiguous states of Bihar, Delhi, Haryana, and Uttar Pradesh to compensate for high birth rates, crowded urban conditions, poor sanitation and infrastructure, low routine vaccination coverage, and insufficient health personnel. The SEAR Technical Consultative Group meeting in May 2001 called for 1) Increased prioritization of AFP cases highly suspected of being true polio cases; 2) prompt supplementary vaccination campaigns in areas with wild poliovirus transmission; 3) prompt reporting of AFP cases, timely laboratory results, and regular analysis of data; and 4) establishment of national expert review committees in SEAR countries. Although AFP surveillance has improved in Bangladesh, India, Myanmar, and Nepal through the SMO network (*5*), surveillance remains suboptimal in DPR Korea, and AFP performance indicators have declined in Indonesia.

Assessments of AFP surveillance by WHO and the ministries of health were conducted in India and Nepal in 2001. The review concluded that the existing surveillance system is unlikely to miss areas in India with sustained wild poliovirus transmission. The review recommended implementation of the mopping-up plan, regular active AFP searches by the reporting units, greater private sector involvement, regular analysis of surveillance data for programmatic action, addressing vacancies of key district government posts, and strengthening project management at national and regional levels. AFP surveillance reviews in Bangladesh and DPR Korea are planned for late 2001.

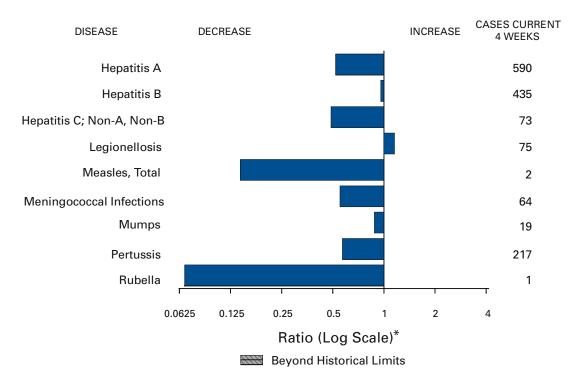


FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending August 25, 2001, with historical data

* 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.

		Cum. 2001		Cum. 2001
Anthrax		-	Poliomyelitis, paralytic	-
Brucellosis*		51	Psittacosis*	9
Cholera		4	Q fever*	15
Cyclosporiasis	5*	104	Rabies, human	1
Diphtheria		1	Rocky Mountain spotted fever (RMSF)	307
Ehrlichiosis:	human granulocytic (HGE)*	126	Rubella, congenital syndrome	-
	human monocytic (HME)*	48	Streptococcal disease, invasive, group A	2,543
Encephalitis:	California serogroup viral*	21	Streptococcal toxic-shock syndrome*	43
•	eastern equine*	4	Syphilis, congenital §	157
	St. Louis [*]		Tetanus	17
	western equine*		Toxic-shock syndrome	82
Hansen diseas	se (leprosy)*	51	Trichinosis	14
Hantavirus pu	Ilmonary syndrome*	4	Tularemia*	69
Hemolytic ure	mic syndrome, postdiarrheal*	72	Typhoid fever	166
HIV infection,	pediatric*1	98	Yellow fever	-
Plaque		2		

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending August 25, 2001 (34th Week)

-: No reported cases. *Not notifiable in all states.

¹ 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 June 26, 2001. [§]Updated from reports to the Division of STD Prevention, NCHSTP.

	All	00	Chlor	audia†	Connetaa	n avidia aia	NE		coli O157:H7 PH	
Demosting Area	Cum.	Cum.	Cum.	nydia [†] Cum.	Cum.	poridiosis Cum.	Cum.	Cum.	Cum.	Cum.
Reporting Area UNITED STATES	2001 ⁵ 19,145	2000 25,088	2001 434,579	2000 449,825	2001 1,354	2000 1,391	2001 1,477	2000 2,751	2001 1,210	2000 2,418
NEW ENGLAND Maine N.H. Vt. Mass. R.I. Conn.	746 20 17 10 411 53 235	1,412 25 25 27 890 54 391	14,459 668 809 385 6,607 1,859 4,131	15,095 913 672 352 6,400 1,651 5,107	66 10 4 25 20 3 4	76 12 9 17 25 2 11	155 19 24 10 78 9 15	251 17 21 25 120 11 57	153 22 18 5 76 7 25	268 22 28 27 120 12 59
MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	3,974 322 1,996 960 696	5,778 606 3,136 1,121 915	48,224 8,733 19,132 6,458 13,901	41,965 951 17,377 7,484 16,153	160 64 63 4 29	209 55 107 10 37	107 81 18 N	289 178 17 94 N	122 85 8 29	201 38 14 91 58
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	1,408 237 165 665 261 80	2,417 388 216 1,364 331 118	62,370 9,481 9,102 17,043 19,591 7,153	77,409 19,992 8,523 21,870 16,465 10,559	400 101 41 99 158	396 63 23 55 54 201	345 89 50 88 51 67	652 127 79 138 78 230	257 69 32 80 40 36	511 145 62 108 71 125
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. Nebr. Kans.	454 85 47 218 1 18 39 46	604 115 61 286 2 6 38 96	22,117 4,261 1,858 8,443 599 1,163 2,054 3,739	25,413 5,184 3,504 8,701 574 1,153 2,392 3,905	185 93 49 15 7 6 15	139 21 40 21 7 9 35 6	237 92 43 32 9 15 32 14	398 95 110 79 14 33 49 18	215 91 31 48 19 19 7	401 121 101 75 15 39 38 12
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	6,167 116 751 465 501 49 402 350 757 2,776	6,754 131 839 448 461 37 430 525 705 3,178	83,480 1,811 7,467 1,764 11,814 1,524 13,148 7,750 16,028 22,174	83,763 1,875 8,893 2,087 10,301 1,395 14,390 5,619 17,750 21,453	200 2 28 9 15 1 19 - 71 55	229 5 6 8 3 17 - 84 98	132 2 9 - 38 4 29 7 19 24	215 1 17 - 45 10 48 15 33 46	83 4 1 30 3 17 9 12 7	206 - 1 U 42 7 49 13 36 58
E.S. CENTRAL Ky. Tenn. Ala. Miss.	977 201 293 224 259	1,295 146 531 337 281	31,106 5,795 9,359 8,269 7,683	32,696 5,144 9,218 10,305 8,029	30 3 7 11 9	37 5 9 12 11	81 38 25 11 7	86 25 38 5 18	70 39 27 4	79 25 41 5 8
W.S. CENTRAL Ark. La. Okla. Tex.	2,058 104 472 107 1,375	2,594 126 368 219 1,881	66,707 4,572 10,893 6,934 44,308	67,971 4,324 12,138 5,491 46,018	21 5 7 7 2	75 5 10 4 56	44 6 3 18 17	187 48 13 11 115	59 - 24 20 15	228 34 36 11 147
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	714 12 15 1 140 56 295 63 132	1,005 10 239 107 319 95 212	24,776 1,305 1,124 537 4,790 3,622 9,368 996 3,034	26,134 985 1,192 515 7,820 3,144 8,419 1,534 2,525	94 7 9 1 25 17 6 26 3	57 8 3 5 17 5 6 10 3	167 10 25 7 65 9 21 22 8	268 26 40 12 101 15 35 32 7	87 - 1 44 8 9 24 1	201 23 8 73 14 27 46 10
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	2,647 290 112 2,204 13 28	3,229 291 107 2,733 12 86	81,340 8,827 2,917 65,435 1,750 2,411	79,379 8,426 4,460 62,600 1,590 2,303	198 37 20 137 1 3	173 U 11 162 -	209 54 29 113 3 10	405 127 75 170 23 10	164 31 25 105 - 3	323 145 86 81 2 9
Guam P.R. V.I. Amer. Samoa C.N.M.I.	9 580 2 - -	13 759 25 -	- 1,697 53 U 85	333 U U U U	- - - U -	- - U U	N 1 - U -	N 5 U U		

TABLE II. Provisional cases of selected notifiable diseases, United States,weeks ending August 25, 2001, and August 26, 2000 (34th Week)

N: Not rotifiable. 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.* * Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update June 26, 2001.

	Gono	rrhea	Hepati Non-A,	tis C; Non-B	Legione	llosis	Listeriosis		me ease
Reporting Area	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2001	Cum. 2000
UNITED STATES	199,624	226,200	2,294	2,146	590	634	287	6,557	10,259
NEW ENGLAND Maine N.H. Vt. Mass. R.I. Conn.	4,045 79 107 47 2,029 478 1,305	4,280 53 69 41 1,732 399 1,986	14 - 6 8 -	21 2 - 4 10 5	29 4 7 4 5 2 7	38 2 3 15 3 13	32 - 2 16 1 11	1,824 - 88 4 405 218 1,109	3,060 - 20 949 211 1,844
MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	24,015 5,391 8,016 3,830 6,778	24,022 4,346 7,382 4,657 7,637	977 40 - 896 41	461 25 - 404 32	117 39 6 5 67	169 45 23 16 85	43 18 7 7 11	3,438 1,867 1 448 1,122	5,420 1,929 153 2,084 1,254
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	34,013 5,634 3,803 10,670 11,441 2,465	45,660 11,930 3,947 13,630 11,615 4,538	121 8 1 11 101	171 7 17 147	145 79 14 - 32 20	170 65 25 23 29 28	33 11 4 15 2	368 79 9 1 279	646 45 17 31 20 533
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. Nebr. Kans.	9,362 1,375 428 5,034 19 183 695 1,628	11,250 2,073 740 5,528 42 187 936 1,744	458 7 - 443 - 3 5	395 5 1 379 - 3 7	40 9 15 1 3 5 1	44 3 11 21 - 2 3 4	8 - 5 - 1 2	228 182 23 17 - - 3 3	162 86 18 41 - - 3 14
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	51,398 1,039 4,116 1,558 6,853 410 10,795 5,344 8,707 12,576	58,951 1,091 6,034 1,603 6,430 427 11,827 5,384 11,263 14,892	74 13 - 9 14 5 - 33	64 2 8 2 3 12 13 1 2 21	126 3 26 7 17 N 7 5 9 52	105 5 39 - 17 N 9 4 6 25	50 8 - 10 5 2 4 7 14	567 31 372 8 94 9 26 3 - 24	805 162 472 3 101 22 32 3 2 3 2
E.S. CENTRAL Ky. Tenn. Ala. Miss.	19,957 2,279 6,206 6,415 5,057	23,355 2,237 7,347 7,872 5,899	157 6 50 2 99	316 28 66 7 215	41 9 21 9 2	22 13 6 2 1	15 4 6 5	31 17 8 6	33 6 19 5 3
W.S. CENTRAL Ark. La. Okla. Tex.	32,636 2,828 7,603 3,185 19,020	35,551 2,426 8,794 2,362 21,969	162 3 75 3 81	537 7 293 6 231	5 - 2 3 -	20 - 7 2 11	6 1 - 2 3	7 - 1 - 6	56 5 5 46
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	6,491 78 48 1,959 592 2,590 88 1,091	6,847 28 59 36 2,060 689 2,878 157 940	235 1 2 190 14 11 9 2 6	52 4 3 2 10 11 13 - 9	40 - 2 4 11 2 11 7 3	25 1 4 - 8 1 6 5 -	26 - 1 6 6 6 1 5	10 - 4 3 1 - - 1 1	5 - 1 2 - - - 2
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	17,707 1,972 428 14,669 249 389	16,284 1,448 605 13,713 213 305	96 16 10 70 -	129 20 22 85 - 2	47 6 N 37 - 4	41 14 N 27 -	74 5 3 62 - 4	84 5 72 2 N	72 4 5 61 2 N
Guam P.R. V.I. Amer. Samoa C.N.M.I.	392 6 U 7	34 352 - U U	- 1 - U -	2 1 - U U	2 - - -	- 1 - U U	- - - -	N - U -	- N - U U

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States,
weeks ending August 25, 2001, and August 26, 2000 (34th Week)

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

			-	-		Salmon	ellosis*	
		aria		s, Animal		TSS		ilis
Reporting Area	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	699	886	4,001	4,569	20,996	23,606	17,043	20,731
NEW ENGLAND Maine N.H. Vt. Mass. R.I. Conn.	38 4 2 12 3 17	46 4 1 2 18 5 16	437 46 16 43 164 40 128	509 90 9 41 168 33 168	1,479 135 129 45 880 82 208	1,479 91 87 84 868 83 266	1,466 121 116 45 754 113 317	1,526 70 93 84 871 106 302
MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	167 42 79 21 25	217 43 115 34 25	786 510 20 111 145	818 516 8 109 185	2,736 757 685 590 704	3,197 740 811 774 872	2,554 816 790 527 421	3,356 868 840 638 1,010
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	69 20 13 1 22 13	101 13 5 52 21 10	75 25 1 9 34 6	104 29 - 17 47 11	2,951 895 320 740 524 472	3,222 755 379 1,038 582 468	2,601 726 310 704 546 315	2,229 937 417 1 627 247
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. S. Dak. Nebr. Kans.	25 6 5 8 - 2 4	37 13 9 2 - 6 6	221 25 49 25 24 25 4 69	395 58 55 34 94 75 1 78	1,363 381 210 377 37 106 100 152	1,533 357 223 464 43 59 142 245	1,424 438 193 515 51 92 - 135	1,711 465 232 570 56 73 107 208
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	196 1 81 13 38 1 9 5 12 36	188 3 69 13 37 2 16 1 4 43	1,422 25 179 278 95 392 84 223 146	1,594 31 279 388 85 386 107 218 100	5,255 59 517 55 902 79 744 541 821 1,537	4,520 78 500 37 625 97 607 450 749 1,377	3,414 61 569 U 678 87 570 459 745 245	3,762 88 458 01 615 96 702 355 1,134 314
E.S. CENTRAL Ky. Tenn. Ala. Miss.	21 8 8 4 1	28 8 6 13 1	140 15 84 41	133 17 71 44 1	1,323 218 352 392 361	1,379 245 360 368 406	1,008 143 437 294 134	1,136 179 513 368 76
W.S. CENTRAL Ark. La. Okla. Tex.	10 3 4 2 1	57 2 10 4 41	510 20 - 48 442	617 20 2 44 551	1,496 428 270 252 546	2,971 407 497 253 1,814	1,296 92 457 236 511	1,802 341 405 190 866
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	33 2 3 17 2 3 3 3 3	34 1 2 - 18 - 5 4 4	176 31 11 21 - 10 95 7 1	186 48 8 41 - 16 62 9 2	1,408 49 93 44 387 173 411 153 98	1,768 69 88 46 484 159 413 326 183	823 4 22 276 146 216 136 23	1,686 79 39 472 148 448 329 171
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	140 4 9 119 1 7	178 16 30 123 9	234 1 196 37	213 5 183 25	2,985 315 156 2,250 27 237	3,537 339 209 2,802 37 150	2,457 358 217 1,701 2 179	3,523 451 265 2,629 24 154
Guam P.R. V.I. Amer. Samoa C.N.M.I.	3 - U	1 4 - U U	67 U	- 54 - U U	365 - U 8	20 404 - U U	U U U U	

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States,
weeks ending August 25, 2001, and August 26, 2000 (34th Week)

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).

		Shige				philis		
	NET			HLIS		Secondary)		rculosis
Reporting Area	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	10,280	14,020	4,763	7,873	3,621	3,945	7,709	9,077
NEW ENGLAND Maine N.H. Vt. Mass. R.I. Conn.	166 6 4 113 15 22	257 8 4 3 182 19 41	168 2 2 112 19 31	245 11 7 163 22 42	36 - 1 2 19 6 8	55 1 - 38 4 11	283 7 11 2 160 22 81	263 12 14 4 151 24 58
MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	916 368 252 145 151	1,842 515 764 379 184	582 93 267 157 65	1,183 176 509 318 180	306 19 161 69 57	186 7 78 45 56	1,495 206 785 323 181	1,495 200 799 349 147
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	2,614 1,832 146 262 195 179	2,902 224 1,084 822 534 238	1,134 731 28 204 151 20	843 190 129 2 482 40	608 57 111 154 269 17	811 53 249 290 181 38	799 138 64 405 157 35	880 198 84 397 143 58
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. Nebr. Kans.	1,020 286 311 183 16 117 54 53	1,540 480 343 491 10 4 72 140	807 318 249 134 18 59 - 29	1,327 560 255 350 20 3 59 80	47 21 8 - 2 15	48 8 10 25 - 2 3	286 143 18 89 3 8 25	327 102 25 127 2 13 12 46
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	1,509 6 93 37 187 7 244 199 149 587	1,789 11 130 38 304 3 104 86 156 957	478 7 51 110 7 112 91 81 19	669 13 68 U 234 3 83 66 128 74	1,288 8 145 24 73 - 299 178 215 346	1,306 7 194 27 85 2 346 140 253 252	1,569 9 136 48 155 20 216 134 276 575	1,872 8 166 16 178 21 252 175 391 665
E.S. CENTRAL Ky. Tenn. Ala. Miss.	910 333 63 170 344	636 221 247 37 131	393 175 73 119 26	356 51 275 27 3	404 29 214 87 74	576 58 346 82 90	487 78 182 162 65	594 70 224 195 105
W.S. CENTRAL Ark. La. Okla. Tex.	1,053 407 112 31 503	2,250 142 195 76 1,837	711 155 129 15 412	676 43 120 29 484	454 23 91 47 293	540 73 146 79 242	709 99 - 98 512	1,338 139 94 104 1,001
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	616 2 25 148 76 274 43 46	673 6 41 121 83 271 50 97	273 - - 80 45 99 41 8	477 23 3 86 57 186 57 65	159 - - 31 13 104 7 4	151 1 6 12 126 1 4	290 6 8 2 78 18 110 21 47	328 10 4 2 52 29 134 32 65
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	1,476 131 54 1,241 4 46	2,131 340 117 1,641 7 26	217 119 70 - 1 27	2,097 315 76 1,681 3 22	319 36 7 269 7	272 47 10 214 1	1,791 167 71 1,431 28 94	1,980 159 62 1,596 72 91
Guam P.R. V.I. Amer. Samoa	- 7 - U	34 22 U	U U U U	U U U U	172 U	2 110 Ū	- 76 - U	35 109 - U
C.N.M.I. N: Not notifiable	4 U: Unav	U	U	U rted cases.	-	Ŭ	20	Ŭ

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending August 25, 2001, and August 26, 2000 (34th Week)

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).

	H influ	ienzae,	Hepatitis (Viral), By Type					CK/	Meas	les (Rubec	la)	
		isive	A	cputtis(V	B		Indige	nous	Impo		Tota	
Reporting Area	Cum. 2001 [†]	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	2001	Cum. 2001	2001	Cum. 2001	Cum. 2001	Cum. 2000
UNITED STATES	913	862	6,176	8,342	4,182	4,501	-	46	-	39	85	62
NEW ENGLAND	56	65	325	254	60	75	-	4	-	1	5	6
Maine N.H.	1 4	1 11	6 12	14 18	5 11	5 11	-	-	-	-	-	3
Vt. Mass.	2 34	5 32	8 124	8 98	3	6 9	-	1 2	-	- 1	1 3	3
R.I. Conn.	3 12	1 15	19 156	15 101	17 24	14 30	-	- 1	-	-	- 1	-
MID. ATLANTIC	128	162	656	912	641	798	-	4	-	10	14	20
Upstate N.Y. N.Y. City	49 34	65 44	168 196	146 316	90 301	86 390	-	1 2	-	4 1	5 3	9 10
N.J. Pa.	30 15	31 22	159 133	171 279	64 186	125 197	U	- 1	U	1 4	1 5	- 1
E.N. CENTRAL	123	133	652	1,104	585	473	-	-	-	10	10	6
Ohio Ind.	51 36	41 22	156 59	186 45	77 30	77 33	-	-	-	3 4	3 4	2
III. Mich.	10 7	45 9	182 216	494 318	95 383	80 260	-	-	-	3	3	3 1
Wis.	19	16	39	61	-	23	-	-	-	-	-	-
W.N. CENTRAL Minn.	44 25	46 23	262 20	531 148	125 13	199 25	-	4 2	-	-	4 2	1 1
lowa Mo.	13	15	25 67	53 224	16 64	20 104	-	- 2	-	-	- 2	-
N. Dak.	4	2	2	2	-	2	-	-	-	-	-	-
S. Dak. Nebr.	1	- 3	1 28	23	1 17	30	-	-	-	-	-	-
Kans. S. ATLANTIC	1 266	3 198	119 1,420	81 876	14 872	18 774	-	- 4	-	- 1	- 5	- 2
Del.	-	-	-	10	-	10	U	-	U	-	_	-
Md. D.C.	62	55	181 33	116 20	92 11	85 24	-	2	-	1 -	3	-
Va. W. Va.	19 10	32 5	89 8	103 48	101 20	101 9	-	1 -	-	-	1 -	2
N.C. S.C.	37 5	19 7	113 56	108 39	131 22	160 7	-	-	-	-	-	-
Ga. Fla.	67 66	50 30	549 391	157 275	210 285	129 249	-	1	-	-	1	-
E.S. CENTRAL	59	36	244	298	296	314	-	2	-	-	2	-
Ky. Tenn.	2 29	12 15	70 98	37 104	31 151	60 148	-	2	-	-	2	-
Ala. Miss.	26 2	7	63 13	43 114	61 53	34 72	-	-	-	-	-	-
W.S. CENTRAL	34	51	632	1,593	446	687	_	1	_	_	1	-
Ark. La.	- 3	1 15	51 53	107 54	63 29	71 101	-	-	-	-	-	-
Okla. Tex.	31	33 2	95 433	180 1,252	64 290	99 416	-	- 1	-	-	- 1	-
MOUNTAIN	122	84	455 556	588	384	347	_	-	_	1	1	12
Mont. Idaho	- 1	1 3	9 50	4 19	2 9	4 5	-	-	-	- 1	- 1	-
Wyo. Colo.	17	1 18	22 53	4 137	31 76	1 54	-	-	-	-	-	- 2
N. Mex.	28 15	17	27	56	103	108	-	-	-	-	-	-
Ariz. Utah	45 6	34 7	290 61	285 39	111 21	128 16	-	-	-	-	-	3
Nev.	10	3	44	44	31 772	31	U	- 77	U	-	-	7
PACIFIC Wash.	81 2	87 5	1,429 88	2,186 187	773 88	834 55	-	27 13	-	16 2	43 15	15 3
Oreg. Calif.	17 34	24 30	58 1,268	138 1,837	50 613	69 692	-	3 8	-	10	3 18	- 9
Alaska Hawaii	5 23	6 22	14 1	11 13	7 15	9 9	-	- 3	-	-4	-7	1 2
Guam	-	1	-	1	-	9	U	-	U	-	-	-
P.R. V.I.	1	3	67	185	117	188	Ü	-	Ü	-	-	2
Amer. Samoa C.N.M.I.	U -	U U	U -	U U	U 26	U U	U U	U -	U U	U -	U -	U U

 TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending August 25, 2001, and August 26, 2000 (34th Week)

N: Not notifiable. U: Unavailable. - : No reported cases. *For imported measles, cases include only those resulting from importation from other countries. † Of 187 cases among children aged <5 years, serotype was reported for 90, and of those, 15 were type b.

		gococcal		<u>ust 20</u>	, 2000						
	Cum.	ease Cum.		Mumps Cum.	Cum.		Pertussis Cum.	Cum.		Rubella Cum.	Cum.
Reporting Area	2001 1,547	2000 1,534	2001 3	2001 146	2000 244	<u>2001</u> 62	2,896	2000 4,005	2001	2001 17	2000 107
NEW ENGLAND	83	90	-	-	4	3	2,890	4,005	_	-	107
Maine	1	7	-	-	-	-	-	30	-	-	-
N.H. Vt.	10 5	9 2	-	-	-	-	25 25	79 168	-	-	2
Mass. R.I.	47 2	52 7	-	-	1 1	- 3	194 5	709 14	-	-	8
Conn.	18	13	-	-	2	-	14	37	-	-	1
MID. ATLANTIC Upstate N.Y.	165 46	173 47	-	15 3	19 6	1 1	210 116	375 173	-	5 1	8 1
N.Y. City	31 39	35 32	.ī	9	6	U	34	54		3	7
N.J. Pa.	39 49	32 59	U -	3	3 4	-	8 52	30 118	U -	1	-
E.N. CENTRAL	197	265	-	15	18	16	362	461	-	3	1
Ohio Ind.	68 28	62 31	-	1 1	7	15	216 46	222 52	-	- 1	-
III. Mich.	20 46	67 75	-	10 3	6 4	- 1	39 37	48 54	-	2	1
Wis.	35	30	-	-	1	-	24	85	-	-	-
W.N. CENTRAL Minn.	104 15	106 16	-	8 3	14	2	152 47	266 159	-	3	1
lowa	21 39	21 50	-	-	6	-	17 67	30 38	-	1 1	-
Mo. N. Dak.	5	2	-	-	4	2	-	2	-	-	-
S. Dak. Nebr.	4 10	5 5	-	- 1	- 1	-	3 4	3 8	-	-	- 1
Kans.	10	7	-	4	3	-	14	26	-	1	-
S. ATLANTIC Del.	296 3	221	1 U	24	37	6 U	155	296 8	Ū	4	60
Md. D.C.	34	22	-	4	8	1	19 1	77	-	-	-
Va.	31	35	1	6	8	1	28	44	-	-	-
W. Va. N.C.	11 57	10 31	-	- 1	- 5	2	2 48	1 69	-	-	52
S.C. Ga.	31 36	17 37	-	2 7	10 2	1	26 7	23 25	-	2	6
Fla.	93	69	-	4	4	1	24	46	-	2	2
E.S. CENTRAL Ky.	103 18	106 22	-	3 1	4	4	79 17	88 44	-	-	5 1
Tenn. Ala.	44 30	44 29	-	-	2 2	4	35 24	25 16	-	-	1 3
Miss.	30 11	11	-	2	-	-	3	3	-	-	-
W.S. CENTRAL	173	164	-	8	25 1	2	246 9	210	-	-	7
Ark. La.	14 56	11 38	-	1 2	5	1 -	2	29 14	-	-	1 1
Okla. Tex.	23 80	22 93	-	- 5	- 19	- 1	1 234	9 158	-	-	- 5
MOUNTAIN	76	70	-	9	14	22	997	476	-	1	2
Mont. Idaho	3 7	4 6	-	1 1	1	-	21 165	24 45	-	-	-
Wyo. Colo.	6 27	23	-	1 1	1	- 5	1 193	3 258	-	- 1	- 1
N. Mex.	11	6 21	-	2 1	1	5 7	86 466	76 46	-	-	-
Ariz. Utah	11 7	7	-	1	3 4	6 4	400 56 9	15	-	-	-
Nev.	4	3	U	1	4	U		9	U	-	-
PACIFIC Wash.	350 53	339 36	2	64 1	109 4	6 5	432 99	796 233	-	1 -	12 7
Oreg. Calif.	29 257	43 246	N -	N 29	N 77	1 -	34 268	85 429	-	-	- 5
Alaska Hawaii	2 9	6 8	- 2	1 33	8 20	-	3 28	18 31	-	- 1	-
Guam	-	-	U	-	11	U	-	3	U	-	1
P.R. V.I.	3	8	Ū	-	-	- U	2	5	- U	-	-
Amer. Samoa	U	U	U	U	Ŭ	U	U	Ŭ	U	U	Ŭ
<u>C.N.M.I.</u>	-	U	U	-	U	U	-	U	U	-	U

TABLE III. (Cont'd) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending August 25, 2001, and August 26, 2000 (34th Week)

N: Not notifiable. U: Unavailable.

- : No reported cases.

		All Cau	ises, By	Age (Ye	ears)		P&I [†]			All Cau	ises, By	Age (Y	ears)		P&l⁺
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. Bridgeport, Conn Cambridge, Mass Fall River, Mass. Hartford, Conn. Lowell, Mass. Lynn, Mass. New Bedford, Ma New Haven, Conn Providence, R.I. Somerville, Mass. Springfield, Mass Waterbury, Conn. Worcester, Mass. MID. ATLANTIC Albany, N.Y. Allentown, Pa. Buffalo, N.Y. Camden, N.J. Elizabeth, N.J.	. 20 26 28 29 35 . 22 . 46 . 8 . 30 17 54 1,803 36 20 80 19 22	266 U 17 17 24 20 20 7 19 27 35 6 19 27 35 6 19 14 41 1,262 26 17 56 7 7	U 5 2 2 6 5 6 2 12 8 2 2 7 - 9 341 6 1 12 7 3	20 U 1 - 2 3 - 1 3 2 - 2 3 3 129 2 2 6 2 2 2	5 U - - - - - 1 - - - - 1 42 1 - 2 1 - - 1	2 U - - 1 - - - - - - - 28 1 - - 28 1 - - - 28 2 - - - - - - - - - - - - - -	27 U 1 3 5 2 1 1 2 5 - 2 2 3 73 6 - 3 1 -	S. ATLANTIC Atlanta, Ga. Baltimore, Md. Charlotte, N.C. Jacksonville, Fla Miami, Fla. Norfolk, Va. Richmond, Va. Savannah, Ga. St. Petersburg, F Tampa, Fla. Washington, Dcl E.S. CENTRAL Birmingham, Al Chattanooga, Te Knoxville, Tenn. Lexington, Ky. Memphis, Tenn Mobile, Ala.	87 49 65 51 51a. 56 180 0. 100 1. 26 795 a. 160 500 795 a. 180 64 . 187 63 . 187 63 . 187 63 . 187 . 187 . 187 . 187 . 187 . 187 . 187 . 195 . 100 . 1	736 72 119 49 99 52 34 34 34 34 34 34 38 46 131 13 13 507 107 506 56 43 116 42 2 U	264 33 66 17 32 5 18 6 4 30 29 2 186 34 16 17 13 5 18 5 18 0 29 2 186 34 16 17 17 30 29 2 186 34 17 30 29 2 186 34 17 30 20 30 30 30 30 30 30 30 30 30 30 30 30 30	124 15 25 61 10 7 7 4 3 9 6 11 60 10 4 6 5 15 6 U	36 7 4 3 3 3 - 2 - 3 6 5 - 18 5 1 2 2 5 1 U	35 94 15 13 43 - 41 - 23 34 31 61 U	68 1 17 3 6 13 1 7 4 8 7 1 - 49 13 3 7 2 10 2 U
Erie, Pa.§ Jersey City, N.J. New York City, N.Y. Paterson, N.J. Philadelphia, Pa. Pittsburgh, Pa.§ Reading, Pa. Rochester, N.Y. Schenectady, N.Y. Scranton, Pa.§ Syracuse, N.Y. Trenton, N.J. Utica, N.Y. Yonkers, N.Y.	41 24 U 51 13 128	35 31 765 10 16 U 37 9 8 16 20 68 19 15 U	14 5 0 8 2 14 5 16 13 5	3 81 2 U 2 1 6 2 1 4 1 2 U	2 21 6 - - - - - - - - - - - - - - - - - -	1 - 8 1 U 2 1 3 - - 3 1 - U U	1 38 1 U 1 5 2 1 9 4 1 U	Nashville, Tenn. W.S. CENTRAL Austin, Tex. Baton Rouge, La Corpus Christi, Dallas, Tex. El Paso, Tex. Ft. Worth, Tex. Houston, Tex. Little Rock, Ark. New Orleans, La San Antonio, Te Shreveport, La. Tulsa, Okla.	Fex. 63 183 71 110 418 68 . U x. 224 U 114	93 892 43 37 45 105 50 66 263 47 U 158 U 78	48 295 19 14 12 41 15 30 93 14 U 37 U 20	14 138 12 2 3 28 4 10 43 5 U 8 U 13 13	2 37 4 1 2 4 1 2 2 U 8 U 1	5 23 1 1 5 1 2 7 - U 3 U 2	12 68 3 2 2 10 1 4 21 3 U 11 U 1 1 1 1 1 1 1 1 1 1 1 1 1
E.N. CENTRAL Akron, Ohio Canton, Ohio Chicago, III. Cincinnati, Ohio Cleveland, Ohio Dayton, Ohio Dayton, Ohio Detroit, Mich. Evansville, Ind. Fort Wayne, Ind. Gary, Ind. Grand Rapids, Mi Indianapolis, Ind. Lansing, Mich. Milwaukee, Wis. Peoria, III. South Bend, Ind. Toledo, Ohio Youngstown, Ohi W.N. CENTRAL Des Moines, Iowa Duluth, Minn. Kansas City, Kans Kansas City, Kans Kansas City, Kans St. Louis, Mo. St. Louis, Mo. St. Paul, Minn. Wichita, Kans.	182 69 111 63 U U 77 0 55 809 37 . 36 101 35	909 31 37 0 50 87 128 0 0 49 124 1343 854 0 0 538 27 165 277 107 62 74 67	8 37 360 U U U 7 4 2 28 18 17 9 U U 14 5 14 8 7 9 21 6 21 32 8 8	82 2 2 U 7 13 12 6 U U 4 2 2 5 6 8 6 U U 5 2 58 1 1 4 15 1 9 5 13 3 6	43 1 - U 6 7 3 1 UU 5 2 3 10 1 - 2 UU 2 - 43 - 1 6 8 1 6 - 7 2 12	28 2 1 U U 5 3 2 1 U U - 1 4 3 1 1 1 U U 4 - 27 2 1 1 1 1 - 3 3 6 7 3	74 1 4 U 4 8 7 6 U U 4 8 7 6 U U 7 1 7 7 6 7 7 4 U U 3 2 4 0 8 2 2 4 6 7 5 9 2	MOUNTAIN Albuquerque, N Boise, Idaho Colo. Springs, C Denver, Colo. Las Vegas, Nev. Ogden, Utah Phoenix, Ariz. Pueblo, Colo. Salt Lake City, U Tucson, Ariz. PACIFIC Berkeley, Calif. Fresno, Calif. Glendale, Calif. Honolulu, Hawa Long Beach, Cal Los Angeles, Ca Pasadena, Calif. Portland, Oreg. Sacramento, Ca San Jose, Calif. Sant Francisco, C San Jose, Calif. Sant Aruz, Cali Seattle, Wash. TocmaL	41 olo. 59 101 210 26 U 37 tah 99 147 1,169 17 101 101	559 58 29 46 63 147 17 0 29 63 107 818 15 77 49 0 7 62 140 0 7 62 111 111 26 62 16,485	$\begin{array}{c} 164\\ 27\\ 11\\ 17\\ 46\\ 6\\ 0\\ 2\\ 2\\ 2\\ 15\\ 0\\ 7\\ 10\\ 0\\ 3\\ 25\\ 3\\ 26\\ 0\\ 3\\ 7\\ 20\\ 6\\ 1\\ 1,892\\ 1,892\\ 1\\ 1,892\\ 1\\ 1,892\\ 1\\ 1,892\\ 1\\ 1,892\\ 1\\ 1,892\\ 1\\ 1,892\\ 1\\ 1,892\\ 1\\ 1,892\\ 1\\ 1\\ 1,892\\ 1\\ 1\\ 1,892\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\ 1\\$	55 9 2 1 8 4 1 U 3 5 12 76 - 5 U 7 5 U 1 10 9 4 U 21 - 8 4 2 742 742	27 4 - 1 7 1 1 U 3 8 2 41 - 4 U 4 1 U - 7 5 2 U 5 - 10 1 2 292	17 5 6 2 1 U - 2 2 1 U - 2 2 1 2 2 U 1 2 2 U 1 2 2 U 1 2 2 4 6 U 4 - 2 1 1 - 2 2 0 6 U 4 - 2 2 1 1 - 2 2 0 6	51 9 - 2 6 10 1 U 3 12 8 73 1 2 U 7 6 U 2 5 13 4 U 10 3 6 3 1 523

TABLE IV. Deaths in 122 U.S. cities,* week ending August 25, 2001 (34th Week)

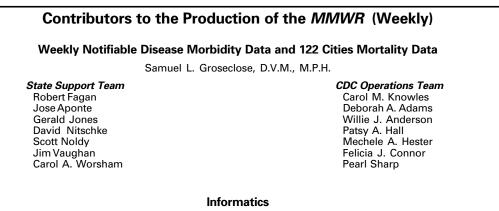
U: Unavailable. -:No reported cases. *Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included. ¹ Pneumonia and influenza. ⁸ 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. ⁹ Total includes unknown ages.

Poliomyelitis Eradication — Continued

Intensive and well-planned supplementary vaccination activity may interrupt wild poliovirus transmission during the next 6–12 months in SEAR following the example of the Region of Americas in 1991, the Western Pacific Region in 1997, and the European Region in 1998 (*6–8*). If interruption of wild poliovirus occurs in SEAR before the end of 2002, global certification is possible in 2005 (*9*).

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- ** All *MMWR* references are available on the Internet at <http://www.cdc.gov/mmwr>. Use the search function to find specific articles.



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