MMWR™
Morbidity and Mortality Weekly Report

Weekly January 10, 2003 / Vol. 52 / No. 1

Pertussis Outbreak Among Adults at an Oil Refinery — Illinois, August–October 2002

On September 16, 2002, the Crawford County Health Department (CCHD) reported to the Illinois Department of Public Health (IDPH) four cases of cough illness among workers at an oil refinery (total worker population: 750) in Crawford County, Illinois. On August 14, a worker aged 39 years reported to the plant's health unit with a cough lasting 14 days. On the same day, the worker's supervisor aged 50 years visited the health unit for a paroxysmal cough of 3 days' duration and an incident of cough syncope. Both patients were referred to private health-care providers; blood samples from both patients had serologic test results suggestive of recent *Bordetella pertussis* infection, and CCHD was contacted. On September 18, IDPH and CCHD initiated active surveillance and case investigations. This report summarizes the results of that investigation, which found that during August 1–October 9, pertussis was diagnosed in 15 (10%) of 150 oil refinery workers from two separate operations (n=95) and maintenance (n=55) complexes, who were linked by contact with the ill supervisor. Through enhanced case finding, 24 cases of pertussis, 21 (88%) of which occurred in adults aged ≥20 years, were identified in this outbreak, underscoring the need to recognize this highly infectious disease in adults and to improve national diagnostic and preventive strategies.

A clinical case was defined as an acute cough illness lasting ≥2 weeks in a person with 1) at least one of the following: paroxysms of coughing, inspiratory "whoop," or post-tussive vomiting, without other apparent cause or 2) ≥14 days of cough in a person in an outbreak setting. A confirmed case was defined as a cough illness of any duration in a person with isolation by culture of *B. pertussis* or a case that met the clinical case definition and was confirmed by polymerase chain reaction (PCR) for *B. pertussis* DNA or by epidemiologic linkage to a laboratory-confirmed case. A probable case met the clinical case definition, was not laboratory-confirmed, and was not linked by direct contact with a laboratory-confirmed case. At the oil refinery, any worker reporting a cough illness to the health unit was referred to the local community hospital for evaluation for pertussis and interviewed by CCHD or IDPH staff to establish onset of illness, symptoms, area of work and work schedules, and information on all close contacts. Community cases were identified through standard IDPH case report forms submitted by health-care providers to CCHD for suspected cases of pertussis and then reviewed by the IDPH immunization section to determine if the case definition was met.

As of December 13, a total of 17 cases of pertussis have been associated with the oil refinery: four confirmed cases (including one culture-positive case, one PCR-positive case, and two epidemiologically linked cases) and 13 probable cases; 10 patients were males. A pulsed-field gel electrophoresis (PFGE) DNA fingerprint from the *B. pertussis* isolate from the culture-confirmed case (illness onset date: September 10) was PFGE profile 13. The median age of patients was 40 years (range: 16–53 years). Six patients worked in the same work unit. Eight of 14 patients tested by a private diagnostic laboratory had serologic testing results (anti-*B. pertussis* IgA, IgM, or IgG enzyme immunoassay) suggestive of recent *B. pertussis* infection. In addition to the 17 patients identified from the oil refinery, seven patients in the community who were unrelated epidemiologically to the oil refinery also were identified as having probable cases of pertussis; four were males with a

INSIDE

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

The *MMWR* series of publications is published by the Epidemiology Program Office, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

SUGGESTED CITATION
Centers for Disease Control and Prevention. [Article Title]. MMWR 2003;52:[inclusive page numbers].

median age of 24 years (range: 5–33 years). All 24 patients (Figure) received treatment with macrolide antibiotics and were encouraged to be tested for pertussis by PCR and nasopharyngeal culture. On September 19, with the cooperation of the oil refinery management, 150 close work contacts of the 17 patients at the oil refinery plant were prescribed azithromycin prophylaxis at a dose schedule of 500 mg for the first day, followed by 250 mg daily for the next 4 days.

Other than a meeting lasting approximately 5 minutes conducted indoors each morning, daily work assignments at the plant are performed outdoors. However, workers may congregate in an indoor dining area reserved for lunch.

No cases of pertussis at the oil refinery have been reported since October 9. School officials and health-care providers within the community have been given guidelines on pertussis case recognition, reporting, and prophylaxis measures. IDPH and the local health department continue to perform ongoing case ascertainment.

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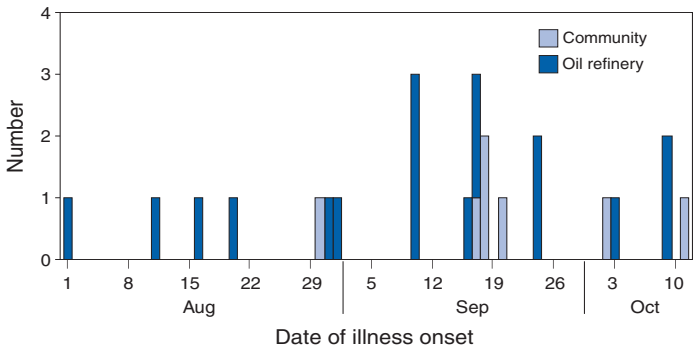
Editorial Note: Among the diseases for which universal childhood vaccination is recommended in the United States, only pertussis has increased in incidence in the United States during the preceding 20 years, from 1,730 cases in 1980 to 8,296 cases provisionally reported in 2002 (*1*; CDC, unpublished data, 2002). The outbreak described in this report reflects the changing demographics of pertussis in the United States, with reported incidence rates in adults increasing 400% during 1990–2001 (*2*; CDC, unpublished data, 2002). Adults and adolescents might be a reservoir for *B. pertussis* in the

FIGURE. Number of confirmed and probable *Bordetella pertussis* cases*, by date of illness onset and location of onset — Crawford County, Illinois, August 1–October 11, 2002



* N=24.

community because immunity from childhood vaccination declines beginning 5–15 years after the last pertussis vaccine dose (*3*). Despite increasing recognition of pertussis as a disease affecting older children and adults, pertussis often is overlooked in the differential diagnosis of cough illness in this population (*4*). Pertussis can be highly infectious during the 3 weeks after illness onset, and infection can spread to exposed infants, who have the highest rates for complications and death (*5*) (Box). In this outbreak, pertussis was not considered initially in the index patient's 14-day cough illness until the patient's supervisor reported to the oil refinery health unit concurrently with cough syncope, triggering referral of both patients to the local community hospital for evaluation for pertussis. Emblematic in this outbreak was the protracted duration of cough symptoms in the first patient, followed by a comprehensive public health response once several close contacts became infected and, late in the outbreak, *B. pertussis* was cultured successfully from an oil refinery worker; isolation of *B. pertussis* from an adult is uncommon.

In Illinois, 46 of 191 cases (24%) of reported pertussis in 2001 occurred in adults aged ≥20 years (incidence rate: 0.5 per 100,000 population), a proportion similar to that of cases in the United States among this age group (*1*). Persons aged 10–19 years comprised 18% of all cases in 2001 in Illinois. Waning vaccine-induced immunity probably accounts for susceptibility to *B. pertussis* infection in both adults and adolescents (*3,6*). Since the 1980s, the reported incidence rates in adolescents and adults in the United States have increased as a result of changes in reporting, a true increase in incidence, or both (*1,2*). In 1995, the case definition for pertussis was expanded to include PCR-positive tests and epidemiologic linking of pertussis cases as confirmation criteria. In addition, a possible increase in awareness of pertussis in older age groups within the medical community during the 1990s might have contributed to increased diagnosis rates in this population (*7*).

Adults with pertussis can have mild symptoms and might not seek medical care, and clinicians might not consider pertussis as a cause of illness (*8*). Although the fastidious *B. pertussis* bacterium often cannot be isolated, to confirm diagnosis in symptomatic adults, health-care providers should obtain a nasopharyngeal aspirate or swab for *B. pertussis* culture within 2 weeks of cough onset. In this outbreak, serologic testing for diagnosis of recent *B. pertussis* infection was performed in the majority of cases. No serologic assay for a single convalescent sera is currently approved or recommended for serodiagnosis of pertussis. Because adults might report to health-care providers late in the disease course, a standardized and valid serologic test is needed to diagnose recent *B. pertussis* infection in adults (*9*).

As one of several state health departments with enhanced pertussis surveillance systems, IDPH analyzes *B. pertussis* iso-

BOX. Epidemiology, diagnosis, treatment, and prevention of pertussis (whooping cough)

Epidemiology
- 8,296 cases provisionally reported in the United States in 2002, the highest number of reported cases since 1967.
- Approximately 50% of cases are in adolescents (aged 10–19 years) and adults (aged ≥20 years).
- Case-fatality rate is 0.8% in infants aged <6 months.
- Transmitted person to person via aerosolized droplets from cough or sneeze or by direct contact with secretions from the respiratory tract of infectious persons.
- Incubation period 6–20 days; usually 7–10 days.
- Highly contagious; 80% secondary attack rates among susceptible persons.
- Endemic in the United States; epidemic every 3–5 years.

Clinical findings
- Catarrhal period (week 0–1): illness onset insidious (coryza, mild fever, non-productive cough); infants can have apnea and/or respiratory distress.
- Paroxysmal period (week 1–6): paroxysmal cough, inspiratory "whoop," post-tussive vomiting; pneumonia common among infants; infrequent manifestations include seizures.
- Convalescent period (week 6–12): cough paroxysms and intensity gradually decrease.

Laboratory testing
- Nasopharyngeal aspirate or Dacron™ swab for *Bordetella pertussis* on Regan Lowe or Bordet-Gengou culture media plate.
- Detection of *B. pertussis* DNA by PCR.
- Diagnosis confirmed with isolation of *B. pertussis* or positive *B. pertussis* PCR test.

Outbreak setting testing
- Confirm outbreak with ≥1 culture-confirmed case.
- Test persons when pertussis is highly suspected, symptoms are compatible with pertussis, or person has been exposed to a case and has new cough symptoms.
- Do not test contacts without respiratory symptoms.

Recommended treatment
- Prescribe 14-day course of erythromycin.
  - — Children: 40–50 mg/kg/day divided QID
  - — Adults: 2 g/day divided QID
- Alternatively, use trimethoprim (T)-sulfamethoxazole (S).
  - — Children: 8 mg/kg/day (T); 40 mg/kg/day (S) divided BID
  - — Adults: 320 mg/day (T); 1600 mg/day (S) divided BID
- Exclude from school or work for first 5 days.
- Treat persons aged ≥1 year within 3 weeks of cough onset.
- Treat infants aged <1 year within 6 weeks of cough onset.

Prevention
- Vaccinate children aged 6 weeks–6 years with diphtheria, tetanus toxoids and acellular pertussis vaccine (DTaP).
- Prescribe 14-day course of antibiotics for close contacts, especially in high-risk settings; same doses as in treatment schedule.
  - — Persons aged ≥1 year: within 3 weeks of exposure
  - — Infants aged <1 year: within 6 weeks of exposure
  - — DTaP not licensed for persons aged ≥7 years
- Report all cases to local and state health departments.

lates from cases by PFGE. The single isolate in this outbreak indicated PFGE profile 13, the most frequently identified pattern from *B. pertussis* isolates in the United States. Identification of pertussis DNA fingerprints by PFGE might allow health officials to track disease transmission and associated outbreaks.

A 14-day course of erythromycin, a macrolide antibiotic with substantial in vitro and in vivo activity against *B. pertussis*, is the recommended antimicrobial for treatment of patients with pertussis and for prophylaxis of close contacts. Treatment and prophylaxis are most effective when erythromycin is administered to patients within 3 weeks of illness onset and to close contacts within 3 weeks of cough onset in the primary case (*9*). During an outbreak, repeated exposure to pertussis might warrant repeated courses of erythromycin. If erythromycin is poorly tolerated because of gastrointestinal side effects, trimethoprim-sulfamethoxazole can be prescribed; azithromycin and clarithromycin might be effective alternatives in the eradication of *B. pertussis* in symptomatic patients (*9,10*). However, effectiveness of azithromycin or clarithromycin as prophylaxis for asymptomatic close contacts in an outbreak setting is not well documented.

Outbreaks of pertussis in adults are controlled through prompt treatment of patients and antimicrobial prophylaxis for close contacts. Acellular pertussis vaccines are licensed in the United States for infants and children aged 6 weeks–6 years (i.e., before the seventh birthday). These vaccines might have a future role in the prevention of disease and control of outbreaks in older age groups (*4,5,7*).

References

1. CDC. Pertussis—United States, 1997–2000. MMWR 2002;51:73–6.
2. Guris D, Strebel PM, Bardenheier B, et al. Changing epidemiology of pertussis in the United States: increasing reported incidence among adolescents and adults, 1990–1996. Clin Infect Dis 1999;28:1230.
3. Jenkinson D. Duration of effectiveness of pertussis vaccine: evidence from a 10-year community study. Br J Med 1988;296:612–4.
4. Keitel WA, Edwards KM. Pertussis in adolescents and adults: time to reimmunize? Semin Respir Infect 1995;10:51–7.
5. CDC. Pertussis deaths—United States, 2000. MMWR 2002;51:616–9.
6. Mortimer EA Jr. Pertussis vaccine. In: Plotkin SA, Mortimer EA Jr, eds. Vaccines. Philadelphia, Pennsylvania: WB Saunders, 1988:74–97.
7. Yih WK, Lett SM, des Vignes FN, Carrison KM, Sipe PL, Marchant CD. The increasing incidence of pertussis in Massachusetts adolescents and adults, 1989–1998. J Infect Dis 2000;182:1409–16.
8. Dworkin MS, Shoemaker P. Pertussis in adults. Ann Int Med 1998;128:1047.
9. CDC. Guidelines for the control of pertussis outbreaks. Available at http://www.cdc.gov/nip/publications/pertussis/guide.htm.
10. Halperin SA, Langley JM, Boucher FD, Smith B. Azithromycin is as effective as and better tolerated than erythromycin estolate for the treatment of pertussis. [Abstract]. Presented at the 40th Annual Meeting of Infectious Diseases Society of America. Chicago, Illinois: Infectious Diseases Society of America, October 24–27, 2002; A169.

Accelerated Measles Control — Cambodia, 1999–2002

Cambodia is recovering from approximately 30 years of civil war that resulted in the breakdown of the country's public health infrastructure (*1*). In 1999, the Ministry of Health initiated a measles-control program with the goal of reducing the annual incidence of measles to <10,000 cases in 2005 by strengthening measles surveillance, improving routine vaccination coverage, implementing supplementary measles immunization activities (SIAs), and providing vitamin A during outbreak investigations and SIAs. This report summarizes measles-vaccination activities and their impact in reducing reported measles cases from 13,827 in 1999 to 1,234 in 2002 and suggests options for future measles-control efforts in postconflict situations.

Routine and Supplementary Vaccination

Routine measles vaccination began at Cambodian health centers in 1986, with outreach activities added in 1990 and SIAs in 2000. The most basic organizational component of the health-care delivery system is the health center, each serving approximately 10,000 persons. Many villages lack easy access to these facilities, and only 30% of children had access to vaccination services during the early 1990s. Since 1990, outreach teams from health centers have visited villages every 4–8 weeks to deliver vaccination and other preventive health services. These outreach services helped increase coverage for measles vaccination in the country from 34% in 1990 to 75% in 1995, although coverage declined to 63% during 1998–1999, after a resurgence of civil unrest in 1997. In 2000, before the initiation of SIAs, measles vaccination coverage increased to 69% (Cambodian Ministry of Health, unpublished data, 2001).

The Cambodian National Immunization Program (NIP), in collaboration with partner agencies, initiated measles SIAs in December 2000 to vaccinate children who were missed by routine services. The initial plan was to vaccinate all children aged 9 months–5 years, regardless of previous vaccination history, in two phases. After Phase I, the subsequent phase was expanded in 2001 to include children aged 9 months–14 years after a review of measles surveillance data indicated that approximately 50% of measles cases occurred in children aged >5 years. To avoid overextending the public health system of the country and compromising the quality of the campaign, the second phase was then divided into two (phases II and III).

Phase I, conducted during December 2000–May 2001, targeted 191,527 children aged <5 years living in remote border areas who were administered multiple vaccines (measles, oral polio vaccine [OPV], diphtheria-tetanus-pertussis vaccine),

vitamin A, and mebendazole for helminth control; an 89% coverage rate with measles vaccine was attained. Phase II, conducted during October 2001–April 2002, targeted 2,489,761 children aged 9 months–14 years living in eight provinces in densely populated central areas. These children were administered measles vaccine, OPV (in selected areas), vitamin A, and mebendazole; a 97% coverage rate with measles vaccine was attained. Phase III, which began in October 2002 and will continue through April 2003, will target approximately 2,300,000 children aged 9 months–14 years living in the remaining seven provinces in central areas with measles vaccine, OPV (in selected areas), vitamin A, and mebendazole.

SIAs are conducted in a "rolling" manner, which cover one province at a time by teams comprising local, district, and provincial Expanded Program on Immunization (EPI) staff, with supervision by staff from the national program. Each district is covered in approximately 2 weeks. SIAs are preceded by social mobilization activities in which local volunteers and community leaders publicize the upcoming activities. Temporary vaccination posts operate in the mornings and are followed by house-to-house vaccination in the afternoons. House-to-house vaccination is particularly necessary in densely populated urban areas, where social mobilization might not be as effective as in villages.

Surveillance and Outbreak Response

Data on measles incidence before 1999 are limited. The World Health Organization (WHO) assisted NIP in conducting 30 outbreak investigations during 1999, recording 1,423 cases, including 14 deaths (case fatality ratio: 1%). In addition, 80 (5.6%) persons showed signs of vitamin A deficiency, and six (0.4%) had encephalitis. In 1999, surveillance was strengthened through the addition of an active search for measles cases during routine outreach visits by EPI staff. Outreach visits detected an estimated 95% of reported measles cases (K. Feldon, M.P.H., WHO Cambodia, personal communication, 2002).

On receiving a report of a measles outbreak from an outreach team, an investigation is conducted approximately 1–4 weeks later by provincial, district, and health center staff. In each village, treatment with vitamin A at the WHO-recommended dosage (*2*) is provided to all persons with measles to prevent complications and as a prophylaxis to all children aged <12 years. Monetary incentives are provided to EPI staff for reporting an outbreak and to national, provincial, district, and health center staff for conducting the investigation.

Serologic confirmation of outbreaks began in three of the 24 provinces in early 2000 and is now standard in eight provinces. Samples are collected from the first five cases of each outbreak. Testing for measles IgM antibodies is conducted by the National Reference Laboratory in Phnom Penh.

Measles Incidence

The peak of measles transmission in Cambodia occurs during the hot dry season (November–April). In 1999, when the surveillance system covered six of 24 provinces, NIP received reports of 13,827 measles cases. In 2000, following expansion of measles surveillance nationwide, Cambodia reported 11,940 cases with case reports from 21 provinces. In 2001, the number of reported cases decreased to 3,696 distributed among 19 provinces. Measles incidence continued to decline in 2002, with 1,234 cases reported from 11 provinces as of October 18 (Figure).

During January 2000–October 2002, a total of 94%–99% of reported measles cases occurred among persons aged <15 years. The proportion of cases among children aged <5 years decreased from 47% in 2000 to 36% in 2001 and 35% in 2002 (Table). Among patients aged <10 years, the proportion with a history of previous measles vaccination has remained steady, ranging from 23% in 2000 to 27% in 2002.

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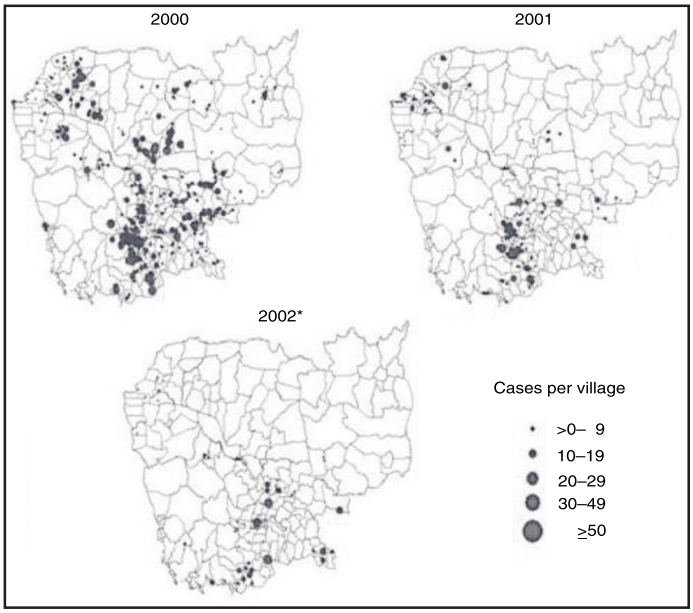
FIGURE. Annual number of reported measles cases, by village — Cambodia, 2000–2002



*As of October 18, 2002.

TABLE. Number and percentage of reported measles cases and percentage of persons who were vaccinated, by age group and year — Cambodia, 2000–2002

	2000			2001			2002*			Total		
Age group	No.	(%)	% Vaccinated	No.	(%)	% Vaccinated	No.	(%)	% Vaccinated	No.	(%)	% Vaccinated
0–11 mos	1	(<0.1)	100	74	(2.0)	1	28	(2.3)	4	**103**	**(0.6)**	**12**
1– 4 yrs	5,597	(46.9)	32	1,336	(36.1)	31	429	(34.8)	33	**7,362**	**(43.6)**	**32**
5– 9 yrs	4,847	(40.6)	22	1,570	(42.5)	18	555	(45.0)	19	**6,972**	**(41.3)**	**21**
10–14 yrs	1,495	(12.5)	13	503	(13.6)	15	194	(15.7)	18	**2,192**	**(13.0)**	**14**
15–25 yrs	0		—	95	(2.6)	3	23	(1.9)	4	**118**	**(0.7)**	**3**
>25 yrs	0		—	14	(0.4)	—	4	(0.3)	—	**18**	**(<0.1)**	—
Unknown	0		—	104	(2.8)	1	1	(<0.1)	—	**105**	**(0.6)**	—
Total	**11,940**		**25**	**3,696**		**21**	**1,234**		**23**	**16,870**		**24**

*As of October 18, 2002.

Editorial Note: The marked decrease in the annual number of reported measles cases in Cambodia during 2000–2002 is attributable in part to increases in routine vaccination coverage and to SIAs conducted during the previous 3 years. In addition, the decrease might reflect the natural decline in incidence following an epidemic. Consistent with the low measles vaccination coverage in Cambodia, the majority of cases continue to occur among children aged <10 years and among unvaccinated persons.

Providing routine vaccinations through outreach visits to villages has improved vaccination coverage in a country whose public health infrastructure was destroyed by civil unrest and is being rebuilt. Although vaccination activities began in 1986 with the formation of EPI, insecurity in the countryside restricted the program to the capital and the surrounding provinces. Large areas of the country remained inaccessible until 1996, and only in 1998, when hostilities ceased, was travel possible throughout the country.

Outreach visits also are a major component of the enhanced measles surveillance system that was established in 1999 and helped overcome the lack of information available in health-care facilities. The majority of Cambodian children with measles are not brought to health-care facilities because of a traditional belief that children should be kept at home during the period of rash; as a result, health-care facility records are not useful for measles surveillance. In addition, health-care workers do not inquire routinely about a history of measles when evaluating a child with possible measles complications (e.g., otitis media, pneumonia, diarrhea, encephalitis, or corneal ulceration or scarring) (S. Sarath, M.D., NIP, Cambodia, personal communication, 2002).

In addition, the strategy of implementing "rolling" SIAs effectively reaches children who missed routine vaccination in infancy. SIAs have been conducted in phases because of the limited health staff trained in administering injections and inadequate cold chain facilities in Cambodia. With this approach, a district is covered thoroughly, ensuring a high-quality campaign and a high rate of vaccination coverage.

The findings in this report are subject to at least four limitations. First, because the quality of surveillance and vaccine-coverage data has improved substantially since 1999, comparisons with pre-1999 data are difficult. Second, current surveillance systems might underreport the number of cases in younger children and in persons from remote areas. Third, as measles incidence (and the positive predictive value of clinical diagnosis) decreases, the lack of capacity for laboratory confirmation might lead to overreporting of true measles cases. Finally, estimating vaccination coverage with the administrative method depends on accurate population estimates and might overestimate the true coverage.

For measles control to be achieved, Cambodia will need to 1) increase routine vaccination coverage further by using a combination of fixed vaccination sites and outreach services, 2) continue periodic SIAs to reach children missed by routine services, and 3) further strengthen measles surveillance by enhancing data management and laboratory capacity. As the number of measles cases decreases, laboratory confirmation of all reported outbreaks will be necessary, requiring extension of laboratory confirmation to all provinces. Lessons learned in Cambodia might be useful in planning measles-control strategies in other postconflict settings, especially in areas with few trained health staff and limited transportation and cold chain facilities.

References

1. Gollogly L. The dilemmas of aid: Cambodia 1992–2002. Lancet 2002;360:793–8.
2. Expanded Programme on Immunization. Joint WHO/UNICEF statement on vitamin A for measles. Wkly Epidemiol Rec 1987;62:133–4.

Tobacco Use Among Middle and High School Students — New Hampshire, 1995–2001

Tobacco use is the leading cause of preventable death in the United States (*1*). Because 80% of adult smokers began smoking as minors (*2*), efforts to prevent smoking initiation have focused on adolescents. To examine trends in smoking prevalence among adolescents, the New Hampshire Department of Health and Human Services analyzed data from the New Hampshire Youth Risk Behavior Survey (NHYRBS) and the New Hampshire Youth Tobacco Survey (NHYTS) during 1995–2001. This report summarizes the results of that analysis, which indicate that smoking prevalence in New Hampshire has declined among both middle and high school students. When fully operational, New Hampshire's comprehensive tobacco-prevention and -control program should lead to further reductions in smoking among adolescents and begin to decrease smoking among adults.

NHYRBS was conducted in grades 9–12 in odd-numbered years during 1995–2001. Although survey results for 1995, 1997, 1999, and 2001 were reviewed, weighted data were available only from 1995 (Table 1); data were not weighted if the overall response rate (i.e., the school response rate multiplied by the student response rate) was <60%. All 81 public high schools in New Hampshire were invited to participate in the survey. Classes in participating schools were sampled at random, and all students in selected classrooms were eligible to participate. NHYTS was conducted in public schools in grades 7–8 during March–May 2000 and in grades 6–12 during October–November 2001 (Table 1). The survey used a two-stage cluster sample design; schools were selected with probability proportional to size, and classrooms in schools were selected at random. All students in selected classrooms were eligible to participate. The 2001 survey was divided into two separate samples, one for middle schools (grades 6–8) and one for high schools (grades 9–12). Analysis of middle school data was restricted to grades 7–8. In all surveys, local parental consent procedures were followed before survey administration.

Among high school students in the 2001 NHYTS, 25.3% (95% confidence interval [CI]=21.7%–28.9%) were current smokers (i.e., reported having smoked cigarettes on ≥1 of the 30 days preceding the survey), which is significantly lower than the 1995 weighted result from NHYRBS (36.0%; 95% CI=33.2%–38.8%). Declines were significant for females and for students in grades 9 and 11 (Table 2). Among middle school students surveyed in NHYTS in 2000 and 2001, current smoking among students in grades 7–8 declined from 12.0% (95% CI=9.4%–14.6%) in 2000 to 6.3% (95% CI=4.2%–8.4%) in 2001; declines were significant for males and for students in grade 7 (Table 3).

TABLE 1. Sample size and response rates for New Hampshire Youth Risk Behavior Survey (NHYRBS), 1995, and New Hampshire Youth Tobacco Survey (NHYTS), 2000–2001, by survey and grade — New Hampshire

Survey	Grades	Sample size	School response rate	Student response rate	Overall response rate*
1995 NHYRBS	9–12	2,092	76%	86%	**65%**
2000 NHYTS	7– 8	1,525	80%	87%	**70%**
2001 NHYTS	6– 8	1,538	80%	91%	**73%**
2001 NHYTS	9–12	1,446	74%	85%	**63%**

* School response rate multiplied by student response rate.

TABLE 2. Prevalence of current smoking* among high school† students, by sex and grade — New Hampshire Youth Risk Behavior Survey (NHYRBS), 1995, and New Hampshire Youth Tobacco Survey (NHYTS), 2001, New Hampshire

	Male	Female	9th grade	10th grade	11th grade	12th grade	Total
Survey	% (95% CI§)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)
1995 NHYRBS	32.0 (29.0–35.0)	39.9 (35.7–44.1)	29.5 (24.5–34.5)	34.8 (30.8–38.8)	40.5 (36.4–44.6)	41.2 (34.2–48.2)	**36.0 (33.2–38.8)**
2001 NHYTS	26.2 (21.8–30.6)	24.4 (17.6–31.2)	18.3 (14.9–21.7)	23.2 (13.9–32.5)	28.1 (22.8–33.4)	34.7 (25.7–43.7)	**25.3 (21.7–28.9)**

* Smoked cigarettes on ≥1 of the 30 days preceding the survey.
† Grades 9–12.
§ Confidence interval.

TABLE 3. Prevalence of current smoking* among middle school† students, by sex and grade — New Hampshire Youth Tobacco Survey (NHYTS), New Hampshire, 2000–2001

	Male		Female		7th grade		8th grade		Total	
Survey	%	(95% CI§)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
2000 NHYTS	11.1	(8.9–13.3)	12.8	(8.6–17.0)	9.2	(6.2–12.2)	14.8	(11.9–17.7)	**12.0**	**(9.4–14.6)**
2001 NHYTS	5.8	(3.1– 8.5)	6.8	(3.9– 9.7)	3.8	(2.2– 5.4)	8.7	(4.7–12.7)	**6.3**	**(4.2– 8.4)**

* Smoked cigarettes on ≥1 of the 30 days preceding the survey.
† Grades 7–8.
§ Confidence interval.

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Editorial Note: The results of this study indicate that smoking prevalence in New Hampshire declined among middle school students during 2000–2001 and among high school students during 1995–2001. The decline in current smoking among high school students is consistent with the national trend (*3*).

New Hampshire's tobacco-control program began in 1995 with federal funding. During 1995–2001, the program was funded at <10% of the current CDC-recommended minimum level (*4*). Beginning in 2001, new sources of funding from the Master Settlement Agreement (MSA) and the American Legacy Foundation resulted in expansion of the program; for fiscal year 2002, the program was funded at $3.70 per capita which is 43% of the CDC-recommended minimum level.

At least four explanations might account for the decline in adolescent smoking prevalence in New Hampshire. First, during 1997–2001, the price of cigarettes increased 100%, from $1.77 per pack to $3.53 (*5*). Of this increase, $1.39 was from price increases by the tobacco industry, $0.27 was from state excise tax, and $0.10 was from federal excise tax. Previous studies indicate that increases in tobacco prices decrease smoking prevalence, particularly among youth (*6*). Second, although the state's tobacco-control program was funded at a low level during 1995–2001, it contained some components of a comprehensive program, including efforts to develop community programs and to begin countermarketing (*4*). Third, in fiscal year 2001, the neighboring states of Maine, Massachusetts, and Vermont had comprehensive tobacco-control programs funded above the CDC-recommended minimum level (*7*). Because media markets for these three states encompass large parts of New Hampshire, those states' countermarketing efforts probably affected New Hampshire. Finally, national efforts at tobacco control, along with media coverage of the tobacco industry at the time of the adoption of MSA, also might have had an impact.

Price increases and control efforts that affect adolescents also are expected to have an impact on tobacco use by adults. Although adult smoking prevalence in New Hampshire, as measured by the Behavioral Risk Factor Surveillance System, did not change significantly during 1991–2001 (23.8% [95% CI=21.5%–26.2%] in 1991 versus 24.1% [95% CI=22.5%–25.6%] in 2001) (*8*), per capita sales declined 22% during 1997–2001, from 174 packs of cigarettes per person in 1997 to 136 in 2001 (*5*). An increase of 10% in cigarette prices is generally estimated to result in a 3%–5% decline in cigarette sales (*6*). Although the decline in sales in New Hampshire was smaller than predicted, sales figures might in part reflect sales to residents of neighboring states, where cigarettes are more expensive.

The findings in this report are subject to at least four limitations. First, trend analysis for smoking prevalence among high school students was limited by the lack of weighted data from NHYRBS since 1995. Second, data from the 2000 NHYTS did not include either students in grade 6 or those in high school, which limited the comparison to the 2001 NHYTS to students in grades 7–8. Third, neither survey included adolescents in private schools or those who had dropped out of school. However, this should not affect the analysis of trends because the percentage of students in these categories did not change substantially during the study period (*9*; K. Schoeneman, New Hampshire Department of Education, personal communication, 2002). Finally, data used to assess changes in smoking prevalence among high school students were obtained from two different surveys. Although both surveys contained identical questions on smoking prevalence and were administered in the same manner, differences might exist between the two surveys.

New Hampshire plans to repeat NHYRBS in 2003 and is attempting to increase the response rate, particularly among schools, to ensure that the data can be weighted. The state also intends to repeat NHYTS in grades 6–12 in 2004. The remaining elements of New Hampshire's comprehensive tobacco-prevention and -control program are being implemented. When fully operational, the program should hasten the decline in smoking among adolescents and begin to decrease prevalence among adults.

References

1. CDC. Annual smoking-attributable mortality, years of potential life lost, and economic costs—United States, 1995–1999. MMWR 2002;51:300–3.
2. U.S. Department of Health and Human Services. Preventing tobacco use among young people: a report of the Surgeon General. Atlanta, Georgia: U.S. Department of Health and Human Services, Public Health Service, CDC, 1994.
3. CDC. Trends in cigarette smoking among high school students—United States, 1991–2001. MMWR 2002;51:409–12.
4. CDC. Best practices for comprehensive tobacco control programs. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, 1999.
5. Orzechowski W, Walker RC. The tax burden on tobacco: historical compilation 2001. Arlington, Virginia: Orzechowski and Walker, 2002.
6. U.S. Department of Health and Human Services. Reducing tobacco use: a report of the Surgeon General. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, 2000.
7. CDC. Investment in tobacco control: state highlight—2001. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, 2001.

8. CDC. Prevalence of adult smoking in New Hampshire, 1990–2001. Available at http://apps.nccd.cdc.gov/brfss/trends/trendchart.asp?qkey=10000&state=nh.
9. New Hampshire Department of Education. State totals—fall enrollments, 1992–93 through 2001–02. Available at http://www.ed.state.nh.us/reportsandstatistics/attendanceandenrollment.htm.

Notice to Readers

Changes in National Notifiable Diseases List and Data Presentation

This issue of *MMWR* incorporates modifications to Tables I and II Cases of Notifiable Diseases, United States. This year, the modifications add diseases designated nationally notifiable by the Council of State and Territorial Epidemiologists (CSTE) in conjunction with CDC. As of January 1, 2003, three disease have been added to the list of nationally notifiable diseases: chronic hepatitis B infection, hepatitis C virus infection (past or present), and varicella (Table 1). Incidence data for chronic hepatitis B infection and hepatitis C virus infection (past or present) will not be presented in the weekly *MMWR* tables pending evaluation of the data by the Division of Viral Hepatitis, National Center for Infectious Diseases. Except where indicated, National Notifiable Diseases Surveillance System (NNDSS) data presented in the notifiable disease tables are transmitted to CDC through the National Electronic Telecommunications System for Surveillance (NETSS). Additional information about nationally notifiable diseases, NNDSS, NETSS, and CSTE is available at http://www.cdc.gov/epo/dphsi/phs.htm and http://www.cste.org.

Modifications to Table I

Provisional incidence data for diseases with annual incidence of <300 cases in the United States or diseases that are designated as notifiable in ≤25 states are presented in Table I. Measles (total), mumps, rubella, and congenital rubella syndrome data have been added to Table 1. A Table I footnote will specify the total number of indigenous and imported measles cases comprising total reported measles incidence.

Modifications to Table II

Provisional incidence data for diseases with annual incidence of ≥300 cases in the United States and diseases that are designated as notifiable in >25 states are presented in Table II. For clarity of notifiable disease data presentation, if any distinct manifestation of a disease meets the Table II criteria, all distinct disease conditions related to Table II-eligible diseases will be included in Table II. As of January 6, 2003, three diseases have been added to Table II: coccidioidomycosis, West Nile encephalitis/meningitis, and varicella. Acute hepatitis C virus infection data are presented as a separate category, and acute hepatitis non-A, non-B incidence data are no longer presented in Table II.

Notice to Readers

Epi Info 2002: A Course for Teachers of Epidemiologic Computing

CDC and Emory University's Rollins School of Public Health will co-sponsor, "Epi Info 2002: A Course for Teachers of Epidemiologic Computing" during March 10-13, 2003, at Emory University. The course is designed for teachers of epidemiologic computing with intermediate to advanced skills in computing.

The course will cover hands-on experience with the new windows version of Epi Info, programming Epi Info software at the intermediate to advanced level, methods of teaching epidemiologic computing, computerized interactive exercises for teaching epidemiology, and computing. There is a tuition charge. Application deadline is February 1, 2003.

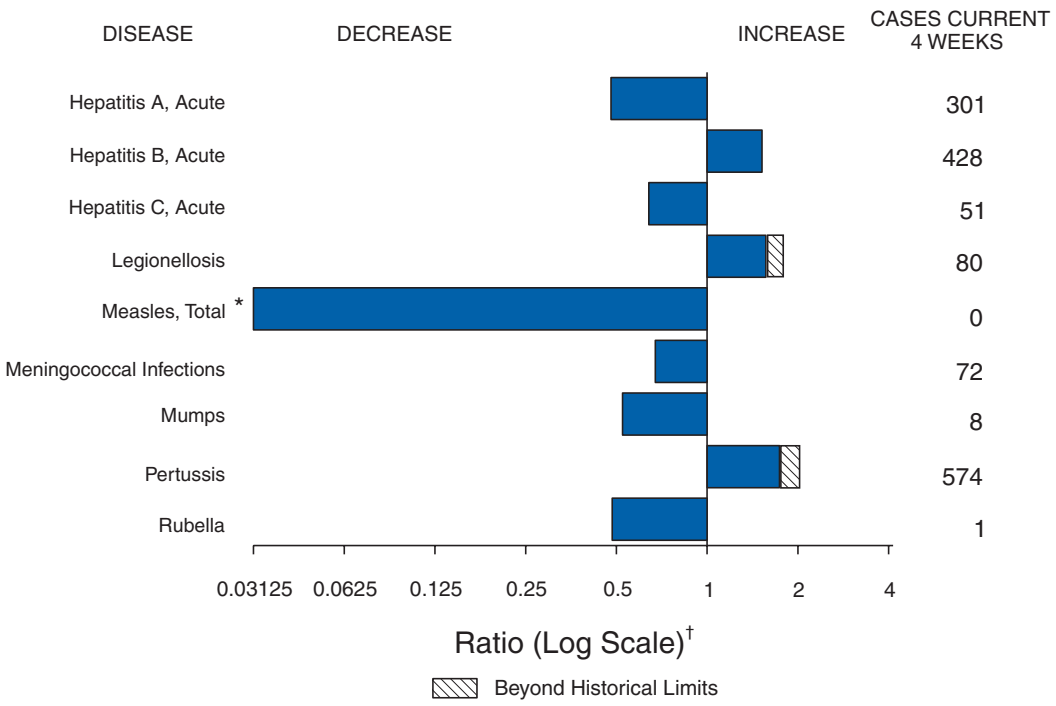
Additional information and applications are available at http://www.sph.emory.edu/EPICOURSES or by e-mail, pvaleri@sph.emory.edu.

Notice to Readers

2003 CDC and ATSDR Symposium on Statistical Methods

The Ninth Biennial Symposium on Statistical Methods sponsored by CDC and the Agency for Toxic Substances and Disease Registry (ATSDR) will be held January 28–29, 2003, in Atlanta, Georgia, at the Crown Plaza Ravinia. A short course, "Modeling and Analysis Using Monte Carlo Methods," will be offered January 27, along with the symposium. Presentations will include applications of study designs that have improved public health decision-making, alternate study designs and implications for public health decision-making processes, decision-making algorithms and related software applications and development, and statistics and policymaking in the face of uncertainty. The symposium and course are open to the public, and there is no charge to attend. Registration and additional information about the symposium are available from CDC at http://www.cdc.gov/od/ads/sag.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending January 4, 2003, with historical data



* No measles cases were reported for the current 4-week period yielding a ratio for week 1 of zero (0).
† 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 January 4, 2003 (1st Week)*

	Cum. 2003	Cum. 2002		Cum. 2003	Cum. 2002
Anthrax	-	-	Hansen disease (leprosy)†	-	1
Botulism:	-	-	Hantavirus pulmonary syndrome†	-	-
foodborne	-	-	Hemolytic uremic syndrome, postdiarrheal†	-	4
infant	-	1	HIV infection, pediatric†§	-	-
other (wound & unspecified)	-	1	Measles, total¶	-	-
Brucellosis†	-	1	Mumps	1	2
Chancroid	-	1	Plague	-	-
Cholera	-	-	Poliomyelitis, paralytic	-	-
Cyclosporiasis†	-	-	Psittacosis†	-	-
Diphtheria	-	-	Q fever†	-	1
Ehrlichiosis:	-	-	Rabies, human	-	-
human granulocytic (HGE)†	-	-	Rubella	-	-
human monocytic (HME)†	-	1	Rubella, congenital	-	1
other and unspecified	-	-	Streptococcal toxic-shock syndrome†	-	-
Encephalitis/Meningitis:	-	-	Tetanus	-	-
California serogroup viral†	-	-	Toxic-shock syndrome	-	1
eastern equine†	-	-	Trichinosis	-	-
Powassan†	-	-	Tularemia†	-	-
St. Louis†	-	-	Yellow fever	-	-
western equine†	-	-			

-: No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).
† Not notifiable in all states.
§ 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 November 24, 2002.
¶ No cases of indigenous or imported measles were reported.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending January 4, 2003, and January 5, 2002 (1st Week)*

Reporting area	AIDS		Chlamydia†		Coccidiodomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile	
	Cum. 2003§	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES		1,526	6,213	3,711	6	4	8	27		
NEW ENGLAND		-	58	445			1	-		
Maine	-	-	4	21	-	-	-	-	-	
N.H.		-	-	21				-		
Vt.		-	7	15			1	-		
Mass.		-	-	183				-		
R.I.		-	44	47				-		
Conn.		-	3	158				-		
MID. ATLANTIC		1,442	26	1,079				4		
Upstate N.Y.		435	25	24				-		
N.Y. City		1,006	1	545				3		
N.J.		1	-	146				-		
Pa.	-	-	-	364	-	-	-	1	-	
E.N. CENTRAL		-	3,256	1,786				13		
Ohio		-	2,507	501				1		
Ind.		-	287	337				-		
Ill.		-	278	482				3		
Mich.		-	154	231				1		
Wis.		-	30	235				8		
W.N. CENTRAL		9	207	575			4	-		
Minn.		-	-	135				-		
Iowa		-	7	15			1	-		
Mo.		-	66	228			1	-		
N. Dak.		-	-	5				-		
S. Dak.		-	24	20			2	-		
Nebr.		9	-	50				-		
Kans.		-	110	122				-		
S. ATLANTIC		57	1,132	983			3	2		
Del.		-	44	27				-		
Md.		-	74	158				-		
D.C.	-	1	-	33	-	-	-	-	-	
Va.		54	190	17				-		
W. Va.	-	-	25	26	-	-	-	-	-	
N.C.		-	337	144				-		
S.C.	-	-	-	45	-	-	-	-	-	
Ga.		-	71	11			2	1		
Fla.		2	391	492			1	1		
E.S. CENTRAL		-	415	533				-		
Ky.	-	-	86	72	-	-	-	-	-	
Tenn.		-	75	159				-		
Ala.		-	-	212				-		
Miss.		-	254	90				-		
W.S. CENTRAL		-	365	1,688				1		
Ark.		-	68	99				-		
La.		-	37	163				-		
Okla.		-	44	271				-		
Tex.		-	716	1,155				1		
MOUNTAIN		17	235	546	6			-		
Mont.		-	34					-		
Idaho		-	48	2				-		
Wyo.		-	13	10				-		
Colo.		13	19	215				-		
N. Mex.	-	4	-	73	-	-	-	-	-	
Ariz.		-	121	156	6			-		
Utah		-	-	8				-		
Nev.	-	-	-	32	-	-	-	-	-	
PACIFIC		1	19	1,076		4		7		
Wash.		-	-	127				U		
Oreg.		1	-	45				2		
Calif.		-	-	826		4		5		
Alaska		-	15	22				-		
Hawaii	-	-	4	56	-	-	-	-	-	
Guam		-	-					-		
P.R.	-	-	-	4	-	-	-	-	-	
V.I.		-	-					-		
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.		U	-	U		U		U		U

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

* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

† 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 November 24, 2002.

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 4, 2003, and January 5, 2002 (1st Week)*

Reporting area	*Escherichia coli*, Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped					
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	8	16	-	2	-	-	79	187	3,272	4,348
NEW ENGLAND	-	-	-	-	-	-	1	22	19	148
Maine	-	-	-	-	-	-	-	1	-	-
N.H.	-	-	-	-	-	-	-	-	-	2
Vt.	-	-	-	-	-	-	1	2	-	2
Mass.	-	-	-	-	-	-	-	18	-	68
R.I.	-	-	-	-	-	-	-	-	18	16
Conn.	-	-	-	-	-	-	-	1	1	60
MID. ATLANTIC	-	1	-	-	-	-	1	30	18	484
Upstate N.Y.	-	-	-	-	-	-	1	1	16	5
N.Y. City	-	-	-	-	-	-	-	12	2	228
N.J.	-	1	-	-	-	-	-	11	-	76
Pa.	N	N	-	-	-	-	-	6	-	175
E.N. CENTRAL	2	7	-	-	-	-	24	54	2,074	909
Ohio	1	-	-	-	-	-	20	9	1,669	288
Ind.	-	-	-	-	-	-	-	-	123	160
Ill.	-	4	-	-	-	-	-	25	130	309
Mich.	1	-	-	-	-	-	4	8	144	67
Wis.	-	3	-	-	-	-	-	12	8	85
W.N. CENTRAL	-	1	-	-	-	-	11	12	72	305
Minn.	-	-	-	-	-	-	-	-	-	50
Iowa	-	1	-	-	-	-	9	6	2	5
Mo.	-	-	N	N	N	N	-	5	22	141
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	-	4
Nebr.	-	-	-	-	-	-	-	-	-	11
Kans.	-	-	-	-	-	-	2	1	48	94
S. ATLANTIC	4	2	-	2	-	-	33	38	472	887
Del.	-	-	-	-	-	-	-	2	20	27
Md.	-	-	-	-	-	-	4	3	46	132
D.C.	-	-	-	-	-	-	-	1	-	67
Va.	-	-	-	-	-	-	-	-	75	118
W. Va.	-	-	-	-	-	-	-	-	9	13
N.C.	2	-	-	-	-	-	-	-	129	207
S.C.	-	-	-	-	-	-	-	-	-	17
Ga.	-	2	-	1	-	-	20	6	40	28
Fla.	2	-	-	1	-	-	9	26	153	278
E.S. CENTRAL	-	-	-	-	-	-	4	3	235	287
Ky.	-	-	-	-	-	-	-	-	61	23
Tenn.	-	-	-	-	-	-	2	-	34	84
Ala.	-	-	-	-	-	-	2	3	-	103
Miss.	-	-	-	-	-	-	-	-	140	77
W.S. CENTRAL	-	-	-	-	-	-	-	-	333	845
Ark.	-	-	-	-	-	-	-	-	33	124
La.	-	-	-	-	-	-	-	-	11	97
Okla.	-	-	-	-	-	-	-	-	15	99
Tex.	-	-	-	-	-	-	-	-	274	525
MOUNTAIN	-	-	-	-	-	-	5	11	43	170
Mont.	-	-	-	-	-	-	-	1	3	-
Idaho	-	-	-	-	-	-	-	-	4	-
Wyo.	-	-	-	-	-	-	-	-	-	-
Colo.	-	-	-	-	-	-	5	6	10	71
N. Mex.	-	-	-	-	-	-	-	1	-	18
Ariz.	-	-	-	-	-	-	-	-	26	52
Utah	-	-	-	-	-	-	-	-	-	-
Nev.	-	-	-	-	-	-	-	3	-	29
PACIFIC	2	5	-	-	-	-	-	17	6	313
Wash.	-	-	-	-	-	-	-	-	-	58
Oreg.	-	4	-	-	-	-	-	15	-	10
Calif.	-	1	-	-	-	-	-	-	-	232
Alaska	-	-	-	-	-	-	-	1	2	6
Hawaii	2	-	-	-	-	-	-	1	4	7
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	-	1
V.I.	-	-	-	-	-	-	-	-	-	1
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 4, 2003, and January 5, 2002 (1st Week)*

Reporting area	*Haemophilus influenzae*, invasive								Hepatitis (viral, acute), by type	
	All ages		Age <5 years							
	All serotypes		Serotype B		Non-serotype B		Unknown serotype		A	
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	7	30	-	-	1	2	-	-	33	140
NEW ENGLAND	-	5	-	-	-	1	-	-	1	10
Maine	-	-	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-	-	-
Vt.	-	-	-	-	-	-	-	-	-	-
Mass.	-	4	-	-	-	1	-	-	1	6
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	-	1	-	-	-	-	-	-	-	4
MID. ATLANTIC	-	10	-	-	-	-	-	-	-	7
Upstate N.Y.	-	1	-	-	-	-	-	-	-	-
N.Y. City	-	4	-	-	-	-	-	-	-	1
N.J.	-	4	-	-	-	-	-	-	-	5
Pa.	-	1	-	-	-	-	-	-	-	1
E.N. CENTRAL	-	9	-	-	-	-	-	-	5	12
Ohio	-	5	-	-	-	-	-	-	2	3
Ind.	-	-	-	-	-	-	-	-	-	-
Ill.	-	3	-	-	-	-	-	-	-	5
Mich.	-	-	-	-	-	-	-	-	3	3
Wis.	-	1	-	-	-	-	-	-	-	1
W.N. CENTRAL	-	-	-	-	-	-	-	-	1	10
Minn.	-	-	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	1	4
Mo.	-	-	-	-	-	-	-	-	-	1
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	-	-
Nebr.	-	-	-	-	-	-	-	-	-	1
Kans.	-	-	-	-	-	-	-	-	-	4
S. ATLANTIC	3	2	-	-	-	-	-	-	24	45
Del.	-	-	-	-	-	-	-	-	-	-
Md.	1	-	-	-	-	-	-	-	7	10
D.C.	-	-	-	-	-	-	-	-	-	-
Va.	-	-	-	-	-	-	-	-	-	-
W. Va.	-	-	-	-	-	-	-	-	-	-
N.C.	-	-	-	-	-	-	-	-	-	10
S.C.	-	-	-	-	-	-	-	-	-	-
Ga.	-	2	-	-	-	-	-	-	3	5
Fla.	2	-	-	-	-	-	-	-	14	20
E.S. CENTRAL	2	-	-	-	1	-	-	-	1	2
Ky.	-	-	-	-	-	-	-	-	-	-
Tenn.	-	-	-	-	-	-	-	-	-	-
Ala.	2	-	-	-	1	-	-	-	1	-
Miss.	-	-	-	-	-	-	-	-	-	2
W.S. CENTRAL	-	-	-	-	-	-	-	-	-	14
Ark.	-	-	-	-	-	-	-	-	-	-
La.	-	-	-	-	-	-	-	-	-	-
Okla.	-	-	-	-	-	-	-	-	-	-
Tex.	-	-	-	-	-	-	-	-	-	14
MOUNTAIN	1	1	-	-	-	1	-	-	1	3
Mont.	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-
Wyo.	-	-	-	-	-	-	-	-	-	-
Colo.	1	-	-	-	-	-	-	-	-	-
N. Mex.	-	1	-	-	-	1	-	-	1	1
Ariz.	-	-	-	-	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-	-	-
Nev.	-	-	-	-	-	-	-	-	-	2
PACIFIC	1	3	-	-	-	-	-	-	-	37
Wash.	-	-	-	-	-	-	-	-	-	-
Oreg.	-	2	-	-	-	-	-	-	-	7
Calif.	-	-	-	-	-	-	-	-	-	30
Alaska	-	-	-	-	-	-	-	-	-	-
Hawaii	1	1	-	-	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 4, 2003, and January 5, 2002 (1st Week)*

Reporting area	Hepatitis (viral, acute), by type				Legionellosis		Listeriosis		Lyme disease	
	B		C							
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	75	50	4	48	7	3	3	2	10	54
NEW ENGLAND	-	5	-	1	-	-	-	-	1	7
Maine	-	-	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-	-	-
Vt.	-	-	-	1	-	-	-	-	1	-
Mass.	-	3	-	-	-	-	-	-	-	7
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	-	2	-	-	-	-	-	-	-	-
MID. ATLANTIC	-	8	-	20	-	-	-	-	1	21
Upstate N.Y.	-	-	-	-	-	-	-	-	1	8
N.Y. City	-	2	-	-	-	-	-	-	-	-
N.J.	-	5	-	20	-	-	-	-	-	13
Pa.	-	1	-	-	-	-	-	-	-	-
E.N. CENTRAL	6	8	1	-	2	1	1	1	-	-
Ohio	6	2	-	-	1	-	1	-	-	-
Ind.	-	-	-	-	-	-	-	-	-	-
Ill.	-	-	-	-	-	-	-	-	-	-
Mich.	-	5	1	-	1	1	-	-	-	-
Wis.	-	1	-	-	-	-	-	1	U	U
W.N. CENTRAL	1	3	-	9	1	-	-	-	-	1
Minn.	-	-	-	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	-	-
Mo.	1	1	-	9	-	-	-	-	-	1
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	-	-
Nebr.	-	1	-	-	-	-	-	-	-	-
Kans.	-	1	-	-	1	-	-	-	-	-
S. ATLANTIC	65	10	2	1	4	1	1	-	8	25
Del.	-	-	-	1	-	-	-	-	-	-
Md.	-	2	-	-	2	1	-	-	6	25
D.C.	-	1	-	-	-	-	-	-	-	-
Va.	-	-	-	-	-	-	-	-	-	-
W. Va.	-	-	-	-	N	N	-	-	-	-
N.C.	-	-	-	-	-	-	-	-	-	-
S.C.	-	-	-	-	-	-	-	-	-	-
Ga.	56	1	-	-	1	-	-	-	-	-
Fla.	9	6	2	-	1	-	1	-	2	-
E.S. CENTRAL	-	3	-	2	-	-	1	-	-	-
Ky.	-	-	-	-	-	-	-	-	-	-
Tenn.	-	-	-	-	-	-	-	-	-	-
Ala.	-	-	-	-	-	-	1	-	-	-
Miss.	-	3	-	2	-	-	-	-	-	-
W.S. CENTRAL	-	7	-	12	-	1	-	1	-	-
Ark.	-	-	-	-	-	-	-	-	-	-
La.	-	1	-	-	-	-	-	-	-	-
Okla.	-	-	-	-	-	-	-	-	-	-
Tex.	-	6	-	12	-	1	-	1	-	-
MOUNTAIN	3	2	1	-	-	-	-	-	-	-
Mont.	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-
Wyo.	-	-	-	-	-	-	-	-	-	-
Colo.	3	-	1	-	-	-	-	-	-	-
N. Mex.	-	-	-	-	-	-	-	-	-	-
Ariz.	-	-	-	-	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-	-	-
Nev.	-	2	-	-	-	-	-	-	-	-
PACIFIC	-	4	-	3	-	-	-	-	-	-
Wash.	-	-	-	-	-	-	-	-	-	-
Oreg.	-	2	-	2	N	N	-	-	-	-
Calif.	-	2	-	1	-	-	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	1	-	-	-	-	-	-	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 4, 2003, and January 5, 2002 (1st Week)*

Reporting area	Malaria		Meningococcal disease		Pertussis		Rabies, animal		Rocky Mountain spotted fever	
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	3	17	14	26	37	64	23	33	2	7
NEW ENGLAND	-	1	-	2	6	24	2	-	-	-
Maine	-	-	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-	-	-
Vt.	-	-	-	1	6	7	2	-	-	-
Mass.	-	1	-	1	-	16	-	-	-	-
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	-	-	-	-	-	1	-	-	-	-
MID. ATLANTIC	-	3	-	2	-	2	8	10	-	1
Upstate N.Y.	-	-	-	-	-	-	8	8	-	-
N.Y. City	-	2	-	-	-	2	-	-	-	-
N.J.	-	1	-	1	-	-	-	2	-	-
Pa.	-	-	-	1	-	-	-	-	-	1
E.N. CENTRAL	1	-	3	7	6	13	-	-	-	-
Ohio	1	-	2	6	6	2	-	-	-	-
Ind.	-	-	-	-	-	-	-	-	-	-
Ill.	-	-	-	-	-	7	-	-	-	-
Mich.	-	-	1	-	-	-	-	-	-	-
Wis.	-	-	-	1	-	4	-	-	-	-
W.N. CENTRAL	1	1	2	1	3	5	4	4	-	-
Minn.	-	-	-	-	-	-	-	-	-	-
Iowa	1	1	1	-	-	5	-	-	-	-
Mo.	-	-	1	-	1	-	-	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	1	-	-	-	2	-	-
Nebr.	-	-	-	-	-	-	-	-	-	-
Kans.	-	-	-	-	2	-	4	2	-	-
S. ATLANTIC	1	2	7	6	15	3	8	9	2	6
Del.	-	-	-	-	-	1	-	-	-	-
Md.	-	1	1	-	1	2	-	6	2	1
D.C.	-	-	-	-	-	-	-	-	-	-
Va.	-	-	-	-	-	-	-	1	-	-
W. Va.	-	-	-	-	-	-	-	-	-	-
N.C.	-	1	-	1	-	-	6	-	-	5
S.C.	-	-	-	-	-	-	2	-	-	-
Ga.	-	-	-	2	13	-	-	2	-	-
Fla.	1	-	6	3	1	-	-	-	-	-
E.S. CENTRAL	-	1	2	-	-	5	-	-	-	-
Ky.	-	-	-	-	-	-	-	-	-	-
Tenn.	-	-	-	-	-	-	-	-	-	-
Ala.	-	-	2	-	-	-	-	-	-	-
Miss.	-	1	-	-	-	5	-	-	-	-
W.S. CENTRAL	-	-	-	6	-	1	-	8	-	-
Ark.	-	-	-	-	-	1	-	-	-	-
La.	-	-	-	1	-	-	-	-	-	-
Okla.	-	-	-	-	-	-	-	1	-	-
Tex.	-	-	-	5	-	-	-	7	-	-
MOUNTAIN	-	-	-	1	7	4	1	-	-	-
Mont.	-	-	-	-	-	-	1	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-
Wyo.	-	-	-	-	-	-	-	-	-	-
Colo.	-	-	-	-	6	2	-	-	-	-
N. Mex.	-	-	-	-	-	2	-	-	-	-
Ariz.	-	-	-	-	1	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-	-	-
Nev.	-	-	-	1	-	-	-	-	-	-
PACIFIC	-	9	-	1	-	7	-	2	-	-
Wash.	-	-	-	-	-	-	-	-	-	-
Oreg.	-	-	-	-	-	-	-	-	-	-
Calif.	-	7	-	1	-	7	-	1	-	-
Alaska	-	-	-	-	-	-	-	1	-	-
Hawaii	-	2	-	-	-	-	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	2	-	-
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 4, 2003, and January 5, 2002 (1st Week)*

Reporting area	Salmonellosis		Shigellosis		*Streptococcal* disease, invasive, group A		*Streptococcus pneumoniae*, invasive			
							Drug resistant, all ages		Age <5 years	
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002
UNITED STATES	140	359	154	149	24	54	24	13	-	3
NEW ENGLAND	-	14	-	4	2	3	-	-	-	1
Maine	-	-	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	N	-	-	N	N
Vt.	-	-	-	-	1	1	-	-	-	1
Mass.	-	14	-	4	1	2	N	N	N	N
R.I.	-	-	-	-	-	-	-	-	-	-
Conn.	-	-	-	-	-	-	-	-	-	-
MID. ATLANTIC	-	36	-	6	-	10	-	-	-	-
Upstate N.Y.	-	-	-	-	-	1	-	-	-	-
N.Y. City	-	16	-	2	-	7	U	U	U	U
N.J.	-	15	-	3	-	2	N	N	N	N
Pa.	-	5	-	1	-	-	-	-	-	-
E.N. CENTRAL	20	53	3	20	7	12	-	-	-	2
Ohio	19	15	2	2	5	3	-	-	-	-
Ind.	-	-	-	-	-	-	-	-	-	-
Ill.	-	27	-	18	-	6	-	-	-	-
Mich.	1	6	1	-	2	3	-	-	N	N
Wis.	-	5	-	-	-	-	N	N	-	2
W.N. CENTRAL	9	18	4	24	2	-	5	2	-	-
Minn.	-	-	-	7	-	-	-	-	-	-
Iowa	3	5	-	4	-	-	N	N	N	N
Mo.	3	10	4	2	1	-	-	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	-	-
S. Dak.	1	-	-	6	1	-	-	-	-	-
Nebr.	-	-	-	4	-	-	-	1	N	N
Kans.	2	3	-	1	-	-	5	1	N	N
S. ATLANTIC	89	99	135	53	8	19	18	10	-	-
Del.	-	-	-	-	-	-	-	-	N	N
Md.	8	5	16	1	2	N	N	N	N	N
D.C.	-	-	-	1	-	-	-	-	-	-
Va.	-	-	-	-	-	-	N	N	N	N
W. Va.	-	-	-	-	-	-	-	-	-	-
N.C.	22	21	-	7	-	5	N	N	U	U
S.C.	-	-	-	-	-	-	-	-	N	N
Ga.	7	13	60	18	1	6	3	5	N	N
Fla.	52	60	59	26	5	6	15	5	N	N
E.S. CENTRAL	10	20	10	11	1	-	-	-	-	-
Ky.	-	-	-	1	-	-	-	-	N	N
Tenn.	2	-	-	-	1	-	-	-	N	N
Ala.	7	10	10	5	-	-	-	-	N	N
Miss.	1	10	-	5	-	-	-	-	-	-
W.S. CENTRAL	-	29	-	7	-	3	-	-	-	-
Ark.	-	-	-	-	-	-	-	-	-	-
La.	-	2	-	-	-	-	-	-	-	-
Okla.	-	-	-	-	-	-	N	N	-	-
Tex.	-	27	-	7	-	3	N	N	-	-
MOUNTAIN	9	5	-	1	4	4	1	1	-	-
Mont.	1	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	N	N	N	N
Wyo.	-	-	-	-	-	-	-	-	-	-
Colo.	4	3	-	-	1	1	-	-	-	-
N. Mex.	4	-	-	1	1	3	1	1	-	-
Ariz.	-	-	-	-	2	-	-	-	N	N
Utah	-	-	-	-	-	-	-	-	-	-
Nev.	-	2	-	-	-	-	-	-	-	-
PACIFIC	3	85	2	23	-	3	-	-	-	-
Wash.	-	-	-	-	-	-	-	-	N	N
Oreg.	-	7	-	-	N	N	N	N	N	N
Calif.	-	74	-	23	-	2	N	N	N	N
Alaska	-	1	-	-	-	-	-	-	N	N
Hawaii	3	3	2	-	-	1	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	1	-	-	N	N	-	-	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending January 4, 2003, and January 5, 2002 (1st Week)*

Reporting area	Syphilis				Tuberculosis		Typhoid fever		Varicella (Chickenpox)
	Primary & secondary		Congenital						
	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003	Cum. 2002	Cum. 2003
UNITED STATES	35	49	-	5	15	63	-	7	82
NEW ENGLAND	-	-	-	-	-	5	-	-	15
Maine	-	-	-	-	-	-	-	-	15
N.H.	-	-	-	-	-	-	-	-	-
Vt.	-	-	-	-	-	-	-	-	-
Mass.	-	-	-	-	-	-	-	-	-
R.I.	-	-	-	-	-	3	-	-	-
Conn.	-	-	-	-	-	2	-	-	-
MID. ATLANTIC	1	4	-	1	7	1	-	1	-
Upstate N.Y.	-	-	-	-	-	-	-	-	-
N.Y. City	1	3	-	-	7	-	-	1	-
N.J.	-	1	-	1	-	-	-	-	-
Pa.	-	-	-	-	-	1	-	-	-
E.N. CENTRAL	6	2	-	-	1	1	-	2	30
Ohio	1	1	-	-	1	-	-	-	8
Ind.	-	1	-	-	-	-	-	-	-
Ill.	2	-	-	-	-	1	-	-	-
Mich.	3	-	-	-	-	-	-	-	22
Wis.	-	-	-	-	-	-	-	2	-
W.N. CENTRAL	1	3	-	-	3	19	-	-	-
Minn.	-	1	-	-	-	-	-	-	-
Iowa	-	-	-	-	-	-	-	-	-
Mo.	1	1	-	-	-	17	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	1	-	-	-	-
Nebr.	-	-	-	-	-	-	-	-	-
Kans.	-	1	-	-	2	2	-	-	-
S. ATLANTIC	9	19	-	1	-	-	-	4	37
Del.	-	-	-	-	-	-	-	-	-
Md.	-	2	-	-	-	-	-	1	-
D.C.	-	1	-	-	-	-	-	-	-
Va.	2	1	-	-	-	-	-	-	-
W. Va.	-	-	-	-	-	-	-	-	37
N.C.	2	10	-	-	-	-	-	-	-
S.C.	2	-	-	1	-	-	-	-	-
Ga.	2	-	-	-	-	-	-	-	-
Fla.	1	5	-	-	-	-	-	3	-
E.S. CENTRAL	4	4	-	1	3	6	-	-	-
Ky.	1	-	-	-	-	-	-	-	-
Tenn.	2	1	-	-	-	6	-	-	-
Ala.	1	2	-	-	3	-	-	-	-
Miss.	-	1	-	1	-	-	-	-	-
W.S. CENTRAL	10	6	-	2	-	18	-	-	-
Ark.	-	-	-	-	-	-	-	-	-
La.	-	2	-	-	-	-	-	-	-
Okla.	-	1	-	-	-	-	-	-	-
Tex.	10	3	-	2	-	18	-	-	-
MOUNTAIN	4	3	-	-	1	1	-	-	-
Mont.	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-
Wyo.	-	-	-	-	1	-	-	-	-
Colo.	-	-	-	-	-	-	-	-	-
N. Mex.	-	1	-	-	-	1	-	-	-
Ariz.	4	2	-	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-	-
Nev.	-	-	-	-	-	-	-	-	-
PACIFIC	-	8	-	-	-	12	-	-	-
Wash.	-	-	-	-	-	-	-	-	-
Oreg.	-	-	-	-	-	-	-	-	-
Calif.	-	8	-	-	-	11	-	-	-
Alaska	-	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	1	-	-	-
Guam	-	-	-	-	-	-	-	-	-
P.R.	-	2	-	1	-	-	-	-	-
V.I.	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2002 and 2003 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,* week ending January 4, 2003 (1st Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	510	356	100	37	7	10	65
Boston, Mass.	172	117	31	15	5	4	15
Bridgeport, Conn.	34	19	12	2	-	1	5
Cambridge, Mass.	28	21	7	-	-	-	6
Fall River, Mass.	U	U	U	U	U	U	U
Hartford, Conn.	52	33	11	7	1	-	9
Lowell, Mass.	11	8	3	-	-	-	2
Lynn, Mass.	9	5	3	1	-	-	1
New Bedford, Mass.	19	15	2	1	-	1	3
New Haven, Conn.	37	27	4	4	1	1	4
Providence, R.I.	U	U	U	U	U	U	U
Somerville, Mass.	4	4	-	-	-	-	-
Springfield, Mass.	37	27	7	1	-	2	10
Waterbury, Conn.	28	18	7	3	-	-	1
Worcester, Mass.	79	62	13	3	-	1	9
MID. ATLANTIC	2,389	1,709	464	146	38	32	126
Albany, N.Y.	69	52	14	2	1	-	4
Allentown, Pa.	20	19	1	-	-	-	1
Buffalo, N.Y.	78	61	13	3	-	1	8
Camden, N.J.	20	13	4	1	1	1	3
Elizabeth, N.J.	16	13	1	2	-	-	-
Erie, Pa.	53	38	9	6	-	-	2
Jersey City, N.J.	49	28	13	6	1	1	-
New York City, N.Y.	1,232	906	233	65	15	13	53
Newark, N.J.	55	22	15	14	2	2	5
Paterson, N.J.	32	24	5	2	-	1	1
Philadelphia, Pa.	367	242	74	31	15	5	13
Pittsburgh, Pa.§	36	23	9	2	-	2	5
Reading, Pa.	23	18	5	-	-	-	2
Rochester, N.Y.	132	98	29	3	1	1	15
Schenectady, N.Y.	40	28	8	3	-	1	3
Scranton, Pa.	30	26	4	-	-	-	1
Syracuse, N.Y.	61	44	12	3	-	2	7
Trenton, N.J.	37	24	9	2	-	2	2
Utica, N.Y.	17	15	1	-	1	-	-
Yonkers, N.Y.	22	15	5	1	1	-	1
E.N. CENTRAL	1,252	910	228	66	24	24	93
Akron, Ohio	63	44	14	3	-	2	14
Canton, Ohio	41	29	10	1	-	1	2
Chicago, Ill.	U	U	U	U	U	U	U
Cincinnati, Ohio	U	U	U	U	U	U	U
Cleveland, Ohio	120	90	22	6	2	-	10
Columbus, Ohio	181	126	33	13	3	6	12
Dayton, Ohio	110	79	24	7	-	-	11
Detroit, Mich.	U	U	U	U	U	U	U
Evansville, Ind.	55	45	7	2	-	1	2
Fort Wayne, Ind.	72	51	14	6	1	-	5
Gary, Ind.	20	11	6	2	1	-	-
Grand Rapids, Mich.	53	35	9	1	4	4	4
Indianapolis, Ind.	173	117	32	10	7	7	15
Lansing, Mich.	U	U	U	U	U	U	U
Milwaukee, Wis.	104	75	23	2	3	1	7
Peoria, Ill.	U	U	U	U	U	U	U
Rockford, Ill.	48	41	3	2	2	-	3
South Bend, Ind.	56	44	10	1	-	1	2
Toledo, Ohio	97	77	14	5	-	1	4
Youngstown, Ohio	59	46	7	5	1	-	2
W.N. CENTRAL	588	418	117	26	11	16	47
Des Moines, Iowa	62	44	16	1	1	-	5
Duluth, Minn.	23	15	7	1	-	-	-
Kansas City, Kans.	46	33	11	2	-	-	4
Kansas City, Mo.	65	48	9	2	-	6	5
Lincoln, Nebr.	46	34	8	2	1	1	8
Minneapolis, Minn.	59	39	9	6	1	4	-
Omaha, Nebr.	92	66	16	5	2	3	11
St. Louis, Mo.	U	U	U	U	U	U	U
St. Paul, Minn.	39	32	5	1	1	-	4
Wichita, Kans.	156	107	36	6	5	2	10
S. ATLANTIC	1,226	754	279	118	43	31	77
Atlanta, Ga.	333	186	83	41	12	11	12
Baltimore, Md.	179	112	42	19	5	-	19
Charlotte, N.C.	111	73	26	6	2	4	13
Jacksonville, Fla.	50	33	11	2	3	1	1
Miami, Fla.	182	108	38	24	7	5	8
Norfolk, Va.	41	25	10	2	1	3	3
Richmond, Va.	37	19	12	4	-	2	2
Savannah, Ga.	U	U	U	U	U	U	U
St. Petersburg, Fla.	44	35	4	3	2	-	4
Tampa, Fla.	138	102	22	9	4	1	11
Washington, D.C.	100	57	27	6	6	4	2
Wilmington, Del.	11	4	4	2	1	-	2
E.S. CENTRAL	750	525	146	50	13	15	57
Birmingham, Ala.	156	117	27	5	5	1	15
Chattanooga, Tenn.	39	24	12	3	-	-	4
Knoxville, Tenn.	88	54	23	5	2	4	4
Lexington, Ky.	33	23	6	3	-	1	1
Memphis, Tenn.	227	160	40	19	2	6	27
Mobile, Ala.	19	13	4	2	-	-	-
Montgomery, Ala.	41	29	8	3	1	-	-
Nashville, Tenn.	147	105	26	10	3	3	6
W.S. CENTRAL	1,208	747	244	104	74	39	73
Austin, Tex.	85	44	25	11	4	1	8
Baton Rouge, La.	23	20	3	-	-	-	1
Corpus Christi, Tex.	35	29	6	-	-	-	2
Dallas, Tex.	175	97	39	26	7	6	11
El Paso, Tex.	101	70	23	3	5	-	4
Ft. Worth, Tex.	105	69	17	8	8	3	8
Houston, Tex.	239	110	43	27	41	18	10
Little Rock, Ark.	51	32	14	2	1	2	1
New Orleans, La.	U	U	U	U	U	U	U
San Antonio, Tex.	260	186	48	13	6	7	23
Shreveport, La.	5	5	-	-	-	-	-
Tulsa, Okla.	129	85	26	14	2	2	5
MOUNTAIN	917	646	181	50	24	16	68
Albuquerque, N.M.	86	74	8	3	1	-	8
Boise, Idaho	34	28	4	-	-	2	4
Colo. Springs, Colo.	69	48	12	6	1	2	4
Denver, Colo.	104	62	25	9	3	5	4
Las Vegas, Nev.	290	188	70	18	11	3	23
Ogden, Utah	34	27	6	1	-	-	5
Phoenix, Ariz.	U	U	U	U	U	U	U
Pueblo, Colo.	39	28	10	1	-	-	1
Salt Lake City, Utah	142	98	27	8	6	3	11
Tucson, Ariz.	119	93	19	4	2	1	8
PACIFIC	831	570	161	56	26	17	55
Berkeley, Calif.	16	12	3	1	-	-	1
Fresno, Calif.	U	U	U	U	U	U	U
Glendale, Calif.	15	11	1	-	2	1	-
Honolulu, Hawaii	U	U	U	U	U	U	U
Long Beach, Calif.	U	U	U	U	U	U	U
Los Angeles, Calif.	245	163	47	18	13	4	11
Pasadena, Calif.	U	U	U	U	U	U	U
Portland, Oreg.	109	83	13	7	1	4	9
Sacramento, Calif.	U	U	U	U	U	U	U
San Diego, Calif.	145	90	36	12	5	2	15
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	U	U	U	U	U	U	U
Santa Cruz, Calif.	U	U	U	U	U	U	U
Seattle, Wash.	142	89	36	10	3	4	9
Spokane, Wash.	65	51	11	2	-	1	6
Tacoma, Wash.	94	71	14	6	2	1	4
TOTAL	9,671¶	6,635	1,920	653	260	200	661

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.

† Pneumonia and influenza.

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

¶ Total includes unknown ages.

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