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## Public Health Dispatch

## Update: Assessment of Risk for Meningococcal Disease Associated With the Hajj 2001

During late March and early April 2000, four cases of meningococcal disease caused by *Neisseria meningitidis* serogroup W-135 were identified among U.S. pilgrims returning from the Hajj in Saudi Arabia, their close contacts, and communities (1). These cases occurred as part of a larger epidemic in which approximately 400 cases caused by a similar and unusual strain were identified worldwide (2). The Hajj, an annual pilgrimage to the major holy places of Islam, is attended by approximately two million persons from approximately 140 countries, including an estimated 15,000 from the United States.

After an outbreak of serogroup A meningococcal disease in 1987 associated with the Hajj, CDC recommended that U.S. pilgrims receive the quadrivalent meningococcal polysaccharide vaccine (3). This vaccine provides protection against disease caused by serogroups A, C, Y, and W-135; however, the vaccine may not affect asymptomatic pharyngeal carriage or a person's ability to transmit disease. To assess the risk for meningococcal disease in 2001 among U.S. pilgrims, CDC conducted a study of pharyngeal carriage of *N. meningitidis* in departing pilgrims traveling to Saudi Arabia and of passengers returning from Saudi Arabia after the Hajj 1–2 weeks later.

After informed consent was obtained, pilgrims departing from John F. Kennedy International Airport (JFK), New York, on seven consecutive direct flights to Saudi Arabia during February 16–27, 2001, were asked to complete a questionnaire and provide an oropharyngeal swab for culture. During March 9–16, all disembarking passengers (i.e., pilgrims and nonpilgrims) on five consecutive direct flights from Saudi Arabia to JFK were similarly approached; 451 pilgrims were enrolled in the departing portion of the study and 869 passengers, including 727 pilgrims, were enrolled in the returning portion. Of the 27 *N. meningitidis* isolates recovered from 1320 passengers, 17 (63%) were nongroupable (i.e., a typically nonpathogenic strain); seven (26%) were serogroup W-135. Returning pilgrims were more likely to be carriers than departing pilgrims (2.6% versus 0.9%; p=0.04). None of the departing pilgrims carried serogroup W-135; however, six (0.8%) returning pilgrims were serogroup W-135 carriers (p=0.06). Among returning passengers, carriage of serogroup W-135 was similar among pilgrims and nonpilgrims (0.8% versus 0.9%; p=0.98).

Many returning passengers reported upper respiratory symptoms; 63% reported cough, 58% had sore throat, and 24% had fever during the 2 weeks before their return.

Meningococcal Disease — Continued

Antibiotic use was reported by 396 (49%) of 811 returning passengers and was associated with decreased (although not significantly [2.1% versus 4.2%; p=0.09]) *N. meningitidis* carriage. The cause of this illness is not known; severe illness requiring hospitalization was not reported.

Because of the low rate of *N. meningitidis* serogroup W-135 carriage, antimicrobial chemoprophylaxis for all pilgrims returning to the United States is not recommended. Although overall carriage was low, the high proportion of serogroup W-135 carriage suggests continuing transmission in Saudi Arabia. Evidence of this transmission, combined with reports of cases of invasive disease among pilgrims returning to the United Kingdom who received only bivalent vaccine against serogroup A and C, suggests that U.S. pilgrims should continue to receive quadrivalent meningococcal polysaccharide vaccine before travel to the Hajj.

Reported by: Div of Applied Public Health Training, Epidemiology Program Office; Meningitis and Special Pathogens Br, Div of Bacterial and Mycotic Diseases; Surveillance and Epidemiology Br, Div of Quarantine, National Center for Infectious Diseases; and EIS officers, CDC.

#### References

- 1. CDC. Risk for meningococcal disease associated with the Hajj 2001. MMWR 2001;50:97-8.
- 2. Popovic T, Sacchi CT, Reeves MW, et al. *N. meningitidis* serogroup W135 isolates associated with the ET-37 complex [Letter]. Emerg Infect Dis 2000;6:428–9.
- 3. Moore PS, Harrison LH, Telzak EE, et al. Group A meningococcal carriage in travelers returning from Saudi Arabia. JAMA 1988;260:2686–9.

# Apparent Global Interruption of Wild Poliovirus Type 2 Transmission

In 1988, the World Health Assembly of the World Health Organization (WHO) resolved to eradicate poliomyelitis by 2000. Since then, the WHO Region of the Americas and Western Pacific Region have been certified free of polio, and the European Region is approaching 3 years since the last confirmed case of polio. Transmission of wild poliovirus types 1 and 3 continues to decline in the other WHO regions (1). This report summarizes the evidence, obtained through surveillance for acute flaccid paralysis (AFP), supporting the global interruption of wild poliovirus type 2 transmission.

Along with achieving and maintaining high routine coverage with oral poliovirus vaccine (OPV), conducting National Immunization Days\* to decrease poliovirus circulation, and mopping-up vaccination activities $^{\dagger}$  to eliminate remaining reservoirs $^{\$}$  of poliovirus transmission, one of the main polio eradication strategies is AFP surveillance. The quality of AFP surveillance is assessed primarily by the nonpolio AFP rate (target:  $\geq 1$  per 100,000 population aged <15 years), and by the completeness of specimen collection (target: two adequate stool specimens $^{\$}$  from >80% of persons with AFP).

<sup>\*</sup>Nationwide mass campaigns during a short period (days to weeks), in which two doses of OPV are administered to all children in the target age group (usually aged <5 years), regardless of vaccination history, with an interval of 4–6 weeks between doses.

<sup>&</sup>lt;sup>†</sup> Focal mass campaigns in high-risk areas during a short period (days to weeks) in which two OPV doses are administered to all children in the target age groups, regardless of vaccination history, with an interval of 4–6 weeks between doses.

<sup>§</sup> Countries where polio is endemic that have large populations and that may export poliovirus to neighboring countries and elsewhere.

Two stool specimens, collected 24 to 48 hours apart within 14 days of paralysis onset, that arrive in the laboratory in good condition.

Wild Poliovirus Type 2 — Continued

The last countries to report wild poliovirus type 2 isolates were Afghanistan and Pakistan in 1997, Nigeria in 1998, and India in 1999 (2). The last known reservoirs of wild poliovirus type 2 transmission occurred in Bihar, Uttar Pradesh, and West Bengal in northern India. Several type 2 isolates were obtained from this region during 1998–1999. The rapidly declining genetic diversity of the few sustaining type 2 isolate chains is consistent with the final phase of transmission. The last wild poliovirus type 2 isolated was from a child reported as an AFP case in West Bihar with paralysis onset in October 1999.

Despite substantially improved AFP surveillance globally since late 1999, no wild poliovirus type 2 isolates have been reported by any WHO region since late 1999. From 1999 to 2000, the number of AFP cases reported worldwide increased from 29,583 to 30,436 despite a decrease of confirmed polio cases from 7141 in 1999 to 2824 in 2000. In the South-East Asia Region during 1999–2000, the overall nonpolio AFP rate increased from 1.6 to 1.7 per 100,000 population aged <15 years, and the rate of adequate stool collection increased from 71% to 81%, respectively. In the Eastern Mediterranean Region, the overall nonpolio AFP rate increased from 1.1 to 1.4 and the rate of adequate stool collection remained at 67%. In the African Region during 1999–2000, the overall nonpolio AFP rate increased from 0.8 to 1.3; however, the rate of adequate stool collection (53%) remained below the 2000 target level. Surveillance remains suboptimal in the major reservoir countries of Angola, Democratic Republic of Congo, Ethiopia, and Nigeria.

AFP surveillance comprises a global network of seven specialized, 15 reference, and 126 national WHO-accredited laboratories. The network processed 48,370 stool specimens in 1999 and approximately 50,000 in 2000. During 1999–2000, 1423 isolates were wild poliovirus type 1 (989 in 1999 and 434 in 2000); 11 were wild poliovirus type 2 (11 in 1999 [from India] and zero in 2000); 1127 were wild poliovirus type 3 (894 in 1999 and 233 in 2000), and 23 were wild poliovirus types 1 and 3 mixed isolates (16 in 1999 and seven in 2000) (Table 1).

TABLE 1. Number of confirmed cases of poliomyelitis and wild poliovirus, by type and region — World Health Organization, 1999 and 2000

			1999			2000							
Region	No. confirmed cases	Wild virus confirmed	Type 1	Type 2	Type 3	No. confirmed cases	Wild virus confirmed	Type 1	Type 2	Type 3			
African	2861	246	167	0	79	1763	144	139	0	5			
Americas	0	0	0	0	0	0	0	0	0	0			
Eastern													
Mediterranea	an 914	479 (four were mixed types 1 and 3)	392 S	0	83	453	259 (six were mixed types 1 and 3)	155	0	98			
European	0	0	0	0	0	0	0	0	0	0			
South-East Asia	a 3365	1185 430 11 732 608 271 (12 were (one was		(one was mixed types	140	0	130						
Western Pacifi	ic 1*	1	0	0	0	0	0	0	0	0			
Total	7141	1911	989	11	894	2824	674	434	0	233			

<sup>\*</sup> Imported case.

Wild Poliovirus Type 2 — Continued

Reported by: Vaccines and Biologicals Dept, World Health Organization, Geneva, Switzerland. Respiratory and Enteric Viruses Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Vaccine Preventable Disease Eradication Div, National Immunization Program, CDC.

**Editorial Note:** The apparent elimination of wild poliovirus type 2 represents a milestone for the global polio eradication initiative and an indication that the current strategies can eradicate poliovirus types 1 and 3. Since late 1999, the global polio laboratory network has processed tens of thousands of stool specimens, including those from countries at high risk for undetected poliovirus circulation. All polioviruses type 2 isolated since October 1999 have been vaccine derived, and the declining genetic diversity of the last wild isolates from India is consistent with the final phase of transmission.

Before the advent of the polio vaccine, wild poliovirus type 2 had worldwide distribution. As the vaccine was introduced, particularly in temperate climates, wild poliovirus type 2 transmission disappeared quickly. Transmission continued in countries with high population density and poor sanitation, but disappeared more quickly than other poliovirus types as vaccination rates improved. The high immunogenicity of type 2 polioviruses in OPV and the efficient spread of the vaccine-derived strain from vaccinated persons to close contacts may be important factors in its earlier disappearance.

Although the likelihood of undetected transmission decreases with time, evidence of interruption of type 2 transmission is reinforced with continued improvement in AFP surveillance, particularly in Africa, where the nonpolio AFP rate and rate of timely specimen collection remain inadequate in some high-risk countries. In addition, the increased laboratory workload generated by improving stool collection rates must be met with additional human and financial resources to maintain the quality and timeliness of specimen processing.

Although wild polioviruses types 1 and 3 have been more difficult to control than type 2, the experience in the Americas, Western Pacific, and Europe underscores the feasibility of global eradication of all wild poliovirus serotypes.

#### References

- 1. CDC. Progress toward global poliomyelitis eradication, 1999. MMWR 2000;49:349-54.
- 2. CDC. Progress toward the global interruption of wild poliovirus type 2 transmission, 1999. MMWR 1999;48:736–9.

# Severe Malnutrition Among Young Children — Georgia, January 1997–June 1999

In October 1999, the Georgia Department of Human Resources (GDHR) was notified of two cases of severe malnutrition in toddlers. Both cases were associated with the use of commercial alternative milk. In response, GDHR and CDC reviewed Georgia hospital records to assess the frequency and cause of hospitalized cases of rickets and protein energy malnutrition (PEM). The findings of this review indicated that, although no new cases were associated with milk alternatives, three children had PEM and six had vitamin D deficiency rickets. The children with rickets had been breast fed for approximately 6 months while receiving no vitamin D supplementation. Rickets is preventable through the adequate intake of vitamin D. The American Academy of Pediatrics (AAP) is examining vitamin D supplementation among breast-fed infants.

Malnutrition Among Young Children — Continued

For the purpose of this study, vitamin D deficient rickets was defined as having an *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) (1) code of 268.0 (active rickets), 268.9 (unspecified vitamin D deficiency), or 268.2 (unspecified osteomalacia) combined with a low serum 25-hydroxy-vitamin-D level (below laboratory reference range) and one or more of the following radiographic changes: osteopenia, widening of growth plates, fraying and cupping of the metaphysis, or craniomalacia. Severe PEM was defined as codes 260 (kwashiorkor), 261 (nutritional marasmus), or 262 (severe protein calorie malnutrition) combined with one or more of the clinical signs: edema, nonspecific dermatitis, thinning and streaking of hair, inadequate growth (below the fifth percentile weight-for-height), or weight loss.

To identify rickets and PEM cases among children aged 6 months–5 years, GDHR and CDC reviewed hospital discharge records for January 1997–June 1999, and confirmed cases by medical record review. Cases determined to have nutritional causes were evaluated through telephone interviews with parents, guardians, or attending physicians to assess the child's diet (e.g., use of alternative milk beverages and vitamin supplements) and time spent outdoors. Among children aged 6 months–5 years residing in Georgia during January 1997–June 1999, case findings and Georgia census data (2) suggest that five per one million children were hospitalized with vitamin D deficient rickets and two per million were hospitalized with severe PEM.

Forty cases were identified; 11 were rickets and 29 were severe PEM. Five rickets cases and 24 PEM cases were associated with metabolic disorders from congenital (n=seven) or genetic (n=12) abnormalities, premature birth (n=seven), or chronic diseases (n=three). Two children had disorders associated with chronic infectious diseases. Six cases of rickets and three cases of PEM were associated with primary nutritional deficiency. Interviews were conducted with a parent or guardian for three of the children with rickets and two with PEM. Of the remaining four cases, two families declined an interview and two could not be located.

The six children with rickets were male and age 8–21 months. Three children had skin complexions ranging from light to dark brown. The annual income level of two families was \$30,000–\$49,999; two families' income level was \$10,000–\$29,999; and the income level of two families was unknown. During this investigation, vitamin D deficient rickets was reported in a child aged 17 months who drank a soy beverage containing no vitamin D. This child also received a multivitamin supplement (30% of the recommended dose) 1 month before hospital admission. Six children received breast milk until age 8–20 months; none of the children received routine vitamin D supplementation while breast feeding. Two children were exposed to six and 21 hours of sunlight per week, respectively, one child "did not receive much sunlight," and two children received "minimal sunlight." Sun exposure was unknown for one child.

Three children with severe PEM and one child with kwashiorkor were age 6–22 months at diagnosis. The child with kwashiorkor drank a rice beverage with a low protein content. One family reported \$30,000–\$49,999 annual income; the income level of two families was unknown. Two children had eczema attributed to food allergies. Concern about allergies led to diet restrictions and subsequent PEM.

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Malnutrition Among Young Children — Continued

**Editorial Note**: Rickets and severe PEM are rare in Georgia, and each can be prevented through adequate nutritional intake. Rickets is caused by vitamin D deficiency and severe PEM by severe protein and energy (caloric) deficiency (*3,4*). Vitamin D is obtained from dietary sources or is synthesized in the skin by the action of ultraviolet (UV) light on the cholesterol precursor 7-dehydrocholesterol (7-DHC). Melanin in skin competes with 7-DHC for UV light, thus decreasing vitamin D synthesis (*3*). The vitamin D content of human milk is low (approximately 22 IU/L) (*5*). However, among most breast-fed infants, the combination of breast milk and sunlight exposure provides sufficient vitamin D. AAP recommends 400 IU per day vitamin D supplementation for breast-fed infants whose mothers are vitamin D deficient or for those infants not exposed to adequate sunlight (*5,6*). Skin complexion, environmental conditions, use of sunscreen, and the risk for developing skin cancer (*7,8*) complicate the determination of adequate sunlight.

The findings in this study are subject to at least two limitations. First, the extent of rickets in Georgia probably was underestimated because the study was limited to hospitalized children. Rickets and PEM are not reportable diseases, and no surveillance system or national rates exist for these conditions. ICD-9-CM codes alone do not distinguish nutritional deficiencies from other causes of rickets. Second, the parents of four of the nine children were not interviewed.

AAP is examining the recommendation for vitamin D supplementation among breast-fed infants. In addition, efforts are under way to assess the frequency of malnutrition associated with commercial or homemade alternative beverages. Clinicians and state health departments should report such cases by accessing the Food and Drug Administration's MedWatch program, http://www.fda.gov/medwatch/how.htm\* or by calling MedWatch at (800) FDA[332]-1088. Caretakers also should discuss a child's dietary intake and nutritional needs with their health-care provider to ensure that these needs are met. Information on the nutritional requirements of children is available from AAP, http://www.aap.org/pubserv\*.

#### References

- Public Health Service and Health Care Financing Administration. International classification of diseases, 9th revision, clinical modification. Washington, DC: Public Health Service, 1997.
- 2. US Bureau of the Census, Population Estimates Program, Population Division. Population Estimate for the U.S. and states by single year: January 1997–June 1999. Available at http://www.census.gov/population/estimates/state/stats/st-99-10.txt. Accessed March 2001.
- 3. Hollick MF. Vitamin D. In: Shils ME, Olson JA, Shike M, Ross AC, eds. Modern nutrition in health and diseases. Baltimore, Maryland: Williams and Wilkins, 1999:329–44.
- Torun B, Chew F. Protein-energy malnutrition. In: Shils ME, Olson JA, Shike M, Ross AC, eds. Modern nutrition in health and diseases. Baltimore, Maryland: Williams and Wilkins, 1999:936–88.
- 5. American Academy of Pediatrics. Vitamins: vitamin D. In: Kleinman RE, ed. Pediatric nutrition handbook, 4th edition. Elk Grove Village, Illinois: American Academy of Pediatrics, 1998:275–7
- American Academy of Pediatrics Work Group on Breast-feeding. Breast-feeding and the use of human milk. Pediatrics 1997;100:1035–9.

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

Malnutrition Among Young Children — Continued

- 7. Armstrong BK. Melanoma: childhood or lifelong sun exposure. In: Grob JJ, Stern RS, Mackie RM, Weinstock WA, eds. Epidemiology, causes, and prevention of skin diseases. Malden, Massachusetts: Blackwell Science, 1997:63–71.
- 8. Gallagher RP, Hill GB, Bajdik CD, et al. Sunlight exposure, pigmentation factors, and risk of non-melanocytic skin cancer, I: basal cell carcinoma. Arch Dermatol 1995;131:157–63.

# Outbreak of Community-Acquired Pneumonia Caused by *Mycoplasma pneumoniae* — Colorado, 2000

On May 18, 2000, the Colorado Department of Public Health and Environment (CDPHE) was contacted by a family physician in Moffat County, Colorado (1998 population: 12,700), about a large number (>50) of community-acquired pneumonia cases diagnosed by chest radiograph in a group practice over several months. An investigation by state public health officials and CDC implicated *Mycoplasma pneumoniae* as the cause of illness. This report summarizes the results of the investigation and underscores the importance of investigating outbreaks of severe unexplained respiratory illness to enable implementation of appropriate treatment and control measures.

During January–July 2000, 109 persons were diagnosed with pneumonia by chest radiograph in group practice A (the largest outpatient practice in the county), compared with 21 persons in the same practice during January–June 1999. A case was defined as an acute infiltrate consistent with pneumonia on a chest radiograph in a person aged 2–49 years with illness onset during January–July 2000. Medical records were abstracted to collect demographic and clinical information.

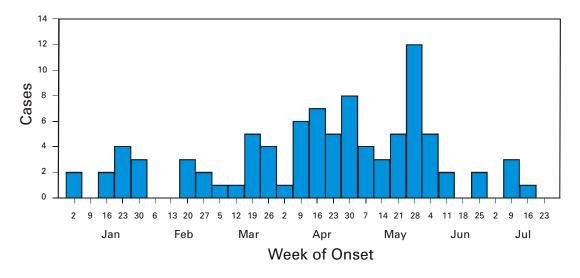
Following recognition of the outbreak, throat and nasopharyngeal swab specimens were collected from acutely ill persons who agreed to be tested. During early June, specimens from seven case-patients underwent polymerase chain reaction (PCR) testing for bacterial pathogens and for viral culture at CDC. Acute and convalescent serum specimens were available from six patients (including five of the seven patients for whom PCR was performed and one patient for whom PCR testing was not performed); these paired serum specimens were tested at CDC for antibodies by the Remel test. The paired serum specimens also were tested for complement fixation (CF) antibody titers to respiratory viruses and *M. pneumoniae* at the CDPHE laboratory.

Ninety-one patients had illness that met the case definition; 64 (70%) had illness onset during April–July (Figure 1). The median age was 11 years; 59 (65%) were aged 5–14 years, and 52 (57%) were male. Records of 77 (85%) patients were reviewed. Symptoms included cough (77 [100%]), fever (72 [94%]), sputum production (44 [57%]), and abnormal lung auscultation findings (54 [70%]). Three (3%) patients were hospitalized.

All eight patients tested had laboratory evidence of *M. pneumoniae* infection. Specimens from four patients were positive by PCR and the Remel test and had a fourfold rise in CF titers; two patients were positive by PCR alone (serum not collected); one patient had a positive Remel test and two convalescent-phase CF titers ≥1:128, consistent with recent infection (PCR not performed); and one patient had a positive Remel test and two convalescent-phase CF titers of 1:32, consistent with recent infection (PCR negative). PCR testing for nucleic acid of *Chlamydophila pneumoniae* was negative as was viral culture and serologic testing for viral respiratory pathogens, including influenza and respiratory syncytial virus.

Mycoplasma pneumoniae — Continued

FIGURE 1. Number\* of cases of community-acquired pneumonia, by week of onset — Moffat County, Colorado, January–July 2000



\*n=91.

In mid-June, CDPHE, in conjunction with the county public health nursing service, notified local health-care providers that *M. pneumoniae* had been confirmed by laboratory testing and provided information about the illness, including appropriate antibiotic treatment and treatment of symptomatic close contacts. Local media reports provided the community with similar information.

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**Editorial Note:** *M. pneumoniae* is a common cause of acute respiratory tract infections (e.g., pharyngitis, tracheobronchitis, and pneumonia), especially in school-aged children. Although some infections can be fatal, most illnesses attributed to *M. pneumoniae* are relatively mild, and pneumonia caused by *Mycoplasma* rarely results in hospitalization (1,2). Outbreaks can occur in closed settings (e.g., institutions and summer camps) or can occur as communitywide epidemics (3,4). Communitywide epidemics often may not be recognized (5).

The highest incidence rates of pneumonia caused by *Mycoplasma* are among children aged 5–9 years followed by children aged 10–14 years (6). Children aged 2–4 years have higher rates than adults, although *M. pneumoniae* accounts for a low proportion of all pneumonias in this age group for which viral and other bacterial etiologies predominate (6). During outbreaks, the estimated frequency of pneumonia among school-aged children with *M. pneumoniae* infection has been 10%–19% (4,6). The incubation period for *Mycoplasma* is approximately 3 weeks (7). High rates of transmission have been documented within families, with a high proportion of secondary cases involving lower

Mycoplasma pneumoniae — Continued

respiratory tract infection (7,8). In a study of community spread, transmission of Myco-plasma within schools was relatively low compared with spread within families; clustering of infections also occurred among neighborhood playmates (9).

The findings in this report are subject to at least four limitations. First, case ascertainment was conducted at only one of several medical practices in the affected community. Second, case ascertainment included only cases of pneumonia rather than the broader spectrum of acute respiratory illness that probably was occurring. Third, determination of the beginning of the outbreak was not possible with available data. Fourth, laboratory testing was performed only during a limited portion of the outbreak because acute isolates were available for only a fraction of possible patients following recognition of the outbreak. A portion of the cases, especially those occurring earlier in the outbreak, may have been attributed to other agents such as influenza and respiratory syncytial virus. However, because of the relatively mild nature of the symptoms, the prolonged duration of the outbreak, the occurrence of cases among school-aged children, and the laboratory results, *M. pneumoniae* was most likely the cause of the outbreak.

Definitive diagnosis of *M. pneumoniae* traditionally has depended upon isolation of *M. pneumoniae* or a fourfold rise in CF antibody titers between acute- and convalescent-phase serum specimens collected 4 weeks apart; isolation may require several weeks and acute and convalescent titers often are difficult to collect. Single elevated CF antibody titers are of limited use for clinical diagnosis. Although the CF and Remel tests both indicated *Mycoplasma* infection on the six paired serum specimens tested, the Remel test is now preferred because of its improved specificity. PCR testing of oropharyngeal or nasopharyngeal swabs offers more sensitive and rapid diagnosis of acute *M. pneumoniae* infections; however, this test is not widely available (10).

Macrolides and tetracycline are the antimicrobials of choice for *Mycoplasma* infections. Tetracycline should not be used for children aged <8 years because it may cause permanent dental discoloration. Prophylactic antimicrobial therapy with azithromycin substantially reduces the secondary attack rate in institutional outbreaks (3). No data support routine chemoprophylaxis during community outbreaks of *M. pneumoniae*.

Evaluation of clusters or outbreaks of acute respiratory illness may be important to determine appropriate treatment of infected persons and appropriate control measures, including use of chemoprophylaxis. The possible etiologic agents depend on the predominant acute respiratory syndrome observed (i.e., prolonged or paroxysmal cough, bronchitis, influenza-like illness, pneumonia, and rapidly progressive pneumonia). As demonstrated in this outbreak, factors such as the population affected, incubation period, and clinical features may suggest a particular agent and help to guide laboratory testing. CDC can assist local, state, and territorial health departments with the investigation of acute respiratory disease outbreaks of unknown etiology.

#### References

- 1. Foy HM. Infections caused by *Mycoplasma pneumoniae* and possible carrier state in a different population of patients. Clin Infect Dis 1993;17:37–46.
- 2. Talkington DF, Thacker WL, Keller DW, Jensen JS. Diagnosis of *Mycoplasma pneumoniae* infection in autopsy and open lung biopsy tissues by nested PCR. J Clin Microbiol 1998;36:1151–3.
- 3. Klausner JD, Passaro D, Rosenberg J, et al. Enhanced control of an outbreak of *Myco-plasma pneumoniae* pneumonia with azithromycin prophylaxis. J Infect Dis 1998;177:161–6.
- 4. Broome CV, LaVenture M, Kaye HS, et al. An explosive outbreak of *Mycoplasma pneumoniae* infection in a summer camp. Pediatrics 1980;66:884–8.

Mycoplasma pneumoniae — Continued

- 5. Clyde WA Jr. Clinical overview of typical *Mycoplasma pneumoniae* infections. Clin Infect Dis 1993;17:32–6.
- 6. Foy HM, Kenny GE, Cooney MK, Allan ID. Long-term epidemiology of infections with *Mycoplasma pneumoniae*. J Infect Dis 1979;139:681–7.
- 7. Foy HM, Grayston JT, Kenny GE, Alexander ER, McMahan R. Epidemiology of *Myco-plasma pneumoniae* infection in families. JAMA 1966;197:137–44.
- 8. Balassanian N, Robbins FC. *Mycoplasma pneumoniae* infection in families. N Engl J Med 1967;277:719–25.
- 9. Foy HM, Kenny GE, McMahan R, Kaiser G, Grayston JT. *Mycoplasma pneumoniae* in the community. Am J Epidemiol 1971;93:55–67.
- Feikin DR, Moroney JF, Talkington DF, et al. An outbreak of acute respiratory disease caused by *Mycoplasma pneumoniae* and adenovirus at a federal service training academy: new implications from an old scenario. Clin Infect Dis 1999;29:1545–50.

## Notice to Readers

## Publication of Surgeon General's Report on Smoking and Health

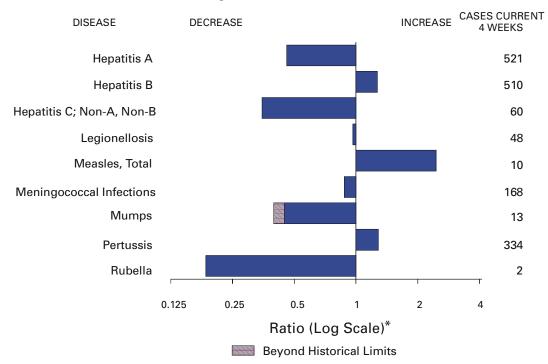
The Surgeon General's report, Women and Smoking (1), was released on March 27, 2001. This report updates and expands the 1980 Surgeon General's report, The Health Consequences of Smoking for Women, and examines various facets of smoking among women: patterns of tobacco use, health consequences of smoking, social and individual factors influencing cigarette smoking and smokeless tobacco use, and prevention and cessation programs and policies.

Additional information about the report and a free copy of the executive summary are available from CDC's Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC, Mailstop K-50, 4770 Buford Highway, NE, Atlanta, Georgia 30341-3724; telephone (770) 488-5705. Copies of the full report (stock no. 017-023-00207-4) can be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402-9328; fax (202) 512-2250. Copies of the full report, executive summary, and the "At a Glance" pamphlet on the report are available on the World-Wide Web, http://www.cdc.gov/tobacco.

#### Reference

 US Department of Health and Human Services. Women and smoking: a report of the Surgeon General. Atlanta, Georgia: US Department of Health and Human Services, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2001.

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



<sup>\*</sup> Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending March 24, 2001 (12th Week)

	Cum. 2001		Cum. 2001
Anthrax Brucellosis* Cholera Cyclosporiasis* Diphtheria Ehrlichiosis: human granulocytic (HGE)*	- 14 - 22 - 5	Poliomyelitis, paralytic Psittacosis* Ofever* Rabies, human Rocky Mountain spotted fever (RMSF) Rubella, congenital syndrome	3 2 - 21
human monocytic (HME)* Encephalitis: California serogroup viral* eastern equine* St. Louis* western equine*	3	Streptococcal disease, invasive, group A Streptococcal toxic-shock syndrome* Syphilis, congenital <sup>§</sup> Tetanus Toxic-shock syndrome	662 15 5 2 33
Hansen disease (leprosy)* Hantavirus pulmonary syndrome*† Hemolytic uremic syndrome, postdiarrheal* HIV infection, pediatric*§ Plague	9 2 11 37 -	Trichinosis Tularemia* Typhoid fever Yellow fever	2 4 30

<sup>-:</sup> No reported cases.
\*Not notifiable in all states.
\*Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).

\*Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).

Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update February 27, 2001.

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

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 24, 2001, and March 25, 2000 (12th Week)

		Tuning it							coli O157:H7	
	Cum.	Cum.	Chlan Cum.	Cum.	Cum.	oridiosis Cum.	NET Cum.	Cum.	PH Cum.	Cum.
Reporting Area UNITED STATES	2001 <sup>§</sup> 5,820	<b>2000</b> 6,226	<b>2001</b> 126,779	2000 153,639	<b>2001</b> 277	<b>2000</b> 288	<b>2001</b> 193	<b>2000</b> 312	<b>2001</b> 129	<b>2000</b> 255
NEW ENGLAND	200	500	4,638	5,264	11	22	24	30	18	32
Maine N.H.	3 12	6 6	208 227	308 246	-	3	3 5	3 4	3 3	2
Vt. Mass.	9 118	360	132 1,934	131 2,246	5 2	6 6	1 12	1 11	10	2 10
R.I. Conn.	24 34	17 111	688 1,449	534 1,799	2 2	2 5	3	11	2	14
MID. ATLANTIC	1,180	1,591	3,778	13,919	10	20	14	29	10	43
Upstate N.Y. N.Y. City	29 740	65 985	N -	N 5,814	10 -	16 -	14 -	<b>28</b> -	6 1	<b>35</b> -
N.J. Pa.	241 170	387 154	826 2,952	2,981 5,124	-	1 3	- N	1 N	3	3 5
E.N. CENTRAL	463	591	16,653	26,527	96	62	38	56	18	17
Ohio Ind.	77 45	91 56	249 3,295	7,308 3,008	26 11	13 3	17 8	11 3	10 1	6 4
III. Mich.	226 97	354 67	4,809 6,253	7,597 4,728	26	7 7	5 4	19 10	4	3
Wis. W.N. CENTRAL	18 110	23 147	2,047 6,015	3,886 8,767	33 12	32 17	4 21	13 52	3 16	4 54
Minn. Iowa	29 15	31 10	1,307 610	1,898 875	- 5	4 3	3	11 10	8 1	24 5
Mo. N. Dak.	38 1	67	1,439 213	3,102 229	4	5 1	10	21 2	4	13 4
S. Dak.	9	2 7	434 656	416 807	- 3	1 2	1	1 3	1	1 4
Nebr. Kans.	18	30	1,356	1,440	-	1	4	4	2	3
S. ATLANTIC Del.	1,673 37	1,508 25	28,729 703	29,031 690	63	45 -	27	<b>2</b> 8	10	17 -
Md. D.C.	131 166	154 113	3,030 647	2,714 657	17 3	5 -	1	5 -	Ū	1 U
Va. W. Va.	137 12	113 7	3,974 512	3,494 487	5	1	5 1	6 2	4	5 1
N.C. S.C.	101 171	74 153	4,457 3,006	4,470 3,731	11	3	13 1	6	2	2
Ga. Fla.	187 731	180 689	5,502 6,898	5,541 7,247	13 14	27 9	2 4	3 6	2 2	3 5
E.S. CENTRAL	360	279	10,872	11,893	8	11	9	17	4	15
Ky. Tenn.	51 132	37 104	2,018 3,411	1,830 3,278	2	- 1	1 4	6 5	2 1	4 9
Ala. Miss.	95 82	91 47	3,071 2,372	4,020 2,765	2 4	7 3	4	1 5	- 1	2
W.S. CENTRAL Ark.	629 45	532 20	22,302 1,995	23,016	6 2	14 1	15	18 4	18	28 3
La.	188	91	4,097	1,135 4,449	3	2	-	-	6	7
Okla. Tex.	36 360	17 404	2,283 13,927	1,878 15,554	1 -	1 10	5 10	4 10	5 7	3 15
MOUNTAIN Mont.	241 5	210 3	7,025 384	8,996 271	22 1	20 1	17 2	29 8	10	12
ldaho Wyo.	5	3	421 175	451 181	3	1 1	2	4 2	-	1 2
Colo. N. Mex.	40 15	52 25	600 1,141	2,433 1,121	12 3	7 1	7	10	4	5
Ariz. Utah	93 23	55 28	3,066 270	3,085 572	1 2	2 6	5	3 1	4	3 1
Nev.	60	43	968	882	-	1	1	1	i	-
PACIFIC Wash.	964 117	868 101	26,767 3,112	26,226 2,842	49 N	77 U	28 5	53 5	25 5	37 11
Oreg. Calif.	38 798	22 721	1,309 21,103	1,162 20,938	8 41	2 75	3 20	8 36	2 16	9 13
Alaska Hawaii	2 9	- 24	544 699	559 725	-	-	-	4	2	4
Guam	5	7	-	-	-	-	N	N	U	
P.R. V.I.	158 1	150 5	1,118 U	U U	Ü	Ü	Ü	1 U	U U	U U U
Amer. Samoa C.N.M.I.	-	-	U U	U U	U U	U U	U U	U U	U U	U

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

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

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

† Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update February 27, 2001.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending March 24, 2001, and March 25, 2000 (12th Week)

	Gono	rrhea	Hepati Non-A,	tis C;	Legionel		Listeriosis	Lyı Dise	
Reporting Area	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2001	Cum. 2000
UNITED STATES	59,953	79,476	357	758	133	144	67	452	918
NEW ENGLAND Maine N.H.	1,310 32 29	1,493 17 22	4 - -	5 - -	4 - -	15 2 2	8 - -	134 - 42	137 - 15
Vt. Mass.	19 594	10 618	2 2	2 3	2 1	- 8	- 6	1 14	40
R.I. Conn.	169 467	135 691	-	-	1	- 3	2	77	-0 - 82
MID. ATLANTIC Upstate N.Y.	3,403 1,435	7,842 1,186	18 11	148 11	8 7	25 12	5 3	203 168	630 229
N.Y. City N.J. Pa.	517 1,451	2,523 1,698 2,435	- 7	129 8	- - 1	13	2	- - 35	85 316
E.N. CENTRAL Ohio	8,519 186	15,888 4,122	48 4	<b>6</b> 5	43 21	46 20	9 2	10 10	23 2
Ind. III.	1,453 2,741	1,353 5,283	2	- 8	5	7 4	1	-	1 1
Mich. Wis.	3,458 681	3,443 1,687	42 -	57 -	13 4	8 7	5 1	Ū	19
W.N. CENTRAL Minn.	2,534 411	3,688 723	61	102	11 1	5 1	2	11 8	14 6
Iowa Mo. N. Dak.	202 1,013 9	224 1,803 11	- 58 -	- 98 -	2 5 -	2 2 -	- 1 -	3	3
S. Dak. Nebr. Kans.	47 223 629	61 279 587	2 1	1 3	2 1	-	- - 1	- - -	1 4
S. ATLANTIC Del.	17,931 377	22,337 379	20	16 1	22	27 2	9	75 -	93 12
Md. D.C.	1,939 667	1,828 497	5	2	6 1	8	1	64 5	68
Va.	2,170	2,260	-	-	2	3	1	2	5 4
W. Va. N.C.	105 3,669	130 4,060	6	1 7	N 2	N 3	1 -	1 2	4
S.C. Ga.	2,272 2,860	4,570 3,506	2	-	1	2 1	2	-	-
Fla.	3,872	5,107	7	5	10	8	4	1	-
E.S. CENTRAL Ky.	7,028 798	8,288 736	49 1	116 12	13 5	3 1	4 1	2 2	-
Tenn. Ala.	2,230 2,495	2,502 2,994	13 1	22 3	6 2	1 1	2 1	-	-
Miss.	1,505	2,056	34	79	-	-	-	-	-
W.S. CENTRAL Ark.	11,109 1,248	11,993 558	102 1	247 3	1 -	4	2 1	-	4
La. Okla.	2,852 1,125	3,114 880	52 1	143 -	1 -	2	-	-	2
Tex.	5,884	7,441	48	101	-	2	1	-	2
MOUNTAIN Mont.	2,207 19	2,490 2	22	19 -	8 -	8	6 -	1 -	-
ldaho Wyo.	22 15	25 16	1 3	-	-	1 -	-	-	-
Cólo. N. Mex.	772 184	811 223	8 6	10 4	3 1	4	1 2	-	-
Ariz. Utah	846 26	1,022 76	1	4	3	3	1	-	-
Nev.	323	315	3	1	1	-	2	1	-
PACIFIC Wash.	5,912 707	5,457 528	33 8	40 5	23 5	11 5	22 1	16 1	17 -
Oreg. Calif.	232 4,780	135 4,635	4 21	9	N 18	Ň 6	2 19	2 13	1 16
Alaska	60	65	-	26 -	-	-	-	-	-
Hawaii Guam	133	94	-	-	-	-	-	N -	N -
P.R.	294 U	104	- U	1 U	2 U	- - U	-	N U	N U
V.I. Amer. Samoa C.N.M.I.	Ü	U U U	U	U	Ü	U	-	Ü	Ü

N: Not notifiable.

U: Unavailable.

-: No reported cases.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending March 24, 2001, and March 25, 2000 (12th Week)

		_	<u> </u>	Salmonellosis*						
					TSS	Pl	ILIS			
			Cum. 2000				Cum. 2000			
166	184	929	1,137	4,039	5,106	3,338	4,744			
17	5	106	123	344	346	307	368			
1	1 -	3	29 2	29	29 23	24	15 25			
- 5	- 4	23 25			23 204		27 205			
-	-	11	6	18	8	<b>2</b> 8	21 75			
							75 875			
7	10	114	150	138	143	64	235 259			
-	5	26	27	-	239	111	147			
							234			
5	2	-	2	241	182	157	431 153			
8 -		1 -	-	52 147		43 144	92 1			
12	8 1	3	6 6	117 65	122 148	98 49	128 57			
4	10	65	88	250	245	269	324			
1 1	4	12 14	22 9	31 45	39 29	88 37	100 34			
i	1	4	2	92	79 4	98	97 17			
-	-	9	26	22	12	12	19			
- 1	3	15	16	18 41	35 47	29	24 33			
49	48	417	405	1,093	886	688	777			
20	22	74	10 84	136	14 145	96	18 142			
4 9	13	- 78	104	16 122	- 94	U 79	U 104			
- 1	-	32 121	26 106	8 218	23 162	16 115	19 120			
2	-	18	24	132	85	150	73 223			
11	8	43	23	281	227	28	78			
8	7	18	39	291	271 56	97 20	212 39			
3	-	10	25	74	61	56 56	95			
-	1	4 -	6 -	50	97 57	11	68 10			
3	2	74	197	249	507	305	346			
1	2	-		32	58	95	25 76			
1 1	-	15 59	13 184	19 148	46 354	23 158	45 200			
15	13	35	38	328	450	268	382			
1 1	1 -	-	-	9 12	18 26	4	- 27			
9	- 7	10	19 -	9 97	6 119	6 80	4 97			
1	-	1	2	40	46	39	97 39 132			
1	2	-	-	35	65	35	60			
		- 70	<b>3</b> 8				23 1,029			
1	3	-	-	69	58	37	131			
30	39	46	31	567	879	284	78 765			
1 -	2	24 -	7 -	8 -	13 51	- 65	14 41			
-	-	-	-	-	-	Ų	Ü			
Ū	U	U	U	58 U	U	U	Ü			
U U	U U	U U	U U	U U	U U	U U	U U			
	Cum. 2001  166  17  1  5  10  8  7  -  1  25  8  12  -  4  1  1  20  4  1  1  20  4  9  1  1  1  8  2  1  1  1  1  1  5  1  U  U	2001         2000           166         184           17         5           1         1           -         -           5         4           -         -           10         -           8         20           7         10           -         -           1         5           25         28           5         2           8         1           -         16           12         8           -         16           12         8           -         1           -         2           1         3           20         22           4         9           13         -           1         5           2         -           1         8           7         2           1         -           1         -           2         -           1         2           1         -           2         -           1 <td>Cum. 2001         Cum. 2000         Cum. 2001           166         184         929           17         5         106           1         1         15           1         23           5         4         25           -         11         10           -         23         11           10         -         29           8         20         140           7         10         114           -         -         26           1         5         26           1         5         26           1         5         26           1         5         -           25         28         4           5         26         -           1         5         -           25         28         4           1         1         -           2         -         -           1         4         12           1         4         12           1         4         12           1         4         17           2<td>Cum. 2001         Cum. 2000         Cum. 2000         Cum. 2000           166         184         929         1,137           17         5         106         123           1         1         15         29           1         -         -         23         7           5         4         25         38         -           -         -         11         6         6           10         -         29         41         4         25         38         -           -         -         11         6         6         10         -         29         41         6         10         -         29         41         4         25         38         -         -         11         6         10         195         7         10         114         150         10         114         150         10         114         150         11         15         12         1         1         14         14         15         12         1         1         1         1         1         1         1         1         1         1         1         1         1</td><td>Cum.         Cum.         Cum.         Cum.         Cum.           2001         20001         2000.         2001           166         184         929         1,137         4,039           17         5         106         123         344           1         1         15         29         14           1         1         -         33         2         29           -         -         23         7         18         14           -         -         -         11         6         18           10         -         -         11         6         18           10         -         -         11         6         18           10         -         -         9         41         51           10         -         -         9         41         51           10         -         -         12         41         15           1         -         -         -         17         -         -         -         -         -         -         -         -         -         -         -         -         -</td><td>Malaria         Rables, Animal         NETSS           Cum.         Cum.</td><td>  Malaria   Rabies, Animal   NETSS   PF    </td></td>	Cum. 2001         Cum. 2000         Cum. 2001           166         184         929           17         5         106           1         1         15           1         23           5         4         25           -         11         10           -         23         11           10         -         29           8         20         140           7         10         114           -         -         26           1         5         26           1         5         26           1         5         26           1         5         -           25         28         4           5         26         -           1         5         -           25         28         4           1         1         -           2         -         -           1         4         12           1         4         12           1         4         12           1         4         17           2 <td>Cum. 2001         Cum. 2000         Cum. 2000         Cum. 2000           166         184         929         1,137           17         5         106         123           1         1         15         29           1         -         -         23         7           5         4         25         38         -           -         -         11         6         6           10         -         29         41         4         25         38         -           -         -         11         6         6         10         -         29         41         6         10         -         29         41         4         25         38         -         -         11         6         10         195         7         10         114         150         10         114         150         10         114         150         11         15         12         1         1         14         14         15         12         1         1         1         1         1         1         1         1         1         1         1         1         1</td> <td>Cum.         Cum.         Cum.         Cum.         Cum.           2001         20001         2000.         2001           166         184         929         1,137         4,039           17         5         106         123         344           1         1         15         29         14           1         1         -         33         2         29           -         -         23         7         18         14           -         -         -         11         6         18           10         -         -         11         6         18           10         -         -         11         6         18           10         -         -         9         41         51           10         -         -         9         41         51           10         -         -         12         41         15           1         -         -         -         17         -         -         -         -         -         -         -         -         -         -         -         -         -</td> <td>Malaria         Rables, Animal         NETSS           Cum.         Cum.</td> <td>  Malaria   Rabies, Animal   NETSS   PF    </td>	Cum. 2001         Cum. 2000         Cum. 2000         Cum. 2000           166         184         929         1,137           17         5         106         123           1         1         15         29           1         -         -         23         7           5         4         25         38         -           -         -         11         6         6           10         -         29         41         4         25         38         -           -         -         11         6         6         10         -         29         41         6         10         -         29         41         4         25         38         -         -         11         6         10         195         7         10         114         150         10         114         150         10         114         150         11         15         12         1         1         14         14         15         12         1         1         1         1         1         1         1         1         1         1         1         1         1	Cum.         Cum.         Cum.         Cum.         Cum.           2001         20001         2000.         2001           166         184         929         1,137         4,039           17         5         106         123         344           1         1         15         29         14           1         1         -         33         2         29           -         -         23         7         18         14           -         -         -         11         6         18           10         -         -         11         6         18           10         -         -         11         6         18           10         -         -         9         41         51           10         -         -         9         41         51           10         -         -         12         41         15           1         -         -         -         17         -         -         -         -         -         -         -         -         -         -         -         -         -	Malaria         Rables, Animal         NETSS           Cum.         Cum.	Malaria   Rabies, Animal   NETSS   PF			

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

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

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending March 24, 2001, and March 25, 2000 (12th Week)

	weeks end			<u>001, and M</u>		2000 (12th	ı Week)	
	NET		llosis* F	PHLIS	Sy (Primary 8	philis & Secondary)	Tube	rculosis
Reporting Area	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	2,001	3,223	1,114	2,146	993	1,424	1,422	2,295
NEW ENGLAND	30	71	28	56	9	21	70	66
Maine N.H.	1 -	2 1	1 -	- 1	-	-	6	2 1
Vt. Mass.	23	1 51	19	38	- 6	- 17	1 38	- 41
R.I. Conn.	- 6	6 10	1 7	6 11	3	1 3	3 22	4 18
MID. ATLANTIC	113	214	150	295	23	61	208	387
Upstate N.Y. N.Y. City	94	133	2 65	84 124	4	2 26	36 22	32 232
N.J.	-	51	39	42	7	11	93	90
Pa.	19	30	44	45	12	22	57	33
E.N. CENTRAL Ohio	340 106	551 31	183 54	199 27	127 14	303 19	197 24	226 44
Ind. III.	66 78	62 214	11 68	11 2	34 15	99 111	14 107	15 135
Mich. Wis.	72 18	182 62	48 2	153 6	57 7	56 18	30 22	19 13
W.N. CENTRAL	230	193	216	146	9	24	77	94
Minn. Iowa	66 43	42 23	126 31	52 31	6	3 6	41 9	37 8
Mo.	67	98	46	45	2	12	16	36
N. Dak. S. Dak.	9 4	- 1	1 1	1 -	-	-	1	3
Nebr. Kans.	14 27	19 10	- 11	11 6	- 1	2 1	10	3 7
S. ATLANTIC	336	361	103	124	425	467	309	321
Del. Md.	3 23	3 26	- 4	2 8	1 46	2 86	32	- 46
D.C. Va.	14 25	14	U 6	U 14	9 47	16 31	11 37	29
W. Va.	4	2	6	2	-	1	6	9
N.C. S.C.	94 25	18 3	47 11	12 3	104 62	121 41	27 19	49 18
Ga. Fla.	26 122	39 256	25 4	52 31	45 111	81 88	50 127	73 97
E.S. CENTRAL	182	160	38	115	120	215	117	171
Ky. Tenn.	69 20	35 72	16 16	21 88	11 60	19 140	15 31	14 62
Ala. Miss.	37 56	9 44	6	4 2	25 24	27 29	60 11	68 27
W.S. CENTRAL	217	548	233	177	155	205	45	389
Ark. La.	109 14	48 72	65 48	3 37	12 32	16 56	27 -	20 6
Okla. Tex.	3 91	8 420	120	6 131	18 93	46 87	18	9 354
MOUNTAIN	156	223	96	116	42	39	65	109
Mont. Idaho	- 5	22	-	- 15	-	-	- 4	4
Wyo.	_	1	-	1	-	-	-	-
Colo. N. Mex.	33 29 76	40 23 81	22 23 36	18 14	2	1 3	18 5	10 18
Ariz. Utah	5	7	7	32 10	28 6	33	18 5	38 7
Nev.	8	49	8	26	2	2	15	32
PACIFIC Wash.	397 43	902 165	67 37	918 201	83 19	89 10	334 38	532 34
Oreg. Calif.	22 331	<i>7</i> 9 645	22	46 660	3 58	2 77	- 287	1 464
Alaska Hawaii	1	4 9	- 8	3 8	3	-	9	13 20
Guam	-	-	U	U	-	-	-	-
P.R. V.I.	5 U U	10 U	Ü	Ŭ	74 U	43 U	19 U	21 U U
Amer. Samoa	Ü	U	U	U	U	U	U	Ü
C.N.M.I.	U	U	U	U	U	U	U	U

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

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

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending March 24, 2001, and March 25, 2000 (12th Week)

	∐ infl	ienzae,	1		iral), By Ty		1	Measles (Rubeola)						
		i <i>enzae,</i> isive	A	epatitis (Vi	В	<del>Je</del>	Indige	nous	Impo		Tota	l		
Reporting Area	Cum. 2001 <sup>†</sup>	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	2001	Cum. 2001	2001	Cum. 2001	Cum. 2001	Cum. 2000		
UNITED STATES	294	309	1,816	2,855	1,175	1,198	1 2001	14	4	13	27	15		
NEW ENGLAND	12	30	87	85	13	25	-	3	-	1	4	-		
Maine N.H.	-	1 4	1 3	3 7	1 4	1 6	-	-	-	-	-	-		
Vt. Mass.	12	3 18	2 32	3 37	1 1	3 1	-	1 2	-	- 1	1 3	-		
R.I. Conn.	-	 - 4	4 45	4 31	6	2 12	-	-	-		-	-		
MID. ATLANTIC	21	32	45 54	89	36	101	-	1		2	3	6		
Upstate N.Y. N.Y. City	13	20	40	54	24	22	-	-	-	2	2	- 6		
N.J.	7	10	-	7	-	10	-	-	-	-	-	-		
Pa. E.N. CENTRAL	1 34	2 53	14 205	28 418	12 152	69 122	-	1	4	- 7	1 7	3		
Ohio	23	16	65	92	31	24	-	-	2	2	2	2		
Ind. III.	6	4 21	10 42	11 180	3 9	5 2	-	-	2	2 3	2 3	-		
Mich. Wis.	2 3	3 9	88 -	122 13	109 -	90 1	-	-	-	-	-	1 -		
W.N. CENTRAL	10	12	120	241	47	75	1	4	-	-	4	-		
Minn. Iowa	4 1	7 -	7 9	23 28	2 5	4 11	1 -	1 -	-	-	1 -	-		
Mo. N. Dak.	4	4 1	37	147	32	48	-	3	-	-	3	-		
S. Dak.	- 1	-	1	- 8	1	- 8	-	-	-	-	-	-		
Nebr. Kans.	1 -	-	17 49	35	5 2	4	-	-	-	-	-	-		
S. ATLANTIC	113	75 -	388	294	255	208 4	-	2	-	1	3	-		
Del. Md.	29	25	56	5 37	32	37	-	2	-	1	3	-		
D.C. Va.	9	14	12 35	- 45	3 26	34	-	-	-	-	-	-		
W. Va. N.C.	4 17	2 6	1 29	29 58	3 51	- 81	-	-	-	-	-	-		
S.C. Ga.	2 21	3 19	13 117	5 41	1 71	2 13	-	-	-	-	-	-		
Fla.	31	6	125	74	68	37	-	-	-	-	-	-		
E.S. CENTRAL Ky.	20	15 9	67 8	126 8	86 8	98 16	-	-	-	-	-	-		
Tenn.	10 9	4 2	32 23	43 19	35 26	43 7	-	-	-	-	-	-		
Ala. Miss.	1	-	4	56	26 17	32	-	-	-	-	-	-		
W.S. CENTRAL Ark.	5	21	222 16	558 42	183 22	134 17	-	1	-	-	1	-		
La.	1	7	13	22	12	36	-	-	-	-	-	-		
Okla. Tex.	4 -	14 -	42 151	92 402	22 127	17 64	-	1	-	-	1	-		
MOUNTAIN	62	39	216	193	124	100	-	-	-	1	1	-		
Mont. Idaho	1	2	4 23	1 8	1 4	3 4	-	-	-	1	1	-		
Wyo. Colo.	- 11	- 11	1 26	3 45	- 27	23	U -	-	U	-	-	-		
N. Mex. Ariz.	10 33	11 11	7 109	22 85	34 43	23 34 28	-	-	-	-	-	-		
Utah	1 6	2 2	18 28	13 16	4	28 3 5	-	-	-	-	-	-		
Nev. PACIFIC	6 17	32	26 457	851	11 279	335	-	3	-	1	4	6		
Wash.	1	2	19	49	20	9	-	-	-	-	-	3		
Oreg. Calif.	13 2	8 11	24 406	70 723	39 218	29 290	-	2 1	-	1	2 2	3		
Alaska Hawaii	1 -	1 10	8 -	3 6	2	2 5	-	-	-	_	-	-		
Guam	-	-	-	-	-	-	U	-	U	-	-	-		
P.R. V.I.	Ū	1 U	26 U	86 U	12 U	61 U	Ū	Ū	Ū	Ū	Ū	Ū		
Amer. Samoa C.N.M.I.	U U	U U	U U	U U	U	U U	U U	U U	U U	U U	U U	U U		

N: Not notifiable. U: Unavailable. -: No reported cases.
\*For imported measles, cases include only those resulting from importation from other countries.

† Of 55 cases among children aged <5 years, serotype was reported for 24, and of those, four were type b.

TABLE III. (Cont'd) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending March 24, 2001, and March 25, 2000 (12th Week)

	Mening	ococcal		ren 25,	2000 (	12(11.	VCCK,					
	Dise Cum.	ease Cum.		Mumps Cum.	Cum.	<u> </u>	Pertussis Cum.	Cum.		Rubella Cum.	Cum.	
Reporting Area	2001	2000	2001	2001	2000	2001	2001	2000	2001	2001	2000	
UNITED STATES	653	649	2	31	113	58	1,116	1,143	-	2	13	
NEW ENGLAND Maine	46	38 3	-	-	2	1	200	313 7	-	-	4	
N.H. Vt.	4 4	3 1	-	-	-	- 1	16 20	45 52	-	-	1	
Mass.	26	23	-	-	-	-	158	200	-	-	3	
R.I. Conn.	12	2 6	-	-	1 1	-	6	5 4	-	-	-	
MID. ATLANTIC	42	38	-	-	7	2	68	104	-	1	4	
Upstate N.Y. N.Y. City	23	12	-	-	3 2	2	60	55 23	-	1 -	2 2	
N.J. Pa.	18 1	13 13	-	-	2	-	8	- 26	-	-	-	
E.N. CENTRAL	55	113	-	5	13	7	128	172	-	1	_	
Ohio Ind.	29 1	19 15	-	1 -	4	4 2	102 5	108 8	-	-	-	
III. Mich.	16	33 32	-	3 1	3 6	1	7 13	14 6	-	1	-	
Wis.	9	14	-	-	-	-	1	36	-	-	-	
W.N. CENTRAL Minn.	43 1	39 3	-	2	5	3	36	30 10	-	-	1	
lowa	13	10	-	-	3	-	3	6	-	-	-	
Mo. N. Dak.	16 2	21 1	-	-	1 -	3 -	21 -	5 1	-	-	-	
S. Dak. Nebr.	2 2	2 1	-	-	- 1	-	2	1 2	-	-	- 1	
Kans.	7	1	-	2	-	-	10	5	-	-	-	
S. ATLANTIC Del.	137	97	1	4	13	7	48	77 1	-	-	1	
Md. D.C.	19	10	-	2	5	1	12	18	-	-	-	
Va.	14	17	-	1	1	-	6	5	-	-	-	
W. Va. N.C.	4 36	2 17	-	-	2	4	1 19	- 28	-	-	-	
S.C. Ga.	11 17	6 19	1 -	1 -	4	-	6	12 9	-	-	-	
Fla.	36	26	-	-	1	2	4	4	-	-	1	
E.S. CENTRAL Ky.	48 8	42 8	-	-	1 -	1 1	23 6	31 21	-	-	-	
Tenn. Ala.	18 18	17 12	-	-	- 1		13 2	2 7	-	-	-	
Miss.	4	5	-	-	-	-	2	1	-	-	-	
W.S. CENTRAL Ark.	100 7	78 4	-	2 1	13 1	-	8 2	18 5	-	-	3	
La.	30	23	-	1	3	-	-	2	-	-	-	
Okla. Tex.	11 52	9 42	-	-	9	-	1 5	11	-	-	3	
MOUNTAIN	34	40	-	4	5	30	546	208	-	-	-	
Mont. Idaho	3	1 5	-	-	1 -	16	3 148	1 32	-	-	-	
Wyo. Colo. N. Mex.	12	- 11	U	1 1	-	U 9	- 117	122	U	-	-	
N. Mex. Ariz.	6 6	11 6 11	-	2	1	2	14 255	122 35 11	-	-	-	
Utah	4	5	-	-	1	3	9	4	-	-	-	
Nev. PACIFIC	3 148	1 164	1	- 14	2 54	- 7	- 59	3 190	-	-	-	
Wash.	22 19	13	-	-	2	6	22 5	41	-	-	-	
Oreg. Calif.	106	20 127	N 1	N 13	N 47	1 -	32	18 123	-	-	-	
Alaska Hawaii	1 -	1 3	-	1 -	- 5	-	-	2 6	-	-	-	
Guam	-	-	U	-	-	U	-	-	U	-	-	
P.R. V.I.	1 U	3 U	Ū	Ū	Ū	Ū	Ū	Ū	Ū	Ū	Ū	
Amer. Samoa C.N.M.I.	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	U U	

N: Not notifiable.

U: Unavailable.

TABLE IV. Deaths in 122 U.S. cities,\* week ending March 24, 2001 (12th Week)

	,	All Cau	ıses, By	Age (Ye			P&I	71 (12tii vve		All Cau	ises, By	Age (Y	ears)		P&I†
Reporting Area	All Ages	≥ <b>65</b>	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. Erie, Pa.§ Jersey City, N.J.	. 18 26 35 27 22 ss. 29 . 48 U . 5	429 113 37 15 225 22 18 23 32 32 30 56 1,655 39 21 77 75 88	30 9 2 3 4 4 3 5 9 0 1 5 5 6 4 5 1 1 1 3 8 1 1 1 3 8 1 1 1 1 3 8 1 3 8 1 1 1 1	33 14 1 1 2 1 1 2 U - 8 - 2 143 2 - 9 9 3 1 - 5 5	12 2 - - 1 1 - - 3 U - 1 2 2 3 9 1 - - 1 1 1 - - 1 1 1 - - 1 1 1 1 1 1	11 3 3 3 2 U 3 3 33 4	73 20 3 3 1 9 5 2 4 2 0 7 4 13 8 2 9 2 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, D.G Wilmington, Del E.S. CENTRAL Birmingham, Ali Chattanooga, Te Knoxville, Tenn. Lexington, Ky. Memphis, Tenn. Mobile, Ala. Montgomery, A Nashville, Tenn.	123 54 77 58 Fla. 61 199 C. 99 I. U 942 a. 224 nnn. 76 101 55 187	854 132 133 70 78 36 44 42 42 140 58 U 621 155 51 67 31 116 82 32 87	292 49 41 21 39 26 13 35 12 13 35 20 U 203 42 17 26 15 42 20 8 33	137 222 266 8 14 14 3 7 4 5 19 15 U 71 22 4 4 6 12 7 15	30 8 3 2 2 3 1 1 1 4 5 5 2 8 3 3 2 2 3 10 1 10 10 10 10 10 10 10 10 10 10 10 1	24 65 4 3 1 1 2 - - 1 1 1 U 19 2 - 7 7 4 - 3 3 3 3 1 3 1 2 2 3 1 3 1 3 1 3 1 3 1 3	102 10 20 11 14 18 3 4 4 2 13 3 U 76 19 4 3 9 16 2 9
New York City, N.J. Newark, N.J. 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.	Y. 1,180 65 27 290 36 42 140	20 837 36 18 182 26 37 111 23 35 69 14 24	248 12 6 61 7 4 20 3 7 11	64 13 3 25 3 6 1 1 5 2	16 4 - 9 - - 2 2 - - - 1	14 - 12 - 1 1 - 1	59 1 2 19 2 7 11 2 1 7 4 2	W.S. CENTRAL Austin, Tex. Baton Rouge, La Corpus Christi, 1 Dallas, Tex. El Paso, Tex. Ft. Worth, Tex. Houston, Tex. Little Rock, Ark. New Orleans, La San Antonio, Te Shreveport, La. Tulsa, Okla.	Tex. 64 176 65 110 360 55	975 70 74 49 115 43 74 231 37 U 187 U 95	299 20 21 11 43 8 22 83 12 U 48 U 31	111 7 10 2 12 9 12 30 4 U 17 U 8	26 1 2 3 4 1 6 - U 8 U	31 7 2 - 3 1 10 2 U 2 U 3	103 8 1 2 14 8 12 29 2 U 18 U 9
E.N. CENTRAL Akron, Ohio Canton, Ohio Canton, Ohio Chicago, Ill. Cincinnati, Ohio Cleveland, Ohio Dayton, Ohio Detroit, Mich. Evansville, Ind. Fort Wayne, Ind. Gary, Ind. Grand Rapids, Mi Indianapolis, Ind. Lansing, Mich. Milwaukee, Wis. Peoria, Ill. South Bend, Ind. Toledo, Ohio Youngstown, Ohi W.N. CENTRAL Des Moines, Iowa Duluth, Minn. Kansas City, Kans Kansas City, Kans Kansas City, Mo. Lincoln, Nebr. Minneapolis, Min Omaha, Nebr. St. Louis, Mo. St. Paul, Minn. Wichita, Kans.	217 42 104 49 50 45 115 0 66 813 1 28 . 48 99 37	1,510 36 2344 81 199 136 107 7 35 155 5 32 95 5 5 7 5 7 5 7 5 6 7 7 5 5 7 7 5 5 7 7 5 7 5	9 6 77 22 366 452 259 6 8 7 7 46 7 25 7 8 8 14 9 1461 16 12 15 4 19 22 28 8	117 2 1 29 10 87 722 1 2 1 2 9 2 7 - 8 2 3 1 4 6 1 3 8 7 9 9 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9	47 5 - 9 2 1 6 3 7 - 3 3 1 3 1 1 1 - 1 1 - 4 3 1 2 -	50 2 -10 4 4 6 -7 1 1 4 -2 3 2 3 2 3 2 1 3 -1 2 1 3 2 1 3 2 1 2 1 3 2 1 2 1 2 1 3 2 1 2 1	158 5 24 13 8 15 9 16 2 5 3 6 10 1 9 2 5 2 13 2 72 5 4 6 19 6 14 2 5 3 12	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, Cal Pasadena, Calif. Portland, Oreg. Sacramento, Cal San Diego, Califi San Francisco, C San Jose, Calif. Santa Cruz, Calif.	49 olo. 63 116 200 29 197 36 tah 99 147 1,314 16 51 10 ii 59 if. 246 if. 246 if. 29 if. 201 alif. U f. 35;	723 85 344 73 124 24 74 103 932 9 9 10 32 9 9 10 138 83 136 139 U U 28 88 42 80 8,296	209 31 8 15 25 52 1 27 9 14 27 236 2 14 5 5 17 33 7 10 21 2,350	85 12 5 4 12 16 1 13 2 6 14 92 2 4 1 3 2 2 1 1 7 2 5 8 16 17 17 17 17 17 17 17 17 17 17 17 17 17	29 4 2 - 1 1 6 1 10 1 1 2 2 28 1 1 1 - 3 3 9 - 3 4 4 4 U U - 2 - 1 250	25 3 5 2 2 9 - 3 1 1 2 8 - 1 2 2 4 U U - 3 3 3 - 2 2 2 3 3 - 2 2 4 4 0 0 0 1 2 1 2 2 3 3 3 3 3 3 3 2 3 3 3 3 3 3 3	80 16 4 8 12 15 9 1 8 7 111 4 4 2 2 17 20 3 7 8 8 8 U U 4 10 4 8 10 10 4 8 10 10 4 8 10 4 10 4

U: Unavailable. -:No reported cases.

\*Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

¹Pneumonia and influenza.

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

\*Total includes unknown ages.

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