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Effect of Ending an Antitobacco Youth Campaign on Adolescent Susceptibility to Cigarette Smoking — Minnesota, 2002–2003

The majority of persons who become regular cigarette smokers begin smoking during adolescence. Comprehensive state antitobacco programs, especially those with strong advertising (i.e., paid media) campaigns, have contributed to the substantial decline in adolescent smoking since 1997 (*1,2*). In Minnesota, annual funding for tobacco-control programs was reduced from $23.7 million to $4.6 million in July 2003, ending the Target Market (TM) campaign directed at youths since 2000. To assess the effects of cutting the state's tobacco-control funding, during November–December 2003, the University of Miami School of Medicine surveyed Minnesota adolescents aged 12–17 years to determine their awareness of the TM campaign and their susceptibility to smoking. These data were compared with results from previous surveys. This report summarizes the results of that analysis, which indicated that the percentage of adolescents who were aware of the TM campaign declined from 84.5% during July–August 2003 to 56.5% during November–December 2003, and the percentage of adolescents susceptible to cigarette smoking increased from 43.3% to 52.9%. These findings underscore the need to maintain adequate funding of state antitobacco programs to prevent tobacco use among youths.

Begun in 2000, the Minnesota TM campaign was organized around three components: a paid advertising campaign, a youth organization, and a website targeted to youth. Each component was branded with the TM logo. Data from four cross-sectional telephone surveys of Minnesota youths aged 12–17 years were used to measure the target audience's awareness of the campaign and the impact of the campaign on susceptibility to smoking. The four surveys were conducted during July–September 2002, March–April 2003, July–August 2003, and November–December 2003. A $10 department store gift card was used as an incentive to participate, and parental permission was required. Response rates for the four surveys ranged from 73.2% to 76.1%, and sample sizes ranged from 1,079 to 1,150. The demographic distribution of each sample, according to 2000 U.S. census data, was similar to that of the adolescent population in Minnesota by age group, sex, race/ethnicity, and geographic region (i.e., Minneapolis/St. Paul metropolitan area versus the rest of the state) (*3*).

Confirmed campaign awareness was defined as awareness of the TM brand logo, as indicated by responses to the statement, "When you see the capital letters 'TM' inside of a circle, tell me what you think of." To confirm brand awareness, survey participants had to provide responses that were specific to the TM brand message (e.g., linking specific campaign components to campaign objectives, the brand logo with a major message theme, or acknowledging TM as an organized movement). Overly general responses, such as "Don't smoke," were not counted as confirmed awareness. To determine susceptibility to cigarette smoking (*4,5*), participants were asked to respond to the statement, "You will smoke a cigarette in the next year." Susceptibility was defined as any response other than "strongly disagree." The same statements and response categories for confirmed campaign awareness and susceptibility to smoking were used for all four surveys.

Findings from surveys conducted during July–September 2002 (2 years after the campaign began), March–April 2003,

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and July–August 2003 indicated an increase in confirmed campaign awareness from 74.6% to 84.5%, with a plateau observed between the second and third surveys. The youth campaign was ended in July 2003, and a statistically significant decline to 56.5% occurred in confirmed awareness between the surveys conducted during July–August 2003 and November–December 2003 (Figure). Similar patterns for campaign awareness were observed by age group, sex, and geographic area (Table). In addition, between the July–August 2003 and November–December 2003 surveys, a corresponding statistically significant increase in susceptibility to smoking, from 43.3% to 52.9%, occurred among Minnesota adolescents (Figure). Susceptibility to smoking increased in all age groups, both sexes, and by geographic area.

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Editorial Note: The findings in this report demonstrate the impact on awareness of elimination of a Minnesota youth antitobacco campaign 6 months after that campaign ended and suggest that state cutbacks in antitobacco campaigns might increase the susceptibility of youths to smoking, which is a key predictor of adolescent tobacco use (*4,5*). These findings are consistent with data from a previous study in Massachusetts that documented an increase in illegal tobacco sales to minors after funding cuts to that state's antitobacco program (*6*). These findings are of particular concern in states where antitobacco efforts have been cut substantially. For example, programs in Massachusetts and Florida included paid media campaigns and substantial youth components before funding declined 92% and 99%, respectively, from peak levels (*7*).

The prevalence of smoking among youths has declined most rapidly in states that have used the most extensive paid media

FIGURE. Trends in antitobacco campaign awareness and susceptibility to smoking among adolescents aged 12–17 years, by survey date — Minnesota, July 2002–December 2003

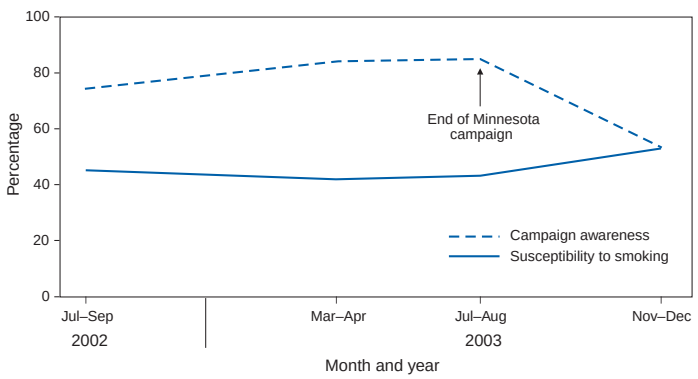

TABLE. Percentage of adolescents aged 12–17 years aware of antitobacco campaign and susceptible to cigarette smoking, by date, age group, sex, and geographic area — Minnesota, July 2002–December 2003

	July–September 2002				March–April 2003				July–August 2003				November–December 2003			
	Aware		Susceptible		Aware		Susceptible		Aware		Susceptible		Aware		Susceptible	
Characteristic	%	(95% CI*)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Age group (yrs)																
12–13	57.9	(±5.5)	28.8	(±7.6)	74.9	(±4.4)	30.7	(±4.7)	77.4	(±4.2)	35.4	(±4.8)	36.4	(±4.8)	46.7	(±5.0)
14–15	81.8	(±3.8)	44.4	(±7.3)	87.6	(±3.0)	44.0	(±4.5)	83.8	(±3.7)	46.0	(±5.0)	61.0	(±4.7)	53.7	(±4.9)
16–17	81.2	(±4.0)	48.7	(±3.5)	90.4	(±3.2)	51.7	(±5.4)	93.1	(±2.7)	48.7	(±5.0)	75.9	(±4.8)	59.4	(±5.5)
Sex																
Female	74.0	(±3.7)	43.3	(±4.2)	83.7	(±3.0)	35.6	(±4.0)	83.7	(±3.0)	41.8	(±4.1)	57.7	(±4.1)	51.2	(±4.2)
Male	75.2	(±3.6)	47.1	(±4.2)	84.8	(±2.9)	48.0	(±4.1)	85.4	(±3.0)	44.8	(±4.2)	55.2	(±4.1)	54.5	(±4.0)
Geographic area																
Minneapolis/St. Paul	76.2	(±4.0)	46.2	(±4.2)	86.0	(±2.9)	42.2	(±4.0)	89.7	(±2.5)	44.5	(±4.2)	60.9	(±4.1)	52.0	(±4.2)
Remainder of state	73.0	(±3.7)	44.2	(±4.2)	82.6	(±3.1)	41.5	(±4.1)	79.3	(±3.3)	42.0	(±4.1)	52.1	(±4.2)	53.7	(±4.1)
Total	**74.6**	**(±2.6)**	**45.2**	**(±3.0)**	**84.3**	**(±2.1)**	**41.8**	**(±2.8)**	**84.5**	**(±3.1)**	**43.3**	**(±3.0)**	**56.5**	**(±3.0)**	**52.9**	**(±3.0)**

* Confidence interval.

campaigns in combination with other antitobacco activities (*8*). For example, after a comprehensive program with an extensive paid media campaign was initiated in Florida, smoking prevalence among middle school students declined 40% in 2 years (*8*).

In 1998, the Master Settlement Agreement (MSA) was accepted by states and the tobacco industry. MSA provided more than $200 billion to states over 25 years (*7*). Proponents of MSA, including governors and other state leaders, supported using these funds for antitobacco programs (*7*). However, at least 20 states and the District of Columbia have issued or plan to issue bonds backed by MSA payments, allowing them to receive their MSA funds in advance, often to help reduce state revenue shortfalls (*7*). As a result, MSA funds in multiple states might not be available to sustain effective antitobacco efforts.

The findings in this report are subject to at least four limitations. First, all data are self-reported and might be subject to recall bias. Second, participants' campaign awareness was assessed on the basis of their TM brand awareness; certain respondents might not have recognized the logo yet still might have been aware of the campaign and vice versa. Third, susceptibility to smoking might be caused by factors other than cuts in antitobacco programs, such as increased marketing of tobacco products. Finally, not all adolescents categorized as having increased susceptibility become regular cigarette smokers. However, in prospective studies, this categorization has been found to be strongly and independently associated with increased likelihood of regular cigarette smoking (*4,5*).

The components of successful state youth antitobacco programs are based on substantial research; such programs include countermarketing, increased tobacco excise taxes, comprehensive school-based education programs, enforcement of tobacco-control laws, and ongoing surveillance and evaluation (*1,9*). Paid media campaigns are critical to countermarketing (*9*). When combined with other interventions, such campaigns are strongly recommended by the Task Force on Community Preventive Services to prevent initiation of tobacco use by youth (*1*). In Minnesota, paid advertisements consistently have accounted for >90% of total campaign awareness (*3*).

Because tobacco use remains the leading preventable cause of death in the United States, efforts to prevent smoking initiation among youths can have a profound impact on public health. While cutbacks in state programs were occurring, the tobacco industry spent $11.2 billion in 2001 (the most recent year for which data are available), or $39 per person in the United States, on advertising and promotion expenditures (*10*). These tobacco industry expenditures were 17% higher than the previous year and nearly double the amount spent on marketing in 1997, the year before MSA (*10*). The decline in campaign awareness and increase in adolescent susceptibility in Minnesota suggest that antitobacco funding cuts could reverse the recent declines in youth tobacco use.

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Progress Toward Measles Elimination — Region of the Americas, 2002–2003

In 1994, countries in the Region of the Americas adopted the goal of eliminating endemic measles transmission* in the Western hemisphere by 2000 (*2*). Since 1994, rapid progress has been made. The number of measles cases has declined >99%, from approximately 250,000 in 1990 to 105 confirmed cases† reported in six countries in 2003. During 2003, only Mexico and the United States reported outbreaks. The three chains of transmission in Mexico and two U.S. outbreaks were import-related (*3*); a third U.S. outbreak was of unknown source. Since November 2002, no transmission of the D6 and D9 genotypes has been reported; these genotypes were responsible for several large outbreaks in the region during 1997–2002 (*4*). This report summarizes the epidemiology of measles in the Americas during 2002–2003 and highlights progress toward measles elimination, including the lowest ever number of reported measles cases in the region. Because the region is under constant threat of measles importation from regions where the disease is endemic, countries must maintain high population immunity to measles and sensitive surveillance to ensure the timely detection of imported cases and allow for rapid implementation of control measures.

Vaccination Activities

Key vaccination activities in the measles-elimination initiative include implementing the Pan American Health Organization (PAHO)'s recommended vaccination strategies§ or attaining ≥95% routine vaccination coverage with 2 doses of measles-containing vaccine (MCV) (*5*). Special efforts in the region have focused on identifying and increasing vaccination levels in districts at high risk because of high population density, high rural-to-urban migration, presence of indigenous populations and tourism, populous border regions, areas with low vaccination coverage, and areas with poor surveillance or poor access to health services.

The most important of these activities were nationwide supplemental immunization activities (SIAs); 10 of these were conducted in 2002. The estimated number of children vaccinated against measles in SIAs was 10.4 million in 2000; 10.6 million in 2001; and 9.9 million in 2002.

Reported routine measles vaccination coverage for the region¶ was 94% in 2000, 96% in 2001, and 92% in 2002. In 2002, reported routine coverage ranged from 51% in the Latin American/Caribbean subregion to 99% in the Southern Cone subregion (i.e., Argentina, Chile, Paraguay, and Uruguay). Coverage of ≥90% was reported by 28 countries; 12 reported coverage of <90%. The percentage of children living in municipalities with routine coverage of ≥95% was 55% in 2000, 59% in 2001, and 50% in 2002**.

Measles Surveillance

During 2002–2003, the number of suspected measles and rubella cases (defined as a febrile rash illness or any case for which a health-care provider suspects measles or rubella) notified to national surveillance systems decreased from 46,629 to 30,118 (Table). The proportion of suspected cases with a timely home visit for case investigation increased from 65% in 2002 to 85% in 2003. During 2002–2003, the proportion of persons with suspected measles with adequate specimens taken for laboratory diagnosis increased from 74% to 81%, and the proportion of notification sites sending weekly reports increased from 85% to 91%. The rate of notification of febrile rash illnesses that are not measles, rubella, or dengue declined from 6.7 per 100,000 population in 2001, to 6.2 in 2002, and to 4.6 in 2003.

Measles Epidemiology, 2002–2003

In 2002, a total of 2,584 confirmed†† measles cases were reported in the Americas. Of these, 2,397 occurred during an outbreak in Venezuela after an importation of a D9 measles virus from Europe (*6,7*). The outbreak affected 16 (67%) of the 24 states in Venezuela. The age groups most affected were children aged <1 year (120 cases per 100,000 population). This outbreak spread to Colombia, where 139 cases were reported. The last confirmed measles case in these outbreaks, and the last case attributed to the D9 virus in the Americas, occurred in Venezuela in November 2002. In 2002, an additional 44 confirmed cases were reported in the United States, six were reported in Canada, and one was reported in Brazil.

* Measles elimination refers to interruption of endemic transmission in a sizable geographic area in which vaccination must continue because of the continued threat of reintroduction of the virus (*1*).
† Provisional data as of week 7 (week ending February 21, 2004).
§ The PAHO-recommended measles vaccination strategy has three key components: 1) a one-time national "catch-up" campaign for all children aged 1–14 years, 2) routine "keep-up" vaccination for infants aged 1 year, and 3) national "follow-up" campaigns every 3–5 years for all children aged 1–4 years, regardless of measles vaccination history.
¶ Excluding the United States and Canada.
** This information is not collected in the United States or Canada.
†† Include clinically confirmed cases, laboratory-confirmed cases, and suspected cases linked epidemiologically to a laboratory-confirmed measles case.

TABLE. Measles surveillance indicators, by subregion*— Region of the Americas, 2001–2003

Subregion†	Suspected cases reported			% persons with timely home visits§			% sites reporting weekly			% persons with adequate samples¶			% laboratories receiving samples in ≤5 days			% laboratories with results in ≤4 days		
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
AND	10,217	15,816	5,756	88	74	78	91	90	90	94	94	96	64	67	69	79	65	80
BRA	38,680	23,950	15,727	56	57	56	78	83	92	65	58	70	52	48	61	73	75	80
CAP	2,155	2,166	1,734	75	81	85	78	62	92	91	99	99	68	74	79	84	86	84
CAR	320	423	314	100	99	98	99	100	100	94	97	87	15	25	25	86	100	99
LAC	2,484	1,712	1,606	84	95	99	50	100	100	95	97	98	67	51	46	68	90	95
MEX	1,204	1,633	3,801	95	—	98	—	—	89	89	—	99	69	—	82	44	—	54
SOC	906	879	1,117	36	47	42	93	91	96	97	98	90	74	73	74	87	88	91
NOA	170	50	63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	**56,136**	**46,629**	**30,118**	**61**	**65**	**85**	**85**	**85**	**91**	**71**	**74**	**81**	**54**	**58**	**63**	**74**	**74**	**73**

* Excludes United States and Canada.
† AND=Andean Region (Bolivia, Colombia, Ecuador, Peru, and Venezuela); BRA=Brazil; CAP=Central American Region and Panama (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama); CAR=Non-Hispanic Caribbean countries; LAC=Latin American Caribbean Region (Cuba, Dominican Republic, French Guyana, Guyana, Haiti, Martinique, and Puerto Rico); MEX=Mexico; SOC=Southern Cone Region (Argentina, Chile, Paraguay, and Uruguay); and NOA=North American Region (Canada and United States).
§ Within 48 hours of case notification.
¶ Obtained <30 days after rash onset.

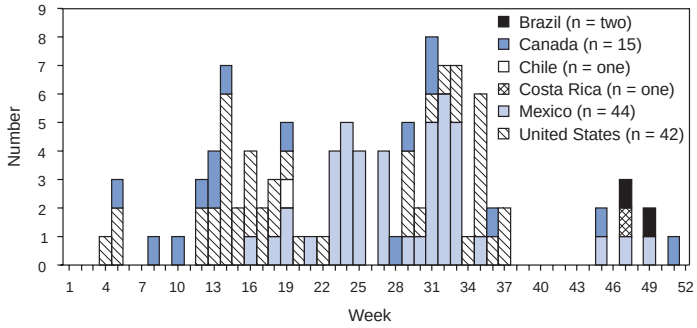
In 2003, a total of 105 confirmed measles cases were reported in the Americas, the lowest number ever reported in the region. Of these, one occurred in Chile, one in Costa Rica, two in Brazil, 15 in Canada, 42 in the United States, and 44 in Mexico (Figure).

The case in Chile occurred in a man aged 33 years who had rash onset on March 28 after travel to Japan. The case in Costa Rica occurred in a man aged 38 years who had rash onset on November 17 after returning from travel to India. In Brazil, the first case occurred in a man aged 34 years who had rash onset on November 21 after travel to Germany, England, and Holland. The second case occurred in a child aged 11 months of the initial patient, with symptom onset on December 1. The 15 cases in Canada were all imported[§§]. Of 42 U.S. cases, 33 were imported or linked to an importation; the remaining nine cases were of unknown origin[¶¶].

During 2003, Mexico reported three chains of transmission, with a total of 44 confirmed measles cases occurring in 17 municipalities. In 41 cases, rash onset occurred during April 13–August 25. Subsequently, three cases were detected with rash onset in November and early December. Of the 44 confirmed cases, 14 occurred in infants aged <1 year and 12 in adults aged 20–29 years; 42 patients were unvaccinated. The first chain of 22 cases had rash onset during April 13–July 4, the second chain of 19 cases had rash onset during July 22–August 25, and the last chain of three cases had rash onset in November and early December. To control the outbreaks, Mexican authorities conducted clinical and epidemiologic case studies and active case searches around homes of confirmed patients and in areas at high risk. Approximately 10 million children aged 6–11 years were vaccinated as well as groups at high risk (e.g., health-care workers).

§§ Cases among persons who were infected outside Canada.
¶¶ Includes all other cases acquired in the United States for which no epidemiologic link or virologic evidence is found to indicate importation.

FIGURE. Number of confirmed measles cases*, by week and country — Region of the Americas, 2003



* As of February 21, 2004, N = 105.

During 2003, two measles-related deaths occurred in the United States. One death occurred in an immunosuppressed male aged 13 years who had neurologic complications and had measles virus isolated from a brain biopsy. The other fatal case occurred in a man aged 75 years who, within 2 weeks of his arrival from overseas, had a rash illness and subsequently died of pulmonary and neurologic complications. Serologic tests were positive for measles IgM.

Virologic Surveillance

The H1 virus genotype, known to circulate in parts of Eastern Asia, was identified from three separate chains of transmission in Mexico and from one chain of transmission in Hawaii that were either imported from the Marshall Islands (H1) or of unknown source. This genotype also was found in Chile's imported measles case.

The D9 virus, imported from Europe, circulated for 16 months in Venezuela and Colombia during 2001 through November 2002. In addition to the Hawaiian cases, outbreaks and cases reported in the United States during 2003 for which viral genotype information was available were associated with

travel from Lebanon (D4) (*3*), Germany (D7), France or Italy (D7), and Israel (D6).

Reported by: *Ministries of health or public health authorities in the countries of the Region of the Americas. J Andrus, G Tambini, K Kohler, A Ropero, C Castillo, M Landaverde, J Fitzimmons, S Garcia, Family and Community Health Area, Pan American Health Organization, District of Columbia. J Rota, P Rota, W Bellini, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; F Lievano, C Lee, V Dietz, Global Immunization Div, National Immunization Program, CDC.*

Editorial Note: During 2003, the countries in the Western Hemisphere reported the lowest number of measles cases ever and two measles-related deaths. The goal of measles elimination in the region might have been achieved. Ongoing epidemiologic and virologic surveillance will be required to confirm the absence of endemic strains of measles virus. The substantial reduction in transmission of measles in the Americas underscores the need for criteria to define and certify when elimination has been achieved. The outbreaks in Mexico during 2003 also highlight the need for criteria for determining when any importation-related chain(s) of transmission suggests reestablishment of endemic transmission.

Despite these successes, several trends in the region are of concern. First, measles vaccination coverage indicates a slightly decreasing trend, which has been attributed to improvements in calculating population-based coverage (PAHO, unpublished data, 2004). Second, the number of reported suspected cases and the rate of notification of suspected cases have decreased. The cause of these decreases is unknown but could be explained in part by long-term cyclical trends in the circulation of other viruses that produce febrile rash illnesses. PAHO is evaluating the surveillance data to identify a specific indicator for monitoring sensitivity of surveillance. The measles-associated deaths that occurred in the United States underscore the risks associated with importation of measles. One case might have been an importation from overseas; the other is of unknown origin, although the virologic genotype isolated matched a Philippines genotype.

Because the region is under constant threat of measles importation from regions where the disease is endemic, countries must maintain sensitive surveillance to ensure the timely detection of imported cases and allow for rapid implementation of control measures. Continuous training of health professionals is necessary to maintain this high quality of surveillance. Vaccination activities must continue to ensure the highest possible population immunity (i.e., ≥95%), and timely follow-up campaigns are necessary to reduce the number of susceptible persons. Active case-finding should continue, and countries should identify and prioritize high-risk areas.

Success with measles elimination and the development of a strong surveillance and laboratory network in the region provide the foundation for additional accelerated disease-control activities. In September 2003, PAHO passed a resolution to eliminate rubella and congenital rubella syndrome from the region by 2010 (*8*). To meet this goal, countries are drafting national plans of action. The integration of measles and rubella surveillance and combined measles-rubella vaccines will facilitate this endeavor.

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Measles Outbreak in a Boarding School — Pennsylvania, 2003

Measles has not been endemic in the United States since 1997, although limited outbreaks continue to be caused by imported* cases (*1,2*). In 2003, CDC assisted in investigating the largest school outbreak of measles in the United States since 1998 (*3*). The outbreak consisted of 11 laboratory-confirmed cases: nine cases in a boarding school in eastern Pennsylvania and two epidemiologically linked cases in New York City (NYC). This report summarizes the results of the outbreak investigation, which indicated that measles continues to be imported into the United States and that high coverage with 2 doses of measles-containing vaccine (MCV) among students was effective in limiting the size of the outbreak. Health-care providers should maintain a high index of suspicion for measles, especially in those who have traveled abroad recently, and recommendations for 2 doses of MCV in all school-aged children should be followed.

*An imported case of measles has its source outside the country, rash onset occurs within 21 days of entering the country, and illness cannot be linked to local transmission.

In April 2003, the Pennsylvania Department of Health reported to CDC two cases of measles in unvaccinated twins aged 13 years in a boarding school with 663 students. Active surveillance for measles[†] was conducted in the school, hospitals, and doctors' offices through May 2003. Patients were interviewed, acute- and convalescent-phase sera were collected for measles IgM enzyme-linked immunosorbent assay testing, and throat swabs and urine samples were collected for viral genotyping. Efforts to control the outbreak included vaccinating or excluding from campus and isolating all students and staff members with no evidence of immunity to measles[§]. School and personal vaccination records were reviewed to identify susceptible students and staff members, respectively.

For evaluation of vaccine effectiveness, only students enrolled in the school at the beginning of the outbreak were included. All staff members and those students who received measles vaccination during the outbreak were excluded. Vaccine effectiveness (VE) was calculated as VE (%) = [(ARU - ARV) / ARU] x 100, where ARU is the attack rate in unvaccinated persons and ARV is the attack rate in students who had received 2 doses of MCV previously (*4*).

A total of 11 laboratory-confirmed cases of measles were identified. The source patient was a student aged 17 years who had received 2 doses of MCV. On March 15, 2003, the student had returned to the United States from Beirut, Lebanon, where measles was known to be circulating. He had cough and fever the following day and rash on March 21, when he visited an emergency department and was diagnosed with a viral exanthem. Upon returning to school, the patient stayed at the school health center before returning to his dormitory.

Five persons with laboratory-confirmed measles were linked epidemiologically to the source patient. These five included the unvaccinated twins who lived in the same dormitory, the dormitory houseparent, and two other students in different dormitories. One of these latter students infected two additional students in his dormitory and an unvaccinated child aged 13 months in NYC, who was linked epidemiologically to an unvaccinated immigrant aged 33 years, who was diagnosed with measles and who lived in the same apartment building. The ninth school patient was linked epidemiologically to, and might have been infected by, any one of five infected persons from different dormitories.

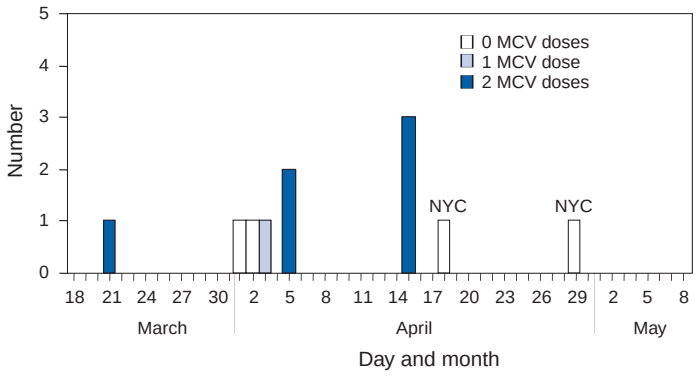
All nine measles cases in the school were confirmed serologically. Measles genotype D4 was identified in two school patients and the child in NYC. The last date of rash onset in a boarding school patient was April 15 (Figure). No deaths or major complications were reported; two students with measles, who were unvaccinated because of religious exemptions, required hospitalization for dehydration.

The median age of the nine patients in the school was 17 years (range: 13–26 years). Of the nine, two had not received any doses of MCV, one had received 1 dose, and six had received 2 doses. Patients with 1 or 2 doses of MCV had milder illness than unvaccinated patients, including a shorter duration of rash (median: 5 days versus 10 days; $p<0.05$) and fewer days of school or work missed (median: 5 days versus 8 days; $p<0.05$) (Table).

Of the 663 students in the boarding school, eight (1.2%) students had never received any doses of MCV, 26 (3.9%) students had received 1 dose, and 629 (94.9%) students had received 2 doses before the outbreak. Thus, vaccine coverage for 2 doses was 94.9% and for ≥1 dose was 98.8%. Vaccination with measles, mumps, and rubella vaccine was begun on April 3. Of the eight unvaccinated students, four had claimed religious or philosophical exemptions. Of these four students, two contracted measles, one was excluded from the school, and one was vaccinated during the outbreak. All of the remaining four unvaccinated students who did not claim any exemptions were vaccinated during the outbreak as well as other susceptible students and staff members.

Excluding five previously unvaccinated students who were vaccinated during the outbreak and two students who had 2 doses of MCV previously but were inadvertently revaccinated during the outbreak, the measles attack rate was 66.7% (two of three) among unvaccinated students and 1.0% (six of 627) among students who had received 2 doses of MCV. All

FIGURE. Number* of confirmed measles patients, by date of rash onset and number of measles-containing vaccine (MCV) doses received previously — Pennsylvania and New York City (NYC), March–May 2003



* N = 11.

† Surveillance was conducted by using the 1997 case definition for measles issued by CDC and the Council of State and Territorial Epidemiologists: illness characterized by a generalized maculopapular rash lasting ≥3 days; a temperature of ≥101.0° F (≥38.3° C); and cough, coryza, or conjunctivitis.

§ Students and staff members were classified as having no evidence of measles immunity if they were born after 1957 and could not document history of physician-diagnosed measles illness, positive serology of measles IgG, history of 2 doses of MCV at least 28 days apart (students), or 1 dose (adults) with the first dose at or after age 1 year.

TABLE. Demographic, vaccination, clinical, and hospitalization status for nine patients with laboratory-confirmed measles at a boarding school — Pennsylvania, 2003

Patient	Age (yrs)	Grade	Dormitory	No. measles vaccination doses received*	Duration of rash (days)*	Highest fever (°F)	Had cough/ coryza/ conjunctivitis? (yes/no)	Met clinical case definition? (yes/no)	Admitted to school health center? (yes/no)	Visited hospital emergency department? (yes/no)	Admitted to hospital? (yes/no)	School/ work missed (days)*
1†	17	12	1	2	5	103.0	Y/Y/N	Y	Y	Y	N	5
2	13	8	1	0	11	104.0	Y/Y/Y	Y	Y	Y	Y/3 days	8
3	13	8	1	0	9	104.0	Y/Y/Y	Y	Y	Y	Y/3 days	8
4	26	Staff	1	1	8	–§	N/N/N	N	N	Y	N	7
5	16	11	2	2	4	104.5	Y/N/N	Y	Y	Y	N	3
6	17	12	3	2	7	102.0	Y/Y/Y	Y	N	Y	N	7
7	18	12	3	2	4	99.4	Y/Y/N	N	Y	N	N	2
8	18	11	3	2	6	101.9	N/N/N	N	Y	N	N	4
9	17	12	1	2	4	101.6	Y/N/N	Y	Y	N	N	5

* Patients with 1 or 2 doses of measles-containing vaccine had shorter median duration of rash (5 days versus 10 days; p<0.05) and fewer days of school or work missed (5 days versus 8 days; p<0.05); Wilcoxon rank-sum test for one-sided p value used.
† The source patient.
§ Record of temperature not available.

vaccinees with 1 dose of MCV received a second dose during the outbreak; no measles cases were diagnosed among these students. VE was 98.6% among students who had received 2 doses of MCV.

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Editorial Note: Measles is rare in the United States, with only 42 confirmed cases in 2003, according to provisional data (*2*). The limited outbreak described in this report highlights both the success of the U.S. vaccination program and the continuing risk for imported measles despite a high immunity among the U.S. population. The last reported U.S. school outbreak occurred in 2000 and involved nine persons, including six high school students (*1*). Five of those six student patients had received only 1 dose of MCV, which was in compliance with state requirements at that time (*1*).

Before 1989, when the Advisory Committee on Immunization Practices recommended a routine 2-dose MCV schedule for school-aged children, larger measles outbreaks with >100 cases occurred in schools (*5,6*). All states but one now require 2 doses of MCV for children attending school (*7*). However, exemptions for religious or philosophical reasons are permitted in the majority of states, resulting in exemption for 0.6% of the nation's children (*8*). These children have a higher likelihood of acquiring and spreading measles than those who have been vaccinated (*9*).

In the outbreak described in this report, consistent with previous evaluations (*10*), 2 doses of MCV were highly effective in preventing the spread of measles, although a substantial number of exposed students, combined with a 1% failure rate among recipients with 2 doses, resulted in two generations of transmission in the school. Recipients of 2 doses of MCV had milder symptoms and shorter duration of illness than unvaccinated patients. Two unvaccinated students were hospitalized for dehydration, but none of the vaccinated students required hospitalization.

If an outbreak occurs, all persons whose illness is consistent with the definition for suspected[¶] measles should be tested for both measles IgM and measles virus by culture or reverse transcriptase polymerase chain reaction. A convalescent serum should be obtained if the acute IgM is negative. This investigation highlighted the importance of viral specimens to document importation from overseas, confirm spread of the same genotype to NYC, and provide continued evidence for the absence of endemic transmission in the United States (*1*).

This outbreak of measles was caused by importation; the source patient was infected in Lebanon. Although the patient had classic signs for the disease (e.g., fever, rash, cough, and coryza), measles was not diagnosed initially, and the outbreak was not recognized until two unvaccinated students were hospitalized. A history of recent travel outside the United States should raise suspicion for a diagnosis of measles in a patient with appropriate clinical signs, regardless of vaccination status.

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¶ Suspected measles is a febrile illness with a generalized maculopapular rash.

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Brief Report

Update: Measles Among Adoptees from China — April 14, 2004

As of April 14, 2004, investigators had identified six confirmed and three suspected cases of measles among the 12 adoptees from China who departed for the United States on March 26 (*1*). Three other children remain under observation by public health authorities. The latest confirmed cases of measles were in an adoptee aged 13 months who traveled to New York state and in an adoptee aged 12 months who traveled to Washington state.

Among the nine children with either confirmed or suspected measles, three had been considered infectious while traveling. A fourth child has been identified as potentially infectious during travel on the following commercial airline flights:

- March 26, China Southern flight 327 from Guangzhou, China, to Los Angeles
- March 27, Delta Airlines flight 484 from Los Angeles to Cincinnati
- March 27, Delta Airlines flight 518 from Cincinnati to Washington, DC.

Persons on these flights who have fever and rash on or before April 17 should be evaluated for measles by a health-care provider. Although the typical incubation period for measles from exposure to rash onset is approximately 10 days (range: 7–18 days), on rare occasions the incubation period can be as long as 19–21 days.

Other children adopted recently from China, not identified by this investigation, might have been exposed to measles and become potentially infectious. Health-care providers should remain vigilant for measles among persons with febrile rash illness. Persons with suspected measles should be reported immediately to local public health officials.

Reported by: *Alaska Dept of Health and Social Svcs. Florida Dept of Health. Maryland Dept of Health and Mental Hygiene. New York State Dept of Health. Public Health—Seattle and King County; Snohomish Health District; Washington State Department of Health. Epidemiology and Surveillance Div, National Immunization Program; Div of Global Migration and Quarantine, National Center for Infectious Diseases, CDC.*

Reference

1. CDC. Multistate investigation of measles among adoptees from China—April 9, 2004. MMWR 2004;53:309–10.

Multistate Investigation of Measles Among Adoptees from China — April 9, 2004

On April 9, this report was posted as an MMWR Dispatch *on the* MMWR *website* (http://www.cdc.gov/mmwr).

On April 6, 2004, Public Health — Seattle and King County, Washington, reported a laboratory-confirmed case of measles in a recently adopted child from China. Public health authorities in Washington state notified CDC, which collaborated with health officials in other states to locate other recently adopted children from China and contact their adoptive families. This report summarizes the preliminary results of an ongoing multistate investigation that has so far identified four confirmed and five suspected cases of measles among adoptees from China, underscoring the need for health-care providers to remain vigilant for measles and other vaccine-preventable communicable diseases in children adopted from international regions.

The investigation determined that a group of 11 families traveled to China in March to adopt children. The group, and their 12 adopted children, remained together for approximately 10 days during the adoption process before departing for the United States on March 26. The 12 children were adopted from two orphanages in Hunan Province. They traveled to five U.S. states. Eight traveled to Washington, and one each traveled to Alaska, Florida, Maryland, and New York.

As of April 9, investigators had determined that nine of the 12 adopted children had measles-like rash illness, including four (three in Washington and one in Maryland) who were serologically confirmed to have measles. The nine serologically confirmed or suspected cases were in patients aged 12–18 months; they had rash onset during March 22–April 6. The three children who did not develop measles-like rash illness traveled to Washington (a child aged 7 years), Alaska (a child aged 13 months), and Florida (a child aged 13 months). To date, all 12 children have been or are being evaluated for laboratory evidence of measles or are under observation by public health authorities. Vaccination status or history of

measles illness is not known for any of the 12 children. State and local health departments are continuing to investigate, seeking potential cases, identifying and evaluating potential contacts, and providing prophylaxis when indicated, as recommended by the Advisory Committee on Immunization Practices (*1*).

Three of the children with suspected measles were likely infectious* while traveling from China to the United States on March 26 on the following airline flights: United Airlines flight 862 from Hong Kong to San Francisco, Cathay Pacific flight CX872 from Hong Kong to San Francisco, United Airlines flight 476 from San Francisco to Seattle, and United Airlines flight 794 from San Francisco to Seattle. Because most persons in the United States are immune to measles, U.S. airline passengers usually are at low risk. However, persons traveling on the four flights who have fever or rash on or before April 16† should be evaluated for measles by a health-care provider. Investigators have determined that the other six children with rash illness were not likely to have been infectious with measles during the time they traveled from China to their ultimate destinations in the United States.

Reported by: *Alaska Dept of Health and Social Svcs. Florida Dept of Health. Maryland Dept of Health and Mental Hygiene. New York State Dept of Health. Public Health — Seattle and King County; Snohomish Health District; Washington State Department of Health. Epidemiology and Surveillance Div, National Immunization Program; Div of Global Migration and Quarantine, National Center for Infectious Diseases, CDC.*

Editorial Note: Measles, a highly infectious viral illness that can cause pneumonia, diarrhea, encephalitis, and death, continues to be imported into the United States (*2*). Although measles is no longer endemic in the United States (*3*), as this investigation highlights, maintaining high levels of vaccination coverage and strong surveillance in the United States is critical.

During 2001, an outbreak among children adopted internationally resulted in 14 U.S. measles cases, 10 among adopted children and four among caregivers and siblings aged 28 months–47 years (*4*). Health-care providers should have a high index of suspicion for measles in persons with febrile rash illness from families who recently adopted children from abroad and among persons who have had close contact with children who were adopted recently from abroad. Suspected cases should be reported to the local health department.

In the latest outbreak, all confirmed and suspected cases of measles have been in children aged >12 months, for whom vaccination with measles-containing vaccine is recommended in both the United States (*1*) and China (*5*). Vaccination of internationally adopted children is not required before their immigration into the United States, but should occur within 30 days of entry (*6*). Although this measure should ensure that internationally adopted children receive recommended vaccines expeditiously, it cannot prevent importation of vaccine-preventable infectious diseases. Efforts to ensure that adoptees are administered safe and age-appropriate vaccines in their country of origin in accordance with recommendations of the World Health Organization or the country of origin could help prevent this type of importation in the future.

* The infectious period for measles is from 4 days before to 4 days after onset of rash.
† The incubation period for measles from the time of exposure to onset of rash is 7–21 days.

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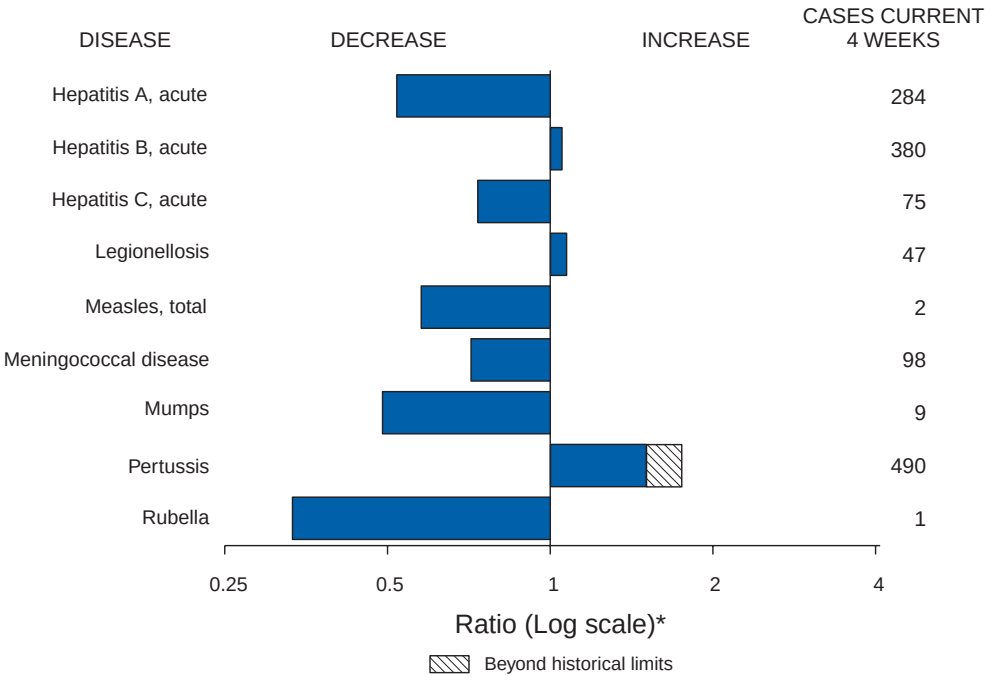
Notice to Readers

Vaccination Week of the Americas, April 24–30, 2004

During April 24–30, all 42 countries in the Region of the Americas will participate in Vaccination Week of the Americas (VWA). The objective is to vaccinate susceptible populations by improving access among underserved populations, keeping vaccination programs on the political agendas of countries in the Western Hemisphere, and promoting cooperation among countries in the region. By ensuring the vaccination of susceptible persons, health authorities will maintain measles-elimination programs in the region and support implementation of rubella and congenital rubella syndrome–elimination plans.

During VWA, surveillance gaps will be identified through active searches for unreported cases of measles, rubella, and acute flaccid paralysis. The target group to be vaccinated during this week is children aged <5 years who have incomplete vaccination series and adults, including women of childbearing age (WCBA), with no previous contact with the vaccination program. The total population to be vaccinated is estimated at 40 million persons. Countries with vaccination activities scheduled for 2004 will conduct these activities during VWA. Other countries of the region will intensify vaccination efforts among children aged <5 years and WCBA. Additional information is available from the Pan American Health Organization at http://www.paho.org/english/dd/pin/sv_2004.htm.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals April 10, 2004, with historical data



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

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending April 10, 2004 (14th Week)*

	Cum. 2004	Cum. 2003		Cum. 2004	Cum. 2003
Anthrax	-	-	Hemolytic uremic syndrome, postdiarrheal†	13	32
Botulism:	-	-	HIV infection, pediatric†§	-	76
foodborne	3	5	Measles, total	6¶	6**
infant	20	19	Mumps	43	61
other (wound & unspecified	4	5	Plague	-	-
Brucellosis†	16	26	Poliomyelitis, paralytic	-	-
Chancroid	9	16	Psittacosis†	2	6
Cholera	1	-	Q fever†	6	17
Cyclosporiasis†	18	22	Rabies, human	-	-
Diphtheria	-	-	Rubella	11	3
Ehrlichiosis:	-	-	Rubella, congenital syndrome	-	-
human granulocytic (HGE)†	5	23	SARS-associated coronavirus disease†††	-	5
human monocytic (HME)†	8	20	Smallpox† §§	-	NA
human, other and unspecified	-	1	*Staphylococcus aureus*:	-	-
Encephalitis/Meningitis:	-	-	Vancomycin-intermediate (VISA)† §§	4	NA
California serogroup viral†	-	-	Vancomycin-resistant (VRSA)† §§	-	NA
eastern equine†	-	2	Streptococcal toxic-shock syndrome†	28	63
Powassan†	-	-	Tetanus	3	4
St. Louis†	1	2	Toxic-shock syndrome	35	41
western equine†	-	-	Trichinosis	2	-
Hansen disease (leprosy)†	18	29	Tularemia†	4	4
Hantavirus pulmonary syndrome†	2	4	Yellow fever	-	-

-: No reported cases.
* Incidence data for reporting years 2003 and 2004 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. Last update December 28, 2003.
¶ Of six cases reported, five were indigenous, and one was imported from another country.
** Of six cases reported, two were indigenous, and four were imported from another country.
†† Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (notifiable as of July 2003).
§§ Not previously notifiable.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending April 10, 2004, and April 5, 2003 (14th Week)*

Reporting area	AIDS		Chlamydia†		Coccidiodomycosis		Cryptosporidiosis		Encephalitis/Meningitis West Nile	
	Cum. 2004§	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	-	12,488	201,418	225,306	1,329	968	626	597	7	57
NEW ENGLAND	-	429	7,664	7,412	-	-	33	35	-	-
Maine	-	13	436	528	N	N	5	2	-	-
N.H.	-	7	437	418	-	-	9	3	-	-
Vt.	-	5	326	296	-	-	4	5	-	-
Mass.	-	186	3,917	2,864	-	-	9	19	-	-
R.I.	-	29	936	823	-	-	1	4	-	-
Conn.	-	189	1,612	2,483	N	N	5	2	-	-
MID. ATLANTIC	-	2,857	28,089	26,587	-	-	110	74	2	-
Upstate N.Y.	-	144	5,693	4,540	N	N	24	15	-	-
N.Y. City	-	1,585	8,553	9,174	-	-	23	26	-	-
N.J.	-	424	3,383	3,866	-	-	7	3	-	-
Pa.	-	704	10,460	9,007	N	N	56	30	2	-
E.N. CENTRAL	-	1,180	32,071	41,351	4	2	123	110	1	-
Ohio	-	154	6,199	11,474	-	-	42	16	1	-
Ind.	-	178	4,041	4,640	N	N	18	6	-	-
Ill.	-	553	8,672	13,465	-	-	8	17	-	-
Mich.	-	235	10,177	7,240	4	2	33	23	-	-
Wis.	-	60	2,982	4,532	-	-	22	48	-	-
W.N. CENTRAL	-	194	11,717	13,087	2	1	69	40	1	-
Minn.	-	41	2,201	2,912	N	N	27	22	-	-
Iowa	-	27	-	1,295	N	N	10	7	-	-
Mo.	-	83	5,086	4,732	1	1	15	2	1	-
N. Dak.	-	-	324	354	N	N	-	-	-	-
S. Dak.	-	4	684	629	-	-	7	7	-	-
Nebr.¶	-	18	1,404	1,225	1	-	1	2	-	-
Kans.	-	21	2,018	1,940	N	N	9	-	-	-
S. ATLANTIC	-	3,597	33,405	40,913	-	1	140	182	2	57
Del.	-	58	811	813	N	N	-	1	-	-
Md.	-	193	5,257	4,374	-	1	7	6	-	-
D.C.	-	380	942	930	-	-	1	-	-	-
Va.	-	297	1,245	4,298	-	-	16	7	-	-
W. Va.	-	20	761	655	N	N	2	-	-	-
N.C.	-	437	7,510	6,434	N	N	27	10	-	-
S.C.¶	-	213	5,204	3,876	-	-	5	1	2	-
Ga.	-	493	1,298	8,509	-	-	48	28	-	-
Fla.	-	1,506	10,377	11,024	N	N	34	129	-	57
E.S. CENTRAL	-	493	12,922	14,840	N	N	31	33	-	-
Ky.	-	57	1,443	2,272	N	N	7	7	-	-
Tenn.	-	221	5,797	5,180	N	N	12	11	-	-
Ala.	-	110	3,077	3,893	-	-	8	12	-	-
Miss.	-	105	2,605	3,495	N	N	4	3	-	-
W.S. CENTRAL	-	1,284	27,707	27,940	1	1	20	11	1	-
Ark.	-	35	2,135	1,755	1	-	8	2	-	-
La.	-	136	6,886	5,145	N	N	-	-	1	-
Okla.	-	51	2,534	2,414	N	N	8	2	-	-
Tex.	-	1,062	16,152	18,626	-	1	4	7	-	-
MOUNTAIN	-	460	11,482	13,932	828	696	33	22	-	-
Mont.	-	7	263	574	N	N	3	2	-	-
Idaho	-	5	871	731	N	N	2	4	-	-
Wyo.	-	4	285	273	-	-	2	1	-	-
Colo.	-	105	2,109	3,542	N	N	18	5	-	-
N. Mex.	-	42	1,245	2,056	6	-	1	1	-	-
Ariz.	-	217	4,787	4,345	799	684	5	2	-	-
Utah	-	22	653	755	5	1	1	5	-	-
Nev.	-	58	1,269	1,656	18	11	1	2	-	-
PACIFIC	-	1,994	36,361	39,244	492	267	67	90	-	-
Wash.	-	161	4,621	4,064	N	N	4	-	-	-
Oreg.	-	87	1,630	2,054	-	-	7	8	-	-
Calif.	-	1,705	29,132	30,764	492	267	55	82	-	-
Alaska	-	9	967	950	-	-	-	-	-	-
Hawaii	-	32	11	1,412	-	-	1	-	-	-
Guam	-	1	-	-	-	-	-	-	-	-
P.R.	-	325	494	566	N	N	N	N	-	-
V.I.	-	9	20	93	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	32	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 2003 and 2004 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 December 28, 2003.

¶ Contains data reported through National Electronic Disease Surveillance System (NEDSS).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 10, 2004, and April 5, 2003 (14th Week)*

Reporting area	*Escherichia coli*, Enterohemorrhagic (EHEC)						Giardiasis		Gonorrhea	
	O157:H7		Shiga toxin positive, serogroup non-O157		Shiga toxin positive, not serogrouped					
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	234	298	33	66	31	27	3,704	4,850	70,014	85,756
NEW ENGLAND	15	12	1	7	4	3	344	290	1,857	1,873
Maine	-	1	-	-	-	-	32	28	69	40
N.H.	2	3	-	1	-	-	11	16	28	33
Vt.	-	-	-	-	-	-	21	20	21	28
Mass.	2	3	-	2	4	3	176	153	940	701
R.I.	1	1	-	-	-	-	23	29	257	266
Conn.	10	4	1	4	-	-	81	44	542	805
MID. ATLANTIC	18	30	1	1	9	4	795	849	9,080	10,636
Upstate N.Y.	6	7	1	-	3	2	237	186	1,885	1,778
N.Y. City	4	3	-	-	-	-	263	345	2,754	3,555
N.J.	-	4	-	-	2	-	60	114	1,307	2,383
Pa.	8	16	-	1	4	2	235	204	3,134	2,920
E.N. CENTRAL	45	63	7	11	4	2	442	684	12,699	18,646
Ohio	14	14	-	8	4	2	201	199	2,919	5,904
Ind.	9	7	-	-	-	-	-	-	1,448	1,771
Ill.	6	13	-	-	-	-	59	200	3,451	5,926
Mich.	8	12	1	-	-	-	138	170	4,021	3,422
Wis.	8	17	6	3	-	-	44	115	860	1,623
W.N. CENTRAL	42	33	7	5	6	6	420	400	4,019	4,437
Minn.	20	13	3	4	-	-	149	117	825	724
Iowa	4	3	-	-	-	-	54	58	-	261
Mo.	5	9	4	1	1	-	117	131	2,102	2,293
N. Dak.	2	1	-	-	3	1	7	12	37	13
S. Dak.	-	2	-	-	-	-	18	11	71	36
Nebr.	5	4	-	-	-	-	35	41	297	402
Kans.	6	1	-	-	2	5	40	30	687	708
S. ATLANTIC	20	57	12	34	3	10	621	1,476	15,477	20,476
Del.	-	-	N	N	N	N	14	15	278	351
Md.	2	-	-	-	-	-	26	28	2,285	2,104
D.C.	-	1	-	-	-	-	14	6	604	675
Va.	-	3	5	-	-	-	92	58	472	2,124
W. Va.	1	1	-	-	-	-	9	7	228	225
N.C.	-	-	4	7	-	-	N	N	4,083	3,616
S.C.	-	-	-	-	-	-	15	30	2,443	2,242
Ga.	6	5	2	2	-	-	155	196	780	4,202
Fla.	11	47	1	25	3	10	296	1,136	4,304	4,937
E.S. CENTRAL	8	12	1	-	4	-	80	76	5,871	7,465
Ky.	4	2	1	-	4	-	N	N	616	930
Tenn.	2	6	-	-	-	-	28	34	2,138	2,301
Ala.	1	3	-	-	-	-	52	42	1,783	2,436
Miss.	1	1	-	-	-	-	-	-	1,334	1,798
W.S. CENTRAL	15	15	-	2	-	2	65	51	10,282	11,437
Ark.	1	2	-	-	-	-	33	31	974	1,018
La.	-	-	-	-	-	-	7	3	3,221	2,925
Okla.	3	-	-	-	-	-	25	17	1,092	977
Tex.	11	13	-	2	-	2	-	-	4,995	6,517
MOUNTAIN	41	32	3	5	1	-	329	323	2,857	2,970
Mont.	2	-	-	-	-	-	7	11	11	37
Idaho	5	8	1	3	-	-	47	41	19	25
Wyo.	-	-	-	-	-	-	3	4	14	12
Colo.	21	14	1	1	1	-	99	88	676	820
N. Mex.	3	-	-	1	-	-	15	15	152	342
Ariz.	3	8	N	N	N	N	66	60	1,365	1,161
Utah	3	2	-	-	-	-	61	70	73	68
Nev.	4	-	1	-	-	-	31	34	547	505
PACIFIC	30	44	1	1	-	-	608	701	7,872	7,816
Wash.	6	15	-	-	-	-	60	51	691	761
Oreg.	2	6	1	1	-	-	93	77	198	259
Calif.	16	23	-	-	-	-	422	528	6,817	6,371
Alaska	1	-	-	-	-	-	13	20	165	152
Hawaii	5	-	-	-	-	-	20	25	1	273
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	21	4	20	46	68
V.I.	-	-	-	-	-	-	-	-	4	27
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	3	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 10, 2004, and April 5, 2003 (14th 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. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	568	565	6	6	30	36	62	67	1,442	1,921
NEW ENGLAND	55	41	1	1	2	3	2	1	264	48
Maine	5	2	-	-	-	-	-	1	8	1
N.H.	9	4	-	-	1	-	-	-	6	3
Vt.	4	6	-	-	-	-	-	-	5	2
Mass.	25	19	1	1	-	3	2	-	213	27
R.I.	1	1	-	-	-	-	-	-	6	4
Conn.	11	9	-	-	1	-	-	-	26	11
MID. ATLANTIC	104	85	-	-	2	1	15	12	169	316
Upstate N.Y.	37	26	-	-	2	1	3	4	22	24
N.Y. City	15	16	-	-	-	-	4	4	58	120
N.J.	20	15	-	-	-	-	2	1	34	54
Pa.	32	28	-	-	-	-	6	3	55	118
E.N. CENTRAL	89	69	-	1	9	2	12	14	117	180
Ohio	39	17	-	-	2	-	5	4	16	29
Ind.	12	9	-	-	3	1	1	-	5	10
Ill.	19	30	-	-	-	-	5	9	43	64
Mich.	9	6	-	1	4	1	-	-	42	56
Wis.	10	7	-	-	-	-	1	1	11	21
W.N. CENTRAL	22	33	1	-	1	4	1	3	36	41
Minn.	9	12	-	-	1	4	-	-	1	4
Iowa	1	-	1	-	-	-	-	-	8	12
Mo.	7	14	-	-	-	-	-	3	15	10
N. Dak.	-	1	-	-	-	-	-	-	-	-
S. Dak.	-	1	-	-	-	-	-	-	2	-
Nebr.	4	-	-	-	-	-	-	-	7	3
Kans.	1	5	-	-	-	-	1	-	3	12
S. ATLANTIC	154	189	-	1	3	9	13	13	293	691
Del.	3	-	-	-	-	-	2	-	3	3
Md.	27	21	-	-	1	2	-	-	48	40
D.C.	-	-	-	-	-	-	-	-	3	7
Va.	11	9	-	-	-	-	-	2	27	29
W. Va.	6	3	-	-	-	-	3	-	2	4
N.C.	14	9	-	-	-	-	-	-	19	24
S.C.	-	2	-	-	-	-	-	-	11	17
Ga.	55	22	-	-	-	-	8	2	111	155
Fla.	38	123	-	1	2	7	-	9	69	412
E.S. CENTRAL	21	33	-	-	-	1	5	4	48	48
Ky.	-	3	-	-	-	1	-	-	5	7
Tenn.	13	17	-	-	-	-	4	3	28	24
Ala.	8	12	-	-	-	-	1	1	5	9
Miss.	-	1	-	-	-	-	-	-	10	8
W.S. CENTRAL	19	28	-	-	2	3	-	3	75	134
Ark.	2	4	-	-	-	1	-	-	7	8
La.	3	8	-	-	-	-	-	3	1	26
Okla.	14	16	-	-	2	2	-	-	13	4
Tex.	-	-	-	-	-	-	-	-	54	96
MOUNTAIN	85	55	2	1	10	8	11	10	152	109
Mont.	-	-	-	-	-	-	-	-	3	1
Idaho	2	-	-	-	-	-	1	-	6	6
Wyo.	-	-	-	-	-	-	-	-	1	1
Colo.	25	11	-	-	-	-	5	4	24	10
N. Mex.	14	6	-	-	3	2	2	1	3	7
Ariz.	35	28	-	1	6	3	1	3	93	63
Utah	4	6	2	-	-	1	1	2	19	6
Nev.	5	4	-	-	1	2	1	-	3	15
PACIFIC	19	32	2	2	1	5	3	7	288	354
Wash.	3	3	2	-	-	2	1	1	13	14
Oreg.	10	12	-	-	-	-	-	3	15	22
Calif.	3	15	-	2	1	3	2	3	251	312
Alaska	-	-	-	-	-	-	-	-	3	3
Hawaii	3	2	-	-	-	-	-	-	6	3
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	3	15
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 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 10, 2004, and April 5, 2003 (14th Week)*

Reporting area	Hepatitis (viral, acute), by type				Legionellosis		Listeriosis		Lyme disease	
	B		C							
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	1,431	2,446	312	638	256	382	101	150	1,610	2,028
NEW ENGLAND	59	84	-	-	4	11	4	5	121	154
Maine	1	-	-	-	-	-	1	-	18	-
N.H.	12	3	-	-	-	-	1	1	8	4
Vt.	1	1	-	-	-	1	-	-	4	3
Mass.	45	60	-	-	1	5	-	2	41	87
R.I.	-	1	-	-	1	1	-	-	18	32
Conn.	-	19	U	U	2	4	2	2	32	28
MID. ATLANTIC	192	303	32	42	54	50	23	22	1,267	1,518
Upstate N.Y.	18	20	3	9	11	13	6	3	476	475
N.Y. City	14	146	-	-	2	6	2	7	-	-
N.J.	87	68	-	-	11	4	5	3	249	320
Pa.	73	69	29	33	30	27	10	9	542	723
E.N. CENTRAL	95	115	14	37	62	66	14	9	28	48
Ohio	47	37	2	3	32	27	7	1	22	8
Ind.	2	4	-	-	4	3	1	1	-	3
Ill.	-	1	1	11	2	10	-	3	-	-
Mich.	46	54	11	23	22	20	5	4	-	-
Wis.	-	19	-	-	2	6	1	-	6	37
W.N. CENTRAL	113	77	148	74	6	8	3	3	22	19
Minn.	8	5	1	1	-	2	2	1	6	13
Iowa	1	4	-	-	1	3	-	-	3	2
Mo.	94	53	147	73	4	1	1	-	12	3
N. Dak.	1	-	-	-	-	1	-	-	-	-
S. Dak.	-	1	-	-	1	-	-	-	-	-
Nebr.	6	8	-	-	-	-	-	2	-	-
Kans.	3	6	-	-	-	1	-	-	1	1
S. ATLANTIC	508	1,104	54	111	66	187	16	59	144	224
Del.	5	2	-	-	2	-	N	N	8	33
Md.	44	28	3	7	10	13	2	3	78	81
D.C.	5	1	1	-	-	1	-	-	1	2
Va.	57	34	9	-	5	5	-	3	6	10
W. Va.	2	2	3	-	2	-	1	1	1	-
N.C.	44	49	3	3	7	7	4	5	31	15
S.C.	24	41	-	14	1	3	-	2	1	-
Ga.	167	311	7	7	6	7	4	7	1	3
Fla.	160	636	28	80	33	151	5	38	17	80
E.S. CENTRAL	105	96	16	24	9	5	4	4	2	12
Ky.	13	13	9	3	2	-	1	-	1	1
Tenn.	45	29	5	3	5	2	3	-	1	2
Ala.	18	24	-	4	2	1	-	3	-	-
Miss.	29	30	2	14	-	2	-	1	-	9
W.S. CENTRAL	22	265	22	325	12	19	9	16	2	28
Ark.	9	28	-	2	-	-	-	-	-	-
La.	7	47	9	49	-	-	-	-	-	3
Okla.	6	13	-	-	2	2	-	1	-	-
Tex.	-	177	13	274	10	17	9	15	2	25
MOUNTAIN	134	167	14	9	21	15	5	10	3	3
Mont.	-	4	2	1	-	-	-	1	-	-
Idaho	3	2	-	1	1	1	1	-	-	1
Wyo.	1	5	-	-	4	1	-	-	1	-
Colo.	18	26	4	3	3	4	1	4	-	-
N. Mex.	5	12	-	-	-	1	-	1	-	-
Ariz.	72	90	2	3	5	4	-	4	1	-
Utah	15	9	-	-	7	2	-	-	1	1
Nev.	20	19	6	1	1	2	3	-	-	1
PACIFIC	203	235	12	16	22	21	23	22	21	22
Wash.	21	14	2	2	3	2	5	1	3	-
Oreg.	27	37	4	3	N	N	3	1	6	6
Calif.	149	177	4	10	19	19	15	20	12	15
Alaska	4	2	-	-	-	-	-	-	-	1
Hawaii	2	5	2	1	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	6	34	-	-	-	-	-	-	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 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 10, 2004, and April 5, 2003 (14th Week)*

Reporting area	Malaria		Meningococcal disease		Pertussis		Rabies, animal		Rocky Mountain spotted fever	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	241	328	488	630	2,036	1,770	884	1,384	119	93
NEW ENGLAND	16	8	24	28	517	176	107	113	4	-
Maine	-	1	7	3	-	1	11	11	-	-
N.H.	-	2	2	1	10	10	6	5	-	-
Vt.	1	-	1	-	15	18	5	8	-	-
Mass.	8	5	14	20	479	132	40	41	4	-
R.I.	2	-	-	1	9	1	6	8	-	-
Conn.	5	-	-	3	4	14	39	40	-	-
MID. ATLANTIC	49	59	60	60	569	179	108	204	11	9
Upstate N.Y.	11	11	17	8	424	68	79	65	1	-
N.Y. City	18	34	11	14	-	15	-	1	1	4
N.J.	7	4	8	10	45	28	-	51	1	4
Pa.	13	10	24	28	100	68	29	87	8	1
E.N. CENTRAL	16	27	64	88	231	118	3	6	6	1
Ohio	4	5	28	26	120	65	2	-	6	1
Ind.	-	-	7	12	11	9	1	2	-	-
Ill.	2	11	1	21	-	-	-	1	-	-
Mich.	5	8	22	18	28	11	-	3	-	-
Wis.	5	3	6	11	72	33	-	-	-	-
W.N. CENTRAL	19	6	24	46	111	82	94	155	4	2
Minn.	8	4	7	10	14	27	14	5	-	-
Iowa	1	2	4	7	15	31	12	18	-	1
Mo.	3	-	6	22	68	13	3	2	4	1
N. Dak.	1	-	-	-	3	1	13	17	-	-
S. Dak.	1	-	1	-	1	2	10	28	-	-
Nebr.	1	-	1	3	-	1	15	28	-	-
Kans.	4	-	5	4	10	7	27	57	-	-
S. ATLANTIC	90	137	93	165	132	224	447	734	81	75
Del.	2	-	1	7	3	1	9	-	-	-
Md.	23	21	4	9	32	16	50	92	4	6
D.C.	4	2	-	-	1	-	-	-	-	-
Va.	6	7	4	6	28	30	105	115	-	1
W. Va.	-	2	3	1	2	1	17	17	-	-
N.C.	5	5	12	14	26	51	157	189	70	44
S.C.	4	1	8	9	10	6	40	46	2	3
Ga.	12	7	12	12	15	5	64	93	3	3
Fla.	34	92	49	107	15	114	5	182	2	18
E.S. CENTRAL	7	6	23	23	26	31	30	50	9	4
Ky.	1	1	3	2	3	4	5	9	-	-
Tenn.	1	3	8	4	15	16	10	35	3	3
Ala.	4	2	6	6	4	8	15	5	1	-
Miss.	1	-	6	11	4	3	-	1	5	1
W.S. CENTRAL	6	22	47	74	65	81	42	66	-	2
Ark.	1	1	8	7	3	3	13	17	-	-
La.	2	1	12	22	3	4	-	-	-	-
Okla.	1	-	3	5	6	4	29	49	-	-
Tex.	2	20	24	40	53	70	-	-	-	2
MOUNTAIN	12	9	28	22	239	281	20	17	-	-
Mont.	-	-	1	1	4	-	3	2	-	-
Idaho	-	1	2	1	14	8	-	-	-	-
Wyo.	-	-	2	2	3	86	-	-	-	-
Colo.	5	7	14	5	138	96	-	-	-	-
N. Mex.	1	-	4	2	10	19	-	-	-	-
Ariz.	1	1	4	8	46	47	17	15	-	-
Utah	3	-	1	-	21	20	-	-	-	-
Nev.	2	-	-	3	3	5	-	-	-	-
PACIFIC	26	54	125	124	146	598	33	39	4	-
Wash.	2	7	8	11	103	90	-	-	-	-
Oreg.	2	5	28	24	37	68	-	-	2	-
Calif.	22	42	85	83	-	439	26	36	2	-
Alaska	-	-	1	-	3	-	7	3	-	-
Hawaii	-	-	3	6	3	1	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	2	4	1	-	16	17	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 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 10, 2004, and April 5, 2003 (14th Week)*

Reporting area	Salmonellosis		Shigellosis		Streptococcal disease, invasive, group A		*Streptococcus pneumoniae*, invasive			
							Drug resistant, all ages		Age <5 years	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	6,109	10,654	2,530	7,067	1,460	2,201	823	1,263	118	143
NEW ENGLAND	293	311	57	87	60	191	7	35	3	1
Maine	16	16	1	3	3	11	-	-	-	-
N.H.	17	22	3	-	8	13	-	-	N	N
Vt.	13	5	1	3	1	8	3	4	1	1
Mass.	174	187	37	57	46	84	N	N	N	N
R.I.	13	17	1	2	2	1	4	-	2	-
Conn.	60	64	14	22	-	74	-	31	U	U
MID. ATLANTIC	782	841	303	438	213	343	48	42	28	25
Upstate N.Y.	178	140	138	66	82	115	21	21	21	17
N.Y. City	234	271	79	114	27	51	U	U	U	U
N.J.	139	153	48	110	33	82	N	N	N	N
Pa.	231	277	38	148	71	95	27	21	7	8
E.N. CENTRAL	850	953	212	377	244	484	183	147	42	62
Ohio	244	276	47	71	85	104	146	103	29	36
Ind.	75	54	40	24	24	28	37	44	10	5
Ill.	216	348	71	189	25	138	-	-	-	-
Mich.	170	134	32	61	101	139	N	N	N	N
Wis.	145	141	22	32	9	75	N	N	3	21
W.N. CENTRAL	398	365	91	180	115	131	75	74	12	16
Minn.	88	95	11	24	57	55	-	-	9	13
Iowa	75	82	26	9	N	N	N	N	N	N
Mo.	118	92	26	65	20	27	3	3	3	1
N. Dak.	12	7	1	3	4	7	-	3	-	2
S. Dak.	18	18	4	8	7	13	1	-	-	-
Nebr.	32	27	4	48	7	15	-	-	N	N
Kans.	55	44	19	23	20	14	71	68	N	N
S. ATLANTIC	1,530	5,583	828	3,809	364	493	426	868	3	4
Del.	8	21	2	89	1	4	3	-	N	N
Md.	111	161	30	159	69	100	-	2	-	-
D.C.	8	7	13	15	2	3	1	-	3	-
Va.	163	136	29	67	15	28	N	N	N	N
W. Va.	29	15	-	-	9	11	42	16	-	4
N.C.	205	277	116	210	37	31	N	N	U	U
S.C.	83	84	118	55	21	9	31	55	N	N
Ga.	308	213	169	365	140	76	148	184	N	N
Fla.	615	4,669	351	2,849	70	231	201	611	N	N
E.S. CENTRAL	338	386	152	240	68	61	50	40	-	-
Ky.	61	72	22	35	24	12	12	3	N	N
Tenn.	98	137	57	78	44	49	38	37	N	N
Ala.	122	115	54	86	-	-	-	-	N	N
Miss.	57	62	19	41	-	-	-	-	-	-
W.S. CENTRAL	364	565	370	1,013	49	163	21	44	26	12
Ark.	55	68	14	14	3	2	3	13	4	4
La.	33	92	27	107	-	1	18	31	3	4
Okla.	53	48	95	172	19	29	N	N	11	4
Tex.	223	357	234	720	27	131	N	N	8	-
MOUNTAIN	516	457	199	257	187	177	13	12	4	23
Mont.	25	30	3	1	-	-	-	-	-	-
Idaho	41	55	1	5	3	10	N	N	N	N
Wyo.	13	5	1	1	4	-	4	2	-	-
Colo.	133	124	42	42	56	53	-	-	2	21
N. Mex.	33	36	32	46	27	47	5	10	-	-
Ariz.	171	136	93	142	84	63	-	-	N	N
Utah	54	41	11	9	12	4	2	-	2	2
Nev.	46	30	16	11	1	-	2	-	-	-
PACIFIC	1,038	1,193	318	666	160	158	-	1	-	-
Wash.	72	97	19	49	20	-	-	-	N	N
Oreg.	65	104	16	21	N	N	N	N	N	N
Calif.	802	929	269	583	110	130	N	N	N	N
Alaska	27	23	2	4	1	-	-	-	N	N
Hawaii	72	40	12	9	29	28	-	1	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	30	123	1	2	N	N	N	N	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	3	U	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 10, 2004, and April 5, 2003 (14th Week)*

Reporting area	Syphilis: Primary & secondary		Syphilis: Congenital		Tuberculosis		Typhoid fever		Varicella (Chickenpox)	
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	1,666	1,912	52	129	1,711	2,739	54	88	4,119	4,865
NEW ENGLAND	33	48	1	-	52	71	7	6	252	1,186
Maine	-	2	-	-	-	-	-	-	43	339
N.H.	1	7	-	-	1	4	-	-	-	-
Vt.	-	-	-	-	-	2	-	-	209	252
Mass.	22	31	-	-	41	32	7	2	-	74
R.I.	3	3	-	-	5	11	-	2	-	2
Conn.	7	5	1	-	5	22	-	2	-	519
MID. ATLANTIC	217	209	6	20	443	542	8	14	15	5
Upstate N.Y.	16	4	1	1	48	43	-	3	-	-
N.Y. City	122	111	3	11	241	267	3	7	-	-
N.J.	38	52	2	8	94	81	3	3	-	-
Pa.	41	42	-	-	60	151	2	1	15	5
E.N. CENTRAL	174	255	18	23	243	254	3	8	1,899	2,034
Ohio	55	56	1	2	47	39	1	-	520	443
Ind.	10	10	-	6	13	31	-	2	-	-
Ill.	55	95	1	10	156	125	-	1	-	-
Mich.	49	90	16	5	8	48	2	5	1,347	1,281
Wis.	5	4	-	-	19	11	-	-	32	310
W.N. CENTRAL	32	64	-	2	63	105	2	-	91	11
Minn.	4	21	-	-	30	34	1	-	-	-
Iowa	-	5	-	-	7	8	-	-	N	N
Mo.	20	22	-	2	11	29	1	-	2	-
N. Dak.	-	-	-	-	2	-	-	-	65	11
S. Dak.	-	-	-	-	2	9	-	-	24	-
Nebr.	4	1	-	-	6	5	-	-	-	-
Kans.	4	15	-	-	5	20	-	-	-	-
S. ATLANTIC	448	484	7	27	338	492	9	30	630	700
Del.	2	2	-	-	-	-	-	-	2	3
Md.	81	75	2	5	47	40	2	3	-	-
D.C.	20	11	-	-	-	-	-	-	6	7
Va.	1	25	-	1	6	44	2	8	147	136
W. Va.	1	-	-	-	6	4	-	-	383	511
N.C.	43	48	1	5	48	37	2	2	-	-
S.C.	33	35	-	4	35	40	-	-	92	43
Ga.	60	104	-	5	11	125	1	2	-	-
Fla.	207	184	4	7	185	202	2	15	-	-
E.S. CENTRAL	87	103	2	7	94	168	1	1	1	-
Ky.	14	16	-	1	15	27	-	-	-	-
Tenn.	43	41	1	1	41	51	1	-	-	-
Ala.	24	37	1	4	38	69	-	1	-	-
Miss.	6	9	-	1	-	21	-	-	1	-
W.S. CENTRAL	281	229	15	19	127	434	3	2	334	849
Ark.	12	12	-	-	30	19	-	-	-	-
La.	63	29	-	-	-	-	-	-	1	7
Okla.	7	13	2	-	36	29	-	-	-	-
Tex.	199	175	13	19	61	386	3	2	333	842
MOUNTAIN	105	90	3	15	47	61	3	3	897	80
Mont.	-	-	-	-	-	-	-	-	-	-
Idaho	8	4	-	-	-	1	-	-	-	-
Wyo.	1	-	-	-	-	1	-	-	14	2
Colo.	-	10	-	3	6	25	-	3	651	-
N. Mex.	20	19	-	4	-	3	-	-	23	-
Ariz.	69	52	3	8	27	25	1	-	-	-
Utah	3	1	-	-	14	6	1	-	209	78
Nev.	4	4	-	-	-	-	1	-	-	-
PACIFIC	289	430	-	16	304	612	18	24	-	-
Wash.	20	16	-	-	52	60	1	-	-	-
Oreg.	9	13	-	-	16	24	1	2	-	-
Calif.	260	396	-	16	201	482	11	22	-	-
Alaska	-	-	-	-	7	17	-	-	-	-
Hawaii	-	5	-	-	28	29	5	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	38	51	-	7	14	22	-	-	78	136
V.I.	-	1	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	-	U	10	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting years 2003 and 2004 are provisional and cumulative (year-to-date).

TABLE III. Deaths in 122 U.S. cities,* week ending April 10, 2004 (14th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	374	266	82	19	4	3	31
Boston, Mass.	128	83	32	8	3	2	8
Bridgeport, Conn.	U	U	U	U	U	U	U
Cambridge, Mass.	26	20	5	1	-	-	3
Fall River, Mass.	24	18	5	1	-	-	4
Hartford, Conn.	U	U	U	U	U	U	U
Lowell, Mass.	27	19	8	-	-	-	2
Lynn, Mass.	8	4	4	-	-	-	-
New Bedford, Mass.	28	25	2	1	-	-	2
New Haven, Conn.	U	U	U	U	U	U	U
Providence, R.I.	U	U	U	U	U	U	U
Somerville, Mass.	4	3	-	1	-	-	1
Springfield, Mass.	32	24	5	2	-	1	4
Waterbury, Conn.	34	27	6	1	-	-	1
Worcester, Mass.	63	43	15	4	1	-	6
MID. ATLANTIC	2,169	1,523	449	131	40	25	150
Albany, N.Y.	43	24	15	2	2	-	-
Allentown, Pa.	18	13	3	1	1	-	-
Buffalo, N.Y.	85	58	22	3	2	-	11
Camden, N.J.	34	23	8	2	-	1	3
Elizabeth, N.J.	15	10	2	2	1	-	-
Erie, Pa.	42	33	7	2	-	-	2
Jersey City, N.J.	47	30	13	4	-	-	-
New York City, N.Y.	1,098	777	226	61	18	15	69
Newark, N.J.	37	14	16	5	1	1	3
Paterson, N.J.	13	7	4	1	1	-	-
Philadelphia, Pa.	361	244	79	28	8	2	17
Pittsburgh, Pa.§	18	13	2	-	1	2	1
Reading, Pa.	26	21	4	1	-	-	1
Rochester, N.Y.	145	106	26	9	2	2	23
Schenectady, N.Y.	25	20	3	2	-	-	3
Scranton, Pa.	29	25	3	1	-	-	4
Syracuse, N.Y.	89	69	13	3	3	1	10
Trenton, N.J.	24	17	2	4	-	1	1
Utica, N.Y.	20	19	1	-	-	-	2
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	1,888	1,262	397	128	43	56	120
Akron, Ohio	50	31	14	2	-	3	4
Canton, Ohio	39	25	8	6	-	-	4
Chicago, Ill.	341	205	86	22	7	19	24
Cincinnati, Ohio	66	41	15	3	3	4	4
Cleveland, Ohio	171	127	27	7	6	4	10
Columbus, Ohio	213	141	47	15	7	3	13
Dayton, Ohio	123	82	30	10	1	-	11
Detroit, Mich.	130	74	30	16	7	3	2
Evansville, Ind.	37	28	8	-	1	-	2
Fort Wayne, Ind.	46	35	7	2	1	1	2
Gary, Ind.	5	3	1	1	-	-	2
Grand Rapids, Mich.	43	26	8	2	1	6	7
Indianapolis, Ind.	193	132	39	10	2	10	14
Lansing, Mich.	30	18	7	4	-	1	-
Milwaukee, Wis.	114	77	25	9	1	2	11
Peoria, Ill.	45	34	6	4	1	-	2
Rockford, Ill.	59	49	7	3	-	-	2
South Bend, Ind.	38	26	7	4	1	-	3
Toledo, Ohio	68	48	14	6	-	-	2
Youngstown, Ohio	77	60	11	2	4	-	1
W.N. CENTRAL	668	455	145	32	18	17	46
Des Moines, Iowa	72	49	18	3	2	-	8
Duluth, Minn.	33	27	6	-	-	-	1
Kansas City, Kans.	42	28	8	4	1	1	3
Kansas City, Mo.	98	60	25	5	4	4	9
Lincoln, Nebr.	25	21	2	1	-	1	2
Minneapolis, Minn.	59	51	6	1	1	-	5
Omaha, Nebr.	99	66	20	7	4	2	7
St. Louis, Mo.	85	42	31	6	2	3	2
St. Paul, Minn.	59	40	10	2	1	6	3
Wichita, Kans.	96	71	19	3	3	-	6
S. ATLANTIC	1,174	750	257	95	41	31	78
Atlanta, Ga.	127	67	36	15	4	5	7
Baltimore, Md.	182	103	50	19	7	3	21
Charlotte, N.C.	91	57	24	5	4	1	11
Jacksonville, Fla.	155	101	31	12	7	4	6
Miami, Fla.	97	70	16	7	3	1	3
Norfolk, Va.	55	34	11	4	2	4	3
Richmond, Va.	64	44	10	6	3	1	2
Savannah, Ga.	62	37	12	5	1	7	5
St. Petersburg, Fla.	48	29	9	6	3	1	7
Tampa, Fla.	177	129	32	10	3	3	10
Washington, D.C.	100	67	23	5	4	1	2
Wilmington, Del.	16	12	3	1	-	-	1
E.S. CENTRAL	860	577	203	47	19	13	80
Birmingham, Ala.	176	126	34	7	4	4	15
Chattanooga, Tenn.	48	38	8	-	1	1	2
Knoxville, Tenn.	73	52	15	5	-	1	-
Lexington, Ky.	56	33	17	3	1	2	4
Memphis, Tenn.	205	133	54	11	6	1	24
Mobile, Ala.	95	61	26	5	3	-	7
Montgomery, Ala.	41	31	5	3	2	-	7
Nashville, Tenn.	166	103	44	13	2	4	21
W.S. CENTRAL	1,496	930	378	105	42	41	104
Austin, Tex.	90	53	22	8	3	4	6
Baton Rouge, La.	U	U	U	U	U	U	U
Corpus Christi, Tex.	61	35	19	3	2	2	8
Dallas, Tex.	224	126	60	19	8	11	13
El Paso, Tex.	99	64	22	6	4	3	8
Ft. Worth, Tex.	121	81	26	8	3	3	6
Houston, Tex.	369	225	89	32	10	13	25
Little Rock, Ark.	65	36	23	2	2	2	2
New Orleans, La.	51	30	14	7	-	-	-
San Antonio, Tex.	215	142	51	13	6	3	21
Shreveport, La.	90	65	20	5	-	-	7
Tulsa, Okla.	111	73	32	2	4	-	8
MOUNTAIN	863	559	198	66	21	18	68
Albuquerque, N.M.	103	73	18	9	3	-	11
Boise, Idaho	42	28	9	4	1	-	2
Colo. Springs, Colo.	86	48	33	3	-	2	6
Denver, Colo.	103	58	26	10	2	7	6
Las Vegas, Nev.	248	154	63	17	11	3	16
Ogden, Utah	25	18	4	2	1	-	2
Phoenix, Ariz.	94	58	24	7	1	3	7
Pueblo, Colo.	26	19	5	2	-	-	-
Salt Lake City, Utah	136	103	16	12	2	3	18
Tucson, Ariz.	U	U	U	U	U	U	U
PACIFIC	1,506	1,047	298	102	31	28	128
Berkeley, Calif.	14	10	2	-	1	1	1
Fresno, Calif.	140	91	29	16	3	1	7
Glendale, Calif.	17	12	2	2	1	-	2
Honolulu, Hawaii	83	55	20	7	-	1	3
Long Beach, Calif.	69	47	15	4	2	1	9
Los Angeles, Calif.	268	168	69	23	4	4	30
Pasadena, Calif.	30	22	6	-	-	2	6
Portland, Oreg.	140	98	20	10	5	7	9
Sacramento, Calif.	U	U	U	U	U	U	U
San Diego, Calif.	189	138	36	10	3	2	19
San Francisco, Calif.	100	71	19	7	2	1	8
San Jose, Calif.	198	152	30	10	3	3	16
Santa Cruz, Calif.	36	26	7	-	3	-	6
Seattle, Wash.	74	53	14	7	-	-	7
Spokane, Wash.	54	41	9	1	2	1	2
Tacoma, Wash.	94	63	20	5	2	4	3
TOTAL	10,998¶	7,369	2,407	725	259	232	805

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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