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Increases in Fluoroquinolone-Resistant *Neisseria gonorrhoeae* Among Men Who Have Sex with Men — United States, 2003, and Revised Recommendations for Gonorrhea Treatment, 2004

In the United States, an estimated 700,000–800,000 persons are infected with *Neisseria gonorrhoeae* each year (*1,2*). Since 1993, CDC has recommended use of fluoroquinolones (i.e., ciprofloxacin, ofloxacin, or levofloxacin) for gonorrhea treatment. Fluoroquinolone therapy is used frequently because it is an inexpensive, oral, and single-dose therapy. However, because of increased prevalence of fluoroquinolone-resistant *N. gonorrhoeae* (QRNG)* in Asia, the Pacific Islands (including Hawaii), and California, fluoroquinolones are no longer recommended for treating gonorrhea acquired in those locations (*3–5*). This report describes increases in QRNG among men who have sex with men (MSM) in Massachusetts, New York City, and 30 sites surveyed by the Gonococcal Isolate Surveillance Project (GISP) during 2003. CDC recommends that clinicians no longer use fluoroquinolones as a first-line treatment for gonorrhea in MSM.

GISP

GISP is a CDC-sponsored sentinel surveillance system that monitors antimicrobial susceptibilities in *N. gonorrhoeae* through ongoing testing of approximately 5,000 male urethral gonococcal isolates obtained annually from patients at 30 sexually transmitted disease (STD) clinics in the United States. Preliminary data collected during January–September 2003 from all GISP sites indicate a QRNG prevalence of 4.2%, compared with 2.2% in 2002 (*6*) and 0.7% in 2001 (*6*). Excluding Hawaii and California, preliminary 2003 QRNG prevalence was 0.9% in 2003, compared with 0.4% in 2002 and 0.02% in 2001; in addition, in 2003, QRNG prevalence was 4.9% among MSM and 0.4% among heterosexual men (Figure), compared with 1.8% among MSM and 0.2% among heterosexual men in 2002.

Massachusetts

During January–August 2003, the Massachusetts State Laboratory Institute performed antimicrobial susceptibility tests on 249 gonococcal isolates from 235 patients in clinical facilities throughout the state. QRNG accounted for 10.4% (26 of 249) of gonococcal isolates tested during this period, compared with 2.1% (10 of 486) in 2002 and zero (0 of 386) in 2001.

The 26 QRNG isolates in 2003 were obtained from 24 patients, of whom 22 were male and two were female partners of men identified with QRNG; seven (29%) were STD clinic patients. Of the 22 male QRNG patients, four (18%) reported having sex exclusively with women, one reported having sex with men and women, and 17 (77%) reported having sex

*Defined by the National Committee on Clinical Laboratory Standards as *N. gonorrhoeae* resistant to ciprofloxacin (minimum inhibitory concentration [MIC] >1.0 μg/mL by agar dilution or disk diffusion zone size ≤27 mm) or ofloxacin (MIC >2.0 μg/mL or disk diffusion zone size <24 mm).

INSIDE

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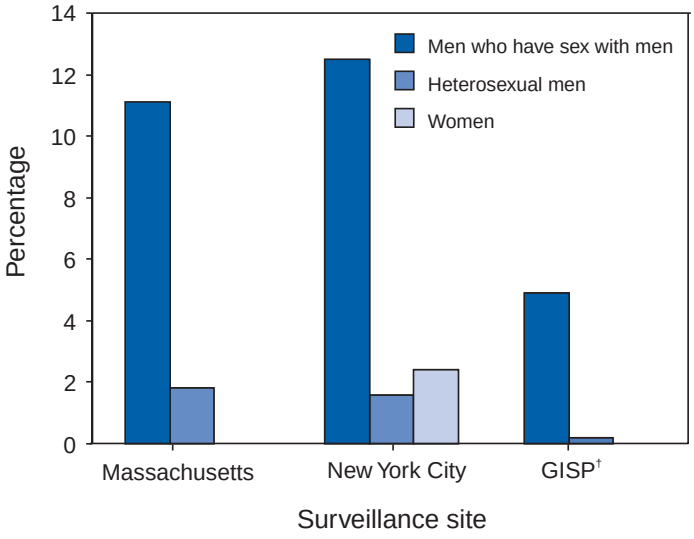
FIGURE. Prevalence of fluoroquinolone-resistant *Neisseria gonorrhoeae* infection, by sex, sexual behavior, and surveillance site — United States, 2003*



* Data from Massachusetts and New York City are from sexually transmitted disease clinics. In the Gonococcal Isolate Surveillance Project (GISP), data are presented for all areas, excluding Hawaii and California; no women are surveyed in GISP. All data are preliminary.
† Gonococcal Isolate Surveillance Project.

exclusively with men. None of the patients with QRNG was identified as a result of treatment failure.

Medical records were reviewed for all 111 male gonorrhea patients who had diagnosis by culture at STD clinics in the state. Of these, seven (6.3%) had QRNG identified, with 11.1% (six of 54) QRNG prevalence among MSM and 1.8% (one of 55) among heterosexual men. A total of 14 female patients had gonorrhea diagnosed at STD clinics; none had QRNG.

Since 1987, the Massachusetts Department of Public Health has recommended use of ceftriaxone rather than fluoroquinolones for treatment of uncomplicated gonococcal infections. When local increases in QRNG were identified in late 2002, the health department issued a clinical advisory to health-care providers throughout the state, alerting them to the increase and advising that fluoroquinolones were not recommended for gonorrhea treatment unless antimicrobial susceptibility testing excluded fluoroquinolone resistance†. Beginning in June 2003, any health-care provider who reported a patient who had been treated with a fluoroquinolone was sent a notice recommending that a test of cure be performed unless susceptibility testing was performed initially to rule out QRNG.

† Available at http://www.state.ma.us/dph/cdc/std/ca_gc.htm.

New York City

During January–July 2003, antimicrobial susceptibility testing was performed on 643 gonococcal isolates from patients evaluated at the 10 STD clinics operated by the New York City Department of Health and Mental Hygiene's Bureau of Sexually Transmitted Disease Control. During this interval, antimicrobial resistance information was available from cultures performed on oropharyngeal and rectal specimens in all 10 clinics. Consequently, MSM probably are overrepresented among men who have culture-confirmed gonorrhea. In one clinic, cultures also were performed on urethral specimens. None of the clinics obtained endocervical specimens for culture. Most testing for gonorrhea was conducted by using nucleic acid amplification methods. QRNG accounted for 3.4% (22 of 643) of isolates tested during January–July 2003, compared with 0.3% (eight of 3,196) in 2002 and 0.1% (three of 3,144) in 2001.

Medical record reviews were performed at six of the STD clinics. During January–July 2003, a total of 394 gonococcal isolates from 369 patients at these six clinics were tested for antimicrobial susceptibility; QRNG was identified in 5% (18 of 369) of the patients. Seventeen (94%) of the 18 patients with QRNG were male, and 13 (77%) reported being MSM. QRNG prevalence among patients for whom sexual behavior was documented was 12.5% (14 of 112) among MSM, 1.6% (three of 183) among heterosexual men, and 2.4% (one of 42) among women.

Fourteen of the 17 patients with QRNG for whom gonorrhea treatment history was available had been treated with ceftriaxone. New York City STD clinic treatment protocols specify that gonorrhea be treated with ceftriaxone and that fluoroquinolones only be used if culture is performed so the patient can be recalled if QRNG is identified.

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Editorial Note: Fluoroquinolones are used frequently to treat gonorrhea in the United States because they are inexpensive and easy to administer and their continued use might decrease the use of cephalosporins and delay the development of cephalosporin resistance. However, local and national data suggest that the prevalence of QRNG among MSM infected with gonorrhea is close to or exceeds 5%. This level of resistance often is used as the level at which a therapeutic regimen should be changed (*7*); other factors, including prevalence of gonorrhea, availability of antimicrobial susceptibility data, and cost of various diagnostic and treatment options, might result in higher or lower thresholds for change. In the absence of antimicrobial susceptibility testing or tests of cure, fluoroquinolones should no longer be used to treat proven or suspected gonococcal infections in MSM in the United States. Health departments should notify clinicians about this new recommendation. Some local health departments have issued similar recommendations recently.

Fluoroquinolones also should not be used to treat patients whose gonorrhea was acquired in Asia, the Pacific Islands (including Hawaii), California, and other areas, such as England and Wales, with increased QRNG prevalence (*4,8*). For those infections acquired where QRNG is not endemic, before determining treatment, clinicians should obtain travel histories from patients and information on the sex of sex partners from male patients with proven or suspected gonorrhea. A list of places that should be included in a relevant travel history is available at http://www.cdc.gov/std/gisp.

For patients with gonorrhea who are MSM or who provide a history suggesting acquisition of infection in an area with high QRNG prevalence, CDC recommends ceftriaxone 125 mg intramuscularly or cefixime 400 mg orally (not currently available in the United States [*9*]); spectinomycin 2 g intramuscularly is an alternative. Spectinomycin may be used for urogenital and anorectal gonorrhea but is not sufficiently effective to treat pharyngeal gonorrhea (*4,10*). If *Chlamydia trachomatis* is not ruled out, each regimen should be followed with either azithromycin 1.0 g orally (single dose) or doxycycline 100 mg orally twice daily for 7 days to treat possible coinfection with chlamydia.

The limited availability of a recommended oral treatment regimen for gonorrhea poses practical problems for treating QRNG. Besides the fluoroquinolones, cefixime, whose manufacture was discontinued in 2002, is the only CDC-recommended oral agent for treating gonorrhea. Although Lupin, Ltd. (Baltimore, Maryland) received Food and Drug Administration approval to manufacture and market cefixime in February 2004, the 400-mg tablets to treat gonorrhea are not yet available; the suspension (100 mg/5 mL) is available. The health departments of California and Washington state have suggested alternative oral treatments (e.g., cefpodoxime 400 mg) that have not yet been evaluated adequately. CDC will provide additional information about the availability of cefixime and efficacy of other oral agents for treating gonorrhea as it becomes available (http://www.cdc.gov/std/treatment/cefixime.htm).

Clinicians must be vigilant in identifying treatment failures when fluoroquinolones are used, advise their patients about the importance of follow-up if symptoms persist, and be

prepared to evaluate such cases by culture. In cases of persistent gonococcal infection after treatment with fluoroquinolones, antimicrobial susceptibility testing should be performed. Only culture of *N. gonorrhoeae* can be used to determine antimicrobial susceptibility. Health departments without the capacity to perform culture and antimicrobial susceptibility testing should develop those capabilities locally or partner with laboratories outside their jurisdictions. The antimicrobial susceptibility testing panel should, at a minimum, include a fluoroquinolone, ceftriaxone, spectinomycin, azithromycin, and any other drugs in local use for gonorrhea treatment. Arrangements for antimicrobial susceptibility testing can be made by contacting state and local health departments. Through their state and local health departments, clinicians and laboratorians should report treatment failures or resistant gonococcal isolates to CDC, telephone 404-639-2059.

Given the apparent low prevalence of QRNG among heterosexuals, a national change in treatment in that group is not recommended at this time. However, QRNG prevalence among heterosexuals is likely to increase over time and already might be high enough in some areas to warrant new local treatment recommendations. For example, increased prevalence of QRNG among heterosexuals has been identified in several counties in Michigan, where recommendations have been made to avoid using fluoroquinolones among all persons infected with gonorrhea. Because gonococcal infections, especially in women, frequently are asymptomatic, monitoring for symptomatic treatment failures alone does not provide a reliable indication of emerging antimicrobial resistance. Therefore, as part of effective gonorrhea-control programs, health departments should evaluate their current QRNG surveillance activities and consider plans to monitor for the presence of QRNG among heterosexual populations with gonorrhea. If prevalence increases nationally among heterosexuals, guidance from CDC will be forthcoming. Local and state treatment recommendations, technical information, surveillance data, references, and other links related to gonococcal resistance are available at http://www.cdc.gov/std/gisp.

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Preliminary FoodNet Data on the Incidence of Infection with Pathogens Transmitted Commonly Through Food — Selected Sites, United States, 2003

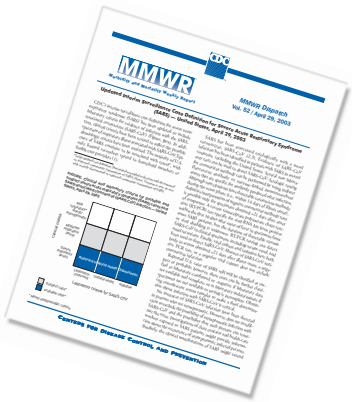
In the United States, an estimated 76 million persons contract foodborne and other acute diarrheal illnesses each year (*1*). CDC's Emerging Infections Program Foodborne Diseases Active Surveillance Network (FoodNet) collects data on diseases caused by enteric pathogens transmitted commonly through food in nine* U.S. sites (*2*). FoodNet quantifies and monitors the incidence of these infections by conducting active surveillance for laboratory-diagnosed illness (*3*). This report describes preliminary surveillance data for 2003 and compares them with 1996–2002 data. The data indicate substantial declines in the incidence of infections caused by *Campylobacter*, *Cryptosporidium parvum*, *Escherichia coli* O157, *Salmonella*, and *Yersinia enterocolitica*. These data represent progress toward meeting the 2010 national health objectives of reducing the incidence of foodborne infections (objective nos. 10.1a, 10.1b, and 10.1d) (*4*). However, increased efforts are needed to reduce further the incidence of foodborne illnesses, particularly among children.

In 1996, FoodNet began active surveillance for laboratory-diagnosed cases of *Campylobacter*, Shiga toxin–producing *E. coli* (STEC) O157, *Listeria*, *Salmonella*, *Shigella*, *Vibrio*, and *Yersinia*. In 1997, FoodNet added surveillance for cases of *Cryptosporidium* and *Cyclospora cayetanensis*. During 1996–2003, the FoodNet surveillance population increased from

* California, Colorado, Connecticut, Georgia, Maryland, Minnesota, New York, Oregon, and Tennessee.

up-to-the-minute: *adj*

1 : extending up to the immediate present, including the very latest information; see also *MMWR*.



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14.2 million persons in five sites to 41.5 million in nine sites (14% of the U.S. population).

To ascertain cases, FoodNet personnel routinely contact all clinical laboratories in their surveillance areas. Preliminary incidence for 2003 was calculated by using the number of cases of diagnosed infections divided by 2002 population estimates (*5*).

2003 Surveillance

In 2003, a total of 15,600 laboratory-diagnosed cases of infections under surveillance caused by nine pathogens were identified: 6,017, *Salmonella*; 5,215, *Campylobacter*; 3,021, *Shigella*; 480, *Cryptosporidium*; 443, *E. coli* O157; 161, *Yersinia*; 138, *Listeria*; 110, *Vibrio*; and 15, *Cyclospora*. Among the 5,455 (91%) *Salmonella* isolates serotyped, five serotypes accounted for 59% of infections: 1,104 (20%) Typhimurium, 759 (14%) Enteritidis, 653 (12%) Newport, 348 (6%) Heidelberg, and 331 (6%) Javiana. Among 2,810 (93%) *Shigella* isolates identified to species, 2,410 (86%) were *S.* sonnei, and 370 (13%) were *S.* flexneri. Among 100 (91%) *Vibrio* isolates identified to species, 46 (46%) were *V. parahaemolyticus*, and 16 (16%) were *V. vulnificus*.

As in previous years, certain infections affected children disproportionately. The incidence of *Salmonella* infection, defined as the number of laboratory isolations per 100,000 persons, was 122.7 for infants (i.e., aged <1 year) and 50.6 young children (i.e., aged 1–4 years), compared with 10.8 for other persons (i.e., aged ≥5 years). The incidence of *Yersinia* infection was 9.6 for infants and 1.4 for young children, compared with 0.2 for other persons. The incidence of *E. coli* O157 infection was 4.5 for young children, compared with 0.9 for other persons. Substantial variation in incidence across sites also was reported for most infections (Table).

1996–2003 Comparison

For most pathogens, the 2003 incidence of infection was lower than the average annual incidence for 1996–1998 (Table). However, the number of sites and the population under surveillance have increased since FoodNet began in 1996, confounding this comparison. To account for the increased population and variation in the incidence among sites, a main effects log-linear Poisson regression model was used to estimate the effect of time on the incidence of the various pathogens by treating calendar year as a categorical variable. The relative change in incidence from 1996 to 2003 was estimated along with corresponding confidence intervals (CIs).

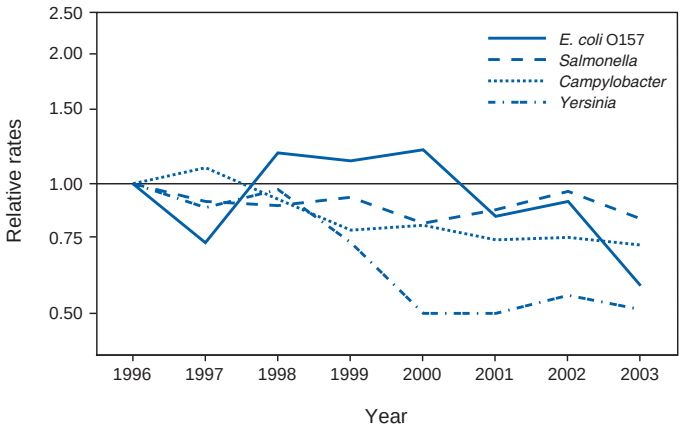
During 1996–2003, the estimated incidence of several infections declined significantly (Figure 1). The estimated incidence of *Yersinia* infections decreased 49% (95% CI = 61% to 34% decrease), *E. coli* O157 decreased 42% (95% CI = 58% to 19% decrease), *Campylobacter* decreased 28% (95% CI = 36% to 20% decrease), and *Salmonella* decreased 17% (95% CI = 26% to 7% decrease). From 1997 to 2003, the incidence of *Cryptosporidium* infection decreased 51% (95% CI = 64% to 34% decrease). The decrease in *E. coli* O157 infections occurred primarily during 2002–2003. Although the incidence of *Cyclospora* infection has decreased since 1997,

TABLE. Incidence of cases of infection with nine pathogens under surveillance by the Foodborne Diseases Active Surveillance Network, by site, compared with national health objectives for 2010 — United States, 1996–1998 and 2003

Pathogens	California	Colorado	Connecticut	Georgia	Maryland	Minnesota	New York	Oregon	Tennessee	Overall 2003	Overall 1996–1998*	National health objectives for 2010
Bacteria												
Campylobacter†	26.9	14.6	15.7	7.0	7.4	18.7	11.8	16.4	7.9	12.6	21.7	12.3
Escherichia coli O157†	0.9	1.5	1.1	0.3	0.3	2.7	1.2	2.4	0.6	1.1	2.3	1.0
Listeria§	5.3	2.4	6.4	3.7	5.1	1.2	2.8	1.4	1.9	3.3	4.9	2.5
Salmonella†	14.9	10.0	11.6	23.3	14.6	11.5	10.0	10.7	13.0	14.5	13.5	6.8
Shigella†	8.6	9.5	2.0	13.2	8.5	2.1	6.0	3.0	6.9	7.3	7.7	NA¶
Vibrio§	6.2	0.4	2.9	3.4	4.0	0.8	1.8	1.7	1.9	3.0	2.4	NA
Yersinia§	5.9	2.0	4.6	5.7	2.0	2.4	3.8	1.4	5.0	4.0	8.9	NA
Parasites												
Cryptosporidium§	5.7	4.8	5.8	14.1	3.1	30.7	12.1	9.7	7.2	10.9	26.8	NA
Cyclospora§	NR**	NR	1.2	0.9	0.4	NR	0.3	NR	NR	0.3	1.6	NA
Population in surveillance (millions)††	3.2	2.5	3.5	8.6	5.5	5.0	4.0	3.5	5.8	41.5	—	—

* Total number of reported cases during 1996–1998 (1997–1998 for parasitic pathogens) divided by total number of person-years under surveillance.
† Per 100,000 persons.
§ Per 1,000,000 persons.
¶ No applicable health objective.
** None reported.
†† Population for some sites is entire state, for other sites, selected counties. For some sites, the catchment area for *Cryptosporidium* and *Cyclospora* is larger than for bacterial pathogens.

FIGURE 1. Relative rates compared with 1996 of laboratory-confirmed cases of *Yersinia, Escherichia coli* 0157, *Campylobacter*, and *Salmonella*, by year — Foodborne Diseases Active Surveillance Network, United States, 1996–2003

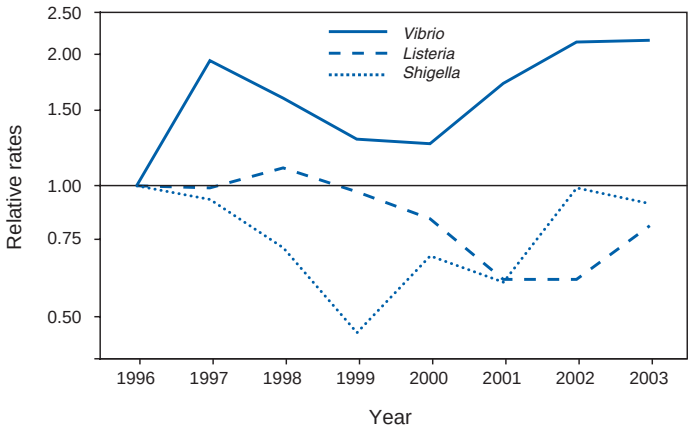


the Poisson regression model could not be applied because of the small number of cases.

During 1996–2003, the estimated incidence of the most common *Salmonella* serotype, *S.* Typhimurium, decreased 38% (95% CI = 47% to 27% decrease). The incidence of the next most common serotypes, *S.* Enteritidis, *S.* Newport, and *S.* Heidelberg, showed considerable variation by year and did not change significantly. The incidence of *S.* Javiana increased 227% (95% CI = 66% to 546% increase) from 1996 to 2003; most of this increase occurred in Georgia.

The estimated incidence of *Shigella* and *Listeria* infections showed considerable variation by year and site and did not change significantly during 1996–2003 (Figure 2). *Listeria* did not continue to decline in 2003, as observed during the preceding 4 years. During 1996–2003, the incidence of *Vibrio* infections increased 116% (95% CI = 24% to 276% increase).

FIGURE 2. Relative rates compared with 1996 of laboratory-confirmed cases of *Shigella, Listeria*, and *Vibro*, by year — Foodborne Diseases Active Surveillance Network, United States, 1996–2003



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Editorial Note: During 1996–2003, the estimated incidence of *Campylobacter*, *Cryptosporidium*, *E. coli* O157, *Salmonella*, and *Yersinia* infections declined substantially. The decline in *Campylobacter* and *E. coli* O157 infections demonstrates that meeting the 2010 national health objectives of 12.3 and 1.0 per 100,000 persons, respectively (objective nos. 10.1a and 10.1b) is likely. Although the incidence of *Salmonella* infection has declined, it remains above its objective, and among the five most common *Salmonella* serotypes, only *S.* Typhimurium demonstrated a sustained decline in incidence.

The changes in the incidence of these infections occurred in the context of control measures implemented by government agencies and the food industry, enhanced food-safety education efforts, and increased attention by consumer groups and the media. In 1997, the U.S. Department of Agriculture (USDA)'s Food Safety and Inspection Service (FSIS) implemented the Pathogen Reduction/Hazard Analysis and Critical Control Point (HACCP) systems regulations in meat and poultry slaughter and processing plants. The decline of human *E. coli* O157 infections in 2003 follows an October 2002 FSIS notice to manufacturers of raw ground beef products that they must reassess their HACCP plans regarding this pathogen (*6*). Many beef processing plants do not distribute production lots of raw ground beef unless tests performed at the plant are negative for *E. coli* O157 (M. Koohmaraie, Meat Animal Research Center, USDA, personal communication, 2004). FSIS reported declines in the frequency of *E. coli* O157:H7 contamination of ground beef for 2003 (*7*). The decline in human *Salmonella* infections during 1996–2003 accompanies a decline in the isolation of *Salmonella* from meat and poultry by FSIS (*8*). The Food and Drug Administration has introduced additional interventions to prevent foodborne diseases. These include implementing HACCP regulations for the seafood industry beginning in 1997 and the juice industry beginning in 2002, publishing sprout safety guidance in 1999, publishing produce safety guidance in 1998, and

implementing regulations requiring the refrigeration and safety labeling of shell eggs in 2001 (*9*).

During 1996–2003, no substantial changes were observed in the incidence of infection caused by *Listeria*, *Shigella*, and several common *Salmonella* serotypes (*S.* Enteritidis, *S.* Newport, and *S.* Heidelberg). The incidence of *Vibrio* and *S.* Javiana infections increased. Listeriosis might decline after full implementation of the national *Listeria* Action Plan (*9*). Future control measures should include mandatory, on-farm prevention efforts to reduce egg contamination with *S.* Enteritidis (*10*) and greater use of pasteurized eggs and irradiated ground meat. Additional targeted efforts should include further steps to reduce the prevalence of pathogens in the following animal reservoirs and the foods derived from them: broiler chickens and turkeys (*Salmonella* and *Campylobacter*); cattle and ground beef (*Salmonella* and *E. coli* O157); and seafood, particularly oysters (*Vibrio*). Efforts also should include steps to reduce contamination of fresh produce. The high incidence of several of these infections in infants and young children is of major concern. Further efforts are needed to determine risk factors for these infections and opportunities for prevention.

The findings in this report are subject to at least four limitations. First, although the majority of foodborne illnesses are not laboratory-diagnosed, FoodNet data are limited to laboratory-diagnosed illnesses, and are thus biased by factors that affect the probability of an illness being reported. Second, illnesses reported to FoodNet might be acquired through nonfoodborne sources (e.g., contaminated water, person-to-person contact, and direct animal exposure); reported incidences do not represent foodborne sources exclusively. Third, although FoodNet data provide the most detailed information available for these infections, the findings might not be generalizable to the entire U.S. population. Finally, year-to-year changes in incidence might reflect either annual variation or sustained trends; further data are needed to discern trends clearly.

The 2003 FoodNet final report, available in late 2004 at http://www.cdc.gov/foodnet, will include incidence figures and other information such as illness severity, hemolytic uremic syndrome, and non-O157 STEC isolations.

Acknowledgment

This report is based on data contributed by members of the Emerging Infections Program FoodNet Working Group.

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Progress Toward Poliomyelitis Eradication — Nigeria, January 2003–March 2004

Since the 1988 World Health Assembly resolution to eradicate poliomyelitis (*1*), three World Health Organization (WHO) regions (Americas, Western Pacific, and European) have been certified polio-free, and the number of countries where polio is endemic has decreased from 125 in 1988 to six in 2003 (Afghanistan, Egypt, India, Niger, Nigeria, and Pakistan). In 2003, Nigeria, the most populous country of the African continent (2003 population projected from 1991 census report: 125 million), reported 355 wild poliovirus (WPV) cases, accounting for 45% of cases reported globally and >80% of cases reported from the African Region (AFR). This report summarizes progress toward polio eradication in Nigeria during January 2003–March 2004. The findings indicate the urgent need to implement high-quality supplementary immunization activities (SIAs) in Nigeria to interrupt ongoing WPV transmission.

Routine Vaccination

To date, routine coverage estimates vary considerably from state to state. Because administrative data for 2003 are still being evaluated, national estimates of coverage are not available.

SIAs

Since 1996, SIAs targeting children aged <5 years have been conducted annually in Nigeria (*2*). National Immunization Days (NIDs)* were conducted annually through 2002 (*3*). During February and March 2004, two NID rounds were conducted, targeting all 37 states (36 states plus one Federal Capital Territory [FCT]). All states except Kano and Zamfara participated in the February round, and all except Kano participated in the March round.

In 2003, nine rounds of Subnational Immunization Days (SNIDs)† were conducted, targeting northern states where polio is endemic. The number of participating states and target population varied in each SNID, with the number of children vaccinated ranging from 3.6 to 15.0 million. Twelve states with endemic disease (Bauchi, Borno, Gombe, Jigawa, Kaduna, Kano, Katsina, Kebbi, Niger, Sokoto, Yobe, and Zamfara) and FCT participated in at least two rounds of SNIDs during 2003. Reported coverage at the state level during these SNIDs ranged from 56% to 100%. In addition, during 2003, four rounds of mop-up vaccination activities were conducted in Nasawara state and two rounds each in Benue and Kogi, sites that had been re-infected with WPV after being polio-free for >12 months. Reported coverage in these states during these mop-up activities ranged from 86% to 100%.

National polio eradication programs analyze the oral polio vaccine (OPV) vaccination status (routine and supplemental doses) of children aged <5 years, with nonpolio acute flaccid paralysis (AFP) as a proxy for OPV coverage in the general population. As the OPV coverage of population increases, the percentage of nonpolio AFP cases with >3 doses of OPV also should increase. During 2003, the proportion of nonpolio AFP cases in children aged <5 years who had received >3 doses of OPV was <60% in 12 of 13 states (median: 33%; range: 9%–75%) where polio is endemic. The proportion of nonpolio AFP cases in children aged <5 years who had received >3 doses of OPV was <60% in five of eight re-infected states, but in only one of the 14 states without endemic disease.

* Nationwide mass campaigns during a short period (days to weeks) during which 2 doses of OPV are administered to all children (usually aged <5 years) regardless of previous vaccination history, with an interval of 4–6 weeks between doses.
† Campaigns similar to NIDs but confined to certain parts of the country.

AFP Surveillance

Surveillance for AFP, initiated in 1997, is conducted at 4,035 reporting sites in the 774 Local Government Areas (LGAs) in Nigeria. AFP surveillance quality is evaluated by two key indicators: 1) annual reporting rate (target: nonpolio AFP rate of >1 case per 100,000 children aged <15 years) and 2) completeness of stool specimen collection (target: two adequate specimens from >80% of all persons with AFP). In 2003, Nigeria attained a national nonpolio AFP rate of 5.5; all 37 states attained rates of >1.0. The adequate stool specimen collection rate nationally for 2003 was 91%; all 37 states the target rate of >80% (Table). Surveillance performance at the LGA level varied; 123 (16%) of 774 LGAs were below the target levels for one or both surveillance indicators.

When surveillance quality is high, previous genetic analyses of WPV from all regions with endemic disease have indicated that nearly all isolates are >99% identical to some other previous isolate in the viral VP1 coding region. During 2003, approximately 17.5% of the isolates in Nigeria (type 1 [PV1], n = 43; type 3 [PV3], n = 19) were <98.5% identical to any other previous isolate, indicating that some of the closely related polioviruses were not detected because of gaps in surveillance quality (i.e., viruses missed in the chain of transmission for >1 year).

Stool samples collected from persons with AFP in Nigeria are tested at two WHO-accredited national polio laboratories, one in Ibadan (Oyo state) and one in Maiduguri (Borno state). In 2003, the Ibadan and Maiduguri laboratories processed 6,549 stool specimens. The proportion of specimens with nonpolio enterovirus (NPEV) isolated is used as a combined indicator of quality of specimen transport and sensitivity of laboratory processing; a rate of >10% is considered acceptable. The NPEV isolation rate during 2003 was 11.9% for Ibadan and 9.5% for Maiduguri. Median times for reporting primary isolation and intratypic differentiation results were 17 days (75% within 20 days) and 16 days (75% within 22 days), respectively.

WPV Incidence

During 2002–2003, the number of confirmed WPV in Nigeria increased from 202 to 355 (Table). Of these, 192 were PV1, and 163 were PV3. In 2003, a total of 23 of 37 states reported at least one WPV, representing a wider area of circulation than in 2002, when 15 states reported WPV (Figure). Of these 23 states, 13 are considered to have endemic transmission, whereas 10 were re-infected after being polio-free for >12 months. Early in 2004, PV1 was reported from Anambra state, one of 14 southern states that had remained polio-free in 2003.

In 2003, the outbreaks in Nigeria centered in Kano. Of 89 WPV cases in Kano, 57 (64%) were associated with PV3 and 32 (36%) with PV1. Virus sequence data indicated that the PV3 virus radiated outward along multiple independent chains of transmission. This outbreak started in March. The PV1 outbreak started in May, at the onset of high transmission season. A second peak of PV3 cases occurred in August, when numbers of PV1 and PV3 cases were equal. Of 355 polio cases reported in 2003, a total of 81 (23%) occurred in children aged >3 years, of which 69 (85%) were either never or incompletely vaccinated.

Of the 18 genetic clusters (corresponding to groups of related chains of transmission) observed in Nigeria in 2002 (14 PV1 and four PV3), seven were not observed in 2003 (six PV1 and one PV3). However, the large outbreaks in 2003 have increased the genetic diversity of several clusters such that some previous PV1 clusters have expanded into at least four new genetic clusters, indicating intense transmission.

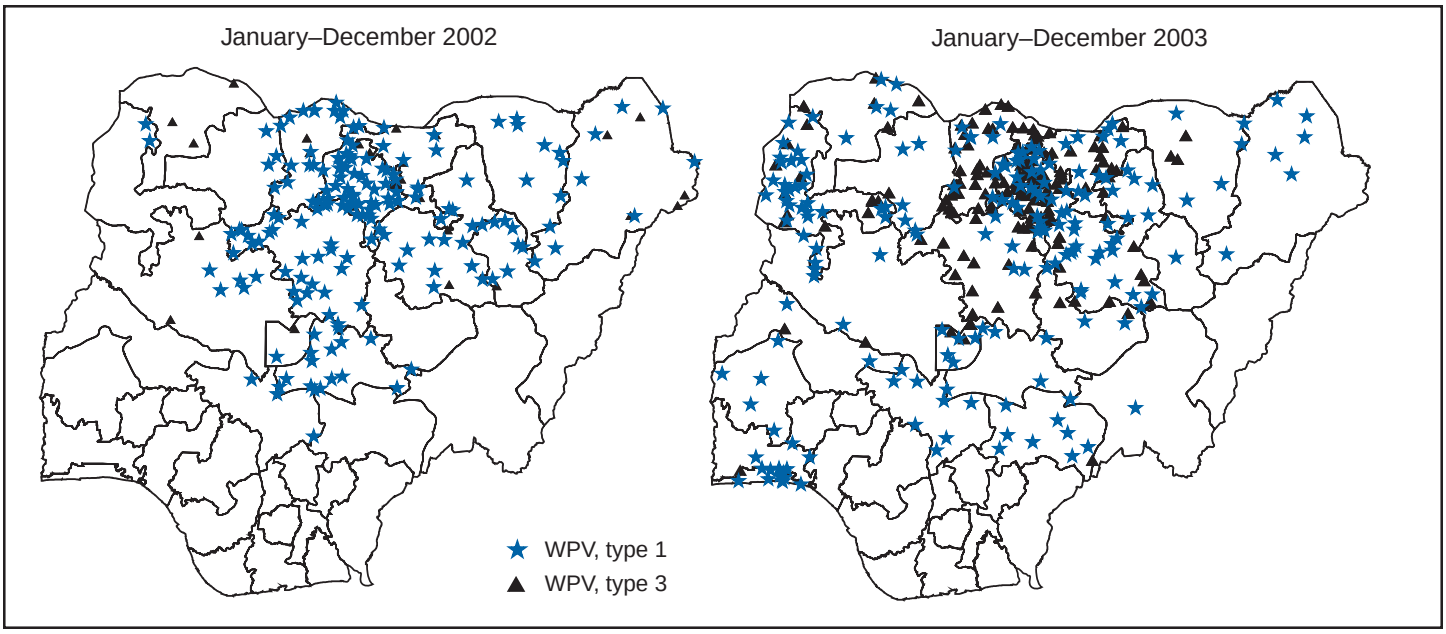
Reported by: *Federal Ministry of Health, Country Office of the World Health Organization, Abuja, Nigeria. Vaccine Preventable Diseases, World Health Organization Regional Office for Africa, Harare, Zimbabwe. Vaccines and Biologicals Dept, World Health Organization, Geneva, Switzerland. Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Global Immunization Div, National Immunization Program, CDC.*

TABLE. Number of confirmed wild poliovirus (WPV) cases and key surveillance indicators, by year — Nigeria, January 2002–March 2004

Year	No. confirmed WPV cases	Serotype distribution of WPV isolates			No. AFP* cases	Nonpolio AFP rate	% persons with AFP with adequate stool specimens
		Type 1	Type 2	Type 3			
2002	202	174	0	28	3,010	5.7	84
2003	355	192	0	163	3,319†	5.5	91
2004§	19	15	0	4	565	2.6	92

* Acute flaccid paralysis.
† A total of 60 persons with AFP, inadequate stool samples, and negative laboratory results or with no stool samples are pending classification and awaiting review by the National Polio Expert Committee.
§ As of March 19.

FIGURE. Distribution of wild poliovirus (WPV) isolates from acute flaccid paralysis cases — Nigeria, January–December 2002 and January–December 2003



Editorial Note: After gains toward polio eradication during 1996–2002, Nigeria suffered a resurgence of WPV transmission attributable to the suspension of vaccination campaigns in fall 2003 in several northern states, particularly Kano. This resurgence resulted in the reintroduction of WPV into previously polio-free Nigerian states and exportation of WPV to eight polio-free countries in West and Central Africa (Benin, Cameroon, the Central African Republic, Chad, Ghana, Ivory Coast, Burkina Faso, and Togo).

The increased intensity of WPV transmission in the states with endemic polio in northern Nigeria in 2003 occurred despite an increased number of targeted SIAs. Seven of the 13 states with endemic disease were involved in four or more SNID rounds in 2003; all 13 states have continued to confirm WPV. Continued WPV transmission with expansion of genetic diversity, the occurrence of polio in older children, and OPV data from nonpolio AFP cases demonstrate the failure to reach a substantial proportion of children during the vaccination campaigns.

False rumors about OPV safety adversely affected SNIDs, with the greatest impact in Kano, where 25% of all Nigerian WPV cases occurred in 2003. Citing vaccine safety concerns, state authorities in Kano (which last conducted a SNID in April 2003) decided in August 2003 to suspend all SIAs (*4*). Statewide suspension of SIAs at different times during 2003–2004 also occurred in Kaduna, Zamfara, and (to a limited extent) in Niger state. As a result of these rumors, public health managers and frontline health-care workers found it increasingly difficult to improve microplanning, training, and implementation of SIAs.

On January 15, 2004, the federal minister of health signed the Geneva Declaration on Polio Eradication together with the ministers from the other five countries with endemic disease. To address OPV safety concerns, the president of Nigeria established a safety verification committee, which included religious and traditional leaders, state officials, and federal government scientists. The committee undertook testing of OPV in India and South Africa and, in March 2004, presented its report, which indicated that OPV is safe. As a result, the northern states, except Kano, fully endorsed their participation in SIAs, with the president of Nigeria personally launching the campaign in Zamfara.

Nigeria and its polio partner agencies have endorsed a strategic plan that proposes six SIA rounds in all states with endemic disease by December 2004. The plan focuses on improving the quality of microplanning, vaccination team selection, training, and social mobilization. In addition, a new mechanism for rapidly disbursing funds to vaccinators is being planned for 2004. Restoring public confidence in the safety of OPV will be critical to the success of SIAs.

During 2003, Nigeria maintained certification-quality AFP surveillance at the national and state levels. Remaining gaps at the LGA level will be addressed through greater scrutiny of the timeliness and completeness of surveillance reports and prioritized supervision of low-performing LGAs.

The opportunity to achieve polio eradication globally has never been greater. The government of Nigeria and its partners must ensure that every child is administered OPV, so that Nigeria, the rest of Africa, and the world can achieve polio eradication.

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2. CDC. Progress toward poliomyelitis eradication—Nigeria, January 2002–March 2003. MMWR 2003;52:567–70.
3. CDC. Progress toward poliomyelitis eradication—Nigeria, January 2000–March 2002. MMWR 2002;51:479–81.
4. Samba E, Nkrumah F, Leke R. Getting polio eradication back on track in Nigeria. N Engl J Med 2004;350:645–6.

Notice to Readers

Update on *MMWR* Table II: AIDS Surveillance Data and Provisional Nationally Notifiable Disease Data

CDC has received inquiries about the absence of provisional 2004 AIDS surveillance data among National Notifiable Diseases Surveillance System (NNDSS) case report data presented in Table II of *MMWR* (*1*). The AIDS case report data usually are updated monthly in this table. However, although states report data to CDC on a monthly basis, because of an internal data processing problem, CDC did not publish 2004 data until last week (*2*). If any delay occurs in presenting monthly updates in provisional AIDS case counts in Table II, CDC will add a footnote to explain the reason for the delay.

MMWR Table II includes cumulative (year-to-date) incidence data for selected nationally notifiable diseases for the current and preceding year, by state. NNDSS data can be used to identify aberrations or discrepancies in reported disease incidence, whether because of a true change in disease incidence or reporting artifacts. However, because of reporting delays, data reported in the current year are only an estimate of true disease incidence, whereas data with which they are compared from the preceding year represent finalized (or nearly finalized) data that account for delayed case reporting from states to CDC and include subsequent corrections. When current year-to-date provisional data indicate fewer cases than for the preceding year, the difference might indicate 1) a real decrease in cases or 2) artifactual changes attributed to reporting delays in the current year. The interpretation of provisional NNDSS weekly case counts also is complicated because it differs by state and disease program and is highly subject to changes in state-specific surveillance system policies and procedures.

Readers can send their comments on the use and display of provisional NNDSS data to CDC by telephone, 770-488-8359 or by e-mail, soib@cdc.gov.

References

1. CDC. Table II: provisional cases of selected notifiable diseases, United States, weeks ending March 27, 2004 and March 22, 2003 (12th week). MMWR 2004;53:271–9.
2. CDC. Table II: provisional cases of selected notifiable diseases, United States, weeks ending April 17, 2004 and April 12, 2003 (15th week). MMWR 2004;53:325–33.

Notice to Readers

Innovative STD Prevention Programs

April is National STD Awareness Month. Sexually transmitted diseases (STD) continue to be a serious health threat in the United States. In 2000, an estimated 18.9 million persons were infected with STDs, of which half were persons aged <25 years; direct medical costs of STDs were approximately $9.3–$15.5 billion. Despite these data, innovative STD prevention efforts are having a positive impact on infection rates in several U.S. cities.

Because of the high prevalence of chlamydia in young women and its frequent lack of symptoms, CDC recommends annual chlamydia screening for all sexually active women aged <25 years. However, screening levels might be low in many settings (*1*). In nonmedical settings, innovative chlamydia screening and treatment efforts have been successful. For example, a program in Philadelphia identified and treated approximately 800 chlamydia infections among female students in city schools during the 2002–03 school year. The intervention prevented an estimated 240 cases of pelvic inflammatory disease and saved the health-care system an estimated $300,000 in future treatment costs (*2*).

Recent studies have shown potential for reaching sex partners through e-mail and Internet chat rooms and referring them for STD testing and treatment (*3,4*). Recent data also have demonstrated the potential of "patient-delivered partner therapy," an approach in which persons who have an STD diagnosed are given appropriate medication to provide for their sex partners. Continued innovations, coupled with continued commitment to STD prevention and treatment by health-care providers, health educators, public health agencies, and community leaders, are necessary to reduce the burden of STDs. Additional information about STD prevention is available at http://www.cdc.gov/std.

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QuickGuide

Recommended Childhood and Adolescent Immunization Schedule — United States, July–December 2004

Weekly April 30, 2004 / Vol. 53 / No. 16

CDC's Advisory Committee on Immunization Practices (ACIP) periodically reviews the recommended childhood and adolescent immunization schedule to ensure that the schedule is current with changes in manufacturers' vaccine formulations and reflects revised recommendations for the use of licensed vaccines, including those newly licensed. Recommendations and format of the childhood and adolescent immunization schedule for January–June 2004 were approved by ACIP, the American Academy of Family Physicians (AAFP), and the American Academy of Pediatrics (AAP) and published in January 2004 (*1*).

This report updates that schedule with the recommendation that, beginning in fall 2004, children aged 6–23 months, as well as household and out-of-home caregivers for such children, receive annual influenza vaccine (*2*). This change is reflected in the revised childhood and adolescent immunization schedule for July–December 2004 (Figure). A catch-up immunization schedule for children and adolescents who start late or who are >1 month behind remains unchanged from that published in January 2004 (Table).

Changes in the Schedule for July–December 2004

The childhood and adolescent immunization schedule for July–December 2004 differs from the previous schedule in the following ways:

- The range of recommendations bar for influenza vaccine for children aged 6–23 months has been moved above the dotted red line, indicating that these children should be vaccinated annually.
- The influenza vaccine footnote has been updated to highlight the recommendation that healthy children aged 6–23 months and close contacts of healthy children aged 0–23 months receive influenza vaccine because children in this age group are at substantially increased risk for influenza-related hospitalizations.
- The influenza vaccine footnote has been updated to highlight the recommendation that health-care workers and other persons (including household members) in close contact with persons in groups at high risk be vaccinated annually.

Vaccine Information Statements

The National Childhood Vaccine Injury Act requires that all health-care providers provide parents or patients with copies of Vaccine Information Statements before administering each dose of the vaccines listed in the schedule. Additional information is available from state health departments and at http://www.cdc.gov/nip/publications/vis.

Detailed recommendations for using vaccines are available from the manufacturers' package inserts, ACIP statements on specific vaccines, and the *2003 Red Book* (*3*). ACIP statements for each recommended childhood vaccine can be viewed, downloaded, and printed from CDC's National Immunization Program website at http://www.cdc.gov/nip/publications/acip-list.htm. Instructions on the use of Vaccine Information Statements are available at http://www.cdc.gov/nip/publications/vis/vis-instructions.pdf. In addition, guidance on how to obtain and complete a Vaccine Adverse Event Reporting System (VAERS) form is available at http://www.vaers.org or by telephone, 800-822-7967.

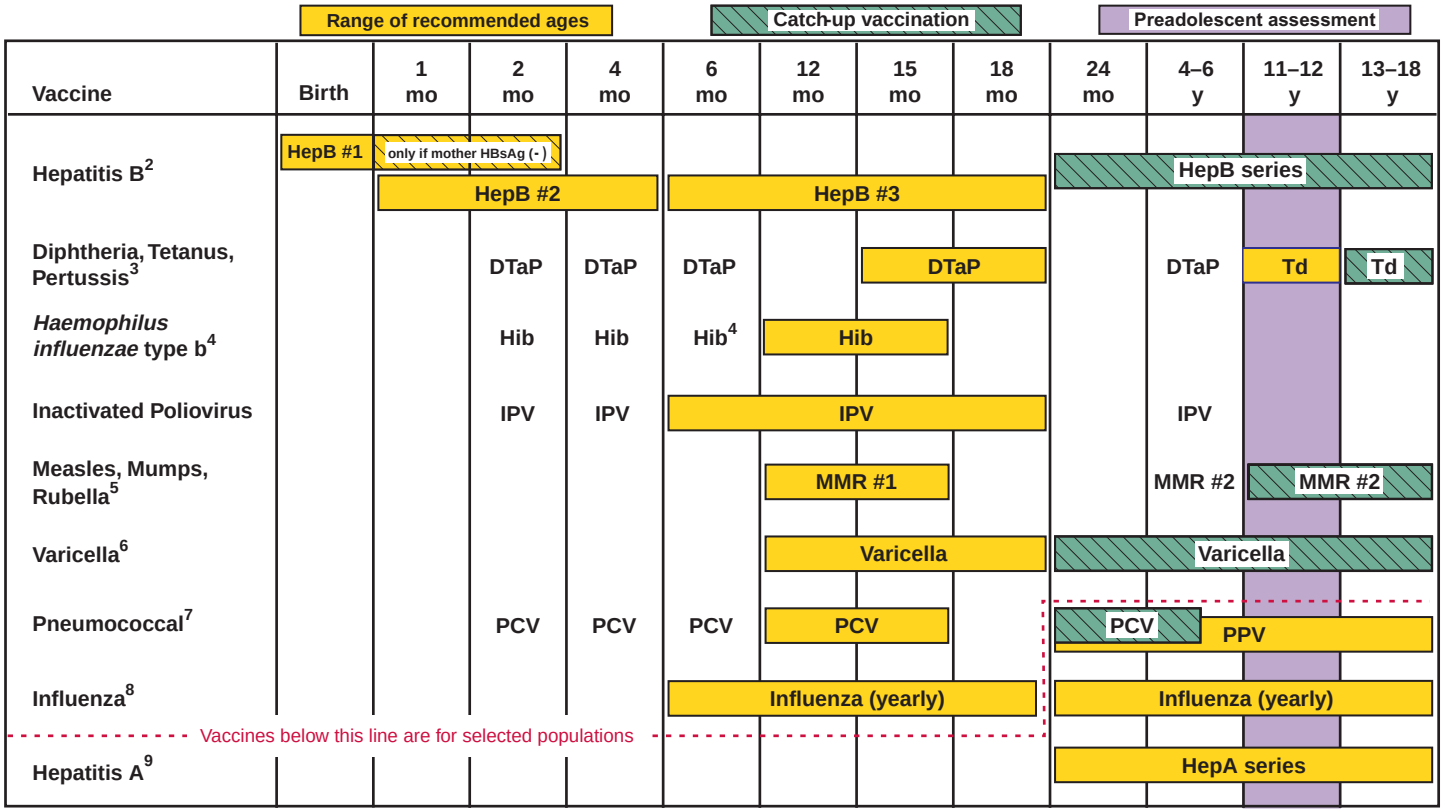
The Recommended Childhood and Adolescent Immunization Schedule and the Catch-up Childhood and Adolescent Immunization Schedule have been adopted by the Advisory Committee on Immunization Practices, the Academy of Pediatrics, and the Academy of Family Physicians. The standard *MMWR* footnote format has been modified for joint publication of this harmonized schedule.

Suggested citation: Centers for Disease Control and Prevention. Recommended Childhood and Adolescent Immunization Schedule—United States, 2004. MMWR 2004;53:Q1–4.

References

1. CDC. Recommended Childhood and Adolescent Immunization Schedule—United States, January–June 2004. MMWR 2004;52:Q1–4.
2. CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2004;53(RR):(in press).
3. American Academy of Pediatrics. Active and passive immunization. In: Pickering LK, ed. 2003 Red Book: Report of the Committee on Infectious Diseases, 26th ed. Elk Grove Village, Illinois: American Academy of Pediatrics, 2003.

FIGURE. Recommended childhood and adolescent immunization schedule[1] — United States, July–December 2004



1. Indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of April 1, 2004, for children through age 18 years. Any dose not given at the recommended age should be given at any subsequent visit when indicated and feasible. ▨ Indicates age groups that warrant special effort to administer those vaccines not given previously. Additional vaccines may be licensed and recommended during the year. Licensed combination vaccines may be used whenever any components of the combination are indicated and the vaccine's other components are not contraindicated. Providers should consult the manufacturers' package inserts for detailed recommendations. Clinically significant adverse events that follow vaccination should be reported to the Vaccine Adverse Event Reporting System (VAERS). Guidance about how to obtain and complete a VAERS form is available at http://www.vaers.org/ or by telephone, 800-822-7967.

2. Hepatitis B vaccine (HepB). All infants should receive the first dose of HepB vaccine soon after birth and before hospital discharge; the first dose also may be given by age 2 months if the infant's mother is HBsAg-negative. Only monovalent HepB vaccine can be used for the birth dose. Monovalent or combination vaccine containing HepB may be used to complete the series; 4 doses of vaccine may be administered when a birth dose is given. The second dose should be given at least 4 weeks after the first dose except for combination vaccines, which cannot be administered before age 6 weeks. The third dose should be given at least 16 weeks after the first dose and at least 8 weeks after the second dose. The last dose in the vaccination series (third or fourth dose) should not be administered before age 24 weeks. Infants born to HBsAg-positive mothers should receive HepB vaccine and 0.5 mL hepatitis B immune globulin (HBIG) within 12 hours of birth at separate sites. The second dose is recommended at age 1–2 months. The last dose in the vaccination series should not be administered before age 24 weeks. These infants should be tested for HBsAg and anti-HBs at age 9–15 months. Infants born to mothers whose HBsAg status is unknown should receive the first dose of the HepB vaccine series within 12 hours of birth. Maternal blood should be drawn as soon as possible to determine the mother's HBsAg status; if the HBsAg test is positive, the infant should receive HBIG as soon as possible (no later than age 1 week). The second dose is recommended at age 1–2 months. The last dose in the vaccination series should not be administered before age 24 weeks.

3. Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP). The fourth dose of DTaP may be administered at age 12 months provided that 6 months have elapsed since the third dose and the child is unlikely to return at age 15–18 months. The final dose in the series should be given at age ≥4 years. **Tetanus and diphtheria toxoids (Td)** is recommended at age 11–12 years if at least 5 years have elapsed since the last dose of tetanus and diphtheria toxoid-containing vaccine. Subsequent routine Td boosters are recommended every 10 years.

4. *Haemophilus influenzae* type b (Hib) conjugate vaccine. Three Hib conjugate vaccines are licensed for infant use. If PRP-OMP (PedvaxHIB® or ComVax® [Merck]) is administered at ages 2 and 4 months, a dose at age 6 months is not required. DTaP/Hib combination products should not be used for primary vaccination in infants at ages 2, 4, or 6 months but can be used as boosters after any Hib vaccine. The final dose in the series should be given at age ≥12 months.

5. Measles, mumps, and rubella vaccine (MMR). The second dose of MMR is recommended routinely at age 4–6 years but may be administered during any visit, provided at least 4 weeks have elapsed since the first dose and both doses are administered beginning at or after age 12 months. Those who have not received the second dose previously should complete the schedule by the visit at age 11–12 years.

6. Varicella vaccine (VAR). Varicella vaccine is recommended at any visit at or after age 12 months for susceptible children (i.e., those who lack a reliable history of chickenpox). Susceptible persons aged ≥13 years should receive 2 doses given at least 4 weeks apart.

7. Pneumococcal vaccine. The heptavalent **pneumococcal conjugate vaccine (PCV)** is recommended for all children aged 2–23 months and for certain children aged 24–59 months. The final dose in the series should be given at age ≥12 months. **Pneumococcal polysaccharide vaccine (PPV)** is recommended in addition to PCV for certain high-risk groups. See *MMWR* 2000;49(No. RR-9):1–35.

8. Influenza vaccine. Influenza vaccine is recommended annually for children aged ≥6 months with certain risk factors (including but not limited to asthma, cardiac disease, sickle cell disease, HIV, and diabetes), health care workers, and other persons (including household members) in close contact with persons in groups at high risk (see *MMWR* 2004;53;[RR][in press]) and can be administered to all others wishing to obtain immunity. In addition, healthy children aged 6–23 months and close contacts of healthy children aged 0–23 months are recommended to receive influenza vaccine, because children in this age group are at substantially increased risk for influenza-related hospitalizations. For healthy persons aged 5–49 years, the intranasally administered live, attenuated influenza vaccine (LAIV) is an acceptable alternative to the intramuscular trivalent inactivated influenza vaccine (TIV). See *MMWR* 2003;52(No. RR-13):1–8. Children receiving TIV should be administered a dosage appropriate for their age (0.25 mL if 6–35 months or 0.5 mL if ≥3 years). Children aged ≤8 years who are receiving influenza vaccine for the first time should receive 2 doses (separated by at least 4 weeks for TIV and at least 6 weeks for LAIV).

9. Hepatitis A vaccine. Hepatitis A vaccine is recommended for children and adolescents in selected states and regions and for certain high-risk groups. Consult your local public health authority and *MMWR* 1999;48(No.RR-12):1–37. Children and adolescents in these states, regions, and high-risk groups who have not been immunized against hepatitis A can begin the hepatitis A vaccination series during any visit. The 2 doses in the series should be administered at least 6 months apart.

Additional information about vaccines, including precautions and contraindications for vaccination and vaccine shortages is available at http://www.cdc.gov/nip or from the National Immunization Information Hotline, 800-232-2522 (English) or 800-232-0233 (Spanish). Approved by the **Advisory Committee on Immunization Practices** (http://www.cdc.gov/nip/acip), the **American Academy of Pediatrics** (http://www.aap.org), and the **American Academy of Family Physicians** (http://www.aafp.org).

TABLE. Catch-up immunization schedule for children and adolescents who start late or who are >1 month behind

Catch-up schedule for children aged 4 months–6 years

Dose 1 (minimum age)	Minimum interval between doses			
	Dose 1 to dose 2	Dose 2 to dose 3	Dose 3 to dose 4	Dose 4 to dose 5
DTaP (6 wk)	**4 wk**	**4 wk**	**6 mo**	**6 mo**[1]
IPV (6 wk)	**4 wk**	**4 wk**	**4 wk**[2]	
HepB[3] **(birth)**	**4 wk**	**8 wk** (and 16 wk after 1st dose)		
MMR (12 mo)	**4 wk**[4]			
VAR (12 mo)				
Hib[5] **(6 wk)**	**4 wk:** if 1st dose given at age <12 mo **8 wk (as final dose):** if 1st dose given at age 12–14 mo **No further doses needed:** if 1st dose given at age ≥15 mo	**4 wk**[6]**:** if current age <12 mo **8 wk (as final dose)**[6]**:** if current age ≥12 mo and 2nd dose given at age <15 mo **No further doses needed:** if previous dose given at age ≥15 mo	**8 wk (as final dose):** this dose only necessary for children aged 12 mo–5 y who received 3 doses before age 12 mo	
PCV[7] **(6 wk)**	**4 wk:** if 1st dose given at age <12 mo and current age <24 mo **8 wk (as final dose):** if 1st dose given at age ≥12 mo or current age 24–59 mo **No further doses needed:** for healthy children if 1st dose given at age ≥24 mo	**4 wk:** if current age <12 mo **8 wk (as final dose):** if current age ≥12 mo **No further doses needed:** for healthy children if previous dose given at age ≥24 mo	**8 wk (as final dose):** this dose only necessary for children aged 12 mo–5 y who received 3 doses before age 12 mo	

Catch-up schedule for children aged 7–18 years

Minimum interval between doses		
Dose 1 to dose 2	Dose 2 to dose 3	Dose 3 to booster dose
Td: **4 wk**	**Td:** **6 mo**	**Td**[8]**:** **6 mo:** if 1st dose given at age <12 mo and current age <11 y **5 y:** if 1st dose given at age ≥12 mo and 3rd dose given at age <7 y and current age ≥11 y **10 y:** if 3rd dose given at age ≥7 y
IPV[9]**:** **4 wk**	**IPV**[9]**:** **4 wk**	**IPV**[2, 9]
HepB: **4 wk**	**HepB:** **8 wk** (and 16 wk after 1st dose)	
MMR: **4 wk**		
VAR[10]**:** **4 wk**		

Note: A vaccine series does not require restarting, regardless of the time that has elapsed between doses.

1. **Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP):** The fifth dose is not necessary if the fourth dose was given after the fourth birthday.
2. **Inactivated polio vaccine (IPV):** For children who received an all-IPV or all-oral poliovirus (OPV) series, a fourth dose is not necessary if third dose was given at age ≥4 years. If both OPV and IPV were given as part of a series, a total of 4 doses should be given, regardless of the child's current age.
3. **Hepatitis B vaccine (HepB):** All children and adolescents who have not been vaccinated against hepatitis B should begin the hepatitis B vaccination series during any visit. Providers should make special efforts to immunize children who were born in, or whose parents were born in, areas of the world where hepatitis B virus infection is moderately or highly endemic.
4. **Measles, mumps, and rubella vaccine (MMR):** The second dose of MMR is recommended routinely at age 4–6 years, but may be given earlier if desired.
5. ***Haemophilus influenzae* type b (Hib) conjugate vaccine:** Vaccine generally is not recommended for children aged ≥5 years.
6. **Hib:** If current age is <12 months and the first 2 doses were PRP-OMP (PedvaxHIB® or ComVax® [Merck]), the third (and final) dose should be given at age 12–15 months and at least 8 weeks after the second dose.
7. **Pneumococcal conjugate vaccine (PCV):** Vaccine generally is not recommended for children aged ≥5 years.
8. **Tetanus and diphtheria toxoids (Td):** For children aged 7–10 years, the interval between the third and booster dose is determined by the age when the first dose was given. For adolescents aged 11–18 years, the interval is determined by the age when the third dose was given.
9. **IPV:** Vaccine generally is not recommended for persons aged ≥18 years.
10. **Varicella vaccine (VAR):** Give 2-dose series to all susceptible adolescents aged ≥13 years.

Reporting adverse reactions. Clinically significant adverse events that follow vaccination should be reported to the Vaccine Adverse Event Reporting System (VAERS). Guidance on completing a VAERS form is available at http://www.vaers.org or at telephone, 800-822-7967. **Disease reporting.** Suspected cases of vaccine-preventable diseases should be reported to state or local health departments. Additional information about vaccines, including precautions and contraindications for vaccination and vaccine shortages, is available at http://www.cdc.gov/nip or at the National Immunization information hotline, telephone 800-232-2522 (English) or 800-232-0233 (Spanish).

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Notice to Readers

International Course in Applied Epidemiology

CDC and Emory University's Rollins School of Public Health will co-sponsor a course, "International Course in Applied Epidemiology," during September 27–October 22, 2004, in Atlanta, Georgia. The course is directed at public health professionals from countries other than the United States and will include presentations and discussions of epidemiologic principles, basic statistical analysis, public health surveillance, field investigations, surveys and sampling, and epidemiologic aspects of current major public health problems in international health. Included are small group discussions of epidemiologic case exercises based on field investigations. Participants are encouraged to give a short presentation reviewing epidemiologic data from their own countries.

Computer training using Epi Info (Windows® version), a software program developed by CDC and the World Health Organization for epidemiologists, is included. Prerequisites include familiarity with the vocabulary and principles of basic epidemiology or completion of CDC's "Principles of Epidemiology" home-study course (SS3030) or equivalent. Preference will be given to applicants whose work involves priority public health problems in international health. Early registration deadline is June 1; late registration deadline is September 1. Tuition is charged.

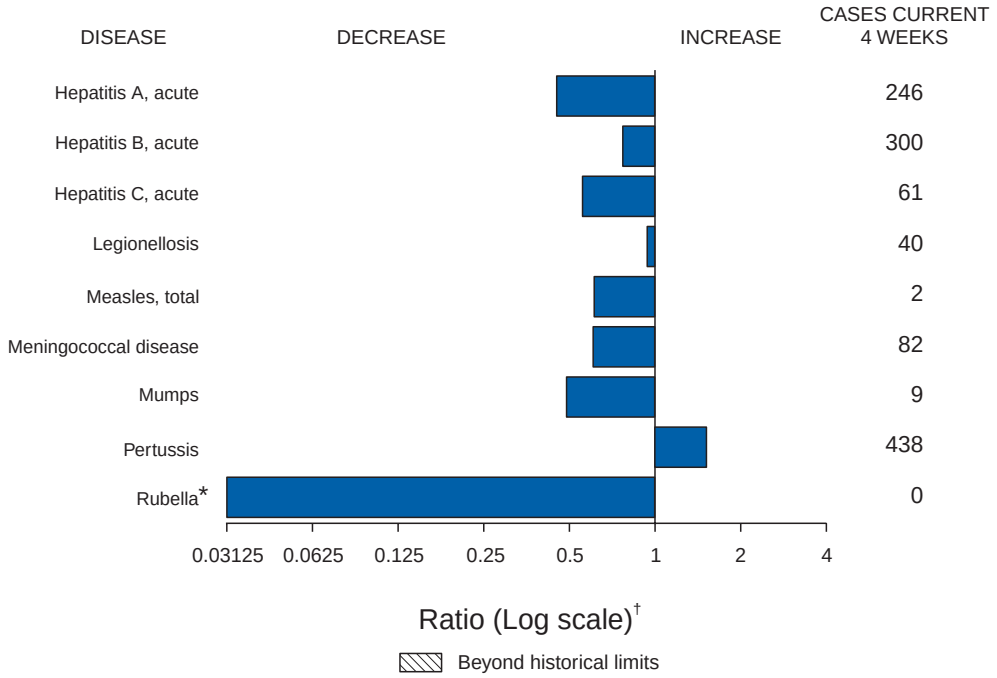
Additional information and applications are available from Emory University's Rollins School of Public Health, International Health Dept. (PIA), 1518 Clifton Road, N.E., Room 746, Atlanta, GA 30322; fax, 404-727-4590; at http://www.sph.emory.edu/epicourses; or by e-mail, pvaleri@sph.emory.edu.

Notice to Readers

National Sexual Violence Prevention Conference, May 26–28, 2004

CDC, in conjunction with numerous partners, is hosting the 2004 National Sexual Violence Prevention Conference, May 26–28, 2004, at the Westin Bonaventure Hotel and Suites in Los Angeles, California. The theme of this third national conference is "Building Leadership and Commitment to End Sexual Violence." The purpose of the conference is to strengthen communication and working relationships among national, state, and local representatives in fields working to end sexual violence. The deadline for advance registration is May 14. Registration information is available from CDC at http://www.cdc.gov/ncipc/2004nsvpc.htm and by e-mail, dvpinfo@cdc.gov.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals April 24, 2004, with historical data



* No rubella cases were reported for the current 4-week period yielding a ratio for week 16 of zero (0).
† Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending April 24, 2004 (16th Week)*

	Cum. 2004	Cum. 2003		Cum. 2004	Cum. 2003
Anthrax	-	-	Hemolytic uremic syndrome, postdiarrheal†	17	33
Botulism:	-	-	HIV infection, pediatric†§	52	73
foodborne	5	5	Measles, total	7¶	14**
infant	21	22	Mumps	49	71
other (wound & unspecified	3	5	Plague	-	-
Brucellosis†	22	24	Poliomyelitis, paralytic	-	-
Chancroid	10	16	Psittacosis†	2	3
Cholera	1	-	Q fever†	8	17
Cyclosporiasis†	30	11	Rabies, human	-	-
Diphtheria	-	-	Rubella	12	3
Ehrlichiosis:	-	-	Rubella, congenital syndrome	-	1
human granulocytic (HGE)†	7	20	SARS-associated coronavirus disease† ††	-	4
human monocytic (HME)†	10	8	Smallpox† §§	-	NA
human, other and unspecified	-	2	*Staphylococcus aureus*:	-	-
Encephalitis/Meningitis:	-	-	Vancomycin-intermediate (VISA)† §§	4	NA
California serogroup viral†	-	-	Vancomycin-resistant (VRSA)† §§	-	NA
eastern equine†	-	-	Streptococcal toxic-shock syndrome†	34	69
Powassan†	-	-	Tetanus	3	1
St. Louis†	2	-	Toxic-shock syndrome	37	44
western equine†	-	-	Trichinosis	2	-
Hansen disease (leprosy)†	19	22	Tularemia†	6	4
Hantavirus pulmonary syndrome†	2	5	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 March 26, 2004.
¶ Of seven cases reported, four were indigenous, and three were imported from another country.
** Of 14 cases reported, nine were indigenous, and five 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 24, 2004, and April 19, 2003 (16th 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	8,910	12,447	243,769	260,313	1,516	1,065	708	562	5	-
NEW ENGLAND	311	429	8,749	8,493	-	-	36	41	-	-
Maine	5	13	520	599	N	N	6	2	-	-
N.H.	11	7	534	477	-	-	10	5	-	-
Vt.	7	5	340	329	-	-	5	6	-	-
Mass.	84	186	4,411	3,295	-	-	9	21	-	-
R.I.	32	29	1,054	981	-	-	1	5	-	-
Conn.	172	189	1,890	2,812	N	N	5	2	-	-
MID. ATLANTIC	1,283	2,836	33,075	31,443	-	-	118	85	-	-
Upstate N.Y.	134	139	6,584	5,387	N	N	27	17	-	-
N.Y. City	380	1,589	9,496	10,712	-	-	25	33	-	-
N.J.	386	424	4,130	4,410	-	-	7	3	-	-
Pa.	383	684	12,865	10,934	N	N	59	32	-	-
E.N. CENTRAL	806	1,182	41,326	48,560	5	2	161	130	1	-
Ohio	229	154	9,405	13,495	-	-	45	19	1	-
Ind.	117	178	5,120	5,162	N	N	25	7	-	-
Ill.	279	554	10,199	14,989	-	-	8	21	-	-
Mich.	132	236	12,513	9,639	5	2	37	26	-	-
Wis.	49	60	4,089	5,275	-	-	46	57	-	-
W.N. CENTRAL	228	194	14,311	15,040	4	1	78	49	1	-
Minn.	48	41	2,486	3,325	N	N	32	27	-	-
Iowa	11	27	1,087	1,509	N	N	12	7	-	-
Mo.	107	83	5,749	5,497	3	1	15	5	1	-
N. Dak.	10	-	324	405	N	N	-	1	-	-
S. Dak.	-	4	775	727	-	-	9	7	-	-
Nebr.¶	6	18	1,567	1,390	1	-	1	2	-	-
Kans.	46	21	2,323	2,187	N	N	9	-	-	-
S. ATLANTIC	3,510	3,586	44,653	47,362	-	1	149	83	2	-
Del.	42	57	934	953	N	N	-	1	-	-
Md.	343	193	5,820	4,997	-	1	7	6	-	-
D.C.	149	380	1,127	1,069	-	-	1	-	-	-
Va.	141	297	7,066	5,097	-	-	15	9	-	-
W. Va.	30	20	883	774	N	N	2	-	-	-
N.C.	243	437	8,425	7,224	N	N	30	10	-	-
S.C.¶	204	213	5,947	4,456	-	-	5	1	2	-
Ga.	509	492	2,399	10,177	-	-	52	31	-	-
Fla.	1,849	1,497	12,052	12,615	N	N	37	25	-	-
E.S. CENTRAL	446	493	14,905	16,970	N	N	34	38	-	-
Ky.	42	57	1,657	2,584	N	N	8	8	-	-
Tenn.¶	187	221	6,743	5,867	N	N	12	11	-	-
Ala.	127	110	3,286	4,520	-	-	9	16	-	-
Miss.	90	105	3,219	3,999	N	N	5	3	-	-
W.S. CENTRAL	1,307	1,280	32,084	31,729	1	5	22	13	1	-
Ark.	43	35	2,258	1,940	1	-	8	2	-	-
La.	281	137	7,734	5,578	N	N	-	-	1	-
Okla.	37	51	3,193	2,838	N	N	8	3	-	-
Tex.	946	1,057	18,899	21,373	-	5	6	8	-	-
MOUNTAIN	257	459	12,846	15,782	944	748	36	27	-	-
Mont.	-	7	263	699	N	N	4	3	-	-
Idaho	2	5	981	806	N	N	4	6	-	-
Wyo.	2	4	337	316	-	-	2	1	-	-
Colo.	48	105	2,441	4,078	N	N	18	6	-	-
N. Mex.	20	41	1,459	2,231	7	-	1	1	-	-
Ariz.	109	217	5,148	4,791	908	734	5	2	-	-
Utah	17	22	845	971	10	2	1	6	-	-
Nev.	59	58	1,372	1,890	19	12	1	2	-	-
PACIFIC	762	1,988	41,820	44,934	560	308	74	96	-	-
Wash.	127	160	5,308	4,739	N	N	4	-	-	-
Oreg.	53	87	1,759	2,362	-	-	9	9	-	-
Calif.	543	1,700	33,624	35,079	560	308	60	87	-	-
Alaska	8	9	1,118	1,100	-	-	-	-	-	-
Hawaii	31	32	11	1,654	-	-	1	-	-	-
Guam	1	1	-	-	-	-	-	-	-	-
P.R.	143	325	494	659	N	N	N	N	-	-
V.I.	2	9	20	110	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	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 March 26, 2004.

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 24, 2004, and April 19, 2003 (16th 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	293	300	36	54	37	20	4,305	4,566	85,344	97,464
NEW ENGLAND	17	15	1	7	6	4	389	331	2,097	2,153
Maine	-	1	-	-	-	-	35	35	82	51
N.H.	3	5	-	1	-	-	13	17	40	41
Vt.	-	-	-	-	-	-	25	22	23	29
Mass.	2	4	-	2	6	4	202	180	1,050	828
R.I.	2	1	-	-	-	-	33	33	293	295
Conn.	10	4	1	4	-	-	81	44	609	909
MID. ATLANTIC	23	35	1	1	9	5	942	962	10,642	12,459
Upstate N.Y.	10	9	1	-	3	2	297	226	2,177	2,142
N.Y. City	4	3	-	-	-	-	287	368	3,030	4,160
N.J.	1	4	-	-	2	-	81	135	1,605	2,731
Pa.	8	19	-	1	4	3	277	233	3,830	3,426
E.N. CENTRAL	56	77	9	12	5	4	532	801	16,667	21,224
Ohio	17	16	-	9	5	4	225	237	4,610	6,968
Ind.	9	9	-	-	-	-	-	-	1,811	1,990
Ill.	9	16	-	-	-	-	59	238	4,197	6,464
Mich.	10	16	1	-	-	-	165	191	4,891	3,972
Wis.	11	20	8	3	-	-	83	135	1,158	1,830
W.N. CENTRAL	54	40	8	7	7	6	503	448	4,714	5,036
Minn.	23	14	4	5	-	-	166	133	998	818
Iowa	5	4	-	-	-	-	66	64	160	298
Mo.	7	14	4	1	2	-	155	147	2,333	2,620
N. Dak.	2	1	-	-	3	1	8	13	37	15
S. Dak.	2	2	-	-	-	-	19	14	84	46
Nebr.	7	4	-	1	-	-	42	43	318	448
Kans.	8	1	-	-	2	5	47	34	784	791
S. ATLANTIC	27	23	12	18	3	-	716	693	20,214	23,191
Del.	-	-	N	N	N	N	16	15	310	392
Md.	3	-	-	-	-	-	27	32	2,520	2,375
D.C.	-	1	-	-	-	-	20	13	738	774
Va.	1	4	5	-	-	-	109	77	2,853	2,446
W. Va.	1	1	-	-	-	-	9	7	255	261
N.C.	-	-	4	8	-	-	N	N	4,576	3,984
S.C.	1	-	-	-	-	-	16	34	2,746	2,497
Ga.	7	6	2	2	-	-	193	225	1,256	4,892
Fla.	14	11	1	8	3	-	326	290	4,960	5,570
E.S. CENTRAL	10	13	1	-	5	-	88	95	6,793	8,394
Ky.	4	2	1	-	3	-	N	N	703	1,071
Tenn.	2	7	-	-	2	-	36	42	2,436	2,528
Ala.	1	3	-	-	-	-	52	53	1,939	2,762
Miss.	3	1	-	-	-	-	-	-	1,715	2,033
W.S. CENTRAL	16	13	-	2	1	-	74	64	11,900	12,818
Ark.	1	2	-	-	-	-	35	36	1,037	1,122
La.	-	1	-	-	-	-	8	4	3,628	3,183
Okla.	3	1	-	-	-	-	31	24	1,380	1,127
Tex.	12	9	-	2	1	-	-	-	5,855	7,386
MOUNTAIN	48	34	3	6	1	1	364	361	3,200	3,324
Mont.	2	-	-	-	-	-	11	13	11	44
Idaho	6	9	1	4	-	-	49	45	25	27
Wyo.	-	-	-	-	-	-	3	5	18	16
Colo.	24	14	1	1	1	1	115	104	816	906
N. Mex.	3	-	-	1	-	-	17	16	179	394
Ariz.	4	8	N	N	N	N	69	65	1,458	1,269
Utah	5	3	-	-	-	-	69	77	102	83
Nev.	4	-	1	-	-	-	31	36	591	585
PACIFIC	42	50	1	1	-	-	697	811	9,117	8,865
Wash.	8	16	-	-	-	-	72	61	835	872
Oreg.	5	8	1	1	-	-	116	84	225	289
Calif.	22	26	-	-	-	-	461	614	7,864	7,221
Alaska	1	-	-	-	-	-	20	26	192	168
Hawaii	6	-	-	-	-	-	28	26	1	315
Guam	N	N	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	25	6	27	46	76
V.I.	-	-	-	-	-	-	-	-	4	30
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 24, 2004, and April 19, 2003 (16th 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	654	543	6	6	36	40	70	67	1,660	1,923
NEW ENGLAND	56	43	1	1	3	3	2	1	293	61
Maine	5	2	-	-	-	-	-	1	8	1
N.H.	11	4	-	-	2	-	-	-	6	4
Vt.	4	6	-	-	-	-	-	-	5	3
Mass.	24	20	1	1	-	3	2	-	243	31
R.I.	1	1	-	-	-	-	-	-	6	4
Conn.	11	10	-	-	1	-	-	-	25	18
MID. ATLANTIC	125	93	-	-	1	1	20	13	195	377
Upstate N.Y.	45	28	-	-	1	1	4	3	28	31
N.Y. City	19	15	-	-	-	-	4	4	66	143
N.J.	23	18	-	-	-	-	2	1	42	65
Pa.	38	32	-	-	-	-	10	5	59	138
E.N. CENTRAL	104	78	-	1	9	2	14	16	142	201
Ohio	47	20	-	-	2	-	7	5	17	31
Ind.	17	12	-	-	3	1	1	-	9	12
Ill.	19	32	-	-	-	-	5	9	49	74
Mich.	9	6	-	1	4	1	-	-	54	61
Wis.	12	8	-	-	-	-	1	2	13	23
W.N. CENTRAL	28	37	1	-	2	4	2	3	50	53
Minn.	12	15	-	-	2	4	-	-	11	14
Iowa	1	-	1	-	-	-	-	-	11	13
Mo.	8	15	-	-	-	-	1	3	15	11
N. Dak.	1	1	-	-	-	-	-	-	1	-
S. Dak.	-	1	-	-	-	-	-	-	2	-
Nebr.	4	-	-	-	-	-	-	-	7	3
Kans.	2	5	-	-	-	-	1	-	3	12
S. ATLANTIC	175	116	-	-	7	4	13	8	318	452
Del.	5	-	-	-	-	-	2	-	3	3
Md.	28	25	-	-	2	3	-	-	49	43
D.C.	-	-	-	-	-	-	-	-	3	9
Va.	12	12	-	-	-	-	-	2	28	31
W. Va.	8	3	-	-	-	-	3	-	2	4
N.C.	17	10	-	-	1	-	-	-	22	26
S.C.	-	2	-	-	-	-	-	-	12	18
Ga.	61	25	-	-	-	-	8	4	123	182
Fla.	44	39	-	-	4	1	-	2	76	136
E.S. CENTRAL	22	35	-	-	-	2	5	3	55	56
Ky.	-	3	-	-	-	1	-	-	9	10
Tenn.	14	19	-	-	-	1	4	2	31	26
Ala.	8	12	-	-	-	-	1	1	5	9
Miss.	-	1	-	-	-	-	-	-	10	11
W.S. CENTRAL	25	29	-	-	3	3	-	3	106	185
Ark.	1	4	-	-	-	1	-	-	18	10
La.	3	8	-	-	-	-	-	3	2	28
Okla.	21	17	-	-	3	2	-	-	13	4
Tex.	-	-	-	-	-	-	-	-	73	143
MOUNTAIN	95	62	2	2	11	9	11	9	167	125
Mont.	-	-	-	-	-	-	-	-	3	1
Idaho	2	-	-	-	-	-	1	-	8	6
Wyo.	-	-	-	-	-	-	-	-	1	1
Colo.	29	12	-	-	-	-	5	4	24	12
N. Mex.	16	10	-	-	4	2	2	1	4	8
Ariz.	37	30	-	2	6	4	1	2	102	73
Utah	5	6	2	-	-	1	1	2	21	9
Nev.	6	4	-	-	1	2	1	-	4	15
PACIFIC	24	50	2	2	-	12	3	11	334	413
Wash.	3	3	2	-	-	2	1	1	16	18
Oreg.	13	15	-	-	-	-	-	3	19	27
Calif.	3	29	-	2	-	10	2	7	290	361
Alaska	-	-	-	-	-	-	-	-	3	4
Hawaii	5	3	-	-	-	-	-	-	6	3
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	7	18
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 24, 2004, and April 19, 2003 (16th 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	1,708	1,994	362	658	295	312	119	142	1,929	2,210
NEW ENGLAND	72	98	1	-	5	11	5	5	147	206
Maine	1	-	-	-	-	-	1	-	30	-
N.H.	15	3	-	-	-	-	1	1	8	5
Vt.	1	1	1	-	-	1	-	-	8	3
Mass.	54	70	-	-	2	5	-	2	51	109
R.I.	1	3	-	-	1	1	1	-	18	48
Conn.	-	21	U	U	2	4	2	2	32	41
MID. ATLANTIC	242	281	35	41	67	61	27	29	1,517	1,680
Upstate N.Y.	22	20	3	6	13	19	8	5	562	524
N.Y. City	18	104	-	-	2	7	3	7	-	2
N.J.	113	75	-	-	16	5	7	6	334	375
Pa.	89	82	32	35	36	30	9	11	621	779
E.N. CENTRAL	119	140	19	48	72	73	15	14	32	57
Ohio	51	41	2	3	36	29	7	2	26	8
Ind.	8	4	1	-	5	4	1	1	-	4
Ill.	-	1	1	11	2	12	-	3	-	-
Mich.	60	73	15	34	27	22	6	6	-	-
Wis.	-	21	-	-	2	6	1	2	6	45
W.N. CENTRAL	133	85	164	85	7	11	4	4	29	22
Minn.	8	8	1	1	-	2	2	2	7	15
Iowa	3	4	-	-	1	4	1	-	5	2
Mo.	107	57	163	84	4	2	1	-	16	4
N. Dak.	1	-	-	-	1	1	-	-	-	-
S. Dak.	-	1	-	-	1	-	-	-	-	-
Nebr.	8	9	-	-	-	1	-	2	-	-
Kans.	6	6	-	-	-	1	-	-	1	1
S. ATLANTIC	570	519	63	54	70	93	19	34	171	175
Del.	6	2	-	-	3	-	N	N	14	36
Md.	51	34	6	6	10	15	3	3	93	100
D.C.	5	1	1	-	-	1	-	-	2	2
Va.	62	37	9	-	5	6	1	4	8	10
W. Va.	2	2	3	-	2	-	1	1	1	-
N.C.	57	50	5	3	7	8	4	7	33	17
S.C.	33	44	1	14	1	4	-	2	1	1
Ga.	177	157	7	4	6	10	4	8	1	3
Fla.	177	192	31	27	36	49	6	9	18	6
E.S. CENTRAL	162	114	25	29	11	6	6	4	4	17
Ky.	13	18	10	6	2	-	2	-	2	2
Tenn.	53	38	6	3	7	3	4	-	1	5
Ala.	18	25	-	4	2	1	-	3	-	-
Miss.	78	33	9	16	-	2	-	1	1	10
W.S. CENTRAL	29	294	27	371	17	20	9	17	2	27
Ark.	11	32	-	2	-	-	-	-	-	-
La.	8	50	10	54	-	1	-	1	-	4
Okla.	10	15	2	-	2	2	-	1	-	-
Tex.	-	197	15	315	15	17	9	15	2	23
MOUNTAIN	154	178	14	10	22	16	6	10	4	3
Mont.	-	8	2	1	-	-	-	1	-	-
Idaho	3	2	-	1	1	1	1	-	-	1
Wyo.	4	7	-	-	4	1	-	-	1	-
Colo.	21	28	4	4	3	4	1	4	-	-
N. Mex.	5	12	-	-	-	1	-	1	-	-
Ariz.	82	89	2	3	5	5	-	4	1	-
Utah	15	11	-	-	8	2	-	-	2	1
Nev.	24	21	6	1	1	2	4	-	-	1
PACIFIC	227	285	14	20	24	21	28	25	23	23
Wash.	22	16	3	3	4	2	5	1	3	-
Oreg.	26	42	4	4	N	N	3	1	7	6
Calif.	174	219	5	12	20	19	20	23	13	16
Alaska	4	2	-	-	-	-	-	-	-	1
Hawaii	1	6	2	1	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	7	38	-	-	1	-	-	-	N	N
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U	-	U

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

TABLE II. (*Continued*) Provisional cases of selected notifiable diseases, United States, weeks ending April 24, 2004, and April 19, 2003 (16th 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	276	303	557	646	2,379	1,958	1,018	2,048	134	82
NEW ENGLAND	16	8	25	32	569	203	130	128	4	-
Maine	-	1	7	4	-	1	11	11	-	-
N.H.	-	2	3	3	14	14	6	6	-	-
Vt.	1	-	1	-	20	22	5	8	-	-
Mass.	8	5	14	21	517	151	49	50	4	-
R.I.	2	-	-	1	9	1	10	13	-	-
Conn.	5	-	-	3	9	14	49	40	-	-
MID. ATLANTIC	58	70	65	66	652	181	123	249	13	9
Upstate N.Y.	11	14	17	11	488	71	94	85	1	-
N.Y. City	23	39	11	15	-	21	-	1	2	4
N.J.	10	5	12	11	56	32	-	58	2	4
Pa.	14	12	25	29	108	57	29	105	8	1
E.N. CENTRAL	18	32	80	98	273	130	5	8	8	1
Ohio	6	6	31	28	131	72	2	2	6	1
Ind.	-	-	10	13	22	12	2	2	1	-
Ill.	2	13	8	27	-	-	-	1	-	-
Mich.	5	10	25	19	32	13	1	3	1	-
Wis.	5	3	6	11	88	33	-	-	-	-
W.N. CENTRAL	19	9	28	52	137	96	108	192	5	2
Minn.	8	6	8	13	28	33	16	7	-	-
Iowa	1	2	5	8	19	32	14	23	-	1
Mo.	3	-	7	22	68	20	3	2	5	1
N. Dak.	1	-	-	-	5	1	18	17	-	-
S. Dak.	1	-	1	1	7	2	10	38	-	-
Nebr.	1	-	1	4	-	1	15	37	-	-
Kans.	4	1	6	4	10	7	32	68	-	-
S. ATLANTIC	92	78	102	122	153	138	508	836	84	65
Del.	2	-	1	7	3	1	9	-	-	-
Md.	23	22	5	11	33	16	50	112	4	8
D.C.	4	4	-	1	1	-	-	-	-	-
Va.	7	7	4	6	39	33	121	143	-	1
W. Va.	-	2	3	1	2	1	17	23	-	-
N.C.	5	6	14	16	29	54	192	211	73	47
S.C.	5	1	9	9	10	5	40	46	2	3
Ga.	12	11	14	14	17	8	64	113	3	3
Fla.	34	25	52	57	19	20	15	188	2	3
E.S. CENTRAL	7	8	24	28	27	34	36	63	15	5
Ky.	1	1	3	2	4	4	7	10	-	-
Tenn.	1	3	9	7	15	19	13	47	7	3
Ala.	4	2	6	8	4	8	16	5	2	-
Miss.	1	2	6	11	4	3	-	1	6	2
W.S. CENTRAL	24	33	55	80	78	101	49	499	-	-
Ark.	1	2	12	7	3	4	15	25	-	-
La.	2	1	12	24	2	4	-	-	-	-
Okla.	1	1	3	6	10	4	34	63	-	-
Tex.	20	29	28	43	63	89	-	411	-	-
MOUNTAIN	12	9	31	31	291	357	21	24	1	-
Mont.	-	-	1	2	4	-	3	2	-	-
Idaho	-	1	3	2	14	9	-	-	-	-
Wyo.	-	-	2	2	3	114	-	-	-	-
Colo.	5	7	14	5	166	115	-	-	1	-
N. Mex.	1	-	4	3	32	19	-	-	-	-
Ariz.	1	1	4	14	47	72	18	22	-	-
Utah	3	-	3	-	22	21	-	-	-	-
Nev.	2	-	-	3	3	7	-	-	-	-
PACIFIC	30	56	147	137	199	718	38	49	4	-
Wash.	2	7	10	11	111	109	-	-	-	-
Oreg.	3	5	31	26	58	78	-	-	2	-
Calif.	24	44	101	92	23	530	30	44	2	-
Alaska	-	-	1	2	3	-	8	5	-	-
Hawaii	1	-	4	6	4	1	-	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	2	5	1	1	16	21	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 24, 2004, and April 19, 2003 (16th 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	7,079	7,748	2,863	5,753	1,708	2,302	963	916	161	183
NEW ENGLAND	340	371	63	94	76	236	8	37	3	1
Maine	17	22	1	4	3	13	-	-	-	-
N.H.	22	27	3	1	9	15	-	-	N	N
Vt.	17	9	1	3	4	11	3	4	1	1
Mass.	199	216	42	59	55	108	N	N	N	N
R.I.	25	19	2	3	5	1	5	-	2	-
Conn.	60	78	14	24	-	88	-	33	U	U
MID. ATLANTIC	920	955	350	486	253	390	57	48	36	33
Upstate N.Y.	224	167	155	82	95	137	25	23	26	22
N.Y. City	259	301	95	131	31	52	U	U	U	U
N.J.	161	167	58	118	45	87	N	N	N	N
Pa.	276	320	42	155	82	114	32	25	10	11
E.N. CENTRAL	1,001	1,111	229	442	288	564	221	166	58	72
Ohio	274	324	52	81	102	121	169	115	36	43
Ind.	97	77	44	32	33	41	52	51	15	7
Ill.	252	390	76	219	26	153	-	-	-	-
Mich.	194	152	32	73	115	162	N	N	N	N
Wis.	184	168	25	37	12	87	N	N	7	22
W.N. CENTRAL	492	423	105	204	135	148	90	82	20	17
Minn.	117	112	13	27	63	64	-	-	17	14
Iowa	88	89	29	12	N	N	N	N	N	N
Mo.	148	113	28	71	29	31	5	4	3	1
N. Dak.	12	10	1	3	4	7	-	3	-	2
S. Dak.	21	20	6	8	8	14	1	-	-	-
Nebr.	38	34	7	57	8	17	-	-	N	N
Kans.	68	45	21	26	23	15	84	75	N	N
S. ATLANTIC	1,717	1,821	907	1,917	400	405	480	464	4	5
Del.	12	24	3	94	2	4	3	-	N	N
Md.	124	182	31	175	73	123	-	2	-	-
D.C.	11	10	13	17	2	3	2	-	3	-
Va.	185	171	30	85	16	36	N	N	N	N
W. Va.	29	17	-	-	11	16	45	23	1	5
N.C.	225	302	121	221	45	36	N	N	U	U
S.C.	84	92	132	63	23	12	31	73	N	N
Ga.	349	247	198	408	151	87	168	123	N	N
Fla.	698	776	379	854	77	88	231	243	N	N
E.S. CENTRAL	388	432	162	284	79	66	52	56	1	-
Ky.	71	80	24	35	27	13	14	5	N	N
Tenn.	112	150	61	94	52	53	38	51	N	N
Ala.	131	132	56	99	-	-	-	-	N	N
Miss.	74	70	21	56	-	-	-	-	-	-
W.S. CENTRAL	441	720	458	1,302	82	120	22	49	34	29
Ark.	65	77	14	17	4	3	4	14	4	4
La.	33	113	30	121	-	1	18	35	4	5
Okla.	60	62	105	186	23	32	N	N	16	6
Tex.	283	468	309	978	55	84	N	N	10	14
MOUNTAIN	597	511	232	282	215	190	14	13	5	26
Mont.	28	30	3	1	-	-	-	-	-	-
Idaho	45	58	4	6	3	10	N	N	N	N
Wyo.	16	8	1	1	5	-	4	2	-	-
Colo.	149	143	48	47	68	57	-	-	3	24
N. Mex.	44	47	35	55	33	52	5	11	-	-
Ariz.	202	144	113	145	91	67	-	-	N	N
Utah	62	48	12	14	14	4	3	-	2	2
Nev.	51	33	16	13	1	-	2	-	-	-
PACIFIC	1,183	1,404	357	742	180	183	19	1	-	-
Wash.	79	125	19	58	20	-	-	-	N	N
Oreg.	84	131	18	24	N	N	N	N	N	N
Calif.	910	1,069	304	646	128	149	N	N	N	N
Alaska	30	29	3	4	-	-	-	-	N	N
Hawaii	80	50	13	10	32	34	19	1	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	34	156	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 24, 2004, and April 19, 2003 (16th Week)*

Reporting area	Syphilis				Tuberculosis		Typhoid fever		Varicella (Chickenpox)	
	Primary & secondary		Congenital							
	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003	Cum. 2004	Cum. 2003
UNITED STATES	1,967	2,167	66	151	2,102	3,377	70	85	5,313	5,596
NEW ENGLAND	41	57	1	-	73	95	8	8	296	1,317
Maine	-	3	-	-	-	-	-	-	43	359
N.H.	1	8	-	-	6	4	-	-	-	-
Vt.	-	-	-	-	-	2	-	-	253	292
Mass.	29	37	-	-	50	44	8	4	-	80
R.I.	3	4	-	-	8	14	-	2	-	2
Conn.	8	5	1	-	9	31	-	2	-	584
MID. ATLANTIC	265	237	9	24	544	566	14	15	20	8
Upstate N.Y.	25	5	1	1	55	47	1	3	-	-
N.Y. City	138	131	5	14	284	313	4	8	-	-
N.J.	46	52	3	9	116	97	5	3	-	-
Pa.	56	49	-	-	89	109	4	1	20	8
E.N. CENTRAL	199	291	23	29	291	278	3	8	2,249	2,253
Ohio	65	67	1	2	56	49	1	-	604	473
Ind.	13	12	4	6	13	38	-	2	-	-
Ill.	62	106	1	10	193	130	-	1	-	-
Mich.	52	100	17	11	8	47	2	5	1,534	1,407
Wis.	7	6	-	-	21	14	-	-	111	373
W.N. CENTRAL	37	68	-	3	92	126	2	-	106	14
Minn.	5	21	-	-	37	47	1	-	-	-
Iowa	2	5	-	-	7	8	-	-	N	N
Mo.	21	26	-	3	27	32	1	-	2	-
N. Dak.	-	-	-	-	2	-	-	-	66	14
S. Dak.	-	-	-	-	3	9	-	-	38	-
Nebr.	4	1	-	-	6	5	-	-	-	-
Kans.	5	15	-	-	10	25	-	-	-	-
S. ATLANTIC	551	565	9	29	426	644	12	20	851	827
Del.	2	2	-	-	-	-	-	-	3	3
Md.	100	92	2	6	58	54	2	3	-	-
D.C.	23	12	-	-	-	-	-	-	9	7
Va.	14	26	1	1	47	57	4	10	246	174
W. Va.	1	-	-	-	6	5	-	-	464	574
N.C.	44	56	1	5	50	60	2	3	-	-
S.C.	42	38	-	4	51	42	-	-	129	69
Ga.	82	129	-	5	11	146	2	2	-	-
Fla.	243	210	5	8	203	280	2	2	-	-
E.S. CENTRAL	98	108	3	7	144	199	1	1	2	-
Ky.	14	16	-	1	17	31	-	-	-	-
Tenn.	45	43	1	1	42	63	1	-	-	-
Ala.	30	40	1	4	52	76	-	1	-	-
Miss.	9	9	1	1	33	29	-	-	2	-
W.S. CENTRAL	334	255	16	21	150	517	5	3	722	1,086
Ark.	12	12	-	-	36	26	-	-	-	-
La.	72	30	-	-	-	-	-	-	3	7
Okla.	7	15	2	-	39	37	-	-	-	-
Tex.	243	198	14	21	75	454	5	3	719	1,079
MOUNTAIN	115	100	5	17	60	81	6	3	1,067	91
Mont.	-	-	-	-	-	-	-	-	-	-
Idaho	8	4	-	-	-	1	-	-	-	-
Wyo.	1	-	-	-	1	1	-	-	14	12
Colo.	-	11	-	3	12	28	3	3	813	-
N. Mex.	20	21	-	4	-	5	-	-	26	-
Ariz.	79	59	5	10	33	33	1	-	-	-
Utah	3	1	-	-	14	9	1	-	214	79
Nev.	4	4	-	-	-	4	1	-	-	-
PACIFIC	327	486	-	21	322	871	19	27	-	-
Wash.	23	18	-	-	61	71	1	-	-	-
Oreg.	9	15	-	-	20	27	1	2	-	-
Calif.	295	448	-	21	201	721	12	25	-	-
Alaska	-	-	-	-	8	21	-	-	-	-
Hawaii	-	5	-	-	32	31	5	-	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	38	64	-	7	14	22	-	-	92	164
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 24, 2004 (16th Week)

Reporting Area	All causes, by age (years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	526	379	107	23	8	9	59
Boston, Mass.	151	103	33	6	6	3	25
Bridgeport, Conn.	44	33	10	1	-	-	7
Cambridge, Mass.	19	15	3	1	-	-	2
Fall River, Mass.	14	13	1	-	-	-	5
Hartford, Conn.	47	29	15	1	-	2	9
Lowell, Mass.	38	30	6	2	-	-	1
Lynn, Mass.	4	3	1	-	-	-	-
New Bedford, Mass.	29	23	3	1	2	-	1
New Haven, Conn.	U	U	U	U	U	U	U
Providence, R.I.	60	38	15	4	-	3	-
Somerville, Mass.	1	1	-	-	-	-	-
Springfield, Mass.	32	23	7	1	-	1	2
Waterbury, Conn.	35	26	7	2	-	-	1
Worcester, Mass.	52	42	6	4	-	-	6
MID. ATLANTIC	2,245	1,543	476	150	38	33	113
Albany, N.Y.	46	35	8	2	-	1	6
Allentown, Pa.	16	11	5	-	-	-	2
Buffalo, N.Y.	84	63	13	6	1	1	8
Camden, N.J.	24	13	7	4	-	-	1
Elizabeth, N.J.	23	16	4	3	-	-	-
Erie, Pa.	55	47	4	3	1	-	3
Jersey City, N.J.	44	32	11	1	-	-	-
New York City, N.Y.	1,158	795	252	80	21	7	56
Newark, N.J.	71	37	14	14	5	1	3
Paterson, N.J.	26	14	9	-	-	3	-
Philadelphia, Pa.	332	202	80	20	9	19	8
Pittsburgh, Pa.§	24	20	3	1	-	-	1
Reading, Pa.	23	21	-	2	-	-	3
Rochester, N.Y.	118	91	21	6	-	-	11
Schenectady, N.Y.	21	16	4	1	-	-	1
Scranton, Pa.	25	17	6	2	-	-	-
Syracuse, N.Y.	79	57	22	-	-	-	7
Trenton, N.J.	29	25	-	2	1	1	1
Utica, N.Y.	21	12	8	1	-	-	-
Yonkers, N.Y.	26	19	5	2	-	-	2
E.N. CENTRAL	2,100	1,368	487	165	40	38	134
Akron, Ohio	58	40	10	5	-	3	6
Canton, Ohio	36	26	7	3	-	-	4
Chicago, Ill.	386	231	103	35	7	8	32
Cincinnati, Ohio	U	U	U	U	U	U	U
Cleveland, Ohio	245	170	52	16	1	6	10
Columbus, Ohio	199	126	44	22	4	3	16
Dayton, Ohio	134	95	30	6	1	2	5
Detroit, Mich.	208	95	77	23	9	4	10
Evansville, Ind.	53	39	10	2	2	-	2
Fort Wayne, Ind.	54	41	9	3	1	-	2
Gary, Ind.	16	6	7	2	1	-	-
Grand Rapids, Mich.	50	38	6	2	2	2	6
Indianapolis, Ind.	204	133	48	17	4	2	11
Lansing, Mich.	50	36	7	6	1	-	3
Milwaukee, Wis.	124	78	31	11	2	2	10
Peoria, Ill.	50	35	11	1	2	1	5
Rockford, Ill.	59	41	12	4	1	1	3
South Bend, Ind.	U	U	U	U	U	U	U
Toledo, Ohio	117	89	17	6	2	3	3
Youngstown, Ohio	57	49	6	1	-	1	6
W.N. CENTRAL	623	416	136	38	16	17	45
Des Moines, Iowa	40	33	6	1	-	-	1
Duluth, Minn.	32	26	5	-	-	1	1
Kansas City, Kans.	43	24	15	2	2	-	5
Kansas City, Mo.	93	66	16	4	4	3	5
Lincoln, Nebr.	32	22	8	2	-	-	2
Minneapolis, Minn.	57	37	12	4	1	3	5
Omaha, Nebr.	59	50	7	1	-	1	5
St. Louis, Mo.	120	66	32	13	4	5	11
St. Paul, Minn.	53	35	13	2	2	1	5
Wichita, Kans.	94	57	22	9	3	3	5
S. ATLANTIC	1,279	838	292	101	26	22	88
Atlanta, Ga.	160	98	37	18	5	2	5
Baltimore, Md.	148	98	38	10	1	1	15
Charlotte, N.C.	148	108	22	9	3	6	8
Jacksonville, Fla.	133	76	38	15	1	3	3
Miami, Fla.	136	80	38	11	6	1	5
Norfolk, Va.	60	41	11	6	2	-	3
Richmond, Va.	46	34	7	4	1	-	1
Savannah, Ga.	64	37	20	4	-	3	2
St. Petersburg, Fla.	59	39	14	4	1	1	9
Tampa, Fla.	211	147	44	14	5	1	35
Washington, D.C.	100	67	23	5	1	4	1
Wilmington, Del.	14	13	-	1	-	-	1
E.S. CENTRAL	869	553	210	71	19	16	73
Birmingham, Ala.	184	125	35	19	3	2	27
Chattanooga, Tenn.	87	53	25	5	2	2	7
Knoxville, Tenn.	98	61	26	9	2	-	2
Lexington, Ky.	60	39	15	4	1	1	1
Memphis, Tenn.	175	113	39	13	5	5	16
Mobile, Ala.	74	49	16	5	3	1	4
Montgomery, Ala.	58	34	19	3	-	2	6
Nashville, Tenn.	133	79	35	13	3	3	10
W.S. CENTRAL	1,507	1,012	308	100	51	35	83
Austin, Tex.	102	56	30	7	6	3	1
Baton Rouge, La.	47	35	10	2	-	-	1
Corpus Christi, Tex.	52	39	4	4	1	4	3
Dallas, Tex.	209	132	39	23	9	6	19
El Paso, Tex.	82	60	19	1	2	-	1
Ft. Worth, Tex.	109	78	21	2	6	2	5
Houston, Tex.	392	249	82	38	14	9	30
Little Rock, Ark.	65	42	16	2	2	3	-
New Orleans, La.	40	31	8	-	1	-	-
San Antonio, Tex.	245	177	41	16	6	4	16
Shreveport, La.	53	37	11	2	2	1	1
Tulsa, Okla.	111	76	27	3	2	3	6
MOUNTAIN	892	593	189	62	26	22	66
Albuquerque, N.M.	114	74	33	5	-	2	7
Boise, Idaho	33	22	6	2	2	1	1
Colo. Springs, Colo.	48	34	9	2	-	3	1
Denver, Colo.	99	64	15	8	5	7	11
Las Vegas, Nev.	278	190	61	16	9	2	18
Ogden, Utah	23	14	3	6	-	-	3
Phoenix, Ariz.	U	U	U	U	U	U	U
Pueblo, Colo.	22	16	3	1	2	-	2
Salt Lake City, Utah	121	75	27	12	4	3	10
Tucson, Ariz.	154	104	32	10	4	4	13
PACIFIC	1,275	913	230	71	31	30	125
Berkeley, Calif.	13	9	2	-	-	2	-
Fresno, Calif.	130	93	26	9	2	-	13
Glendale, Calif.	25	23	1	1	-	-	5
Honolulu, Hawaii	74	52	14	7	1	-	8
Long Beach, Calif.	68	47	17	2	2	-	10
Los Angeles, Calif.	325	219	67	24	9	6	42
Pasadena, Calif.	U	U	U	U	U	U	U
Portland, Oreg.	53	36	10	3	4	-	1
Sacramento, Calif.	U	U	U	U	U	U	U
San Diego, Calif.	191	136	36	9	6	4	13
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	153	112	20	7	2	12	13
Santa Cruz, Calif.	23	18	4	1	-	-	-
Seattle, Wash.	72	55	12	3	2	-	5
Spokane, Wash.	52	43	4	3	-	2	10
Tacoma, Wash.	96	70	17	2	3	4	5
TOTAL	11,316¶	7,615	2,435	781	255	222	786

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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