

MMWRTM
**MORBIDITY AND MORTALITY
WEEKLY REPORT**

- 181 Lyme Disease — United States, 1999
- 185 Knowledge and Use of Folic Acid Among Women of Reproductive Age — Michigan, 1998
- 189 Update on the Supply of Tetanus and Diphtheria Toxoids and of Diphtheria and Tetanus Toxoids and Acellular Pertussis Vaccine

Lyme Disease — United States, 1999

Lyme disease (LD) is caused by the tickborne spirochete *Borrelia burgdorferi* sensu lato and is the most common vectorborne disease in the United States. Surveillance for LD was initiated by CDC in 1982, and the Council of State and Territorial Epidemiologists designated it a nationally notifiable disease in January 1991. This report summarizes the number of LD cases reported to CDC during 1999. Although the number of cases decreased from 1998, the number of cases in 1999 was higher than the number reported during the early 1990s. LD can be prevented by avoiding tick-infested habitats, by using personal protective measures, by vaccination, by checking for and removing ticks attached to the body and clothes, and by reducing tick populations.

For surveillance purposes, LD is defined as the presence of an erythema migrans rash ≥ 5 cm (≥ 2 inches) in diameter or at least one late manifestation of musculoskeletal, neurologic, or cardiovascular disease with laboratory confirmation of *B. burgdorferi* infection (1). Incidence rates for states and the District of Columbia (DC) were calculated using U.S. Census Bureau 1999 population estimates; county rates were based on 1995 population estimates.

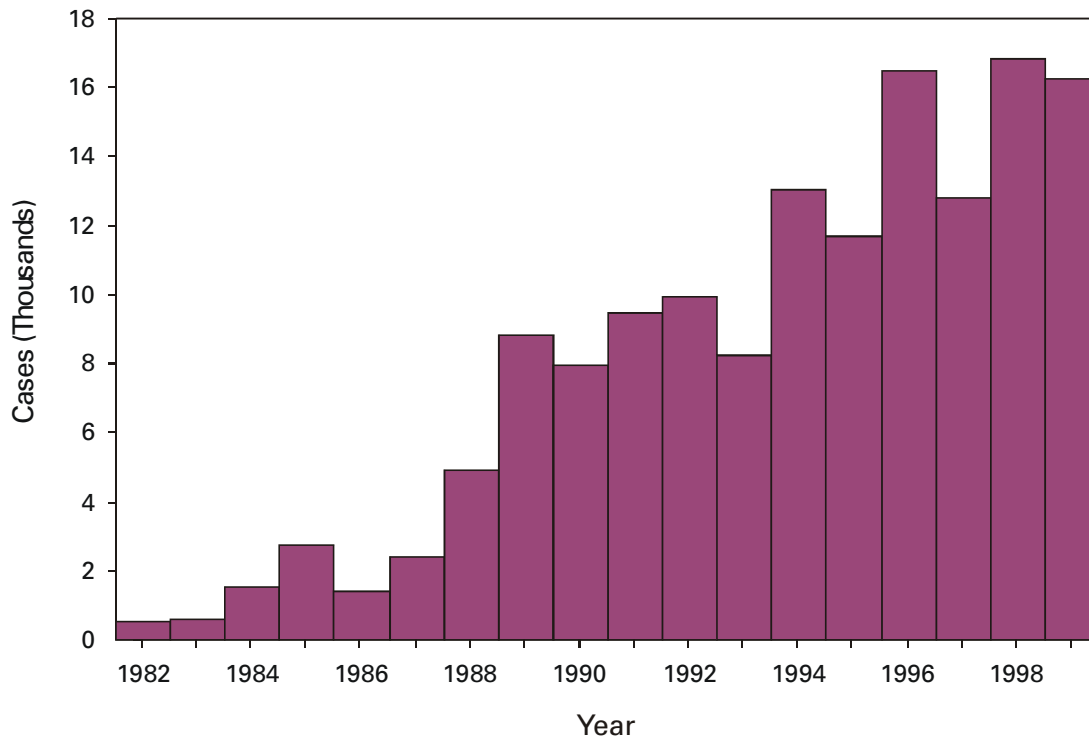
During 1990–1996, the number of reported LD cases was 7943, 9470, 9908, 8257, 13,043, 11,700, and 16,455, respectively. In 1999, 16,273 LD cases were reported (overall incidence: 6.0 per 100,000 population), a 3% decrease from 16,801 cases reported in 1998 and a 21% increase from 12,801 cases reported in 1997 (Figure 1). Most cases were reported in northeastern, mid-Atlantic, and north central states (Table 1). Nine states reported LD incidences higher than the national rate (i.e., Connecticut, 98.0; Rhode Island, 55.1; New York, 24.2; Pennsylvania, 23.2; Delaware, 22.2; New Jersey, 21.1; Maryland, 17.4; Massachusetts, 12.7; and Wisconsin, 9.3). These states accounted for 92.0% of the nationally reported cases. Alaska, Georgia, Hawaii, Montana, and South Dakota reported no cases during 1999. From 1998 to 1999, 22 states had increases in the number of cases, 24 states and DC had decreases, and four states had no change.

County of residence was available for 16,214 (99.6%) LD patients. Among the 3143 U.S. counties, 713 (22.7%) had at least one case during 1999; 90% of the cases were from 109 (15.3%) reporting counties (Figure 2). Incidence exceeded 100 cases per 100,000 population in 24 counties in Connecticut, Maryland, Massachusetts, Minnesota, New Jersey, New York, Pennsylvania, Rhode Island, and Wisconsin; the highest county-specific incidence (950.7) occurred in Nantucket County, Massachusetts.

Among the 16,145 (99.2%) patients for whom age was reported, 4061 (25.0%) were aged < 15 years; 2005 (12.3%) were 15–29 years, 3528 (21.7%) were 30–44 years, 3694 (22.7%) were 45–59 years, 2051 (12.6%) were 60–74 years, and 806 (5.0%) were ≥ 75

Lyme Disease — Continued

FIGURE 1. Number of reported cases of Lyme disease, by year — United States, 1982–1999



years. Among the 16,226 patients for whom sex was reported, 8511 (52.5%) were male. Of patients <15 years, 2338 (57.8%) were male; of patients 15–29 years, 1139 (56.9%) were male; of patients ≥ 75 years, 360 (44.6%) were male. Among 12,479 (76.7%) patients for whom month of illness onset was reported, 7161 (57.4%) had illness onset during June (28.5%) and July (28.9%); <5.8% reported illness onset during January, February, and December 1999.

Reported by: State health depts. Bacterial Zoonoses Br, Div of Vector-borne Infectious Diseases, National Center for Infectious Diseases, CDC.

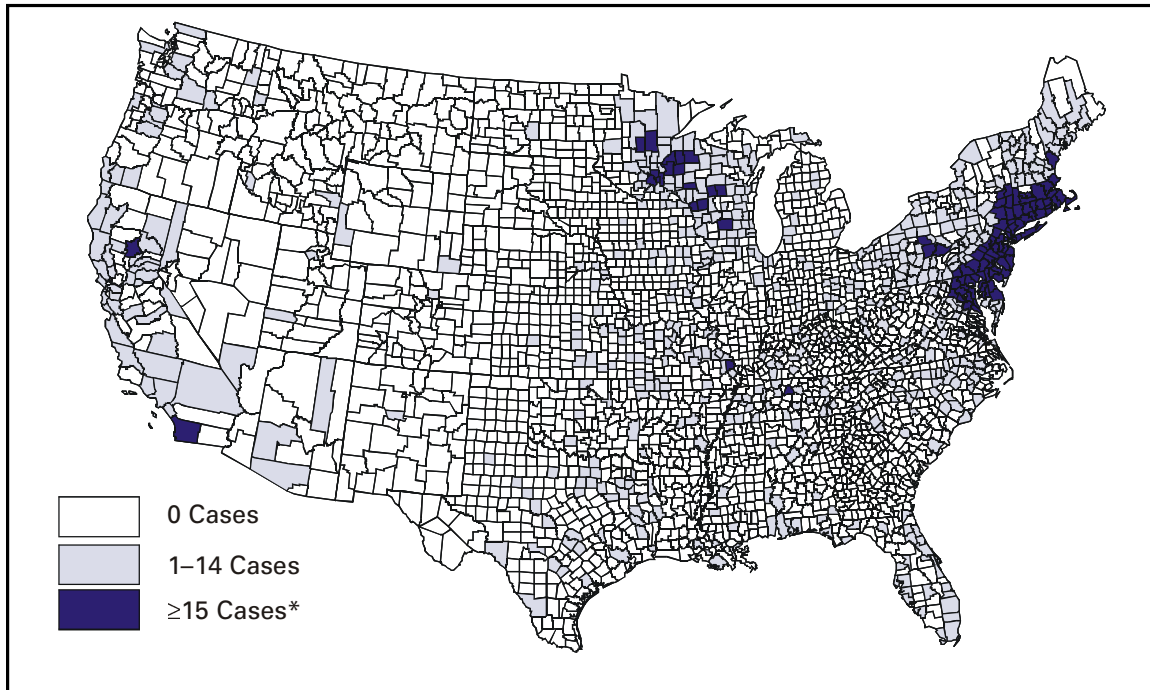
Editorial Note: From 1991 to 1999, the incidence of LD increased 1.7-fold. The geographic distribution expanded early in the epidemic, then stabilized (2). Most cases continue to occur in northeastern, mid-Atlantic, and north central states. The large proportion of patients aged <15 years and 45–59 years may be the result of greater exposure than other groups to infected ticks, to less use of personal protective measures, to differential use of health-care services, or to reporting bias. The large number of reported LD cases during June and July reflects the seasonal peak of host-seeking activities of infective nymphal-stage vector ticks in areas where LD is endemic (3).

The findings in this report are subject to at least three limitations. First, distribution of reported cases could be distorted by reporting bias. Second, LD is underreported in areas where it is endemic and may be overreported where it is not endemic. Third, the LD case definition is limited in sensitivity and specificity, not all LD cases present with typical manifestations and other conditions may be confused with LD, and laboratory testing may be inaccurate.

*Lyme Disease — Continued***TABLE 1. Number of reported cases of Lyme disease, by state, 1990–1999, and nationwide incidence*, 1999 — United States**

State	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total	1999 Incidence
Alabama	33	13	10	4	6	12	9	11	24	20	142	0.5
Alaska	0	0	0	0	0	0	0	2	1	0	3	0.0
Arizona	0	1	0	0	0	1	0	4	1	3	10	0.1
Arkansas	22	31	20	8	15	11	27	27	8	7	176	0.3
California	345	265	231	134	68	84	64	154	135	139	1,619	0.4
Colorado	0	1	0	0	1	0	0	0	0	3	5	0.1
Connecticut	704	1,192	1,760	1,350	2,030	1,548	3,104	2,297	3,434	3,215	20,634	98.0
Delaware	54	73	219	143	106	56	173	109	77	167	1,177	22.2
District of Columbia	5	5	3	2	9	3	3	10	8	6	54	1.2
Florida	7	35	24	30	28	17	55	56	71	59	382	0.4
Georgia	161	25	48	44	127	14	1	9	5	0	434	0.0
Hawaii	2	0	2	1	0	0	1	0	0	0	6	0.0
Idaho	1	2	2	2	3	0	2	4	7	3	26	0.2
Illinois	30	51	41	19	24	18	10	13	14	17	237	0.1
Indiana	15	16	22	32	19	19	32	33	39	21	248	0.4
Iowa	16	22	33	8	17	16	19	8	27	24	190	0.8
Kansas	14	22	18	54	17	23	36	4	13	16	217	0.6
Kentucky	18	44	28	16	24	16	26	20	27	19	238	0.5
Louisiana	3	6	7	3	4	9	9	13	15	9	78	0.2
Maine	9	15	16	18	33	45	63	34	78	41	352	3.3
Maryland	238	282	183	180	341	454	447	494	659	899	4,177	17.4
Massachusetts	117	265	223	148	247	189	321	291	699	787	3,287	12.7
Michigan	134	46	35	23	33	5	28	27	17	11	359	0.1
Minnesota	70	84	197	141	208	208	251	256	261	283	1,959	5.9
Mississippi	7	8	0	0	0	17	24	27	17	4	104	0.1
Missouri	205	207	150	108	102	53	52	28	12	72	989	1.3
Montana	0	0	0	0	0	0	0	0	0	0	0	0.0
Nebraska	0	25	22	6	3	6	5	2	4	11	84	0.7
Nevada	2	5	1	5	1	6	2	2	6	2	32	0.1
New Hampshire	4	38	44	15	30	28	47	39	45	27	317	2.2
New Jersey	1,074	915	688	786	1,533	1,703	2,190	2,041	1,911	1,719	14,560	21.1
New Mexico	0	3	2	2	5	1	1	1	4	1	20	0.1
New York	3,244	3,944	3,448	2,818	5,200	4,438	5,301	3,327	4,640	4,402	40,762	24.2
North Carolina	87	73	67	86	77	84	66	34	63	74	711	1.0
North Dakota	3	2	1	2	0	0	2	0	0	1	11	0.2
Ohio	36	112	32	30	45	30	32	40	47	47	451	0.4
Oklahoma	13	29	27	19	99	63	42	45	13	8	358	0.2
Oregon	11	5	13	8	6	20	19	20	21	15	138	0.5
Pennsylvania	553	718	1,173	1,085	1,438	1,562	2,814	2,188	2,760	2,781	17,072	23.2
Rhode Island	101	142	275	272	471	345	534	442	789	546	3,917	55.1
South Carolina	7	10	2	9	7	17	9	3	8	6	78	0.2
South Dakota	2	1	1	0	0	0	0	1	0	0	5	0.0
Tennessee	28	35	31	20	13	28	24	45	47	59	330	1.1
Texas	44	57	113	48	56	77	97	60	32	72	656	0.4
Utah	1	2	6	2	3	1	1	1	0	2	19	0.1
Vermont	11	7	9	12	16	9	26	8	11	26	135	4.4
Virginia	129	151	123	95	131	55	57	67	73	122	1,003	1.8
Washington	30	7	14	9	4	10	18	11	7	14	124	0.2
West Virginia	11	43	14	50	29	26	12	10	13	20	228	1.1
Wisconsin	337	424	525	401	409	369	396	480	657	490	4,488	9.3
Wyoming	5	11	5	9	5	4	3	3	1	3	49	0.6
Total	7,943	9,470	9,908	8,257	13,043	11,700	16,455	12,801	16,801	16,273	122,651	6.0

*Per 100,000 population.

*Lyme Disease — Continued***FIGURE 2. Number of reported cases of Lyme disease, by county — United States, 1999**

*Total number of cases from these counties represented 90% of all cases reported in 1999.

LD can be prevented by avoiding tick-infested areas, using repellents, and promptly removing ticks that become attached to clothing or the body. A vaccine for persons aged 15–70 years, approved by the Food and Drug Administration in 1998, is 76% effective in preventing LD after three doses (4). New methods of reducing tick vectors are being developed (e.g., baited devices that passively apply acaricides to deer and rodents) (5; CDC, unpublished data, 2001). In addition, early diagnosis and treatment of LD can reduce morbidity. Updated guidelines for LD treatment were published in 2000 (6,7).

CDC supports collaborative efforts with health departments and academic and non-profit organizations to prevent LD. During 2001, community-based projects are being initiated with the goal of reducing incidence to 9.7 per 100,000 population by 2010 in states where LD is endemic (8). Additional information about LD is available at <http://www.cdc.gov/ncidod/dvbid/lymeinfo.htm>.

References

1. Case definitions for infectious conditions under public health surveillance. *MMWR* 1997;46(no. RR-10):20–1.
2. Orloski KA, Hayes EB, Campbell GL, Dennis DT. Surveillance for Lyme disease—United States, 1992–1998. In: CDC surveillance summaries (April 28). *MMWR* 2000;49(no. SS-3):1–9.
3. Dennis DT. Epidemiology, ecology, and prevention of Lyme disease. In: Rahn DW, Evans J, eds. *Lyme disease*. Philadelphia, Pennsylvania: American College of Physicians, 1998:7–34.
4. CDC. Recommendations for the use of Lyme disease vaccine: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 1999;48(no. RR-7).
5. Pound JM, Miller JA, George JE, Lemeilleur CA. The '4-poster' passive topical treatment device to apply acaricide for controlling ticks (*Acari: Ixodidae*) feeding on white-tailed deer. *J Med Entomol* 2000;37:588–94.
6. Wormser GP, Nadelman RB, Dattwyler RJ, et al. Practice guidelines for the treatment of Lyme disease. *Clin Infect Dis* 2000;31(suppl 1):S1–S14.

Lyme Disease — Continued

7. Abramowicz M, ed. Treatment of Lyme disease. *The Medical Letter* 2000;42:37–9.
8. US Department of Health and Human Services. *Healthy people 2010* (conference ed, 2 vols). Washington, DC: US Department of Health and Human Services, 2000.

Knowledge and Use of Folic Acid Among Women of Reproductive Age — Michigan, 1998

Neural tube defects (NTDs), which include spina bifida and anencephaly, are serious malformations that occur in the developing fetus during the first 17–30 days after conception (1). Consumption of supplements containing folic acid can reduce NTDs 50%–70% (2,3). In the United States, approximately 4000 pregnancies are affected by NTDs each year, including approximately 140 infants in Michigan. In 1992, the U.S. Public Health Service recommended that all women of childbearing age consume at least 400 μg of folic acid daily (4). In 1998, the Institute of Medicine reaffirmed that recommendation and added that women capable of becoming pregnant take 400 μg of synthetic folic acid daily from fortified foods and/or supplements and consume a balanced, healthy diet of folate-rich foods (5). This report summarizes findings from the 1998 Behavioral Risk Factor Surveillance System (BRFSS) about multivitamin use and folic acid knowledge among women of reproductive age in Michigan. The findings suggest that public health campaigns that promote the consumption of folic acid should target women who are young, unmarried, obese, smoke, eat few fruits and vegetables, and have a low level of education.

BRFSS is an ongoing, state-based, random-digit-dialed telephone survey of the U.S. civilian, noninstitutionalized population aged ≥ 18 years (6). In 1998, 2613 persons were interviewed in Michigan. Analysis was restricted to 739 women of reproductive age (aged 18–44 years).

Multivitamin use was defined as taking a folic acid-containing multivitamin or a folic acid supplement at least once a day. Knowledge of folic acid use was defined as having answered that the reason health experts recommend that women take folic acid was to prevent birth defects. Univariable and multivariable logistic regression models were used to determine risk factors for multivitamin use and knowledge of folic acid. SUDAAN was used to account for the complex study design (6). Age, race, education, marital status, fruit and vegetable consumption, smoking, and weight status (overweight: body mass index [BMI] ≥ 25.0 kg/(height²)[in meters] < 30.0 or obese: BMI ≥ 30.0 kg/(height²)) were identified as variables of interest and included in the multivariable analysis.

Overall, 42.4% of women reported taking a multivitamin or folic acid supplement daily. Multivitamin use increased with age, from 33.1% for women aged 18–24 years to 48.1% for women aged 40–44 years. The prevalence of women who used a multivitamin was highest among those who were consumers of five or more fruits and vegetables a day (54.9%), college educated (49.9%), aged 35–39 years (49.6%), former smokers (47.4%), married (46.0%), not overweight (44.5%), and white (44.2%) (Table 1). After multivariable analysis, the following groups were statistically significantly less likely than their respective comparison group to use a multivitamin daily: women aged 18–24 years, women who had a low level of education, women who ate less than five fruits and vegetables a day, and obese women.

Overall, 30.0% of women had knowledge of folic acid use, defined as responding that the prevention of birth defects is the reason to take folic acid. The prevalence of women

*Folic Acid — Continued***TABLE 1. Prevalence of daily multivitamin or folic acid supplement use and adjusted odds ratios (AOR) among women aged 18–44 years, by selected characteristics — Behavioral Risk Factor Surveillance System, Michigan, 1998**

Characteristic	No.*	(%)	AOR	(95% CI†)
Age group (yrs)				
18–24	149	(33.1)	0.5	(0.3–0.9)
25–29	115	(38.5)	0.7	(0.4–1.2)
30–34	134	(42.9)	0.7	(0.4–1.3)
35–39	172	(49.6)	1.1	(0.7–1.8)
40–44	149	(48.1)	1.0	Ref
Race				
Black	99	(37.2)	1.1	(0.6–1.8)
Other	29	(25.9)	0.5	(0.2–1.2)
White	588	(44.2)	1.0	Ref
Education				
<High school	47	(27.7)	0.4	(0.2–0.9)
High school	225	(43.1)	0.8	(0.5–1.2)
Some college	252	(39.1)	0.7	(0.4–1.0)
College graduate	195	(49.9)	1.0	Ref
Marital status				
Unmarried	357	(38.1)	1.0	(0.7–1.5)
Married	361	(46.0)	1.0	Ref
Fruit and vegetable consumption				
<Five a day	537	(38.4)	0.6	(0.4–0.9)
≥Five a day	182	(54.9)	1.0	Ref
Smoking				
Current smoker	235	(42.3)	1.2	(0.7–2.0)
Never smoked	371	(40.9)	0.8	(0.5–1.4)
Former smoker	112	(47.4)	1.0	Ref
Weight status				
Obese	127	(35.1)	0.6	(0.4–0.9)
Overweight	164	(42.5)	0.9	(0.6–1.4)
Not overweight	371	(44.5)	1.0	Ref

* Unweighted sample size.

† Confidence interval.

with folic acid knowledge was highest among women who were college graduates (42.2%), aged 25–29 years (39.8%), former smokers (37.0%), married (35.8%), ate five or more fruits and vegetables a day (34.9%), not overweight (31.9%), and white (31.5%) (Table 2). Multivariable analysis indicated that women who were high school graduates, current smokers, and unmarried were statistically significantly less likely than their respective comparison group to have correct knowledge of folic acid use. Women aged 18–29 were statistically significantly more likely than their respective comparison group to have correct knowledge.

Reported by: M Reeves, A Rafferty, Bur of Epidemiology; JC Simmeron, J Bach, Michigan Birth Defects Registry, Michigan Dept of Community Health. State Br, Div of Applied Public Health Training, Epidemiology Program Office; Maternal and Child Health Br, Div of Reproductive

*Folic Acid — Continued***TABLE 2. Prevalence of folic acid knowledge and adjusted odds ratios (AOR) among women aged 18–44 years, by selected characteristics — Behavioral Risk Factor Surveillance System, Michigan, 1998**

Characteristic	No.*	(%)	AOR	(95% CI) [†]
Age group (yrs)				
18–24	156	(27.4)	2.0	(1.0–3.9)
25–29	114	(39.8)	2.7	(1.4–5.2)
30–34	136	(31.1)	1.6	(0.8–2.9)
35–39	177	(29.9)	1.4	(0.8–2.6)
40–44	152	(24.2)	1.0	Ref
Race				
Black	101	(23.1)	0.8	(0.4–1.5)
Other	30	(26.2)	0.5	(0.2–1.3)
White	601	(31.5)	1.0	Ref
Education				
<High school	47	(23.6)	0.6	(0.2–1.5)
High school	231	(23.3)	0.5	(0.3–0.9)
Some college	258	(28.2)	0.7	(0.4–1.1)
College graduate	199	(42.2)	1.0	Ref
Marital status				
Unmarried	368	(23.4)	0.6	(0.4–0.9)
Married	366	(35.8)	1.0	Ref
Fruit and vegetable consumption				
<5 a day	549	(28.4)	0.8	(0.5–1.3)
≥5 a day	186	(34.9)	1.0	Ref
Smoking				
Current smoker	242	(21.3)	0.5	(0.3–0.9)
Never smoked	381	(33.4)	0.8	(0.4–1.3)
Former smoker	111	(37.0)	1.0	Ref
Weight status				
Obese	132	(25.0)	0.8	(0.5–1.4)
Overweight	166	(31.5)	0.9	(0.6–1.5)
Not overweight	378	(31.9)	1.0	Ref

* Unweighted sample size.

† Confidence interval.

Health, National Center for Chronic Disease Prevention and Health Promotion; and an EIS Officer, CDC.

Editorial Note: The findings in this report indicate that younger women, women with low education, women with low fruit and vegetable consumption, and obese women were associated with lower levels of reported multivitamin use. Being unmarried or a current smoker was associated with low folic acid knowledge, and having less education (an indicator of low socioeconomic status) was associated with both low levels of multivitamin use and low folic acid knowledge. Eating few fruits and vegetables and smoking also are correlated with socioeconomic status. Therefore, socioeconomic status is a marker for low folic acid knowledge and low multivitamin use in Michigan, as has been shown in previous studies (7). Because low education level was associated with low folic acid

Folic Acid — Continued

knowledge, a continued educational effort from medical and nutritional professionals is needed to increase knowledge and support behavior change (8).

The findings in this report are subject to at least four limitations. First, because BRFSS excludes persons aged <18 years, folic acid knowledge and prevalence estimates do not represent the entire reproductive-aged population. Second, BRFSS excludes persons without telephones; therefore, data may underestimate the number of women of reproductive age from low socioeconomic groups. Third, the data are self-reported and the validity of the data is unknown. Finally, because the overall sample size is relatively small, some estimates are unreliable, as indicated by the wide confidence intervals.

Through a 3-year cooperative agreement with CDC, the Michigan Department of Community Health (MDCH) Division for Vital Records and Health Statistics and the Hereditary Disorders Program seek opportunities to increase awareness of NTD prevention through conferences, presentations, and the distribution of folic acid literature to public and professional audiences. The School Health Unit at MDCH also identifies opportunities for folic acid education in curricula developed for the Michigan Model for Comprehensive School Health Education, which reaches approximately 950,000 Michigan students and their families.

Other organizations, such as the March of Dimes and the Association of Women's Health, Obstetric and Neonatal Nurses are implementing folic acid campaigns and educational programs to help prevent NTDs in Michigan. The March of Dimes Greater Michigan Chapter has partnered with grocery stores in the Grand Rapids area to print folic acid messages on store grocery bags, and the Southeast Michigan Chapter has disseminated folic acid messages through public service announcements and partnerships with faith based organizations, corporations, representatives from the Arab and Hispanic communities, and professional medical groups.

The public health community should continue to use multiple strategies to increase folic acid intake and consumption. The current level of folic acid in fortified food (140 μg per 100 g cereal grain product) is intended to increase a woman's intake by approximately 100 μg per day (9). Although the current levels of fortification may not be sufficient to provide the necessary dietary intake of folic acid for many women who become pregnant, fortification has had a substantial effect on increasing folate levels (10). Because approximately 50% of pregnancies are unplanned, all women of childbearing age should be encouraged to consume 400 μg of folic acid from fortified foods and/or supplements and to consume a balanced, healthy diet of folate-rich foods.

References

1. CDC. Knowledge and use of folic acid by women of childbearing age—United States, 1995 and 1998. *MMWR* 1999;48:325–7.
2. Milunsky A, Jick H, Jick SS, et al. Multivitamin/folic acid supplementation in early pregnancy reduces the prevalence of neural tube defects. *JAMA* 1989;262:2847–52.
3. MRC Vitamin Study Research Group. Prevention of neural tube defects: results of the Medical Research Council Vitamin Study. *Lancet* 1991;338:131–7.
4. CDC. Recommendations for the use of folic acid to reduce the number of cases of spina bifida and other neural tube defects. *MMWR* 1992;41(no. RR-14).
5. Institute of Medicine. Dietary reference intake: folate, other B vitamins, and choline. Washington, DC: National Academy Press, 1998.
6. CDC. Health risks in America: gaining insight from the Behavioral Risk Factor Surveillance System. Atlanta, Georgia: US Department of Health and Human Services, CDC, 1997.
7. Wasserman CR, Shaw GM, Selvin S, Gould JB, Syme SL. Socioeconomic status, neighborhood social conditions, and neural tube defects. *Am J Public Health* 1998;88:1674–80.

Folic Acid — Continued

8. Pastuszak AL. Changing human behaviour is the greatest challenge in the folic acid saga. *Frontiers in Fetal Health—A Global Perspective* 1999;4:1–3.
9. Mills JL. Fortification of foods with folic acid—how much is enough? *N Engl J Med* 2000;342:1442–4.
10. CDC. Folate status in women of childbearing age—United States, 1999. *MMWR* 2000;49:962–5.

Notice to Readers**Update on the Supply of Tetanus and Diphtheria Toxoids and of Diphtheria and Tetanus Toxoids and Acellular Pertussis Vaccine**

During the last quarter of 2000, the U.S. Public Health Service learned of a shortage of tetanus and diphtheria toxoids (Td) and tetanus toxoid (TT) resulting from decreased production of these vaccines by the two U.S. manufacturers. Previously published recommendations outlined priorities for use of the limited supply of Td and TT (1). The shortage was expected to be resolved by early 2001; however, on January 10, 2001, Wyeth Lederle (Pearl River, New York)* announced it had stopped production of tetanus toxoid-containing products. Although a small amount of Td is produced by the University of Massachusetts for local distribution, Aventis Pasteur (Swiftwater, Pennsylvania) is now the sole nationwide distributor of Td and TT. Aventis Pasteur is shipping limited quantities of vaccine to assure a wide distribution of available doses.

In accordance with previous recommendations, priority will be given to clinics and hospitals that treat acute wounds; continuing to prioritize Td and TT use will be necessary until supplies are restored (1). Clinics and hospitals in need of vaccine for wound care should call Aventis Pasteur, telephone (800) 822-2463. Aventis Pasteur is increasing the amount of Td production. However, because of the long production time required, the shortage is not expected to be resolved for 12–18 months.

In addition to Wyeth Lederle discontinuing production of its tetanus and diphtheria toxoids and acellular pertussis vaccine (DTaP; ACEL-IMUNE®), Baxter Hyland Immuno Vaccines (formerly North American Vaccine, Inc.) (Baltimore, Maryland) is not producing its DTaP vaccine (Certiva™). Aventis Pasteur and Glaxo SmithKline (Philadelphia, Pennsylvania), producers of Tripedia® and Infanrix™, respectively, are the remaining suppliers of DTaP. On March 7, 2001, the Food and Drug Administration approved a newly formulated version of Tripedia® in one-dose vials without preservative and with only a trace amount of thimerosal. Approval of this vaccine should improve the supply of DTaP.

DTaP vaccine is recommended as a five-dose series: three doses given to infants at ages 2, 4, and 6 months, followed by two booster doses at age 15–18 months and at age 4–6 years (2). Some vaccine providers may have difficulties obtaining sufficient supplies of DTaP to vaccinate all children in their practices. If providers have insufficient quantities of DTaP, priorities should be given to vaccinating infants with the initial three DTaP doses and, if necessary, to defer the fourth DTaP dose. However, children should be vaccinated with all other recommended vaccines according to the Childhood Immunization Schedule

*Use of trade names and commercial sources is for identification only and does not imply endorsement by CDC or the U.S. Department of Health and Human Services.

Notice to Readers — Continued

(3)[†]. When adequate DTaP supplies are available, providers should recall for vaccination all children who did not receive the fourth dose of DTaP. If supplies are sufficient, children aged 4–6 years should be vaccinated in accordance with existing ACIP recommendations to assure immunity to pertussis, diphtheria, and tetanus during the elementary school years. CDC is evaluating the situation, and more guidance will be provided should substantial supply problems occur.

References

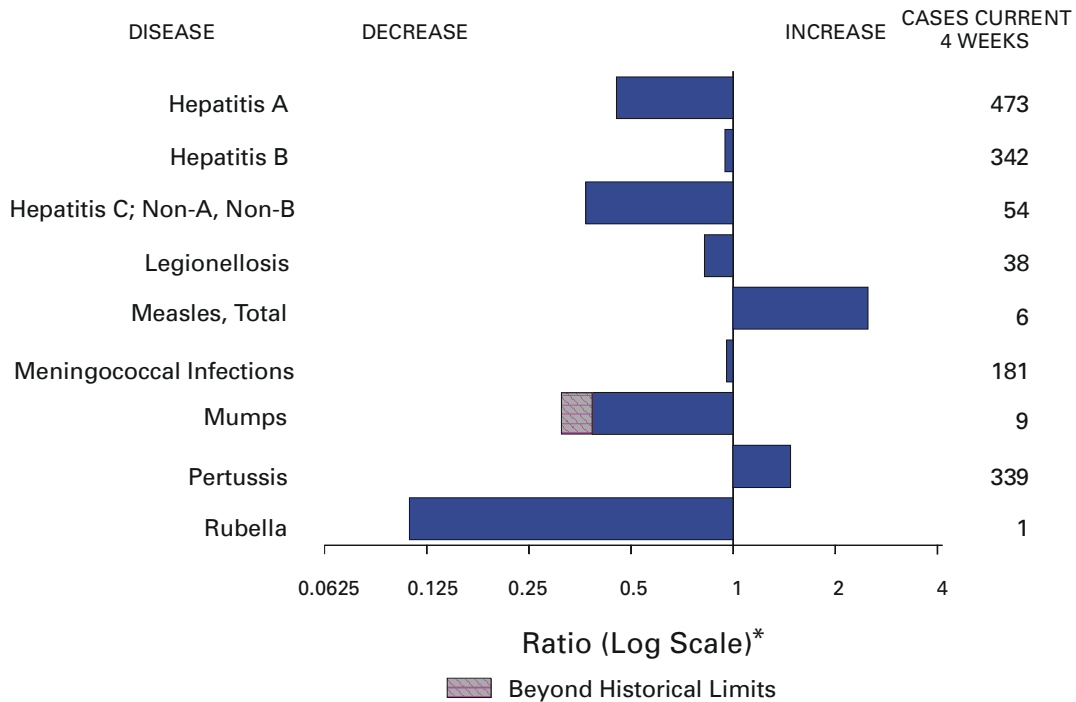
1. CDC. Shortage of tetanus and diphtheria toxoids. *MMWR* 2000;49:1029–30.
2. Advisory Committee on Immunization Practices. Pertussis vaccination: use of acellular pertussis vaccine among infants and young children—recommendations of the Advisory Committee on Immunization Practices. *MMWR* 1997;46(no. RR-7).
3. CDC. Recommended childhood immunization schedule—United States, 2001. *MMWR* 2001;50:7–10,19.

[†] Children traveling to a country where the risk for diphtheria is high should be vaccinated according to the Childhood Immunization Schedule. Travelers may be at substantial risk for exposure to toxigenic strains of *Corynebacterium diphtheriae*, especially with prolonged travel, extensive contact with children, or exposure to poor hygiene. High-risk countries include the following: Africa—Algeria, Egypt, and sub-Saharan Africa; Americas—Brazil, Dominican Republic, Ecuador, and Haiti; Asia/Oceania—Afghanistan, Bangladesh, Cambodia, China, India, Indonesia, Iran, Iraq, Laos, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Syria, Thailand, Turkey, Vietnam, and Yemen; and Europe—Albania and all countries of the former Soviet Union.

Erratum: Vol. 50, No. 6

In the Notice to Readers “Risk for Meningococcal Disease Associated With the Hajj 2001,” the information telephone number should be (877) 463-3287 ([877] INFECTS).

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending March 10, 2001, with historical data



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

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending March 10, 2001 (10th Week)

	Cum. 2001		Cum. 2001
Anthrax	-	Poliomyelitis, paralytic	-
Brucellosis*	9	Psittacosis*	2
Cholera	-	Q fever*	1
Cyclosporiasis*	6	Rabies, human	-
Diphtheria	-	Rocky Mountain spotted fever (RMSF)	10
Ehrlichiosis: human granulocytic (HGE)*	3	Rubella, congenital syndrome	-
human monocytic (HME)*	2	Streptococcal disease, invasive, group A	511
Encephalitis: California serogroup viral*	-	Streptococcal toxic-shock syndrome*	15
eastern equine*	-	Syphilis, congenital†	1
St. Louis*	-	Tetanus	1
western equine*	-	Toxic-shock syndrome	25
Hansen disease (leprosy)*	6	Trichinosis	2
Hantavirus pulmonary syndrome*†	2	Tularemia*	3
Hemolytic uremic syndrome, postdiarrheal*	11	Typhoid fever	27
HIV infection, pediatric*§	37	Yellow fever	-
Plague	-		

-: No reported cases.

*Not notifiable in all states.

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

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

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

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending March 10, 2001, and March 11, 2000 (10th Week)

Reporting Area	AIDS		Chlamydia [†]		Cryptosporidiosis		<i>Escherichia coli</i> O157:H7*			
	Cum. 2001 [‡]	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	NETSS		PHLIS	
							Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	5,820	6,226	105,385	125,233	190	229	146	261	86	197
NEW ENGLAND	200	500	3,709	4,406	7	15	18	22	11	25
Maine	3	6	159	257	-	1	1	2	-	2
N.H.	12	6	186	208	-	-	4	4	2	4
Vt.	9	-	109	109	3	5	1	1	-	2
Mass.	118	360	1,542	1,879	1	5	12	8	7	6
R.I.	24	17	574	438	1	1	-	-	-	-
Conn.	34	111	1,139	1,515	2	3	-	7	2	11
MID. ATLANTIC	1,180	1,591	6,749	11,251	14	19	10	26	7	39
Upstate N.Y.	29	65	N	N	8	12	10	24	6	32
N.Y. City	740	985	4,232	4,638	6	4	-	1	1	-
N.J.	241	387	733	2,515	-	-	-	1	-	2
Pa.	170	154	1,784	4,098	-	3	N	N	-	5
E.N. CENTRAL	463	591	13,106	22,200	54	52	28	47	17	11
Ohio	77	91	231	5,994	23	12	13	8	10	3
Ind.	45	56	2,368	2,403	10	3	6	2	1	3
Ill.	226	354	3,480	6,297	-	6	4	19	4	-
Mich.	97	67	5,398	4,191	21	5	2	8	-	2
Wis.	18	23	1,629	3,315	-	26	3	10	2	3
W.N. CENTRAL	110	147	5,115	7,186	6	10	15	45	14	42
Minn.	29	31	1,100	1,574	-	3	3	6	8	18
Iowa	15	10	514	657	3	1	2	10	-	4
Mo.	38	67	1,439	2,580	-	1	7	20	3	11
N. Dak.	1	-	171	199	-	1	-	2	-	2
S. Dak.	-	2	347	366	-	1	1	-	1	-
Nebr.	9	7	583	654	3	2	-	3	-	4
Kans.	18	30	961	1,156	-	1	2	4	2	3
S. ATLANTIC	1,673	1,508	22,642	24,148	41	34	22	23	6	17
Del.	37	25	577	546	-	-	-	-	-	-
Md.	131	154	2,385	2,221	5	3	-	5	-	1
D.C.	166	113	527	522	3	-	-	-	U	U
Va.	137	113	3,302	3,042	3	-	3	5	3	5
W. Va.	12	7	418	411	-	-	1	2	-	1
N.C.	101	74	3,777	3,672	8	3	13	6	1	2
S.C.	171	153	1,948	3,317	-	-	1	-	-	-
Ga.	187	180	4,209	4,737	11	20	1	2	-	3
Fla.	731	689	5,499	5,680	11	8	3	3	2	5
E.S. CENTRAL	360	279	8,220	9,019	3	7	6	12	3	12
Ky.	51	37	1,619	1,530	-	-	-	4	2	3
Tenn.	132	104	2,553	2,653	-	-	3	4	1	8
Ala.	95	91	2,160	2,800	2	6	3	1	-	-
Miss.	82	47	1,888	2,036	1	1	-	3	-	1
W.S. CENTRAL	629	532	18,403	18,853	4	13	10	14	8	18
Ark.	45	20	1,711	896	2	1	-	4	-	3
La.	188	91	3,373	3,585	1	1	-	-	5	7
Okla.	36	17	1,898	1,692	1	1	2	3	2	3
Tex.	360	404	11,421	12,680	-	10	8	7	1	5
MOUNTAIN	241	210	5,544	7,247	18	14	13	28	7	9
Mont.	5	3	278	217	-	1	-	8	-	-
Idaho	5	3	390	380	2	1	2	3	-	-
Wyo.	-	1	139	152	-	1	-	2	-	2
Colo.	40	52	525	1,989	10	3	7	10	4	3
N. Mex.	15	25	1,027	915	3	1	-	-	-	-
Ariz.	93	55	2,324	2,409	1	2	4	3	2	3
Utah	23	28	67	432	2	5	-	1	1	1
Nev.	60	43	794	753	-	-	-	1	-	-
PACIFIC	964	868	21,897	20,923	43	65	24	44	13	24
Wash.	117	101	2,503	2,483	N	U	3	5	5	7
Oreg.	38	22	943	900	8	1	3	6	1	6
Calif.	798	721	17,622	16,461	35	64	18	29	5	8
Alaska	2	-	350	409	-	-	-	-	-	-
Hawaii	9	24	479	670	-	-	-	4	2	3
Guam	5	7	-	-	-	-	N	N	U	U
P.R.	158	150	758	U	U	U	U	1	U	U
V.I.	1	5	U	U	U	U	U	U	U	U
Amer. Samoa	-	-	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	U	U	U	U	U	U	U	U

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

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

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

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

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending March 10, 2001, and March 11, 2000 (10th Week)

Reporting Area	Gonorrhea		Hepatitis C; Non-A, Non-B		Legionellosis		Listeriosis	Lyme Disease	
	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2001	Cum. 2000
UNITED STATES	50,050	65,811	291	656	102	127	57	377	785
NEW ENGLAND	1,027	1,281	2	5	1	10	6	105	118
Maine	20	14	-	-	-	2	-	-	-
N.H.	22	18	-	-	-	1	-	42	15
Vt.	15	8	2	2	1	-	-	1	-
Mass.	462	521	-	3	-	6	4	14	24
R.I.	149	104	-	-	-	-	-	-	-
Conn.	359	616	-	-	-	1	2	48	79
MID. ATLANTIC	4,334	6,414	15	119	6	21	5	178	543
Upstate N.Y.	1,211	1,009	11	10	5	9	3	151	168
N.Y. City	1,898	2,006	-	-	-	-	-	-	17
N.J.	448	1,396	-	102	-	-	-	-	78
Pa.	777	2,003	4	7	1	12	2	27	280
E.N. CENTRAL	6,454	13,477	40	61	35	40	8	10	19
Ohio	183	3,414	4	-	17	17	2	10	2
Ind.	1,042	1,112	-	-	4	4	-	-	1
Ill.	1,640	4,380	-	7	-	4	-	-	1
Mich.	3,019	3,138	36	54	10	8	5	-	-
Wis.	570	1,433	-	-	4	7	1	U	15
W.N. CENTRAL	2,245	2,987	41	88	9	4	2	6	11
Minn.	358	589	-	-	1	1	-	4	4
Iowa	177	155	-	-	2	1	-	-	-
Mo.	1,013	1,496	38	85	3	2	1	2	3
N. Dak.	6	9	-	-	-	-	-	-	-
S. Dak.	40	54	-	-	-	-	-	-	-
Nebr.	211	211	2	1	2	-	-	-	-
Kans.	440	473	1	2	1	-	1	-	4
S. ATLANTIC	14,443	18,844	15	16	19	25	8	63	77
Del.	314	288	-	1	-	2	-	-	11
Md.	1,507	1,464	5	2	7	7	1	57	55
D.C.	540	434	-	-	1	-	-	2	-
Va.	1,865	1,924	-	-	2	3	1	2	3
W. Va.	84	112	-	1	N	N	1	-	4
N.C.	3,075	3,392	4	7	2	3	-	2	4
S.C.	1,758	4,146	2	-	-	2	-	-	-
Ga.	2,201	3,024	-	-	1	-	2	-	-
Fla.	3,099	4,060	4	5	6	8	3	-	-
E. S. CENTRAL	5,493	6,522	40	94	5	3	4	2	-
Ky.	679	621	1	8	2	1	1	2	-
Tenn.	1,791	2,066	9	18	2	1	2	-	-
Ala.	1,850	2,229	-	3	1	1	1	-	-
Miss.	1,173	1,606	30	65	-	-	-	-	-
W. S. CENTRAL	9,364	9,916	99	218	1	4	1	-	3
Ark.	1,095	454	1	3	-	-	1	-	-
La.	2,354	2,574	51	118	1	2	-	-	2
Okla.	941	769	-	-	-	-	-	-	-
Tex.	4,974	6,119	47	97	-	2	-	-	1
MOUNTAIN	1,780	2,039	15	17	5	8	5	-	-
Mont.	14	1	-	-	-	-	-	-	-
Idaho	18	22	1	-	-	1	-	-	-
Wyo.	13	13	3	-	-	-	-	-	-
Colo.	685	720	5	8	3	4	1	-	-
N. Mex.	175	174	5	4	-	-	1	-	-
Ariz.	608	793	-	4	1	-	1	-	-
Utah	9	62	-	-	-	3	-	-	-
Nev.	258	254	1	1	1	-	2	-	-
PACIFIC	4,910	4,331	24	38	21	12	18	13	14
Wash.	549	472	4	4	4	5	-	-	-
Oreg.	172	95	4	9	N	N	2	2	1
Calif.	4,070	3,638	16	25	17	7	16	11	13
Alaska	38	41	-	-	-	-	-	-	-
Hawaii	81	85	-	-	-	-	-	N	N
Guam	-	-	-	-	-	-	-	-	-
P.R.	218	90	-	1	2	-	-	N	N
V.I.	U	U	U	U	U	U	-	U	U
Amer. Samoa	U	U	U	U	U	U	-	U	U
C.N.M.I.	U	U	U	U	U	U	-	U	U

N: Not notifiable.

U: Unavailable.

- : No reported cases.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending March 10, 2001, and March 11, 2000 (10th Week)

Reporting Area	Malaria		Rabies, Animal		Salmonellosis*			
	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	NETSS		PHLIS	
					Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	143	166	716	878	3,296	4,392	2,441	3,851
NEW ENGLAND	13	3	78	92	262	266	202	291
Maine	-	-	12	21	11	27	7	15
N.H.	-	-	2	2	20	18	14	19
Vt.	-	-	19	6	15	6	12	13
Mass.	3	3	19	26	168	166	106	167
R.I.	-	-	8	5	11	3	24	18
Conn.	10	-	18	32	37	46	39	59
MID. ATLANTIC	12	31	112	150	241	629	376	696
Upstate N.Y.	5	10	89	118	107	102	64	177
N.Y. City	6	12	1	U	103	182	156	202
N.J.	-	5	22	18	-	200	55	119
Pa.	1	4	-	14	31	145	101	198
E.N. CENTRAL	22	22	4	6	485	658	445	331
Ohio	4	2	-	2	174	162	126	117
Ind.	7	1	1	-	40	50	36	68
Ill.	-	14	-	-	120	226	144	1
Mich.	11	5	3	-	100	95	98	101
Wis.	-	-	-	4	51	125	41	44
W.N. CENTRAL	3	10	52	71	198	197	188	247
Minn.	1	4	12	21	31	39	75	76
Iowa	1	-	13	6	30	17	2	27
Mo.	1	1	3	2	66	65	76	67
N. Dak.	-	-	8	9	1	2	5	16
S. Dak.	-	-	9	19	18	10	9	15
Nebr.	-	2	-	-	16	24	-	19
Kans.	-	3	7	14	36	40	21	27
S. ATLANTIC	39	39	312	321	850	708	479	637
Del.	1	-	-	10	16	11	13	14
Md.	16	21	67	66	120	118	96	124
D.C.	4	-	-	-	15	-	U	U
Va.	8	12	64	75	100	71	66	75
W. Va.	-	-	21	21	3	20	13	13
N.C.	1	4	95	82	186	156	45	98
S.C.	1	-	9	20	84	57	74	65
Ga.	1	-	24	28	117	102	144	186
Fla.	7	2	32	19	209	173	28	62
E.S. CENTRAL	7	6	5	31	221	216	94	168
Ky.	1	2	2	5	43	42	27	25
Tenn.	3	-	3	23	44	47	56	77
Ala.	3	3	-	3	100	78	-	57
Miss.	-	1	-	-	34	49	11	9
W.S. CENTRAL	3	2	70	144	191	417	155	303
Ark.	-	-	-	-	34	36	13	22
La.	1	2	-	-	24	50	56	70
Okla.	1	-	11	8	16	33	15	35
Tex.	1	-	59	136	117	298	71	176
MOUNTAIN	12	11	29	30	269	381	189	313
Mont.	1	1	5	9	8	17	-	-
Idaho	1	-	-	-	10	22	4	21
Wyo.	-	-	10	14	9	6	6	3
Colo.	6	5	-	-	76	94	59	81
N. Mex.	1	-	1	2	30	38	29	37
Ariz.	1	2	13	5	92	113	64	116
Utah	1	2	-	-	29	58	27	55
Nev.	1	1	-	-	15	33	-	-
PACIFIC	32	42	54	33	579	920	313	865
Wash.	1	2	-	-	44	40	37	110
Oreg.	5	5	-	-	41	54	39	67
Calif.	25	34	32	26	488	769	177	641
Alaska	1	-	22	7	6	12	-	10
Hawaii	-	1	-	-	-	45	60	37
Guam	-	-	-	-	-	-	U	U
P.R.	-	2	24	10	36	64	U	U
V.I.	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	U	U	U	U	U	U	U	U

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

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

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending March 10, 2001, and March 11, 2000 (10th Week)

Reporting Area	Shigellosis*				Syphilis (Primary & Secondary)		Tuberculosis	
	NETSS		PHLIS		Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000				
UNITED STATES	1,662	2,757	802	1,153	836	1,189	1,124	1,856
NEW ENGLAND	21	61	23	48	7	17	56	51
Maine	-	2	-	-	-	-	-	2
N.H.	-	1	-	1	-	-	4	1
Vt.	-	1	-	-	-	-	-	-
Mass.	17	45	16	33	4	14	30	29
R.I.	-	4	1	6	-	1	3	2
Conn.	4	8	6	8	3	2	19	17
MID. ATLANTIC	128	211	115	166	51	48	251	273
Upstate N.Y.	80	67	2	38	3	1	29	21
N.Y. City	34	81	56	62	36	25	106	174
N.J.	-	42	14	28	7	10	71	69
Pa.	14	21	43	38	5	12	45	9
E.N. CENTRAL	274	465	168	166	114	257	151	171
Ohio	80	21	43	17	10	15	21	36
Ind.	53	49	7	10	26	85	14	14
Ill.	69	179	68	2	15	87	71	103
Mich.	63	168	48	131	57	56	26	11
Wis.	9	48	2	6	6	14	19	7
W.N. CENTRAL	205	151	158	107	8	22	56	81
Minn.	66	33	104	43	5	3	31	29
Iowa	35	21	2	22	-	6	9	7
Mo.	56	75	42	29	2	11	10	34
N. Dak.	8	-	1	1	-	-	-	-
S. Dak.	3	1	1	-	-	-	1	3
Nebr.	12	15	-	8	-	1	5	1
Kans.	25	6	8	4	1	1	-	7
S. ATLANTIC	259	270	64	103	331	355	243	282
Del.	2	1	-	2	1	1	-	-
Md.	21	21	4	8	39	69	20	32
D.C.	9	-	U	U	7	15	10	-
Va.	14	12	6	13	31	22	21	23
W. Va.	3	1	6	1	-	1	6	8
N.C.	82	18	19	6	86	92	21	41
S.C.	14	3	9	1	48	28	14	18
Ga.	24	18	16	45	33	61	50	63
Fla.	90	196	4	27	86	66	101	97
E.S. CENTRAL	140	125	36	95	104	168	70	143
Ky.	55	26	15	17	9	14	9	13
Tenn.	13	57	16	72	50	113	-	53
Ala.	36	8	-	4	23	25	50	55
Miss.	36	34	5	2	22	16	11	22
W.S. CENTRAL	154	475	104	156	132	182	34	315
Ark.	58	40	10	3	11	11	21	13
La.	11	66	32	32	25	46	-	6
Okla.	1	8	-	5	15	44	13	9
Tex.	84	361	62	116	81	81	-	287
MOUNTAIN	133	201	71	76	37	35	41	82
Mont.	-	-	-	-	-	-	-	-
Idaho	5	22	-	15	-	-	3	-
Wyo.	-	1	-	1	-	-	-	-
Colo.	30	35	18	16	2	1	13	9
N. Mex.	25	22	20	13	4	3	1	14
Ariz.	60	67	28	25	25	29	10	22
Utah	5	5	5	6	4	-	3	7
Nev.	8	49	-	-	2	2	11	30
PACIFIC	348	798	63	236	52	105	222	458
Wash.	37	146	37	182	13	9	30	34
Oreg.	21	78	18	46	2	2	-	1
Calif.	289	563	-	-	35	94	185	395
Alaska	1	2	-	1	-	-	7	12
Hawaii	-	9	8	7	2	-	-	16
Guam	-	-	U	U	-	-	-	-
P.R.	2	10	U	U	51	34	-	17
V.I.	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	U	U	U	U	U	U	U	U

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

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

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending March 10, 2001, and March 11, 2000 (10th Week)

Reporting Area	<i>H. influenzae</i> , Invasive		Hepatitis (Viral), By Type				Measles (Rubeola)					
	Cum. 2001 [†]	Cum. 2000	A		B		Indigenous		Imported*		Total	
			Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	2001	Cum. 2001	2001	Cum. 2001	Cum. 2001	Cum. 2000
UNITED STATES	242	258	1,469	2,449	851	1,052	1	12	1	7	19	13
NEW ENGLAND	11	22	77	64	12	18	-	3	-	1	4	-
Maine	-	-	1	3	1	1	-	-	-	-	-	-
N.H.	-	3	3	7	4	5	-	-	-	-	-	-
Vt.	-	3	2	2	1	2	-	1	-	-	1	-
Mass.	11	16	26	27	2	1	-	2	-	1	3	-
R.I.	-	-	3	-	4	-	-	-	-	-	-	-
Conn.	-	-	42	25	-	9	-	-	-	-	-	-
MID. ATLANTIC	26	37	65	152	68	182	-	1	1	1	2	5
Upstate N.Y.	10	14	30	51	16	18	-	-	1	1	1	-
N.Y. City	8	12	27	77	44	98	-	-	-	-	-	5
N.J.	7	9	-	6	-	8	-	-	-	-	-	-
Pa.	1	2	8	18	8	58	-	1	-	-	1	-
E.N. CENTRAL	27	46	167	355	123	107	-	-	-	2	2	3
Ohio	18	14	52	80	26	23	-	-	-	-	-	2
Ind.	5	3	5	8	3	5	-	-	-	-	-	-
Ill.	-	17	32	149	7	2	-	-	-	2	2	-
Mich.	2	3	78	105	87	76	-	-	-	-	-	1
Wis.	2	9	-	13	-	1	-	-	-	-	-	-
W.N. CENTRAL	5	9	101	211	36	67	1	3	-	-	3	-
Minn.	-	5	3	20	1	3	-	-	-	-	-	-
Iowa	1	-	9	23	5	10	-	-	-	-	-	-
Mo.	3	3	29	130	23	45	1	3	-	-	3	-
N. Dak.	-	1	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	1	-	1	-	-	-	-	-	-	-
Nebr.	1	-	17	6	4	6	-	-	-	-	-	-
Kans.	-	-	42	32	2	3	-	-	-	-	-	-
S. ATLANTIC	92	58	246	210	164	144	-	2	-	1	3	-
Del.	-	-	-	4	-	1	-	-	-	-	-	-
Md.	26	21	47	30	25	31	-	2	-	1	3	-
D.C.	-	-	7	-	2	-	-	-	-	-	-	-
Va.	8	11	27	32	16	25	-	-	-	-	-	-
W. Va.	3	1	-	22	1	-	-	-	-	-	-	-
N.C.	16	5	23	52	49	55	-	-	-	-	-	-
S.C.	1	1	9	3	-	1	-	-	-	-	-	-
Ga.	16	16	52	26	32	2	-	-	-	-	-	-
Fla.	22	3	81	41	39	29	-	-	-	-	-	-
E.S. CENTRAL	12	13	54	103	63	77	-	-	-	-	-	-
Ky.	-	8	7	5	5	10	-	-	-	-	-	-
Tenn.	5	3	28	35	24	35	U	-	U	-	-	-
Ala.	6	2	18	15	22	5	-	-	-	-	-	-
Miss.	1	-	1	48	12	27	-	-	-	-	-	-
W.S. CENTRAL	4	19	185	473	41	106	-	-	-	-	-	-
Ark.	-	-	16	35	16	15	-	-	-	-	-	-
La.	1	6	13	20	12	32	-	-	-	-	-	-
Okla.	3	13	30	72	12	9	-	-	-	-	-	-
Tex.	-	-	126	346	1	50	-	-	-	-	-	-
MOUNTAIN	54	28	184	155	110	83	-	-	-	1	1	-
Mont.	-	-	4	1	1	3	-	-	-	-	-	-
Idaho	1	1	22	7	4	4	-	-	-	1	1	-
Wyo.	-	-	1	2	-	-	-	-	-	-	-	-
Colo.	9	9	24	38	22	23	-	-	-	-	-	-
N. Mex.	9	9	5	20	33	24	-	-	-	-	-	-
Ariz.	33	6	89	61	35	22	-	-	-	1	2	3
Utah	1	2	13	12	4	3	-	-	-	-	-	-
Nev.	1	1	26	14	11	4	-	-	-	-	-	-
PACIFIC	11	26	390	726	234	268	-	3	-	1	4	5
Wash.	-	2	10	33	17	7	-	-	-	-	-	2
Oreg.	10	8	21	55	34	23	-	2	-	-	2	-
Calif.	-	5	351	631	182	232	-	1	-	1	2	3
Alaska	1	1	8	3	1	3	-	-	-	-	-	-
Hawaii	-	10	-	4	-	3	-	-	-	-	-	-
Guam	-	-	-	-	-	-	U	-	U	-	-	-
P.R.	-	1	8	75	9	44	-	-	-	-	-	-
V.I.	U	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	U	U	U	U	U	U	U	U	U	U	U	U

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

*For imported measles, cases include only those resulting from importation from other countries.

[†] Of 44 cases among children aged <5 years, serotype was reported for 16 and of those, 2 was type b.

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