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Trends in Cigarette Smoking Among High School Students — United States, 1991–2001

Cigarette smoking among adolescents is one of the 10 Leading Health Indicators that reflect the major health concerns in the United States (*1*). To examine changes in cigarette smoking among U.S. high school students during 1991–2001, CDC analyzed data from the national Youth Risk Behavior Survey (YRBS). This report summarizes the results of the analysis, which found that although cigarette smoking rates increased during most of the 1990s, they have declined significantly since 1997. If this pattern continues, the United States could achieve the national health objective for 2010 of reducing current smoking rates among high school students to ≤16% (objective no. 27-2b) (*1*) .

YRBS, a component of CDC's Youth Risk Behavior Surveillance System, measures the prevalence of health risk behaviors among high school students through representative biennial national, state, and local surveys. The 1991, 1993, 1995, 1997, 1999, and 2001 national surveys used independent three-stage cluster samples to obtain cross-sectional data representative of students in grades 9–12 in all 50 states and the District of Columbia. During 1991–2001, sample sizes ranged from 10,904 to 16,296, school response rates ranged from 70% to 79%, student response rates ranged from 83% to 90%, and overall response rates ranged from 60% to 70%.

For each cross-sectional survey, students completed an anonymous, self-administered questionnaire that included identically worded questions about cigarette smoking. For this report, three behaviors were assessed: lifetime smoking (defined as having ever smoked cigarettes, even one or two puffs), current smoking (defined as smoking on ≥1 of the 30 days preceding the survey), and current frequent smoking (defined as smoking on ≥20 of the 30 days preceding the survey). Data are presented only for non-Hispanic black, non-Hispanic white, and Hispanic students because the numbers of students from other racial/ethnic populations were too small for meaningful analysis. Current smoking was analyzed among sex, racial/ethnic, and grade subgroups.

Data were weighted to provide national estimates, and SUDAAN was used for all data analysis. Temporal changes were analyzed using logistic regression analyses that assessed linear and quadratic time effects simultaneously and that controlled for sex, race/ethnicity, and grade. Quadratic trends indicated a significant but nonlinear trend in the data over time. When a significant quadratic trend accompanied a significant linear trend, the data demonstrated some nonlinear variation (e.g., leveling off or change in direction) in addition to a linear trend.

Significant linear and quadratic trends were detected for lifetime, current, and current frequent smoking. The prevalence of lifetime smoking, although stable through the 1990s, declined significantly from 70.4% in 1999 to 63.9% in 2001 (Table 1). The prevalence of current smoking increased from 27.5% in 1991 to 36.4% in 1997 and then declined significantly to 28.5% in 2001. Current frequent smoking increased from 12.7% in 1991 to 16.7% in 1997 and 16.8% in 1999 and then declined significantly to 13.8% in 2001.

Among female students, a significant quadratic trend was detected, indicating that the prevalence of current smoking peaked during 1997–1999 and then declined significantly by

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2001 (Table 2). Similarly, among white female, black male, Hispanic, Hispanic female, Hispanic male, and 9th- and 11th-grade students, current smoking prevalence peaked by 1999 and then declined significantly by 2001. A positive linear trend was detected among black female students, indicating that the prevalence of current smoking among this subgroup increased significantly throughout the decade.

Among male students, significant linear and quadratic trends were detected, indicating that the prevalence of current smoking increased significantly during 1991–1997 and then declined significantly by 2001. A similar pattern was detected among white, white male, black, and 10th- and 12th-grade students; however, among 12th-grade students, the increase lasted until 1999.

During 2001, white and Hispanic students were significantly more likely than black students to report current smoking. Current smoking was significantly more likely to be reported by white and Hispanic female students than by black female students, by white and Hispanic male students than by black male students, and by 12th-grade students than by 9th- and 10th-grade students.

Reported by: *Office on Smoking and Health and Div of Adolescent and School Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.*

Editorial Note: This report indicates that substantial progress is being made toward achieving the national health objective for 2010 of reducing cigarette smoking rates among high school students. The data are consistent with other national surveys suggesting that smoking levels among high school students have peaked and are now declining (*2,3*). Factors that might have contributed to the decline in cigarette use include a 70% increase in the retail price of cigarettes during December 1997–May 2001 (*4*), increased school-based efforts to prevent tobacco use (*5*), and increased exposure of youth to both state and national mass media smoking prevention campaigns (*6*). Factors that might have promoted cigarette use include tobacco industry expenditures on advertising and promotion, which increased substantially during 1998–1999 (*7*), and the frequency with which smoking was depicted in films (*8*).

Despite the declines in cigarette smoking rates among high school students, 28.5% of high school students are current smokers, and 13.8% are current frequent smokers. Many high school students already are nicotine dependent. Because schools reach most youth and could provide students with the motivation and skills to quit smoking, effective school-based or school-linked cessation programs are needed.

Additional research might examine how current smoking rates and temporal changes in these rates vary among racial/ethnic populations. For example, throughout the 1990s, YRBS and other national surveys reported that black high school

TABLE 1. Percentage of high school students who reported lifetime smoking,* current smoking,† and current frequent smoking§ — Youth Risk Behavior Survey, United States, 1991–2001¶

Behavior	1991 %	1991 (95% CI**)	1993 %	1993 (95% CI)	1995 %	1995 (95% CI)	1997 %	1997 (95% CI)	1999 %	1999 (95% CI)	2001 %	2001 (95% CI)
Lifetime	70.1	(±2.2)	69.5	(±1.4)	71.3	(±1.7)	70.2	(±1.9)	70.4	(±2.9)	63.9	(±2.1)††
Current	27.5	(±2.7)	30.5	(±1.9)	34.8	(±2.3)	36.4	(±2.3)	34.8	(±2.5)	28.5	(±2.0)††
Current frequent	12.7	(±2.3)	13.8	(±1.7)	16.1	(±2.7)	16.7	(±1.9)	16.8	(±2.6)	13.8	(±1.6)††

* Ever smoked cigarettes, even one or two puffs.
† Smoked cigarettes on ≥1 of the 30 days preceding the survey.
§ Smoked cigarettes on ≥20 of the 30 days preceding the survey.
¶ Linear and quadratic trend analyses were conducted by using a logistic regression model controlling for sex, race/ethnicity, and grade. Prevalence estimates shown here were not standardized by demographic variables.
** Confidence interval.
†† Significant linear effect (p<0.05) and significant quadratic effect (p<0.05).

TABLE 2. Percentage of high school students who reported current smoking,* by sex, race/ethnicity,† and grade — Youth Risk Behavior Survey, United States, 1991–2001§

Characteristic	1991 %	1991 (95% CI¶)	1993 %	1993 (95% CI)	1995 %	1995 (95% CI)	1997 %	1997 (95% CI)	1999 %	1999 (95% CI)	2001 %	2001 (95% CI)
Sex												
Female	27.3	(±3.4)	31.2	(±2.1)	34.3	(±3.2)	34.7	(±2.8)	34.9	(±2.6)	27.7	(±2.1)**
Male	27.6	(±3.1)	29.8	(±2.3)	35.4	(±2.4)	37.7	(±2.7)	34.7	(±2.9)	29.2	(±2.6)**††
Race/ethnicity												
White, non-Hispanic	30.9	(±3.3)	33.7	(±2.2)	38.3	(±2.7)	39.7	(±2.4)	38.6	(±3.1)	31.9	(±2.3)**††
Female	*31.7*	*(±4.6)*	*35.3*	*(±2.6)*	*39.8*	*(±3.5)*	*39.9*	*(±3.2)*	*39.1*	*(±3.6)*	*31.2*	*(±2.5)***
Male	*30.2*	*(±3.8)*	*32.2*	*(±2.7)*	*37.0*	*(±3.3)*	*39.6*	*(±3.8)*	*38.2*	*(±3.5)*	*32.7*	*(±3.0)**††
Black, non-Hispanic	12.6	(±2.5)	15.4	(±2.5)	19.2	(±3.2)	22.7	(±3.8)	19.7	(±4.2)	14.7	(±2.8)**††
Female	*11.3*	*(±2.3)*	*14.4*	*(±2.7)*	*12.2*	*(±3.1)*	*17.4*	*(±3.9)*	*17.7*	*(±3.5)*	*13.3*	*(±3.4)*††
Male	*14.1*	*(±4.5)*	*16.3*	*(±4.2)*	*27.8*	*(±5.5)*	*28.2*	*(±5.5)*	*21.8*	*(±7.0)*	*16.3*	*(±3.2)**
Hispanic	25.3	(±2.8)	28.7	(±2.9)	34.0	(±5.3)	34.0	(±2.7)	32.7	(±3.7)	26.6	(±4.3)**
Female	*22.9*	*(±3.8)*	*27.3*	*(±3.9)*	*32.9*	*(±5.6)*	*32.3*	*(±3.7)*	*31.5*	*(±4.8)*	*26.0*	*(±3.7)**
Male	*27.9*	*(±3.6)*	*30.2*	*(±3.4)*	*34.9*	*(±8.7)*	*35.5*	*(±3.6)*	*34.0*	*(±4.4)*	*27.2*	*(±7.0)**
Grade												
9th	23.2	(±3.8)	27.8	(±2.4)	31.2	(±1.6)	33.4	(±5.1)	27.6	(±3.7)	23.9	(±2.9)**
10th	25.2	(±2.7)	28.0	(±3.3)	33.1	(±3.8)	35.3	(±4.1)	34.7	(±2.4)	26.9	(±3.2)**††
11th	31.6	(±3.8)	31.1	(±3.2)	35.9	(±3.8)	36.6	(±3.6)	36.0	(±3.0)	29.8	(±3.7)**
12th	30.1	(±4.4)	34.5	(±3.8)	38.2	(±3.6)	39.6	(±4.9)	42.8	(±5.5)	35.2	(±4.1)**††

* Smoked cigarettes on ≥1 of the 30 days preceding the survey.
† Numbers for other racial/ethnic groups were too small for meaningful analysis.
§ Linear and quadratic trend analyses were conducted using a logistic regression model controlling for sex, race/ethnicity, and grade. Prevalence estimates shown here were not standardized by demographic variables.
¶ Confidence interval.
** Significant quadratic effect (p<0.05).
†† Significant linear effect (p<0.05).

students smoked at lower rates than white and Hispanic high school students (*2*).

The findings in this report are subject to at least two limitations. First, these data reflect only adolescents who attend high school. In 1998, 5% of persons aged 16–17 years were not enrolled in a high school program and had not completed high school (*9*). Second, the extent of underreporting or overreporting in YRBS cannot be determined, although the survey questions demonstrate good test-retest reliability (*10*).

Reducing youth smoking further will require that states and communities implement comprehensive, effective, and sustainable tobacco-control programs to reduce the appeal of tobacco products, including at least the following six interventions: youth-oriented mass media campaigns, increased tobacco excise taxes, smoke-free policies for schools and other community venues, greater regulation of tobacco products, reductions in youth access to tobacco products, and school-based health programs to reduce tobacco use and addiction.

References

1. U.S. Department of Health and Human Services. Healthy People 2010 (conference ed., 2 vols). Washington, DC: U.S. Department of Health and Human Services, 2000.
2. Johnston LD, O'Malley PM, Bachman JG. Monitoring the Future national results on adolescent drug use: overview of key findings, 2001. Bethesda, Maryland: National Institute on Drug Abuse, 2002 (NIH Publication no. 02-5105).
3. Substance Abuse and Mental Health Services Administration. Summary of findings from the 2000 National Household Survey on Drug Abuse. Rockville, Maryland: U.S. Department of Health and Human Services, 2001 (DHHS publication no. [SMA] 01-3549).
4. U.S. Department of Labor, Bureau of Labor Statistics. Consumer Price Index-All Urban Consumers (Current Series). Washington, DC: U.S. Department of Labor, 2002.

5. Kolbe LJ, Kann L, Brener ND. Overview and summary findings: school health policies and programs study 2000. J Sch Health 2001;71:253–9.
6. Farrelly MC, Healton CG, Davis KC, Messeri P, Hersey JC, Haviland ML. Getting to the truth: evaluating national tobacco countermarketing campaigns. Am J Public Health, 2002 (in press).
7. Federal Trade Commission. Cigarette report for 1999. Washington, DC: Federal Trade Commission, 2001.
8. Sargent JD, Beach ML, Dalton MA, et al. Effect of seeing tobacco use in films on trying smoking among adolescents: cross sectional study. BMJ 2001;323:1–6.
9. Kaufman P, Kwon JY, Klein S, Chapman CD. Dropout rates in the United States: 1998. Washington, DC: U.S. Department of Education, National Center for Educational Statistics, 1999.
10. Brener ND, Kann L, McManus T, Kinchen SA, Sundberg EC, Ross JG. Reliability of the 1999 Youth Risk Behavior Survey Questionnaire. J Adolesc Health, 2002 (in press).

Prevalence of Health-Care Providers Asking Older Adults About Their Physical Activity Levels — United States, 1998

Regular physical activity reduces the risk for heart disease, diabetes, and high blood pressure; helps in the control of weight; and maintains muscles, joints, and bone strength (*1*). Physical activity also might afford additional benefits for adults aged ≥50 years by increasing coordination and balance (*2*), preventing falls, and maintaining independence (*1*). Despite these findings, the prevalence of inactivity increases with age (*3*), and approximately one third of older U.S. adults are not active during their leisure time (*4*). The national health objectives for 2010 include recommendations to increase the proportion of adults who engage in regular, preferably daily, moderate physical activity for ≥30 minutes per day and vigorous physical activity ≥3 days per week for ≥20 minutes per occasion (*5*). To evaluate whether health-care providers ask about physical activity among older adults, CDC analyzed data from the 1998 National Health Interview Survey (NHIS). This report summarizes the results of that analysis, which indicate that approximately half of older adults who attended a routine check-up during the previous year reported being asked about physical activity by their health-care providers. To help older adults make lifestyle changes, health-care providers should ask older adults during routine check-ups about their physical activity levels.

NHIS is a stratified, multistage probability sample survey that collects data on health conditions and disability among the U.S. civilian, noninstitutionalized population. For 1998, the overall household response rate was 90.0%, and the overall family response rate was 88.2%; the overall response rate for adults was 73.9% (*6*). Data were analyzed from the 1998 adult sample of the 12,629 respondents aged ≥50 years; SUDAAN (version 7.5 for Windows) was used to account for the complex sampling. Respondents were excluded who 1) had not seen a health-care provider for a routine check-up during the previous year (n=4,081), 2) reported a physical disability that could restrict participation in leisure-time physical activity (n=1,974), or 3) were missing data on demographic variables (n=420). The final sample comprised 6,154 persons.

Respondents were asked whether their health-care provider had asked during their most recent check-up about the amount of physical activity or exercise in which they engaged. Respondents also were asked about their participation in leisure-time physical activities (e.g., exercise, sports, and physically active hobbies); respondents were asked how often they engaged for at least 10 minutes in vigorous activities that caused heavy sweating or large increases in breathing or heart rate and light or moderate activities that caused only light sweating or slight or moderate increases in breathing or heart rate. Those who reported activity were asked how long they did that activity per occasion. Respondents were categorized as either meeting or not meeting physical activity recommendations according to both frequency and duration of their activities. Recommended physical activity was defined as moderate-intensity physical activity (≥5 times per week for ≥30 minutes per occasion) or vigorous-intensity physical activity (≥3 times per week for ≥20 minutes per occasion) (*3*). Multivariate logistic regression was used to determine whether being asked was associated with specific characteristics of older adults or their physical activity levels. The prevalence of recommended physical activity among older adults who were asked about physical activity was compared with those who were not asked.

A total of 52% of respondents reported that their health-care providers had asked about their level of physical activity or exercise (Table 1). Women were significantly less likely than men to be asked (adjusted odds ratio [OR]=0.8; 95% confidence interval [CI]=0.7–0.9). The likelihood of being asked declined with age and increased with level of education. Persons who were obese (OR=1.2; CI=1.1–1.4) were more likely to be asked than persons with normal weight.

The prevalence of older adults who met recommended levels of physical activity was higher among those asked (36%) than among those not asked (23%) (Table 2). This pattern was consistent for both men and women and across each of the three sex-specific age categories examined. After accounting for age, sex, race/ethnicity, education, marital status, body mass index, and region of residence, those who were asked about physical activity were 1.7 times (CI=1.5–2.0) more likely to engage in recommended levels of physical activity than those who were not asked.

TABLE 1. Number* and percentage† of adults aged ≥50 years whose health-care providers asked during routine patient check-ups about physical activity — National Health Interview Survey, United States, 1998

Characteristic	No.	(%)	OR§	(95% CI¶)
Sex				
Men	2,434	(55.2)	1.0	—
Women	3,720	(48.9)	0.8	(0.7–0.9)
Age group (yrs)				
50–64	3,016	(56.6)	1.0	—
65–79	2,502	(47.6)	0.7	(0.6–0.8)
≥80	636	(38.9)	0.6	(0.4–0.7)
Race/ethnicity				
Non-Hispanic white	4,797	(51.3)	1.0	—
Non-Hispanic black	671	(52.3)	1.1	(0.9–1.3)
Hispanic	539	(52.6)	1.1	(0.9–1.4)
Other**	147	(57.2)	1.2	(0.8–1.8)
Education				
<High school	1,443	(43.3)	1.0	—
High school	1,951	(50.7)	1.3	(1.1–1.5)
Some college	1,461	(52.8)	1.4	(1.2–1.6)
College or higher	1,299	(59.2)	1.7	(1.4–2.1)
Marital status				
Married	3,309	(52.9)	1.0	—
Widowed	1,490	(45.9)	1.1	(0.9–1.3)
Divorced	794	(51.7)	0.9	(0.8–1.1)
Separated	136	(55.5)	1.2	(0.7–1.8)
Single	425	(52.2)	1.0	(0.7–1.2)
Region††				
Northeast	1,372	(54.7)	1.0	—
Midwest	1,423	(50.4)	0.8	(0.7–0.9)
South	2,155	(50.0)	0.8	(0.7–0.9)
West	1,204	(52.5)	0.9	(0.7–1.0)
Body mass index (kg/m²)				
Normal (<25)	2,444	(48.8)	1.0	—
Overweight (25–29)	2,441	(52.7)	1.1	(1.0–1.3)
Obese (≥30)	1,269	(55.0)	1.2	(1.1–1.4)
Total	**6,154**	**(51.6)**	**—**	**—**

* Unweighted sample size of those who visited a health-care provider during the previous year for a routine check-up.
† Percent is weighted.
§ Odds ratio adjusted for sex, age, race/ethnicity, education, marital status, region of residence, and body mass index.
¶ Confidence interval.
** Includes American Indians/Alaska Natives and Asians/Pacific Islanders.
†† Northeast=Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; Midwest=Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; South=Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; West=Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Reported by: *D Galuska, PhD, M Serdula, MD, D Brown, PhD, National Center for Chronic Disease Prevention and Health Promotion; J Kruger, PhD, EIS Officer, CDC.*

Editorial Note: Although health-care providers generally have positive attitudes toward preventive care practices, this study indicated that only 52% of older adults reported being asked during routine check-ups about physical activity or exercise. This finding is consistent with a 1999 study indicating that <50% of older adults reported that their health-care provider had ever recommended exercise (*7*). Common barriers to discussing physical activity with older adults in the health care setting include lack of time, lack of reimbursement for physician counseling, and lack of evidence-based protocols and resources (*2*). However, at least one study that addressed barriers related to time, physical activity assessment, and counseling protocols indicated that provider-based counseling for physical activity produced moderate short-term increases in physical activity among sedentary adults (*8*).

Regular physical activity among older adults provides substantial health benefits, including reduced risk for heart disease, diabetes, high blood pressure, obesity, and fall-related injuries (*1*,*2*). These findings and the 2010 national health objectives supported development of a national action plan, the *National Blueprint: Increasing Physical Activity Among Adults Aged 50 and Older,* which identifies the health-care setting as one of several important delivery channels for encouraging all older adults to increase physical activity (*2*). Older adults with symptoms or risk factors for cardiovascular disease or those who are sedentary and plan to start a program of vigorous physical activity are advised to consult with their health-care providers before beginning an activity program (*9*).

The findings in this report are subject to at least four limitations. First, NHIS does not collect information on the amount or quality of physical activity information provided by health-care providers. Second, data were self-reported, making them subject to error, including respondent overreporting of socially desirable behaviors (e.g., engagement

TABLE 2. Number and percentage of adults aged ≥50 years reporting participation in recommended physical activity,* by age group, sex, and health-care provider asking or not asking about physical activity during routine patient check-ups† — National Health Interview Survey, United States, 1998

	Asks						Does not ask					
	Men		Women		Total		Men		Women		Total	
Age group (yrs)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
50–64	706	(42.6%)	1,001	(33.7%)	**1,708**	**(37.9%)**	506	(29.0%)	802	(25.0%)	**1,308**	**(26.7%)**
65–79	533	(40.6%)	681	(28.2%)	**1,214**	**(34.2%)**	470	(29.3%)	818	(18.2%)	**1,288**	**(22.6%)**
≥80	82	(39.0%)	160	(21.9%)	**242**	**(28.2%)**	136	(14.4%)	258	(8.3%)	**394**	**(10.7%)**
Total	**1,321**	**(41.7%)**	**1,842**	**(30.9%)**	**3,164**	**(36.0%)**	**1,112**	**(27.6%)**	**1,878**	**(20.3%)**	**2,990**	**(23.3%)**

* Defined as moderate-intensity physical activity (≥5 times per week for ≥30 minutes per occasion) or vigorous-intensity physical activity (≥3 times per week for ≥20 minutes per occasion).
† Analysis is limited to those who visited a health-care provider during the previous year for a routine check-up. Sample sizes are unweighted. Percentages are weighted.

in physical activities). Third, data are cross-sectional, and a causal relation between health-care providers' inquiries and their patients' physical activity levels cannot be inferred. Fourth, NHIS measures only leisure-time physical activity; estimates based on this measure do not account for other contributors to overall physical activity (e.g., occupational tasks, housework, and childcare).

Health-care providers should increase efforts to promote physical activity among older adults. The U.S. Preventive Services Task Force recommends that this promotion include assessing patients' current activity levels and providing information on physical activity and disease prevention to help patients make lifestyle changes (*10*). The health-care setting affords opportunities for providing counseling and information on physical activity resources. This analysis demonstrates that this setting is underused, possibly due in part to provider-based counseling resulting only in moderate short-term increases in physical activity among patients (*9*). The *National Blueprint* documents strategies that could lead to more substantial increases in patients' physical activity through the health-care setting (*2*). These include increased health-care provider training, the development of materials and toolkits, and identification of community resources. Increased coordination between health-care providers and community programs (e.g., community centers, senior centers, and community-based health and wellness programs) to facilitate referrals and information sharing might encourage greater and longer-term increases in physical activity behavior change.

References

1. CDC. Physical activity and health: a report of the Surgeon General. Atlanta, Georgia: U.S. Department of Health and Human Services, CDC, 1996.
2. Robert Wood Johnson Foundation. National blueprint: increasing physical activity among adults age 50 and older. Princeton, New Jersey: The Robert Wood Johnson Foundation, 2001.
3. Schoenborn CA, Barnes PM. Leisure-time physical activity among adults: United States, 1997–1998. Advanced data from vital and health statistics, no. 325. Hyattsville, Maryland: National Center for Health Statistics, 2002.
4. CDC. Physical activity trends—United States 1990–1998. MMWR 2001;50:166–9.
5. U.S. Department of Health and Human Services. Healthy people 2010 (conference ed., 2 vols). Washington, DC: U.S. Department of Health and Human Services, 2000.
6. U.S. Department of Health and Human Services. 1998 National Health Interview Survey: public use data release. Hyattsville, Maryland: U.S. Department of Health and Human Services, 2000.
7. Damush TM. Prevalence and correlates of physician recommendations to exercise among older adults. J Gerontol A Biol Sci Med Sci 1999;54:4423–7.
8. Calfas KJ, Long BJ, Sallis JF, Wooten W, Pratt M, Patrick K. A controlled trial of physician counseling to promote the adoption of physical activity. Prev Med 1996;25:225–33.
9. American College of Sports Medicine. ACSM's guidelines for exercise testing and prescription, 5th ed. Media, Pennsylvania: Williams & Wilkins, 1995.
10. U.S. Preventive Services Task Force. Guide to clinical preventive services, 2nd ed. Baltimore, Maryland: Williams & Wilkins, 1996.

Update: Neurologic Illness Associated with Eating Florida Pufferfish, 2002

As of May 15, 2002, a total of 13 presumptive cases of saxitoxin poisoning were reported in Florida residents who ate pufferfish caught in waters near Titusville, Florida. Five cases were reported in April (*1*), and eight cases were identified through increased surveillance by Florida poison control centers, hospital emergency departments (EDs), and county health departments. This report updates the investigation of these cases.

All 13 cases occurred during January 1–April 25, 2002. Nine were identified through Florida poison control centers; four were identified by active surveillance of hospital EDs and health department foodborne illness complaint logs.

Investigators defined a case as tingling or numbness in the mouth and/or lips in a person who had eaten Florida pufferfish. All ill persons reported at least one of the following symptoms after a meal that included pufferfish: tingling or numbness in the mouth or lips (13 persons), face (eight), arms (10), legs (seven), and fingertips (one). In initial reports, two patients reported ataxia, and one reported muscle weakness. Some ill persons experienced nausea (six) and vomiting (four) before presenting to a hospital ED. Symptom onset occurred 30 minutes to approximately 8 hours after ingestion of fish (median: 2 hours). Duration of illness ranged from 10 hours to 45 days (mean: 6.6 days; median 24 hours). Eleven persons were treated in an ED, and five were admitted to the hospital. Some patients received intravenous fluids. All cases resolved.

Severity of illness was not associated with amount of pufferfish eaten, and nine meal partners who also ate the pufferfish did not become ill. Testing of approximately 25 pufferfish collected from Florida waters by the Food and Drug Administration's (FDA) Center for Food Safety and Applied Nutrition (CFSAN), in collaboration with the Florida Fish and Wildlife Conservation Commission (FWC), and additional testing by FDA's Northeast Regional Laboratory indicated that pufferfish containing potentially toxic concentrations of saxitoxins (2–53 μg saxitoxin equivalent toxicity/g) are present in the Indian River in the area of the Titusville Pier. Lower concentrations of saxitoxin have been found in pufferfish from the South Banana River.

All pufferfish related to these cases were caught in the Indian River Lagoon; 11 patients caught pufferfish off the Titusville Pier. The FWC banned retaining pufferfish caught from Volusia, Brevard, Indian River, and St. Lucie counties on April 25; the ban will remain in effect until mid-July. Information about this ban was provided at the Titusville Pier on April 30, 2002.

No filets associated with the Florida illnesses were available for testing to confirm the presence of saxitoxin. However, ongoing statewide sampling of pufferfish in Florida has indicated that pufferfish containing saxitoxins are limited to the Indian and South Banana rivers. Because saxitoxin poisoning is usually associated with mollusks, CFSAN and the Florida Department of Agriculture and Consumer Services sampled approximately 100 hard-shell clams from aquaculture lease sites at five locations along the Indian River Lagoon, including the Titusville area in Florida. Clams from two additional locations were chosen as control samples and were collected from the west coast of Florida in the Gulf of Mexico. All samples tested negative for saxitoxin.

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Editorial Note: The initial report described 10 illnesses that were associated with pufferfish ingestion in three states (New Jersey, Virginia, and Florida) and were consistent with exposure to saxitoxins (*1*). One case (New Jersey) was associated with commercially purchased pufferfish from Titusville, and all other cases resulted from recreationally caught pufferfish in the Titusville area. Laboratory analysis by the Canadian Institute for Marine Biosciences of partially eaten pufferfish from the New Jersey incidents confirmed the presence of saxitoxin and two analogs (*2*). These results were confirmed with additional analysis by FDA's Northeast Regional Laboratory (*3*).

Some previous intoxications by pufferfish in Florida were attributed to tetrodotoxin (*4*). Seven cases of pufferfish poisoning were reported in Florida during 1951–1974, including three fatalities (*5,6*). These case reports were associated with ingestion of locally caught species of pufferfish *Sphoeroides*. A 1963 study of pufferfish from the east coast of Florida (from the Indian and Banana Rivers, including the Titusville area) demonstrated that pufferfish were toxic to mice (*4*). Although the species tested in this study was listed as *Sphoeroides maculatus* (northern pufferfish), there was confusion over the identification of this species with *S. nephelus* (southern pufferfish) (Figure 1). Northern pufferfish extend only as far south as Jacksonville, Florida (*7*), and are not known to exist in the Indian and Banana rivers.

The illnesses described in this report occurred after ingestion of pufferfish but are consistent with the presence of saxitoxin, a paralytic shellfish toxin usually associated with ingestion of filter-feeding shellfish. Concentration of saxitoxin in the pufferfish tested from the Titusville area varies. Saxitoxin has been reported in pufferfish from the Far East (*8*) and the Philippines (*9*). Shellfish containing 2–10 μg saxitoxin/g previously have caused illness (*10*), but saxitoxin has not previously been reported in Florida. The severity of illnesses in persons described in this report varied probably because of the concentration of saxitoxin in a particular pufferfish and/or the amount of pufferfish eaten.

Approximately 100 species of pufferfish are known worldwide, and nine species are present in Florida. Southern pufferfish populations have been increasing in the Northern Indian River during the previous 5 years (FWC, unpublished data, 2002). The southern pufferfish that have been caught recently near Titusville are normally present in this area of Florida, but they have not been implicated previously in fish poisoning events.

Sportfishers in Florida need to be educated that potentially toxic pufferfish might be in the Titusville area. Warnings about the presence of certain species of potentially toxic pufferfish should be posted in commonly fished areas. Because many sportfishers vacation in Florida and transport fish home to other states, health-care providers should be aware that rapid onset of neurologic symptoms after a meal of pufferfish could be caused by saxitoxin. Ingestion of paralytic shellfish toxins produces neurologic symptoms that are sensory, cerebellar,

FIGURE 1. A southern pufferfish (*Sphoeroides nephelus*)

Photo/Florida Marine Research Institute, Florida Fish and Wildlife Conservation Commission

and motor. The most common symptoms are tingling and burning of the mouth and tongue, numbness, drowsiness, and incoherent speech. These symptoms usually occur 30 minutes to 2 hours after ingestion of the fish, depending on the amount of toxin ingested. In severe cases, ataxia, muscle weakness, respiratory paralysis, and death can occur (*10*). Ill persons should contact their local poison control center and proceed to a hospital ED. Hospital EDs and poison control centers should contact the local health department if persons report neurologic symptoms after eating pufferfish.

Acknowledgments

This report is based on data contributed by R Weisman, Pharm D, JL Schauben, PharmD, V Speranza, PharmD, Florida Poison Information Center; D Johnson, MD, Bur of Environmental Epidemiology, Florida Dept of Health. T Litovitz, MD, American Association of Poison Control Centers, Washington, DC. Office of Regulatory Affairs and Center for Food Safety and Applied Nutrition, Food and Drug Administration.

References

1. CDC. Neurologic illness associated with eating Florida pufferfish, 2002. MMWR 2002;51:321–3.
2. Quilliam M, Hess P, Dell'Aversano C. Recent developments in the analysis of phycotoxins by liquid chromatography-mass spectrometry. In: deKoe WJ, Samson RA, Van Egmond HP, Gilbert J, Sabino M, eds. Mycotoxins and Phycotoxins in Perspective at the Turn of the Century. Wageningen, The Netherlands: W.J.deKoe, 2001:383–91.
3. Manger R, Leja LS, Lee SY, Hungerford JM, Wekell MM. Tetrazolium-based cell bioassay for neurotoxins active on voltage-sensitive sodium channels: semi-automated assay for saxitoxins, brevetoxins, and ciguatoxins. Anal Biochem 1993;214:190–4.
4. Lalone RC, DeVillez D, Larson E. An assay of the toxicity of the Atlantic pufferfish, *Spheroides maculatus*. Toxicon 1963;1:159.
5. Benson J. Tetraodon (blowfish) poisoning. A report of two fatalities. J Forensic Sci 1956;1:119–26.
6. Burklew MA, Morton RA. The toxicity of Florida Gulf puffers, genus *Spheoroides*. Toxicon 1971;9:205–10.
7. Shipp RL, Yerger RW. Status, characters and distribution of the northern and southern puffers of the genus *Sphoeroides*. Copeia 1969;3:425.
8. Nakamura M, Oshima Y, Yasumoto T. Occurrence of saxitoxin in puffer fish. Toxicon 1984;22:381–5.
9. Sato S, Ogata T, Borja V, Gonzales C, Fukuyo Y, Kodama M. Frequent occurrence of paralytic shellfish poisoning toxins as dominant toxins in marine pufferfish from tropical waters. Toxicon 2000;38:1101–9.
10. Rodrigue D, Etzel R, Hall S, et al. Lethal paralytic shellfish poisoning in Guatemala. Am J Trop Med Hyg 1990;42:267–71.

Notice to Readers

Buckle Up America Week, May 20–27, 2002

May 20–27, 2002, is Buckle Up America Week. Sponsored by the National Highway Traffic Safety Administration (NHTSA), this is a national campaign to promote safety-belt and child safety seat use. The focus of this year's campaign is to increase safety-belt use among teenagers.

In 1999, motor-vehicle crashes accounted for 38% of all deaths for persons aged 15–19 years (*1*). In 2000, an estimated 5,648 teenagers died in motor-vehicle crashes. Among the passengers killed, 63% were riding with a teenaged driver. Of teenagers killed as drivers or passengers, one third were wearing safety belts (*2*). Teenagers have the lowest safety-belt use among all age groups (50%), compared with a national estimate of 73% among all ages. Greater safety-belt use among teenagers would substantially decrease unintentional death and injuries in the United States.

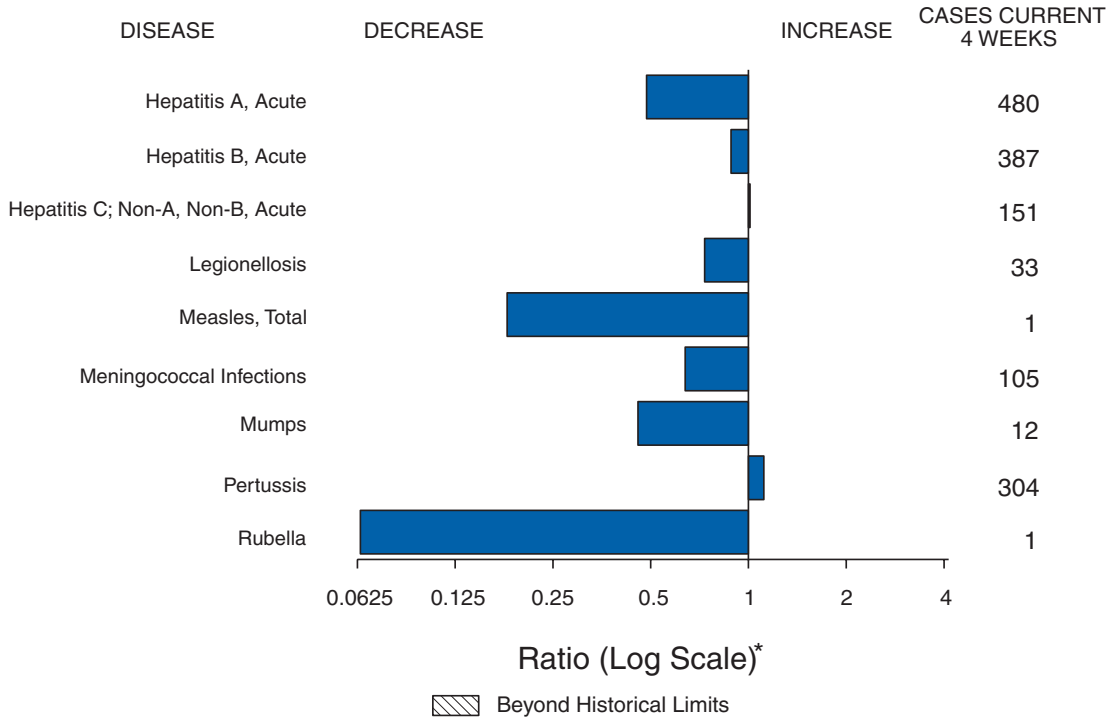
Buckle Up America Week involves a wide range of efforts to promote safety-belt use among all persons in the United States to achieve NHTSA's goal of 90% safety-belt use by 2005 (*3*) and the national health objective for 2010 of 92% safety-belt use (*4*). Safety-belt laws and enhanced law enforcement are among the most effective means for increasing widespread safety-belt use (*5*). The combination of education and public awareness targeted to those most at risk and high-visibility law enforcement provides the greatest opportunity to make immediate gains in safety-belt use that can be sustained over time. These strategies were endorsed and recommended by the Task Force on Community Preventive Services to reduce injuries to motor-vehicle occupants (*6*). Additional information on child passenger safety and Buckle Up America activities is available at http://www.nhtsa.dot.gov and http://www.buckleupamerica.org, or telephone 888-327-4236.

References

1. CDC. WONDER. Atlanta, Georgia: CDC, National Center for Health Statistics, 1999. Available at http://www.cdc.gov/wonder.
2. U.S. Department of Transportation. National Highway Traffic Safety Administration. Fatality analysis reporting system 2000. Available at http://www.fars.nhsta.dot.gov/queryreport.cfm.
3. U.S. Department of Transportation, National Highway Traffic Safety Administration. Presidential initiative for increasing seat belt use nationwide: recommendations from the Secretary of Transportation. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration, 1997 (Publication no. DOT-HS 808-576).
4. U.S. Department of Health and Human Services. Healthy People 2010 (conference ed., 2 vols). Washington, DC: U.S. Department of Health and Human Services, 2000.
5. Dinh-Zarr TB, Sleet DA, Shults RA, et al, and the Task Force on Community Preventive Services. Reviews of evidence regarding interventions to increase the use of safety belts. Am J Prev Med 2001;21:48–65.
6. CDC. Motor vehicle occupant injury: strategies for increasing use of child seats, increasing use of safety belts, and reducing alcohol-impaired driving: a report on recommendations of the Task Force on Community Preventive Services. MMWR 2001:50(No. RR-7).

(Continued on page 427)

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending May 11, 2002, 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 May 11, 2002 (19th Week)*

		Cum. 2002	Cum. 2001		Cum. 2002	Cum. 2001
Anthrax		1	-	Encephalitis: West Nile†	14	-
Botulism:	foodborne	6	9	Hansen disease (leprosy)†	26	34
	infant	17	42	Hantavirus pulmonary syndrome†	2	3
	other (wound & unspecified)	7	5	Hemolytic uremic syndrome, postdiarrheal†	40	32
Brucellosis†		27	23	HIV infection, pediatric†§	31	64
Chancroid		24	14	Plague	-	-
Cholera		1	2	Poliomyelitis, paralytic	-	-
Cyclosporiasis†		38	44	Psittacosis†	9	4
Diphtheria		1	1	Q fever†	10	2
Ehrlichiosis:	human granulocytic (HGE)†	32	24	Rabies, human	-	-
	human monocytic (HME)†	15	12	Streptococcal toxic-shock syndrome†	29	38
	other and unspecified	1	1	Tetanus	4	14
Encephalitis:	California serogroup viral†	6	-	Toxic-shock syndrome	45	52
	eastern equine†	-	-	Trichinosis	5	5
	Powassan†	-	-	Tularemia†	10	10
	St. Louis†	-	-	Yellow fever	1	-
	western equine†	1	-			

-:No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).
† Not notifiable in all states.
§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update April 28, 2002.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending May 11, 2002, and May 12, 2001 (19th Week)*

Reporting Area	AIDS		Chlamydia†		Cryptosporidiosis		*Escherichia coli* O157:H7		*Escherichia coli* Shiga Toxin Positive, Serogroup non-O157	
	Cum. 2002§	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	13,092	13,255	254,030	273,073	684	665	443	453	19	25
NEW ENGLAND	459	460	9,355	8,333	31	26	34	43	2	11
Maine	8	14	485	473	1	2	1	5	-	-
N.H.	13	13	579	470	9	-	2	6	-	2
Vt.	5	10	264	215	7	9	1	2	-	-
Mass.	243	266	3,833	3,389	5	9	20	21	2	2
R.I.	42	38	954	994	5	3	3	3	-	-
Conn.	148	119	3,240	2,792	4	3	7	6	-	7
MID. ATLANTIC	2,520	3,711	25,992	27,588	77	97	37	40	-	-
Upstate N.Y.	304	584	5,474	4,606	23	26	27	21	-	-
N.Y. City	1,397	2,043	10,756	10,616	34	44	-	3	-	-
N.J.	544	602	1,319	3,440	6	4	10	16	-	-
Pa.	275	482	8,443	8,926	14	23	N	N	-	-
E.N. CENTRAL	1,335	919	39,079	51,944	168	231	113	115	-	1
Ohio	269	158	7,436	13,825	50	44	19	29	-	1
Ind.	155	84	5,592	5,828	19	19	9	19	-	-
Ill.	560	436	9,519	15,369	17	17	28	24	-	-
Mich.	282	191	11,926	10,899	39	47	27	17	-	-
Wis.	69	50	4,606	6,023	43	104	30	26	-	-
W.N. CENTRAL	197	249	12,077	14,154	73	28	69	43	3	2
Minn.	45	48	3,292	3,031	27	-	25	19	3	-
Iowa	41	24	629	1,627	5	15	15	4	-	-
Mo.	66	113	4,254	4,954	11	7	15	8	-	-
N. Dak.	-	1	286	389	5	-	-	-	-	-
S. Dak.	2	-	817	670	4	3	1	4	-	1
Nebr.	22	25	567	1,280	15	3	8	-	-	1
Kans.	21	38	2,232	2,203	6	-	5	8	-	-
S. ATLANTIC	4,422	3,674	50,390	53,431	135	117	50	48	9	9
Del.	82	72	1,002	1,087	1	1	1	-	-	-
Md.	645	436	5,213	5,367	5	21	-	3	-	-
D.C.	202	293	1,235	1,344	3	7	-	-	-	-
Va.	281	309	5,978	6,567	1	7	7	10	-	1
W. Va.	25	26	834	860	1	-	1	1	-	-
N.C.	357	166	7,836	8,764	16	14	8	20	-	-
S.C.	335	237	4,946	5,995	2	1	-	2	-	-
Ga.	788	389	9,921	10,835	68	44	25	5	5	6
Fla.	1,707	1,746	13,425	12,612	38	22	8	7	4	2
E.S. CENTRAL	621	654	18,473	18,238	47	15	18	19	-	-
Ky.	109	121	3,168	3,170	1	1	3	3	-	-
Tenn.	270	197	5,895	5,474	23	2	12	9	-	-
Ala.	118	174	5,706	4,999	20	5	2	5	-	-
Miss.	124	162	3,704	4,595	3	7	1	2	-	-
W.S. CENTRAL	1,494	1,266	37,235	38,853	6	14	2	37	-	-
Ark.	100	81	1,365	2,840	2	2	-	1	-	-
La.	375	319	6,652	6,384	1	4	-	2	-	-
Okla.	77	67	3,645	3,665	3	2	2	8	-	-
Tex.	942	799	25,573	25,964	-	6	-	26	-	-
MOUNTAIN	449	510	15,314	15,522	48	43	44	41	3	-
Mont.	6	11	680	853	3	3	8	3	-	-
Idaho	8	7	833	671	15	5	1	5	-	-
Wyo.	2	1	324	295	5	1	1	1	1	-
Colo.	96	121	3,200	4,314	10	14	13	17	1	-
N. Mex.	28	42	2,600	2,260	5	8	3	3	1	-
Ariz.	191	189	4,203	4,947	5	1	5	7	-	-
Utah	22	47	1,818	279	2	9	7	3	-	-
Nev.	96	92	1,656	1,903	3	2	6	2	-	-
PACIFIC	1,595	1,812	46,115	45,010	99	94	76	67	2	2
Wash.	176	198	7,946	4,989	15	U	8	14	-	-
Oreg.	155	69	2,431	2,544	12	11	25	10	2	2
Calif.	1,242	1,520	33,176	35,023	71	82	33	38	-	-
Alaska	2	9	1,315	998	-	-	3	1	-	-
Hawaii	20	16	1,247	1,456	1	1	7	4	-	-
Guam	2	8	-	-	-	-	N	N	-	-
P.R.	376	406	1,306	1,068	-	-	-	-	-	-
V.I.	55	2	30	69	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	2	U	85	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 year 2001 and 2002 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 April 28, 2002.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending May 11, 2002, and May 12, 2001 (19th Week)*

Reporting Area	*Escherichia coli* Shiga Toxin Positive, Not Serogrouped		Giardiasis	Gonorrhea		*Haemophilus influenzae*, Invasive			
						All Ages, All Serotypes		Age <5 Years Serotype B	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	4	4	4,587	108,102	123,224	604	634	5	10
NEW ENGLAND	-	1	489	2,810	2,233	46	21	-	1
Maine	-	-	58	27	49	1	1	-	-
N.H.	-	-	18	46	47	4	-	-	-
Vt.	-	1	39	37	30	3	-	-	-
Mass.	-	-	223	1,235	1,013	20	18	-	1
R.I.	-	-	40	345	263	8	-	-	-
Conn.	-	-	111	1,120	831	10	2	-	-
MID. ATLANTIC	-	-	937	12,130	13,041	118	95	1	1
Upstate N.Y.	-	-	364	2,958	2,792	53	24	1	-
N.Y. City	-	-	400	4,434	4,430	27	26	-	-
N.J.	-	-	-	1,394	1,546	27	37	-	-
Pa.	-	-	173	3,344	4,273	11	8	-	1
E.N. CENTRAL	2	2	821	18,464	26,218	73	103	1	1
Ohio	2	2	288	4,072	7,283	43	28	-	1
Ind.	-	-	-	2,448	2,437	16	19	-	-
Ill.	-	-	132	5,254	8,191	-	42	-	-
Mich.	-	-	288	5,155	6,216	8	4	1	-
Wis.	-	-	113	1,535	2,091	6	10	-	-
W.N. CENTRAL	-	-	578	5,093	5,788	20	23	-	1
Minn.	-	-	208	1,012	932	15	11	-	-
Iowa	-	-	86	170	425	1	-	-	-
Mo.	-	-	165	2,765	2,904	2	10	-	-
N. Dak.	-	-	6	13	13	-	-	-	-
S. Dak.	-	-	20	95	82	-	-	-	-
Nebr.	-	-	47	135	460	-	1	-	1
Kans.	-	-	46	903	972	2	1	-	-
S. ATLANTIC	-	-	866	29,434	32,087	165	177	-	1
Del.	-	-	16	612	587	-	-	-	-
Md.	-	-	34	2,867	3,048	38	42	-	-
D.C.	-	-	16	1,038	1,134	-	-	-	-
Va.	-	-	58	3,837	3,162	8	10	-	-
W. Va.	-	-	9	349	199	2	4	-	1
N.C.	-	-	-	5,543	6,487	14	22	-	-
S.C.	-	-	14	2,892	4,573	6	3	-	-
Ga.	-	-	323	5,239	5,847	57	47	-	-
Fla.	-	-	396	7,057	7,050	40	49	-	-
E.S. CENTRAL	-	1	112	10,409	11,672	22	37	1	-
Ky.	-	1	-	1,244	1,240	2	1	-	-
Tenn.	-	-	50	3,242	3,586	13	14	-	-
Ala.	-	-	62	3,639	3,966	5	20	1	-
Miss.	-	-	-	2,284	2,880	2	2	-	-
W.S. CENTRAL	-	-	14	16,424	18,572	25	26	-	1
Ark.	-	-	14	873	1,777	1	-	-	-
La.	-	-	-	4,118	4,317	2	6	-	-
Okla.	-	-	-	1,612	1,710	22	19	-	-
Tex.	-	-	-	9,821	10,768	-	1	-	1
MOUNTAIN	2	-	436	3,492	3,726	77	79	1	2
Mont.	-	-	29	38	43	-	-	-	-
Idaho	-	-	21	34	32	1	1	-	-
Wyo.	-	-	7	22	20	1	-	-	-
Colo.	2	-	148	1,290	1,124	16	19	-	-
N. Mex.	-	-	55	493	370	14	12	-	-
Ariz.	-	-	61	981	1,419	35	38	1	1
Utah	-	-	69	144	26	8	2	-	-
Nev.	-	-	46	490	692	2	7	-	1
PACIFIC	-	-	334	9,846	9,887	58	73	1	2
Wash.	-	-	127	1,712	1,100	2	1	1	-
Oreg.	-	-	140	307	439	30	20	-	-
Calif.	-	-	-	7,457	7,983	9	34	-	2
Alaska	-	-	31	212	126	1	2	-	-
Hawaii	-	-	36	158	239	16	16	-	-
Guam	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	224	258	-	-	-	-
V.I.	-	-	-	17	10	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	6	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending May 11, 2002, and May 12, 2001 (19th Week)*

Reporting Area	*Haemophilus influenzae*, Invasive, Age <5 Years, Non-Serotype B		*Haemophilus influenzae*, Invasive, Age <5 Years, Unknown Serotype		Hepatitis (Viral, Acute), By Type, A		B		C; Non-A, Non-B	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	105	116	6	11	3,151	3,887	2,169	2,596	868	1,996
NEW ENGLAND	5	6	-	-	137	174	73	48	14	21
Maine	-	-	-	-	4	3	2	3	-	-
N.H.	-	-	-	-	8	4	7	6	-	-
Vt.	-	-	-	-	-	3	2	3	7	5
Mass.	3	5	-	-	66	61	39	10	7	16
R.I.	-	-	-	-	18	7	10	8	-	-
Conn.	2	1	-	-	41	96	13	18	-	-
MID. ATLANTIC	17	14	1	-	396	527	515	553	358	934
Upstate N.Y.	7	2	-	-	72	89	49	45	20	12
N.Y. City	5	4	-	-	173	154	301	232	-	-
N.J.	4	4	-	-	39	211	85	161	330	896
Pa.	1	4	1	-	112	73	80	115	8	26
E.N. CENTRAL	11	19	-	1	399	488	305	256	43	97
Ohio	5	3	-	-	137	96	38	47	5	5
Ind.	5	4	-	1	22	34	9	11	-	1
Ill.	-	8	-	-	107	191	21	22	4	14
Mich.	-	-	-	-	93	135	237	174	34	77
Wis.	1	4	-	-	40	32	-	2	-	-
W.N. CENTRAL	2	1	2	2	136	145	84	87	245	492
Minn.	2	1	1	-	22	12	2	9	-	-
Iowa	-	-	-	-	30	16	10	6	1	-
Mo.	-	-	1	2	28	28	50	52	234	488
N. Dak.	-	-	-	-	1	-	1	-	-	-
S. Dak.	-	-	-	-	3	1	-	1	-	-
Nebr.	-	-	-	-	5	20	13	8	10	1
Kans.	-	-	-	-	47	68	8	11	-	3
S. ATLANTIC	26	31	-	4	1,018	699	582	488	59	30
Del.	-	-	-	-	8	3	5	6	3	1
Md.	1	4	-	-	119	85	52	50	9	3
D.C.	-	-	-	-	33	18	9	3	-	-
Va.	2	4	-	-	30	49	65	49	1	-
W. Va.	-	-	-	-	9	2	11	11	1	4
N.C.	2	1	-	4	105	46	77	83	8	7
S.C.	2	1	-	-	30	23	33	6	3	3
Ga.	13	12	-	-	232	288	185	143	10	-
Fla.	6	9	-	-	452	185	145	137	24	12
E.S. CENTRAL	6	7	-	1	57	121	60	144	65	95
Ky.	-	-	-	-	23	17	13	19	2	4
Tenn.	4	3	-	-	-	52	-	49	15	25
Ala.	2	3	-	1	15	44	25	39	2	1
Miss.	-	1	-	-	19	8	22	37	46	65
W.S. CENTRAL	6	4	-	-	35	724	106	346	6	253
Ark.	-	-	-	-	11	23	26	40	-	3
La.	1	-	-	-	10	82	9	92	6	167
Okla.	5	4	-	-	13	63	1	33	-	2
Tex.	-	-	-	-	1	556	70	181	-	81
MOUNTAIN	18	9	2	1	234	271	156	196	29	27
Mont.	-	-	-	-	7	4	3	1	-	-
Idaho	-	-	-	-	18	26	3	7	-	1
Wyo.	-	-	-	-	3	1	9	-	5	4
Colo.	2	-	-	-	38	28	38	44	16	5
N. Mex.	4	5	-	1	6	10	17	55	-	10
Ariz.	8	4	1	-	117	144	54	62	1	4
Utah	3	-	-	-	21	24	13	11	-	-
Nev.	1	-	1	-	24	34	19	16	7	3
PACIFIC	14	25	1	2	739	738	288	478	49	47
Wash.	1	-	-	1	56	27	23	38	6	12
Oreg.	4	4	-	-	38	50	49	62	8	8
Calif.	6	20	1	1	638	643	211	365	35	27
Alaska	1	-	-	-	7	11	3	3	-	-
Hawaii	2	1	-	-	-	7	2	10	-	-
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	37	47	24	75	-	1
V.I.	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	24	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending May 11, 2002, and May 12, 2001 (19th Week)*

Reporting Area	Legionellosis		Listeriosis		Lyme Disease		Malaria		Measles Total	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	219	293	125	172	1,547	1,673	346	415	8†	68§
NEW ENGLAND	7	8	14	16	60	313	21	30	-	5
Maine	1	-	2	-	-	-	1	2	-	-
N.H.	1	2	2	-	18	2	5	2	-	-
Vt.	-	3	-	-	1	1	1	-	-	1
Mass.	3	2	7	10	34	110	8	13	-	3
R.I.	-	-	1	-	7	-	1	1	-	-
Conn.	2	1	2	6	-	200	5	12	-	1
MID. ATLANTIC	53	70	19	34	1,248	1,018	77	109	4	8
Upstate N.Y.	15	16	9	9	868	238	14	16	-	4
N.Y. City	10	5	4	7	48	25	48	57	4	1
N.J.	9	9	2	13	86	244	9	23	-	1
Pa.	19	40	4	5	246	511	6	13	-	2
E.N. CENTRAL	61	76	18	24	12	80	39	59	-	10
Ohio	31	33	9	4	10	5	9	8	-	3
Ind.	4	3	1	2	2	2	1	9	-	4
Ill.	-	10	-	8	-	9	7	20	-	3
Mich.	20	16	6	8	-	-	18	15	-	-
Wis.	6	14	2	2	U	64	4	7	-	-
W.N. CENTRAL	15	17	4	2	22	30	30	15	-	4
Minn.	2	1	-	-	14	19	10	6	-	2
Iowa	2	4	1	-	3	3	2	1	-	-
Mo.	6	8	1	1	4	6	7	4	-	2
N. Dak.	-	-	1	-	-	-	1	-	-	-
S. Dak.	1	-	-	-	-	-	-	-	-	-
Nebr.	4	3	-	-	-	-	5	2	-	-
Kans.	-	1	1	1	1	2	5	2	-	-
S. ATLANTIC	45	39	18	23	152	153	105	89	1	4
Del.	3	-	-	-	19	16	1	1	-	-
Md.	4	7	3	2	81	99	25	34	-	3
D.C.	-	1	-	-	6	7	2	4	-	-
Va.	2	6	1	4	6	22	7	15	-	-
W. Va.	N	N	-	2	-	1	1	1	-	-
N.C.	3	4	2	-	18	5	7	1	-	-
S.C.	4	1	3	2	1	1	3	3	-	-
Ga.	7	4	3	6	-	-	39	15	-	1
Fla.	22	16	6	7	21	2	20	15	1	-
E.S. CENTRAL	6	26	8	8	10	3	5	10	-	-
Ky.	4	6	2	2	4	2	1	2	-	-
Tenn.	-	9	3	3	2	1	1	4	-	-
Ala.	2	7	3	3	4	-	2	3	-	-
Miss.	-	4	-	-	-	-	1	1	-	-
W.S. CENTRAL	2	11	3	15	2	44	2	6	-	1
Ark.	-	-	-	1	-	-	-	2	-	-
La.	-	8	-	-	1	4	2	2	-	-
Okla.	2	1	3	-	-	-	-	1	-	-
Tex.	-	2	-	14	1	40	-	1	-	1
MOUNTAIN	16	16	11	13	8	2	13	19	-	1
Mont.	1	-	-	-	-	-	-	2	-	-
Idaho	-	-	-	-	1	1	-	2	-	1
Wyo.	3	1	-	1	-	-	-	-	-	-
Colo.	4	6	2	1	2	-	6	9	-	-
N. Mex.	1	1	-	3	1	-	-	1	-	-
Ariz.	3	5	7	3	1	-	2	1	-	-
Utah	4	1	2	1	2	-	2	2	-	-
Nev.	-	2	-	4	1	1	3	2	-	-
PACIFIC	14	30	30	37	33	30	54	78	3	35
Wash.	1	6	3	2	-	1	5	2	-	15
Oreg.	N	N	2	4	1	3	2	6	-	2
Calif.	13	20	25	31	32	26	44	63	3	13
Alaska	-	1	-	-	-	-	1	1	-	-
Hawaii	-	3	-	-	N	N	2	6	-	5
Guam	-	-	-	-	-	-	-	-	-	-
P.R.	-	2	-	-	N	N	-	3	-	-
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 year 2001 and 2002 are provisional and cumulative (year-to-date).
† Of eight cases reported, three were indigenous and five were imported from another country.
§ Of 68 cases reported, 33 were indigenous and 35 were imported from another country.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending May 11, 2002, and May 12, 2001 (19th Week)*

Reporting Area	Meningococcal Disease		Mumps		Pertussis		Rabies, Animal	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	663	1,283	101	91	1,715	1,861	1,717	2,302
NEW ENGLAND	49	62	4	-	237	189	266	219
Maine	4	1	-	-	3	-	17	29
N.H.	5	6	3	-	3	16	3	6
Vt.	3	4	-	-	39	22	52	32
Mass.	25	35	1	-	186	143	86	68
R.I.	4	1	-	-	1	1	18	25
Conn.	8	15	-	-	5	7	90	59
MID. ATLANTIC	66	112	11	7	111	143	309	144
Upstate N.Y.	22	35	2	2	75	81	191	-
N.Y. City	9	20	1	4	5	20	8	5
N.J.	11	23	1	-	3	2	46	57
Pa.	24	34	7	1	28	40	64	82
E.N. CENTRAL	86	163	12	12	237	211	13	15
Ohio	40	46	3	1	145	118	3	1
Ind.	18	15	-	1	15	17	3	1
Ill.	-	39	4	10	36	25	2	2
Mich.	18	38	5	-	28	19	5	7
Wis.	10	25	-	-	13	32	-	4
W.N. CENTRAL	67	73	10	3	202	79	136	124
Minn.	15	10	2	1	70	17	7	15
Iowa	9	17	-	-	64	10	17	22
Mo.	27	25	3	-	40	36	12	13
N. Dak.	-	3	1	-	-	-	7	17
S. Dak.	2	3	-	-	5	3	20	19
Nebr.	9	6	-	-	4	2	-	-
Kans.	5	9	4	2	19	11	73	38
S. ATLANTIC	119	198	14	16	153	86	733	856
Del.	5	-	-	-	2	-	9	12
Md.	3	24	2	4	16	13	112	176
D.C.	-	-	-	-	1	1	-	-
Va.	16	21	2	2	69	10	180	148
W. Va.	-	4	-	-	3	1	62	50
N.C.	14	44	1	-	14	30	207	222
S.C.	12	18	2	1	24	15	28	48
Ga.	16	30	3	7	11	7	132	121
Fla.	53	57	4	2	13	9	3	79
E.S. CENTRAL	31	77	8	2	44	35	60	124
Ky.	5	13	4	1	12	11	9	9
Tenn.	13	28	2	-	25	14	40	106
Ala.	9	28	1	-	7	7	11	9
Miss.	4	8	1	1	-	3	-	-
W.S. CENTRAL	28	288	7	10	201	110	33	577
Ark.	7	10	-	-	5	7	-	-
La.	11	101	1	4	2	4	-	6
Okla.	9	17	-	-	22	3	33	35
Tex.	1	160	6	6	172	96	-	536
MOUNTAIN	53	53	5	5	290	740	73	97
Mont.	2	-	-	-	2	6	4	14
Idaho	3	6	1	-	28	156	-	-
Wyo.	-	-	-	1	5	-	6	17
Colo.	16	22	1	1	134	139	-	-
N. Mex.	1	7	-	2	32	45	4	2
Ariz.	17	9	-	-	69	375	58	64
Utah	4	5	2	-	13	14	-	-
Nev.	10	4	1	1	7	5	1	-
PACIFIC	164	257	30	36	240	268	94	146
Wash.	32	34	-	-	120	33	-	-
Oreg.	23	33	N	N	21	13	-	-
Calif.	105	181	24	20	94	212	71	110
Alaska	1	1	-	1	2	-	23	36
Hawaii	3	8	6	15	3	10	-	-
Guam	-	-	-	-	-	-	-	-
P.R.	1	2	-	-	-	2	31	41
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending May 11, 2002, and May 12, 2001 (19th Week)*

Reporting Area	Rocky Mountain Spotted Fever		Rubella				Salmonellosis	
			Rubella		Congenital Rubella			
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	107	51	3	7	2	-	8,596	9,924
NEW ENGLAND	-	-	-	-	-	-	515	723
Maine	-	-	-	-	-	-	53	83
N.H.	-	-	-	-	-	-	30	46
Vt.	-	-	-	-	-	-	21	29
Mass.	-	-	-	-	-	-	274	406
R.I.	-	-	-	-	-	-	25	32
Conn.	-	-	-	-	-	-	112	127
MID. ATLANTIC	8	1	-	3	-	-	1,058	1,547
Upstate N.Y.	2	-	-	1	-	-	342	278
N.Y. City	-	-	-	2	-	-	411	347
N.J.	-	-	-	-	-	-	82	553
Pa.	6	1	-	-	-	-	223	369
E.N. CENTRAL	3	3	-	1	-	-	1,434	1,343
Ohio	3	-	-	-	-	-	421	419
Ind.	-	-	-	-	-	-	116	113
Ill.	-	3	-	1	-	-	433	354
Mich.	-	-	-	-	-	-	295	227
Wis.	-	-	-	-	-	-	169	230
W.N. CENTRAL	13	12	-	1	-	-	700	534
Minn.	-	-	-	-	-	-	156	169
Iowa	-	1	-	1	-	-	112	81
Mo.	13	11	-	-	-	-	269	132
N. Dak.	-	-	-	-	-	-	9	1
S. Dak.	-	-	-	-	-	-	26	29
Nebr.	-	-	-	-	-	-	45	43
Kans.	-	-	-	-	-	-	83	79
S. ATLANTIC	72	22	1	1	-	-	2,222	2,075
Del.	-	-	-	-	-	-	14	23
Md.	11	3	1	-	-	-	198	208
D.C.	-	-	-	-	-	-	26	24
Va.	1	-	-	-	-	-	224	340
W. Va.	-	-	-	-	-	-	25	22
N.C.	39	11	-	-	-	-	274	346
S.C.	11	4	-	-	-	-	118	236
Ga.	9	1	-	-	-	-	542	330
Fla.	1	3	-	1	-	-	801	546
E.S. CENTRAL	10	7	-	-	1	-	482	489
Ky.	-	-	-	-	-	-	87	87
Tenn.	8	5	-	-	1	-	149	127
Ala.	2	1	-	-	-	-	160	163
Miss.	-	1	-	-	-	-	86	112
W.S. CENTRAL	-	3	1	-	-	-	186	1,260
Ark.	-	1	-	-	-	-	49	100
La.	-	1	-	-	-	-	49	438
Okla.	-	1	-	-	-	-	86	54
Tex.	-	-	1	-	-	-	2	668
MOUNTAIN	1	3	-	-	-	-	627	588
Mont.	-	-	-	-	-	-	31	25
Idaho	-	1	-	-	-	-	43	27
Wyo.	-	1	-	-	-	-	17	24
Colo.	-	-	-	-	-	-	174	178
N. Mex.	-	-	-	-	-	-	85	71
Ariz.	-	-	-	-	-	-	166	164
Utah	-	1	-	-	-	-	50	62
Nev.	1	-	-	-	-	-	61	37
PACIFIC	-	-	1	1	1	-	1,372	1,365
Wash.	-	-	-	-	-	-	102	128
Oreg.	-	-	-	-	-	-	119	84
Calif.	-	-	1	-	-	-	1,065	1,024
Alaska	-	-	-	-	-	-	21	15
Hawaii	-	-	-	1	1	-	65	114
Guam	-	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	52	262
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	-	U	14	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending May 11, 2002, and May 12, 2001 (19th Week)*

Reporting Area	Shigellosis		Streptococcal Disease, Invasive, Group A		*Streptococcus pneumoniae*, Drug Resistant, Invasive		*Streptococcus pneumoniae*, Invasive (<5 Years)	
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	4,346	4,729	1,673	1,800	1,112	1,350	78	111
NEW ENGLAND	84	83	85	58	4	6	4	1
Maine	3	2	14	7	-	-	-	-
N.H.	4	1	21	6	-	-	-	-
Vt.	-	2	8	7	3	6	1	-
Mass.	56	56	35	34	-	-	3	-
R.I.	4	6	7	4	1	-	-	1
Conn.	17	16	-	-	-	-	-	-
MID. ATLANTIC	229	557	263	309	53	78	29	50
Upstate N.Y.	56	148	145	119	49	76	29	50
N.Y. City	123	139	68	86	U	U	-	-
N.J.	20	169	29	81	-	-	-	-
Pa.	30	101	21	23	4	2	-	-
E.N. CENTRAL	474	656	255	410	86	94	23	56
Ohio	276	174	103	105	-	-	1	-
Ind.	24	98	16	32	83	94	19	28
Ill.	89	182	3	142	2	-	-	18
Mich.	54	118	133	101	1	-	3	10
Wis.	31	84	-	30	-	-	-	-
W.N. CENTRAL	422	469	122	171	281	32	17	3
Minn.	58	177	63	65	195	2	17	2
Iowa	32	80	-	-	-	-	-	-
Mo.	48	105	26	43	5	8	-	-
N. Dak.	7	9	-	4	-	2	-	1
S. Dak.	126	37	5	5	1	2	-	-
Nebr.	100	26	13	16	21	3	-	-
Kans.	51	35	15	38	59	15	-	-
S. ATLANTIC	1,835	649	317	324	583	822	5	1
Del.	5	4	1	2	3	1	-	-
Md.	251	40	47	24	-	-	-	-
D.C.	19	20	4	2	28	3	1	-
Va.	343	44	33	48	-	-	-	-
W. Va.	2	4	7	10	26	26	-	1
N.C.	102	145	60	74	-	-	-	-
S.C.	20	44	23	4	100	159	4	-
Ga.	649	98	81	96	161	232	-	-
Fla.	444	250	61	64	265	401	-	-
E.S. CENTRAL	337	383	50	38	72	149	-	-
Ky.	54	126	5	16	8	17	-	-
Tenn.	22	35	45	22	64	131	-	-
Ala.	154	93	-	-	-	1	-	-
Miss.	107	129	-	-	-	-	-	-
W.S. CENTRAL	161	986	17	168	11	145	-	-
Ark.	24	205	-	-	2	12	-	-
La.	29	179	-	-	9	123	-	-
Okla.	107	11	16	25	-	10	-	-
Tex.	1	591	1	143	-	-	-	-
MOUNTAIN	184	263	306	193	22	23	-	-
Mont.	1	-	-	-	-	-	-	-
Idaho	2	9	5	3	-	-	-	-
Wyo.	3	-	6	4	8	3	-	-
Colo.	41	57	115	76	-	-	-	-
N. Mex.	45	48	54	40	14	20	-	-
Ariz.	67	114	125	67	-	-	-	-
Utah	14	16	1	3	-	-	-	-
Nev.	11	19	-	-	-	-	-	-
PACIFIC	620	683	258	129	-	1	-	-
Wash.	29	62	26	-	-	-	-	-
Oreg.	34	38	-	-	-	-	-	-
Calif.	538	568	210	108	-	-	-	-
Alaska	2	2	-	-	-	-	-	-
Hawaii	17	13	22	21	-	1	-	-
Guam	-	-	-	-	-	-	-	-
P.R.	1	6	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	-	-	U	U
C.N.M.I.	6	U	-	U	-	-	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending May 11, 2002, and May 12, 2001 (19th Week)*

Reporting Area	Syphilis				Tuberculosis		Typhoid Fever	
	Primary & Secondary		Congenital†					
	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001	Cum. 2002	Cum. 2001
UNITED STATES	2,068	1,993	27	169	3,165	4,036	89	120
NEW ENGLAND	32	14	-	3	125	139	8	6
Maine	-	-	-	-	5	7	-	-
N.H.	1	-	-	-	6	8	-	1
Vt.	1	-	-	-	-	3	-	-
Mass.	19	10	-	2	71	73	7	4
R.I.	2	1	-	-	12	15	-	-
Conn.	9	3	-	1	31	33	1	1
MID. ATLANTIC	221	165	3	26	728	635	26	47
Upstate N.Y.	9	4	1	15	92	-	3	6
N.Y. City	126	98	-	-	379	371	13	9
N.J.	42	31	2	9	179	174	9	30
Pa.	44	32	-	2	78	90	1	2
E.N. CENTRAL	381	328	-	27	363	416	11	14
Ohio	52	29	-	1	56	81	4	2
Ind.	22	69	-	3	35	29	1	1
Ill.	92	114	-	21	189	214	1	7
Mich.	207	104	-	2	77	63	3	2
Wis.	8	12	-	-	6	29	2	2
W.N. CENTRAL	23	28	-	4	153	155	3	6
Minn.	9	17	-	-	74	86	2	2
Iowa	-	-	-	-	-	9	-	-
Mo.	8	6	-	2	57	41	1	4
N. Dak.	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	7	4	-	-
Nebr.	4	-	-	-	6	15	-	-
Kans.	2	5	-	2	9	-	-	-
S. ATLANTIC	529	721	5	44	676	764	11	15
Del.	7	4	-	-	7	-	-	-
Md.	61	99	-	1	58	75	1	3
D.C.	41	14	-	1	-	28	-	-
Va.	11	44	-	1	36	70	-	2
W. Va.	-	-	-	-	8	11	-	-
N.C.	111	168	-	6	106	89	-	1
S.C.	45	105	-	9	42	70	-	-
Ga.	72	109	-	10	102	148	7	6
Fla.	181	178	5	16	317	273	3	3
E.S. CENTRAL	219	213	1	8	243	263	2	-
Ky.	35	16	-	-	44	33	2	-
Tenn.	89	126	-	4	89	92	-	-
Ala.	74	33	1	2	74	99	-	-
Miss.	21	38	-	2	36	39	-	-
W.S. CENTRAL	271	255	16	27	73	653	-	5
Ark.	6	19	-	2	19	49	-	-
La.	46	52	-	-	-	-	-	-
Okla.	25	31	-	1	54	38	-	-
Tex.	194	153	16	24	-	566	-	5
MOUNTAIN	102	71	1	7	82	152	8	2
Mont.	-	-	-	-	4	-	-	1
Idaho	1	-	-	-	-	3	-	-
Wyo.	-	-	-	-	2	-	-	-
Colo.	6	12	1	-	15	43	4	-
N. Mex.	21	7	-	-	7	16	-	-
Ariz.	68	44	-	7	44	50	-	-
Utah	5	6	-	-	8	6	3	-
Nev.	1	2	-	-	2	34	1	1
PACIFIC	290	198	1	23	722	859	20	25
Wash.	29	22	-	-	79	80	-	1
Oreg.	5	5	-	-	27	37	2	2
Calif.	252	167	1	23	543	671	18	21
Alaska	-	-	-	-	24	15	-	-
Hawaii	4	4	-	-	49	56	-	1
Guam	-	-	-	-	-	-	-	-
P.R.	75	101	-	8	8	30	-	-
V.I.	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	13	U	-	U	19	U	-	U

N: Not notifiable. U: Unavailable. - : No reported cases.
* Incidence data for reporting year 2001 and 2002 are provisional and cumulative (year-to-date).
† Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE III. Deaths in 122 U.S. cities,* week ending May 11, 2002 (19th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	389	260	56	44	20	9	29
Boston, Mass.	U	U	U	U	U	U	U
Bridgeport, Conn.	35	27	4	3	1	-	-
Cambridge, Mass.	24	21	2	1	-	-	1
Fall River, Mass.	36	28	4	3	-	1	4
Hartford, Conn.	65	22	8	20	12	3	2
Lowell, Mass.	16	12	3	1	-	-	-
Lynn, Mass.	16	15	-	-	1	-	-
New Bedford, Mass.	26	22	4	-	-	-	2
New Haven, Conn.	47	29	11	2	2	3	5
Providence, R.I.	U	U	U	U	U	U	U
Somerville, Mass.	1	-	-	1	-	-	-
Springfield, Mass.	34	20	6	7	1	-	3
Waterbury, Conn.	21	14	3	3	1	-	3
Worcester, Mass.	68	50	11	3	2	2	9
MID. ATLANTIC	2,321	1,583	482	181	40	34	122
Albany, N.Y.	45	28	11	4	-	2	4
Allentown, Pa.	27	24	2	1	-	-	2
Buffalo, N.Y.	75	52	16	5	-	2	8
Camden, N.J.	23	14	6	1	1	1	-
Elizabeth, N.J.	26	21	2	2	1	-	-
Erie, Pa.	42	35	5	1	1	-	1
Jersey City, N.J.	44	29	11	2	-	2	-
New York City, N.Y.	1,084	747	225	86	16	9	45
Newark, N.J.	46	19	19	7	-	1	5
Paterson, N.J.	21	13	5	1	1	1	1
Philadelphia, Pa.	456	286	108	43	13	6	28
Pittsburgh, Pa.§	29	21	5	2	-	1	4
Reading, Pa.	18	15	2	1	-	-	1
Rochester, N.Y.	126	94	22	7	3	-	8
Schenectady, N.Y.	24	20	-	4	-	-	-
Scranton, Pa.	27	23	3	1	-	-	-
Syracuse, N.Y.	108	82	14	6	2	4	11
Trenton, N.J.	59	33	13	6	2	5	2
Utica, N.Y.	21	16	4	1	-	-	-
Yonkers, N.Y.	20	11	9	-	-	-	2
E.N. CENTRAL	1,674	1,132	355	113	34	40	117
Akron, Ohio	U	U	U	U	U	U	U
Canton, Ohio	46	35	8	2	1	-	6
Chicago, Ill.	U	U	U	U	U	U	U
Cincinnati, Ohio	97	69	15	8	2	3	11
Cleveland, Ohio	122	73	40	7	1	1	4
Columbus, Ohio	198	135	37	19	3	4	10
Dayton, Ohio	99	69	24	5	1	-	7
Detroit, Mich.	172	101	49	17	2	3	18
Evansville, Ind.	50	39	10	1	-	-	1
Fort Wayne, Ind.	61	41	16	3	1	-	4
Gary, Ind.	22	9	6	2	3	2	2
Grand Rapids, Mich.	71	52	12	4	2	1	8
Indianapolis, Ind.	214	131	47	14	9	13	11
Lansing, Mich.	50	37	10	2	1	-	2
Milwaukee, Wis.	121	82	19	10	2	8	9
Peoria, Ill.	54	38	13	2	-	1	5
Rockford, Ill.	55	40	10	2	1	2	6
South Bend, Ind.	83	65	9	7	2	-	1
Toledo, Ohio	107	73	23	6	3	2	10
Youngstown, Ohio	52	43	7	2	-	-	2
W.N. CENTRAL	502	328	98	31	23	22	35
Des Moines, Iowa	U	U	U	U	U	U	U
Duluth, Minn.	29	21	5	1	2	-	2
Kansas City, Kans.	24	12	8	2	1	1	1
Kansas City, Mo.	93	63	15	5	4	6	7
Lincoln, Nebr.	39	30	7	2	-	-	6
Minneapolis, Minn.	58	42	9	3	3	1	4
Omaha, Nebr.	89	61	20	6	-	2	10
St. Louis, Mo.	103	54	24	7	10	8	-
St. Paul, Minn.	U	U	U	U	U	U	U
Wichita, Kans.	67	45	10	5	3	4	5
S. ATLANTIC	1,365	845	333	102	44	41	76
Atlanta, Ga.	156	93	34	12	9	8	2
Baltimore, Md.	148	88	46	10	4	-	14
Charlotte, N.C.	118	73	32	5	-	8	11
Jacksonville, Fla.	131	85	27	13	2	4	11
Miami, Fla.	113	68	28	8	2	7	3
Norfolk, Va.	67	40	20	4	1	2	2
Richmond, Va.	74	45	12	9	5	3	4
Savannah, Ga.	65	49	10	1	4	1	8
St. Petersburg, Fla.	69	45	17	4	2	1	7
Tampa, Fla.	201	126	54	14	4	3	11
Washington, D.C.	205	115	53	22	11	4	3
Wilmington, Del.	18	18	-	-	-	-	-
E.S. CENTRAL	883	602	190	58	20	12	72
Birmingham, Ala.	204	143	44	9	6	1	18
Chattanooga, Tenn.	59	38	15	5	1	-	6
Knoxville, Tenn.	108	73	20	9	3	3	2
Lexington, Ky.	80	57	20	2	1	-	5
Memphis, Tenn.	185	118	41	16	7	3	20
Mobile, Ala.	79	56	16	5	-	2	2
Montgomery, Ala.	40	25	8	6	1	-	3
Nashville, Tenn.	128	92	26	6	1	3	16
W.S. CENTRAL	1,324	822	294	113	47	47	99
Austin, Tex.	73	45	20	4	2	2	5
Baton Rouge, La.	31	15	10	5	-	1	-
Corpus Christi, Tex.	46	30	9	3	2	2	6
Dallas, Tex.	200	109	44	29	8	10	10
El Paso, Tex.	57	39	11	3	4	-	1
Ft. Worth, Tex.	99	66	20	7	1	5	7
Houston, Tex.	343	188	89	34	17	15	28
Little Rock, Ark.	83	50	18	4	6	5	8
New Orleans, La.	U	U	U	U	U	U	U
San Antonio, Tex.	232	172	39	12	4	4	16
Shreveport, La.	58	38	13	6	-	1	8
Tulsa, Okla.	102	70	21	6	3	2	10
MOUNTAIN	891	588	186	74	26	17	77
Albuquerque, N.M.	99	67	21	9	1	1	10
Boise, Idaho	53	36	10	4	2	1	3
Colo. Springs, Colo.	50	27	7	8	7	1	2
Denver, Colo.	116	78	21	8	3	6	16
Las Vegas, Nev.	254	152	60	30	8	4	16
Ogden, Utah	34	28	5	-	-	1	5
Phoenix, Ariz.	U	U	U	U	U	U	U
Pueblo, Colo.	25	19	6	-	-	-	2
Salt Lake City, Utah	128	85	27	9	5	2	13
Tucson, Ariz.	132	96	29	6	-	1	10
PACIFIC	1,441	1,038	264	91	28	19	107
Berkeley, Calif.	14	11	2	1	-	-	1
Fresno, Calif.	179	126	41	10	2	-	19
Glendale, Calif.	15	13	2	-	-	-	-
Honolulu, Hawaii	70	48	14	6	1	1	-
Long Beach, Calif.	74	55	13	2	2	1	9
Los Angeles, Calif.	180	138	26	11	5	-	-
Pasadena, Calif.	21	16	1	3	-	1	6
Portland, Oreg.	90	67	13	8	2	-	8
Sacramento, Calif.	209	151	33	16	4	5	20
San Diego, Calif.	161	107	40	10	2	2	10
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	146	109	25	6	3	3	15
Santa Cruz, Calif.	U	U	U	U	U	U	U
Seattle, Wash.	112	75	23	9	5	-	4
Spokane, Wash.	48	35	8	2	-	3	6
Tacoma, Wash.	122	87	23	7	2	3	9
TOTAL	10,790¶	7,198	2,258	807	282	241	734

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.

(Continued from page 416)

Addendum: Vol. 51, No. RR-5

In the Recommendations and Reports "Progressing Toward Tuberculosis Elimination in Low-Incidence Areas of the United States: Recommendations of the Advisory Council for the Elimination of Tuberculosis," the membership list of the Advisory Council for the Elimination of Tuberculosis was inadvertently omitted. The list is printed below.

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Erratum: Vol. 51, No. 18

In Table II (Cont'd), "Provisional cases of selected notifiable diseases, United States, May 4, 2002, and May 5, 2001 (18th Week)" on page 403, cumulative (year-to-date) disease incidence data presented for Rocky Mountain Spotted Fever, Rubella, Congenital Rubella, and Salmonellosis for 2002 and 2001 were incorrect. The correct cumulative incidence data for these diseases are included in this publication.

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