

MMWR™

MORBIDITY AND MORTALITY WEEKLY REPORT

- 825 The Great American Smokeout
- 826 Health-Care Provider Advice on Tobacco Use To Persons Aged 10–22 Years — United States, 1993
- 830 Symptoms of Substance Dependence Associated with Use of Cigarettes, Alcohol, and Illicit Drugs — United States, 1991–1992
- 839 Minors' Access to Smokeless Tobacco — Florida, 1994
- 841 Outbreak of Acute Febrile Illness and Pulmonary Hemorrhage — Nicaragua, 1995

The Great American Smokeout, November 16, 1995

Since 1977, the American Cancer Society has sponsored the Great American Smokeout to foster community-based activities that encourage cigarette smokers to stop smoking. This year, the Great American Smokeout will be on Thursday, November 16. The primary goal of this year's event is to prevent initiation of tobacco use among adolescents.

From 1965 through 1993, the annual prevalence of cigarette smoking among adults in the United States declined 40% (1). However, the prevalence of smoking among adolescents remained steady since the mid-1980s (2), and the most recent data suggest it is increasing (3).

Events this year will include a week of classroom activities intended to raise awareness among teenagers about the social and physical benefits of never starting to smoke. In addition, American Cancer Society volunteers will conduct activities for smokers and their nonsmoking partners at shopping malls, work-sites, hospitals, military installations, and other locations.

Additional information is available from the American Cancer Society, telephone (800) 227-2345 or (404) 320-3333; and from CDC, telephone (800) 232-1311 or (770) 488-5705.

Reported by: American Cancer Society, Atlanta. Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

References

1. CDC. Cigarette smoking among adults—United States, 1993. *MMWR* 1994;43:925-9.
2. Nelson DE, Giovino GA, Shopland DR, et al. Trends in cigarette smoking among U.S. adolescents, 1974 through 1991. *Am J Public Health* 1995;85:35-40.
3. NCHS. Health, United States, 1994. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, CDC, 1995; DHHS publication no. (PHS)95-1232.

Health-Care Provider Advice on Tobacco Use to Persons Aged 10–22 Years — United States, 1993

Among U.S. adults who have ever smoked daily, 91% tried their first cigarette and 77% became daily smokers before age 20 years (1). Among high school seniors who had ever tried smokeless tobacco (SLT), 73% did so by the ninth grade (1). Despite the widely publicized risks of tobacco use, in 1993, 61% of high school sophomores believed that the risk from cigarette smoking was "great," and 44% believed the risk from SLT use was "great" (2). The low levels of understanding about the harmfulness of tobacco products underscore the need for health-care providers and others to provide adolescents and young adults with information to counter the allure of tobacco use created by marketing efforts. This report summarizes an analysis of data from the 1993 Teenage Attitudes and Practices Survey (TAPS II) regarding the provision of information about tobacco use by health-care providers to persons aged 10–22 years.

Data about knowledge of, attitudes toward, and practices regarding tobacco use among persons aged 10–22 years were collected by TAPS II by telephone interviews and by personal interviews among respondents not available by telephone. The sample for this analysis comprised 7960 respondents who had participated in the 1989 TAPS interview and who subsequently responded to TAPS II (aged 15–22 years at the time of the second interview), and an additional 4992 persons from a new probability sample in 1993 of 5590 persons aged 10–15 years (89.3% response rate). Data were weighted to provide national estimates. Adjusted odds ratios were computed by multiple logistical regression simultaneously adjusting for all other variables, and 95% confidence intervals were calculated using SUDAAN (3). Questions included: "Has a doctor, dentist, or nurse ever said anything to you about cigarette smoking?" and "Has a doctor, dentist, or nurse ever said anything to you about using chewing tobacco or snuff?" Correlations with affirmative responses were analyzed in relation to five categories of smoking and SLT use: Never smoked/used (never), tried but never smoked/used on daily basis or during the month preceding the interview (tried), smoked/used daily for at least 1 month but no smoking/use during the month preceding the interview (past daily), smoked/used during the month preceding the interview but never smoked/used daily for at least 1 month (current, never daily), and smoked/used daily for at least 1 month and on ≥ 1 day during the month preceding the interview (current, ever daily).

One fourth (25%) of respondents reported that a health-care provider had said something to them about cigarette smoking, and 12% said the same about SLT. More females (27%) than males (24%) answered "yes" to the question about cigarettes, and more males (14%) than females (9%) answered "yes" about SLT (Tables 1 and 2). The proportion of respondents who answered "yes" increased significantly with age for cigarette smoking but not for SLT.

Affirmative responses were most strongly correlated with having a history of tobacco use (Tables 1 and 2). Young persons who reported current or previous smoking or SLT use on a daily basis for at least 1 month (current or past daily) were significantly more likely than persons who had never smoked/used to answer "yes." Among current, ever daily users, 50% of smokers and 48% of SLT users answered "yes" compared with 21% of never smokers and 10% of never SLT users.

Reported by: LS Baker, MPH, Center for the Future of Children, The David and Lucile Packard Foundation, Los Altos, California. GE Morley, The Robert Wood Johnson Foundation, Princeton,

Tobacco Use — Continued

TABLE 1. Percentage of persons aged 10–22 years* who reported that a health-care provider† ever said anything to them about cigarette smoking, by selected characteristics — United States, Teenage Attitudes and Practices Survey, 1993

Characteristic	%	(95% CI) [§]	Adjusted odds ratio [¶]	(95% CI)
Sex				
Male	23.6	(22.5%–24.8%)	1.0	Referent
Female	26.5	(25.3%–27.8%)	1.2	(1.1–1.3)
Age group (yrs)				
10–16	20.7	(19.6%–21.8%)	1.0	Referent
17–19	29.0	(27.4%–30.6%)	1.2	(1.1–1.4)
20–22	33.7	(31.8%–35.7%)	1.4	(1.3–1.6)
Poverty status**				
At/Above poverty level	25.6	(24.6%–26.5%)	1.0	Referent
Below poverty level	22.6	(20.4%–24.8%)	1.1	(0.9–1.3)
Unknown	23.8	(20.6%–27.0%)	1.0	(0.8–1.2)
Health status				
Excellent	24.4	(23.2%–25.6%)	1.0	Referent
Very good/Good	25.6	(24.3%–26.9%)	1.1	(1.0–1.2)
Fair/Poor	29.4	(24.7%–34.1%)	1.3	(1.0–1.7)
Region^{††}				
Northeast	27.6	(25.7%–29.4%)	1.0	Referent
Midwest	24.0	(22.4%–25.7%)	1.1	(1.0–1.3)
South	24.8	(23.2%–26.4%)	0.9	(0.8–1.1)
West	24.6	(22.8%–26.5%)	1.0	(0.9–1.2)
Smoking history^{§§}				
PM–,ED–,ET–	20.9	(19.8%–21.9%)	1.0	Referent
PM–,ED–,ET+	24.0	(22.2%–25.7%)	1.1	(1.0–1.2)
PM–,ED+	41.5	(36.0%–46.9%)	2.2	(1.7–2.8)
PM+,ED–	26.1	(22.6%–29.6%)	1.2	(1.0–1.5)
PM+,ED+	50.2	(47.3%–53.2%)	3.2	(2.8–3.7)
Total	25.1	(24.2%–25.9%)		

*n=12,871. Persons who had missing data on any variable (n=81) were excluded from this analysis.

†Doctor, dentist, or nurse.

§Confidence interval.

¶Each odds ratio was simultaneously adjusted by multiple logistical regression for all other characteristics and for race/ethnicity.

**Poverty statistics are based on a definition originated by the Social Security Administration in 1964, subsequently modified by federal interagency committees in 1969 and 1980, and prescribed by the Office of Management and Budget as the standard to be used by federal agencies for statistical purposes.

††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.

§§PM–=Did not smoke during the month preceding the interview; ED–=Never smoked daily for at least 1 month preceding the interview; ET–=Never tried cigarette smoking; ET+=Ever tried cigarette smoking; ED+=Ever smoked daily for at least 1 month preceding the interview; PM+=Smoked on ≥1 day during the month preceding the interview.

Tobacco Use — Continued

TABLE 2. Percentage of persons aged 10–22 years* who reported that a health-care provider† ever said anything to them about using chewing tobacco or snuff, by selected characteristics — United States, Teenage Attitudes and Practices Survey, 1993

Characteristic	%	(95% CI [§])	Adjusted odds ratio [¶]	(95% CI)
Sex				
Male	14.3	(13.4%–15.2%)	1.0	Referent
Female	9.2	(8.4%–10.0%)	0.7	(0.6–0.8)
Age group (yrs)				
10–16	11.3	(10.4%–12.1%)	1.0	Referent
17–19	12.0	(10.9%–13.1%)	0.9	(0.8–1.1)
20–22	13.0	(11.6%–14.5%)	1.0	(0.8–1.2)
Poverty status**				
At/Above poverty level	11.9	(11.2%–12.7%)	1.0	Referent
Below poverty level	10.6	(9.1%–12.2%)	1.0	(0.8–1.3)
Unknown	12.0	(9.5%–14.5%)	0.9	(0.7–1.2)
Health status				
Excellent	11.7	(10.9%–12.6%)	1.0	Referent
Very good/Good	11.9	(10.9%–12.9%)	1.0	(0.9–1.2)
Fair/Poor	11.5	(7.7%–15.2%)	1.0	(0.7–1.6)
Region^{††}				
Northeast	10.0	(8.7%–11.3%)	1.0	Referent
Midwest	11.2	(9.9%–12.5%)	0.9	(0.7–1.1)
South	13.6	(12.3%–14.8%)	1.0	(0.8–1.2)
West	11.0	(9.8%–12.3%)	1.2	(1.0–1.4)
Smokeless tobacco use history^{§§}				
PM–,ED–,ET–	10.4	(9.7%–11.2%)	1.0	Referent
PM–,ED–,ET+	13.2	(11.5%–14.9%)	1.2	(1.0–1.4)
PM–,ED+	27.3	(19.9%–34.6%)	2.7	(1.8–4.1)
PM+,ED–	20.2	(15.1%–25.4%)	1.8	(1.3–2.6)
PM+,ED+	47.9	(41.5%–54.2%)	6.3	(4.7–8.5)
Total	11.8	(11.1%–12.4%)		

*n=12,843. Persons who had missing data on any variable (n=109) were excluded from this analysis.

†Doctor, dentist, or nurse.

§Confidence interval.

¶Each odds ratio was simultaneously adjusted by multiple logistical regression for all other characteristics and for race/ethnicity.

**Poverty statistics are based on a definition originated by the Social Security Administration in 1964, subsequently modified by federal interagency committess in 1969 and 1980, and prescribed by the Office of Management and Budget as the standard to be used by federal agencies for statistical purposes.

††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.

§§PM–=Did not use SLT during the month preceding the interview; ED–=Never used SLT daily for at least 1 month preceding the interview; ET–=Never tried SLT; ET+=Ever tried SLT; ED+=Ever used SLT daily for at least 1 month preceding the interview; PM+=Used SLT on ≥1 day during the month preceding the interview.

Tobacco Use — Continued

New Jersey. DC Barker, MHS, The California Wellness Foundation, Woodland Hills, California. Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: One of the national health objectives for the year 2000 is to increase to at least 75% the proportion of primary-care physicians who routinely provide smoking-cessation advice to their patients (objective 3.16) (4). In addition, the American Medical Association has recommended that primary-care physicians and other health-care providers ask adolescents annually about their use of tobacco products and patterns of use and provide a cessation plan to adolescents who use tobacco products (5). The findings in this report indicate that only approximately half of those persons aged 10–22 years who had ever smoked or used SLT daily and were current cigarette smokers or users of SLT recall ever receiving any communication about the use of cigarettes or SLT from physicians, dentists, or nurses.

The analysis of the TAPS II data is subject to at least two limitations. First, because these self-reported data are based on respondents' recollection of their communication with a health-care provider, they probably underestimate the interactions between patients and their health-care providers. Second, TAPS and TAPS II do not contain information about the number of visits to health-care providers. However, the likelihood that health-care providers will advise against tobacco use is directly related to the number of visits, and the average annual number of physician contacts varies by age, sex, race/ethnicity, and income level (6).

The analysis of TAPS is consistent with other reports documenting missed opportunities to provide information before adolescents begin to use tobacco (1,7,8). Although use of cigarettes and SLT begins early in adolescence (1), the TAPS findings indicate that only 24% of respondents who had tried a cigarette and only 13% of those who had tried SLT recalled hearing about tobacco use from a health-care provider. In addition, health-care providers were more likely to say something about tobacco use to patients who were current or heavy users, a pattern consistent with that for adults (9).

Basic strategies to prevent nicotine addiction in adolescents and young adults include tobacco tax increases, enforcement of laws preventing the access of minors to tobacco, youth-oriented mass media campaigns, and school-based tobacco-use prevention programs (1). In addition, the role of health-care providers is critical in preventing patients from initiating tobacco use or quitting if they become addicted to nicotine: patients who are told to quit smoking by their physician are nearly twice as likely to be preparing to quit than were those who had never been so advised (10). The National Cancer Institute and the American Medical Association have developed guidelines and national training programs to assist health-care providers in discussing both cigarette and SLT use with young patients (5,7,8). In addition, CDC, in conjunction with the American Medical Association, is funding new initiatives to foster development of innovative cessation services for adolescents.

References

1. US Department of Health and Human Services. Preventing tobacco use among young people: a report of the Surgeon General. Atlanta: US Department of Health and Human Services, Public Health Service, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1994.
2. Johnston LD, O'Mally PM, Bachman JG. National survey results on drug use from the Monitoring the Future study, 1975–1993. Volume 1: secondary school students. Rockville, Maryland:

Tobacco Use — Continued

- US Department of Health and Human Services, Public Health Service, National Institutes of Health, National Institute on Drug Abuse, 1994; NIH publication no. 94-3809.
3. Shah BV, Barnwell BG, Hunt PN, LaVange LM. Software for survey data analysis (SUDAAN) version 5.5 [Software documentation]. Research Triangle Park, North Carolina: Research Triangle Institute, 1991.
 4. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives—full report, with commentary. Washington, DC: US Department of Health and Human Services, Public Health Service, 1991; DHHS publication no. (PHS)91-50212.
 5. American Medical Association. Guidelines for adolescent preventive health services. Chicago: American Medical Association, 1993.
 6. Benson V, Marano MA. Current estimates from the National Health Interview Survey, 1993. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, CDC, NCHS, 1994. (Vital and health statistics; series 10, no. 190).
 7. Epps RP, Manley MW. Prevention of tobacco use during childhood and adolescence: five steps to prevent the onset of smoking. *Cancer* 1993;72:1002-4.
 8. Mecklenberg RE, Christen AG, Gerbert B, et al. How to help your patients stop using tobacco: a manual for the oral health team. Bethesda, Maryland: US Department of Health and Human Services, National Institutes of Health, National Cancer Institute, 1993; NIH publication no. 93-3191.
 9. Frank E, Winkleby MS, Altman DG, Rockhill B, Fortmann SP. Predictors of physicians' smoking cessation advice. *JAMA* 1991;266:3139-44.
 10. Gilpin EA, Pierce JP, Johnson M, Bal D. Physician advice to quit smoking: results from the 1990 California Tobacco Survey. *J Gen Intern Med* 1993;8:549-53.

Symptoms of Substance Dependence Associated with Use of Cigarettes, Alcohol, and Illicit Drugs — United States, 1991-1992

Each year in the United States, approximately 400,000 deaths result from cigarette smoking, 100,000 from misuse of alcohol, and 20,000 from use of illicit drugs (1). Many of the adverse health effects associated with the use of tobacco, alcohol, and illicit drugs result from long-term use caused by substance dependence (i.e., addiction) (2,3)—a cluster of cognitive, behavioral, and physiological symptoms indicating sustained psychoactive substance use despite substance-related problems (4). In addition, substance dependence is characterized by repeated self-administration that usually results in tolerance, withdrawal, and compulsive drug-taking behavior. Nicotine is the psychoactive substance in cigarettes and other forms of tobacco that accounts for the addictive properties of tobacco (2). In addition to tobacco, other potentially addictive substances include alcohol, marijuana, and cocaine (3). To assess the prevalence of selected indicators of substance dependence among the U.S. population, CDC and the National Institute on Drug Abuse analyzed data from the National Household Survey on Drug Abuse (NHSDA) (5) for 1991-1992. The findings in this report suggest that a symptom of substance dependence is more likely to be reported by persons who smoke cigarettes and persons who use cocaine than by persons who use alcohol or marijuana.

NHSDA is a household survey of a nationally representative sample of the U.S. civilian, noninstitutionalized population aged ≥ 12 years. Data from the 1991 and 1992 surveys were combined ($n=61,426$) to estimate the prevalence of daily use of cigarettes, alcohol, marijuana, and cocaine for ≥ 2 consecutive weeks during the preceding

Substance Dependence — Continued

12 months; attempts to reduce use; and four indicators of substance dependence among persons aged ≥ 12 years who reported having used one of the four substances one or more times during the 30 days preceding the survey. Indicators of dependence for other substances (including heroin, tranquilizers, sedatives, analgesics, and inhalants) were not analyzed because the numbers of persons who reported use were too small to calculate reliable estimates.

Information about the indicators of dependence was based on responses to four questions; persons who reported current use* of cigarettes, alcohol, marijuana, or cocaine were asked whether, during the 12 months preceding the survey, they 1) "felt [they] needed or were dependent on [the substance]," 2) "needed larger amounts to get the same effect," 3) "felt unable to cut down on [their] use even though [they] tried," and 4) "had withdrawal symptoms, that is, felt sick because [they] stopped or cut down on [their] use." The analysis of "unable to cut down" and "felt sick" was restricted to persons who reported trying to reduce their substance use during the preceding 12 months. Data were adjusted for nonresponse and weighted to provide national estimates. Standard errors were calculated by using SUDAAN (6).

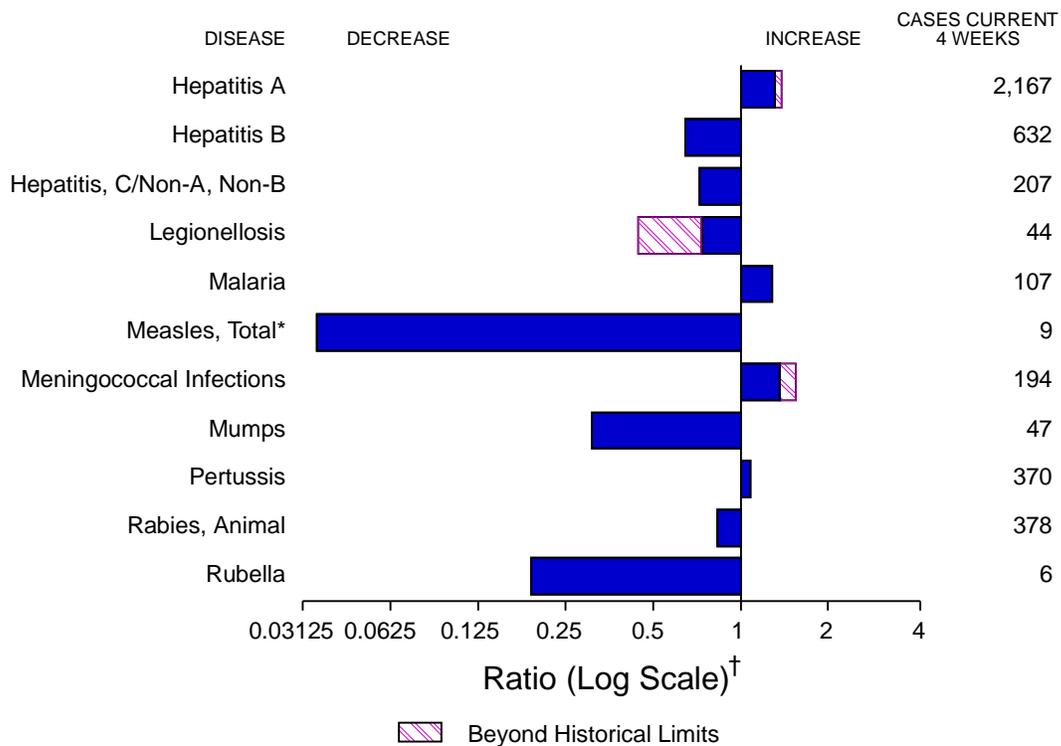
Of the 61,426 total NHDSA participants during 1991–1992, use of cigarettes, alcohol, marijuana, or cocaine during the 30 days preceding the survey was reported by 14,688 (26.6%), 27,814 (49.4%), 3904 (4.6%), and 821 (0.8%) persons, respectively (Table 1, page 837). Daily use of these substances for ≥ 2 consecutive weeks during the 12 months preceding the survey was reported by 78.4% of persons who smoked cigarettes, and by 22.6%, 13.8%, and 12.4% of those who used marijuana, alcohol, and cocaine, respectively. Cigarette smokers were more likely than persons who used the other substances to report having tried to cut down, and were approximately twice as likely as persons who used alcohol, marijuana, or cocaine to report having been unable to cut down (Table 1, page 837). Cigarette smokers were more likely than users of the other substances to report feeling dependent on the substance or feeling sick when they stopped or cut down on its use. Cigarette smokers (75.2%) were more likely to report one of the four symptoms of dependence than were persons who used cocaine (29.1%), marijuana (22.6%), or alcohol (14.1%).

To compare data for more frequent users, the analysis was restricted to persons who had used these substances daily for ≥ 2 consecutive weeks during the 12 months preceding the survey. Of the 47,227 current substance users, 14,615 (30.9%) reported daily use. Among these persons, those who smoked cigarettes were more likely than those who used alcohol or marijuana to report having been unable to cut down (Table 1, page 837). Persons who had used cocaine daily were more likely than persons who had used cigarettes, alcohol, or marijuana to report feeling a need for more of the substance to get the same effect. Persons who were daily cigarette smokers were more likely than persons who used alcohol, marijuana, or cocaine daily to report feeling dependent on the substance and were more likely than daily users of alcohol or marijuana to report feeling sick when they stopped or cut down. Among persons who had used any of the four substances every day for ≥ 2 consecutive weeks, those who smoked cigarettes (90.9%) and those who used cocaine (78.9%) were more likely to report a symptom of addiction than were persons who used alcohol (48.1%) or marijuana (58.8%).

(Continued on page 837)

*Used one or more times during the 30 days preceding the survey.

FIGURE I. Notifiable disease reports, comparison of 4-week totals ending November 4, 1995, with historical data — United States



*The large apparent decrease in the number of reported cases of measles (total) reflects dramatic fluctuations in the historical baseline.

[†]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 — cases of specified notifiable diseases, United States, cumulative, week ending November 4, 1995 (44th Week)

	Cum. 1995		Cum. 1995
Anthrax	-	Psittacosis	58
Brucellosis	75	Rabies, human	2
Cholera	14	Rocky Mountain Spotted Fever	499
Congenital rubella syndrome	6	Syphilis, congenital, age < 1 year [†]	469
Diphtheria	-	Tetanus	28
<i>Haemophilus influenzae</i> *	993	Toxic shock syndrome	157
Hansen Disease	114	Trichinosis	26
Plague	7	Typhoid fever	283
Poliomyelitis, Paralytic	-		

*Of 974 cases of known age, 231 (24%) were reported among children less than 5 years of age.

[†]Updated quarterly from reports to the Division of STD Prevention, National Center for Prevention Services. This total through third quarter 1995.

-: no reported cases

TABLE II. Cases of selected notifiable diseases, United States, weeks ending November 4, 1995, and November 5, 1994 (44th Week)

Reporting Area	AIDS*	Gonorrhea		Hepatitis (Viral), by type						Legionellosis	
				A		B		C/NA,NB			
				Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994		
UNITED STATES	59,806	293,125	345,214	24,311	20,912	8,221	9,694	3,156	3,457	1,010	1,331
NEW ENGLAND	2,862	5,177	7,288	266	252	170	288	19	128	30	70
Maine	81	72	82	27	23	7	11	-	-	5	5
N.H.	79	95	98	9	16	18	24	12	10	2	-
Vt.	30	54	31	5	10	1	9	-	12	-	-
Mass.	1,245	2,445	2,771	114	93	70	158	-	86	19	49
R.I.	210	452	398	32	23	8	8	7	20	4	16
Conn.	1,217	2,059	3,908	79	87	66	78	-	-	N	N
MID. ATLANTIC	16,251	27,936	38,615	1,480	1,442	1,084	1,280	389	385	166	217
Upstate N.Y.	1,978	3,846	9,508	396	478	333	328	206	181	46	49
N.Y. City	8,425	10,058	13,984	691	562	314	307	1	1	4	7
N.J.	3,885	3,470	4,322	207	245	273	319	143	172	24	37
Pa.	1,963	10,562	10,801	186	157	164	326	39	31	92	124
E.N. CENTRAL	4,463	62,091	68,897	2,615	2,125	854	1,005	234	284	271	378
Ohio	884	17,515	17,856	1,554	808	93	141	13	20	133	173
Ind.	473	7,002	7,821	151	336	197	181	6	9	63	41
Ill.	1,877	17,708	21,074	428	518	172	268	55	77	16	37
Mich.	923	15,046	15,510	324	259	343	333	160	178	29	72
Wis.	306	4,820	6,636	158	204	49	82	-	-	30	55
W.N. CENTRAL	1,415	16,561	19,247	1,600	1,062	515	570	110	75	99	88
Minn.	303	2,540	2,782	166	214	55	55	4	16	6	2
Iowa	91	1,335	1,287	54	56	42	24	12	11	19	29
Mo.	646	9,471	10,743	1,123	539	343	432	68	19	47	34
N. Dak.	6	24	34	23	5	4	-	8	1	4	4
S. Dak.	18	188	187	61	34	2	2	1	-	3	1
Nebr.	93	757	1,060	43	119	29	28	6	12	13	13
Kans.	258	2,246	3,154	130	95	40	29	11	16	7	5
S. ATLANTIC	15,414	88,931	92,189	1,130	1,081	1,229	1,763	294	365	165	325
Del.	266	1,928	1,678	8	21	8	14	1	1	2	31
Md.	2,305	7,471	15,923	194	159	223	304	4	18	29	73
D.C.	894	4,005	6,100	21	21	19	46	-	1	4	7
Va.	1,210	8,900	11,496	176	155	95	112	18	23	18	8
W. Va.	96	585	688	22	19	48	37	43	35	4	3
N.C.	898	20,669	24,161	93	119	254	241	49	53	31	25
S.C.	814	10,271	11,361	42	35	47	28	16	9	31	15
Ga.	1,990	17,735	U	53	28	62	520	13	179	14	108
Fla.	6,941	17,367	20,782	521	524	473	461	150	46	32	55
E.S. CENTRAL	1,922	35,212	39,968	1,644	541	695	1,023	797	812	43	78
Ky.	245	4,112	4,370	39	140	60	71	22	27	10	9
Tenn.	763	11,615	13,166	1,357	251	539	880	773	770	24	40
Ala.	523	14,159	12,880	76	84	96	72	2	15	6	13
Miss.	391	5,326	9,552	172	66	-	-	-	-	3	16
W.S. CENTRAL	5,162	28,184	42,064	3,942	2,696	1,256	1,101	284	271	17	37
Ark.	223	3,201	5,666	515	165	54	24	4	7	1	6
La.	880	9,320	10,400	124	135	192	146	140	151	3	13
Okla.	235	4,658	4,025	920	312	188	118	58	52	5	11
Tex.	3,824	11,005	21,973	2,383	2,084	822	813	82	61	8	7
MOUNTAIN	1,827	7,015	8,733	3,322	4,182	674	553	351	384	102	75
Mont.	20	61	76	137	20	19	19	13	12	4	14
Idaho	41	104	76	268	319	72	69	41	67	2	1
Wyo.	13	46	76	99	25	25	23	142	144	12	4
Colo.	571	2,420	3,022	467	477	116	86	54	62	38	17
N. Mex.	148	878	886	706	949	258	176	39	45	4	3
Ariz.	555	2,591	2,809	895	1,672	92	63	37	24	9	9
Utah	113	131	243	613	511	62	65	10	16	16	6
Nev.	366	784	1,545	137	209	30	52	15	14	17	21
PACIFIC	10,490	22,018	28,213	8,312	7,531	1,744	2,111	678	753	117	63
Wash.	785	2,273	2,518	712	938	162	195	184	228	20	12
Oreg.	387	279	867	1,982	918	93	136	30	37	-	-
Calif.	9,051	18,373	23,457	5,431	5,439	1,466	1,742	431	483	92	48
Alaska	62	609	762	48	187	10	13	2	-	-	-
Hawaii	205	484	609	139	49	13	25	31	5	5	3
Guam	-	66	113	5	22	1	4	-	-	1	1
P.R.	1,967	501	422	85	76	459	327	18	167	-	-
V.I.	30	6	37	-	3	2	7	-	1	-	-
Amer. Samoa	-	28	30	6	8	-	-	-	-	-	-
C.N.M.I.	-	42	45	18	8	13	1	-	-	-	-

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

*Updated monthly to the Division of HIV/AIDS Prevention, National Center for Prevention Services, last update October 26, 1995.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending November 4, 1995, and November 5, 1994 (44th Week)

Reporting Area	Lyme Disease		Malaria		Measles (Rubeola)						Meningococcal Infections		Mumps		
	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Indigenous		Imported*		Total		Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	
					1995	Cum. 1995	1995	Cum. 1995	Cum. 1995	Cum. 1994					
UNITED STATES	7,485	10,610	1,087	929	3	253	1	28	281	876	2,534	2,306	687	1,225	
NEW ENGLAND	1,728	2,513	42	67	1	8	-	-	2	10	27	124	107	11	19
Maine	25	24	6	6	-	-	-	-	-	5	10	19	4	3	
N.H.	23	27	1	3	-	-	-	-	-	1	21	8	1	4	
Vt.	8	15	1	3	-	-	-	-	-	3	10	2	-	-	
Mass.	182	177	15	31	1	2	-	1	3	7	42	51	2	3	
R.I.	285	427	4	8	-	5	-	-	5	7	-	-	1	2	
Conn.	1,205	1,843	15	16	-	1	-	1	2	4	41	27	3	7	
MID. ATLANTIC	4,752	6,384	288	184	-	7	-	5	12	221	289	249	100	100	
Upstate N.Y.	2,426	3,965	58	47	-	1	-	-	1	26	89	80	24	29	
N.Y. City	203	25	154	64	-	2	-	3	5	14	42	30	15	9	
N.J.	1,087	1,257	54	43	-	4	-	2	6	173	75	53	13	13	
Pa.	1,036	1,137	22	30	-	-	-	-	-	8	83	86	48	49	
E.N. CENTRAL	73	508	117	97	-	7	-	4	11	102	350	342	133	220	
Ohio	46	40	11	15	-	1	-	1	2	17	102	101	47	63	
Ind.	14	18	15	13	-	-	-	-	-	1	63	46	4	7	
Ill.	8	23	53	41	-	-	-	2	2	56	81	108	37	96	
Mich.	5	25	24	25	-	4	-	1	5	25	65	50	45	41	
Wis.	-	402	14	3	-	2	-	-	2	3	39	37	-	13	
W.N. CENTRAL	200	277	23	42	-	2	-	-	2	170	172	148	41	63	
Minn.	129	150	4	13	-	-	-	-	-	-	27	15	4	4	
Iowa	13	15	2	5	-	-	-	-	-	7	30	18	9	16	
Mo.	35	97	8	12	-	1	-	-	1	160	71	72	22	38	
N. Dak.	-	-	1	1	-	-	-	-	-	-	1	1	1	4	
S. Dak.	-	-	2	-	-	-	-	-	-	-	6	8	-	-	
Nebr.	3	3	3	5	-	-	-	-	-	2	14	13	4	1	
Kans.	20	12	3	6	-	1	-	-	1	1	23	21	1	-	
S. ATLANTIC	474	692	226	202	1	12	-	1	13	66	466	340	92	174	
Del.	23	102	1	3	-	-	-	-	-	-	6	5	-	-	
Md.	267	222	61	75	-	-	-	1	1	4	33	31	20	53	
D.C.	2	7	16	14	-	-	-	-	-	-	6	4	-	-	
Va.	50	121	50	32	-	-	-	-	-	3	57	63	21	39	
W. Va.	22	23	4	-	-	-	-	-	-	37	8	12	-	3	
N.C.	65	76	15	11	-	-	-	-	-	3	71	47	16	36	
S.C.	16	7	1	4	-	-	-	-	-	-	55	26	11	7	
Ga.	13	117	37	32	1	3	-	-	3	4	94	70	8	9	
Fla.	16	17	41	31	-	9	-	-	9	15	136	82	16	27	
E.S. CENTRAL	42	40	22	31	-	-	-	-	-	28	155	166	15	21	
Ky.	9	23	2	11	-	-	-	-	-	-	50	35	-	-	
Tenn.	20	11	9	10	-	-	-	-	-	28	37	35	2	7	
Ala.	8	6	8	9	-	-	-	-	-	-	37	65	4	5	
Miss.	5	-	3	1	-	-	-	-	-	-	31	31	9	9	
W.S. CENTRAL	101	112	48	41	-	28	-	3	31	17	306	274	48	214	
Ark.	9	8	2	3	-	2	-	-	2	1	29	40	9	5	
La.	6	1	5	8	-	17	-	1	18	1	46	34	12	27	
Okla.	43	64	1	7	-	-	-	-	-	-	33	28	-	23	
Tex.	43	39	40	23	-	9	-	2	11	15	198	172	27	159	
MOUNTAIN	11	15	55	29	1	68	1	2	70	164	172	149	25	149	
Mont.	-	-	3	-	-	-	-	-	-	-	2	6	1	-	
Idaho	-	3	1	2	1	1	1	1	2	1	9	16	3	8	
Wyo.	3	4	-	1	-	-	-	-	-	-	7	7	-	2	
Colo.	-	1	25	13	-	26	-	-	26	19	45	30	2	4	
N. Mex.	1	5	6	3	-	30	-	1	31	-	35	13	N	N	
Ariz.	1	-	10	4	U	10	U	-	10	1	51	51	2	96	
Utah	1	1	6	4	-	-	-	-	-	134	15	18	11	26	
Nev.	5	1	4	2	-	1	-	-	1	9	8	8	6	13	
PACIFIC	104	69	266	236	-	121	-	11	132	81	500	531	222	265	
Wash.	10	3	21	29	-	16	-	4	20	4	80	83	12	18	
Oreg.	9	6	19	15	-	-	-	3	3	2	92	116	N	N	
Calif.	85	60	213	176	-	105	-	3	108	61	312	324	190	226	
Alaska	-	-	3	2	-	-	-	-	-	10	12	2	13	4	
Hawaii	-	-	10	14	-	-	-	1	1	4	4	6	7	17	
Guam	-	-	-	-	U	-	U	-	-	228	3	-	3	6	
P.R.	-	-	1	4	-	11	-	-	11	11	23	7	2	2	
V.I.	-	-	-	-	U	-	U	-	-	-	-	-	2	4	
Amer. Samoa	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
C.N.M.I.	-	-	1	1	U	-	U	-	-	29	-	-	-	2	

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

N: Not notifiable U: Unavailable -: no reported cases

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending November 4, 1995, and November 5, 1994 (44th Week)

Reporting Area	Pertussis			Rubella			Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal	
	1995	Cum. 1995	Cum. 1994	1995	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994
UNITED STATES	84	3,451	3,455	1	135	209	12,400	18,008	16,772	18,452	5,924	6,608
NEW ENGLAND	22	477	419	-	47	128	142	186	429	419	1,330	1,649
Maine	-	40	18	-	1	-	2	4	12	23	45	-
N.H.	1	46	72	-	1	-	1	4	18	14	131	189
Vt.	-	64	41	-	-	-	-	-	2	7	161	125
Mass.	21	298	250	-	7	124	58	79	240	215	385	621
R.I.	-	4	6	-	-	2	4	13	41	37	291	40
Conn.	-	25	32	-	38	2	77	86	116	123	317	674
MID. ATLANTIC	23	328	539	1	14	6	690	1,194	3,453	3,779	1,130	1,758
Upstate N.Y.	16	181	201	1	5	5	43	154	435	506	443	1,313
N.Y. City	-	33	142	-	8	-	332	529	1,846	2,163	-	-
N.J.	-	14	15	-	1	1	141	199	658	660	299	233
Pa.	7	100	181	-	-	-	174	312	514	450	388	212
E.N. CENTRAL	14	342	522	-	5	9	2,192	2,646	1,637	1,766	85	57
Ohio	13	141	143	-	-	-	755	1,013	232	289	12	4
Ind.	-	52	55	-	1	-	241	215	202	157	12	13
Ill.	-	73	98	-	1	1	795	901	811	887	15	20
Mich.	1	64	86	-	3	8	253	252	331	382	37	12
Wis.	-	12	140	-	-	-	148	265	61	51	9	8
W.N. CENTRAL	-	241	186	-	-	2	640	1,020	489	499	308	189
Minn.	-	127	85	-	-	-	34	40	118	116	20	15
Iowa	-	11	18	-	-	-	40	56	53	53	109	75
Mo.	-	53	39	-	-	2	529	858	190	219	22	23
N. Dak.	-	8	4	-	-	-	-	1	3	9	25	10
S. Dak.	-	11	19	-	-	-	-	2	21	22	86	33
Nebr.	-	9	9	-	-	-	11	11	20	17	5	-
Kans.	-	22	12	-	-	-	26	52	84	63	41	33
S. ATLANTIC	2	301	319	-	25	15	3,195	4,694	2,792	3,279	1,842	1,739
Del.	-	10	3	-	-	-	15	24	46	39	74	55
Md.	-	35	67	-	-	-	137	272	241	289	265	473
D.C.	-	6	8	-	-	-	96	189	89	100	11	2
Va.	-	19	36	-	-	-	511	688	202	292	373	355
W. Va.	-	-	4	-	-	-	10	9	60	68	103	66
N.C.	-	110	78	-	1	-	968	1,443	377	407	418	150
S.C.	-	25	13	-	1	-	505	704	278	327	112	153
Ga.	2	28	28	-	-	2	630	709	319	565	248	332
Fla.	-	68	82	-	23	13	323	656	1,180	1,192	238	153
E.S. CENTRAL	-	262	125	-	-	-	3,205	3,357	1,339	1,334	255	165
Ky.	-	20	60	-	-	-	175	176	250	265	26	20
Tenn.	-	204	22	-	-	-	756	906	360	442	86	34
Ala.	-	35	31	-	-	-	552	573	344	372	134	107
Miss.	-	3	12	N	N	N	1,722	1,702	385	255	9	4
W.S. CENTRAL	1	268	180	-	8	13	1,642	3,884	2,187	2,377	521	592
Ark.	-	36	27	-	1	-	90	404	33	204	-	31
La.	1	17	10	-	-	-	876	1,480	6	15	43	63
Okla.	-	31	26	-	-	4	160	136	326	208	28	34
Tex.	-	184	117	-	7	9	516	1,864	1,822	1,950	450	464
MOUNTAIN	8	474	418	-	5	5	206	212	543	470	156	142
Mont.	-	3	9	-	-	-	4	3	10	9	42	18
Idaho	-	90	49	-	-	-	-	1	14	11	3	3
Wyo.	-	1	-	-	1	-	1	1	4	8	24	19
Colo.	3	87	199	-	-	-	100	107	66	66	9	18
N. Mex.	5	112	22	-	-	-	34	19	71	55	6	7
Ariz.	U	149	106	U	3	-	34	40	257	182	49	55
Utah	-	27	30	-	1	4	4	11	37	41	15	13
Nev.	-	5	3	-	-	1	29	30	84	98	8	9
PACIFIC	14	758	747	-	31	31	488	815	3,903	4,529	297	317
Wash.	14	276	102	-	2	-	13	30	202	218	7	15
Oreg.	-	46	91	-	2	4	7	33	39	90	-	13
Calif.	-	389	537	-	24	23	467	746	3,456	3,940	286	256
Alaska	-	1	-	-	-	-	1	3	63	74	4	33
Hawaii	-	46	17	-	3	4	-	3	143	207	-	-
Guam	U	1	2	U	-	1	8	3	38	73	-	-
P.R.	-	14	2	-	-	-	268	278	195	167	45	70
V.I.	U	-	-	U	-	-	2	28	-	-	-	-
Amer. Samoa	-	-	1	-	-	-	-	1	4	4	-	-
C.N.M.I.	U	-	-	U	-	-	12	1	16	28	-	-

U: Unavailable - : no reported cases

**TABLE III. Deaths in 121 U.S. cities,* week ending
November 4, 1995 (44th Week)**

Reporting Area	All Causes, By Age (Years)						P&J†	Total	Reporting Area	All Causes, By Age (Years)						P&J†	Total
	All Ages	≥65	45-64	25-44	1-24	<1				All Ages	≥65	45-64	25-44	1-24	<1		
NEW ENGLAND	603	428	102	38	18	17	27	S. ATLANTIC	985	606	211	110	35	23	69		
Boston, Mass.	131	80	28	9	6	8	4	Atlanta, Ga.	163	87	37	29	8	2	4		
Bridgeport, Conn.	37	26	6	2	2	1	-	Baltimore, Md.	126	72	26	23	4	1	13		
Cambridge, Mass.	29	21	8	-	-	-	3	Charlotte, N.C.	73	49	13	7	2	2	7		
Fall River, Mass.	20	14	4	1	1	-	1	Jacksonville, Fla.	104	73	22	6	1	2	5		
Hartford, Conn.	71	39	16	11	2	3	-	Miami, Fla.	99	60	24	12	2	1	-		
Lowell, Mass.	34	30	4	-	-	-	5	Norfolk, Va.	60	38	11	5	3	3	6		
Lynn, Mass.	21	14	6	1	-	-	2	Richmond, Va.	90	63	18	5	3	1	7		
New Bedford, Mass.	28	24	1	2	1	-	1	Savannah, Ga.	57	22	13	10	6	6	7		
New Haven, Conn.	38	27	7	1	1	2	1	St. Petersburg, Fla.	54	39	10	2	1	2	4		
Providence, R.I.	68	53	5	5	4	1	3	Tampa, Fla.	149	98	32	11	5	3	16		
Somerville, Mass.	6	3	2	1	-	-	1	Washington, D.C.	U	U	U	U	U	U	U		
Springfield, Mass.	42	34	4	2	1	1	3	Wilmington, Del.	10	5	5	-	-	-	-		
Waterbury, Conn.	32	29	3	-	-	-	2	E.S. CENTRAL	798	541	144	79	19	14	57		
Worcester, Mass.	46	34	8	3	-	1	1	Birmingham, Ala.	111	70	18	14	4	5	3		
MID. ATLANTIC	2,249	1,503	413	259	33	41	107	Chattanooga, Tenn.	80	55	15	8	1	1	8		
Albany, N.Y.	45	33	7	3	-	2	2	Knoxville, Tenn.	103	67	21	12	1	2	12		
Allentown, Pa.	U	U	U	U	U	U	U	Lexington, Ky.	58	42	12	3	1	-	4		
Buffalo, N.Y.	103	81	13	7	-	2	14	Memphis, Tenn.	212	155	38	14	4	1	17		
Camden, N.J.	43	26	7	4	3	3	3	Mobile, Ala.	38	23	4	8	1	2	3		
Elizabeth, N.J.	38	31	5	2	-	-	1	Montgomery, Ala.	54	39	9	2	1	2	2		
Erie, Pa.§	43	35	4	3	-	1	1	Nashville, Tenn.	142	90	27	18	6	1	8		
Jersey City, N.J.	62	45	9	7	-	1	2	W.S. CENTRAL	1,258	801	253	116	49	39	71		
New York City, N.Y.	1,201	762	252	155	17	15	39	Austin, Tex.	79	50	16	10	-	3	6		
Newark, N.J.	55	26	8	15	3	3	-	Baton Rouge, La.	74	49	12	9	2	2	-		
Paterson, N.J.	27	19	3	5	-	-	-	Corpus Christi, Tex.	47	32	10	1	1	3	1		
Philadelphia, Pa.	300	191	56	39	5	9	13	Dallas, Tex.	213	129	43	20	11	10	6		
Pittsburgh, Pa.§	43	33	7	2	1	-	2	El Paso, Tex.	46	29	11	3	1	2	5		
Reading, Pa.	12	10	1	1	-	-	4	Ft. Worth, Tex.	83	53	17	9	3	1	6		
Rochester, N.Y.	110	81	20	6	2	1	8	Houston, Tex.	185	104	45	27	7	2	9		
Schenectady, N.Y.	28	21	5	2	-	-	-	Little Rock, Ark.	45	33	6	3	2	1	7		
Scranton, Pa.§	23	19	3	1	-	-	-	New Orleans, La.	96	50	23	14	8	1	-		
Syracuse, N.Y.	78	63	7	3	1	4	15	San Antonio, Tex.	210	142	37	17	7	7	18		
Trenton, N.J.	20	14	2	3	1	-	3	Shreveport, La.	70	54	13	1	2	-	8		
Utica, N.Y.	18	13	4	1	-	-	1	Tulsa, Okla.	110	76	20	2	5	7	5		
Yonkers, N.Y.	U	U	U	U	U	U	U	MOUNTAIN	884	584	169	84	28	19	57		
E.N. CENTRAL	2,151	1,482	392	181	50	44	147	Albuquerque, N.M.	108	70	23	13	1	1	6		
Akron, Ohio	49	34	8	4	1	2	-	Colo. Springs, Colo.	51	35	8	4	1	3	3		
Canton, Ohio	35	28	5	-	2	-	1	Denver, Colo.	99	60	23	10	2	4	4		
Chicago, Ill.	387	249	71	45	15	5	36	Las Vegas, Nev.	168	107	40	11	8	2	9		
Cincinnati, Ohio	223	159	49	11	1	3	14	Ogden, Utah	22	15	3	3	1	-	1		
Cleveland, Ohio	150	91	38	17	1	3	4	Phoenix, Ariz.	155	94	28	19	8	6	15		
Columbus, Ohio	157	103	36	11	6	1	16	Pueblo, Colo.	22	18	4	-	-	-	1		
Dayton, Ohio	123	107	13	3	-	-	8	Salt Lake City, Utah	114	80	16	11	4	3	12		
Detroit, Mich.	225	133	41	35	7	9	6	Tucson, Ariz.	145	105	24	13	3	-	6		
Evansville, Ind.	45	38	5	2	-	-	3	PACIFIC	1,294	886	221	120	44	23	120		
Fort Wayne, Ind.	55	38	7	5	2	3	3	Berkeley, Calif.	20	13	2	5	-	-	1		
Gary, Ind.	19	14	4	-	-	1	-	Fresno, Calif.	87	67	10	3	4	3	6		
Grand Rapids, Mich.	45	32	8	5	-	-	9	Glendale, Calif.	U	U	U	U	U	U	U		
Indianapolis, Ind.	191	127	38	17	5	4	12	Honolulu, Hawaii	92	59	15	11	3	4	7		
Madison, Wis.	54	41	10	1	-	2	6	Long Beach, Calif.	77	53	17	4	3	-	13		
Milwaukee, Wis.	111	79	16	11	1	4	9	Los Angeles, Calif.	U	U	U	U	U	U	U		
Peoria, Ill.	33	25	6	1	1	-	3	Pasadena, Calif.	16	15	-	1	-	-	-		
Rockford, Ill.	47	31	10	1	3	2	4	Portland, Ore.	123	90	16	10	3	4	7		
South Bend, Ind.	42	32	5	3	2	-	5	Sacramento, Calif.	184	122	38	17	7	-	19		
Toledo, Ohio	93	69	14	6	2	2	5	San Diego, Calif.	119	74	19	18	7	1	16		
Youngstown, Ohio	67	52	8	3	1	3	3	San Francisco, Calif.	146	89	31	22	1	3	17		
W.N. CENTRAL	908	616	151	71	36	12	55	San Jose, Calif.	158	114	27	6	5	6	23		
Des Moines, Iowa	82	60	11	7	4	-	10	Santa Cruz, Calif.	28	19	6	2	1	-	1		
Duluth, Minn.	15	12	2	1	-	-	4	Seattle, Wash.	116	82	16	13	4	1	7		
Kansas City, Kans.	63	43	15	-	4	1	-	Spokane, Wash.	50	36	8	4	2	-	1		
Kansas City, Mo.	130	72	18	15	3	-	6	Tacoma, Wash.	78	53	16	4	4	1	2		
Lincoln, Nebr.	29	17	9	3	-	-	1	TOTAL	11,130 [¶]	7,447	2,056	1,058	312	232	710		
Minneapolis, Minn.	196	143	29	15	6	3	16										
Omaha, Nebr.	87	61	16	6	3	1	3										
St. Louis, Mo.	111	80	13	9	7	2	4										
St. Paul, Minn.	60	43	9	3	3	2	6										
Wichita, Kans.	135	85	29	12	6	3	5										

*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. 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 these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶Total includes unknown ages.

U: Unavailable - : no reported cases

TABLE 1. Percentage of respondents* who reported current substance use† during the 12 months preceding the survey, by selected indicators of dependence‡ — United States, National Household Survey on Drug Abuse, 1991–1992

Category/ Substance	No. persons who reported use	Used daily for ≥2 weeks		Tried to cut down		Unable to cut down		Felt need for more		Felt dependent		Felt sick when stopped		≥1 indicator¶	
		%	(95% CI)**	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
All respondents††															
Cigarettes	14,688	78.4	(±1.7)	64.4	(± 1.7)	76.6	(± 1.8)	14.0	(± 1.2)	68.9	(± 1.7)	34.9	(± 2.0)	75.2	(± 1.6)
Alcohol	27,814	13.8	(±0.9)	25.1	(± 1.0)	39.8	(± 2.5)	5.8	(± 0.5)	6.6	(± 0.6)	8.8	(± 1.4)	14.1	(± 0.8)
Marijuana	3,904	22.6	(±2.5)	31.7	(± 2.5)	33.6	(± 4.2)	10.3	(± 1.6)	12.2	(± 1.6)	9.8	(± 2.6)	22.6	(± 2.1)
Cocaine	821	12.4	(±4.0)	39.7	(± 7.1)	38.4	(±10.8)	17.6	(± 5.3)	13.9	(± 3.8)	19.4	(± 8.1)	29.1	(± 6.3)
Daily users§§															
Cigarettes	10,343	NA¶¶	NA	74.9	(± 1.9)	79.6	(± 1.8)	17.5	(± 1.5)	85.0	(± 1.4)	37.4	(± 2.1)	90.9	(± 1.1)
Alcohol	3,335	NA	NA	48.8	(± 3.8)	61.7	(± 5.3)	23.9	(± 3.2)	32.8	(± 2.9)	25.4	(± 4.0)	48.1	(± 3.7)
Marijuana	830	NA	NA	51.9	(± 6.1)	49.9	(± 7.1)	30.7	(± 5.3)	39.0	(± 5.8)	17.8	(± 5.4)	59.8	(± 6.3)
Cocaine	107	NA	NA	72.1	(±15.6)	66.0	(±21.4)	65.0	(±17.7)	62.7	(±17.9)	48.9	(±20.8)	78.9	(±14.9)

* Aged ≥12 years.

† Used cigarettes, alcohol, marijuana, or cocaine one or more times during the 30 days preceding the survey.

‡ Tried to cut down on the use of substance; "felt unable to cut down on [their] use even though [they] tried"; "needed larger amounts to get the same effect"; "felt [they] needed or were dependent on [the substance]"; "had withdrawal symptoms, that is, felt sick because [they] stopped or cut down on [their] use."

¶ Current substance users who responded yes to at least one of the last four indicators.

** 95% Confidence interval.

†† n=61,426.

§§ Respondents who reported daily use for ≥2 consecutive weeks during the 12 months preceding the survey; n=14,615.

¶¶ Not applicable.

Substance Dependence — Continued

To determine whether the prevalence of reported symptoms varied for different measures of frequency of use, the analysis was further restricted to persons who reported that, on average, they used each substance on a daily or weekly basis during the 12 months preceding the survey. Although the prevalence estimates varied within each category of substance use, the relative ranking of the substances by frequency of symptoms of dependency remained constant.

Reported by: J Henningfield, Clinical Pharmacology Research Br, Addiction Research Center, National Institute on Drug Abuse. Epidemiology Br, Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: The findings in this report suggest that persons who smoked cigarettes and persons who used cocaine were more likely than those who used alcohol or marijuana to report a symptom of substance dependence after controlling for frequency of use. The high level of dependency associated with cigarette smoking may account, in part, for the low success rate for attempts to quit smoking (only 2.5% of smokers successfully quit each year) even though most smokers report wanting to quit smoking (7). In addition, a high proportion (73%) of adolescents who smoke but who intended to quit smoking in 5–6 years were still smoking 5 years later (8).

The findings in this report are subject to at least three limitations. First, the four NHSDA indicators do not provide a comprehensive measure of substance dependence because not all symptoms of the withdrawal syndromes characteristic of each substance were included. As a result, the proportion of persons who reported at least one indicator of substance dependence may be underestimated. Second, the categories of substance use were not mutually exclusive, and possible interactions experienced by users of multiple substances were not examined. Finally, these findings are based on self-reported data, and self-perception of substance dependence was not validated; however, self-reported symptoms of nicotine dependence have been confirmed previously by observer rating (2).

Although the severity of dependence can be estimated by the number of symptoms reported for persons using a particular psychoactive substance (4), criteria have not been developed to enable comparisons of the severity of dependence of different substances (9). Therefore, the findings in this report cannot be interpreted to indicate that nicotine produces more severe addiction than cocaine, marijuana, or alcohol. In addition, differences in the patterns of use of these substances and in the development of dependency may reflect their availability and accessibility: because cigarettes and alcohol are legal for adults, they are more available and accessible than marijuana and cocaine. Other factors that may account for some of these differences include price, advertising and promotion, social pressure, regulations, sanctions, and pharmacologic characteristics (9).

The use of cigarettes, alcohol, and illicit drugs all result in excess dependence, morbidity, and mortality and in substantial economic costs (1,3,10). Public health interventions that decrease the availability and social acceptability of tobacco use assist in reducing the initiation of use and the development of nicotine addiction (8). These approaches include reducing illegal sales of tobacco to minors, increasing the real price of tobacco products, restricting tobacco advertising and promotion targeted toward minors, and conducting educational and advertising campaigns that “deglamorize” tobacco use. School- and community-based educational interventions can help prevent tobacco initiation (8) and the use of alcohol and other substances (10). In

Substance Dependence — Continued

addition, improved access to substance-dependence treatment programs may help reduce the health burden resulting from the use of tobacco, alcohol, and illicit drugs (10).

References

1. McGinnis JM, Foege WH. Actual causes of death in the United States. *JAMA* 1993;270:2207–12.
2. CDC. The health consequences of smoking: nicotine addiction—a report of the Surgeon General. Rockville, Maryland: US Department of Health and Human Services, Public Health Service, CDC, 1988; DHHS publication no. (CDC)88-8406.
3. Schuster CR, Kilbey MM. Prevention of drug abuse. In: Maxcy KF, Rosenau MJ, Last JM, (eds). Maxcy-Rosenau-Last public health and preventive medicine. 13th ed. East Norwalk, Connecticut: Appleton and Lange, 1992.
4. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 4th ed. Washington, DC: American Psychiatric Association, 1994.
5. Substance Abuse and Mental Health Services Administration. National Household Survey on Drug Abuse: population estimates, 1992. Rockville, Maryland: US Department of Health and Human Services, Public Health Service, Substance Abuse and Mental Health Services Administration, 1993; DHHS publication no. (SMA)93-2053.
6. Shah BV. Software for survey data analysis (SUDAAN), version 5.5 [Software documentation]. Research Triangle Park, North Carolina: Research Triangle Institute, 1991.
7. CDC. Smoking cessation during previous year among adults—United States, 1990 and 1991. *MMWR* 1993;42:504–7.
8. US Department of Health and Human Services. Preventing tobacco use among young people: a report of the Surgeon General. Atlanta, Georgia: US Department of Health and Human Services, Public Health Service, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1994.
9. Henningfield JE, Cohen C, Slade JD. Is nicotine more addictive than cocaine? *Br J Addict* 1991;86:565–9.
10. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives—full report, with commentary. Washington, DC: US Department of Health and Human Services, Public Health Service, 1991; DHHS publication no. (PHS)91-50212.

Minors' Access to Smokeless Tobacco — Florida, 1994

Laws enacted by the legislature in Florida to restrict access of minors to tobacco (Florida Revised Statutes 859.06–859.061) went into effect October 1, 1992, and May 20, 1994; these laws prohibit the sale of tobacco products to persons aged <18 years and require the posting of a warning sign indicating that such sales to minors are illegal. Merchants convicted for such violations can be fined up to \$500 and imprisoned up to 60 days. Florida and Vermont are the only states that enforce access laws restricting the sale of tobacco to minors statewide (1). Although minors' access to cigarettes is well documented, the extent to which minors have access to smokeless tobacco (SLT) has not been well characterized. To assess the effectiveness of the Florida laws in preventing minors from gaining over-the-counter access to SLT and in ensuring that tobacco vendors comply with the sign statute, in November 1994, the Department of Exercise Science/Wellness Education of Florida Atlantic University conducted a study of minors' attempts to access SLT in Palm Beach County (1990 population: 863,518). The findings in this report indicate that, despite the enactment of laws prohibiting the sale of tobacco products to persons aged <18 years, some minors still were successful at purchasing SLT.

Smokeless Tobacco — Continued

The 1994–95 Florida Business Directory was used to identify four categories of retail outlets in Palm Beach County: convenience stores, grocery stores, pharmacies, and gasoline stations (n=722). A map of the county was divided into 12 equally sized areas; within each of these areas, 11 sample retail sites were randomly selected to produce a total sample of 132 retail sites. Of the 132 sites, 44 were excluded from the assessment because they had closed, had moved, no longer sold tobacco products, or were considered by the adult team member at the time of the purchase attempt to be in unsafe areas. The remaining 88 stores represented 12% of the 722 retail sites in the county, and comprised 25 (17%) of 149 pharmacies, 10 (8%) of 125 grocery stores, 39 (16%) of 246 gas stations, and 14 (7%) of 202 convenience stores. Four teams of volunteers, each comprising one minor (from among four minors aged 11–17 years) and one adult, were used for the assessment; three of the minors were female, aged 11, 14, and 17 years, and one was a 14-year-old male. One purchase attempt was made at each of the 88 stores.

Purchase attempts followed a standard procedure: the adult member of the team entered the store first to note the presence of any clearly displayed signs stating that tobacco products would not be sold to minors. The adult then observed while the minor entered the retail site, selected a SLT (i.e., snuff or loose-leaf or fine-cut chewing tobacco) and attempted to purchase the product. If a sale was recorded on the cash register or the vendor placed the SLT on the counter for purchase by the minor, the attempt was considered successful; the minor would then state that he or she had insufficient money for purchase and would immediately leave the store. The attempt also was considered successful if the vendor asked the minor's age but was prepared to sell the SLT.* If the minor was denied purchase outright or was asked for age verification and denied purchase, the attempt was considered unsuccessful. The adult member recorded reasons for refusal as stated by the vendor at the time of attempted purchase; when no refusal reason was provided to the minor, the adult team member waited until the minor had departed and then asked the vendor about the reason for refusal. Significance testing was performed using Pearson chi-square tests.

Overall, attempts by minors to purchase SLT were successful in 31 (35%) of the 88 retail sites. The likelihood of a successful attempt was greater for the 17-year-old female (24 [77%] of 31 attempts) ($p<0.01$). The likelihood of a successful attempt was similar for each of the four categories of stores: attempts were successful at 15 (39%) of the 39 gas stations; five (36%) of the 14 convenience stores; eight (32%) of the 25 pharmacies; and three (30%) of the 10 grocery stores. Of the 65 stores for which data were available, warning signs provided by the Florida Department of Business and Professional Regulation were posted in 27 (42%); purchase attempts were more successful in stores without signs than in those with signs (20 [57%] of 35 versus seven [23%] of 30, respectively [$p<0.01$]).

Reasons specified by the vendors for the 57 unsuccessful attempts were that the minors looked too young (34 [60%] attempts), that the sale of tobacco products to minors was illegal (11 [19%] attempts), and that the store had a policy prohibiting sales to minors (eight [14%] attempts); in four (7%) attempts, either no product was offered when a minor requested it or no refusal explanation was offered.

*During one successful purchase attempt, the adult/minor team determined that the vendor was prepared to sell based on the vendor's tone of voice during the attempted transaction and the vendor's movement of the SLT toward the minor at the sales counter.

Smokeless Tobacco — Continued

Reported by: FS Bridges, EdD, RL Welsh, PhD, Dept of Exercise Science/Wellness Education, Florida Atlantic Univ, Davie; JM Malecki, MD, HRS/Palm Beach County Public Health Unit, West Palm Beach, Florida. Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: The assessment in Palm Beach County indicates that, despite the enactment of state laws prohibiting the sale of tobacco to persons aged <18 years, 35% of minors were successful in making attempts to purchase SLT. Previous assessments in Kansas and Texas documented successful attempt rates by minors of 15% and 59%, respectively (2,3). The differences in successful attempt rates in the three assessments may reflect, in part, variations related to the ages of the minors making the purchase attempts. For example, in Palm Beach County, the 17-year-old female was more likely to be successful than those minors aged <14 years, possibly because some vendors may have presumed that the SLT was not for her use (S. Bridges, Florida Atlantic University, personal communication, 1995).

As a result of the assessment in Palm Beach County, measures to reduce the sale and use of tobacco products among minors in the county will be implemented and will include educating the public and the business community about this problem, and encouraging businesses that sell SLT to comply with the state laws prohibiting the sale of tobacco to minors and to post warning signs about those laws. In addition, other strategies policy makers and school and public health officials can use to prevent the use of tobacco by minors include 1) the designation of state agencies to be primarily responsible for investigation and enforcement of sales to minors, 2) increasing the severity of penalties for repeat illegal sales, 3) levying separate fines for failure to post warning signs stating the legal age of purchase, 4) requiring retailers to ask all purchasers of tobacco products to show proof of age, 5) restricting tobacco-product advertising targeted toward minors, 6) ensuring that health education curricula in grades kindergarten through 12 include a tobacco-education component; and 7) banning the use of vending machines (3,4).

References

1. Office of Evaluations and Inspections. Youth access to tobacco. Washington, DC: US Department of Health and Human Services, Office of the Inspector General, 1992; DHHS publication no. (OEI)02-91-00880.
2. Hoppock KC, Houston TP. Availability of tobacco products to minors. *J Fam Pract* 1990;30:174-6.
3. CDC. Minors' access to tobacco—Missouri, 1992, and Texas, 1993. *MMWR* 1993;42:125-8.
4. Public Health Service. Model Sale of Tobacco Products to Minors Control Act. Washington, DC: US Department of Health and Human Services, Public Health Service, 1990.

Outbreak of Acute Febrile Illness and Pulmonary Hemorrhage — Nicaragua, 1995

During the week of October 15, three persons died after presenting to the Achuapa Health Center in Leon state (1995 population: 330,168), Nicaragua, with an acute febrile illness. During the next 2 weeks, at least 400 persons were evaluated at clinics in Achuapa (1995 population: 12,741) and nearby El Sauce (1995 population: 24,289) for acute illnesses characterized by fever, chills, headache, and musculoskeletal pain. As of November 7, approximately 150 of these patients and 150 persons from nearby

Acute Febrile Illness — Continued

areas had been hospitalized in the regional medical center in Leon because of more severe manifestations, including intense abdominal pain, hypotension, and/or respiratory distress. At least 13 of the patients have died from respiratory distress and pulmonary hemorrhage. This report summarizes the preliminary findings of the ongoing investigation of this outbreak by the Nicaraguan Ministry of Health, the Pan American Health Organization, and CDC.

Dengue and dengue hemorrhagic fever were initially suspected as the cause of the outbreak but were ruled out in Nicaragua and at CDC by serologic tests and polymerase chain reaction assays of serum specimens. Additional serologic tests found no significant reactions to other arthropodborne and zoonotic pathogens, including New World arenaviruses, lymphocytic choriomeningitis virus, hantaviruses, other Bunyaviridae, Filoviridae, Flaviviridae, Rhabdoviridae, Togaviridae, spotted-fever-group and typhus-group rickettsia, *Ehrlichia chaffeensis*, and *Coxiella burnetii*.

Preliminary histopathologic examination at CDC of multiple tissues from four decedents indicates features consistent with leptospirosis. Specifically, silver impregnation staining of autopsy specimens from two patients identified organisms with typical leptospiral morphology in kidney and liver tissue; in a third patient, leptospiral morphology was less typical. These findings were confirmed by immunohistochemical staining using rabbit polyclonal reference antiserum reactive with 16 different leptospiral strains. Leptospiral antigens were seen as intact leptospira, thread-like filaments, and granular forms in liver and kidney tissue from three patients. Immunohistochemical tests of these tissues with polyclonal antibodies were negative for dengue virus, yellow fever virus, hantaviruses, arenaviruses and Ebola virus.

Reported by: F Muñoz, MD, C Jarquin, MD, A Gonzalez, MD, J Amador, MD, J de los Reyes, MD, R Jimenez, MD, Ministry of Health, Nicaragua. F Lamy, MD, N Jiron, MD, Pan American Health Organization, Nicaragua. F Pinheiro, Pan American Health Organization, Washington, DC. US Agency for International Development, Managua, Nicaragua. Div of Vector-Borne Infectious Diseases, Div of Bacterial and Mycotic Diseases, and Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases, CDC.

Editorial Note: The preliminary findings of this investigation indicate that leptospirosis was the most likely cause of fatal pulmonary hemorrhage in four hospitalized patients in Nicaragua. Additional studies are under way to confirm the role of leptospiral infection in the outbreak of acute febrile illness, establish animal reservoirs of infection, and identify potentially modifiable risk factors for disease. The investigation has thus far ruled out the potential role of dengue virus and other arthropodborne and rodentborne pathogens; in Central and South America, mosquito-borne dengue is a leading cause of febrile illness, and the increasing circulation of multiple dengue serotypes, including dengue type 3, has been associated with an increase in reported hemorrhagic manifestations of dengue (1,2).

Leptospirosis is a zoonotic disease of worldwide distribution, involving many wild and domestic animals (3). Human infection may result from indirect or direct exposure to infected urine, often through contaminated water or soil. The investigation in Nicaragua is examining the possibility that infection in humans resulted from exposure to water and soil contaminated by animal urine following recent heavy rainfall and flooding in that region.

The spectrum of leptospiral disease is broad and may include fever, headache, chills, myalgia, abdominal pain, and conjunctival suffusion; more severe manifestations include renal failure, jaundice, meningitis, hypotension, hemorrhage, and/or

Acute Febrile Illness — Continued

hemorrhagic pneumonitis (4). Severe pulmonary symptoms and pulmonary hemorrhage have not been characteristic of leptospirosis in the Western Hemisphere but have been associated with large outbreaks in Korea and China (5,6). Clinical features of leptospirosis are similar to many other febrile illnesses; in the tropics, the differential diagnosis of such illnesses also may include dengue and malaria. Leptospirosis is diagnosed by isolation of leptospire from blood or cerebrospinal fluid during the acute illness and from urine ≥ 10 days after the onset of symptoms or by documenting rising titers in serologic tests, such as the microagglutination test.

Penicillin is the antibiotic of choice for leptospirosis, and treatment should be initiated early in the course of illness (7). Alternatives are amoxicillin, ampicillin, doxycycline, and tetracycline. Supportive therapy is essential for managing dehydration, hypotension, hemorrhage, renal failure, and pulmonary involvement. For adults with short-term, high-risk exposure to leptospirosis, doxycycline provides effective prophylaxis when administered weekly in a single oral dose of 200 mg (8). Public health measures include controlling rodents, preventing contact with animal urine, wearing protective clothing (e.g., water-resistant boots) when exposure is likely, and avoiding swimming or wading in potentially contaminated water (i.e., with urine of infected animals).

Additional information is available from the CDC Fax Information Service, telephone (404) 332-4565; enter document number 221013# at the prompt.

References

1. Gubler DJ, Clark GG. Dengue/dengue hemorrhagic fever: the emergence of a global health problem. *Emerging Infectious Diseases* 1995;1:55–7.
2. CDC. Dengue type 3 infection—Nicaragua and Panama, October–November 1994. *MMWR* 1995;44:21–4.
3. Torten M, Marshall RB. Leptospirosis. In: Beran GW, ed. *Handbook of zoonoses. Section A: bacterial, rickettsial, chlamydial, and mycotic*. Boca Raton, Florida: CRC Press, 1994:245–64.
4. Farr RW. Leptospirosis. *Clin Infect Dis* 1995;21:1–8.
5. Wang CN, Liu J, Chang TF, Cheng WJ, Luo MY, Hung AT. Studies on anicteric leptospirosis: I. Clinical manifestations and antibiotic therapy. *Chinese Med J* 1965;84:283–391.
6. Park SK, Lee SH, Rhee YK, et al. Leptospirosis in Chonbuk Province of Korea in 1987: a study of 93 patients. *Am J Trop Med Hyg* 1989;41:345–51.
7. Farrar WE. *Leptospira species (Leptospirosis)*. In: Mandell GL, Bennett JE, Dolin R, eds. *Principles and practice of infectious diseases*. 4th ed. New York: Churchill Livingstone, 1995:2137–41.
8. Takafuji ET, Kirkpatrick JW, Miller RN, et al. An efficacy trial of doxycycline chemoprophylaxis against leptospirosis. *N Engl J Med* 1984;310:497–500.

The *Morbidity and Mortality Weekly Report (MMWR) Series* is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format and on a paid subscription basis for paper copy. To receive an electronic copy on Friday of each week, send an e-mail message to lists@list.cdc.gov. The body content should read *subscribe mmwr-toc*. Electronic copy also is available from CDC's World-Wide Web server at <http://www.cdc.gov/> or from CDC's file transfer protocol server at <ftp.cdc.gov>. To subscribe for paper copy, contact Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone (202) 512-1800.

Data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the following Friday. Address inquiries about the *MMWR* Series, including material to be considered for publication, to: Editor, *MMWR* Series, Mailstop C-08, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333; telephone (404) 332-4555.

All material in the *MMWR* Series is in the public domain and may be used and reprinted without permission; citation as to source, however, is appreciated.

Director, Centers for Disease Control and Prevention David Satcher, M.D., Ph.D.	Editor, <i>MMWR</i> Series Richard A. Goodman, M.D., M.P.H.
Deputy Director, Centers for Disease Control and Prevention Claire V. Broome, M.D.	Managing Editor, <i>MMWR</i> (weekly) Karen L. Foster, M.A.
Director, Epidemiology Program Office Stephen B. Thacker, M.D., M.Sc.	Writers-Editors, <i>MMWR</i> (weekly) David C. Johnson Darlene D. Rumph-Person Caran R. Wilbanks

☆ U.S. Government Printing Office: 1996-733-175/27025 Region IV