

- 437 World No-Tobacco Day—May 31, 2000
- **438** Prevalence of Cigarette Smoking Among Secondary School Students— Budapest, Hungary, 1995 and 1999
- 441 Costs of Smoking Among Active Duty U.S. Air Force Personnel— United States, 1997
- 445 Progress Toward Poliomyelitis Eradication—African Region, 1999–March 2000
- 449 Notice to Readers

World No-Tobacco Day — May 31, 2000

May 31 is World No-Tobacco Day (WNTD) 2000. This year's theme, "Entertainment and Tobacco Promotion—Countering the Deception," intends to raise awareness of the tobacco industry's global marketing practices and to mobilize action to counter the industry's recruitment of new customers through glamorizing tobacco use in films, music, art, and sports. Worldwide, tobacco use will cause an estimated 10 million deaths annually by 2030 (1). Each day, the tobacco industry must recruit 11,000 new users to replace smokers who die (2).

To build global support for tobacco-control measures, the World Health Organization (WHO) has developed the "Tobacco Kills—Don't Be Duped" media initiative. This effort

includes distribution of products with the "Bob" image (Figure 1), public service announcements featuring a super model and pop group, and a video with entertainers, artists, and sports figures endorsing antitobacco messages. Local and regional WNTD events will take place around the world, especially in countries where tobacco marketing remains largely unregulated.

MORBIDITY AND MORTALITY

WEEKLY REPORT

Additional informa-

FIGURE 1. "Bob" from "Don't Be Duped," No-Tobacco Day Message, 2000



tion about World No-Tobacco Day 2000 is available at WHO's World-Wide Web site, http://www.who.int/toh/media/wntd2000/wntd2000.htm*, and at CDC's Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion site, http://www.cdc.gov/tobacco, or telephone (800) 232-1311. *References*

- 1. World Health Organization. Combating the tobacco epidemic. In: World Health Organization's world health report 1999. Geneva, Switzerland: World Health Organization;1999:65–79.
- 2. World Health Organization. Tobacco kills—don't be duped. Available at: http:// www.who.int/toh/media/wntd2000/posters.html. Accessed April 3, 2000.

*References to sites of non-CDC organizations on the World-Wide Web are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of pages found at these sites.

Prevalence of Cigarette Smoking Among Secondary School Students — Budapest, Hungary, 1995 and 1999

The average per capita cigarette consumption in Hungary is among the highest in the world (World Health Organization [WHO], unpublished data, 1997) (1). In 1999, the Metropolitan Institute of State Public Health and Public Health Officer Service, Budapest, Hungary, collaborating with CDC, conducted a survey of cigarette smoking among secondary school students aged 14–18 years in Budapest (1999 population of Budapest: approximately 2 million), similar to a survey conducted in 1995 (2). This report summarizes the survey findings, which indicate that current smoking among secondary school students in Budapest increased from 36% in 1995 to 46% in 1999.

The objective of the 1999 survey was to compare changes that had occurred since the 1995 survey in the prevalence of current* cigarette smoking, in the factors associated with current cigarette smoking, and in the smoking behaviors of current cigarette smokers (i.e., number of cigarettes smoked per day and number of days smoking occurred on school property). Among the 80,352 secondary school students in Budapest in 1999, 67,253 attended traditional high schools and 13,099 attended vocational/technical schools. Of 222 secondary schools (grades 9–12), 21 traditional high schools and nine vocational/technical schools were selected with a probability proportional to enrollment size. Classrooms in the 30 schools were selected randomly. All selected schools and classrooms agreed to participate, and all students in the selected classrooms were eligible to participate.

From March through May 1999, 2615 (85%) of 3092 eligible students[†] completed a pretested, standardized questionnaire that included questions about tobacco use translated from the U.S. Youth Risk Behavior Survey (*3*). Of the 2615 completed surveys, 2434 (93%) were from students aged 14–18 years; 24 (<1.0%) were age 14 years, a number too small for meaningful analysis. Therefore, analysis of data from 1999 was limited to students aged 15–18 years. The 1995 data for students aged 15–18 years were compared with 1999 data using Epi Info version 6.0. Prevalence odds ratios (POR)[§] and 95% confidence intervals (CIs) were calculated using CSAMPLE to account for the complex survey design (*4*).

Among the 2410 students, 1148 (46.0%) (95% CI=42.4%–49.5%) reported current smoking (Table 1). Prevalence of current smoking among male and female students was similar (44.9% and 46.9%, respectively) (POR=0.9; 95% CI=0.8–1.1). Students aged 18 years were more likely to be current smokers than students aged 15 years (51.8% and 37.2%, respectively) (POR=1.8; 95% CI=1.3–2.6). Prevalence of current smoking was higher among vocational/technical students than traditional high school students (60.2% and 43.1%, respectively) (POR=2.0; 95% CI=1.5–2.6); among students whose friends smoked than those whose friends did not smoke (51.9% and 5.2%, respectively) (POR=19.5; 95% CI=9.8–38.9); among students who reported that they had seen a teacher smoking during the school year than those who had not seen a teacher smoking (47.2% and 35.8%, respectively) (POR=1.6; 95% CI=1.4–1.9); and among students with a family member who smoked than students whose family members did not smoke (51.9% and 36.6%, respectively) (POR=1.9; 95% CI=1.5–2.3). The prevalence of current smoking was

[†] 350 were absent; 127 refused to participate.

^{*}Smoked on at least 1 day during the 30 days preceding the survey.

[§] Used to calculate odds ratios from cross-sectional data; an odds ratio from studies of prevalent rather than incident cases.

Cigarette Smoking Among Secondary School Students — Continued

			Current smokers						
				1999	1995 ⁺				
Characteristic S	ample size⁵	No.	%	(95% CI [¶])	%	(95% CI)			
Sex									
Male	1181	558	44.9	(40.0–49.8)	36.7	(31.8–41.7)			
Female	1209	586	46.9	(43.2–50.6)	35.2	(30.1–40.3)			
Age (yrs)									
15	375	145	37.2	(28.5–45.9)	26.5	(21.7–31.3)			
16	664	295	43.0	(38.6–47.4)	35.5	(29.3–41.7)			
17	843	424	49.4	(45.9–52.9)	39.4	(35.5–45.3)			
18	515	284	51.8	(47.3–56.3)	47.9	(42.1–53.6)			
Grade									
9	548	234	40.9	(33.0–48.8)	34.0	(28.5–39.7)			
10	764	366	45.5	(40.9–50.2)	32.8	(28.5–37.1)			
11	733	376	50.1	(45.3–54.8)	41.9	(36.6–47.2)			
12	333	159	47.2	(42.4–51.9)	36.1	(29.0–43.1)			
School type									
Vocational/Technical	680	409	60.2	(55.2–65.2)	54.2	(47.7–60.5)			
Traditional									
high school	1717	739	43.1	(39.0–47.3)	31.5	(27.1–36.0)			
Total	2410	1148	46.0	(42.4–49.5)	35.9	(32.0–39.8)			

TABLE 1. Number and percentage of current* smokers among secondary school
students aged 15–18 years, by selected characteristics — Budapest, Hungary,
1995 and 1999

*Smoked a cigarette on at least 1 day of the preceding 30 days.

[†] Reference 2. The survey consists of 942 students who indicated that they were current smokers aged 15–18 years.

[§]For some characteristics, the sample size does not equal 2410 because of missing data.

[¶]Confidence interval.

similar among students who discussed issues related to smoking and health in any of their classes and those who did not receive such instruction (44.8% and 48.6%, respectively) (POR=0.9; 95% Cl=0.7–1.1). Among students who were current smokers, 23.5% smoked \geq 11 cigarettes on the days that they smoked, 46.7% smoked daily, and 36.9% smoked on school property on \geq 10 days during the preceding month.

From 1995 to 1999, current smoking increased among female students (35.2% versus 46.9%), 17-year-old students (39.4% versus 49.4%), 10th graders (32.8% versus 45.5%), and traditional high school students (31.5% versus 43.1%). Although the prevalence of daily smoking was similar among male and female students in 1999 (46.2% and 46.4%, respectively), daily smoking among female students increased from 32% in 1995 while the rate for male students remained stable. The percentage of secondary school students in Budapest who smoked \geq 11 cigarettes per day during the preceding month increased from 1995 to 1999 (Table 2).

Reported by: É Kiss, MD, Div of Health Promotion and Protection; F Ferenczi, E Végh, MD, Dept of Child and Youth Health, Div of Health Promotion and Protection; K Lun, MD, Metropolitan Institute of State Public Health and Public Health Officer Svc, Budapest, Republic of Hungary. Epidemiology Br, Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion; and an EIS Officer, CDC.

Editorial Note: The survey findings indicate that the prevalence of current cigarette smoking among secondary school students aged 15–18 years in Budapest increased

Cigarette Smoking Among Secondary School Students — Continued

		Current smokers							
			1999	1995 [§]					
Characteristic	No.¶	(%)	(95%CI**)	(%)	(95%CI)				
No. cigarettes smoked per day	1								
1	205	19.8	(16.1–23.4)	22.9	(20.3–25.4)				
2–10	629	56.7	(52.8–60.7)	59.6	(56.1–63.1)				
≥11	294	23.5	(20.9–26.2)	17.5	(15.5–19.5)				
No. days used per month									
1–2	171	16.1	(12.9–19.3)	20.2	(18.0–22.4)				
3–9	158	14.6	(12.0–17.2)	14.7	(11.7–17.6)				
10–29	257	22.6	(20.2–25.0)	26.6	(22.9–30.4)				
≥30	562	46.7	(42.6–50.7)	38.5	(34.1–43.0)				
No. days used on school prop	erty								
per month									
0	459	43.2	(37.6–48.8)	48.6	(41.6–55.6)				
1–2	104	8.7	(6.5–10.9)	10.4	(8.5–12.2)				
3–9	143	11.2	(8.3–14.0)	11.1	(8.8–13.3)				
≥10	440	36.9	(33.4–40.5)	30.0	(23.9–36.1)				

TABLE 2. Number and percentage of secondary school students aged 15–18 years who were current* smokers, by selected characteristics — Budapest, Hungary, 1995 and 1999⁺

* Smoked a cigarette on at least 1 day of the preceding 30 days.

[†] n=1148.

⁵ Reference 2. The survey consisted of 942 students who indicated that they were current smokers aged 15–18 years. [¶] For each characteristic, the sample size does not equal 1148 because of missing data.

**Confidence interval.

significantly from 1995 to 1999. In 1999, the prevalence of current smoking among adolescents aged 15 years was 37.2%. This finding is consistent with smoking rates among adolescents aged 13–15 years during 1999 in the Russian Federation, Moscow, where 33.4% were current smokers (5). The estimated 46% smoking prevalence for students in Budapest in 1999 is higher than the estimated 28.4% prevalence for U.S. high school students (grades 9–12) who participated in the 1999 National Youth Tobacco Survev (6).

In 1999, the Hungarian Parliament passed stronger legislation to enforce restrictions on smoking in the workplace and other public places. However, factors that may have contributed to the increased prevalence of smoking among youth in Budapest include a lack of regulation of the sale of cigarettes to minors until 1999 (T. Szilágyi, Health 21 Hungarian Foundation, personal communication, 2000), fewer advertising restrictions since 1997, free distribution of cigarette samples, weak health warnings, availability of contraband cigarettes, low fines for advertising violations, and lack of enforcement of existing regulations (1).

The findings in this report are subject to at least one important limitation. These data apply only to youth who attended secondary school and are not representative of all persons in this age group (e.g., secondary school students who dropped out and approximately 80% of gypsy children who do not attend secondary school) (7).

To better understand increasing prevalence rates of smoking among youth in Budapest and other central and eastern European countries, national health agencies must expand and evaluate tobacco prevention efforts and continue surveillance of trends in tobacco use among youth. The Global Youth Tobacco Survey (GYTS), sponsored by WHO's Tobacco Free Initiative (8) and CDC, will be conducted in Budapest by the end of

Cigarette Smoking Among Secondary School Students - Continued

2000 and throughout Hungary in 2001. GYTS will evaluate a wide range of variables, including knowledge and attitudes about tobacco, exposure to environmental tobacco smoke, familiarity with prosmoking and antismoking media messages, and exposure to tobacco-use prevention curricula in schools. These efforts, along with Hungary's development of a plan for tobacco control as part of the Framework Convention on Tobacco Control (*8*), are important steps in curbing the increase in smoking among secondary school students in Hungary.

References

- 1. World Tobacco Marketfile. Emerging markets in central and eastern Europe. Available at http://www.marketfile.co.uk/tobacco. Accessed March 2000.
- CDC. Prevalence of cigarette smoking among secondary school students—Budapest, Hungary, 1995. MMWR 1997;46:56–9.
- 3. CDC. Youth risk behavior survey—United States, 1997. MMWR 1998;47(no. SS-3).
- 4. Dean AG, Dean JA, Coulombier D, et al. Epi Info, version 6: a word processing, database, and statistics program for public health on IBM-compatible microcomputers. Atlanta, Georgia: US Department of Health and Human Services, CDC, 1996.
- 5. Canadian Public Health Association. Tobacco, smoking and youth. CPHA Health Digest April 1999;23:1–8.
- 6. CDC. Tobacco use among middle and high school students—United States, 1999. MMWR 2000;49:49–53.
- Kézdi G. Secondary school education of Roma youngsters. In: Hungarian Academy of Sciences, ed. Gypsies in Hungary. Budapest, Hungary: Hungarian Academy of Sciences, 1999.
- 8. World Health Organization. The world health report 1999—making a difference. Combating the tobacco epidemic. Geneva, Switzerland: World Health Organization, 1999.

Costs of Smoking Among Active Duty U.S. Air Force Personnel — United States, 1997

Smoking is the leading cause of preventable disease and death in the United States (1). The health consequences of smoking impose a substantial economic toll on persons, employers, and society. Smoking accounts for \$50–\$73 billion in annual medical-care expenditures, or 6%–12% of all U.S. medical costs (2–5). The costs associated with lost productivity also are extensive (2). In 1997, approximately 25% of male and 27% of female active duty Air Force (ADAF) personnel aged 17–64 years were smokers (6). A 1997 retrospective cohort study was conducted among ADAF personnel to estimate the short-term medical and lost productivity costs of current smoking to the U.S. Air Force (USAF). This report summarizes the results of the study, which indicate that current smoking costs the USAF approximately \$107.2 million per year: \$20 million from medical-care expenditures and \$87 million from lost workdays.

Study participants completed a health assessment survey and were followed for 1 year; then researchers calculated participants' use of medical care and health-related lost work time (i.e., time spent on smoke breaks, days spent in the hospital, and time away from duty station for outpatient clinic visits). Total expenditures among current smokers and never smokers were used to compute population-attributable fractions (PAFs) (i.e., the fraction of expenditures attributable to ADAF members who currently smoked). Data were collected from 5164 active duty TRICARE Prime enrollees aged 17–64 years in Arkansas, Louisiana, Oklahoma, and Texas who completed the Health

Costs of Smoking — Continued

Enrollment Assessment Review (HEAR) survey during September–December 1996, and who remained enrolled in the health plan the year following the HEAR survey. The HEAR instrument is a voluntary survey given to all TRICARE Prime enrollees. Self-reported demographic data were obtained by written questionnaires from the Air Force personnel system; smoking status, weekly alcohol consumption, frequency of aerobic exercise, and body mass index data also were obtained through self-administered questionnaires from HEAR (Table 1) (7). Respondents were classified as current, former, or never smokers*. Results for former smokers were not included in this study. Inpatient and outpatient visits, clinical diagnoses, bed days, and encounter costs were obtained from the Corporate Executive Information System (CEIS) and the TRICARE Management Activity. Prevalence estimates of all currently smoking ADAF personnel during 1997 were based on a linear interpolation of results from the 1995 and 1998 U.S. Department of Defense (DoD) Survey of Health Related Behaviors Among Military Personnel⁺ (6–8). Prevalence estimates in the DoD survey were 22% and 49% higher than HEAR among men and women, respectively. The DoD survey of risk behaviors is anonymous and is assumed to reflect current smoking in the ADAF population more accurately than the HEAR survey, which is not anonymous.

*HEAR defined current smokers as those who, at the time of the interview, smoked cigarettes every day or some days, and former smokers as those who currently did not smoke but had smoked in the past.

[†] The DoD survey defined current smokers as those who had smoked ≥100 cigarettes during their lifetime and smoked within the 30 days preceding the survey, former smokers as those who had smoked ≥100 cigarettes during their lifetime but had not smoked within the 30 days preceding the survey, and never smokers as those who had smoked <100 cigarettes during their lifetime.

		/len	W	omen	
Characteristic	Cohort	All	Cohort	All	ADAF
Age (yrs)⁺	31.9	30.4	30.9	28.2	
Race					
White	70.5%	78.4%	62.1%	67.7%	
Black	12.2%	13.5%	18.0%	22.8%	
Other⁵	17.3%	8.1%	19.9%	9.5%	
Current smoker	20.9%	25.5%	18.0%	26.8%	
Type of cost [¶]					
Smoking-attributable	е				
direct medical cost	S	\$18,442,979		\$1,655,360	\$20,098,339
Smoking-attributable	е				
expenditures		7.7%		1.5%	5.8%
Smoking-attributable	е				
productivity** cos	ts	\$75,989,629		\$11,153,087	\$87,142,716
Lost FTEs [#]		2,957		615	3,573

TABLE 1. Characteristics of study cohort and all active duty Air Force (ADAF)personnel and current smoking-attributable costs among ADAF personnel —United States, 1997*

* Age and race data for all ADAF personnel supplied by Air Force Personnel Center, Randolph Air Force Base, Texas.

[†]Mean.

[§] Includes Hispanics, Asians/Pacific Islanders, and American Indians/Alaska Natives.

[¶]Based on 1995 and 1998 ADAF estimates from the U.S. Department of Defense Survey of Health Related Behaviors Among Military Personnel.

**Time lost spent on breaks, days spent in the hospital, and time away from duty station for outpatient clinic visits.

[#] Full-time equivalents (i.e., the amount of time worked by one ADAF member in 1 year).

Vol. 49 / No. 20

MMWR

Costs of Smoking - Continued

An empirical model was used to compare medical-care expenditures and lost work time among current smokers and never smokers. Men and women were modeled separately because of the influence of pregnancy-related events. A log-linear Poisson regression model was used to compare the rates of accumulating medical-care costs. Sexspecific rate ratios (RRs) were adjusted for age, race, weekly alcohol consumption, frequency of aerobic exercise, and body mass index. Adjusted RRs from HEAR were combined with current smoking prevalence data from the DoD survey to estimate PAFs of expenditures associated with current smoking for all ADAF personnel. The use of two distinct datasets in the PAF formula precluded computing confidence intervals (CIs). The average margin of error (one half the width of the Cl around the mean) was $\pm 3.6\%$ for the RR estimates and ±4.1% for the prevalence estimates. The RR margins of error and smoking prevalence estimates indicate the overall stability of the PAFs. Smoking-attributable expenditures (SAEs) among men and women were calculated by multiplying the PAFs by total medical-care costs for each sex. Total medical-care costs for all ADAF personnel were \$347 million and were estimated by using CEIS data to extrapolate the sex-specific medical-care costs for the study cohort to the entire ADAF population. Productivity costs were estimated using 1996 age-specific and sex-specific salary and benefit data among ADAF personnel. Hospital days, outpatient clinic visit time, and excess break time for current smokers were included; nonhospital sick days were excluded.

Smoking-attributable medical-care costs for ADAF personnel were approximately \$20 million (Table 1), representing approximately 6% of the total annual Air Force medical system expenditures. In 1997, current smoking was associated with 893,128 lost workdays: 739,374 among men and 153,755 among women. Assuming 250 workdays per year, this lost work time represents a loss of approximately 3573 full-time equivalent positions (FTEs) in 1997: 2957 among men and 615 among women. Lost workdays represent approximately \$87 million in annual productivity losses: \$76 million among men and \$11 million among women.

Reported by: AS Robbins, MD, SY Chao, MS, GA Coil, MPH, VP Fonseca, MD, Office for Prevention and Health Svcs Assessment, Air Force Medical Operations Agency, Brooks Air Force Base, Texas. Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: Current smoking among ADAF personnel is associated with large medical expenditures and lost productivity each year, particularly among men. The 6% SAF of medical expenditures is within the 6%–12% range of recent SAF estimates of total U.S. medical costs (2–5). DoD estimated that current smoking among all U.S. military health system beneficiaries cost the DoD an estimated \$930 million in 1995: \$584 million in annual health care expenditures and \$346 million in lost productivity (9). Among ADAF personnel, smoking-attributable productivity losses were more than four times the cost of medical care: 6.7 times among women and 4.1 times among men. The number of lost FTEs is larger than the number of FTEs on active duty at 35 (40%) of 87 USAF installations.

The findings in this report differ from previous cost-of-smoking estimates because the study population in this report excludes persons aged \geq 65 years; the costs for former smokers were excluded. Consequently, medical costs among this younger population are a much smaller percentage of total smoking-attributable costs than in other studies (2,3). The exclusion of results for former smokers also lowers the costs of smoking estimates for women compared with men. Pregnancy-related events were a large portion of health-care use among ADAF women. Because a substantial proportion of women

Costs of Smoking — Continued

quit smoking during pregnancy and many others conceal their smoking status during pregnancy (*10*), the SAEs PAFs among women who are classified as current smokers may be artificially low; this may account for the lower costs of smoking for women relative to men. In 1993, smoking-attributable medical costs for the United States were approximately 51% lower for women than men (*4*).

The findings in this report are subject to at least four limitations. First, the study cohort may not be representative of all ADAF personnel. Second, study participants knew their HEAR survey responses would become part of their medical record. This might have reduced the rate of self-reported smoking and other risk behaviors when compared with anonymous ADAF surveys (6-8); however, anonymity may be only one factor influencing differences in reported risk behaviors. Third, the medical-care costs and productivity losses of former smokers were not included. Finally, the study excluded lost productivity on days that ADAF personnel were on convalescent leave or confined to quarters; a large number of work days may have been missed because of less severe illnesses that did not require hospitalization. Limitations two, three, and four may underestimate the costs of smoking among ADAF personnel.

These results support USAF and DoD efforts to decrease the prevalence of smoking among ADAF personnel. Smoking-attributable lost work time is particularly important for USAF operational commanders because it adversely affects military readiness; however, the impact of smoking on productivity also is relevant to civilian employers. The prevalence of smoking among ADAF members is approximately the same as among the U.S. population aged 18–64 years (1). However, because of physical training requirements, smokers in the ADAF population are probably healthier than smokers in the civilian population. If so, average productivity losses to civilian employers could be larger than those found in this military group. Costs related to tobacco use are largely preventable. Implementing comprehensive tobacco-control programs remains an effective way to reduce associated medical and productivity losses.

References

- 1. CDC. Tobacco use-United States, 1900-1999. MMWR 1999;48:986-93.
- Rice DP, Hodgson TA, Sinsheimer P, Browner W, Kopstein AN. The economic costs of the health effects of smoking, 1984. Milbank Q 1986;64:489–547.
- CDC. Medical-care expenditures attributable to cigarette smoking—United States, 1993. MMWR 1994;43:469-72.
- Miller VP, Ernst C, Collin F. Smoking-attributable medical care costs in the USA. Soc Sci Med 1999;48:375–91.
- 5. Miller LS, Zhang X, Rice DP, Max W. State estimates of total medical expenditures attributable to cigarette smoking, 1993. Public Health Reports 1998;113:447–58.
- Bray RM, Sanchez RP, Ornstein ML, et al. 1998 Department of Defense Survey of Health Related Behaviors Among Military Personnel. Research Triangle Park, North Carolina: Research Triangle Institute, 1999.
- US Air Force Office for Prevention and Health Services Assessment. Health Enrollment Assessment Review 1.0 (HEAR) High Resource Utilization (HRU) Validation Study: final report. Washington, DC: Report for the Air Force Medical Operations Agency, January 1999.
- Bray RM, Kroutil LA, Wheeless SC, et al. 1995 Department of Defense Survey of Health Related Behaviors Among Military Personnel. Research Triangle Park, North Carolina: Research Triangle Institute, 1995.
- Helyer AJ, Brehm WT, Perino L. Economic consequences of tobacco use for the Department of Defense, 1995. Mil Med 1998;163:217–21.

Costs of Smoking — Continued

 Kendrick JS, Zahniser SC, Miller N, et al. Integrating smoking cessation into routine public prenatal care: the smoking cessation in pregnancy project. Am J Public Health 1995;85:217–22.

Progress Toward Poliomyelitis Eradication — African Region, 1999–March 2000

In 1988, the World Health Assembly resolved to eradicate poliomyelitis globally by 2000 (1). The African Region (AFR) of the World Health Organization (WHO) began implementing polio eradication strategies in 1996, including National Immunization Days (NIDs*) and acute flaccid paralysis (AFP) surveillance (2,3). This report summarizes progress toward polio eradication in AFR during 1999–March 2000, and suggests that although substantial progress has been reported toward interrupting poliovirus transmission in eastern and southern Africa, poliovirus remains endemic in other African countries in west and central Africa, especially among those experiencing internal strife or civil war.

Routine vaccination

AFR includes 48 countries and territories and is divided geographically into five major epidemiologic blocks: eastern, western, southern, central, and countries in special situations. Reported regional coverage with three doses of oral poliovirus vaccine (OPV3) among children aged 1 year was approximately 55% in 1999 and has remained relatively stable since 1990. OPV3 coverage by country ranged from 65%–75% in the eastern and southern blocks, 50%–55% in the western block, and approximately 40% in the central block. Coverage was lower (approximately 30%) among countries in difficult circumstances (e.g., Angola, Democratic Republic of Congo [DR Congo], and Ethiopia).

Supplemental vaccination

From January 1999 through March 2000, two or more rounds of NIDs or Subnational Immunization Days (SNIDs) were conducted in all 35 (73%) countries and territories of the region where polio is either endemic (20 countries) or was considered endemic until recently (15). An estimated 133 million children received at least two supplemental doses of OPV during 1999, representing a 50% increase over the number of children reached in similar campaigns in 1998. NIDs coverage was reported to be >80% in all countries, with the exception of Sierra Leone (76%) and Congo Brazzaville (55%). Countries conducting SNIDs (predominantly eastern and southern block countries) reported coverage >80%.

To accelerate progress toward eradication, intensified NIDs were conducted in nine countries in the region (Angola, Benin, Chad, DR Congo, Guinea-Bissau, Liberia, Niger, Nigeria, and Sierra Leone) during 1999. Intensified NIDs consisted of either additional rounds or administering the vaccine house-to house. DR Congo conducted three rounds of NIDs during July–September 1999 and reported coverage rates of 81%, 91%, and 80% for the first, second, and third rounds, respectively (*4*). Nigeria targeted 13 million children residing in 15 (35%) of 37 states during April–May 1999; all OPV doses were

^{*}Nationwide mass campaigns over a short period (days to weeks), in which two doses of oral poliovirus vaccine are administered to all children in the target age group (usually aged <5 years), regardless of vaccination history, with an interval of 4–6 weeks between doses.

Poliomyelitis Eradication — Continued

administered in house-to-house vaccination campaigns. This effort reached 10%–40% more children in each state than had been reported from previous NID rounds (5). SNIDs also were conducted in the capitals of Central African Republic (Bangui) and Burkina Faso (Ouagadougou) in May and June 1999.

AFP surveillance

AFP surveillance improved rapidly in AFR during 1999; 4999 AFP cases were reported in 1999 compared with 1754 in 1998, an increase of nearly 200%. The nonpolio AFP rate more than doubled from 0.3 cases per 100,000 children aged <15 years in 1998 to 0.8 in 1999 (target: ≥1 nonpolio AFP case per 100,000 population aged <15 years) (Table 1). However, the proportion of AFP cases with two stool specimens collected within 14 days of onset of paralysis declined from 35% in 1998 to 31% in 1999. Of the 15 polio laboratories in the region, 13 were accredited during 1999, and all stool specimens were processed in accredited network laboratories.

Impact on poliovirus transmission

In 1999, wild poliovirus was isolated from 238 AFP case-patients residing in 16 AFR countries, mainly in central and western Africa and Angola (Figure 1). Angola experienced the largest polio outbreak ever recorded in Africa with 1093 cases and 89 deaths

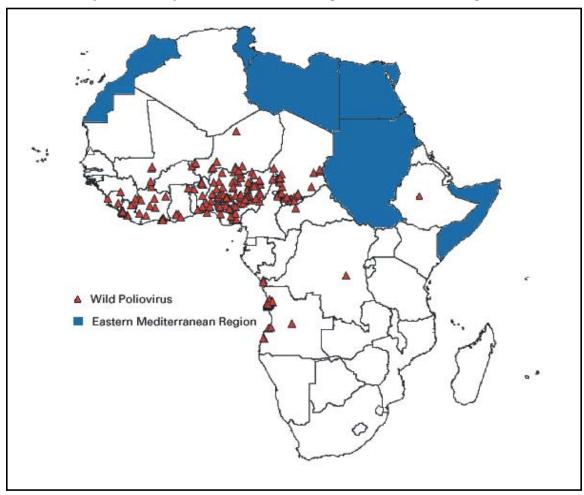


FIGURE 1. Reported wild poliovirus — African Region, World Health Organization, 1999

Poliomyelitis Eradication — Continued

		199			1999							
			%	0 7		%						
Block/ Country	No. AFP cases	-	Cases with adequate speciment	polio		No. AFP cases	Nonpolio AFP rate	adequate	Confirmed polio (Wild virus)			
Central												
Cameroon	40	0.4	60%	16 (0)		95	1.5	74%	1(1)			
C. African	40	0.4	0070	10 (0)		55	1.5	7470	1 (1/			
Republic	59	3.3	41%	6 (2)		38	1.3	43%	18 (1)			
Chad	12	0.3	83%	4(4)		156	1.6	38%	109 (35)			
Congo	0	0.0	0070			11	0.8	100%	2 (0)			
Equitorial Gu						1	0.0	0	1(0)			
Gabon	1	0.2	100%	0(0)		2	0.3	50%	0(0)			
Western	•	0.2	10070	0 (0/		-	0.0	0070	0 (0/			
Algeria	88	0.8	75%	0(0)		78	0.5	47%	10 (0)			
Benin	15	0.3	67%	8(3)		70	1.4	42%	37 (8)			
Burkina Fasc		0.0	50%	8(4)		53	0.9	26%	5(0)			
Gambia	0	0.1	5070	5 (+/		0	0.0	2070	0(0)			
Ghana	154	0.5	30%	112 (18)		114	1.4	50%	3 (3)			
Guinea	7	0.1	43%	4(0)		51	0.9	43%	22 (3)			
Guinea-Bissa	-	0.1	-1070	-+ (U)		0	0.0		0(0)			
Cotê d'Ivoire		0.4	42%	38 (11)		144	1.8	60%	9(9)			
Liberia	0	0.4	4270	00 (11)		75	2.4	36%	42 (11)			
Mali	23	0.2	30%	14 (2)		43	0.4	51%	22 (4)			
Mauritania	0	0.2	5070	17 (2)		13	0.4	31%	6(0)			
Niger	12	0.1	50%	8(4)		110	1.1	44%	56 (10)			
Senegal	12	0.1	39%	10 (2)		65	1.5	44 <i>%</i> 58%	0(0)			
Sierra Leone		<0.2	0	3(0)		24	0.5	33%	14 (2)			
Togo	10	0.2	60%	5(1)		36	1.5	58%	1(1)			
Southern	10	0.2	0070	5(1)		50	1.5	5070	1 (1)			
Botswana	5	0.7	80%	0(0)		11	1.6	45%	0(0)			
Lesotho	5	0.2	40%	3(0)		12	1.3	45 <i>%</i> 75%	0(0)			
Madagascar	17	0.2	4078 53%	6(0)		28	0.4	52%	0(0)			
Malawi	28	0.2	79%	5(0)		20	0.4	73%	0(0)			
Mozambique	16	0.3	56%	7(0)		32	0.4	22%	0(0)			
Namibia	10	1.3	64%	2(0)		16	1.9	6%	3(0)			
South Africa		0.4	13%	104 (0)		147	1.9	29%	3 (0) 4 (0)			
Swaziland	5	1.3	60%	0 (0)		5	1.0	23% 80%	4 (0) 0 (0)			
Zimbabwe	51	0.7	43%	17 (0)		57	1.3	42%	2(0)			
Eastern	51	0.7	-10/0	17 (0)		57		4270	2(0)			
Burundi	0					16	0.5	94%	1(0)			
Eritrea	0					10	0.3	38%	7(0)			
Kenya	123	0.1	8%	109 (0)		270	0.3	30 <i>%</i> 41%	63 (0)			
Rwanda	2	0.1	0% 0	2(0)		45	0.8	38%	28 (0)			
Tanzania	127	0.1	48%	2 (0) 66 (0)		45 199	0.5 1.3	38% 71%	28(0) 0(0)			
Uganda	61	0.4 0.1	48% 23%	46(0)		199 187	1.3	71% 49%	0(0)			
Zambia	23	0.1	23% 39%			68	0.8	49% 41%	30 (0)			
Special Situati		0.4	33/0	6(0)		00	0.0	4170	30 (0)			
-	on 16	0.1	56%	7 (3)		1176	1.2	7%	1103 (53)			
Angola DB Congo				10 (0)								
DR Congo	21	0.1	52% 12%	55 (0)		84 190	0.2	43%	45 (1)			
Ethiopia Nigoria	63 490	0.1	13%			189 1242	0.2	24%	132 (1)			
Nigeria	489 1754	0.4	39%	312 (42)		1242	0.5	26%	981 (95)			
Total	1754	0.3	39%	993 (96)		4999	0.8	31% 2	2856 (238)			

TABLE 1. Performance indicators for acute flace	cid paralysis (AFP) surveillance, by
country — African Region, World Health Organ	nization, 1998 and 1999

* Per 100,000 children aged <15 years.
 [†] Two stool specimens collected at an interval of at least 24 hours within 14 days of onset of paralysis and adequately shipped to the laboratory.

Poliomyelitis Eradication — Continued

(6). Wild poliovirus circulation was detected in stool specimens from AFP cases in Nigeria (95), Angola (53), Chad (35), Liberia (11), Niger (10), Cotê d'Ivoire (nine), and Benin (eight). Wild poliovirus also was detected in Cameroon, Central African Republic, DR Congo, Ethiopia, Ghana, Guinea, Mali, Sierra Leone, and Togo. No wild poliovirus was detected in southern Africa.

Reported by: Expanded Program on Immunization, World Health Organization Regional Office for Africa, Harare, Zimbabwe; Vaccines and Biologicals Div, World Health Organization, Geneva, Switzerland. Respiratory and Enteric Viruses Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases; Vaccine Preventable Disease Eradication Div, National Immunization Program, CDC.

Editorial Note: Intensified efforts to achieve polio eradication were implemented in the remaining countries of AFR where polio is endemic during 1999. Specific actions to improve the quality of supplemental vaccination campaigns (NIDs and SNIDs) included 1) intensified NIDs using the house-to-house strategy; 2) increased provision of technical assistance (e.g., logisticians, epidemiologists, and social mobilization experts); 3) dissemination of guidelines to achieve quality NIDs; and 4) synchronization of NIDs among countries having contiguous borders, including special cross-border coordination strategies. In addition, SNIDs were implemented in at least two countries, and special attention was given to improving the quality and geographic coverage of AFP surveillance.

Serious constraints to improving the quality and the geographic coverage of NIDs persisted in 1999. Wars, civil unrest, and political instability made it impossible to reach all unvaccinated children in certain countries during NIDs (Angola, Congo Brazzaville, DR Congo, Nigeria, and Sierra Leone). In October and November of 1999, the global shortfall in the OPV supply made it necessary to postpone NIDs in Burknia Faso, Chad, Ghana, Kenya, Niger, Sierra Leone, and Togo. In addition, some countries received OPV without vaccine vial monitors.

Although AFP surveillance has improved substantially from 1998 to 1999, further improvements are needed to increase the nonpolio AFP rate from 0.8 to the standard threshold of \geq 1.0, indicating a sensitive surveillance system. The stool collection rate remains low in AFR. Although some of the decrease in the collection rate during 1998–1999 may be because not all cases associated with the 1999 Angola outbreak needed to be virologically confirmed, stool collection rates in the region did not increase in 1999.

Wild poliovirus is assumed to circulate in Sierra Leone and Congo Brazzaville, but surveillance was not operating for most of 1999 in these countries. In addition, the quality of surveillance is inadequate to determine whether wild poliovirus transmission continues in Madagascar, Malawi, and Mozambique. These three countries have low routine vaccination coverage and no longer conduct supplementary vaccination activities.

Efforts to improve the quality of AFP surveillance in 1999 and early 2000 include 1) increased funding for AFP surveillance; 2) expansion of active surveillance to the provincial level; and 3) provision of additional technical support for AFP surveillance through the Stop Transmission of Polio (STOP) Initiative in Chad, DR Congo, Ghana, Guinea, Kenya, Niger, Nigeria, and Uganda.

Although indigenous wild poliovirus is virtually absent in southern and eastern Africa and wild poliovirus circulation has declined to low levels in the some parts of west Africa, countries with intense circulation of wild poliovirus, including Angola, Chad, DR Congo, Ethiopia, Nigeria, and Sierra Leone, pose a risk for delaying global polio eradication. The remaining major challenges to polio eradication in AFR are 1) conducting high-quality

Poliomyelitis Eradication — Continued

supplemental vaccination activities and additional rounds and mopping-up activities where indicated, with emphasis on reaching previously unvaccinated children; 2) gaining access to all children in countries affected by conflict (e.g., Angola, Congo Brazzaville, DR Congo, and Sierra Leone); 3) assuring adequate quantities of potent OPV vaccines for routine and supplemental vaccination activities; 4) addressing basic routine EPI infrastructure in Angola, DR Congo, Liberia, Nigeria, and Sierra Leone; 5) filling the shortfall in funding[†] for polio eradication in AFR; and 6) rapidly improving the quality of AFP surveillance.

References

- 1. World Health Assembly. Global eradication of poliomyelitis by the year 2000: resolution of the 41st World Health Assembly. Geneva, Switzerland: World Health Organization, 1988 (Resolution WHA 41.28).
- Regional Committee for Africa. Expanded Program on Immunization: disease control goals, the countdown has started—resolutions of the 45th Regional Committee for Africa. Brazzaville, Congo: World Health Organization, 1995 (Resolution AFR/RC45/R5).
- 3. Organization of African Unity. Yaounde declaration on polio eradication in Africa. In: Proceedings of the 32nd Ordinary Session of the Organization of African Unity meeting. Yaounde, Cameroon: Organization of African Unity, 1996 (AHG/Declaration 1 [XXXII]).
- CDC. Progress toward poliomyelitis eradication—Democratic Republic of Congo, 1996– 1999. MMWR 2000;49:253–8.
- 5. CDC. Progress toward poliomyelitis eradication—Nigeria, 1996–1998. MMWR 1999;48: 312–6.
- 6. Valente F, Otten M, Balbina F, et al. Massive outbreak of poliomyelitis caused by type-3 wild poliovirus in Angola in 1999. Bull WHO 2000;78:339–46.

Notice to Readers

Satellite Broadcast on Preparing for the Next Influenza Pandemic

A Public Health Training Network (PHTN) satellite broadcast titled "Update: Preparing for the Next Influenza Pandemic," is scheduled for July 13, 2000, from 9 to 11 a.m. and rebroadcast from 1 to 3 p.m. eastern time. This broadcast will update local, state, and national plans; describe the integration of local, state, and federal partners in pandemic influenza planning; and describe roles for antiviral drug use and triage and infection control measures. Additional information is available on the World-Wide Web at http:// www.cdc.gov/phtn/pandemic/pandemicflu.htm, by telephone at (404) 639-8799, or by e-mail at cwilkins@cdc.gov. This program is a production of the PHTN and CDC's National Immunization Program and National Vaccine Program Office.

[†] The polio eradication initiative in AFR is supported by AFR member countries. External funding is provided by Rotary International, United Nations Childrens' Fund, the governments of Canada, United States, United Kingdom, Norway, and Belgium, the United Nations Foundation, the Gates Foundation, the De Beers Corporation, WHO, and CDC.

450

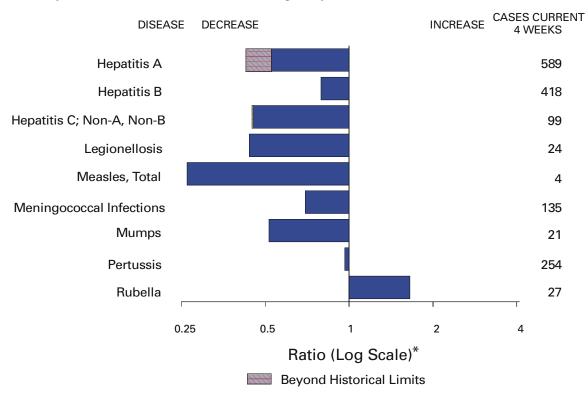


FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending May 20, 2000, with historical data

*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.

		Cum. 2000		Cum. 2000
Anthrax		-	HIV infection, pediatric* [§]	85
Brucellosis*		15	Plague	2
Cholera		_	Poliomyelitis, paralytic	-
Congenital ru	bella syndrome	4	Psittacosis*	5
Cyclosporiasis	s* ,	6	Rabies, human	-
Diphtheria		-	Rocky Mountain spotted fever (RMSF)	52
Encephalitis:	California serogroup viral*	2	Streptococcal disease, invasive, group A	1,205
•	eastern equine*	-	Streptococcal toxic-shock syndrome*	43
	St. Louis*	-	Syphilis, congenital [¶]	38
	western equine*	-	Tetanus	8
Ehrlichiosis	human granulocytic (HGE)*	26	Toxic-shock syndrome	52
	human monocytic (HME)*	3	Trichinosis	4
Hansen disea	se (leprosy)*	14	Typhoid fever	103
Hantavirus pu	Ilmonary syndrome*†	4	Yellow fever	-
	emic syndrome, postdiarrheal*	31		

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending May 20, 2000 (20th Week)

-: No reported cases.

*Not notifiable in all states. *Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID). *Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update April 30, 2000.

¹Updated from reports to the Division of STD Prevention, NCHSTP.

							Escherichia coli O157:H7*				
	All Cum.	DS Cum.	Chlan Cum.	nydia⁺ Cum.	Cryptos Cum.	ooridiosis Cum.	NET Cum.	Cum.	PH Cum.	LIS Cum.	
Reporting Area	2000 [§]	1999	2000	1999	2000 422	1999 616	2000 587	1999 484	2000 357	1999	
NEW ENGLAND	13,355 802	16,929 895	210,632 8,247	255,327 8,058	422	32	56	484 78	357 56	416 72	
Maine	14	15	516	276	5	4	4	4	3	-	
N.H. Vt.	11 2	25 6	399 202	409 197	2 9	4 6	5 2	8 8	4 2	10 1	
Mass.	535	614	3,903	3,465	3	15	23	35	26	32	
R.I. Conn.	34 206	52 183	906 2,321	892 2,819	2	- 3	22	4 19	21	6 23	
MID. ATLANTIC	3,280	4,308	12,365	30,219	38	142	72	33	53	22	
Upstate N.Y. N.Y. City	186 1,943	529 2,108	N 2,188	N 14,560	28 5	39 84	68 3	25 2	40	2	
N.J. [′]	703	846	2,337	4,844	1	11	1	6	8	20	
Pa.	448	825	7,840	10,815	4	8	N	N	5	-	
E.N. CENTRAL Ohio	1,310 194	1,142 186	35,606 8,300	39,727 11,801	84 19	110 16	102 20	89 33	35 11	70 22	
Ind. III.	100 809	146 505	4,425	4,525	7	8 17	19 30	14 23	9	11 18	
Mich.	153	248	10,099 9,245	10,893 8,495	14	16	16	19	11	13	
Wis.	54	57	3,537	4,013	40	53	17	Ν	4	6	
W.N. CENTRAL Minn.	299 55	298 45	12,545 2,319	14,728 2,969	35 4	35 13	110 29	85 22	65 30	84 23	
lowa	26 139	37 105	1,675	1,615	11 8	7	18 37	9	4 17	3 10	
Mo. N. Dak.	-	4	4,764 61	5,392 352	2	3	6	3	4	2	
S. Dak. Nebr.	3 20	11 24	664 1,049	647 1,365	3 5	2 5	2 11	3 33	2 5	5 41	
Kans.	56	72	2,013	2,388	2	1	7	7	3	-	
S. ATLANTIC	3,641	4,706	44,205	54,819	86	108	53	54	26	37	
Del. Md.	65 392	50 561	1,143 4,515	1,104 5,184	2 5	- 6	- 8	3 4	- 1	-	
D.C. Va.	264 278	161 263	1,280 5,940	N 5,542	- 3	4 6	- 12	- 15	U 10	U 12	
W. Va.	21	24	753	715	-	-	2	1	2	1	
N.C. S.C.	195 294	358 473	7,913 3,508	8,903 7,796	8	1	9 3	10 6	2 1	10 5	
Ga.	357	588	7,016	13,865	50	67	5	3	5	U	
Fla. E.S. CENTRAL	1,775	2,228	12,137	11,710	18 19	24 6	14 31	12	5 21	9	
Ky.	639 80	713 127	18,770 3,084	17,073 2,952	1	1	10	32 8	8	27 7	
Tenn. Ala.	287 169	312 112	5,515 5,947	5,471 3,828	4 8	3 1	14 1	12 7	11	11 8	
Miss.	103	162	4,224	4,822	6	1	6	5	2	1	
W.S. CENTRAL	1,128	2,043	32,164	34,192	12	46	23	24	37	28	
Ark. La.	69 232	69 378	1,978 7,212	2,196 5,509	1 -	- 19	4	5 3	3 8	4 5	
Okla. Tex.	65 762	55 1,541	3,297 19,677	3,271 23,216	2 9	1 26	7 12	4 12	3 23	5 14	
MOUNTAIN	477	622	12,045	13,123	32	29	55	37	23	25	
Mont.	6	4	591	512	4	3	9	3	-	-	
ldaho Wyo.	9 2	8 3	731 302	680 302	3 2	2	7 3	1 2	2	3 3	
Colo.	99 50	143	1,862 1,687	2,754	9 1	4 11	19 2	14 2	- 7 2	5 1	
N. Mex. Ariz.	165	37 270	4,899	1,880 4,949	3	7	13	7	11	4	
Utah Nev.	52 94	61 96	966 1,007	801 1,245	8 2	N 2	1 1	6 2	1	7 2	
PACIFIC	1,779	2,202	34,685	43,388	95	108	85	52	41	51	
Wash.	202	115	4,830	4,679	N	N	18	13	22	21	
Oreg. Calif.	47 1,476	50 1,989	1,799 26,413	2,400 34,332	3 92	10 98	12 50	13 25	14	12 17	
Alaska Hawaii	5 49	6 42	974 669	750 1,227	-	-	1 4	- 1	- 5	- 1	
Guam	13	1	-	181	-	-	N	N	U	U	
P.R.	284	583	142	U	-	-	2	8	Ŭ	Ŭ	
V.I. Amer. Samoa	18 -	13 -	-	U U	-	U U	-	U U	U U	U U	
C.N.M.I.	-	- navailable	-	U reported ca	-		-	Ũ	Ŭ	Ŭ	

TABLE II. Provisional cases of selected notifiable diseases, United States,
weeks ending May 20, 2000, and May 22, 1999 (20th Week)

N: Not notifiable. U: Unavailable. -: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands. * Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS). † Chlamydia refers to genital infections caused by *C. trachomatis.* Totals reported to the Division of STD Prevention, NCHSTP. § Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update April 30, 2000.

	Gono	rrhea		atitis C; A, Non-B	Legior	nellosis	Lyme Disease		
Reporting Area	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	
UNITED STATES	111,035	134,634	999	1,456	236	328	1,242	2,019	
NEW ENGLAND Maine N.H. Vt. Mass. R.I. Conn.	2,238 32 35 20 1,017 233 901	2,538 22 28 24 990 228 1,246	23 - - 3 18 2	7 1 2 1 3	16 2 - 8 1 3	22 3 3 5 2 6	217 26 1 97 93	477 1 - 108 16 352	
MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	8,172 2,252 824 1,282 3,814	16,173 2,325 6,115 2,808 4,925	22 22 - -	53 26 - 27	43 20 - 23	90 24 11 6 49	772 371 4 397	1,104 381 32 221 470	
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	22,212 4,823 2,020 7,173 6,680 1,516	22,212 23,858 9 4,823 6,326 2,020 2,500 7,173 7,713 6,680 5,739 8		93 833 3		96 29 8 12 28 19	12 10 1 1 U	86 14 3 3 1 65	
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. Nebr. Kans.	5,389 932 358 2,812 4 96 349 838	6,154 1,112 361 3,012 35 61 616 957	244 1 222 - - 3 17	62 2 57 - 3	17 1 3 10 - 1 - 2	16 1 5 7 1 2	47 13 9 - - 24	39 8 3 19 1 - 4 4	
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	32,230 636 3,135 899 3,843 227 6,648 3,980 4,462 8,400	40,624 661 4,736 2,472 3,729 244 7,605 4,093 8,877 8,207	42 5 1 4 12 - 20	85 - 23 - 8 11 20 12 1 10	50 4 14 - 3 N 6 2 3 18	36 2 4 9 N 7 6 - 8	154 12 103 - 14 6 8 1 - 10	215 12 160 1 11 4 25 1 - 1	
E.S. CENTRAL Ky. Tenn. Ala. Miss.	13,272 1,279 4,208 4,456 3,329	13,283 1,275 4,223 3,659 4,126	167 16 36 6 109	104 5 38 1 60	7 5 1 1	15 7 6 2	4 - 3 1 -	29 2 13 6 8	
W.S. CENTRAL Ark. La. Okla. Tex.	16,815 1,065 5,030 1,450 9,270	19,189 1,032 4,678 1,660 11,819	260 3 162 2 93	176 9 116 3 48	4 - 2 1 1	1 - 1 -	1 - 1 -	6 - 3 2 1	
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	3,848 20 34 25 1,268 367 1,610 105 419	3,581 17 34 11 835 328 1,810 81 465	85 1 - 54 12 5 10 - 3	80 4 30 11 13 14 2 2	15 - 1 7 1 2 3	24 - - 4 1 3 10 6	1 - - 1 - - -	4 - 1 - 1 - 1 1	
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	6,859 847 216 5,594 119 83	9,234 828 346 7,758 134 168	63 8 15 40 -	56 5 7 44	22 8 N 14 -	28 7 N 20 1	34 2 32 N	59 1 3 55 N	
Guam P.R. V.I. Amer. Samoa C.N.M.I. N: Not potifiable	170 - - -	27 144 U U U	- 1 - -	- U U U U	- - - -	- U U U	N - -	N U U U	

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States,
weeks ending May 20, 2000, and May 22, 1999 (20th Week)

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

			uy 20, 20		Salmonellosis*						
	Ma	laria	Rabie	s, Animal	NE	TSS		LIS			
Reporting Area	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999			
UNITED STATES	328	428	1,857	2,188	9,150	10,157	6,060	9,058			
NEW ENGLAND Maine N.H. Vt. Mass. R.I. Conn.	12 2 1 2 3 2 2	16 1 - 1 6 - 8	240 59 3 16 83 6 73	341 60 24 53 76 40 88	584 50 44 43 328 25 94	573 40 29 23 332 32 117	578 25 43 44 329 36 101	605 25 29 25 344 44 138			
MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	44 19 15 4 6	123 29 56 27 11	356 255 U 57 44	403 269 U 79 55	1,153 314 271 322 246	1,367 292 395 330 350	1,137 349 402 215 171	1,076 323 407 311 35			
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	32 4 2 14 10 2	51 8 7 23 9 4	17 4 - 13 -	25 8 - 17 -	1,316 324 164 418 236 174	1,540 297 131 480 338 294	768 259 142 1 275 91	1,361 262 129 493 321 156			
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. Nebr. Kans.	15 4 - 1 2 - 2 6	15 2 5 7 - - 1	195 30 5 54 40 - 36	292 38 46 11 60 84 1 52	555 73 76 222 14 25 53 92	625 170 63 199 11 26 67 89	588 185 25 220 22 24 37 75	699 223 58 237 21 36 51 73			
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	93 2 35 2 20 9 1 4 20	102 - - - - 20 - - - 7 24	793 13 154 - 208 48 175 51 91 53	782 23 172 187 45 168 57 61 69	1,754 32 251 1 224 47 252 139 292 516	1,803 41 248 34 218 31 330 95 307 499	1,026 30 223 U 184 33 155 113 282 6	1,608 50 270 U 194 29 335 110 444 176			
E.S. CENTRAL Ky. Tenn. Ala. Miss.	14 2 5 6 1	9 2 4 3	70 10 41 19	106 20 37 49	465 98 120 151 96	543 125 140 158 120	307 56 144 91 16	366 88 148 112 18			
W.S. CENTRAL Ark. La. Okla. Tex.	4 1 2 1	11 2 7 1 1	29 - - 29 -	46 - 46 -	711 102 59 94 456	1,138 110 137 108 783	644 22 79 73 470	742 76 156 73 437			
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	18 1 - 10 2 3 2	18 2 7 2 4 1 1	71 23 22 4 21 1	71 25 26 1 - 19 -	928 38 45 18 281 71 253 138 84	888 18 32 9 285 100 260 118 66	641 14 246 59 197 125	827 1 37 13 290 102 199 132 53			
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	96 8 19 67 2	83 5 9 64 5	86 - 71 15 -	122 1 116 5	1,684 143 117 1,337 23 64	1,680 140 138 1,278 15 109	371 157 145 16 53	1,774 255 174 1,238 7 100			
Guam P.R. V.I. Amer. Samoa C.N.M.I. N: Not notifiable		- U U U Vailable	- 16 - -	35 U U U	24 - - -	20 169 U U U	U U U U U				

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending May 20, 2000, and May 22, 1999 (20th Week)

N: Not notifiable. U: Unavailable. -: No reported cases. *Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

T	<u>meene e</u>	Shige				philis			
F	NET			HLIS		k Secondary)	Tuberculosis		
Reporting Area	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999	Cum. 2000	Cum. 1999 [†]	
UNITED STATES	5,369	4,883	2,489	2,654	2,276	2,565	3,631	5,277	
NEW ENGLAND Maine N.H. Vt.	106 4 1 1	126 2 6 4	89 - 4 -	113 - 6 3	26 - -	24 - - 1	134 2 2 88	130 6 1	
Mass. R.I. Conn.	71 9 20	77 12 25	57 8 20	69 9 26	22 1 3	1 1		62 16 45	
MID. ATLANTIC Upstate N.Y. N.Y. City N.J. Pa.	690 326 283 38 43	358 76 123 102 57	493 136 264 61 32	191 26 87 76 2	74 7 23 14 30	114 9 46 29 30	813 88 464 195 66	866 111 430 178 147	
E.N. CENTRAL Ohio Ind. III. Mich. Wis.	943 78 234 274 287 70	806 228 30 299 121 128	325 45 29 2 234 15	45 46 29 35 29 11 181 122 2 258 115 167 234 78 119 70		35 122 167 70	454 94 22 253 51 34	526 75 41 266 111 33	
W.N. CENTRAL Minn. Iowa Mo. N. Dak. S. Dak. Nebr. Kans.	435 51 108 226 2 2 19 27	298 38 4 211 2 7 22 14	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		172 61 13 68 - 9 6 15	180 75 14 64 1 3 8 15			
S. ATLANTIC Del. Md. D.C. Va. W. Va. N.C. S.C. Ga. Fla.	748 5 37 49 2 44 18 90 503	784 7 48 24 28 4 77 36 83 477	154 3 10 U 35 2 16 28 28 28 32	201 2 10 9 2 43 15 30 90	759 2 119 22 53 1 230 76 116 140	903 2 179 46 63 2 207 107 165 132	727 86 2 57 15 112 30 137 288	1,009 11 89 17 83 19 153 131 205 301	
E.S. CENTRAL Ky. Tenn. Ala. Miss.	276 47 154 14 61	421 45 293 46 37	191 31 148 9 3	245 33 190 21 1	362 37 229 44 52	457 44 238 116 59	250 42 102 106	321 42 99 120 60	
W.S. CENTRAL Ark. La. Okla. Tex.	638 77 54 14 493	1,049 41 67 201 740	540 3 38 8 491	333 21 47 61 204	314 44 77 68 125	387 27 91 89 180	115 72 1 42	800 56 U 41 703	
MOUNTAIN Mont. Idaho Wyo. Colo. N. Mex. Ariz. Utah Nev.	367 3 28 1 63 38 143 31 60	268 6 4 2 45 37 142 17 15	153 - 2 30 20 66 35	154 - 3 1 33 21 72 18 6	82 - 1 2 11 66 - 2	77 - - 1 5 68 1 2	145 4 3 13 19 66 12 28	162 5 1 U 21 87 16 32	
PACIFIC Wash. Oreg. Calif. Alaska Hawaii	1,166 229 87 827 7 16	773 37 27 688 - 21	284 222 51 3 8	775 47 26 683 19	164 23 2 139	137 28 2 105 1 1	821 72 6 677 28 38	1,283 57 39 1,101 25 61	
Guam P.R. V.I. Amer. Samoa C.N.M.I. N: Not notifiable.	- 1 - - - U: Unay	4 32 U U U		U U U U tred cases.	49 - -	- 78 U U U	- - - -	- 73 U U U	

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending May 20, 2000, and May 22, 1999 (20th Week)

N: Not notifiable. U: Unavailable. -: No reported cases. *Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS). *Cumulative reports of provisional tuberculosis cases for 1999 are unavailable ("U") for some areas using the Tuberculosis Information System (TIMS).

	and May 22, 1999 (20th Week)											
	<i>H. influ</i> Inva			epatitis (V	iral), By Typ	be				les (Rubeo	-	
	Cum.	Cum.	A Cum.	Cum.	B Cum.	Cum.	Indiger	Cum.	Impo	rted* Cum.	Total Cum.	Cum.
Reporting Area	2000 [†]	1999	2000	1999	2000	1999	2000	2000	2000	2000	2000	1999
UNITED STATES	472	482	4,254	7,421	2,107	2,544	-	12	-	4	16	51
NEW ENGLAND Maine	32 1	36 4	93 6	83 2	20 4	59 -	-	-	-	-	-	9
N.H.	6	6	11	7	8	5	-	-	-	-	-	1
Vt. Mass.	2 16	4 15	3 39	1 26	3 3	1 26	-	-	-	-	-	6
R.I. Conn.	1 6	-7	1 33	9 38	2	11 16	Ū	-	- U	-	-	- 2
MID. ATLANTIC	66	73	179	475	193	373	-	-	-	_	_	2
Upstate N.Y.	30	29 23	89	95	45	79	-	-	-	-	-	2
N.Y. City N.J.	14 18	20	90 -	127 62	148	120 53	-	-	-	-	-	-
Pa.	4	1	-	191	-	121	-	-	-	-	-	-
E.N. CENTRAL Ohio	62 26	73 25	541 125	1,362 315	243 40	229 42	-	3 2	-	-	3 2	1
Ind. III.	10 22	11 30	20 187	47 263	20 38	19	-	-	-	-	-	1
Mich.	4	7	196	698	144	149	-	- 1	-	-	- 1	-
Wis.	-	-	13	39	1	19	-	-	-	-	-	-
W.N. CENTRAL Minn.	19 7	22 12	503 97	305 25	200 7	111 16	2	1 -	-	-	1	-
lowa Mo.	- 4	1 2	40 252	63 174	19 134	19 63	-	-	-	-	-	-
N. Dak.	1	-	-	1	2	-	-	-	-	-	-	-
S. Dak. Nebr.	- 3	1 3	- 17	8 27	- 18	10	-	-	-	-	-	-
Kans.	4	3	97	7	20	3	-	1	-	-	1	-
S. ATLANTIC Del.	135	105	521	658 2	439	397	-	-	-	-	-	4
Md.	28	30 3	65 2	133	44	82	-	-	-	-	-	-
D.C. Va.	27	10	60	30 54	6 57	10 39	-	-	-	-	-	3
W. Va. N.C.	4 10	3 20	37 84	9 50	4 109	11 93	-	-	-	-	-	-
S.C. Ga.	6 39	2 25	15 67	11 193	3 67	35 45	-	-	-	-	-	-
Fla.	21	12	191	176	149	40 82	-	-	-	-	-	1
E.S. CENTRAL	25	35	139	175	122	186	-	-	-	-	-	2
Ky. Tenn.	9 13	5 17	18 21	32 75	32 27	13 82	-	-	-	-	-	2
Ala. Miss.	3	11 2	26 74	32 36	20 43	46 45	-	-	-	-	-	-
W.S. CENTRAL	26	35	746	2,040	249	396	-	-	-	-	-	3
Ark. La.	- 6	1 9	76 26	18 66	40 45	31 77	-	-	-	-	-	-
Okla.	19	23	130	227	46	46	-	-	-	-	-	-
Tex. MOUNTAIN	1	2	514	1,729	118	242	-	-	-	-	-	3
Mont.	54 -	51 1	358 1	627 12	168 3	239 15	-	8 -	-	1 -	9	-
ldaho Wyo.	2	1 1	13 6	24 3	4	12 4	-	-	-	-	-	-
Colo. N. Mex.	11 11	6 10	68 37	108 20	35 37	37 81	-	1	-	1	2	-
Ariz.	25	27	179	386	64	52	-	-	-	-	-	-
Utah Nev.	4 1	4 1	29 25	23 51	8 17	14 24	Ū	3 4	Ū	-	3 4	-
PACIFIC	53	52	1,174	1,696	473	554	-	-	-	3	3	30
Wash. Oreg.	3 14	1 18	์112 91	101 118	22 37	21 46	-	-	-	-	-	5 10
Calif.	22	28	966	1,467	406	475	-	-	-	3	3	15
Alaska Hawaii	1 13	4 1	5	4 6	3 5	7 5	Ū	-	Ū	-	-	-
Guam	-	-	-	2	-	2	U	-	U	-	-	1
P.R. V.I.	-	1 U	40	112 U	24	107 U	U U	-	U U	-	-	Ū
Amer. Samoa C.N.M.I.	-	Ū U	-	Ŭ U	-	Ŭ U	Ŭ U	-	Ŭ U	-	-	Ŭ U
C.IV.IVI.I.	-		-	U		U	0	-	0	-	-	<u> </u>

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending May 20, 2000, and May 22, 1999 (20th Week)

N: Not notifiable. U: Unavailable. -: No reported cases. *For imported measles, cases include only those resulting from importation from other countries. *Of 112 cases among children aged <5 years, serotype was reported for 47 and of those, 10 were type b.

	Meningococcal Disease			-	1333 (2		CON/					
			Mumps				Pertussis		Rubella			
Reporting Area	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999	2000	Cum. 2000	Cum. 1999	
UNITED STATES	966	1,107	8	157	158	57	1,698	2,327	4	48	64	
NEW ENGLAND Maine	56 3	58 4	-	2	3	9	428 11	225	-	5	7	
N.H. Vt.	4	9 4	-	-	1	- 6	54 94	45 9	-	1	-	
Mass.	2 37	33	-	-	2	6 3	244	159	-	3	- 7	
R.I. Conn.	3 7	2 6	Ū	1 1	-	Ū	7 18	3 9	Ū	- 1	-	
MID. ATLANTIC	86	108	-	9	19	1	132	509	-	2	9	
Upstate N.Y. N.Y. City	22 21	28 36	-	6	3 3	1	77	447 10	-	2	5	
N.J.	21	18	-	- 3	1	-	-	13	-	-	1	
Pa. E.N. CENTRAL	22 175	26 197	-	3 17	12 20	- 17	55 222	39 187	-	-	3	
Ohio	36	73	-	7	6	10	156	95	-	-	-	
Ind. III.	22 43	22 55	-	- 3	2 4	3	22 18	9 39	-	-	-	
Mich. Wis.	56 18	24 23	-	7	7 1	4	16 10	17 27	-	-	-	
W.N. CENTRAL	77	117	-	10	6	9	75	66	-	2	26	
Minn.	3 15	26 23	-	- 4	1 3	4	40 11	18 14	-	-	- 2	
Iowa Mo.	48	40	-	4	3 1	3	12	14	-	-	- -	
N. Dak. S. Dak.	1 4	3 5	-	-	-	-	1 1	2	-	-	-	
Nebr. Kans.	3 3	8 12	-	2 3	- 1	- 2	3 7	1 14	-	- 2	24	
S. ATLANTIC	159	153	3	25	28	4	147	105	-	28	2	
Del. Md.	15	3 27	-	- 5	- 4	2 1	3 36	36	-	-	- 1	
D.C.	-	1	-	-	2	-	-	-	-	-	-	
Va. W. Va.	28 4	22 3	-	4	8	-	13 -	13 1	-	-	-	
N.C. S.C.	26 10	22 21	- 1	3 7	5 3	-	39 16	26 7	-	20 6	1	
Ga. Fla.	26 50	29 25	2	2	-	1	19 21	12 10	-	2	-	
E.S. CENTRAL	50 68	25 85	2	5	3	- 1	30	49	-	4	2	
Ky.	13 32	16 31	-	- 2	-	-	16 5	12 25	-	1	-	
Tenn. Ala.	19	21	1	2	1	-	8	10	-	3	2	
Miss.	4	17	-	1	2	-	1	2	-	-	-	
W.S. CENTRAL Ark.	80 6	105 20	-	15 1	21	3 1	61 9	62 4	-	2	4	
La. Okla.	25 19	37 18	-	3	3 1	-	3 5	2 8	-	-	-	
Tex.	30	30	-	11	17	2	44	48	-	2	4	
MOUNTAIN Mont.	54 1	78 1	4	15 1	9	5	315 6	255 1	-	1	12	
Idaho	6	8	-	- 1	-	-	37	89 2	-	-	-	
Wyo. Colo.	15 7	20	-	1	3	4	173	68	-	1	-	
N. Mex. Ariz.	7 16	10 26	- 3	1 3	N	- 1	57 33	19 45	-	-	- 10	
Utah Nev.	7 2	5 5	1 U	5 3	5 1	Ū	6 3	29 2	Ū	-	1 1	
PACIFIC	211	206	-	59	49	8	288	869	4	4	2	
Wash. Oreg.	22 27	28 38	Ň	3 N	1 N	6 2	103 31	435 16	-	-	-	
Calif.	155	131	-	51	42	-	144	398	4	4	2	
Alaska Hawaii	3 4	5 4	Ū	4 1	1 5	Ū	6 4	3 17	Ū	-	-	
Guam	-	1	U	-	1	U	-	1	U	-	-	
P.R. V.I.	2	7 U	U U	-	Ū	U U	-	7 U	U U	-	Ū	
Amer. Samoa C.N.M.I.	-	U U	U U	-	U U	U U	-	U U	U U	-	U U	
N: Not potifichlo			-	No roporto		Ŭ		<u> </u>	~		<u> </u>	

TABLE III. (Cont'd) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending May 20, 2000, and May 22, 1999 (20th Week)

N: Not notifiable. U: Unavailable.

- : No reported cases.

All Causes, By Age (Years)					P&I [†]	All Causes, By Age (Years)						P&I⁺			
Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	Total	Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	Total
NEW ENGLAND Boston, Mass. Bridgeport, Conn Cambridge, Mass Fall River, Mass. Hartford, Conn. Lowell, Mass. Lynn, Mass. New Bedford, Ma New Haven, Conn Providence, R.I. Somerville, Mass. Springfield, Mass Waterbury, Conn. Worcester, Mass. MID. ATLANTIC	. 26 30 45 27 12 ss. 20 . 40 53 . 40 27 62 2,097	429 103 25 21 27 31 17 9 43 3 29 43 3 27 22 55 1,475	9 4 6 408	33 14 1 2 1 3 1 2 2 3 1 2 3 1 2 1 1 1	11 5 - 1 - 1 1 - 2 1 - 2 1 - 40	6 3 - - - 3 3 - - 33	48 16 1 2 2 4 3 - 2 5 2 - 2 - 9 101	S. ATLANTIC Atlanta, Ga. Baltimore, Md. Charlotte, N.C. Jacksonville, Fla Miami, Fla. Norfolk, Va. Richmond, Va. Savannah, Ga. St. Petersburg, I Tampa, Fla. Washington, D.I Wilmington, De E.S. CENTRAL Birmingham, Al Chattanooga, TG	97 52 74 37 Fla. 76 239 C. 100 I. 10 785 a. 179 enn. 79	700 96 73 96 55 31 31 23 57 164 68 6 525 124 60	232 U 33 23 26 24 9 28 9 28 9 12 47 47 21 - 158 32 14	105 U 21 7 10 17 3 10 4 5 20 8 - 69 18 5	21 U 6 1 2 1 1 5 1 3 15 1 5	22 U 3 1 1 7 4 - 1 2 2 - 18 4 -	78 U 13 8 10 16 3 2 5 18 3 - 5 18 3 - 68 17 7
Albany, N.Y. Allentown, Pa. Buffalo, N.Y. Camden, N.J. Elizabeth, N.J. Erie, Pa.§	40 U 78 32 15 43 35	29 U 55 23 12 32 24	7 U 15 4 9 8	4 U 5 2 1 - 2	U 2 2 2	- U 1 1 - 1	1 U 6 1 2 3	Knoxville, Ťenn. Lexington, Ky. Memphis, Tenn Mobile, Ala. Montgomery, A Nashville, Tenn.	79 70 . 201 U	52 47 130 U 29 83	17 16 37 U 7 35	5 4 22 U 2 13	4 2 6 U 2	1 6 U 6	4 8 15 U 11 6
Jersey City, N.J. New York City, N.Y Paterson, N.J. Philadelphia, Pa. Pittsburgh, Pa.§ Reading, Pa. Rochester, N.Y. Schenectady, N.Y. Scranton, Pa.§ Syracuse, N.Y. Trenton, N.J. Utica, N.Y. Yonkers, N.Y.	Y. 1,136 48 18 256 63 31 128	24 805 24 154 43 28 97 21 23 57 16 20 U	8 225 9 3 64 11 25 4 6 11 3 2 U	2 79 9 1 24 3 1 4 - 2 3 1 U	17 3 - 9 2 - 1 - 2 - 2 - U	10 3 2 5 4 1 1 - 3 - U	41 2 - 14 3 1 10 6 2 6 2 1 U	W.S. CENTRAL Austin, Tex. Baton Rouge, La Corpus Christi, " Dallas, Tex. El Paso, Tex. Ft. Worth, Tex. Houston, Tex. Little Rock, Ark. New Orleans, La San Antonio, Te Shreveport, La. Tulsa, Okla.	Tex. 56 210 70 98 413 77 . 99	1,021 86 32 38 121 39 69 259 49 64 145 43 76	307 18 5 10 45 16 21 87 12 16 37 10 30	136 8 1 5 25 9 4 47 9 1 14 3 10	65 3 11 3 1 17 4 12 9 1 2	34 4 1 8 3 3 3 3 4 2 3	94 8 1 7 9 1 9 29 4 - 16 4 6
E.N. CENTRAL Akron, Ohio Canton, Ohio Chicago, Ill. Cincinnati, Ohio Cleveland, Ohio Columbus, Ohio Dayton, Ohio Detroit, Mich. Evansville, Ind. Fort Wayne, Ind. Gary, Ind. Grand Rapids, Mi Indianapolis, Ind. Lansing, Mich. Milwaukee, Wis. Peoria, Ill. Rockford, Ill. South Bend, Ind. Toledo, Ohio Youngstown, Ohi W.N. CENTRAL Des Moines, Iowa Duluth, Minn. Kansas City, Kans Kansas City, Kans Kansas City, Mo. Lincoln, Nebr.	178 31 98 54 39 64 103 0 71 859 44 28 859 44 28 8 81 36 n. 147 64	1,332 33 21 242 63 77 143 75 88 39 30 25 114 25 114 25 50 637 637 50 637 50 637 50 637 50 26 26 27 4 56 26 26 113 46 26 113 46 26 114 25 115 114 25 114 25 114 114 25 114 114 25 114 114 25 114 114 25 114 114 114 114 114 114 114 114 114 11	$\begin{array}{c} 24\\ 48\\ 8\\ 17\\ 5\\ 12\\ 41\\ 5\\ 20\\ 7\\ 1\\ 11\\ 21\\ 12\\ 144\\ 7\\ 6\\ 15\\ 12\\ 6\\ 2\\ 16\end{array}$	158 4 2 4 9 11 13 6 23 5 1 1 3 13 4 2 5 2 3 5 5 40 - 7 11 2 3 1 5	37 - 9 - 4 9 3 1 1 1 3 2 2 2 16 1 - 2 1 1 3 - 2	67 1 - 17 1 4 10 3 6 1 5 1 1 7 1 1 1 3 2 - 2 22 1 1 6 1 6	120 2 2 3 8 6 5 16 9 8 2 6 - 1 3 1 4 2 3 1 8 3 8 8 8 1 8 2 - 16 9 8 2 6 - 1 3 1 4 2 3 1 8 8 8 8 8 8 8 1 8 2 9 8 2 6 9 8 2 1 8 8 8 1 8 9 8 2 9 8 8 9 8 2 9 8 8 9 8 9 8 9 8 9	MOUNTAIN Albuquerque, N Boise, Idaho Colo. Springs, C Denver, Colo. Las Vegas, Nev. Ogden, Utah Phoenix, Ariz. Pueblo, Colo. Salt Lake City, U Tucson, Ariz. PACIFIC Berkeley, Calif. Fresno, Calif. Glendale, Calif. Honolulu, Hawa Long Beach, Cal Dos Angeles, Ca Pasadena, Calif. Portland, Oreg. Sacramento, Ca San Diego, Calif. San Francisco, C San Jose, Calif. Santa Cruz, Calif. Seattle, Wash. Spokane, Wash. Tacoma, Wash.	38 colo. 73 106 234 25 169 32 tah 114 119 1,391 9 11,391 9 11,391 9 11,391 9 11,391 9 11,391 129 11, 409 129 115. 40 129 115. 40 115. 40 1	615 U 28 48 68 169 21 100 16 77 8 981 6 U 8 7 45 286 9 86 U 122 286 9 86 U 124 30 84 84 7,715	$\begin{array}{c} 177\\ U\\ 3\\ 13\\ 29\\ 48\\ 2\\ 40\\ 8\\ 16\\ 18\\ 270\\ 2\\ U\\ 1\\ 3\\ 9\\ 86\\ 4\\ 24\\ U\\ 26\\ U\\ 42\\ 2\\ 27\\ 11\\ 23\\ 2,212\\ \end{array}$	74 U 9 6 11 2 17 7 8 10 86 - U 4 6 28 1 11 U 8 U 2 11 1 4 8 42	26 U 2 3 2 2 - 6 1 8 2 24 - U 1 5 1 5 U 3 U 2 - 4 - 3 255	18 U 1 - 1 4 - 6 - 5 1 28 1 U - 1 3 4 1 3 U 7 U 3 - 1 2 8 1 U - - - - - - - - - - - - -	62 U 1 5 5 20 3 11 - 9 8 106 1 U - 8 15 16 - 7 U 18 U 8 6 12 5 10 746
St. Louis, Mo. St. Paul, Minn. Wichita, Kans.	91 87 183	63 66 135		5 3 8	2 1 5	6 2 5	4 9 19		. 1,200	,,, 10	_,	0.12	200	2.10	740

TABLE IV. Deaths in 122 U.S. cities,* week ending
May 20, 2000 (20th Week)

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.

Contributors to the Production of the *MMWR* (Weekly) Weekly Notifiable Disease Morbidity Data and 122 Cities Mortality Data

Samuel L. Groseclose, D.V.M., M.P.H.

State Support Team Robert Fagan Jose Aponte Paul Gangarosa, M.P.H. Gerald Jones David Nitschke Carol A. Worsham

CDC Operations Team Carol M. Knowles Deborah A. Adams Willie J. Anderson Patsy A. Hall Pearl Sharp Kathryn Snavely

Informatics T. Demetri Vacalis, Ph.D.

Michele D. Renshaw

Erica R. Shaver

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 *listserv@listserv.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 (888) 232-3228.

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	Acting Director,	Writers-Editors,				
Control and Prevention	Epidemiology Program Office	<i>MMWR</i> (Weekly)				
Jeffrey P. Koplan, M.D., M.P.H.	Barbara R. Holloway, M.P.H.	Jill Crane				
Acting Deputy Director for Science	Editor, <i>MMWR</i> Series	David C. Johnson				
and Public Health, Centers for	John W. Ward, M.D.	Teresa F. Rutledge				
Disease Control and Prevention Walter W. Williams, M.D., M.P.H.	Acting Managing Editor, <i>MMWR</i> (Weekly) Caran R. Wilbanks	Desktop Publishing Lynda G. Cupell Morie M. Higgins				
☆U.S. Government Printing Office: 2000-533-206/28014 Region IV						