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World No-Tobacco Day — May 31, 1997

World No-Tobacco Day is an annual international event that encourages governments, communities, and other groups to become more aware of the hazards of tobacco use and requests all persons who use tobacco to quit for at least 24 hours. This year's event will be held May 31; the theme is "United for a Tobacco-Free World" (*1*).

Tobacco use is expected to be the greatest risk factor for death and disability in the world by 2020 (*2*). In 1990, approximately 3 million deaths were attributed to tobacco use; by 2025, the annual number of tobacco-related deaths is projected to reach 10 million, with 70% of deaths occurring in developing countries (*1*). Efforts to reduce tobacco use require the participation of all sectors of society and must be comprehensive in scope. This year's event will highlight the complementary roles of policies and programs at the local, national, and international levels in achieving a tobacco-free world.

The World Health Organization (WHO), which is sponsoring this year's event, will provide press releases, fact sheets, a poster, and an advisory kit on comprehensive measures to reduce tobacco use. Additional information is available from WHO on the Internet (http://www.who.ch/programmes/psa/toh.htm), the WHO Regional Office for the Americas (telephone [202] 974-3000), and from CDC's Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion (http://www.cdc.gov/tobacco) (telephone [770] 488-5705).

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Cigar Smoking Among Teenagers — United States, Massachusetts, and New York, 1996

Cigar smoking can cause cancers of the oral cavity, larynx, esophagus, and lung (*1*) and chronic obstructive pulmonary disease (*2*). In addition, cigars contain substantial levels of nicotine, an addictive drug (*3*). Despite these health risks, total cigar consumption in the United States was approximately 4.5 billion cigars in 1996, and con-

Cigar Smoking Among Teenagers — Continued

sumption of larger cigars increased by 44.5% from 1993 through 1996 (from 2,138 million cigars to 3,090 million cigars, respectively) (*4*). This report presents estimates of the prevalence of cigar smoking among youth based on analyses of data from the Robert Wood Johnson Foundation's (RWJF) 1996 National Study of Tobacco Price Sensitivity, Behavior, and Attitudes Among Teenagers and Young Adults; a 1996 survey by the Massachusetts Department of Public Health (MDPH) of high school and junior high school students; and the Roswell Park Cancer Institute's 1996 Survey of Alcohol, Tobacco, and Drug Use in two New York counties (*5*). The analyses indicate that, during the year before being surveyed, 26.7% of U.S. and 28.1% of Massachusetts high school students reported having smoked at least one cigar and that 13%–15% of ninth grade students in two New York counties reported having smoked cigars during the previous 30 days.

National Survey

The RWJF survey employed a three-stage cluster sample design to produce a nationally representative sample of students in grades 9–12. Within the selected sample of 200 counties (primary sampling units), schools were randomly selected, with the probability of selection proportional to enrollment size. Four alternate high schools were simultaneously selected, matching the original school in size, type, location, and the race/ethnicity and socioeconomic status of the students. An alternate was substituted when the first school chosen for the study could not participate. A total of 202 schools (representing 146 [73%] of the 200 primary sampling units) participated in the study. Within each school, one class per grade was chosen randomly. All students in the selected classes were eligible to participate; 80% of the students enrolled in the sample of selected classes participated. A total of 16,556 students aged 14–19 years completed the survey; however, 139 were excluded from these analyses because of missing information on sex. Participants were asked, "How many cigars, if any, have you smoked in the past year?" Annual cigar smokers were defined as any student who reported smoking a cigar during the previous year; frequent cigar smokers were defined as any student who reported smoking ≥50 cigars during the previous year. Data were weighted by age, race/ethnicity, sex, and region* to provide national estimates. Confidence intervals (CIs) were calculated using SUDAAN.

In 1996, an estimated 6.0 million (26.7% [95% CI=±1.7%]) 14–19-year-olds reported having smoked a cigar during the previous year (4.3 million [37.0% (95% CI=±2.4%)] males and 1.7 million [16.0% (95% CI=1.3%)] females) (Table 1). Cigarette smokers were more than three times as likely as noncigarette smokers to report having smoked a cigar (54.1% [95% CI=±2.4%], compared with 14.2% [95% CI=±1.2%], respectively). Among the 68.8% of students who did not smoke cigarettes, males were more likely than females to have reported smoking a cigar during the previous year (20.4% [95% CI=±1.8%] versus 7.8% [95% CI=±1.1%], respectively). Users of smokeless tobacco were more than three times as likely as nonusers to report having smoked cigars

*The four regions were *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), and *West* (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming).

TABLE 1. Percentage of students aged 14–19 years who reported having smoked at least one cigar during the previous year, by selected characteristics — United States, National Study of Tobacco Price Sensitivity, Behavior, and Attitudes Among Teenagers and Young Adults, 1996

	Annual cigar use*						Frequent cigar use†					
	Female		Male		Total		Female		Male		Total	
Characteristic	**%**	**(95% CI§)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**
Race/Ethnicity												
White, non-Hispanic	16.0	(± 1.8%)	41.6	(±2.7%)	**28.9**	**(±2.1%)**	1.2	(±0.4%)	3.4	(±0.8%)	**2.3**	**(±0.5%)**
Black, non-Hispanic	13.4	(± 2.9%)	25.2	(±3.7%)	**19.3**	**(±2.9%)**	1.6	(±0.6%)	5.6	(±2.0%)	**3.6**	**(±1.1%)**
Hispanic	20.0	(± 3.0%)	32.3	(±3.0%)	**26.2**	**(±2.1%)**	1.8	(±0.8%)	3.2	(±0.9%)	**2.5**	**(±0.6%)**
Other¶	14.5	(± 2.7%)	28.5	(±4.3%)	**22.2**	**(±2.9%)**	0.5	(±0.7%)	5.8	(±2.4%)	**3.4**	**(±1.3%)**
Age group (yrs)												
14–16	16.8	(± 1.8%)	32.1	(±2.4%)	**24.4**	**(±1.7%)**	1.3	(±0.4%)	2.9	(±0.7%)	**2.1**	**(±0.4%)**
17–18	14.9	(± 1.8%)	43.9	(±3.2%)	**29.8**	**(±2.4%)**	1.1	(±0.5%)	5.2	(±1.1%)	**3.2**	**(±0.7%)**
19	14.9	(± 6.7%)	35.5	(±7.8%)	**27.5**	**(±5.3%)**	3.1	(±3.0%)	4.9	(±2.6%)	**4.2**	**(±2.1%)**
Region**												
Northeast	12.4	(± 2.1%)	33.7	(±5.2%)	**23.2**	**(±3.4%)**	0.8	(±0.5%)	3.0	(±1.0%)	**1.9**	**(±0.5%)**
Midwest	16.9	(± 2.6%)	42.3	(±4.2%)	**29.8**	**(±3.4%)**	1.3	(±0.7%)	4.9	(±1.5%)	**3.2**	**(±0.9%)**
South	17.2	(± 2.2%)	37.1	(±3.7%)	**27.3**	**(±2.4%)**	1.5	(±0.5%)	4.3	(±1.3%)	**3.0**	**(±0.9%)**
West	16.4	(± 3.4%)	34.5	(±5.4%)	**25.6**	**(±4.2%)**	1.1	(±0.5%)	3.0	(±1.0%)	**2.1**	**(±0.5%)**
Education of parents††												
Completed college	16.0	(± 2.0%)	38.7	(±3.1%)	**27.9**	**(±2.2%)**	1.0	(±0.4%)	3.5	(±0.9%)	**2.3**	**(±0.5%)**
Did not complete college	16.0	(± 1.5%)	37.0	(±3.3%)	**26.1**	**(±2.1%)**	1.3	(±0.4%)	4.0	(±0.8%)	**2.6**	**(±0.5%)**
School performance												
Better or much better than average	12.5	(± 1.6%)	31.2	(±2.9%)	**21.5**	**(±2.0%)**	0.7	(±0.3%)	3.2	(±0.8%)	**1.9**	**(±0.4%)**
Average	19.2	(± 1.8%)	40.9	(±3.0%)	**30.1**	**(±2.1%)**	1.6	(±0.5%)	4.3	(±1.0%)	**3.0**	**(±0.6%)**
Below average	28.6	(± 6.0%)	54.7	(±5.4%)	**45.1**	**(±4.2%)**	3.5	(±1.9%)	5.4	(±2.1%)	**4.7**	**(±1.6%)**
Household smoker												
Present	19.1	(± 1.7%)	41.2	(±3.1%)	**30.1**	**(±2.1%)**	1.8	(±0.5%)	4.9	(±1.1%)	**3.4**	**(±0.6%)**
Not present	13.0	(± 1.7%)	33.0	(±2.8%)	**23.2**	**(±1.9%)**	0.7	(±0.4%)	3.0	(±0.6%)	**1.8**	**(±0.4%)**
Cigarette use												
Smoker§§	34.0	(± 2.6%)	73.9	(±2.6%)	**54.1**	**(±2.4%)**	3.0	(±0.8%)	9.4	(±1.7%)	**6.2**	**(±0.9%)**
Nonsmoker	7.8	(± 1.1%)	20.4	(±1.8%)	**14.2**	**(±1.2%)**	0.3	(±0.2%)	1.5	(±0.4%)	**0.9**	**(±0.2%)**

Smokeless tobacco use												
User¶¶	50.1	(±12.0%)	75.9	(±3.6%)	**73.4**	**(±3.4%)**	3.3	(±3.5%)	8.4	(±2.4%)	**7.9**	**(±2.2%)**
Nonuser	15.5	(± 1.3%)	30.6	(±1.9%)	**22.6**	**(±1.4%)**	1.2	(±0.3%)	3.2	(±0.6%)	**2.1**	**(±0.3%)**
Total	**16.0**	**(± 1.3%)**	**37.0**	**(±2.4%)**	**26.7**	**(±1.7%)**	**1.2**	**(±0.3%)**	**3.9**	**(±0.6%)**	**2.6**	**(±0.4%)**

* Smoked one or more cigars during the previous year.
† Smoked ≥50 cigars during the previous year.
§ Confidence interval.
¶ Numbers for other races were too small for meaningful analysis.
** *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; and *West*=Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.
†† Highest level of education of either parent.
§§ Smoked during the previous 30 days.
¶¶ Used chewing tobacco or snuff during the previous 30 days.

Cigar Smoking Among Teenagers — Continued

(73.4% [95% CI=±3.4%], compared with 22.6% [95% CI=±1.4%], respectively). Cigar smoking did not vary substantially by region or race/ethnicity, although prevalence was greatest among white, non-Hispanic males (41.6% [95% CI=±2.7%]).

Massachusetts Survey

The MDPH survey sample comprised two subsamples of students in grades 6–12: a statewide random sample, proportionately stratified by area and grade, and a separate random sample of five urban areas in the state, stratified by percentage of nonwhite students in each grade. These five urban areas were selected to oversample communities with racial/ethnic minorities to ensure adequate representation for analysis. Of the 191 schools meeting eligibility criteria, 171 (90%) participated in this survey. Of the 8236 students eligible to participate in the survey, 6844 (83.1%) participated. Data were collected during November 1996–January 1997. School and class selection was random, participation was voluntary, and all responses were anonymous. The questionnaires were self-administered. All students were asked "How often have you smoked cigars in your lifetime?"; "How often have you smoked cigars during the last 12 months?"; and "How often have you smoked cigars during the last 30 days?" The response categories were never, one to two times, three to five times, six to nine times, 10–19 times, 20–39 times, and ≥40 times.

Among the 1020 students in grade 6, 9.9% (95% CI=±1.8%) reported having ever smoked a cigar, 5.0% (95% CI=±0.8%) smoked a cigar during the previous year, and 2.0% (95% CI=±0.9%) smoked a cigar during the previous month. Among 1942 students in grades 7 and 8, 22.3% (95% CI=±1.8%) reported having ever smoked a cigar, 14.1% (95% CI=±1.5%) smoked a cigar during the previous year, and 7.6% (95% CI=±1.2%) smoked a cigar during the previous month. Among the 3873 high school students in grades 9–12, 38.9% (95% CI=±1.5%) reported having ever smoked a cigar, 28.1% (95% CI=±1.4%) smoked a cigar during the previous year, and 14.5% (95% CI=±1.1%) smoked a cigar during the previous month.

High school students who had used other tobacco products during the previous month were also more likely to have smoked cigars during the previous month. Among students in grades 9–12, 30.3% (95% CI=±2.5%) of those who had smoked cigarettes during the previous month also reported having smoked a cigar, compared with 3.4% (95% CI=±6.6%) of those who had never smoked a cigarette; among those who had used smokeless tobacco during the previous month, 60.7% (95% CI=±6.6%) also reported having smoked a cigar during the previous month, compared with 8.3% (95% CI=±1.0%) of those who had never used smokeless tobacco.

New York Survey

The Roswell Park Cancer Institute survey was conducted in Erie (predominantly urban) and Chautauqua (predominantly rural) counties in New York during the fall of 1996. The survey was administered to 9916 ninth grade students in 57 of the 60 public and parochial high schools in Erie County (81% of the 12,216 ninth grade students in the 60 schools) and to 1677 ninth grade students in 16 of the 18 public schools in Chautauqua County (80% of the 2102 ninth grade students in the 18 schools). Of the students who participated in the survey in Erie County, 79% were non-Hispanic white, 12% were non-Hispanic black, 3% were Hispanic, and 5% were of other racial/ethnic groups. Of those students who participated in the survey in Chautauqua County, 89% were non-Hispanic white. The median age of all students was 14 years. Students

Cigar Smoking Among Teenagers — Continued

completed a self-administered questionnaire with three questions on cigar use and purchasing: "In the past 30 days, did you smoke a cigar?"; "Have you ever bought cigars for yourself?"; and "When you try to buy cigars, how often are you asked about your age?"

Response patterns were similar for the two counties (Table 2). In Erie County, of the 9916 students, 1253 (12.7%) of 9862 students who responded to the question reported having smoked a cigar during the previous 30 days (937 [19.5%] of 4810 boys and 304 [6.1%] of 4983 girls). In Chautauqua County, of the 1677 students, 246 (14.8%) of 1657 students who responded reported having smoked a cigar during the previous

TABLE 2. Number and percentage of ninth grade students who reported having smoked cigars during the previous 30 days or who purchased cigars for their own use, by selected characteristics — Erie and Chautauqua counties, New York, Survey of Alcohol, Tobacco, and Drug Use, 1996

	Erie County*			Chautauqua County†		
		Smoked or purchased			Smoked or purchased	
Category/Characteristic	Total responses§	No.	(%)	Total responses§	No.	(%)
SMOKED CIGAR						
Sex						
Male	4810	937	(19.5)	836	201	(24.0)
Female	4983	304	(6.1)	809	43	(5.3)
Cigarette use						
Never smoked	6977	323	(4.6)	1147	56	(4.9)
Occasionally smoked¶	1708	458	(26.8)	288	91	(31.6)
Regularly smoked**	1148	469	(40.9)	218	99	(45.4)
Smokeless tobacco use						
Not used during previous 30 days	9469	1032	(10.9)	1532	170	(11.1)
Used during previous 30 days	348	217	(62.4)	119	75	(63.0)
Marijuana use						
Never used	6918	360	(5.2)	1126	58	(5.2)
Ever used	2899	885	(30.5)	521	187	(35.9)
Used during previous 30 days	*1523*	*606*	*(39.8)*	*293*	*134*	*(45.7)*
Total	**9862**	**1253**	**(12.7)**	**1657**	**246**	**(14.8)**
PURCHASED CIGAR						
Sex						
Male	4800	608	(12.7)	831	114	(13.7)
Female	4969	166	(3.3)	813	21	(2.6)
Cigarette use						
Never smoked	6957	210	(3.0)	1147	31	(2.7)
Occasionally smoked¶	1705	237	(13.9)	288	35	(12.2)
Regularly smoked**	1147	331	(28.9)	217	70	(32.3)
Total	**9839**	**779**	**(7.9)**	**1657**	**136**	**(8.2)**

*n=9916.
†n=1677.
§May not equal county totals because of missing data about cigar use and/or purchasing.
¶Smoked on 1–19 days during the previous 30 days.
**Smoked on 20–30 days during the previous 30 days.

Cigar Smoking Among Teenagers — Continued

30 days (201 [24.0%] of 836 boys and 43 [5.3%] of 809 girls). In comparison, 29.0% of students in Erie County and 30.6% of students in Chautauqua County reported having smoked cigarettes during the previous 30 days. Cigarette smokers also were more likely than noncigarette smokers to report having smoked a cigar during the previous 30 days (Table 2). The prevalence of reported smokeless tobacco use during the previous 30 days was 3.5% in Erie County and 7.3% in Chautauqua County. Among smokeless tobacco users, reported rates of cigar smoking were 62.4% (217 of 348 students who responded) in Erie County and 63.0% (75 of 119 students who responded) in Chautauqua County (Table 2).

Among students who reported ever purchasing a cigar for themselves, most (63.7% in Erie and 77.0% in Chautauqua) also reported having smoked a cigar during the previous 30 days. Among those who had ever purchased a cigar, 76.6% in Erie County and 71.7% in Chautauqua County reported that they were "rarely" or "never" asked about their age when purchasing a cigar. In comparison, 59.0% in Erie County and 67.7% in Chautauqua County reported that they were "rarely" or "never" asked about their age when purchasing cigarettes.

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Editorial Note: This report is the first to estimate the prevalence of cigar smoking among youth in the United States and documents the level of access to and use of cigars. The risk for several cancers is higher for cigar smokers than for nonsmokers. Therefore, if cigar consumption continues to increase (*4*), cigar-related morbidity and mortality can be expected to increase.[†]

Although the findings from New York and from Massachusetts were from local surveys, they are consistent with the results from the national survey. However, a potential limitation to these data is that they represent the cigar use of only those adolescents attending school and, therefore, may not be representative of all adolescents.

Although federal law requires states to enact laws prohibiting the sale of cigars and other tobacco products to minors (*6*), young persons in New York reported being able to purchase cigars easily. These findings, especially if replicated in other communities, may warrant actions to curtail youth access to cigars that are consistent with measures for limiting access to cigarettes and smokeless tobacco (e.g., Food and Drug Administration regulations) (*7*). The findings from the surveys in this report also indicate that cigar smoking, once primarily an activity among older men (*8*), is now an activity of both male and female teenagers. Therefore, priorities include the need to further characterize the use of cigars in the United States, determine the prevalence of cigar smoking among adults, and continue monitoring the prevalence of cigar use among youth. Although the Surgeon General's health warning is legally mandated for some tobacco products, the law does not include cigars (*9*). Therefore, teenagers and other

[†]The National Cancer Institute has announced that it will publish a comprehensive monograph on cigar smoking by the end of 1997 titled "Cigar Smoking in the U.S.: Health Effects and Trends."

Cigar Smoking Among Teenagers — Continued

users of cigars may be unaware of the health risks of cigar smoking. Immediate efforts should be made to publicize the health risks of cigar smoking; deglamorize the product in magazines, movies, and television programs; and protect nonsmokers from secondhand cigar smoke.

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Illegal Sales of Cigarettes to Minors — Mexico City, Mexico, 1997

Because of the increasing prevalence of tobacco use among youth in the United States and Mexico (*1,2*), in 1996 the United States-Mexico Binational Commission (US-MBC) Health Working Group identified prevention of tobacco use, with an emphasis on adolescents, as one of its four priority health concerns. From 1970 to 1990, annual death rates for the leading causes of smoking-related deaths in Mexico nearly tripled and, in 1992, an estimated 10,253 persons in Mexico died as a result of smoking-related diseases, 9% of all deaths that year (*3*). In addition, from 1988 to 1993, the prevalence of current smoking among minors aged 12–17 years increased from 6.6% to 9.6%, respectively (in Mexico City, the 1993 prevalence was 12.8%), and in 1993, 72% of adult smokers in Mexico reported becoming regular smokers before

Cigarette Sales to Minors — Continued

age 18 years (*2,4*). Although since 1984 the General Health Law of Mexico has prohibited the sale of tobacco products to minors aged <18 years, compliance with this law has not been assessed. As part of the Mexican national program to reduce the prevalence of cigarette smoking among children and adolescents and in support of the goals of the US-MBC, during 1997 the General Directorate of Epidemiology (GDE) in the Secretariat of Health (SOH) conducted a survey of tobacco outlets in Mexico City to assess the percentage of retailers willing to sell cigarettes to minors. This report summarizes the results of the survey, which indicate that virtually no surveyed retailers asked minors attempting to purchase cigarettes about their age and that most retailers sold cigarettes to minors.

This survey, the first assessment in Mexico of illegal sales of cigarettes to minors, was conducted during March 23–April 4, 1997, in the 16 districts composing Mexico City proper (1990 population: 8.5 million, excluding the surrounding metropolitan area). Because neither commercial business lists of tobacco outlets nor tobacco licensure lists were available and because resources were not available for SOH staff to enumerate a comprehensive list of all operational tobacco outlets in the city, stores were selected as the survey teams visited socioeconomically diverse commercial and residential neighborhoods in each of the 16 districts. Survey teams visited 35 stores in each of 15 districts and 36 stores in one district. The 561 stores included in the nonsystematic sample were categorized as small neighborhood stores (302 [54%]), street stalls (137 [24%]), pharmacies (96 [17%]), convenience stores (19 [3%]), and large supermarkets (seven [1%]) (gasoline stations in Mexico are government owned and do not sell cigarettes). Chi-square tests were used to calculate statistical differences in the sales rates associated with selected variables.

The minors who participated in the survey were recruited from the families of staff at GDE and included eight boys aged 10–14 years and seven girls aged 11–15 years. The adult survey escorts were medical residents from the Field Epidemiology Training Program of GDE. Teams consisting of one medical resident, one GDE staff driver, and two minors made one purchase attempt per store using the following protocol: the medical resident entered the store shortly before one of the minors entered the store. The medical resident noted whether age-of-sale warning signs were posted inside the store and unobtrusively observed the transaction between the retailer and the minor as the minor attempted to purchase a pack of cigarettes. If asked by the retailers, the minors were instructed to truthfully state their age and that they carried no age identification. The purchase attempt was considered successful if cigarettes were purchased and was considered unsuccessful if the sale was refused for any reason. If the attempt was successful, the minor promptly left the store with the cigarettes and gave them to the medical resident after the resident exited the store.

Of the 561 stores visited, 443 (79.0%) of the retailers sold cigarettes to the minors (Table 1). Purchase attempts by the oldest minors (aged 14–15 years) were more likely to be successful than those by the youngest minors (aged 10–11 years) (92.2% versus 66.0%, respectively [$p<0.01$]) and by girls than by boys (84.0% versus 72.7%, respectively [$p<0.01$]). Sales were transacted at all types of stores. Although the proportion of successful sales did not vary by sex of the retailer, the proportion was higher for attempts involving male clerks and girls than for those involving male clerks and boys (88.3% versus 68.1%, $p<0.01$). Age-of-sale warning signs were displayed in 64 (11.8%) stores; the presence of a warning sign was not associated with lower sales rates. Four

Cigarette Sales to Minors — Continued

TABLE 1. Number of retail businesses surveyed and number and percentage of successful attempts by minors* to purchase cigarettes, by category — Mexico City, Mexico, 1997

Category	No. retail businesses	Successful attempts		
		No.	(%)	p value
Age group (yrs) of minor				
10–11	247	163	(66.0)	<0.01
12–13	44	31	(70.5)	
14–15	270	249	(92.2)	
Sex of minor				
Male	253	184	(72.7)	<0.01
Female	308	259	(84.0)	
Type of store				
Large supermarket	7	3	(42.9)	<0.01
Convenience	19	11	(57.9)	
Small neighborhood	302	238	(78.8)	
Pharmacy	96	71	(74.0)	
Street stalls	137	120	(87.6)	
Warning sign				
Yes	64	47	(73.4)	0.25
No	497	396	(79.7)	
Sex of retailer				
Male	300	237	(79.0)	0.98
Female	261	206	(78.9)	
Total	**561**	**443**	**(79.0)**	

*Persons aged <18 years.

(0.7%) retailers asked the minor's age; one (0.2%) asked for proof of age; and 30 (5.4%) asked for whom the cigarettes were being purchased. Of the 118 retailers who did not sell cigarettes to the participating minors, 73 (62%) indicated to the participants that they do not sell cigarettes to minors.

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Editorial Note: Most of the retailers included in the sample in this survey in Mexico City illegally sold cigarettes to the participating minors. In the United States, a national health objective for 2000 is to reduce to ≤20% the proportion of retailers who sell tobacco to minors (objective 3.13) (*5*). Among 13 local U.S. studies published during 1989–1993, rates of over-the-counter cigarette sales to minors ranged from 32% to 87% (*6*). Compliance surveys estimating the overall rate of cigarette sales to minors also have been conducted in Canada (52.1% in 1995 and 39.5% in 1996) (*7*) and Adelaide, Australia (46% in 1991) (*8*).

The findings in this report are subject to at least two limitations. First, because this survey used a nonsystematic sample of retail businesses, the findings probably do not uniformly represent the patterns of tobacco sales to minors throughout Mexico City. For example, even though the survey teams visited all districts of Mexico City, some types of stores and neighborhoods at some socioeconomic levels—especially those at

Cigarette Sales to Minors — Continued

lower levels—may not have been included in the sample. However, it is not known whether sales rates in lower socioeconomic neighborhoods differed from those in higher socioeconomic neighborhoods. Second, the rate may have been underestimated because retailers in small neighborhood stores and street stalls in particular may have suspected that the adult team member, who entered the store or approached the stall before the minor, was accompanying the minor.

Based on current global patterns of smoking, the World Health Organization (WHO) has projected that 200–300 million persons who are aged <20 years in 1997 will die from smoking-related diseases later in life (*9*). In 1986, the World Health Assembly adopted a resolution urging member states to consider a comprehensive tobacco-control strategy containing nine elements (*10*), including one that targets the prevention of smoking by children and adolescents. However, in the early 1990s, WHO determined that only approximately 25 countries had established laws prohibiting the sale of cigarettes to minors (the age of prohibition varied from 16 to 21 years), and that among these, only a limited number had attempted to enforce the laws. To decrease cigarette sales to minors, WHO recommends that countries adopt the following four measures: 1) establish a minimum age of purchase of 18 years or older; 2) create a tobacco-sales licensing system to identify tobacco retailers and inform them of their legal responsibilities; 3) establish a graduated schedule of civil law penalties for illegal sales, ranging from warnings to license revocations; and 4) enlist the assistance of teenagers in efforts of enforcement officers to assess retailers' compliance with the prohibition of sale to minors. Other categories of legislation also may be effective in decreasing sales to minors. For example, several local studies in the United States demonstrated substantially reduced tobacco sales to minors when retailers requested photo identification or other proof of age from persons attempting to purchase tobacco products (*1*).

SOH will use the results of this survey to emphasize the need for assessing compliance of retailers in other cities with the federal law prohibiting tobacco sales to minors in Mexico and to underscore the need for resources to support increased enforcement activities. In addition to the enforcement of strong minors' access laws, a comprehensive approach for preventing initiation of smoking by youth should include provisions that reduce the appeal of cigarettes to minors through restrictions on advertising and promotion and through educational programs (*1*).

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As part of its commemoration of CDC's 50th anniversary, MMWR *is reprinting selected* MMWR *articles of historical interest to public health, accompanied by a current editorial note. Reprinted below is the report published October 30, 1987, which analyzed smoking-attributable mortality and years of potential life lost for 1984, followed by a contemporary editorial note.*

Perspectives in Disease Prevention and Health Promotion

Smoking-Attributable Mortality and Years of Potential Life Lost — United States, 1984

Cigarette smoking has been identified as the chief avoidable cause of death in the United States (*1*). Several estimates of mortality attributable to cigarette smoking have been reported, including 270,000 deaths for 1980 (*2*) and 314,000 deaths for 1982 (*3*). Published estimates vary considerably because of changing mortality rates, decreasing smoking rates, and differences in methods used. Smoking-attributable mortality and years of potential life lost (YPLL) for 1984 are analyzed in this report.

Relative risk (RR) estimates for smoking-related diseases and prevalence estimates of current, former, and never smokers among adults ≥20 years of age were used to calculate the smoking-attributable fraction (SAF) and smoking-attributable mortality for 19 underlying causes of death (*2*) (Table 1).* Age-, sex-, and race-specific mortality data for 1984 were obtained from National Center for Health Statistics reports. Age-, sex-, and race-specific smoking prevalence rates were obtained from the 1985 Current Population Survey (Supplement) of the Bureau of the Census (Office on Smoking and Health, CDC, unpublished data). Years of potential life lost were calculated to age 65 according to previously described methods (*6*). Age-adjusted smoking-attributable mortality and YPLL rates were calculated by the direct method, with the 1984 U.S. population used as the standard.

For deaths among adults, the disease-specific SAFs are derived from RR estimates for current and former smokers that are weighted averages from four prospective studies (*7–10*). RR estimates for women based on these studies may be lower than the current RRs for many of the specific smoking-related diseases among women. However, the SAF for lung cancer among women (0.75) has been updated based on RR

*The equation for calculating the smoking-attributable fraction of each disease category is: $SAF=[p_0 + p_1(RR_1) + p_2(RR_2)] - 1/[p_0 + p_1(RR_1) + p_2(RR_2)]$ where p_0=percentage of never smokers, p_1=percentage of current smokers, p_2=percentage of former smokers, RR_1=relative risk for current smokers (relative to never smokers), and RR_2=relative risk for former smokers (relative to never smokers) (*4*). This formula is derived from the standard attributable risk (AR) formula (*5*): $AR=p(RR - 1)/[p(RR - 1) + 1]$.

Smoking-Attributable Mortality — Continued

estimates from more recent mortality data (*11*). Race-specific RR estimates for smoking-attributable diseases were not available.

For four pediatric diagnoses, the mortality attributed to maternal smoking during pregnancy for children <1 year of age was determined. These calculations used RR estimates from McIntosh (*12*) and current smoking prevalence among women

TABLE 1. Total mortality, weighted smoking-attributable fractions (SAF), and smoking-attributable mortality (SAM), by disease category and sex — United States, 1984

Disease Category*		Males			Females			Total SAM†
		Deaths	SAF	SAM	Deaths	SAF	SAM	
Adults ≥20 years old								
Neoplasms:								
140-149	Lip, oral cavity, pharynx	5,754	0.688	3,958	2,689	0.413	1,110	5,068
150	Esophagus	6,310	0.589	3,717	2,345	0.536	1,257	4,974
151	Stomach	8,468	0.172	1,455	5,772	0.254	1,467	2,922
157	Pancreas	11,513	0.300	3,459	11,634	0.142	1,653	5,112
161	Larynx	2,959	0.806	2,385	664	0.413	274	2,660
162	Trachea, lung, bronchus	82,459	0.796	65,659	36,227	0.750	27,170	92,829
180	Cervix uteri	0	0.0	0	4,562	0.369	1,685	1,685
188	Urinary bladder	6,597	0.371	2,447	3,114	0.274	853	3,299
189	Kidney, other urinary	5,424	0.243	1,319	3,403	0.118	403	1,722
Circulatory diseases:								
401-405	Hypertension	13,464	0.156	2,099	17,855	0.148	2,645	4,744
410-414	Ischemic heart disease <age 65	78,340	0.285	22,362	27,000	0.181	4,892	27,253
410-414	Ischemic heart disease ≥age 65	211,003	0.159	33,461	224,756	0.075	16,816	50,276
427.5	Cardiac arrest	19,392	0.399	7,745	17,296	0.344	5,950	13,695
430-438	Cerebrovascular disease	59,185	0.096	5,692	88,285	0.139	12,228	17,920
440	Arteriosclerosis	9,235	0.238	2,200	15,216	0.315	4,797	6,996
441	Aortic aneurysm	10,323	0.624	6,444	4,791	0.468	2,244	8,689
Respiratory Diseases:								
480-487	Pneumonia, influenza	28,774	0.208	5,986	28,935	0.093	2,679	8,664
491-492	Chronic bronchitis, emphysema	10,708	0.850	9,097	5,517	0.694	3,831	12,928
496	Chronic airways obstruction	31,240	0.850	26,541	16,625	0.694	11,545	38,085
Digestive diseases:								
531-534	Ulcers	3,251	0.479	1,556	3,365	0.445	1,497	3,053
Pediatric diseases, <1 year old								
765	Short gestation, low birthweight	1,729	0.182	314	33	0.182	279	593
769	Respiratory distress syndrome	2,178	0.182	396	1,379	0.182	251	647
770	Other respiratory conditions of newborn	1,982	0.182	360	1,515	0.182	275	636
798.0	Sudden infant death syndrome	3,176	0.128	405	2,069	0.128	264	669
Total†				**209,057**			**106,063**	**315,120**

* International Classification of Disease, ninth revision.
† Sums may not equal total because of rounding.

Smoking-Attributable Mortality — Continued

20–64 years of age as a proxy for the percentage of pregnant women who smoke. The RR (1.50) for sudden infant death syndrome from McIntosh (*12*) was used, but the RR (1.76) for total infant mortality reported by McIntosh was used to calculate the SAF for only three specific infant death categories (short gestation/low birthweight, respiratory distress syndrome, and other respiratory conditions).

An estimated 315,120 deaths and 949,924 YPLL before age 65 years resulted from cigarette smoking in 1984 (Table 2). The smoking-attributable mortality rate among men is more than twice the rate among women, and the rate among blacks is 20% higher than the rate among whites (Table 3). The smoking-attributable YPLL rate among men is more than twice the rate among women, and the rate among blacks is more than twice the rate among whites (Table 3).

Reported by: Office on Smoking and Health, Center for Health Promotion and Education, CDC.

Editorial Note: The total smoking-attributable mortality and YPLL reported here is similar to that cited in previous reports (*2,3*), showing that the disease impact of smoking in the United States continues to be enormous despite recent declines in the prevalence of smoking. These figures do not include mortality and YPLL due to peripheral vascular disease (for which specific RR estimates are generally lacking), cancer at unspecified sites, cigarette-caused fires, or involuntary (passive) smoking. In 1984, an estimated 1,570 deaths were attributed to cigarette-initiated fires (*13*); an estimated 3,825 nonsmokers per year die from lung cancer attributed to involuntary smoking (*14*). When the figures for fires and involuntary smoking are included, the estimated total of smoking-attributable deaths in the United States in 1984 is 320,515, or 15.7% of all (2,039,369) U.S. deaths. Total smoking-attributable YPLL (949,924) represents

TABLE 2. Estimated smoking-attributable mortality and years of potential life lost (YPLL)*, by race and sex — United States, 1984

	Mortality			YPLL		
	Males	Females	Total†	Males	Females	Total†
Whites	184,296	95,340	279,636	489,827	199,590	689,418
Blacks	22,647	10,131	32,779	129,952	63,473	193,425
Total population§	**209,057**	**106,063**	**315,120**	**661,651**	**288,273**	**949,924**

*YPLL before age 65.
†Sums may not equal total because of rounding.
§Includes whites, blacks, and racial category "other."

TABLE 3. Age-adjusted smoking-attributable mortality rates* and years of potential life lost (YPLL) rates†, by race and sex — United States, 1984

	Mortality rate			YPLL		
	Males	Females	Total†	Males	Females	Total
Whites	189.7	64.2	119.0	5.56	2.17	3.81
Blacks	236.5	75.5	143.2	12.07	4.85	8.14
Total population§	**192.6**	**68.0**	**133.2**	**6.53**	**2.71**	**4.56**

*Per 100,000 persons (population data from 1984 U.S. Census).
†YPLL before age 65/1,000 persons <65 years (population data from 1984 U.S. Census).
§Includes whites, blacks, and racial category "other."

Smoking-Attributable Mortality — Continued

8.1% of all (11,761,000) U.S. YPLL before age 65 (excluding YPLL due to cigarette-caused fires or involuntary smoking).

Among blacks, the smoking-attributable mortality (32,779) represents 13.9% of total 1984 mortality (235,884), whereas the smoking-attributable mortality for whites (279,636) was 15.7% of total 1984 mortality (1,781,897), excluding deaths due to fires or involuntary smoking. However, the smoking-attributable mortality rate and YPLL rate were higher among blacks than among whites. These differences in rates reflect a higher prevalence of smoking and a higher mortality rate from smoking-related diseases among blacks. Higher YPLL rates among blacks may also reflect more smoking-attributable deaths at earlier ages. Because blacks tend to smoke fewer cigarettes per day than whites (*15,16*), the difference in smoking-attributable mortality and YPLL rates between blacks and whites may be slightly overestimated. On the other hand, the RR of smoking-related diseases among blacks may be higher than the RR estimates used here because of increased interactions between smoking and other risk factors, different tar and nicotine exposures, or different smoking patterns. Still, these findings support previously cited concerns regarding the increased burden of smoking-related disease among blacks (*17*).

Smoking prevalence for 1985 was used to calculate the SAFs in this study. However, the 1984 smoking-related mortality is a result of a higher smoking prevalence during the 1950s, '60s, and '70s, the decades during which these diseases were developing. Therefore, the SAFs used here are conservative.

CDC has examined YPLL before age 65 years since 1979 (*6*). In this study, most smoking-related deaths (218,691, or 69.4%) occurred among persons ≥65 years of age. Thus, the smoking-attributable YPLL among persons <65 reported here (949,924) is substantially lower than the 3.6 million smoking-attributable YPLL calculated when the average life expectancy in the United States is used for calculating YPLL for 1984.

Group-specific calculations such as these are possible for states and other defined populations if mortality and smoking prevalence data for those populations are available. A computer program has recently been developed to aid in calculating mortality and YPLL attributed to cigarette smoking (*18*). CDC is now collaborating with all 50 state health departments, Puerto Rico, and the District of Columbia to perform similar studies. Results from this project will be reported in 1988.

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Editorial Note—1997: In 1987, CDC published the preceding report that provided a detailed and comprehensive estimate of the number of deaths attributed to cigarette smoking in the United States. Using the attributable fraction, which measures the magnitude of a public health problem accounted for by an etiologic agent, CDC was able to quantify the impact of smoking. This method established that smoking was the leading cause of preventable deaths in the United States (*1*). As a result, increased emphasis was placed on decreasing the health burden caused by tobacco use and on reducing cigarette smoking. Since this SAM estimate was published in 1987, continued research has increased understanding of the health risks associated with tobacco use, including nicotine addiction and the recognition that addiction begins in childhood. Public health programs have responded by focusing on preventing tobacco use among adolescents, assisting in tobacco-use cessation, and protecting nonsmokers from environmental tobacco smoke. This contemporary editorial note reviews previous SAM estimates, presents new SAM estimates for 1990–1994, and discusses future implications.

SAM and YPLL estimates for the United States published since the first estimate for 1984 include 390,000 deaths for 1985, 434,000 deaths and 6 million YPLL before age 85 for 1988, and 418,000 deaths and 5 million YPLL to life expectancy for 1990 (*2*). SAM and YPLL also have been estimated for all 50 states and the District of Columbia for 1985 and for 1990 (*3*). Although all estimates were calculated by the same equation used for the SAF, the data sources, study populations, and causes of death have changed. The Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC) software program has also been used for calculating these estimates (*2*).

Since 1989, RR estimates for calculating SAM and YPLL have been obtained from the American Cancer Society's Cancer Prevention Study II (CPS-II) for 1982–1986 (*4*). The CPS-II was selected, in part, because it is the largest prospective U.S. study that has collected data on the relation between smoking and mortality (*4*). Recent SAM

Smoking-Attributable Mortality — Continued

estimates for adults have been limited to persons aged ≥35 years because the CPS-II study population was restricted to this age range. Deaths from stomach cancer and ulcers were dropped from the calculation of SAM because a causal relation has not been established (*4*). Conversely, the cardiovascular and respiratory disease categories were expanded to include the *International Classification of Diseases, Ninth Revision* [ICD-9], codes 390–398, 415–417, 420–429, 442–448, 010–012, and 493. The CPS-II data also enabled the calculation of the RR for smoking and cerebrovascular disease, which declines with age (*4*), for two age groups (35–64 years and ≥65 years).

Cigarette smoking remains the leading preventable cause of death in the United States. The same methods and data sources that were used to calculate the 1990 SAM and YPLL (*2*)† were used for the 1990–1994 calculations, which indicated that 2,153,700 deaths (1,393,200 men and 760,400 women; total annual average: 430,700 deaths) were attributed to smoking (19.5% of all deaths). A total of 906,600 of these deaths resulted from cardiovascular diseases; 778,700, from neoplasms; 454,800, from nonmalignant respiratory diseases; 7900, from diseases among infants; and 5500, from smoking-related fires. Lung cancer (616,800 deaths), ischemic heart disease (IHD) (490,000 deaths), and chronic airway obstruction (270,100 deaths) accounted for most deaths. During 1990–1994, cigarette smoking resulted in 5,732,900 YPLL before age 65 years and in 28,606,000 YPLL to life expectancy.

During 1990–1994, estimates of SAM were higher among men than among women, reflecting their longer duration and higher prevalence of smoking and greater numbers of cigarettes smoked per day (*6*). Annual SAM rates will probably remain stable if current trends in smoking prevalence among adults continue. Although the prevalence of smoking among persons aged ≥35 years decreased from 1985 to 1990 (28.4% to 24.1%), during 1990–1994, smoking prevalence remained relatively constant—at 23.6%–24.8% (CDC, unpublished data). However, the prevalence of smoking among U.S. adolescents has been increasing since 1992 (*7*). If these smoking patterns continue into adulthood, SAM and YPLL are expected to increase. Assuming that one third of adult smokers, 10% of former smokers, and 5.3 million persons aged <18 years die from smoking and that current smoking patterns continue, an estimated 25 million persons alive today will die prematurely from smoking-related illnesses (*7,8*).

Lung cancer has been and probably will continue to be the leading cause of SAM because, although lung cancer death rates are decreasing among men, rates are continuing to increase among women (*9*). Among women, death rates for lung cancer have surpassed those for breast cancer since 1987 (*9*). In addition, because recent trends indicate a slowing of the decline in IHD mortality, IHD will probably remain a major contributor to SAM (*9*).

SAM and YPLL may be underestimated for several reasons (*2*); recent studies have addressed two of these reasons. First, SAM and YPLL estimates are based on the prevalence of current and former smokers in the current year; however, the deaths that occur during a given year are primarily among persons who began smoking 30–50 years earlier (*10*), many of whom have quit smoking (*10*). Including these persons in the prevalence estimates of former smokers may decrease the SAF because the summary measure of risk for former smokers does not reflect their increased likeli-

†Except for the prevalence of smoking among pregnant women in the United States for 1992 through 1994, which was estimated from the 1992–1993 National Pregnancy and Health Survey (*5*).

Smoking-Attributable Mortality — Continued

hood of dying from a smoking-related disease (*4*). Among whites, expanding the classification of smoking to include information on duration and number of cigarettes smoked per day resulted in 10% larger SAM estimates for IHD than SAM estimates in which smoking was categorized as current, former, and never (*10*). Second, the SAM estimates do not include mortality caused by cigar smoking, pipe smoking, or smokeless tobacco use. Approximately 1000 deaths were attributable to pipe smoking in 1991 (*11*).

Although SAM and YPLL estimates are not adjusted for confounders (*2–4*), a recent study has documented little change in SAM estimates after adjustment for confounders (*12*). Among whites, SAM estimates for the combined disease categories of lung cancer, IHD, bronchitis/emphysema, chronic airway obstruction, and cerebrovascular disease were 2% higher than age-adjusted estimates after adjustment for relevant confounders including age, education, alcohol intake, diabetes, and hypertension (*12*).

Cigarette smoking has resulted in approximately 10 million deaths since the first Surgeon General's report on smoking and health in 1964 (*2,4,13*). In 1993, $50 billion in medical costs were attributable to smoking (*14*). The human and economic costs of smoking will continue to accumulate until the completely effective implementation of public health efforts to prevent initiation, to promote cessation, and to protect nonsmokers from the adverse effects of environmental tobacco smoke. Examples of such efforts include Food and Drug Administration regulations to restrict youth access to tobacco and to reduce the appeal of cigarette advertising to youth (*7*); comprehensive state-based efforts, including tax increases and earmarked funding for tobacco-use prevention and mass media campaigns similar to those in Massachusetts and California (*15*); physician adherence to the Agency for Health Care Policy and Research's smoking cessation guidelines (*8*); institutional adoption of the Guidelines for School Health Programs to Prevent Tobacco Use and Addiction (*16*); and clean indoor-air policies that protect nonsmokers.

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Outbreaks of Cyclosporiasis — United States, 1997

In April and May 1997, CDC received reports of seven event-associated clusters of cases of cyclosporiasis from five states (California, Florida, Nevada, New York, and Texas). Approximately 80 cases of infection with human-associated *Cyclospora*, a recently characterized coccidian parasite (*1*), have been laboratory-confirmed. State and local health departments, CDC, and the Food and Drug Administration are conducting investigations to identify the vehicles of infection.

Both foodborne and waterborne outbreaks of cyclosporiasis have previously been reported in the United States during spring and summer months (*2–4*). In 1996, a total of 978 laboratory-confirmed cases of cyclosporiasis in the United States and Canada were reported in association with a widespread foodborne outbreak (*3*). The average incubation period of cyclosporiasis is 1 week. Illness can be protracted (from days to weeks) with frequent, watery stools and other gastrointestinal symptoms; symptoms may remit and relapse. Health-care providers should consider *Cyclospora* infection in persons with prolonged diarrheal illness and specifically request laboratory testing for this parasite (*5,6*), which is not routinely performed by most laboratories.

Cyclosporiasis can be treated with a 7-day course of oral trimethoprim (TMP)-sulfamethoxazole (SMX) (for adults, 160 mg TMP plus 800 mg SMX twice daily; for children, 5 mg/kg TMP plus 25 mg/kg SMX twice daily) (*7*). Treatment regimens for patients who cannot tolerate sulfa drugs have not yet been identified.

Health departments that identify cases of cyclosporiasis should contact CDC's Division of Parasitic Diseases, National Center for Infectious Diseases, telephone (770) 488-7760.

Reported by: State and local health departments. Office of Regulatory Affairs, and Center for Food Safety and Applied Nutrition, Food and Drug Administration. Div of Parasitic Diseases, National Center for Infectious Diseases, CDC.

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Cyclosporiasis — Continued

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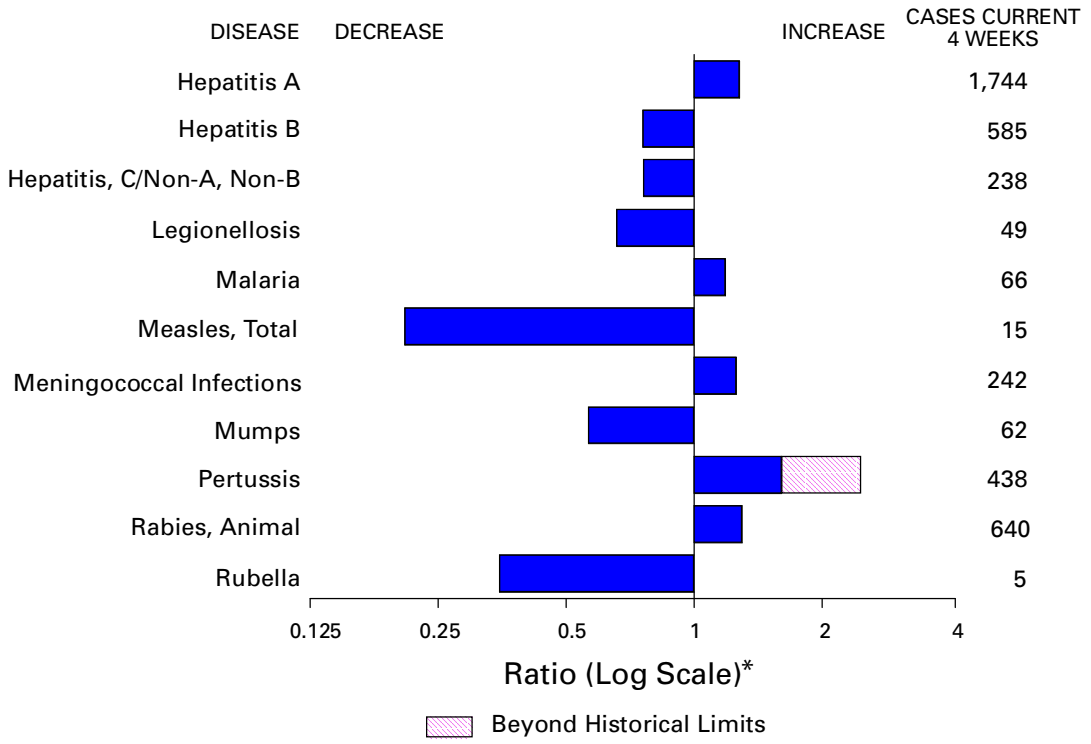
Notice to Reader

Courses on Epidemiology, Public Health Informatics, and Advanced Case Studies in Public Health Practice

CDC and the University of Washington School of Public Health and Community Medicine will cosponsor courses in epidemiology, public health informatics, and advanced case studies in public health practice as part of the 1997 Summer Institute of Public Health Practice at the University of Washington School of Public Health, July 21–August 1, 1997, in Seattle, Washington. The epidemiology course will provide an in-depth consideration of special epidemiologic topics. The informatics course will cover the principles of applying information technology to public health practice. The advanced case studies course will examine current issues in public health practice using several management tools and analytic techniques. These courses are offered in conjunction with various practice-oriented public health science and management courses at the Summer Institute. Public health practitioners are encouraged to attend the courses.

Participation in each course is limited, and early application is encouraged. There is a tuition charge. Additional information and applications are available from the Center for Health Education and Research, 1001 Broadway, Suite 217, Seattle, WA 98122; telephone (206) 720-4250; fax (206) 720-4218; e-mail: si97@u.washington.edu; World-Wide Web site: http://healthlinks.washington.edu/nwcphp/edu/si/intro.html.

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending May 17, 1997, with historical data — United States



*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 — provisional cases of selected notifiable diseases, United States, cumulative, week ending May 17, 1997 (20th Week)

	Cum. 1997		Cum. 1997
Anthrax	-	Plague	1
Brucellosis	16	Poliomyelitis, paralytic	-
Cholera	1	Psittacosis	15
Congenital rubella syndrome	2	Rabies, human	2
Cryptosporidiosis*	430	Rocky Mountain spotted fever (RMSF)	49
Diphtheria	4	Streptococcal disease, invasive Group A	542
Encephalitis: California*	4	Streptococcal toxic-shock syndrome*	13
eastern equine*	-	Syphilis, congenital¶	62
St. Louis*	1	Tetanus	9
western equine*	-	Toxic-shock syndrome	41
Hansen Disease	40	Trichinosis	3
Hantavirus pulmonary syndrome*†	4	Typhoid fever	102
Hemolytic uremic syndrome, post-diarrheal*	14	Yellow fever	-
HIV infection, pediatric*§	92		

-: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 to the Division of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), last update April 29, 1997.
¶Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending May 17, 1997, and May 18, 1996 (20th Week)

Reporting Area	AIDS		Chlamydia		*Escherichia coli* O157:H7		Gonorrhea		Hepatitis C/NA,NB	
					NETSS†	PHLIS§				
	Cum. 1997*	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1997	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996
UNITED STATES	20,222	26,411	145,458	155,853	374	166	92,582	115,544	1,122	1,235
NEW ENGLAND	671	942	6,130	7,247	33	15	2,072	3,016	17	41
Maine	25	15	333	U	1	-	17	18	-	-
N.H.	8	31	277	270	2	-	50	56	3	2
Vt.	16	9	146	175	2	1	20	24	-	12
Mass.	282	549	2,703	2,542	24	14	861	832	12	24
R.I.	55	61	800	808	1	-	193	208	2	3
Conn.	285	277	1,871	3,452	3	-	931	1,878	-	-
MID. ATLANTIC	6,683	7,513	17,953	27,522	27	4	10,483	16,606	126	104
Upstate N.Y.	1,143	794	N	N	16	3	1,801	2,725	98	83
N.Y. City	3,308	4,474	9,220	14,659	5	-	4,219	6,437	-	2
N.J.	1,444	1,413	2,742	5,675	6	-	1,584	3,513	-	-
Pa.	788	832	5,991	7,188	N	1	2,879	3,931	28	19
E.N. CENTRAL	1,416	2,208	22,901	34,445	65	24	13,848	22,231	224	201
Ohio	270	487	5,326	7,804	20	10	3,391	5,540	5	4
Ind.	302	306	3,204	3,891	13	5	2,205	2,561	5	6
Ill.	509	980	4,357	9,965	15	-	2,123	6,593	16	48
Mich.	259	318	7,309	8,514	17	2	4,950	5,671	198	143
Wis.	76	117	2,705	4,271	N	7	1,179	1,866	-	-
W.N. CENTRAL	383	570	8,424	12,200	50	33	3,955	5,601	60	22
Minn.	79	125	U	1,806	29	20	U	867	1	-
Iowa	59	43	1,765	1,503	12	5	452	398	15	8
Mo.	150	232	4,168	5,325	3	5	2,766	3,201	31	9
N. Dak.	4	5	339	404	3	2	23	11	2	-
S. Dak.	2	7	452	537	-	-	42	78	-	-
Nebr.	35	39	258	799	2	-	89	165	1	2
Kans.	54	119	1,442	1,826	1	1	583	881	10	3
S. ATLANTIC	4,846	6,520	31,518	21,165	49	12	31,042	36,557	99	68
Del.	69	113	-	-	1	1	420	561	-	-
Md.	576	847	2,768	2,402	2	1	5,072	4,905	6	1
D.C.	282	431	N	N	-	-	1,319	60	-	-
Va.	421	359	4,186	4,537	N	4	3,118	3,677	8	5
W. Va.	27	50	1,320	813	N	-	379	252	5	6
N.C.	281	280	6,569	U	13	6	6,098	7,318	22	18
S.C.	270	344	4,498	U	1	-	3,991	4,378	17	14
Ga.	683	868	3,377	4,632	15	-	4,453	8,722	U	-
Fla.	2,237	3,228	8,800	8,739	17	-	6,192	6,684	41	24
E.S. CENTRAL	609	869	12,485	11,327	32	7	12,436	12,086	146	236
Ky.	60	152	2,546	2,651	10	-	1,628	1,582	7	12
Tenn.	285	310	4,847	4,818	17	7	4,069	4,271	84	197
Ala.	151	276	2,902	3,371	2	-	4,114	5,163	5	1
Miss.	113	131	2,190	487	3	-	2,625	1,070	50	26
W.S. CENTRAL	2,040	2,598	16,494	8,300	13	4	11,188	7,853	122	139
Ark.	83	121	474	620	1	1	965	1,539	-	3
La.	385	612	3,098	2,574	3	3	2,855	2,777	78	58
Okla.	116	100	2,913	2,673	-	-	1,831	1,709	4	43
Tex.	1,456	1,765	10,009	2,433	9	-	5,537	1,828	40	35
MOUNTAIN	601	785	7,877	5,949	36	24	2,659	2,978	143	260
Mont.	16	10	311	497	3	-	14	13	5	9
Idaho	18	10	578	615	5	-	43	34	19	67
Wyo.	11	2	200	274	3	-	22	11	55	79
Colo.	156	245	101	8	14	8	554	654	18	24
N. Mex.	58	45	1,278	1,564	4	3	508	352	26	33
Ariz.	158	233	3,694	1,284	N	10	1,142	1,456	15	28
Utah	41	85	660	620	4	-	87	122	2	10
Nev.	143	155	1,055	1,087	3	3	289	336	3	10
PACIFIC	2,973	4,406	21,676	27,698	69	40	4,899	8,616	185	164
Wash.	241	309	3,563	3,876	11	4	780	900	9	26
Oreg.	128	223	1,325	2,094	20	14	205	177	4	3
Calif.	2,570	3,784	15,675	20,666	35	19	3,582	7,149	109	58
Alaska	12	10	532	359	3	-	174	185	-	2
Hawaii	22	80	581	703	N	3	158	205	63	75
Guam	2	3	14	162	N	-	1	28	-	5
P.R.	520	422	N	N	21	U	248	106	42	13
V.I.	29	9	N	N	N	U	-	-	-	-
Amer. Samoa	-	-	-	-	N	U	-	-	-	-
C.N.M.I.	-	-	N	N	N	U	11	11	2	-

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–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention, last update April 29, 1997.

†National Electronic Telecommunications System for Surveillance.

§Public Health Laboratory Information System.

TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending May 17, 1997, and May 18, 1996 (20th Week)

Reporting Area	Legionellosis		Lyme Disease		Malaria		Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal
	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997
UNITED STATES	308	283	970	1,497	439	423	3,011	4,505	5,184	6,499	2,707
NEW ENGLAND	23	14	193	167	14	13	62	68	127	203	417
Maine	1	1	3	2	1	3	-	-	2	8	87
N.H.	4	-	5	3	1	1	-	1	1	4	19
Vt.	3	2	2	-	1	1	-	-	2	-	69
Mass.	7	6	48	14	9	5	35	29	82	57	79
R.I.	4	5	33	21	2	3	-	-	7	20	8
Conn.	4	N	102	127	-	-	27	38	33	114	155
MID. ATLANTIC	52	62	604	1,175	102	125	134	203	1,125	1,114	581
Upstate N.Y.	11	13	85	559	21	23	14	24	145	118	424
N.Y. City	-	3	5	61	51	68	33	65	597	580	-
N.J.	6	7	139	134	21	25	49	71	227	255	52
Pa.	35	39	375	421	9	9	38	43	156	161	105
E.N. CENTRAL	117	103	17	12	30	53	272	752	599	717	39
Ohio	66	37	13	7	4	6	92	295	124	107	34
Ind.	15	25	4	4	3	3	64	104	51	71	2
Ill.	-	13	-	1	5	25	24	199	293	400	1
Mich.	31	18	-	-	15	10	45	71	88	110	2
Wis.	5	10	U	U	3	9	47	83	43	29	-
W.N. CENTRAL	28	18	11	36	11	11	51	170	177	163	162
Minn.	1	1	9	1	5	3	U	15	47	40	16
Iowa	5	2	-	5	3	1	3	13	20	19	64
Mo.	6	4	-	13	2	5	32	126	71	55	8
N. Dak.	2	-	-	-	-	-	-	-	4	2	22
S. Dak.	1	2	-	-	-	-	-	-	2	13	17
Nebr.	9	7	2	-	1	-	-	6	4	12	1
Kans.	4	2	-	17	-	2	16	10	29	22	34
S. ATLANTIC	45	31	95	51	111	71	1,245	1,468	1,122	1,134	1,160
Del.	4	2	-	26	2	2	11	16	7	21	25
Md.	15	5	72	5	32	20	327	228	109	96	208
D.C.	2	1	5	1	6	3	41	8	34	51	2
Va.	4	9	-	-	22	8	113	192	111	82	240
W. Va.	-	1	-	3	-	1	1	2	21	23	28
N.C.	5	3	3	10	6	7	273	419	127	125	359
S.C.	2	3	1	2	5	3	157	173	125	134	57
Ga.	-	-	1	-	12	8	209	282	202	236	108
Fla.	13	7	13	4	26	19	113	148	386	366	133
E.S. CENTRAL	9	17	25	22	13	12	720	1,110	394	499	106
Ky.	-	2	2	6	2	3	65	55	77	86	10
Tenn.	4	7	10	6	4	5	302	365	79	165	69
Ala.	1	1	2	1	4	1	183	222	163	160	27
Miss.	4	7	11	9	3	3	170	468	75	88	-
W.S. CENTRAL	4	2	4	7	5	10	374	461	126	753	113
Ark.	-	-	-	4	1	-	29	119	76	69	19
La.	1	-	1	-	4	-	153	206	-	1	1
Okla.	-	2	2	2	-	-	49	62	50	61	46
Tex.	3	-	1	1	-	10	143	74	U	622	47
MOUNTAIN	16	16	1	-	28	24	63	52	193	215	34
Mont.	1	1	-	-	2	2	-	-	2	7	6
Idaho	1	-	-	-	-	-	-	1	4	3	-
Wyo.	1	2	-	-	1	2	-	1	2	1	11
Colo.	3	5	-	-	14	12	1	16	44	39	-
N. Mex.	1	-	-	-	4	1	-	-	8	30	1
Ariz.	4	4	1	-	3	3	54	30	83	91	15
Utah	4	1	-	-	1	3	2	-	6	10	-
Nev.	1	3	-	-	3	1	6	4	44	34	1
PACIFIC	14	20	20	27	125	104	90	221	1,321	1,701	95
Wash.	3	1	-	1	6	6	6	2	74	94	-
Oreg.	-	-	8	9	8	8	3	4	57	66	1
Calif.	10	19	12	16	107	85	79	214	1,090	1,441	81
Alaska	-	-	-	-	2	1	1	-	33	36	13
Hawaii	1	-	-	1	2	4	1	1	67	64	-
Guam	-	-	-	-	-	-	-	3	2	45	-
P.R.	-	-	-	-	3	-	80	48	88	58	21
V.I.	-	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	-	-
C.N.M.I.	-	-	-	-	-	-	4	1	-	-	-

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

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending May 17, 1997, and May 18, 1996 (20th Week)

Reporting Area	*H. influenzae*, invasive		Hepatitis (Viral), by type				Measles (Rubeola)					
			A		B		Indigenous		Imported†		Total	
	Cum. 1997*	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	1997	Cum. 1997	1997	Cum. 1997	Cum. 1997	Cum. 1996
UNITED STATES	453	488	9,838	10,204	3,090	3,469	1	31	-	14	45	144
NEW ENGLAND	25	11	226	128	69	82	-	-	-	-	-	6
Maine	3	-	35	10	4	2	-	-	-	-	-	-
N.H.	2	6	16	3	5	6	-	-	-	-	-	-
Vt.	-	-	6	3	1	5	-	-	-	-	-	1
Mass.	17	5	97	64	40	19	-	-	-	-	-	4
R.I.	2	-	20	4	8	4	-	-	-	-	-	-
Conn.	1	-	52	44	11	46	-	-	-	-	-	1
MID. ATLANTIC	52	96	749	693	416	576	-	7	-	4	11	12
Upstate N.Y.	4	24	97	151	81	127	-	1	-	3	4	4
N.Y. City	17	21	257	242	127	225	-	4	-	1	5	7
N.J.	22	29	145	149	103	113	-	1	-	-	1	-
Pa.	9	22	250	151	105	111	-	1	-	-	1	1
E.N. CENTRAL	62	85	816	972	331	429	-	4	-	2	6	11
Ohio	39	48	169	385	37	49	-	-	-	-	-	2
Ind.	5	3	123	136	35	53	-	-	-	-	-	-
Ill.	11	25	173	221	54	125	-	4	-	1	5	2
Mich.	6	4	299	144	193	166	-	-	-	1	1	2
Wis.	1	5	52	86	12	36	-	-	-	-	-	5
W.N. CENTRAL	20	14	747	784	206	176	-	9	-	1	10	6
Minn.	12	7	64	35	17	13	-	-	-	1	1	5
Iowa	2	2	102	166	29	21	-	-	-	-	-	-
Mo.	2	3	390	384	136	112	-	1	-	-	1	1
N. Dak.	-	-	7	21	1	-	-	-	-	-	-	-
S. Dak.	2	1	12	34	-	-	-	8	-	-	8	-
Nebr.	1	1	55	93	9	12	U	-	U	-	-	-
Kans.	1	-	117	51	14	18	-	-	-	-	-	-
S. ATLANTIC	105	90	622	359	455	444	-	1	-	2	3	2
Del.	-	1	11	5	2	2	-	-	-	-	-	1
Md.	36	31	116	77	67	67	-	-	-	1	1	-
D.C.	2	4	13	15	18	15	-	-	-	1	1	-
Va.	6	4	68	57	44	57	-	-	-	-	-	-
W. Va.	3	4	5	10	6	11	-	-	-	-	-	-
N.C.	13	14	80	43	93	129	-	-	-	-	-	-
S.C.	4	3	53	29	41	38	-	-	-	-	-	-
Ga.	17	24	115	13	46	7	-	-	-	-	-	-
Fla.	24	5	161	110	138	118	-	1	-	-	1	1
E.S. CENTRAL	32	17	307	693	276	319	-	-	-	-	-	-
Ky.	5	4	27	14	14	32	-	-	-	-	-	-
Tenn.	19	7	200	495	165	197	-	-	-	-	-	-
Ala.	8	5	45	89	29	20	-	-	-	-	-	-
Miss.	-	1	35	95	68	U	U	-	U	-	-	-
W.S. CENTRAL	22	17	1,933	1,652	340	298	-	3	-	1	4	2
Ark.	1	-	109	204	17	33	-	-	-	-	-	-
La.	2	-	82	46	45	39	-	-	-	-	-	-
Okla.	14	16	662	733	10	18	-	-	-	-	-	-
Tex.	5	1	1,080	669	268	208	-	3	-	1	4	2
MOUNTAIN	42	27	1,608	1,586	358	433	1	2	-	-	2	12
Mont.	-	-	44	50	5	4	-	-	-	-	-	-
Idaho	1	1	68	119	14	53	-	-	-	-	-	1
Wyo.	-	-	18	17	15	13	-	-	-	-	-	-
Colo.	6	5	186	149	74	52	-	-	-	-	-	4
N. Mex.	3	7	109	205	124	142	-	-	-	-	-	-
Ariz.	13	9	790	530	71	98	1	2	-	-	2	3
Utah	3	5	288	376	38	51	-	-	-	-	-	-
Nev.	16	-	105	140	17	20	-	-	-	-	-	4
PACIFIC	93	131	2,830	3,337	639	712	-	5	-	4	9	93
Wash.	1	1	197	217	20	46	-	-	-	-	-	24
Oreg.	18	18	149	479	49	47	-	-	-	-	-	3
Calif.	70	108	2,413	2,577	553	616	-	2	-	4	6	1
Alaska	1	2	16	28	12	1	-	-	-	-	-	63
Hawaii	3	2	55	36	5	2	-	3	-	-	3	2
Guam	-	-	-	3	-	-	U	-	U	-	-	-
P.R.	-	-	139	24	500	74	-	-	-	-	-	1
V.I.	-	-	-	-	-	-	U	-	U	-	-	-
Amer. Samoa	-	-	-	-	-	-	U	-	U	-	-	-
C.N.M.I.	4	10	1	1	19	5	U	1	U	-	1	-

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

*Of 93 cases among children aged <5 years, serotype was reported for 46 and of those, 18 were type b.

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

TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending May 17, 1997, and May 18, 1996 (20th Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996
UNITED STATES	1,598	1,472	30	255	272	114	1,941	1,246	1	20	80
NEW ENGLAND	97	56	-	7	-	8	436	229	-	-	11
Maine	9	8	-	-	-	-	6	10	-	-	-
N.H.	9	1	-	-	-	1	57	16	-	-	-
Vt.	2	3	-	-	-	4	153	7	-	-	2
Mass.	53	19	-	2	-	3	203	193	-	-	7
R.I.	6	5	-	4	-	-	12	-	-	-	-
Conn.	18	20	-	1	-	-	5	3	-	-	2
MID. ATLANTIC	134	142	-	24	38	4	138	88	-	1	5
Upstate N.Y.	34	36	-	4	9	-	50	45	-	-	3
N.Y. City	23	24	-	-	10	-	19	14	-	1	1
N.J.	30	31	-	-	2	-	5	4	-	-	1
Pa.	47	51	-	20	17	4	64	25	-	-	-
E.N. CENTRAL	218	227	2	27	72	4	150	183	-	2	3
Ohio	91	75	2	12	26	2	62	56	-	-	-
Ind.	24	31	-	4	5	2	22	12	-	-	-
Ill.	67	67	-	7	14	-	22	51	-	-	1
Mich.	18	28	-	4	26	-	26	12	-	-	2
Wis.	18	26	-	-	1	-	18	52	-	2	-
W.N. CENTRAL	116	108	-	8	4	-	106	54	-	-	-
Minn.	12	9	-	3	1	-	65	35	-	-	-
Iowa	24	22	-	3	-	-	15	2	-	-	-
Mo.	61	49	-	-	1	-	16	10	-	-	-
N. Dak.	1	2	-	-	2	-	2	-	-	-	-
S. Dak.	3	3	-	-	-	-	1	1	-	-	-
Nebr.	5	10	U	2	-	U	2	2	U	-	-
Kans.	10	13	-	-	-	-	5	4	-	-	-
S. ATLANTIC	289	220	-	39	29	5	179	112	-	2	12
Del.	4	2	-	-	-	-	-	10	-	-	-
Md.	29	22	-	4	15	3	67	46	-	-	-
D.C.	1	3	-	-	-	-	2	-	-	-	1
Va.	25	27	-	4	3	-	19	5	-	1	-
W. Va.	10	10	-	-	-	-	3	2	-	-	-
N.C.	48	34	-	6	-	-	35	24	-	-	-
S.C.	37	31	-	9	4	-	8	1	-	1	1
Ga.	57	68	-	4	2	-	6	6	-	-	-
Fla.	78	23	-	12	5	2	39	18	-	-	10
E.S. CENTRAL	122	117	-	15	10	-	36	122	-	-	-
Ky.	30	17	-	2	-	-	2	110	-	-	-
Tenn.	46	35	-	4	1	-	16	7	-	-	-
Ala.	30	33	-	5	3	-	10	2	-	-	-
Miss.	16	32	U	4	6	U	8	3	U	-	N
W.S. CENTRAL	163	170	4	28	22	2	31	39	-	3	7
Ark.	22	22	-	-	-	2	5	2	-	-	-
La.	28	32	-	7	8	-	7	3	-	-	1
Okla.	18	14	-	-	-	-	5	4	-	-	-
Tex.	95	102	4	21	14	-	14	30	-	3	6
MOUNTAIN	99	89	23	34	13	81	596	146	1	2	4
Mont.	7	3	-	-	-	3	5	5	-	-	-
Idaho	6	12	-	2	-	72	450	56	-	-	2
Wyo.	-	-	-	1	-	-	3	-	-	-	-
Colo.	30	14	-	3	1	4	102	25	-	-	-
N. Mex.	16	18	N	N	N	2	22	26	-	-	-
Ariz.	22	25	22	22	1	-	9	10	1	2	1
Utah	12	9	1	4	2	-	3	3	-	-	-
Nev.	6	8	-	2	9	-	2	21	-	-	1
PACIFIC	360	343	1	73	84	10	269	273	-	10	38
Wash.	43	45	-	5	8	-	137	120	-	-	5
Oreg.	78	63	-	1	-	4	15	25	-	-	-
Calif.	237	229	1	56	61	6	111	118	-	5	31
Alaska	1	4	-	2	2	-	1	-	-	-	-
Hawaii	1	2	-	9	13	-	5	10	-	5	2
Guam	-	1	U	1	4	U	-	-	U	-	-
P.R.	8	2	-	4	1	-	-	-	-	-	-
V.I.	-	-	U	-	-	U	-	-	U	-	-
Amer. Samoa	-	-	U	-	-	U	-	-	U	-	-
C.N.M.I.	-	-	U	1	-	U	-	-	U	-	-

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

TABLE IV. Deaths in 122 U.S. cities,* week ending May 17, 1997 (20th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1	
NEW ENGLAND	575	411	106	32	14	12	39
Boston, Mass.	141	99	27	5	5	5	9
Bridgeport, Conn.	38	25	6	4	3	-	4
Cambridge, Mass.	22	18	2	2	-	-	2
Fall River, Mass.	25	24	-	1	-	-	2
Hartford, Conn.	67	41	18	2	3	3	2
Lowell, Mass.	31	26	5	-	-	-	3
Lynn, Mass.	14	14	-	-	-	-	1
New Bedford, Mass.	29	22	6	1	-	-	2
New Haven, Conn.	39	21	11	5	-	2	1
Providence, R.I.	65	47	7	7	2	2	4
Somerville, Mass.	3	3	-	-	-	-	-
Springfield, Mass.	39	25	12	1	1	-	3
Waterbury, Conn.	U	U	U	U	U	U	U
Worcester, Mass.	62	46	12	4	-	-	6
MID. ATLANTIC	2,220	1,550	426	174	42	27	101
Albany, N.Y.	46	38	5	2	-	1	5
Allentown, Pa.	26	24	2	-	-	-	-
Buffalo, N.Y.	58	44	10	2	1	1	1
Camden, N.J.	34	17	11	1	2	3	3
Elizabeth, N.J.	27	21	3	3	-	-	1
Erie, Pa.	53	41	8	2	2	-	3
Jersey City, N.J.	55	43	7	4	-	1	1
New York City, N.Y.	1,207	818	251	104	22	12	41
Newark, N.J.	42	21	11	7	2	1	4
Paterson, N.J.	28	16	11	-	-	1	-
Philadelphia, Pa.	301	193	60	33	12	3	19
Pittsburgh, Pa.§	45	29	6	6	-	3	3
Reading, Pa.	11	11	-	-	-	-	1
Rochester, N.Y.	118	95	18	3	1	1	6
Schenectady, N.Y.	18	13	4	1	-	-	1
Scranton, Pa.	26	23	2	1	-	-	-
Syracuse, N.Y.	76	64	10	2	-	-	11
Trenton, N.J.	30	23	6	1	-	-	1
Utica, N.Y.	19	16	1	2	-	-	-
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	2,020	1,395	382	133	58	51	129
Akron, Ohio	43	31	9	-	-	3	-
Canton, Ohio	41	33	7	1	-	-	5
Chicago, Ill.	408	259	83	43	15	7	34
Cincinnati, Ohio	86	60	15	3	5	3	10
Cleveland, Ohio	146	93	30	17	3	3	4
Columbus, Ohio	154	106	35	2	6	5	7
Dayton, Ohio	113	87	18	7	-	1	6
Detroit, Mich.	212	124	54	18	10	6	6
Evansville, Ind.	50	34	8	-	3	5	5
Fort Wayne, Ind.	73	52	12	6	2	1	5
Gary, Ind.	13	8	2	2	1	-	-
Grand Rapids, Mich.	55	40	8	4	2	1	8
Indianapolis, Ind.	179	125	31	14	4	5	12
Lansing, Mich.	33	23	4	5	-	1	2
Milwaukee, Wis.	125	90	23	4	3	5	9
Peoria, Ill.	38	30	7	-	-	1	4
Rockford, Ill.	45	34	6	1	1	3	2
South Bend, Ind.	49	38	8	2	1	-	3
Toledo, Ohio	79	63	11	2	2	1	4
Youngstown, Ohio	78	65	11	2	-	-	3
W.N. CENTRAL	807	575	128	47	23	17	44
Des Moines, Iowa	73	53	10	6	1	3	8
Duluth, Minn.	30	25	2	1	2	-	2
Kansas City, Kans.	22	8	8	2	4	-	1
Kansas City, Mo.	113	64	19	7	4	2	1
Lincoln, Nebr.	54	45	4	3	1	1	2
Minneapolis, Minn.	164	119	25	13	3	4	13
Omaha, Nebr.	92	68	17	2	3	2	6
St. Louis, Mo.	128	97	21	7	-	3	6
St. Paul, Minn.	50	37	10	1	2	-	4
Wichita, Kans.	81	59	12	5	3	2	1

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1	
S. ATLANTIC	1,302	848	264	121	38	29	64
Atlanta, Ga.	146	88	35	13	5	5	5
Baltimore, Md.	240	148	45	31	8	8	17
Charlotte, N.C.	97	69	14	9	2	3	6
Jacksonville, Fla.	131	96	24	8	1	2	2
Miami, Fla.	104	60	24	18	1	1	1
Norfolk, Va.	57	37	12	5	3	-	2
Richmond, Va.	68	48	13	3	3	1	4
Savannah, Ga.	60	30	22	3	3	2	3
St. Petersburg, Fla.	55	48	5	1	-	1	2
Tampa, Fla.	177	130	32	7	5	2	16
Washington, D.C.	155	87	38	18	7	4	6
Wilmington, Del.	12	7	-	5	-	-	-
E.S. CENTRAL	832	552	165	76	22	17	59
Birmingham, Ala.	171	117	33	11	9	1	10
Chattanooga, Tenn.	70	51	15	3	-	1	4
Knoxville, Tenn.	90	62	11	13	-	4	11
Lexington, Ky.	102	65	22	8	3	4	11
Memphis, Tenn.	140	90	30	12	3	5	12
Mobile, Ala.	89	60	19	7	3	-	2
Montgomery, Ala.	43	31	5	6	1	-	3
Nashville, Tenn.	127	76	30	16	3	2	6
W.S. CENTRAL	1,466	939	313	137	45	32	87
Austin, Tex.	77	51	12	8	4	2	3
Baton Rouge, La.	55	34	10	11	-	-	3
Corpus Christi, Tex.	52	30	12	8	2	-	2
Dallas, Tex.	173	100	38	20	10	5	3
El Paso, Tex.	73	51	13	4	3	2	5
Ft. Worth, Tex.	123	81	27	7	4	4	5
Houston, Tex.	402	247	100	40	11	4	29
Little Rock, Ark.	71	44	21	2	1	3	5
New Orleans, La.	75	43	17	10	3	2	-
San Antonio, Tex.	230	159	39	17	5	10	20
Shreveport, La.	41	32	6	2	1	-	4
Tulsa, Okla.	94	67	18	8	1	-	8
MOUNTAIN	908	629	160	71	29	17	48
Albuquerque, N.M.	87	66	9	8	2	2	2
Boise, Idaho	43	37	3	-	1	2	6
Colo. Springs, Colo.	53	37	12	3	1	-	3
Denver, Colo.	108	65	20	15	3	5	4
Las Vegas, Nev.	201	126	53	14	6	1	7
Ogden, Utah	16	13	3	-	-	-	-
Phoenix, Ariz.	135	92	18	11	9	4	10
Pueblo, Colo.	28	24	4	-	-	-	3
Salt Lake City, Utah	104	74	14	10	4	2	8
Tucson, Ariz.	133	95	24	10	3	1	5
PACIFIC	1,965	1,360	354	164	43	44	146
Berkeley, Calif.	16	11	4	1	-	-	1
Fresno, Calif.	73	47	14	4	7	1	5
Glendale, Calif.	31	28	3	-	-	-	2
Honolulu, Hawaii	68	53	10	2	3	-	2
Long Beach, Calif.	63	39	16	7	-	1	7
Los Angeles, Calif.	560	375	106	52	12	15	29
Pasadena, Calif.	14	11	2	1	-	-	-
Portland, Oreg.	132	98	19	8	3	4	11
Sacramento, Calif.	216	152	44	11	5	4	25
San Diego, Calif.	162	108	33	16	2	3	16
San Francisco, Calif.	124	85	24	14	-	1	16
San Jose, Calif.	188	120	35	23	2	8	16
Santa Cruz, Calif.	28	22	5	1	-	-	1
Seattle, Wash.	143	97	21	18	5	2	7
Spokane, Wash.	56	45	7	1	2	1	5
Tacoma, Wash.	91	69	11	5	2	4	3
TOTAL	12,095¶	8,259	2,298	955	314	246	717

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 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 this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶Total includes unknown ages.

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