CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

May 21, 1999 / Vol. 48 / No. 19

MMWR™
MORBIDITY AND MORTALITY
WEEKLY REPORT

World No-Tobacco Day — May 31, 1999

The theme for this year's World No-Tobacco Day, May 31, is "Leave the Pack Behind." As part of World No-Tobacco Day, smokers are encouraged to quit, and governments, community organizations, schools, and families and friends are encouraged to help smokers quit.

Preventing tobacco use by young persons is critical for long-term reductions in tobacco-related deaths. However, the projected increase in global mortality from tobacco use, from 3 million deaths in 1990 to 10 million in 2025, primarily represents mortality among persons who already smoke (*1*). Smoking cessation interventions can prevent many of these projected deaths.

The World Health Organization (WHO) recommends that governments, community organizations, and health-care systems and professionals 1) make tobacco-use treatment an important public health priority; 2) offer practical interventions; 3) assess and document tobacco use and provide treatment as part of total health care; 4) fund proven treatments and make them widely available; 5) take responsibility for motivating smokers to quit and remain abstinent; 6) monitor tobacco use, and tax and regulate the sale and marketing of tobacco products; 7) invest in developing new treatments for nicotine dependence; and 8) encourage other professionals to set an example by quitting tobacco use (*2*).

Additional information about World No-Tobacco Day 1999 is available from WHO's World-Wide Web site, http://www.who.int/toh/worldnotobacco99/teaser.htm* and CDC's Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, http://www.cdc.gov/tobacco, telephone (800) 232-1311.

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*References to sites of nonfederal 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.

Illegal Sales of Cigarettes to Minors — Ciudad Juárez, Mexico; El Paso, Texas; and Las Cruces, New Mexico, 1999

In 1996, the United States-Mexico Binational Commission (US-MBC) Health Working Group identified prevention of tobacco use, particularly among adolescents, as a priority and subsequently recommended joint efforts toward reducing illegal sales of cigarettes to minors. A 1997 survey of 561 commercial cigarette outlets in Mexico City found that 79% of retailers sold cigarettes to minors (*1*). To assess the illegal sale of cigarettes to minors in other regions of Mexico and on both sides of the U.S.–Mexico border, during January–February 1999 the General Directorate of Epidemiology in Mexico, the Chihuahua State Department of Health Services (CDH), the Ciudad Juárez Department of Health (CJDH), the Texas Department of Health (TDH), and the New Mexico Department of Health (NMDH) surveyed cigarette outlets in Ciudad Juárez, Mexico; El Paso, Texas; and Las Cruces, New Mexico. This report summarizes the results of these surveys, which indicate that almost all retailers in the surveyed outlets in Ciudad Juárez sold cigarettes to minors and that sales rates to minors were substantially lower in El Paso and Las Cruces.

Although survey methods were the same in each location, sampling methods varied. In Ciudad Juárez, where no list of cigarette outlets was available, the sample was selected by using a stratified cluster design. Within each of eight geographic areas, 23 clusters were selected, each with an equal probability of selection. All stores within each selected cluster were visited by adults, and the operational cigarette outlets were identified and surveyed. In El Paso, where a list of licensed cigarette outlets was available, a stratified cluster design was used in which the strata were six geographic areas within the city limits and the clusters were postal ZIP code areas. Within each of the six areas, two clusters were selected with a probability of selection proportional to the number of cigarette outlets; within a selected cluster, all outlets were surveyed. In Las Cruces, a list of all operational cigarette outlets was available and all outlets were surveyed. Because the Las Cruces list was a census and not a sample, confidence intervals were not calculated. For both Ciudad Juárez and El Paso, sampling weights were calculated using the inverse probability of selection for each cluster within a stratum. Standard errors and 95% confidence intervals were calculated using SUDAAN (*2*).

Minors who participated in the surveys were recruited from local schools in Ciudad Juárez and El Paso and from a youth organization in Las Cruces. Adult survey escorts were staff of the local or state health departments and volunteers. Teams comprising one adult and two minors attempted to make one purchase per store using the following protocol (*1,3*): the adult entered the store before one of the minors and noted whether age-of-sale warning signs were posted. Then the adult observed the transaction between the retailer and minor as the minor attempted to purchase a pack of cigarettes. If asked by the retailer, minors were instructed to state truthfully their age and that they carried no identification. An illegal sale was defined as a transaction in which a retailer sold a pack of cigarettes to a minor. If a sale was completed, the minor left the store with the cigarettes and gave them to the adult.

Illegal sales rates to minors in the teams were higher in Ciudad Juárez (98.1%) than in El Paso (18.0%) or Las Cruces (6.1%) (Table 1). In Ciudad Juárez, sales rates did not

TABLE 1. Number and percentage of store visits and of retailers who sold cigarettes to minors,* by category and location — Ciudad Juárez, Mexico; El Paso, Texas; and Las Cruces, New Mexico, 1999

	Ciudad Juárez, Mexico					El Paso, Texas					Las Cruces, New Mexico			
	Store visits		Retailer sold cigarettes to minors			Store visits		Retailer sold cigarettes to minors			Store visits		Retailer sold cigarettes to minors	
Category	No.	(%)†	No.	(%)§	(95% CI¶)	No.	(%)†	No.	(%)§	(95% CI)	No.	(%)	No.	(%)**
Minor's age (yrs)														
15	159	(66.1)	151	(95.2)	(±3.7)	94	(26.3)	8	(10.2)	(± 6.8)	38	(38.8)	0	(0.0)
16	81	(33.9)	80	(98.0)	(±3.9)	162	(45.4)	38	(25.9)	(± 6.3)	4	(4.1)	0	(0.0)
17	0	(—)	—	(—)	(—)	101	(28.3)	11	(11.2)	(± 6.5)	56	(57.1)	6	(10.7)
Minor's sex														
Male	141	(58.7)	135	(95.3)	(±4.2)	175	(49.0)	15	(8.8)	(± 4.5)	69	(70.4)	1	(1.4)
Female	99	(41.3)	96	(97.2)	(±3.3)	182	(51.0)	42	(26.1)	(± 6.1)	29	(29.6)	5	(17.2)
Retailer's estimated age (yrs)														
<25	53	(22.1)	51	(97.0)	(±4.3)	131	(36.7)	31	(25.3)	(± 7.1)	43	(43.9)	5	(11.6)
≥25	187	(77.9)	180	(95.9)	(±3.3)	226	(63.3)	26	(13.6)	(± 4.8)	55	(56.1)	1	(1.8)
Retailer's sex														
Male	125	(52.3)	120	(96.3)	(±3.7)	173	(48.6)	27	(17.6)	(± 6.0)	43	(43.9)	4	(9.3)
Female	114	(47.7)	110	(95.9)	(±4.2)	183	(51.4)	30	(18.4)	(± 5.5)	55	(56.1)	2	(3.6)
Unknown	1		1			1		0			0		0	
Retailer asked age														
Yes	8	(3.3)	6	††	††	33	(9.2)	2	(7.1)	(± 9.5)	19	(19.4)	0	(0.0)
No	232	(96.7)	225	(97.2)	(±2.3)	324	(90.8)	55	(19.1)	(± 4.1)	79	(80.6)	6	(7.6)
Retailer asked for identification														
Yes	2	(0.8)	2	††	††	285	(79.8)	8	(3.0)	(± 2.0)	84	(85.7)	1	(1.2)
No	238	(99.2)	229	(96.1)	(±2.8)	72	(20.2)	49	(69.8)	(±10.6)	14	(14.3)	5	(35.7)
Warning signs present														
Yes	3	(1.3)	2	††	††	218	(61.2)	31	(15.2)	(± 4.8)	48	(49.0)	0	(0.0)
No	237	(98.7)	229	(96.4)	(±2.7)	138	(38.8)	25	(21.6)	(± 7.0)	50	(51.0)	6	(12.0)
Unknown	0		0			1		1			0		0	
Total	**240**	**(100.0)**	**231**	**(98.1)**	**(±2.8)**	**357**	**(100.0)**	**57**	**(18.0)**	**(± 3.8)**	**98**	**(100.0)**	**6**	**(6.1)**

*Aged <18 years.
†Unweighted percentages.
§Weighted percentages.
¶Confidence interval.
**Because percentage of successful purchase attempts represented all cigarette outlets in Las Cruces, 95% CIs are not presented.
††Numbers were too small to calculate precise estimates.

Illegal Sales of Cigarettes to Minors — Continued

vary by age or sex of the minors, sex or estimated age of the retailers, or type of store. In El Paso, sales rates were significantly lower for boys, minors aged 15 or 17 years, and if the retailer asked for identification. Illegal sales did not differ by store type in El Paso. In Las Cruces, sales rates were lower for boys, for minors aged 15 or 16 years, if warning signs were present, and if the retailer appeared to be aged ≥25 years, female, or asked for age or identification.

Reported by: R Adame-Moreno, MD, O Ibarra-Heredia, MD, Ciudad Juárez Dept of Health, Ciudad Juárez, Chihuahua; H Torres-Simental, MD, State Dept of Health, Chihuahua; P Kuri-Morales, MD, M Hoy, MD, General Directorate of Epidemiology; R Tapia-Conyer, MD, Secretariat of Health, Mexico City, Mexico. M Escobedo, MD, R Zima, P Huang, MD, D Satterwhite, Texas Dept of Health. Al Vizcarra, Teens Needing Teens Program, Las Cruces Housing Authority, Las Cruces; S Babb, MPH, ASSIST Program, L Escobedo, MD, Border Health Office, New Mexico Dept of Health. Office of International and Refugee Health, US Dept of Health and Human Svcs. Program Svcs Br, Epidemiology Br, Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: The substantial difference in the percentage of retailers willing to sell tobacco to minors between Ciudad Juárez and the two U.S. border cities may reflect efforts in the United States to enforce minors' access laws and to provide comprehensive retailer education programs. In surveys conducted during 1987–1993, rates of over-the-counter sales to minors ranged from 32% to 87% and sales from vending machines ranged from 82% to 100% (*4*). However, since those studies were conducted, enforcement of laws against the sale of tobacco to minors has increased in the United States at the local, state, and federal levels (*3,4*).

Enforcement inspections in the United States use the same methodology as this study, except that retailers who sell tobacco to minors are given warnings or fines or can lose their retail tobacco license for repeated illegal sales. The Synar Amendment, administered by the Substance Abuse and Mental Health Services Administration, requires all states to 1) enact and enforce laws against tobacco sales to minors, 2) conduct annually a representative inspection survey (i.e., Synar surveys) to determine the percentage of retailers in compliance with laws prohibiting sales to minors, and 3) develop a strategy and time frame for achieving a noncompliance rate of ≤20% or risk losing some federal funds (*5*). In 1998, Synar surveys in Texas and New Mexico found that retailer noncompliance rates were 13.0% and 13.5%, respectively (J. Steele, Texas Commission on Alcohol and Drug Abuse and D. Maestas, New Mexico Behavioral Services Division, personal communication, 1999).

In El Paso, enforcement has been conducted by local officers, and state-funded enforcement has been conducted in communities adjacent to El Paso. Federal level enforcement and retailer education in El Paso were funded directly by the Food and Drug Administration (FDA) (*6*) and indirectly through activities required by the Synar Amendment. In Las Cruces, nine compliance-check surveys conducted during 1996–1998 resulted in warning notices to noncompliant retailers, media publicity, extensive retailer education, and recognition for compliant retailers. Synar Amendment-related enforcement activities have been conducted in New Mexico for several years, and the FDA has distributed retailer education material to tobacco outlets.

In Mexico, the sale of tobacco to minors has been prohibited since 1984. The Mexican Secretariat of Health has developed proposals for strengthening minors' access laws, including requiring identification, prohibiting sale of loose cigarettes and packs

Illegal Sales of Cigarettes to Minors — Continued

with <14 cigarettes, eliminating vending machines in places accessible to minors, and decreasing marketing to youth.

The findings in this report are subject to at least two limitations. First, although this study used standard methods during the store visits, the methods may underestimate the ability of underaged persons to purchase cigarettes because they may use false identification, lie about their age, dress to appear older, persuade retailers to sell them cigarettes, or target retailers known to sell cigarettes to minors (*7*). Second, because sales rates varied by age and sex of minors in El Paso and Las Cruces, some of the difference in sales rates between these locations can be explained by differences in the percentage of young persons aged 15–17 years who participated in the surveys.

The World Health Organization (WHO) supports a comprehensive approach to tobacco control, including legislative action. However, few countries enact or enforce minors' access laws. To reduce tobacco sales to young persons, WHO recommends that countries 1) establish a minimum age of purchase of ≥18 years; 2) create a tobacco-sales licensing system so retailers can be identified and informed of their legal responsibilities; 3) establish a graduated schedule of civil law penalties for illegal sales, ranging from warnings to license revocation; 4) enlist the assistance of teenagers in the efforts of law enforcement officers to assess retailers' compliance with the prohibition of sales to minors; 5) end tobacco sales in health care, educational, and athletics facilities; and 6) end tobacco sales in vending machines and from self-service displays (*8,9*). Other strategies include requesting photo identification or other proof-of-age from persons attempting to purchase tobacco products (*3,4,10*).

The Mexican Secretariat of Health, CDH, and CJDH will use the results of this survey to demonstrate the need for stricter policies prohibiting the sale of tobacco to minors and to intensity enforcement and retailer education. TDH and NMDH plan to publicize the results of the study to show that enforcement and education efforts must continue. In addition to the enforcement of strong minors' access laws and retailer education, a comprehensive approach to preventing young persons from using tobacco should include raising tobacco taxes and reducing the appeal of tobacco to minors through restrictions on advertising and promotion and through counter-advertising and other educational programs (*3,4,6,8*). The US-MBC will continue to conduct bilateral collaborative tobacco research.

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Determination of Nicotine, pH, and Moisture Content of Six U.S. Commercial Moist Snuff Products — Florida, January–February 1999

The use of smokeless tobacco (moist snuff and chewing tobacco) can cause oral cancer and precancerous oral lesions (leukoplakia) and is a risk factor for cardiovascular diseases and nicotine addiction (*1*). Despite these adverse effects, smokeless tobacco is used commonly in the United States by young people, especially male high school students (*2*). Officials in Florida requested CDC assistance in analyzing six moist snuff products to measure three factors that affect their nicotine dose: pH, nicotine content, and moisture content. This report summarizes the results of the analysis, which indicate that the pH, amount of nicotine, and moisture vary widely among brands.

During January 5–February 7, 1999, University of Miami staff and affiliated persons bought six smokeless tobacco products from stores in Daytona Beach, Fort Myers, Miami, Orlando, Tallahassee, and Tampa/St. Petersburg, Florida. These products were Copenhagen Snuff, Skoal Bandits Straight, Skoal Bandits Wintergreen, Skoal Long Cut Wintergreen, Kodiak Wintergreen, and Hawken Wintergreen,* and were chosen to reflect a cross-section of products from the five leading U.S. moist snuff brands sold in the United States during 1997 (*3*).

The pH, nicotine, and total moisture content in samples of the six products were analyzed at CDC using a federal standard protocol† (*4*). Samples were stored in their original containers at –95.8 F (–71 C) until tested. The pH was obtained by suspending 2 g of moist snuff in 10 mL distilled water. Total moisture content (water and tobacco constituents that are volatile at 211.1 F [99.5 C]) was obtained by calculating the weight difference in 5 g of tobacco before and after 3 hours of oven drying at 211.1 F (99.5 C). Nicotine was extracted from moist snuff by using methyl *tert*- butyl ether, and tobacco extracts were analyzed by gas chromatography to determine the nicotine content. The nicotine extraction and pH measurements were conducted at room temperature. The percentage of free (unprotonated) nicotine, which is dependent on the pH, was calculated according to the Henderson-Hasselbalch equation and by using a pK_a value of 8.02 for nicotine (*5*). Free nicotine content then was calculated by

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

†The protocol for determining pH, total moisture, and nicotine content used in this analysis was published as a notice to solicit public comment on the protocol in the Federal Register (62 FR 24116, May 2, 1997). The final version of the protocol was published in the Federal Register on March 23, 1999. The differences between the two protocols are minor and would not affect the results of this study; however, the sampling of the products for this study is different from that required by the protocol.

Nicotine, pH, and Moisture Content of Smokeless Tobacco — Continued

multiplying the percentage of free nicotine by the total nicotine content (percentage of free nicotine x nicotine content). The tests were not blinded to the brands being tested, and all analyses were done in triplicate. Statistical analyses were performed using Statistical Analysis System (SAS) software.

The mean total moisture content ranged from 48.9% to 54.1%, except Hawken Wintergreen, which had a mean total moisture content of 24.7%; the mean nicotine content varied from 7.11 mg/g to 11.04 mg/g, except Hawken Wintergreen, which had a mean nicotine content of 3.37 mg/g; the mean pH varied from 5.24 (Hawken Wintergreen) to 8.35 (Kodiak Wintergreen). The mean amount of nicotine per dry tobacco weight ranged from 0.45% (Hawken Wintergreen) to 2.41% (Skoal Long Cut Wintergreen). Mean free nicotine levels varied from 0.01 mg/g (Hawken Wintergreen) to 6.23 mg/g (Copenhagen Snuff). The percentage of free nicotine varied from a mean value of 0.23% (Hawken Wintergreen) to 68.14% (Kodiak Wintergreen) (Table 1).

Reported by: Univ of Miami; Florida Office of Tobacco Control, Florida Dept of Health. Air Toxicants Br, Div of Laboratory Sciences, National Center for Environmental Health; Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: The findings in this report indicate that substantial differences exist in the pH, the amount of moisture and nicotine, and the percentage of free nicotine among six commonly used U. S. smokeless tobacco products bought at several locations in Florida. The nicotine dose smokeless tobacco users receive may be controlled by adjusting the concentration of nicotine, varying the size of tobacco cuttings, and altering the pH (*6*). The pH in tobacco strongly affects nicotine absorption through the nose and mouth, especially free nicotine, the chemical form most readily absorbed across the buccal mucosa into the bloodstream (*1*). Although pH is a determinant of nicotine absorption, other factors can modulate the absorption rate (e.g., amount of moist snuff used and behavioral and physiologic factors unique to each user); however, these factors probably have little effect on the nicotine absorption rate (*7*). Among the 562 compounds reported on the smokeless tobacco ingredient list (*8*), several salts (e.g., ammonium, sodium, and potassium) may alter the pH of smokeless tobacco. The findings in this report confirm that products with high nicotine content and high pH have a high percentage of free nicotine.

The findings in this report are subject to at least two limitations. First, the analysis did not use a sales-weighted or representative sample of all U.S. brands or manufacturers; the moist snuff products tested were six leading products manufactured by the two industry leaders. Second, the findings for any specific brand could have been affected by factors unique to the sample delivered to each city surveyed, such as the retailers' duration and conditions of storage (e.g., humidity and temperature) and manufacturing dates.

This study is a new federal analysis of pH, moisture, and nicotine content of smokeless tobacco that quantifies a wide range of nicotine dosing capabilities in moist snuff products. These findings are consistent with other studies (*6,9*) that have found a wide variation in the nicotine dosing capabilities of these products. The Food and Drug Administration previously found that smokeless tobacco contains components intended to control the delivery of nicotine to the body (*10*). Smokeless tobacco users who dip or chew eight to 10 times a day may be exposed to the same amount of nicotine as persons who smoke 30 to 40 cigarettes a day (*1*). In addition, smokeless

TABLE 1. Mean values of nicotine, total moisture, and pH of six moist snuff products* — Florida, January–February 1999†

Product	Place of purchase	Total moisture (%)	pH	Nicotine content (mg/g)§	Nicotine dry weight (%)	Free nicotine (mg/g)§	Free nicotine (%)
Copenhagen Snuff	Daytona Beach	54.8	8.21	10.76	2.38	6.546	60.81
	Fort Myers	53.4	7.99	10.32	2.21	4.982	48.27
	Miami	52.7	8.05	10.62	2.25	5.471	51.53
	Tampa/St. Petersburg	55.1	8.48	10.66	2.37	7.920	74.33
	Overall mean	**54.0**	**8.18**	**10.59**	**2.30**	**6.229**	**58.74**
	SD¶	**±1.0**	**±0.20**	**±0.17**	**±0.08**	**±1.178**	**±10.56**
Skoal Bandits Straight**	Orlando	49.4	5.47	8.00	1.58	0.022	0.28
	Tampa/St. Petersburg	47.3	5.57	8.05	1.53	0.029	0.35
	Tallahassee	50.1	5.51	7.71	1.55	0.024	0.31
	Overall mean	**48.9**	**5.52**	**7.92**	**1.55**	**0.025**	**0.31**
	SD	**±1.2**	**±0.05**	**±0.16**	**±0.02**	**±0.003**	**± 0.03**
Skoal Bandits Wintergreen**	Daytona Beach	50.6	6.91	7.12	1.44	0.515	7.24
	Orlando	49.3	6.88	7.42	1.47	0.502	6.77
	Tampa/St. Petersburg	49.8	6.86	7.05	1.40	0.456	6.47
	Tallahassee	49.7	6.74	6.83	1.36	0.341	4.99
	Overall mean	**49.9**	**6.85**	**7.11**	**1.42**	**0.454**	**6.37**
	SD	**±0.5**	**±0.07**	**±0.22**	**±0.04**	**±0.072**	**± 0.88**
Skoal Long Cut Wintergreen	Daytona Beach	54.9	7.87	11.10	2.46	4.627	41.68
	Miami	54.4	7.80	10.95	2.40	4.121	37.64
	Orlando	54.2	7.94	10.79	2.35	4.895	45.36
	Tampa/St. Petersburg	53.1	7.53	11.33	2.42	2.775	24.48
	Overall mean	**54.1**	**7.79**	**11.04**	**2.41**	**4.105**	**37.29**
	SD	**±0.7**	**±0.16**	**±0.21**	**±0.04**	**±0.853**	**± 8.23**
Kodiak Wintergreen	Daytona Beach	53.5	8.34	9.01	1.94	6.078	67.46
	Orlando	53.0	8.34	8.46	1.80	5.724	67.67
	Tallahassee	53.8	8.47	8.23	1.78	6.058	73.63
	Tampa/St. Petersburg	52.7	8.27	8.54	1.80	5.448	63.79
	Overall mean	**53.2**	**8.35**	**8.56**	**1.83**	**5.827**	**68.14**
	SD	**±0.4**	**±0.08**	**±0.30**	**±0.07**	**±0.272**	**± 3.68**
Hawken Wintergreen	Orlando	28.0	5.45	3.00	0.42	000.8	0.27
	Tallahassee	25.1	5.61	3.17	0.42	0.012	0.39
	Tampa/St. Petersburg	20.9	4.65	3.93	0.50	0.002	0.04
	Overall mean	**24.7**	**5.24**	**3.37**	**0.45**	**0.007**	**0.23**
	SD	**±3.1**	**±0.45**	**±0.43**	**±0.04**	**±0.005**	**± 0.15**

*Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services or CDC.
†Mean values for three replicated samples.
§Units for nicotine and free nicotine content are milligrams of nicotine (or free nicotine) per gram of tobacco (mg/g).
¶Standard deviation.
**Skoal Bandits come in 0.5 g sachets. Each sachet provides half the nicotine indicated.

Nicotine, pH, and Moisture Content of Smokeless Tobacco — Continued

tobacco contains known cancer-causing agents: nitrosamines, polycyclic aromatic hydrocarbons, and radioactive polonium (*1*). These findings underscore the need for intensive efforts to prevent children and adolescents from using any tobacco product, including smokeless tobacco, and to educate young users about the risks associated with smokeless tobacco.

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Prenatal Discussion of HIV Testing and Maternal HIV Testing — 14 States, 1996–1997

In July 1995, the Public Health Service recommended that health-care providers counsel all pregnant women about human immunodeficiency virus (HIV) prevention and encourage testing for HIV infection (*1*) and, if indicated, initiate zidovudine therapy (*2*). To evaluate compliance with these recommendations, CDC analyzed population-based data on HIV counseling and testing during 1996–1997 from 14 states participating in the Pregnancy Risk Assessment Monitoring System (PRAMS). This report presents an analysis of survey data collected from 1996 through 1997; results indicate that HIV counseling and testing of pregnant women were common but varied by state, type of prenatal health-care provider, Medicaid status, and maternal demographic characteristics.

PRAMS is an ongoing, state-based surveillance system that collects information about maternal behaviors, attitudes, and experiences. Each month, PRAMS surveys a random sample of mothers who have given birth to live infants during the previous 2–6 months using stratified, systematic sampling of resident birth certificates. A questionnaire is mailed to each mother, and a follow-up questionnaire is mailed to nonrespondents. Nonrespondents then are contacted by telephone. Statistical weights are applied to account for sampling probability, nonresponse, and sampling frame coverage in each state. The annual state-specific response rate to the entire

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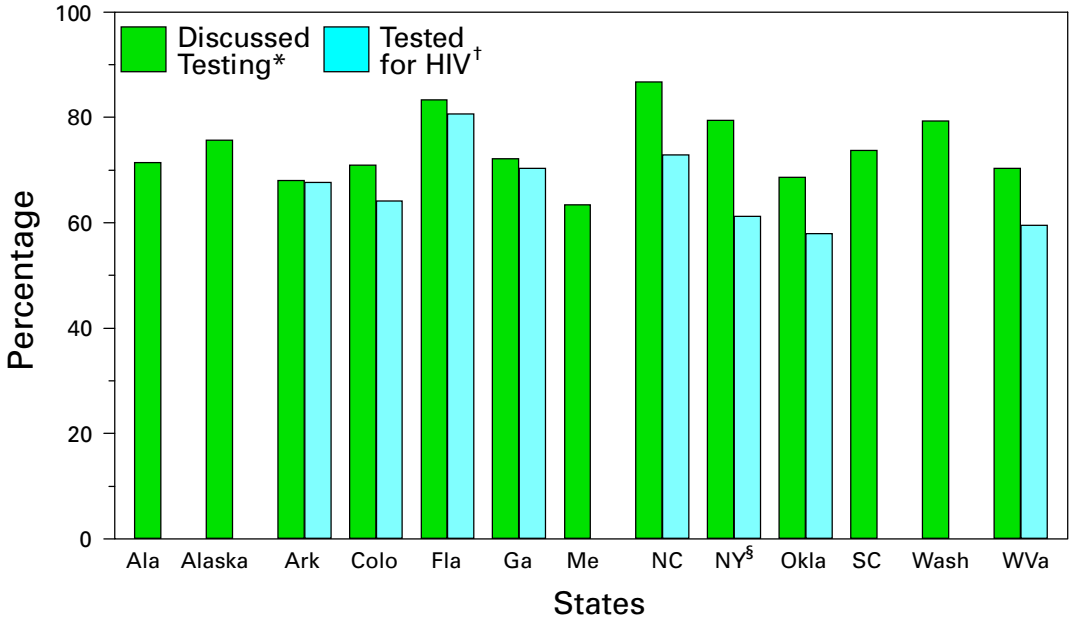
questionnaire for 11 states in 1996 and 13 states in 1997 was approximately 70% (range: 69.4%–80.0%). Details of the survey design, questionnaire, and other operational aspects of the survey have been published (*3*).

Beginning in 1996, mothers who received prenatal care were asked whether a doctor, nurse, or other health-care provider counseled them about testing for HIV. Mothers in eight states, regardless of whether they received prenatal care, were asked if they had been tested for HIV infection during pregnancy or at delivery. Mothers who received any prenatal care and responded to the provider test discussion question were included in the analysis (n=17,354 [97.4%] in 1996; n=19,693 [98.1%] in 1997). To analyze maternal HIV testing, data were included on all mothers who responded to the HIV testing question regardless of having received prenatal care (n=8420 [89.8%] in 1996; n=11,152 [91.0%] in 1997). To account for the complex survey design, SUDAAN was used to calculate point estimates, risk ratios, and 95% confidence intervals (CIs) surrounding the risk ratios. State-specific risk ratios were considered significant if the 95% CI did not include 1. State-specific risk ratios are not presented for sparse data (response categories with <20 women).

During 1997, the state-specific proportion of mothers who recalled discussing HIV testing with their prenatal health-care provider ranged from 63.4% (Maine) to 86.7% (North Carolina), and the proportion of mothers who recalled being tested ranged from 58.0% (Oklahoma) to 80.7% (Florida) (Figure 1). Among 10 states with data from 1996 to 1997, increases in testing discussions occurred in New York (22.8%), Oklahoma (17.8%), and West Virginia (15.3%). Seven states demonstrated no increases

FIGURE 1. Percentage of mothers who recalled discussing HIV testing with their health-care provider and percentage who reported being tested for HIV during pregnancy or at delivery, by state — 13 states, Pregnancy Risk Assessment Monitoring System, 1997



*Includes only mothers who received prenatal care.
†Includes all mothers.
§Estimates do not include births in New York City.

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(range: –2 to 0.9%) in prenatal testing discussions. The largest increase in reporting of maternal testing from 1996 to 1997 occurred in New York (18.1%). Smaller increases occurred in West Virginia (15.2%), Florida (14.3%), Oklahoma (11.5%), and Georgia (6.5%).

During 1997 in all states, black mothers were significantly more likely than white mothers to report that their provider discussed testing (risk ratio [RR]=1.05–1.29). Hispanic mothers were not significantly more likely to report having had a testing discussion in most states. In seven states, mothers with less than a high school education were significantly more likely (RR=0.96–1.22) to recall a discussion about testing. Similarly, in 11 states, mothers aged <25 years were significantly more likely to recall a discussion about testing (RR=1.04–1.25). Public health-care providers were more likely than private providers to discuss testing (RR=0.96–1.29) in 10 states. In 11 states, mothers who received Medicaid benefits during pregnancy were significantly more likely to report discussions with a health-care provider (RR=0.99–1.32).

In most states, black race, type of prenatal health-care provider, education level, age, and receipt of Medicaid benefits were associated significantly with maternal HIV testing. However, associations between maternal characteristics and testing discussions were stronger than associations between maternal characteristics and actual testing.

Reported by: Pregnancy Risk Assessment Monitoring System Working Group, Div of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion; Div of HIV/AIDS–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention, CDC.

Editorial Note: This report documents a substantial level of counseling about HIV testing and receipt of testing for women who have given birth since publication of the 1995 guidelines. In 1997, >70% of women in nine states recalled discussing HIV testing with their health-care provider during prenatal care, and at least 50% of women in all states reported being tested for HIV during pregnancy or at delivery.

Data from PRAMS suggest that physician practices regarding prenatal HIV testing discussions and prenatal maternal HIV testing may be influenced by state-specific variations in HIV seroprevalence rates among childbearing women and physician perceptions of maternal HIV risk factors. Health-care providers serving women in states with high HIV seroprevalence rates may be more aware of HIV prevention and may place higher priority on prenatal HIV prevention. For example, on average, fewer mothers (69.2%) in low HIV seroprevalence states (HIV seroprevalence rate among pregnant women <0.05%) recalled a discussion about testing compared with mothers (81.4%) in high seroprevalence states (seroprevalence rate >0.4%) (*4*). Maternal HIV testing demonstrated a similar association; fewer mothers (58.0%) in low seroprevalence states were tested compared with mothers (70.9%) in high seroprevalence states. Variations in testing discussions by maternal race, age, and Medicaid status may reflect targeted testing efforts by providers on the basis of known epidemiology of HIV among women in their area. In addition, perception of the mother's risk may influence whether a provider discusses HIV testing.

Differences in state legislation also may contribute to variations in HIV discussions and testing. During 1996, Florida and New York enacted legislation requiring that all health-care providers include HIV counseling during prenatal care. High levels of provider discussions on HIV testing reported in Washington and North Carolina can be

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attributed to legislation mandating this activity before 1996. In July 1997, Arkansas law required that providers test all pregnant women for HIV; however, that legislation probably did not affect results presented in this report. An association among legislation, discussions, and actual HIV testing cannot be established using PRAMS data (*5*).

Another survey has shown increased test counseling for women who were young and other than white, sought care from a public provider, and had low incomes (*6*). PRAMS data also are consistent with a provider survey that found variations in prenatal test counseling according to provider type (i.e., public versus private) and type of patient insurance (i.e., Medicaid versus other) (*7*).

The findings in this report are subject to at least four limitations. First, information about previous HIV testing among mothers and the testing date, if any, were not available. Second, the wording of the survey questions did not allow consideration of a cause-effect relationship between provider test counseling and maternal test acceptance. Third, information was not collected on maternal risk for HIV infection, context of test counseling (i.e., strength of provider encouragement), or reasons a mother refused testing. Finally, data were not available to estimate self-reported information accuracy; however, most respondents completed the questionnaire within 4 months of the infants' delivery, minimizing recall bias.

Data from this survey permit health-care professionals and policymakers to monitor ongoing health-care provider counseling and maternal testing. The results described in this report emphasize the need for increasing health-care providers'—especially private sector providers'—awareness of HIV testing during prenatal care to ensure that health-care providers counsel all pregnant women.

References

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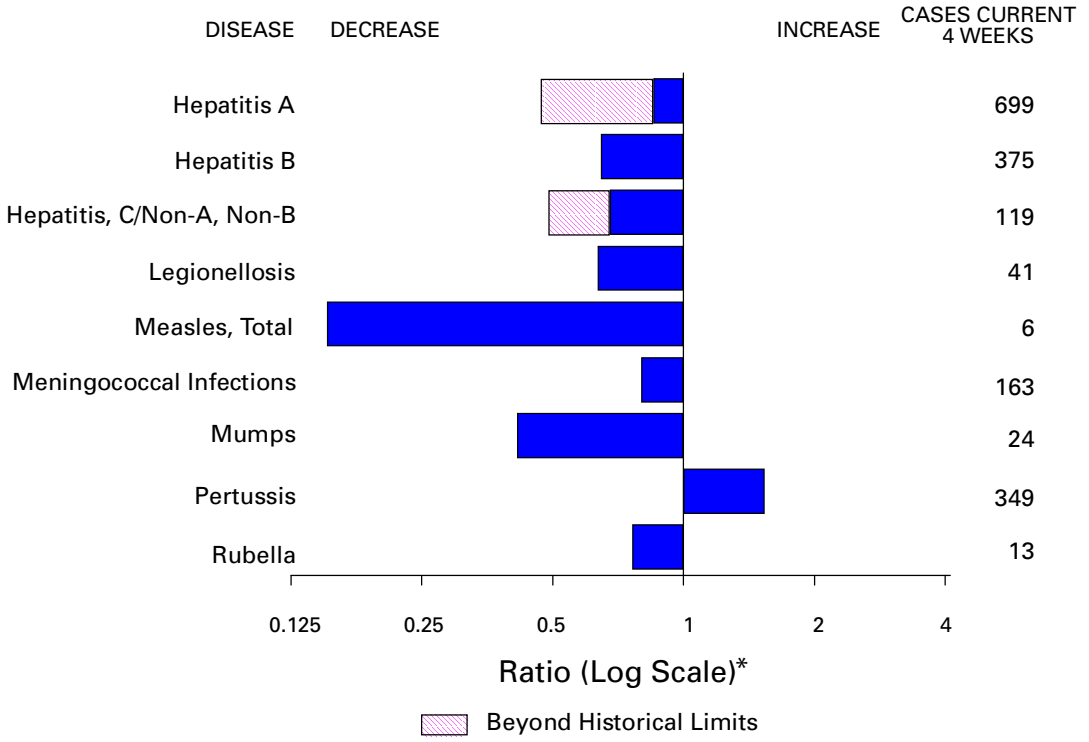
FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending May 15, 1999, with historical data — United States



*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 15, 1999 (19th Week)

	Cum. 1999		Cum. 1999
Anthrax	-	Plague	-
Brucellosis	12	Poliomyelitis, paralytic	-
Cholera	-	Psittacosis	12
Congenital rubella syndrome	2	Rabies, human	-
Cryptosporidiosis*	430	Rocky Mountain spotted fever (RMSF)	53
Diphtheria	-	Streptococcal disease, invasive Group A	809
Encephalitis: California*	2	Streptococcal toxic-shock syndrome*	18
eastern equine*	-	Syphilis, congenital[¶]	47
St. Louis*	-	Tetanus	6
western equine*	1	Toxic-shock syndrome	39
Hansen Disease	30	Trichinosis	6
Hantavirus pulmonary syndrome*[†]	7	Typhoid fever	96
Hemolytic uremic syndrome, post-diarrheal*	8	Yellow fever	-
HIV infection, pediatric*[§]	57		

-: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 25, 1999.
[¶] Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending May 15, 1999, and May 16, 1998 (19th Week)

Reporting Area	AIDS		Chlamydia		*Escherichia coli* O157:H7		Gonorrhea		Hepatitis C/NA,NB	
					NETSS†	PHLIS§				
	Cum. 1999*	Cum. 1998	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1999	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1998
UNITED STATES	14,890	15,998	197,155	206,759	430	220	105,919	120,627	928	1,649
NEW ENGLAND	779	483	6,696	7,532	62	50	2,101	2,032	68	29
Maine	15	10	193	355	4	-	15	12	1	-
N.H.	23	12	332	355	3	2	22	33	-	-
Vt.	5	10	186	144	6	1	20	11	2	2
Mass.	500	206	3,183	3,112	32	29	925	749	62	27
R.I.	52	42	833	924	3	3	218	128	3	-
Conn.	184	203	1,969	2,642	14	15	901	1,099	-	-
MID. ATLANTIC	3,612	4,629	26,824	25,695	30	2	14,120	14,119	63	149
Upstate N.Y.	406	547	N	N	27	-	1,949	2,459	40	122
N.Y. City	1,894	2,654	13,718	13,244	-	1	5,686	5,616	-	-
N.J.	765	820	3,626	4,273	3	1	1,919	2,519	-	-
Pa.	547	608	9,478	8,178	N	-	4,566	3,525	23	27
E.N. CENTRAL	1,105	1,291	28,639	31,282	67	36	19,322	23,045	236	194
Ohio	183	247	8,121	9,770	32	8	4,912	5,898	-	5
Ind.	147	271	-	-	5	8	726	2,283	-	4
Ill.	505	487	10,277	8,433	16	7	7,263	6,891	8	23
Mich.	215	217	7,936	8,136	14	7	5,606	6,026	228	162
Wis.	55	69	2,305	4,943	N	6	815	1,947	-	-
W.N. CENTRAL	285	281	7,101	12,660	87	32	2,365	5,995	42	10
Minn.	44	48	2,319	2,608	26	21	857	895	-	-
Iowa	35	14	1,012	1,581	9	2	235	494	-	4
Mo.	102	138	-	4,354	9	5	-	3,192	39	4
N. Dak.	4	4	325	374	3	-	31	32	-	-
S. Dak.	12	7	619	614	3	4	57	101	-	-
Nebr.	26	31	1,146	1,075	30	-	517	419	-	2
Kans.	62	39	1,680	2,054	7	-	668	862	3	-
S. ATLANTIC	4,155	4,065	43,754	39,879	51	26	31,386	32,374	96	40
Del.	50	44	1,052	942	2	-	634	500	-	-
Md.	467	488	2,916	3,026	3	-	2,643	3,337	22	3
D.C.	160	339	N	N	-	-	964	1,320	-	-
Va.	231	285	4,700	3,308	15	7	3,122	2,261	7	1
W. Va.	24	34	795	898	1	1	225	310	11	3
N.C.	269	271	8,220	8,446	9	6	7,086	7,118	19	10
S.C.	402	275	7,213	6,937	5	3	3,981	4,454	12	-
Ga.	583	504	9,885	9,150	3	-	6,360	7,390	1	8
Fla.	1,969	1,825	8,973	7,172	13	9	6,371	5,684	24	15
E.S. CENTRAL	634	586	15,055	14,258	31	8	11,836	13,462	100	52
Ky.	104	85	2,634	2,279	11	-	1,185	1,268	6	9
Tenn.	286	180	5,234	4,679	11	4	4,005	3,916	37	40
Ala.	112	183	3,788	3,615	6	3	3,467	4,665	1	3
Miss.	132	138	3,399	3,685	3	1	3,179	3,613	56	-
W.S. CENTRAL	1,553	1,949	28,999	30,804	16	9	16,292	18,420	99	344
Ark.	56	71	2,020	1,295	4	2	943	1,465	2	3
La.	162	330	6,245	4,610	3	3	4,978	3,920	82	2
Okla.	46	107	3,032	3,840	4	4	1,554	2,072	2	1
Tex.	1,289	1,441	17,702	21,059	5	-	8,817	10,963	13	338
MOUNTAIN	545	513	9,973	11,318	34	17	2,638	3,032	60	201
Mont.	4	12	509	402	2	-	17	21	4	4
Idaho	8	12	501	705	1	2	26	60	4	77
Wyo.	3	1	288	261	2	3	10	11	20	47
Colo.	103	91	2,408	2,879	13	4	747	838	12	10
N. Mex.	21	76	1,385	1,359	2	1	243	268	4	34
Ariz.	274	198	3,161	3,893	8	3	1,148	1,416	12	2
Utah	54	44	701	856	6	2	74	83	2	14
Nev.	78	79	1,020	963	-	2	373	335	2	13
PACIFIC	2,222	2,201	30,114	33,331	52	40	5,859	8,148	164	630
Wash.	117	162	4,486	4,097	12	16	802	697	5	8
Oreg.	50	64	2,056	-	15	11	289	-	4	10
Calif.	2,016	1,928	22,019	27,663	25	12	4,530	7,154	155	570
Alaska	6	11	717	734	-	-	129	127	-	1
Hawaii	33	36	836	837	-	1	109	170	-	41
Guam	1	-	-	122	N	-	-	14	-	-
P.R.	493	661	U	U	5	U	121	150	-	-
V.I.	13	15	N	N	N	U	U	U	U	U
Amer. Samoa	-	-	U	U	N	U	U	U	U	U
C.N.M.I.	-	-	N	N	N	U	-	14	-	-

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

*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 25, 1999.

†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 15, 1999, and May 16, 1998 (19th Week)

Reporting Area	Legionellosis		Lyme Disease		Malaria		Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal
	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1998	Cum. 1999*	Cum. 1998*	Cum. 1999
UNITED STATES	331	432	1,485	1,624	354	419	2,164	2,574	1,844	2,964	1,848
NEW ENGLAND	21	22	203	392	14	18	26	28	114	152	295
Maine	3	1	-	4	1	-	-	1	6	3	58
N.H.	2	2	-	7	-	3	-	1	-	2	15
Vt.	3	1	-	2	1	-	1	2	-	1	52
Mass.	5	8	122	95	4	13	16	19	59	82	59
R.I.	2	4	10	24	-	2	1	-	16	17	35
Conn.	6	6	71	260	8	-	8	5	33	47	76
MID. ATLANTIC	76	94	957	1,009	87	121	96	105	665	750	375
Upstate N.Y.	24	25	363	492	27	28	11	12	91	105	253
N.Y. City	5	22	5	25	24	62	42	21	422	449	U
N.J.	5	4	118	127	24	17	11	38	152	196	71
Pa.	42	43	471	365	12	14	32	34	U	U	51
E.N. CENTRAL	71	164	26	25	35	39	388	379	120	149	19
Ohio	28	55	19	17	8	2	34	65	U	U	6
Ind.	5	37	5	4	4	1	32	66	U	U	-
Ill.	10	21	1	2	13	19	248	148	U	U	-
Mich.	26	23	1	2	8	14	70	72	86	109	13
Wis.	2	28	U	U	2	3	4	28	34	40	-
W.N. CENTRAL	16	26	17	14	14	22	15	67	166	132	201
Minn.	1	3	8	3	2	8	5	5	70	44	37
Iowa	9	4	2	8	4	3	3	-	14	2	44
Mo.	5	8	-	2	7	8	-	49	62	54	6
N. Dak.	-	-	1	-	-	1	-	-	1	3	54
S. Dak.	1	-	-	-	-	-	-	1	3	9	25
Nebr.	-	9	-	-	-	-	4	4	6	4	1
Kans.	-	2	6	1	1	2	3	8	10	16	34
S. ATLANTIC	39	47	174	129	99	92	745	1,015	350	537	705
Del.	2	6	3	3	-	1	2	11	-	8	3
Md.	5	9	126	106	30	33	158	278	U	U	146
D.C.	-	3	1	4	7	7	14	30	15	42	-
Va.	8	4	9	4	19	15	56	71	83	89	174
W. Va.	N	N	4	4	1	-	2	1	16	21	42
N.C.	7	6	22	1	8	7	197	280	152	267	157
S.C.	6	4	2	1	-	3	101	126	84	110	56
Ga.	-	-	-	2	7	13	110	112	U	U	61
Fla.	11	14	7	4	27	13	105	106	U	U	66
E.S. CENTRAL	52	18	35	16	7	12	424	431	108	226	96
Ky.	44	10	16	3	2	1	43	43	U	U	19
Tenn.	6	4	7	7	3	6	226	213	U	U	31
Ala.	2	1	6	6	2	3	105	93	102	136	46
Miss.	-	3	6	-	-	2	50	82	6	90	-
W.S. CENTRAL	1	9	2	6	8	12	332	330	93	771	34
Ark.	-	-	-	3	-	1	27	50	55	38	-
La.	1	-	-	-	6	4	91	106	U	U	-
Okla.	-	3	2	-	1	1	73	17	38	44	34
Tex.	-	6	-	3	1	6	141	157	-	689	-
MOUNTAIN	20	22	4	1	15	21	47	90	59	81	63
Mont.	-	1	-	-	2	-	-	-	5	2	23
Idaho	-	-	1	-	1	1	-	-	-	4	-
Wyo.	-	1	1	-	-	-	-	-	1	1	25
Colo.	2	4	-	-	5	6	1	4	U	U	1
N. Mex.	1	2	1	-	2	6	-	10	22	24	-
Ariz.	2	4	-	-	4	4	43	68	U	U	14
Utah	9	8	1	-	-	1	1	3	16	21	-
Nev.	6	2	-	1	1	3	2	5	15	29	-
PACIFIC	35	30	67	32	75	82	91	129	169	166	60
Wash.	7	3	1	1	5	6	28	6	90	88	-
Oreg.	1	-	1	4	8	8	1	-	U	U	-
Calif.	26	27	65	27	57	67	59	123	U	U	55
Alaska	1	-	-	-	-	-	1	-	22	17	5
Hawaii	-	-	-	-	5	1	2	-	57	61	-
Guam	-	1	-	-	-	1	-	-	-	37	-
P.R.	-	-	-	-	-	-	75	84	-	46	28
V.I.	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	-	-	-	-	-	98	-	54	-

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

*Cumulative reports of provisional tuberculosis cases for 1998 and 1999 are unavailable ("U") for some areas using the Tuberculosis Information Management System (TIMS).

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending May 15, 1999, and May 16, 1998 (19th Week)

Reporting Area	*H. influenzae*, invasive		Hepatitis (Viral), by type				Measles (Rubeola)					
			A		B		Indigenous		Imported†		Total	
	Cum. 1999*	Cum. 1998	Cum. 1999	Cum. 1998	Cum. 1999	Cum. 1998	1999	Cum. 1999	1999	Cum. 1999	Cum. 1999	Cum. 1998
UNITED STATES	449	453	5,811	8,313	2,155	3,193	-	16	-	10	26	24
NEW ENGLAND	32	30	67	117	34	53	-	-	-	1	1	1
Maine	3	2	2	10	-	-	-	-	-	-	-	-
N.H.	5	1	7	6	4	7	U	-	U	1	1	-
Vt.	4	2	3	7	1	2	-	-	-	-	-	-
Mass.	14	23	19	36	18	25	U	-	U	-	-	1
R.I.	-	2	7	8	11	8	-	-	-	-	-	-
Conn.	6	-	29	50	-	11	U	-	U	-	-	-
MID. ATLANTIC	55	66	361	602	275	476	-	-	-	2	2	9
Upstate N.Y.	33	24	92	126	73	113	-	-	-	2	2	-
N.Y. City	5	16	60	217	61	141	-	-	-	-	-	-
N.J.	17	24	42	110	33	83	-	-	-	-	-	8
Pa.	-	2	167	149	108	139	-	-	-	-	-	1
E.N. CENTRAL	52	70	1,201	1,151	183	624	-	-	-	-	-	4
Ohio	25	28	305	128	37	27	-	-	-	-	-	-
Ind.	1	13	29	112	4	300	-	-	-	-	-	3
Ill.	20	27	166	298	-	98	-	-	-	-	-	-
Mich.	6	-	676	513	142	165	-	-	-	-	-	1
Wis.	-	2	25	100	-	34	-	-	-	-	-	-
W.N. CENTRAL	39	31	268	681	114	138	-	-	-	-	-	-
Minn.	12	17	21	28	13	11	-	-	-	-	-	-
Iowa	10	1	61	317	22	19	-	-	-	-	-	-
Mo.	11	8	146	266	64	89	-	-	-	-	-	-
N. Dak.	-	-	1	2	-	2	-	-	-	-	-	-
S. Dak.	1	-	8	8	-	1	-	-	-	-	-	-
Nebr.	3	-	16	16	7	7	-	-	-	-	-	-
Kans.	2	5	15	44	8	9	-	-	-	-	-	-
S. ATLANTIC	109	84	653	552	413	299	-	1	-	3	4	6
Del.	-	-	1	3	-	-	-	-	-	-	-	1
Md.	30	27	125	142	66	66	-	-	-	-	-	1
D.C.	2	-	24	24	9	6	U	-	U	-	-	-
Va.	10	10	51	103	39	37	-	1	-	2	3	2
W. Va.	1	3	7	-	10	3	-	-	-	-	-	-
N.C.	19	12	50	37	83	81	-	-	-	-	-	-
S.C.	2	2	10	12	36	-	-	-	-	-	-	-
Ga.	23	18	162	114	45	57	-	-	-	-	-	1
Fla.	22	12	223	117	125	49	-	-	-	1	1	1
E.S. CENTRAL	39	27	189	162	183	164	-	-	-	-	-	-
Ky.	6	5	31	8	22	19	U	-	U	-	-	-
Tenn.	20	15	94	94	80	116	-	-	-	-	-	-
Ala.	11	6	32	34	40	29	-	-	-	-	-	-
Miss.	2	1	32	26	41	-	-	-	-	-	-	-
W.S. CENTRAL	29	26	1,110	1,536	180	460	-	1	-	2	3	-
Ark.	1	-	16	20	16	30	-	-	-	-	-	-
La.	7	12	44	13	54	11	-	-	-	-	-	-
Okla.	19	12	185	211	40	25	-	-	-	-	-	-
Tex.	2	2	865	1,292	70	394	-	1	-	2	3	-
MOUNTAIN	47	66	546	1,240	218	297	-	-	-	-	-	-
Mont.	1	-	9	25	10	3	-	-	-	-	-	-
Idaho	1	-	21	87	12	14	-	-	-	-	-	-
Wyo.	1	-	3	19	1	2	-	-	-	-	-	-
Colo.	6	12	103	95	39	39	-	-	-	-	-	-
N. Mex.	10	3	20	67	81	106	-	-	-	-	-	-
Ariz.	23	31	316	777	41	75	U	-	U	-	-	-
Utah	4	3	24	78	11	25	-	-	-	-	-	-
Nev.	1	17	50	92	23	33	-	-	-	-	-	-
PACIFIC	47	53	1,416	2,272	555	682	-	14	-	2	16	4
Wash.	1	3	100	373	21	47	-	-	-	-	-	1
Oreg.	18	25	102	168	36	70	-	8	-	-	8	-
Calif.	23	22	1,210	1,696	486	552	-	6	-	2	8	3
Alaska	4	1	3	10	7	7	-	-	-	-	-	-
Hawaii	1	2	1	25	5	6	-	-	-	-	-	-
Guam	-	-	-	-	-	1	U	-	U	-	-	-
P.R.	1	2	61	19	57	227	-	-	-	-	-	-
V.I.	U	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	-	1	-	28	U	-	U	-	-	-

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

*Of 93 cases among children aged <5 years, serotype was reported for 37 and of those, 5 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 15, 1999, and May 16, 1998 (19th Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 1999	Cum. 1998	1999	Cum. 1999	Cum. 1998	1999	Cum. 1999	Cum. 1998	1999	Cum. 1999	Cum. 1998
UNITED STATES	985	1,213	6	135	343	87	1,869	1,624	4	27	220
NEW ENGLAND	44	59	-	1	-	-	145	304	-	3	34
Maine	3	4	-	-	-	-	-	5	-	-	-
N.H.	-	1	U	1	-	U	30	21	U	-	-
Vt.	3	1	-	-	-	-	10	27	-	-	-
Mass.	30	27	U	-	-	U	97	245	U	3	7
R.I.	2	3	-	-	-	-	3	-	-	-	-
Conn.	6	23	U	-	-	U	5	6	U	-	27
MID. ATLANTIC	84	125	2	18	161	44	467	204	3	6	99
Upstate N.Y.	23	30	1	3	3	43	418	99	1	3	89
N.Y. City	19	14	-	3	153	-	10	11	-	-	6
N.J.	17	34	-	-	2	-	-	8	-	-	4
Pa.	25	47	1	12	3	1	39	86	2	3	-
E.N. CENTRAL	142	180	-	15	36	-	137	174	-	-	-
Ohio	72	61	-	6	15	-	94	59	-	-	-
Ind.	7	26	-	-	2	-	2	45	-	-	-
Ill.	43	54	-	3	6	-	23	12	-	-	-
Mich.	20	20	-	6	13	-	18	20	-	-	-
Wis.	-	19	-	-	-	-	-	38	-	-	-
W.N. CENTRAL	116	101	1	5	19	18	43	129	-	2	9
Minn.	26	16	1	1	10	18	18	76	-	-	-
Iowa	28	14	-	3	6	-	12	29	-	2	-
Mo.	39	43	-	1	2	-	10	9	-	-	1
N. Dak.	3	-	-	-	1	-	-	-	-	-	-
S. Dak.	5	6	-	-	-	-	2	4	-	-	-
Nebr.	4	4	-	-	-	-	1	5	-	-	-
Kans.	11	18	-	-	-	-	-	6	-	-	8
S. ATLANTIC	176	180	-	29	25	5	109	99	-	2	4
Del.	2	1	-	-	-	-	-	-	-	-	-
Md.	26	19	-	3	-	-	33	20	-	1	-
D.C.	1	-	U	2	-	U	-	1	U	-	-
Va.	22	19	-	8	4	-	13	6	-	-	-
W. Va.	2	5	-	-	-	-	1	1	-	-	-
N.C.	21	25	-	5	7	-	25	42	-	1	3
S.C.	21	28	-	2	4	-	8	12	-	-	-
Ga.	27	37	-	-	1	1	9	1	-	-	-
Fla.	54	46	-	9	9	4	20	16	-	-	1
E.S. CENTRAL	86	91	-	1	4	-	35	45	1	1	-
Ky.	24	15	U	-	-	U	3	18	U	-	-
Tenn.	27	34	-	-	-	-	22	13	-	-	-
Ala.	18	27	-	1	1	-	7	12	1	1	-
Miss.	17	15	-	-	3	-	3	2	-	-	-
W.S. CENTRAL	67	143	1	17	26	-	52	89	-	5	56
Ark.	17	16	-	-	-	-	4	11	-	-	-
La.	30	25	1	2	2	-	3	-	-	-	-
Okla.	14	22	-	1	-	-	7	6	-	-	-
Tex.	6	80	-	14	24	-	38	72	-	5	56
MOUNTAIN	72	71	-	8	18	3	195	305	-	6	5
Mont.	-	2	-	-	-	-	1	1	-	-	-
Idaho	7	3	-	-	1	1	86	112	-	-	-
Wyo.	2	3	-	-	1	-	2	7	-	-	-
Colo.	20	16	-	3	1	-	42	68	-	-	-
N. Mex.	9	11	N	N	N	2	15	55	-	-	1
Ariz.	24	25	U	-	4	U	21	35	U	5	1
Utah	5	7	-	4	3	-	26	14	-	-	2
Nev.	5	4	-	1	8	-	2	13	-	1	1
PACIFIC	198	263	2	41	54	17	686	275	-	2	13
Wash.	26	28	-	1	4	16	415	109	-	-	9
Oreg.	36	44	N	N	N	1	11	20	-	-	-
Calif.	128	186	2	34	35	-	252	142	-	2	2
Alaska	4	1	-	1	2	-	3	-	-	-	-
Hawaii	4	4	-	5	13	-	5	4	-	-	2
Guam	-	1	U	-	2	U	-	-	U	-	-
P.R.	2	3	-	-	1	1	5	2	-	-	-
V.I.	U	U	U	U	U	U	U	U	U	U	U
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	U	-	2	U	-	1	U	-	-

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

TABLE IV. Deaths in 122 U.S. cities,* week ending May 15, 1999 (19th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1	
NEW ENGLAND	533	405	78	30	9	11	49
Boston, Mass.	161	113	29	11	4	4	21
Bridgeport, Conn.	34	25	5	2	1	1	3
Cambridge, Mass.	17	15	2	-	-	-	3
Fall River, Mass.	27	23	3	1	-	-	2
Hartford, Conn.	U	U	U	U	U	U	U
Lowell, Mass.	25	21	2	-	1	1	2
Lynn, Mass.	13	9	1	2	1	-	-
New Bedford, Mass.	20	14	5	1	-	-	1
New Haven, Conn.	30	23	2	2	-	3	3
Providence, R.I.	53	37	9	5	1	1	4
Somerville, Mass.	7	4	1	2	-	-	1
Springfield, Mass.	49	38	8	2	1	-	2
Waterbury, Conn.	28	24	3	1	-	-	1
Worcester, Mass.	69	59	8	1	-	1	6
MID. ATLANTIC	2,325	1,610	437	195	41	41	104
Albany, N.Y.	41	33	6	1	-	1	3
Allentown, Pa.	U	U	U	U	U	U	U
Buffalo, N.Y.	73	55	14	3	-	1	-
Camden, N.J.	34	25	4	3	1	1	5
Elizabeth, N.J.	12	9	3	-	-	-	-
Erie, Pa.	44	36	3	3	1	1	4
Jersey City, N.J.	28	19	7	2	-	-	-
New York City, N.Y.	1,089	745	215	97	13	19	35
Newark, N.J.	57	27	18	8	3	-	4
Paterson, N.J.	20	10	8	1	-	1	-
Philadelphia, Pa.	500	332	98	46	12	12	27
Pittsburgh, Pa.§	59	37	14	6	2	-	3
Reading, Pa.	23	17	2	3	-	1	2
Rochester, N.Y.	129	103	20	6	-	-	8
Schenectady, N.Y.	25	21	3	-	1	-	1
Scranton, Pa.	32	30	1	-	1	-	3
Syracuse, N.Y.	97	68	13	8	6	2	5
Trenton, N.J.	41	27	6	5	1	2	3
Utica, N.Y.	21	16	2	3	-	-	1
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	2,184	1,466	446	176	47	48	130
Akron, Ohio	54	41	7	2	1	3	-
Canton, Ohio	32	23	9	-	-	-	4
Chicago, Ill.	453	275	106	56	12	4	37
Cincinnati, Ohio	123	87	24	7	4	1	10
Cleveland, Ohio	162	94	41	14	3	10	1
Columbus, Ohio	179	128	29	18	2	2	10
Dayton, Ohio	146	102	27	12	3	2	8
Detroit, Mich.	203	112	53	24	6	8	7
Evansville, Ind.	56	44	11	1	-	-	1
Fort Wayne, Ind.	56	41	12	2	-	-	4
Gary, Ind.	22	12	6	4	-	-	-
Grand Rapids, Mich.	66	39	18	4	1	4	6
Indianapolis, Ind.	189	126	43	9	5	6	3
Lansing, Mich.	36	28	3	4	-	1	3
Milwaukee, Wis.	96	85	9	1	1	-	10
Peoria, Ill.	43	33	6	3	1	-	2
Rockford, Ill.	46	32	8	-	4	2	6
South Bend, Ind.	43	30	7	5	1	-	3
Toledo, Ohio	88	71	12	3	-	2	8
Youngstown, Ohio	91	63	15	7	3	3	7
W.N. CENTRAL	684	499	116	38	11	20	56
Des Moines, Iowa	68	50	8	7	2	1	7
Duluth, Minn.	25	21	3	-	-	1	3
Kansas City, Kans.	U	U	U	U	U	U	U
Kansas City, Mo.	99	70	24	4	-	1	9
Lincoln, Nebr.	27	20	4	3	-	-	1
Minneapolis, Minn.	225	164	35	14	3	9	25
Omaha, Nebr.	85	60	16	4	3	2	8
St. Louis, Mo.	U	U	U	U	U	U	U
St. Paul, Minn.	155	114	26	6	3	6	3
Wichita, Kans.	U	U	U	U	U	U	U

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	>65	45-64	25-44	1-24	<1	
S. ATLANTIC	999	649	224	87	24	11	65
Atlanta, Ga.	U	U	U	U	U	U	U
Baltimore, Md.	220	143	43	27	6	-	28
Charlotte, N.C.	81	52	19	4	2	3	10
Jacksonville, Fla.	127	84	26	11	5	1	2
Miami, Fla.	111	60	28	17	1	4	-
Norfolk, Va.	41	27	10	2	-	2	1
Richmond, Va.	64	39	17	5	2	1	4
Savannah, Ga.	58	45	8	3	2	-	8
St. Petersburg, Fla.	U	U	U	U	U	U	U
Tampa, Fla.	196	142	40	12	2	-	8
Washington, D.C.	92	54	27	6	4	-	4
Wilmington, Del.	9	3	6	-	-	-	-
E.S. CENTRAL	831	569	159	61	23	19	45
Birmingham, Ala.	179	140	27	6	3	3	15
Chattanooga, Tenn.	60	44	9	3	1	3	4
Knoxville, Tenn.	69	42	17	8	2	-	-
Lexington, Ky.	76	42	18	9	5	2	6
Memphis, Tenn.	160	107	32	14	4	3	13
Mobile, Ala.	80	59	11	8	2	-	1
Montgomery, Ala.	62	43	12	4	2	1	4
Nashville, Tenn.	145	92	33	9	4	7	2
W.S. CENTRAL	1,358	903	272	112	42	29	106
Austin, Tex.	58	43	6	5	2	2	2
Baton Rouge, La.	2	1	-	1	-	-	-
Corpus Christi, Tex.	43	33	6	3	-	1	7
Dallas, Tex.	183	117	39	14	8	5	4
El Paso, Tex.	82	60	10	7	4	1	3
Ft. Worth, Tex.	113	74	23	11	2	3	13
Houston, Tex.	396	235	94	43	16	8	37
Little Rock, Ark.	59	38	14	4	2	1	4
New Orleans, La.	87	48	23	10	5	1	11
San Antonio, Tex.	176	137	26	8	1	4	9
Shreveport, La.	58	47	7	2	-	2	11
Tulsa, Okla.	101	70	24	4	2	1	5
MOUNTAIN	853	560	161	85	23	24	59
Albuquerque, N.M.	104	68	21	10	5	-	2
Boise, Idaho	46	33	7	3	1	2	3
Colo. Springs, Colo.	68	49	5	9	1	4	5
Denver, Colo.	102	61	24	9	3	5	7
Las Vegas, Nev.	194	123	43	20	7	1	16
Ogden, Utah	17	13	1	2	-	1	2
Phoenix, Ariz.	43	22	13	6	-	2	1
Pueblo, Colo.	17	14	2	1	-	-	4
Salt Lake City, Utah	107	74	14	10	5	4	13
Tucson, Ariz.	155	103	31	15	1	5	6
PACIFIC	1,323	964	208	88	29	34	149
Berkeley, Calif.	18	13	3	2	-	-	2
Fresno, Calif.	87	67	9	8	1	2	9
Glendale, Calif.	9	8	1	-	-	-	1
Honolulu, Hawaii	71	54	9	4	2	2	5
Long Beach, Calif.	58	40	12	3	2	1	7
Los Angeles, Calif.	213	155	33	13	8	4	15
Pasadena, Calif.	26	18	4	1	1	2	2
Portland, Oreg.	110	82	17	7	-	4	10
Sacramento, Calif.	157	124	25	4	1	3	35
San Diego, Calif.	195	133	31	17	5	9	25
San Francisco, Calif.	U	U	U	U	U	U	U
San Jose, Calif.	195	139	30	15	7	4	26
Santa Cruz, Calif.	27	22	2	2	-	1	6
Seattle, Wash.	109	73	23	9	2	2	1
Spokane, Wash.	48	36	9	3	-	-	5
Tacoma, Wash.	U	U	U	U	U	U	U
TOTAL	11,090¶	7,625	2,101	872	249	237	763

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.

Notice to Readers

Satellite Broadcast on *Vaccinating Adults: The Technical Issues*

On June 3 from 12 noon to 2 p.m. eastern daylight time, CDC's National Immunization Program and the Public Health Training Network will cosponsor a satellite broadcast, *Vaccinating Adults: The Technical Issues*. The broadcast is intended for physicians, physician assistants, nurses, nurse practitioners, pharmacists, medical students, and others who provide vaccinations or establish immunization policy, and will present an in-depth discussion of the vaccines for influenza, pneumococcal disease, and hepatitis B, including vaccine indications, contraindications, and adverse reactions. This is a taped re-broadcast and will not contain a live question and answer session.

Course registration information is available from state health department immunization programs; from two CDC World-Wide Web sites, http://www.cdc.gov/nip or http://www.cdc.gov/phtn; and from the course coordinator, telephone (404) 639-8799. Continuing education credit for a variety of professions will be offered based on 2 hours of instruction.

Addendum: Vol. 48, No. RR-2

In the March 19, 1999, *MMWR Recommendations and Reports*, "Rotavirus Vaccine for the Prevention of Rotavirus Gastroenteritis Among Children," on page v, the list of CDC staff members who prepared the report should include Paul E. Kilgore, M.D., M.P.H., Epidemiology and Surveillance Division, National Immunization Program, CDC.

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