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MORBIDITY AND MORTALITY WEEKLY REPORT

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National, State, and Urban Area Vaccination Coverage Levels Among Children Aged 19–35 Months — United States, April 1994–March 1995

The National Immunization Survey (NIS) is an ongoing survey to provide national, state, and selected urban area estimates of vaccination coverage levels among children aged 19–35 months. CDC implemented NIS in April 1994 as one element of the five-part Childhood Immunization Initiative (CII) (1), a national strategy to achieve and maintain high vaccination levels among children during the first 2 years of life; CII contains interim goals to the year 2000 national objectives (2). NIS collects quarterly data from all 50 states, the District of Columbia, and 27 urban areas considered to be at high risk for undervaccination. This report provides the results of national, state, and urban area vaccination coverage levels for April 1994–March 1995, which document the highest overall vaccination levels ever achieved for preschool-aged children in the United States, but a wide range (41 percentage points) between areas with the highest and lowest vaccination coverage levels.

NIS uses a two-phase sample design: the first phase employs a quarterly random sample of telephone numbers for each survey area and includes administration of a screening questionnaire to respondents aged ≥ 18 years to locate households with one or more children aged 19–35 months. Vaccination information is collected for age-eligible children. All respondents are asked to refer to written records; however, reports from recall also are accepted. During April 1994–March 1995, approximately 1.6 million telephone numbers were called, and 33,876 interviews were completed (an average of 434 interviews per area). The overall response rate for eligible households was 70% (range: 60%–85% among the 78 survey sites).

In the second phase, vaccination information is requested from health-care providers of children in surveyed households. During 1994, households were excluded that used records indicating their children received all recommended doses of four specific vaccines.* All households identified in the first quarter of 1995 were included in the second phase. Based on exclusions, 27,108 (80%) children were eligible for the second phase; of these, vaccination information was obtained from providers for 11,609 (43%)

*These vaccines were four doses of diphtheria and tetanus toxoids and pertussis vaccine, three doses of poliovirus vaccine, one dose of measles-mumps-rubella vaccine, and three doses of *Haemophilus influenzae* type b vaccine.

Vaccination Coverage Levels — Continued

children. The demographic characteristics and the reported vaccination histories were similar for children in households with and without provider information.

Overall, for 54% of the children in the survey, either written records of having received all of the required doses for the four vaccines were available, or vaccination information based on provider records was available. The data obtained from provider records enabled improvements in the accuracy of the vaccination coverage estimates for the entire sample. Standard two-phase estimation procedures (3) were used to estimate vaccination coverage for each surveyed area. Estimates were adjusted using natality data to create a weighted sample representative of children aged 19–35 months in the United States; in addition, adjustments were made for non-response and for exclusion of households without a telephone because children in households without telephones are less likely to be vaccinated than children in households with a telephone (4; CDC, unpublished data, 1995).

Based on NIS, among children born during May 1991–August 1993 and who were aged 19–35 months (median age: 27 months) at the time of the survey, estimated vaccination coverage was >90% for three or more doses of diphtheria and tetanus toxoids and pertussis vaccine (DTP); coverage for three or more doses of poliovirus vaccine, one dose of measles-mumps-rubella vaccine (MMR), and three or more doses of

TABLE 1. Vaccination coverage levels among children aged 19–35 months, by selected vaccines — National Immunization Survey (NIS), United States, April 1994–March 1995

Vaccine/Dose	1996 Goal	Year 2000 objective	NHIS*		NIS	
			%	(95% CI) [†]	%	(95% CI)
DTP/DT[§]						
≥3 Doses	90%	90%	93	(±1.4%)	94	(±0.6%)
≥4 Doses	—	90%	75	(±2.4%)	77	(±1.0%)
Poliovirus						
≥3 Doses	90%	90%	83	(±2.2%)	84	(±0.9%)
<i>Haemophilus influenzae</i> type b (Hib)						
≥3 Doses	90%	90%	89	(±1.8%)	90	(±0.7%)
MMR[¶]						
≥1 Dose	90%	90%	87	(±1.8%)	89	(±0.8%)
Hepatitis B						
≥3 Doses	70%	90%	26	(±2.2%)	42	(±1.2%)
19–24 Months			41	(±4.1%)	58	(±1.4%)
25–30 Months			23	(±3.5%)	41	(±1.4%)
31–35 Months			10	(±2.9%)	24	(±1.3%)
Combined series						
4 DTP/3 Polio/1 MMR ^{**}	—	90%	73	(±2.4%)	75	(±1.0%)
4 DTP/3 Polio/1 MMR/ 3 Hib ^{††}	—	90%	71	(±2.4%)	72	(±1.1%)

* 1994 National Health Interview Survey.

† Confidence interval.

§ Diphtheria and tetanus toxoids and pertussis vaccine/Diphtheria and tetanus toxoids.

¶ Measles-mumps-rubella vaccine.

** Four doses of DTP/DT, three doses of poliovirus vaccine, and one dose of MMR.

†† Four doses of DTP/DT, three doses of poliovirus vaccine, one dose of MMR, and three doses of Hib.

Vaccination Coverage Levels — Continued

Haemophilus influenzae type b vaccine (Hib) ranged from 84% to 90% (Table 1). Hepatitis B vaccine coverage was 42% and ranged from 24% for children aged 25–35 months to 58% for children aged 19–24 months.

Estimated vaccination coverage was 75% (95% confidence interval [CI]=±1.0%) for receipt of at least four doses of DTP, three doses of poliovirus vaccine, and one dose of MMR (4:3:1 series). When the series was expanded to include three doses of Hib (4:3:1:3 series), estimated coverage levels were 72% (95% CI=±1.1%). The lower overall coverage for the 4:3:1 and 4:3:1:3 series compared with coverage for the individual vaccines was accounted for primarily by low coverage for the fourth dose of DTP (77%).

State-specific estimated coverage levels for the 4:3:1 series ranged from 63% (95% CI=±5.3%) to 87% (95% CI=±4.1%), and for the 4:3:1:3 series from 59% (95% CI=±5.3%) to 86% (95% CI=±4.2%) (Table 2). Estimated coverage levels among selected large urban areas ranged from 52% (95% CI=±8.2%) to 87% (95% CI=±5.2%) for the 4:3:1 series, and from 46% (95% CI=±8.0%) to 87% (95% CI=±5.2%) for the 4:3:1:3 series (Table 3).

To assess the validity of estimates from NIS, findings were compared with coverage estimates from the National Health Interview Survey (NHIS) (CDC, unpublished data, 1995), a national household survey of the U.S. civilian, noninstitutionalized population. During 1994, NHIS data had been supplemented with provider information in the same manner as in NIS. The estimated coverage levels in NIS of 75% for the 4:3:1 series and 72% for the 4:3:1:3 series were similar to those in NHIS (73% and 71%, respectively). Vaccine coverage levels for each vaccine (except for hepatitis B) were nearly identical (Table 1).

Reported by: National Center for Health Statistics; Assessment Br, Data Management Div, National Immunization Program, CDC.

Editorial Note: The NIS data provide the first population-based state and urban area-specific estimates of vaccination coverage produced by a standard methodology for the United States. NIS permits monitoring of coverage levels of existing vaccines and tracking of the implementation of vaccination with new vaccines. Vaccination coverage estimates from the April 1994–March 1995 NIS and the 1994 NHIS are the highest ever recorded in the United States. In particular, findings from NIS indicate achievement of the 1996 CII goal for 90% coverage with three doses each of DTP and Hib, and the 90% coverage goals for polio and measles were nearly attained (5). Estimated coverage for hepatitis B, the vaccine most recently added to the pediatric schedule, was the lowest because, within the 19–35-month age group, many children were born before this vaccine was recommended (6). Estimated coverage increased with successive age cohorts born after the recommendation for hepatitis B was widely disseminated (Table 1). In addition, the NIS-based estimate of coverage for hepatitis B vaccine probably exceeds that from NHIS because NHIS assessed coverage from January through December 1994, when a higher proportion of children were born before promulgation of the recommendation for universal hepatitis B vaccination. In addition, NIS assessed coverage from April 1994 through March 1995, when all children surveyed were born after the recommendation went into effect.

The Advisory Committee on Immunization Practices recently reaffirmed its recommendation for a fourth dose of DTP for all children aged 12–18 months (1). Recently completed field trials suggest that the efficacy of whole-cell vaccine can decrease

Vaccination Coverage Levels — Continued

TABLE 2. Estimated vaccination coverage with the 4:3:1 series* and 4:3:1:3 series†, by coverage level and state — National Immunization Survey, United States, April 1994–March 1995

Coverage level/ State	4:3:1 Series coverage		Coverage level/ State	4:3:1:3 Series coverage	
	%	(95% CI)§		%	(95% CI)
≥85%			≥85%		
Connecticut	86	(±4.8%)	Vermont	86	(±4.2%)
Massachusetts	85	(±4.2%)	75%–84%		
Vermont	87	(±4.1%)	Connecticut	84	(±5.2%)
75%–84%			Delaware	79	(±5.8%)
Arizona	77	(±4.3%)	Florida	78	(±4.9%)
Colorado	76	(±5.8%)	Georgia	75	(±5.4%)
Delaware	81	(±5.7%)	Hawaii	80	(±5.6%)
Florida	79	(±4.8%)	Iowa	82	(±4.8%)
Georgia	76	(±5.3%)	Kansas	79	(±5.1%)
Hawaii	84	(±5.1%)	Kentucky	80	(±5.3%)
Iowa	83	(±4.5%)	Maine	80	(±5.1%)
Kansas	82	(±4.8%)	Maryland	77	(±4.8%)
Kentucky	81	(±5.2%)	Massachusetts	83	(±4.5%)
Maine	83	(±4.9%)	Minnesota	77	(±5.3%)
Maryland	79	(±4.6%)	Mississippi	80	(±5.5%)
Minnesota	78	(±5.2%)	New Hampshire	82	(±5.2%)
Mississippi	80	(±5.5%)	New York	75	(±4.6%)
New Hampshire	84	(±5.0%)	North Carolina	79	(±5.6%)
New York	76	(±4.5%)	North Dakota	80	(±4.5%)
North Carolina	83	(±5.3%)	Pennsylvania	76	(±4.6%)
North Dakota	82	(±4.4%)	Rhode Island	81	(±5.2%)
Pennsylvania	78	(±4.4%)	South Carolina	79	(±5.3%)
Rhode Island	83	(±5.0%)	Virginia	77	(±5.8%)
South Carolina	81	(±5.3%)	Wyoming	76	(±5.4%)
South Dakota	76	(±5.6%)	65%–74%		
Virginia	78	(±5.8%)	Alabama	73	(±5.3%)
Washington	75	(±4.2%)	Alaska	68	(±6.2%)
Wisconsin	76	(±4.4%)	Arizona	74	(±4.5%)
Wyoming	79	(±5.2%)	Arkansas	66	(±6.1%)
65%–74%			California	70	(±4.6%)
Alabama	74	(±5.2%)	Colorado	73	(±6.1%)
Alaska	72	(±6.1%)	Idaho	65	(±6.3%)
Arkansas	69	(±6.0%)	Indiana	70	(±5.1%)
California	73	(±4.5%)	Louisiana	72	(±5.4%)
Idaho	66	(±6.3%)	Missouri	66	(±6.5%)
Illinois	69	(±5.1%)	Montana	71	(±5.7%)
Indiana	72	(±5.0%)	Nebraska	67	(±5.9%)
Louisiana	74	(±5.3%)	Nevada	65	(±6.6%)
Missouri	67	(±6.5%)	New Jersey	69	(±6.0%)
Montana	72	(±5.7%)	New Mexico	70	(±6.5%)
Nebraska	72	(±5.7%)	Ohio	73	(±4.6%)
Nevada	68	(±6.5%)	Oklahoma	70	(±6.7%)
New Jersey	70	(±5.9%)	Oregon	65	(±6.3%)
New Mexico	73	(±6.2%)	South Dakota	74	(±5.7%)
Ohio	74	(±4.6%)	Tennessee	70	(±4.3%)
Oklahoma	73	(±6.6%)	Texas	68	(±3.9%)
Oregon	67	(±6.2%)	Utah	67	(±4.9%)
Tennessee	73	(±4.2%)	Washington	73	(±4.3%)
Texas	71	(±3.8%)	West Virginia	68	(±6.3%)
Utah	70	(±4.8%)	Wisconsin	74	(±4.4%)
West Virginia	69	(±6.3%)	<65%		
<65%			Illinois	64	(±5.2%)
Michigan	63	(±5.3%)	Michigan	59	(±5.3%)
Total	75	(±1.0%)	Total	72	(±1.1%)

* Four doses of diphtheria and tetanus toxoids and pertussis vaccine/Diphtheria and tetanus toxoids (DTP/DT), three doses of poliovirus vaccine, and one dose of measles-mumps-rubella vaccine (MMR).

† Four doses of DTP/DT, three doses of poliovirus vaccine, one dose of MMR, and three doses of *Haemophilus influenzae* type b vaccine.

§ Confidence interval.

Vaccination Coverage Levels — Continued

substantially >6 months after the third dose and underscore the need for boosting immunity with a fourth dose of DTP (7,8). Findings in this report indicate that coverage with four doses of DTP was the lowest of the four vaccines included in the combined series, emphasizing the importance of intensifying efforts to ensure timely administration of the fourth dose of DTP and the need for simultaneous administration with other vaccines recommended for children aged 12–18 months.

TABLE 3. Estimated vaccination coverage with the 4:3:1 series* and the 4:3:1:3 series†, by coverage level and selected urban area — National Immunization Survey, United States, April 1994–March 1995

Coverage level/ Area	4:3:1 Series coverage		Coverage level/ Area	4:3:1:3 Series coverage	
	%	(95% CI) [§]		%	(95% CI)
≥85%			≥85%		
Boston	87	(± 5.2%)	Boston	87	(± 5.2%)
Santa Clara Co., Calif.	85	(± 4.9%)	75%–84%		
75%–84%			Baltimore	77	(± 6.1%)
Baltimore	80	(± 5.8%)	Cuyahoga Co., Ohio	82	(± 5.5%)
Cuyahoga Co., Ohio	84	(± 5.3%)	El Paso Co., Tex.	79	(± 5.4%)
Dade Co., Fla.	77	(± 6.4%)	Fulton/DeKalb cos., Ga.	75	(± 6.9%)
El Paso Co., Tex.	82	(± 5.1%)	Jefferson Co., Ala.	75	(± 6.3%)
Fulton/DeKalb cos., Ga.	77	(± 6.7%)	Marion Co., Ind.	78	(± 6.1%)
Jefferson Co., Ala.	78	(± 6.0%)	Milwaukee Co., Wis.	77	(± 6.0%)
Kings Co., Wash.	78	(± 5.3%)	New York City	75	(± 6.5%)
Maricopa Co., Ariz.	77	(± 6.1%)	Santa Clara Co., Calif.	80	(± 5.6%)
Marion Co., Ind.	81	(± 5.8%)	65%–74%		
Milwaukee Co., Wis.	80	(± 5.7%)	Dade Co., Fla.	74	(± 6.6%)
New York City	76	(± 6.5%)	Dallas Co., Tex.	66	(± 7.0%)
65%–74%			Davidson Co., Tenn.	67	(± 6.4%)
Bexar Co., Tex.	67	(± 6.5%)	District of Columbia	67	(± 7.3%)
Dallas Co., Tex.	71	(± 6.6%)	Duval Co., Fla.	71	(± 6.2%)
Davidson Co., Tenn.	69	(± 6.3%)	Franklin Co., Ohio	70	(± 6.8%)
District of Columbia	72	(± 7.0%)	Kings Co., Wash.	74	(± 5.6%)
Duval Co., Fla.	74	(± 6.0%)	Los Angeles Co., Calif.	68	(± 7.7%)
Franklin Co., Ohio	71	(± 6.8%)	Maricopa Co., Ariz.	74	(± 6.3%)
Los Angeles Co., Calif.	73	(± 7.5%)	Orleans Parish, La.	66	(± 7.8%)
Orleans Parish, La.	67	(± 7.8%)	Philadelphia Co., Pa.	69	(± 7.4%)
Philadelphia Co., Pa.	71	(± 7.3%)	San Diego Co., Calif.	72	(± 5.8%)
San Diego Co., Calif.	74	(± 5.8%)	Shelby Co., Tenn.	71	(± 7.0%)
Shelby Co., Tenn.	73	(± 6.9%)	<65%		
<65%			Bexar Co., Tex.	64	(± 6.6%)
Chicago	61	(± 8.7%)	Chicago	61	(± 8.7%)
Detroit	52	(± 8.2%)	Detroit	46	(± 8.0%)
Houston	62	(± 8.1%)	Houston	58	(± 8.0%)
Newark, N.J.	62	(±10.0%)	Newark, N.J.	55	(±10.1%)

*Four doses of diphtheria and tetanus toxoids and pertussis vaccine/Diphtheria and tetanus toxoids (DTP/DT), three doses of poliovirus vaccine, and one dose of measles-mumps-rubella vaccine (MMR).

†Four doses of DTP, three doses of poliovirus vaccine, one dose of MMR, and three doses of *Haemophilus influenzae* type b vaccine.

§Confidence interval.

Vaccination Coverage Levels — Continued

One of the national health objectives for the year 2000 is to achieve series-complete coverage for the recommended vaccines among at least 90% of children aged 2 years (objective 20.11) (2). Series-specific coverage levels that include Hib (i.e., 4:3:1:3 series) are reported here. All children included in the survey were born after October 1990, when recommendations for universal Hib vaccination of infants became effective.

Coverage levels varied substantially by state and large urban areas (e.g., a difference of 27 percentage points in 4:3:1:3 coverage between the states and 41 percentage points between the urban areas with the highest and lowest reported coverage levels). Although reasons for these differences have not been determined, these findings suggest that the national goals are achievable and that effective approaches should be adapted from the most successful areas. Efforts must be intensified to increase coverage among children in those areas with the lowest coverage.

Publication of the state NIS data in August 1995 assisted in strengthening vaccination program activities at the state level in some areas with the lowest coverage (9). For example, in Michigan, related efforts have included creation of a new plan to address undervaccination; organization of meetings with health-care providers, community groups, and business leaders to discuss undervaccination; and conducting an immunization summit at which the Michigan Department of Public Health initiated a new statewide vaccination information campaign. In Missouri, the governor established as a priority the need to increase vaccination levels of children aged <2 years and established goals of increasing levels to 75% by 1996 and to 90% by 1997. CDC will continue to use data from NIS and NHIS to evaluate progress toward national vaccination goals and to stimulate further efforts to improve vaccination coverage.

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Continued Sexual Risk Behavior Among HIV-Seropositive, Drug-Using Men — Atlanta; Washington, D.C.; and San Juan, Puerto Rico, 1993

Behaviors associated with increased risk for sexual transmission of human immunodeficiency virus (HIV) by infected persons include unprotected intercourse, multiple sex partners, use of crack cocaine, failure to disclose serostatus to sex partners, and trading sex for money or drugs. Some sexually active, HIV-infected persons in the United States continue to practice risky behaviors (1–4). To characterize continued sexual risk behaviors among HIV-positive, illicit-drug-using men, in 1993 CDC analyzed data from such men recruited for a small group-intervention program in three cities—Atlanta; Washington, D.C.; and San Juan, Puerto Rico. This report summarizes the results of that analysis, which indicate that some seropositive men continue to engage in unprotected sex.

Data were collected from interviews administered by trained, on-site interviewers of 120 men known to be HIV-seropositive and illicit-drug users. They were recruited through support groups and a day drug-treatment program for assisting HIV-infected persons; four persons were excluded because of incomplete data. The 116 men included 63 from San Juan, 38 from Atlanta, and 15 from Washington; all reported use of injected drugs or noninjection use of cocaine during the preceding year. Information obtained during the interviews included demographic data; respondents' perceptions of personal health; HIV-related services received; and sexual risk behaviors, including unprotected sexual intercourse with steady, nonsteady, and commercial sex partners (i.e., men who were male prostitutes or had had sex with prostitutes). Risk behaviors were reported for sexual activity during the preceding 30 days. To assess an association between unprotected sex and selected characteristics (i.e., race/ethnicity, age, perceptions of health status, services being received, use of crack cocaine, route of drug administration, and frequency of drug use), data on the men reporting unprotected anal or vaginal sex were analyzed by contingency table chi-square techniques.

The mean age of the 116 men was 36 years (range: 22–54 years). The men had known of their HIV seropositivity for an average of 49 months, and most (100 [86%]) were participating in two or more HIV-related services, including case management, HIV and substance-abuse-related support groups, and medical care; 60 (52%) had been admitted to residential drug treatment for at least 1 month during the preceding year. Most (83 [72%]) reported having used crack cocaine.

Of the 116 men, 35 (30%) reported engaging in sexual intercourse ≥ 12 times during the preceding 30 days. A total of 39 (34%) reported two or more sex partners, 32 (28%) reported having vaginal or anal sex without a condom, and 22 (23%) reported having traded sex for drugs or money. A total of 37 (32%) had not disclosed their HIV status to all partners, and 73 (63%) were either unaware of any partners' HIV status or believed they were negative.

The 32 men who reported sex without a condom were significantly more likely than those who used condoms to report multiple sex partners, having oral sex, trading sex for money or drugs, failure to disclose HIV serostatus, and having intercourse ≥ 12 times ($p \leq 0.05$). These men were at high risk for infecting their sex partners and reported a mean of four sex partners (range: one–25) with an average of 14 sex acts without a condom for all partners during the preceding month.

Sexual Risk Behavior — Continued

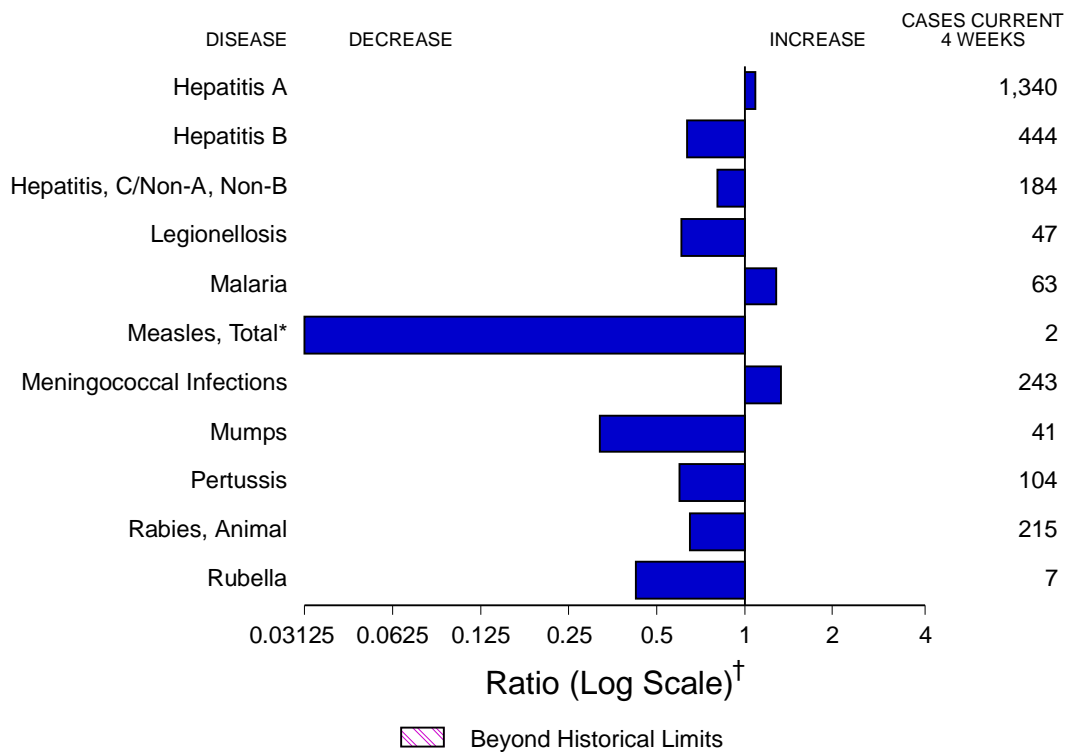
Reported by: SC Kalichman, PhD, Psychology Dept, Georgia State Univ, Atlanta. Behavioral Intervention Research Br, Div of STD Prevention, National Center for Prevention Svcs, CDC.

Editorial Note: The findings in this report underscore that some persons with HIV infection need ongoing assistance and support to acquire and maintain safer sex practices. For example, in this study, men who reported not using condoms were more likely than men who reported using condoms to report trading sex for money or drugs. This finding indicates the need for further characterization of the behavioral and environmental determinants of continued unsafe sexual behavior among HIV-seropositive, illicit-drug users. In addition, the findings indicate opportunities for strengthening prevention because most of these men already were linked to ongoing community programs that provide drug treatment, mental health services, health care, and psychologic support. Such programs also should educate, motivate, and assist patients in acquiring skills needed to maintain safer practices.

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FIGURE I. Selected notifiable disease reports, comparison of 4-week totals ending February 17, 1996, with historical data — United States



* The large apparent decrease in the number of reported cases of measles (total) reflects dramatic fluctuations in the historical baseline. (Ratio [log scale] for week 7 measles [total] is 0.020408.)
[†] Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary — cases of selected notifiable diseases, United States, cumulative, week ending February 17, 1996 (7th Week)

	Cum. 1996		Cum. 1996
Anthrax	-	HIV infection, pediatric* [§]	26
Brucellosis	5	Plague	-
Cholera	-	Poliomyelitis, paralytic [¶]	-
Congenital rubella syndrome	-	Psittacosis	2
Cryptosporidiosis*	113	Rabies, human	-
Diphtheria	1	Rocky Mountain spotted fever (RMSF)	6
Encephalitis: California*	-	Streptococcal toxic-shock syndrome*	-
eastern equine*	-	Syphilis, congenital**	-
St. Louis*	-	Tetanus	2
western equine*	-	Toxic-shock syndrome	16
Hansen Disease	8	Trichinosis	4
Hantavirus pulmonary syndrome* [†]	-	Typhoid fever	17

*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, National Center for Prevention Services (NCPS), last update January 30, 1996.
[¶] No suspected cases of polio reported for 1996.
^{**} Updated quarterly from reports to the Division of STD Prevention, NCPS. First quarter 1996 is not yet available.
 -: no reported cases

TABLE II. Cases of selected notifiable diseases, United States, weeks ending February 17, 1996, and February 18, 1995 (7th Week)

Reporting Area	AIDS*		Chlamydia	<i>Escherichia coli</i> O157:H7		Gonorrhea		Hepatitis C/NA,NB		Legionellosis	
	Cum. 1996	Cum. 1995		NETSS†	PHLIS‡	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995
			Cum. 1996	Cum. 1996							
UNITED STATES	4,357	9,266	19,371	81	16	33,302	52,063	338	507	82	136
NEW ENGLAND	208	502	1,325	15	2	918	836	7	6	4	-
Maine	7	15	-	2	-	3	8	-	-	1	-
N.H.	3	5	84	1	1	15	16	-	-	-	-
Vt.	-	-	-	3	1	14	3	3	-	-	-
Mass.	135	285	930	6	-	336	462	4	6	2	-
R.I.	9	28	311	2	-	73	70	-	-	1	-
Conn.	54	169	-	1	-	477	277	-	-	N	N
MID. ATLANTIC	1,235	2,496	885	8	3	862	5,825	24	41	11	15
Upstate N.Y.	158	248	N	7	3	-	980	22	18	4	3
N.Y. City	696	1,567	-	-	-	-	1,923	1	1	-	1
N.J.	244	445	885	-	-	406	529	-	17	-	4
Pa.	137	236	-	N	-	456	2,393	1	5	7	7
E.N. CENTRAL	419	692	5,594	11	1	6,583	11,632	43	43	32	55
Ohio	143	124	749	8	-	493	4,044	2	1	15	22
Ind.	50	78	1,304	2	-	1,132	1,057	-	-	6	7
Ill.	156	245	-	1	-	2,518	2,588	1	16	-	11
Mich.	37	216	3,281	-	1	2,221	2,990	40	26	11	7
Wis.	33	29	260	N	-	219	953	-	-	-	8
W.N. CENTRAL	145	197	1,955	12	4	1,629	2,930	53	12	3	14
Minn.	20	27	-	2	2	-	434	-	-	-	-
Iowa	17	14	59	2	1	23	204	31	2	1	2
Mo.	53	97	1,382	1	-	1,198	1,655	22	6	1	12
N. Dak.	-	-	-	1	1	-	-	-	-	-	-
S. Dak.	2	-	126	-	-	19	23	-	1	-	-
Nebr.	15	20	388	1	-	57	158	-	1	1	-
Kans.	38	39	-	5	-	332	456	-	2	-	-
S. ATLANTIC	880	2,224	5,851	9	-	14,000	15,883	17	34	10	29
Del.	32	32	-	-	-	227	295	-	-	-	-
Md.	69	347	616	N	-	1,870	2,111	-	1	1	8
D.C.	64	140	N	-	-	667	901	-	-	1	1
Va.	36	233	1,631	N	-	1,192	1,632	1	-	2	-
W. Va.	7	5	-	N	-	45	73	3	6	1	3
N.C.	1	85	-	4	-	2,686	3,538	5	11	3	7
S.C.	13	75	-	1	-	1,649	1,775	1	1	1	3
Ga.	215	235	1,001	1	-	3,230	2,748	-	3	-	4
Fla.	443	1,072	2,603	-	-	2,434	2,810	7	12	1	3
E.S. CENTRAL	152	272	1,110	3	-	3,747	5,665	3	239	9	6
Ky.	43	37	-	-	-	582	732	-	2	2	2
Tenn.	56	127	1,101	N	-	1,201	1,393	3	236	3	2
Ala.	35	35	-	1	-	1,876	2,298	-	1	-	1
Miss.	18	73	9	2	-	88	1,242	-	-	4	1
W.S. CENTRAL	495	904	684	3	1	2,123	3,938	44	7	-	1
Ark.	19	45	-	2	-	438	439	-	-	-	-
La.	113	168	-	N	1	1,173	1,737	7	-	-	-
Okla.	1	57	684	1	-	512	58	30	5	-	1
Tex.	362	634	-	-	-	-	1,704	7	2	-	-
MOUNTAIN	120	209	523	7	1	846	1,254	94	46	4	12
Mont.	2	7	-	-	-	2	17	3	2	-	1
Idaho	1	5	190	2	-	9	19	33	7	-	1
Wyo.	-	4	85	-	-	6	7	27	16	-	-
Colo.	54	76	-	3	1	284	407	4	12	4	5
N. Mex.	8	7	-	-	-	139	173	17	4	-	-
Ariz.	37	38	-	N	-	329	390	6	2	-	1
Utah	17	5	68	1	-	26	24	4	3	-	2
Nev.	1	67	180	1	-	51	217	-	-	-	2
PACIFIC	703	1,770	1,444	13	4	2,594	4,100	53	79	9	4
Wash.	65	93	1,298	3	4	356	350	5	7	-	-
Oreg.	48	59	-	4	-	9	42	2	4	-	-
Calif.	580	1,539	-	4	-	2,125	3,487	26	60	9	2
Alaska	3	18	N	-	-	63	136	1	-	-	-
Hawaii	7	61	146	N	-	41	85	19	8	-	2
Guam	-	-	-	N	-	-	12	-	-	-	-
P.R.	255	494	N	N	U	33	75	8	7	-	-
V.I.	1	-	N	N	U	-	-	-	-	-	-
Amer. Samoa	-	-	N	N	U	-	4	-	-	-	-
C.N.M.I.	-	-	N	N	U	-	4	-	-	-	-

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

*Updated monthly to the Division of HIV/AIDS Prevention, National Center for Prevention Services, last update January 30, 1996.

†National Electronic Telecommunications System for Surveillance.

‡Public Health Laboratory Information System.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending February 17, 1996, and February 18, 1995 (7th Week)

Reporting Area	Lyme Disease		Malaria		Meningococcal Disease		Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal	
	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995
UNITED STATES	298	503	95	115	503	423	1,245	2,108	1,254	1,475	359	701
NEW ENGLAND	21	18	3	3	19	26	24	26	35	24	53	192
Maine	-	-	-	-	5	2	-	-	4	-	-	-
N.H.	-	-	-	-	1	6	-	1	-	-	5	25
Vt.	-	-	1	-	1	2	-	-	-	-	10	23
Mass.	4	2	2	-	4	7	12	11	8	9	14	97
R.I.	12	-	-	2	-	-	-	-	7	6	8	-
Conn.	5	16	-	1	8	9	12	14	16	9	16	47
MID. ATLANTIC	247	391	26	21	30	43	20	154	142	210	50	180
Upstate N.Y.	65	123	9	2	7	14	-	13	9	20	23	115
N.Y. City	120	27	16	8	5	7	10	91	67	94	-	-
N.J.	-	60	-	7	14	13	6	24	47	44	14	31
Pa.	62	181	1	4	4	9	4	26	19	52	13	34
E.N. CENTRAL	5	5	10	19	59	70	286	343	257	195	2	1
Ohio	4	3	1	-	29	19	116	115	48	37	1	1
Ind.	1	1	1	1	4	12	41	31	16	6	-	-
Ill.	-	1	2	15	17	24	79	122	164	105	-	-
Mich.	-	-	5	1	4	8	30	41	26	44	-	-
Wis.	-	-	1	2	5	7	20	34	3	3	1	-
W.N. CENTRAL	11	10	2	4	39	18	53	121	30	46	33	38
Minn.	-	-	-	2	-	-	-	3	7	10	3	2
Iowa	8	-	1	-	13	6	4	10	5	12	20	10
Mo.	-	4	1	2	15	9	46	106	9	14	1	6
N. Dak.	-	-	-	-	1	-	-	-	-	-	2	4
S. Dak.	-	-	-	-	2	-	-	-	5	-	7	11
Nebr.	-	-	-	-	4	1	3	2	-	-	-	-
Kans.	3	6	-	-	4	2	-	-	4	10	-	5
S. ATLANTIC	12	64	20	28	81	70	391	548	121	227	187	201
Del.	-	8	2	1	1	1	9	3	-	7	10	11
Md.	9	46	8	5	10	1	65	51	21	62	57	48
D.C.	-	-	1	3	2	1	13	20	8	15	-	1
Va.	-	1	5	3	5	4	56	76	1	-	52	36
W. Va.	2	5	-	-	3	-	1	-	10	13	3	8
N.C.	1	3	2	4	12	10	122	156	24	10	26	40
S.C.	-	1	-	-	15	6	45	81	19	29	6	12
Ga.	-	-	2	3	24	26	43	97	-	40	28	36
Fla.	-	-	-	9	9	21	37	64	38	51	5	9
E.S. CENTRAL	-	4	-	1	42	22	334	508	112	112	7	27
Ky.	-	-	-	-	6	6	32	31	18	14	-	3
Tenn.	-	3	-	-	3	5	84	81	-	46	-	12
Ala.	-	-	-	1	16	8	89	83	57	52	7	12
Miss.	-	1	-	-	17	3	129	313	37	-	-	-
W.S. CENTRAL	-	-	1	-	71	42	120	289	82	55	1	20
Ark.	-	-	-	-	8	4	41	70	10	9	-	11
La.	-	-	-	-	15	5	69	149	-	-	-	7
Okla.	-	-	-	-	3	6	10	23	9	21	1	2
Tex.	-	-	1	-	45	27	-	47	63	25	-	-
MOUNTAIN	-	1	7	8	41	35	16	37	49	59	5	7
Mont.	-	-	-	1	1	1	-	1	-	-	-	3
Idaho	-	-	1	-	4	2	-	-	1	2	-	-
Wyo.	-	-	-	-	2	1	-	-	-	-	3	-
Colo.	-	-	4	5	4	9	8	18	2	3	-	-
N. Mex.	-	-	1	2	9	5	-	7	2	13	1	-
Ariz.	-	-	-	-	14	15	6	6	37	37	1	4
Utah	-	-	1	-	3	1	-	1	-	3	-	-
Nev.	-	1	-	-	4	1	2	4	7	1	-	-
PACIFIC	2	10	26	31	121	97	1	82	426	547	21	35
Wash.	-	-	-	3	7	6	-	1	33	32	-	-
Oreg.	1	-	3	2	20	24	1	1	5	3	-	-
Calif.	1	10	22	24	90	66	-	80	362	477	18	34
Alaska	-	-	-	1	2	-	-	-	10	12	3	1
Hawaii	-	-	1	1	2	1	-	-	16	23	-	-
Guam	-	-	-	-	-	1	-	1	-	4	-	-
P.R.	-	-	-	-	-	6	26	40	-	-	3	10
V.I.	-	-	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	1	-	-
C.N.M.I.	-	-	-	-	-	-	-	-	-	4	-	-

N: Not notifiable

U: Unavailable

-: no reported cases

TABLE III. Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending February 17, 1996, and February 18, 1995 (7th Week)

Reporting Area	<i>H. influenzae</i> , invasive		Hepatitis (viral), by type				Measles (Rubeola)			
	Cum. 1996*	Cum. 1995	A		B		Indigenous		Imported†	
			Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	1996	Cum. 1996	1996	Cum. 1996
UNITED STATES	161	184	2,638	2,995	739	993	-	3	-	1
NEW ENGLAND	4	1	27	20	2	34	-	2	-	-
Maine	-	-	4	5	-	1	-	1	-	-
N.H.	4	-	2	1	-	2	-	-	-	-
Vt.	-	1	-	-	-	1	-	-	-	-
Mass.	-	-	12	3	1	4	-	1	-	-
R.I.	-	-	2	4	1	5	-	-	-	-
Conn.	-	-	7	7	-	21	-	-	-	-
MID. ATLANTIC	25	19	154	126	115	91	-	-	-	-
Upstate N.Y.	9	6	33	19	27	34	-	-	-	-
N.Y. City	2	2	113	61	82	14	-	-	-	-
N.J.	8	4	-	22	-	24	-	-	-	-
Pa.	6	7	8	24	6	19	-	-	-	-
E.N. CENTRAL	23	44	234	527	73	163	-	-	-	-
Ohio	18	23	144	309	16	11	-	-	-	-
Ind.	-	3	40	26	1	28	-	-	-	-
Ill.	5	15	9	106	5	53	-	-	-	-
Mich.	-	3	38	51	48	63	-	-	-	-
Wis.	-	-	3	35	3	8	-	-	-	-
W.N. CENTRAL	9	5	173	121	66	76	-	-	-	-
Minn.	-	-	-	5	-	1	-	-	-	-
Iowa	7	1	67	8	34	11	-	-	-	-
Mo.	2	4	60	95	21	62	-	-	-	-
N. Dak.	-	-	2	-	-	-	-	-	-	-
S. Dak.	-	-	9	-	-	-	-	-	-	-
Nebr.	-	-	11	6	2	2	-	-	-	-
Kans.	-	-	24	7	9	-	-	-	-	-
S. ATLANTIC	33	43	97	115	132	127	-	-	-	-
Del.	-	-	1	2	-	1	-	-	-	-
Md.	10	13	25	28	37	33	-	-	-	-
D.C.	-	-	3	1	1	7	-	-	-	-
Va.	2	5	10	30	17	10	-	-	-	-
W. Va.	-	-	3	4	3	9	-	-	-	-
N.C.	5	10	18	14	55	39	-	-	-	-
S.C.	1	-	10	1	6	3	-	-	-	-
Ga.	15	7	-	-	-	3	-	-	-	-
Fla.	-	8	27	35	13	22	-	-	-	-
E.S. CENTRAL	2	2	87	156	11	135	-	-	-	-
Ky.	-	1	4	15	-	16	-	-	-	-
Tenn.	-	-	19	110	6	100	-	-	-	-
Ala.	2	1	9	22	5	19	-	-	-	-
Miss.	-	-	55	9	-	-	-	-	-	-
W.S. CENTRAL	7	4	470	205	52	47	-	-	-	-
Ark.	-	1	80	10	5	-	-	-	-	-
La.	-	-	6	5	5	4	-	-	-	-
Okla.	7	3	241	71	14	9	-	-	-	-
Tex.	-	-	143	119	28	34	-	-	-	-
MOUNTAIN	13	19	413	578	119	72	-	-	-	-
Mont.	-	-	10	9	-	4	-	-	-	-
Idaho	1	1	65	65	15	13	-	-	-	-
Wyo.	3	1	4	20	3	-	-	-	-	-
Colo.	1	2	24	86	9	20	-	-	-	-
N. Mex.	4	4	82	116	55	20	-	-	-	-
Ariz.	2	6	101	135	11	9	-	-	-	-
Utah	1	2	106	128	19	2	-	-	-	-
Nev.	1	3	21	19	7	4	U	-	U	-
PACIFIC	45	47	983	1,147	169	248	-	1	-	1
Wash.	-	3	46	28	8	8	-	1	-	-
Oreg.	3	6	142	218	7	17	U	-	U	-
Calif.	40	36	767	883	151	219	-	-	-	-
Alaska	-	-	12	13	2	1	-	-	-	-
Hawaii	2	2	16	5	1	3	-	-	-	1
Guam	-	-	-	-	-	-	U	-	U	-
P.R.	-	2	14	2	27	13	-	-	-	-
V.I.	-	-	-	-	-	-	U	-	U	-
Amer. Samoa	-	-	-	4	-	-	U	-	U	-
C.N.M.I.	-	-	-	1	-	-	U	-	U	-

*Of 32 cases among children aged <5 years, serotype was reported for 7 and of those, 1 was type B.

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

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

TABLE III. (Cont'd.) Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending February 17, 1996, and February 18, 1995 (7th Week)

Reporting Area	Measles (Rubeola), cont'd.		Mumps			Pertussis			Rubella		
	Total		1996	Cum. 1996	Cum. 1995	1996	Cum. 1996	Cum. 1995	1996	Cum. 1996	Cum. 1995
	Cum. 1996	Cum. 1995									
UNITED STATES	4	35	10	69	93	41	173	347	5	16	10
NEW ENGLAND	2	3	-	-	-	4	18	36	-	2	1
Maine	1	-	-	-	-	-	2	5	-	-	-
N.H.	-	-	-	-	-	1	4	1	-	-	-
Vt.	-	-	-	-	-	-	5	2	-	-	-
Mass.	1	1	-	-	-	3	7	26	-	-	1
R.I.	-	2	-	-	-	-	-	-	-	-	-
Conn.	-	-	-	-	-	-	-	2	-	2	-
MID. ATLANTIC	-	-	-	5	12	5	25	31	-	-	-
Upstate N.Y.	-	-	-	3	3	5	22	18	-	-	-
N.Y. City	-	-	-	2	1	-	3	8	-	-	-
N.J.	-	-	-	-	-	-	-	3	-	-	-
Pa.	-	-	-	-	8	-	-	2	-	-	-
E.N. CENTRAL	-	-	3	20	16	3	33	47	-	-	-
Ohio	-	-	2	10	7	3	24	22	-	-	-
Ind.	-	-	1	1	2	-	2	3	-	-	-
Ill.	-	-	-	-	-	-	-	-	-	-	-
Mich.	-	-	-	9	7	-	5	21	-	-	-
Wis.	-	-	-	-	-	-	2	1	-	-	-
W.N. CENTRAL	-	1	-	2	8	1	1	14	-	-	-
Minn.	-	-	-	-	-	1	1	-	-	-	-
Iowa	-	-	-	-	1	-	-	1	-	-	-
Mo.	-	1	-	-	7	-	-	6	-	-	-
N. Dak.	-	-	-	2	-	-	-	1	-	-	-
S. Dak.	-	-	-	-	-	-	-	1	-	-	-
Nebr.	-	-	-	-	-	-	-	-	-	-	-
Kans.	-	-	-	-	-	-	-	5	-	-	-
S. ATLANTIC	-	-	3	6	14	2	16	34	-	-	1
Del.	-	-	-	-	-	-	-	1	-	-	-
Md.	-	-	1	1	4	2	11	-	-	-	-
D.C.	-	-	-	-	-	-	-	1	-	-	-
Va.	-	-	1	2	4	-	-	-	-	-	-
W. Va.	-	-	-	-	-	-	-	-	-	-	-
N.C.	-	-	-	-	3	-	-	30	-	-	-
S.C.	-	-	1	2	1	-	2	1	-	-	-
Ga.	-	-	-	1	-	-	1	-	-	-	-
Fla.	-	-	-	-	2	-	2	1	-	-	1
E.S. CENTRAL	-	-	-	3	4	-	5	9	-	-	-
Ky.	-	-	-	-	-	-	4	-	-	-	-
Tenn.	-	-	-	-	-	-	-	-	-	-	-
Ala.	-	-	-	3	2	-	1	9	-	-	-
Miss.	-	-	-	-	2	-	-	-	N	N	N
W.S. CENTRAL	-	-	-	3	7	1	3	4	-	-	-
Ark.	-	-	-	-	2	1	2	-	-	-	-
La.	-	-	-	3	1	-	1	-	-	-	-
Okla.	-	-	-	-	-	-	-	-	-	-	-
Tex.	-	-	-	-	4	-	-	4	-	-	-
MOUNTAIN	-	31	-	6	3	3	18	121	-	-	2
Mont.	-	-	-	-	-	2	2	2	-	-	-
Idaho	-	-	-	-	-	-	2	47	-	-	-
Wyo.	-	-	-	-	-	-	-	-	-	-	-
Colo.	-	17	-	-	-	-	-	23	-	-	-
N. Mex.	-	9	N	N	N	1	9	3	-	-	-
Ariz.	-	5	-	-	-	-	2	46	-	-	2
Utah	-	-	-	-	1	-	-	-	-	-	-
Nev.	-	-	U	6	2	U	3	-	U	-	-
PACIFIC	2	-	4	24	29	22	54	51	5	14	6
Wash.	1	-	-	2	1	-	5	4	-	-	-
Oreg.	-	-	N	N	N	U	12	-	U	-	-
Calif.	-	-	4	15	25	22	36	45	5	14	6
Alaska	-	-	-	1	2	-	-	-	-	-	-
Hawaii	1	-	-	6	1	-	1	2	-	-	-
Guam	-	-	U	-	-	U	-	-	U	-	-
P.R.	-	-	-	-	-	-	-	1	-	-	-
V.I.	-	-	U	-	-	U	-	-	U	-	-
Amer. Samoa	-	-	U	-	-	U	-	-	U	-	-
C.N.M.I.	-	-	U	-	-	U	-	-	U	-	-

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

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