

# MMWR™

MORBIDITY AND MORTALITY WEEKLY REPORT

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## National Diabetes Awareness Month — November 1995

November is National Diabetes Awareness Month. In the United States, approximately half of the 16 million persons with diabetes are believed to be aware that they have this condition. This year, efforts will emphasize increasing awareness among health professionals and the public about scientific findings that confirm the benefit of glycemic control and comprehensive strategies in preventing several complications of diabetes. Special materials are available from a consortium of federal agencies and private organizations (1). These materials include information about diabetes and its preventable complications (i.e., amputations, blindness, cardiovascular disease, and renal disease).

Additional information about diabetes is available from diabetes-control programs in state and territorial health departments, and a Diabetes Home Page is now available through the CDC home page on the Internet World Wide Web (<http://www.cdc.gov/nccdphp/ddt/ddthome.htm>).

### Reference

1. CDC. Availability of information on diabetes awareness. MMWR 1995;44:821–2.

## Cardiovascular Disease Risk Factors and Related Preventive Health Practices Among Adults With and Without Diabetes — Utah, 1988–1993

The risk for cardiovascular disease (CVD) among persons with diabetes is two to three times higher than among persons without diabetes, and CVD accounts for 48% of all deaths among persons with diabetes (1,2). To estimate the prevalence of CVD risk factors among and related preventive health practices of the adult population with diabetes in Utah, the Utah Diabetes Control Program (UDCP) previously had relied primarily on data from national surveys. To guide in planning and decision-making about future activities of the UDCP and to assess CVD-related behaviors and health practices among persons with diabetes, UDCP analyzed data from Utah's Behavioral Risk Factor Surveillance System (BRFSS) for 1988–1993. This report presents the findings of this analysis.

*Cardiovascular Disease Risk Factors — Continued*

Data were available for 10,388 adults who participated in the Utah BRFSS during 1988–1993. The BRFSS is a state-specific, population-based, random-digit-dialed telephone survey of the civilian, noninstitutionalized population aged  $\geq 18$  years. The analysis examined sociodemographic characteristics, CVD risk factors, and related preventive health practices of all BRFSS respondents. SUDAAN was used to weight the results to reflect the age and sex distributions of the Utah population aged  $\geq 18$  years and to control for potential confounding by age and sex using logistic regression (3).

Of the 10,388 respondents, 405 (3.4% [95% confidence interval (CI)=3.0%–3.8%]) reported having been told by a physician they have diabetes. The unadjusted results indicated that persons with diabetes were more likely than persons without diabetes to be older and female, to have attained a lower level of education, to be retired, and to have lower annual incomes (Table 1).

**TABLE 1. Percentage distribution of selected characteristics among persons with and without diabetes — Behavioral Risk Factor Surveillance System, Utah, 1988–1993\***

Characteristic <sup>†</sup>	With diabetes			Without diabetes		
	Sample size (n=405)	%	(95% CI) <sup>§</sup>	Sample size (n=9983)	%	(95% CI)
<b>Age group (yrs)</b>						
18–24	13	6.5	( 2.8%–10.2%)	1415	24.1	(22.9%–25.3%)
25–34	34	9.1	( 5.7%–12.5%)	2642	26.8	(25.8%–27.8%)
35–44	43	9.3	( 6.1%–12.4%)	2206	15.6	(14.9%–16.3%)
45–54	54	14.8	(10.8%–18.7%)	1260	12.2	(11.5%–12.9%)
55–64	78	22.7	(17.9%–27.5%)	976	10.3	( 9.6%–11.0%)
≥65	182	37.6	(32.4%–42.8%)	1466	11.0	(10.4%–11.6%)
<b>Sex</b>						
Men	133	41.7	(36.0%–47.3%)	4281	49.0	(47.8%–50.1%)
Women	272	58.3	(52.7%–64.0%)	5702	51.0	(50.0%–52.2%)
<b>Education</b>						
Less than high school diploma	67	14.4	(10.7%–18.0%)	790	8.1	( 7.5%– 8.7%)
High school graduate	147	37.8	(32.4%–43.1%)	3183	32.4	(31.3%–33.5%)
Some college	140	35.2	(29.8%–40.6%)	3634	37.6	(36.5%–38.7%)
College	49	12.7	( 9.0%–16.3%)	2357	21.9	(21.0%–22.8%)
<b>Employment</b>						
Employed	136	37.5	(31.9%–43.1%)	6221	63.3	(62.1%–64.5%)
Unemployed	20	5.5	( 2.6%– 8.5%)	342	3.7	( 3.2%– 4.1%)
Homemaker	47	11.5	( 8.3%–15.2%)	1299	12.2	(11.6%–12.9%)
Student	8	3.0	( 0.1%– 5.8%)	507	8.0	( 7.1%– 8.9%)
Retired	193	42.2	(36.8%–47.6%)	1603	12.8	(12.1%–13.5%)
<b>Annual household income</b>						
<\$20,000	206	52.6	(46.7%–58.6%)	3161	35.7	(34.5%–36.9%)
\$20,000–\$34,999	79	25.7	(20.4%–30.9%)	3043	35.1	(33.9%–36.3%)
≥\$35,000	72	21.7	(16.8%–26.6%)	2430	29.2	(28.0%–30.3%)

\* Weighted data. Unweighted sample size=10,388.

<sup>†</sup>In this analysis, data for each characteristic are included only for persons for whom the data were available; excluded data were either unknown or refused.

<sup>§</sup>Confidence interval.

*Cardiovascular Disease Risk Factors — Continued*

Among persons with diabetes, risk factors for CVD were highly prevalent (Table 2): 50% reported having been told by a health-care professional they have high blood pressure, and 11% reported current smoking\*. After controlling for potential confounding by age and sex, persons with diabetes were approximately 2.5 times more likely than persons without diabetes to report having high blood pressure (odds ratio [OR]=2.7; 95% CI=2.1–3.4) and to be obese† (OR=2.5; 95% CI=2.0–3.2) and somewhat more likely to report a sedentary lifestyle‡ (OR=1.3; 95% CI=1.0–1.7).

Persons with diabetes were more likely than persons without diabetes to report having engaged in health practices to prevent CVD (Table 2), including having had a routine examination (86% versus 62%), having had their blood cholesterol checked during the preceding year (68% versus 39%), and trying to lose weight (41% versus 32%). However, of persons who reported trying to lose weight, those with diabetes were less likely to report using exercise, either alone or in conjunction with diet, than persons without diabetes (45% versus 71%). Differences in the prevalence of preventive health behaviors persisted after controlling for age and sex: routine examination (OR=2.6; 95% CI=1.8–3.8), blood cholesterol check (OR=2.0; 95% CI=1.5–2.5), trying to lose weight (OR=1.5; 95% CI=1.1–2.1).

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**Editorial Note:** In Utah, characteristics of persons with and without diabetes are similar to national patterns: among persons with diabetes, higher proportions are older, have lower incomes, and are less educated (4). Based on these patterns, UDCP is collaborating with the state Medicare program to address the need for providers caring for patients with diabetes to receive reimbursement for outpatient education and nutrition counseling, and to ensure access to diabetes education and counseling for Medicaid recipients. In addition, UDCP is adapting current diabetes educational materials for selected groups, including persons who attained low education levels.

Although the prevalences of major CVD risk factors in the adult population of Utah were lower than national prevalences (5,6), the BRFSS findings documented substantially higher prevalences among persons with diabetes. Based on these findings, UDCP will initiate efforts to increase patient and community awareness about CVD risk factors by 1) educating community members through outreach activities; 2) training local health department staff to emphasize the importance of diabetes education and the reduction of CVD risk factors (e.g., smoking and sedentary lifestyle); and 3) implementing a statewide media campaign with the Utah Diabetes Awareness Partnership about CVD risk factors. The BRFSS findings also will be used to increase awareness and improve care practices among health-care providers through 1) professional education seminars for primary-care physicians in rural areas, geriatric nurses working in home health, and mid-level practitioners; 2) development of office reminder systems to improve the quality of care in the primary-care setting, and 3) collaboration with the state Medicaid program to develop statewide standards of care for persons with diabetes.

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\*Persons who smoked at least 100 cigarettes during their lifetime and who reported smoking at the time of the interview.

†Body mass index (kg/m<sup>2</sup>) ≥27.8 for men and ≥27.3 for women.

‡Fewer than three 20-minute sessions of leisure-time physical activity per week.

## Cardiovascular Disease Risk Factors — Continued

**TABLE 2. Prevalence of cardiovascular disease (CVD) risk factors and related preventive health practices among persons with and without diabetes — Behavioral Risk Factor Surveillance System, Utah, 1988–1993\***

Category†	With diabetes			Without diabetes		
	Sample size (n=405)	%	(95% CI)§	Sample size (n=9983)	%	(95% CI)
<b>CVD RISK FACTORS</b>						
Hypertension¶	212	50.4	(44.9%–56.0%)	1996	17.6	(16.8%–18.4%)
<b>Cigarette smoking</b>						
Current smoker**	42	11.3	( 7.6%–15.0%)	1591	15.6	(14.7%–16.4%)
Former smoker††	108	27.7	(22.6%–32.8%)	1658	15.7	(15.0%–16.5%)
Nonsmoker	254	60.9	(55.5%–66.4%)	6684	68.5	(67.4%–69.6%)
<b>Obesity§§</b>						
Men	51	38.5	(29.1%–47.9%)	858	19.2	(17.9%–20.4%)
Women	109	42.7	(35.9%–49.4%)	1039	17.5	(16.3%–18.6%)
<b>Sedentary lifestyle¶¶</b>						
Men	35	26.6	(17.1%–34.0%)	733	20.0	(18.5%–21.4%)
Women	79	35.0	(28.1%–41.8%)	1095	22.7	(21.4%–24.1%)
<b>PREVENTIVE HEALTH PRACTICES</b>						
<b>Weight control</b>						
Not trying to lose weight	159	59.1	(58.5%–68.4%)	4341	66.9	(65.6%–68.2%)
Yes, trying to lose weight	102	41.5	(34.6%–48.4%)	2045	33.1	(32.4%–34.4%)
Diet only	56	54.9	(50.2%–62.9%)	602	29.4	(24.3%–25.1%)
Exercise only	5	4.9	( 2.9%– 6.9%)	315	15.4	(13.2%–17.1%)
Diet and exercise	41	40.2	(36.4%–42.3%)	1128	55.2	(53.8%–57.9%)
<b>Routine examination</b>						
During preceding year	361	85.5	(80.9%–90.1%)	6320	62.3	(61.2%–63.4%)
1–5 years ago	32	10.0	( 6.2%–13.9%)	2397	15.4	(13.2%–17.1%)
>5 years ago	9	3.6	( 1.0%– 6.2%)	1027	10.3	( 9.0%–10.4%)
Never	3	0.9	( 0 – 1.8%)	198	2.3	( 1.8%– 2.6%)
<b>Cholesterol checked***</b>						
During preceding year	282	68.1	(62.5%–73.6%)	4138	39.0	(37.8%–40.1%)
>1 year ago	46	11.8	( 8.3%–15.3%)	1558	14.9	(14.2%–15.7%)
Not checked	71	20.2	(15.0%–25.3%)	4083	46.1	(44.9%–47.3%)

\*Weighted data. Unweighted sample size= 10,388.

†In this analysis, data for each characteristic age included only for persons for whom the data were available; excluded data were either unknown or refused.

§Confidence interval.

¶Among persons ever told by a health-care professional they have high blood pressure.

\*\*Persons who smoked at least 100 cigarettes during their lifetime and who reported smoking at the time of the interview.

††Persons who smoked at least 100 cigarettes during their lifetime and who reported not smoking at the time of the interview.

§§Body mass index (kg/m<sup>2</sup>) ≥27.8 for men and ≥27.3 for women.

¶¶Fewer than three 20-minute sessions for leisure-time physical activity per week.

\*\*\*Not asked in 1993.

*Cardiovascular Disease Risk Factors — Continued*

Beginning in 1994, CDC-funded cooperative agreements facilitated the restructuring of state diabetes-control programs to emphasize quality of care and monitoring of behavioral risk factors and preventive health practices (7). Based on the findings in this report, the Utah Department of Health will emphasize development of strategies to increase awareness about CVD risk factors and related preventive health behaviors and to improve medical care for persons with diabetes. In 1994, UDCP expanded surveillance efforts to include the use of the new BRFSS diabetes module recently developed by CDC to collect additional information from persons with diabetes about diabetes education, glycemic control, the frequency of screening for diabetic complications, and impaired visual acuity. These data are not available from other state-specific data sources and will enable the UDCP to evaluate the impact of efforts to improve the health status of persons with diabetes.

*References*

1. CDC. The prevention and treatment of complications of diabetes mellitus: a guide for primary care practitioners. Atlanta, Georgia: US Department of Health and Human Services, Public Health Service, CDC, 1991.
2. CDC. Diabetes surveillance, 1993. Atlanta, Georgia: US Department of Health and Human Services, Public Health Service, CDC, 1993.
3. Shah BV. SUDAAN. Professional software for survey data analysis for multistage sample designs. Research Triangle Park, North Carolina: Research Triangle Institute, 1992.
4. Cowie CC, Eberhardt MS. Sociodemographic characteristics of persons with diabetes. In: National Diabetes Data Group, National Institutes of Health. Diabetes in America. 2nd ed. Bethesda, Maryland: US Department of Health and Human Services, Public Health Service, National Institutes of Health, 1995:85-116; DHHS publication no. (NIH)95-1468.
5. Siegel PZ, Brackbill RM, Frazier EL, et al. Behavioral risk factor surveillance, 1986-1990. In: CDC Surveillance Summaries (December). MMWR 1991;40(no. SS-4).
6. CDC. Prevalence of adults with no known major risk factors for coronary heart disease—Behavioral Risk Factor Surveillance System, 1992. MMWR 1994;43:61-63,69.
7. CDC. State-based programs to reduce the burden of diabetes: guidelines for program design, implementation, and evaluation. Atlanta, Georgia: US Department of Health and Human Services, Public Health Service, CDC, 1994.

### **Progress Toward Poliomyelitis Eradication — Eastern Mediterranean Region, 1988-1994**

In 1988, the Regional Committee of the Eastern Mediterranean Region (EMR) of the World Health Organization\* (WHO) adopted a resolution to eradicate poliomyelitis from the region by the year 2000 (1). Since this goal was established, substantial progress toward polio eradication has been achieved using three major strategies: 1) achieving and maintaining high coverage with at least three doses of oral poliovirus vaccine (OPV3); 2) implementing supplementary vaccination activities, including National Immunization Days (NIDs)<sup>†</sup>, to rapidly interrupt poliovirus transmission;

\* Member countries are Djibouti, Egypt, Libya, Morocco, Somalia, Sudan, and Tunisia in northern and eastern Africa; the Arab Gulf states of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Yemen; Iraq, Jordan, Lebanon, Syria, and the Palestinian people in the Middle East; Afghanistan, Iran, and Pakistan in Asia; and Cyprus.

<sup>†</sup> Mass campaigns over a short period (days to weeks) in which two doses of OPV are administered to all children in the target age group (usually age <5 years) regardless of prior vaccination history, with an interval of 4-6 weeks between doses.

*Poliomyelitis Eradication — Continued*

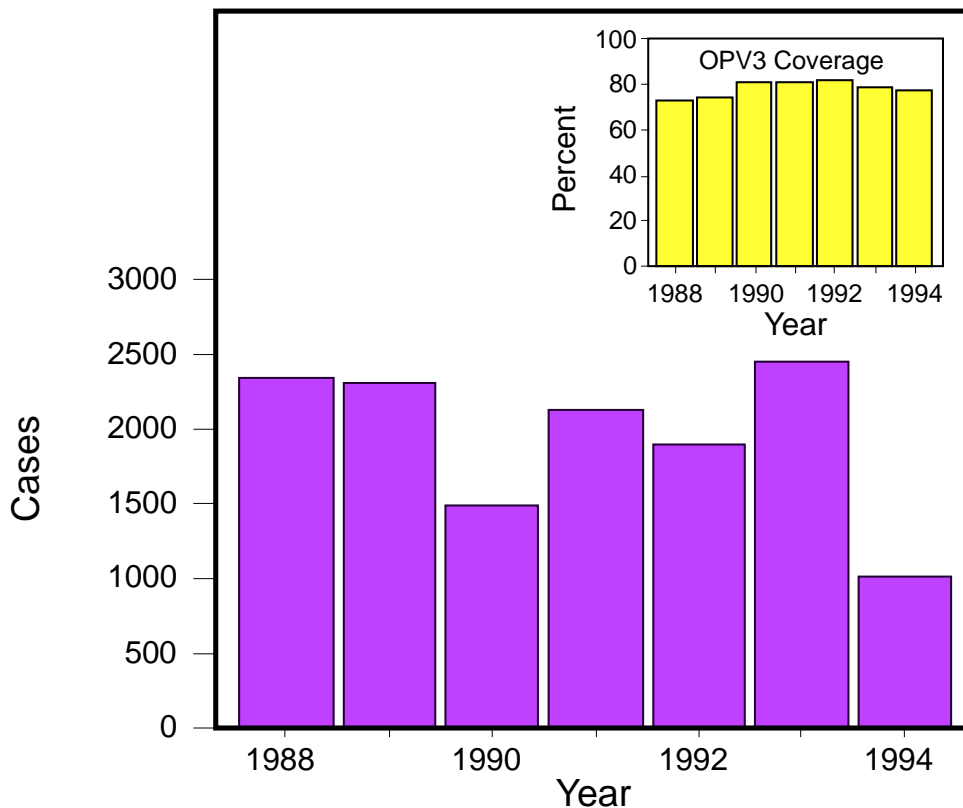
and 3) developing sensitive systems of epidemiologic and laboratory surveillance, including use of the standard WHO case definition (2).<sup>§</sup> This report summarizes progress toward polio eradication in EMR countries from 1988 through 1994 and is based on reports received through August 1, 1995.

**Incidence of Polio**

From 1988 through 1994, the number of confirmed polio cases reported in the region decreased 57%, from 2342 to 1015 (Figure 1). The sharp decline in reported cases from 1993 (2451 cases) to 1994 (1015 cases) especially reflected improved control of polio in Pakistan and Sudan, both of which experienced large outbreaks in 1993. Both countries conducted NIDs for the first time in 1994. Despite the substantial decrease in the number of cases reported from 1993 to 1994, Pakistan continues to report more cases than any other country in the region; the 527 cases reported in 1994 represent 52% of the regional total. During 1994, nine other countries reported polio cases, including Yemen (173 [17%]), Egypt (120 [10%]), Iran (93 [9%]), Iraq (63 [6%]), Sudan

<sup>§</sup>A confirmed case of polio is defined as acute flaccid paralysis and at least one of the following: 1) laboratory-confirmed wild poliovirus infection, 2) residual paralysis at 60 days, 3) death, or 4) no follow-up investigation at 60 days.

**FIGURE 1. Reported coverage with three doses of oral poliovirus vaccine (OPV3) and number of poliomyelitis cases, by year — Eastern Mediterranean Region, World Health Organization,\* 1988–1994**



\* Member countries are Djibouti, Egypt, Libya, Morocco, Somalia, Sudan, and Tunisia in northern and eastern Africa; the Arab Gulf states of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Yemen; Iraq, Jordan, Lebanon, Syria, and the Palestinian people in the Middle East; Afghanistan, Iran, and Pakistan in Asia; and Cyprus.

*Poliomyelitis Eradication — Continued*

(25 [2%]), Saudi Arabia (six [0.5%]), Jordan (four [0.3%]), and Lebanon and Syria (one each [0.1%]). Eleven countries reported no cases. Five countries (Cyprus, Kuwait, Libya, Morocco, and Qatar) have reported no cases for at least 3 years.

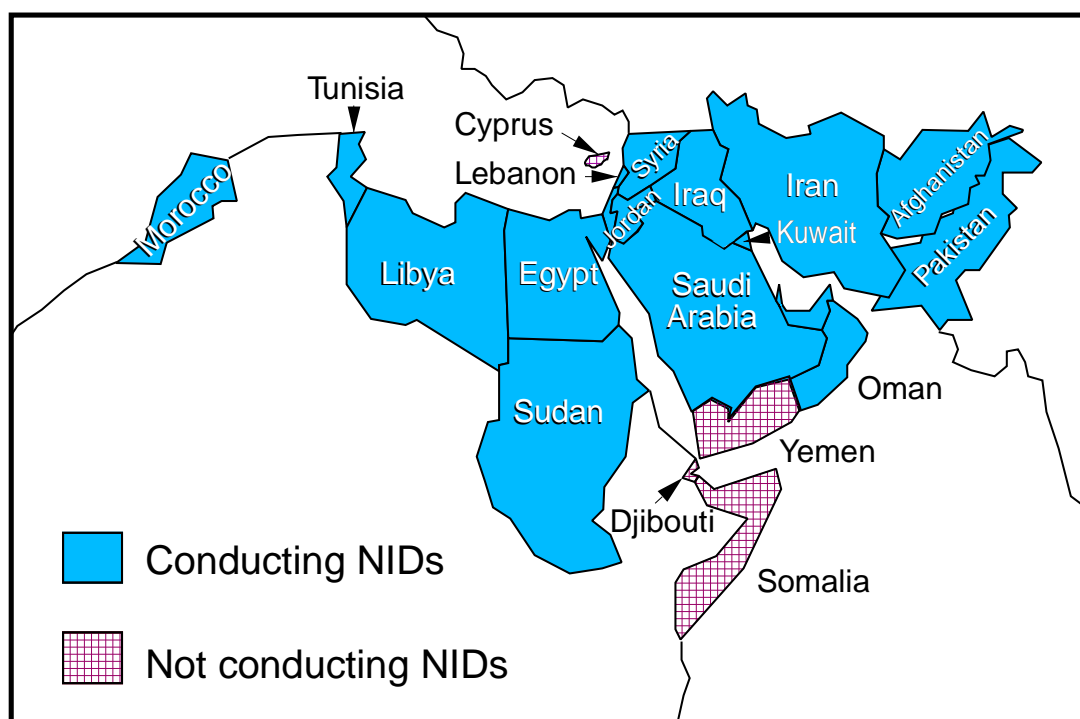
**Vaccination Coverage**

From 1990 through 1993, routine coverage with OPV3 among children aged <1 year in EMR was  $\geq 80\%$ ; coverage decreased in 1994 to 78% (Figure 1). Of 20 countries reporting OPV3 coverage in 1994, a total of 16 reported coverage  $>80\%$ . Of these, 12 reported OPV3 coverage  $>90\%$ . The decrease in coverage in 1994 primarily reflected declining coverage in four countries (Djibouti, Pakistan, Sudan, and Yemen). In conjunction with declining routine vaccination coverage, Pakistan experienced an outbreak of paralytic polio in the second and third quarters of 1995 in its most populous province (Punjab).

NIDs were conducted in two countries (Egypt and Syria) in 1993 and in five countries (Egypt, Iran, Pakistan, Sudan, and Syria) in 1994. By the end of 1995, a total of 19 (82%) countries, representing 93% of the estimated population in the region, will have conducted NIDs (Figure 2). Cyprus, Djibouti, Somalia, and Yemen will not conduct NIDs in 1995.

(Continued on page 817)

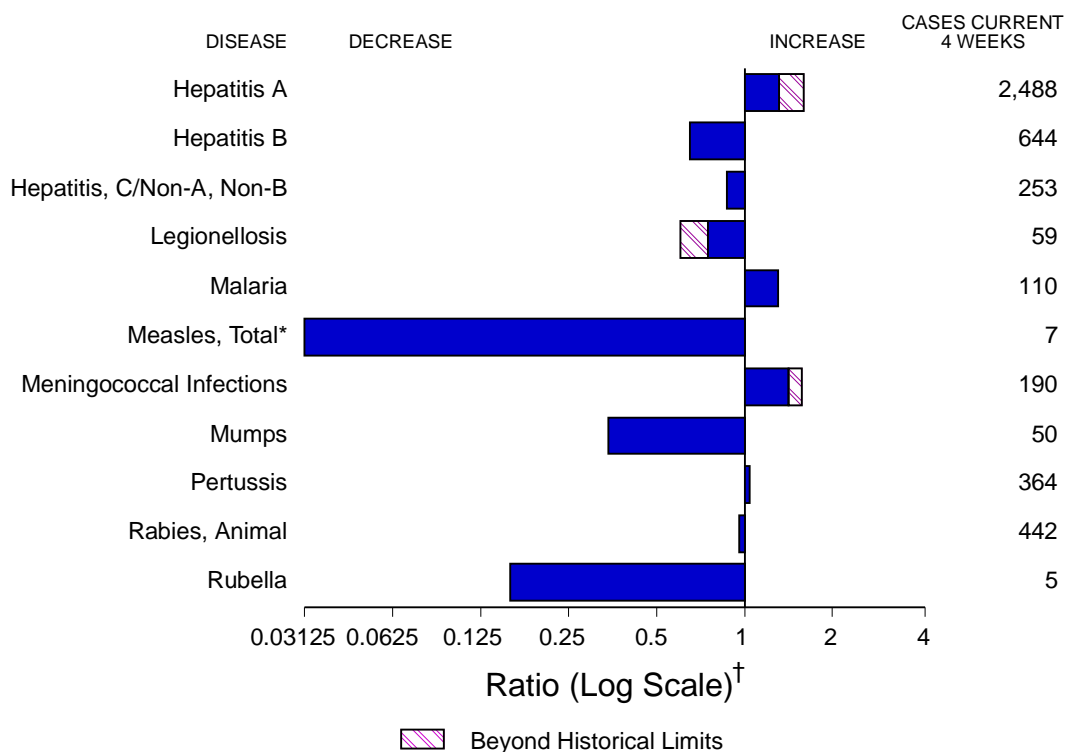
**FIGURE 2. Countries conducting National Immunization Days (NIDs)\* — Eastern Mediterranean Region, World Health Organization,† 1995**



\* Mass campaigns over a short period (days to weeks) in which two doses of OPV are administered to all children in the target age group (usually age <5 years) regardless of prior vaccination history, with an interval of 4–6 weeks between doses.

† Member countries are Djibouti, Egypt, Libya, Morocco, Somalia, Sudan, and Tunisia in northern and eastern Africa; the Arab Gulf states of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Yemen; Iraq, Jordan, Lebanon, Syria, and the Palestinian people in the Middle East; Afghanistan, Iran, and Pakistan in Asia; and Cyprus.

**FIGURE I. Notifiable disease reports, comparison of 4-week totals ending October 28, 1995, with historical data — United States**



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

<sup>†</sup> Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

**TABLE I. Summary — cases of specified notifiable diseases, United States, cumulative, week ending October 28, 1995 (43rd Week)**

	Cum. 1995		Cum. 1995
Anthrax	-	Psittacosis	55
Brucellosis	75	Rabies, human	2
Cholera	14	Rocky Mountain Spotted Fever	492
Congenital rubella syndrome	6	Syphilis, congenital, age < 1 year <sup>†</sup>	469
Diphtheria	-	Tetanus	26
<i>Haemophilus influenzae</i> *	968	Toxic shock syndrome	153
Hansen Disease	112	Trichinosis	26
Plague	7	Typhoid fever	273
Poliomyelitis, Paralytic	-		

\*Of 948 cases of known age, 227 (24%) were reported among children less than 5 years of age.

<sup>†</sup> Updated quarterly from reports to the Division of STD Prevention, National Center for Prevention Services. This total through third quarter 1995.

-: no reported cases



**TABLE II. Cases of selected notifiable diseases, United States, weeks ending October 28, 1995, and October 29, 1994 (43rd Week)**

Reporting Area	AIDS*	Gonorrhea		Hepatitis (Viral), by type						Legionellosis	
				A		B		C/NA,NB			
				Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994		
UNITED STATES	54,704	288,473	336,385	23,595	20,290	7,893	9,423	3,123	3,370	993	1,294
NEW ENGLAND	2,653	4,979	7,199	255	247	168	280	19	127	30	69
Maine	81	69	79	27	23	7	11	-	-	5	5
N.H.	77	95	95	9	16	18	23	12	9	2	-
Vt.	30	53	31	5	10	1	8	-	12	-	-
Mass.	1,137	2,394	2,698	107	91	68	158	-	86	19	48
R.I.	192	441	390	31	21	8	7	7	20	4	16
Conn.	1,136	1,927	3,906	76	86	66	73	-	-	N	N
MID. ATLANTIC	14,696	27,714	37,616	1,385	1,399	1,045	1,226	380	378	162	213
Upstate N.Y.	1,736	3,846	8,614	374	469	323	320	198	179	43	49
N.Y. City	7,624	10,058	13,984	633	541	304	285	1	1	4	7
N.J.	3,575	3,470	4,284	196	240	262	308	143	167	23	37
Pa.	1,761	10,340	10,734	182	149	156	313	38	31	92	120
E.N. CENTRAL	4,122	61,428	67,591	2,363	2,055	752	976	224	277	260	367
Ohio	852	17,515	17,830	1,535	777	91	139	13	20	127	166
Ind.	429	6,816	7,510	147	324	186	173	6	8	62	39
Ill.	1,736	17,294	20,574	217	503	94	259	33	75	13	35
Mich.	825	15,046	15,215	310	253	334	326	172	174	28	72
Wis.	280	4,757	6,462	154	198	47	79	-	-	30	55
W.N. CENTRAL	1,266	16,141	18,669	1,549	1,035	495	554	107	73	98	85
Minn.	285	2,508	2,711	164	207	50	53	4	16	6	2
Iowa	71	1,295	1,270	53	56	40	24	12	9	19	29
Mo.	564	9,224	10,320	1,093	523	333	418	65	19	47	31
N. Dak.	6	24	34	23	5	4	-	8	1	4	4
S. Dak.	15	148	187	56	33	2	2	1	-	3	1
Nebr.	84	757	1,060	37	118	26	28	6	12	12	13
Kans.	241	2,185	3,087	123	93	40	29	11	16	7	5
S. ATLANTIC	14,155	87,227	89,961	1,118	1,043	1,205	1,731	293	353	165	315
Del.	241	1,874	1,624	8	21	6	14	1	1	2	31
Md.	2,250	7,471	15,525	187	153	212	296	4	18	29	68
D.C.	827	3,925	6,100	21	18	19	43	-	1	4	7
Va.	1,082	8,797	11,183	176	151	95	112	18	22	18	8
W. Va.	86	566	669	22	17	48	34	43	31	4	3
N.C.	816	20,321	23,551	93	114	253	238	49	53	31	24
S.C.	766	9,852	11,043	41	35	44	28	16	8	31	15
Ga.	1,784	17,369	U	52	28	62	519	13	174	14	106
Fla.	6,303	17,052	20,266	518	506	466	447	149	45	32	53
E.S. CENTRAL	1,763	34,531	38,995	1,632	527	676	968	810	795	43	74
Ky.	221	4,065	4,221	37	139	58	70	22	26	10	9
Tenn.	709	11,410	12,775	1,351	239	523	830	786	754	24	36
Ala.	484	13,839	12,792	73	84	95	68	2	15	6	13
Miss.	349	5,217	9,207	171	65	-	-	-	-	3	16
W.S. CENTRAL	4,691	27,983	40,828	3,879	2,625	1,185	1,071	267	269	17	37
Ark.	209	3,201	5,514	505	158	55	22	4	7	1	6
La.	785	9,150	10,165	111	133	167	144	140	150	3	13
Okla.	206	4,627	3,935	916	303	146	117	43	52	5	11
Tex.	3,491	11,005	21,214	2,347	2,031	817	788	80	60	8	7
MOUNTAIN	1,716	6,948	8,472	3,274	4,057	650	543	348	377	101	73
Mont.	17	59	76	132	19	19	18	13	12	4	14
Idaho	38	99	74	263	301	71	68	41	65	2	1
Wyo.	12	42	75	98	24	23	23	139	141	12	4
Colo.	523	2,380	2,962	454	462	108	85	54	61	37	15
N. Mex.	137	862	859	696	933	250	174	39	45	4	3
Ariz.	545	2,591	2,688	895	1,627	92	60	37	23	9	9
Utah	112	131	240	599	484	57	64	10	16	16	6
Nev.	332	784	1,498	137	207	30	51	15	14	17	21
PACIFIC	9,642	21,522	27,054	8,140	7,302	1,717	2,074	675	721	117	61
Wash.	717	2,273	2,465	700	897	162	191	182	210	20	11
Oreg.	347	249	859	1,982	879	93	135	30	36	-	-
Calif.	8,328	17,932	22,373	5,271	5,292	1,440	1,710	424	470	92	47
Alaska	60	591	754	48	186	9	13	1	-	-	-
Hawaii	190	477	603	139	48	13	25	38	5	5	3
Guam	-	66	113	5	22	1	4	-	-	1	1
P.R.	1,925	470	422	85	73	459	317	18	154	-	-
V.I.	27	6	35	-	3	2	7	-	1	-	-
Amer. Samoa	-	27	28	6	8	-	-	-	-	-	-
C.N.M.I.	-	42	45	18	8	13	1	-	-	-	-

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

\*Updated monthly to the Division of HIV/AIDS Prevention, National Center for Prevention Services, last update September 28, 1995.

**TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending October 28, 1995, and October 29, 1994 (43rd Week)**

Reporting Area	Lyme Disease		Malaria		Measles (Rubeola)						Meningococcal Infections		Mumps	
	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Indigenous		Imported*		Total		Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994
					1995	Cum. 1995	1995	Cum. 1995	Cum. 1995	Cum. 1994				
UNITED STATES	7,281	10,357	1,030	903	-	250	-	27	277	875	2,487	2,245	675	1,203
NEW ENGLAND	1,678	2,429	41	65	-	7	-	2	9	27	118	106	11	19
Maine	25	18	6	6	-	-	-	-	5	10	19	4	3	
N.H.	21	25	1	3	-	-	-	-	1	20	8	1	4	
Vt.	8	15	1	3	-	-	-	-	3	9	2	-	-	
Mass.	170	171	14	29	-	1	-	1	2	7	41	50	2	3
R.I.	285	372	4	8	-	5	-	-	5	7	-	-	1	2
Conn.	1,169	1,828	15	16	-	1	-	1	2	4	38	27	3	7
MID. ATLANTIC	4,613	6,234	272	179	-	7	-	5	12	221	284	244	96	98
Upstate N.Y.	2,419	3,914	58	46	-	1	-	-	1	26	88	80	24	28
N.Y. City	186	22	140	64	-	2	-	3	5	14	39	30	14	8
N.J.	980	1,234	53	40	-	4	-	2	6	173	74	52	13	13
Pa.	1,028	1,064	21	29	-	-	-	-	-	8	83	82	45	49
E.N. CENTRAL	68	504	93	93	-	7	-	4	11	102	334	333	129	212
Ohio	46	39	11	15	-	1	-	1	2	17	98	97	46	59
Ind.	14	16	15	12	-	-	-	-	-	1	61	42	4	7
Ill.	3	23	32	40	-	-	-	2	2	56	71	108	37	95
Mich.	5	25	22	23	-	4	-	1	5	25	65	49	42	39
Wis.	-	401	13	3	-	2	-	-	2	3	39	37	-	12
W.N. CENTRAL	200	272	23	41	-	2	-	-	2	170	171	144	41	62
Minn.	129	148	4	13	-	-	-	-	-	-	27	15	4	4
Iowa	15	15	2	5	-	-	-	-	-	7	30	18	9	15
Mo.	35	96	8	12	-	1	-	-	1	160	70	68	22	38
N. Dak.	-	-	1	1	-	-	-	-	-	-	1	1	1	4
S. Dak.	-	-	2	-	-	-	-	-	-	-	6	8	-	-
Nebr.	2	3	3	4	-	-	-	-	-	2	14	13	4	1
Kans.	19	10	3	6	-	1	-	-	1	1	23	21	1	-
S. ATLANTIC	470	686	216	195	-	11	-	1	12	65	461	328	91	167
Del.	23	102	1	3	-	-	-	-	-	-	6	5	-	-
Md.	267	218	57	73	-	-	-	1	1	4	33	29	20	50
D.C.	2	7	16	14	-	-	-	-	-	-	6	4	-	-
Va.	50	121	50	29	-	-	-	-	-	3	57	59	21	38
W. Va.	22	23	4	-	-	-	-	-	-	37	8	12	-	3
N.C.	64	76	15	11	-	-	-	-	-	3	71	44	16	35
S.C.	16	7	1	4	-	-	-	-	-	-	55	25	10	7
Ga.	10	117	31	31	-	2	-	-	2	3	89	69	8	9
Fla.	16	15	41	30	-	9	-	-	9	15	136	81	16	25
E.S. CENTRAL	41	40	21	31	-	-	-	-	-	28	152	159	15	21
Ky.	9	23	2	11	-	-	-	-	-	-	49	34	-	-
Tenn.	20	11	8	10	-	-	-	-	-	28	37	29	2	7
Ala.	7	6	8	9	-	-	-	-	-	-	36	65	4	5
Miss.	5	-	3	1	-	-	-	-	-	-	30	31	9	9
W.S. CENTRAL	101	108	48	40	-	28	-	3	31	17	305	262	48	213
Ark.	9	8	2	3	-	2	-	-	2	1	26	39	9	5
La.	6	1	5	8	-	17	-	1	18	1	43	34	12	27
Okla.	43	62	1	6	-	-	-	-	-	-	33	26	-	23
Tex.	43	37	40	23	-	9	-	2	11	15	203	163	27	158
MOUNTAIN	11	15	54	28	-	67	-	1	68	164	171	146	25	147
Mont.	-	-	3	-	-	-	-	-	-	-	2	6	1	-
Idaho	-	3	1	2	-	-	-	-	-	1	9	16	3	7
Wyo.	3	4	-	1	-	-	-	-	-	-	7	7	-	2
Colo.	-	1	24	12	-	26	-	-	26	19	45	29	2	4
N. Mex.	1	5	6	3	-	30	-	1	31	-	34	13	N	N
Ariz.	1	-	10	4	U	10	U	-	10	1	51	49	2	96
Utah	1	1	6	4	-	-	-	-	-	134	15	18	11	25
Nev.	5	1	4	2	-	1	-	-	1	9	8	8	6	13
PACIFIC	99	69	262	231	-	121	-	11	132	81	491	523	219	264
Wash.	10	3	21	28	-	16	-	4	20	4	80	81	12	18
Oreg.	9	6	19	14	-	-	-	3	3	2	92	116	N	N
Calif.	80	60	209	173	-	105	-	3	108	61	307	318	187	225
Alaska	-	-	3	2	-	-	-	-	-	10	8	2	13	4
Hawaii	-	-	10	14	-	-	-	1	1	4	4	6	7	17
Guam	-	-	-	-	U	-	U	-	-	228	3	-	3	6
P.R.	-	-	1	4	-	11	-	-	11	11	23	7	2	2
V.I.	-	-	-	-	U	-	U	-	-	-	-	-	2	4
Amer. Samoa	-	-	-	-	-	-	-	-	-	-	-	-	-	2
C.N.M.I.	-	-	1	1	U	-	U	-	-	29	-	-	-	2

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

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

**TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending October 28, 1995, and October 29, 1994 (43rd Week)**

Reporting Area	Pertussis			Rubella			Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal	
	1995	Cum. 1995	Cum. 1994	1995	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994
UNITED STATES	94	3,343	3,363	-	134	209	12,176	17,591	16,311	18,139	5,823	6,456
NEW ENGLAND	12	455	413	-	47	128	137	180	416	417	1,305	1,598
Maine	1	40	18	-	1	-	2	4	12	23	45	-
N.H.	1	45	68	-	1	-	1	4	18	14	129	171
Vt.	-	64	40	-	-	-	-	-	2	7	155	120
Mass.	10	277	250	-	7	124	54	77	231	215	381	603
R.I.	-	4	5	-	-	2	3	12	40	37	286	40
Conn.	-	25	32	-	38	2	77	83	113	121	309	664
MID. ATLANTIC	26	300	529	-	13	6	689	1,171	3,366	3,748	1,120	1,711
Upstate N.Y.	24	163	201	-	4	5	43	147	418	490	438	1,276
N.Y. City	2	30	133	-	8	-	332	515	1,797	2,163	-	-
N.J.	-	14	14	-	1	1	141	198	642	651	295	230
Pa.	-	93	181	-	-	-	173	311	509	444	387	205
E.N. CENTRAL	13	328	500	-	5	9	2,150	2,607	1,614	1,715	73	56
Ohio	5	128	133	-	-	-	737	1,007	224	282	12	4
Ind.	6	52	55	-	1	-	228	206	198	153	12	12
Ill.	2	73	96	-	1	1	786	887	800	853	3	20
Mich.	-	63	78	-	3	8	252	246	331	377	37	12
Wis.	-	12	138	-	-	-	147	261	61	50	9	8
W.N. CENTRAL	5	241	184	-	-	2	629	1,003	476	482	292	184
Minn.	5	127	85	-	-	-	34	40	107	113	20	15
Iowa	-	11	18	-	-	-	39	56	52	51	98	75
Mo.	-	53	39	-	-	2	519	841	190	207	22	20
N. Dak.	-	8	4	-	-	-	-	1	3	9	25	10
S. Dak.	-	11	17	-	-	-	-	2	21	22	81	33
Nebr.	-	9	9	-	-	-	11	11	20	17	5	-
Kans.	-	22	12	-	-	-	26	52	83	63	41	31
S. ATLANTIC	7	299	289	-	25	15	3,139	4,587	2,687	3,211	1,827	1,707
Del.	-	10	3	-	-	-	14	24	41	37	74	54
Md.	-	35	66	-	-	-	137	264	241	280	265	466
D.C.	-	6	8	-	-	-	95	189	88	99	11	2
Va.	-	19	36	-	-	-	496	657	202	292	373	353
W. Va.	-	-	4	-	-	-	10	9	60	68	102	65
N.C.	-	110	58	-	1	-	950	1,406	371	403	412	148
S.C.	2	25	13	-	1	-	497	703	271	316	109	150
Ga.	5	26	24	-	-	2	622	692	319	565	243	319
Fla.	-	68	77	-	23	13	318	643	1,094	1,151	238	150
E.S. CENTRAL	1	262	124	-	-	-	3,126	3,276	1,272	1,321	243	165
Ky.	1	20	59	-	-	-	172	170	250	259	26	20
Tenn.	-	204	22	-	-	-	720	885	336	442	78	34
Ala.	-	35	31	-	-	-	538	563	342	367	130	107
Miss.	-	3	12	N	N	N	1,696	1,658	344	253	9	4
W.S. CENTRAL	8	264	180	-	8	13	1,618	3,810	2,160	2,327	519	586
Ark.	-	34	27	-	1	-	82	400	33	204	-	28
La.	-	16	10	-	-	-	865	1,458	6	15	41	62
Okla.	-	30	26	-	-	4	155	136	326	207	28	32
Tex.	8	184	117	-	7	9	516	1,816	1,795	1,901	450	464
MOUNTAIN	6	464	407	-	5	5	202	210	507	463	156	140
Mont.	-	3	8	-	-	-	4	3	10	9	42	17
Idaho	-	90	47	-	-	-	-	1	12	11	3	3
Wyo.	-	1	-	-	1	-	-	1	4	8	24	19
Colo.	-	84	197	-	-	-	98	107	37	61	9	18
N. Mex.	6	105	21	-	-	-	33	19	66	55	6	7
Ariz.	U	149	101	U	3	-	34	39	257	180	49	54
Utah	-	27	30	-	1	4	4	11	37	41	15	13
Nev.	-	5	3	-	-	1	29	29	84	98	8	9
PACIFIC	16	730	737	-	31	31	486	747	3,813	4,455	288	309
Wash.	16	263	99	-	2	-	13	30	202	214	7	15
Oreg.	-	46	91	-	2	4	7	33	36	90	-	10
Calif.	-	375	530	-	24	23	465	678	3,376	3,881	277	251
Alaska	-	-	-	-	-	-	1	3	59	67	4	33
Hawaii	-	46	17	-	3	4	-	3	140	203	-	-
Guam	U	1	2	U	-	1	8	3	38	73	-	-
P.R.	-	14	2	-	-	-	253	275	195	167	44	68
V.I.	U	-	-	U	-	-	2	27	-	-	-	-
Amer. Samoa	-	-	1	-	-	-	-	1	4	4	-	-
C.N.M.I.	U	-	-	U	-	-	12	1	16	28	-	-

U: Unavailable -: no reported cases

TABLE III. Deaths in 121 U.S. cities,\* week ending  
October 28, 1995 (43rd Week)

Reporting Area	All Causes, By Age (Years)						P&J <sup>†</sup> Total	Reporting Area	All Causes, By Age (Years)						P&J <sup>†</sup> Total
	All Ages	≥65	45-64	25-44	1-24	<1			All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	644	421	123	68	10	22	36	S. ATLANTIC	1,153	704	245	131	31	36	50
Boston, Mass.	205	120	41	29	1	14	9	Atlanta, Ga.	153	96	34	16	3	4	2
Bridgeport, Conn.	33	24	5	4	-	-	2	Baltimore, Md.	140	79	34	20	3	4	9
Cambridge, Mass.	15	12	3	-	-	-	-	Charlotte, N.C.	96	70	13	10	-	3	9
Fall River, Mass.	15	12	3	-	-	-	1	Jacksonville, Fla.	135	85	32	16	-	2	8
Hartford, Conn.	50	26	14	7	2	1	1	Miami, Fla.	88	44	25	13	6	-	-
Lowell, Mass.	24	19	2	2	-	1	1	Norfolk, Va.	46	36	5	4	1	-	1
Lynn, Mass.	12	9	2	1	-	-	2	Richmond, Va.	U	U	U	U	U	U	U
New Bedford, Mass.	25	19	4	1	1	-	-	Savannah, Ga.	49	31	9	5	2	2	2
New Haven, Conn.	44	32	4	5	-	3	1	St. Petersburg, Fla.	49	35	3	9	1	1	5
Providence, R.I.	56	36	13	6	-	1	4	Tampa, Fla.	164	113	36	6	4	4	7
Somerville, Mass.	4	4	-	-	-	-	1	Washington, D.C.	219	109	51	32	11	16	7
Springfield, Mass.	54	38	10	1	3	2	8	Wilmington, Del.	14	6	3	-	-	-	-
Waterbury, Conn.	34	26	4	2	2	-	2	E.S. CENTRAL	738	469	164	67	21	17	49
Worcester, Mass.	73	44	18	10	1	-	4	Birmingham, Ala.	121	83	28	5	2	3	7
MID. ATLANTIC	2,449	1,619	461	267	54	48	124	Chattanooga, Tenn.	71	42	18	10	-	1	4
Albany, N.Y.	55	39	8	5	1	2	5	Knoxville, Tenn.	49	27	15	1	4	2	4
Allentown, Pa.	18	14	4	-	-	-	-	Lexington, Ky.	68	40	18	6	1	3	6
Buffalo, N.Y.	95	79	10	3	-	3	4	Memphis, Tenn.	173	107	41	20	3	2	14
Camden, N.J.	25	17	1	1	3	3	2	Mobile, Ala.	62	43	11	6	1	1	3
Elizabeth, N.J.	14	7	3	3	1	-	1	Montgomery, Ala.	67	51	10	2	3	1	2
Erie, Pa.§	41	34	3	2	2	-	2	Nashville, Tenn.	127	76	23	17	7	4	9
Jersey City, N.J.	33	20	7	5	-	1	1	W.S. CENTRAL	1,474	929	324	137	58	25	77
New York City, N.Y.	1,392	894	275	175	33	15	56	Austin, Tex.	67	42	10	6	8	1	2
Newark, N.J.	55	24	16	13	2	-	3	Baton Rouge, La.	41	26	6	2	4	3	1
Paterson, N.J.	27	19	4	3	1	-	3	Corpus Christi, Tex.	72	48	17	4	3	-	3
Philadelphia, Pa.	300	196	52	29	7	16	15	Dallas, Tex.	216	130	51	24	8	3	4
Pittsburgh, Pa.§	70	46	14	7	1	2	2	El Paso, Tex.	66	42	14	4	4	2	2
Reading, Pa.	9	6	2	1	-	-	2	Ft. Worth, Tex.	113	65	29	15	2	2	13
Rochester, N.Y.	125	81	28	10	3	3	12	Houston, Tex.	347	196	83	49	12	7	29
Schenectady, N.Y.	12	9	3	-	-	-	1	Little Rock, Ark.	81	49	17	8	6	1	3
Scranton, Pa.§	32	28	4	-	-	-	1	New Orleans, La.	116	78	29	2	6	1	-
Syracuse, N.Y.	86	69	12	3	-	2	5	San Antonio, Tex.	210	151	39	13	4	2	13
Trenton, N.J.	44	26	12	5	-	1	7	Shreveport, La.	73	56	9	7	-	1	5
Utica, N.Y.	16	11	3	2	-	-	2	Tulsa, Okla.	72	46	20	3	1	2	2
Yonkers, N.Y.	U	U	U	U	U	U	U	MOUNTAIN	889	572	172	87	40	18	49
E.N. CENTRAL	2,236	1,532	392	195	60	56	124	Albuquerque, N.M.	109	77	17	6	8	1	2
Akron, Ohio	55	35	12	6	-	2	-	Colo. Springs, Colo.	45	31	5	7	2	-	2
Canton, Ohio	37	28	7	2	-	-	3	Denver, Colo.	140	90	29	16	4	1	7
Chicago, Ill.	463	274	84	70	19	15	31	Las Vegas, Nev.	197	125	44	15	9	4	4
Cincinnati, Ohio	78	49	17	4	2	6	3	Ogden, Utah	25	15	7	1	1	1	2
Cleveland, Ohio	147	93	36	13	3	2	2	Phoenix, Ariz.	156	94	28	19	8	7	14
Columbus, Ohio	181	120	39	14	6	2	15	Pueblo, Colo.	11	10	1	-	-	-	-
Dayton, Ohio	112	81	21	5	2	3	8	Salt Lake City, Utah	95	59	18	11	4	3	9
Detroit, Mich.	280	199	42	29	8	2	8	Tucson, Ariz.	111	71	23	12	4	1	9
Evansville, Ind.	53	41	6	3	2	1	3	PACIFIC	1,274	876	217	125	34	22	112
Fort Wayne, Ind.	60	43	8	4	4	1	1	Berkeley, Calif.	16	7	4	5	-	-	3
Gary, Ind.	14	8	3	3	-	-	-	Fresno, Calif.	68	54	8	1	3	2	3
Grand Rapids, Mich.	62	51	7	2	1	1	10	Glendale, Calif.	U	U	U	U	U	U	U
Indianapolis, Ind.	215	143	41	14	7	10	11	Honolulu, Hawaii	61	37	16	6	2	-	4
Madison, Wis.	71	54	10	3	1	3	7	Long Beach, Calif.	68	38	21	8	1	-	7
Milwaukee, Wis.	132	102	20	7	-	3	6	Los Angeles, Calif.	U	U	U	U	U	U	U
Peoria, Ill.	15	11	4	-	-	-	3	Pasadena, Calif.	30	25	2	2	1	-	6
Rockford, Ill.	52	39	6	2	2	3	4	Portland, Ore.	124	89	23	7	1	4	10
South Bend, Ind.	44	32	6	4	2	-	3	Sacramento, Calif.	166	115	33	10	6	2	17
Toledo, Ohio	106	83	13	7	1	2	4	San Diego, Calif.	122	77	24	12	2	7	23
Youngstown, Ohio	59	46	10	3	-	-	2	San Francisco, Calif.	161	103	26	23	5	4	15
W.N. CENTRAL	795	554	144	55	19	14	45	San Jose, Calif.	150	112	22	11	4	1	9
Des Moines, Iowa	20	11	4	3	1	1	2	Santa Cruz, Calif.	32	28	2	2	-	-	3
Duluth, Minn.	26	20	4	-	2	-	3	Seattle, Wash.	142	94	18	21	7	2	5
Kansas City, Kans.	36	23	5	6	2	-	-	Spokane, Wash.	45	32	4	7	2	-	1
Kansas City, Mo.	88	51	17	6	2	3	3	Tacoma, Wash.	89	65	14	10	-	-	6
Lincoln, Nebr.	45	36	7	2	-	-	2	TOTAL	11,652 <sup>¶</sup>	7,676	2,242	1,132	327	258	666
Minneapolis, Minn.	205	151	38	12	3	1	16								
Omaha, Nebr.	84	63	14	2	2	3	6								
St. Louis, Mo.	122	84	23	9	2	4	3								
St. Paul, Minn.	45	30	8	3	2	2	2								
Wichita, Kans.	124	85	24	12	3	-	8								

\*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

<sup>†</sup>Pneumonia and influenza.

<sup>§</sup>Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

<sup>¶</sup>Total includes unknown ages.

U: Unavailable - : no reported cases

*Poliomyelitis Eradication — Continued***Surveillance**

By 1992, a total of 21 of the 23 countries in EMR had developed surveillance for polio; surveillance could not be established in Afghanistan and Somalia because of civil conflict. By 1994, a total of 19 countries had established systems for reporting and monitoring the occurrence of acute flaccid paralysis (AFP), compared with six countries in 1992. Four countries (Afghanistan, Pakistan, Somalia, and Yemen) are not reporting cases of AFP. By 1994, AFP or polio cases were being investigated clinically and epidemiologically in 21 countries, compared with eight in 1992. An important indicator of the sensitivity of surveillance that has been consistent in many countries throughout the world is the rate of nonpolio AFP among children aged <15 years ( $\geq 1$  case per 100,000); by 1994, five EMR countries had achieved this rate.

**Laboratory Support**

By 1994, laboratory surveillance for polioviruses had been initiated in 14 countries, compared with six in 1992. In 1994, the EMR laboratory network was involved in the investigation of 717 AFP cases. Of these, two stool specimens were available for 495 (69%). Of 422 cases with onset and collection data available, 354 (84%) had stool specimens collected within 14 days of onset of paralysis.

*Reported by: Regional Office for the Eastern Mediterranean Region, Alexandria, Egypt; Global Program for Vaccines and Immunization, World Health Organization, Geneva. Respiratory and Enterovirus Br; National Center for Infectious Diseases; Polio Eradication Activity, National Immunization Program, CDC.*

**Editorial Note:** The findings in this report document substantial progress toward polio eradication in EMR during 1988–1994. In addition to providing member countries with technical support to implement global polio eradication strategies, the EMR has initiated three major regional initiatives to accelerate polio eradication. First, during 1993–1994, WHO collaborated with Rotary International and the United Nations Children's Fund (UNICEF) and used teams of national and international laboratory and epidemiology experts to conduct rapid surveillance assessments in 19 countries. Second, WHO coordinated efforts (including NIDs) to detect and prevent cases in three geographically contiguous and epidemiologically similar countries (the Mahgreb Union in Northern Africa; the Arab Gulf states; and the Middle Eastern and Asian states of Jordan, Lebanon, Palestine, Syria, Afghanistan, Iran, Iraq, and Pakistan) to foster the emergence of polio-free zones within the region. Third, a monthly newsletter ("Poliofax") is sent to all ministries of health in the region to provide feedback and to encourage complete and timely disease reporting.

Despite progress toward polio eradication, some barriers persist and underscore the need to 1) increase vaccination levels in unvaccinated subpopulations; 2) maintain high routine vaccination coverage in all member countries; 3) translate political commitment into action, including the provision of sufficient funds for the purchase of oral polio vaccine (both for routine and supplementary vaccination) by governments of all member countries; 4) encourage all member countries to establish polio eradication as a priority activity, including the initiation of AFP surveillance and implementation of NIDs; 5) overcome the impediments to the regional polio eradication initiative as the result of war and civil strife in some countries; and 6) strengthen the timely exchange of information among countries and with WHO, UNICEF, Rotary International, and other partner organizations to enable coordination and enhanced support of regional polio eradication activities.

*Poliomyelitis Eradication — Continued**References*

1. Regional Committee for the Eastern Mediterranean Region, World Health Organization. Poliomyelitis eradication in the Eastern Mediterranean Region. Alexandria, Egypt: World Health Organization, 1988. (Resolution EM/RC35/R.14).
2. Hull HF, Ward NA, Hull BP, Milstien JB, de Quadros C. Paralytic poliomyelitis: seasoned strategies, disappearing disease. *Lancet* 1994;343:1331-7.

## Hospitalization for Epilepsy — United States, 1988-1992

Epilepsy is a chronic neurologic condition manifested by repeated unprovoked seizures that affects approximately 1% of the U.S. population (1). Although effective treatment can prevent seizures in most persons with epilepsy, some persons have frequent seizures, which can lead to brain damage, disability, and diminished quality of life (2,3). To assist in characterizing the public health impact of epilepsy in the United States, CDC analyzed data from the National Hospital Discharge Survey (NHDS) for 1988-1992 to estimate the number of hospitalizations for which epilepsy was the first-listed diagnosis.

The NHDS is conducted annually and collects data from a sample of inpatient records obtained from a nationally representative sample of nonfederal general and short-stay specialty hospitals in the United States (4). Hospitalizations for which the first-listed diagnosis was epilepsy were selected by using the *International Classification of Diseases, Ninth Revision, Clinical Modification*, codes 345.0-345.9. Age-specific and age-adjusted rates were estimated for the civilian population; the direct method was used to age-adjust the estimates to the 1980 U.S. resident population. Because of differences in the racial designation of the denominator population in different years, race-specific rates for the total period could be estimated for whites only and for all other groups combined. Hospitalizations for persons with race not stated were included with whites. To increase the stability of the estimates, data for all 5 survey years were combined. SUDAAN was used to calculate the estimates and standard errors.

From 1988 through 1992, epilepsy was the first-listed diagnosis for an estimated 466,000 hospitalizations; the age-adjusted hospitalization rate was 37 hospitalizations per 100,000 persons (Table 1). The age-specific rate per 100,000 persons varied by age group and was highest for persons aged  $\geq 65$  years (68 per 100,000) and lowest for persons aged 15-64 years (30).

The age-adjusted hospitalization rate was higher for males (40) than females (34); however, age-specific rates for males and females were similar (Table 1). The age-adjusted hospitalization rate was higher in the Northeast (49) than in the South (37), North Central (35), and West (27).\*

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\* Northeast=Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; North Central=Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin; South=Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; West=Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

## Epilepsy — Continued

**TABLE 1. Number and rate\* of hospitalizations for epilepsy,<sup>†</sup> by age group and sex — United States, 1988–1992**

Age group (yrs)	Women			Men			Total		
	No. <sup>§</sup>	Rate	(SE) <sup>¶</sup>	No.	Rate	(SE)	No.	Rate	(SE)
≤14	51	38	(±4)	62	44	(±5)	112	41	(±4)
15–64	114	28	(±2)	132	33	(±2)	247	30	(±1)
≥65	62	67	(±6)	44	69	(±6)	106	68	(±4)
<b>Total</b>	<b>228</b>	<b>36</b>	<b>(±2)</b>	<b>238</b>	<b>39</b>	<b>(±2)</b>	<b>466</b>	<b>37</b>	<b>(±1)</b>
<i>Age-adjusted</i>		34	(±2)		40	(±2)		37	(±1)

\*Per 100,000 persons in the civilian population.

<sup>†</sup> *International Classification of Diseases, Ninth Revision, Clinical Modification*, codes 345.0–345.9 as first-listed diagnosis on hospitalization record.

<sup>§</sup>In thousands. Totals may not add because of rounding.

<sup>¶</sup>Standard error.

Age-adjusted rates were substantially lower for whites (35) than for all other racial groups combined (51). Age-specific rates were similar for the youngest age group; however, compared with whites, rates were higher in other age groups for the other racial groups combined (Figure 1). The ratio of rates increased directly by age group—0.9 among persons aged <15 years, 1.6 among those aged 15–64 years, and 1.8 among those aged ≥65 years.

*Reported by: Statistics Br, Div of Chronic Disease Control and Community Intervention, National Center for Chronic Disease Prevention and Health Promotion, CDC.*

**Editorial Note:** Hospitalizations for epilepsy represent a potentially preventable complication of this condition. The findings in this report indicate that, during 1988–1992, approximately 93,000 hospitalizations each year were attributed to epilepsy. These rates are similar to those reported for 1973–1976 (5) and to rates based on studies employing rigorous ascertainment of cases (6).

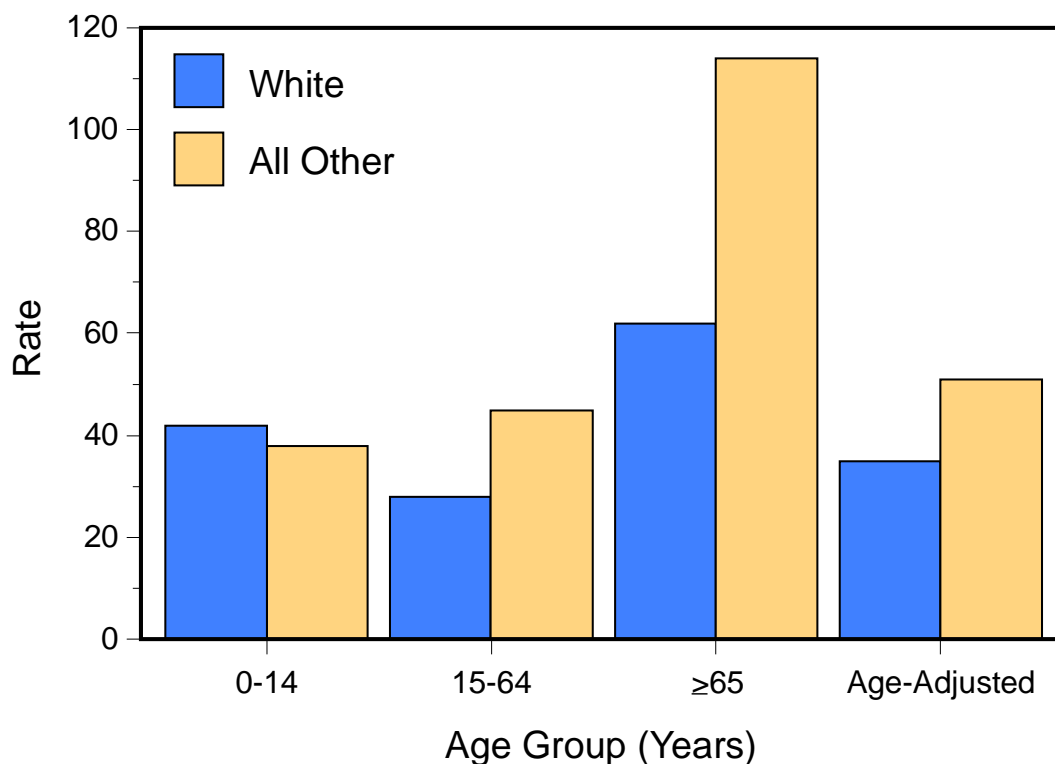
Comparing these results with the estimated prevalence of self-reported epilepsy (7), approximately 8% of persons with epilepsy are hospitalized each year. The proportion of persons hospitalized is similar for men and women but varies considerably with age; an estimated one fourth of persons with epilepsy aged ≥65 years are hospitalized each year with epilepsy as the first-listed diagnosis. This may be attributable to either severity of epilepsy, its underlying causes in older age groups, or underreporting of epilepsy in this population segment.

Although data characterizing the prevalence of epilepsy by racial/ethnic group are limited, the prevalence among whites, in general, has been reported to be lower than for blacks (7,8). In 1992, 20% of NHDS records lacked a designation of race (7). Because most of these persons were discharged from hospitals that historically reported most of their patients as white, these records were included with whites in this analysis, thus resulting in an overestimate of hospitalization rates for whites. Despite this bias, however, the hospitalization rate for whites was different when compared with all other racial groups combined. In this analysis, this disparity increased directly with age, possibly reflecting cumulative differences in disease severity or access to effective therapy.

The findings in this report are subject to at least two limitations. First, the hospitalization data could not be linked to individuals. Persons with particularly refractory

*Epilepsy — Continued*

**FIGURE 1. Actual and age-adjusted rate\* of hospitalization for epilepsy†, by age group and race§ — United States, 1988–1992**



\*Per 100,000 persons in the civilian population.

†*International Classification of Diseases, Ninth Revision, Clinical Modification*, codes 345.0–345.9 as first-listed diagnosis on hospitalization record.

§Because of differences in the racial designation of the denominator population in different years, race-specific rates for the total period could be estimated only for whites and for all other groups combined.

seizures may have been hospitalized multiple times during the study period. Second, epilepsy may be the underlying factor for hospitalizations attributed to other causes (e.g., trauma). Therefore, this analysis probably underestimated the total number of hospitalizations for epilepsy.

Although hospitalization accounts for only a small proportion of the total medical and public health impact of epilepsy, rates of hospitalization for epilepsy are especially high in some age groups. In addition, hospitalizations attributable to epilepsy are preventable with effective outpatient management focusing on proper diagnosis, treatment, and patient compliance. Patients with epilepsy refractory to treatment in the primary-care setting or those experiencing difficulties in compliance or adverse effects of antiepileptic medication should be referred to appropriate specialty centers for the diagnosis and treatment of epilepsy (9). CDC is collaborating with representatives of professional and voluntary organizations to develop guidelines for consumers and health-care providers for the management and referral of persons with epilepsy in primary-care settings.



*Epilepsy — Continued*

November is National Epilepsy Month. Additional information about epilepsy and its treatment is available from the Epilepsy Foundation of America, telephone (800) 332-1000 or (301) 459-3700.

*References*

1. Hauser WA, Hesdorffer DC. Epilepsy: frequency, causes, and consequences. New York: Epilepsy Foundation of America, 1990.
2. Annegers JF, Hauser WA, Elveback LR. Remission of seizures and relapse in patients with epilepsy. *Epilepsia* 1979;20:729-37.
3. Dodrill CB. Correlates of generalized tonic-clonic seizures with intellectual, neuropsychological, emotional, and social function in patients with epilepsy. *Epilepsia* 1986;27:399-411.
4. NCHS. National Hospital Discharge Survey: annual summary, 1992. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, CDC, October 1994. (Vital and health statistics; series 13, no. 119).
5. Jerath BK, Kimbell BA. Hospitalization rates for epilepsy in the United States, 1973-1976. *Epilepsia* 1981;22:55-64.
6. Hauser WA, Kurland LT. The epidemiology of epilepsy in Rochester, Minnesota, 1935 through 1967. *Epilepsia* 1975;16:1-66.
7. CDC. Prevalence of self-reported epilepsy—United States, 1986-1990. *MMWR* 1994;43:810-1, 817-8.
8. Haerer AF, Anderson DW, Schoenberg BS. Prevalence and clinical features of epilepsy in a biracial United States population. *Epilepsia* 1986;27:66-75.
9. Lesser RP. The role of epilepsy centers in delivering care to patients with intractable epilepsy. *Neurology* 1994;44:1347-52.

*Notice to Readers***Availability of Information on Diabetes Awareness**

Three resources to promote diabetes awareness have recently been published and are available to the public. The *1995 National Diabetes Fact Sheet* provides statistical information about the impact of diabetes in the United States. The fact sheet was a collaborative effort involving a consortium of federal agencies (CDC; the Health and Human Resource Services Administration; the Indian Health Service; the National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health; and the Department of Veterans Affairs) and volunteer diabetes organizations (the American Association of Diabetes Educators, the American Diabetes Association, and the Juvenile Diabetes Foundation). The document is available free of charge through any of the agencies or national headquarters of the organizations participating in the consortium or on CDC's Diabetes Home Page on Internet (<http://www.cdc.gov/nccdphp/ddt/ddthome.htm>). To order the document from CDC, write to TISB, Mailstop K-13, Attention: DK, CDC, 4770 Buford Highway, N.E., Atlanta, GA 30341-3724.

This consortium, as well as the Pedorthic Footwear Association (PFA) and the California College of Podiatric Medicine (CCPM), is collaborating on a foot-care awareness campaign to detect loss of protective foot sensation, which can lead to foot ulcers and eventually to amputations. Additional information about the campaign is available from any of the agencies or national headquarters of the organizations participating in the consortium, PFA, or CCPM.

*Notice to Readers — Continued*

The National Diabetes Data Group, National Institutes of Health, has published *Diabetes in America, 2nd Edition*, a compilation and assessment of the scope and impact of diabetes in the United States (1). The book addresses the descriptive epidemiology of diabetes, complications of the disease, characteristics of therapy and medical care for diabetes, economic aspects, and diabetes in specific racial/ethnic populations. A substantial portion of the data is derived from CDC's National Center for Health Statistics surveys, including the National Health Interview Survey, National Health and Nutrition Examination Survey, National Hospital Discharge Survey, National Ambulatory Medical Care Survey, and the vital statistics system. The document is available for \$20 (postage and handling charge) from the National Diabetes Information Clearinghouse, National Institute of Diabetes and Digestive and Kidney Diseases, One Information Way, Bethesda, MD, 20892-3560; telephone (301) 654-3327.

*References*

1. National Diabetes Data Group, National Institutes of Health. *Diabetes in America*. 2nd ed. Bethesda, Maryland: US Department of Health and Human Services, Public Health Service, National Institutes of Health, 1995; DHHS publication no. (NIH)95-1468.

### Monthly Immunization Table

To track progress toward achieving the goals of the Childhood Immunization Initiative (CII), CDC publishes monthly a tabular summary of the number of cases of all diseases preventable by routine childhood vaccination reported during the previous month and year-to-date (provisional data). In addition, the table compares provisional data with final data for the previous year and highlights the number of reported cases among children aged <5 years, who are the primary focus of CII. Data in the table are reported through the National Electronic Telecommunications System for Surveillance (NETSS).

#### Number of reported cases of diseases preventable by routine childhood vaccination — United States, September 1994 and 1994–1995\*

Disease	No. cases, September 1995	Total cases January–September		No. cases among children aged <5 years†	
		1994	1995	1994	1995
Congenital rubella syndrome	0	3	4	3	4
Diphtheria	0	2	0	1	0
<i>Haemophilus influenzae</i> §	82	850	885	238	209
Hepatitis B¶	824	8571	7165	97	55
Measles	9	860	267	203	95
Mumps	55	1097	615	172	120
Pertussis	675	2924	2936	1699	1708
Poliomyelitis, paralytic**	0	1	0	0	0
Rubella	4	208	128	24	17
Tetanus	4	28	23	0	2

\*Data for 1994 and 1995 are provisional.

†For 1994 and 1995, age data were available for ≥93% cases.

§Invasive disease; *H. influenzae* serotype is not routinely reported to the National Notifiable Diseases Surveillance System. Of 209 cases among children aged <5 years, serotype was reported for 54 cases, and of those, 32 were type b, the only serotype of *H. influenzae* preventable by vaccination.

¶Because most hepatitis B virus infections among infants and children aged <5 years are asymptomatic (although likely to become chronic), acute disease surveillance does not reflect the incidence of this problem in this age group or the effectiveness of hepatitis B vaccination in infants.

\*\*One case with onset in July 1994 has been confirmed; this case was vaccine-associated. An additional six suspected cases are under investigation. In 1993, three of 10 suspected cases were confirmed; two of the confirmed cases were vaccine-associated, and one was imported. The imported case occurred in a 2-year-old Nigerian child brought to the United States for care of his paralytic illness; no poliovirus was isolated from the child.

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