



### 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.

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 ≥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 ≥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\*

	·	With dia	abetes	Wi	thout o	diabetes
Characteristic <sup>†</sup>	Sample size (n=405)	%	(95% CI <sup>§</sup> )	Sample size (n=9983)	%	(95% CI)
Age group (yrs)						
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%)
Sex						
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%)
Education 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%)
Employment						
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%)
Annual						
household income						
<\$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%)

<sup>\*</sup>Weighted data. Unweighted sample size=10,388.

<sup>&</sup>lt;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.

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% Cl=2.1–3.4) and to be obese<sup>†</sup> (OR=2.5; 95% Cl=2.0–3.2) and somewhat more likely to report a sedentary lifestyle§ (OR=1.3; 95% Cl=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.

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

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

<sup>§</sup>Fewer than three 20-minute sessions of leisure-time physical activity per week.

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\*

		With	diabetes		Witho	ut diabetes
Category <sup>†</sup>	Sample size (n=405) %		(95% CI <sup>§</sup> )	Sample size (n=9983		(95% CI)
CVD RISK FACTORS						
Hypertension¶	212	50.4	(44.9%–56.0%)	1996	17.6	(16.8%–18.4%)
Cigarette smoking			,			,
Current smoker**	42	11.3	(7.6%-15.0%)	1591	15.6	(14.7%-16.4%)
Former smoker <sup>††</sup>	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%)
Obesity <sup>§§</sup>						
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%)
Sedentary lifestyle <sup>¶</sup>						
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%)
PREVENTIVE HEALTH PRACTICES						
Weight control						
Not trying			<b>,</b>			,
to lose weight	159	59.1	(58.5%–68.4%)	4341	66.9	(65.6%–68.2%)
Yes, trying	100	44 5	(24 (0/ 40 40/)	20.45	22.4	(22.40/.24.40/)
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 Diet and exercise	5	4.9 40.2	( 2.9%- 6.9%)	315	15.4	(13.2%–17.1%)
Routine examination	41	40.2	(36.4%–42.3%)	1128	55.2	(53.8%–57.9%)
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%)
Cholesterol checked***	· ·	0.7	( 0 1.070)	.,,		( 1.070 2.070)
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%)

<sup>\*</sup>Weighted data. Unweighted sample size= 10,388.

<sup>†</sup>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.

<sup>§</sup>Confidence interval.

<sup>¶</sup>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  $(kg/m^2) \ge 27.8$  for men and  $\ge 27.3$  for women.

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

<sup>\*\*\*</sup>Not asked in 1993.

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

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- 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;

<sup>\*</sup>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.

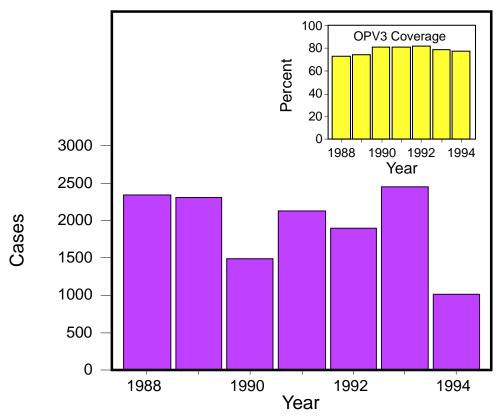
<sup>&</sup>lt;sup>†</sup>Mass campaigns over a short period (days to weeks) in which two doses of OPV are administered to all children in the target age group (usually age <5 years) regardless of prior vaccination history, with an interval of 4–6 weeks between doses.

and 3) developing sensitive systems of epidemiologic and laboratory surveillance, including use of the standard WHO case definition (2).§ 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

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



<sup>\*</sup>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>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.

(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.

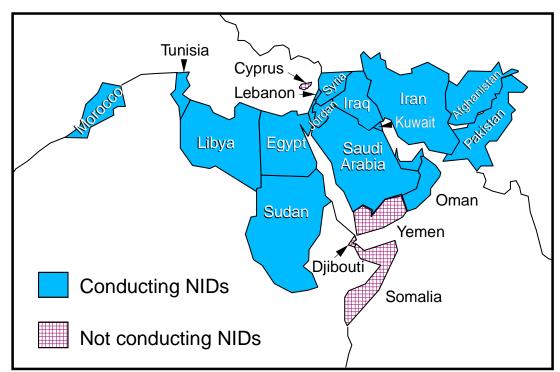
### **Vaccination Coverage**

From 1990 through 1993, routine coverage with OPV3 among children aged <1 year in EMR was ≥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)

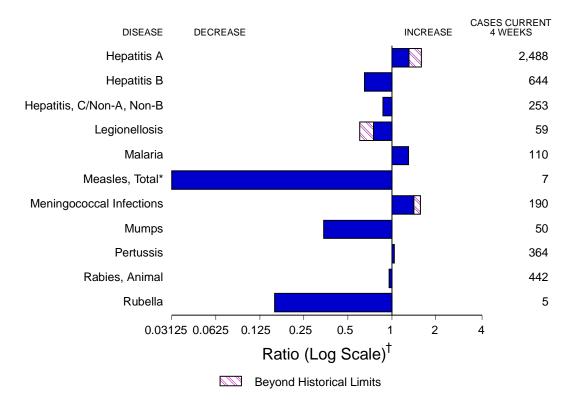
FIGURE 2. Countries conducting National Immunization Days (NIDs)\* — Eastern Mediterranean Region, World Health Organization,† 1995



<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.

<sup>&</sup>lt;sup>†</sup>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



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

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

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

<sup>&</sup>lt;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.

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

\*Updated quarterly from reports to the Division of STD Prevention, National Center for Prevention Services. This total through third quarter 1995.

<sup>-:</sup> no reported cases

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

						Hepatitis (	(Viral), by	type			
Reporting Area	AIDS*	Gono	rrhea	ļ	١	В		C/NA	A,NB	Legion	ellosis
	Cum. 1995	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	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 69	7,199 79	255	247	168	280	19	127	30	69
Maine N.H.	81 77	95	95	27 9	23 16	7 18	11 23	12	9	5 2	5 -
Vt. Mass.	30 1,137	53 2,394	31 2,698	5 107	10 91	1 68	8 158	-	12 86	- 19	48
R.I. Conn.	192 1,136	441 1,927	390 3,906	31 76	21 86	8 66	7 73	7	20	4 N	16 N
MID. ATLANTIC	14,696	27,714	37,616	1,385	1,399	1,045	1,226	380	378	162	213
Upstate N.Y. N.Y. City	1,736 7,624	3,846 10,058	8,614 13,984	374 633	469 541	323 304	320 285	198 1	179 1	43 4	49 7
N.J. Pa.	3,575 1,761	3,470 10,340	4,284 10,734	196 182	240 149	262 156	308 313	143 38	167 31	23 92	37 120
E.N. CENTRAL	4,122	61,428	67,591	2,363	2,055	752	976	224	277	260	367
Ohio Ind.	852 429	17,515 6,816	17,830 7,510	1,535 147	777 324	91 186	139 173	13 6	20 8	127 62	166 39
III.	1,736	17,294	20,574	217	503	94	259	33	75	13	35
Mich. Wis.	825 280	15,046 4,757	15,215 6,462	310 154	253 198	334 47	326 79	172 -	174 -	28 30	72 55
W.N. CENTRAL	1,266	16,141	18,669	1,549	1,035 207	495	554	107	73	98	85 2
Minn. Iowa	285 71	2,508 1,295	2,711 1,270	164 53	56	50 40	53 24	4 12	16 9	6 19	29
Mo. N. Dak.	564 6	9,224 24	10,320 34	1,093 23	523 5	333 4	418	65 8	19 1	47 4	31 4
S. Dak. Nebr.	15 84	148 757	187 1,060	56 37	33 118	2 26	2 28	1 6	- 12	3 12	1 13
Kans.	241	2,185	3,087	123	93	40	29	11	16	7	5
S. ATLANTIC Del.	14,155 241	87,227 1,874	89,961 1,624	1,118 8	1,043 21	1,205 6	1,731 14	293 1	353 1	165 2	315 31
Md. D.C.	2,250	7,471 3,925	15,525	187 21	153 18	212 19	296 43	4	18 1	29 4	68 7
Va.	827 1,082	8,797	6,100 11,183	176	151	95	112	18	22	18	8
W. Va. N.C.	86 816	566 20,321	669 23,551	22 93	17 114	48 253	34 238	43 49	31 53	4 31	3 24
S.C. Ga.	766 1,784	9,852 17,369	11,043 U	41 52	35 28	44 62	28 519	16 13	8 174	31 14	15 106
Fla.	6,303	17,052	20,266	518	506	466	447	149	45	32	53
E.S. CENTRAL Ky.	1,763 221	34,531 4,065	38,995 4,221	1,632 37	527 139	676 58	968 70	810 22	795 26	43 10	74 9
Tenn. Ala.	709 484	11,410 13,839	12,775 12,792	1,351 73	239 84	523 95	830 68	786 2	754 15	24	36 13
Miss.	349	5,217	9,207	171	65	-	-	-	-	3	16
W.S. CENTRAL Ark.	4,691 209	27,983 3,201	40,828 5,514	3,879 505	2,625 158	1,185 55	1,071 22	267 4	269 7	17 1	37 6
La.	785	9,150	10,165	111	133	167	144	140	150	3	13
Okla. Tex.	206 3,491	4,627 11,005	3,935 21,214	916 2,347	303 2,031	146 817	117 788	43 80	52 60	5 8	11 7
MOUNTAIN Mont.	1,716 17	6,948 59	8,472 76	3,274 132	4,057 19	650 19	543 18	348 13	377 12	101 4	73 14
Idaho	38	99	74	263	301	71	68	41	65	2	1
Wyo. Colo.	12 523	42 2,380	75 2,962	98 454	24 462	23 108	23 85	139 54	141 61	12 37	4 15
N. Mex. Ariz.	137 545	862 2,591	859 2,688	696 895	933 1,627	250 92	174 60	39 37	45 23	4 9	3 9
Utah Nev.	112 332	131 784	240 1,498	599 137	484 207	57 30	64 51	10 15	16 14	16 17	6 21
PACIFIC	9,642	21,522	27,054	8,140	7,302	30 1,717	2,074	675	721	117	61
Wash. Oreg.	717 347	2,273 249	2,465 859	700 1,982	897 879	162 93	191 135	182 30	210 36	20	11
Calif.	8,328	17,932	22,373	5,271	5,292	1,440	1,710	424	470	92	47
Alaska Hawaii	60 190	591 477	754 603	48 139	186 48	9 13	13 25	1 38	5	5	3
Guam	- 1,925	66 470	113	5 95	22	1 450	4 217	- 10	- 1 <b>-</b> 1	1	1
P.R. V.I.	1,925	470 6	422 35	85 -	73 3	459 2	317 7	18 -	154 1	-	-
Amer. Samoa C.N.M.I.	-	27 42	28 45	6 18	8 8	13	1	-	-	-	-

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

C.N.M.I.: Commonwealth of Northern Mariana Islands

<sup>\*</sup>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)

							Measle	es (Rube	eola)		I			
Reporting Area		me ease	Mal	aria	Indig	enous	Impo	orted*	To	tal		ococcal tions	Mu	mps
	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	1995	Cum. 1995	1995	Cum. 1995	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	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 18	41 6	65	-	7	-	2	9	27 5	118 10	106 19	11 4	19 3
Maine N.H.	25 21	25	1	6 3	-	-	-	-	-	1	20	8	1	4
Vt. Mass.	8 170	15 171	1 14	3 29	-	- 1	-	- 1	2	3 7	9 41	2 50	2	3
R.I. Conn.	285	372	4	8	-	5 1	-	1	5 2	7 4	-	27	1 3	2 7
MID. ATLANTIC	1,169 4.613	1,828 6,234	15 272	16 179	-	1 7	-	5	12	221	38 284	244	96	98
Upstate N.Y.	2,419	3,914	58	46	-	1	-	-	1	26	88	80	24	28
N.Y. City N.J.	186 980	22 1,234	140 53	64 40	-	2 4	-	3 2	5 6	14 173	39 74	30 52	14 13	8 13
Pa.	1,028	1,064	21	29	-	-	-	-	-	8	83	82	45	49
E.N. CENTRAL Ohio	68 46	504 39	93 11	93 15	-	7 1	-	4 1	11 2	102 17	334 98	333 97	129 46	212 59
Ind.	14	16	15	12	-	-	-	-	-	1	61	42	4	7
III. Mich.	3 5	23 25	32 22	40 23	-	4	-	2 1	2 5	56 25	71 65	108 49	37 42	95 39
Wis.	-	401	13	3	-	2	-	-	2	3	39	37	-	12
W.N. CENTRAL Minn.	200 129	272 148	23 4	41 13	-	2	-	-	2	170 -	171 27	144 15	41 4	62 4
Iowa	15	15	2	5	-	-	-	-	-	7	30	18	9	15
Mo. N. Dak.	35	96 -	8 1	12 1	-	1	-	-	1	160 -	70 1	68 1	22 1	38 4
S. Dak. Nebr.	2	3	2	- 4	-	-	-	-	-	2	6 14	8 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. Md.	23 267	102 218	1 57	3 73	-	-	-	1	1	4	6 33	5 29	20	50
D.C. Va.	2 50	7 121	16 50	14 29	-	-	-	-	-	3	6 57	4 59	- 21	38
W. Va.	22	23	4	-	-	-	-	-	-	37	8	12	-	3
N.C. S.C.	64 16	76 7	15 1	11 4	-	-	-	-	-	3 -	71 55	44 25	16 10	35 7
Ga. Fla.	10 16	117 15	31 41	31 30	-	2 9	-	-	2 9	3 15	89 136	69 81	8 16	9 25
E.S. CENTRAL	41	40	21	31	_	-	_	-	-	28	152	159	15	21
Ky. Tenn.	9	23 11	2 8	11 10	-	-	-	-	-	28	49 37	34 29	2	- 7
Ala.	7	6	8	9	-	-	-	-	-	-	36	65	4	5
Miss.	5	-	3	1	-	-	-	-	-	-	30	31	9	9
W.S. CENTRAL Ark.	101 9	108 8	48 2	40 3	-	28 2	-	3	31 2	17 1	305 26	262 39	48 9	213 5
La. Okla.	6 43	1 62	5 1	8 6	-	17	-	1	18	1	43 33	34 26	12	27 23
Tex.	43	37	40	23	-	9	-	2	11	15	203	163	27	158
MOUNTAIN Mont	11	15	54	28	-	67	-	1	68	164	171	146	25	147
iviont. Idaho	-	3	3 1	2	-	-	-	-	-	1	2 9	6 16	3	7
Wyo. Colo.	3	4 1	24	1 12	-	26	-	-	26	- 19	7 45	7 29	2	2 4
N. Mex.	1	5	6	3		30		1	31	-	34	13	N	N
Ariz. Utah	1 1	1	10 6	4 4	U -	10	U -	-	10 -	1 134	51 15	49 18	2 11	96 25
Nev.	5	1	4	2	-	1	-	-	1	9	8	8	6	13
PACIFIC Wash.	99 10	69 3	262 21	231 28	-	121 16	-	11 4	132 20	81 4	491 80	523 81	219 12	264 18
Oreg. Calif.	9	60	19 209	14 173	-	105	-	3	3 108	2 61	92 307	116 318	N 187	N 225
Alaska	-	-	3	2	-	-	-	-	-	10	8	2	13	4
Hawaii	-	-	10	14	-	-	-	1	1	4	4	6	7	17
Guam P.R.	-	-	1	4	U -	- 11	U -	-	- 11	228 11	3 23	- 7	3 2	6 2
V.I. Amer. Samoa	-	-	-	-	U	-	U	-	-	-	-	-	2	4 2
C.N.M.I.	-	-	1	1	Ū	-	Ū	-	-	29	-	-	-	2

 $<sup>{}^\</sup>star For \ imported \ measles, cases \ include \ only \ those \ resulting \ from \ importation \ from \ other \ countries.$ 

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)

		Dantuasia			B. L. II.		Sypi (Prima		Tubero	ulosis	Rab	
Reporting Area		Pertussis Cum.	Cum.		Rubella Cum.	Cum.	Šecon Cum.	dary) Cum.	Cum.	Cum.	Ani Cum.	Cum.
LINUTED OTATEO	1995	1995	1994	1995	1995	1994	1995	1994	1995	1994	1995	1994
UNITED STATES NEW ENGLAND	94 12	3,343 455	3,363 413	-	134 47	209 128	12,176 137	17,591 180	16,311 416	18,139 417	5,823 1,305	6,456 1,598
Maine	1	40	18	-	1	-	2	4	12	23	45	1,370
N.H. Vt.	1	45 64	68 40	-	1	-	1	4	18 2	14 7	129 155	171 120
Mass.	10	277	250	-	7	124	54	77	231	215	381	603
R.I. Conn.	-	4 25	5 32	-	38	2 2	3 77	12 83	40 113	37 121	286 309	40 664
MID. ATLANTIC	26	300	529	-	13	6	689	1,171	3,366	3,748	1,120	1,711
Upstate N.Y. N.Y. City	24 2	163 30	201 133	-	4 8	5	43 332	147 515	418 1,797	490 2,163	438	1,276
N.J.	-	14	14	-	1	1	141	198	642	651	295	230
Pa.	-	93	181	-	-	-	173	311	509	444	387	205
E.N. CENTRAL Ohio	13 5	328 128	500 133	-	5 -	9	2,150 737	2,607 1,007	1,614 224	1,715 282	73 12	56 4
Ind.	6	52	55	-	1	-	228	206	198	153	12	12
III. Mich.	2	73 63	96 78	-	1 3	1 8	786 252	887 246	800 331	853 377	3 37	20 12
Wis.	-	12	138	-	-	-	147	261	61	50	9	8
W.N. CENTRAL Minn.	5 5	241 127	184 85	-	-	2	629 34	1,003 40	476 107	482 113	292 20	184 15
Iowa	-	11	18	-	-	-	39	56	52	51	98	75
Mo. N. Dak.	-	53 8	39 4	-	-	2	519 -	841 1	190 3	207 9	22 25	20 10
S. Dak.	-	11	17	-	-	-	-	2	21	22	81	33
Nebr. Kans.	-	9 22	9 12	-	-	-	11 26	11 52	20 83	17 63	5 41	31
S. ATLANTIC	7	299	289	-	25	15	3,139	4,587	2,687	3,211	1,827	1,707
Del. Md.	-	10 35	3 66	-	-	-	14 137	24 264	41 241	37 280	74 265	54 466
D.C.	-	6 19	8	-	-	-	95	189	88	99 292	11	2
Va. W. Va.	-	_	36 4	-	-	-	496 10	657 9	202 60	292 68	373 102	353 65
N.C. S.C.	2	110 25	58 13	-	1 1	-	950 497	1,406 703	371 271	403 316	412 109	148 150
Ga.	5	26	24	-	-	2	622	692	319	565	243	319
Fla. E.S. CENTRAL	- 1	68 262	77 124	-	23	13	318 3,126	643 3,276	1,094	1,151	238 243	150 165
Ky.	1	20	59	-	-	-	172	170	1,272 250	1,321 259	26	20
Tenn. Ala.	-	204 35	22 31	-	-	-	720 538	885 563	336 342	442 367	78 130	34 107
Miss.	-	3	12	N	N	Ν	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. La.	-	34 16	27 10	-	1 -	-	82 865	400 1,458	33 6	204 15	41	28 62
Okla. Tex.	- 8	30 184	26 117	-	- 7	4 9	155 516	136 1,816	326 1,795	207 1,901	28 450	32 464
MOUNTAIN	6	464	407	_	, 5	5	202	210	507	463	156	140
Mont.	-	3 90	8	-	-	-	4	3 1	10	9	42	17 3
ldaho Wyo.	-	1	47 -	-	1	-	-	1	12 4	11 8	24	19
Colo. N. Mex.	- 6	84 105	197 21	-	-	-	98 33	107 19	37 66	61 55	9 6	18 7
Ariz.	U	149	101	U	3	:	34	39	257	180	49	54
Utah Nev.	-	27 5	30 3	-	1	4 1	4 29	11 29	37 84	41 98	15 8	13 9
PACIFIC	16	730	737	-	31	31	486	747	3,813	4,455	288	309
Wash. Oreg.	16	263 46	99 91	-	2 2	- 4	13 7	30 33	202 36	214 90	7	15 10
Calif.	-	375	530	-	24	23	465	678	3,376	3,881	277	251
Alaska Hawaii	-	46	- 17	-	3	4	1	3 3	59 140	67 203	4	33
Guam	U	1	2	U	-	1	8	3	38	73	-	-
P.R. V.I.	U	14	2	- U	-	-	253 2	275 27	195	167	44	68
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)

	All Causes, By Age (Years)						P&I <sup>†</sup>		All Cau	ıses, By	Age (Y	ears)		P&I <sup>†</sup>	
Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	Total	Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	Total
NEW ENGLAND Boston, Mass. Bridgeport, Conn. Cambridge, Mass. Fall River, Mass. Hartford, Conn. Lowell, Mass. Lynn, Mass. New Bedford, Mass. New Haven, Conn. Providence, R.I. Somerville, Mass. Springfield, Mass. Waterbury, Conn. Worcester, Mass. MID. ATLANTIC		421 1200 24 12 12 26 19 9 19 32 36 4 38 26 44 1,619	5 3 14 2 2 4 4 13	68 29 4 - 7 2 1 1 5 6 - 1 2 10	10 1 - - 2 - 1 - 3 2 1 54	22 14 - - 1 1 1 - - 3 1 - - 2 - -	36 9 2 - 1 1 1 2 - 1 4 1 8 2 4	S. ATLANTIC Atlanta, Ga. Baltimore, Md. Charlotte, N.C. Jacksonville, Fla. Miami, Fla. Norfolk, Va. Richmond, Va. Savannah, Ga. St. Petersburg, Fla. Tampa, Fla. Washington, D.C. Wilmington, Del. E.S. CENTRAL Birmingham, Ala.	164 219 14 738 121	704 96 79 70 85 44 36 U 31 35 113 109 6	245 34 34 13 32 25 5 U 9 3 36 51 3 164 28 18	131 16 20 10 16 13 4 U 5 9 6 32 -	31 3 3 - 6 1 U 2 1 4 11 - 2 2	36 4 4 3 2 - - U 2 1 4 16 - - 17 3 1	50 2 9 8 - 1 U 2 5 7 7 - 49
Albany, N.Y. Allentown, Pa. Buffalo, N.Y. Camden, N.J. Elizabeth, N.J. Erie, Pa.§	2,449 55 18 95 25 14 41	39 14 79 17 7 34	8 4 10 1 3 3	5 3 1 3 2	1 - - 3 1 2	3 3	5 4 2 1 2	Chattanooga, Tenn. Knoxville, Tenn. Lexington, Ky. Memphis, Tenn. Mobile, Ala. Montgomery, Ala. Nashville, Tenn.	49 68 173 62 67 127	42 27 40 107 43 51 76	15 18 41 11 10 23	10 1 6 20 6 2 17	4 1 3 1 3 7	2 3 2 1 1 4	4 6 14 3 2 9
Jersey City, N.J. New York City, N.Y. Newark, N.J. Paterson, N.J. Philadelphia, Pa. Pittsburgh, Pa.§ Reading, Pa. Rochester, N.Y. Schenectady, N.Y. Scranton, Pa.§ Syracuse, N.Y. Trenton, N.J. Utica, N.Y. Yonkers, N.Y.	33 1,392 55 27 300 70 9 125 12 32 86 44 16 U	20 894 24 19 196 46 6 81 9 28 69 26 11 U	2 28 3 4 12	5 175 13 3 29 7 1 10 - - 3 5 2 U	33 2 1 7 1 - 3 - -	1 15 - 16 2 - 3 - 2 1	1 56 3 15 2 12 1 1 5 7 2 U	W.S. CENTRAL Austin, Tex. Baton Rouge, La. Corpus Christi, Tex. Dallas, Tex. El Paso, Tex. Ft. Worth, Tex. Houston, Tex. Little Rock, Ark. New Orleans, La. San Antonio, Tex. Shreveport, La. Tulsa, Okla.	216 66 113 347 81 116 210 73 72	929 42 26 48 130 42 65 196 49 78 151 56	324 10 6 17 51 14 29 83 17 29 39 9	137 6 2 4 24 4 15 49 8 2 13 7	58 8 4 3 8 4 2 12 6 6 4	25 1 3 2 2 7 1 1 2 1 2	77 2 1 3 4 2 13 29 3 - 13 5 2
E.N. CENTRAL Akron, Ohio Canton, Ohio Canton, Ohio Chicago, III. Cincinnati, Ohio Cleveland, Ohio Dayton, Ohio Dayton, Ohio Dayton, Ohio Detroit, Mich. Evansville, Ind. Fort Wayne, Ind. Gary, Ind. Gary, Ind. Grand Rapids, Micl Indianapolis, Ind. Madison, Wis. Milwaukee, Wis. Peoria, III. Rockford, III. South Bend, Ind. Toledo, Ohio Youngstown, Ohio W.N. CENTRAL Des Moines, Iowa Duluth, Minn. Kansas City, Kans. Kansas City, Kans.	2,236 55 37 463 78 147 181 112 280 53 60 14 1. 62 215 71 132 15 52 44 106 59 795 20 26 38	1,532 35 28 274 49 93 1200 81 1199 41 135 54 102 111 39 32 83 46 554 11 20 23 51	392 7 84 17 36 39 21 42 6 8 3 7 41 10 20 4 6 6 6 13 10 10 11 10 10 10 10 10 10 10	195 6 270 4 13 14 5 29 3 4 3 7 - 2 4 7 7 3 5 5 5 6 6	60 	56 2 15 6 2 2 2 3 3 2 2 1 1 1 100 3 3 3	124 331 32 15 88 31 10 10 11 7 63 4 4 2 45 2 3	MOUNTAIN Albuquerque, N.M. Colo. Springs, Colo Denver, Colo. Las Vegas, Nev. Ogden, Utah Phoenix, Ariz. Pueblo, Colo. Salt Lake City, Utah Tucson, Ariz. PACIFIC Berkeley, Calif. Fresno, Calif. Glendale, Calif. Honolulu, Hawaii Long Beach, Calif. Los Angeles, Calif. Portland, Oreg. Sacramento, Calif. San Diego, Calif. San Diego, Calif. San Jose, Calif. Santa Cruz, Calif. Santa Cruz, Calif. Seattle, Wash. Spokane, Wash.	. 45 140 197 25 156 151 1 95 111 1,274 168 0 U 61 68 U 30 124 166 122 f. 161 150 32 144 45	572 77 31 90 125 15 94 10 59 7 54 U 25 87 6 7 7 115 77 103 112 28 32	172 177 5 29 44 7 28 1 18 23 217 4 8 U 16 21 U 2 23 33 24 26 22 28 1 1 1 1 1 1 1 1 2 1 2 1 1 1 2 1 2	87 67 16 15 19 112 125 1 U 6 8 U 2 7 10 123 11 21 7 10 12 12 17 10 12 12 17 12 12 17 17 17 17 17 17 17 17 17 17 17 17 17	40 82 4 91 8 - 4 4 34 - 3 1 2 1 1 1 6 2 5 4 - 7 2	18 1 4 1 7 3 1 22 2 U 4 2 7 4 4 1 1 2 2 2 7 4 4 1 1 2 1 2 7 4 1 2 7 4 4 1 1 2 7 4 1 2 7 4 4 1 2 7 4 4 1 2 7 4 4 1 2 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7	49 22 7 42 14 9 9 11 3 3 0 4 7 0 6 0 17 3 15 15 15 15 15 15 15 15 15 15 15 15 15
Kansas City, Mo. Lincoln, Nebr. Minneapolis, Minn. Omaha, Nebr. St. Louis, Mo. St. Paul, Minn. Wichita, Kans.	45	36 151 63 84 30 85	7 38 14 23	12 12 9 3 12	3 2 2 2 3	1 3 4 2	16 6 3 2 8	Tacoma, Wash.	89 11,652 <sup>¶</sup>	65	14	10	327	- 258	6 666

<sup>\*</sup>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.

†Pneumonia and influenza.

§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.

†Total includes unknown ages.
U: Unavailable -: no reported cases

#### 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.

References

- 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 ≥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).\*

<sup>\*</sup>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,† by age group and sex — United States, 1988–1992

Age group		Women			Men			Total			
(yrs)	No.§	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	<b>(±4)</b>		
Total	228	36	(±2)	238	39	(±2)	466	37	(±1)		
Age-adjusted		34	(±2)		40	(±2)		37	(±1)		

<sup>\*</sup>Per 100,000 persons in the civilian population.

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

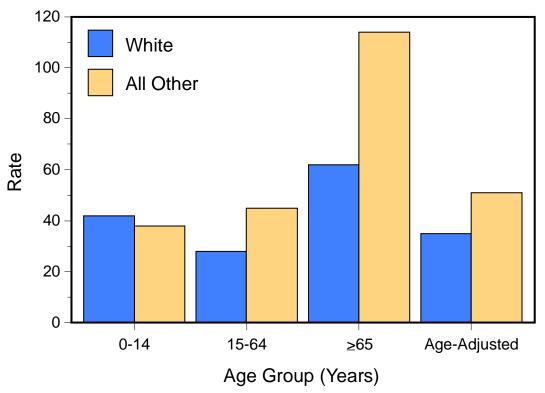
<sup>†</sup> International Classification of Diseases, Ninth Revision, Clinical Modification, codes 345.0–345.9 as first-listed diagnosis on hospitalization record.

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

<sup>¶</sup>Standard error.

Epilepsy — Continued

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



<sup>\*</sup>Per 100,000 persons in the civilian population.

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.

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

<sup>§</sup>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.

#### 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.

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## 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\*

	No. cases, September	Total o		No. cases among children aged <5 years <sup>†</sup> January-September			
Disease	1995	1994	1995	1994	1995		
Congenital rubella							
syndrome	0	3	4	3	4		
Diphtheria	0	2	0	1	0		
Haemophilus influenzae§	82	850	885	238	209		
Hepatitis B <sup>¶</sup>	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		

<sup>\*</sup>Data for 1994 and 1995 are provisional.

<sup>&</sup>lt;sup>†</sup>For 1994 and 1995, age data were available for ≥93% cases.

<sup>§</sup>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.

<sup>\*\*</sup>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.

The Morbidity and Mortality Weekly Report (MMWR) Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available free of charge in electronic format and on a paid subscription basis for paper copy. To receive an electronic copy on Friday of each week, send an e-mail message to lists@list.cdc.gov. The body content should read subscribe mmwr-toc. Electronic copy also is available from CDC's World-Wide Web server at http://www.cdc.gov/ or from CDC's file transfer protocol server at ftp.cdc.gov. To subscribe for paper copy, contact Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone (202) 512-1800.

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