CDC
CENTERS FOR DISEASE CONTROL AND PREVENTION

February 4, 1994 / Vol. 43 / No. 4

MMWR
MORBIDITY AND MORTALITY WEEKLY REPORT

Current Trends

Reported Vaccine-Preventable Diseases — United States, 1993, and the Childhood Immunization Initiative

In the United States, children are routinely vaccinated against nine diseases—diphtheria, *Haemophilus influenzae* type b (Hib), hepatitis B, measles, mumps, pertussis, poliomyelitis (paralytic), rubella, and tetanus (*1*). Based on public health surveillance and epidemiologic assessment of most of these diseases, the impact of childhood vaccination on reported occurrence has been substantial (*2,3*): provisional surveillance data for 1993 indicate that for five of these diseases and for congenital rubella syndrome (CRS), the number of reported cases is at or near the lowest levels ever, suggesting near interruption of transmission of these diseases. This report presents provisional data for December 1993 for these 10 diseases, compares provisional data for 1993 with final data for 1992, and describes the Childhood Immunization Initiative (CII).

In December 1993, state health departments reported no cases of CRS, diphtheria, or poliomyelitis, and fewer than five cases each of measles and tetanus (Table 1). In addition, no cases of indigenously acquired measles were reported that could not be linked to chains of transmission from known imported cases during September–December, the longest such period since surveillance began in 1912.

Provisional data for 1993 indicate that the numbers of reported cases of CRS, diphtheria, measles, poliomyelitis, rubella, and tetanus were at or near the lowest levels ever (Table 1). Marked differences were observed in the age-specific incidence of invasive *H. influenzae* disease,* acute hepatitis B, mumps, and pertussis; the number of persons with reported cases for whom age was known was 1211, 11,633, 1515, and 5793, respectively. For invasive *H. influenzae* disease, preschool-aged (aged <5 years) children constituted 399 (33%) cases; for acute hepatitis B, 142 (1%†); for mumps,

* *H. influenzae* serotype is not routinely reported to the National Notifiable Diseases Surveillance System.

† Because most hepatitis B virus infections among infants and children aged <5 years are asymptomatic (although more 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.

Childhood Immunization Initiative — Continued

275 (18%); and for pertussis, 3753 (65%). Of preschool-aged children with pertussis, 2549 (68%) were aged <1 year (*4*).

Reported by: National Immunization Program, CDC.

Editorial Note: The findings in this report indicate that the incidences of most vaccine-preventable diseases during 1993 were at or near their lowest reported levels. However, decreases in disease burden and mortality can be sustained only by achieving and maintaining high vaccination levels among children aged 0–2 years. For example, although the incidence of measles was low during 1981–1988, during 1989–1991, a resurgence of measles—attributed primarily to a failure to vaccinate preschool-aged children on time (i.e., early during the second year of life) (*5*)—accounted for an estimated 55,000 measles cases, 11,000 hospitalizations, and 130 deaths (CDC, unpublished data, 1993).

The national response to the resurgence of measles has improved vaccination coverage among children aged 0–2 years. However, because no system has been fully established to ensure that all children complete the recommended series of 11–15 doses of vaccine by their second birthday, vaccination coverage remains unacceptably low in many areas of the United States (*1,6*). In 1993, the President initiated CII, a more comprehensive national response to undervaccination. The goals of CII are to 1) eliminate indigenous cases of six vaccine-preventable diseases (i.e., diphtheria, Hib disease [among children aged <5 years], measles, poliomyelitis, rubella, and tetanus

TABLE 1. Number of reported cases of diseases preventable by routine childhood vaccination — United States, December 1993 and 1992–1993*

Disease	No. cases, December 1993	Total cases		No. cases among children aged <5 years†	
		1992	1993	1992	1993
Congenital rubella syndrome (CRS)	0	**9**	**7**	9	5§
Diphtheria	0	**3**	**0**	1	0
Haemophilus influenzae ¶	135	**1,412**	**1,264**	592	399
Hepatitis B**	1,330	**16,126**	**12,396**	215	142
Measles	4	**2,231**	**281**	1,116	104
Mumps	157	**2,485**	**1,640**	364	275
Pertussis	700	**3,935**	**6,335**	2,261	3,753
Poliomyelitis, paralytic††	—	**—**	**—**	—	—
Rubella	11	**157**	**195**	24	36
Tetanus	4	**44**	**43**	0	1

*Data for 1992 are final and for 1993, provisional.
†For 1992 and 1993, age data were available for 90% or more cases, except for 1992 age data for mumps and rubella, which were available for 84% and 64% of cases, respectively.
§Age reported for five of seven persons with CRS through December 31, 1993.
¶Invasive disease; *H. influenzae* serotype is not routinely reported to the National Notifiable Diseases Surveillance System.
**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.
††Four cases of suspected poliomyelitis were reported in 1993; four of the five suspected cases with onset in 1992 were confirmed, and the confirmed cases were vaccine-associated.

Childhood Immunization Initiative — Continued

TABLE 2. Vaccination coverage levels targeted by the objectives for the Childhood Immunization Initiative, by vaccine and year* — United States

Vaccine	1992 Baseline†	1994	1995	1996
Diphtheria and tetanus toxoids and pertussis (3–4 doses)	83%	85%	87%	90%
Poliomyelitis (3 doses)	72%	75%	85%	90%
Measles-mumps-rubella (1 dose)	83%	85%	90%	90%
Haemophilus influenzae type b (3–4 doses)	—	75%	85%	90%
Hepatitis B (3 doses)	—	30%	50%	70%§

*Baseline data for 1993 are not yet available.
†Baseline data from 1992 National Health Interview Survey (*6*).
§The goal is for 90% vaccination coverage by 1998.

[among children aged <15 years] by 1996§; 2) increase vaccination coverage levels to at least 90% among 2-year-old children by 1996 for each of the vaccinations recommended routinely for children (for hepatitis B, the objective is set for 1998) (Table 2); and 3) establish a vaccination-delivery system that maintains and further improves high coverage levels.

CII comprises six broad areas of activity that constitute the framework for meeting the nation's goals for 1996 and beyond:

- **Improve quality and quantity of vaccination-delivery services.** State and local health agencies will use new federal resources to hire personnel, extend clinic hours, and encourage health-care providers to use all health-care contacts to administer needed vaccines and reduce obstacles parents encounter in obtaining vaccinations for children (*7*). Computerized state vaccination information systems are being developed to remind parents when vaccinations are due and to assist health-care providers in determining the vaccination needs of patients.
- **Increase community participation and education.** A long-term, national outreach campaign will be initiated in April 1994 to improve parent awareness of the need for timely childhood vaccination and to prompt health-care providers to use all health-care contacts to administer needed vaccines to children. At the national level, elements of this campaign will include widespread distribution of radio, television, and print public service announcements; dissemination of a national theme and call to action; and other activities designed to unify efforts throughout the country. At the state and community levels, the campaign will include a grass roots organizing effort to unite all sectors of the community (e.g. public and private health-care providers, business groups, community leaders, minority groups, voluntary and service organizations, religious institutions, and media affiliates).
- **Reduce vaccine cost for parents.** To reduce vaccine cost as a barrier to vaccination, the U.S. Department of Health and Human Services will initiate the Vaccines for Children program on October 1, 1994. This program will purchase vaccines from manufacturers and provide them at no cost to participating public and private health-care providers for use in children aged 0–18 years who are eligible for Medicaid, are without health insurance, or are American Indian. Children with health insurance who are served by federally qualified health centers also will be able to

§Objectives to reduce cases of mumps, pertussis, and hepatitis B will be set during 1994.

Childhood Immunization Initiative — Continued

receive free vaccine if their insurance does not cover vaccination. State vaccination programs will be permitted to purchase additional vaccines at reduced federal contract prices.

- **Improve surveillance for coverage and disease.** An improved system for measuring vaccination coverage at the national, state, and local levels among infants and young children is being established to identify undervaccinated populations and to monitor progress in achieving coverage goals. Clinic or office-based assessments are being completed to assist health-care providers in increasing coverage among the populations they serve. Surveillance for vaccine-preventable diseases will be intensified by investigating each case of disease targeted for elimination to determine how that case might have been prevented and enable initiation of aggressive control measures when cases are detected.
- **Form and strengthen partnerships.** Many federal agencies provide vaccinations to children, reimburse for vaccination services, or have access—through education, food, housing, or other assistance—to populations at high risk for undervaccination. Similarly, many private providers and organizations vaccinate children or otherwise serve or advocate for children. Coordination of these efforts will be strengthened and new partnerships formed to concentrate the efforts of these providers and organizations on improving the vaccination of children.
- **Improve vaccines.** Emphasis will be placed on the development and licensure of new and safer or more effective vaccines. Existing vaccination schedules will be simplified, and development of combination vaccines will be promoted.

To track progress toward achieving the goals of CII, CDC's National Immunization Program is initiating in this issue of *MMWR* monthly publication of a table that summarizes the number of cases of all diseases preventable by routine childhood vaccination reported during the previous month and year-to-date (provisional data) (Table 1). 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 derived from CDC's National Notifiable Diseases Surveillance System.

References

1. CDC. General recommendations on immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1994;43(in press).
2. Orenstein WA, Atkinson W, Mason D, Bernier RH. Barriers to vaccinating preschool children. J Health Care Poor Underserved 1990;1:315–30.
3. Adams WG, Deaver KA, Cochi SL, et al. Decline of childhood *Haemophilus influenzae* type b (Hib) disease in the Hib vaccine era. JAMA 1993;269:221–6.
4. CDC. Resurgence of pertussis—United States, 1993. MMWR 1993;42:952–3,959–60.
5. National Vaccine Advisory Committee. The measles epidemic: the problems, barriers, and recommendations. JAMA 1991;266:1547–52.
6. CDC. Vaccination coverage of 2-year-old children—United States, 1991–1992. MMWR 1993; 42:985–8.
7. CDC. Standards for pediatric immunization practices. JAMA 1993;269:1817–22.

Current Trends

Prevalence of Adults With No Known Major Risk Factors for Coronary Heart Disease — Behavioral Risk Factor Surveillance System, 1992

Although the death rate for coronary heart disease (CHD) in the United States has declined approximately 50% since 1970, CHD remains the leading cause of death for both men and women and, in 1990, accounted for 489,340 deaths (*1*). National strategies and programs have targeted individual risk factors for death attributed to CHD. However, an alternative approach may be to measure the prevalence of adults who have no known risk factors for CHD. This report provides state-specific estimates of and characterizes adults who report having no known major risk factors for CHD.

Data were analyzed from 91,428 persons aged ≥18 years who resided in 48 states and the District of Columbia and participated in the 1992 Behavioral Risk Factor Surveillance System (BRFSS), a random-digit–dialed telephone survey. The analysis examined survey responses regarding the following risk factors: current cigarette smoking (smoked at least 100 cigarettes in their lifetime and now smoking), physical inactivity (no or irregular leisure-time physical activity), overweight (body mass index ≥27.3 for women and ≥27.8 for men), high blood pressure (told more than once by a health professional he/she has high blood pressure or is currently taking antihypertensive medications), high blood cholesterol (ever told by a health professional he/she has high blood cholesterol), and diabetes (ever told by a doctor he/she has diabetes). Persons who reported having none of these risk factors were defined as having no known risk factors for CHD.

The results were weighted to account for the distribution of demographic characteristics in each state. To determine the actual prevalence of adults in each state with no known CHD risk factors, state-specific estimates were not standardized to a referent population. For data aggregated from all states, census data for the 1980 U.S. population were used to standardize comparisons by age, race, and educational status; aggregated analyses were restricted to black and white respondents for whom the age, race, and education distributions of the population were known. SESUDAAN was used to calculate the standard errors for the prevalence estimates (*2*).

Of the 91,428 respondents, 18% reported having none of the six major CHD risk factors; 35% reported having one risk factor; 29%, two risk factors; 13%, three risk factors; and 5%, four to six risk factors. In every state, less than 30% of the population had no known risk factors. The state-specific proportion of respondents with no known risk factors varied minimally; in 45 (92%) of the states, the proportion ranged from 14% to 26% (Table 1).

For both males and females, the percentage of respondents with no known risk factors was highest for 18–34-year-olds. Among males, the percentage was lowest for those aged 50–64 years, and among females, the percentage varied inversely with age (Table 2). The prevalence of no known risk factors for CHD increased directly with increasing level of education.

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Editorial Note: The finding in this report that, in 1992, only 18% of adults reported having no known risk factors for CHD indicates that, despite improvements in the treatment and control of CHD-related conditions, a substantial percentage of adults continue to be at risk for CHD. This low prevalence underscores the need for primary prevention efforts that focus on achieving behavioral changes that prevent the occur-

TABLE 1. Percentage of adults who reported having no known major risk factors for coronary heart disease,* by state — Behavioral Risk Factor Surveillance System, 1992

State	Sample size	% With no risk factors	(95% CI†)	State	Sample size	% With no risk factors	(95% CI)
Alabama	2115	24.5	(±2.0)	Montana	1160	22.8	(±2.8)
Alaska	1463	26.4	(±3.6)	Nebraska	1527	21.1	(±2.4)
Arizona	1737	19.9	(±2.7)	Nevada	1561	22.8	(±2.5)
California	3831	24.8	(±1.6)	New Hampshire	1408	23.8	(±2.7)
Colorado	1753	28.2	(±2.4)	New Jersey	1363	19.6	(±2.4)
Connecticut	1630	21.0	(±2.2)	New Mexico	1127	21.6	(±2.8)
Delaware	1417	19.3	(±2.5)	New York	2227	18.1	(±1.8)
District of Columbia	1405	19.4	(±2.6)	North Carolina	2012	17.5	(±1.9)
Florida	2613	20.4	(±1.7)	North Dakota	1731	19.9	(±2.2)
Georgia	1903	17.8	(±2.1)	Ohio	1232	16.7	(±2.3)
Hawaii	1853	21.5	(±2.3)	Oklahoma	1419	18.7	(±2.6)
Idaho	1697	25.1	(±2.4)	Oregon	3158	26.0	(±1.7)
Illinois	2095	19.9	(±2.0)	Pennsylvania	2309	18.7	(±1.8)
Indiana	2277	17.2	(±1.9)	Rhode Island	1733	24.5	(±2.3)
Iowa	1601	18.9	(±2.2)	South Carolina	1860	14.4	(±2.0)
Kansas	1338	23.6	(±2.6)	South Dakota	1667	9.4	(±1.6)
Kentucky	2039	15.2	(±1.9)	Tennessee	2582	16.9	(±1.6)
Louisiana	1560	15.9	(±2.2)	Texas	2361	21.1	(±1.9)
Maine	1205	20.7	(±2.6)	Utah	1721	28.9	(±2.4)
Maryland	2038	18.5	(±1.9)	Vermont	1819	24.7	(±2.3)
Massachusetts	1408	26.1	(±2.6)	Virginia	1683	24.1	(±2.3)
Michigan	2344	18.6	(±1.8)	Washington	2425	26.9	(±2.0)
Minnesota	3339	22.4	(±1.6)	West Virginia	2318	14.1	(±1.6)
Mississippi	1450	14.3	(±2.2)	Wisconsin	1469	20.6	(±2.5)
Missouri	1440	18.5	(±2.2)				

*Risk factors: current cigarette smoking (smoked at least 100 cigarettes in their lifetime and now smoking), physical inactivity (no or irregular leisure-time physical activity), overweight (body mass index ≥27.3 for women and ≥27.8 for men), high blood pressure (told more than once by a health professional he/she has high blood pressure or is currently taking antihypertensive medications), high blood cholesterol (ever told by a health professional he/she has high blood cholesterol), and diabetes (ever told by a doctor he/she has diabetes).
†Confidence interval.

Coronary Heart Disease — Continued

TABLE 2. Percentage of adults who reported having no known major risk factors for coronary heart disease,* by age group, education level, and sex — Behavioral Risk Factor Surveillance System, 1992

	Men			Women		
Characteristic	Sample size	% With no risk factor	(95% CI†)	Sample size	% With no risk factor	(95% CI)
Age group (yrs)§						
18–34	12,202	24.5	(±1.3)	14,647	22.7	(±1.1)
35–49	11,652	12.6	(±0.9)	13,955	17.9	(±1.0)
50–64	6,598	9.4	(±1.0)	8,515	11.6	(±0.9)
≥65	5,601	13.4	(±1.2)	10,488	9.2	(±0.8)
Education (yrs)¶						
<12	4,961	10.4	(±1.5)	7,145	8.5	(±1.2)
12	11,577	14.6	(±0.9)	16,941	15.9	(±0.8)
>12	19,515	25.4	(±0.9)	23,519	26.9	(±0.8)

*Risk factors: current cigarette smoking (smoked at least 100 cigarettes in their lifetime and now smoking), physical inactivity (no or irregular leisure-time physical activity), overweight (body mass index ≥27.3 for women and ≥27.8 for men), high blood pressure (told more than once by a health professional he/she has high blood pressure or is currently taking antihypertensive medications), high blood cholesterol (ever told by a health professional he/she has high blood cholesterol), and diabetes (ever told by a doctor he/she has diabetes).
†Confidence interval.
§Age comparisons were standardized for education and race by using 1980 U.S. Bureau of the Census data.
¶Number of years completed; education comparisons were standardized for age and race by using 1980 U.S. Bureau of the Census data.

rence of risk factors. Several of the year 2000 national health objectives target the primary prevention of specific risk factors for CHD, including overweight (objective 15.10), physical inactivity (objective 15.11), high blood cholesterol (objective 15.7), and cigarette smoking (objective 15.12) (*3*). Achievement of these objectives should substantially increase the number of U.S. adults who have no known major risk factors for CHD and should further reduce CHD-associated mortality.

The prevalences of two risk factors—cigarette smoking and high blood cholesterol—have decreased substantially. In 1965, approximately 40% of U.S. adults smoked cigarettes; in comparison, by 1991, 26% smoked cigarettes (*4*). In addition, from the second National Health and Nutrition Examination Survey (NHANES II) (1976–1980) to NHANES III (1988–1991), the proportion of adults with high blood cholesterol levels (≥240 mg/dL) decreased from 26% to 20% (*5*). For other risk factors, however, prevalences have remained constant or increased. For example, when compared with 1987, the proportion of adults who engaged in no leisure-time physical activity (24%) in 1991 was unchanged, and the proportion who engaged in moderate physical activity five or more times per week increased only slightly (22% in 1987 and 24% in 1991) (*6*). From 1987 through 1991, the proportion of U.S. adults who were overweight increased from 26% to 28%, respectively (*6*). Finally, despite substantial improvements in the awareness, treatment, and control of hypertension, hypertension continues to affect an estimated 50 million persons in the United States (*7*).

Although the findings in this report assist in targeting efforts to reduce specific risk factors for CHD, these findings are subject to at least two limitations. First, because BRFSS estimates are based on self-reports, the prevalence of most risk factors,

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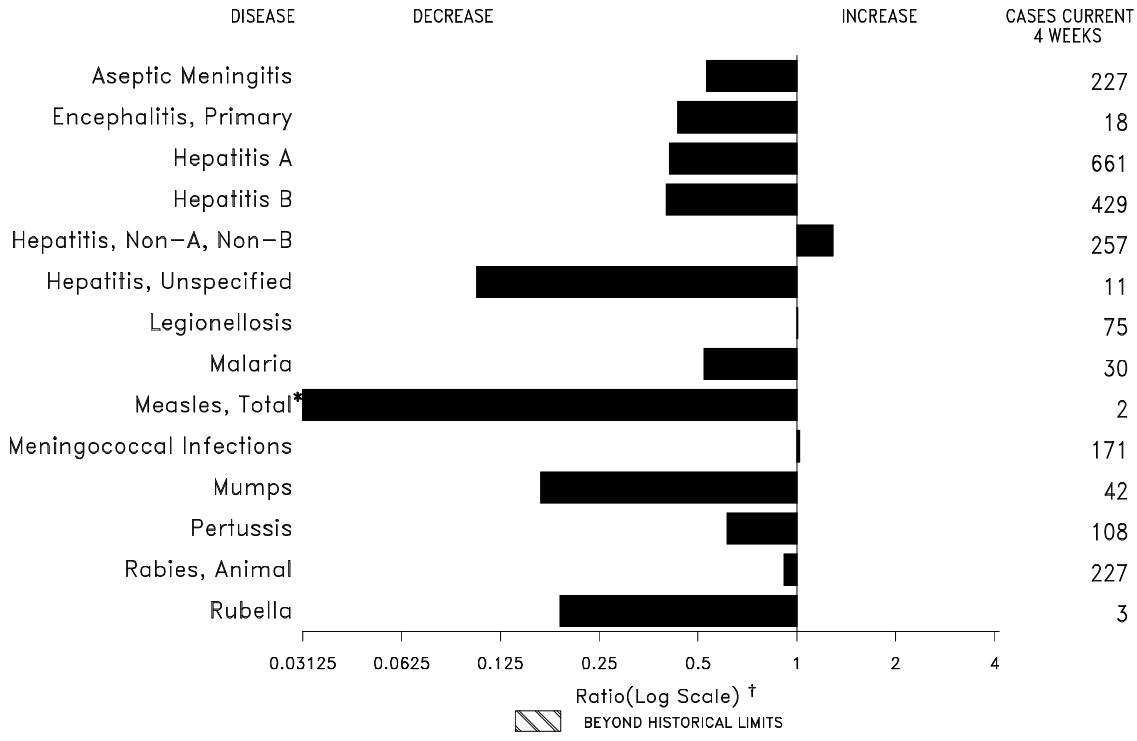
FIGURE I. Notifiable disease reports, comparison of 4-week totals ending January 29, 1994, with historical data — United States



*The large apparent decrease in reported cases of measles(total) reflects dramatic fluctuations in the historical baseline. (Ratio (log scale) for week four is 0.00651).

† 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 thehatched 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 January 29, 1994 (4th Week)

	Cum. 1994		Cum. 1994
AIDS*	-	Measles: imported	2
Anthrax	-	indigenous	2
Botulism: Foodborne	5	Plague	-
Infant	-	Poliomyelitis, Paralytic§	-
Other	1	Psittacosis	2
Brucellosis	2	Rabies, human	-
Cholera	-	Syphilis, primary & secondary	1,211
Congenital rubella syndrome	-	Syphilis, congenital, age < 1 year	-
Diphtheria	-	Tetanus	1
Encephalitis, post-infectious	6	Toxic shock syndrome	11
Gonorrhea	23,326	Trichinosis	-
Haemophilus influenzae (invasive disease)†	60	Tuberculosis	989
Hansen Disease	9	Tularemia	-
Leptospirosis	4	Typhoid fever	15
Lyme Disease	101	Typhus fever, tickborne (RMSF)	6

*Updated monthly; last update December 31, 1993.
†Of 55 cases of known age, 17 (31%) were reported among children less than 5 years of age.
§Two (2) cases of suspected poliomyelitis have been reported in 1994; 4 of the 5 suspected cases with onset in 1992 were confirmed; the confirmed cases were vaccine associated.

TABLE II. Cases of selected notifiable diseases, United States, weeks ending January 29, 1994, and January 30, 1993 (4th Week)

Reporting Area	AIDS*	Aseptic Meningitis	Encephalitis		Gonorrhea		Hepatitis (Viral), by type				Legionellosis	Lyme Disease
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum. 1994	Cum. 1994	Cum. 1994	Cum. 1994	Cum. 1994	Cum. 1993	Cum. 1994	Cum. 1994	Cum. 1994	Cum. 1994	Cum. 1994	Cum. 1994
UNITED STATES	-	283	26	6	23,326	29,175	919	479	277	19	88	101
NEW ENGLAND	-	20	3	-	610	543	25	24	9	5	8	19
Maine	-	2	1	-	3	6	-	-	-	-	-	-
N.H.	-	-	-	-	-	4	2	-	1	-	-	-
Vt.	-	2	-	-	1	5	-	-	-	-	-	-
Mass.	-	7	1	-	230	305	15	22	3	5	7	14
R.I.	-	9	1	-	29	41	8	2	5	-	1	5
Conn.	-	-	-	-	347	182	-	-	-	-	-	-
MID. ATLANTIC	-	18	1	-	856	3,407	20	16	8	1	3	35
Upstate N.Y.	-	4	-	-	-	275	6	6	3	-	-	11
N.Y. City	-	-	-	-	-	1,541	-	-	-	-	-	-
N.J.	-	-	-	-	-	616	5	-	-	-	-	4
Pa.	-	14	1	-	856	975	9	10	5	1	3	20
E.N. CENTRAL	-	59	10	4	4,897	5,079	78	66	25	-	36	2
Ohio	-	15	2	-	1,783	1,227	34	15	-	-	20	2
Ind.	-	23	-	-	665	540	27	20	-	-	7	-
Ill.	-	3	2	-	969	1,617	-	-	-	-	1	-
Mich.	-	18	6	4	1,389	1,148	14	29	25	-	7	-
Wis.	-	-	-	-	91	547	3	2	-	-	1	-
W.N. CENTRAL	-	23	-	-	1,301	1,653	17	12	1	-	14	1
Minn.	-	-	-	-	376	221	-	-	-	-	-	-
Iowa	-	13	-	-	65	148	2	2	-	-	4	-
Mo.	-	2	-	-	608	748	4	8	1	-	3	-
N. Dak.	-	-	-	-	-	9	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	16	-	-	-	-	-	-
Nebr.	-	-	-	-	-	70	8	-	-	-	6	-
Kans.	-	8	-	-	252	441	3	2	-	-	1	1
S. ATLANTIC	-	58	2	-	7,853	8,269	69	137	67	1	7	36
Del.	-	-	-	-	100	114	1	5	16	-	-	20
Md.	-	7	2	-	1,393	1,241	19	15	10	-	1	2
D.C.	-	2	-	-	681	468	4	3	-	-	-	-
Va.	-	-	-	-	1,319	487	-	5	1	1	-	-
W. Va.	-	3	-	-	63	55	1	3	1	-	1	1
N.C.	-	14	-	-	2,019	1,848	5	37	10	-	1	7
S.C.	-	3	-	-	736	970	4	1	-	-	1	-
Ga.	-	3	-	-	-	1,098	14	49	19	-	-	6
Fla.	-	26	-	-	1,542	1,988	21	19	10	-	3	-
E.S. CENTRAL	-	26	1	1	3,363	2,829	25	61	88	-	7	1
Ky.	-	14	1	1	310	378	13	2	2	-	-	1
Tenn.	-	1	-	-	732	538	4	51	86	-	5	-
Ala.	-	9	-	-	1,507	1,171	6	8	-	-	-	-
Miss.	-	2	-	-	814	742	2	-	-	-	2	-
W.S. CENTRAL	-	5	-	-	2,053	3,785	36	33	19	-	1	-
Ark.	-	2	-	-	719	671	2	-	-	-	-	-
La.	-	1	-	-	1,334	1,098	1	3	-	-	-	-
Okla.	-	-	-	-	-	253	14	22	19	-	1	-
Tex.	-	2	-	-	-	1,763	19	8	-	-	-	-
MOUNTAIN	-	8	1	-	507	838	196	28	28	2	6	4
Mont.	-	-	-	-	20	10	-	2	-	-	2	-
Idaho	-	-	-	-	4	7	22	3	12	-	-	-
Wyo.	-	-	-	-	8	4	2	2	5	-	-	-
Colo.	-	5	-	-	202	345	8	-	3	1	1	-
N. Mex.	-	1	-	-	87	67	75	13	3	1	1	4
Ariz.	-	2	-	-	43	213	72	3	-	-	-	-
Utah	-	-	-	-	29	5	13	2	3	-	-	-
Nev.	-	-	1	-	114	187	4	3	2	-	2	-
PACIFIC	-	66	8	1	1,886	2,772	453	102	32	10	6	3
Wash.	-	-	-	-	242	330	42	7	6	-	2	-
Oreg.	-	-	-	-	99	108	17	2	-	-	-	-
Calif.	-	54	7	-	1,439	2,253	380	87	23	10	4	3
Alaska	-	1	1	-	45	45	8	-	-	-	-	-
Hawaii	-	11	-	1	61	36	6	6	3	-	-	-
Guam	-	-	-	-	-	8	-	-	-	-	-	-
P.R.	-	-	-	-	37	37	-	1	-	-	-	-
V.I.	-	-	-	-	3	10	-	1	-	-	-	-
Amer. Samoa	-	-	-	-	4	3	2	-	-	-	-	-
C.N.M.I.	-	-	-	-	4	6	-	-	-	-	-	-

N: Not notifiable U: Unavailable C.N.M.I.: Commonwealth of Northern Mariana Islands

*Updated monthly; last update December 31, 1993.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending January 29, 1994, and January 30, 1993 (4th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
	Cum. 1994	1994	Cum. 1994	1994	Cum. 1994	Cum. 1993	Cum. 1994	1994	Cum. 1994	1994	Cum. 1994	Cum. 1993	1994	Cum. 1994	Cum. 1993
UNITED STATES	35	-	2	-	2	14	214	16	56	36	173	221	1	3	11
NEW ENGLAND	4	-	-	-	-	7	16	-	1	2	8	83	1	1	-
Maine	1	-	-	-	-	-	3	-	-	-	-	3	-	-	-
N.H.	-	-	-	-	-	-	1	-	1	-	2	37	-	-	-
Vt.	-	-	-	-	-	1	-	-	-	2	4	10	-	-	-
Mass.	-	-	-	-	-	3	8	-	-	-	-	32	1	1	-
R.I.	3	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Conn.	-	-	-	-	-	3	4	-	-	-	2	-	-	-	-
MID. ATLANTIC	1	-	-	-	-	2	8	2	6	9	50	33	-	1	2
Upstate N.Y.	1	-	-	-	-	-	2	-	-	-	5	6	-	1	-
N.Y. City	-	U	-	U	-	-	-	U	-	U	-	-	U	-	-
N.J.	-	-	-	-	-	2	-	-	-	-	-	17	-	-	2
Pa.	-	-	-	-	-	-	6	2	6	9	45	10	-	-	-
E.N. CENTRAL	3	-	-	-	-	-	44	4	12	3	27	46	-	-	1
Ohio	1	-	-	-	-	-	9	-	-	-	18	7	-	-	-
Ind.	1	-	-	-	-	-	10	1	1	2	2	2	-	-	-
Ill.	-	-	-	-	-	-	14	-	4	-	-	9	-	-	-
Mich.	1	-	-	-	-	-	7	3	7	1	7	5	-	-	-
Wis.	-	-	-	-	-	-	4	-	-	-	-	23	-	-	1
W.N. CENTRAL	1	-	-	-	-	-	7	1	1	1	8	9	-	-	1
Minn.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iowa	1	-	-	-	-	-	-	1	1	-	-	-	-	-	-
Mo.	-	-	-	-	-	-	3	-	-	1	3	5	-	-	1
N. Dak.	-	U	-	U	-	-	-	U	-	U	-	1	U	-	-
S. Dak.	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-
Nebr.	-	-	-	-	-	-	1	-	-	-	-	2	-	-	-
Kans.	-	-	-	-	-	-	2	-	-	-	5	-	-	-	-
S. ATLANTIC	10	-	-	-	-	3	39	5	16	12	34	2	-	-	1
Del.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Md.	3	-	-	-	-	1	4	3	3	7	12	2	-	-	-
D.C.	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Va.	-	-	-	-	-	1	1	-	-	1	1	-	-	-	-
W. Va.	-	-	-	-	-	-	4	-	-	-	1	-	-	-	-
N.C.	1	-	-	-	-	-	6	2	10	2	14	-	-	-	-
S.C.	1	-	-	-	-	-	-	-	1	1	5	-	-	-	-
Ga.	1	-	-	-	-	-	9	-	-	-	-	-	-	-	-
Fla.	3	-	-	-	-	1	14	-	2	1	1	-	-	-	-
E.S. CENTRAL	-	-	-	-	-	-	31	1	1	1	3	5	-	-	-
Ky.	-	-	-	-	-	-	7	-	-	-	-	1	-	-	-
Tenn.	-	-	-	-	-	-	7	-	-	1	1	1	-	-	-
Ala.	-	-	-	-	-	-	11	-	-	-	2	3	-	-	-
Miss.	-	-	-	-	-	-	6	1	1	-	-	-	-	-	-
W.S. CENTRAL	-	-	-	-	1	-	16	1	8	-	4	3	-	-	-
Ark.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
La.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Okla.	-	-	-	-	-	-	5	-	3	-	4	3	-	-	-
Tex.	-	-	-	-	1	-	10	1	5	-	-	-	-	-	-
MOUNTAIN	1	-	1	-	-	-	13	2	2	3	4	6	-	-	2
Mont.	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Idaho	-	-	1	-	-	-	1	1	1	-	-	-	-	-	-
Wyo.	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Colo.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
N. Mex.	-	-	-	-	-	-	2	N	N	-	1	4	-	-	-
Ariz.	-	-	-	-	-	-	5	-	-	3	3	1	-	-	-
Utah	1	-	-	-	-	-	2	-	-	-	-	-	-	-	2
Nev.	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
PACIFIC	15	-	1	-	1	2	40	-	9	5	35	34	-	1	4
Wash.	-	-	-	-	-	-	4	-	1	1	6	1	-	-	-
Oreg.	-	-	-	-	-	-	3	N	N	-	1	-	-	-	1
Calif.	11	-	1	-	1	1	32	-	6	1	24	30	-	1	1
Alaska	-	-	-	-	-	-	-	-	2	-	-	-	-	-	1
Hawaii	4	-	-	-	-	1	1	-	-	3	4	3	-	-	1
Guam	-	U	-	U	-	-	-	U	-	U	-	-	U	-	-
P.R.	-	-	-	-	-	30	-	-	-	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C.N.M.I.	1	1	10	-	-	-	-	-	-	-	-	-	-	-	-

*For measles only, imported cases include both out-of-state and international importations.
N: Not notifiable U: Unavailable † International § Out-of-state

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending January 29, 1994, and January 30, 1993 (4th Week)

Reporting Area	Syphilis (Primary & Secondary)		Toxic-Shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1994	Cum. 1993	Cum. 1994	Cum. 1994	Cum. 1993	Cum. 1994	Cum. 1994	Cum. 1994	Cum. 1994
UNITED STATES	1,211	2,118	11	989	960	-	15	6	254
NEW ENGLAND	18	49	-	13	13	-	2	-	89
Maine	-	-	-	-	2	-	-	-	-
N.H.	-	4	-	-	-	-	-	-	9
Vt.	-	-	-	-	-	-	-	-	2
Mass.	4	29	-	3	1	-	2	-	42
R.I.	1	1	-	1	-	-	-	-	-
Conn.	13	15	-	9	10	-	-	-	36
MID. ATLANTIC	71	190	2	43	138	-	-	-	38
Upstate N.Y.	-	9	2	-	18	-	-	-	-
N.Y. City	56	135	-	34	85	-	-	-	-
N.J.	-	39	-	-	10	-	-	-	24
Pa.	15	7	-	9	25	-	-	-	14
E.N. CENTRAL	134	318	3	67	90	-	2	-	2
Ohio	49	87	1	13	14	-	-	-	-
Ind.	16	17	-	4	5	-	1	-	-
Ill.	40	114	-	46	67	-	-	-	-
Mich.	24	58	2	-	-	-	1	-	-
Wis.	5	42	-	4	4	-	-	-	2
W.N. CENTRAL	70	136	4	22	17	-	-	-	9
Minn.	4	9	-	6	-	-	-	-	-
Iowa	3	12	4	3	2	-	-	-	6
Mo.	63	114	-	9	8	-	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	2	2	-	-	-	-
Nebr.	-	1	-	-	2	-	-	-	-
Kans.	-	-	-	2	3	-	-	-	3
S. ATLANTIC	400	590	-	127	128	-	4	4	89
Del.	-	11	-	-	1	-	-	-	1
Md.	11	32	-	22	20	-	2	-	37
D.C.	13	12	-	11	8	-	-	-	-
Va.	48	44	-	-	-	-	-	-	19
W. Va.	-	1	-	3	4	-	-	-	-
N.C.	160	177	-	-	33	-	-	4	7
S.C.	38	95	-	18	22	-	-	-	6
Ga.	69	106	-	73	40	-	-	-	19
Fla.	61	112	-	-	-	-	2	-	-
E.S. CENTRAL	307	274	-	38	38	-	-	1	8
Ky.	15	30	-	5	12	-	-	-	-
Tenn.	63	61	-	-	-	-	-	-	-
Ala.	62	83	-	31	17	-	-	-	8
Miss.	167	100	-	2	9	-	-	1	-
W.S. CENTRAL	196	434	-	21	5	-	-	1	5
Ark.	34	54	-	21	4	-	-	-	1
La.	162	159	-	-	-	-	-	-	-
Okla.	-	47	-	-	1	-	-	1	4
Tex.	-	174	-	-	-	-	-	-	-
MOUNTAIN	14	8	-	30	7	-	2	-	9
Mont.	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	2	-	-	-	-	-
Wyo.	-	-	-	1	-	-	-	-	2
Colo.	8	3	-	-	-	-	1	-	-
N. Mex.	-	1	-	4	-	-	-	-	-
Ariz.	3	3	-	17	7	-	-	-	7
Utah	3	-	-	-	-	-	1	-	-
Nev.	-	1	-	6	-	-	-	-	-
PACIFIC	1	119	2	628	524	-	5	-	5
Wash.	1	5	-	13	12	-	-	-	-
Oreg.	-	7	-	8	3	-	-	-	-
Calif.	-	106	2	596	491	-	4	-	1
Alaska	-	-	-	-	1	-	-	-	4
Hawaii	-	1	-	11	17	-	1	-	-
Guam	-	-	-	-	1	-	-	-	-
P.R.	25	46	-	-	-	-	-	-	4
V.I.	1	5	-	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	1	-	-
C.N.M.I.	-	-	-	10	-	-	-	-	-

U: Unavailable

TABLE III. Deaths in 121 U.S. cities,* week ending January 29, 1994 (4th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	624	431	118	54	16	5	61
Boston, Mass.	158	98	33	20	5	2	27
Bridgeport, Conn.	50	36	9	4	1	-	4
Cambridge, Mass.	22	15	6	1	-	-	2
Fall River, Mass.	27	24	2	1	-	-	2
Hartford, Conn.	62	43	8	7	4	-	5
Lowell, Mass.	23	19	3	1	-	-	2
Lynn, Mass.	14	10	2	2	-	-	-
New Bedford, Mass.	20	14	4	1	1	-	-
New Haven, Conn.	39	26	8	3	1	1	4
Providence, R.I.	54	31	16	7	-	-	5
Somerville, Mass.	3	3	-	-	-	-	-
Springfield, Mass.	60	44	9	3	4	-	4
Waterbury, Conn.	26	17	5	3	-	1	-
Worcester, Mass.	66	51	13	1	-	1	6
MID. ATLANTIC	3,001	2,044	510	308	67	72	163
Albany, N.Y.	48	40	6	-	1	1	5
Allentown, Pa.	39	30	7	1	1	-	-
Buffalo, N.Y.	100	71	19	5	3	2	3
Camden, N.J.	48	32	6	7	-	3	2
Elizabeth, N.J.	31	20	5	5	-	1	3
Erie, Pa.§	84	70	8	5	1	-	5
Jersey City, N.J.	59	38	9	8	2	2	2
New York City, N.Y.	1,515	969	265	216	30	35	54
Newark, N.J.	98	36	29	26	2	5	11
Paterson, N.J.	31	20	7	2	2	-	1
Philadelphia, Pa.	295	203	56	15	11	10	16
Pittsburgh, Pa.§	129	101	21	4	2	1	14
Reading, Pa.	14	10	1	1	2	-	3
Rochester, N.Y.	170	134	24	5	3	4	14
Schenectady, N.Y.	35	27	8	-	-	-	4
Scranton, Pa.§	77	69	7	-	1	-	4
Syracuse, N.Y.	115	88	13	3	5	6	19
Trenton, N.J.	47	32	10	3	-	2	-
Utica, N.Y.	35	28	5	1	1	-	1
Yonkers, N.Y.	31	26	4	1	-	-	2
E.N. CENTRAL	2,705	1,747	481	267	122	88	243
Akron, Ohio	67	47	13	3	1	3	-
Canton, Ohio	38	29	8	1	-	-	4
Chicago, Ill.	604	254	113	125	80	32	44
Cincinnati, Ohio	93	72	11	3	1	6	13
Cleveland, Ohio	211	147	40	16	3	5	8
Columbus, Ohio	231	166	36	17	9	3	25
Dayton, Ohio	151	111	29	5	1	5	13
Detroit, Mich.	269	170	55	29	10	5	21
Evansville, Ind.	77	56	12	5	2	2	11
Fort Wayne, Ind.	76	59	11	4	1	1	6
Gary, Ind.	20	12	3	4	1	-	-
Grand Rapids, Mich.	63	42	13	3	1	4	16
Indianapolis, Ind.	377	267	58	33	9	10	33
Madison, Wis.	44	35	7	1	-	1	5
Milwaukee, Wis.	137	94	32	4	1	6	11
Peoria, Ill.	64	46	11	7	-	-	11
Rockford, Ill.	59	46	6	3	1	3	11
South Bend, Ind.	28	19	6	1	1	1	2
Toledo, Ohio	96	75	17	3	-	1	9
Youngstown, Ohio	U	U	U	U	U	U	U
W.N. CENTRAL	1,007	765	136	62	22	21	98
Des Moines, Iowa	105	76	21	4	2	2	4
Duluth, Minn.	27	22	4	1	-	-	3
Kansas City, Kans.	34	20	5	2	4	2	2
Kansas City, Mo.	101	75	17	5	2	2	7
Lincoln, Nebr.	47	38	6	1	1	1	2
Minneapolis, Minn.	252	193	34	16	4	5	39
Omaha, Nebr.	102	80	10	7	3	2	10
St. Louis, Mo.	173	135	18	13	4	3	17
St. Paul, Minn.	73	58	8	5	1	1	6
Wichita, Kans.	93	68	13	8	1	3	8

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
S. ATLANTIC	1,559	1,015	288	176	48	32	113
Atlanta, Ga.	227	144	42	25	4	12	10
Baltimore, Md.	296	180	47	48	15	6	31
Charlotte, N.C.	82	52	23	4	3	-	11
Jacksonville, Fla.	178	126	30	17	4	1	15
Miami, Fla.	124	78	23	16	5	2	1
Norfolk, Va.	64	41	13	4	3	3	2
Richmond, Va.	99	64	20	9	3	3	8
Savannah, Ga.	44	26	12	3	1	2	6
St. Petersburg, Fla.	57	48	6	2	1	-	3
Tampa, Fla.	202	146	30	22	3	1	24
Washington, D.C.	160	89	39	24	6	2	2
Wilmington, Del.	26	21	3	2	-	-	-
E.S. CENTRAL	1,073	767	192	64	26	24	101
Birmingham, Ala.	168	120	30	11	5	2	8
Chattanooga, Tenn.	73	50	15	6	2	-	5
Knoxville, Tenn.	18	10	4	2	-	2	4
Lexington, Ky.	191	138	37	7	3	6	25
Memphis, Tenn.	233	168	40	11	8	6	31
Mobile, Ala.	124	84	25	8	4	3	7
Montgomery, Ala.	76	53	12	8	2	1	4
Nashville, Tenn.	190	144	29	11	2	4	17
W.S. CENTRAL	1,747	1,102	340	179	86	40	168
Austin, Tex.	99	66	17	9	5	2	10
Baton Rouge, La.	20	12	4	3	-	1	1
Corpus Christi, Tex.	U	U	U	U	U	U	U
Dallas, Tex.	241	162	48	24	4	3	19
El Paso, Tex.	76	53	13	9	-	1	4
Ft. Worth, Tex.	146	99	19	9	8	11	17
Houston, Tex.	505	280	117	67	34	7	55
Little Rock, Ark.	105	76	14	11	4	-	17
New Orleans, La.	104	31	18	21	24	10	-
San Antonio, Tex.	272	200	47	15	5	5	27
Shreveport, La.	59	45	10	3	1	-	4
Tulsa, Okla.	120	78	33	8	1	-	14
MOUNTAIN	985	640	201	88	23	32	71
Albuquerque, N.M.	115	74	22	9	4	6	5
Colo. Springs, Colo.	63	46	10	4	1	2	7
Denver, Colo.	114	76	23	11	1	3	6
Las Vegas, Nev.	162	88	46	21	4	2	10
Ogden, Utah	32	19	10	3	-	-	3
Phoenix, Ariz.	214	137	40	17	7	13	22
Pueblo, Colo.	19	13	4	2	-	-	1
Salt Lake City, Utah	105	74	16	7	4	4	12
Tucson, Ariz.	161	113	30	14	2	2	5
PACIFIC	2,399	1,656	384	230	68	55	243
Berkeley, Calif.	19	16	3	-	-	-	4
Fresno, Calif.	138	105	12	12	3	6	15
Glendale, Calif.	28	25	3	-	-	-	6
Honolulu, Hawaii	88	67	13	5	1	2	9
Long Beach, Calif.	97	61	15	12	2	7	13
Los Angeles, Calif.	623	428	103	59	20	7	47
Pasadena, Calif.	47	33	8	1	2	3	9
Portland, Oreg.	220	152	35	14	10	9	15
Sacramento, Calif.	194	132	35	19	5	3	25
San Diego, Calif.	142	93	25	17	5	2	27
San Francisco, Calif.	205	120	32	43	5	5	10
San Jose, Calif.	222	164	33	17	5	3	33
Santa Cruz, Calif.	33	27	3	3	-	-	4
Seattle, Wash.	171	112	31	18	5	5	9
Spokane, Wash.	56	41	9	2	2	2	6
Tacoma, Wash.	116	80	24	8	3	1	11
TOTAL	15,100¶	10,167	2,650	1,428	478	369	1,261

*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.

Coronary Heart Disease — Continued

especially overweight and current smoking status, are likely to be underreported. Second, risk factors for which awareness is low are underreported; for example, only an estimated 29% of adults know their cholesterol level (*8*). Therefore, this report most likely overestimates the proportion of adults without CHD risk factors.

To assist in reducing the prevalence of CHD risk factors, health programs and organizations have intensified advocacy of primary prevention strategies. For example, the National High Blood Pressure Education Program has developed policy recommendations for implementing primary prevention interventions for hypertension (*9*), and the National Cholesterol Education Program has made dietary recommendations to reduce cholesterol levels (*10*). The need for the primary prevention of CHD risk factors also is important because education or treatment of persons with established risk factors may not reduce their risk to the level of persons who never have the risk factor; for example, persons who effectively control their hypertension remain at higher risk for CHD than do persons who never develop hypertension (*9*).

References

1. American Heart Association. 1993 Heart and stroke facts statistics. Dallas: American Heart Association, 1992.
2. Shah BV. SESUDAAN: standard errors program for computing of standardized rates from sample survey data. Research Triangle Park, North Carolina: Research Triangle Institute, 1981.
3. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives—full report, with commentary. Washington, DC: US Department of Health and Human Services, Public Health Service, 1991; DHHS publication no. (PHS)91-50212.
4. CDC. Cigarette smoking among adults—United States, 1991. MMWR 1993;42:230–3.
5. Sempos CT, Cleeman JI, Carroll MD, et al. Prevalence of high blood cholesterol among US adults: an update based on guidelines from the second report of the National Cholesterol Education Program Adult Treatment Panel. JAMA 1993;269:3009–14.
6. CDC. Health, United States, 1992, and healthy people 2000 review. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, 1993; DHHS publication no. (PHS)93-1232.
7. Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure. The fifth report of the Joint National Committee onDetection, Evaluation, and Treatment of High Blood Pressure (JNC V). Arch Intern Med 1993;153:154–83.
8. CDC. Cholesterol screening and awareness—Behavioral Risk Factor Surveillance System, 1990. MMWR 1992;41:669,675–8.
9. National High Blood Pressure Education Program Working Group. National High Blood Pressure Education Program Working Group report on primary prevention of hypertension. Arch Intern Med 1993;153:186–208.
10. Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults. Summary of the second report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel II). JAMA 1993;269:3015–23.

International Notes

Update: Dracunculiasis Eradication — Mali and Niger, 1993

Mali and Niger, countries in West Africa, ranked sixth and eighth in the number of reported cases of dracunculiasis (i.e., Guinea worm disease) in 1992 (*1*). In March 1993, Global 2000, Inc., and the World Health Organization (WHO) Collaborating Center for Research, Training, and Eradication of Dracunculiasis at CDC began

Dracunculiasis Eradication — Continued

providing direct assistance for the eradication of dracunculiasis in both countries by assigning a resident public health advisor to each country. This report summarizes surveillance data for the two countries during 1991–1993 and describes their progress toward eradication of dracunculiasis.

Mali

In 1990, Mali (population: 8.5 million) reported 884 cases of dracunculiasis to WHO (*1*). During that year, health officials in Mali initiated a pilot project to control dracunculiasis in 68 villages with endemic disease within Douentza District of Mopti Region. This effort employed trained village-based health workers to conduct health education, undertake active surveillance, and distribute nylon cloth to families for filtering drinking water.

From December 1991 through March 1992, national village-by-village searches for cases detected 16,060 cases of dracunculiasis in 1264 villages in five of seven regions of the country (Table 1). Approximately 95% of cases were enumerated in two regions (Mopti and Kayes). By December 1993, Mali's Guinea Worm Eradication Program (GWEP) had trained one village-based health worker in each of 1100 (87%) villages with endemic dracunculiasis and had begun monthly reporting of cases from 433 (34%) such villages. In addition, health education had been initiated in 68% of villages with endemic disease in Mali and use of cloth filters in 34%; improved water supplies already existed or were scheduled to be available by 1994 in 60%. A provisional total of 5779 cases was reported for 1993.

Niger

In 1989 (the most recent year for which passive data were available), Niger (population: 8 million) reported 288 cases of dracunculiasis to WHO. In 1991, the Ministry of Health initiated a pilot project to control dracunculiasis in Boubon, Niger (population: approximately 4500), a village in which 2700 cases had been reported that year. Elements of this project included trained village-based health workers, health education, improved water supplies, and use of nylon filters. By 1993, the incidence of dracunculiasis in Boubon had declined to 108 cases.

From October through November 1991, national village-by-village searches detected 32,831 cases of dracunculiasis in 1690 villages. Nearly two thirds of persons

TABLE 1. Numbers of cases of dracunculiasis and villages with endemic disease detected during national village-by-village searches for cases — Mali and Niger, 1993

Mali			Niger		
Region	No. affected villages	No. cases	Department	No. affected villages	No. cases
Mopti	720	9,154	Zinder	808	21,057
Kayes	379	6,504	Tahoua	225	4,696
Segou	87	277	Tillaberi	348	4,442
Koulikoro	44	89	Maradi	224	1,452
Sikasso	34	36	Dosso	83	1,182
Gao	NA*	NA	Diffa	2	2†
Timbuktu	NA	NA	Agadez	0	0
Total	**1,264**	**16,060**	**Total**	**1,690**	**32,831**

*Not available; these regions have not been searched yet.
†Imported dracunculiasis.

Dracunculiasis Eradication — Continued

with dracunculiasis (21,057) resided in Zinder, one of the country's seven departments; of these, 85% resided in one district (Mirriah).

By December 1993, Niger's GWEP had initiated at least one intervention in 928 (55%) villages with endemic dracunculiasis and had trained health workers for dracunculiasis eradication activities at national, regional, and district levels and in 298 (18%) villages with endemic disease. In addition, health education had been initiated in 49% of villages with endemic disease in Niger and use of cloth filters in 31%; improved water supplies already existed or were scheduled to be available by 1994 in 63%. Completion of training of village-based health workers for all villages in Niger with endemic disease is projected in early 1994. Niger has not yet begun monthly reporting of cases but has recorded a provisional total of 16,231 cases for 1993.

Reported by: AT Toure, President, National Intersectorial Committee for Dracunculiasis Eradication; I Degoga, MD, National Program Coordinator, Guinea Worm Eradication Program, Ministry of Public Health, Mali. S Moussa, National Program Coordinator, Guinea Worm Eradication Program, Ministry of Public Health, Niger. Global 2000, Inc, The Carter Center, Atlanta. World Health Organization Collaborating Center for Research, Training, and Eradication of Dracunculiasis, Div of Parasitic Diseases, National Center for Infectious Diseases, CDC.

Editorial Note: Mali and Niger are part of the core area of West Africa where dracunculiasis is endemic. Although Mali and Niger joined the campaign to eradicate dracunculiasis when fewer than 3 years remained until the target date for eradication (December 1995), both countries were successful in rapidly establishing GWEPs. However, implementation of the interventions described in this report (i.e., health education, cloth filters, and improved supplies of safe drinking water) will probably be insufficient alone to eradicate dracunculiasis before December 1995. To complete eradication of dracunculiasis, in 1994 health officials in Mali and Niger are planning to implement more stringent measures for case containment and begin selective use of temephos (Abate®)* to kill the copepod intermediate host of the parasite in unsafe drinking water sources of selected villages (*2*).

References

1. World Health Organization. Dracunculiasis: global surveillance summary, 1992. Wkly Epidemiol Rec 1993;68:125–31.
2. Hopkins DR, Ruiz-Tiben E. Strategies for dracunculiasis eradication. Bull World Health Organ 1991;69:533–40.

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

Current Trends

State Cancer Registries: Status of Authorizing Legislation and Enabling Regulations — United States, October 1993

Population-based cancer registries have identified cancer incidence rates indicating that the burden of cancer in the United States is substantial and varies widely by geographic location and ethnicity. However, for most existing state cancer registries, resources are inadequate for insuring minimum standards for quality and for completeness of case information. In October 1992, Congress enacted the Cancer

TABLE 1. Status of authorizing legislation and enabling regulations for state cancer registration — United States, October 1, 1993

State	Authorizing law*	Facility reporting	Physician reporting	Record access	Standard format	Case confidentiality	Research access	Research conduct	Liability protection
Alabama	no	no	no	no	no	no	no	no	no
Alaska	no	yes	no	no	yes	yes	no	no	no
Arizona	yes	yes	yes	yes	yes	yes	no	no	no
Arkansas	yes	no	no	no	no	yes	yes	yes	no
California	yes	yes	yes	yes	yes	yes	yes	yes	yes
Colorado	yes	yes	no	yes	yes	yes	yes	yes	no
Connecticut	no	yes	no	no	yes	yes	yes	yes	no
Delaware	yes	yes	no	yes	yes	yes	no	no	yes
Florida	yes	yes	no	no	yes	yes	yes	yes	yes
Georgia	no	yes	no	no	yes	yes	yes	yes	yes
Hawaii	yes	yes	no	no	yes	yes	yes	no	yes
Idaho	no	yes	yes	no	yes	yes	yes	yes	no
Illinois	yes	yes	no	yes	yes	yes	yes	yes	yes
Indiana	yes	yes	yes	yes	yes	yes	yes	yes	yes
Iowa	no	no	no	no	no	yes	yes	yes	yes
Kansas	no	yes	no	no	yes	yes	no	no	no
Kentucky	yes	yes	no	yes	yes	yes	yes	yes	yes
Louisiana	yes	yes	no	yes	yes	yes	no	yes	yes
Maine	yes	yes	no	yes	yes	yes	no	yes	yes
Maryland	yes	yes	no	yes	yes	yes	yes	yes	no
Massachusetts	yes	yes	no	yes	yes	yes	yes	yes	yes
Michigan	yes	yes	no	yes	yes	yes	yes	yes	yes
Minnesota	yes	yes	yes	yes	yes	yes	yes	yes	yes
Mississippi	yes	no	no	no	no	yes	yes	yes	yes
Missouri	yes	yes	no	no	yes	yes	yes	yes	yes
Montana	yes	yes	no	no	yes	yes	no	no	no
Nebraska	yes	yes	no	yes	yes	yes	yes	yes	yes
Nevada	yes	yes	no	yes	yes	yes	yes	yes	yes
New Hampshire	yes	yes	yes	yes	yes	yes	yes	yes	no
New Jersey	yes	yes	yes	yes	yes	yes	yes	yes	yes
New Mexico	no	no	no	no	no	yes	no	no	yes
New York	yes	yes	yes	yes	yes	yes	yes	yes	yes
North Carolina	yes	no	yes	no	yes	yes	no	no	yes
North Dakota	no	no	no	no	no	no	no	no	no
Ohio	yes	yes	yes	yes	yes	yes	yes	yes	yes
Oklahoma	yes	no	no	no	yes	yes	yes	yes	no
Oregon	no	no	no	no	no	no	no	no	no
Pennsylvania	yes	yes	no	yes	yes	yes	yes	yes	no

Rhode Island	yes	yes	yes	yes	yes	yes	yes	yes	yes
South Carolina	no	no	no	yes	no	no	no	no	yes
South Dakota	yes	no	no	no	yes	yes	yes	yes	yes
Tennessee	yes	yes	no	yes	yes	yes	yes	yes	no
Texas	yes	yes	no	no	yes	yes	yes	yes	yes
Utah	no	no	no	no	no	no	no	no	no
Vermont	yes	yes	yes	yes	yes	yes	yes	yes	yes
Virginia	yes	yes	yes	yes	yes	yes	no	yes	no
Washington	yes	yes	yes	yes	yes	yes	yes	yes	yes
West Virginia	yes	yes	yes	yes	yes	yes	no	yes	yes
Wisconsin	yes	yes	yes	no	yes	yes	no	no	yes
Wyoming	yes	yes	yes	no	no	no	no	no	no
Total with legislation/regulations	**38**	**38**	**17**	**27**	**40**	**44**	**32**	**35**	**31**

* States that have a regulation authorizing a state cancer registry are Alaska, Connecticut, Georgia, Idaho, Iowa, Kansas, and Utah.

State Cancer Registries — Continued

Registries Amendment Act* that authorized CDC to establish a national program in support of cancer registries. The goal of this program is to enhance existing state cancer registries and to help establish statewide cancer registries so that all states have population-based cancer registries meeting minimum standards for completeness, timeliness, and quality. To ensure complete and timely reporting of newly diagnosed cases of cancer, the federal statute requires authorization of cancer registries under state-specific laws and promulgation of regulations that ensure case reporting and use of data for research. This report extends efforts by the National Cancer Institute (*1*) to assess existing state laws and regulations to determine how they compare to state-specific legislation required in the cancer registries act.

In August and September 1993, all 50 states provided CDC with copies of state laws, statutes, regulations, and rules related to cancer registries in effect as of October 1, 1993. State law was defined as legislation enacted by the state legislature. Regulations were defined as measures promulgated by agencies such as state health departments and, although enforceable as law, can be modified by administrative action. In addition to enacting an authorizing law, each state is required to promulgate eight categories of regulations regarding the collection and use of cancer data; these regulations are intended to 1) require reporting of newly diagnosed cancer cases by hospitals and other health-care facilities; 2) require reporting of cancer cases by physicians and other health-care practitioners; 3) guarantee access by the statewide cancer registry to all records of medical status of persons with cancer; 4) require the use of standardized reporting formats; 5) ensure confidentiality of cancer case data; 6) allow use of confidential case data by certain researchers; 7) authorize the conduct of studies using cancer registry data; and 8) ensure protection of persons complying with the law from liability.

On October 1, 1993, nine states had a law authorizing state cancer registries and had all essential regulations in place (Table 1). Twenty-nine states had laws authorizing state cancer registries but did not have all essential regulations (Table 1). Seven states had only regulations authorizing cancer registries. Four states had no law or regulation authorizing cancer registries and had none of the essential regulations. Of the other 46 states, 38 required reporting on cancer cases by health-care facilities, and 44 required protection of the confidentiality of case information.

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

Editorial Note: Comprehensive, timely, and accurate information regarding cancer incidence and stage at diagnosis is essential for monitoring cancer trends and identifying variations in incidence by factors such as age, race/ethnicity, and geographic region. Cancer incidence rates vary by ethnicity, but whether these variations reflect differences in factors such as socioeconomic status, access to medical care, prevalence of specific risks, or misclassification of ethnicity is not known. Registries provide a means for collecting such information and may assist in conducting population-based epidemiologic and biologic research, allocating of health resources, and evaluating cancer-control and cancer-prevention programs.

*Copies of the Cancer Registries Amendment Act, Public Law 102-515, §(c)(2)(D), October 24, 1992, are available from CDC's Division of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion, 4770 Buford Highway, NE, Mailstop K-55, Atlanta, GA 30341-3724; telephone (404) 488-4682.

State Cancer Registries — Continued

At the state level, both authorizing legislation and enabling regulations are necessary to establish and maintain statewide, population-based cancer registries. The findings in this report indicate that legislation and regulations related to cancer registries vary widely among states. For states seeking federal funding, the cancer registries act can provide an incentive to enact needed legislation or regulations.

In fiscal year 1994, CDC will offer support to states, the District of Columbia, and Puerto Rico to enhance existing cancer registries and to plan and implement statewide cancer registries in states and territories that do not have registries. This support is intended to ensure that state cancer registries are population-based and meet minimum standards of completeness, timeliness, and quality. In addition, CDC will assist states in the development of model state legislation. These efforts also should enable evaluation of progress toward cancer control and national health objectives for the year 2000 (*2*).

References

1. Fisher R, Haenlein M. Legislative authorizations for cancer registries. In: National Cancer Institute, National Institutes of Health. State Cancer Legislative Database Update. Bethesda, Maryland: US Department of Health and Human Services, Public Health Service, National Institutes of Health, National Cancer Institute, April 1991:8–15.
2. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives—full report, with commentary. Washington, DC: US Department of Health and Human Services, Public Health Service, 1991; DHHS publication no. (PHS)91-50212.

Addendum: Vol. 43, No. 3

In the article, "Deaths Resulting from Firearm- and Motor-Vehicle–Related Injuries—United States, 1968–1991," the following clause should be added to the end of the fourth sentence of the first paragraph (page 37): ". . . (Figure 1); *these findings are consistent with those from previous reports (*1a,1b*)*. Reference 1a is *Wintemute G. Motor vehicles or firearms: which takes a heavier toll? [Letter]. JAMA 1993;269:2213*; reference 1b is *CDC. Firearm-related deaths—Louisiana and Texas, 1970–1990. MMWR 1992;41:213–5,221*.

The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and Prevention (CDC) and is available on a paid subscription basis from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone (202) 783-3238.

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