

# MNWR

MORBIDITY AND MORTALITY WEEKLY REPORT

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## Current Trends

### **Update: Influenza Activity — United States, 1993–94 Season**

From mid-November through December 1993, influenza activity in the United States increased. This report summarizes surveillance information regarding influenza activity in the United States from October 3, 1993, through January 1, 1994.

As of January 1, 1994, influenza viruses had been reported in 46 states; four states had not documented the presence of influenza this season (Delaware, Mississippi, New Hampshire, and Rhode Island). Nearly all (99%) influenza isolates reported to CDC have been influenza type A; one influenza type B virus was isolated in New York.

Of the 750 influenza type A viruses reported from the World Health Organization (WHO) collaborating laboratories, 409 were subtyped as type A(H3N2) and 16 as type A(H1N1); 325 were not subtyped. As of January 10, 208 influenza isolates had been received by the WHO Collaborating Center for Influenza at CDC for antigenic analysis. Of the 68 influenza type A(H3N2) virus isolates completely analyzed, all were antigenically related to the A/Beijing/32/92(H3N2) strain included in the 1993–94 influenza vaccine. The ratio of specimens positive for influenza virus to total specimens submitted for respiratory virus testing increased from less than 0.01 in previous weeks to 0.04 the week ending November 20 and to 0.18 the week ending December 25.

Weekly reports by state and territorial epidemiologists also had indicated increasing levels of influenza-like illness (ILI). The number of states reporting sporadic\* activity ranged from five to eight per week during October and from 17 to 20 per week during November. Regional activity associated with laboratory-confirmed influenza was first reported from Wyoming and Montana during the week ending November 13 (1). However, no more than three states reported regional activity during any week until the week ending December 4, when regional activity was reported by six states and the District of Columbia. For the week ending December 18, the number of states reporting regional activity increased to 12. Widespread activity was first reported in Florida and Oregon for the week ending December 11.

\*Levels of activity are 1) *sporadic*—sporadically occurring ILI or culture-confirmed influenza, with no outbreaks detected; 2) *regional*—outbreaks of ILI or culture-confirmed influenza in counties having a combined population of less than 50% of the state's total population; and 3) *widespread*—outbreaks of ILI or culture-confirmed influenza in counties having a combined population of 50% or more of the state's total population.

*Influenza — Continued*

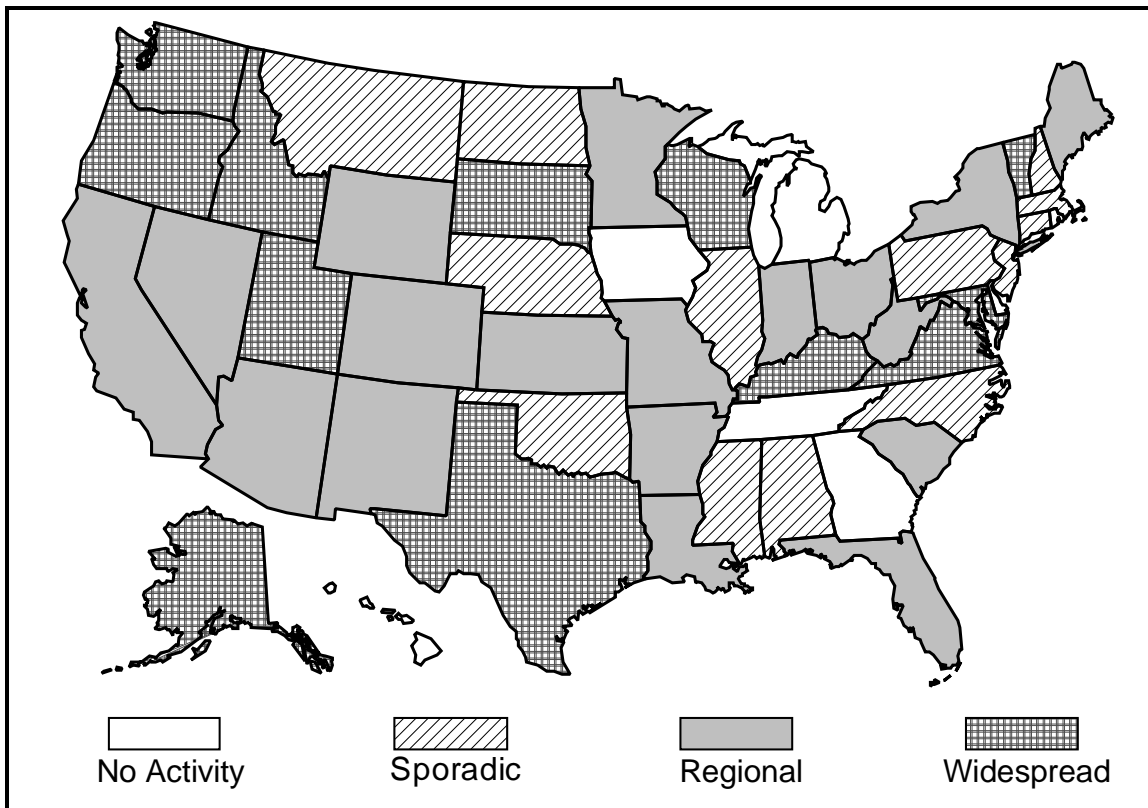
For the week ending January 1, 13 states reported sporadic activity, 18 reported regional activity, and 12 reported widespread activity (Figure 1). Most reported outbreaks of laboratory-confirmed influenza type A were in schools, but outbreaks also occurred in nursing homes and other facilities housing older adults.

Of total deaths reported through CDC's 121-city mortality surveillance system, the proportion of deaths associated with pneumonia and influenza exceeded the epidemic threshold† for 2 consecutive weeks beginning December 19. This is the first time this season that these proportions have been elevated for 2 consecutive weeks in addition to other indices of increased influenza activity; they indicate the occurrence of epidemic influenza-associated mortality.

*Reported by: Participating state and territorial epidemiologists and state public health laboratory directors. World Health Organization collaborating laboratories. Sentinel Physicians Influenza Surveillance System of the American Academy of Family Physicians. Influenza Br and*

†The epidemic threshold is 1.645 standard deviations above the seasonal baseline calculated using a periodic regression model applied to observed percentages since 1983. This baseline was calculated using a robust regression procedure.

**FIGURE 1. Influenza morbidity,\* by state — United States, week ending January 1, 1994**



\*Levels of activity are 1) *sporadic*—sporadically occurring influenza-like illness (ILI) or culture-confirmed influenza, with no outbreaks detected; 2) *regional*—outbreaks of ILI or culture-confirmed influenza in counties having a combined population of less than 50% of the state's total population; and 3) *widespread*—outbreaks of ILI or culture-confirmed influenza in counties having a combined population of 50% or more of the state's total population.

*Influenza — Continued*

*Epidemiology Activity, Office of the Director, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases, CDC.*

**Editorial Note:** Although sharp increases in influenza activity were reported in some areas during December, national influenza activity is expected to continue increasing during January based on observations of other seasons in which influenza type A(H3N2) predominated.

Compared with periods of predominant influenza type A(H1N1) or type B activity, influenza type A(H3N2) activity is associated with higher morbidity and mortality among the elderly. For example, approximately 80%–90% of influenza-related deaths occur among persons aged >64 years, and influenza A(H3N2) epidemics often are characterized by an increase in the proportion of deaths attributed to pneumonia and influenza (2).

Although antigens contained in the 1993–94 influenza vaccine closely match circulating influenza viruses, the antiviral agents amantadine and rimantadine—which are effective against influenza A—should be considered as an adjunct to vaccination. Because of differences in the pharmacokinetic properties of these two drugs, the dosage recommendations and the potential for adverse reactions vary with such factors as patient's age, presence of certain underlying health conditions, and the potential for adverse drug interactions.

Influenza surveillance data are updated every other week throughout the influenza season, and summaries are available by computer to subscribers of the Public Health Network and to health-care providers and the public through the CDC Voice Information System at (404) 332-4555 or by facsimile at (404) 332-4565.

*References*

1. CDC. Update: influenza activity—United States and Europe, 1993–94 season. *MMWR* 1993;42:909–11.
2. Lui K-J, Kendal AP. Impact of influenza epidemics on mortality in the United States from October 1972 to May 1985. *Am J Public Health* 1987;77:712–6.

*Current Trends*

### **Prevalence and Characteristics of Alcohol Consumption and Fetal Alcohol Syndrome Awareness — Alaska, 1991 and 1993**

Fetal alcohol syndrome (FAS) is a leading preventable cause of birth defects and mental retardation in the United States (1). To reduce alcohol exposure to the developing fetus and to modify health-related behaviors, public health professionals and policy makers require effective methodologies to identify at-risk populations and develop strategies for preventing this problem. In Alaska, the prevalence of FAS is higher than the national average (2). Because of the need for information to assist in planning prevention programs, identifying training needs for service providers, and monitoring changes in factors related to FAS in target populations, the Alaska Department of Health and Social Services (ADHSS), the Indian Health Service (IHS), and CDC have conducted surveys to measure relevant knowledge, attitudes, beliefs, and behaviors (KABBs) in selected populations in Alaska. This report summarizes survey findings during 1991 and 1993 regarding the prevalence of alcohol consumption by

*Fetal Alcohol Syndrome — Continued*

and characteristics of women of childbearing age in Alaska and FAS-related KABBs in Alaska residents.

**Alcohol Consumption Among Women of Childbearing Age**

The prevalence of alcohol consumption among women aged 18–44 years in Alaska and characteristics of women who report consumption were obtained through the 1991 Behavioral Risk Factor Surveillance System (BRFSS), a random-digit-dialed telephone survey in which rural areas are oversampled (3,4). Respondents were grouped into three alcohol-consumption categories: nondrinker (no alcohol use reported during the previous month); light drinker (30 or fewer drinks consumed during the previous month and fewer than five drinks on any occasion); and heavy drinker (more than 30 drinks consumed during the previous month or five or more drinks on at least one occasion). Weighted prevalence estimates, prevalence ratios (PRs), and 95% confidence intervals (CIs) of drinking behavior were calculated for each alcohol-consumption category.

Of 519 respondents, alcohol-consumption patterns could be determined for 511 (98%). An estimated 45% (95% CI=38–51) were categorized as nondrinkers, 38% (95% CI=32–44) as light drinkers, and 17% (95% CI=12–22) as heavy drinkers. In addition, 22% had at least a college degree, 26% were current smokers, and 88% were non-American Indian/Alaskan Native (AI/AN).

Non-AI/AN women were more likely to report light drinking (41%) than AI/AN women (17%) (PR=2.4; 95% CI=1.6–3.8). The prevalence of heavy drinking among non-AI/AN women (15%) was half that among AI/AN women (32%) (PR=0.5; 95% CI=0.2–0.9).

Women who smoked were more likely to report heavy drinking (29%) than were nonsmokers (13%) (PR=2.2; 95% CI=1.2–3.9); smoking status was not associated with light drinking. In addition, women with at least a college degree were less likely to report heavy drinking (6%) than were women with less education (20%) (PR=0.3; 95% CI=0.2–0.6). However, those with a college degree were more likely to report light drinking (53%) than were those with less education (34%) (PR=1.6; 95% CI=1.1–2.2).

**Knowledge, Attitudes, Beliefs, and Behaviors About FAS Among Alaskan Adults**

In March 1993, random-digit dialing was used to identify 400 adults (aged  $\geq 18$  years) who were interviewed by telephone to determine KABBs related to FAS. Of the 400 respondents, 239 (60%) were women. Knowledge of FAS was defined as correct answers to all seven true and false statements regarding FAS. False statements included "FAS is a disorder in adults caused by excessive drinking of alcohol," "A baby or child with FAS is impaired physically but not mentally," and "The effects of FAS lessen as the child gets older." Respondents also were asked how likely they would be to intervene if a friend or family member were pregnant and drinking alcohol on a regular basis.

Although most (365 [91%]) respondents had heard of FAS, only 164 (41%) met the criterion for being classified as knowledgeable about the syndrome. Of 117 respondents with a college degree, 71 (61%) were knowledgeable about FAS, compared with 91 (32%) of 283 respondents with less education (PR=1.9; 95% CI=1.5–2.4). In addition, of the 344 non-AI/AN respondents, 147 (43%) were knowledgeable, compared with 15 (27%) of 56 AI/ANs (PR=1.6; 95% CI=1.0–2.5).

*Fetal Alcohol Syndrome — Continued*

The proportion of respondents classified as knowledgeable was higher among respondents who reported they were likely to discuss with a pregnant friend or relative who consumed alcohol the harmful effects of alcohol on the developing fetus (42%) than among those who indicated they would be unlikely to discuss the issue (14%) (PR=3.1; 95% CI=1.1–8.9). The percentage of adults who were knowledgeable about FAS did not vary significantly by sex, marital status, age, or the number of children in the household.

*Reported by: D Ingle, P Owen, Alaska Div of Public Health, L Jones, S Perry, S Cassidy, Alaska Div of Alcoholism and Drug Abuse, JP Middaugh, MD, State Epidemiologist, Alaska Dept of Health and Social Svcs. Behavioral Risk Factor Surveillance Br, Office of Surveillance and Analysis, National Center for Chronic Disease Prevention and Health Promotion; Developmental Disabilities Br, Div of Birth Defects and Developmental Disabilities, National Center for Environmental Health, CDC.*

**Editorial Note:** Among the 48 states participating in the 1991 BRFSS, Alaska ranks in the top quartile for heavy alcohol consumption. Based on 1990 census data for Alaska (5), the findings in this report indicate that in 1991, approximately 21,600 women aged 18–44 years in Alaska were heavy drinkers, some of whom, if they became pregnant and continued to drink, would be at risk for delivering an alcohol-affected infant. Such women should be identified and counseled through the health-care and social services system before they become pregnant. In addition, based on these findings, health-care and social service workers should ascertain the smoking status and educational levels of women as a means for identifying and targeting subgroups at risk for heavy drinking.

Knowledge of FAS may influence the drinking behavior of a woman during pregnancy and may increase the likelihood that a person will discuss with a pregnant friend or relative the harmful effects of drinking. However, the results of the KABBs survey indicate that less than half of adults in Alaska had knowledge about FAS. Because a high proportion of women of childbearing age in Alaska consume alcohol, public awareness campaigns to prevent FAS in Alaska should emphasize the dangers of drinking during pregnancy and the need to stop drinking before becoming pregnant.

Because persons without a post-high school education were the least knowledgeable about FAS and were characterized by a higher prevalence of heavy drinking, education programs about the dangers of drinking during pregnancy are indicated for school-aged children. The positive association between alcohol consumption and smoking indicates that FAS should be addressed within the context of a comprehensive health education program.

The findings in this report indicate that AI/AN women were more likely to report heavy drinking and to be less knowledgeable about FAS than non-AI/AN women. These findings are consistent with previous studies that documented high rates of FAS among AI/AN women (2,6). The consideration of race as a potential risk factor for FAS may assist in the identification of cultural factors that may be associated with drinking behavior and in the targeting of prevention efforts.

The findings in this report are subject to at least three limitations. First, because these data depend on self-reported alcohol use, the prevalence of alcohol consumption may be underestimated for some groups. Second, because both surveys were conducted by telephone and 28% of Alaska's rural population does not have telephones (7), the BRFSS and KABBs prevalence estimates may not be generalizable to

*Fetal Alcohol Syndrome — Continued*

all persons residing in Alaska. Third, alcohol consumption during the previous month may not be representative of usual drinking patterns.

The general population FAS-awareness survey and the BRFSS results are being used in Alaska to target future education campaigns on FAS and the harmful effects of drinking on the developing fetus to subgroups of the population at greatest risk for drinking. ADHSS, CDC, and IHS are conducting other KABBs surveys among health-care and social services providers statewide to assess the extent to which the at-risk population is being counseled and to identify potential training needs for providers.

*References*

1. Abel E, Sokol RJ. Incidence of fetal alcohol syndrome and economic impact of FAS-related anomalies. *Drug Alcohol Depend* 1987;19:51-70.
2. CDC. Linking multiple data sources in fetal alcohol syndrome surveillance—Alaska. *MMWR* 1993;42:312-4.
3. Frazier EL, Franks AL, Sanderson LM. Behavioral risk factor data. In: CDC. Using chronic disease data: a handbook for public health practitioners. Atlanta: US Department of Health and Human Services, Public Health Service, CDC, 1992:4-1-4-17.
4. CDC. Behavioral risk factor surveillance system: operations manual. Atlanta: US Department of Health and Human Services, Public Health Service, CDC, 1990.
5. Department of Labor, State of Alaska. Alaska population overview: 1991 estimates. Juneau, Alaska: Department of Labor, July 1993.
6. May AM, Hymbaugh KJ, Aase JM, Samet JM. Epidemiology of fetal alcohol syndrome among American Indians of the Southwest. *Soc Biol* 1983;30:374-87.
7. Bureau of the Census. Census of population and housing, 1990: summary tape file 2 [Machine-readable data tape]. Washington, DC: US Department of Commerce, Bureau of the Census, 1991.

*International Notes***National Immunization Days  
and Status of Poliomyelitis Eradication — Philippines, 1993**

The Western Pacific Regional Committee of the World Health Organization (WHO) resolved in 1988 to eradicate poliomyelitis in the region by 1995. Despite intensified surveillance for acute flaccid paralysis (AFP), reported cases of poliomyelitis decreased from 5485 in 1989 to 1909 in 1992. Of the five countries in the region that continue to report endemic poliomyelitis (Cambodia, People's Republic of China, Laos, Republic of the Philippines, and Vietnam), reported incidence is lowest in Philippines, which also was the first country in the region to undertake national immunization days (NIDs) with oral poliovirus vaccine (OPV); in addition, other vaccines were administered at vaccination posts by trained health workers. This report assesses the impact of Philippines' first NID, which was initiated as part of its poliomyelitis eradication efforts, and summarizes progress toward eradication of poliomyelitis in Philippines.

In 1992, Philippines achieved vaccination coverage of 92% with three doses of OPV by age 1 year by routine vaccination delivery. Eight of the 47 reported AFP cases in Philippines that year were classified as confirmed poliomyelitis based on standard WHO criteria (1)—three based on isolation of wild virus, four based on residual paralysis at 60 days, and one because of loss to follow-up.

*National Immunization Days — Continued*

To accelerate the eradication of poliomyelitis, the official commitment to conduct NIDs annually during a 3-year period was made on March 3, 1993, by the President of Philippines. Following intensive planning efforts that focused on technical and logistical issues, social mobilization, and recruitment of volunteers, Philippines' NID—the first NID in Asia—was conducted on April 21; a second round of vaccinations was conducted on May 19. An estimated 400,000 volunteers and 15,000 Philippines Department of Health staff worked at approximately 64,000 vaccination posts. All children aged 0–59 months were targeted to receive one dose of OPV in each of two rounds; an estimated 9.2 million children were vaccinated in each round. Each child aged 12–59 months also was targeted to receive 200,000 international units (IU) of vitamin A. In addition, approximately one third of vaccination posts administered additional vaccines recommended by WHO's Expanded Program on Immunization (EPI) to eligible persons based on review of their vaccination records; these vaccines included measles vaccine, bacille Calmette-Guérin vaccine, and diphtheria and tetanus toxoids and pertussis vaccine for young children and tetanus toxoid for women aged 15–44 years.

To estimate vaccine coverage achieved during the NIDs, standard 30-cluster EPI coverage surveys were conducted in June 1993 in one randomly selected province in each of Philippines' 15 regions. A total of 3123 children aged <5 years were evaluated. Estimated OPV coverage was 89.6% (95% confidence interval [CI]=88.9%–90.0%) for round one and 90.9% (95% CI=89.8%–92.0%) for round two. In traditionally hard-to-reach areas with ongoing civil strife, estimated OPV coverage was 83%. For injectable vaccines, coverage was substantially lower: 21% of targeted children received measles vaccine, and 39% of mothers received tetanus toxoid. Seventy-five percent of children aged 12–59 months received 200,000 IU of vitamin A during the second round.

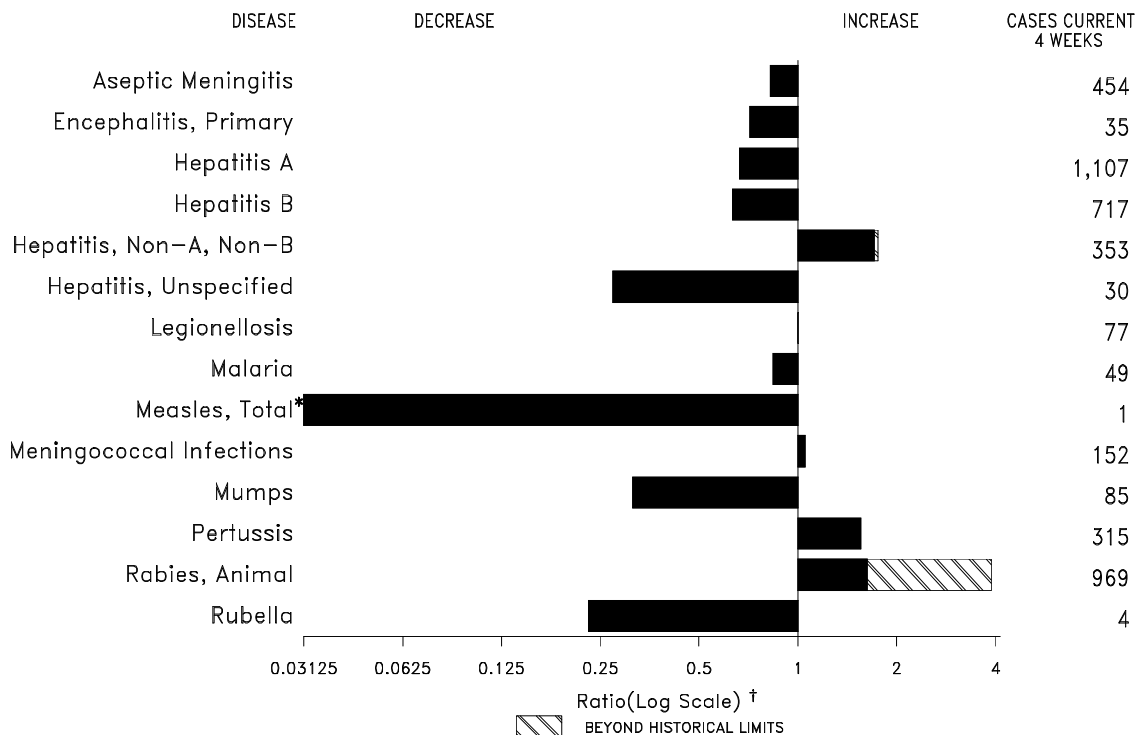
This nationwide effort received resources and other assistance from government and nongovernment agencies, including Rotary International, which supplied approximately half of the OPV. Assistance also was provided by professional societies, other civic organizations, churches, schools and universities, and private business firms. An extensive media campaign featured popular television and radio entertainers, and private amateur radio groups facilitated logistics and communications in remote areas. Similar preparations are under way for the 1994 NIDs on February 16 and March 16.

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**Editorial Note:** NIDs in which OPV is administered during two rounds to all young children, regardless of previous vaccination history, are now an integral component of strategies recommended by WHO to achieve global eradication of poliovirus transmission by the year 2000. This is one of two approaches that supplement routine vaccination with four doses of OPV (at birth and at ages 6 weeks, 10 weeks, and 14 weeks). The second approach is to conduct house-to-house, two-dose supplemental vaccination of those children living in areas considered at high risk for poliovirus transmission. In addition to an effective surveillance system for investigation and reporting of AFP, this combination of routine and supplemental vaccination strategies has been instrumental in eradicating poliomyelitis from the Western Hemisphere,

*(Continued on page 13)*

**FIGURE I. Notifiable disease reports, comparison of 4-week totals ending January 8, 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 one is 0.00335).

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

**TABLE I. Summary — cases of specified notifiable diseases, United States, cumulative, week ending January 8, 1994 (1st Week)**

	Cum. 1994		Cum. 1994
AIDS*	-	Measles: imported	-
Anthrax	-	indigenous	-
Botulism: Foodborne	-	Plague	-
Infant	-	Poliomyelitis, Paralytic <sup>§</sup>	-
Other	-	Psittacosis	1
Brucellosis	1	Rabies, human	-
Cholera	-	Syphilis, primary & secondary	319
Congenital rubella syndrome	-	Syphilis, congenital, age < 1 year	-
Diphtheria	-	Tetanus	-
Encephalitis, post-infectious	1	Toxic shock syndrome	2
Gonorrhea	4,654	Trichinosis	-
<i>Haemophilus influenzae</i> (invasive disease) <sup>†</sup>	5	Tuberculosis	81
Hansen Disease	-	Tularemia	-
Leptospirosis	1	Typhoid fever	2
Lyme Disease	8	Typhus fever, tickborne (RMSF)	1

\*Updated monthly; last update December 31, 1993.

<sup>†</sup>Of 4 cases of known age, 1 (25%) was reported in a child less than 5 years of age.

<sup>§</sup>Two (2) cases of suspected poliomyelitis were reported in 1993; 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 8, 1994, and January 9, 1993 (1st 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		
UNITED STATES	-	46	3	1	4,654	6,600	106	116	82	1	9	8
NEW ENGLAND	-	11	1	-	117	141	5	7	3	-	2	7
Maine	-	1	-	-	-	-	-	-	-	-	-	-
N.H.	-	-	-	-	-	-	-	-	-	-	-	-
Vt.	-	-	-	-	-	3	-	-	-	-	-	-
Mass.	-	2	-	-	64	129	2	7	1	-	1	5
R.I.	-	8	1	-	10	9	3	-	2	-	1	2
Conn.	-	-	-	-	43	-	-	-	-	-	-	-
MID. ATLANTIC	-	2	-	-	-	741	6	6	2	-	-	-
Upstate N.Y.	-	-	-	-	-	-	2	1	1	-	-	-
N.Y. City	-	-	-	-	-	425	-	-	-	-	-	-
N.J.	-	-	-	-	-	165	-	-	-	-	-	-
Pa.	-	2	-	-	-	151	4	5	1	-	-	-
E.N. CENTRAL	-	15	2	1	1,308	991	16	22	8	-	4	-
Ohio	-	4	-	-	46	472	4	4	-	-	1	-
Ind.	-	2	-	-	133	1	8	6	-	-	1	-
Ill.	-	-	-	-	718	214	-	-	-	-	-	-
Mich.	-	9	2	1	397	159	4	12	8	-	2	-
Wis.	-	-	-	-	14	145	-	-	-	-	-	-
W.N. CENTRAL	-	3	-	-	24	218	4	1	-	-	-	-
Minn.	-	-	-	-	-	-	-	-	-	-	-	-
Iowa	-	2	-	-	24	62	1	1	-	-	-	-
Mo.	-	-	-	-	-	114	-	-	-	-	-	-
N. Dak.	-	-	-	-	-	2	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	5	-	-	-	-	-	-
Nebr.	-	-	-	-	-	35	3	-	-	-	-	-
Kans.	-	1	-	-	-	-	-	-	-	-	-	-
S. ATLANTIC	-	8	-	-	1,877	1,976	24	52	21	-	-	1
Del.	-	-	-	-	26	27	-	-	-	-	-	-
Md.	-	-	-	-	225	333	4	1	-	-	-	1
D.C.	-	2	-	-	179	-	3	1	-	-	-	-
Va.	-	-	-	-	421	212	-	-	-	-	-	-
W. Va.	-	-	-	-	9	19	-	-	-	-	-	-
N.C.	-	5	-	-	567	279	1	4	2	-	-	-
S.C.	-	-	-	-	258	233	3	-	-	-	-	-
Ga.	-	-	-	-	-	279	13	46	18	-	-	-
Fla.	-	1	-	-	192	594	-	-	1	-	-	-
E.S. CENTRAL	-	5	-	-	634	481	4	13	41	-	-	-
Ky.	-	1	-	-	96	66	2	1	1	-	-	-
Tenn.	-	-	-	-	138	191	-	10	40	-	-	-
Ala.	-	4	-	-	184	38	2	2	-	-	-	-
Miss.	-	-	-	-	216	186	-	-	-	-	-	-
W.S. CENTRAL	-	2	-	-	571	469	1	7	1	-	1	-
Ark.	-	2	-	-	220	167	-	-	-	-	-	-
La.	-	-	-	-	351	165	-	-	-	-	-	-
Okla.	-	-	-	-	-	137	1	7	1	-	1	-
Tex.	-	-	-	-	-	-	-	-	-	-	-	-
MOUNTAIN	-	-	-	-	21	214	33	4	3	1	2	-
Mont.	-	-	-	-	-	8	-	-	-	-	-	-
Idaho	-	-	-	-	-	4	-	-	-	-	-	-
Wyo.	-	-	-	-	1	-	-	-	1	-	-	-
Colo.	-	-	-	-	-	69	3	-	-	1	-	-
N. Mex.	-	-	-	-	17	24	18	3	-	-	2	-
Ariz.	-	-	-	-	2	24	9	-	-	-	-	-
Utah	-	-	-	-	1	-	3	1	2	-	-	-
Nev.	-	-	-	-	-	85	-	-	-	-	-	-
PACIFIC	-	-	-	-	102	1,369	13	4	3	-	-	-
Wash.	-	-	-	-	71	95	10	2	1	-	-	-
Oreg.	-	-	-	-	22	23	-	-	-	-	-	-
Calif.	-	-	-	-	-	1,235	-	-	-	-	-	-
Alaska	-	-	-	-	3	9	1	-	-	-	-	-
Hawaii	-	-	-	-	6	7	2	2	2	-	-	-
Guam	-	-	-	-	-	2	-	-	-	-	-	-
P.R.	-	-	-	-	17	4	-	-	-	-	-	-
V.I.	-	-	-	-	-	3	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	1	-	-	-	-	-
C.N.M.I.	-	-	-	-	1	-	-	-	-	-	-	-

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 8, 1994, and January 9, 1993 (1st Week)**

Reporting Area	Malaria	Measles (Rubeola)					Men- gococcal infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total		1994	Cum. 1994	1994	Cum. 1994	Cum. 1993	1994	Cum. 1994	Cum. 1993
		Cum. 1994	1994	Cum. 1994	1994	Cum. 1994									
UNITED STATES	4	-	-	-	-	2	23	4	4	39	39	48	1	1	2
NEW ENGLAND	3	-	-	-	-	1	2	-	-	-	-	7	-	-	-
Maine	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-
N.H.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Vt.	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-
Mass.	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-
R.I.	3	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Conn.	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
MID. ATLANTIC	-	-	-	-	-	-	3	-	-	-	-	10	1	1	1
Upstate N.Y.	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-
N.Y. City	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N.J.	-	-	-	-	-	-	-	-	-	-	-	10	-	-	1
Pa.	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-
E.N. CENTRAL	-	-	-	-	-	-	6	2	2	11	11	20	-	-	-
Ohio	-	-	-	-	-	-	1	-	-	10	10	7	-	-	-
Ind.	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Ill.	-	-	-	-	-	-	1	-	-	-	-	4	-	-	-
Mich.	-	-	-	-	-	-	4	2	2	1	1	1	-	-	-
Wis.	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-
W.N. CENTRAL	1	-	-	-	-	-	-	-	-	-	-	3	-	-	-
Minn.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iowa	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mo.	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nebr.	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Kans.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S. ATLANTIC	-	-	-	-	-	-	7	1	1	19	19	-	-	-	-
Del.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Md.	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-
D.C.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Va.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W. Va.	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-
N.C.	-	-	-	-	-	-	3	-	-	12	12	-	-	-	-
S.C.	-	-	-	-	-	-	-	1	1	4	4	-	-	-	-
Ga.	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Fla.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
E.S. CENTRAL	-	-	-	-	-	-	1	-	-	1	1	2	-	-	-
Ky.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenn.	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Ala.	-	-	-	-	-	-	1	-	-	1	1	1	-	-	-
Miss.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W.S. CENTRAL	-	-	-	-	-	-	-	-	-	7	7	1	-	-	-
Ark.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
La.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Okla.	-	-	-	-	-	-	-	-	-	7	7	1	-	-	-
Tex.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MOUNTAIN	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-
Mont.	-	U	-	U	-	-	-	U	-	U	-	-	U	-	-
Idaho	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wyo.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colo.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
N. Mex.	-	-	-	-	-	-	-	N	N	-	-	-	-	-	-
Ariz.	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Utah	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nev.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PACIFIC	-	-	-	-	-	1	1	1	1	1	1	5	-	-	1
Wash.	-	-	-	-	-	-	1	1	1	1	1	-	-	-	-
Oreg.	-	-	-	-	-	-	-	N	N	-	-	-	-	-	-
Calif.	-	U	-	U	-	1	-	U	-	U	-	3	U	-	1
Alaska	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-
Guam	-	U	-	U	-	-	-	U	-	U	-	-	U	-	-
P.R.	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C.N.M.I.	1	3	3	-	-	-	-	-	-	-	-	-	-	-	-

\*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 8, 1994, and January 9, 1993 (1st 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	319	440	2	81	260	-	2	1	60
NEW ENGLAND	4	16	-	2	5	-	1	-	25
Maine	-	-	-	-	2	-	-	-	-
N.H.	-	1	-	-	-	-	-	-	2
Vt.	-	-	-	-	-	-	-	-	1
Mass.	3	14	-	-	-	-	1	-	14
R.I.	-	-	-	-	-	-	-	-	-
Conn.	1	1	-	2	3	-	-	-	8
MID. ATLANTIC	52	43	-	7	21	-	-	-	10
Upstate N.Y.	-	-	-	-	-	-	-	-	-
N.Y. City	52	43	-	7	20	-	-	-	-
N.J.	-	-	-	-	-	-	-	-	3
Pa.	-	-	-	-	1	-	-	-	7
E.N. CENTRAL	36	7	-	15	16	-	-	-	1
Ohio	5	-	-	1	-	-	-	-	-
Ind.	3	1	-	1	1	-	-	-	-
Ill.	23	-	-	13	15	-	-	-	-
Mich.	5	1	-	-	-	-	-	-	-
Wis.	-	5	-	-	-	-	-	-	1
W.N. CENTRAL	1	23	2	1	-	-	-	-	1
Minn.	-	-	-	-	-	-	-	-	-
Iowa	1	3	2	-	-	-	-	-	1
Mo.	-	19	-	-	-	-	-	-	-
N. Dak.	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	-
Nebr.	-	1	-	-	-	-	-	-	-
Kans.	-	-	-	1	-	-	-	-	-
S. ATLANTIC	69	96	-	33	13	-	-	1	17
Del.	-	2	-	-	-	-	-	-	-
Md.	2	11	-	9	-	-	-	-	7
D.C.	3	-	-	2	1	-	-	-	-
Va.	-	2	-	-	-	-	-	-	1
W. Va.	-	-	-	-	2	-	-	-	-
N.C.	30	28	-	-	-	-	-	1	1
S.C.	11	9	-	-	10	-	-	-	2
Ga.	15	28	-	22	-	-	-	-	6
Fla.	8	16	-	-	-	-	-	-	-
E.S. CENTRAL	95	60	-	3	5	-	-	-	1
Ky.	3	-	-	-	-	-	-	-	-
Tenn.	33	4	-	-	-	-	-	-	-
Ala.	16	36	-	3	5	-	-	-	1
Miss.	43	20	-	-	-	-	-	-	-
W.S. CENTRAL	62	86	-	-	-	-	-	-	2
Ark.	11	21	-	-	-	-	-	-	-
La.	51	38	-	-	-	-	-	-	-
Okla.	-	27	-	-	-	-	-	-	2
Tex.	-	-	-	-	-	-	-	-	-
MOUNTAIN	-	-	-	17	1	-	1	-	2
Mont.	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-
Wyo.	-	-	-	1	-	-	-	-	-
Colo.	-	-	-	-	-	-	-	-	-
N. Mex.	-	-	-	-	-	-	-	-	-
Ariz.	-	-	-	16	1	-	-	-	2
Utah	-	-	-	-	-	-	1	-	-
Nev.	-	-	-	-	-	-	-	-	-
PACIFIC	-	109	-	3	199	-	-	-	1
Wash.	-	2	-	-	1	-	-	-	-
Oreg.	-	-	-	2	-	-	-	-	-
Calif.	-	106	-	-	196	-	-	-	-
Alaska	-	-	-	-	-	-	-	-	1
Hawaii	-	1	-	1	2	-	-	-	-
Guam	-	-	-	-	1	-	-	-	-
P.R.	5	11	-	-	-	-	-	-	-
V.I.	-	1	-	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-
C.N.M.I.	-	-	-	6	-	-	-	-	-

U: Unavailable

TABLE III. Deaths in 121 U.S. cities,\* week ending  
January 8, 1994 (1st Week)

Reporting Area	All Causes, By Age (Years)						P&I <sup>†</sup> Total	Reporting Area	All Causes, By Age (Years)						P&I <sup>†</sup> Total
	All Ages	≥65	45-64	25-44	1-24	<1			All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	583	433	84	49	7	10	52	S. ATLANTIC	1,415	939	278	128	36	32	76
Boston, Mass.	U	U	U	U	U	U	U	Atlanta, Ga.	193	112	54	20	6	1	6
Bridgeport, Conn.	37	29	3	5	-	-	7	Baltimore, Md.	157	107	27	11	3	8	14
Cambridge, Mass.	24	17	5	2	-	-	5	Charlotte, N.C.	90	59	15	13	-	2	1
Fall River, Mass.	38	31	3	4	-	-	1	Jacksonville, Fla.	202	146	37	13	1	5	14
Hartford, Conn.	91	59	15	11	3	3	1	Miami, Fla.	99	55	25	14	3	2	-
Lowell, Mass.	40	31	8	1	-	-	5	Norfolk, Va.	65	47	6	3	3	6	3
Lynn, Mass.	19	15	3	-	-	1	2	Richmond, Va.	114	76	22	11	3	2	8
New Bedford, Mass.	36	28	4	3	1	-	2	Savannah, Ga.	47	29	12	2	2	2	2
New Haven, Conn.	49	29	11	6	1	2	2	St. Petersburg, Fla.	66	51	8	5	2	-	2
Providence, R.I.	72	60	4	8	-	-	7	Tampa, Fla.	197	149	35	11	1	1	21
Somerville, Mass.	4	2	1	1	-	-	1	Washington, D.C.	149	79	31	24	12	3	5
Springfield, Mass.	64	53	5	5	-	1	8	Wilmington, Del.	36	29	6	1	-	-	-
Waterbury, Conn.	43	32	6	1	1	3	1	E.S. CENTRAL	753	537	131	48	23	14	63
Worcester, Mass.	66	47	16	2	1	-	10	Birmingham, Ala.	83	61	16	4	1	1	3
MID. ATLANTIC	2,719	1,781	509	308	65	56	126	Chattanooga, Tenn.	60	42	10	7	1	-	2
Albany, N.Y.	37	30	4	3	-	-	5	Knoxville, Tenn.	102	73	21	5	2	1	17
Allentown, Pa.	33	30	2	1	-	-	1	Lexington, Ky.	104	71	19	8	4	2	12
Buffalo, N.Y.	115	86	20	4	3	2	5	Memphis, Tenn.	116	90	11	6	7	2	17
Camden, N.J.	40	21	7	7	4	1	2	Mobile, Ala.	71	48	14	6	1	2	3
Elizabeth, N.J.	U	U	U	U	U	U	U	Montgomery, Ala.	62	44	15	1	1	1	1
Erie, Pa.§	62	43	11	5	2	1	5	Nashville, Tenn.	155	108	25	11	6	5	8
Jersey City, N.J.	52	30	6	10	1	5	-	W.S. CENTRAL	1,824	1,202	338	179	54	47	152
New York City, N.Y.	1,781	1,115	358	237	42	29	63	Austin, Tex.	130	91	23	10	5	1	9
Newark, N.J.	66	33	17	10	2	4	5	Baton Rouge, La.	U	U	U	U	U	U	U
Paterson, N.J.	36	17	6	6	3	4	-	Corpus Christi, Tex.	66	43	13	3	1	6	7
Philadelphia, Pa.	U	U	U	U	U	U	U	Dallas, Tex.	292	186	55	29	10	12	18
Pittsburgh, Pa.§	64	45	12	4	2	1	5	El Paso, Tex.	77	51	9	6	10	1	5
Reading, Pa.	19	13	5	-	1	-	3	Ft. Worth, Tex.	119	81	22	12	-	4	6
Rochester, N.Y.	176	134	26	9	3	4	15	Houston, Tex.	408	241	85	64	8	10	40
Schenectady, N.Y.	20	16	4	-	-	-	-	Little Rock, Ark.	97	64	22	6	3	2	11
Scranton, Pa.§	40	32	7	-	-	1	1	New Orleans, La.	132	78	29	14	5	2	-
Syracuse, N.Y.	100	77	12	7	-	4	8	San Antonio, Tex.	291	211	46	20	9	5	31
Trenton, N.J.	29	21	5	2	1	-	-	Shreveport, La.	83	65	13	4	1	-	7
Utica, N.Y.	20	17	2	-	1	-	2	Tulsa, Okla.	129	91	21	11	2	4	18
Yonkers, N.Y.	29	21	5	3	-	-	6	MOUNTAIN	1,085	741	211	79	30	24	97
E.N. CENTRAL	2,455	1,644	441	210	103	57	189	Albuquerque, N.M.	143	105	24	7	3	4	5
Akron, Ohio	73	59	10	3	-	1	8	Colo. Springs, Colo.	42	32	8	1	-	1	6
Canton, Ohio	65	48	9	5	1	2	4	Denver, Colo.	138	90	25	14	5	4	13
Chicago, Ill.	329	111	84	79	46	9	13	Las Vegas, Nev.	175	115	39	16	4	1	12
Cincinnati, Ohio	88	64	18	4	2	-	9	Ogden, Utah	29	26	3	-	-	-	5
Cleveland, Ohio	190	130	41	8	3	8	5	Phoenix, Ariz.	275	176	60	28	8	3	37
Columbus, Ohio	128	90	25	9	2	2	16	Pueblo, Colo.	56	40	12	2	1	1	1
Dayton, Ohio	159	116	32	5	3	3	17	Salt Lake City, Utah	98	74	13	1	4	6	13
Detroit, Mich.	306	190	61	38	12	5	16	Tucson, Ariz.	129	83	27	10	5	4	5
Evansville, Ind.	95	73	18	2	2	-	5	PACIFIC	1,871	1,308	310	165	38	45	173
Fort Wayne, Ind.	62	48	9	3	-	2	5	Berkeley, Calif.	30	23	5	1	1	-	5
Gary, Ind.	20	9	6	3	1	1	-	Fresno, Calif.	118	85	15	7	4	7	13
Grand Rapids, Mich.	60	44	8	1	4	3	12	Glendale, Calif.	28	22	4	2	-	-	3
Indianapolis, Ind.	279	199	38	18	12	12	20	Honolulu, Hawaii	87	62	13	7	-	4	9
Madison, Wis.	43	36	4	3	-	-	3	Long Beach, Calif.	112	81	13	7	5	6	13
Milwaukee, Wis.	162	120	29	7	4	2	20	Los Angeles, Calif.	483	314	84	61	14	6	27
Peoria, Ill.	62	47	8	6	1	-	6	Pasadena, Calif.	36	24	6	2	2	2	4
Rockford, Ill.	69	52	6	6	3	2	12	Portland, Ore.	126	97	16	9	-	4	6
South Bend, Ind.	46	40	4	1	-	1	4	Sacramento, Calif.	U	U	U	U	U	U	U
Toledo, Ohio	130	99	18	6	4	3	10	San Diego, Calif.	218	141	37	25	8	7	27
Youngstown, Ohio	89	69	13	3	3	1	4	San Francisco, Calif.	U	U	U	U	U	U	U
W.N. CENTRAL	670	479	117	50	16	8	39	San Jose, Calif.	182	134	33	8	2	5	26
Des Moines, Iowa	22	18	3	1	-	-	1	Santa Cruz, Calif.	67	53	10	2	1	1	10
Duluth, Minn.	13	9	1	2	1	-	2	Seattle, Wash.	181	129	37	15	-	-	7
Kansas City, Kans.	31	24	6	-	1	-	2	Spokane, Wash.	80	57	13	8	-	2	14
Kansas City, Mo.	112	79	22	10	1	-	4	Tacoma, Wash.	123	86	24	11	1	1	9
Lincoln, Nebr.	56	41	12	1	2	-	4	TOTAL	13,375 <sup>†</sup>	9,064	2,419	1,216	372	293	967
Minneapolis, Minn.	210	140	38	22	8	2	15								
Omaha, Nebr.	102	75	17	7	1	2	4								
St. Louis, Mo.	U	U	U	U	U	U	U								
St. Paul, Minn.	64	46	13	3	-	2	4								
Wichita, Kans.	60	47	5	4	2	2	3								

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

<sup>†</sup>Pneumonia and influenza.

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

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

U: Unavailable.

*National Immunization Days — Continued*

where the last case of poliomyelitis resulting from wild poliovirus was confirmed in a 2-year-old child in Peru in August 1991.

Of the five countries in the Western Pacific Region with endemic poliomyelitis, four (China, Laos, Philippines, and Vietnam) have adopted the strategy of NIDs. The successes in Philippines and China (2) reflect the high levels of political support engendered during the extensive planning for and conduct of the NIDs and the multisectoral involvement of public and private partnerships formed in countries in this region.

*References*

1. Expanded Program on Immunization, World Health Organization. Poliomyelitis section. In: Report of the Combined Research and Development Group and technical consultative meeting of the Expanded Programme on Immunization. Geneva: World Health Organization, Expanded Program on Immunization, 1993:12–3; publication no. WHO/EPI/GEN/93.20.
2. CDC. National poliomyelitis immunization days—People's Republic of China, 1993. *MMWR* 1993;42:837–9.

*Health Objectives for the Nation***Public Health Core Functions — Alabama, Maryland, Mississippi, New Jersey, South Carolina, and Wisconsin, 1993**

The three core functions of public health are assessment, policy development, and assurance (1,2). Within these core functions, CDC has identified 10 basic public health practices that are integral to the operation of state and local health agencies (Table 1) (3). As a part of assessing the core functions of public health, public health officials at local health departments in six states (Alabama, Maryland, Mississippi, New Jersey, South Carolina, and Wisconsin) were surveyed in 1993 by the state local liaison affiliates of the Association of State and Territorial Local Health Liaison Officials, the School of Public Health at the University of North Carolina at Chapel Hill, and CDC. This report summarizes the findings from this survey.

The questionnaire included 26 questions about the three core functions of public health; these questions were derived from previous surveys (4). Respondents were asked to 1) evaluate whether each of the 10 public health practices existed in their jurisdiction and 2) assess the adequacy of the performance of the practice by the entire community. A total of 395 jurisdictions was surveyed, with respondents being either the local health department director or the district health officer. The office of the state local liaison affiliates received and analyzed completed questionnaires.

Overall, completed surveys were received from 370 (94%) of the 395 jurisdictions surveyed. Of these 370, 313 (85%) served areas with populations of less than 100,000; those jurisdictions accounted for 39% of the population for all six states. The survey represented approximately 11% of the U.S. population and 12% of all U.S. local health departments.

For all respondents, the mean percentage score for performance by the community was 56%. For the presence of the three core functions, the mean percentage scores were 46% for assessment, 53% for policy development, and 68% for assurance. The

*Public Health Core Functions — Continued*

mean percentage scores for the presence of the 10 specific practices ranged from 38% for planning to 91% for informing and educating (Table 1).

The mean percentage score for the perceived adequacy of performance by the community was 32%. For the adequacy of the three core functions, the mean percentage scores were 27% for assessment, 29% for policy development, and 40% for assurance. The mean percentage score for the adequacy of the 10 basic public health practices ranged from 19% for assessing to 51% for informing and educating (Table 1).

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**Editorial Note:** An assessment by the Institute of Medicine in 1988 highlighted the need to improve essential public health functions in the United States (1). In 1989, a survey of state health officers documented a wide range in the presence of the three core functions at the state level: the function of assessment was being performed in 82% of states; policy development, in 72%; and assurance, in 56% (5). Although the findings in this report contrast with previous findings, they extend understanding of the presence and adequacy of core public health functions to the local level.

The results of this survey are subject to at least two limitations: 1) because this survey was designed as a pilot, the findings cannot be generalized; and 2) the diversity

**TABLE 1. Mean summary scores for the percentage performance of a public health practice in a community and the percentage perceived adequacy of performance of the practice — Alabama, Maryland, Mississippi, New Jersey, South Carolina, and Wisconsin, 1993\***

Function and practice	Performance	Perceived adequacy of performance
<b>Assessment</b>	<b>46%</b>	<b>27%</b>
Assess the health needs	42%	19%
Investigate the occurrence of health effects and health hazards	40%	25%
Analyze the determinants of identified health needs	63%	41%
<b>Policy development</b>	<b>53%</b>	<b>29%</b>
Advocate for public health, build constituencies, and identify resources	69%	38%
Set priorities among health needs	46%	26%
Develop plans and policies to address priority health needs	38%	21%
<b>Assurance</b>	<b>68%</b>	<b>40%</b>
Manage resources and develop organizational structures	70%	49%
Implement programs	67%	37%
Evaluate programs and provide quality assurance	46%	22%
Inform and educate	91%	51%

\*Of 395 jurisdictions surveyed, 370 (94%) local health department directors or district health officers completed surveys.

*Public Health Core Functions — Continued*

in the organization and activities of the different public health agencies restrict the comparability of the findings. Despite these limitations, refinement of this approach will assist in monitoring efforts to achieve the national health objective to “increase to at least 90 percent the proportion of people who are served by a local health department that is effectively carrying out the core functions of public health” (objective 8.14) (2).

*References*

1. Institute of Medicine. The future of public health. Washington, DC: National Academy Press, 1988.
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.
3. Roper WL, Baker EL, Dyal WW, Nicola RM. Strengthening the public health system. *Public Health Rep* 1992;107:609–15.
4. Miller CA, Moore KS, Richards TB, Kotelchuck M, Kaluzny AD. Longitudinal observations on a selected group of local health departments. *J Public Health Policy* 1993;14:34–50.
5. Scott HD, Tierney JT, Waters WJ. The future of public health: a survey of the states. *J Public Health Policy* 1990;11:296–304.

*Current Trends***Adult Blood Lead Epidemiology and Surveillance —  
United States, Third Quarter, 1993**

CDC's National Institute for Occupational Safety and Health (NIOSH) Adult Blood Lead Epidemiology and Surveillance (ABLES) program monitors elevated blood lead levels (BLLs) in adults in the United States. Laboratories report results of testing for BLLs to state-based lead surveillance programs, and results are compiled each quarter by NIOSH (1). Twenty states currently report results to NIOSH (Table 1). Ten additional states (Colorado, Florida, Georgia, Maine, Minnesota, Mississippi, Nebraska, New Mexico, North Carolina, and Oklahoma) are developing the capacity to systematically collect and/or report elevated BLL data (Figure 1). Programs in 30 states now have or are implementing 1) regulations specifying a reportable BLL in adults; 2) requirements that laboratories report elevated BLLs to appropriate state agencies; 3) protocols for investigating reported cases; and 4) mechanisms for linking case reports with follow-up activities (e.g., educational efforts and epidemiologic field investigations).

Reports based on data from ABLES have not included analysis of trends because of the incremental development of the surveillance system (i.e., yearly addition of participating states) and the availability of complete data for only 1 year (1992). However, the availability of data for 1993 will enable analysis of trends for a 2-year period (1992–1993).

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## Lead Epidemiology and Surveillance — Continued

**TABLE 1. Reports of elevated blood lead levels (BLLs) in adults — 20 states,\* third quarter, 1993**

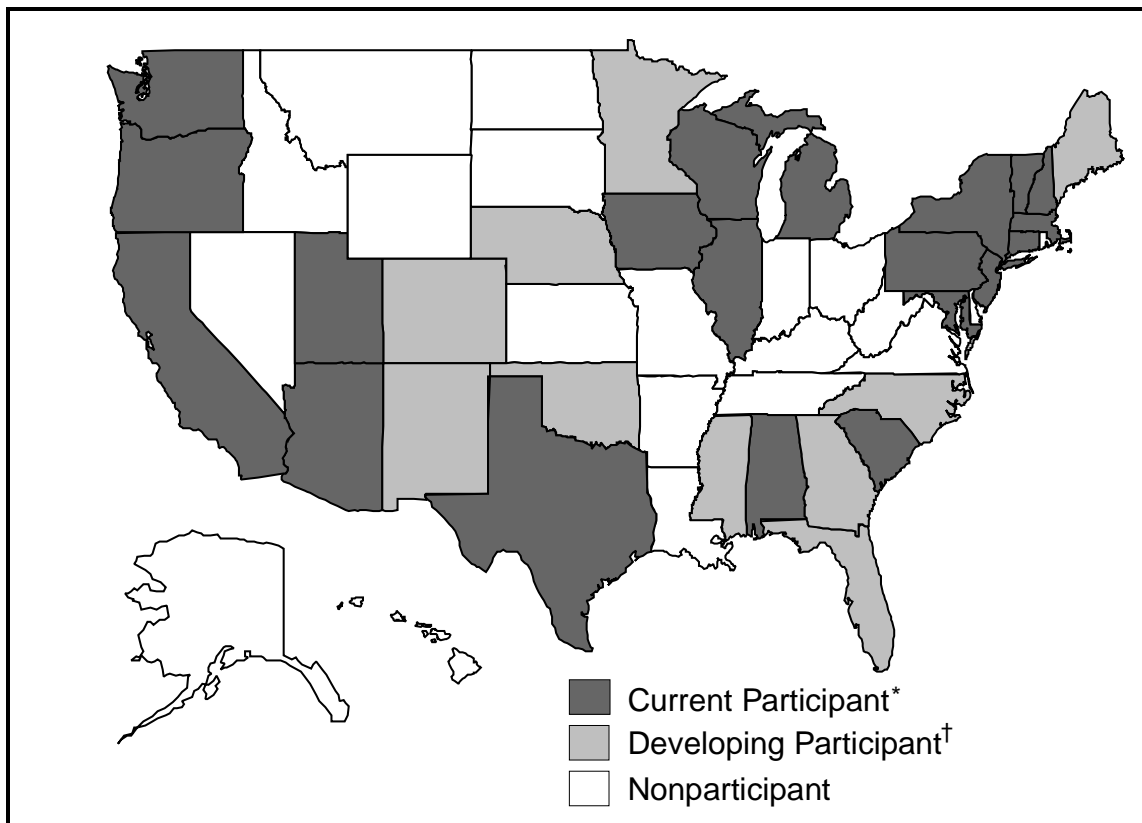
Reported BLL ( $\mu\text{g/dL}$ )	Third quarter, 1993		Cumulative reports, 1993 <sup>§</sup>	Cumulative reports, 1992 <sup>¶</sup>
	No. reports	No. persons <sup>†</sup>		
25–39	3,848	2,358	11,261	9,377
40–49	1,256	706	3,163	2,257
50–59	369	222	788	615
≥60	171	91	411	324
<b>Total</b>	<b>5,644</b>	<b>3,377</b>	<b>15,623</b>	<b>12,573</b>

\* Alabama, Arizona, California, Connecticut, Illinois, Iowa, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Oregon, Pennsylvania, South Carolina, Texas, Utah, Vermont, Washington, and Wisconsin.

<sup>†</sup> Individual reports are based on the highest reported BLL for the person during the given quarter.

<sup>§</sup> Data for first quarter 1993 reported from 17 states (Alabama, Connecticut, Illinois, Iowa, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Oregon, Pennsylvania, South Carolina, Texas, Utah, Vermont, and Wisconsin). Second quarter 1993 reports are from the 20 states previously described.

<sup>¶</sup> Cumulative totals for 1992 reflect first-, second-, and third-quarter data from 17 states (Alabama, California, Colorado, Connecticut, Illinois, Iowa, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Oregon, South Carolina, Texas, Utah, and Wisconsin).

**FIGURE 1. States participating in Adult Blood Lead Epidemiology and Surveillance — United States, December 1993**

\* Reporting blood lead level (BLL) data to CDC's National Institute for Occupational Safety and Health.

<sup>†</sup> Developing capacity to systematically collect and/or report BLL data.



*Lead Epidemiology and Surveillance — Continued*

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*Reference*

1. CDC. Surveillance of elevated blood lead levels among adults—United States, 1992. MMWR 1992;41:285–8.

Notice to Readers

**Performance Evaluation Program for *Mycobacterium tuberculosis*  
Drug-Susceptibility Testing Process**

As part of the continuing initiative for assessing the quality and effectiveness of laboratory testing systems to support public health objectives and disease surveillance, prevention, and treatment programs, CDC is conducting a performance evaluation program to assess the drug-susceptibility testing process of laboratories for multidrug-resistant strains of *Mycobacterium tuberculosis*. Participation in the program, which is not designed to satisfy regulatory requirements, is voluntary and free of charge. Anonymity of individual laboratory contributions to the program is maintained.

Program participants will perform periodic drug-susceptibility testing on performance evaluation panels (Lowenstein-Jensen slants) in the same manner by which they evaluate patient isolates. Panels consist of strains of *M. tuberculosis* exhibiting patterns of resistance to the primary antituberculosis drugs (e.g., isoniazid, rifampin, pyrazinamide, ethambutol, and streptomycin). Only laboratories following Biosafety Level 3 practices are eligible to participate (Biosafety Level 2 facilities with Level 3 containment equipment are acceptable). Participant laboratories should follow guidelines described in the *Biosafety in Microbiological and Biomedical Laboratories* (1), 1993 edition.

Participants in the program should benefit by 1) analyzing referenced cultures that closely resemble the cultures they may encounter in routine clinical testing; 2) comparing results and methods reported by other participant laboratories for commonly analyzed cultures; 3) comparing quality-control results and procedures; 4) having a mechanism for performing self-assessment of individual performance; and 5) detecting problems with instrumentation and reagents.

Additional information is available from the Division of Laboratory Systems, Public Health Practice Program Office, CDC, 4770 Buford Highway, NE, Building 102, Mailstop G-23, Atlanta, GA 30341; telephone (404) 488-7685; fax (404) 488-7693.

*Notice to Readers — Continued*

*Reference*

1. CDC/National Institutes of Health. Biosafety in microbiological and biomedical laboratories. 3rd ed. Atlanta: US Department of Health and Human Services, Public Health Service, CDC/National Institutes of Health, 1993; DHHS publication no. (CDC)93-8395.

*Notice to Readers*

**Third National Symposium on Biosafety**

CDC, the American Biological Safety Association, and the American Industrial Hygiene Association will cosponsor the Third National Symposium on Biosafety, "Application of Biosafety Principles to Various Worksites," in Atlanta February 27–March 2, 1994. The symposium will address the fundamental principles and practices of biosafety, containment concepts, and engineering design developed for biomedical and microbiologic laboratories and health-care settings. Workshops will focus these principles on specific worksites (e.g., hospitals, physician/dental offices, biotechnology facilities, agricultural facilities, and public safety arenas) with a potential for occupational transmission of infectious diseases.

Registration information is available from the Professional and Scientific Associates, Inc., 2635 Century Parkway, Suite 990, Atlanta, GA 30345-3112; telephone (800) 772-8232.

**Erratum: Vol. 42, Nos. 51 & 52**

In the article "Vaccination Coverage of 2-Year-Old Children—United States, 1991–1992," on page 986, the first two sentences of the second paragraph should read "In 1992, 71%–72% of children in need of at least one of the recommended vaccines were at or above the poverty level (Table 2). Among children in need of at least one of the recommended vaccines, 72%–75% were white." In addition, in Table 1, the  $\pm$  symbol should appear in front of each 95% confidence interval variable.

**Erratum: Vol. 42, No. 14**

In the article "Update: Multistate Outbreak of *Escherichia coli* O157:H7 Infections from Hamburgers—Western United States, 1992–1993," on page 262, the last sentence of the second to last paragraph incorrectly states the internal temperature for cooked hamburgers as "155 F (86.1 C)"; the correct Centigrade temperature is 68 C (the Fahrenheit temperature is correct as published).



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