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Current Trends

Vaccination Coverage of 2-Year-Old Children — United States, 1991–1992

Protecting children against vaccine-preventable diseases is a national priority in public health. Because approximately 80% of childhood vaccine doses are recommended for administration during the first 2 years of life, vaccination coverage among children must be continuously monitored. National estimates of vaccination coverage were calculated annually from 1959 through 1985 but not for 1986–1990. Beginning in 1991, national estimates of vaccination coverage of preschool children have been available through the National Health Interview Survey (NHIS), a national survey of the civilian noninstitutionalized population conducted by CDC's National Center for Health Statistics (*1*). This report presents 1992 national estimates of vaccination coverage for 2-year-old children and describes changes from 1991 to 1992.

The NHIS collects vaccination information during household interviews. If vaccination records are available, data are abstracted from the record. If such records are not available, information is based on parental recall. For data measurement, 2-year-old children are defined as persons aged 19–35 months. The proportion of children vaccinated were separately analyzed by poverty classification and place of residence. In addition, to assist in targeting vaccination activities based on cultural differences, data were analyzed by race. Limitations in sample size precluded collection of data on ethnicity and analysis of data for races other than black and white.

Coverage for measles-containing vaccine was similar in 1991 and 1992 (82.0% and 82.5%, respectively) (Table 1). In contrast, coverage in 1992 was substantially higher than that in 1991 for diphtheria and tetanus toxoids and pertussis vaccine (DTP) and poliovirus vaccine. From 1991 to 1992, coverage for three or more doses of DTP increased from 68.8% to 83.0% and for three or more doses of poliovirus vaccine, from 53.2% to 72.4%.

Children living below the poverty level* were less well vaccinated than others. Differences between children living below the poverty level and those living at or above the poverty level ranged from a low of 4.1 percentage points for measles (80.2% vs

*Poverty statistics are based on definitions developed by the Social Security Administration that include a set of income thresholds that vary by family size and composition.

Vaccination Coverage — Continued

84.3%) to a high of 8.1 percentage points for polio (66.6% vs 74.7%). Vaccination levels in urban, suburban, and rural areas were similar in 1992. In general, vaccination levels were lower in black children than in white.

In 1992, 71%–72% of children at or above the poverty level were in need of at least one vaccine (Table 2). Among white children, 72%–75% were in need of at least one of the recommended vaccines. Overall, an estimated 1 million 2-year-olds required a single dose of measles-containing vaccine, and 1.6 million 2-year-olds required one or more doses of poliovirus vaccine. Approximately 1 million children had not received at least three doses of DTP vaccine.

Reported by: National Immunization Program; Div of Health Interview Statistics, National Center for Health Statistics, CDC.

Editorial Note: The findings in this report summarizing NHIS data document the overall continuing problem of undervaccination of children in the United States. However, vaccination coverage for some antigens has improved in some age groups—particularly for vaccination against measles in the preschool population. Estimated measles vaccine coverage for 2-year-olds in 1985 was 61%, compared with 82% in 1991 and 1992; before 1991, the highest previously documented level was 67% in 1982 (CDC, unpublished data, 1993). The recent increase in coverage reflects the national response to increased vaccination levels following the measles resurgence during

TABLE 1. Percentage* of 2-year-olds† receiving doses of diphtheria and tetanus toxoids and pertussis vaccine (DTP), poliovirus vaccine, and measles-containing vaccine (MCV), by selected characteristics — United States, 1991 and 1992

	≥3 doses DTP				≥3 doses poliovirus				1 dose MCV			
Characteristic	**1991**	**(95% CI§)**	**1992**	**(95% CI)**	**1991**	**(95% CI)**	**1992**	**(95% CI)**	**1991**	**(95% CI)**	**1992**	**(95% CI)**
Socioeconomic status¶												
Below poverty level	53.0	(8.8)	79.7	(5.7)	38.7	(7.9)	66.6	(6.2)	73.4	(6.8)	80.2	(5.6)
At or above poverty level	75.7	(2.8)	84.6	(2.2)	59.5	(3.6)	74.7	(2.5)	86.6	(2.3)	84.3	(2.2)
Race												
White	73.4	(3.6)	84.8	(2.3)	57.3	(4.0)	74.1	(2.6)	82.9	(2.7)	83.6	(2.4)
Black	50.6	(7.3)	74.7	(6.3)	35.6	(6.1)	62.7	(7.0)	77.4	(7.3)	77.9	(6.3)
Other**	58.0	(12.5)	79.3	(9.0)	49.8	(14.8)	75.5	(9.9)	83.8	(12.5)	79.9	(10.0)
Residence												
Urban	64.8	(4.4)	82.5	(3.5)	49.9	(4.7)	74.1	(4.0)	78.4	(4.0)	84.5	(2.7)
Suburban	72.3	(4.3)	84.4	(2.8)	55.8	(5.2)	72.6	(3.4)	85.0	(3.5)	83.3	(3.1)
Rural	67.6	(6.0)	80.7	(5.4)	52.5	(5.9)	69.0	(5.3)	81.1	(5.7)	77.2	(6.7)
Total	**68.8**	**(3.0)**	**83.0**	**(2.2)**	**53.2**	**(3.4)**	**72.4**	**(2.3)**	**82.0**	**(2.5)**	**82.5**	**(2.3)**

*Data are based on household interviews of a sample of the civilian noninstitutionalized population. Refusals and unknowns were excluded (DTP: 4% in 1991, 16% in 1992; measles-containing vaccine: 3% in 1991, 14% in 1992; poliovirus vaccine: 3% in 1991, 17% in 1992). In 1991, 45.6% of respondents had a vaccination record; in 1992, 31.2% had a vaccination record.

†Children aged 19–35 months.

§Confidence interval.

¶Poverty statistics are based on definitions developed by the Social Security Administration that include a set of income thresholds that vary by family size and composition.

**Data for American Indians/Alaskan Natives and Asians/Pacific Islanders were combined because of limitations in sample size.

Vaccination Coverage — Continued

1988–1991; as a result of these efforts, the incidence of measles decreased to a historic low in 1993 (*2*).

This report also documents a substantial increase in poliovirus and DTP vaccination levels from 1991 to 1992. At least two factors may account for these increases. First, many state and local public health agencies, in collaboration with national and local private voluntary organizations, have intensified their efforts to vaccinate preschool children, especially since the 1989–1991 measles resurgence. Second, changes in survey methodology between 1991 and 1992 have simplified data collection from parental recall. In 1991, respondents were required to specify the exact ages at which vaccinations were administered for the full number of doses to be credited; however, some parents had difficulty recalling the exact ages at which their child received vaccinations. As a consequence, in 1992, a parental response that the child had received all doses of a particular antigen was accepted; retrospective studies have shown this methodology has enhanced the accuracy of data (CDC, unpublished data, 1993). Because of difficulties in determining vaccination status from parental recall (*3*), in 1994, the NHIS will include a check of provider records for all children aged 19–35 months, thus allowing for adjustment of overall survey results. In addition, health-care providers will encourage parents to maintain home vaccination records (*4*).

Despite ongoing and substantial efforts to improve the vaccine delivery system in the United States, vaccination levels for 2-year-olds remain below 90%. In addition, coverage varies by and are substantially lower in some population groups, especially those underserved by the health-care system.

Differences in vaccination levels among racial/ethnic groups may be influenced by social and cultural phenomena and require special interventions. For example, during 1992 in Los Angeles, 42% of Hispanic preschool children were fully vaccinated by age 24 months, compared with 25% of black children, even though Hispanic parents reported lower mean annual family incomes ($3218 vs. $4596) and lower mean years of education (8.6 years vs. 12.5 years) (CDC, unpublished data, 1993).

TABLE 2. Percentage of all undervaccinated 2-year-olds* requiring at least one dose of diphtheria and tetanus toxoids and pertussis vaccine (DTP), poliovirus vaccine, and/or measles-containing vaccine (MCV), by selected characteristics — United States, 1992

Characteristic	<3 doses DTP	<3 doses poliovirus	0 doses MCV
Socioeconomic status†			
Below poverty level	28	29	28
At or above poverty level	72	71	72
Total	**100**	**100**	**100**
Race			
White	72	75	75
Black	22	20	19
Other§	6	4	6
Total	**100**	**99**	**100**

*Children aged 19–35 months.
†Poverty statistics are based on definitions developed by the Social Security Administration that include a set of income thresholds that vary by family size and composition.
§Data for American Indians/Alaskan Natives and Asians/Pacific Islanders were combined because of limitations in sample size.

Vaccination Coverage — Continued

Limitations in the sample size of the 1992 NHIS preclude estimation of vaccination coverage of Hispanic populations; however, the increased incidence of measles among Hispanics before and during the measles resurgence suggests that overall vaccination coverage is also substantially lower in Hispanics than in white non-Hispanics (*5–7*). The prevention of vaccine-preventable diseases in the United States will require that uniformly high vaccination levels for preschool children be achieved and sustained in all communities.

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Effectiveness in Disease and Injury Prevention

HIV Prevention Practices of Primary-Care Physicians — United States, 1992

Primary-care physicians can be important providers human immunodeficiency virus (HIV)-prevention services to their patients. In 1991, 15% of U.S. adults reported having been tested for HIV antibody; of these, 55% reported their most recent HIV test had been in a physician's office or a hospital (*1*). During 1992, CDC and the Health Resources and Services Administration (HRSA) commissioned a national survey to characterize the types of HIV prevention services provided by primary-care physicians and barriers to the provision of these services. This report summarizes the results of the survey.

In October 1992, a questionnaire was mailed to 4011* primary-care physicians who were randomly selected from the American Medical Association (AMA) Physician Masterfile, which comprises all physicians in the United States. The sample was stratified by location, race/ethnicity, and specialty. Two categories of location were defined on the basis of the prevalence of acquired immunodeficiency syndrome (AIDS) in metropolitan statistical areas (MSAs): 1) physicians practicing in the 20 MSAs with the highest prevalence and 2) those practicing in the remaining MSAs. Physicians were asked about their risk assessment of new patients; HIV counseling, testing, and treatment practices; and basic understanding of and attitudes about HIV infection and persons with HIV disease. The data were weighted to adjust for unequal probabilities of selection and for the variability of response rates among the strata.

*Represents 3% of the total primary-care physician population.

HIV Prevention Practices — Continued

Of the 3735 eligible† physicians, 2545 (68%) responded; of these, 802 were general/family practitioners; 360, pediatrician/adolescent medicine physicians; 683, obstetrician/gynecologists (OB/GYNs); and 700, general internal medicine physicians. Of the 2545 respondents, 1931 (76%) were men. Three hundred eighty (15%) were aged <35 years; 1042 (41%), 35–44 years; and 1123 (44%), >44 years. Of 2496 respondents for whom primary practice was known, 1487 (60%) were based in private, single-specialty practices; 442 (18%), in private, multispecialty practices; 299 (12%), in hospitals, public clinics, and community health centers; and 267 (11%), from academia and other institutions. Six hundred two (24%) of the physicians were located in areas with high prevalences of AIDS.

Almost all (94%) respondents indicated they "usually" or "always" asked new adult (aged ≥19 years) patients about cigarette smoking; however, sexual history-taking was less frequently reported (Table 1): 49% asked about sexually transmitted diseases (STDs), 31% about condom use, 27% about sexual orientation, and 22% about number of sex partners. In comparison, 84% of all physicians asked new adolescent (aged 13–18 years) patients about cigarette smoking, 56% about STDs, 52% about condom use, 34% about number of sex partners, and 27% about sexual orientation. One fourth (25%) of all physicians believed their patients would be offended by questions about their sexual behaviors.

The percentage of physicians who indicated they would "likely" or "very likely" encourage HIV testing varied by patient risk category (Table 2) and ranged from 95% (homosexual men with multiple partners and injecting-drug users) to 40% (sexually active adolescent patients).

Most physicians (66%) indicated that if HIV testing were indicated for a patient, they would probably provide the test counseling themselves. Factors that either "moderately" or "strongly" influenced physicians to refer for counseling and testing rather than provide it themselves were that counseling was too time consuming (55%), information was insufficient to enable counseling (45%), and they preferred anonymous testing for their patients (42%). Most respondents indicated that their decision to refer was not influenced by inadequate reimbursement (86%) or discomfort with counseling (85%).

Ninety-two percent of physicians indicated that they would counsel an HIV-positive patient to reduce the risk for transmitting HIV. In addition, 76%–81% indicated they would counsel the patient to notify sex partners, refer the patient to the local health department for assistance with the notification, or both.

Of physicians in OB/GYN practices, 85% indicated they would provide contraceptive services and 47% would provide prenatal care to all women, regardless of their HIV status (Table 3). In comparison, 73% would provide contraceptive services and 29% would provide prenatal care to women with HIV.

Physicians who reported they would refer patients with HIV for medical services indicated the primary reasons for referring were their lack of experience with HIV (83%) and the availability of other providers with more expertise in treating HIV infection (94%). Overall, 68% of physicians indicated they believed they had an obligation to take care of someone infected with HIV, and 87% indicated that professional training could help "increase their comfort in caring for AIDS patients."

†Physicians who were not practicing in one of the primary-care specialties, were practicing out of the country, retired, or deceased were deemed ineligible.

TABLE 1. Percentage* of primary-care physicians who would "usually" or "always" assess risks for new adult and adolescent patients, by risk behavior and physician specialty — United States, 1992

	General/Family practitioner				Pediatrician/Adolescent medicine physician				Obstetrician/Gynecologist				General internal medicine physician				Total			
	Adult (n=765)		Adolescent (n=723)		Adult (n=78)		Adolescent (n=327)		Adult (n=676)		Adolescent (n=653)		Adult (n=669)		Adolescent (n=492)		Adult (n=2188)		Adolescent (n=2195)	
Risk behavior	**%**	**(95% CI†)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**	**%**	**(95% CI)**
Cigarette smoking	93§	(±1.9)	81	(±2.9)	89	(±7.0)	75	(±4.1)	93	(±2.3)	92	(±2.6)	96§	(±1.3)	89	(±2.7)	**94§**	**(±1.0)**	**84**	**(±1.6)**
Alcohol use	79§	(±2.9)	69	(±3.4)	74	(±9.8)	67	(±4.4)	80	(±3.8)	80	(±3.9)	92	(±1.9)	84	(±3.1)	**84§**	**(±1.6)**	**75**	**(±1.9)**
Contraceptive use	53	(±3.6)	58	(±3.7)	65	(±10.8)	62	(±4.6)	97	(±1.7)	96	(±1.8)	49	(±3.6)	59	(±4.2)	**61**	**(±2.1)**	**66**	**(±2.0)**
STDs¶	34§	(±3.4)	43	(±3.6)	44	(±11.3)	49	(±4.7)	82	(±3.7)	85	(±3.4)	45§	(±3.5)	54	(±4.3)	**49§**	**(±2.2)**	**56**	**(±2.1)**
Other illicit drugs	36§	(±3.4)	43	(±3.6)	64	(±10.8)	53	(±4.7)	59	(±4.7)	65	(±4.6)	54§	(±3.5)	66	(±4.0)	**49§**	**(±2.2)**	**55**	**(±2.1)**
Illicit IV drugs	37	(±3.5)	38	(±3.6)	57	(± 1.1)	46	(±4.7)	60	(±4.6)	65	(±4.6)	55§	(±3.5)	63	(±4.1)	**50§**	**(±2.2)**	**51**	**(±2.1)**
Condom use	21§	(±2.9)	41	(±3.6)	50§	(± 1.1)	56	(±4.7)	60§	(±4.6)	75	(±4.2)	23	(±3.0)	45	(±4.3)	**31§**	**(±2.0)**	**52**	**(±2.1)**
High-risk sex partner	22§	(±2.9)	29	(±3.3)	21§	(± 9.3)	32	(±4.4)	39§	(±4.6)	46	(±4.8)	28§	(±3.2)	40	(±4.2)	**28§**	**(±2.0)**	**36**	**(±2.1)**
No. sex partners	16§	(±2.6)	17	(±3.2)	24§	(± 9.5)	30	(±4.4)	37§	(±4.6)	52	(±4.8)	18§	(±2.7)	33	(±4.0)	**22§**	**(±1.8)**	**34**	**(±2.0)**
Sexual orientation	18	(±2.7)	18	(±2.8)	13	(± 7.6)	28	(±4.2)	36§	(±4.6)	36	(±4.6)	33	(±3.3)	32	(±4.0)	**27**	**(±1.9)**	**27**	**(±1.9)**

* Percentages are based on the number of physicians who indicated that they see adult or adolescent patients in their practice.
† Confidence interval.
§ p<.001 (McNemar test comparing physicians' assessment of adults and adolescents).
¶ Sexually transmitted diseases.

TABLE 2. Percentage of primary-care physicians who would "likely" or "very likely" encourage HIV testing, by risk behavior and physician specialty — United States, 1992

	General/Family practitioner			Pediatrician/Adolescent medicine physician			Obstetrician/ Gynecologist			General internal medicine physician			Total		
Risk behavior	**No.**	**(%)**	**(95% CI*)**	**No.**	**(%)**	**(95% CI)**	**No.**	**(%)**	**(95% CI)**	**No.**	**(%)**	**(95% CI)**	**No.**	**(%)**	**(95% CI)**
Homosexual men with multiple partners	768	(96)	(±1.5)	230	(94)	(±3.1)	74	(88)	(±7.4)	755	(95)	(±1.6)	**1827**	**(95)**	**(±1.0)**
Injecting-drug use	760	(95)	(±1.6)	283	(91)	(±3.3)	380	(96)	(±2.0)	750	(96)	(±1.5)	**2174**	**(95)**	**(±.94)**
Homosexual men	771	(92)	(±1.9)	238	(85)	(±4.5)	73	(88)	(±7.4)	700	(92)	(±1.9)	**1839**	**(91)**	**(±1.3)**
Current/Past STD†	784	(76)	(±3.0)	373	(63)	(±4.9)	431	(71)	(±4.3)	764	(79)	(±2.9)	**2352**	**(74)**	**(±1.8)**
Heterosexual men with multiple partners	787	(66)	(±3.3)	340	(53)	(±5.3)	426	(70)	(±4.3)	769	(72)	(±3.2)	**2322**	**(67)**	**(±1.9)**
Other drug and alcohol users	783	(52)	(±3.5)	355	(50)	(±5.2)	416	(66)	(±4.5)	769	(57)	(±3.5)	**2321**	**(57)**	**(±2.0)**
Sexually active adolescents	755	(38)	(±3.5)	433	(32)	(±4.4)	427	(40)	(±4.6)	637	(46)	(±3.9)	**2253**	**(40)**	**(±2.0)**

* Confidence interval.
† Sexually transmitted disease.

TABLE 3. Percentage* of primary-care physicians who would provide obstetric/gynecologic services for all adult female patients and for all adult female patients with HIV infection, by service and physician specialty — United States, 1992

	General/ Family practitioner (n=515)				Pediatrician/Adolescent medicine physician (n=74)				Obstetrician/ Gynecologist (n=675)				General internal medicine physician (n=277)				Total (n=1541)			
Service	**All**	**(95% CI†)**	**HIV**	**(95% CI)**	**All**	**(95% CI)**	**HIV**	**(95% CI)**	**All**	**(95% CI)**	**HIV**	**(95% CI)**	**All**	**(95% CI)**	**HIV**	**(95% CI)**	**Total**	**(95% CI)**	**HIV**	**(95% CI)**
Contraceptive	91§	(±2.5)	76	(±3.7)	55	(±1.2)	50	(±1.2)	99§	(±1.1)	86	(±3.3)	60§	(±6.0)	51	(±6.1)	**85§**	**(±2.0)**	**73**	**(±2.5)**
Postpregnancy	61§	(±4.3)	50	(±4.4)	5	(±5.6)	5	(±5.6)	93§	(±2.5)	76	(±4.2)	16	(±4.4)	12	(±4.0)	**59§**	**(±2.7)**	**48**	**(±2.8)**
Emergency gynecology	22	(±3.6)	20	(±3.5)	4	(±4.9)	4	(±4.9)	95§	(±2.0)	85	(±3.5)	6	(±2.7)	5	(±2.7)	**42§**	**(±2.7)**	**37**	**(±2.7)**
Elective gynecology	26§	(±3.8)	19	(±3.5)	12	(±8.0)	12	(±8.0)	95§	(±2.2)	72	(±4.3)	7	(±3.0)	5	(±2.6)	**44§**	**(±2.8)**	**33**	**(±2.6)**
Prenatal	40§	(±4.3)	22	(±3.6)	5	(±5.2)	5	(±5.1)	89§	(±3.0)	58	(±4.8)	5	(±2.6)	3	(±1.9)	**47§**	**(±2.8)**	**29**	**(±2.5)**
Delivery	35§	(±4.2)	20	(±3.5)	9	(±5.6)	9	(±7.0)	87§	(±6.7)	59	(±4.8)	3	(±3.2)	1	(±1.3)	**44§**	**(±2.8)**	**28**	**(±2.5)**
Sterilization on request	12	(±2.9)	10	(±2.7)	0	–	0	–	93§	(±2.4)	81	(±3.8)	1	(±1.0)	0	–	**36§**	**(±2.7)**	**31**	**(±2.6)**
Abortion	3	(±1.4)	3	(±1.5)	<1	(±1.5)	<1	(±1.1)	27	(±4.3)	25	(±4.2)	0	–	0	–	**10**	**(±1.7)**	**9**	**(±1.6)**

* Percentages are based on the number of physicians who indicated that they provide obstetric/gynecologic services.
† Confidence interval.
§ p<.001 (McNemar test comparing services physicians would provide to all women and to women with HIV).

HIV Prevention Practices — Continued

Reported by: J Loft, PhD, W Marder, PhD, Abt Associates, Inc., Chicago. L Bresolin, PhD, R Rinaldi, PhD, American Medical Association. Div of Medicine, Bureau of Health Professions, Health Resources and Svcs Administration. National AIDS Information andEducation Program, Office of HIV/AIDS; Women's Health and Fertility Br, Div of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion; Div of Sexually Transmitted Diseases and Human Immunodeficiency Virus Prevention, and Behavioral Studies Section, Behavioral and Prevention Research Br, Div of Sexually Transmitted Diseases and HIV Prevention, National Center for Prevention Svcs, CDC.

Editorial Note: Although primary-care physicians may contribute to the prevention of HIV transmission by counseling patients who are at risk, the findings in this report underscore the substantial number of physicians who are missing opportunities to counsel during encounters with patients. To more effectively use these encounters as a means of prevention, physicians first must be knowledgeable about HIV infection and its transmission (*2*). In addition, they should be made aware of the importance of assessing patients' risk for HIV infection and prepared to counsel patients, based on their risk (*3*). Therefore, medical schools and professional organizations should continue to emphasize HIV/AIDS prevention and treatment as priorities in training new and practicing physicians.

The findings in this report can assist in the development of HIV prevention policies and programs. For example, the reluctance of some physicians to assess the risky sex practices of patients underscores the importance for public health agencies to assist physicians in improving risk assessment and risk-reduction counseling efforts for their patients and patients' partners. These findings may be used by HRSA to improve training strategies and programs for health-care professionals and AMA and other professional organizations to develop training objectives for primary-care physicians.

Finally, these findings can assist in efforts to achieve the national health objectives for the year 2000 regarding HIV prevention (*4*). These objectives include increasing to at least 80% the proportion of persons with HIV infection who have been tested (objective 18.8); increasing to at least 75% the proportion of primary-care and mental health-care providers who provide age-appropriate counseling on the prevention of HIV and other STDs (objective 18.9); and increasing to at least 50% the proportion of primary-care clinics who screen, diagnose, treat, counsel, and provide (or refer for) partner notification services for HIV infection and bacterial STDs (objective 18.13).

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Epidemiologic Notes and Reports

Occupational Pesticide Poisoning in Apple Orchards — Washington, 1993

During July–December 1993, the Washington Department of Health (WDOH) received and conducted follow-up investigations of 26 reports of occupational illness related to exposure to mevinphos (Phosdrin®*), an organophosphate (OP) insecticide. The reports involved illnesses during June 13–August 18, 1993, in persons working in 19 different apple orchards; all involved use of mevinphos to control apple aphids. This report summarizes the results of these investigations by WDOH.

All the affected workers were men ranging in age from 19 to 72 years (median: 35 years). Eighteen (69%) were Hispanic; eight (31%) were non-Hispanic whites. Twenty-three (88%) of the workers were exposed during mixing/loading or application of mevinphos. The other three (12%) were exposed to mevinphos residues (two while working in close proximity to a recently treated orchard and one after reentering an orchard within 24 hours after it was sprayed).

Of the 23 workers exposed during mevinphos mixing/loading or application, 22 had worked on ground applications and used an airblast† system; one worked on an aerial application. All 23 sought medical attention in emergency departments. Twenty-one workers had systemic manifestations characteristic of OP poisoning, including nausea (81%), vomiting (62%), dizziness (43%), visual disturbances (43%), muscle weakness (38%), abdominal pain (29%), headache (24%), sweating (24%), and excessive salivation (5%). Two persons had conjunctivitis only, which was attributed to direct ocular exposure to mevinphos.

Of the seven workers who were hospitalized, four required intensive care. Plasma and/or red blood cell cholinesterase activity was depressed to at least 25% below the lower limit of normal in 14 (88%) of the 16 workers tested; for one worker, the level of activity was depressed 97%, and for three, 75%–90%. Atropine was administered to all seven hospitalized workers and to four of the 14 workers with systemic illness who were treated in the emergency department and released. Eighteen (86%) of the 21 workers with systemic effects were exposed to mixtures of mevinphos and less toxic OP pesticides.

WDOH investigation of all the poisoning incidents determined that personal protective equipment had been available to all mixers/loaders and applicators, but that in 78% of the incidents, U.S. Environmental Protection Agency (EPA) requirements regarding use of protective equipment§ had not been followed (e.g., respirators, gloves, or goggles had been removed during pesticide handling or leather [instead of rubber] footwear had been used).

On August 19, 1993, in response to these reports, the Washington State Department of Agriculture (WSDA) prohibited mixing/loading or application of mevinphos

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

†This application technique involves the use of a tractor-drawn sprayer with oscillating nozzles that are oriented in a flat plane and direct the spray mixture into the canopy of the trees for complete coverage.

§Protective suits, chemical-resistant gloves and shoes, goggles or face shields, and an approved respirator are required for ground application.

Pesticide Poisoning — Continued

by unlicensed applicators. On August 30, use of mevinphos on apples and pears was temporarily suspended. WSDA will determine before the 1994 pesticide application season (i.e., late spring through late summer) whether this suspension will be permanent.

Reported by: C Sagerser, V Skeers, MN, L Baum, MS, M Magaña, MD, B Morrissey, MS, B Mason, Pesticide Section; JM Kobayashi, MD, State Epidemiologist, Washington Dept of Health. Surveillance Br, Div of Surveillance, Hazard Evaluations, and Field Studies, National Institute for Occupational Safety and Health, CDC.

Editorial Note: Mevinphos is an acutely toxic (oral LD_{50} 3.7–6.1 mg/kg, dermal LD_{50} 4.2–4.7 mg/kg [rats]) broad-spectrum OP insecticide (*1*). EPA classifies mevinphos in its highest toxicity category (Class I), restricts its use to certified applicators or to persons directly supervised by certified applicators, and requires use of protective equipment and mandatory reentry intervals (i.e., time between mevinphos application and safe reentry onto treated fields without use of personal protective equipment). Toxicity of mevinphos is similar to that of ethyl parathion, an OP insecticide that in 1991 was removed from the market for most uses because of its high hazard potential. Like other OPs, mevinphos is readily absorbed through the lungs, gastrointestinal tract, and skin. Typical manifestations of poisoning include nausea, vomiting, miosis, dizziness, headache, muscle weakness and twitching, bradycardia, and generalized hypersecretion. Use of mevinphos is particularly hazardous for apple orchard workers because apples generally require ground (rather than aerial) application of pesticide, hand cultivation, and hand harvesting.

In May 1992, sale of phosphamidon, a less toxic OP insecticide used to control apple aphids, was discontinued by the manufacturer. When growers in Washington subsequently began to consider use of mevinphos for aphid control, the manufacturer of mevinphos recommended in early 1993 that WSDA institute additional restrictions on its use. WSDA issued emergency rules for the use of mevinphos on June 14, 1993, which included the requirements that an observer be present during all mixing/loading activities, the EPA-mandated reentry interval be extended from 48 to 96 hours, and warning signs be posted at all treated orchards. Despite these requirements, all but one of the poisonings described in this report occurred after these emergency rules were issued; 22% of the incidents apparently occurred despite reported adherence to all application requirements.

The detection of this outbreak and the resulting public health actions by WDOH and WSDA highlight the role of state-based surveillance systems in the recognition and prevention of occupational pesticide-related illness. The cases described in this report represent the first reported hospitalizations of workers in Washington associated with agricultural use of any OP insecticide since implementation of the WDOH pesticide surveillance system in 1990. Although mevinphos was mixed with other OP insecticides in most of the reported incidents, there were no reports to WDOH of severe occupational illness associated with individual use of other compounds. The magnitude of the risk for mevinphos poisoning among Washington agricultural workers cannot be estimated because the total number of workers who may be at risk for exposure to this pesticide is unknown.

Occupational poisonings with mevinphos (including fatalities) have been reported in California (*2,3*) and Florida (*4*). During 1982–1990, agricultural use of mevinphos in California was associated with 495 (43%) of 1154 reported cases of OP poisoning—

Pesticide Poisoning — Continued

more than for any other OP pesticide (*5*)—and during 1974–1982, mevinphos was among the six leading causes of hospitalization resulting from occupational pesticide poisoning nationally (*6,7*). As demonstrated by the Washington cases, even when use of mevinphos is strictly regulated and mandated precautions apparently are followed, poisonings occur.

Surveillance data have identified a high proportion of Hispanics among cases of agriculturally related pesticide poisoning. This most likely reflects Hispanic prevalence in the U.S. farmworker population (70% of U.S. farmworkers [*8*]), as well as previously documented risk factors for occupational disease and injury among migrant farmworkers (*9*), who are predominantly Hispanic (*8*).

In April 1993, EPA identified mevinphos as a pesticide warranting "immediate attention and the implementation of risk-reduction measures" and requested that manufacturers provide information to assist in characterizing the risks for U.S. agricultural workers (*10*). EPA will continue to assess the risks associated with exposure to mevinphos and the need for additional regulatory measures.

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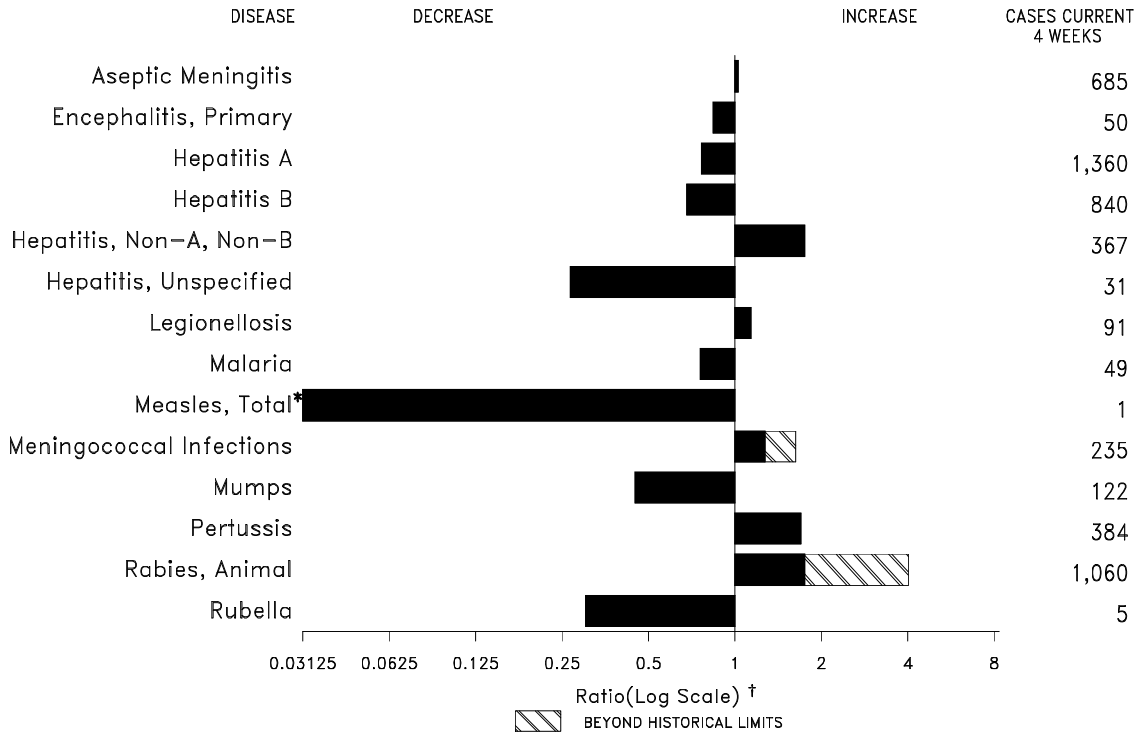
Notice to Readers

Change of Telephone Number for Reporting of Malaria Cases

The CDC telephone number from which health-care providers and the general public can obtain information about the treatment of malaria infections and to which they can report malaria cases acquired in the United States has changed; the new number is (404) 488-7760. The malaria hotline number for recommendations for the prevention of malaria remains the same: ([404] 332-4555).

FIGURE I. Notifiable disease reports, comparison of 4-week totals ending December 25, 1993, 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 fifty-one is 0.00291).

† 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 December 25, 1993 (51st Week)

	Cum. 1993		Cum. 1993
AIDS*	93,282	Measles: imported	56
Anthrax	-	indigenous	221
Botulism: Foodborne	21	Plague	10
Infant	54	Poliomyelitis, Paralytic§	-
Other	5	Psittacosis	51
Brucellosis	88	Rabies, human	2
Cholera	18	Syphilis, primary & secondary	25,559
Congenital rubella syndrome	7	Syphilis, congenital, age < 1 year¶	1,493
Diphtheria	-	Tetanus	42
Encephalitis, post-infectious	151	Toxic shock syndrome	216
Gonorrhea	386,225	Trichinosis	16
Haemophilus influenzae (invasive disease)†	1,213	Tuberculosis	21,479
Hansen Disease	169	Tularemia	120
Leptospirosis	46	Typhoid fever	337
Lyme Disease	7,624	Typhus fever, tickborne (RMSF)	448

*Updated monthly; last update November 27, 1993.
†Of 1157 cases of known age, 378 (33%) were reported among children less than 5 years of age.
§Two (2) cases of suspected poliomyelitis have been reported in 1993; 4 of the 5 suspected cases with onset in 1992 were confirmed; the confirmed cases were vaccine associated.
¶Reports through second quarter of 1993.

TABLE II. Cases of selected notifiable diseases, United States, weeks ending December 25, 1993, and December 19, 1992 (51st Week)

Reporting Area	AIDS*	Aseptic Menin-gitis	Encephalitis		Gonorrhea		Hepatitis (Viral), by type				Legionel-losis	Lyme Disease
			Primary	Post-in-fectious			A	B	NA,NB	Unspeci-fied		
	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993
UNITED STATES	93,282	12,140	879	151	386,225	475,647	21,346	11,846	4,996	591	1,226	7,624
NEW ENGLAND	4,689	418	23	8	8,220	9,988	456	468	547	20	82	1,746
Maine	119	41	2	-	82	93	16	11	4	-	6	11
N.H.	100	55	-	2	75	115	36	122	449	3	6	70
Vt.	68	45	6	-	24	26	9	10	4	-	3	7
Mass.	2,532	169	10	4	3,132	3,568	212	235	77	17	44	180
R.I.	299	108	5	2	418	619	73	21	13	-	23	267
Conn.	1,571	-	-	-	4,489	5,567	110	69	-	-	-	1,211
MID. ATLANTIC	23,757	936	61	11	44,893	55,592	1,037	1,279	387	7	243	4,363
Upstate N.Y.	3,315	549	43	6	9,244	11,095	432	428	262	1	86	2,560
N.Y. City	12,796	104	1	-	12,294	19,701	177	121	1	-	3	3
N.J.	4,982	-	-	-	5,570	7,541	275	387	86	-	33	750
Pa.	2,664	283	17	5	17,785	17,255	153	343	38	6	121	1,050
E.N. CENTRAL	7,602	2,145	216	28	83,331	89,890	2,407	1,388	567	13	322	108
Ohio	1,490	714	72	4	22,287	27,041	326	188	36	-	159	39
Ind.	846	230	23	11	8,160	8,863	633	236	18	1	56	30
Ill.	2,827	507	51	3	29,314	29,944	827	272	73	5	21	16
Mich.	1,732	639	54	10	17,680	19,823	213	394	399	7	62	23
Wis.	707	55	16	-	5,890	4,219	408	298	41	-	24	-
W.N. CENTRAL	2,783	775	47	11	20,158	25,396	2,229	653	196	16	102	265
Minn.	624	119	18	-	2,505	2,956	453	79	12	4	3	127
Iowa	172	158	5	2	1,508	1,555	58	36	9	4	18	8
Mo.	1,464	226	6	9	11,717	14,281	1,353	457	144	8	32	71
N. Dak.	2	21	4	-	40	73	79	1	3	-	2	2
S. Dak.	29	22	7	-	243	162	16	-	-	-	-	-
Nebr.	168	27	1	-	476	1,653	193	20	12	-	40	6
Kans.	324	202	6	-	3,669	4,716	77	60	16	-	7	51
S. ATLANTIC	19,841	2,540	227	59	98,376	139,209	1,221	2,223	804	86	215	898
Del.	342	78	3	-	1,532	1,736	10	163	170	-	12	423
Md.	2,039	218	25	-	16,353	16,080	158	262	38	4	55	175
D.C.	1,425	38	-	1	5,515	6,551	11	43	2	-	15	2
Va.	1,377	328	39	7	12,143	14,655	145	144	49	41	10	75
W. Va.	94	56	116	-	670	807	27	44	38	-	4	50
N.C.	1,095	264	31	-	24,039	24,710	88	306	76	-	27	84
S.C.	1,366	34	-	-	10,612	10,865	18	50	5	1	19	9
Ga.	2,547	160	2	-	4,660	36,586	101	264	175	1	36	43
Fla.	9,556	1,364	11	51	22,852	27,219	663	947	251	39	37	37
E.S. CENTRAL	2,427	743	30	7	43,290	48,317	320	1,311	1,001	4	43	37
Ky.	313	317	14	6	4,810	4,670	130	79	16	-	18	13
Tenn.	1,031	162	10	-	12,511	15,299	96	1,121	970	3	17	20
Ala.	689	186	3	-	15,816	16,914	56	105	5	1	2	4
Miss.	394	78	3	1	10,153	11,434	38	6	10	-	6	-
W.S. CENTRAL	9,039	1,381	75	2	45,148	52,644	2,639	1,726	396	162	39	71
Ark.	370	70	2	-	9,001	7,526	52	58	4	2	6	2
La.	1,198	84	7	-	11,746	14,219	92	216	151	4	6	2
Okla.	676	1	8	-	4,199	5,468	215	310	156	9	17	23
Tex.	6,795	1,226	58	2	20,202	25,431	2,280	1,142	85	147	10	44
MOUNTAIN	3,719	685	30	5	10,463	12,240	3,877	699	342	76	72	20
Mont.	30	1	-	1	84	110	77	29	3	-	7	-
Idaho	70	11	-	-	159	118	279	82	-	3	1	2
Wyo.	46	7	-	-	75	64	16	30	108	-	6	9
Colo.	1,245	221	15	-	3,302	4,484	827	73	52	41	9	-
N. Mex.	292	119	4	2	932	915	394	221	111	4	6	2
Ariz.	1,205	172	8	-	3,687	4,102	1,350	86	13	12	15	-
Utah	253	73	1	1	340	349	764	57	35	14	11	2
Nev.	578	81	2	1	1,884	2,098	170	121	20	2	17	5
PACIFIC	19,425	2,517	170	20	32,346	42,371	7,160	2,099	756	207	108	116
Wash.	1,467	-	1	-	3,600	3,850	850	223	184	9	10	8
Oreg.	741	-	-	-	1,144	1,619	96	34	15	1	-	2
Calif.	16,771	2,360	161	20	26,390	35,756	5,429	1,809	544	194	88	105
Alaska	96	21	7	-	608	639	718	13	10	-	-	-
Hawaii	350	136	1	-	604	507	67	20	3	3	10	1
Guam	-	6	-	-	87	53	2	3	-	11	-	-
P.R.	2,985	64	-	-	500	233	79	399	95	2	-	-
V.I.	41	-	-	-	93	107	-	5	-	-	-	-
Amer. Samoa	-	-	-	-	42	50	19	-	-	-	-	-
C.N.M.I.	-	3	1	-	71	77	-	2	-	1	-	-

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

*Updated monthly; last update November 27, 1993.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending December 25, 1993, and December 19, 1992 (51st Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
	Cum. 1993	1993	Cum. 1993	1993	Cum. 1993	Cum. 1992	Cum. 1993	1993	Cum. 1993	1993	Cum. 1993	Cum. 1992	1993	Cum. 1993	Cum. 1992
UNITED STATES	1,162	1	221	-	56	2,212	2,359	40	1,602	78	5,935	3,264	-	189	152
NEW ENGLAND	96	-	57	-	6	65	134	-	12	6	768	296	-	2	6
Maine	6	-	1	-	-	4	16	-	-	2	24	11	-	1	1
N.H.	6	-	2	-	-	13	16	-	-	2	250	113	-	-	-
Vt.	3	-	30	-	1	-	7	-	1	1	89	19	-	-	-
Mass.	47	-	14	-	4	21	68	-	2	-	307	103	-	1	-
R.I.	7	-	1	-	1	21	1	-	2	-	13	6	-	-	4
Conn.	27	-	9	-	-	6	26	-	7	1	85	44	-	-	1
MID. ATLANTIC	216	-	11	-	7	215	272	2	126	14	881	203	-	62	10
Upstate N.Y.	122	-	-	-	2	112	119	1	44	12	359	121	-	17	7
N.Y. City	24	-	5	-	2	61	19	-	2	-	78	22	-	22	-
N.J.	45	-	6	-	3	42	44	-	12	-	64	60	-	17	3
Pa.	25	-	-	-	-	-	90	1	68	2	380	131	-	6	-
E.N. CENTRAL	83	1	22	-	6	61	374	5	250	40	1,468	726	-	8	11
Ohio	15	-	7	-	2	6	107	1	73	29	487	114	-	1	-
Ind.	3	-	1	-	-	20	60	-	8	11	176	61	-	3	-
Ill.	40	-	5	-	-	18	104	-	67	-	371	54	-	1	9
Mich.	19	1	6	-	1	13	63	4	80	-	110	15	-	2	2
Wis.	6	-	3	-	3	4	40	-	22	-	324	482	-	1	-
W.N. CENTRAL	32	-	1	-	2	14	163	1	54	2	553	314	-	1	8
Minn.	9	-	-	-	-	12	20	-	2	-	323	109	-	-	-
Iowa	5	-	-	-	-	1	28	1	11	-	37	11	-	-	3
Mo.	7	-	1	-	-	-	57	-	33	-	140	115	-	1	1
N. Dak.	2	-	-	-	-	-	3	-	5	-	5	15	-	-	-
S. Dak.	2	-	-	-	-	-	6	-	-	-	8	17	-	-	-
Nebr.	4	-	-	-	-	-	14	-	2	-	16	14	-	-	-
Kans.	3	-	-	-	2	1	35	-	1	2	24	33	-	-	4
S. ATLANTIC	302	-	17	-	13	130	410	2	446	6	645	194	-	10	20
Del.	3	-	1	-	-	1	15	-	7	-	16	7	-	2	-
Md.	48	-	-	-	4	16	51	-	79	-	131	39	-	3	5
D.C.	11	-	-	-	-	2	6	-	1	-	13	1	-	-	-
Va.	39	-	-	-	4	16	48	-	36	-	65	17	-	-	-
W. Va.	2	-	-	-	-	-	14	-	23	-	8	9	-	-	1
N.C.	101	-	-	-	-	24	67	-	224	4	200	43	-	-	-
S.C.	7	-	-	-	-	29	31	-	16	-	73	10	-	-	7
Ga.	21	-	-	-	-	3	90	-	18	-	40	17	-	-	-
Fla.	70	-	16	-	5	39	88	2	42	2	99	51	-	5	7
E.S. CENTRAL	29	-	1	-	-	468	144	-	54	1	276	33	-	4	1
Ky.	5	-	-	-	-	451	25	-	-	-	30	1	-	-	-
Tenn.	12	-	-	-	-	-	39	-	15	-	173	10	-	4	1
Ala.	7	-	1	-	-	-	49	-	22	1	61	19	-	-	-
Miss.	5	-	-	-	-	17	31	-	17	-	12	3	-	-	-
W.S. CENTRAL	32	-	7	-	3	1,107	219	18	260	3	206	240	-	18	8
Ark.	3	-	-	-	-	-	21	-	4	-	12	17	-	-	-
La.	6	-	1	-	-	-	38	-	20	-	12	15	-	1	-
Okla.	6	-	-	-	-	12	23	-	15	3	99	49	-	1	-
Tex.	17	-	6	-	3	1,095	137	18	221	-	83	159	-	16	8
MOUNTAIN	35	-	5	-	1	37	179	2	70	2	410	430	-	10	8
Mont.	2	-	-	-	-	-	13	-	-	-	11	9	-	-	-
Idaho	1	-	-	-	-	-	18	-	5	-	119	46	-	2	1
Wyo.	-	-	-	-	-	1	5	-	4	-	1	-	-	-	-
Colo.	21	-	2	-	1	31	35	-	16	-	134	106	-	1	2
N. Mex.	5	-	-	-	-	2	7	N	N	2	41	101	-	-	-
Ariz.	1	-	2	-	-	3	75	-	14	-	62	126	-	2	2
Utah	2	-	-	-	-	-	19	-	5	-	37	40	-	4	1
Nev.	3	-	1	-	-	-	7	2	26	-	5	2	-	1	2
PACIFIC	337	-	100	-	18	115	464	10	330	4	728	828	-	74	80
Wash.	28	-	-	-	-	11	73	4	14	-	85	222	-	-	8
Oreg.	6	-	-	-	-	3	32	N	N	1	39	45	-	3	2
Calif.	293	-	89	-	7	60	333	5	280	1	577	488	-	43	47
Alaska	3	-	-	-	2	9	16	-	11	-	5	17	-	1	-
Hawaii	7	-	11	-	9	32	10	1	25	2	22	56	-	27	23
Guam	2	-	4	-	-	10	1	-	10	-	-	-	-	-	3
P.R.	-	-	311	-	-	481	9	-	4	-	11	12	-	-	1
V.I.	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-
Amer. Samoa	-	-	1	-	-	-	-	-	1	-	2	6	-	-	-
C.N.M.I.	-	-	71	-	1	2	-	-	13	-	1	2	-	-	-

*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 December 25, 1993, and December 19, 1992 (51st Week)

Reporting Area	Syphilis (Primary & Secondary)		Toxic-Shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993
UNITED STATES	25,559	32,641	216	21,479	23,158	120	337	448	9,073
NEW ENGLAND	379	653	15	548	513	-	31	5	1,660
Maine	8	8	3	35	19	-	-	-	-
N.H.	29	37	5	17	18	-	2	-	145
Vt.	1	1	1	7	6	-	-	-	40
Mass.	122	323	5	311	297	-	23	5	701
R.I.	15	38	1	56	35	-	-	-	2
Conn.	204	246	-	122	138	-	6	-	772
MID. ATLANTIC	2,350	4,421	34	4,515	5,636	1	68	27	3,031
Upstate N.Y.	242	331	16	534	706	1	20	7	2,203
N.Y. City	1,183	2,478	1	2,573	3,394	-	26	-	-
N.J.	303	548	-	813	902	-	16	10	451
Pa.	622	1,064	17	595	634	-	6	10	377
E.N. CENTRAL	4,126	4,983	49	2,314	2,252	4	39	14	109
Ohio	1,170	822	12	304	328	-	7	8	6
Ind.	348	286	3	223	203	1	2	1	11
Ill.	1,604	2,266	10	1,234	1,164	2	21	2	23
Mich.	543	901	24	459	462	1	8	2	18
Wis.	461	708	-	94	95	-	1	1	51
W.N. CENTRAL	1,531	1,516	15	504	546	39	2	25	342
Minn.	63	92	3	80	154	-	-	1	45
Iowa	64	56	7	59	45	-	-	7	77
Mo.	1,276	1,142	2	244	228	16	2	11	25
N. Dak.	2	1	-	7	10	-	-	-	61
S. Dak.	2	-	-	14	27	17	-	3	45
Nebr.	10	24	-	20	27	3	-	2	11
Kans.	114	201	3	80	55	3	-	1	78
S. ATLANTIC	6,358	8,756	25	4,144	4,237	4	56	216	2,618
Del.	91	197	1	47	53	-	1	1	134
Md.	356	592	1	399	395	-	8	12	1,204
D.C.	325	399	-	162	116	-	-	-	18
Va.	644	707	7	415	347	-	6	13	387
W. Va.	13	17	-	72	91	-	-	6	89
N.C.	1,856	2,435	4	578	590	2	3	128	104
S.C.	909	1,174	-	395	389	-	-	11	163
Ga.	1,052	1,681	2	741	861	-	3	37	466
Fla.	1,112	1,554	10	1,335	1,395	2	35	8	53
E.S. CENTRAL	3,962	4,116	11	1,514	1,503	4	7	61	203
Ky.	335	177	3	366	387	1	2	14	19
Tenn.	1,056	1,169	4	424	453	2	2	32	72
Ala.	861	1,365	2	487	409	1	3	4	112
Miss.	1,710	1,405	2	237	254	-	-	11	-
W.S. CENTRAL	5,672	6,094	2	2,291	2,710	48	8	85	591
Ark.	710	880	-	193	221	27	-	9	42
La.	2,517	2,529	-	-	217	-	1	1	11
Okla.	406	452	2	155	154	17	1	70	66
Tex.	2,039	2,233	-	1,943	2,118	4	6	5	472
MOUNTAIN	233	330	14	511	598	14	10	15	169
Mont.	1	7	-	15	13	5	-	2	24
Idaho	-	1	2	13	24	-	-	-	6
Wyo.	13	9	-	6	-	3	-	10	25
Colo.	77	66	2	54	75	1	5	3	26
N. Mex.	24	40	1	59	79	2	2	-	9
Ariz.	95	158	1	236	251	-	2	-	60
Utah	11	8	6	28	72	2	1	-	4
Nev.	12	41	2	100	84	1	-	-	15
PACIFIC	948	1,772	51	5,138	5,163	6	116	-	350
Wash.	55	74	7	260	301	1	7	-	-
Oreg.	40	49	-	100	125	2	1	-	-
Calif.	837	1,636	43	4,482	4,409	3	105	-	325
Alaska	8	4	-	51	59	-	-	-	25
Hawaii	8	9	1	245	269	-	3	-	-
Guam	3	3	-	72	69	-	4	-	-
P.R.	486	338	-	233	225	-	-	-	43
V.I.	42	68	-	2	3	-	-	-	-
Amer. Samoa	-	-	-	2	-	-	1	-	-
C.N.M.I.	7	6	-	40	56	-	-	-	-

U: Unavailable

TABLE III. Deaths in 121 U.S. cities,* week ending December 25, 1993 (51st Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	578	404	103	50	11	10	50
Boston, Mass.	153	98	27	20	6	2	21
Bridgeport, Conn.	47	32	10	3	1	1	2
Cambridge, Mass.	23	18	3	2	-	-	-
Fall River, Mass.	25	21	4	-	-	-	2
Hartford, Conn.	41	26	8	4	2	1	1
Lowell, Mass.	27	21	4	2	-	-	3
Lynn, Mass.	15	11	3	1	-	-	-
New Bedford, Mass.	25	16	5	4	-	-	3
New Haven, Conn.	36	20	8	4	1	3	2
Providence, R.I.	38	24	11	3	-	-	5
Somerville, Mass.	14	10	3	-	-	1	-
Springfield, Mass.	36	25	7	3	1	-	3
Waterbury, Conn.	21	19	1	1	-	-	2
Worcester, Mass.	77	63	9	3	-	2	6
MID. ATLANTIC	2,325	1,490	441	283	57	53	139
Albany, N.Y.	59	40	9	4	2	4	3
Allentown, Pa.	26	15	7	4	-	-	-
Buffalo, N.Y.	100	53	21	18	4	4	2
Camden, N.J.	35	20	9	3	2	1	1
Elizabeth, N.J.	22	17	1	3	1	-	1
Erie, Pa.§	36	24	9	3	-	-	5
Jersey City, N.J.	35	21	7	6	-	1	6
New York City, N.Y.	1,253	783	241	173	28	28	49
Newark, N.J.	52	19	20	7	4	2	8
Paterson, N.J.	27	12	7	5	1	2	-
Philadelphia, Pa.	210	131	42	27	4	6	19
Pittsburgh, Pa.§	103	73	16	8	5	1	12
Reading, Pa.	21	13	5	3	-	-	3
Rochester, N.Y.	121	93	20	5	1	2	15
Schenectady, N.Y.	33	26	5	1	1	-	4
Scranton, Pa.§	30	28	-	2	-	-	1
Syracuse, N.Y.	91	71	11	6	1	2	7
Trenton, N.J.	15	10	4	1	-	-	2
Utica, N.Y.	19	13	3	1	2	-	-
Yonkers, N.Y.	37	28	4	3	1	-	1
E.N. CENTRAL	1,451	1,024	240	104	32	51	101
Akron, Ohio	63	50	9	3	-	1	3
Canton, Ohio	26	22	2	2	-	-	7
Chicago, Ill.	U	U	U	U	U	U	U
Cincinnati, Ohio	141	94	18	15	3	11	11
Cleveland, Ohio	179	107	38	15	7	12	8
Columbus, Ohio	190	129	39	12	3	7	11
Dayton, Ohio	101	72	19	7	2	1	7
Detroit, Mich.	U	U	U	U	U	U	U
Evansville, Ind.	38	30	4	3	1	-	3
Fort Wayne, Ind.	66	47	8	8	3	-	4
Gary, Ind.	11	3	4	3	1	-	-
Grand Rapids, Mich.	36	30	2	-	-	4	5
Indianapolis, Ind.	180	129	33	10	4	4	14
Madison, Wis.	41	25	8	4	1	3	5
Milwaukee, Wis.	104	75	16	9	1	3	6
Peoria, Ill.	28	25	2	-	1	-	3
Rockford, Ill.	32	27	2	2	-	1	5
South Bend, Ind.	45	38	4	2	1	-	4
Toledo, Ohio	114	79	21	9	2	3	4
Youngstown, Ohio	56	42	11	-	2	1	1
W.N. CENTRAL	695	526	107	39	14	9	32
Des Moines, Iowa	71	56	11	3	1	-	2
Duluth, Minn.	19	15	4	-	-	-	1
Kansas City, Kans.	26	21	2	2	1	-	1
Kansas City, Mo.	122	93	16	9	3	1	7
Lincoln, Nebr.	21	20	-	-	1	-	3
Minneapolis, Minn.	135	101	19	10	1	4	9
Omaha, Nebr.	101	73	21	4	3	-	4
St. Louis, Mo.	120	83	20	9	4	4	-
St. Paul, Minn.	38	30	6	2	-	-	3
Wichita, Kans.	42	34	8	-	-	-	2
S. ATLANTIC	1,278	805	249	148	43	31	71
Atlanta, Ga.	156	88	34	26	6	2	5
Baltimore, Md.	280	179	49	36	7	9	24
Charlotte, N.C.	86	54	18	8	6	-	4
Jacksonville, Fla.	98	71	14	9	3	1	8
Miami, Fla.	110	59	25	18	6	2	1
Norfolk, Va.	38	21	11	4	1	1	3
Richmond, Va.	52	37	9	2	2	2	4
Savannah, Ga.	52	30	11	5	-	6	2
St. Petersburg, Fla.	70	49	10	5	2	4	-
Tampa, Fla.	179	128	33	13	1	2	16
Washington, D.C.	126	65	30	20	9	2	4
Wilmington, Del.	31	24	5	2	-	-	-
E.S. CENTRAL	698	462	155	44	21	16	48
Birmingham, Ala.	108	66	27	6	1	8	4
Chattanooga, Tenn.	46	29	13	2	1	1	3
Knoxville, Tenn.	85	58	21	4	2	-	8
Lexington, Ky.	42	28	11	2	-	1	7
Memphis, Tenn.	224	146	48	20	9	1	16
Mobile, Ala.	49	32	8	6	2	1	1
Montgomery, Ala.	37	26	8	1	2	-	-
Nashville, Tenn.	107	77	19	3	4	4	9
W.S. CENTRAL	1,190	768	231	115	49	24	83
Austin, Tex.	55	39	8	7	-	-	9
Baton Rouge, La.	51	36	9	5	1	-	-
Corpus Christi, Tex.	44	31	8	2	3	-	3
Dallas, Tex.	172	103	40	20	9	-	4
El Paso, Tex.	47	29	13	3	-	2	2
Ft. Worth, Tex.	107	62	21	14	4	6	10
Houston, Tex.	292	184	55	36	8	9	25
Little Rock, Ark.	48	40	3	1	4	-	6
New Orleans, La.	79	41	16	8	8	4	-
San Antonio, Tex.	167	114	33	9	9	2	13
Shreveport, La.	54	34	12	6	2	-	4
Tulsa, Okla.	74	55	13	4	1	1	7
MOUNTAIN	905	602	185	66	26	26	80
Albuquerque, N.M.	75	52	14	5	2	2	1
Colo. Springs, Colo.	52	34	10	6	1	1	5
Denver, Colo.	98	58	20	12	2	6	9
Las Vegas, Nev.	160	105	40	11	3	1	16
Ogden, Utah	25	21	3	1	-	-	5
Phoenix, Ariz.	183	116	42	10	8	7	12
Pueblo, Colo.	24	15	8	-	-	1	1
Salt Lake City, Utah	146	103	22	11	5	5	18
Tucson, Ariz.	142	98	26	10	5	3	13
PACIFIC	1,653	1,134	281	160	49	25	127
Berkeley, Calif.	13	9	2	1	-	1	1
Fresno, Calif.	U	U	U	U	U	U	U
Glendale, Calif.	16	9	3	3	1	-	-
Honolulu, Hawaii	64	45	14	3	-	2	3
Long Beach, Calif.	95	72	13	5	1	4	8
Los Angeles, Calif.	383	252	76	33	15	3	19
Pasadena, Calif.	34	23	7	3	1	-	5
Portland, Oreg.	152	106	29	15	2	-	10
Sacramento, Calif.	204	144	29	19	5	7	13
San Diego, Calif.	114	86	15	9	4	-	12
San Francisco, Calif.	162	90	29	33	8	2	11
San Jose, Calif.	191	130	36	16	5	4	25
Santa Cruz, Calif.	U	U	U	U	U	U	U
Seattle, Wash.	103	70	14	12	5	2	6
Spokane, Wash.	32	25	5	1	1	-	2
Tacoma, Wash.	90	73	9	7	1	-	12
TOTAL	10,773¶	7,215	1,992	1,009	302	245	731

*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.

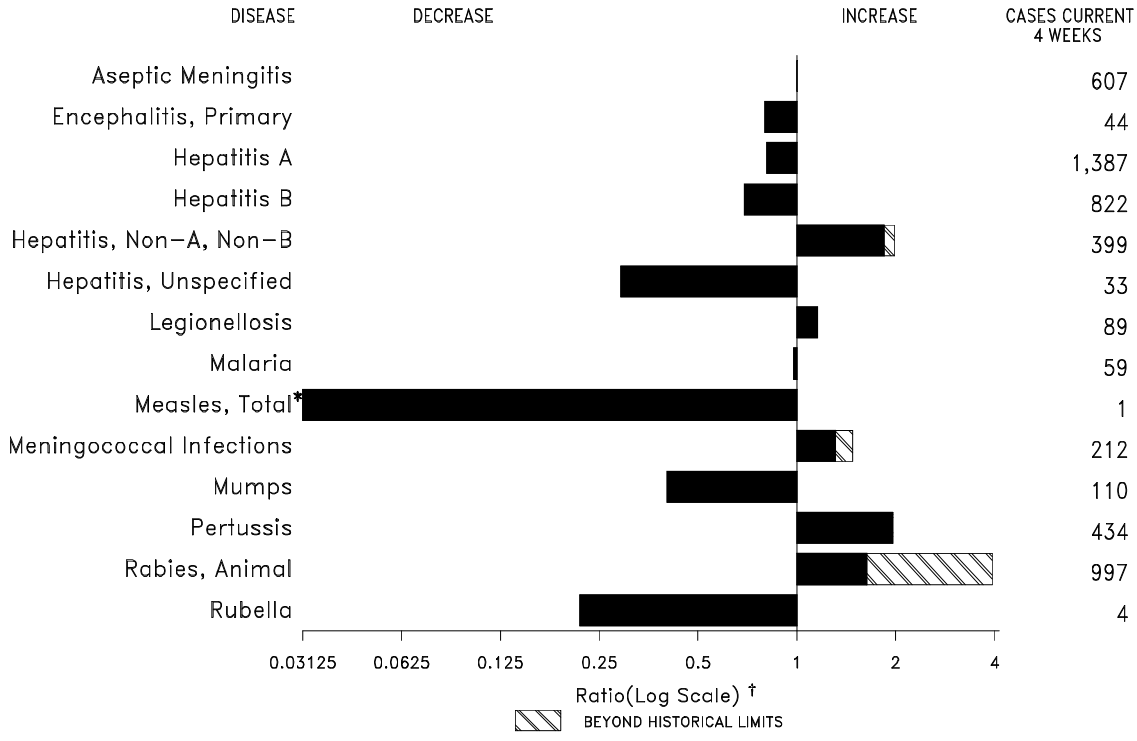
†Pneumonia and influenza.

§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.

FIGURE I. Notifiable disease reports, comparison of 4-week totals ending January 1, 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 fifty-two is 0.00303).

† 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 1, 1994 (52nd Week)

	Cum. 1993		Cum. 1993
AIDS*	93,282	Measles: imported	56
Anthrax	-	indigenous	221
Botulism: Foodborne	21	Plague	10
Infant	55	Poliomyelitis, Paralytic§	-
Other	5	Psittacosis	53
Brucellosis	88	Rabies, human	2
Cholera	18	Syphilis, primary & secondary	25,875
Congenital rubella syndrome	7	Syphilis, congenital, age < 1 year¶	1,493
Diphtheria	-	Tetanus	42
Encephalitis, post-infectious	151	Toxic shock syndrome	218
Gonorrhea	392,192	Trichinosis	16
Haemophilus influenzae (invasive disease)†	1,236	Tuberculosis	22,038
Hansen Disease	170	Tularemia	120
Leptospirosis	46	Typhoid fever	341
Lyme Disease	7,760	Typhus fever, tickborne (RMSF)	450

*Updated monthly; last update November 27, 1993.
†Of 1175 cases of known age, 381 (32%) were reported among children less than 5 years of age.
§Two (2) cases of suspected poliomyelitis have been reported in 1993; 4 of the 5 suspected cases with onset in 1992 were confirmed; the confirmed cases were vaccine associated.
¶Reports through second quarter of 1993.

TABLE II. Cases of selected notifiable diseases, United States, weeks ending January 1, 1994, and December 26, 1992 (52nd Week)

Reporting Area	AIDS*	Aseptic Meningitis	Encephalitis		Gonorrhea		Hepatitis (Viral), by type				Legionellosis	Lyme Disease
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993
UNITED STATES	93,282	12,287	890	151	392,192	485,765	21,846	12,106	5,134	605	1,241	7,760
NEW ENGLAND	4,689	418	25	8	8,356	10,169	465	475	557	20	87	1,771
Maine	119	41	3	-	83	96	16	11	4	-	6	11
N.H.	100	55	-	2	75	115	39	128	459	3	6	70
Vt.	68	45	6	-	25	26	9	10	4	-	3	7
Mass.	2,532	169	11	4	3,175	3,610	215	236	77	17	49	181
R.I.	299	108	5	2	424	636	73	21	13	-	23	271
Conn.	1,571	-	-	-	4,574	5,686	113	69	-	-	-	1,231
MID. ATLANTIC	23,757	947	61	11	46,119	56,977	1,060	1,299	390	7	248	4,441
Upstate N.Y.	3,315	559	43	6	9,570	12,008	449	441	265	1	87	2,619
N.Y. City	12,796	104	1	-	12,657	19,901	177	121	1	-	3	3
N.J.	4,982	-	-	-	5,721	7,684	275	387	86	-	33	750
Pa.	2,664	284	17	5	18,171	17,384	159	350	38	6	125	1,069
E.N. CENTRAL	7,602	2,160	216	28	83,800	91,765	2,433	1,397	573	13	317	110
Ohio	1,490	720	72	4	22,287	27,298	337	194	37	-	154	41
Ind.	846	230	23	11	8,285	9,114	633	236	18	1	56	30
Ill.	2,827	514	51	3	29,425	31,207	842	277	77	5	21	16
Mich.	1,732	639	54	10	17,870	19,893	213	393	400	7	62	23
Wis.	707	57	16	-	5,933	4,253	408	297	41	-	24	-
W.N. CENTRAL	2,783	781	50	11	20,571	25,857	2,247	665	196	16	104	268
Minn.	624	120	18	-	2,603	3,020	466	86	12	4	3	129
Iowa	172	159	7	2	1,823	1,653	59	36	9	4	19	8
Mo.	1,464	231	6	9	11,717	14,544	1,356	461	144	8	33	71
N. Dak.	2	21	5	-	40	73	80	1	3	-	2	2
S. Dak.	29	22	7	-	243	164	16	-	-	-	-	-
Nebr.	168	27	1	-	476	1,687	193	20	12	-	40	6
Kans.	324	201	6	-	3,669	4,716	77	61	16	-	7	52
S. ATLANTIC	19,841	2,558	228	59	100,166	142,615	1,250	2,274	855	92	217	924
Del.	342	78	3	-	1,586	1,763	12	167	179	-	13	440
Md.	2,039	220	25	-	16,713	16,462	159	265	42	5	56	180
D.C.	1,425	38	-	1	5,816	6,553	11	44	3	-	15	2
Va.	1,377	328	39	7	12,144	16,605	151	148	52	46	10	77
W. Va.	94	56	117	-	688	817	28	45	42	-	4	50
N.C.	1,095	270	31	-	24,577	24,993	94	315	80	-	27	86
S.C.	1,366	35	-	-	10,758	10,865	18	51	5	1	19	9
Ga.	2,547	160	2	-	4,660	36,727	101	281	199	1	36	43
Fla.	9,556	1,373	11	51	23,224	27,830	676	958	253	39	37	37
E.S. CENTRAL	2,427	757	30	7	43,719	49,055	339	1,342	1,017	4	43	37
Ky.	313	324	14	6	4,877	4,713	136	80	16	-	18	13
Tenn.	1,031	162	10	-	12,769	15,732	102	1,149	986	3	17	20
Ala.	689	191	3	-	15,792	16,914	58	107	5	1	2	4
Miss.	394	80	3	1	10,281	11,696	43	6	10	-	6	-
W.S. CENTRAL	9,039	1,419	77	2	45,637	53,753	2,775	1,796	408	163	40	72
Ark.	370	71	2	-	9,001	7,847	52	58	4	2	6	2
La.	1,198	86	7	-	11,960	14,349	95	221	155	4	7	2
Okla.	676	1	8	-	4,474	5,547	218	314	161	9	17	23
Tex.	6,795	1,261	60	2	20,202	26,010	2,410	1,203	88	148	10	45
MOUNTAIN	3,719	697	30	5	10,620	12,415	3,953	707	347	77	73	20
Mont.	30	1	-	1	84	110	77	28	3	-	7	-
Idaho	70	11	-	-	159	119	288	84	-	4	1	2
Wyo.	46	7	-	-	76	64	17	31	110	-	6	9
Colo.	1,245	230	15	-	3,378	4,557	854	78	54	42	9	-
N. Mex.	292	119	4	2	942	923	414	222	111	3	6	2
Ariz.	1,205	175	8	-	3,726	4,174	1,362	86	13	12	15	-
Utah	253	73	1	1	350	349	770	57	36	14	12	2
Nev.	578	81	2	1	1,905	2,119	171	121	20	2	17	5
PACIFIC	19,425	2,550	173	20	33,204	43,159	7,324	2,151	791	213	112	117
Wash.	1,467	-	1	-	3,657	3,938	861	229	210	11	13	8
Oreg.	741	-	-	-	1,144	1,653	101	35	15	1	-	2
Calif.	16,771	2,392	163	20	27,131	36,415	5,577	1,852	553	198	89	106
Alaska	96	21	8	-	657	646	716	13	10	-	-	-
Hawaii	350	137	1	-	615	507	69	22	3	3	10	1
Guam	-	6	-	-	87	53	2	3	-	11	-	-
P.R.	2,985	64	-	-	500	239	79	399	95	2	-	-
V.I.	41	-	-	-	93	107	-	5	-	-	-	-
Amer. Samoa	-	-	-	-	42	51	19	-	-	-	-	-
C.N.M.I.	-	3	1	-	71	78	-	2	-	1	-	-

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

*Updated monthly; last update November 27, 1993.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending January 1, 1994, and December 26, 1992 (52nd Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
	Cum. 1993	1993	Cum. 1993	1993	Cum. 1993	Cum. 1992	Cum. 1993	1993	Cum. 1993	1993	Cum. 1993	Cum. 1992	1993	Cum. 1993	Cum. 1992
UNITED STATES	1,184	-	221	-	56	2,217	2,423	20	1,630	144	6,132	3,407	1	188	153
NEW ENGLAND	98	-	57	-	6	65	136	-	12	11	797	316	-	2	6
Maine	7	-	1	-	-	4	16	-	-	-	24	11	-	1	1
N.H.	7	-	2	-	-	13	16	-	-	-	250	120	-	-	-
Vt.	3	-	30	-	1	-	7	-	1	5	94	21	-	-	-
Mass.	47	-	14	-	4	21	69	-	2	-	325	113	-	1	-
R.I.	7	-	1	-	1	21	1	-	2	-	13	6	-	-	4
Conn.	27	-	9	-	-	6	27	-	7	6	91	45	-	-	1
MID. ATLANTIC	217	-	11	-	7	217	276	3	129	14	895	255	-	62	11
Upstate N.Y.	123	-	-	-	2	112	121	2	46	5	364	173	-	17	8
N.Y. City	24	-	5	-	2	63	19	-	2	-	78	22	-	22	-
N.J.	45	-	6	-	3	42	44	-	12	-	64	60	-	17	3
Pa.	25	-	-	-	-	-	92	1	69	9	389	148	-	6	-
E.N. CENTRAL	84	-	22	-	6	61	376	1	251	69	1,557	737	-	8	11
Ohio	15	-	7	-	2	6	108	1	74	69	556	119	-	1	-
Ind.	3	-	1	-	-	20	60	-	8	-	176	62	-	3	-
Ill.	41	-	5	-	-	18	105	-	67	-	391	54	-	1	9
Mich.	19	-	6	-	1	13	63	-	80	-	110	16	-	2	2
Wis.	6	-	3	-	3	4	40	-	22	-	324	486	-	1	-
W.N. CENTRAL	32	-	1	-	2	14	162	-	54	11	565	323	-	1	8
Minn.	9	-	-	-	-	12	20	-	2	8	331	116	-	-	-
Iowa	5	-	-	-	-	1	28	-	11	1	38	11	-	-	3
Mo.	7	-	1	-	-	-	57	-	33	2	143	117	-	1	1
N. Dak.	2	-	-	-	-	-	3	-	5	-	5	15	-	-	-
S. Dak.	2	U	-	U	-	-	6	U	-	U	8	17	U	-	-
Nebr.	4	-	-	-	-	-	14	-	2	-	16	14	-	-	-
Kans.	3	-	-	-	2	1	34	-	1	-	24	33	-	-	4
S. ATLANTIC	303	-	17	-	13	130	418	3	452	4	650	203	-	10	20
Del.	3	-	1	-	-	1	15	-	7	1	17	7	-	2	-
Md.	48	-	-	-	4	16	53	-	82	2	133	47	-	3	5
D.C.	11	-	-	-	-	2	6	-	1	-	13	1	-	-	-
Va.	39	-	-	-	4	16	48	-	36	-	66	18	-	-	-
W. Va.	2	-	-	-	-	-	19	-	23	-	8	9	-	-	1
N.C.	101	-	-	-	-	24	67	-	224	-	200	43	-	-	-
S.C.	7	-	-	-	-	29	31	-	16	-	73	10	-	-	7
Ga.	21	-	-	-	-	3	90	-	18	-	40	17	-	-	-
Fla.	71	-	16	-	5	39	89	3	45	1	100	51	-	5	7
E.S. CENTRAL	29	-	1	-	-	468	152	-	56	3	279	33	-	2	1
Ky.	5	-	-	-	-	451	25	-	-	-	30	1	-	-	-
Tenn.	12	-	-	-	-	-	44	-	17	-	173	10	-	2	1
Ala.	7	-	1	-	-	-	51	-	22	3	64	19	-	-	-
Miss.	5	-	-	-	-	17	32	-	17	-	12	3	-	-	-
W.S. CENTRAL	35	-	7	-	3	1,109	225	9	269	4	210	245	-	18	8
Ark.	3	-	-	-	-	-	21	-	4	-	12	17	-	-	-
La.	6	-	1	-	-	-	40	-	20	-	12	15	-	1	-
Okla.	6	-	-	-	-	12	23	1	16	4	103	52	-	1	-
Tex.	20	-	6	-	3	1,097	141	8	229	-	83	161	-	16	8
MOUNTAIN	38	-	5	-	1	37	189	1	73	14	435	434	-	10	8
Mont.	2	-	-	-	-	-	13	-	-	-	11	9	-	-	-
Idaho	1	-	-	-	-	-	21	-	5	2	121	46	-	2	1
Wyo.	-	-	-	-	-	1	5	1	5	-	1	-	-	-	-
Colo.	24	-	2	-	1	31	36	-	17	11	155	108	-	1	2
N. Mex.	5	-	-	-	-	2	7	N	N	1	42	102	-	-	-
Ariz.	1	-	2	-	-	3	81	-	15	-	63	127	-	2	2
Utah	2	-	-	-	-	-	19	-	5	-	37	40	-	4	1
Nev.	3	-	1	-	-	-	7	-	26	-	5	2	-	1	2
PACIFIC	348	-	100	-	18	116	489	3	334	14	744	861	1	75	80
Wash.	35	-	-	-	-	11	89	-	14	9	94	226	-	-	8
Oreg.	6	-	-	-	-	3	36	N	N	-	39	45	-	3	2
Calif.	297	-	89	-	7	60	338	2	283	4	583	517	1	44	47
Alaska	3	-	-	-	2	9	16	-	11	-	5	17	-	1	-
Hawaii	7	-	11	-	9	33	10	1	26	1	23	56	-	27	23
Guam	2	-	4	-	-	10	1	-	10	-	-	-	-	-	3
P.R.	-	-	311	-	-	481	9	-	4	-	11	13	-	-	1
V.I.	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-
Amer. Samoa	-	-	1	-	-	-	-	-	1	-	2	6	-	-	-
C.N.M.I.	1	11	82	-	1	2	-	-	13	-	1	2	-	-	2

*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 1, 1994, and December 26, 1992 (52nd Week)

Reporting Area	Syphilis (Primary & Secondary)		Toxic-Shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993
UNITED STATES	25,875	33,200	218	22,038	24,087	120	341	450	8,555
NEW ENGLAND	382	659	15	595	540	-	31	5	1,685
Maine	8	8	3	35	21	-	-	-	-
N.H.	29	37	5	17	18	-	2	-	149
Vt.	1	1	1	7	6	-	-	-	45
Mass.	123	327	5	350	305	-	23	5	714
R.I.	16	38	1	62	51	-	-	-	2
Conn.	205	248	-	124	139	-	6	-	775
MID. ATLANTIC	2,396	4,485	34	4,559	6,076	1	68	27	3,064
Upstate N.Y.	242	349	16	542	763	1	20	7	2,224
N.Y. City	1,210	2,511	1	2,573	3,755	-	26	-	-
N.J.	303	561	-	843	917	-	16	10	458
Pa.	641	1,064	17	601	641	-	6	10	382
E.N. CENTRAL	4,179	5,127	50	2,381	2,298	4	39	13	109
Ohio	1,209	852	13	312	328	-	7	8	6
Ind.	348	287	3	231	209	1	2	1	11
Ill.	1,604	2,370	10	1,281	1,180	2	21	2	23
Mich.	551	905	24	463	477	1	8	2	18
Wis.	467	713	-	94	104	-	1	-	51
W.N. CENTRAL	1,533	1,542	15	519	572	39	2	25	345
Minn.	65	94	3	92	154	-	-	1	45
Iowa	64	61	7	59	49	-	-	7	79
Mo.	1,276	1,160	2	244	248	16	2	11	25
N. Dak.	2	1	-	7	10	-	-	-	61
S. Dak.	2	-	-	14	28	17	-	3	45
Nebr.	10	25	-	20	28	3	-	2	11
Kans.	114	201	3	83	55	3	-	1	79
S. ATLANTIC	6,463	8,896	25	4,207	4,275	4	56	219	2,033
Del.	94	201	1	66	54	-	1	1	135
Md.	369	601	1	407	418	-	8	14	610
D.C.	326	405	-	162	122	-	-	-	18
Va.	663	719	7	415	347	-	6	13	387
W. Va.	13	17	-	75	92	-	-	6	90
N.C.	1,866	2,478	4	595	597	2	3	129	104
S.C.	924	1,174	-	399	389	-	-	11	165
Ga.	1,081	1,721	2	753	861	-	3	37	470
Fla.	1,127	1,580	10	1,335	1,395	2	35	8	54
E.S. CENTRAL	3,976	4,171	11	1,550	1,586	4	7	61	208
Ky.	336	180	3	393	390	1	2	14	20
Tenn.	1,056	1,212	4	424	527	2	2	32	72
Ala.	861	1,365	2	487	415	1	3	4	116
Miss.	1,723	1,414	2	246	254	-	-	11	-
W.S. CENTRAL	5,760	6,204	2	2,399	2,812	48	10	85	592
Ark.	710	886	-	197	225	27	-	9	43
La.	2,598	2,586	-	-	217	-	1	1	11
Okla.	413	460	2	168	157	17	1	70	66
Tex.	2,039	2,272	-	2,034	2,213	4	8	5	472
MOUNTAIN	237	338	15	513	601	14	10	15	169
Mont.	1	7	-	15	13	5	-	2	24
Idaho	-	1	2	13	25	-	-	-	6
Wyo.	13	9	-	6	-	3	-	10	25
Colo.	81	66	2	54	77	1	5	3	26
N. Mex.	24	44	1	59	79	2	2	-	9
Ariz.	95	162	2	238	251	-	2	-	60
Utah	11	8	6	28	72	2	1	-	4
Nev.	12	41	2	100	84	1	-	-	15
PACIFIC	949	1,778	51	5,315	5,327	6	118	-	350
Wash.	56	74	7	275	301	1	8	-	-
Oreg.	40	54	-	100	130	2	1	-	-
Calif.	837	1,636	43	4,640	4,566	3	106	-	325
Alaska	8	5	-	51	59	-	-	-	25
Hawaii	8	9	1	249	271	-	3	-	-
Guam	3	3	-	72	74	-	4	-	-
P.R.	486	347	-	233	225	-	-	-	43
V.I.	42	68	-	2	3	-	-	-	-
Amer. Samoa	-	-	-	2	-	-	1	-	-
C.N.M.I.	7	6	-	40	59	-	-	-	-

U: Unavailable

TABLE III. Deaths in 121 U.S. cities,* week ending January 1, 1994 (52nd Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	647	462	108	40	17	20	57
Boston, Mass.	158	105	33	8	5	7	18
Bridgeport, Conn.	30	19	5	2	1	3	3
Cambridge, Mass.	30	24	4	2	-	-	1
Fall River, Mass.	29	26	2	1	-	-	-
Hartford, Conn.	50	38	6	2	1	3	1
Lowell, Mass.	30	18	9	1	1	1	3
Lynn, Mass.	20	18	2	-	-	-	3
New Bedford, Mass.	23	21	-	2	-	-	-
New Haven, Conn.	51	34	7	6	2	2	5
Providence, R.I.	55	41	10	2	2	-	8
Somerville, Mass.	10	7	3	-	-	-	-
Springfield, Mass.	49	32	8	5	4	-	2
Waterbury, Conn.	50	35	11	3	-	1	2
Worcester, Mass.	62	44	8	6	1	3	11
MID. ATLANTIC	2,364	1,548	444	258	60	54	115
Albany, N.Y.	47	26	12	4	3	2	3
Allentown, Pa.	42	36	1	5	-	-	-
Buffalo, N.Y.	100	69	23	3	2	3	3
Camden, N.J.	41	24	9	5	3	-	2
Elizabeth, N.J.	12	11	1	-	-	-	1
Erie, Pa.§	50	41	6	1	1	1	2
Jersey City, N.J.	43	26	10	5	-	2	-
New York City, N.Y.	1,322	837	247	185	27	26	59
Newark, N.J.	52	21	18	9	1	3	2
Paterson, N.J.	12	9	3	-	-	-	-
Philadelphia, Pa.	194	120	42	14	8	10	11
Pittsburgh, Pa.§	80	56	17	3	1	3	6
Reading, Pa.	18	14	1	3	-	-	3
Rochester, N.Y.	130	89	23	10	6	2	8
Schenectady, N.Y.	38	30	4	4	-	-	-
Scranton, Pa.§	44	38	4	-	2	-	4
Syracuse, N.Y.	78	56	11	5	4	2	10
Trenton, N.J.	42	28	10	2	2	-	-
Utica, N.Y.	19	17	2	-	-	-	1
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	1,361	948	251	101	35	26	94
Akron, Ohio	72	49	16	4	1	2	-
Canton, Ohio	30	25	4	1	-	-	3
Chicago, Ill.	U	U	U	U	U	U	U
Cincinnati, Ohio	U	U	U	U	U	U	U
Cleveland, Ohio	146	100	25	13	6	2	6
Columbus, Ohio	U	U	U	U	U	U	U
Dayton, Ohio	111	94	11	4	-	2	8
Detroit, Mich.	218	130	45	27	10	6	5
Evansville, Ind.	20	14	6	-	-	-	3
Fort Wayne, Ind.	56	40	11	3	-	2	4
Gary, Ind.	17	10	5	2	-	-	2
Grand Rapids, Mich.	83	57	11	6	8	1	15
Indianapolis, Ind.	125	84	21	13	3	4	1
Madison, Wis.	65	51	9	2	3	-	10
Milwaukee, Wis.	137	102	26	7	1	1	10
Peoria, Ill.	37	25	10	1	-	1	4
Rockford, Ill.	65	48	14	1	-	2	5
South Bend, Ind.	77	55	9	11	1	1	10
Toledo, Ohio	102	64	28	6	2	2	8
Youngstown, Ohio	U	U	U	U	U	U	U
W.N. CENTRAL	682	502	85	57	18	18	36
Des Moines, Iowa	70	51	11	6	-	2	4
Duluth, Minn.	17	13	2	1	-	1	2
Kansas City, Kans.	40	23	5	7	1	3	1
Kansas City, Mo.	122	93	16	9	3	1	7
Lincoln, Nebr.	U	U	U	U	U	U	U
Minneapolis, Minn.	117	92	14	10	1	-	8
Omaha, Nebr.	71	47	11	7	4	2	5
St. Louis, Mo.	124	96	10	10	4	4	4
St. Paul, Minn.	50	38	5	3	2	2	3
Wichita, Kans.	71	49	11	4	3	3	2

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
S. ATLANTIC	941	660	151	93	21	16	53
Atlanta, Ga.	134	87	24	21	2	-	4
Baltimore, Md.	166	107	30	19	6	4	20
Charlotte, N.C.	83	61	12	7	1	2	2
Jacksonville, Fla.	110	81	16	10	2	1	3
Miami, Fla.	108	70	22	7	5	4	1
Norfolk, Va.	48	29	9	7	1	2	2
Richmond, Va.	U	U	U	U	U	U	U
Savannah, Ga.	39	27	6	5	1	-	2
St. Petersburg, Fla.	74	64	5	2	-	3	3
Tampa, Fla.	151	109	24	15	3	-	16
Washington, D.C.	U	U	U	U	U	U	U
Wilmington, Del.	28	25	3	-	-	-	-
E.S. CENTRAL	570	370	122	59	16	3	51
Birmingham, Ala.	98	61	18	13	5	1	1
Chattanooga, Tenn.	68	43	15	5	5	-	5
Knoxville, Tenn.	18	12	3	2	1	-	3
Lexington, Ky.	26	16	6	4	-	-	7
Memphis, Tenn.	147	94	31	18	3	1	19
Mobile, Ala.	68	40	24	2	1	1	6
Montgomery, Ala.	38	31	4	2	1	-	1
Nashville, Tenn.	107	73	21	13	-	-	9
W.S. CENTRAL	1,113	720	225	102	34	32	60
Austin, Tex.	58	41	9	7	1	-	7
Baton Rouge, La.	34	25	9	-	-	-	-
Corpus Christi, Tex.	48	29	15	2	-	2	2
Dallas, Tex.	166	105	31	19	6	5	2
El Paso, Tex.	U	U	U	U	U	U	U
Ft. Worth, Tex.	66	44	13	7	1	1	2
Houston, Tex.	268	172	51	28	11	6	19
Little Rock, Ark.	79	43	24	7	2	3	9
New Orleans, La.	82	56	12	7	6	1	-
San Antonio, Tex.	194	137	36	10	6	5	14
Shreveport, La.	19	13	3	2	-	1	2
Tulsa, Okla.	99	55	22	13	1	8	3
MOUNTAIN	827	576	165	52	17	17	91
Albuquerque, N.M.	76	49	12	9	5	1	2
Colo. Springs, Colo.	60	43	13	3	-	1	6
Denver, Colo.	108	81	16	9	-	2	11
Las Vegas, Nev.	141	96	35	7	1	2	15
Ogden, Utah	30	25	4	-	1	-	10
Phoenix, Ariz.	133	83	31	11	6	2	13
Pueblo, Colo.	24	15	8	-	-	1	1
Salt Lake City, Utah	113	82	18	6	3	4	22
Tucson, Ariz.	142	102	28	7	1	4	11
PACIFIC	1,749	1,211	280	172	47	32	145
Berkeley, Calif.	25	16	5	3	1	-	4
Fresno, Calif.	U	U	U	U	U	U	U
Glendale, Calif.	15	11	3	1	-	-	1
Honolulu, Hawaii	73	53	9	7	2	2	4
Long Beach, Calif.	89	63	14	9	1	2	14
Los Angeles, Calif.	378	243	63	44	14	8	19
Pasadena, Calif.	35	26	3	3	3	-	3
Portland, Oreg.	145	105	19	13	5	3	13
Sacramento, Calif.	191	134	35	11	6	4	18
San Diego, Calif.	104	66	19	16	3	-	13
San Francisco, Calif.	121	78	24	17	-	2	2
San Jose, Calif.	225	172	31	14	5	3	33
Santa Cruz, Calif.	U	U	U	U	U	U	U
Seattle, Wash.	205	135	35	27	3	5	6
Spokane, Wash.	63	49	7	4	2	1	5
Tacoma, Wash.	80	60	13	3	2	2	10
TOTAL	10,254¶	6,997	1,831	934	265	218	702

*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.

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