

MMWR

MORBIDITY AND MORTALITY WEEKLY REPORT

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Update: AIDS Among Women — United States, 1994

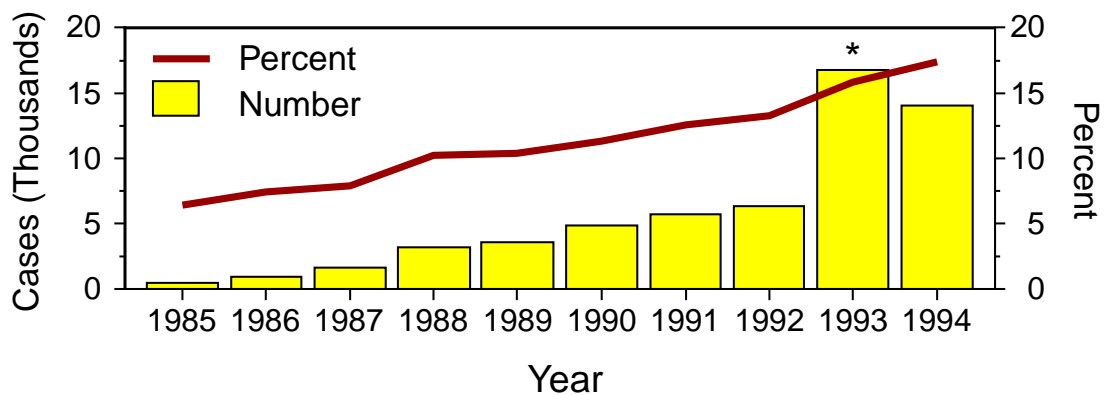
In 1993, human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) was the fourth leading cause of death among women aged 25–44 years in the United States (1); in addition, the incidence of AIDS is increasing more rapidly among women than men (2). Women with AIDS reported in 1994 represented 13% of the cumulative total of 58,448 cases among women. This report presents characteristics of women and men reported with AIDS in 1994, summarizes trends in cases reported during 1985–1994, and describes findings of an HIV seroprevalence survey among childbearing women during 1989–1993.*

AIDS Surveillance

In 1994, of the 79,674 persons aged ≥13 years reported with AIDS, 14,081 (18%) occurred among women—nearly threefold greater than the proportion (534 [7%] of 8153) reported in 1985; in addition, the proportion of cases among women has increased steadily since 1985 (Figure 1). The median age of women reported with AIDS was 35 years, and women aged 15–44 years accounted for 84% of cases. More than

*Single copies of this report will be available until February 10, 1996, from the CDC National AIDS Clearinghouse, P.O. Box 6005, Rockville, MD 20849-6003; telephone (800) 458-5231.

FIGURE 1. Number and percentage of AIDS cases among women aged ≥13 years — United States, 1985–1994



*The AIDS surveillance case definition was expanded in 1993.

AIDS Among Women — Continued

three fourths (77%) of cases among women occurred among blacks and Hispanics, and rates for black and Hispanic women were 16 and seven times higher, respectively, than those for white women (Table 1).

In 1994, the Northeast region accounted for the largest percentage of AIDS cases reported among women (44%), followed by the South (36%), West (9%), Midwest (7%), and Puerto Rico and U.S. territories (4%). In the Northeast, most cases among women occurred in urban areas; 1.4% of women with AIDS in the Northeast resided outside metropolitan statistical areas (MSAs) compared with 10.2% of women who resided outside MSAs in the South. Of all cases among women, 61% were reported from five states: New York (26%), Florida (13%), New Jersey (10%), California (7%), and Texas (5%).

In 1994, 59% of AIDS cases among women were reported based on criteria added in the 1993 expanded AIDS surveillance case definition (3). This total included 7181 women with severe HIV-related immunosuppression (CD4+ T-lymphocytes <200 cells/ μ L or percentage of total lymphocytes <14), 557 with pulmonary tuberculosis, 376 with recurrent pneumonia, and 164 with invasive cervical cancer.

In 1994, 41% of women with AIDS reported injecting-drug use; 38%, heterosexual contact with a partner at risk for or known to have HIV infection or AIDS; and 2%, receipt of contaminated blood or blood products; 19% had no specific HIV exposure reported. Of all women with AIDS who were initially reported without risk but who were later reclassified, most had heterosexual contact with an at-risk partner (66%) or a history of injecting-drug use (27%) (4). In 1994, of the 5353 women reported with AIDS attributed to heterosexual contact, 38% reported contact with a male partner who was an injecting-drug user; 7%, a bisexual male; 2%, a partner who had hemophilia or had received HIV-contaminated blood or blood products; and 53%, a partner who had documented HIV infection or AIDS but whose risk was unspecified.

HIV Seroprevalence in Childbearing Women

Using findings from the HIV Survey in Childbearing Women (SCBW) (5), an estimated 7000 HIV-infected women delivered infants in the United States during 1993. Assuming a perinatal transmission rate of 15%–30%, approximately 1000–2000 infants were perinatally infected with HIV during 1993. From 1989 through 1993, the annual prevalence of HIV infection among childbearing women remained relatively stable

TABLE 1. Number, percentage, and rate* of AIDS cases among adolescents and adults†, by race/ethnicity and sex — United States, 1994

Race/Ethnicity	Men			Women			Total		
	No.	(%)	Rate	No.	(%)	Rate	No.	(%)	Rate
White, non-Hispanic	29,910	(45.6)	38.9	3,148	(22.4)	3.8	33,058	(41.5)	20.8
Black, non-Hispanic	22,838	(34.8)	208.0	8,016	(56.9)	62.7	30,854	(38.7)	129.8
Hispanic	12,016	(18.3)	109.8	2,814	(20.0)	26.0	14,830	(18.6)	68.2
Asian/ Pacific Islander	518	(0.8)	15.3	49	(0.4)	1.3	567	(0.7)	8.0
American Indian/ Alaskan Native	184	(0.3)	26.8	42	(0.3)	5.8	226	(0.3)	16.1
Total[§]	65,591		63.7	14,081		12.8	79,674		37.4

*Per 100,000 population.

†Persons aged \geq 13 years.

§Includes 137 persons whose race/ethnicity is unknown and two persons whose sex is unknown.

AIDS Among Women — Continued

(1.6–1.7 per 1000), although prevalence varied regionally: in the Northeast, prevalence decreased from 4.1 to 3.4 per 1000; in the South, prevalence increased from 1.6 in 1989 to 2.0 in 1991 and remained stable through 1993.

Reported by: Local, state, and territorial health depts. Div of HIV/AIDS, National Center for Infectious Diseases; Office of Women's Health, Office of the Director; Div of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: In 1994, as in previous years, the AIDS epidemic among women continued to disproportionately affect racial/ethnic minorities, primarily in the Northeast and South. AIDS among women was primarily associated with two modes of HIV transmission: injecting-drug use and heterosexual contact with an at-risk partner. The proportion of women in 1994 with unreported risk will decrease substantially after investigation by local and state health departments because, after follow-up, most women are found to have a recognized risk for HIV. Heterosexual contact is the most rapidly increasing transmission category for women (6).

The disproportionate impact of HIV/AIDS among women in racial/ethnic minority groups reflects social and economic factors that have not been completely defined. Despite the methodologic limitations associated with use of race/ethnicity, these data have assisted in the development and implementation of community-based prevention efforts.

The increase in the proportion of cases associated with heterosexual transmission will complicate accurate ascertainment of mode of transmission. In particular, women are more likely than men to be reported initially without a risk for HIV because both women and their care providers may not recognize or report the risk behaviors of the woman or her partners (6). High rates of sexually transmitted diseases are associated with the use of noninjecting drugs and with the exchange of sex for drugs, money, or personal items that may account for increased heterosexual transmission among some women (7). In addition, some women who have sex with other women may be at risk for HIV infection if they inject drugs or have partners with high-risk behaviors (8).

Findings from the SCBW indicate that approximately 7000 infants are born to HIV-infected women in the United States each year. Recent advances in the prevention of perinatal HIV transmission emphasize the need for women to know their HIV-infection status. Zidovudine therapy has been recommended for infected pregnant women and their newborns as an effective means for reducing the risk for perinatal HIV transmission (9). The Public Health Service is developing draft recommendations to establish policy regarding HIV counseling and testing of pregnant women to reduce vertical transmission and promote referrals for on-going health care.

Women at highest risk for heterosexually acquired HIV infection include those whose heterosexual partners have high-risk behaviors (e.g., injecting-drug use), adolescents and young adults with multiple sex partners, and those with sexually transmitted diseases. To reduce HIV transmission to women, prevention programs should emphasize consistent condom use, the need for substance-abuse prevention and treatment services, and counseling to support decisions by women and their partners to reduce risk behaviors. Efforts to improve the prevention of HIV transmission in women also should include the development and evaluation of additional measures such as the female condom and microbicides.

*AIDS Among Women — Continued**References*

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Update: Influenza Activity — United States, 1994–95 Season

Influenza activity has increased throughout the United States since late November 1994; however, the level of activity* has varied widely in different parts of the country. This report summarizes results of influenza surveillance in the United States from October 2, 1994, through January 28, 1995.

From November 27, 1994, through January 21, 1995, most influenza activity had been reported from the Northeast (Figure 1). Regional influenza activity was first reported the week ending December 3 in New York, and widespread activity was first reported the week ending January 7 in Connecticut and Virginia. Regional or widespread activity also was reported by Kentucky, Maryland, New Jersey, and Pennsylvania during the first 3 weeks of January. All other states reported either sporadic activity or no activity until the week ending January 28, when regional activity was reported for the first time in Arizona, Florida, and Wisconsin.

From October 2, 1994, through January 28, 1995, a total of 686 influenza virus isolates were reported in the United States by the World Health Organization collaborating laboratories. Of these, 487 (71%) were type A, and 199 (29%) were type B. Of the 216 influenza A isolates that were subtyped, all have been type A(H3N2). Laboratory-diagnosed influenza has been reported from all regions; however, 84% of all isolates have been reported from the Mid-Atlantic and South Atlantic regions. In the Mid-Atlantic region, influenza type A accounted for 94% (259 of 276) of all isolates; in the South Atlantic region, influenza type B accounted for 59% (176 of 297) of isolates. As of January 27, influenza isolates were reported from 41 states; type A had been identified in 39 states and the District of Columbia, and influenza type B had been identified in 22 states and the District of Columbia (Figure 1).

*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 <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% of the state's total population.

Influenza — Continued

During the 17 weeks from October 2, 1994, through January 28, the proportion of pneumonia and influenza deaths among total deaths reported from 121 U.S. cities slightly exceeded the epidemic threshold[†] during 5 weeks but has not exceeded the threshold for any 2 consecutive weeks.

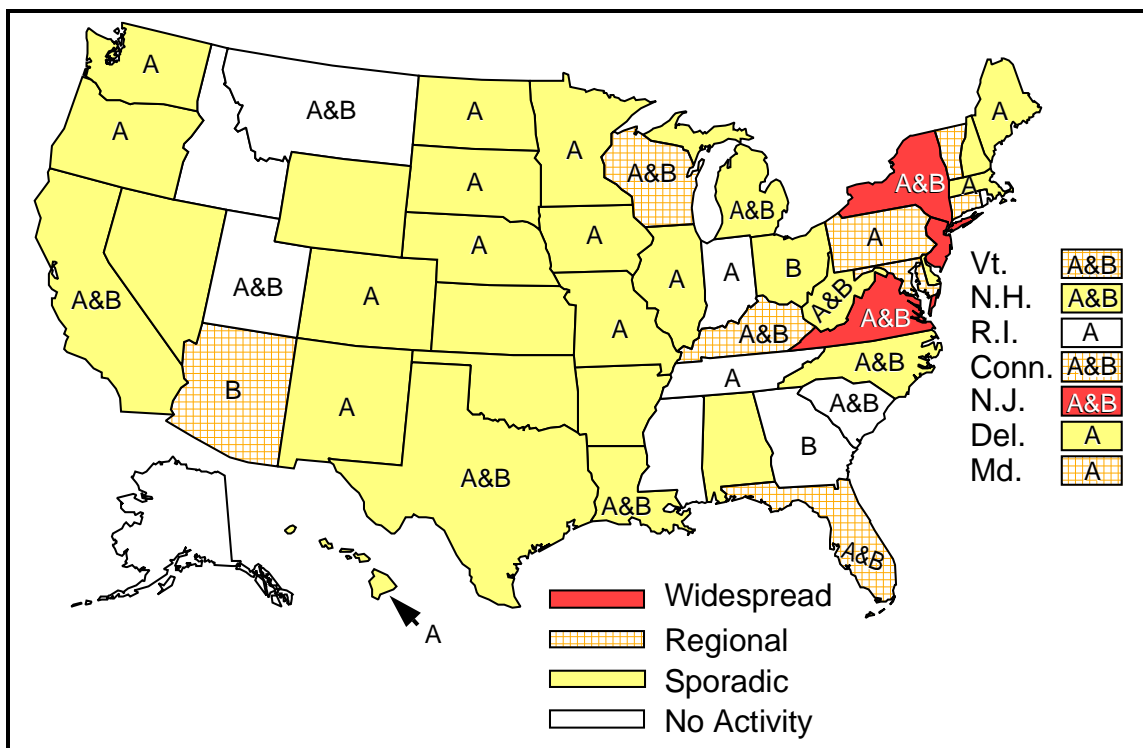
Reported by: Participating state and territorial epidemiologists and state public health laboratory directors. World Health Organization collaborating laboratories. Sentinel Physicians Influenza Surveillance System of the American Academy of Family Physicians. WHO Collaborating Center for Surveillance, Epidemiology, and Control of Influenza, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases, CDC.

Editorial Note: The increase in influenza activity in regions of the United States during December and January suggests the potential for increased activity in other regions during this influenza season. The timing of influenza activity can vary widely from one season to another; in some previous seasons, substantial influenza activity has occurred during April and May.

Influenza vaccine can be administered after influenza activity has begun in a community; however, in these circumstances, short-term antiviral prophylaxis may be indicated because antibody may not develop until up to 2 weeks after vaccination (1).

[†]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. Level of influenza activity,* week ending January 28, 1995, and type of influenza (A and/or B) isolated, by state, 1994–95 season — United States



*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 <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% of the state’s total population.

Influenza — Continued

Health-care providers should be informed about findings of influenza surveillance, particularly when influenza types A and B are cocirculating, because of the availability of antiviral agents to treat and prevent influenza type A (1).

Reference

1. ACIP. Prevention and control of influenza: part II, antiviral agents—recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1994;43(no. RR-15).

Human Rabies — West Virginia, 1994

On October 15, 1994, a 41-year-old male resident of Wirt County, West Virginia, died from rabies. This report summarizes the clinical course, epidemiologic investigation, and probable exposure history of this case.

On October 4, the man was examined at a local hospital with a 1-day history of shaking, speech difficulties, unwillingness to bring liquids to his mouth, vomiting, and severe anxiety. During examination, he had good long-term recall but a short attention span and became extremely agitated when anyone approached him for examination. A white blood cell count (WBC) was 13,600/mm³ (normal: 5000–10,000/mm³), and urinalysis indicated >80 mg/dL ketones (normal: absent), 100 mg/dL protein (normal: absent), trace blood (normal: absent), and carboxy acid tetrahydrocannabinol of 79 ng/mL (normal: absent). Preliminary diagnosis was acute psychotic reaction associated with use of ethanol or marijuana or ingestion of other drugs. The man declined further examination and treatment and left the same day without being admitted.

On the evening of October 4, the man was examined at a regional hospital with extreme agitation and muscle tremors; he was admitted to the intensive-care unit for apparent encephalopathy. Findings on admission included an oral temperature of 101.1 F (38.3 C) and pulse of 64 beats per minute. Laboratory test results included a WBC of 18,100/mm³, creatinine phosphokinase of 1912 IU (normal: 5–50 IU), and a lactic dehydrogenase of 1000 U/L (normal: <300 U/L). Following evaluation, the preliminary differential diagnoses included rabies, tetanus, viral encephalitis, acute hemorrhagic encephalitis, and drug toxicities or withdrawal. Efforts to control spastic movements included treatment with valium, librium, ativan, phenobarbital, and morphine. Because of frequent expectoration of frothy saliva from the mouth, he was placed in isolation. On October 6, he was paralyzed with pavulon/tracrium to control extreme agitation and spastic muscle activity, mechanically ventilated, treated with acyclovir for possible viral infection, and then transferred to a tertiary-care facility.

On October 6 and 7, serial computerized tomographies of the brain revealed low attenuation in the left temporal lobe suggestive of inflammation or neoplasm. On October 6 and 10, cerebrospinal fluid specimens were obtained, but findings were nonspecific. Serologic tests were negative for eastern equine, western equine, St. Louis, and California group arboviral encephalitides. A serum sample and nuchal biopsy specimen obtained on October 7 and a brain biopsy specimen (left temporal lobe) obtained on October 10 were tested for rabies. On October 12, the West Virginia Bureau of Public Health Laboratory diagnosed rabies by both fluorescent antibody stain and demonstration of Negri bodies in the brain tissue, and treatment with paralytic/sedative drugs was terminated; the patient died on October 15.

Human Rabies — Continued

Subsequent confirmatory analysis at CDC included detection of rabies neutralizing antibody in serum and the detection of rabies antigen by direct fluorescent antibody staining of the nuchal biopsy specimen. The specific viral RNA was identified as a variant associated with the silver-haired bat (*Lasionycteris noctivagans*).

Interviews with friends and family members on October 15 indicated that, in late June or early July 1994, the decedent and two acquaintances had shot a bat from the front porch of his house and that the decedent had examined the head of the bat by opening its mouth and feeling the teeth. Descriptions of the bat were consistent with the red bat (*Lasiurus borealis*).

Postexposure rabies immunoprophylaxis was administered to 48 persons (15 medical technicians, 12 registered nurses, four physicians, two licensed practical nurses [LPNs], one LPN student, one physician assistant, one housekeeper, one secretary, and 11 family members and friends).

Reported by: MS Hardman, MA Balleca, MD, DM Senseng, MD, Roane General Hospital, Spencer; S Spencer, SD Hanna, MD, BM Loudon, MD, MA Morehead, MD, P Anderson, St. Joseph's Hospital, Parkersburg; B McTaggart, A Khan, MD, AA Marfin, MD, PJ Marks, MD, E Sang, MD, MA Fisher, MD, RW Farr, MD, Robert C. Byrd Health Sciences Center of West Virginia Univ, Morgantown; J Merrill, Mid-Ohio Valley Health Dept, Elizabeth; C Slemp, MD, F Lambert, Jr, DrPH, D Dodd, L Haddy, MS, State Epidemiologist, West Virginia Dept of Health and Human Resources. Viral and Rickettsial Zoonoses Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases, CDC.

Editorial Note: This report describes the 21st case of human rabies reported in the United States since 1980 and the first from West Virginia since 1979. Of the 21 cases, 11 are presumed to have been acquired inside the United States, and nine have been attributed to bat-associated virus. As a result of exposure to these 21 human rabies cases, at least 880 persons have received postexposure rabies immunoprophylaxis at an estimated direct cost of \$900,000 (1).

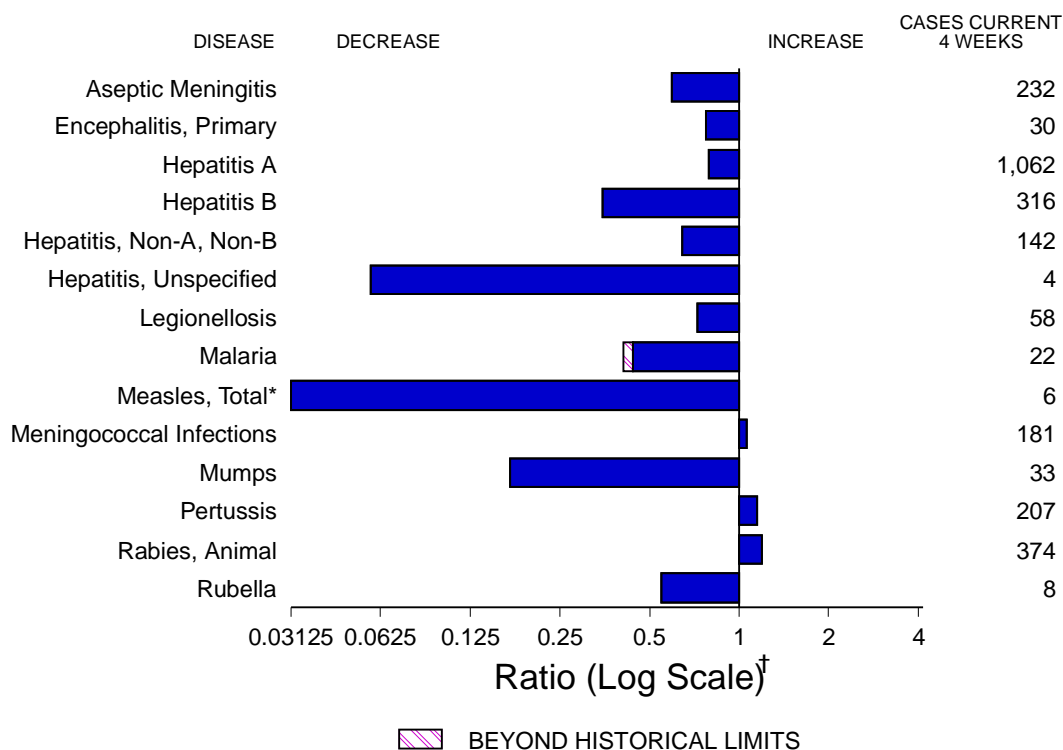
Although a specific exposure to rabies was not elicited before this patient's death, a presumptive diagnosis of rabies had been considered early during hospitalization. As a consequence, the initiation of strict isolation practices reduced the number of persons exposed and, therefore, eliminated the need for postexposure prophylaxis for health-care workers involved with the patient's transfer to and care at the tertiary-care facility. This case emphasizes that prompt collection and analysis of antemortem specimens in suspected cases of human rabies may expedite diagnosis and minimize unnecessary exposures and treatments.

Bat rabies is enzootic in the United States, and cases have been reported from all 48 contiguous states. Although distinct variants of rabies virus have been confirmed in red bats, this case is the first in which the silver-haired bat variant has been potentially linked with red bats. Because the natural history of rabies virus circulation among bats is not completely understood, mammalogists should collaborate with local health departments in the taxonomic identification of bats submitted for rabies diagnosis. In addition, CDC requests that brain tissue from rabid silver-haired and red bats be forwarded from state diagnostic laboratories to CDC's Viral and Rickettsial Zoonoses Branch, Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases, telephone (404) 639-1050.

Exposure to potentially rabid animals (e.g., downed bats and other wild animals) should be avoided. However, postexposure prophylaxis is recommended for all persons bitten by such animals and for nonbite exposures involving contamination of

(Continued on page 93)

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



*The large apparent decrease in the number of reported cases of measles (total), reflect dramatic fluctuations in the historical baseline. (Ratio (log scale) for week 5 measles (total) is 0.023622).

[†]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 February 4, 1995 (5th Week)

	Cum. 1995		Cum. 1995
Anthrax	-	Plague	-
Aseptic Meningitis	296	Poliomyelitis, Paralytic	-
Brucellosis	8	Psittacosis	3
Cholera	-	Rabies, human	-
Congenital rubella syndrome	1	Rocky Mountain Spotted Fever	10
Diphtheria	-	Syphilis, congenital, age < 1 year [†]	2
Encephalitis, primary	34	Tetanus	2
Encephalitis, post-infectious	3	Toxic shock syndrome	9
<i>Haemophilus influenzae</i> *	123	Trichinosis	-
Hansen Disease	7	Tularemia	2
Hepatitis, unspecified	9	Typhoid fever	20
Leptospirosis	5		

*Of 120 cases of known age, 27 (22%) were reported among children less than 5 years of age.

[†]Updated quarterly from reports to the Division of STD & HIV Prevention, National Center for Prevention Services. First quarter data not yet available.

-: no reported cases

TABLE II. Cases of selected notifiable diseases, United States, weeks ending February 4, 1995, and February 5, 1994 (5th Week)

Reporting Area	AIDS*	Gonorrhea		Hepatitis (Viral), by type						Legionellosis	
				A		B		NA,NB			
				Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994		
UNITED STATES	5,574	30,792	36,928	1,523	1,720	456	995	175	379	79	144
NEW ENGLAND	312	654	820	14	25	8	31	1	9	1	1
Maine	15	5	4	3	-	1	-	-	-	-	-
N.H.	5	4	3	-	2	-	3	-	1	-	-
Vt.	1	2	2	-	-	-	-	-	-	-	-
Mass.	199	337	293	4	13	3	21	1	3	1	-
R.I.	9	45	33	2	8	2	2	-	5	-	1
Conn.	83	261	485	5	2	2	5	-	-	-	-
MID. ATLANTIC	1,729	2,716	3,579	74	117	30	127	22	45	8	10
Upstate N.Y.	186	280	805	6	16	10	17	6	11	2	-
N.Y. City	934	680	1,595	39	55	1	28	1	1	-	-
N.J.	379	400	39	17	24	15	40	10	25	4	2
Pa.	230	1,356	1,140	12	22	4	42	5	8	2	8
E.N. CENTRAL	484	7,371	6,668	249	218	61	154	21	38	26	60
Ohio	32	2,575	2,180	184	55	6	20	1	-	18	20
Ind.	38	533	816	18	41	20	31	1	2	6	20
Ill.	243	1,823	1,200	6	79	-	35	-	7	1	6
Mich.	140	2,240	1,806	39	23	35	39	19	29	1	11
Wis.	31	200	666	2	20	-	29	-	-	-	3
W.N. CENTRAL	102	1,840	2,007	31	93	22	48	7	2	5	7
Minn.	25	312	376	4	5	-	1	-	-	-	-
Iowa	4	155	109	6	4	4	2	2	-	2	4
Mo.	51	1,027	958	16	62	18	40	3	1	3	1
N. Dak.	-	-	2	-	-	-	-	-	-	-	-
S. Dak.	-	11	8	-	-	-	-	1	-	-	-
Nebr.	12	-	213	-	18	-	2	-	-	-	1
Kans.	10	335	341	5	4	-	3	1	1	-	1
S. ATLANTIC	1,347	10,757	9,979	74	89	80	214	20	69	19	26
Del.	29	218	155	1	1	1	2	-	-	-	-
Md.	184	1,686	1,773	24	20	15	27	2	8	5	7
D.C.	77	610	543	1	4	7	5	-	-	-	-
Va.	136	1,033	1,624	12	8	8	9	-	2	-	2
W. Va.	4	81	69	3	1	7	3	5	1	2	1
N.C.	82	2,544	2,652	9	8	26	37	6	10	6	1
S.C.	77	1,257	1,168	-	5	2	1	-	-	2	1
Ga.	235	1,803	-	-	3	-	110	-	42	2	10
Fla.	523	1,525	1,995	24	39	14	20	7	6	2	4
E.S. CENTRAL	139	3,712	4,249	29	132	48	137	34	99	2	23
Ky.	7	432	401	7	34	3	17	1	3	-	-
Tenn.	76	-	1,104	7	10	36	111	32	96	-	6
Ala.	35	2,411	1,733	14	8	9	9	1	-	1	-
Miss.	21	869	1,011	1	80	-	-	-	-	1	17
W.S. CENTRAL	379	1,463	4,548	55	104	30	66	16	25	1	1
Ark.	20	-	820	-	3	-	2	-	-	-	-
La.	90	1,235	1,569	1	7	3	6	-	3	-	-
Okla.	35	14	320	44	20	26	31	16	21	1	1
Tex.	234	214	1,839	10	74	1	27	-	1	-	-
MOUNTAIN	171	725	906	386	325	41	51	17	47	10	10
Mont.	7	-	20	3	-	2	1	2	-	1	1
Idaho	5	9	5	35	28	2	3	3	13	-	-
Wyo.	1	5	11	4	2	-	3	5	7	-	-
Colo.	76	274	346	73	31	12	10	4	14	1	2
N. Mex.	7	80	103	92	91	14	19	-	4	-	1
Ariz.	37	275	232	62	150	6	8	3	4	4	1
Utah	5	1	30	104	12	1	2	-	3	2	-
Nev.	33	81	159	13	11	4	5	-	2	2	5
PACIFIC	911	1,554	4,172	611	617	136	167	37	45	7	6
Wash.	91	250	324	11	49	2	9	2	7	-	2
Oreg.	58	-	140	144	34	13	6	3	1	-	-
Calif.	704	1,168	3,583	445	511	118	145	25	35	5	4
Alaska	18	89	53	8	18	1	-	-	-	-	-
Hawaii	40	47	72	3	5	2	7	7	2	2	-
Guam	-	-	16	-	-	-	-	-	-	-	-
P.R.	65	36	51	-	-	4	12	-	1	-	-
V.I.	-	-	3	-	-	-	1	-	-	-	-
Amer. Samoa	-	3	4	1	2	-	-	-	-	-	-
C.N.M.I.	-	-	8	-	-	-	-	-	-	-	-

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

*Updated monthly to the Division of HIV/AIDS, National Center for Infectious Diseases. Last update January 26, 1995.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending February 4, 1995, and February 5, 1994 (5th Week)

Reporting Area	Lyme Disease		Malaria		Measles (Rubeola)						Meningococcal Infections		Mumps	
	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Indigenous		Imported*		Total		Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994
					1995	Cum. 1995	1995	Cum. 1995	Cum. 1995	Cum. 1994				
UNITED STATES	170	231	48	66	4	10	-	-	10	10	258	354	58	114
NEW ENGLAND	10	17	3	4	-	2	-	-	2	1	23	14	-	4
Maine	-	-	-	1	-	-	-	-	-	-	2	3	-	3
N.H.	-	2	-	-	-	-	-	-	-	-	3	1	-	1
Vt.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mass.	10	-	1	-	-	-	-	-	1	1	12	5	-	-
R.I.	-	5	2	3	-	2	-	-	2	-	-	-	-	-
Conn.	-	10	-	-	-	-	-	-	-	-	6	5	-	-
MID. ATLANTIC	116	173	7	15	-	-	-	-	-	3	19	24	3	8
Upstate N.Y.	18	118	-	5	-	-	-	-	-	-	10	5	2	1
N.Y. City	-	9	1	2	-	-	-	-	-	-	-	-	-	-
N.J.	19	34	6	6	-	-	-	-	-	3	8	9	-	1
Pa.	79	12	-	2	U	-	U	-	-	-	1	10	1	6
E.N. CENTRAL	6	3	7	10	-	-	-	-	-	2	46	63	15	28
Ohio	6	3	-	1	-	-	-	-	-	2	11	13	8	6
Ind.	-	-	-	1	-	-	-	-	-	-	17	12	-	1
Ill.	-	-	6	5	-	-	-	-	-	-	15	20	-	14
Mich.	-	-	1	3	-	-	-	-	-	-	3	7	7	7
Wis.	-	-	-	-	-	-	-	-	-	-	-	11	-	-
W.N. CENTRAL	3	3	-	2	-	-	-	-	-	-	8	20	4	5
Minn.	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Iowa	-	-	-	1	-	-	-	-	-	-	5	1	1	1
Mo.	-	2	-	1	-	-	-	-	-	-	1	14	3	4
N. Dak.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Nebr.	-	-	-	-	U	-	U	-	-	-	-	1	-	-
Kans.	3	1	-	-	-	-	-	-	-	-	2	2	-	-
S. ATLANTIC	31	22	9	15	-	-	-	-	-	1	48	58	9	25
Del.	1	2	-	-	-	-	-	-	-	-	-	-	-	-
Md.	21	5	2	3	-	-	-	-	-	-	-	4	-	4
D.C.	-	-	-	1	-	-	-	-	-	-	1	1	-	-
Va.	1	-	1	2	-	-	-	-	-	-	3	7	3	2
W. Va.	4	1	-	-	-	-	-	-	-	-	-	4	-	1
N.C.	3	8	1	1	-	-	-	-	-	-	6	8	3	14
S.C.	1	-	-	1	-	-	-	-	-	-	3	1	-	3
Ga.	-	6	2	3	-	-	-	-	-	-	16	11	-	-
Fla.	-	-	3	4	-	-	-	-	1	1	19	22	3	1
E.S. CENTRAL	-	4	1	2	-	-	-	-	-	-	12	64	3	10
Ky.	-	4	-	-	-	-	-	-	-	-	3	9	-	-
Tenn.	-	-	-	1	-	-	-	-	-	-	2	6	-	-
Ala.	-	-	1	-	-	-	-	-	-	-	6	12	2	-
Miss.	-	-	-	1	-	-	-	-	-	-	1	37	1	10
W.S. CENTRAL	-	-	-	-	-	1	-	-	1	1	15	29	-	17
Ark.	-	-	-	-	-	-	-	-	-	-	-	1	-	-
La.	-	-	-	-	-	-	-	-	-	-	4	1	-	1
Okla.	-	-	-	-	-	-	-	-	-	-	2	5	-	5
Tex.	-	-	-	-	-	1	-	-	1	1	9	22	-	11
MOUNTAIN	2	3	5	2	4	7	-	-	7	-	22	21	2	2
Mont.	-	-	1	-	U	-	U	-	-	-	-	1	-	-
Idaho	-	-	-	-	-	-	-	-	-	-	1	1	-	1
Wyo.	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colo.	1	-	2	-	-	-	-	-	-	-	8	2	-	-
N. Mex.	-	3	2	1	-	3	-	-	3	-	5	3	N	N
Ariz.	-	-	-	-	4	4	-	-	4	-	7	9	-	-
Utah	-	-	-	1	-	-	-	-	-	-	-	3	1	-
Nev.	1	-	-	-	-	-	-	-	-	-	1	2	1	1
PACIFIC	2	6	16	16	-	-	-	-	-	2	65	61	22	15
Wash.	-	-	-	-	-	-	-	-	-	-	2	5	1	1
Oreg.	-	-	2	-	-	-	-	-	-	-	13	11	N	N
Calif.	2	6	13	12	-	-	-	-	-	2	49	44	20	12
Alaska	-	-	1	-	-	-	-	-	-	-	-	-	1	2
Hawaii	-	-	-	4	-	-	-	-	-	-	1	1	-	-
Guam	-	-	-	-	U	-	U	-	-	-	-	-	-	-
P.R.	-	-	-	-	-	-	-	-	-	-	1	1	-	-
V.I.	-	-	-	-	U	-	U	-	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	U	-	U	-	-	-	-	-	-	-
C.N.M.I.	-	-	-	1	U	-	U	-	-	12	-	-	-	-

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

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

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending February 4, 1995, and February 5, 1994 (5th Week)

Reporting Area	Pertussis			Rubella			Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal	
	1995	Cum. 1995	Cum. 1994	1995	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994
UNITED STATES	32	236	391	2	11	15	1,340	1,980	943	1,436	467	445
NEW ENGLAND	1	12	32	-	-	11	18	21	5	17	144	129
Maine	-	5	2	-	-	-	-	-	-	-	-	-
N.H.	-	-	4	-	-	-	1	-	-	-	22	15
Vt.	-	1	5	-	-	-	-	-	-	-	18	9
Mass.	-	5	17	-	-	11	8	5	3	3	73	55
R.I.	-	-	2	-	-	-	-	3	2	2	-	2
Conn.	1	1	2	-	-	-	9	13	-	12	31	48
MID. ATLANTIC	2	16	67	-	-	1	116	142	64	104	122	109
Upstate N.Y.	2	4	11	-	-	1	5	16	3	23	85	64
N.Y. City	-	-	-	-	-	-	86	98	11	52	-	-
N.J.	-	-	5	-	-	-	15	4	20	15	26	25
Pa.	U	12	51	U	-	-	10	24	30	14	11	20
E.N. CENTRAL	2	22	92	-	-	1	228	212	140	117	1	3
Ohio	2	16	31	-	-	-	81	82	29	24	1	-
Ind.	-	-	2	-	-	-	17	22	4	4	-	-
Ill.	-	-	29	-	-	1	83	47	78	70	-	-
Mich.	-	6	6	-	-	-	32	27	26	15	-	1
Wis.	-	-	24	-	-	-	15	34	3	4	-	2
W.N. CENTRAL	-	7	10	-	-	-	64	123	31	22	16	13
Minn.	-	-	-	-	-	-	3	6	6	3	-	-
Iowa	-	1	-	-	-	-	6	7	10	3	7	7
Mo.	-	1	5	-	-	-	55	110	7	9	4	1
N. Dak.	-	-	-	-	-	-	-	-	-	1	2	-
S. Dak.	-	-	-	-	-	-	-	-	-	4	-	1
Nebr.	U	-	-	U	-	-	-	-	-	-	-	-
Kans.	-	5	5	-	-	-	-	-	8	2	3	4
S. ATLANTIC	1	34	65	-	-	1	355	531	127	171	149	127
Del.	-	1	-	-	-	-	3	1	-	1	7	1
Md.	-	-	17	-	-	-	22	15	47	26	39	47
D.C.	-	1	-	-	-	-	17	16	12	14	1	1
Va.	-	-	8	-	-	-	53	69	-	-	28	33
W. Va.	-	-	1	-	-	-	-	1	12	3	6	5
N.C.	-	30	26	-	-	-	101	182	10	-	33	7
S.C.	1	1	5	-	-	-	61	77	16	34	8	9
Ga.	-	1	4	-	-	-	49	83	30	47	19	24
Fla.	-	-	4	-	-	1	49	87	-	46	8	-
E.S. CENTRAL	2	4	24	-	-	-	424	389	47	322	18	18
Ky.	-	-	2	-	-	-	27	20	5	13	2	-
Tenn.	-	-	13	-	-	-	-	89	-	14	8	9
Ala.	2	4	2	-	-	-	72	77	31	34	8	9
Miss.	-	-	7	-	-	-	325	203	11	261	-	-
W.S. CENTRAL	-	2	12	-	6	-	120	409	4	4	6	7
Ark.	-	-	-	-	-	-	-	50	3	-	-	2
La.	-	-	1	-	-	-	99	233	-	-	4	-
Okla.	-	-	11	-	-	-	7	11	1	4	2	5
Tex.	-	2	-	-	6	-	14	115	-	-	-	-
MOUNTAIN	24	115	9	-	-	-	14	27	32	40	5	9
Mont.	U	1	-	U	-	-	-	-	-	-	3	-
Idaho	6	31	-	-	-	-	-	-	2	1	-	-
Wyo.	-	-	-	-	-	-	2	-	-	-	-	2
Colo.	-	-	5	-	-	-	8	15	-	-	-	-
N. Mex.	-	3	1	-	-	-	1	-	-	4	-	-
Ariz.	18	80	3	-	-	-	3	6	13	24	2	7
Utah	-	-	-	-	-	-	-	3	3	-	-	-
Nev.	-	-	-	-	-	-	-	3	14	11	-	-
PACIFIC	-	24	80	2	5	1	1	126	493	639	6	30
Wash.	-	-	7	-	-	-	1	1	26	19	-	-
Oreg.	-	-	4	-	-	-	-	-	2	8	-	-
Calif.	-	21	66	2	5	1	-	125	448	594	6	24
Alaska	-	-	-	-	-	-	-	-	3	4	-	6
Hawaii	-	3	3	-	-	-	-	-	14	14	-	-
Guam	U	-	-	U	-	-	-	-	-	7	-	-
P.R.	-	-	-	-	-	-	17	40	-	-	6	6
V.I.	U	-	-	U	-	-	-	1	-	-	-	-
Amer. Samoa	U	-	-	U	-	-	-	-	1	-	-	-
C.N.M.I.	U	-	-	U	-	-	-	-	-	11	-	-

U: Unavailable - : no reported cases

**TABLE III. Deaths in 121 U.S. cities,* week ending
February 4, 1995 (5th Week)**

Reporting Area	All Causes, By Age (Years)						P&I [†] Total	Reporting Area	All Causes, By Age (Years)						P&I [†] Total
	All Ages	≥65	45-64	25-44	1-24	<1			All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	517	361	87	53	7	9	43	S. ATLANTIC	1,196	756	226	139	40	33	76
Boston, Mass.	118	75	22	17	1	3	8	Atlanta, Ga.	223	131	41	36	4	11	5
Bridgeport, Conn.	37	29	4	4	-	-	5	Baltimore, Md.	121	72	24	20	4	1	7
Cambridge, Mass.	31	22	8	1	-	-	2	Charlotte, N.C.	106	60	20	15	5	6	9
Fall River, Mass.	U	U	U	U	U	U	U	Jacksonville, Fla.	151	110	22	16	3	-	13
Hartford, Conn.	38	24	9	3	2	-	1	Miami, Fla.	104	58	27	10	7	2	-
Lowell, Mass.	24	18	3	2	1	-	-	Norfolk, Va.	55	33	13	6	1	2	4
Lynn, Mass.	11	9	2	-	-	-	-	Richmond, Va.	76	53	11	5	3	2	7
New Bedford, Mass.	17	13	1	3	-	-	2	Savannah, Ga.	57	32	11	4	5	5	1
New Haven, Conn.	40	24	8	5	2	1	2	St. Petersburg, Fla.	58	44	8	3	1	2	8
Providence, R.I.	55	42	6	5	1	1	5	Tampa, Fla.	204	150	32	17	4	1	21
Somerville, Mass.	9	5	2	2	-	-	1	Washington, D.C.	34	11	15	5	2	1	1
Springfield, Mass.	54	42	6	5	-	1	9	Wilmington, Del.	7	2	2	2	1	-	-
Waterbury, Conn.	24	19	5	-	-	-	2	E.S. CENTRAL	797	503	160	62	36	36	61
Worcester, Mass.	59	39	11	6	-	3	6	Birmingham, Ala.	150	96	32	8	7	7	8
MID. ATLANTIC	2,737	1,866	483	283	46	59	175	Chattanooga, Tenn.	78	59	10	6	2	1	7
Albany, N.Y.	53	37	12	1	2	1	5	Knoxville, Tenn.	61	40	13	6	1	1	-
Allentown, Pa.	26	20	4	2	-	-	1	Lexington, Ky.	78	45	15	4	6	8	5
Buffalo, N.Y.	123	104	17	-	-	-	2	Memphis, Tenn.	198	118	42	15	9	14	23
Camden, N.J.	33	23	6	3	1	-	2	Mobile, Ala.	39	23	11	3	2	-	2
Elizabeth, N.J.	21	15	1	4	1	-	4	Montgomery, Ala.	49	32	11	2	2	2	7
Erie, Pa.‡	57	42	11	3	1	-	3	Nashville, Tenn.	144	90	26	18	7	3	9
Jersey City, N.J.	48	29	10	6	1	2	-	W.S. CENTRAL	1,518	967	297	160	49	42	117
New York City, N.Y.	1,509	992	277	195	23	22	71	Austin, Tex.	76	50	13	10	1	2	4
Newark, N.J.	75	34	24	13	3	1	9	Baton Rouge, La.	66	42	10	8	4	2	4
Paterson, N.J.	26	11	10	4	-	-	1	Corpus Christi, Tex.	54	39	7	3	1	4	1
Philadelphia, Pa.	302	191	56	28	7	20	14	Dallas, Tex.	220	136	47	26	6	5	3
Pittsburgh, Pa.§	73	53	10	6	2	2	8	El Paso, Tex.	76	52	14	5	2	3	9
Reading, Pa.	18	10	4	3	-	1	6	Ft. Worth, Tex.	137	93	21	17	4	2	13
Rochester, N.Y.	127	102	17	6	1	1	12	Houston, Tex.	387	226	91	43	13	14	47
Schenectady, N.Y.	28	26	2	-	-	-	2	Little Rock, Ark.	76	40	17	12	4	3	6
Scranton, Pa.§	23	20	2	1	-	-	1	New Orleans, La.	64	40	16	3	2	-	-
Syracuse, N.Y.	107	85	11	4	2	5	7	San Antonio, Tex.	195	140	26	20	4	5	18
Trenton, N.J.	39	31	3	3	1	1	4	Shreveport, La.	103	64	23	9	5	2	9
Utica, N.Y.	23	21	2	-	-	-	1	Tulsa, Okla.	64	45	12	4	3	-	3
Yonkers, N.Y.	26	20	4	1	1	-	3	MOUNTAIN	900	625	161	68	27	19	70
E.N. CENTRAL	2,303	1,481	406	220	138	58	150	Albuquerque, N.M.	100	68	19	6	7	-	6
Akron, Ohio	55	44	8	1	1	1	5	Colo. Springs, Colo.	45	32	10	3	-	-	4
Canton, Ohio	32	24	4	2	2	-	5	Denver, Colo.	109	77	17	9	4	2	7
Chicago, Ill.	532	237	112	95	75	13	23	Las Vegas, Nev.	169	108	36	17	4	4	12
Cincinnati, Ohio	101	72	16	6	4	3	15	Ogden, Utah	38	27	9	2	-	-	2
Cleveland, Ohio	167	104	40	10	5	8	10	Phoenix, Ariz.	191	128	36	12	5	10	13
Columbus, Ohio	163	126	23	13	-	1	12	Pueblo, Colo.	21	20	-	1	-	-	10
Dayton, Ohio	133	90	20	10	10	3	9	Salt Lake City, Utah	96	67	14	9	4	2	5
Detroit, Mich.	223	129	46	33	12	3	9	Tucson, Ariz.	131	98	20	9	3	1	11
Evansville, Ind.	52	44	7	1	-	-	4	PACIFIC	1,984	1,340	354	196	39	37	179
Fort Wayne, Ind.	55	38	9	2	3	3	4	Berkeley, Calif.	21	16	2	1	1	1	1
Gary, Ind.	20	12	4	2	2	-	-	Fresno, Calif.	92	62	17	8	1	4	6
Grand Rapids, Mich.	52	42	4	2	3	1	6	Glendale, Calif.	24	17	3	3	1	-	1
Indianapolis, Ind.	206	130	34	18	12	12	12	Honolulu, Hawaii	64	44	15	4	-	1	7
Madison, Wis.	56	44	8	2	2	-	1	Long Beach, Calif.	78	56	11	5	1	5	8
Milwaukee, Wis.	121	95	20	5	-	1	10	Los Angeles, Calif.	552	324	110	78	27	7	25
Peoria, Ill.	36	27	4	4	-	1	5	Pasadena, Calif.	U	U	U	U	U	U	U
Rockford, Ill.	52	31	15	2	1	3	3	Portland, Ore.	139	103	23	10	1	2	5
South Bend, Ind.	53	47	1	1	2	2	7	Sacramento, Calif.	221	148	43	20	1	9	38
Toledo, Ohio	121	93	20	6	1	1	10	San Diego, Calif.	114	78	21	15	-	-	18
Youngstown, Ohio	73	52	11	5	3	2	-	San Francisco, Calif.	127	77	19	17	-	2	21
W.N. CENTRAL	1,022	735	155	69	29	20	57	San Jose, Calif.	214	163	36	9	1	5	23
Des Moines, Iowa	144	107	20	10	2	5	9	Santa Cruz, Calif.	32	21	6	3	2	-	6
Duluth, Minn.	44	33	9	2	-	-	1	Seattle, Wash.	172	127	27	17	1	-	6
Kansas City, Kans.	42	29	8	3	1	1	3	Spokane, Wash.	51	43	5	2	1	-	8
Kansas City, Mo.	113	75	13	4	5	2	10	Tacoma, Wash.	83	61	16	4	1	1	6
Lincoln, Nebr.	39	34	4	1	-	-	3	TOTAL	12,974 [¶]	8,634	2,329	1,250	411	313	928
Minneapolis, Minn.	251	189	33	17	6	6	12								
Omaha, Nebr.	103	72	14	9	5	3	6								
St. Louis, Mo.	131	92	22	9	7	1	-								
St. Paul, Minn.	82	56	19	5	-	2	10								
Wichita, Kans.	73	48	13	9	3	-	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.

[†]Pneumonia and influenza.

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

[¶]Total includes unknown ages.

U: Unavailable.

-: no reported cases.

Human Rabies — Continued

lesions or mucous membranes with potentially infectious materials such as saliva (2). Because some bat bites may be less severe—and therefore more difficult to recognize—than bites inflicted by larger mammalian carnivores, rabies postexposure treatment should be considered for any physical contact with bats when bite or mucous membrane contact cannot be excluded (3). Because reduction of bat populations is neither feasible nor desirable as a means of controlling rabies in bats, rabies-prevention programs should emphasize the exclusion of bats from human dwellings to minimize direct contact with humans and companion animals.

References

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Pregnancy-Related Mortality — Georgia, 1990–1992

Many pregnancy-related deaths are preventable. State-based surveillance is important for identifying such deaths and developing prevention strategies. Surveillance for pregnancy-related deaths based only on ascertainment through death certificates underestimates actual deaths (1–7). However, when this surveillance method has been supplemented by linking death certificates of reproductive-aged women to birth and fetal death records, ascertainment has increased 1%–153% (1,2,4,6,7). In 1994, the Division of Public Health, Georgia Department of Human Resources, assessed the completeness of reporting of pregnancy-related deaths during 1990–1992 by comparing current death-certificate-based surveillance with a supplemental method of linking women's death records and infants' birth records. This report characterizes the increase in the total number of pregnancy-related deaths identified and presents specific causes of pregnancy-related deaths in Georgia.

In this analysis, pregnancy-related deaths were defined as the immediate result of complications of pregnancy, events initiated by the pregnancy, or an exacerbation of an unrelated condition by the physiologic or pharmacologic effects of the pregnancy that occurred up to 1 year after giving birth or pregnancy termination (8). For both surveillance methods, deaths among women during pregnancy or post partum were first identified, then categorized by specific cause, and coded as pregnancy-related using the American College of Obstetricians and Gynecologists (ACOG) and CDC definitions. In Georgia, physicians, medical examiners, and coroners are required to indicate on the death certificate, regardless of cause of death, whether the decedent was pregnant at the time of death or had given birth within the preceding 90 days. For the current surveillance method, deaths during pregnancy or post partum were identified by manually reviewing each death certificate for this notation or for a cause of death related to the pregnancy or selected key words (e.g., cesarean delivery). For the record-linkage method, females were identified who died within 1 year of delivering a live-born infant by linking death certificates for females aged 10–49 years who died during 1990–1992 to birth records for 1989–1992. A probabilistic method was used to calculate the likelihood of a correct linkage based on use of the mother's first and last names and date of birth. All death and birth record matches identified by the linkage

Pregnancy-Related Mortality — Continued

were manually reviewed. The pregnancy-related mortality ratio during 1990–1992 was calculated as the number of pregnancy-related deaths divided by the number of live births during the period.

During 1990–1992, a total of 210 deaths among women during pregnancy or post partum were identified by death-certificate review and record linkage. Of these, 73 (35%) were pregnancy-related, 65 (31%) resulted from a medical problem unrelated to the pregnancy, and 72 (34%) resulted from injuries (Table 1). Of the 135 additional deaths identified by record linkage, 118 (87%) were caused by injuries and medical problems unrelated to pregnancy (Table 1). Although 35 (26%) of the 135 deaths occurred within 90 days of giving birth or pregnancy termination (i.e., the specified time in Georgia for indicating a recent pregnancy on the death certificate), this information was not indicated on the death certificate.

As a result of record linkage, the pregnancy-related maternal mortality ratio during 1990–1992 increased 30%, from 16.8 deaths per 100,000 live births (based only on death-certificate review) to 21.9 per 100,000 (based on combined death-certificate review and record linkage).

The three leading causes of pregnancy-related death—hemorrhage, embolism, and infection—were the same for deaths identified by the current surveillance method and the combined methods (Table 2). Compared with the current surveillance method, record linkage resulted in increased case ascertainment for all but two specific causes of death (pregnancy-induced hypertension and anesthesia complications). The largest percentage increase in pregnancy-related deaths (200%) was for cardiomyopathy.

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Editorial Note: In Georgia, ascertainment of pregnancy-related deaths improved substantially when death certificates were linked to birth records—a result also documented in other states (2,4,6). However, compared with other states, the percentage increase in pregnancy-related deaths in Georgia was lower. This finding may reflect more complete death-certificate-based ascertainment in Georgia and the linkage of live-birth records only instead of both fetal death and live-birth records. The variation among states in the percentage of additional pregnancy-related deaths

TABLE 1. Number and percentage of deaths among women during pregnancy or post partum, by cause of death and surveillance method — Georgia, 1990–1992

Cause of death	Death certificate review only		Death certificate review and record linkage	
	No.	(%)	No.	(%)
Pregnancy-related*	56	(74.7)	73	(34.7)
Medical problem				
unrelated to pregnancy	6	(8.0)	65	(31.0)
Injury	13	(17.3)	72	(34.3)
Total	75	(100.0)	210	(100.0)

* Defined by the American College of Obstetricians and Gynecologists and CDC as the immediate result of complications of pregnancy, events initiated by the pregnancy, or an exacerbation of an unrelated condition by the physiologic or pharmacologic effects of the pregnancy.

*Pregnancy-Related Mortality — Continued***TABLE 2. Number and percentage of pregnancy-related deaths*, by cause of death and surveillance method — Georgia, 1990–1992**

Cause of death	Death certificate review only		Death certificate review and record linkage	
	No.	(%)	No.	(%)
Hemorrhage	16	(28.6)	17	(23.3)
Embolism	12	(21.4)	16	(21.9)
Infection	6	(10.7)	8	(11.0)
Pregnancy-induced hypertension	4	(7.1)	4	(5.5)
Pulmonary problems	4	(7.1)	6	(8.2)
Anesthesia complications	3	(5.4)	3	(4.1)
Cardiovascular problems†	2	(3.6)	3	(4.1)
Cardiomyopathy	2	(3.6)	6	(8.2)
Other causes	7	(12.5)	10	(13.7)
Total	56	(100.0)	73	(100.0)

* Defined by the American College of Obstetricians and Gynecologists and CDC as the immediate result of complications of pregnancy, events initiated by the pregnancy, or an exacerbation of an unrelated condition by the physiologic or pharmacologic effects of the pregnancy.

† Excludes cardiomyopathy.

identified by linked records (1%–153%) also may be associated with such factors as differences in definitions of maternal death, variables used to match records, and methods used to link records.

A year 2000 national health objective is to reduce the maternal mortality rate to no more than 3.3 deaths per 100,000 live births (objective 14.3). The findings in this report indicate that the pregnancy-related mortality ratio in Georgia is higher than previously estimated (9) and that efforts must be intensified to attain the objective. State health departments should enhance ascertainment of pregnancy-related deaths through linkage of birth and fetal death records to death records of reproductive-aged women to more accurately track pregnancy-related mortality.

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Pregnancy-Related Mortality — Continued

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Notice to Readers

**Publication of Guidelines for the Prevention and Treatment
of B Virus Infections in Exposed Persons**

Cercopithecine herpesvirus 1 (B virus) infection is widespread among *Macaca* genus primates; the virus is the biologic counterpart of herpes simplex virus in humans. B virus infection in humans is recognized as a rapidly ascending encephalomyelitis with a fatality rate of approximately 70%. The need for guidelines in prevention and treatment of human B virus infection was recognized in 1987 after a cluster of four symptomatic infections occurred among persons in Florida. CDC and the National Institutes of Health consulted primate veterinarians and herpesvirus experts to develop guidelines for preventing B virus infection in persons who work with macaques (1). Recommendations intended to minimize the risk for infection of laboratory workers exposed to B virus-contaminated primary rhesus monkey cell cultures were published in 1989 (2). Guidelines for primate handlers were expanded in 1990 in response to the recognition of filovirus infection in quarantined primates (3).

Human infections with B virus remain an uncommon result of macaque-related injuries, and optimal diagnostic and therapeutic approaches are unclear. However, the increase in the use of macaques for research on simian retrovirus infection and hepatitis has expanded the number of potential incidents of human exposure. In January 1990, Emory University and CDC sponsored a B virus working group intended to formulate a rational approach to the prevention, detection, and management of human B virus infections. Written guidelines were developed based on information from published and unpublished cases, knowledge of the behavior of herpes simplex virus, and expert opinion.

These guidelines (4) are intended to assist institutions in which macaques are handled in developing and enforcing effective standard operating procedures and quality-control interventions and to enable local physician consultants identified by the institutions to evaluate and treat persons with potential B virus exposure. Such institutions should keep a copy of these guidelines in bite/wound kits at the work site. Institutions also should provide copies of these guidelines to injured employees referred for medical evaluation; to the emergency rooms, clinics, or offices where injured employees will seek care; and to employees to give to their personal physician. More information on the guidelines is available from B Virus Guidelines, Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases, CDC, Mailstop G-19, 1600 Clifton Road, NE, Atlanta, GA 30333.

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Notice to Readers — Continued

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Addendum: Vol. 43, Nos. 51 & 52

In the article “Hemorrhage and Shock Associated with Invasive Pneumococcal Infection in Healthy Infants and Children—New Mexico, 1993–1994,” the following person should be added to the credits (“reported by”) on the fourth line on page 950: J McLaughlin, PhD, Univ of New Mexico Hospital, Albuquerque.

Erratum: Vol. 44, No. 4

In the article “Acute Pulmonary Hemorrhage Among Infants—Chicago, April 1992–November 1994,” on page 67, the sentence beginning on the fifth line was incorrect. The sentence should read, “For six of the infants who underwent bronchoscopy, the procedure was performed within 2 weeks of the initial presentation with pulmonary hemorrhage.”

Errata: Vol. 43, No. 50

In the article “State-Specific Trends Among Women Who Did Not Receive Prenatal Care—United States, 1980–1992,” on page 939, in the second sentence of the third paragraph, the maximum value in 1992 declined to 5.7%, rather than 4.8%. The fourth paragraph should read: “For 1980–1981, the percentage of women who did not receive prenatal care ranged from 0.18% (Vermont) to 3.64% (New York) (Table 1); for 1991–1992, the percentages ranged from 0.30% (*Rhode Island*) to 6.07% (District of Columbia). When compared with 1980–1981, during 1991–1992 the percentage of women who did not receive prenatal care declined in *nine* states (Florida, Kentucky, *Minnesota*, New Jersey, New York, Oklahoma, Rhode Island, South Dakota, and Utah) and increased in 41 states and the District of Columbia; in *eight* states (Delaware, Illinois, Indiana, Louisiana, Michigan, Pennsylvania, Vermont, and Wisconsin) and *the District of Columbia*, the increase was greater than 100%.”

On page 940, the fourth sentence in the second paragraph should read, “For example, the comparison of data for 1980–1981 with 1991–1992 demonstrated slight decreases in the percentage of women who did not receive prenatal care in *nine* states and substantial increases in *eight states and the District of Columbia*.” On page 941, the state-specific percentages were incorrect for several states. The following table contains the corrected percentages and replaces Table 1.

TABLE 1. Percentages of women who did not receive prenatal care, by state — United States, 1980–1981 and 1991–1992

State	1980–1981	1991–1992	Absolute change* from 1980–1981 to 1991–1992	% Change* from 1980–1981 to 1991–1992
Alabama	1.36	1.38	0.03	1.88
Alaska	0.68	0.80	0.12	17.60
Arizona	1.93	2.24	0.30	15.74
Arkansas	1.45	1.79	0.34	23.52
California	0.93	1.58	0.65	70.29
Colorado	0.79	1.03	0.25	31.53
Connecticut	0.47	0.50	0.03	5.47
Delaware	0.59	1.73	1.14	192.53
District of Columbia	1.54	6.07	4.53	295.32
Florida	2.05	1.85	-0.20	- 9.90
Georgia	1.34	2.13	0.79	58.84
Hawaii	0.54	0.84	0.30	55.47
Idaho	0.81	1.02	0.21	25.80
Illinois	1.01	2.04	1.03	102.48
Indiana	0.92	2.21	1.28	138.82
Iowa	0.36	0.53	0.17	47.52
Kansas	0.51	0.76	0.25	48.00
Kentucky	1.94	1.55	-0.39	-20.07
Louisiana	1.21	2.53	1.33	109.92
Maine	0.82	1.06	0.24	29.69
Maryland	0.85	1.29	0.44	51.29
Massachusetts	0.39	0.50	0.11	28.72
Michigan	0.66	1.50	0.84	128.02
Minnesota	0.61	0.50	-0.12	-19.09
Mississippi	0.85	1.36	0.51	60.26
Missouri	0.99	1.64	0.65	66.41
Montana	0.72	0.77	0.05	6.54
Nebraska	0.40	0.63	0.23	58.46
Nevada	1.44	2.78	1.35	93.76
New Hampshire	0.39	0.72	0.33	84.55
New Jersey	1.48	1.33	-0.16	-10.51
New Mexico	1.84	2.68	0.84	45.48
New York	3.64	2.69	-0.95	-26.11
North Carolina	0.92	1.47	0.55	60.41
North Dakota	0.56	0.58	0.02	3.32
Ohio	0.79	1.50	0.71	89.64
Oklahoma	1.95	1.16	-0.78	-40.28
Oregon	0.78	0.85	0.06	8.25
Pennsylvania	0.73	1.74	1.01	137.07
Rhode Island	0.45	0.30	-0.15	-33.79
South Carolina	1.19	1.88	0.68	57.45
South Dakota	2.00	1.25	-0.75	-37.38
Tennessee	1.33	1.41	0.08	6.35
Texas	2.80	4.10	1.31	46.85
Utah	0.42	0.32	-0.10	-24.31
Vermont	0.18	0.38	0.21	116.11
Virginia	0.75	1.35	0.60	80.57
Washington	0.55	0.65	0.09	16.68
West Virginia	0.92	0.92	0.00	0.41
Wisconsin	0.38	0.77	0.40	105.45
Wyoming	0.81	0.93	0.12	15.04

*Manual calculations of the absolute and percentage changes may not be exact because of rounding.

Monthly Immunization Table

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

Number of reported cases of diseases preventable by routine childhood vaccination — United States, December 1994 and 1993–1994*

Disease	No. cases, December 1994	Total cases January–December		No. cases among children aged <5 years [†] January–December	
		1993	1994	1993	1994
Congenital rubella syndrome (CRS)	1	5	8	4	7
Diphtheria	0	0	1	0	1
<i>Haemophilus influenzae</i> [§]	125	1,419	1,161	435	313
Hepatitis B [¶]	1,090	13,361	11,534	141	114
Measles	21	312	902	119	226
Mumps	172	1,692	1,455	284	232
Pertussis	616	6,586	3,832	3,924	2,046
Poliomyelitis, paralytic ^{**}	0	3	1	1	1
Rubella	7	192	218	32	27
Tetanus	5	48	38	0	0

* Data for 1993 are final and for 1994, are provisional.

[†]For 1993 and 1994, age data were available for ≥90% of patients, except for 1993 age data for CRS, which were available for 80% of patients.

[§]Invasive disease; *H. influenzae* serotype is not routinely reported to the National Notifiable Diseases Surveillance System. Of 313 cases among children aged <5 years, serotype was reported from 37; of those, 29 were type b, the only serotype of *H. influenzae* preventable by vaccination.

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

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

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