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MORBIDITY AND MORTALITY WEEKLY REPORT

Publicly Funded HIV Counseling and Testing — United States, 1985–1989

CDC provides support to 63 human immunodeficiency virus (HIV) prevention programs through health departments in 50 states, four cities, seven territories, the District of Columbia, and Puerto Rico. Each calendar quarter, the 63 programs report to CDC aggregate data regarding the number of 1) pretest counseling sessions, HIV-antibody tests, positive tests, and post-test counseling sessions, by type of testing site; 2) HIV-antibody tests and positive tests, by risk exposure category; and 3) HIV-antibody tests and positive tests, by age group, sex, and race/ethnicity.

From 1985 through 1989,* the programs performed approximately 2.5 million HIV-antibody tests; 149,639 (6.0%) tests were positive. This report summarizes demographic, risk, and site type data from the 63 programs from January 1988 through September 1989.

Number and Type of Testing Sites

From January 1988 through September 1989, the number of counseling and testing sites in the 63 programs increased from 1577 to 5013. In 1989, these included 1297 (25.9%) freestanding HIV counseling and testing sites, 877 (17.5%) sexually transmitted diseases (STD) clinics, 633 (12.6%) family-planning clinics, 522 (10.4%) other health department sites, 504 (10.1%) prenatal/obstetric clinics, 443 (8.8%) tuberculosis clinics, 183 (3.7%) private physicians' offices and clinics, 173 (3.5%) drug-treatment centers, 162 (3.2%) other nonhealth department testing sites, 109 (2.2%) prisons, 29 (0.6%) colleges, and 81 (1.6%) unclassified facilities.

Characteristics of Counseling and Testing Sites

From January 1988 through September 1989, the 63 programs reported 1,403,240 HIV-antibody tests and 64,347 positive tests (Table 1). Of these, freestanding HIV counseling and testing sites and STD clinics together accounted for 916,290 (65.3%) of all tests and 44,425 (69.0%) of all positive tests. Family planning and prenatal/

*Estimated 12-month total for 1989 based on adjustment of data received for January through September.

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obstetric clinics accounted for 8.1% of all reported tests and 1.3% of positive tests. In contrast, drug-treatment centers and prisons accounted for 5.3% of total tests and 7.1% of positive tests.

Risk Category and Demographic Data

Information on self-reported risk category was available for 1,040,392 reported tests (Table 2). Of these, seropositivity rates were highest for homosexual/bisexual intravenous-drug users (IVDUs) (17.1%), homosexual/bisexual males (16.5%), persons with hemophilia (14.0%), and heterosexual IVDUs (11.6%). These four categories accounted for 24.4% of tests from persons who reported their risk category and 70.6% of all positive tests from the same population.

Two groups accounted for 72.9% of tests with a self-reported risk category: 1) 456,188 (43.9%) were from persons categorized as "heterosexuals with reported risk" (including heterosexuals whose sex partners are at risk for or infected with HIV, heterosexuals with multiple sex partners, and heterosexuals with any other factor considered by local health authorities to pose a risk for HIV infection); and 2) 302,005 (29.0%) were from persons classified as "other heterosexual" (primarily heterosexual persons who correctly or incorrectly reported no history of risk behavior or no partner[s] at risk for or infected with HIV) (Table 2). These two heterosexual groups had a combined seropositivity rate of 2.0%, yet accounted for 28.1% of reported positive tests for persons whose risk category was reported. For the "heterosexual with reported risk" category, seropositivity rates by reported partner characteristic were: partner infected with HIV, 11.7% (1455/12,440); partner with hemophilia, 5.1% (34/667); IV-drug–using partner, 5.0% (1792/36,167); and bisexual partner, 4.1% (2312/56,830).

TABLE 1. Number and percentage of HIV-antibody tests and positive tests at publicly funded sites reported to CDC, by type of test site — United States, January 1988–September 1989

Test site	No. tested	HIV positive No.	HIV positive (%)	Total tests (%)	Total HIV positive (%)
Freestanding site	562,647	32,440	(5.8)	(40.1)	(50.4)
Sexually transmitted diseases clinic	353,643	11,985	(3.4)	(25.2)	(18.6)
Private physician's office/clinic	84,752	2,927	(3.5)	(6.0)	(4.6)
Family-planning clinic	65,838	450	(0.7)	(4.7)	(0.7)
Prison	55,853	3,538	(6.3)	(4.0)	(5.5)
Prenatal/obstetric clinic	47,834	382	(0.8)	(3.4)	(0.6)
Other public health department	36,198	3,266	(9.0)	(2.6)	(5.1)
Drug-treatment center	18,632	1,004	(5.4)	(1.3)	(1.6)
College	14,738	610	(4.1)	(1.1)	(1.0)
Tuberculosis clinic	10,974	458	(4.2)	(0.8)	(0.7)
Other nonhealth department sites	108,340	4,540	(4.2)	(7.7)	(7.1)
Unclassified sites	43,791	2,747	(6.3)	(3.1)	(4.3)
Total*	**1,403,240**	**64,347**	**(4.6)**	**(100.0)**	**(100.0)**

*Totals vary from those in Table 2 because of variance in reporting by both persons and test sites.

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Of 828,847 tests for which some demographic information was given, race/ethnicity was specified for 754,900 (91.1%). Of tested persons with known race/ethnicity, seropositivity was highest in Hispanics (8.6%) (Table 3). When compared to the overall U.S. population, both blacks and Hispanics were substantially overrepresented among HIV-antibody tests and positive tests.

Males accounted for 459,046 (55.4%) of the 828,847 tests and 30,758 (79.7%) of all positive tests. Seropositivity in males and females was 6.7% and 2.1%, respectively. Of 735,584 persons for whom age was known, most (73.1%) tests and most (78.9%)

TABLE 2. Number and percentage of HIV-antibody tests and positive tests at publicly funded sites reported to CDC, by self-reported risk category — United States, January 1988–September 1989

Risk category	No. tested	HIV positive No.	HIV positive (%)	Total known tests (%)	Total known HIV positive (%)
Heterosexuals with reported risk	456,188	7,953	(1.7)	(43.9)	(15.0)
Other heterosexuals, no reported risk	302,005	6,954	(2.3)	(29.0)	(13.1)
Homosexual/bisexual males	145,745	24,092	(16.5)	(14.0)	(45.5)
Heterosexual intravenous-drug users (IVDUs)	92,676	10,746	(11.6)	(8.9)	(20.3)
Blood recipients, 1978–1985	28,415	647	(2.3)	(2.7)	(1.2)
Homosexual/bisexual male IVDUs	13,295	2,274	(17.1)	(1.3)	(4.3)
Persons with hemophilia	2,068	290	(14.0)	(0.2)	(0.6)
Total, risk reported	1,040,392	52,956	(5.1)	(100.0)	(100.0)
Total, no risk reported	256,061	8,126	(3.2)		
Total*	**1,296,453**	**61,082**	**(4.7)**		

*Totals vary from those in Table 1 because of variance in reporting by both persons and test sites.

TABLE 3. Number and percentage of HIV-antibody tests and positive tests at publicly funded sites reported to CDC, by race/ethnicity, in comparison with racial/ethnic distribution of U.S. population* — United States, January 1988–September 1989

Race/Ethnicity	No. tested	HIV positive No.	HIV positive (%)	Total known tests (%)	Total known HIV positive (%)	Total U.S. population (%)
White	425,130	16,587	(3.9)	(56.3)	(46.2)	(78.5)
Black	246,935	12,993	(5.3)	(32.7)	(36.2)	(11.4)
Hispanic	71,098	6,078	(8.6)	(9.4)	(16.9)	(7.8)
Asian/Pacific Islander	7,178	150	(2.1)	(1.0)	(0.4)	(1.7)
American Indian/ Alaskan Native	4,559	122	(2.7)	(0.6)	(0.3)	(0.7)
Total known	754,900	35,930	(4.8)	(100.0)	(100.0)	(100.0)
Unknown	73,947	2,641	(3.6)			
Total†	**828,847**	**38,571**	**(4.7)**			

*1980 U.S. census projected to 1988.

†Number of tests for which some demographic information was given.

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positive tests were from persons aged 20–39 years. Seropositivity rates for persons aged 20–29 and 30–39 years were 3.6% and 6.0%, respectively.

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Editorial Note: Of all HIV prevention efforts, counseling and testing activities receive the highest level of resource support from CDC. The data reported here indicate a large and increasing demand for HIV counseling and testing in the United States; from January 1988 through September 1989, one in 22 persons seeking publicly funded HIV counseling and testing services were confirmed to be infected. Knowledge of HIV-infection status and appropriate counseling can assist persons in initiating changes in behavior that will reduce the risk of infecting others or of becoming infected (*1,2*). Positive behavioral changes can also occur in the large number of persons who elect not to be tested but who receive risk-reduction counseling. In addition, early detection of HIV infection and referral (*3*) can lead to optimal medical management and partner notification.

Because of duplicate testing, the total number of persons tested and found to be HIV-antibody positive in U.S. publicly funded settings is not known.[†] However, four publicly funded HIV prevention programs that have monitored repeat tests estimated that 12%–30% (mean: 23%) of HIV-antibody tests and 3%–18% (mean: 13%) of positive tests represented previously tested persons (CDC, unpublished data). When these rates are applied to the data reported here, an estimated 2 million persons have been tested since 1985 through publicly funded counseling and testing programs, and 123,000–145,000 persons have been found to be infected.

Many of the estimated 1 million HIV-infected persons in the United States remain unaware of their infection (*4*). Of persons who are aware of their HIV infection, a substantial proportion had their infection identified in publicly funded counseling and testing programs.

To ensure that persons with undetected HIV infection receive appropriate counseling and testing, priorities should include increasing the number of persons, especially those engaging in risk behaviors, who come to the test sites and the number of persons who receive the fuli range of counseling and testing, referral, and partner notification services. Programs should attempt to maximize the proportion of persons at risk who 1) are offered and receive pretest counseling; 2) accept and receive HIV-antibody testing; 3) return for HIV-antibody test results; 4) are offered and receive post-test counseling; 5) if infected, participate in partner notification; and 6) if infected, are referred for and receive further medical and prevention services.

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[†]In addition to the tests reported here, a large but unknown number of persons are tested for HIV antibody in hospitals, outpatient medical facilities, physicians' offices, blood-donation centers, military facilities, and other settings.

Acute Schistosomiasis in U.S. Travelers Returning from Africa

In December 1988 and May 1989, CDC was notified that members of two groups of travelers who had recently returned to the United States from Botswana and Côte d'Ivoire, respectively, had experienced illnesses characterized by an influenza-like syndrome and eosinophilia. Subsequent investigations documented the occurrence of acute schistosomiasis in each group.

Botswana. From September 14 to October 2, 1988, a group of 16 persons visited the Okavango Delta region of Botswana. Twelve of 13 travelers who responded to mailed questionnaires reported contact with fresh water (e.g., wading, swimming, bathing, washing, and boating) while in this region. None reported recent water contact in other geographic areas in which schistosomiasis was endemic. Within 5 weeks of the expedition, 11 persons had onset of symptoms that included fatigue, fever, sweats, chills, headache, and gastrointestinal discomfort. These symptoms lasted 1–30 days (mean: 8 days) and recurred in five persons 11–20 days (mean: 15 days) after the initial episode.

Complete blood counts done for six persons found peripheral eosinophilia (range: 10%–57%; normal: 0–4%). Of fecal specimens from 11 persons, nine contained small numbers of *Schistosoma* eggs having characteristics of both *S. mansoni* and *S. rodhaini*. Urine samples from three persons were negative for ova of *S. haematobium*. Fifteen travelers submitted serum specimens, and all were positive for antibodies to *Schistosoma* sp. The one member of the group who did not submit a serum sample reportedly had *S. mansoni* ova in a stool specimen.

Persons with positive fecal and/or serologic specimens were treated with a single oral dose of praziquantel (40 mg/kg). All symptoms resolved after treatment, and no serious adverse reactions to therapy were reported. Twelve of the 13 travelers who completed questionnaires were aware of the risks of acquiring malaria and diarrheal illness in this region; seven reported having been advised about the risks for schistosomiasis.

Côte d'Ivoire. From March 1 to April 15, 1989, eight persons traveled to a remote rural area of western Côte d'Ivoire. During their visit, seven members of this group were briefly in contact (bathing, wading, and/or swimming) with fresh river water. None had recently traveled to other areas in which schistosomiasis was endemic.

All seven persons reported transient pruritus immediately after their exposures. Two to 4 weeks later, six of these seven persons developed symptoms including fever, chills, fatigue, headache, and gastrointestinal discomfort. Initial symptoms lasted 2–25 days (mean: 12 days) but recurred within 1–4 weeks in all six patients. Four persons required hospitalization, and five were treated presumptively for malaria. Eosinophilia (range: 15%–48%) occurred in all patients. Fecal examinations in four persons detected ova of *S. mansoni*; egg counts were low and ranged from 16 to 24 eggs per gram of feces. For all seven persons, urine examinations were negative for *Schistosoma* ova. For six persons, serum specimens were positive for antibodies to *Schistosoma* sp. All six were successfully treated with praziquantel.

Each of these seven travelers had received pretravel health advice and were taking malaria prophylaxis. Four were advised about methods for avoiding diarrheal illness; one was cautioned regarding the potential risks for schistosomiasis.

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Editorial Note: The occurrence of these two outbreaks within a 9-month period and the high infection rates emphasize that schistosomiasis poses a continuing hazard for persons traveling in areas in which the disease is endemic. Reports of at least five similar outbreaks among U.S. and European tourists since 1975 have indicated similarly high infection rates (range: 55%–100%; mean: 77%). In these five outbreaks, symptoms of acute schistosomiasis (Katayama syndrome) were reported to occur in 40%–93% (mean: 76%) of those infected (*1–6*). These symptoms are thought to result from an immunologic response to the maturation of adult worms and subsequent

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TABLE I. Summary — cases of specified notifiable diseases, United States

Disease	9th Week Ending			Cumulative, 9th Week Ending		
	Mar. 3, 1990	Mar. 4, 1989	Median 1985-1989	Mar. 3, 1990	Mar. 4, 1989	Median 1985-1989
Acquired Immunodeficiency Syndrome (AIDS)	439	U*	131	7,219	5,431	2,953
Aseptic meningitis	68	75	78	717	725	725
Encephalitis: Primary (arthropod-borne & unspec)	13	12	16	101	100	135
Post-infectious	2	7	2	20	17	13
Gonorrhea: Civilian	13,785	14,471	14,471	114,913	116,512	139,876
Military	207	214	217	1,860	1,895	2,600
Hepatitis: Type A	448	791	537	4,414	5,764	3,980
Type B	384	553	553	3,029	3,397	3,918
Non A, Non B	31	50	62	315	410	475
Unspecified	24	71	71	280	444	576
Legionellosis	24	17	14	188	161	130
Leprosy	-	-	5	21	25	39
Malaria	23	22	21	164	177	116
Measles: Total†	139	268	62	1,992	913	318
Indigenous	133	257	54	1,733	867	296
Imported	6	12	8	259	47	43
Meningococcal infections	74	80	85	528	566	566
Mumps	120	128	128	889	951	802
Pertussis	52	29	41	463	341	307
Rubella (German measles)	21	9	7	76	45	41
Syphilis (Primary & Secondary): Civilian	1,398	948	606	8,179	6,792	5,916
Military	3	3	3	87	51	39
Toxic Shock syndrome	8	10	7	67	53	50
Tuberculosis	380	380	434	2,996	2,897	2,897
Tularemia	1	-	1	7	9	14
Typhoid Fever	3	5	2	56	60	41
Typhus fever, tick-borne (RMSF)	2	-	-	15	17	9
Rabies, animal	50	92	92	476	665	665

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1990		Cum. 1990
Anthrax	-	Leptospirosis	5
Botulism: Foodborne	1	Plague	-
Infant	5	Poliomyelitis, Paralytic§	-
Other	1	Psittacosis (Va. 1)	30
Brucellosis	8	Rabies, human	-
Cholera	-	Tetanus	9
Congenital rubella syndrome	-	Trichinosis (Minn. 2, Calif. 1)	9
Congenital syphilis, ages < 1 year	-		
Diphtheria	1		

*Because AIDS cases are not received weekly from all reporting areas, comparison of weekly figures may be misleading.
†Six of the 139 reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.
§One case of suspected poliomyelitis has been reported in 1990; none of 13 suspected cases in 1989 have been confirmed to date. Nine of 14 suspected cases in 1988 were confirmed and all were vaccine-associated.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending March 3, 1990 and March 4, 1989 (9th Week)

Reporting Area	AIDS	Aseptic Meningitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionellosis	Leprosy
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum. 1990	Cum. 1990	Cum. 1990	Cum. 1990	Cum. 1990	Cum. 1989	Cum. 1990	Cum. 1990	Cum. 1990	Cum. 1990	Cum. 1990	Cum. 1990
UNITED STATES	7,219	717	101	20	114,913	116,512	4,414	3,029	315	280	188	21
NEW ENGLAND	299	44	5	-	3,556	3,293	86	179	9	15	7	-
Maine	15	1	-	-	42	52	-	10	2	1	1	-
N.H.	25	1	-	-	26	39	1	9	-	1	-	-
Vt.	3	4	-	-	12	12	1	6	2	-	1	-
Mass.	163	15	1	-	1,332	1,413	62	125	5	12	3	-
R.I.	10	17	-	-	185	273	11	13	-	1	2	-
Conn.	83	6	4	-	1,959	1,504	11	16	-	-	-	-
MID. ATLANTIC	2,809	133	4	-	13,152	20,192	716	466	46	25	48	7
Upstate N.Y.	302	50	3	-	2,541	3,059	169	120	6	3	19	1
N.Y. City	1,792	16	1	-	6,573	8,950	70	148	8	12	5	4
N.J.	461	-	-	-	2,185	2,493	63	50	13	-	7	2
Pa.	254	67	-	-	1,853	5,690	414	148	19	10	17	-
E.N. CENTRAL	462	120	15	4	23,527	19,768	278	439	18	25	57	-
Ohio	105	40	4	2	7,194	4,586	46	83	6	2	21	-
Ind.	53	24	1	2	2,218	970	39	151	3	10	16	-
Ill.	192	8	4	-	7,375	6,563	77	20	1	5	-	-
Mich.	85	45	6	-	5,797	5,851	90	123	7	8	13	-
Wis.	27	3	-	-	943	1,798	26	62	1	-	7	-
W.N. CENTRAL	202	32	7	1	6,487	4,984	225	115	12	4	10	-
Minn.	32	1	4	1	763	480	25	7	2	-	-	-
Iowa	8	2	1	-	525	391	59	15	1	1	1	-
Mo.	124	16	-	-	3,601	3,060	106	82	3	1	9	-
N. Dak.	-	-	-	-	24	24	2	-	-	1	-	-
S. Dak.	1	1	1	-	39	45	9	1	1	-	-	-
Nebr.	15	8	1	-	247	304	12	6	2	-	-	-
Kans.	22	4	-	-	1,288	680	12	4	3	1	-	-
S. ATLANTIC	1,088	153	34	5	32,433	31,851	504	610	51	41	25	-
Del.	19	3	1	-	446	472	26	16	2	-	2	-
Md.	191	36	4	-	3,788	2,613	254	104	7	3	8	-
D.C.	49	1	-	-	575	2,230	6	5	3	-	-	-
Va.	216	36	12	-	2,996	2,831	19	33	5	31	2	-
W. Va.	12	2	2	-	201	272	4	20	1	-	-	-
N.C.	56	16	9	1	5,684	4,846	97	193	26	-	6	-
S.C.	52	3	-	-	2,951	2,903	11	117	3	3	4	-
Ga.	235	9	3	1	7,764	6,003	37	56	1	2	3	-
Fla.	258	47	3	3	8,028	9,681	50	66	3	2	-	-
E.S. CENTRAL	148	54	6	-	9,977	9,407	64	255	24	2	16	-
Ky.	30	14	-	-	1,061	900	17	69	10	2	3	-
Tenn.	28	7	4	-	2,966	3,060	20	139	9	-	7	-
Ala.	34	27	2	-	3,804	2,873	27	47	5	-	6	-
Miss.	56	6	-	-	2,146	2,574	-	-	-	-	-	-
W.S. CENTRAL	790	25	2	1	10,835	12,265	332	157	18	25	11	6
Ark.	31	1	-	-	1,587	1,029	91	14	1	2	1	-
La.	137	5	1	-	2,161	2,411	14	38	-	1	2	-
Okla.	41	5	-	1	953	1,205	91	28	3	2	8	-
Tex.	581	14	1	-	6,134	7,620	136	77	14	20	-	6
MOUNTAIN	194	30	3	-	2,079	2,341	673	213	23	29	11	-
Mont.	3	1	-	-	22	38	19	19	2	1	-	-
Idaho	6	-	-	-	16	38	11	18	5	-	-	-
Wyo.	-	1	1	-	19	24	13	4	-	-	-	-
Colo.	63	9	-	-	560	416	41	35	6	15	1	-
N. Mex.	12	3	-	-	187	231	74	23	-	-	-	-
Ariz.	66	8	2	-	826	898	425	51	9	6	6	-
Utah	22	3	-	-	75	89	23	8	-	2	-	-
Nev.	22	5	-	-	374	607	67	55	1	5	4	-
PACIFIC	1,227	126	25	9	12,867	12,411	1,536	595	114	114	3	8
Wash.	79	-	1	1	1,019	1,103	242	79	21	4	-	1
Oreg.	58	-	-	-	452	465	180	70	8	5	-	-
Calif.	1,055	115	23	7	11,132	10,592	1,043	425	82	104	3	4
Alaska	9	2	-	-	210	166	38	7	3	-	-	-
Hawaii	26	9	1	1	54	85	33	14	-	1	-	3
Guam	1	-	-	-	27	28	2	1	-	4	-	-
P.R.	351	20	4	-	-	191	18	16	-	16	-	-
V.I.	3	-	-	-	89	102	-	2	-	-	-	-
Amer. Samoa	-	-	-	-	16	8	3	-	-	-	-	2
C.N.M.I.	-	-	-	-	27	18	2	1	-	-	-	-

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

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending March 3, 1990 and March 4, 1989 (9th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
	Cum. 1990	1990	Cum. 1990	1990	Cum. 1990	Cum. 1989	Cum. 1990	1990	Cum. 1990	1990	Cum. 1990	Cum. 1989	1990	Cum. 1990	Cum. 1989
UNITED STATES	164	133	1,733	6	259	913	528	120	889	52	463	341	21	76	45
NEW ENGLAND	23	-	23	1	9	27	33	2	10	4	69	12	-	1	1
Maine	-	-	-	-	-	-	4	-	-	-	1	4	-	-	-
N.H.	2	-	-	1†	7	-	-	1	4	-	6	5	-	-	-
Vt.	3	-	-	-	-	1	4	-	1	-	2	1	-	-	1
Mass.	12	-	-	-	-	7	17	1	4	2	55	-	-	-	-
R.I.	2	-	8	-	2	15	-	-	1	-	-	2	-	1	-
Conn.	4	-	15	-	-	4	8	-	-	2	5	-	-	-	-
MID. ATLANTIC	32	57	179	3	70	69	79	6	56	22	139	32	-	1	2
Upstate N.Y.	5	23	109	3†	60	5	24	3	20	16	116	12	-	1	1
N.Y. City	13	-	11	-	4	17	8	-	-	-	-	-	-	-	1
N.J.	4	-	-	-	-	38	15	-	14	-	6	17	-	-	-
Pa.	10	34	59	-	6	9	32	3	22	6	17	3	-	-	-
E.N. CENTRAL	10	44	783	-	116	66	65	20	91	15	98	40	-	5	2
Ohio	3	43	139	-	-	45	22	17	29	11	30	1	-	-	-
Ind.	-	-	48	-	-	-	10	1	5	3	31	1	-	-	-
Ill.	2	1	292	-	-	20	15	-	17	-	11	15	-	5	1
Mich.	3	-	65	-	116	-	12	2	27	1	14	4	-	-	-
Wis.	2	-	239	-	-	1	6	-	13	-	12	19	-	-	1
W.N. CENTRAL	1	-	48	-	1	202	24	3	36	1	5	9	-	-	1
Minn.	-	-	27	-	1	-	5	-	-	-	-	-	-	-	-
Iowa	-	-	21	-	-	-	1	1	5	-	1	6	-	-	-
Mo.	1	-	-	-	-	199	9	2	16	-	1	2	-	-	1
N. Dak.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	-	2	-	-	1	1	-	-	-	-
Nebr.	-	-	-	-	-	-	3	-	1	-	1	-	-	-	-
Kans.	-	-	-	-	-	3	4	-	14	-	1	1	-	-	-
S. ATLANTIC	38	23	134	1	32	85	106	31	308	2	46	21	1	1	-
Del.	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-
Md.	8	-	9	-	11	4	12	18	167	-	18	2	-	-	-
D.C.	4	-	-	-	1	2	2	-	4	-	1	-	-	-	-
Va.	8	-	3	-	2	-	14	-	9	-	4	3	-	-	-
W. Va.	1	-	-	-	-	-	2	-	22	-	5	1	-	-	-
N.C.	4	-	3	-	-	79	19	1	26	1	6	10	-	-	-
S.C.	-	-	-	-	-	-	7	1	10	-	-	-	-	-	-
Ga.	5	-	1	-	-	-	22	-	20	-	7	1	-	-	-
Fla.	8	23	117	1†	18	-	28	11	50	1	4	4	1	1	-
E.S. CENTRAL	3	1	18	-	-	2	27	2	28	1	15	17	-	-	-
Ky.	-	-	-	-	-	1	10	-	-	-	-	-	-	-	-
Tenn.	2	1	13	-	-	-	10	2	10	1	4	11	-	-	-
Ala.	1	-	-	-	-	1	7	-	3	-	11	4	-	-	-
Miss.	-	-	5	-	-	-	-	-	15	-	-	2	-	-	-
W.S. CENTRAL	1	-	83	-	7	266	42	13	183	-	6	4	-	-	5
Ark.	-	-	-	-	-	-	3	4	39	-	-	1	-	-	-
La.	-	-	-	-	-	1	9	6	38	-	1	-	-	-	-
Okla.	1	-	3	-	-	10	7	-	61	-	5	3	-	-	-
Tex.	-	-	80	-	7	255	23	3	45	-	-	-	-	-	5
MOUNTAIN	4	1	33	-	11	16	8	1	54	3	45	158	-	-	1
Mont.	-	-	-	-	-	13	3	-	-	-	-	-	-	-	-
Idaho	2	-	-	-	-	1	-	1	31	-	2	8	-	-	-
Wyo.	-	U	-	U	-	-	-	U	2	U	-	-	U	-	-
Colo.	-	-	2	-	2	1	2	-	5	3	34	14	-	-	-
N. Mex.	-	-	1	-	-	-	-	N	N	-	-	1	-	-	-
Ariz.	2	-	21	-	7	1	1	-	13	-	6	131	-	-	-
Utah	-	-	-	-	-	-	-	-	2	-	1	3	-	-	-
Nev.	-	1	9	-	2	-	2	-	1	-	2	1	-	-	1
PACIFIC	52	7	432	1	13	180	144	42	123	4	40	48	20	68	33
Wash.	2	-	-	-	10	1	14	-	10	-	8	5	-	-	-
Oreg.	2	-	-	-	-	-	17	N	N	1	3	-	-	-	-
Calif.	47	-	416	-	2	175	110	42	112	3	26	41	20	64	28
Alaska	-	6	15	-	-	-	3	-	-	-	-	-	-	-	-
Hawaii	1	1	1	1†	1	4	-	-	1	-	3	2	-	4	5
Guam	1	U	-	U	-	-	-	U	-	U	-	1	U	-	-
P.R.	-	11	36	-	-	95	3	1	3	-	-	2	-	-	1
V.I.	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Amer. Samoa	-	U	-	U	-	-	-	U	-	U	-	-	U	-	-
C.N.M.I.	-	U	-	U	-	-	-	U	2	U	-	-	U	-	-

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

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending March 3, 1990 and March 4, 1989 (9th Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic-shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1990	Cum. 1989	Cum. 1990	Cum. 1990	Cum. 1989	Cum. 1990	Cum. 1990	Cum. 1990	Cum. 1990
UNITED STATES	8,179	6,792	67	2,996	2,897	7	56	15	476
NEW ENGLAND	318	273	3	51	61	-	-	-	-
Maine	3	-	-	-	1	-	-	-	-
N.H.	23	-	-	1	4	-	-	-	-
Vt.	-	-	-	2	1	-	-	-	-
Mass.	113	97	2	18	25	-	-	-	-
R.I.	1	6	-	12	9	-	-	-	-
Conn.	178	170	1	18	21	-	-	-	-
MID. ATLANTIC	1,393	1,382	9	752	663	1	17	2	131
Upstate N.Y.	102	133	4	17	58	-	7	-	3
N.Y. City	952	496	2	542	439	-	2	-	-
N.J.	290	254	-	96	75	1	7	2	40
Pa.	49	499	3	97	91	-	1	-	88
E.N. CENTRAL	514	281	20	351	323	-	8	1	7
Ohio	94	20	7	46	65	-	3	-	-
Ind.	4	6	2	17	16	-	-	-	-
Ill.	216	137	-	159	146	-	2	-	4
Mich.	155	108	11	112	84	-	3	1	-
Wis.	45	10	-	17	12	-	-	-	3
W.N. CENTRAL	59	61	7	77	71	3	-	2	54
Minn.	18	5	-	16	18	-	-	-	30
Iowa	5	10	1	6	10	-	-	-	-
Mo.	30	30	3	33	18	3	-	2	-
N. Dak.	1	1	-	3	4	-	-	-	5
S. Dak.	-	-	-	4	6	-	-	-	13
Nebr.	2	10	2	7	4	-	-	-	-
Kans.	3	5	1	8	11	-	-	-	6
S. ATLANTIC	3,177	2,507	-	501	613	2	5	4	151
Del.	38	27	-	6	4	-	-	-	2
Md.	172	126	-	49	53	-	3	-	53
D.C.	597	166	-	13	36	-	-	-	-
Va.	106	100	-	40	62	-	-	-	31
W. Va.	2	3	-	8	16	-	-	-	3
N.C.	295	145	-	69	57	1	-	3	2
S.C.	165	121	-	88	70	1	-	1	17
Ga.	694	545	-	69	75	-	1	-	37
Fla.	1,108	1,274	-	159	240	-	1	-	6
E.S. CENTRAL	642	430	4	201	238	-	-	1	19
Ky.	13	8	-	72	60	-	-	-	7
Tenn.	216	151	2	28	56	-	-	1	-
Ala.	223	164	2	73	90	-	-	-	12
Miss.	190	107	-	28	32	-	-	-	-
W.S. CENTRAL	1,155	842	3	345	295	-	1	4	60
Ark.	75	58	-	42	34	-	-	-	4
La.	361	162	-	43	50	-	-	-	-
Okla.	39	12	3	25	17	-	-	4	14
Tex.	680	610	-	235	194	-	1	-	42
MOUNTAIN	139	154	6	55	90	1	2	-	13
Mont.	-	-	-	-	-	-	-	-	6
Idaho	1	-	1	1	3	-	-	-	-
Wyo.	-	-	1	-	-	-	-	-	5
Colo.	11	8	1	-	-	-	-	-	-
N. Mex.	11	4	2	14	14	1	-	-	1
Ariz.	87	39	1	25	47	-	2	-	-
Utah	1	5	-	-	12	-	-	-	-
Nev.	28	98	-	15	14	-	-	-	1
PACIFIC	782	862	15	663	543	-	23	1	41
Wash.	4	56	1	49	36	-	-	-	-
Oreg.	20	46	-	17	19	-	-	-	-
Calif.	752	756	13	566	453	-	22	1	29
Alaska	2	-	-	9	7	-	-	-	12
Hawaii	4	4	1	22	28	-	1	-	-
Guam	-	3	-	8	9	-	-	-	-
P.R.	-	81	-	1	37	-	-	-	12
V.I.	-	1	-	1	1	-	-	-	-
Amer. Samoa	-	-	-	3	-	-	-	-	-
C.N.M.I.	-	1	-	6	1	-	4	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending March 3, 1990 (9th Week)

Reporting Area	All Causes, By Age (Years)						P&I**
	All Ages	≥65	45-64	25-44	1-24	<1	Total
NEW ENGLAND	728	503	119	62	16	28	80
Boston, Mass.	204	113	50	19	8	14	31
Bridgeport, Conn.	39	29	4	4	1	1	6
Cambridge, Mass.	30	25	2	2	-	1	3
Fall River, Mass.	27	25	1	1	-	-	1
Hartford, Conn.	62	39	11	9	1	2	4
Lowell, Mass.	27	21	5	1	-	-	3
Lynn, Mass.	21	15	4	2	-	-	1
New Bedford, Mass.	26	23	3	-	-	-	1
New Haven, Conn.	54	34	10	5	-	5	8
Providence, R.I.	63	44	8	8	1	2	5
Somerville, Mass.	14	10	2	2	-	-	-
Springfield, Mass.	62	51	5	2	2	2	8
Waterbury, Conn.	39	31	6	1	1	-	2
Worcester, Mass.	60	43	8	6	2	1	7
MID. ATLANTIC	2,814	1,860	543	287	67	56	193
Albany, N.Y.	51	36	11	3	-	1	1
Allentown, Pa.	18	13	3	2	-	-	2
Buffalo, N.Y.	102	67	23	8	2	2	6
Camden, N.J.	42	29	8	4	-	1	-
Elizabeth, N.J.	22	15	3	4	-	-	3
Erie, Pa.†	55	43	10	2	-	-	3
Jersey City, N.J.	68	48	9	7	2	2	1
N.Y. City, N.Y.	1,499	957	309	179	34	20	83
Newark, N.J.	117	63	25	18	8	3	13
Paterson, N.J.	28	21	5	2	-	-	1
Philadelphia, Pa.	306	193	59	27	11	16	30
Pittsburgh, Pa.†	66	50	8	5	2	1	2
Reading, Pa.	33	26	4	2	-	-	3
Rochester, N.Y.	118	88	17	7	2	4	21
Schenectady, N.Y.	41	32	4	3	1	1	2
Scranton, Pa.†	33	27	6	-	-	-	5
Syracuse, N.Y.	118	80	26	6	2	4	3
Trenton, N.J.	38	27	4	5	1	1	6
Utica, N.Y.	28	22	6	-	-	-	2
Yonkers, N.Y.	31	23	3	3	2	-	6
E.N. CENTRAL	2,407	1,635	485	160	37	90	158
Akron, Ohio	63	43	14	2	2	2	1
Canton, Ohio	36	27	6	2	1	-	10
Chicago, Ill.§	564	362	125	45	10	22	16
Cincinnati, Ohio	137	91	31	11	1	3	22
Cleveland, Ohio	160	104	35	9	2	10	4
Columbus, Ohio	190	115	52	8	5	10	14
Dayton, Ohio	123	94	16	7	2	4	11
Detroit, Mich.	246	146	55	26	6	13	7
Evansville, Ind.	35	27	7	1	-	-	4
Fort Wayne, Ind.	62	47	10	4	1	-	1
Gary, Ind.	13	10	1	1	-	1	-
Grand Rapids, Mich.	95	73	18	3	-	1	21
Indianapolis, Ind.	199	123	43	17	4	12	7
Madison, Wis.§	36	26	6	3	-	1	1
Milwaukee, Wis.	154	125	21	5	-	3	8
Peoria, Ill.	40	28	7	2	-	3	6
Rockford, Ill.	43	35	5	2	-	1	7
South Bend, Ind.	50	38	8	2	1	1	3
Toledo, Ohio	103	76	19	6	1	1	12
Youngstown, Ohio	58	45	6	4	1	2	3
W.N. CENTRAL	941	691	147	52	18	33	51
Des Moines, Iowa	61	47	12	1	-	1	1
Duluth, Minn.	29	20	5	3	-	1	3
Kansas City, Kans.	44	36	4	2	2	-	1
Kansas City, Mo.	154	109	30	7	1	7	8
Lincoln, Nebr.	51	43	6	2	-	-	4
Minneapolis, Minn.	201	153	25	13	3	7	14
Omaha, Nebr.	104	76	19	4	3	2	5
St. Louis, Mo.	157	109	21	13	4	10	9
St. Paul, Minn.	66	43	12	3	4	4	2
Wichita, Kans.	74	55	13	4	1	1	4
S. ATLANTIC	1,281	794	296	119	31	38	73
Atlanta, Ga.	164	96	40	23	4	1	8
Baltimore, Md.	216	132	52	18	6	8	18
Charlotte, N.C.	81	52	17	5	3	4	2
Jacksonville, Fla.	112	71	28	8	2	3	12
Miami, Fla.	109	67	32	6	2	2	2
Norfolk, Va.	62	35	15	6	-	6	3
Richmond, Va.	94	54	22	11	5	2	3
Savannah, Ga.	44	32	8	2	1	1	5
St. Petersburg, Fla.	75	59	11	3	-	2	6
Tampa, Fla.	85	54	13	9	2	6	9
Washington, D.C.	210	120	52	27	6	3	5
Wilmington, Del.	29	22	6	1	-	-	-
E.S. CENTRAL	885	593	178	53	27	34	66
Birmingham, Ala.	112	65	24	9	8	6	1
Chattanooga, Tenn.	98	65	22	3	2	6	6
Knoxville, Tenn.	84	54	21	5	3	1	7
Louisville, Ky.	151	99	29	9	7	7	10
Memphis, Tenn.	219	144	46	17	5	7	29
Mobile, Ala.	22	13	4	1	-	4	-
Montgomery, Ala.§	56	47	6	2	1	-	3
Nashville, Tenn.	143	106	26	7	1	3	10
W.S. CENTRAL	1,945	1,259	390	198	57	41	112
Austin, Tex.	65	48	9	7	1	-	6
Baton Rouge, La.	71	53	11	4	2	1	3
Corpus Christi, Tex.	46	34	7	3	-	2	8
Dallas, Tex.	247	147	53	34	7	6	13
El Paso, Tex.	76	44	18	7	3	4	4
Fort Worth, Tex	100	76	16	5	2	1	4
Houston, Tex.§	734	436	169	89	24	16	18
Little Rock, Ark.	74	49	17	7	1	-	11
New Orleans, La.	151	114	19	10	5	3	-
San Antonio, Tex.	219	146	42	17	8	6	23
Shreveport, La.	78	55	12	8	3	-	18
Tulsa, Okla.	84	57	17	7	1	2	4
MOUNTAIN	800	522	166	60	32	19	46
Albuquerque, N. Mex.	75	47	15	5	5	2	4
Colo. Springs, Colo.	47	30	9	5	3	-	3
Denver, Colo.	106	79	18	7	1	1	3
Las Vegas, Nev.	148	95	36	9	7	1	8
Ogden, Utah	22	16	4	-	2	-	5
Phoenix, Ariz.	201	109	43	27	10	12	11
Pueblo, Colo.	28	23	5	-	-	-	2
Salt Lake City, Utah	45	29	10	1	2	3	1
Tucson, Ariz.	128	94	26	6	2	-	9
PACIFIC	2,307	1,560	397	215	62	65	157
Berkeley, Calif.	17	15	1	1	-	-	1
Fresno, Calif.	124	95	19	6	3	1	12
Glendale, Calif.	23	16	5	1	1	-	-
Honolulu, Hawaii	73	49	8	9	-	7	7
Long Beach, Calif.	100	63	27	7	1	2	10
Los Angeles Calif.	621	408	110	70	16	10	27
Oakland, Calif.	77	47	17	6	-	7	-
Pasadena, Calif.	42	27	11	1	1	2	2
Portland, Oreg.	165	117	27	14	4	3	19
Sacramento, Calif.	187	136	33	12	2	4	21
San Diego, Calif.	185	121	26	18	14	6	21
San Francisco, Calif.	233	140	41	37	6	8	10
San Jose, Calif.	172	121	31	12	2	6	17
Seattle, Wash.	189	135	24	14	10	6	3
Spokane, Wash.	53	38	8	4	1	2	6
Tacoma, Wash.	46	32	9	3	1	1	1
TOTAL	14,108††	9,417	2,721	1,206	347	404	936

*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.

§Data not available. Figures are estimates based on average of past available 4 weeks.

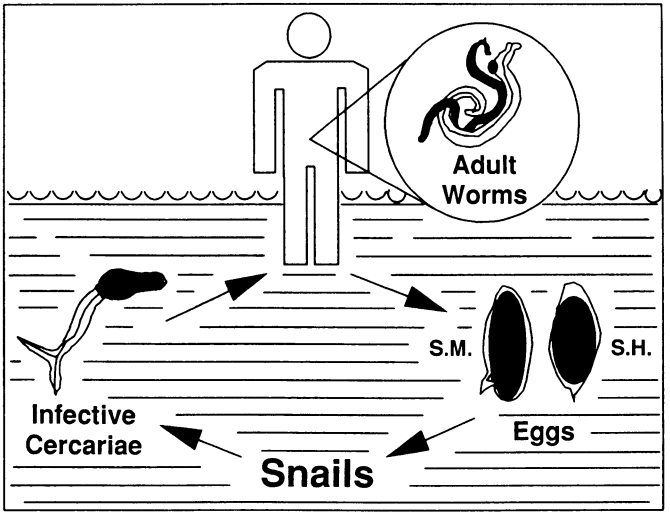
Schistosomiasis — Continued

egg deposition in the vasculature surrounding the intestines and bladder (*7*) (Figure 1). Although the clinical outcome in travelers is usually benign, hospitalization is sometimes necessary, and manifestations can be severe. For example, in 1984, two U.S. students developed transverse myelitis and paraplegia after acquiring infection in Kenya (*4*).

Early manifestations of acute schistosomiasis are often nonspecific and may easily be misdiagnosed. The diagnosis should be considered when eosinophilia is associated with fever, fatigue, headache, and/or gastrointestinal distress in persons who have been exposed to fresh water in areas in which schistosomiasis is endemic. Early diagnosis and treatment based on clinical, epidemiologic, and serologic criteria may be important in preventing serious sequelae (e.g., transverse myelitis) of acute infection. Screening stool and urine specimens for ova and parasites is the traditional method of diagnosis, but signs and symptoms of acute infection can occur before detectable egg excretion (*8*). Sensitive and specific serologic tests have recently been developed that can help establish the diagnosis before substantial egg deposition or excretion (*9*). Single-day therapy with praziquantel (40–60 mg/kg) is effective against all species of schistosomes (*10*). Although side effects to treatment have been reported, they are generally mild and transient (*7*).

Because there is no practical way to distinguish infected from noninfected water, all fresh water in schistosomiasis-endemic areas should be considered suspect. If fresh water contact is unavoidable, bathing water should be heated to 50 C (122 F) for 5 minutes or treated with iodine or chlorine in a manner similar to that used for treating drinking water. In addition, water can be strained with paper filters or allowed

FIGURE 1. Life cycle of human schistosomes represented by *S. mansoni* (S.M.) and *S. haematobium* (S.H.)



Free-swimming cercariae penetrate intact skin in contact with infected fresh water. Adults developing within the human host mate and begin depositing eggs in the vasculature surrounding the intestine and bladder. Eggs released into the stool or urine develop into forms infective for intermediate snail hosts when deposited into fresh water. Infected snails release cercariae to reinitiate the cycle.

Schistosomiasis – Continued

to stand for 3 days before use. Vigorous towel drying and application of rubbing alcohol to exposed skin immediately after contact with untreated water also may help reduce cercarial penetration and subsequent infection (*3,4*).

Schistosomiasis is endemic in 74 countries in Africa, South America, the Caribbean, and Asia (*10*). Because travel to these areas is becoming increasingly popular, health-care providers should be aware of the clinical manifestations, methods for diagnosis, and appropriate treatment of this disease. In addition, health and travel professionals should provide more intensive preventive counseling to persons planning travel to areas endemic for schistosomiasis.

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Low Birthweight – United States, 1975–1987

The incidence of low birthweight (LBW) is monitored in the United States because it is an important indicator of infant morbidity and mortality. This report highlights findings on trends in LBW in the United States from 1975 through 1987 (the most recent year for which data are available) (*1*). These findings are based on analysis of birth certificate data provided by the 50 states and the District of Columbia to CDC's National Center for Health Statistics. For each birth, data include birthweight and related demographic and health information for the mother and infant.

From 1975 through 1985, the incidence of LBW (<2500 g [<5 lbs. 8 oz.]) declined from 73.9 per 1000 live births to 67.5 per 1000, a 9% decrease (Table 1). However, LBW increased 2.2% from 1985 through 1987. Moderately low birthweight (MLBW) (1500–2499 g [3 lbs. 4 oz. to 5 lbs. 8 oz.]) declined by 11% from 1975 through 1985 but also increased 2.2% from 1985 through 1987. Very low birthweight (VLBW) (<1500 g [<3 lbs. 4 oz.]) increased by 4% from 1975 through 1985 and increased another 2.5% from 1985 through 1987. Most of the decline in LBW and MLBW occurred before 1980 (86% and 78%, respectively); all the increase in VLBW occurred after 1980.

Although LBW declined for both white infants and black infants before 1980, the decline was nearly twice as great for white (9%) as for black infants (5%) (Table 1). The decline in LBW rates in the first half of the 1980s was ≤1% for both white infants

Low Birthweight — Continued

and black infants. During the same time, the increase in VLBW was more than twice as great for black (9%) as for white (4%) infants. From 1985 through 1987, LBW rates increased by slightly less than 1% for white infants and by 2% for black infants; the incidence of VLBW for white infants was stable but rose an additional 3% for black infants (Table 1).

In 1985, 52% and 93% of MLBW and VLBW infants, respectively, were born preterm (<37 weeks of gestation) (Table 2). From 1981 through 1985, the rate for full-term LBW infants declined by 7%, but the rate for preterm LBW infants increased by 2% (*1*). Thus, the small decline in the overall rate of LBW in this period is due entirely to the reduction in the rate of full-term LBW infants.

TABLE 1. Rates* of low, moderately low, and very low birthweight, by race of infant — United States, selected years, 1975–1987

	Low birthweight†			Moderately low birthweight§			Very low birthweight¶		
Year	All races**	White	Black	All races**	White	Black	All races**	White	Black
1975	73.9	62.6	130.9	62.3	53.4	107.2	11.6	9.2	23.7
1980	68.4	57.0	124.9	56.9	48.1	100.5	11.5	9.0	24.4
1985	67.5	56.4	124.2	55.4	47.0	97.6	12.1	9.4	26.5
1987	69.0	56.8	127.1	56.6	47.4	99.8	12.4	9.4	27.3

*Rates per 1000 live births.
†<2500 g (5 lbs. 8 oz.).
§1500–2499 g (3 lbs. 4 oz. to 5 lbs. 8 oz.).
¶<1500 g (3 lbs. 4 oz.).
**Includes races other than white and black.

TABLE 2. Percent distribution of low, moderately low, and very low birthweight infants, by period of gestation and race of infant — 49 states* and the District of Columbia, 1981, and United States, 1985

Race/ Gestation (wks)	Low birthweight†			Moderately low birthweight§			Very low birthweight¶		
	% Distribution		% Change	% Distribution		% Change	% Distribution		% Change
	1981	1985	1981–1985	1981	1985	1981–1985	1981	1985	1981–1985
All races**									
<37	56.4	58.6	3.9	49.5	51.6	4.2	91.5	92.6	1.2
≥37	43.6	41.4	–5.0	50.5	48.4	–4.2	8.5	7.4	–12.9
White									
<37	55.9	58.1	3.9	49.4	51.6	4.5	91.7	92.6	1.0
≥37	44.1	41.9	–5.0	50.6	48.4	–4.3	8.3	7.4	–10.8
Black									
<37	58.0	60.4	4.1	50.1	52.0	3.8	91.6	92.8	1.3
≥37	42.0	39.6	–5.7	49.9	48.0	–3.8	8.4	7.2	–14.3

*For 1981, excludes data for New Mexico, which did not require reporting of date of last normal menstrual period.
†<2500 g (5 lbs. 8 oz.).
§1500–2499 g (3 lbs. 4 oz. to 5 lbs. 8 oz.).
¶<1500 g (3 lbs. 4 oz.).
**Includes races other than white and black.

Low Birthweight — Continued

In 1985, compared with a longer interbirth interval (2–4 years after the previous live birth), a short interbirth interval (1–1½ years after the previous live birth) was associated with a two-thirds greater likelihood of LBW and an approximately 80% greater likelihood of VLBW (Table 3).

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Editorial Note: The data in this report underscore the substantial and persistent difference between black and white infants in the risk for LBW. In 1975, black infants were 2.1 times as likely as white infants to have a birthweight of <2500 g. Because the LBW rate declined slightly more for white than for black infants from 1975 through 1985, the relative risk for black infants increased to 2.2 by 1985 and remained at this level through 1987. The relative risk of VLBW for black infants also increased (from 2.6 in 1975 to 2.9 in 1987) (*1*).

Reasons for the worsening gap between rates for black and white LBW and VLBW infants are complex. Relatively more black than white mothers are represented in subgroups at high risk for LBW (i.e., unmarried, <20 years of age, with <12 years of education, or with late or no prenatal care). Within each subgroup, however, black mothers are generally twice as likely to have LBW infants and two to three times as likely to have VLBW infants (*1*). Increased maternal education lowers the risk for LBW for both black and white infants in high-risk categories; however, the risk for black infants relative to white infants in LBW incidence actually increases with added years of completed education (*1*). At comparable levels of education, black mothers have a lower average family income than do white mothers (*2*). These socioeconomic differences may affect the quality of health care available to black women.

Other factors related to the higher rates of LBW among black infants include poorer nutritional status among black mothers, higher rates of mistimed pregnancies, and higher rates of unwanted births (*3*). Black women are generally more likely than

TABLE 3. Rates* of low, moderately low, and very low birthweight, by interval since mother's last live infant and race of infant — 49 states† and the District of Columbia, 1985

Interval since last live infant	Low birthweight§			Moderately low birthweight¶			Very low birthweight**		
	All races††	White	Black	All races††	White	Black	All races††	White	Black
All second and higher-order births§§¶¶	57.9	45.7	116.0	47.7	38.2	92.3	10.2	7.4	23.6
<12 mos¶¶	206.9	166.2	300.5	135.7	113.9	185.9	71.2	52.4	114.6
12–17 mos	73.9	57.9	131.7	61.5	48.3	109.1	12.4	9.6	22.6
18–23 mos	49.6	39.3	104.8	41.7	33.2	86.2	7.9	6.1	18.6
24–47 mos	44.3	35.9	98.5	37.5	30.7	81.2	6.8	5.1	17.3
≥48 mos	61.5	49.4	110.3	51.5	42.1	88.7	10.1	7.3	21.5

*Rates per 1000 live births.
†Excludes data for Texas, which did not require reporting of date of last live birth.
§<2500 g (5 lbs. 8 oz.).
¶1500–2499 g (3 lbs. 4 oz. to 5 lbs. 8 oz.).
**<1500 g (3 lbs. 4 oz.).
††Includes races other than white and black.
§§Includes births with interval not stated.
¶¶Includes only first-born in a multiple delivery.

Low Birthweight — Continued

white women of similar prepregnancy weight to gain <16 lbs. during their pregnancy, and this lower weight gain is associated with an increased risk for LBW (*4*). Anemia is associated with preterm delivery; an estimated 5.0%–8.3% of preterm deliveries among black mothers above the preterm deliveries among white mothers is due to excessive rates of anemia among black women (*5,6*). Iron supplementation for pregnant women with borderline or frank anemia should lead to a modest reduction in preterm delivery and in the relative risk of LBW among black infants (*6*).

Consistent with the finding that infants born <2 years after a previous child are at greater risk for LBW, infants who are either unwanted or conceived before the mother is ready to bear another child have a greater risk for LBW (*3*). The proportion of LBW attributable to mistimed or unwanted births among black infants has been estimated at >16% (*6*). Regardless of whether this attributable risk is causal or is related to other factors associated with unplanned pregnancies, the prevention of unintended pregnancies could substantially reduce the difference in rates of LBW between blacks and whites (*6*).

Recent recommendations on improving prenatal care (*7*) specify that care should begin before conception and should include pregnancy planning; involvement of a care coordinator; and comprehensive treatment for all identified risks, including behavioral and nutritional factors. The provision of comprehensive, coordinated prenatal care has been associated with reduced risk for LBW among poor, predominantly black prenatal patients (*8*).

New information relevant to the etiology of LBW will be available for 1989 from the revised U.S. Certificate of Live Birth for 47 states and the District of Columbia. The revised certificate includes questions relating to medical risk factors during pregnancy, such as anemia and cardiac disease, and such factors as tobacco and alcohol use and weight gain during pregnancy that are closely associated with birthweight. These data, combined with other socioeconomic and health data from birth certificates, should help clarify the reasons for the persistent and large racial differentials in the incidence of LBW and infant mortality (*9*).

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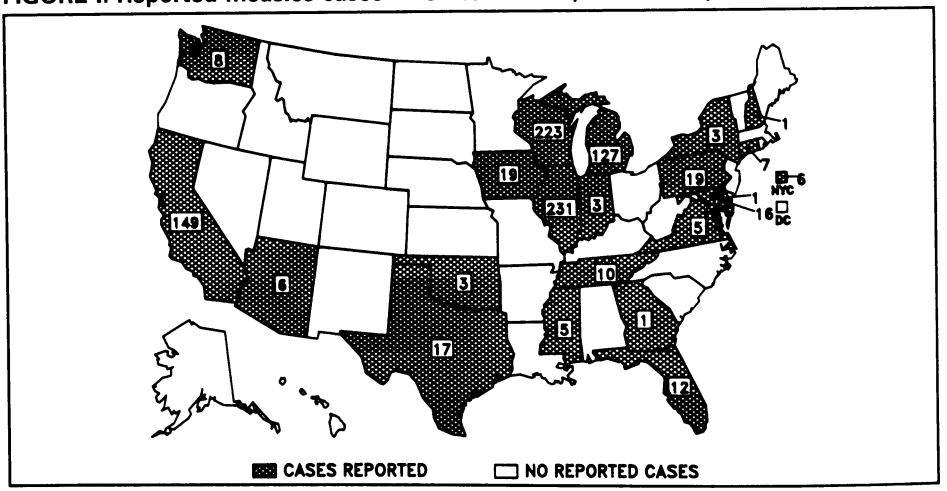
FIGURE I. Reported measles cases — United States, weeks 6–9, 1990



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The data in this report are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday. The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333; telephone (404) 332-4555.

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