CDC
CENTERS FOR DISEASE CONTROL

September 20, 1991 / Vol. 40 / No. 37

MMWR

MORBIDITY AND MORTALITY WEEKLY REPORT

Health Objectives for the Nation

Attempted Suicide Among High School Students – United States, 1990

Suicide rates for adolescents 15–19 years of age have quadrupled from 2.7 per 100,000 in 1950 to 11.3 in 1988 (*1,2*). Data from earlier decades are not available to assess similar trends in rates of attempted suicide in this population. Attempted suicide is a potentially lethal health event, a risk factor for future completed suicide, and a potential indicator of other health problems such as substance abuse, depression, or adjustment and stress reactions (*3*). This report examines self-reported data to estimate the annual prevalence of suicidal thoughts and behaviors among U.S. high school students.

The national school-based Youth Risk Behavior Survey (YRBS) is one component of CDC's Youth Risk Behavior Surveillance System, which periodically measures the prevalence of priority health-risk behaviors among youth through comparable national, state, and local surveys (*4*). The school-based YRBS used a three-stage sample design to obtain a representative sample of 11,631 students in grades 9–12 in the 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands. Students were asked whether they had seriously thought about attempting suicide during the 12 months preceding the survey, whether they had made a specific plan about how they would attempt suicide, how many times they had actually made a suicide attempt, and whether their suicide attempt(s) resulted in an injury or poisoning that had to be treated by a doctor or nurse.

For the 12 months preceding the survey, 27.3% of all students in grades 9–12 reported that they had thought seriously about attempting suicide (Table 1). Fewer students (16.3%) reported that they had made a specific plan to attempt suicide. About half the students who made a specific plan (8.3% of all respondents) reported that they actually attempted suicide. Two percent of the students reported that they made a suicide attempt that resulted in an injury or poisoning requiring medical

Attempted Suicide — Continued

attention. This systematic decline was noted for both male and female students and for white, black, and Hispanic students.

Female students were significantly more likely than male students to report that they had thought seriously about attempting suicide, had made a suicide plan, or had attempted suicide one or more times during the 12 months preceding the survey (Table 1). Similarly, 2.5% of female students and 1.6% of male students indicated they had made a suicide attempt that required medical attention, but this difference was not statistically significant.

Hispanic and white students reported higher levels of suicidal thoughts and behaviors than black students (Table 1), although these differences were not always statistically significant. Hispanic female students (14.9%) were significantly more likely to have attempted suicide during the 12 months preceding the survey than white female (10.1%) or black female students (8.2%).

Reported by: Div of Injury Control, National Center for Environmental Health and Injury Control; Div of Adolescent and School Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: In past surveys assessing the lifetime prevalence of attempted suicide, 9% (*5,6*) to 14% (*7*) of adolescents reported that they had attempted suicide at some time in their lives. Few studies have tried either to quantify the health impact of an adolescent's self-reported attempted suicide or to determine whether high school students' perception of a suicide attempt includes overt injury or other sequelae. The findings reported here add to increasing evidence that most self-reported suicide attempts among adolescents and young adults do not result in injury or hospitalization (*6*). In addition, a recent investigation among college students found that only half of those who sought medical care for injuries sustained during a suicide attempt were admitted to a hospital for one or more nights (*8*). These findings

TABLE 1. Percentage of high school students reporting suicide ideation and suicidal behavior,* by gender and race/ethnicity — United States, Youth Risk Behavior Survey, 1990†

Category	Suicide ideation		Made specific suicide plans		≥1 Suicide attempt(s)		Suicide attempt requiring medical attention§	
	%	(95% CI¶)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Gender								
Female	33.9	(31.6–36.2)	20.2	(18.5–21.8)	10.3	(9.0–11.6)	2.5	(2.0–2.9)
Male	20.5	(18.2–22.7)	12.3	(10.3–14.3)	6.2	(4.8– 7.5)	1.6	(1.1–2.2)
Race/Ethnicity								
Hispanic	30.4	(27.4–33.3)	19.5	(17.0–22.0)	12.0	(10.3–13.6)	2.4	(1.6–3.1)
White	28.1	(25.6–30.6)	16.1	(14.4–17.7)	7.9	(6.6– 9.2)	2.1	(1.6–2.5)
Black	20.4	(17.1–23.7)	13.5	(10.0–16.9)	6.5	(5.4– 7.7)	1.4	(0.8–2.1)
Total	**27.3**	**(25.2–29.4)**	**16.3**	**(14.8–17.8)**	**8.3**	**(7.2– 9.4)**	**2.1**	**(1.7–2.4)**

*During the 12 months preceding the survey.
†Unweighted sample size = 11,631.
§Resulted in an injury or poisoning that had to be treated by a doctor or nurse.
¶Confidence interval.

Attempted Suicide — Continued

suggest that future studies of attempted suicide among adolescents should also assess the medical consequences of self-reported suicidal behavior.

YRBS data indicate an estimated 276,000 high school students in the United States made at least one suicide attempt requiring medical attention during the 12 months preceding the survey (*9*). The national health objective for the year 2000 (objectives 6.2 and 7.8) is to "reduce by 15 percent the incidence of injurious suicide attempts among adolescents aged 14 through 17" (*10*). The YRBS data do not permit a precise calculation of this incidence rate because some students may have made more than one suicide attempt requiring medical attention during the 12 months preceding the survey. However, using the annual prevalence of U.S. high school students who made at least one suicide attempt requiring medical attention as a proxy, the annual prevalence will need to be reduced from 2.1% of high school students in 1990 to 1.8% by the year 2000 to meet the objective.

A variety of youth suicide prevention strategies have been suggested to reduce known risk factors for suicide (e.g., social isolation, depression, alcohol and other drug use, and access to lethal means for suicide) and to increase referrals of high-risk adolescents to appropriate mental health services (*3*). These strategies include educating youth about the warning signs of suicide and about suicide prevention services and training those who work with youth to identify high-risk youth and refer them to prevention services (e.g., crisis centers, hotlines, and other crisis services). These strategies have not been widely implemented, however, and little is known about their relative effectiveness. Evaluation research is needed to help identify the most effective means for preventing attempted and completed suicide among youth.

References

1. CDC. Youth suicide in the United States, 1970–1980. Atlanta: US Department of Health and Human Services, Public Health Service, 1986.
2. NCHS. Vital statistics mortality data, multiple cause-of-death detail [machine-readable public-use data tape]. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, CDC, 1988.
3. Alcohol, Drug Abuse, and Mental Health Administration. Report of the Secretary's Task Force on Youth Suicide. Washington, DC: US Department of Health and Human Services, Public Health Service, 1989; DHHS publication no. (ADM)89-1621-4.
4. Kolbe LJ. An epidemiological surveillance system to monitor the prevalence of youth behaviors that most affect health. Health Education 1990;21:44–7.
5. Harkavy Friedman JM, Asnis GM, Boeck M, DiFiore J. Prevalence of specific suicidal behaviors in a high school sample. Am J Psychiatry 1987;144:1203–6.
6. Smith K, Crawford C. Suicidal behavior among "normal" high school students. Suicide Life Threat Behav 1986;16:313–25.
7. American School Health Association/Association for the Advancement of Health Education/ Society for Public Health Education, Inc. The National Adolescent School Health Survey: a report on the health of America's youth. Oakland, California: Third Party Publishing Co., 1989:31.
8. Meehan PJ, Lamb JA, Saltzman LE, O'Carroll PW. Suicide attempts among young adults. Am J Psychiatry (in press).
9. Bureau of the Census. School enrollment—social and economic characteristics of students: October 1988 and 1987. Washington, DC: US Department of Commerce, Bureau of the Census, 1990:443. (Current population reports; series P-20).
10. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives—full report, with commentary. Washington, DC: US Department of Health and Human Services, Public Health Service, 1991; DHHS publication no. (PHS)91-50212.

Epidemiologic Notes and Reports

Mycobacterium haemophilum Infections — New York City Metropolitan Area, 1990–1991

During September 1990–March 1991, clinicians at a New York City (NYC) hospital diagnosed *Mycobacterium haemophilum* infections in four patients. Two cases occurred in persons with acquired immunodeficiency syndrome (AIDS), and two occurred in persons who had received bone marrow transplants and were on therapy to prevent a graft-versus-host reaction. In April 1991, three additional *M. haemophilum* infections in persons with AIDS were identified in the NYC area. Because *M. haemophilum* infection rarely has been recognized, intensive case finding was initiated in NYC as a result of these reports.

Cases were identified by review of hospital microbiology laboratory records and by reports from infectious disease and laboratory specialists. From April 24 through September 1, 13 persons with *M. haemophilum* infection were identified at seven hospitals in the NYC area. All 13 mycobacterial isolates were confirmed at CDC as *M. haemophilum* by routine biochemical tests and tests for typical mycolic acid patterns by high-performance liquid chromatography (HPLC).

Among these 13 patients, the earliest onset of symptoms occurred in August 1989. *M. haemophilum* was diagnosed in four persons in 1990 and in nine persons in 1991. Nine (69%) patients were male; 12 were white and one was black, including one Hispanic. The mean age of patients at the time of diagnosis was 34 years (range: 27–51 years). Eleven patients had AIDS; the other two patients were the bone marrow transplant recipients. For patients with AIDS, the mean duration of AIDS at the time of *M. haemophilum* illness was 15.9 months (range: 0–43.4 months).

Initial signs and symptoms included multiple cutaneous ulcerating lesions, which were most frequently found on the extremities, often overlying joints (11 patients); upper respiratory complaints (three); and joint effusions (two). *M. haemophilum* was isolated from cutaneous lesions (11 patients), bone (five), sputum (four), synovial fluid (two), blood (one), and lung biopsy tissue (one). For seven patients, *M. haemophilum* was isolated from multiple sites. By September 1, two of the 13 patients had died; for one of the two, pulmonary disease with cavitary lesions from *M. haemophilum* was the cause of death.

Among the NYC cases, *M. haemophilum* was first isolated using growth conditions for fungi. Some clinical specimens were tested specifically for *M. haemophilum*. For other specimens, testing was done only after bacilli were observed on acid-fast smears but growth was not detected by standard mycobacterial culture procedures. Media used to grow the organism included Middlebrook 7H10 agar with hemin supplied by an x-factor strip, brain-heart infusion broth with 5% sheep blood, chocolate agar, and Middlebrook 7H10 agar supplemented with hemoglobin.

The mean time from initiation of laboratory evaluation to final diagnosis of *M. haemophilum* infection was 124 days (range: 14–495 days). Once identified, treatment regimens varied but included combinations of isoniazid, rifampin, ethambutol, minocycline, doxycycline, clarithromycin, ciprofloxacin hydrochloride, amikacin sulfate, clofazimine, streptomycin, and pyrazinamide. Drug susceptibility for nine of the *M. haemophilum* isolates varied from 0 to 100% (Table 1).

Mycobacterium haemophilum — *Continued*

Reported by: D Armstrong, MD, T Kiehn, PhD, N Boone, M White, MD, K Pursell, MD, Memorial-Sloan Kettering Cancer Center, S Lewin, MD, EM Sordillo, MD, N Schneider, MH Grieco, MD, St. Luke's/Roosevelt Hospital, V LaBombardi, PhD, R Yarish, MD, St. Vincent's Hospital, D Larone, PhD, M Tapper, MD, Lenox Hill Hospital, KR Ong, MD, Commission on Disease Intervention, New York City Dept of Health; DL Morse, MD, State Epidemiologist, New York State Dept of Health. J Kocher, MD, Englewood Hospital, Englewood; KC Spitalny, MD, State Epidemiologist, New Jersey State Dept of Health. Respiratory Diseases Br, Div of Bacterial and Mycotic Diseases, National Center for Infectious Diseases, CDC.

Editorial Note: *M. haemophilum* was first described as a human pathogen in 1978 (*1*). Through 1989, only 18 cases of infection with this organism have been reported: seven of these patients were from the United States (*2–6*), and 11 were from Australia, Canada, and France. Since 1989, in addition to the New York specimens, CDC has identified 10 isolates of *M. haemophilum* from eight patients. These patients were from Connecticut, Florida, Georgia, Pennsylvania, Texas, and Virginia.

Previous reports of infections with *M. haemophilum* have most commonly described cutaneous lesions in persons on immunosuppressive therapy following renal transplantation (*7,8*). In addition, infections in persons with AIDS (*3,4*) and cases of cervical lymphadenitis in immunocompetent children have been reported (*6*). Much remains unknown about the organism, including its reservoir, its mode of transmission, and the spectrum of human disease associated with infection.

The incidence of *M. haemophilum* infection is also unknown; the relative rarity of the organism's isolation from clinical specimens may be because of its specific growth requirements. *M. haemophilum* will grow on egg- or agar-based media only if supplemented with 0.4% hemoglobin, 60 μM hemin, or 15 mg/mL ferric ammonium citrate (*9*). The temperature growth range is 25–35 C, but the optimum incubation temperature is reported to be 32 C (*10*). Because of these growth requirements, the organism would not be isolated using routine culture techniques for other mycobacteria such as *M. tuberculosis*. The cases in the NYC area and the eight other cases

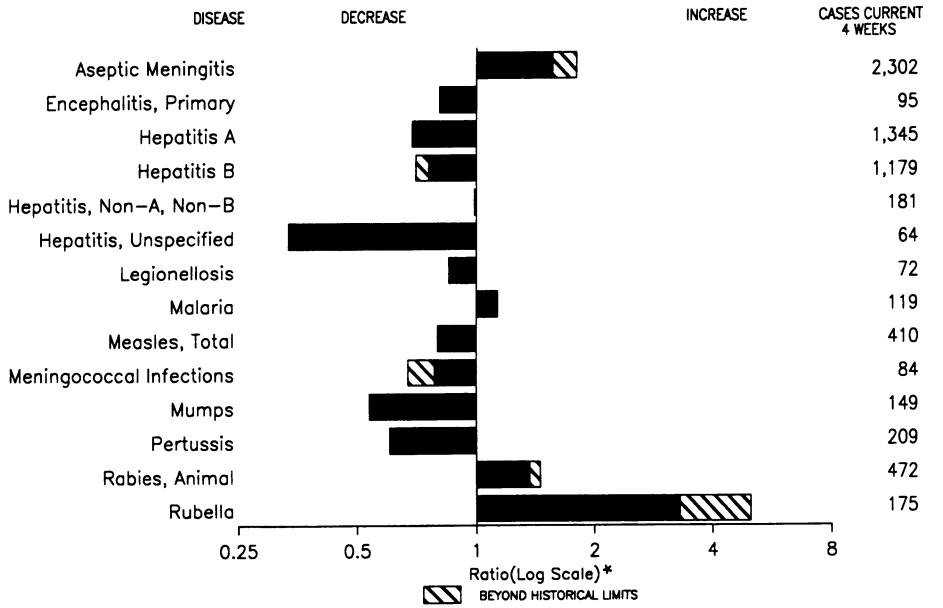
(Continued on page 643)

TABLE 1. Drug susceptibility of nine *Mycobacterium haemophilum* isolates — New York City metropolitan area, 1990–1991

Drug	Concentration tested (mg/mL)	Susceptible*	
		No.	(%)
Capreomycin	10.0	4	(44)
Ciprofloxacin	2.0	9	(100)
Cycloserine	30.0	9	(100)
Ethambutol	5.0	0	(0)
Ethionamide	10.0	1	(11)
Isoniazid	0.2	0	(0)
Isoniazid	1.0	1	(11)
Isoniazid	5.0	2	(22)
Kanamycin	5.0	8	(89)
Pyrazinamide	25.0	0	(0)
Rifabutin	2.0	9	(100)
Rifampin	1.0	5	(56)
Streptomycin	2.0	0	(0)
Streptomycin	10.0	2	(22)

*An isolate was considered susceptible if growth on drug-containing medium was <1% of growth in control medium.

FIGURE I. Notifiable disease reports, comparison of 4-week totals ending September 14, 1991, with historical data — United States



*Ratio of current 4-week total to the 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 September 14, 1991 (37th Week)

	Cum. 1991		Cum. 1991
AIDS	30,802	Measles: imported	169
Anthrax	-	indigenous	8,325
Botulism: Foodborne	12	Plague	4
Infant	52	Poliomyelitis, Paralytic*	-
Other	4	Psittacosis	62
Brucellosis	52	Rabies, human	2
Cholera	17	Syphilis, primary & secondary	28,904
Congenital rubella syndrome	13	Syphilis, congenital, age < 1 year	15
Diphtheria	2	Tetanus	34
Encephalitis, post-infectious	62	Toxic shock syndrome	212
Gonorrhea	415,168	Trichinosis	58
Haemophilus influenzae (invasive disease)	2,140	Tuberculosis	15,669
Hansen Disease	109	Tularemia	134
Leptospirosis	43	Typhoid fever	274
Lyme Disease	5,991	Typhus fever, tickborne (RMSF)	459

*Three suspected cases of poliomyelitis have been reported in 1991; none of the 8 suspected cases in 1990 have been confirmed to date. Five of the 13 suspected cases in 1989 were confirmed and all were vaccine associated.

TABLE II. Cases of selected notifiable diseases, United States, weeks ending September 14, 1991, and September 15, 1990 (37th Week)

Reporting Area	AIDS	Aseptic Meningitis	Encephalitis		Gonorrhea		Hepatitis (Viral), by type				Legionellosis	Lyme Disease
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum. 1991	Cum. 1991	Cum. 1991	Cum. 1991	Cum. 1991	Cum. 1990	Cum. 1991	Cum. 1991	Cum. 1991	Cum. 1991	Cum. 1991	Cum. 1991
UNITED STATES	30,802	9,066	617	62	415,168	480,757	16,807	11,918	2,092	894	810	5,991
NEW ENGLAND	1,291	1,058	23	1	10,279	13,149	409	607	54	23	54	1,134
Maine	46	110	3	-	121	154	18	18	2	-	2	-
N.H.	32	125	5	-	154	157	25	21	5	-	7	28
Vt.	13	202	3	-	40	42	21	12	6	-	2	5
Mass.	747	307	10	1	4,465	5,485	193	422	29	20	40	179
R.I.	62	307	-	-	832	814	79	19	10	3	3	107
Conn.	391	7	2	-	4,667	6,497	73	115	2	-	-	815
MID. ATLANTIC	8,180	1,458	46	11	47,637	63,964	1,576	1,102	218	15	220	3,580
Upstate N.Y.	1,016	765	21	7	9,179	9,850	630	418	128	9	82	2,390
N.Y. City	4,653	182	1	-	16,548	27,232	494	145	5	-	24	-
N.J.	1,675	-	-	-	8,206	10,464	200	271	47	-	24	610
Pa.	836	511	24	4	13,704	16,418	252	268	38	6	90	580
E.N. CENTRAL	2,189	1,745	184	7	77,900	90,467	2,177	1,400	340	43	176	171
Ohio	403	681	66	2	23,702	26,475	290	304	137	16	85	108
Ind.	210	114	17	1	8,163	7,959	284	159	1	1	13	8
Ill.	1,020	280	54	4	24,215	28,567	926	207	50	4	17	5
Mich.	401	585	43	-	17,376	21,080	231	450	93	22	33	50
Wis.	155	85	4	-	4,444	6,386	446	280	59	-	28	-
W.N. CENTRAL	793	463	42	7	20,534	24,894	1,703	501	214	19	40	250
Minn.	169	85	21	-	2,105	3,092	303	55	11	2	6	63
Iowa	78	96	-	4	1,427	1,801	40	34	8	3	10	14
Mo.	437	198	12	3	12,613	14,768	457	327	188	9	13	157
N. Dak.	4	5	2	-	30	101	32	4	4	1	1	1
S. Dak.	1	10	4	-	250	175	628	7	1	-	3	1
Nebr.	42	20	2	-	1,268	1,307	174	28	1	-	6	-
Kans.	62	49	1	-	2,841	3,650	69	46	1	4	1	14
S. ATLANTIC	7,273	1,642	126	28	125,063	137,423	1,227	2,477	281	185	133	455
Del.	53	56	2	-	1,984	2,170	7	34	4	2	2	42
Md.	677	160	20	1	12,909	15,706	208	290	48	13	29	172
D.C.	484	51	1	-	6,750	9,498	58	121	1	1	6	2
Va.	543	260	31	3	12,354	13,095	123	155	24	123	11	104
W. Va.	47	30	18	-	874	879	19	42	2	12	-	31
N.C.	351	214	26	-	25,090	21,402	119	385	98	-	14	58
S.C.	249	34	-	-	10,242	11,063	33	521	16	3	26	9
Ga.	1,008	235	8	2	29,394	30,259	154	369	38	-	13	22
Fla.	3,861	602	20	22	25,466	33,351	506	560	50	31	32	15
E.S. CENTRAL	735	619	26	-	40,971	41,584	169	976	277	3	41	85
Ky.	122	138	7	-	4,212	4,799	29	131	5	2	15	33
Tenn.	236	189	13	-	14,214	12,308	99	720	251	-	11	39
Ala.	235	229	6	-	12,373	14,401	31	116	17	1	14	13
Miss.	142	63	-	-	10,172	10,076	10	9	4	-	1	-
W.S. CENTRAL	2,999	1,047	70	1	47,933	52,087	2,344	1,599	91	178	32	59
Ark.	129	53	24	-	5,791	6,270	217	75	3	5	7	20
La.	506	88	11	-	10,769	9,877	88	212	6	5	6	1
Okla.	142	2	3	-	4,946	4,638	196	166	39	12	10	29
Tex.	2,222	904	32	1	26,427	31,302	1,843	1,146	43	156	9	9
MOUNTAIN	877	164	14	2	8,466	10,304	2,637	710	115	111	60	13
Mont.	22	16	1	-	72	127	68	57	4	5	4	-
Idaho	17	-	-	-	104	104	68	57	2	1	3	2
Wyo.	13	-	-	-	73	131	90	6	-	-	-	8
Colo.	313	56	4	1	2,313	2,923	422	102	50	18	13	-
N. Mex.	64	16	-	-	740	915	664	165	10	29	3	-
Ariz.	177	40	9	1	3,182	3,920	841	126	15	47	22	-
Utah	82	13	-	-	223	305	226	54	12	11	4	-
Nev.	189	23	-	-	1,759	1,879	258	143	22	-	11	3
PACIFIC	6,465	870	86	5	36,385	46,885	4,565	2,546	502	317	54	244
Wash.	392	-	8	1	3,198	4,151	416	319	106	18	5	2
Oreg.	183	-	-	-	1,458	1,811	285	227	89	8	2	-
Calif.	5,751	798	76	4	30,534	39,588	3,750	1,940	290	290	45	242
Alaska	15	31	2	-	619	865	86	25	13	1	-	-
Hawaii	124	41	-	-	576	470	28	35	4	-	2	-
Guam	2	-	-	-	-	218	-	-	-	-	-	-
P.R.	1,258	194	2	3	423	482	70	329	146	42	-	-
V.I.	12	-	-	-	280	310	1	9	-	-	-	-
Amer. Samoa	-	-	-	-	-	70	-	-	-	-	-	-
C.N.M.I.	-	-	-	-	-	156	-	-	-	-	-	-

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

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending September 14, 1991, and September 15, 1990 (37th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
	Cum. 1991	1991	Cum. 1991	1991	Cum. 1991	Cum. 1990	Cum. 1991	1991	Cum. 1991	1991	Cum. 1991	Cum. 1990	1991	Cum. 1991	Cum. 1990
UNITED STATES	823	159	8,325	3	169	21,276	1,533	41	3,045	45	1,650	2,830	145	1,253	786
NEW ENGLAND	54	-	52	1	13	285	115	1	24	2	228	295	-	4	8
Maine	1	-	2	-	-	29	10	-	-	-	49	10	-	-	1
N.H.	2	-	-	-	-	8	12	1	4	-	17	40	-	1	1
Vt.	4	-	5	-	-	1	13	-	4	-	4	7	-	-	-
Mass.	26	-	25	-	10	26	63	-	1	2	136	218	-	2	2
R.I.	7	-	2	-	-	30	1	-	3	-	-	3	-	-	1
Conn.	14	-	18	1†	3	191	16	-	12	-	22	17	-	1	3
MID. ATLANTIC	125	-	4,372	-	6	1,343	163	2	233	5	145	418	2	561	11
Upstate N.Y.	38	-	334	-	4	313	84	2	85	5	96	283	2	539	10
N.Y. City	44	-	1,710	-	-	328	9	-	-	-	-	-	-	-	-
N.J.	34	-	791	-	1	327	34	-	55	-	1	32	-	-	-
Pa.	9	-	1,537	-	1	375	36	-	93	-	48	103	-	22	1
E.N. CENTRAL	65	-	71	-	11	3,518	241	2	275	3	268	758	136	317	31
Ohio	15	-	1	-	2	537	79	-	62	-	87	139	136	283	1
Ind.	3	-	1	-	2	416	19	-	6	2	60	97	-	2	-
Ill.	24	-	26	-	-	1,340	68	-	105	-	51	305	-	6	18
Mich.	20	-	41	-	-	473	52	2	83	1	33	64	-	25	9
Wis.	3	-	2	-	7	752	23	-	19	-	37	153	-	1	3
W.N. CENTRAL	26	-	33	-	14	845	83	-	91	5	125	135	-	17	14
Minn.	7	-	7	-	13	362	17	-	17	-	45	21	-	6	9
Iowa	5	-	16	-	-	26	10	-	16	1	15	17	-	6	4
Mo.	6	-	-	-	1	98	28	-	26	4	46	75	-	5	-
N. Dak.	1	-	-	-	-	-	1	-	2	-	2	2	-	-	1
S. Dak.	1	-	-	-	-	23	2	-	1	-	3	1	-	-	-
Nebr.	1	-	1	-	-	106	6	-	5	-	8	7	-	-	-
Kans.	5	-	9	-	-	230	19	-	24	-	6	12	-	-	-
S. ATLANTIC	179	11	451	-	20	1,248	282	18	1,086	10	193	234	-	13	18
Del.	2	-	21	-	-	11	2	-	6	-	-	7	-	-	-
Md.	51	-	173	-	1	212	27	1	207	2	48	55	-	6	2
D.C.	9	-	-	-	-	22	13	-	23	-	-	14	-	1	1
Va.	38	-	24	-	5	84	29	-	49	-	18	17	-	-	1
W. Va.	2	-	-	-	-	6	12	1	17	-	9	17	-	-	-
N.C.	12	-	40	-	3	30	49	2	226	3	31	63	-	2	-
S.C.	9	-	13	-	-	4	28	2	347	1	11	5	-	-	-
Ga.	17	-	10	-	5	321	57	-	38	-	34	24	-	-	-
Fla.	39	11	170	-	6	558	65	12	173	4	42	32	-	4	14
E.S. CENTRAL	19	-	7	1	3	182	103	1	156	4	71	126	-	100	4
Ky.	2	-	1	-	1	42	37	-	-	-	-	-	-	-	1
Tenn.	10	-	6	-	1	89	32	-	128	1	28	59	-	100	3
Ala.	7	-	-	1§	1	25	32	1	9	3	41	60	-	-	-
Miss.	-	-	-	-	-	26	2	-	19	-	2	7	-	-	-
W.S. CENTRAL	58	7	175	-	14	4,093	112	6	342	3	57	110	1	7	66
Ark.	7	-	-	-	5	42	17	-	42	-	5	13	-	1	3
La.	15	-	-	-	-	10	24	1	23	1	13	26	-	-	-
Okla.	7	-	-	-	-	174	13	1	14	2	25	40	-	-	1
Tex.	29	7	175	-	9	3,867	58	4	263	-	14	31	1	6	62
MOUNTAIN	34	129	1,170	-	19	912	59	1	256	2	166	252	4	17	109
Mont.	1	-	-	-	-	1	10	-	-	1	3	29	-	-	14
Idaho	2	20	427	-	2	26	7	-	8	-	23	47	-	-	49
Wyo.	-	-	1	-	2	15	1	1	4	-	3	-	-	-	-
Colo.	9	-	1	-	5	137	11	-	123	-	72	80	-	1	4
N. Mex.	6	-	117	-	5	93	8	N	N	1	31	17	-	-	-
Ariz.	13	81	393	-	-	296	16	-	96	-	8	49	-	2	32
Utah	2	28	213	-	4	127	-	-	13	-	24	26	4	10	2
Nev.	1	-	18	-	1	217	6	-	12	-	2	4	-	4	8
PACIFIC	263	12	1,994	1	69	8,850	375	10	582	11	397	502	2	217	525
Wash.	18	-	46	-	15	254	51	-	154	1	97	136	-	8	-
Oreg.	5	2	49	-	33	212	46	N	N	6	60	60	-	3	9
Calif.	236	10	1,895	1†	13	8,291	269	9	397	4	193	264	2	201	503
Alaska	-	-	-	-	3	80	7	-	10	-	12	4	-	1	-
Hawaii	4	-	4	-	5	13	2	1	21	-	35	38	-	4	13
Guam	-	U	-	U	-	1	-	U	-	U	-	-	U	-	-
P.R.	1	-	93	-	1	1,636	15	-	9	-	44	6	-	1	-
V.I.	2	U	-	U	2	24	-	U	9	U	-	-	U	-	-
Amer. Samoa	-	U	-	U	-	521	-	U	-	U	-	-	U	-	-
C.N.M.I.	-	U	-	U	-	-	-	U	-	U	-	4	U	-	-

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

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending September 14, 1991, and September 15, 1990 (37th Week)

Reporting Area	Syphilis (Primary & Secondary)		Toxic-shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1991	Cum. 1990	Cum. 1991	Cum. 1991	Cum. 1990	Cum. 1991	Cum. 1991	Cum. 1991	Cum. 1991
UNITED STATES	28,904	34,529	212	15,669	16,486	134	274	459	4,499
NEW ENGLAND	743	1,219	11	438	385	3	29	5	51
Maine	1	7	4	30	-	-	1	-	-
N.H.	12	44	1	5	3	-	1	-	2
Vt.	1	1	-	4	7	-	-	-	-
Mass.	353	474	6	207	211	3	25	4	-
R.I.	40	15	-	69	49	-	-	-	-
Conn.	336	678	-	123	115	-	2	1	49
MID. ATLANTIC	4,408	6,817	33	3,600	3,949	1	52	17	1,531
Upstate N.Y.	103	617	16	240	298	1	11	7	574
N.Y. City	2,148	3,206	1	2,221	2,492	-	25	-	-
N.J.	948	1,125	-	624	657	-	13	6	687
Pa.	1,209	1,869	16	515	502	-	3	4	270
E.N. CENTRAL	3,539	2,441	40	1,596	1,573	6	19	34	124
Ohio	465	385	19	237	273	1	3	20	14
Ind.	122	62	-	156	138	-	-	9	8
Ill.	1,690	975	13	838	796	3	5	3	29
Mich.	886	739	8	294	306	2	10	2	31
Wis.	376	280	-	71	60	-	1	-	42
W.N. CENTRAL	510	382	33	367	423	40	5	31	638
Minn.	47	71	7	69	73	1	2	-	228
Iowa	52	50	6	52	43	-	-	1	125
Mo.	363	199	11	161	217	33	1	19	16
N. Dak.	-	1	-	5	17	-	-	-	72
S. Dak.	1	2	1	26	9	4	-	1	143
Nebr.	11	9	1	14	15	-	2	5	14
Kans.	36	50	7	40	49	2	-	5	40
S. ATLANTIC	8,785	11,183	20	2,974	3,071	4	53	200	1,046
Del.	117	131	1	21	30	-	-	-	118
Md.	701	834	1	266	239	-	10	21	388
D.C.	554	754	1	132	117	-	2	-	10
Va.	644	641	4	256	260	-	8	11	181
W. Va.	21	11	-	50	52	-	1	4	42
N.C.	1,396	1,255	8	393	393	1	3	114	15
S.C.	1,104	735	2	305	340	1	3	30	78
Ga.	2,187	2,881	-	587	506	1	5	19	187
Fla.	2,061	3,941	3	964	1,134	1	21	1	27
E.S. CENTRAL	3,258	3,019	9	1,074	1,184	16	2	85	124
Ky.	69	67	4	247	281	4	2	20	36
Tenn.	1,072	1,168	5	323	315	11	-	49	29
Ala.	1,223	959	-	280	368	1	-	16	59
Miss.	894	825	-	224	220	-	-	-	-
W.S. CENTRAL	5,287	5,816	14	1,931	1,984	38	20	77	483
Ark.	478	366	3	166	254	26	-	17	36
La.	1,814	1,795	-	184	236	-	4	-	5
Okla.	138	175	4	122	144	11	2	60	138
Tex.	2,857	3,480	7	1,459	1,350	1	14	-	304
MOUNTAIN	438	635	27	416	390	21	7	7	167
Mont.	6	-	1	6	22	8	-	5	36
Idaho	4	6	-	4	10	-	-	-	3
Wyo.	9	1	-	3	4	1	-	-	68
Colo.	58	41	5	33	20	6	1	2	12
N. Mex.	24	32	6	54	81	2	1	-	4
Ariz.	264	456	5	227	172	1	4	-	30
Utah	6	8	10	39	32	3	-	-	9
Nev.	67	91	-	50	49	-	1	-	5
PACIFIC	1,936	3,017	25	3,273	3,527	5	87	3	335
Wash.	126	287	3	201	197	2	4	2	1
Oreg.	54	101	-	80	93	2	4	1	5
Calif.	1,748	2,600	22	2,804	3,076	1	76	-	325
Alaska	4	14	-	45	39	-	-	-	3
Hawaii	4	15	-	143	122	-	3	-	1
Guam	-	2	-	-	33	-	-	-	-
P.R.	315	216	-	167	66	-	9	-	52
V.I.	78	10	-	2	4	-	-	-	-
Amer. Samoa	-	-	-	-	14	-	-	-	-
C.N.M.I.	-	3	-	-	44	-	-	-	-

U: Unavailable

TABLE III. Deaths in 121 U.S. cities,* week ending September 14, 1991 (37th Week)

Reporting Area	All Causes, By Age (Years)						P&I**
	All Ages	≥65	45-64	25-44	1-24	<1	Total
NEW ENGLAND	534	367	95	49	12	11	45
Boston, Mass.	152	100	23	20	5	4	16
Bridgeport, Conn.	30	21	6	2	1	-	4
Cambridge, Mass.	23	15	7	1	-	-	3
Fall River, Mass.	18	17	-	1	-	-	-
Hartford, Conn.	53	34	7	8	3	1	3
Lowell, Mass.	19	16	2	1	-	-	-
Lynn, Mass.	15	10	3	1	1	-	2
New Bedford, Mass.	25	22	3	-	-	-	-
New Haven, Conn.	45	27	11	5	1	1	4
Providence, R.I.	40	26	10	3	1	-	2
Somerville, Mass.	7	4	1	2	-	-	-
Springfield, Mass.	38	24	11	1	-	2	1
Waterbury, Conn.	24	17	5	2	-	-	4
Worcester, Mass.	45	34	6	2	-	3	6
MID. ATLANTIC	2,620	1,674	474	329	78	65	131
Albany, N.Y.	54	43	5	4	2	-	2
Allentown, Pa.	19	18	-	1	-	-	2
Buffalo, N.Y.	104	71	22	7	1	3	3
Camden, N.J.	29	17	6	5	-	1	2
Elizabeth, N.J.	30	21	6	3	-	-	4
Erie, Pa.†	44	33	9	2	-	-	2
Jersey City, N.J.	54	30	11	8	2	3	1
New York City, N.Y.	1,328	817	241	202	42	26	62
Newark, N.J.	79	23	28	21	3	4	2
Paterson, N.J.	41	13	8	10	8	2	-
Philadelphia, Pa.	394	252	71	40	13	18	17
Pittsburgh, Pa.†	78	62	12	3	1	-	6
Reading, Pa.	36	29	7	-	-	-	4
Rochester, N.Y.	118	91	11	10	3	3	6
Schenectady, N.Y.	28	16	10	2	-	-	-
Scranton, Pa.†	25	21	3	1	-	-	1
Syracuse, N.Y.	78	60	11	1	2	4	5
Trenton, N.J.	43	30	7	5	-	1	7
Utica, N.Y.	21	14	3	4	-	-	3
Yonkers, N.Y.	17	13	3	-	1	-	2
E.N. CENTRAL	2,205	1,319	448	227	141	70	86
Akron, Ohio	35	27	5	1	-	2	-
Canton, Ohio	41	34	5	2	-	-	2
Chicago, Ill.	491	178	124	89	90	10	11
Cincinnati, Ohio	158	102	40	11	4	1	14
Cleveland, Ohio	159	81	44	13	6	15	3
Columbus, Ohio	128	86	23	11	4	4	3
Dayton, Ohio	122	83	25	8	1	5	10
Detroit, Mich.	235	130	49	33	14	9	4
Evansville, Ind.	34	25	4	4	1	-	1
Fort Wayne, Ind.	55	37	13	4	1	-	1
Gary, Ind.	25	12	7	3	2	1	1
Grand Rapids, Mich.	74	50	13	3	3	5	6
Indianapolis, Ind.	179	124	28	15	5	7	11
Madison, Wis.	49	32	3	10	-	4	2
Milwaukee, Wis.	130	103	20	4	1	2	9
Peoria, Ill.	54	43	6	3	1	1	1
Rockford, Ill.	34	26	4	2	1	1	-
South Bend, Ind.	33	27	4	1	1	-	1
Toledo, Ohio	101	76	18	4	2	1	5
Youngstown, Ohio	68	43	13	6	4	2	1
W.N. CENTRAL	769	556	107	52	29	23	35
Des Moines, Iowa	30	23	2	2	1	2	1
Duluth, Minn.	33	28	4	1	-	-	2
Kansas City, Kans.	25	16	6	1	1	1	-
Kansas City, Mo.	101	69	17	11	2	2	1
Lincoln, Nebr.	59	47	9	-	1	2	-
Minneapolis, Minn.	125	97	16	10	2	-	7
Omaha, Nebr.	105	79	16	2	4	4	4
St. Louis, Mo.	153	104	17	14	11	7	11
St. Paul, Minn.	88	60	15	5	4	4	8
Wichita, Kans.	50	33	5	6	3	1	1
S. ATLANTIC	1,315	779	268	150	49	68	52
Atlanta, Ga.	144	65	41	22	4	12	1
Baltimore, Md.	171	102	39	22	5	3	10
Charlotte, N.C.	113	76	22	8	4	3	3
Jacksonville, Fla.	133	85	28	11	7	2	15
Miami, Fla.	128	65	30	24	1	8	1
Norfolk, Va.	69	46	10	4	4	5	2
Richmond, Va.	70	48	11	6	1	4	3
Savannah, Ga.	46	29	5	10	1	1	2
St. Petersburg, Fla.	67	52	8	3	3	1	-
Tampa, Fla.	131	87	29	11	2	2	12
Washington, D.C.	223	111	41	28	16	27	3
Wilmington, Del.	20	13	4	1	1	-	-
E.S. CENTRAL	642	422	130	49	20	21	30
Birmingham, Ala.	98	65	18	11	2	2	1
Chattanooga, Tenn.	68	47	13	5	3	-	2
Knoxville, Tenn.	49	33	8	4	1	3	2
Louisville, Ky.	60	37	14	3	3	3	4
Memphis, Tenn.	127	71	29	12	8	7	6
Mobile, Ala.	54	36	11	5	1	1	5
Montgomery, Ala.	62	44	13	4	-	1	-
Nashville, Tenn.	124	89	24	5	2	4	10
W.S. CENTRAL	1,024	627	185	129	62	20	41
Austin, Tex.	68	46	12	4	5	1	5
Baton Rouge, La.	48	32	6	9	1	-	1
Corpus Christi, Tex.	41	26	8	7	-	-	2
Dallas, Tex.	226	140	43	29	8	6	4
El Paso, Tex.	70	45	15	10	-	-	5
Ft. Worth, Tex.	71	39	16	10	4	2	3
Houston, Tex.§	U	U	U	U	U	U	U
Little Rock, Ark.	65	46	9	8	1	1	-
New Orleans, La.	89	28	10	18	31	2	-
San Antonio, Tex.	197	122	39	24	7	5	8
Shreveport, La.	50	30	10	6	2	1	6
Tulsa, Okla.	99	73	17	4	3	2	7
MOUNTAIN	635	396	124	65	24	26	24
Albuquerque, N.M.	76	46	15	12	2	1	1
Colo. Springs, Colo.	48	30	9	5	3	1	2
Denver, Colo.	92	57	10	10	6	9	5
Las Vegas, Nev.	111	69	28	9	3	2	3
Ogden, Utah	20	12	5	2	-	1	2
Phoenix, Ariz.	115	70	16	14	6	9	1
Pueblo, Colo.	12	8	4	-	-	-	1
Salt Lake City, Utah	42	28	6	4	1	3	2
Tucson, Ariz.	119	76	31	9	3	-	7
PACIFIC	1,875	1,208	343	218	63	38	110
Berkeley, Calif.	16	9	1	5	-	1	1
Fresno, Calif.	82	54	13	7	4	4	11
Glendale, Calif.	19	16	1	2	-	-	-
Honolulu, Hawaii	93	57	22	7	4	3	13
Long Beach, Calif.	82	49	20	7	3	3	6
Los Angeles, Calif.	546	319	109	85	24	4	26
Oakland, Calif.§	U	U	U	U	U	U	U
Pasadena, Calif.	37	26	4	3	2	2	3
Portland, Oreg.	103	74	16	9	2	2	1
Sacramento, Calif.	164	114	26	14	3	7	7
San Diego, Calif.	137	79	29	19	8	2	16
San Francisco, Calif.	164	94	34	29	3	4	1
San Jose, Calif.	167	119	25	15	7	1	15
Seattle, Wash.	131	89	27	12	2	1	2
Spokane, Wash.	57	46	8	-	-	3	3
Tacoma, Wash.	77	63	8	4	1	1	5
TOTAL	11,619††	7,348	2,174	1,268	478	342	554

*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.

§Report for this week is unavailable (U).

Mycobacterium haemophilum — *Continued*

with isolates submitted to CDC suggest that infections with *M. haemophilum* may occur more commonly than is recognized or that they are increasing in incidence.

Because the number of immunocompromised persons is increasing, the incidence of *M. haemophilum* infections is likely to increase. Clinicians should consider this pathogen in any immunocompromised patient who has cutaneous ulcerating lesions, joint effusions, or osteomyelitis. Lesions can be screened for mycobacteria using an acid-fast stain. If acid-fast bacilli are seen, *M. haemophilum* should be considered. Appropriate media and incubation conditions include Lowenstein-Jensen medium with ferric ammonium citrate (*9*) or Middlebrook 7H10 agar with an x-factor strip (*11*). Specimens should be incubated for at least 6 weeks at 32 C. Definitive identification of cultured isolates can be made through biochemical profiles and mycolic acid patterns shown by HPLC.

Optimal strategies to treat *M. haemophilum* infections are unclear because the small number of reported cases has not permitted comparisons of therapeutic modalities. For the same reason, characteristic drug-susceptibility patterns have not been defined. In addition, the relation between in vitro drug susceptibilities and clinical response is not known for this organism. These issues may be resolved as additional cases are identified through enhanced clinical awareness and appropriate testing.

References

1. Sompolinsky D, Lagziel A, Naveh D, Yankilevitz T. *Mycobacterium haemophilum* sp. nov., a new pathogen of humans. Int J Syst Bacteriol 1978;28:67–75.
2. Davis BR, Brumbach J, Sanders WJ, Wolinsky E. Skin lesions caused by *Mycobacterium haemophilum*. Ann Intern Med 1982;97:723–4.
3. Males BM, West TE, Bartholomew WR. *Mycobacterium haemophilum* infection in a patient with acquired immune deficiency syndrome. J Clin Microbiol 1987;25:186–90.
4. Rogers PL, Walker RE, Lane HC, et al. Disseminated *Mycobacterium haemophilum* infection in two patients with the acquired immunodeficiency syndrome. Am J Med 1988;84:640–2.
5. McBride ME, Rudolph AH, Tschen JA, et al. Diagnostic and therapeutic considerations for cutaneous *Mycobacterium haemophilum* infections. Arch Dermatol 1991;127:276–7.
6. Saubolle MA, Rudinsky M, Merritt ES, Williams J, Raines JM, Dimler M. *Mycobacterium haemophilum* infection in two otherwise normal pediatric patients [Abstract]. In: Program and abstracts of the 91st annual meeting of the American Society for Microbiology. Washington, DC: American Society for Microbiology, 1991:391.
7. Mezo A, Jennis F, McCarthy SW, Dawson DJ. Unusual mycobacteria in 5 cases of opportunistic infections. Pathology 1979;11:377–84.
8. Gouby A, Branger B, Oules R, Ramuz M. Two cases of *Mycobacterium haemophilum* infection in a renal-dialysis unit. J Med Microbiol 1988;25:299–300.
9. Dawson DJ, Jennis F. Mycobacteria with a growth requirement for ferric ammonium citrate, identified as *Mycobacterium haemophilum*. J Clin Microbiol 1980;11:190–2.
10. Wayne LG, Kubica GP. Genus *Mycobacterium*. In: Sneath PHA, Mair NS, Sharpe ME, Holt JG, eds. Bergey's manual of systematic bacteriology. Baltimore: Williams & Wilkins, 1986:1436–57.
11. Vadney FS, Hawkins JE. Evaluation of a simple method for growing *Mycobacterium haemophilum*. J Clin Microbiol 1985;22:884–5.

Current Trends

Infant Mortality — United States, 1988

In 1988, 38,910 infants <1 year of age died in the United States, 502 fewer than in 1987. The infant mortality rate of 10.0 infant deaths per 1000 live births was the lowest final rate ever recorded; the rate was 10.1 in 1987. This report summarizes final 1988 infant mortality data based on information from death certificates compiled by CDC's National Center for Health Statistics' Vital Statistics System (*1*) and compares findings with those for 1987.

In this report, cause-of-death statistics are based on the underlying cause of death* recorded on the death certificate by the attending physician, medical examiner, or coroner in a manner specified by the World Health Organization and endorsed by CDC.

In 1988, for white infants, the mortality rate was 8.5 per 1000 live births, compared with 8.6 in 1987; the rate for black infants was 17.6 per 1000 live births, compared with 17.9 in 1987.

From 1987 to 1988, the neonatal (infants <28 days of age) mortality rate declined from 6.5 to 6.3 deaths per 1000 live births. In 1988, the neonatal mortality rate for white infants was 5.4 per 1000 live births, compared with 5.5 in 1987; the rate for black infants was 11.7 per 1000 live births, compared with 11.5 in 1987.

The postneonatal (infants aged 28 days–11 months) mortality rate per 1000 live births in 1988 was 3.6 for the third consecutive year. In 1988, for white infants, the postneonatal mortality rate also remained the same as the previous 2 years (3.1 per 1000); for black infants, the rate was 6.2 per 1000, compared with 6.1 per 1000 in 1987.

The rank order of the 10 leading causes of infant death differed by race (Table 1). For white infants, the leading cause of death was congenital anomalies, accounting for 24.8% of all deaths among white infants. For black infants, the leading cause of death was sudden infant death syndrome (SIDS), accounting for 12.8% of all deaths among black infants. Four of the 10 leading causes accounted for 42.2% of the difference in infant mortality rates for black and white infants (disorders relating to short gestation and unspecified low birth weight, 17.9% of the difference; SIDS, 11.2%; respiratory distress syndrome, 7.9%; and newborn affected by maternal complications of pregnancy, 5.2%).

The four leading causes of death accounted for 54.3% of all deaths among white infants and 45.3% of all deaths among black infants.

Reported by: Div of Vital Statistics, National Center for Health Statistics, CDC.

Editorial Note: Infant mortality is one of the most widely used general indices of health in the United States and other countries. The United States continues to have an infant mortality rate higher than that in many other developed countries.

The decrease in infant mortality has slowed for both white and black infants—since the late 1970s for white infants and since 1981 for black infants. Since 1960, neonatal mortality rates have decreased for both races, but the rate for white infants has declined faster than for black infants—an average annual decrease of 4% for white

*Defined by the World Health Organization's *International Classification of Diseases, Ninth Revision* (ICD-9) as "(a) the disease or injury which initiated the train of morbid events leading directly to death, or (b) the circumstances of the accidents or violence which produced the fatal injury."

Infant Mortality — Continued

TABLE 1. Number of infant deaths, mortality rate, and percentage of deaths attributed to each cause, by race — United States, 1988

Race/Rank order	Cause of death (ICD-9 codes)	No.	Rate	% distribution
BLACK				
1	Sudden infant death syndrome (798.0)	1,520	226.2	12.8
2	Disorders relating to short gestation and unspecified low birth weight (765)	1,478	219.9	12.5
3	Congenital anomalies (740–759)	1,410	209.8	11.9
4	Respiratory distress syndrome (769)	957	142.4	8.1
5	Newborn affected by maternal complications of pregnancy (761)	509	75.7	4.3
6	Accidents and adverse effects* (E800–E949)	281	41.8	2.4
7	Infections specific to the perinatal period (771)	279	41.5	2.4
8	Newborn affected by complications of placenta, cord, and membranes (762)	268	39.9	2.3
9	Intrauterine hypoxia and birth asphyxia (768)	232	34.5	2.0
10	Pneumonia and influenza (480–487)	224	33.3	1.9
	All other causes (residual)	4,682	697.0	39.5
All causes		**11,840**	**1,762.0**	**100.0**
WHITE				
1	Congenital anomalies (740–759)	6,442	211.5	24.8
2	Sudden infant death syndrome (798.0)	3,771	123.8	14.5
3	Respiratory distress syndrome (769)	2,148	70.5	8.3
4	Disorders relating to short gestation and unspecified low birth weight (765)	1,726	56.7	6.7
5	Newborn affected by maternal complications of pregnancy (761)	875	28.7	3.4
6	Accidents and adverse effects* (E800–E949)	638	20.9	2.5
7	Newborn affected by complications of placenta, cord, and membranes (762)	615	20.2	2.4
8	Infections specific to the perinatal period (771)	574	18.8	2.2
9	Intrauterine hypoxia and birth asphyxia (768)	527	17.3	2.0
10	Pneumonia and influenza (480–487)	387	12.7	1.5
	All other causes (residual)	8,222	270.0	31.7
All causes		**25,925**	**851.1**	**100.0**
TOTAL†				
1	Congenital anomalies (740–759)	8,141	208.2	20.9
2	Sudden infant death syndrome (798.0)	5,476	140.1	14.1
3	Disorders relating to short gestation and unspecified low birth weight (765)	3,268	83.6	8.4
4	Respiratory distress syndrome (769)	3,181	81.4	8.2
5	Newborn affected by maternal complications of pregnancy (761)	1,411	36.1	3.6
6	Accidents and adverse effects* (E800–E949)	936	23.9	2.4
7	Newborn affected by complications of placenta, cord, and membranes (762)	907	23.2	2.3
8	Infections specific to the perinatal period (771)	878	22.5	2.3
9	Intrauterine hypoxia and birth asphyxia (768)	777	19.9	2.0
10	Pneumonia and influenza (480–487)	641	16.4	1.6
	All other causes (residual)	13,294	340.0	34.2
All causes		**38,910**	**995.3**	**100.0**

*When a death occurs under "accidental" circumstances, the preferred term within the public health community is "unintentional injury."
†Includes races other than black and white.

Infant Mortality — Continued

infants, compared with 3% for black infants. In contrast, from 1960 through 1988, the postneonatal rate decreased faster for black infants than for white infants—an average annual decrease of 3% for black infants and an average annual decrease of 2% for white infants.

One of the national health objectives for the year 2000 is to reduce the infant mortality rate to no more than 7 per 1000 live births compared with 10.1 per 1000 live births in 1987 (*2*). The rate of decline slowed from 4.7% per year during the 1970s to 2.8% per year during the 1980s. If the 2.8% decline during the 1980s continues, the infant mortality objective for the year 2000 will be achieved.

The mortality data presented here are important in tracking the health of the nation by identifying groups of infants at greater risk for particular diseases and premature death, thereby improving the efficiency of health education and disease prevention efforts.

References

1. NCHS. Advance report of final mortality statistics, 1988. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, CDC, 1990. (Monthly vital statistics report; vol 39, no. 7, suppl).
2. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives—full report, with commentary. Washington, DC: US Department of Health and Human Services, Public Health Service, 1991; DHHS publication no. (PHS) 91-50212.

Notice to Readers

Review of Draft Guidelines for HIV Testing Services for Patients in Acute-Care Hospital Settings

CDC is updating guidelines for human immunodeficiency virus testing services for patients in acute-care hospital settings. This draft document is available for review from the National AIDS Clearinghouse, P.O. Box 6003, Rockville, MD 20849-6003; telephone (800) 458-5231. Written comments on these proposed guidelines should be sent to the same address by October 21, 1991.

Errata: Vol. 40, No. 36

In the article "Chlorine Gas Toxicity from Mixture of Bleach with Other Cleaning Products—California," on page 628 the last sentence of the first paragraph should read, "There is no federal requirement that wording on MSDSs be cleared by a regulatory agency as a precondition for sale or distribution of chemical products."

On page 629, the references should have included the following citations:

13. Office of Health Compliance Assistance. Inspection procedures for the hazard communication standard. Washington, DC: Occupational Safety and Health Administration, Office of Health Compliance Assistance, 1990. (Instruction CPL 2-2.38C).
14. NIOSH. Occupational exposure to chlorine: criteria for a recommended standard. Cincinnati, Ohio: US Department of Health, Education, and Welfare, Public Health Service, 1976.

Quarterly Table Reporting Alcohol Involvement in Fatal Motor-Vehicle Crashes

The following table reports alcohol involvement in fatal motor-vehicle crashes in the United States for July–September 1990. This table, published quarterly in *MMWR*, focuses attention on the impact of alcohol use on highway safety.

A fatal crash is considered alcohol-related by the National Highway Traffic Safety Administration (NHTSA) if either a driver or nonoccupant (e.g., pedestrian) had a blood alcohol concentration (BAC) of ≥0.01 g/dL in a police-reported traffic crash. Those with a BAC ≥0.10 g/dL (the legal level of intoxication in most states) are considered intoxicated. Because BAC levels are not available for all persons in fatal crashes, NHTSA estimates the number of alcohol-related traffic fatalities based on a discriminant analysis of information from all cases for which driver or nonoccupant BAC data are available. There may be seasonal trends associated with these data.

Estimated number and percentage of total traffic fatalities* and drivers involved in fatal crashes, by age and blood alcohol concentration (BAC) level — United States, July–September, 1990

		Fatalities by BAC†					
		BAC=0.00		0.01%≤BAC≤0.09%		BAC≥0.10%	
Age (yrs)	No. fatalities	No.	(%)	No.	(%)	No.	(%)
0–14	857	650	(75.8)	74	(8.7)	133	(15.5)
15–20	2,238	1,115	(49.8)	328	(14.7)	794	(35.5)
21–24	1,491	474	(31.8)	205	(13.8)	812	(54.4)
25–34	2,952	963	(32.6)	301	(10.2)	1,689	(57.2)
35–64	3,474	1,652	(47.6)	308	(8.9)	1,514	(43.6)
≥65	1,617	1,297	(80.2)	105	(6.5)	215	(13.3)
Total	**12,629**	**6,151**	**(48.7)**	**1,322**	**(10.5)**	**5,156**	**(40.8)**

		Drivers§ by BAC¶					
		BAC=0.00		0.01%≤BAC≤0.09%		BAC≥0.10%	
Age (yrs)	No. drivers	No.	(%)	No.	(%)	No.	(%)
0–14**	53	51	(97.2)	1	(2.3)	0	(0.5)
15–20	2,691	1,804	(67.1)	287	(10.7)	599	(22.3)
21–24	2,072	1,090	(52.6)	235	(11.3)	747	(36.1)
25–34	4,474	2,510	(56.1)	397	(8.9)	1,567	(35.0)
35–64	5,358	3,877	(72.4)	303	(5.7)	1,179	(22.0)
≥65	1,408	1,266	(89.9)	49	(3.5)	92	(6.6)
Total	**16,056**	**10,599**	**(66.0)**	**1,272**	**(7.9)**	**4,185**	**(26.1)**

*Fatalities include all occupants and nonoccupants who died within 30 days of a motor-vehicle crash on a public roadway.

†BAC distributions are estimates for drivers and nonoccupants involved in fatal crashes. Numbers of fatalities are rounded to the nearest whole number.

§Driver may or may not have been killed.

¶BAC distributions are estimates for drivers involved in fatal crashes. Numbers of drivers are rounded to the nearest whole number.

**Although usually too young to legally drive, persons in this age group are included for completeness of the data set.

Source: Fatal Accident Reporting System, National Highway Traffic Safety Administration.

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

The data in the weekly *MMWR* 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. Inquiries about the *MMWR* Series, including material to be considered for publication, should be directed to: Editor, *MMWR* Series, Mailstop C-08, Centers for Disease Control, Atlanta, GA 30333; telephone (404) 332-4555.

☆U.S. Government Printing Office: 1991-531-130/42033 Region IV

HHS Publication No. (CDC) 91-8017