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Perspectives in Disease Prevention and Health Promotion

**Coronary Heart Disease Attributable to Sedentary Lifestyle —
Selected States, 1988**

During 1987, coronary heart disease (CHD)* accounted for 27.5% of the 2.1 million deaths in the United States (1). Well-documented risk factors for CHD include sedentary lifestyle, elevated serum cholesterol, cigarette smoking, hypertension, diabetes, and obesity (2,3). This report uses data from the 1988 Behavioral Risk Factor Surveillance System (BRFSS) and the 1976–1980 Second National Health and Nutrition Examination Survey (NHANES II) (4) to estimate the number of persons at risk for CHD due to sedentary lifestyle and to compare the prevalence of this risk factor with other risk factors for CHD.

The 37 state health departments participating in the BRFSS used standard questionnaires and methods to conduct monthly random-digit-dialed telephone interviews of adults ≥ 18 years of age (5). For the BRFSS, sedentary lifestyle was defined as no physical activity reported or irregular physical activity reported (i.e., fewer than three times per week and/or < 20 minutes per session). NHANES II, a nationwide probability sample of 28,000 persons aged 6 months to 74 years, described the relationship between age and cholesterol levels for men and women aged 20–57 years; because this sample used direct serum measurement instead of self-report to record cholesterol levels, it provides the best national estimate for this CHD risk factor.

In the BRFSS survey, sedentary lifestyle was the most prevalent (58%) modifiable risk factor for CHD reported, followed by cigarette smoking, 25%; obesity, 22%; hypertension, 17%; and diabetes, 5% (Figure 1). Based on NHANES II, the estimate for serum cholesterol levels ≥ 200 mg/dL among persons 20–74 years of age was 31%.

To reduce the burden of CHD attributable to sedentary lifestyle, 13 states[†] are promoting physical activity as part of comprehensive cardiovascular disease prevention programs. Based on a median adjusted[‡] relative risk of 1.9 (2) (i.e., sedentary persons are approximately twice as likely as physically active persons to die from

*International Classification of Diseases, Ninth Revision (ICD-9), rubrics 410–414, 429.2.

[†]Alabama, Colorado, Florida, Maine, Missouri, New York, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Washington, and West Virginia.

[‡]Adjusted for other selected known risk factors for CHD.

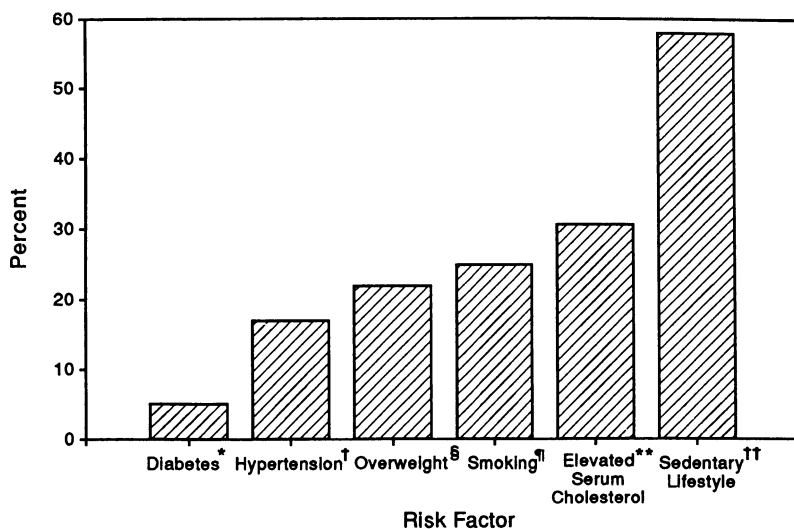
Sedentary Lifestyle – Continued

CHD) and the reported prevalence of sedentary lifestyle ranging from 45% (Washington) to 74% (New York), the percentage of CHD deaths attributable to sedentary lifestyle for these 13 states is 29%–40% (Table 1). Based on population-attributable risk (PAR) (6), the estimated number of preventable CHD deaths (i.e., deaths that might have been prevented if this risk factor had not been present in each of the 13 states) ranged from 1130 (Rhode Island) to 22,225 (New York).

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Editorial Note: These data underscore the high prevalence of sedentary lifestyle and suggest that CHD could be reduced considerably if the U.S. population became more physically active. The estimated number of preventable CHD deaths calculated from these data are substantial; however, the data must be interpreted with caution. The relative risk used in the PAR calculations is a median value obtained from a review of 43 published studies and is adjusted for other selected CHD risk factors, indicating a substantial independent risk for CHD for persons with sedentary lifestyle. However,

FIGURE 1. Prevalences of modifiable risk factors for coronary heart disease – Behavioral Risk Factor Surveillance System, 1988, and Second National Health and Nutrition Evaluation Survey (NHANES II), 1976–1980



*Respondent self-reported having been told by physician that respondent has diabetes.

†Respondent self-reported having been told by a physician that blood pressure is high on multiple checks, or respondent is on medication for high blood pressure.

‡Based on body mass index ≥ 27.8 for men and ≥ 27.3 for women from self-reported height and weight of respondent.

§Respondent self-reported currently smoking.

**Measured ≥ 200 mg/dL by NHANES II.

††Respondent self-reported no physical activity or irregular physical activity (i.e., fewer than three times per week and/or < 20 minutes per session).

Sedentary Lifestyle — Continued

the number of estimated preventable deaths attributed to each factor may not be added to estimate the total population burden of specific CHD risk factors unless the relative risk for each factor was adjusted for the presence or absence of the others. In addition, for a more precise estimate of the number of preventable deaths and years of potential life lost, age-specific data, when available, should be used to describe the prevalence of and relative risk for sedentary lifestyle and CHD death rates. Also, the apparent effects of sedentary lifestyle may be influenced by other, unmeasured risk factors that may not be modifiable by increasing physical activity.

In addition to its beneficial effect on CHD, physical activity confers other important health benefits. Regular physical activity reduces the incidence of, or is otherwise beneficial to, hyperlipidemia, obesity, noninsulin-dependent diabetes mellitus, osteoporosis, psychologic impairment (7), colon cancer (7), stroke (8), and back injury (9).

Several of the 13 state programs to reduce the risk for CHD attributable to sedentary lifestyle are in the planning phase; others already have implemented walking campaigns, worksite activity competitions, and media campaigns to increase awareness and participation. Two handbooks on the promotion of physical activity in the community have been published (10,11); both emphasize a community-based

TABLE 1. State-specific age-adjusted* coronary heart disease (CHD) mortality†, 1987, and prevalence of sedentary lifestyle with associated population-attributable risk (PAR)‡, 1988 — selected states

State	CHD		Sedentary† lifestyle		PAR (%)	Estimated preventable deaths
	No. deaths	Rate**	(%)	95% CI††		
New York	55,702	229.5	73.7	±3.1	39.9	22,225
West Virginia	5,766	226.4	65.9	±2.6	37.2	2,145
Ohio	28,522	209.6	63.2	±2.9	36.2	10,325
South Carolina	7,155	204.6	65.9	±2.6	37.2	2,662
Tennessee	12,283	204.2	67.3	±2.2	37.7	4,631
Rhode Island	3,062	203.2	64.9	±2.5	36.9	1,130
Pennsylvania	35,230	201.3	§§		§§	§§
Maine	3,335	199.3	58.5	±2.9	34.5	1,150
Missouri	13,711	184.8	59.0	±3.0	34.6	4,744
Florida	38,170	182.5	52.7	±2.9	32.2	12,290
Alabama	8,472	169.9	57.8	±2.9	34.2	2,897
Washington	8,928	164.3	45.2	±3.0	28.9	2,580
Colorado	4,918	154.7	¶¶		¶¶	¶¶

*Age-adjusted to the 1980 U.S. population.

†*International Classification of Diseases, Ninth Revision* (ICD-9), rubrics 410–414, 429.2. Data from CDC's National Center for Health Statistics (1).

‡Based on data from the Behavioral Risk Factor Surveillance System (BRFSS), 1988.

PAR = {prevalence estimates [PE] × [relative risk (RR) – 1]} ÷ [PE × (RR – 1) + 1].

¶Defined as no physical activity reported or irregular physical activity reported (i.e., fewer than three times per week and/or <20 minutes per session).

**Per 100,000 population.

††Confidence interval.

§§Pennsylvania initiated the BRFSS in 1989. No 1988 data available.

¶¶Colorado initiated the BRFSS in 1990. No 1988 data available.

Sedentary Lifestyle — Continued

approach and may be useful to public health officials as a resource for both ongoing and new health promotion programs that target sedentary lifestyle.

The current challenge is to effectively target sedentary lifestyle and subsequently reduce the risk for CHD and other chronic diseases associated with physical inactivity. Improved coordination of existing programs, new research, and expanded demonstration projects are needed to meet this challenge. The year 2000 national health objectives will provide guidance for increasing physical activity and fitness (12).

References

1. NCHS. Vital statistics of the United States, 1987. Vol 2, part A. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, CDC, 1990; DHHS publication no. (PHS)90-1101.
2. Powell KE, Thompson PD, Caspersen CJ, Kendrick JS. Physical activity and the incidence of coronary heart disease. *Ann Rev Public Health* 1987;8:253-87.
3. CDC. Chronic disease reports: coronary heart disease mortality—United States, 1986. *MMWR* 1989;38:285-8.
4. NCHS. Total serum cholesterol levels of adults 20-74 years of age: United States, 1976-80. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, CDC, 1986; DHHS publication no. (PHS)86-1686. (Vital and health statistics; series 11, no. 236).
5. Remington PL, Smith MY, Williamson DF, Anda RF, Gentry EM, Hogelin GC. Design, characteristics, and usefulness of state-based behavioral risk factor surveillance: 1981-87. *Public Health Rep* 1988;103:366-75.
6. CDC. Chronic disease reports in the *Morbidity and Mortality Weekly Report (MMWR)*. *MMWR* 1989;38(no. S-1).
7. Powell KE, Caspersen CJ, Koplan JP, Ford ES. Physical activity and chronic diseases. *Am J Clin Nutr* 1989;49:999-1006.
8. Salonen JT, Puska P, Tuomilehto J. Physical activity and risk of myocardial infarction, cerebral stroke and death: a longitudinal study in eastern Finland. *Am J Epidemiol* 1982;115:526-37.
9. Cady LD, Bischoff DP, O'Connell MS. Strength and fitness and subsequent back injuries in firefighters. *J Occup Med* 1979;21:269-72.
10. CDC. Promoting physical activity among adults: a CDC community intervention handbook. Atlanta: US Department of Health and Human Services, Public Health Service, 1989.
11. King AC, Haskell WL, Blair S. Promotion of physical activity in the community. Stanford, California: Stanford Center for Research in Disease Prevention, 1988.
12. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives [Draft]. Washington, DC: US Department of Health and Human Services, Public Health Service, 1989.

*Current Trends***Occupational Homicides among Women — United States, 1980-1985**

In 1985, CDC's National Institute for Occupational Safety and Health (NIOSH) initiated the National Traumatic Occupational Fatality (NTOF) project, which provides surveillance of work-related traumatic deaths using data from death certificates (1). During 1980-1985, NTOF indicated that an estimated 7000 fatal work-related injuries occurred each year; >13% of these deaths resulted from homicide (defined as death resulting from injury purposefully inflicted by another person). Among U.S. working women, who represent 47% of the U.S. workforce, homicide was a leading manner of

Homicides — Continued

death from occupational trauma, accounting for 42% of fatal injuries at work. Among men, 12% of occupational fatalities were homicides. This report presents information on the number and rate of homicides among women at work during 1980–1985.

During 1980–1985, NTOF records* from 46 states† and the District of Columbia identified 950 female homicide victims (mean: 158 per year). The 6-year average annual workplace homicide rate was 4.0 deaths per million working women, with a high of 4.8 per million in 1980 and a low of 3.6 per million in 1985. Rates for other years were: 1981, 4.4 per million; 1982, 4.4 per million; 1983, 3.7 per million; and 1984, 3.6 per million.

Victims were 16–93 years of age (mean: 38 years), accounting for 25,787 years of potential life lost before age 65 (YPLL) (an average of 27 YPLL per woman). Women aged 20–34 years accounted for the largest proportion (46%) of victims, with homicide rates of 4.5 deaths per million working women aged 20–24 years and 4.3 deaths per million working women aged 25–34 years. Women ≥65 years of age had the highest age-specific homicide rate (an average annual rate of 11.3 deaths per million working women). The average annual workplace homicide rate for white women was 3.7 deaths per million working women; the rates for black women and women of other races were 6.3 and 7.4 deaths per million working women, respectively. The rate for women of other races was based on small numbers (48 fatalities). Forty-four (92%) of these women were Asian; 22 owned, managed, or worked in retail food establishments such as markets, groceries, and bakeries.

The most common cause of death was assault by firearms: 609 (64%) women died from gunshot wounds. In addition, 181 (19%) women died from stabbings and slashings; 69 (7%) from asphyxiation; 57 (6%) from blunt force injuries; and 34 (4%) from fires, explosions, motor vehicle crashes, poisonings, sexual assaults, or other causes. Gunshot wounds were the most frequent cause of death for women in all age groups from 25 to 54 years of age; in contrast, stabbings and other injuries involving physical contact (e.g., asphyxiation or blunt force trauma) were more common among women ≥65 years of age.

Three hundred eighty-nine (41%) of the women were employed in retail trade; the annual homicide rate in this industry was 8.3 per million working women. In comparison, although 186 (20%) of the victims were employed in service industries, the service sector homicide rate was 1.9 deaths per million working women per year. Six hundred seventy-five (71%) of the victims were employed in one of four occupational categories: sales personnel (179 [19%]); clerical workers (172 [18%]); service employees, which includes public safety employees, (172 [18%]); and executives/managers/administrators, which includes many self-employed women, (152 [16%]).

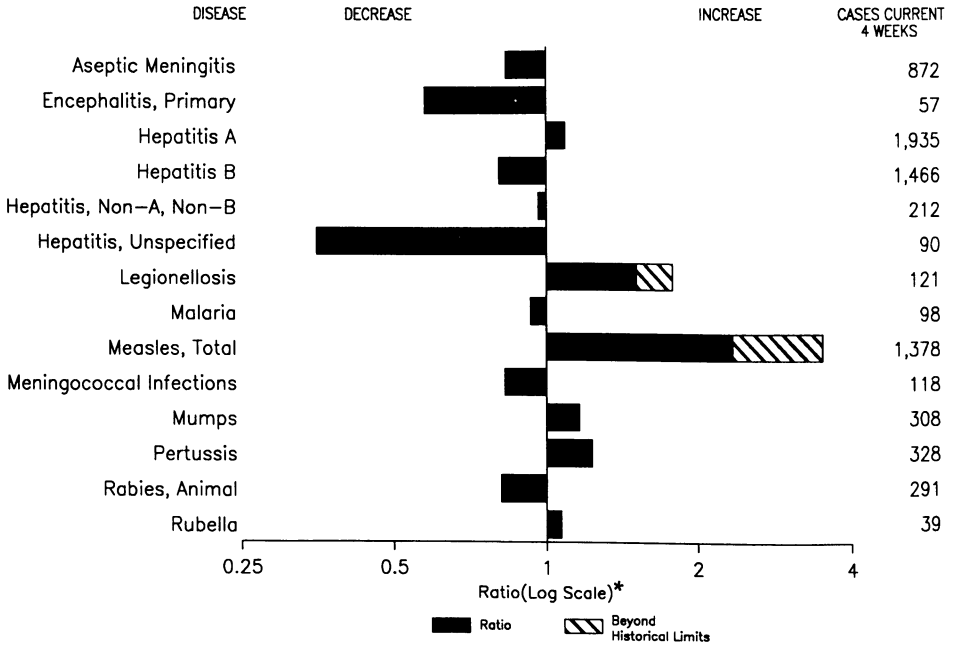
The mean number of homicides per month (based on the mean number of cases per day each month), peaked from December through March and, to a lesser extent,

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*The NTOF database contains information from death certificates provided by the 50 states and the District of Columbia that meet the following criteria: 1) death was related to external causes (*International Classification of Diseases, Ninth Revision*, rubrics E800–E999), 2) the decedent was ≥16 years of age, and 3) the injury occurred at work.

†No information on workplace homicides was included in the NTOF data base from Louisiana, Nebraska, New York, and Oklahoma because, when these data were collected, each had death certification procedures that precluded obtaining this information.

FIGURE I. Notifiable disease reports, comparison of 4-week totals ending August 11, 1990, with historical data — United States



*Ratio of current 4-week total to mean of 15 4-week totals (from comparable, previous, and subsequent 4-week periods for past 5 years).

TABLE I. Summary — cases of specified notifiable diseases, United States, cumulative, week ending August 11, 1990 (32nd Week)

	Cum. 1990		Cum. 1990
AIDS	25,517	Plague	1
Anthrax	-	Poliomyelitis, Paralytic*	1
Botulism: Foodborne	4	Psittacosis	76
Infant	38	Rabies, human	1
Other	5	Syphilis: civilian	29,299
Brucellosis	43	military	160
Cholera	2	Syphilis, congenital, age < 1 year	45
Congenital rubella syndrome	2	Tetanus	35
Diphtheria	1	Toxic shock syndrome	204
Encephalitis, post-infectious	62	Trichinosis	19
Gonorrhea: civilian	401,395	Tuberculosis	13,138
military	5,527	Tularemia	68
Leprosy	127	Typhoid fever	243
Leptospirosis	28	Typhus fever, tickborne (RMSF)	336
Measles: imported	864		
indigenous	16,527		

*Three cases of suspected poliomyelitis have been reported in 1990; five of 13 suspected cases in 1989 were confirmed and all were vaccine-associated.

TABLE II. Cases of specified notifiable diseases, United States, weeks ending August 11, 1990, and August 12, 1989 (32nd Week)

Reporting Area	AIDS	Aseptic Meningitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionel- losis	Leprosy
			Primary	Post-in- fectious			A	B	NA,NB	Unspeci- fied		
	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	25,517	3,961	421	62	401,395	417,826	17,595	12,273	1,312	1,039	698	127
NEW ENGLAND	977	152	15	-	11,250	11,831	366	653	40	42	32	9
Maine	40	6	1	-	122	164	5	25	4	1	3	-
N.H.	44	13	-	-	119	108	6	27	3	2	3	-
Vt.	10	16	2	-	34	43	4	35	3	-	5	-
Mass.	563	48	6	-	4,591	4,604	255	406	20	37	15	8
R.I.	52	46	1	-	690	862	38	31	-	2	6	1
Conn.	268	23	5	-	5,694	6,050	58	129	10	-	-	-
MID. ATLANTIC	7,583	388	33	4	55,281	62,663	2,520	1,717	147	71	217	17
Upstate N.Y.	944	198	28	1	8,170	9,570	690	439	40	20	86	1
N.Y. City	4,295	76	2	1	22,930	25,023	295	470	22	34	42	12
N.J.	1,541	-	1	-	9,613	9,353	250	384	31	-	36	3
Pa.	803	114	2	2	14,568	18,717	1,285	424	54	17	53	1
E.N. CENTRAL	1,815	624	98	11	76,591	74,758	1,371	1,494	100	65	158	2
Ohio	440	137	28	3	23,282	19,842	129	266	36	10	52	-
Ind.	153	108	2	6	6,793	5,370	75	284	5	14	30	-
Ill.	742	100	28	2	24,764	23,812	684	279	27	15	8	1
Mich.	330	252	37	-	17,118	19,360	251	429	23	26	49	1
Wis.	150	27	3	-	4,634	6,374	232	236	9	-	19	-
W.N. CENTRAL	593	170	38	1	21,127	18,381	1,027	563	89	22	33	-
Minn.	93	12	11	1	2,604	1,982	156	76	21	-	-	-
Iowa	25	20	5	-	1,507	1,588	197	43	8	2	3	-
Mo.	357	92	5	-	12,848	11,109	320	338	36	16	19	-
N. Dak.	2	8	-	-	55	87	10	4	2	1	-	-
S. Dak.	2	5	2	-	134	156	131	5	3	-	-	-
Nebr.	29	13	7	-	976	873	57	23	4	-	6	-
Kans.	85	20	8	-	3,003	2,586	156	74	15	3	5	-
S. ATLANTIC	5,359	872	96	18	115,384	113,007	2,128	2,364	201	162	110	4
Del.	58	25	3	-	1,870	1,855	85	61	6	1	5	-
Md.	558	103	13	1	13,053	12,649	760	346	26	8	44	2
D.C.	446	2	-	-	8,034	7,437	12	28	4	-	-	-
Va.	497	130	35	2	10,082	9,533	179	145	29	119	8	-
W. Va.	38	28	12	-	725	871	12	54	4	3	3	-
N.C.	372	81	23	-	18,057	16,703	472	660	79	-	15	1
S.C.	233	12	1	-	9,148	10,338	28	380	12	8	15	-
Ga.	771	170	4	1	25,587	21,802	221	269	7	7	12	-
Fla.	2,386	321	5	14	28,828	31,819	359	421	34	16	8	1
E.S. CENTRAL	644	380	33	1	33,970	32,968	242	928	94	5	45	-
Ky.	111	88	10	-	3,688	3,193	61	322	30	4	18	-
Tenn.	193	59	17	1	10,086	10,888	113	499	48	-	15	-
Ala.	144	161	6	-	11,801	10,582	67	103	14	-	12	-
Miss.	196	72	-	-	8,395	8,305	1	4	2	1	-	-
W.S. CENTRAL	2,910	414	18	6	40,121	43,373	1,781	1,209	58	172	34	28
Ark.	104	7	1	-	5,284	4,973	298	51	6	12	7	-
La.	433	56	4	-	8,071	9,111	117	188	2	6	11	-
Okla.	147	36	2	5	3,673	3,750	354	91	19	16	12	-
Tex.	2,226	315	11	1	23,093	25,539	1,012	879	31	138	4	28
MOUNTAIN	676	188	16	-	7,813	8,917	2,868	932	125	79	28	-
Mont.	9	3	-	-	110	120	79	45	4	4	2	-
Idaho	17	-	-	-	82	120	54	57	8	-	3	-
Wyo.	2	1	1	-	96	57	43	11	5	1	-	-
Colo.	218	43	3	-	1,562	1,927	179	101	28	28	4	-
N. Mex.	54	9	-	-	771	859	566	118	8	2	2	-
Ariz.	213	95	6	-	3,324	3,384	1,453	325	46	30	9	-
Utah	61	21	2	-	248	272	272	65	16	5	3	-
Nev.	102	16	4	-	1,620	2,178	222	210	10	9	5	-
PACIFIC	4,960	773	74	21	39,858	51,928	5,292	2,413	458	421	41	67
Wash.	381	-	5	1	3,315	4,023	896	375	80	18	10	4
Oreg.	184	-	-	-	1,616	1,860	538	267	34	7	-	-
Calif.	4,290	654	64	19	33,983	45,182	3,672	1,691	332	390	30	53
Alaska	22	61	4	-	630	566	126	39	3	1	-	-
Hawaii	83	58	1	1	314	297	60	41	9	5	1	10
Guam	1	2	-	-	136	97	8	1	-	7	-	-
P.R.	902	43	6	-	460	672	107	176	2	19	-	-
V.I.	9	-	-	-	249	419	1	8	-	-	-	-
Amer. Samoa	-	1	-	-	44	30	19	-	-	-	-	10
C.N.M.I.	-	-	-	-	106	63	9	6	-	15	-	3

N: Not notifiable

U: Unavailable

C.N.M.I.: Commonwealth of the Northern Mariana Islands

TABLE II. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending August 11, 1990, and August 12, 1989 (32nd 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	689	39	16,527	38	864	10,616	1,639	68	3,670	95	1,965	1,835	9	691	282
NEW ENGLAND	56	-	236	3	24	303	123	-	36	14	247	243	-	7	6
Maine	1	-	27	-	2	-	10	-	-	4	10	6	-	-	-
N.H.	4	-	-	-	8	8	5	-	8	9	31	5	-	1	4
Vt.	5	-	-	-	1	3	10	-	1	-	6	6	-	-	1
Mass.	30	-	17	31§	7	41	57	-	11	-	184	204	-	2	1
R.I.	4	-	27	-	3	41	12	-	5	-	2	11	-	1	-
Conn.	12	-	165	-	3	210	29	-	11	1	14	11	-	3	-
MID. ATLANTIC	155	10	945	-	149	879	240	3	235	7	338	99	-	5	28
Upstate N.Y.	31	-	199	-	109	137	87	1	103	6	265	42	-	4	11
N.Y. City	51	10	211	-	21	83	33	-	-	-	-	3	-	-	15
N.J.	53	-	173	-	10	418	56	-	54	-	13	23	-	-	2
Pa.	20	-	362	-	9	241	64	2	78	1	60	31	-	1	-
E.N. CENTRAL	32	6	3,076	-	143	3,283	218	16	379	19	423	259	-	30	24
Ohio	5	-	449	-	3	661	71	14	89	8	126	33	-	1	3
Ind.	2	1	317	-	1	51	23	2	15	1	75	17	-	-	-
Ill.	12	-	1,219	-	10	2,079	53	-	114	-	97	91	-	17	19
Mich.	10	5	348	-	125	299	50	-	123	10	54	26	-	9	1
Wis.	3	-	743	-	4	193	21	-	38	-	71	92	-	3	1
W.N. CENTRAL	10	-	750	-	13	631	57	2	105	4	87	117	-	14	6
Minn.	1	-	314	-	3	15	11	-	7	-	17	23	-	9	-
Iowa	2	-	23	-	1	7	1	-	16	3	11	13	-	4	1
Mo.	6	-	78	-	-	363	22	-	46	-	48	72	-	-	4
N. Dak.	-	-	-	-	-	-	1	-	-	-	1	1	-	1	-
S. Dak.	-	-	15	-	8	-	2	-	-	-	1	1	-	-	-
Nebr.	-	-	97	-	1	113	5	-	3	-	2	4	-	-	-
Kans.	1	-	223	-	-	133	15	2	33	1	7	3	-	-	1
S. ATLANTIC	145	4	823	35	207	516	296	28	1,521	9	168	153	-	15	8
Del.	2	U	8	U	3	39	2	U	3	U	3	1	U	-	-
Md.	41	1	190	-	18	60	33	11	877	4	42	16	-	2	2
D.C.	10	-	15	-	7	31	11	2	31	-	14	-	-	1	-
Va.	36	2	70	-	2	21	38	2	87	-	14	9	-	1	-
W. Va.	2	-	6	-	-	51	12	-	40	2	14	20	-	-	-
N.C.	10	-	9	-	15	168	42	-	220	-	39	33	-	-	1
S.C.	-	-	4	-	-	2	21	6	33	-	5	-	-	-	-
Ga.	13	-	80	34§	103	2	54	7	78	3	24	21	-	-	-
Fla.	31	1	441	15	59	142	83	-	152	-	13	53	-	11	5
E.S. CENTRAL	15	3	146	-	2	200	96	2	80	3	106	88	1	2	2
Ky.	2	2	31	-	-	23	31	-	-	-	-	1	-	-	-
Tenn.	8	1	70	-	-	132	35	1	44	2	45	33	1	2	2
Ala.	5	-	19	-	2	45	28	1	12	1	56	45	-	-	-
Miss.	-	-	26	-	-	-	2	-	24	-	5	9	-	-	-
W.S. CENTRAL	30	1	3,889	-	86	3,108	111	6	577	2	49	134	-	4	36
Ark.	2	-	12	-	28	5	16	2	130	-	2	17	-	3	-
La.	1	-	10	-	-	9	26	3	97	1	17	11	-	-	5
Okla.	8	-	174	-	-	105	15	1	104	1	30	25	-	1	1
Tex.	19	1	3,693	-	58	2,989	54	-	246	-	-	81	-	-	30
MOUNTAIN	16	12	735	-	89	356	52	3	291	10	184	464	2	103	35
Mont.	1	-	-	-	1	13	10	-	1	-	26	26	-	13	1
Idaho	3	-	15	-	10	2	5	-	141	-	35	64	-	49	32
Wyo.	-	-	-	-	11	-	-	-	2	-	-	-	-	-	1
Colo.	2	-	90	-	42	71	16	-	21	3	61	38	-	4	-
N. Mex.	1	-	80	-	10	31	6	N	N	1	14	17	-	-	-
Ariz.	8	7	274	-	12	124	4	3	103	6	34	305	-	30	-
Utah	-	-	71	-	-	113	5	-	8	-	10	13	-	1	-
Nev.	1	5	205	-	3	2	6	-	15	-	4	1	2	6	1
PACIFIC	230	3	5,927	-	151	1,340	446	8	446	27	363	278	6	511	137
Wash.	17	-	202	-	69	44	56	1	40	6	87	109	-	-	-
Oreg.	12	3	165	-	44	19	50	N	N	6	35	7	1	10	2
Calif.	196	-	5,474	-	32	1,250	328	7	391	13	207	157	5	491	114
Alaska	2	-	78	-	2	1	8	-	3	-	4	-	-	-	-
Hawaii	3	-	8	-	4	29	4	-	12	2	30	5	-	10	21
Guam	3	U	-	U	1	2	-	U	3	U	-	1	U	-	-
P.R.	2	U	808	U	-	459	9	U	7	U	5	4	U	-	6
V.I.	-	U	21	U	3	4	-	U	7	U	-	-	U	-	-
Amer. Samoa	35	U	132	U	-	-	-	U	15	U	-	-	U	-	-
C.N.M.I.	-	U	-	U	-	-	-	U	7	U	-	-	U	-	-

*For measles only, imported cases includes both out-of-state and international importations.

N: Not notifiable U: Unavailable ¹International [§]Out-of-state

TABLE II. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending August 11, 1990, and August 12, 1989 (32nd 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	29,299	26,277	204	13,138	12,693	68	243	336	2,566
NEW ENGLAND	1,097	1,028	15	386	341	2	18	13	4
Maine	5	5	4	-	12	-	-	-	-
N.H.	40	9	1	3	16	-	-	-	2
Vt.	1	-	-	7	5	-	-	-	-
Mass.	427	315	8	166	178	2	17	12	-
R.I.	9	17	1	119	37	-	-	-	-
Conn.	615	682	1	91	93	-	1	1	2
MID. ATLANTIC	6,104	5,394	21	3,323	2,425	1	63	16	573
Upstate N.Y.	526	567	7	260	200	-	13	8	70
N.Y. City	2,776	2,370	5	2,073	1,346	-	35	-	-
N.J.	1,013	834	-	546	436	1	13	5	183
Pa.	1,789	1,623	9	444	443	-	2	3	320
E.N. CENTRAL	2,046	1,078	49	1,338	1,324	1	21	30	98
Ohio	333	81	19	219	242	1	4	25	5
Ind.	51	42	1	105	124	-	1	-	4
Ill.	843	482	7	678	607	-	11	-	19
Mich.	618	380	22	276	270	-	4	5	26
Wis.	201	93	-	60	81	-	1	-	44
W.N. CENTRAL	279	199	20	347	328	24	1	37	430
Minn.	53	29	1	61	66	-	-	-	159
Iowa	39	21	4	35	28	-	-	-	17
Mo.	152	101	8	170	152	18	1	26	17
N. Dak.	1	3	-	13	11	-	-	-	59
S. Dak.	1	-	-	9	17	3	-	2	139
Nebr.	8	17	3	14	14	1	-	-	4
Kans.	25	28	4	45	40	2	-	9	35
S. ATLANTIC	9,509	9,701	20	2,619	2,672	3	28	135	728
Del.	107	99	1	23	25	-	-	1	13
Md.	727	468	1	206	220	-	7	11	268
D.C.	639	574	1	91	125	-	-	-	-
Va.	515	340	2	231	214	1	2	14	126
W. Va.	33	10	-	47	47	-	-	-	26
N.C.	1,100	608	10	348	306	1	2	72	4
S.C.	600	505	2	293	311	1	1	31	86
Ga.	2,419	2,492	1	424	400	-	1	6	142
Fla.	3,369	4,605	2	956	1,024	-	15	-	63
E.S. CENTRAL	2,618	1,671	9	1,028	1,024	5	2	46	116
Ky.	48	36	2	252	251	1	1	5	31
Tenn.	1,084	724	6	277	281	4	-	34	27
Ala.	785	517	1	316	292	-	1	7	58
Miss.	701	394	-	183	200	-	-	-	-
W.S. CENTRAL	4,490	3,453	11	1,647	1,496	21	8	49	303
Ark.	309	208	-	213	157	14	-	10	35
La.	1,150	803	1	150	201	-	-	1	8
Okl.	144	58	7	119	131	7	2	35	89
Tex.	2,887	2,384	3	1,165	1,007	-	6	3	171
MOUNTAIN	548	467	24	309	293	10	18	7	127
Mont.	-	1	-	10	11	-	-	4	34
Idaho	6	1	2	9	19	-	-	-	1
Wyo.	-	3	2	3	-	3	-	-	42
Colo.	25	53	7	14	20	2	-	-	6
N. Mex.	29	20	3	74	53	3	-	1	6
Ariz.	398	145	7	142	138	-	16	1	25
Utah	6	12	3	18	24	2	-	1	5
Nev.	84	232	-	39	28	-	2	-	8
PACIFIC	2,608	3,286	35	2,141	2,790	1	84	3	187
Wash.	229	272	4	172	150	1	2	-	-
Oreg.	91	152	-	76	93	-	4	1	1
Calif.	2,270	2,850	30	1,749	2,397	-	74	2	164
Alaska	10	3	-	26	42	-	-	-	22
Hawaii	8	9	1	118	108	-	4	-	-
Guam	2	4	-	23	54	-	-	-	-
P.R.	204	349	-	66	200	-	-	-	30
V.I.	3	7	-	4	4	-	-	-	-
Amer. Samoa	-	-	-	8	2	-	1	-	-
C.N.M.I.	1	7	-	29	15	-	4	-	-

U: Unavailable

TABLE III. Deaths in 121 U.S. cities,* week ending August 11, 1990 (32nd Week)

Reporting Area	All Causes, By Age (Years)						P&I**	Total	Reporting Area	All Causes, By Age (Years)						P&I**	Total
	All Ages	≥65	45-64	25-44	1-24	<1				All Ages	≥65	45-64	25-44	1-24	<1		
NEW ENGLAND	527	359	97	42	14	15	45		S. ATLANTIC	1,220	733	230	151	69	37	62	
Boston, Mass.	161	94	36	16	6	9	18		Atlanta, Ga.	171	94	37	27	11	2	6	
Bridgeport, Conn.	33	23	5	3	2	-	3		Baltimore, Md.	213	137	36	23	12	5	17	
Cambridge, Mass.	24	16	6	2	-	-	3		Charlotte, N.C.	73	48	11	7	3	4	9	
Fall River, Mass.	23	16	5	2	-	-	1		Jacksonville, Fla.	109	75	17	8	4	5	6	
Hartford, Conn.	50	33	10	4	1	2	6		Miami, Fla.	112	61	18	21	11	1	-	
Lowell, Mass.	27	23	2	1	1	-	1		Norfolk, Va.	80	49	11	11	7	2	5	
Lynn, Mass.	19	16	-	2	1	-	1		Richmond, Va.	63	37	17	5	1	3	4	
New Bedford, Mass.	15	8	7	-	-	-	-		Savannah, Ga.	48	31	9	2	2	4	2	
New Haven, Conn.	24	17	3	2	1	1	2		St. Petersburg, Fla.	48	41	3	3	-	1	2	
Providence, R.I.	46	30	10	3	1	2	2		Tampa, Fla.	56	28	9	11	5	3	6	
Somerville, Mass.	4	2	1	1	-	-	-		Washington, D.C.	212	105	57	31	13	6	5	
Springfield, Mass.	43	32	7	3	-	1	6		Wilmington, Del.	35	27	5	2	-	1	-	
Waterbury, Conn.	20	14	4	2	-	-	-		E.S. CENTRAL	760	470	153	72	35	30	52	
Worcester, Mass.	38	35	1	1	1	-	2		Birmingham, Ala.	109	67	23	10	6	3	2	
MID. ATLANTIC	2,624	1,687	491	311	64	71	116		Chattanooga, Tenn.	63	47	12	2	1	1	7	
Albany, N.Y.	48	32	9	2	1	4	3		Knoxville, Tenn.	82	51	21	7	2	1	7	
Allentown, Pa.	22	16	4	1	1	-	-		Louisville, Ky.	71	50	13	4	3	1	6	
Buffalo, N.Y.	100	70	20	6	1	3	4		Memphis, Tenn.	196	113	33	20	11	19	17	
Camden, N.J.	35	21	7	3	2	2	-		Mobile, Ala.	62	38	12	7	4	1	5	
Elizabeth, N.J.	29	21	7	-	1	-	2		Montgomery, Ala.†	40	29	6	3	1	1	1	
Erie, Pa.†	35	27	6	-	1	1	4		Nashville, Tenn.	137	75	33	19	7	3	7	
Jersey City, N.J.	42	24	9	7	1	1	1		W.S. CENTRAL	1,686	1,018	356	195	62	55	68	
N.Y. City, N.Y.	1,272	796	222	194	35	25	39		Austin, Tex.	52	35	8	5	2	2	7	
Newark, N.J.	45	24	6	10	1	4	4		Baton Rouge, La.	47	29	6	6	2	4	-	
Paterson, N.J.	21	12	3	4	1	1	-		Corpus Christi, Tex.	48	34	10	3	-	1	4	
Philadelphia, Pa.	595	367	131	62	11	24	29		Dallas, Tex.	208	123	35	30	12	8	7	
Pittsburgh, Pa.†	51	37	6	4	2	2	4		El Paso, Tex.	62	39	9	8	2	4	-	
Reading, Pa.	30	21	7	2	-	-	3		Fort Worth, Tex.	106	49	25	16	9	7	2	
Rochester, N.Y.	103	75	17	3	4	4	14		Houston, Tex.‡	734	436	169	89	24	16	18	
Schenectady, N.Y.‡	21	17	3	1	-	-	-		Little Rock, Ark.	63	39	13	5	3	3	10	
Scranton, Pa.†	17	14	1	2	-	-	-		New Orleans, La.	66	34	16	12	-	4	-	
Syracuse, N.Y.‡	76	52	19	4	1	-	-		San Antonio, Tex.	169	109	36	16	6	2	11	
Trenton, N.J.‡	34	24	7	3	-	-	1		Shreveport, La.	43	33	8	1	-	1	-	
Utica, N.Y.	16	14	1	-	1	-	-		Tulsa, Okla.	88	58	21	4	2	3	9	
Yonkers, N.Y.	32	23	6	3	-	-	5		MOUNTAIN	616	378	116	57	45	20	27	
E.N. CENTRAL	2,193	1,442	450	158	65	77	77		Albuquerque, N. Mex.	65	42	7	14	1	1	3	
Akron, Ohio	61	42	17	-	1	1	5		Colo. Springs, Colo.	47	29	8	4	4	2	5	
Canton, Ohio	37	30	3	2	2	-	4		Denver, Colo.	76	48	17	9	1	1	-	
Chicago, Ill.‡	564	362	125	45	10	22	16		Las Vegas, Nev.	113	65	24	13	8	3	7	
Cincinnati, Ohio	155	103	39	6	3	4	12		Ogden, Utah	21	15	2	-	3	1	3	
Cleveland, Ohio	136	75	39	10	3	9	8		Phoenix, Ariz.	122	71	28	13	6	4	1	
Columbus, Ohio	156	103	35	11	3	4	3		Pueblo, Colo.	29	20	5	1	1	2	1	
Dayton, Ohio	77	49	15	5	5	3	2		Salt Lake City, Utah	42	20	9	3	7	3	-	
Detroit, Mich.	218	120	57	24	9	7	1		Tucson, Ariz.	101	68	16	-	14	3	7	
Evansville, Ind.	35	29	3	1	1	1	3		PACIFIC	1,823	1,203	302	196	75	41	114	
Fort Wayne, Ind.	52	32	11	4	4	1	1		Berkeley, Calif.	13	12	-	-	1	-	1	
Gary, Ind.	17	7	5	2	3	-	2		Fresno, Calif.	101	66	18	9	3	5	9	
Grand Rapids, Mich.	53	43	6	2	1	1	4		Glendale, Calif.	31	21	8	2	-	-	2	
Indianapolis, Ind.	166	116	23	13	7	7	1		Honolulu, Hawaii	80	54	17	5	3	1	11	
Madison, Wis.	41	27	5	3	4	2	2		Long Beach, Calif.	85	47	21	10	4	3	10	
Milwaukee, Wis.	122	89	17	9	4	3	2		Los Angeles, Calif.	523	345	79	67	22	8	20	
Peoria, Ill.	48	30	6	8	2	2	2		Oakland, Calif.	57	38	6	7	3	3	1	
Rockford, Ill.	47	32	9	3	1	2	1		Pasadena, Calif.	26	16	2	2	1	5	2	
South Bend, Ind.	58	41	14	-	1	2	3		Portland, Oreg.	111	89	11	5	2	4	6	
Toledo, Ohio	83	59	14	6	1	3	3		Sacramento, Calif.	150	99	30	12	8	-	13	
Youngstown, Ohio	67	53	7	4	-	3	2		San Diego, Calif.	151	100	25	12	8	4	13	
W.N. CENTRAL	780	532	150	58	21	19	32		San Francisco, Calif.	153	84	31	33	3	1	5	
Des Moines, Iowa	75	54	13	5	2	1	6		San Jose, Calif.	154	101	33	11	6	3	11	
Duluth, Minn.	35	27	7	-	-	1	-		Seattle, Wash.	99	67	11	11	8	2	3	
Kansas City, Kans.	25	19	6	-	-	-	1		Spokane, Wash.	56	39	6	8	2	1	5	
Kansas City, Mo.	110	67	27	10	5	1	8		Tacoma, Wash.	33	25	4	2	1	1	2	
Lincoln, Nebr.	31	23	5	2	-	1	2		TOTAL	12,229 ^{††}	7,822	2,345	1,240	450	365	593	
Minneapolis, Minn.	218	149	33	20	10	6	9										
Omaha, Nebr.	79	59	15	4	1	-	1										
St. Louis, Mo.	107	64	27	8	3	5	1										
St. Paul, Minn.	40	25	10	3	-	2	2										
Wichita, Kans.	60	45	7	6	-	2	2										

*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.

Homicides — Continued

during July and August. Of the 680 cases for which hour of injury was reported, 69% occurred from 3 p.m. to 7 a.m.; fatal injuries most frequently occurred from 4 p.m. to 5 p.m.

Reported by: Div of Safety Research, National Institute for Occupational Safety and Health, CDC.

Editorial Note: The U.S. Department of Justice (2) and CDC's National Center for Health Statistics maintain overall information on homicides. However, this analysis of NTOF data represents a comprehensive attempt to identify work-related homicides. NTOF data is affected by the quality of death certificate information, which is obtained from next-of-kin, mortuary personnel, and certifying authorities (e.g., physicians, medical examiners, and/or coroners) and may vary in accuracy (3). Case ascertainment through NTOF is also affected by state reporting practices and data automation and retrieval procedures. Between 67% and 88% of all traumatic occupational fatalities can be identified through death certificates (4). Despite these limitations, NTOF data are useful for this preliminary characterization of homicide victims at the workplace.

The workplace homicide rate for women identified through NTOF is approximately 5% of the general homicide rate for U.S. women (79 per million women) (5). Data from the Federal Bureau of Investigation indicate that 42% of female homicide victims in the United States are aged 20–34 years (5), and NTOF data are comparable for workplace homicide. The NTOF findings extend the results of studies of fatal occupational trauma in Texas (6,7) and California (8), where homicide was a leading manner of death among working women and the highest workplace homicide rates for women occurred in those ≥ 65 years of age. The higher homicide rate for older women in Texas was interpreted as indicating that older women were more vulnerable targets and were less likely to survive traumatic assault, not as an artifact of underenumeration of working women in the oldest age group (7).

Race-specific workplace homicide rates differ from overall U.S. patterns. Nationally, black women have a substantially higher homicide rate than white women, with a rate ratio of 3.8 (9). In the workplace, black women remain at greater risk for homicide than white women, but the difference is less marked, with a rate ratio of 1.8.

Finally, the frequency of firearm involvement in the deaths of these women mirrors the national homicide pattern. Overall, the proportion of U.S. homicides caused by gunshot wounds ranges from 39% to 75%, depending on the region of the country (5); the NTOF data indicate similar proportions for workplace homicides, with parallel regional variation.

Other studies of violent occupational crime have found a greater risk for homicide in jobs with frequent contact with the public and/or the exchange of money (7,8,10,11). Effective training programs in conflict resolution and nonviolent response exist (9,12,13) and have been implemented in some retail settings (13). Additional risk-reduction strategies such as using locked drop-safes, posting signs indicating that only small amounts of cash are kept in the cash register, increasing the visibility of the work area to the general public, providing well-lit parking lots (13), controlling access to the premises, and, in certain settings, isolating workers behind bulletproof materials may be more widely applicable and should be carefully evaluated in these and other hazardous settings (14).

References

1. CDC. Traumatic occupational fatalities—United States, 1980–1984. *MMWR* 1987;36:461–4, 469–70.

Homicides – Continued

2. Bureau of Justice Statistics. Report to the nation on crime and justice: the data. NCJ-87068. Washington, DC: US Department of Justice, Bureau of Justice Statistics, 1983.
3. Kirchner T, Nelson T, Burdo H. The autopsy as a measure of accuracy of the death certificates. *N Engl J Med* 1985;313:1263–9.
4. Bell CA, Stout NA, Bender TR, Conroy CS, Crouse WE, Myers JR. Fatal occupational injuries in the United States, 1980 through 1985. *JAMA* 1990;263:3047–50.
5. Federal Bureau of Investigation. Uniform crime reports: crime in the United States, 1985. Washington, DC: US Department of Justice, July 1986.
6. CDC. Fatal occupational injuries—Texas, 1982. *MMWR* 1985;34:130–4,139.
7. Davis H, Honchar PA, Suarez L. Fatal occupational injuries of women, Texas 1975–1984. *Am J Public Health* 1987;77:1524–7.
8. Kraus JF. Homicide while at work: persons, industries, and occupations at high risk. *Am J Public Health* 1987;77:1285–9.
9. CDC. Homicide surveillance: high risk racial and ethnic groups—blacks and Hispanics, 1970 to 1983. Atlanta: US Department of Health and Human Services, Public Health Service, 1986.
10. Davis H. Workplace homicides of Texas males. *Am J Public Health* 1987;77:1290–3.
11. Hales T, Seligman PD, Newman SC, Timbrook CL. Occupational injuries due to violence. *J Occup Med* 1988;30:483–7.
12. Erickson R, Crow W. Violence in business settings. *Am Behav Scientist* 1980;23:717–43.
13. Crow W, Bull JL. Robbery deterrence: an applied behavioral science demonstration. La Jolla, California: Western Behavioral Sciences Institute, 1975.
14. Cook PJ. Robbery in the United States: an analysis of recent trends and practices. Washington, DC: US Department of Justice, September 1983.

*Notices to Readers***ATSDR/National Governors' Association Report
on Closed and Restricted Toxic Sites**

The National Governors' Association (NGA), through a cooperative agreement with the Agency for Toxic Substances and Disease Registry (ATSDR), will release a report this month on the NGA's third biennial survey of sites closed or restricted to the public because of contamination by toxic substances. The report, "Restrictions Imposed on Contaminated Sites: A Status of State Actions" (1), describes the affected environmental media (i.e., land, groundwater, and surface water), types of contaminants, and nature of restrictions at 1705 sites nationwide.

The survey found that 69% of site restrictions pertained to groundwater use, particularly for drinking water supplies; 19% involved surface water contamination. Sixteen percent of the sites had both groundwater and land area contamination, and 6% were contaminated in all three media. At 741 of the groundwater sites, state agencies closed 7479 wells. Contaminants found most often in the reported groundwater sites varied by region, i.e., solvents in the industrialized northeast, pesticides and solvents in the more agricultural midwest, and ethylene dibromide (a grain fumigant) in the agricultural south.

Organic chemical pollution was found at 1306 (77%) of the 1705 sites; inorganic chemicals, at 618 (36%); petroleum products, at 163 (10%); and radionuclides, at 60 (4%). The five most common contaminants were trichloroethylene (221 sites), polychlorinated biphenyls (PCBs) (193 sites), lead (157 sites), benzene (148 sites), and perchloroethylene (108 sites).

Toxic Sites — Continued

The NGA survey counts only sites where state agencies have acted to protect the public from threats of toxic exposure; therefore, the NGA list may exclude highly contaminated Superfund sites that have little potential to expose human populations and include other sites with relatively low levels of contamination that could affect the health of nearby communities.

For further information on the survey and report, or to obtain copies, contact Policy Analyst, National Governors' Association, 444 North Capitol Street, Washington, DC 20001.

Reported by: B Wells, National Governors' Association. Div of Health Education, Agency for Toxic Substances and Disease Registry.

Reference

1. Wells B. Restrictions imposed on contaminated sites: a status of state actions. Washington, DC: National Governors' Association, 1990.

ATSDR Training Program on Health Assessments of Hazardous Sites

The Agency for Toxic Substances and Disease Registry (ATSDR) will sponsor a training program on conducting health assessments to evaluate the health implications of hazardous exposures, prevent adverse health effects through recommendations, and identify actions or request health investigations. The program will comprise a general session on the basic components of a health assessment and an advanced session on specific case studies of environmental exposure.

The program will be held September 30, 1990, at the American Public Health Association (APHA) meeting in New York City. Applications are available from the Continuing Education Program, APHA, 1015 15th Street, NW, Washington, DC 20005. For additional information, contact ATSDR at (404) 639-0607.

Course on Childhood Lead Poisoning

The Agency for Toxic Substances and Disease Registry, the National Association of County Health Officials (NACHO), and the Association of Occupational and Environmental Clinics will cosponsor a course on recent findings in childhood lead poisoning and their implications for public health workers. The course will be held September 30, 1990, at the American Public Health Association meeting in New York City. Additional information is available from Assistant Project Director, NACHO, 440 First Street, NW, Washington, DC 20001; telephone (202) 783-5550.

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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. Accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials, as well as 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, Mailstop C-08..

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