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MORBIDITY AND MORTALITY WEEKLY REPORT

Health Objectives for the Nation

Violence-Related Attitudes and Behaviors of High School Students — New York City, 1992

Homicide is the leading cause of death among New York City (NYC) youth aged 15–19 years (*1*) and the second leading cause of death among this age group nationally (*2*). During the 1980s, the rate of firearm-related homicide increased more rapidly among this age group than did any other cause of death (*2*). The 1991 national school-based Youth Risk Behavior Survey indicated that 26% of students in grades 9–12 reported carrying a weapon at least once during the 30 days preceding the survey (*3*). To more effectively target violence-prevention programs for youth in NYC, in 1992 the NYC Department of Health (NYCDOH), the NYC Public Schools (NYCPS), and CDC conducted a survey of violence-related attitudes and behaviors among a representative sample of NYC public high school students. This report summarizes the results of the survey.

A self-administered questionnaire was given to a representative sample of 9th–12th grade students in the NYCPS during June 1992. The sampling frame included all academic, vocational, and alternative NYC public high schools stratified by presence (n=19) or absence (n=96) of a school-based metal detector program. Schools in the metal detector program were visited approximately weekly by a team of security officers with hand-held metal detectors who scanned randomly selected students as they entered the building. Self-reported data were collected from 100% (n=15, three with and 12 without metal detectors) of sampled schools and 67% (n=1399) of sampled students.

During the 1991–92 school year, 36.1% of all 9th–12th grade NYC public school students surveyed reported being threatened with physical harm, and 24.7% were involved in a physical fight anywhere (including home, school, and neighborhood) (Table 1). Overall, 21% of students reported carrying a weapon such as a gun, knife, or club anywhere 1 or more days during the 30 days preceding the survey; 16.1% of students reported carrying a knife or razor; and 7.0% reported carrying a handgun. In comparison, rates for violent and potentially dangerous behaviors were substantially lower inside the school building (being threatened, 14.4%; carrying a weapon, 12.5%;

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carrying a knife or razor, 10.0%; being involved in a physical fight, 7.7%; and carrying a handgun, 3.7%) and when going to or from school.

Students who attended schools with metal detector programs (18% of students) were as likely as those who attended schools without metal detector programs to have carried a weapon anywhere (21.6% versus 21.2%) but were less likely to have carried a weapon inside the school building (7.8% versus 13.6%) or going to and from school (7.7% versus 15.2%) (Table 2). The decrease in school-related weapon-carrying reflected reductions in the carrying of both knives and handguns. Presence of school-based metal detector programs had no apparent effect on the prevalence of threats and physical fights in any location.

Compared with all 9th–12th grade students, students who were involved in a physical fight in school during the 1991–92 school year were less likely to believe that apologizing (38.1% versus 19.0%) and avoiding or walking away from someone who wants to fight (55.5% versus 35.5%) were effective ways to avoid a physical fight, and they were more likely to believe their families would want them to hit back if someone hit them first (56.9% versus 77.9%) (Table 3). Compared with all 9th–12th grade students, students who carried a weapon inside the school building during the 30 days preceding the survey were more likely to believe that threatening to use a weapon (21.4% versus 43.9%) and carrying a weapon (19.9% versus 47.9%) were effective ways to avoid a physical fight; were more likely to believe their families would want them to defend themselves from attack even if it meant using a weapon (43.6% versus 67.5%); and were more likely to feel safer during a physical fight if they had a knife (29.6% versus 64.2%) or a handgun (26.5% versus 60.5%).

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Editorial Note: The findings in this report indicate that violent behaviors and weapon-carrying among youth are substantial problems in both school and community settings. The rates for physical fighting and weapon-carrying among NYC public high school students reported here are consistent with national surveys (*3,4*). The national health objectives for the year 2000 target reductions in homicide rates (objective 7.1), assaultive injuries (objective 7.6), physical fighting (objective 7.9), and weapon-

TABLE 1. Percentage of high school students who were threatened, involved in a physical fight, and/or carried weapons going to or from school, inside the school building, or anywhere — New York City, 1992

	To/From school		Inside school		Anywhere	
Behavior	**%**	**(95% CI*)**	**%**	**(95% CI)**	**%**	**(95% CI)**
Threatened†	15.7	(13.1–18.4)	14.4	(10.8–18.0)	36.1	(30.8–41.4)
Involved in a physical fight†	9.2	(6.3–12.1)	7.7	(5.0–10.4)	24.7	(21.5–28.0)
Carried a weapon§	13.9	(11.0–16.8)	12.5	(9.6–15.5)	21.3	(17.8–24.7)
Knife or razor	10.6	(8.0–13.1)	10.0	(7.7–12.3)	16.1	(13.4–18.9)
Handgun	4.1	(3.4– 4.8)	3.7	(3.1– 4.3)	7.0	(5.0– 8.9)

*Confidence interval.
†At least once during the 1991–92 school year.
§On ≥1 day during the 30 days preceding the survey.

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carrying (objective 7.10) among adolescents and for increasing violence-prevention education and intervention programs in schools (objective 7.16) and communities (objective 7.17) (*5*). In addition, National Education Goal 6 for the year 2000 is for all schools to be free of drugs and violence and to offer a disciplined environment conducive to learning (*6*).

This survey of NYC public high school students suggests that violent behaviors reflect the personal attitudes of students and the attitudes students attribute to their families. Reducing the occurrence of violence in schools will require the coordination of school-based violence-prevention programs with community-based organizations, parent groups, teachers, and state and local health and other agencies that serve youth (*7*). In addition to school-based violence-prevention programs for youth, parents must be taught information and skills to modify the social values, attitudes, and behaviors that foster youth violence in any setting. Violence-related attitudes, behaviors, and injuries should be monitored to guide and evaluate policy and prevention programs.

Approximately one fourth of large urban school districts in the United States use metal detectors to help reduce weapon-carrying in schools (National School Safety Center, unpublished data, 1991). The findings in NYC suggest that school-based metal detector programs may help reduce, but not eliminate, weapon-carrying in schools and to and from schools. It is unknown whether these programs reduced the inci-

TABLE 2. Prevalence among high school students of being threatened, involved in a physical fight, and carrying weapons to or from school, inside the school building, or anywhere, by presence or absence of a school-based metal detector program — New York City, 1992

	Metal detector program (n=243)		No metal detector program (n=1156)	
Behavior	**%**	**(95% CI*)**	**%**	**(95% CI)**
Threatened[†]				
Anywhere	35.7	(20.5–50.9)	36.2	(30.7–41.7)
To/From school	15.8	(10.9–20.6)	15.7	(12.7–18.7)
Inside school	15.3	(8.5–22.1)	14.2	(10.0–18.4)
Involved in a physical fight[†]				
Anywhere	26.2	(14.4–38.0)	24.4	(21.5–27.3)
To/From School	9.4	(6.4–12.3)	9.1	(5.6–12.6)
Inside school	7.5	(0.4–14.5)	7.8	(4.9–10.7)
Carried a weapon[§]				
Anywhere	21.6	(15.3–28.0)	21.2	(17.3–25.1)
To/From school	7.7	(5.6– 9.9)	15.2	(11.7–18.8)
Inside school	7.8	(6.5– 9.1)	13.6	(10.0–17.2)
Carried a knife/razor[§]				
Anywhere	14.1	(6.5–21.6)	16.6	(13.7–19.5)
To/From school	6.3	(3.4– 9.2)	11.5	(8.4–14.5)
Inside school	5.0	(2.8– 7.3)	11.1	(8.3–13.8)
Carried a handgun[§]				
Anywhere	7.3	(0.1–14.5)	6.9	(5.2– 8.6)
To/From school	1.9	(0.0– 3.9)	4.6	(3.8– 5.4)
Inside school	2.1	(1.1– 3.2)	4.0	(3.3– 4.7)

*Confidence interval.
[†]At least once during the 1991–92 school year.
[§]On ≥1 day during the 30 days preceding the survey.

Violence-Related Attitudes and Behaviors — Continued

dence of violence-related injury and death in NYC schools and whether respondents from schools with metal detector programs may have been less likely to report weapon-carrying. Metal detector programs alone cannot end youth violence—among NYC public school students, these programs did not reduce nonschool-related weapon-carrying or threats and physical fights in any location. These findings underscore the need for rigorous evaluations of school-based metal detector programs to establish the strengths and limitations of this intervention.

NYCDOH, in collaboration with the NYCPS, other local agencies, parents, and community groups has instituted the "Safe Routes to School/Safe Havens" program in one neighborhood to reduce violence and pedestrian injuries going to and from school. NYCDOH also is piloting a violence-prevention program in collaboration with community-based youth programs. In 1992, the NYCPS instituted peer mediation centers and conflict resolution/negotiation curricula for high school students and is working to implement or expand developmentally appropriate skills-based violence-prevention education for students in kindergarten through 12th grade. Public health, education, justice, and other agencies must combine their efforts to reduce violence among youth.

TABLE 3. Violence-related attitudes of high school students who were involved in a physical fight in school during the 1991–92 school year or who carried a weapon in school during the 30 days preceding the survey — New York City, 1992

Violence-related attitudes	Students involved in a physical fight in school (n=95)		Students who carried a weapon in school (n=154)		Total student population (n=1399)	
	%	(95% CI*)	%	(95% CI)	%	(95% CI)
Effective ways to avoid a physical fight						
Threaten weapon use†	36.2	(20.2–52.1)	43.9	(31.3–56.6)	**21.4**	**(17.8–25.1)**
Carry a weapon§	35.1	(21.5–48.7)	47.9	(41.2–54.5)	**19.9**	**(17.5–22.3)**
Avoid/Walk away¶	35.5	(27.4–43.6)	43.8	(34.8–52.9)	**55.5**	**(52.2–58.7)**
Apologize**	19.0	(8.1–30.0)	24.5	(16.7–32.2)	**38.1**	**(35.0–41.2)**
Family supports fighting and weapon use in self defense						
Fighting††	77.9	(71.0–84.7)	76.7	(68.9–84.5)	**56.9**	**(47.3–66.5)**
Weapon use§§	54.8	(44.4–65.3)	67.5	(55.1–79.9)	**43.6**	**(36.6–50.5)**
Feel safer with a weapon during a physical fight						
Knife¶¶	48.9	(33.4–64.4)	64.2	(55.0–73.4)	**29.6**	**(25.8–33.3)**
Handgun***	50.7	(39.4–62.1)	60.5	(50.9–70.2)	**26.5**	**(24.2–28.9)**

*Confidence interval.
†Answered yes to "Threatening to use a weapon is an effective way to avoid a physical fight."
§Answered yes to "Carrying a weapon is an effective way to avoid a physical fight."
¶Answered yes to "Avoiding or walking away from someone who wants to fight you is an effective way to avoid a physical fight."
**Answered yes to "Apologizing (saying you're sorry) is an effective way to avoid a physical fight."
††Answered yes to "If someone hit me first, my family would want me to hit them back."
§§Answered yes to "If someone attacked me, my family would want me to defend myself, even if it meant using a weapon."
¶¶Answered yes to "If I was going to be in a physical fight, I'd feel safer if I had a knife."
***Answered yes to "If I was going to be in a physical fight, I'd feel safer if I had a handgun."

Violence-Related Attitudes and Behaviors — Continued

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Epidemiologic Notes and Reports

Unintentional Carbon Monoxide Poisoning from Indoor Use of Pressure Washers — Iowa, January 1992–January 1993

On January 18, 1993, the Iowa Occupational Health Nurses in Agricultural Communities (OHNAC)* project was notified that an Iowa farmer (index case) had died of carbon monoxide (CO) poisoning while using a gasoline-powered pressure washer—a device that produces a high-pressure water spray—to clean his swine farrowing (birthing) barn. OHNAC staff subsequently reviewed hospital records and data from the Sentinel Project Researching Agricultural Injury Notification System (SPRAINS)† and identified four other farmers treated since January 1992 for CO poisoning after operating gasoline-powered pressure washers. This report summarizes the investigation of these incidents.

Index Case

On January 15, 1993, a 33-year-old farm owner died while using an 11-horsepower (HP) washer to clean inside a 3420-cubic-foot (ft^3) swine farrowing area within a larger wooden structure. He was working alone, the door was closed, and there was no other ventilation on this cold day (outside temperatures ranged from –7 F to 20 F [–21.7 C to –6.7 C]). An investigation by the local medical examiner's office indicated that, based

*OHNAC is a national prevention program conducted by CDC's National Institute for Occupational Safety and Health (NIOSH) that has placed public health nurses in rural communities and hospitals in 10 states (California, Georgia, Iowa, Kentucky, Maine, Minnesota, New York, North Carolina, North Dakota, and Ohio) to conduct surveillance of agriculture-related illnesses and injuries that occur among farmers and their family members. These surveillance data are used to assist in reducing the risk for occupational illness and injury in agricultural populations.

†SPRAINS is a statewide active and passive surveillance system in Iowa funded initially by CDC and currently maintained by the Iowa Department of Public Health. Injury data from Iowa farms are analyzed by county of occurrence.

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on the amount of work he had completed, he had been overcome in approximately 30 minutes. His postmortem carboxyhemoglobin (HbCO) level was 75.6% (normal values: ≤2% for nonsmokers, ≤9% for smokers [*1*]). He had recently insulated the farrowing room and replaced his electric pressure washer with a gasoline-powered model.

Case 2

On December 30, 1992, a farm owner found his 12-year-old son unconscious near the door of a swine farrowing building (estimated volume: 4480 ft^3). The boy had been working alone while using a rented 11-HP gasoline-powered washer for approximately 30 minutes. Because outside temperatures had ranged from –2 F to 30 F (–18.9 C to –1.1 C), the washer had been placed inside the building approximately 5 feet from the door. His HbCO level was 50% at the time of initial medical treatment. He required mechanical ventilation and received hyperbaric oxygen therapy; he was discharged following an 8-day hospitalization.

Case 3

On November 3, 1992, a 35-year-old farm owner was found by her husband to have extreme weakness, confusion, and slurred speech. She had been working alone inside a 4480-ft^3 room used for raising calves. During a 7-hour period (most of the time alone) she had intermittently been cleaning the room with a 4-HP gasoline-powered washer. Outside temperatures ranged from 30 F to 34 F (–1.1 C to 1.1 C). She had set the machine inside the building approximately 5 feet from an open doorway. All three doors to the room were open, and an exhaust fan of unreported size was in operation. When found, although obviously confused, she insisted she was only tired. Her HbCO level obtained approximately 90 minutes postexposure was 18.8%. She was treated with oxygen at the local hospital and released.

Case 4

On April 18, 1992, a 32-year-old farm owner was found by her husband in a 5148-ft^3 swine farrowing building she had been cleaning. She was confused, weak, dizzy, and nauseated and reported a severe headache and diffuse muscle pain; she subsequently stated she believed she had been unconscious. She had worked alone intermittently for 6½ hours, with three exhaust fans of unreported size and capacity in operation and a 13-HP gasoline-powered washer located in an adjacent room (outside temperatures ranged from 46 F to 69 F [7.8 C to 20.5 C]). CO apparently entered the work area when the door leading to the room containing the washer blew open sometime during the final hour of work. An HbCO level obtained 5 hours postexposure and after 30 minutes of oxygen therapy was 9.2%.

Case 5

On January 2, 1992, a 37-year-old farm owner was found by his wife in their house; he was dizzy, extremely weak, and somewhat confused. He had been working for approximately 30 minutes in an unventilated, 6480-ft^3 swine farrowing building (outside temperatures ranged from 28 F to 33 F [–2.2 C to 0.6 C]) using a borrowed 9-HP gasoline-powered washer. His symptoms began while he attempted to refuel the washer, which had been placed inside the building. He crawled to the house, where he was found and taken to a hospital, treated with oxygen, and released. An HbCO level obtained 2 hours postexposure was 27.5%.

Investigation by OHNAC

The four surviving persons were interviewed by OHNAC investigators and reported that sudden onset of dizziness, weakness, extreme difficulty walking, and difficulty thinking had inhibited their ability to recognize the hazard, exit the hazardous environment, and seek help. All reported being unaware that the sudden onset of symptoms is characteristic of CO poisoning, that they can be poisoned in a short time, and that CO can remain hazardous in areas with open doors and ventilation fans in operation.

None of the machines involved in these incidents had labels warning of the risk for CO exposure or directing that the equipment not be used indoors, although one engine operator's manual advised that the pressure washer should not be started or run inside a closed area (*2*). However, none of the four farmers had read the operating manuals; the two who had used rented or borrowed equipment had not been provided with manuals. All machines were reported to be properly maintained at the times of the respective incidents.

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Editorial Note: CO is an insidious health hazard because it accumulates rapidly (even in seemingly well-ventilated areas), cannot be detected (it is odorless and colorless), and produces weakness and confusion in persons exposed to toxic levels. Because CO absorption is proportionate to respiratory effort, persons engaged in vigorous physical activity—such as during use of a pressure washer—are at increased risk for adverse health effects when exposed to CO (*1*).

Levels of CO increase rapidly in closed environments and settings with limited ventilation. The average volume of the structures investigated in this report was approximately 150% that of a typical two-car garage. The risk for CO poisoning associated with operation of automobile engines in poorly ventilated spaces is well known; however, the findings in this report underscore the hazards of CO exposure when smaller gasoline-powered engines are operated inside buildings. Based on data collected in the field investigations, it is estimated that a 3–11-HP pressure washer operated in a 4700-ft^3 space will produce dangerous CO levels within minutes (CDC, unpublished data, 1993)[§]. In addition, there are no practical means to determine reliably whether ventilation is adequate for safe indoor operation of even small engines. In this report, the three farmers who were working in unventilated buildings had onset of CO toxicity within 30 minutes of exposure, while the two who were working intermittently in spaces with open doors and windows and with exhaust fans in operation were poisoned despite these precautions. Therefore, even brief indoor use of gasoline-powered pressure washers is hazardous, particularly for persons with preexisting cardiac or respiratory conditions (*1,4*).

In the United States, 81% of the approximately 243,000 swine farms house swine for farrowing, and pressure washers are used for cleaning on approximately 63% (*5,6*). Eleven other recent cases of CO poisoning associated with use of gasoline-powered pressure washers have been identified in four states. In Iowa, OHNAC has

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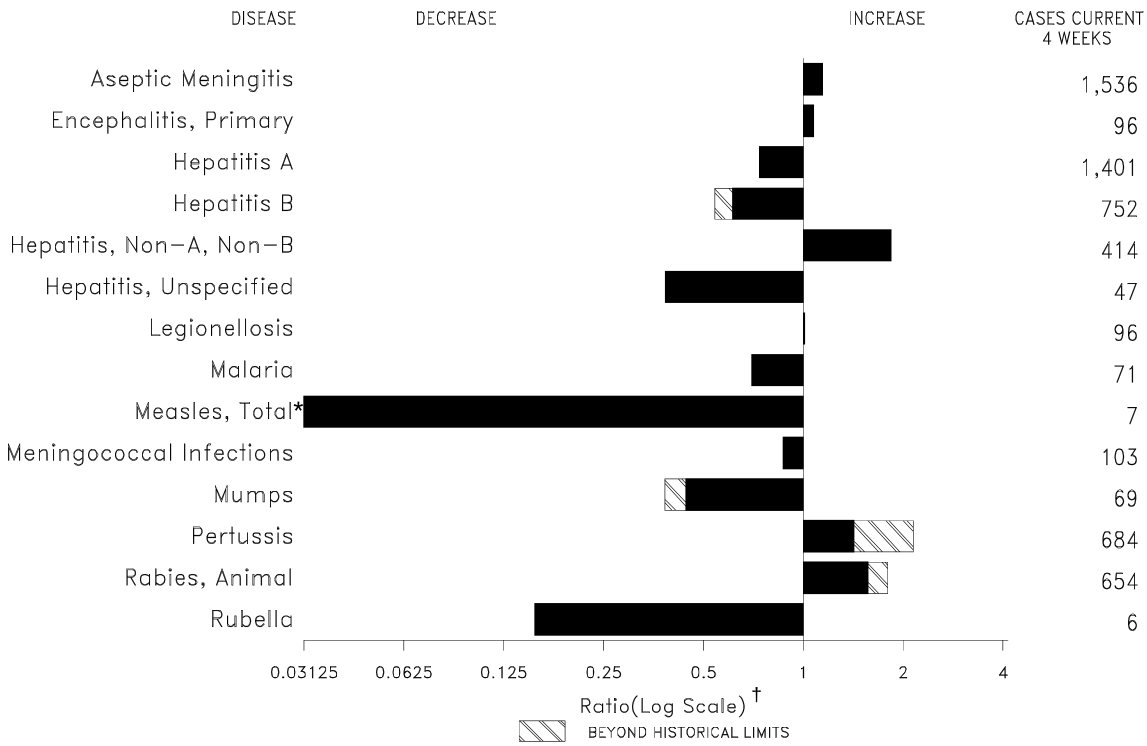
[§]The NIOSH recommended exposure limit for CO is 35 parts per million (ppm) (as an 8-hour, time-weighted average), with a ceiling limit of 200 ppm (*3*).

FIGURE I. Notifiable disease reports, comparison of 4-week totals ending October 9, 1993, with historical data — United States



*The large apparent decrease in reported cases of measles(total) reflects dramatic fluctuations in the historical baseline. (Ratio (log scale) for week forty is 0.01534).

† Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary — cases of specified notifiable diseases, United States, cumulative, week ending October 9, 1993 (40th Week)

	Cum. 1993		Cum. 1993
AIDS*	83,485	Measles: imported	55
Anthrax	-	indigenous	203
Botulism: Foodborne	13	Plague	8
Infant	49	Poliomyelitis, Paralytic§	-
Other	2	Psittacosis	43
Brucellosis	69	Rabies, human	1
Cholera	16	Syphilis, primary & secondary	19,840
Congenital rubella syndrome	6	Syphilis, congenital, age < 1 year¶	1,493
Diphtheria	-	Tetanus	34
Encephalitis, post-infectious	137	Toxic shock syndrome	183
Gonorrhea	292,316	Trichinosis	10
Haemophilus influenzae (invasive disease)†	913	Tuberculosis	16,185
Hansen Disease	133	Tularemia	105
Leptospirosis	32	Typhoid fever	254
Lyme Disease	5,266	Typhus fever, tickborne (RMSF)	381

*Updated monthly; last update October 2, 1993.
†Of 868 cases of known age, 280 (32%) were reported among children less than 5 years of age.
§Two (2) cases of suspected poliomyelitis have been reported in 1993; 4 of the 5 suspected cases with onset in 1992 were confirmed; the confirmed cases were vaccine associated.
¶Reports through second quarter of 1993.

TABLE II. Cases of selected notifiable diseases, United States, weeks ending October 9, 1993, and October 3, 1992 (40th Week)

Reporting Area	AIDS*	Aseptic Menin-gitis	Encephalitis		Gonorrhea		Hepatitis (Viral), by type				Legionel-losis	Lyme Disease
			Primary	Post-in-fectious			A	B	NA,NB	Unspeci-fied		
	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993
UNITED STATES	83,485	9,201	645	137	292,316	378,734	16,274	9,160	3,752	477	935	5,266
NEW ENGLAND	4,183	305	15	8	6,343	8,027	386	380	439	13	48	1,496
Maine	118	29	2	-	70	80	15	10	4	-	5	9
N.H.	83	42	-	2	47	91	33	90	358	3	3	50
Vt.	58	35	4	-	19	21	5	7	2	-	2	5
Mass.	2,210	123	7	4	2,311	2,870	182	209	67	10	34	155
R.I.	274	76	2	2	329	546	66	20	8	-	4	232
Conn.	1,440	-	-	-	3,567	4,419	85	44	-	-	-	1,045
MID. ATLANTIC	20,227	650	47	8	34,133	42,813	810	994	288	5	184	2,644
Upstate N.Y.	3,118	363	31	5	6,896	8,618	298	319	194	1	58	1,430
N.Y. City	10,941	104	1	-	9,407	15,302	177	121	1	-	3	3
N.J.	3,909	-	-	-	3,687	5,883	219	269	63	-	28	593
Pa.	2,259	183	15	3	14,143	13,010	116	285	30	4	95	618
E.N. CENTRAL	6,686	1,530	141	26	54,621	70,974	1,820	1,108	476	13	241	72
Ohio	1,286	551	52	4	17,036	21,473	235	152	32	-	129	33
Ind.	718	169	16	11	6,123	6,885	508	184	10	1	41	14
Ill.	2,423	305	26	3	13,587	22,447	578	201	54	5	12	8
Mich.	1,606	467	37	8	13,334	16,790	166	319	346	7	48	17
Wis.	653	38	10	-	4,541	3,379	333	252	34	-	11	-
W.N. CENTRAL	2,694	579	25	10	16,317	20,184	1,849	505	139	13	74	140
Minn.	579	74	7	-	1,857	2,320	336	57	7	4	1	53
Iowa	159	115	4	2	1,207	1,293	42	27	8	2	10	8
Mo.	1,466	175	2	8	9,546	11,272	1,172	359	102	7	21	38
N. Dak.	2	12	3	-	38	59	63	-	-	-	1	2
S. Dak.	22	19	5	-	193	136	14	-	-	-	-	-
Nebr.	164	19	1	-	476	1,297	157	13	8	-	34	4
Kans.	302	165	3	-	3,000	3,807	65	49	14	-	7	35
S. ATLANTIC	17,732	1,964	176	54	78,178	114,104	936	1,738	530	67	169	724
Del.	308	61	3	-	1,129	1,371	10	130	114	-	10	347
Md.	2,039	194	21	-	12,728	12,195	128	214	17	5	40	122
D.C.	1,181	33	-	-	3,596	4,787	9	35	1	-	13	2
Va.	1,273	238	36	6	9,192	12,909	110	111	29	31	6	63
W. Va.	66	22	90	-	503	674	19	31	24	-	3	41
N.C.	960	198	22	-	19,361	19,609	61	242	57	-	22	73
S.C.	1,269	24	-	-	8,378	8,651	17	40	3	1	18	9
Ga.	2,328	135	1	-	4,660	32,973	72	175	92	1	33	35
Fla.	8,308	1,059	3	48	18,631	20,935	510	760	193	29	24	32
E.S. CENTRAL	2,179	592	28	7	34,370	37,845	219	968	748	2	38	21
Ky.	275	253	9	6	3,728	3,715	86	63	10	-	14	7
Tenn.	897	138	7	-	10,415	11,984	59	815	724	1	16	11
Ala.	611	138	1	-	12,150	13,112	47	84	4	1	2	3
Miss.	396	63	11	1	8,077	9,034	27	6	10	-	6	-
W.S. CENTRAL	8,451	1,025	50	2	35,568	40,701	1,690	1,293	247	138	26	54
Ark.	327	56	1	-	6,751	5,880	44	49	4	2	3	2
La.	1,028	73	5	-	9,318	11,436	65	176	110	3	3	1
Okla.	648	1	7	-	3,246	4,158	132	246	87	10	11	20
Tex.	6,448	895	37	2	16,253	19,227	1,449	822	46	123	9	31
MOUNTAIN	3,375	555	25	4	8,559	9,821	3,133	451	256	64	59	21
Mont.	29	-	-	1	60	88	62	7	2	-	5	-
Idaho	58	10	-	-	132	87	173	37	-	3	1	2
Wyo.	33	6	-	-	66	45	11	23	83	-	6	9
Colo.	1,106	175	11	-	2,690	3,550	727	57	41	35	7	-
N. Mex.	267	107	4	2	711	725	293	164	80	2	5	2
Ariz.	1,136	154	8	-	3,180	3,397	1,163	73	13	12	12	-
Utah	231	38	1	-	268	272	597	41	24	11	8	3
Nev.	515	65	1	1	1,452	1,657	107	49	13	1	15	5
PACIFIC	17,958	2,001	138	18	24,227	34,265	5,431	1,723	629	162	96	94
Wash.	1,337	-	1	-	2,960	3,107	635	185	153	9	10	4
Oreg.	680	-	-	-	1,225	1,281	75	27	11	-	-	2
Calif.	15,586	1,877	132	18	19,166	28,957	4,051	1,484	453	150	77	87
Alaska	58	17	4	-	470	515	607	8	9	-	-	-
Hawaii	297	107	1	-	406	405	63	19	3	3	9	1
Guam	-	2	-	-	39	50	2	2	-	1	-	-
P.R.	2,338	47	-	-	390	169	71	316	74	2	-	-
V.I.	40	-	-	-	79	83	-	4	-	-	-	-
Amer. Samoa	-	-	-	-	37	35	16	-	-	-	-	-
C.N.M.I.	-	3	-	-	62	62	-	1	-	1	-	-

N: Not notifiable U: Unavailable C.N.M.I.: Commonwealth of Northern Mariana Islands
*Updated monthly; last update October 2, 1993.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending October 9, 1993, and October 3, 1992 (40th Week)

Reporting Area	Malaria	Measles (Rubeola) Indigenous		Measles (Rubeola) Imported*		Measles (Rubeola) Total	Meningococcal Infections	Mumps		Pertussis			Rubella		
	Cum. 1993	1993	Cum. 1993	1993	Cum. 1993	Cum. 1992	Cum. 1993	1993	Cum. 1993	1993	Cum. 1993	Cum. 1992	1993	Cum. 1993	Cum. 1992
UNITED STATES	871	2	203	1	55	2,172	1,820	19	1,258	174	4,092	2,196	1	166	140
NEW ENGLAND	68	-	57	-	5	65	100	-	8	5	627	185	-	1	6
Maine	2	-	2	-	-	4	5	-	-	-	19	11	-	1	1
N.H.	6	-	2	-	-	13	13	-	-	3	241	45	-	-	-
Vt.	1	-	30	-	1	-	6	-	-	-	67	8	-	-	-
Mass.	34	-	14	-	3	21	56	-	2	-	234	85	-	-	-
R.I.	2	-	-	-	1	21	1	-	2	-	6	1	-	-	4
Conn.	23	-	9	-	-	6	19	-	4	2	60	35	-	-	1
MID. ATLANTIC	124	-	11	-	6	205	214	2	98	54	528	130	-	54	10
Upstate N.Y.	46	-	-	-	2	111	96	1	34	13	215	79	-	10	7
N.Y. City	24	-	5	-	2	56	19	-	2	-	7	11	-	22	-
N.J.	32	-	6	-	2	38	34	-	12	-	51	40	-	16	3
Pa.	22	-	-	-	-	-	65	1	50	41	255	-	-	6	-
E.N. CENTRAL	58	-	16	-	7	60	280	1	192	43	927	445	-	6	9
Ohio	11	-	5	-	3	6	80	-	68	32	316	60	-	1	-
Ind.	3	-	1	-	-	20	46	-	3	6	99	31	-	1	-
Ill.	31	-	5	-	-	17	78	-	46	1	249	39	-	1	8
Mich.	13	-	5	-	1	13	47	1	60	4	77	11	-	2	1
Wis.	-	-	-	-	3	4	29	-	15	-	186	304	-	1	-
W.N. CENTRAL	24	-	1	-	2	11	118	2	42	2	358	186	-	1	8
Minn.	5	-	-	-	-	10	7	-	2	-	191	33	-	-	-
Iowa	3	-	-	-	-	1	24	-	8	2	30	5	-	-	3
Mo.	7	-	1	-	-	-	45	2	25	-	101	90	-	1	1
N. Dak.	2	-	-	-	-	-	3	-	5	-	3	13	-	-	-
S. Dak.	2	-	-	-	-	-	3	-	-	-	8	12	-	-	-
Nebr.	3	-	-	-	-	-	9	-	1	-	9	9	-	-	-
Kans.	2	-	-	-	2	-	27	-	1	-	16	24	-	-	4
S. ATLANTIC	243	-	15	1	13	125	344	1	377	31	390	122	-	9	18
Del.	2	-	1	-	-	1	11	-	5	-	14	7	-	2	-
Md.	35	-	-	-	4	16	43	-	67	7	115	23	-	2	5
D.C.	11	-	-	-	-	-	5	-	1	1	11	1	-	-	-
Va.	25	-	-	1†	4	15	38	-	25	-	52	10	-	-	-
W. Va.	2	-	-	-	-	-	12	-	15	-	9	7	-	-	1
N.C.	95	-	-	-	-	24	58	-	197	17	71	22	-	-	-
S.C.	5	-	-	-	-	29	31	-	15	-	13	10	-	-	7
Ga.	15	-	-	-	-	3	77	-	14	5	31	14	-	-	-
Fla.	53	-	14	-	5	37	69	1	38	1	74	28	-	5	5
E.S. CENTRAL	25	-	1	-	-	461	109	-	46	-	253	24	-	1	1
Ky.	4	-	-	-	-	444	20	-	-	-	29	1	-	-	-
Tenn.	10	-	-	-	-	-	28	-	13	-	158	6	-	1	1
Ala.	6	-	1	-	-	-	34	-	22	-	55	14	-	-	-
Miss.	5	-	-	-	-	17	27	-	11	-	11	3	-	-	-
W.S. CENTRAL	21	1	8	-	3	1,102	184	2	180	14	146	197	-	17	7
Ark.	3	-	-	-	-	-	18	-	4	-	10	14	-	-	-
La.	2	-	1	-	-	-	34	1	17	-	9	8	-	1	-
Okla.	4	-	-	-	-	11	25	-	11	14	85	28	-	1	-
Tex.	12	1	7	-	3	1,091	107	1	148	-	42	147	-	15	7
MOUNTAIN	30	1	5	-	1	35	144	7	58	11	342	326	1	9	7
Mont.	2	-	-	-	-	-	13	-	-	-	7	4	-	-	-
Idaho	1	-	-	-	-	-	10	-	5	5	109	41	1	2	1
Wyo.	-	-	-	-	-	1	2	-	2	-	1	-	-	-	-
Colo.	18	-	2	-	1	29	27	-	16	1	112	56	-	-	1
N. Mex.	5	-	-	-	-	2	4	N	N	-	34	83	-	-	-
Ariz.	-	1	2	-	-	3	70	5	13	4	48	110	-	2	2
Utah	1	-	-	-	-	-	11	-	4	-	27	30	-	4	1
Nev.	3	-	1	-	-	-	7	2	18	1	4	2	-	1	2
PACIFIC	278	-	89	-	18	108	327	4	257	14	521	581	-	68	74
Wash.	27	-	-	-	-	10	61	-	10	4	59	175	-	-	6
Oreg.	4	-	-	-	-	3	22	N	N	1	17	32	-	3	1
Calif.	240	-	78	-	7	54	218	3	218	6	427	342	-	37	44
Alaska	1	-	-	-	2	9	13	-	8	-	5	12	-	1	-
Hawaii	6	-	11	-	9	32	13	1	21	3	13	20	-	27	23
Guam	1	U	2	U	-	10	1	U	6	U	-	-	U	-	3
P.R.	-	-	224	-	-	339	8	-	3	-	6	12	-	-	-
V.I.	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-
Amer. Samoa	-	U	1	U	-	-	-	U	1	U	2	6	U	-	-
C.N.M.I.	-	-	-	-	1	2	-	-	12	-	1	1	-	-	-

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

N: Not notifiable U: Unavailable † International § Out-of-state

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending October 9, 1993, and October 3, 1992 (40th Week)

Reporting Area	Syphilis (Primary & Secondary)		Toxic-Shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993
UNITED STATES	19,840	26,097	183	16,185	17,387	105	254	381	6,882
NEW ENGLAND	292	511	13	394	374	-	24	5	1,207
Maine	4	5	3	30	19	-	-	-	-
N.H.	26	35	3	9	14	-	2	-	92
Vt.	1	1	1	5	6	-	-	-	22
Mass.	108	257	5	218	205	-	16	5	499
R.I.	12	24	1	44	23	-	-	-	-
Conn.	141	189	-	88	107	-	6	-	594
MID. ATLANTIC	1,768	3,606	30	3,585	4,128	1	50	26	2,621
Upstate N.Y.	158	284	15	331	557	1	11	6	1,999
N.Y. City	859	2,032	1	2,112	2,366	-	26	-	-
N.J.	220	445	-	614	727	-	9	10	343
Pa.	531	845	14	528	478	-	4	10	279
E.N. CENTRAL	2,816	3,871	37	1,488	1,699	4	31	12	93
Ohio	893	621	12	247	245	-	7	8	5
Ind.	261	212	1	167	141	1	1	1	9
Ill.	844	1,677	6	651	861	2	16	1	17
Mich.	465	765	18	354	386	1	6	2	16
Wis.	353	596	-	69	66	-	1	-	46
W.N. CENTRAL	1,277	1,177	12	366	411	33	2	17	286
Minn.	59	75	2	44	114	-	-	1	37
Iowa	54	39	5	40	34	-	-	6	61
Mo.	1,050	877	2	196	183	14	2	7	16
N. Dak.	1	1	-	5	8	-	-	-	51
S. Dak.	1	-	-	11	18	15	-	2	38
Nebr.	10	24	-	14	16	1	-	-	7
Kans.	102	161	3	56	38	3	-	1	76
S. ATLANTIC	5,214	7,146	22	3,210	3,266	3	40	174	1,627
Del.	88	165	1	38	40	-	1	1	119
Md.	286	498	1	301	292	-	8	10	493
D.C.	269	305	-	134	89	-	-	-	14
Va.	504	574	6	309	280	-	4	9	306
W. Va.	12	15	-	61	73	-	-	6	71
N.C.	1,449	1,917	3	424	434	2	2	105	80
S.C.	765	965	-	318	318	-	-	10	127
Ga.	875	1,412	2	591	674	-	3	26	368
Fla.	966	1,295	9	1,034	1,066	1	22	7	49
E.S. CENTRAL	3,109	3,387	9	1,004	1,091	5	7	50	174
Ky.	263	130	2	285	291	1	2	8	17
Tenn.	882	918	3	145	283	3	2	29	72
Ala.	653	1,189	2	385	322	1	3	4	85
Miss.	1,311	1,150	2	189	195	-	-	9	-
W.S. CENTRAL	4,580	4,695	2	1,805	2,005	41	4	86	451
Ark.	600	692	-	148	152	25	-	7	28
La.	2,008	1,941	-	-	155	-	1	1	5
Okla.	320	273	2	122	118	13	-	74	57
Tex.	1,652	1,789	-	1,535	1,580	3	3	4	361
MOUNTAIN	188	287	11	391	462	12	10	11	151
Mont.	1	7	-	15	-	5	-	1	21
Idaho	-	1	1	10	18	-	-	-	6
Wyo.	7	3	-	3	-	3	-	9	19
Colo.	54	49	2	32	46	-	5	1	25
N. Mex.	24	36	1	46	64	1	2	-	9
Ariz.	82	142	1	181	203	-	2	-	54
Utah	8	8	4	23	64	2	1	-	4
Nev.	12	41	2	81	67	1	-	-	13
PACIFIC	596	1,417	47	3,942	3,951	6	86	-	272
Wash.	49	71	7	200	220	1	6	-	-
Oreg.	55	34	-	79	104	2	-	-	-
Calif.	478	1,300	40	3,424	3,378	3	77	-	255
Alaska	8	4	-	40	50	-	-	-	17
Hawaii	6	8	-	199	199	-	3	-	-
Guam	2	3	-	31	58	-	-	-	-
P.R.	402	279	-	185	200	-	-	-	36
V.I.	35	54	-	2	3	-	-	-	-
Amer. Samoa	-	-	-	2	-	-	1	-	-
C.N.M.I.	3	6	-	26	48	-	-	-	-

U: Unavailable

TABLE III. Deaths in 121 U.S. cities,* week ending October 9, 1993 (40th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	633	418	131	54	17	13	54
Boston, Mass.	161	77	49	25	4	6	22
Bridgeport, Conn.	50	36	9	3	2	-	4
Cambridge, Mass.	24	15	7	2	-	-	1
Fall River, Mass.	41	28	10	3	-	-	-
Hartford, Conn.	64	40	11	3	8	2	1
Lowell, Mass.	29	26	3	-	-	-	2
Lynn, Mass.	17	13	4	-	-	-	1
New Bedford, Mass.	21	18	2	1	-	-	-
New Haven, Conn.	33	22	6	4	1	-	5
Providence, R.I.	45	31	12	2	-	-	-
Somerville, Mass.	8	6	2	-	-	-	-
Springfield, Mass.	59	43	6	7	1	2	7
Waterbury, Conn.	26	22	1	3	-	-	2
Worcester, Mass.	55	41	9	1	1	3	9
MID. ATLANTIC	2,421	1,570	451	272	69	59	116
Albany, N.Y.	54	33	14	5	1	1	3
Allentown, Pa.	25	25	-	-	-	-	1
Buffalo, N.Y.	100	57	26	12	3	2	3
Camden, N.J.	30	12	7	6	1	4	-
Elizabeth, N.J.	19	17	2	-	-	-	4
Erie, Pa.§	51	40	7	3	1	-	2
Jersey City, N.J.	40	25	8	5	1	1	1
New York City, N.Y.	1,332	855	242	167	41	27	48
Newark, N.J.	76	45	12	13	5	1	11
Paterson, N.J.	21	15	4	2	-	-	-
Philadelphia, Pa.	293	173	67	33	12	8	17
Pittsburgh, Pa.§	67	45	15	3	-	4	6
Reading, Pa.	10	8	-	2	-	-	2
Rochester, N.Y.	116	88	18	6	2	2	9
Schenectady, N.Y.	27	20	3	3	-	1	1
Scranton, Pa.§	28	24	2	1	1	-	2
Syracuse, N.Y.	72	50	11	5	1	5	4
Trenton, N.J.	40	22	9	6	-	3	1
Utica, N.Y.	20	16	4	-	-	-	1
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	2,000	1,229	361	209	136	65	91
Akron, Ohio	47	31	7	4	2	3	-
Canton, Ohio	24	16	4	2	-	2	2
Chicago, Ill.	562	224	110	114	101	13	19
Cincinnati, Ohio	124	88	24	8	-	4	5
Cleveland, Ohio	139	78	34	13	6	8	2
Columbus, Ohio	U	U	U	U	U	U	U
Dayton, Ohio	126	91	21	7	3	4	9
Detroit, Mich.	205	126	47	20	7	5	4
Evansville, Ind.	45	33	7	3	1	1	6
Fort Wayne, Ind.	46	38	8	-	-	-	1
Gary, Ind.	16	10	2	3	1	-	1
Grand Rapids, Mich.	50	36	10	2	1	1	8
Indianapolis, Ind.	152	107	25	9	4	7	4
Madison, Wis.	36	22	8	1	1	4	1
Milwaukee, Wis.	130	104	15	5	3	3	13
Peoria, Ill.	55	42	7	5	-	1	3
Rockford, Ill.	58	43	8	4	1	2	3
South Bend, Ind.	36	28	6	-	-	2	4
Toledo, Ohio	89	66	11	5	4	3	4
Youngstown, Ohio	60	46	7	4	1	2	2
W.N. CENTRAL	833	602	140	51	22	18	40
Des Moines, Iowa	75	58	13	-	-	4	4
Duluth, Minn.	34	27	3	1	3	-	3
Kansas City, Kans.	61	49	9	3	-	-	6
Kansas City, Mo.	100	71	13	10	5	1	4
Lincoln, Nebr.	33	22	8	3	-	-	1
Minneapolis, Minn.	187	128	40	11	3	5	10
Omaha, Nebr.	88	58	14	11	3	2	3
St. Louis, Mo.	137	105	17	7	4	4	5
St. Paul, Minn.	60	45	9	3	2	1	2
Wichita, Kans.	58	39	14	2	2	1	2
S. ATLANTIC	1,544	931	306	205	55	43	90
Atlanta, Ga.	147	90	26	24	6	1	7
Baltimore, Md.	246	158	39	29	12	7	25
Charlotte, N.C.	72	42	17	8	3	2	4
Jacksonville, Fla.	101	66	15	14	5	1	7
Miami, Fla.	103	46	30	24	2	1	1
Norfolk, Va.	51	34	5	6	2	4	5
Richmond, Va.	83	53	19	10	1	-	9
Savannah, Ga.	31	18	10	2	-	1	2
St. Petersburg, Fla.	67	45	10	8	1	3	2
Tampa, Fla.	173	118	37	9	5	3	14
Washington, D.C.	434	231	94	70	18	19	14
Wilmington, Del.	36	30	4	1	-	1	-
E.S. CENTRAL	577	365	123	43	22	23	27
Birmingham, Ala.	110	59	25	12	5	9	5
Chattanooga, Tenn.	U	U	U	U	U	U	U
Knoxville, Tenn.	65	45	15	2	1	2	6
Lexington, Ky.	51	29	7	6	2	7	1
Memphis, Tenn.	127	84	28	7	6	1	7
Mobile, Ala.	53	41	8	1	3	-	3
Montgomery, Ala.	55	44	8	1	-	2	2
Nashville, Tenn.	116	63	32	14	5	2	3
W.S. CENTRAL	1,136	733	208	109	57	29	41
Austin, Tex.	59	34	14	10	1	-	10
Baton Rouge, La.	76	57	12	5	2	-	4
Corpus Christi, Tex.	41	28	6	3	1	3	2
Dallas, Tex.	215	130	44	25	10	6	2
El Paso, Tex.	65	52	6	2	4	1	5
Ft. Worth, Tex.	109	70	18	8	5	8	4
Houston, Tex.	U	U	U	U	U	U	U
Little Rock, Ark.	79	39	22	7	9	2	2
New Orleans, La.	123	74	23	15	10	1	-
San Antonio, Tex.	198	130	37	18	8	5	5
Shreveport, La.	79	59	9	5	4	2	3
Tulsa, Okla.	92	60	17	11	3	1	4
MOUNTAIN	764	521	133	73	21	16	72
Albuquerque, N.M.	78	54	14	6	1	3	5
Colo. Springs, Colo.	30	21	7	-	2	-	-
Denver, Colo.	99	72	14	8	3	2	7
Las Vegas, Nev.	139	92	35	10	2	-	11
Ogden, Utah	34	25	6	3	-	-	3
Phoenix, Ariz.	160	104	27	20	2	7	26
Pueblo, Colo.	20	16	2	2	-	-	1
Salt Lake City, Utah	87	56	9	14	6	2	9
Tucson, Ariz.	117	81	19	10	5	2	10
PACIFIC	1,648	1,095	282	177	52	40	101
Berkeley, Calif.	29	17	6	6	-	-	6
Fresno, Calif.	81	58	13	7	3	-	5
Glendale, Calif.	25	18	5	2	-	-	-
Honolulu, Hawaii	78	56	10	6	2	4	4
Long Beach, Calif.	79	52	10	11	3	3	9
Los Angeles, Calif.	401	236	83	63	14	3	14
Pasadena, Calif.	31	23	3	2	-	3	1
Portland, Oreg.	142	109	15	9	5	4	5
Sacramento, Calif.	U	U	U	U	U	U	U
San Diego, Calif.	178	113	36	22	3	4	12
San Francisco, Calif.	133	87	19	19	5	3	12
San Jose, Calif.	152	108	29	7	7	1	18
Santa Cruz, Calif.	37	30	2	1	-	4	2
Seattle, Wash.	144	86	27	16	7	8	4
Spokane, Wash.	53	40	8	3	-	2	4
Tacoma, Wash.	85	62	16	3	3	1	5
TOTAL	11,556¶	7,464	2,135	1,193	451	306	632

*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

†Pneumonia and influenza.

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

¶Total includes unknown ages.

U: Unavailable.

Carbon Monoxide Poisoning — Continued

identified two cases in 1991 and two cases related to flood clean-up efforts in July 1993. In Kentucky, OHNAC identified one case occurring in April 1993. Finally, as a result of information disseminated by OHNAC programs about this hazard, family members have reported four more cases to OHNAC—one in 1989 in North Carolina and three in Minnesota during 1991–1993.

As demonstrated in this report, farm workers can be poisoned by CO when operating gasoline-powered washers inside buildings. Preventing CO poisoning requires operating any gasoline-powered equipment outdoors at all times. Because pressure washers are used frequently during the winter months when freezing water is a problem, an approach to safe operation under these conditions includes moving the washer indoors when it is not operating and back outdoors before restarting or draining water from the machine when the washer is turned off. Alternative approaches, such as building separate structures to isolate the washer or attaching specially designed hoses to the exhaust pipe, may be inadequate or pose unique hazards (e.g., high CO exposure on entrance into the isolation structure or leaks or breaks in the hose).

In addition to gasoline-powered pressure washers, CO poisonings among persons on farms have been associated with unvented or inadequately vented space heaters and indoor tractor maintenance, underscoring that gasoline engines, irrespective of size, should not be operated indoors. Although warning labels and operator's manuals often advise against operating gasoline-powered equipment without "adequate" ventilation, adequate ventilation cannot be safely determined. Therefore, these labels and manuals should clearly indicate the CO hazard associated with indoor operation and prohibit any indoor use. In addition, equipment owners should ensure that manuals are provided when equipment is rented or borrowed and that operators read and understand these manuals before operation.

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Current Trends

Self-Reported HIV-Antibody Testing Among Persons With Selected Risk Behaviors — Southern Los Angeles County, 1991–1992

Since 1985, the number of human immunodeficiency virus (HIV) tests provided annually through publicly funded counseling and testing (CT) programs has continued to increase, with more than 2 million tests provided in 1991 (*1*). However, the success of CT programs in reaching persons most at risk for infection and transmission of HIV is unclear. To ensure that resources are used as effectively as possible, CT programs must evaluate their ability to reach persons at highest risk. This report summarizes an assessment of HIV testing among street-recruited injecting-drug users (IDUs), female sex partners of male IDUs, and female prostitutes in southern Los Angeles County in 1991–1992.

From April 1991 through September 1992, anonymous street interviews were conducted in Long Beach, California, and nearby communities as part of activities sponsored by the CDC Acquired Immunodeficiency Syndrome (AIDS) Community Demonstration Projects (*2*). Interviews were conducted in 127 sites that had been associated with high prevalences of drug abuse, prostitution, or both. Trained interviewers familiar with the community and target groups conducted 7734 brief, preliminary risk assessments in these sites with English-speaking persons aged ≥18 years; of these, 3097 persons were identified who met eligibility criteria for the second portion of the on-street interview that included questions about HIV risk, attitudes, and HIV-testing history. Eligibility was based on self-reported membership in one or more of four target populations (i.e., male IDU, female IDU, female sex partner of male IDUs, and female prostitute) and recent sexual or drug-use behavior (i.e., vaginal or anal intercourse in the previous 30 days or needle sharing in the previous 60 days)*. Participants received $2 in fast-food certificates for completing the brief risk assessment or $5 in cash for completing the full interview. Because the interviews were conducted anonymously on the street, repeat interviews (n=704) were identified and excluded from data analysis by using a subset of unique identifiers that retained respondent anonymity (e.g., date of birth, place of birth, ethnicity, and sex).

The statistical relation between CT service use and respondent characteristics were assessed using two methods. First, chi-square tests for general association were used to identify differences in the percentage of persons reporting use of CT services. Second, stepwise logistic regression was used to assess the unique contribution each one of the identified respondent characteristics made to the use of CT services.

Overall, 1709 (71.4%) persons reported having been tested for HIV infection, including 466 (64.9%) of 718 male IDUs and 1243 (74.2%) of 1675 high-risk females. Among male IDUs, HIV-testing history varied by race/ethnicity and sexual orientation, with black and homosexual/bisexual males less likely to have been tested than other male IDUs (Table 1). Among high-risk females, HIV-testing history was related to race/ethnicity, age, sexual orientation, and HIV risk, with females who were black, aged <30 years, and heterosexual less likely to have been tested (Table 2).

*History of IDU was verified by visual inspection of respondent's arms for needle tracks.

HIV-Antibody Testing — Continued

When analyzed using stepwise logistic regression, only nonblack race/ethnicity† remained significantly related to previous testing of males (odds ratio [OR]=1.5; 95% confidence interval [CI]=1.1–2.1). Nonblack race/ethnicity (OR=2.1; 95% CI=1.6–2.7), history of injecting-drug use (OR=1.9; 95% CI=1.5–2.4), history of prostitution (OR=1.8; 95% CI=1.4–2.4), and having a non-IDU sex partner (OR=1.5; 95% CI=1.1–1.9) were positively associated with females having been tested for HIV.

Overall, 1512 (88.5%) persons reported having obtained their test results, including 88.1% of male IDUs and 88.7% of high-risk females. Among male IDUs, no respondent characteristics were associated with receipt of test results (Table 1). Among females, race/ethnicity was significantly related to receipt of results ($p<0.01$) (Table 2). Stepwise logistic regression indicated that both nonblack race/ethnicity (OR=2.2; 95% CI=1.5–3.2) and not having an IDU partner (OR=1.5; 95% CI=1.1–2.1) were independently associated with women having received HIV test results.

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Editorial Note: Findings from CDC's 1989 National Health Interview Survey (NHIS) indicated that in the United States, 41.5% of persons at increased risk§ were tested for

† Race/ethnicity was used to form two groups: black (race/ethnicity=black) and nonblack (race/ethnicity=Hispanic, white, or other).

§ Defined as persons reporting, since 1977, receiving clotting factor concentrates for hemophilia, born in Haiti or Central or East Africa, male homosexual activity, taking illegal drugs by needle, sexual activity with any persons meeting the aforementioned criteria, or having sex for money or drugs.

TABLE 1. Self-reported HIV-antibody testing and receipt of test results among male injecting-drug users (IDUs) — southern Los Angeles County, 1991–1992

Characteristic	Sample size	% Total sample	HIV tested %	HIV tested Chi-square	Received results %	Received results Chi-square
Race/Ethnicity						
Black	444	61.8	60.4	12.5*	88.0	0.6
Hispanic	131	18.2	68.7	—	88.6	—
White	125	17.4	74.4	—	88.2	—
Other	18	2.5	83.3	—	86.7	—
Age (yrs)						
≤29	73	10.2	58.9	1.3	90.7	0.3
≥30	645	89.8	65.6	—	87.8	—
Sexual orientation						
Heterosexual	677	94.4	65.9	5.6†	88.0	0.0
Bisexual/ Homosexual	40	5.6	47.5	—	88.9	—
IDU sex partner						
Yes	466	72.2	61.6	1.7	86.0	3.2
No	179	27.8	67.0	—	92.4	—
Lived in area for ≥1 yr						
Yes	635	88.7	65.4	0.4	87.6	0.8
No	81	11.3	61.7	—	92.0	—

* $p<0.01$.
† $p<0.05$.

HIV-Antibody Testing — Continued

HIV infection and that testing rates were lower among blacks, Hispanics, and persons with less than a high school education (*3*). The NHIS also documented higher rates of CT among persons in metropolitan areas, the western United States, and persons at increased risk. However, because the NHIS sampling scheme targeted households, estimates for HIV testing probably underrepresented some groups of at-risk persons (e.g., those who were homeless or who lived in transitional housing). When compared with the NHIS results, the rates of self-reported testing among the high-risk populations in southern Los Angeles County were higher. In addition, these findings are consistent with information from publicly funded testing sites in Los Angeles County, which indicate comparable return rates (82%) for similar high-risk persons (CDC unpublished data, 1993), and suggest that HIV-prevention programs promoting CT in southern Los Angeles County have been effectively extended to IDUs, female sex partners of male IDUs, and street prostitutes. However, 37% of all at-risk persons interviewed in this assessment had either not been tested or failed to obtain their test results, emphasizing the need to continue to offer CT and other HIV-prevention services to populations at high risk.

TABLE 2. Self-reported HIV-antibody testing and receipt of test results among high-risk women — southern Los Angeles County, 1991–1992

Characteristic	Sample size	% Total sample	HIV tested %	HIV tested Chi-square	Received results %	Received results Chi-square
Race/Ethnicity						
Black	923	55.1	68.3	42.1*	85.2	16.1*
Hispanic	262	15.6	77.5	—	91.1	
White	419	25.0	83.1	—	92.8	
Other	71	4.2	87.3	—	93.5	
Age (yrs)						
≤29	596	35.6	71.3	4.0†	88.7	0.0
≥30	1078	64.4	75.8	—	88.7	
Sexual orientation						
Heterosexual	1363	81.5	72.7	9.0*	88.9	0.2
Bisexual/Homosexual	310	18.5	81.0	—	88.0	
Ever injected drugs						
Yes	937	55.9	80.9	49.7*	90.0	3.0
No	738	44.1	65.7	—	86.8	
Ever traded sex for money or drugs						
Yes	1199	71.6	76.9	16.1*	88.2	1.1
No	475	28.4	67.4	—	90.3	
Injecting-drug user sex partner						
Yes	1121	68.7	71.3	9.2*	87.3	3.5
No	510	31.3	78.4	—	91.0	
Lived in area for ≥1 yr						
Yes	1385	82.8	75.1	2.4	88.6	0.0
No	287	17.2	70.7	—	89.1	

* $p<0.01$.
† $p<0.05$.

HIV-Antibody Testing — Continued

One factor that may account for the lower rates of testing among female sex partners of male IDUs in southern Los Angeles County may be that a substantial proportion of these women did not perceive themselves as being at high risk for HIV infection because they did not personally inject drugs or engage in prostitution (*4,5*). Only 55.5% of female sex partners of male IDUs who had no history of drug injection or prostitution had been tested.

The findings of this report are subject to at least five limitations. First, the total population of high-risk persons from which the study sample was drawn was unknown. Second, because the level of respondents' use of CT services was based on self-reports, their reports of use of CT services may have been influenced by perceived desirability of receiving a HIV test and test results. Third, only minimal respondent characteristic information was collected and available to make comparisons; additional client and service delivery information is necessary for a comprehensive evaluation of CT service use in this geographic area. Fourth, because some of these persons may not have been tested in a publicly funded CT site, these findings cannot be directly compared with national data. Fifth, the racial/ethnic differences may have reflected differences in factors such as socioeconomic status and general use of health-care services.

High rates of AIDS cases continue to be observed in the metropolitan Los Angeles County area (*6*). Self-reports of testing in this assessment addressed neither how recently or how frequently tests were obtained nor the results of tests. However, the high level of self-reports of HIV testing among IDUs and high-risk women in southern Los Angeles County is encouraging when compared with what would have been predicted by findings from national surveys. In continuing to offer HIV CT programs to populations at risk, programs targeting women should emphasize that women's risk for HIV infection is in part determined by the sexual and drug-related practices of their male sex partners.

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Notice to Readers

Publication of *Draft Guidelines for Preventing the Transmission of Tuberculosis in Health-Care Facilities, Second Edition*

CDC has published the *Draft Guidelines for Preventing the Transmission of Tuberculosis in Health-Care Facilities, Second Edition*; the draft document was published in the October 12 *Federal Register* * for public comment. A copy of the document is available from the Guidelines Work Group, Mail Stop E-07, CDC, 1600 Clifton Road, Atlanta, GA 30333; telephone (404) 639-8027. Comments must be received in writing by December 13, 1993, at the above address.

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