

MMWR

MORBIDITY AND MORTALITY WEEKLY REPORT

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World AIDS Day — December 1, 1993

“Time to Act” is the theme selected by the World Health Organization (WHO) for the sixth annual World AIDS Day, December 1, 1993. This year’s theme focuses attention on the need for action against the pandemic of human immunodeficiency virus (HIV) infection and acquired immunodeficiency syndrome (AIDS). WHO estimates that 13 million men, women, and children worldwide have been infected with HIV. Each day, an estimated 5000 persons are newly infected. By the year 2000, 40 million persons could be infected.

Additional information about HIV infection, AIDS, and World AIDS Day is available from the CDC National AIDS Hotline (NAH) and the CDC National AIDS Clearinghouse (NAC). NAH provides information about HIV/AIDS, refers callers to services in their community, and places orders for HIV/AIDS publications; NAC distributes materials and maintains data bases on AIDS service organizations, educational materials, funding sources, and drug trials. The telephone numbers for NAH are (800) 342-2437; Spanish, (800) 344-7432; or TTY/TDD, (800) 243-7889. The telephone number for NAC is (800) 458-5231.*

* Single copies of this issue of *MMWR* will be available free until November 18, 1994, from NAC, P.O. Box 6003, Rockville, MD 20849-6003.

Current Trends

Update: Mortality Attributable to HIV Infection Among Persons Aged 25–44 Years — United States, 1991 and 1992

During the 1980s, human immunodeficiency virus (HIV) infection emerged as a leading cause of death in the United States (1). In 1992, HIV infection became the number one cause of death among men aged 25–44 years. This report updates national trends in deaths caused by HIV infection for 1991 and 1992.

Data are from the National Vital Statistics System and were obtained from death certificates filed in all 50 states and the District of Columbia. Cause of death was reported by attending physicians, medical examiners, and coroners; demographic characteristics were recorded by funeral directors. Data for 1992 are provisional

Mortality Attributable to HIV Infection —Continued

estimates based on a 10% sample of death certificates (2); 1991 is the latest year for which final mortality data are available (3).

In 1992, an estimated 33,590 U.S. residents died from HIV infection; of these, 2% were aged <25 years; 73%, 25–44 years; and 25%, ≥45 years. During 1992, HIV infection became the eighth leading cause of death overall (up from ninth in 1991), accounting for 1.5% of all deaths, and the second leading cause of death among persons aged 25–44 years (up from third in 1991) (16.2% of deaths). In 1992, HIV infection became the leading cause of death for men aged 25–44 years (up from second in 1991) and the fourth leading cause of death for women in this age group (up from fifth in 1991) (19.9% and 7.3% of deaths, respectively) (Table 1).

Stratified by race, HIV infection was the leading cause of death for black men aged 25–44 years during 1991 and 1992 (21.4% and 25.3% of deaths, respectively) and the second leading cause of death (preceded by unintentional injuries) for white men in that age group (17.8% in 1991 and 18.5% in 1992). HIV infection was the second leading cause of death for black women aged 25–44 years (up from third in 1991) in 1992 (12.1% in 1991 and 16.5% in 1992) and the sixth leading cause of death for white women aged 25–44 years in 1991 and 1992 (3.4% in 1991 and 3.8% in 1992). The death rate from HIV infection in 1992 for persons aged 25–44 years was three times as high for black men (136.0 per 100,000) as for white men (42.1 per 100,000) and 12 times as high for black women (38.0 per 100,000) as for white women (3.3 per 100,000).

In 1991 (the most recent year for which mortality data are available for Hispanic ethnicity and for other races), HIV infection was the leading cause of death among Hispanic men aged 25–44 years (24.1% of deaths) and the third leading cause of death among Hispanic women in this age group (12.4% of deaths).* Among Asians/Pacific Islanders, HIV infection was the sixth leading cause of death for men aged 25–44 years (8.8% of deaths) and the ninth leading cause of death for women in this age group (1.1% of deaths). Among American Indians/Alaskan Natives, HIV infection was the

*These data exclude deaths in New Hampshire and Oklahoma, which did not include an item to identify Hispanic ethnicity on their death certificates. The data differ from data for Hispanics published by CDC's National Center for Health Statistics for 1991, which also exclude deaths in New York City (3).

TABLE 1. Percentage of deaths caused by HIV infection, rank of HIV infection among all causes of death*, and death rate from HIV infection for persons aged 25–44 years, by sex and race† — United States, 1992§

Race	Men					Women				
	Total deaths	HIV deaths	(%)¶	Rank	Death rate**	Total deaths	HIV deaths	(%)	Rank	Death rate
White	78,310	14,460	(18.5)	2	42.1	29,580	1,120	(3.8)	6	3.3
Black	25,680	6,490	(25.3)	1	136.0	12,500	2,060	(16.5)	2	38.0
All††	106,690	21,210	(19.9)	1	52.8	43,610	3,200	(7.3)	4	7.8

*Based on the proportion of deaths from each of the cause categories used by CDC's National Center for Health Statistics to rank the 15 leading causes of death.

†Persons of Hispanic ethnicity are included among whites and blacks. Provisional data for 1992 were unavailable for other races.

§Provisional data.

¶Percentage of deaths caused by HIV infection among total deaths in the age, sex, and racial group.

**Per 100,000 population.

††Includes Asians/Pacific Islanders and American Indians/Alaskan Natives.

Mortality Attributable to HIV Infection —Continued

sixth leading cause of death for men aged 25–44 years (4.5% of deaths) and the seventh leading cause of death for women in this age group (1.9% of deaths).

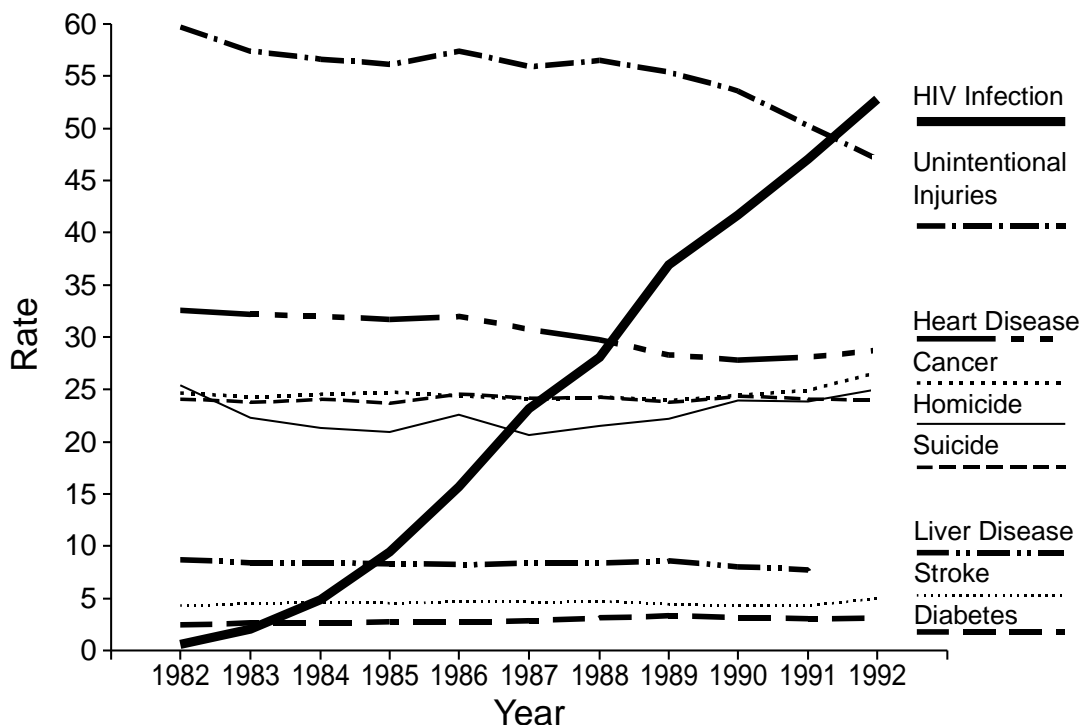
The death rate from HIV infection for persons aged 25–44 years has steadily and dramatically increased during the past 10 years, compared with death rates from most other leading causes of death (Figures 1 and 2). From 1982 to 1992, the rate increased from 0.6 per 100,000 to 52.8 per 100,000 for men aged 25–44 years and from 0.1 per 100,000 to 7.8 per 100,000 for women in this age group.

Reported by: Surveillance Br, Div of HIV/AIDS, National Center for Infectious Diseases; Mortality Statistics Br, Div of Vital Statistics, National Center for Health Statistics, CDC.

Editorial Note: Although these findings underscore the increasing impact of HIV infection on mortality in the United States, particularly among persons aged 25–44 years, the magnitude is greater than indicated in this report. This analysis was based on the underlying cause of death recorded on death certificates; previous studies suggest that deaths for which HIV infection is designated as the underlying cause represent approximately two thirds to three fourths of all HIV-related deaths (4,5).

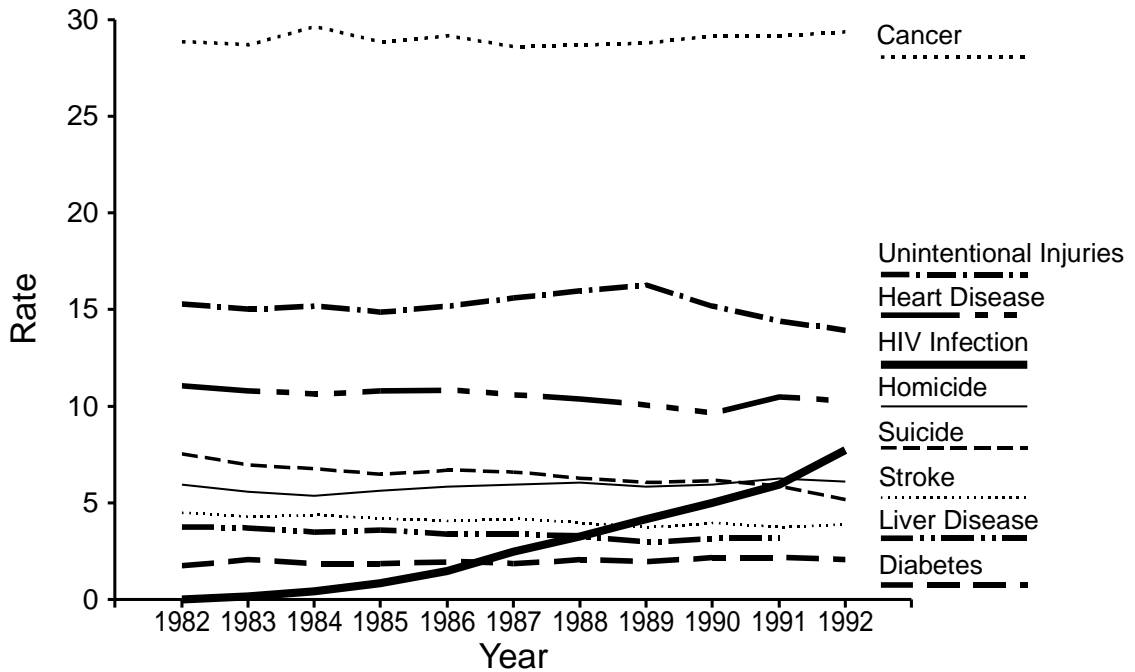
HIV infection has more severely affected mortality among blacks and Hispanics than other racial/ethnic groups. These differences probably reflect social, economic, behavioral, or other factors rather than race/ethnicity directly (6). The social and cultural context of HIV infection must be addressed through prevention efforts designed to meet the needs of specific communities.

FIGURE 1. Death rates* from leading causes of death among men aged 25–44 years, by year — United States, 1982–1992†



* Per 100,000 population.

† National vital statistics based on underlying cause of death, using final data for 1982–1991 and provisional data for 1992. Data for liver disease in 1992 are unavailable.

*Mortality Attributable to HIV Infection —Continued***FIGURE 2. Death rates* from leading causes of death among women aged 25–44 years, by year — United States, 1982–1992†**

* Per 100,000 population.

† National vital statistics based on underlying cause of death, using final data for 1982–1991 and provisional data for 1992. Data for liver disease in 1992 are unavailable.

References

1. CDC. Update: mortality attributable to HIV infection/AIDS among persons aged 25–44 years—United States, 1990 and 1991. *MMWR* 1993;42:481–6.
2. NCHS. Annual summary of births, marriages, divorces, and deaths: United States, 1992. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, CDC, 1993. (Monthly vital statistics report; vol 41, no. 13).
3. NCHS. Advance report of final mortality statistics, 1991. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, CDC, 1993. (Monthly vital statistics report; vol 42, no. 2, suppl).
4. Buehler JW, Devine OJ, Berkelman RL, Chevarley FM. Impact of the human immunodeficiency virus epidemic on mortality trends in young men, United States. *Am J Public Health* 1990; 80:1080–6.
5. Buehler JW, Hanson DL, Chu SY. Reporting of HIV/AIDS deaths in women. *Am J Public Health* 1992;82:1500–5.
6. CDC. Use of race and ethnicity in public health surveillance: summary of the CDC/ATSDR Workshop. *MMWR* 1993;42(no. RR-10).

Current Trends

Assessment of Street Outreach for HIV Prevention — Selected Sites, 1991–1993

Street outreach programs for human immunodeficiency virus (HIV) prevention are designed to deliver HIV prevention messages, materials, and referral services to high-risk persons outside of traditional health-care and drug-treatment clinics. The Acquired Immunodeficiency Syndrome (AIDS) Evaluation of Street Outreach Projects (AESOP) is an eight-site* study designed by CDC in collaboration with researchers in each of the sites to better understand client characteristics, service delivery, and the impact of street outreach programs on the risk behaviors of high-risk populations. The populations studied are injecting-drug users (IDUs) in five of the eight sites and youth in high-risk situations (YHRS) (i.e., youths aged 12–23 years who are homeless or runaway or who support themselves through the “street economy” of drugs, prostitution, panhandling, and crime) in three sites. This report summarizes information collected during the first 2 years of the project.

During the first year of AESOP, from September 1991 through October 1992, each site conducted a community assessment process (CAP), a qualitative, ethnographically based series of individual interviews with IDUs, YHRS, and others involved with the community (e.g., outreach workers, social workers, agency directors, law enforcement personnel, drug-treatment workers, and neighborhood shopkeepers). A total of 618 of these open-ended interviews were conducted in the eight sites; 350 (57%) of the interviews were with IDUs and YHRS.

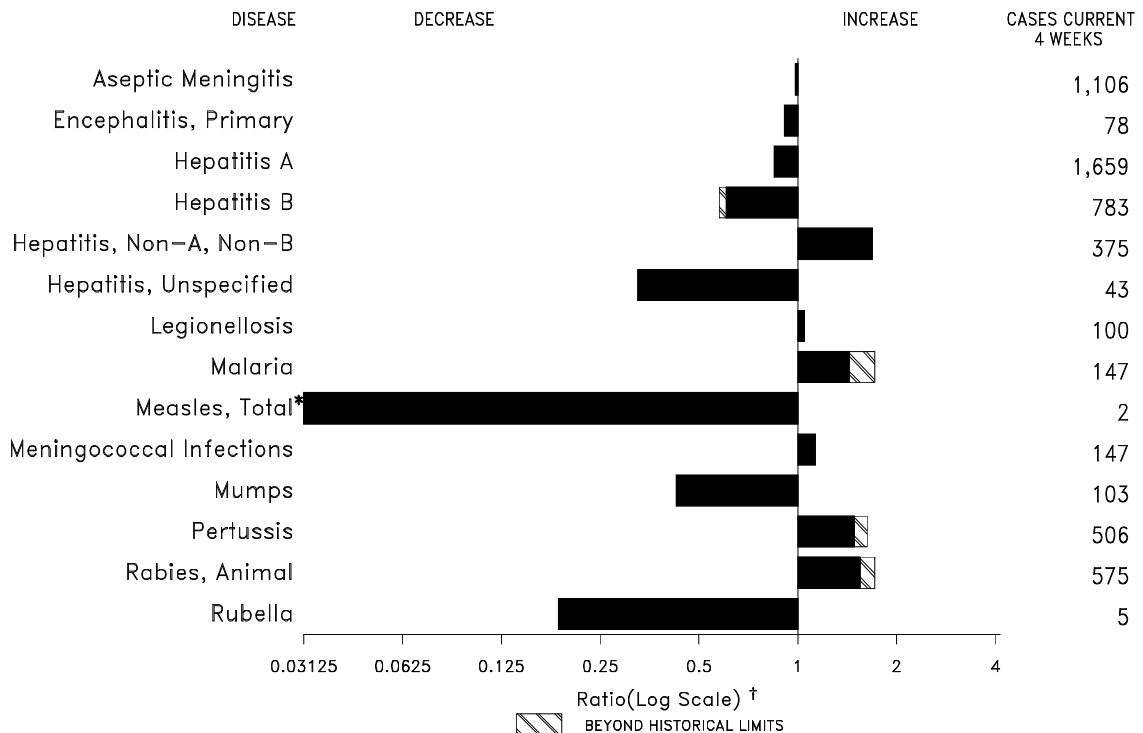
During CAP, three common components of outreach programs were determined: 1) distribution of condoms, bleach kits, and HIV risk-reduction materials and messages; 2) delivery of these HIV-prevention services in outdoor “street” locations or at fixed sites (e.g., homeless shelters, drop-in centers, and soup kitchens); and 3) the provision of other services or activities (e.g., referral for treatment, case management, and mobile health vans). Estimates obtained by AESOP investigators of the size of the high-risk populations ranged from 1000–2000 YHRS in San Francisco to 240,000–250,000 IDUs in New York City. However, outreach programs were not equipped to reach all members of these populations.

During the second year of AESOP, from January through August 1993, a baseline quantitative survey was conducted at each of the eight sites. In these surveys, IDUs and YHRS were sampled systematically to be as representative as possible of the high-risk populations. Interviews were conducted at locations such as drop-in centers, food lines, meal programs, outdoor congregating areas, drug buying areas, and shooting galleries.

Results from the initial round of closed-ended interviews indicated that 17%–65% of IDUs and 23%–46% of YHRS reported that they had talked with an outreach worker (Table 1, page 879). In addition, 14%–58% of IDUs and 11%–26% of YHRS had received HIV-prevention literature; 16%–58% of IDUs and 22%–39% of YHRS had received free supplies of condoms; and 13%–55% of IDUs and 7%–10% of YHRS had received bleach kits from outreach workers. Among IDUs who reported contact with outreach workers, 15%–43% reported that they had never received any form of drug treatment.

*The eight projects are located in six cities: Atlanta, Chicago, Los Angeles, New York, Philadelphia, and San Francisco.

FIGURE I. Notifiable disease reports, comparison of 4-week totals ending November 13, 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-five is 0.00593).

† 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 November 13, 1993 (45th Week)

	Cum. 1993		Cum. 1993
AIDS*	83,485	Measles: imported	56
Anthrax	-	indigenous	221
Botulism: Foodborne	16	Plague	8
Infant	56	Poliomyelitis, Paralytic [§]	-
Other	2	Psittacosis	50
Brucellosis	80	Rabies, human	1
Cholera	17	Syphilis, primary & secondary	21,856
Congenital rubella syndrome	6	Syphilis, congenital, age < 1 year [¶]	1,493
Diphtheria	-	Tetanus	40
Encephalitis, post-infectious	145	Toxic shock syndrome	204
Gonorrhea	327,489	Trichinosis	14
<i>Haemophilus influenzae</i> (invasive disease) [†]	1,008	Tuberculosis	18,371
Hansen Disease	156	Tularemia	112
Leptospirosis	38	Typhoid fever	306
Lyme Disease	6,512	Typhus fever, tickborne (RMSF)	434

*Updated monthly; last update October 2, 1993.

[†]Of 963 cases of known age, 316 (33%) 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 November 13, 1993, and November 7, 1992 (45th Week)

Reporting Area	AIDS*	Aseptic Meningitis	Encephalitis		Gonorrhea		Hepatitis (Viral), by type				Legionellosis	Lyme Disease
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
			Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993		
UNITED STATES	83,485	10,871	771	145	327,489	424,758	18,707	10,407	4,337	536	1,091	6,512
NEW ENGLAND	4,183	364	15	8	7,148	8,748	422	426	483	13	72	1,648
Maine	118	41	2	-	74	84	15	10	4	-	5	11
N.H.	83	48	-	2	65	101	33	104	397	3	6	63
Vt.	58	42	4	-	22	23	8	8	3	-	2	5
Mass.	2,210	150	7	4	2,676	3,185	199	225	71	10	41	166
R.I.	274	83	2	2	362	589	67	20	8	-	18	256
Conn.	1,440	-	-	-	3,949	4,766	100	59	-	-	-	1,147
MID. ATLANTIC	20,227	835	57	9	39,553	48,468	943	1,155	349	6	212	3,538
Upstate N.Y.	3,118	482	41	6	7,678	9,722	395	383	236	1	74	2,120
N.Y. City	10,941	104	1	-	10,703	17,193	177	121	1	-	3	3
N.J.	3,909	-	-	-	5,041	6,709	241	345	81	-	29	647
Pa.	2,259	249	15	3	16,131	14,844	130	306	31	5	106	768
E.N. CENTRAL	6,686	1,886	177	29	63,300	80,894	2,054	1,200	509	13	288	91
Ohio	1,286	665	62	4	19,139	24,198	269	163	35	-	145	39
Ind.	718	205	20	11	7,067	7,801	543	203	14	1	51	22
Ill.	2,423	426	41	3	16,290	26,710	682	221	62	5	17	13
Mich.	1,606	551	44	11	15,578	18,402	185	346	360	7	57	17
Wis.	653	39	10	-	5,226	3,783	375	267	38	-	18	-
W.N. CENTRAL	2,694	681	34	10	17,326	22,717	2,015	570	160	16	86	194
Minn.	579	95	12	-	2,217	2,669	383	62	11	4	2	103
Iowa	159	144	5	2	1,404	1,442	51	32	9	4	14	8
Mo.	1,466	212	2	8	9,779	12,751	1,252	404	116	8	24	38
N. Dak.	2	12	3	-	38	66	63	-	-	-	1	2
S. Dak.	22	19	6	-	193	152	16	-	-	-	-	-
Nebr.	164	25	1	-	476	1,444	179	18	9	-	38	4
Kans.	302	174	5	-	3,219	4,193	71	54	15	-	7	39
S. ATLANTIC	17,732	2,237	205	57	86,755	125,932	1,067	1,963	676	81	196	828
Del.	308	71	3	-	1,320	1,549	10	144	138	-	12	391
Md.	2,039	220	23	-	14,341	14,010	141	240	23	5	45	146
D.C.	1,181	33	-	-	4,100	5,631	11	38	1	-	14	2
Va.	1,273	289	37	7	10,204	13,653	127	122	32	36	9	72
W. Va.	66	32	101	-	578	736	22	35	29	-	4	48
N.C.	960	235	31	-	21,871	21,725	77	258	66	-	25	79
S.C.	1,269	28	-	-	9,233	9,638	18	47	4	1	19	9
Ga.	2,328	156	1	-	4,660	35,009	100	257	173	1	36	46
Fla.	8,308	1,173	9	50	20,448	23,981	561	822	210	38	32	35
E.S. CENTRAL	2,179	683	39	7	37,892	42,840	267	1,151	857	4	39	28
Ky.	275	294	14	6	4,262	4,111	104	77	15	-	15	9
Tenn.	897	160	8	-	10,307	13,553	79	975	827	3	16	16
Ala.	611	160	3	-	14,289	14,793	52	93	5	1	2	3
Miss.	396	69	14	1	9,034	10,383	32	6	10	-	6	-
W.S. CENTRAL	8,451	1,274	67	2	39,976	46,174	2,232	1,505	307	154	30	62
Ark.	327	56	1	-	8,118	6,529	46	52	4	2	4	2
La.	1,028	78	6	-	10,327	12,567	71	184	128	4	3	2
Okla.	648	1	7	-	3,423	4,791	147	266	109	10	13	22
Tex.	6,448	1,139	53	2	18,108	22,287	1,968	1,003	66	138	10	36
MOUNTAIN	3,375	652	29	5	9,581	10,915	3,540	557	314	70	64	20
Mont.	29	-	-	1	70	102	68	7	3	-	5	-
Idaho	58	11	-	-	147	101	243	68	-	3	1	2
Wyo.	33	7	-	-	73	49	13	28	99	-	6	9
Colo.	1,106	209	15	-	3,057	3,932	780	65	49	38	9	-
N. Mex.	267	118	4	2	827	818	337	199	103	3	5	2
Ariz.	1,136	170	8	-	3,503	3,774	1,249	80	13	12	13	-
Utah	231	62	1	1	311	286	722	52	31	13	10	2
Nev.	515	75	1	1	1,593	1,853	128	58	16	1	15	5
PACIFIC	17,958	2,259	148	18	25,958	38,070	6,167	1,880	682	179	104	103
Wash.	1,337	-	1	-	3,241	3,448	691	201	166	9	10	4
Oreg.	680	-	-	-	1,030	1,433	83	30	13	1	-	2
Calif.	15,586	2,123	142	18	20,656	32,143	4,646	1,621	490	166	86	96
Alaska	58	20	4	-	533	585	686	9	10	-	-	-
Hawaii	297	116	1	-	498	461	61	19	3	3	8	1
Guam	-	2	-	-	48	50	2	2	-	3	-	-
P.R.	2,338	56	-	-	461	192	72	343	81	2	-	-
V.I.	40	-	-	-	79	90	-	4	-	-	-	-
Amer. Samoa	-	-	-	-	40	46	18	-	-	-	-	-
C.N.M.I.	-	3	1	-	67	68	-	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 November 13, 1993, and November 7, 1992 (45th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin- gococcal infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total		1993	Cum. 1993	1993	Cum. 1993	Cum. 1992	1993	Cum. 1993	Cum. 1992
		1993	Cum. 1993	1993	Cum. 1993	Cum. 1992									
UNITED STATES	1,046	-	221	-	56	2,188	2,041	16	1,410	79	4,970	2,738	-	181	146
NEW ENGLAND	85	-	58	-	6	65	117	-	9	3	667	207	-	2	6
Maine	5	-	2	-	-	4	8	-	-	-	19	11	-	1	1
N.H.	6	-	2	-	-	13	14	-	-	2	239	49	-	-	-
Vt.	1	-	30	-	1	-	7	-	-	1	80	9	-	-	-
Mass.	41	-	14	-	4	21	62	-	2	-	253	99	-	1	-
R.I.	5	-	1	-	1	21	1	-	2	-	6	2	-	-	4
Conn.	27	-	9	-	-	6	25	-	5	-	70	37	-	-	1
MID. ATLANTIC	206	-	11	-	6	207	250	8	109	36	671	167	-	61	10
Upstate N.Y.	116	-	-	-	2	111	111	2	38	6	307	98	-	17	7
N.Y. City	24	-	5	-	2	56	19	-	2	-	7	16	-	22	-
N.J.	41	-	6	-	2	40	38	-	12	-	51	53	-	16	3
Pa.	25	-	-	-	-	-	82	6	57	30	306	-	-	6	-
E.N. CENTRAL	68	-	19	-	7	60	322	3	211	7	1,120	617	-	7	9
Ohio	15	-	5	-	3	6	92	-	68	-	411	95	-	1	-
Ind.	3	-	1	-	-	20	51	-	5	5	129	39	-	2	-
Ill.	33	-	5	-	-	17	88	-	55	-	273	48	-	1	8
Mich.	17	-	5	-	1	13	56	3	68	2	102	14	-	2	1
Wis.	-	-	3	-	3	4	35	-	15	-	205	421	-	1	-
W.N. CENTRAL	29	-	1	-	2	13	141	-	47	4	500	267	-	1	8
Minn.	9	-	-	-	-	12	15	-	2	-	296	94	-	-	-
Iowa	3	-	-	-	-	1	24	-	9	1	36	9	-	-	3
Mo.	7	-	1	-	-	-	51	-	28	-	124	101	-	1	1
N. Dak.	2	-	-	-	-	-	3	-	5	-	3	15	-	-	-
S. Dak.	2	-	-	-	-	-	6	-	-	-	8	14	-	-	-
Nebr.	4	-	-	-	-	-	14	-	2	-	14	10	-	-	-
Kans.	2	-	-	-	2	-	28	-	1	3	19	24	-	-	4
S. ATLANTIC	266	-	18	-	13	128	379	2	423	5	562	160	-	9	20
Del.	2	-	1	-	-	1	13	-	6	-	14	7	-	2	-
Md.	38	-	-	-	4	16	50	-	74	3	129	30	-	2	5
D.C.	11	-	-	-	-	-	5	-	1	-	12	1	-	-	-
Va.	32	-	-	-	4	16	44	1	32	-	59	15	-	-	-
W. Va.	2	-	-	-	-	-	12	-	16	-	8	9	-	-	1
N.C.	96	-	-	-	-	24	61	-	222	-	152	42	-	-	-
S.C.	7	-	-	-	-	29	31	1	16	2	70	10	-	-	7
Ga.	20	-	1	-	-	3	88	-	16	-	35	14	-	-	-
Fla.	58	-	16	-	5	39	75	-	40	-	83	32	-	5	7
E.S. CENTRAL	26	-	1	-	-	464	129	-	47	-	263	28	-	-	1
Ky.	4	-	-	-	-	447	21	-	-	-	29	1	-	-	-
Tenn.	10	-	-	-	-	-	35	-	13	-	165	8	-	-	1
Ala.	7	-	1	-	-	-	42	-	22	-	58	16	-	-	-
Miss.	5	-	-	-	-	17	31	-	12	-	11	3	-	-	-
W.S. CENTRAL	31	-	8	-	3	1,102	203	2	213	-	155	211	-	17	7
Ark.	3	-	-	-	-	-	20	-	4	-	10	16	-	-	-
La.	6	-	1	-	-	-	35	-	17	-	12	10	-	1	-
Okla.	6	-	-	-	-	11	28	-	11	-	91	33	-	1	-
Tex.	16	-	7	-	3	1,091	120	2	181	-	42	152	-	15	7
MOUNTAIN	33	-	5	-	1	35	157	-	61	7	381	391	-	10	8
Mont.	2	-	-	-	-	-	13	-	-	-	9	9	-	-	-
Idaho	1	-	-	-	-	-	13	-	5	-	113	41	-	2	1
Wyo.	-	-	-	-	-	1	3	-	2	-	1	-	-	-	-
Colo.	20	-	2	-	1	29	32	-	16	5	130	87	-	1	2
N. Mex.	5	-	-	-	-	2	4	N	N	1	39	97	-	-	-
Ariz.	1	-	2	-	-	3	72	-	13	-	48	121	-	2	2
Utah	1	-	-	-	-	-	13	-	4	1	37	34	-	4	1
Nev.	3	-	1	-	-	-	7	-	21	-	4	2	-	1	2
PACIFIC	302	-	100	-	18	114	343	1	290	17	651	690	-	74	77
Wash.	28	-	-	-	-	11	66	-	10	2	67	194	-	-	8
Oreg.	4	-	-	-	-	3	23	N	N	7	31	40	-	3	1
Calif.	261	-	89	-	7	59	231	1	249	8	536	417	-	43	45
Alaska	3	-	-	-	2	9	13	-	9	-	5	14	-	1	-
Hawaii	6	-	11	-	9	32	10	-	22	-	12	25	-	27	23
Guam	1	-	2	-	-	10	2	-	8	-	-	-	-	-	3
P.R.	-	-	241	-	-	411	8	-	3	-	9	12	-	-	1
V.I.	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-
Amer. Samoa	-	-	1	-	-	-	-	-	1	-	2	6	-	-	-
C.N.M.I.	-	14	14	-	1	2	-	-	13	-	1	2	-	-	-

*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 November 13, 1993, and November 7, 1992 (45th 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	21,856	29,553	204	18,371	19,890	112	306	434	7,642
NEW ENGLAND	358	581	15	453	446	-	28	7	1,418
Maine	5	5	3	32	19	-	-	-	-
N.H.	29	35	5	9	16	-	2	-	119
Vt.	1	1	1	5	6	-	-	-	28
Mass.	114	290	5	245	252	-	20	7	596
R.I.	15	35	1	50	31	-	-	-	-
Conn.	194	215	-	112	122	-	6	-	675
MID. ATLANTIC	2,014	4,022	32	4,110	4,657	1	64	26	2,774
Upstate N.Y.	181	308	16	507	617	1	18	6	2,040
N.Y. City	999	2,256	1	2,335	2,673	-	26	-	-
N.J.	268	490	-	705	782	-	14	10	392
Pa.	566	968	15	563	585	-	6	10	342
E.N. CENTRAL	3,150	4,487	42	1,661	1,955	4	37	14	106
Ohio	991	705	11	272	281	-	7	9	6
Ind.	305	246	2	201	168	1	1	1	11
Ill.	937	2,051	8	704	1,015	2	21	2	22
Mich.	508	831	21	408	415	1	7	2	18
Wis.	409	654	-	76	76	-	1	-	49
W.N. CENTRAL	1,340	1,315	12	428	471	38	2	23	310
Minn.	61	88	2	61	136	-	-	1	40
Iowa	60	47	5	47	36	-	-	7	70
Mo.	1,097	994	2	218	205	15	2	11	21
N. Dak.	1	1	-	5	9	-	-	-	51
S. Dak.	1	-	-	12	20	17	-	3	41
Nebr.	10	24	-	18	20	3	-	-	10
Kans.	110	161	3	67	45	3	-	1	77
S. ATLANTIC	5,749	7,985	23	3,543	3,665	3	45	203	1,823
Del.	90	185	1	41	43	-	1	1	126
Md.	323	553	1	330	333	-	8	11	533
D.C.	290	336	-	143	94	-	-	-	16
Va.	540	633	7	386	305	-	5	11	349
W. Va.	13	17	-	66	81	-	-	6	81
N.C.	1,633	2,189	3	459	462	2	3	121	95
S.C.	841	1,086	-	341	346	-	-	10	148
Ga.	969	1,548	2	660	765	-	3	36	426
Fla.	1,050	1,438	9	1,117	1,236	1	25	7	49
E.S. CENTRAL	3,369	3,749	11	1,388	1,309	4	7	55	191
Ky.	311	150	3	329	344	1	2	9	19
Tenn.	827	1,054	4	424	386	2	2	32	72
Ala.	731	1,275	2	433	352	1	3	4	100
Miss.	1,500	1,270	2	202	227	-	-	10	-
W.S. CENTRAL	5,082	5,445	2	1,998	2,372	43	7	91	542
Ark.	659	774	-	148	181	26	-	7	37
La.	2,250	2,261	-	-	162	-	1	1	6
Okla.	334	370	2	137	133	13	1	79	64
Tex.	1,839	2,040	-	1,713	1,896	4	5	4	435
MOUNTAIN	211	308	14	450	513	13	10	15	163
Mont.	1	7	-	23	-	5	-	2	23
Idaho	-	1	2	12	21	-	-	-	6
Wyo.	8	5	-	5	-	3	-	10	21
Colo.	65	56	2	32	60	1	5	3	27
N. Mex.	24	39	1	59	71	1	2	-	9
Ariz.	91	151	1	207	220	-	2	-	58
Utah	10	8	6	28	65	2	1	-	4
Nev.	12	41	2	84	76	1	-	-	15
PACIFIC	583	1,661	53	4,340	4,502	6	106	-	315
Wash.	54	74	7	229	264	1	6	-	-
Oreg.	37	41	-	86	115	2	1	-	-
Calif.	478	1,534	46	3,760	3,836	3	96	-	295
Alaska	8	4	-	49	52	-	-	-	20
Hawaii	6	8	-	216	235	-	3	-	-
Guam	2	3	-	31	58	-	1	-	-
P.R.	451	290	-	185	200	-	-	-	41
V.I.	37	62	-	2	3	-	-	-	-
Amer. Samoa	-	-	-	2	-	-	1	-	-
C.N.M.I.	7	6	-	37	50	-	-	-	-

U: Unavailable

TABLE III. Deaths in 121 U.S. cities,* week ending
November 13, 1993 (45th 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	614	420	111	59	16	8	42	S. ATLANTIC	1,341	837	255	171	46	31	75
Boston, Mass.	181	113	35	21	6	6	16	Atlanta, Ga.	140	68	35	27	8	2	2
Bridgeport, Conn.	42	27	7	5	3	-	1	Baltimore, Md.	274	182	40	36	9	7	16
Cambridge, Mass.	23	22	1	-	-	-	2	Charlotte, N.C.	42	30	8	3	1	-	3
Fall River, Mass.	27	17	4	4	2	-	1	Jacksonville, Fla.	159	107	28	14	6	4	18
Hartford, Conn.	71	39	15	14	2	1	1	Miami, Fla.	112	65	24	16	4	3	-
Lowell, Mass.	30	24	6	-	-	-	3	Norfolk, Va.	57	30	16	7	2	2	5
Lynn, Mass.	16	12	3	1	-	-	1	Richmond, Va.	90	57	21	9	3	-	3
New Bedford, Mass.	25	20	3	2	-	-	1	Savannah, Ga.	46	39	2	4	-	1	7
New Haven, Conn.	30	19	9	1	-	1	1	St. Petersburg, Fla.	45	36	5	4	-	-	-
Providence, R.I.	40	32	6	2	-	-	3	Tampa, Fla.	131	91	24	11	3	1	15
Somerville, Mass.	2	2	-	-	-	-	-	Washington, D.C.	221	115	48	38	9	11	6
Springfield, Mass.	41	33	5	2	1	-	1	Wilmington, Del.	24	17	4	2	1	-	-
Waterbury, Conn.	31	20	7	3	1	-	4	E.S. CENTRAL	717	466	125	72	32	22	64
Worcester, Mass.	55	40	10	4	1	-	7	Birmingham, Ala.	104	61	18	11	8	6	7
MID. ATLANTIC	2,457	1,555	511	278	59	52	104	Chattanooga, Tenn.	73	51	8	5	8	1	7
Albany, N.Y.	41	25	9	6	1	-	3	Knoxville, Tenn.	84	56	11	13	3	1	10
Allentown, Pa.	33	27	5	1	-	-	-	Lexington, Ky.	49	34	7	4	-	4	2
Buffalo, N.Y.	100	71	21	3	4	1	-	Memphis, Tenn.	169	114	35	15	4	1	18
Camden, N.J.	51	38	7	4	1	1	1	Mobile, Ala.	75	41	15	13	3	3	7
Elizabeth, N.J.	22	17	3	-	-	-	7	Montgomery, Ala.	36	30	6	-	-	-	-
Erie, Pa.§	41	32	9	-	-	-	-	Nashville, Tenn.	127	79	25	11	6	6	13
Jersey City, N.J.	42	20	10	6	2	4	1	W.S. CENTRAL	1,302	766	268	131	83	51	69
New York City, N.Y.	1,254	755	278	175	26	20	42	Austin, Tex.	48	28	8	7	3	2	5
Newark, N.J.	90	42	13	20	5	10	5	Baton Rouge, La.	39	16	12	7	3	1	2
Paterson, N.J.	35	16	9	5	2	3	-	Corpus Christi, Tex.	U	U	U	U	U	U	U
Philadelphia, Pa.	299	190	63	33	10	3	16	Dallas, Tex.	210	128	44	28	5	5	3
Pittsburgh, Pa.§	66	47	8	2	4	5	3	El Paso, Tex.	56	37	14	2	3	-	3
Reading, Pa.	14	12	2	-	-	-	1	Ft. Worth, Tex.	91	57	25	6	1	2	3
Rochester, N.Y.	129	89	29	8	2	1	10	Houston, Tex.	350	206	71	43	17	13	29
Schenectady, N.Y.	20	18	1	1	-	-	-	Little Rock, Ark.	50	29	15	4	1	1	1
Scranton, Pa.§	21	15	5	1	-	-	-	New Orleans, La.	172	64	30	13	40	22	-
Syracuse, N.Y.	123	91	22	6	1	3	7	San Antonio, Tex.	149	103	29	9	5	3	15
Trenton, N.J.	33	21	8	4	-	-	3	Shreveport, La.	47	35	6	2	3	1	1
Utica, N.Y.	16	12	4	-	-	-	2	Tulsa, Okla.	90	63	14	10	2	1	7
Yonkers, N.Y.	27	17	5	3	1	1	3	MOUNTAIN	861	544	170	98	33	16	67
E.N. CENTRAL	1,969	1,268	365	156	114	66	114	Albuquerque, N.M.	99	70	17	7	3	2	3
Akron, Ohio	58	47	7	1	2	1	-	Colo. Springs, Colo.	48	31	7	9	1	-	3
Canton, Ohio	35	27	7	-	-	1	2	Denver, Colo.	118	72	26	13	4	3	16
Chicago, Ill.	342	136	60	53	72	21	19	Las Vegas, Nev.	194	113	45	22	11	3	10
Cincinnati, Ohio	72	47	15	5	2	3	9	Ogden, Utah	24	18	3	1	2	-	2
Cleveland, Ohio	148	95	35	10	3	5	1	Phoenix, Ariz.	163	92	37	25	4	5	17
Columbus, Ohio	167	105	40	12	5	5	10	Pueblo, Colo.	23	19	3	-	1	-	1
Dayton, Ohio	121	85	21	7	2	6	7	Salt Lake City, Utah	104	71	13	13	6	1	11
Detroit, Mich.	184	118	37	21	6	2	6	Tucson, Ariz.	88	58	19	8	1	2	4
Evansville, Ind.	43	30	10	1	1	1	1	PACIFIC	1,673	1,056	336	187	52	38	96
Fort Wayne, Ind.	57	44	9	2	2	-	5	Berkeley, Calif.	17	11	4	1	-	1	1
Gary, Ind.	18	9	2	4	1	2	1	Fresno, Calif.	129	80	24	13	7	5	10
Grand Rapids, Mich.	60	48	6	3	3	-	5	Glendale, Calif.	17	7	6	2	1	-	-
Indianapolis, Ind.	188	119	41	17	4	7	10	Honolulu, Hawaii	64	33	19	3	3	6	4
Madison, Wis.	38	25	8	2	1	2	3	Long Beach, Calif.	U	U	U	U	U	U	U
Milwaukee, Wis.	122	94	16	6	3	6	6	Los Angeles, Calif.	470	280	96	63	18	10	14
Peoria, Ill.	38	23	11	2	2	-	4	Pasadena, Calif.	40	22	10	3	3	2	2
Rockford, Ill.	59	43	11	3	1	1	8	Portland, Ore.	115	88	18	7	1	1	5
South Bend, Ind.	52	42	7	1	-	2	6	Sacramento, Calif.	163	111	31	11	5	5	14
Toledo, Ohio	114	87	17	4	3	3	7	San Diego, Calif.	121	76	20	19	5	1	13
Youngstown, Ohio	53	44	5	2	1	1	4	San Francisco, Calif.	127	63	38	24	2	-	7
W.N. CENTRAL	686	512	99	41	19	15	39	San Jose, Calif.	141	107	23	9	1	1	15
Des Moines, Iowa	66	49	13	2	1	1	4	Santa Cruz, Calif.	25	15	8	2	-	-	2
Duluth, Minn.	16	11	4	1	-	-	-	Seattle, Wash.	131	80	26	20	3	2	4
Kansas City, Kans.	21	14	6	1	-	-	1	Spokane, Wash.	59	43	9	4	1	2	4
Kansas City, Mo.	90	69	15	2	2	2	7	Tacoma, Wash.	54	40	4	6	2	2	1
Lincoln, Nebr.	41	29	8	3	-	1	4	TOTAL	11,620 [¶]	7,424	2,240	1,193	454	299	670
Minneapolis, Minn.	172	129	21	13	8	1	13								
Omaha, Nebr.	78	56	10	7	1	4	3								
St. Louis, Mo.	109	78	13	8	5	5	2								
St. Paul, Minn.	46	35	6	4	1	-	4								
Wichita, Kans.	47	42	3	-	1	1	1								

*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.

Street Outreach for HIV Prevention — Continued

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Editorial Note: The findings in this report indicate that IDUs and YHRS can be identified and reached through outreach programs; will talk with outreach workers about HIV prevention; and will accept HIV-prevention literature, materials, and referral services from outreach workers. In addition, survey findings indicated that a substantial proportion of IDUs and YHRS had been in contact with outreach workers.

Street outreach programs may be an effective means for delivering HIV-prevention services to persons at risk for HIV who do not receive such services from more conventional sources. However, to be most effective, public health workers must foster trust and have a basic understanding of the daily lives and needs of their clients. Formative research, such as that conducted during CAP, assisted in identifying the groups, the locations where they could be reached, and their particular needs for services.

Outreach efforts are conducted outside of institutional or clinical settings and involve personal interactions between an outreach worker and a client. These critical aspects of outreach present specific challenges both in the delivery of services and in the assessment of the impact of such services. Assessment is particularly difficult because persons engaging in high-risk behaviors targeted by outreach programs cannot be surveyed by the household or telephone-based sampling methods conventionally used to develop representative samples of populations. Although outreach workers may have easier access to persons with high-risk behaviors, other persons may be difficult to reach because of timing and movement into public places. In addition,

TABLE 1. Percentage of respondents who have talked with or received literature, condoms, or bleach from street outreach workers — selected sites, AIDS Evaluation of Street Outreach Projects, 1991–1993*

Site	No.	Talked with outreach worker		Received literature		Received condoms		Received bleach	
		%	(95% CI) [†]	%	(95% CI)	%	(95% CI)	%	(95% CI)
Injecting-drug user sites									
Chicago	417	17.3	(13.6–20.9)	14.3	(10.9–17.6)	16.3	(12.7–19.9)	13.5	(10.2–16.8)
Atlanta	428	63.3	(58.7–67.9)	58.2	(53.4–63.0)	57.9	(53.2–62.7)	28.6	(24.2–33.0)
Los Angeles County	403	44.9	(40.1–49.8)	36.3	(31.5–41.1)	39.8	(34.9–44.7)	39.4	(34.5–44.3)
Philadelphia	270	65.2	(59.5–70.9)	54.0	(47.6–60.4)	55.7	(49.4–62.1)	50.0	(43.6–56.4)
New York ADAPT [§]	396	59.6	(54.8–64.5)	51.8	(46.8–56.8)	57.4	(52.4–62.3)	54.7	(49.7–59.6)
Youth sites									
Los Angeles Childrens Hospital	400	41.0	(36.2–45.8)	25.9	(21.6–30.1)	31.8	(27.2–36.3)	10.3	(7.4–13.3)
San Francisco	215	23.3	(17.6–28.9)	10.8	(6.7–14.8)	22.0	(16.5–27.4)	7.2	(3.8–10.6)
New York Victims Services	195	46.2	(39.2–53.2)	21.7	(15.6–27.8)	38.5	(31.6–45.3)	6.7	(3.2–10.2)

* Baseline surveys.

[†] Confidence interval.

[§] New York Association for Drug Abuse Prevention and Treatment.

Street Outreach for HIV Prevention — Continued

outreach efforts are often conducted in public places where highly sensitive subjects might be discussed, further constraining the collection of information.

Outreach programs designed to serve high-risk populations are an important component of CDC's HIV-prevention strategy (1-4). CDC supports, directly or indirectly, more than 700 community-based organizations that provide information, materials, and referrals to those at risk for HIV infection. The programs included in the AESOP evaluation are typical of those attempting to reach and influence persons engaging in high-risk behaviors through a variety of outreach strategies. Further work on the AESOP project involves thoroughly assessing the impact of different types of street outreach interventions on risk behavior.

Each AESOP site has developed enhancements to its existing street outreach program. The impact of these enhancements on the risk behaviors of IDUs and YHRS is being evaluated through preenhancement and postenhancement population-based surveys that measure outreach interactions and extent of behavior change in an enhancement area and in a comparison area. Results from this quasi-experimental study should suggest specific recommendations for improving street outreach programs.

References

1. Roper WL. Current approaches to prevention of HIV infections. *Public Health Rep* 1991;106:111-5.
2. Hinman AR. Strategies to prevent HIV infection in the United States. *Am J Public Health* 1991;81:1557-9.
3. CDC. Street outreach for STD/HIV prevention—Colorado Springs, Colorado, 1987-1991. *MMWR* 1992;41:94-5,101.
4. CDC. Cooperative agreements for human immunodeficiency virus (HIV): prevention projects program announcement and availability of funds for fiscal year 1993. *Federal Register* 1992;57:40675-83.

Current Trends

Distribution of STD Clinic Patients Along a Stages-of-Behavioral-Change Continuum — Selected Sites, 1993

Human immunodeficiency virus (HIV) counseling and testing are important components of the public health effort to contain the acquired immunodeficiency syndrome (AIDS) epidemic. Project RESPECT is a multicenter randomized trial being conducted by CDC at five sexually transmitted disease (STD) clinics to evaluate the efficacy of HIV counseling interventions in preventing HIV and other STDs. Because consistent and proper use of latex condoms is one method to substantially reduce the risk for transmitting HIV and other STDs (1), the HIV prevention interventions being evaluated focus primarily on increasing consistent condom use with primary and other sex partners during vaginal and anal sex. Before initiating the randomized trial, pilot studies were conducted to better characterize the population and to develop an operationally feasible enhanced intervention. This report describes the results of one pilot study.

During April and May 1993, patients who came to one of four STD clinics (Denver Metro Health Clinic, City of Long Beach [California] STD Clinic, Newark [New Jersey]

STD Clinic Patients — Continued

STD Clinic, and San Francisco City Clinic) with a new symptom were offered \$10 to participate in a pilot study interview. Of 1005 approached, 694 (69%) agreed to participate. Patients were asked about frequency of vaginal and anal sex with their primary and other sex partners, consistency of condom use during vaginal and anal sex, and both long-range ("sometime within the next six months") and short-range ("sometime within the next two weeks") intentions to always use condoms for vaginal and anal sex with their primary and other partners. Denominators vary because not all persons answered every question.

Self-reported data were used to classify patients into one of five stages-of-change (SOC) categories: "precontemplation" (i.e., those who never or almost never used condoms and who reported no intention to always use condoms); "contemplation" (i.e., those who never or almost never used condoms but who intended to start always using condoms at some point in time, but usually not in the near future); "ready for action" (i.e., those who sometimes or almost always used condoms and who intended to start always using condoms in the near future); "action" (i.e., those who reported always using condoms but had been doing so for less than 6 months); and "maintenance" (i.e., those who reported always using condoms and had been doing so for 6 months or longer) (2).

Two hundred sixty-eight (65%) men and 233 (82%) women reported having an opposite-sex partner they considered to be their primary sex partner (Table 1). Nearly all (97% [443/455]) reported having had vaginal sex with their primary partner during the past 30 days. Twenty-one percent (50/238) of men and 14% (26/193) of women reported always using condoms; 64% (124/193) of women and 55% (130/238) of men reported never using condoms for vaginal sex with their primary partner during this time ($p=0.07$).

Two hundred (49%) men and 82 (29%) women reported having had sex with someone they did not consider to be a primary partner during the past 30 days. Nearly all (98% [273/279]) reported having had vaginal sex with other partners during the past 30 days. Nearly one third (31% [84/269]) of both men and women reported always using condoms; 40% (77/191) of men and 50% (39/78) of women reported never using

TABLE 1. Percentage of men and women with a primary sex partner and other sex partner(s), by sexual practice and condom use — Project RESPECT pilot study, 1993

Sex partner status	Men (n=410)	Women (n=284)
Had a primary sex partner*		
Had same partner >6 months	64%	68%
Had vaginal sex during preceding 30 days	97%	98%
Always used condoms [†]	21%	14%
Never used condoms [†]	55%	64%
Had anal sex during preceding 30 days	5%	4%
Total	65%	82%
Had other sex partner(s)*		
Had vaginal sex during preceding 30 days	97%	100%
Always used condoms [†]	32%	29%
Never used condoms [†]	40%	50%
Had anal sex during preceding 30 days	2%	5%
Total	49%	29%

*106 (26%) men and 49 (17%) women had both a primary and other sex partner(s) and are included in both categories.

[†]Condom use is a calculated rate of the number of times condoms were used divided by the number of times participated in vaginal sex; always used condoms=100%; never used condoms=0.

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condoms for vaginal sex with other partners during the past 30 days ($p=0.29$). Both men and women used condoms significantly more often with other partners than with primary partners ($p=0.007$).

Distributions across the SOC categories for consistent condom use differed significantly by both sex and behavior (Figure 1). For vaginal sex with a primary partner, women were closer to adopting consistent condom use than were men ($p<0.01$). Men were closer to adopting consistent condom use for vaginal sex with other partners than with their primary partner ($p<0.001$).

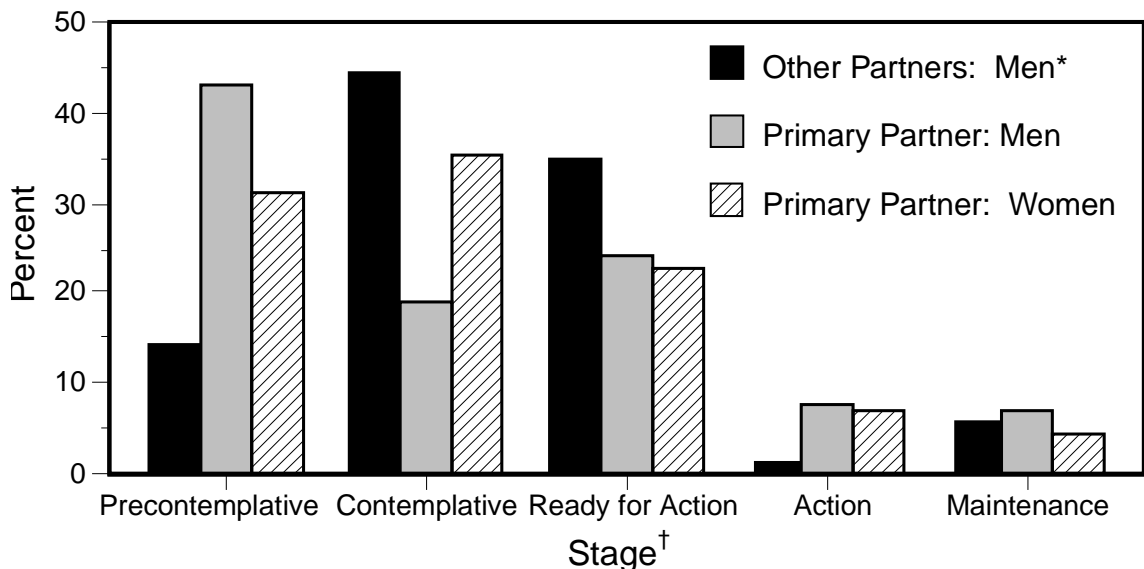
For vaginal sex with a primary partner, men and women were equally likely to be in the ready-for-action, action, and maintenance stages ($p=0.74$). However, men were more likely than women to be precontemplative than contemplative ($p=0.02$).

Forty-three percent (97/225) of men with primary partners were precontemplative about always using condoms with their primary partners; 14% (15/106) of men with other partners were precontemplative about always using condoms with other partners ($p<0.001$).

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Editorial Note: The findings in this report indicate that an SOC model can help identify

FIGURE 1. Stages of consistent condom use with primary and other sex partner(s) among sexually transmitted disease clinic patients — Project RESPECT pilot study, 1993



*Data from women with other partners were too few for meaningful analysis.

[†]Precontemplative—those who never or almost never used condoms and who reported no intention of always using condoms; contemplative—those who never or almost never used condoms but who intended to start always using condoms at some point in time, but usually not in the near future; ready for action—those who sometimes or almost always used condoms and who intended to start always using condoms in the near future; action—those who reported always using condoms but had been doing so for less than 6 months; maintenance—those who reported always using condoms and had been doing so for 6 months or longer.

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differences in the adoption of consistent condom use that are often overlooked when only frequency of condom use is considered. For example, although men and women did not differ significantly in the frequency with which they used condoms with their primary partners, women were significantly more likely to consider adopting consistent condom use than were men. In addition, most STD clinic patients were in the precontemplative or contemplative stage with respect to consistent condom use—i.e., although many patients attending the STD clinics never used condoms and had no intention of using them consistently, other patients who had never used condoms had formed long-range or short-range intentions to begin using condoms consistently. Therefore, even among patients who have never used condoms, counseling sessions must have different foci.

Interventions that do not consider a person's location on an SOC continuum are likely to be ineffective (2). Changing behaviors is complex and requires knowledge of the factors underlying a specific behavior. Therefore, behavior-change interventions should address those underlying factors (e.g., attitudes, perceived norms, and self-efficacy) that can influence the likelihood that a person will move from one stage to the next.

Previous studies suggest that among persons who are HIV seronegative, counseling and testing alone—particularly in clinic settings—has little or no effect on reducing high-risk behaviors (3,4). Because many of these studies do not clearly describe the counseling intervention, it is unclear whether they have evaluated the efficacy of risk-reduction counseling or whether they have evaluated only the efficacy of receiving a nonstandardized, relatively unstructured educational message. Behavioral science theory suggests that educational messages about a disease and how it is transmitted will have little impact on behavior change (5).

The pilot study was conducted in STD clinics where participants had been evaluated and treated for an STD. Thus, these persons were at higher risk than the general population and were less likely to be correct and consistent condom users. Project RESPECT will evaluate the effectiveness of a theory-based counseling intervention by assessing 1) changes in underlying psychosocial variables (e.g., intentions, attitudes, perceived norms, self-efficacy), 2) movement along an SOC continuum, and 3) changes in incident STDs. Because most clinic patients are in the precontemplative or contemplative SOC, interventions targeted to these stages may produce measurable changes in condom-use intentions and behavior.

References

1. CDC. Update: barrier protection against HIV infection and other sexually transmitted diseases. *MMWR* 1993;42:589–91,597.
2. Prochaska JO, DiClemente CC, Norcross JC. In search of how people change. *Am Psychol* 1992;47:1102–14.
3. Higgins DL, Galavotti C, O'Reilly KR, et al. Evidence for the effects of HIV antibody counseling and testing on risk behaviors. *JAMA* 1991;266:2419–29.
4. Otten MW Jr, Zaidi AA, Wroten JE, Witte JJ, Peterman TA. Changes in sexually transmitted disease rates after HIV testing and posttest counseling, Miami, 1988 to 1989. *Am J Public Health* 1993;83:529–33.
5. Fishbein M, Middlestadt SE, Hitchcock PJ. Using information to change sexually transmitted disease-related behaviors: an analysis based on the theory of reasoned action. In: Wasserheit JN, Aral SO, Holmes KK, eds. *Research issues in human behavior and sexually transmitted diseases in the AIDS era*. Washington, DC: American Society for Microbiology, 1991:243–57.

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