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Perspectives in Disease Prevention and Health Promotion

Public Health Service Guidelines for Counseling and Antibody Testing to Prevent HIV Infection and AIDS

These guidelines are the outgrowth of the 1986 recommendations published in the *MMWR* (*1*); the report on the February 24-25, 1987, Conference on Counseling and Testing (*2*); and a series of meetings with representatives from the Association of State and Territorial Health Officials, the Association of State and Territorial Public Health Laboratory Directors, the Council of State and Territorial Epidemiologists, the National Association of County Health Officials, the United States Conference of Local Health Officers, and the National Association of State Alcohol and Drug Abuse Directors.

Human immunodeficiency virus (HIV), the causative agent of acquired immunodeficiency syndrome (AIDS) and related clinical manifestations, has been shown to be spread by sexual contact; by parenteral exposure to blood (most often through intravenous [IV] drug abuse) and, rarely, by other exposures to blood; and from an infected woman to her fetus or infant.

Persons exposed to HIV usually develop detectable levels of antibody against the virus within 6-12 weeks of infection. The presence of antibody indicates current infection, though many infected persons may have minimal or no clinical evidence of disease for years. Counseling and testing persons who are infected or at risk for acquiring HIV infection is an important component of prevention strategy (*1*). Most of the estimated 1.0 to 1.5 million infected persons in the United States are unaware that they are infected with HIV. The primary public health purposes of counseling and testing are to help uninfected individuals initiate and sustain behavioral changes that reduce their risk of becoming infected and to assist infected individuals in avoiding infecting others.

Along with the potential personal, medical, and public health benefits of testing for HIV antibody, public health agencies must be concerned about actions that will discourage the use of counseling and testing facilities, most notably the unauthorized disclosure of personal information and the possibility of inappropriate discrimination.

Guidelines — Continued

Priorities for public health counseling and testing should be based upon providing ready access to persons who are most likely to be infected or who practice high-risk behaviors, thereby helping to reduce further spread of infection. There are other considerations for determining testing priorities, including the likely effectiveness of preventing the spread of infection among persons who would not otherwise realize that they are at risk. Knowledge of the prevalence of HIV infection in different populations is useful in determining the most efficient and effective locations providing such services. For example, programs that offer counseling and testing to homosexual men, IV-drug abusers, persons with hemophilia, sexual and/or needle-sharing partners of these persons, and patients of sexually transmitted disease clinics may be most effective since persons in these groups are at high risk for infection. After counseling and testing are effectively implemented in settings of high and moderate prevalence, consideration should be given to establishing programs in settings of lower prevalence.

Interpretation of HIV-Antibody Test Results

A test for HIV antibody is considered positive when a sequence of tests, starting with a repeatedly reactive enzyme immunoassay (EIA) and including an additional, more specific assay, such as a Western blot, are consistently reactive.

The *sensitivity* of the currently licensed EIA tests is 99% or greater when performed under optimal laboratory conditions. Given this performance, the probability of a false-negative test result is remote, except during the first weeks after infection, before antibody is detectable.

The *specificity* of the currently licensed EIA tests is approximately 99% when repeatedly reactive tests are considered. Repeat testing of specimens initially reactive by EIA is required to reduce the likelihood of false-positive test results due to laboratory error. To further increase the specificity of the testing process, laboratories must use a supplemental test—most often the Western blot test—to validate repeatedly reactive EIA results. The sensitivity of the licensed Western blot test is comparable to that of the EIA, and it is highly specific when strict criteria are used for interpretation. Under ideal circumstances, the probability that a testing sequence will be falsely positive in a population with a low rate of infection ranges from less than 1 in 100,000 (Minnesota Department of Health, unpublished data) to an estimated 5 in 100,000 (*3,4*). Laboratories using different Western blot reagents or other tests or using less stringent interpretive criteria may experience higher rates of false-positive results.

Laboratories should carefully guard against human errors, which are likely to be the most common source of false-positive test results. All laboratories should anticipate the need for assuring quality performance of tests for HIV antibody by training personnel, establishing quality controls, and participating in performance evaluation systems. Health department laboratories should facilitate the quality assurance of the performance of laboratories in their jurisdiction.

Guidelines — Continued

Guidelines for Counseling and Testing for HIV Antibody

These guidelines are based on public health considerations for HIV testing, including the principles of counseling before and after testing, confidentiality of personal information, and the understanding that a person may decline to be tested without being denied health care or other services, except where testing is required by law (*5*). Counseling before testing may not be practical when screening for HIV antibody is required. This is true for donors of blood, organs, and tissue; prisoners; and immigrants for whom testing is a Federal requirement as well as for persons admitted to state correctional institutions in states that require testing. When there is no counseling before testing, persons should be informed that testing for HIV antibody will be performed, that individual results will be kept confidential to the extent permitted by law, and that appropriate counseling will be offered. Individual counseling of those who are either HIV-antibody positive or at continuing risk for HIV infection is critical for reducing further transmission and for ensuring timely medical care.

Specific recommendations follow:

1. *Persons who may have sexually transmitted disease.* All persons seeking treatment for a sexually transmitted disease, in all health-care settings including the offices of private physicians, should be routinely* counseled and tested for HIV antibody.
2. *IV-drug abusers.* All persons seeking treatment for IV-drug abuse or having a history of IV-drug abuse should be routinely counseled and tested for HIV antibody. Medical professionals in all health-care settings, including prison clinics, should seek a history of IV-drug abuse from patients and should be aware of its implications for HIV infection. In addition, state and local health policy makers should address the following issues:
   - Treatment programs for IV-drug abusers should be sufficiently available to allow persons seeking assistance to enter promptly and be encouraged to alter the behavior that places them and others at risk for HIV infection.
   - Outreach programs for IV-drug abusers should be undertaken to increase their knowledge of AIDS and of ways to prevent HIV infection, to encourage them to obtain counseling and testing for HIV antibody, and to persuade them to be treated for substance abuse.
3. *Persons who consider themselves at risk.* All persons who consider themselves at risk for HIV infection should be counseled and offered testing for HIV antibody.

*"Routine counseling and testing" is defined as a policy to provide these services to all clients after informing them that testing will be done. Except where testing is required by law, individuals have the right to decline to be tested without being denied health care or other services.

Guidelines – Continued

4. *Women of childbearing age.* All women of childbearing age with identifiable risks for HIV infection should be routinely counseled and tested for HIV antibody, regardless of the health-care setting. Each encounter between a health-care provider and a woman at risk and/or her sexual partners is an opportunity to reach them with information and education about AIDS and prevention of HIV infection. Women are at risk for HIV infection if they:
   - Have used IV drugs.
   - Have engaged in prostitution.
   - Have had sexual partners who are infected or are at risk for infection because they are bisexual or are IV-drug abusers or hemophiliacs.
   - Are living in communities or were born in countries where there is a known or suspected high prevalence of infection among women.
   - Received a transfusion before blood was being screened for HIV antibody but after HIV infection occurred in the United States (e.g., between 1978 and 1985).

   Educating and testing these women before they become pregnant allows them to avoid pregnancy and subsequent intrauterine perinatal infection of their infants (30%-50% of the infants born to HIV-infected women will also be infected).

   All pregnant women at risk for HIV infection should be routinely counseled and tested for HIV antibody. Identifying pregnant women with HIV infection as early in pregnancy as possible is important for ensuring appropriate medical care for these women; for planning medical care for their infants; and for providing counseling on family planning, future pregnancies, and the risk of sexual transmission of HIV to others.

   All women who seek family planning services and who are at risk for HIV infection should be routinely counseled about AIDS and HIV infection and tested for HIV antibody. Decisions about the need for counseling and testing programs in a community should be based on the best available estimates of the prevalence of HIV infection and the demographic variables of infection.

5. *Persons planning marriage.* All persons considering marriage should be given information about AIDS, HIV infection, and the availability of counseling and testing for HIV antibody. Decisions about instituting routine or mandatory premarital testing for HIV antibody should take into account the prevalence of HIV infection in the area and/or population group as well as other factors and should be based upon the likely cost-effectiveness of such testing in preventing further spread of infection. Premarital testing in an area with a prevalence of HIV infection as low as 0.1% may be justified if reaching an infected person through testing can prevent subsequent transmission to the spouse or prevent pregnancy in a woman who is infected.

Guidelines – Continued

6. *Persons undergoing medical evaluation or treatment.* Testing for HIV antibody is a useful diagnostic tool for evaluating patients with selected clinical signs and symptoms such as generalized lymphadenopathy; unexplained dementia; chronic, unexplained fever or diarrhea; unexplained weight loss; or diseases such as tuberculosis as well as sexually transmitted diseases, generalized herpes, and chronic candidiasis.

   Since persons infected with both HIV and the tubercle bacillus are at high risk for severe clinical tuberculosis, all patients with tuberculosis should be routinely counseled and tested for HIV antibody (*6*). Guidelines for managing patients with both HIV and tuberculous infection have been published (*7*).

   The risk of HIV infection from transfusions of blood or blood components from 1978-1985 was greatest for persons receiving large numbers of units of blood collected from areas with high incidences of AIDS. Persons who have this increased risk should be counseled about the potential risk of HIV infection and should be offered antibody testing (*8*).

7. *Persons admitted to hospitals.* Hospitals, in conjunction with state and local health departments, should periodically determine the prevalence of HIV infections in the age groups at highest risk for infection. Consideration should be given to routine testing in those age groups deemed to have a high prevalence of HIV infection.

8. *Persons in correctional systems.* Correctional systems should study the best means of implementing programs for counseling inmates about HIV infection and for testing them for such infection at admission and discharge from the system. In particular, they should examine the usefulness of these programs in preventing further transmission of HIV infection and the impact of the testing programs on both the inmates and the correctional system (*9*). Federal prisons have been instructed to test all prisoners when they enter and leave the prison system.

9. *Prostitutes.* Male and female prostitutes should be counseled and tested and made aware of the risks of HIV infection to themselves and others. Particularly prostitutes who are HIV-antibody positive should be instructed to discontinue the practice of prostitution. Local or state jurisdictions should adopt procedures to assure that these instructions are followed.

Partner Notification/Contact Tracing

Sexual partners and those who share needles with HIV-infected persons are at risk for HIV infection and should be routinely counseled and tested for HIV antibody. Persons who are HIV-antibody positive should be instructed in how to notify their partners and to refer them for counseling and testing. If they are unwilling to notify their partners or if it cannot be assured that their partners will seek counseling, physicians or health department personnel should use confidential procedures to assure that the partners are notified.

Guidelines — Continued

Confidentiality and Antidiscrimination Considerations

The ability of health departments, hospitals, and other health-care providers and institutions to assure confidentiality of patient information and the public's confidence in that ability are crucial to efforts to increase the number of persons being counseled and tested for HIV infection. Moreover, to assure broad participation in the counseling and testing programs, it is of equal or greater importance that the public perceive that persons found to be positive will not be subject to inappropriate discrimination.

Every reasonable effort should be made to improve confidentiality of test results. The confidentiality of related records can be improved by a careful review of actual record-keeping practices and by assessing the degree to which these records can be protected under applicable state laws. State laws should be examined and strengthened when found necessary. Because of the wide scope of "need-to-know" situations, because of the possibility of inappropriate disclosures, and because of established authorization procedures for releasing records, it is recognized that there is no perfect solution to confidentiality problems in all situations. Whether disclosures of HIV-testing information are deliberate, inadvertent, or simply unavoidable, public health policy needs to carefully consider ways to reduce the harmful impact of such disclosures.

Public health prevention policy to reduce the transmission of HIV infection can be furthered by an expanded program of counseling and testing for HIV antibody, but the extent to which these programs are successful depends on the level of participation. Persons are more likely to participate in counseling and testing programs if they believe that they will not experience negative consequences in areas such as employment, school admission, housing, and medical services should they test positive. There is no known medical reason to avoid an infected person in these and ordinary social situations since the cumulative evidence is strong that HIV infection is not spread through casual contact. It is essential to the success of counseling and testing programs that persons who are tested for HIV are not subjected to inappropriate discrimination.

References

1. CDC. Additional recommendations to reduce sexual and drug abuse-related transmission of human T-lymphotropic virus type III/lymphadenopathy-associated virus. MMWR 1986;35:152-5.
2. CDC. Recommended additional guidelines for HIV antibody counseling and testing in the prevention of HIV infection and AIDS. Atlanta, Georgia: US Department of Health and Human Services, Public Health Service, 1987.
3. Burke DS, Brandt BL, Redfield RR, et al. Diagnosis of human immunodeficiency virus infection by immunoassay using a molecularly cloned and expressed virus envelope polypeptide. Ann Intern Med 1987;106:671-6.
4. Meyer KB, Pauker SG. Screening for HIV: can we afford the false positive rate? N Engl J Med 1987;317:238-41.
5. Bayer R, Levine C, Wolf SM. HIV antibody screening: an ethical framework for evaluating proposed programs. JAMA 1986;256:1768-74.

Guidelines – Continued

6. CDC. Tuberculosis provisional data—United States, 1986. MMWR 1987;36:254-5.
7. CDC. Diagnosis and management of mycobacterial infection and disease in persons with human T-lymphotropic virus type III/lymphadenopathy-associated virus infection. MMWR 1986;35:448-52.
8. CDC. Human immunodeficiency virus infection in transfusion recipients and their family members. MMWR 1987;36:137-40.
9. Hammett TM. AIDS in correctional facilities: issues and options. 2nd ed. Washington, DC: U.S. Department of Justice, National Institute of Justice, 1987.

Polymer-Fume Fever Associated with Cigarette Smoking and the Use of Tetrafluoroethylene – Mississippi

Three of the five workers at a Mississippi shop that produces plastic signs and rubber and metal stamps had several episodes of severe "flu-like" symptoms between July 1985 and March 1986. The symptoms were of unknown origin and usually subsided within a day. Only the employees making stamps were affected. In response to a request by the company's owner, the National Institute for Occupational Safety and Health (NIOSH) sent a medical officer and an industrial hygienist to investigate on March 4, 1986.

The investigators observed work processes, reviewed material safety data sheets to determine the composition of materials being used, and recorded the affected employees' medical histories. They also collected ambient air samples to test for various solvents and metal fumes. These tests showed no detectable levels of trace metals and only trace (microgram) amounts of xylene, toluene, methyl chloroform, and hexane, all of which were well below the respective exposure levels recommended by NIOSH.

The investigators learned, however, that there had been a change in the stamp-making process during the summer of 1985. Prior to that time, a phenolic mold board had been used during production of rubber stamps and notary seals. In early July 1985, the company's supplier had switched to an asbestos-free board. In making the stamps, a die is heat-pressed into the board in a small oven at 152 C (305 F) for about 20 minutes. The die is then used to mold a rubber sheet into the stamp's image. Because this new composition board did not release the rubber sheet properly, a mold-release spray was used.

The material safety data sheet for the mold-release spray indicated the presence of a small amount (<1%) of tetrafluoroethylene, a fluorocarbon monomer. It also warned that fluorocarbon propellants could pose a public health problem by reducing ozone in the upper atmosphere and that excessive heating might burst the container. The supplier failed to state that the products of decomposition of fluorocarbon monomers and polymers can produce a condition known as "polymer-fume fever" and that cigarette smoking is the most common means of creating exposure to these products.

Polymer-Fume Fever — Continued

The first worker to become ill began experiencing symptoms one evening after work during the last week of July 1985. He had a lower backache followed, after 30 to 45 minutes, by intense rigors, nocturnal fever, chills, malaise, and a more intense backache. He also experienced a dry, nonproductive cough. By morning, he felt much better. The same pattern of symptoms occurred two or three times during the week, but not on the weekend. The other two workers experienced similar symptoms, with extraordinary chills and occasional fever. For these workers, too, the symptoms subsided by morning. All three employees ate, drank, and smoked in the vicinity of the heat-pressing oven.

The investigators recommended a ban on smoking or even carrying tobacco products in the work area as well as more effective ventilation and improved sanitation procedures, such as hand washing. The company's

(Continued on page 521)

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

Disease	31st Week Ending			Cumulative, 31st Week Ending		
	August 8, 1987	August 2, 1986	Median 1982-1986	August 8, 1987	August 2, 1986	Median 1982-1986
Acquired Immunodeficiency Syndrome (AIDS)	279	188	N	10,973	7,272	N
Aseptic meningitis	374	360	336	4,563	4,011	3,507
Encephalitis: Primary (arthropod-borne & unspec)	23	33	33	572	545	590
Post-infectious	1	1	1	70	68	68
Gonorrhea: Civilian	14,433	18,576	18,576	462,486	512,665	513,903
Military	216	403	502	9,632	9,839	12,749
Hepatitis: Type A	434	471	414	14,594	13,016	12,836
Type B	422	636	619	15,255	15,419	14,905
Non A, Non B	45	95	N	1,847	2,161	N
Unspecified	42	99	137	1,866	2,756	3,385
Legionellosis	15	14	N	487	358	N
Leprosy	5	5	5	116	175	152
Malaria	18	35	25	466	588	578
Measles: Total*	92	101	38	3,126	4,928	2,145
Indigenous	74	91	N	2,758	4,668	N
Imported	18	10	N	368	254	N
Meningococcal infections: Total	30	45	43	1,925	1,700	1,858
Civilian	30	45	43	1,924	1,698	1,843
Military	-	-	-	1	2	6
Mumps	53	83	33	9,782	3,060	2,310
Pertussis	94	92	67	1,168	1,657	1,257
Rubella (German measles)	1	5	9	264	382	480
Syphilis (Primary & Secondary): Civilian	590	593	593	20,257	15,350	16,439
Military	3	3	4	94	107	209
Toxic Shock syndrome	7	11	N	177	217	N
Tuberculosis	449	447	445	12,268	12,658	12,658
Tularemia	8	5	5	112	72	131
Typhoid Fever	2	3	8	171	161	201
Typhus fever, tick-borne (RMSF)	22	28	40	370	413	505
Rabies, animal	58	101	105	2,864	3,279	3,279

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1987		Cum. 1987
Anthrax	-	Leptospirosis	13
Botulism: Foodborne	4	Plague	6
Infant	35	Poliomyelitis, Paralytic	-
Other	-	Psittacosis	56
Brucellosis (Mo. 1, Fla. 1, Tex. 2)	68	Rabies, human	-
Cholera (La. 2)	2	Tetanus (Pa. 1)	22
Congenital rubella syndrome	3	Trichinosis	28
Congenital syphilis, ages < 1 year	-	Typhus fever, flea-borne (endemic, murine)	17
Diphtheria	1		

*Two of the 92 reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending August 8, 1987 and August 2, 1986 (31st Week)

Reporting Area	AIDS	Aseptic Meningitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis(Viral), by type				Legionellosis	Leprosy
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum. 1987	1987	Cum. 1987	Cum. 1987	Cum. 1987	Cum. 1986	1987	1987	1987	1987	1987	Cum. 1987
UNITED STATES	10,973	374	572	70	462,486	512,665	434	422	45	42	15	116
NEW ENGLAND	461	30	27	2	14,309	11,754	23	38	1	1	-	11
Maine	14	2	1	-	418	535	3	4	-	-	-	-
N.H.	12	2	2	-	240	311	5	8	-	-	-	2
Vt.	4	2	4	-	125	159	1	1	-	-	-	-
Mass.	286	7	12	1	5,174	4,996	13	22	-	1	-	8
R.I.	38	8	3	1	1,199	1,004	-	-	-	-	-	-
Conn.	107	9	5	-	7,153	4,749	1	3	1	-	-	1
MID. ATLANTIC	3,180	47	72	5	75,610	87,008	19	21	3	1	2	6
Upstate N.Y.	421	23	31	3	9,817	10,154	16	17	3	1	1	-
N.Y. City	1,853	1	5	-	40,165	51,519	3	4	-	-	1	6
N.J.	583	23	7	-	9,636	10,867	-	-	-	-	-	-
Pa.	323	-	29	2	15,992	14,468	-	-	-	-	-	-
E.N. CENTRAL	755	92	172	12	67,816	70,687	16	39	2	1	1	4
Ohio	154	28	64	5	15,239	16,910	-	15	-	-	-	1
Ind.	61	19	19	-	5,524	7,009	5	1	-	-	-	-
Ill.	358	1	24	7	20,886	18,498	2	14	-	-	-	1
Mich.	125	44	52	-	20,582	20,973	9	9	2	1	1	1
Wis.	57	-	13	-	5,585	7,297	-	-	-	-	-	1
W.N. CENTRAL	246	14	22	-	18,609	22,163	32	25	7	1	1	-
Minn.	64	3	13	-	2,908	3,101	6	9	1	-	-	-
Iowa	17	2	3	-	1,839	2,189	1	-	1	-	-	-
Mo.	119	5	-	-	9,823	11,176	20	12	2	1	-	-
N. Dak.	1	-	-	-	160	191	-	-	-	-	-	-
S. Dak.	2	2	-	-	346	453	-	2	-	-	1	-
Nebr.	14	2	4		1,159	1,668	-	1	-	-	-	-
Kans.	29	-	2		2,374	3,385	5	1	3	-	-	-
S. ATLANTIC	1,747	75	66	21	121,033	131,528	32	87	7	5	4	5
Del.	14	3	3	1	1,937	2,099	-	1	-	-	-	-
Md.	192	14	10	4	13,531	15,261	9	28	1	-	1	2
D.C.	231	-	-	-	8,113	9,742	-	1	-	-	-	-
Va.	126	8	22	2	8,820	10,718	1	-	-	-	-	-
W. Va.	15	6	10	-	921	1,340	-	1	-	-	-	-
N.C.	88	18	10	-	18,479	20,646	4	13	2	-	1	-
S.C.	42	2	-	-	10,047	11,592	1	6	-	1	-	1
Ga.	267	6	-	-	20,516	22,567	3	10	1	1	-	-
Fla.	772	18	11	14	38,669	37,563	14	27	3	3	2	2
E.S. CENTRAL	129	30	31	6	35,017	41,342	11	31	3	-	1	-
Ky.	22	18	14	1	3,517	4,629	9	5	-	-	-	-
Tenn.	17	4	8	-	12,117	15,991	2	13	1	-	1	-
Ala.	76	8	9	1	11,395	11,731	-	8	2	-	-	-
Miss.	14	-	-	4	7,988	8,991	-	5	-	-	-	-
W.S. CENTRAL	1,073	42	68	4	52,231	61,291	50	33	5	19	3	4
Ark.	22	-	-	2	5,797	5,621	-	-	-	-	-	-
La.	134	4	6	-	9,399	10,921	1	14	2	-	-	-
Okla.	62	5	12	1	5,752	6,838	3	3	-	1	2	-
Tex.	855	33	50	1	31,283	37,911	46	16	3	18	1	4
MOUNTAIN	295	11	13	3	12,220	14,930	93	41	3	4	1	1
Mont.	2	1	-	-	333	429	7	1	-	-	-	-
Idaho	4	-	-	-	433	497	6	4	-	-	-	-
Wyo.	3	-	-	-	274	342	-	-	-	-	-	-
Colo.	130	2	1	-	2,678	3,894	5	2	1	2	-	-
N. Mex.	18	1	1	-	1,330	1,530	15	8	-	-	-	-
Ariz.	86	7	9	1	4,232	4,849	46	18	1	2	-	-
Utah	18	-	-	2	383	642	10	5	-	-	1	-
Nev.	34	-	2	-	2,557	2,747	4	3	1	-	-	1
PACIFIC	3,087	33	101	17	65,641	71,962	158	107	14	10	2	85
Wash.	140	-	9	3	4,708	5,559	69	31	6	1	-	3
Oreg.	71	-	-	-	2,474	2,859	20	18	-	-	-	-
Calif.	2,817	28	88	14	56,921	61,085	69	53	8	9	2	65
Alaska	9	3	2	-	1,004	1,650	-	3	-	-	-	-
Hawaii	50	2	2	-	534	809	-	2	-	-	-	17
Guam	-	-	-	-	135	105	-	-	-	-	-	-
P.R.	73	1	1	1	1,260	1,350	-	4	-	2	-	5
V.I.	-	-	-	-	153	149	-	-	-	-	-	-
Pac. Trust Terr.	-	-	-	-	273	259	1	-	-	-	-	44
Amer. Samoa	-	-	-	-	47	30	-	1	-	-	-	-

N: Not notifiable U: Unavailable

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending August 8, 1987 and August 2, 1986 (31st Week)

Reporting Area	Malaria	Measles (Rubeola)					Meningococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
	Cum. 1987	1987	Cum. 1987	1987	Cum. 1987	Cum. 1986	Cum. 1987	1987	Cum. 1987	1987	Cum. 1987	Cum. 1986	1987	Cum. 1987	Cum. 1986
UNITED STATES	466	74	2,758	18	368	4,928	1,925	53	9,782	94	1,168	1,657	1	264	382
NEW ENGLAND	31	-	100	-	150	84	163	1	30	9	59	106	-	1	9
Maine	-	-	3	-	-	10	10	-	-	1	6	2	-	1	-
N.H.	1	-	51	-	101	42	16	-	8	8	12	55	-	-	1
Vt.	-	-	10	-	15	-	11	-	2	-	4	3	-	-	1
Mass.	11	-	21	-	27	28	78	1	6	-	24	27	-	-	4
R.I.	6	-	1	-	1	2	14	-	2	-	1	3	-	-	2
Conn.	13	-	14	-	6	2	34	-	12	-	12	16	-	-	1
MID. ATLANTIC	47	5	498	1	47	1,465	233	13	169	5	141	120	-	11	30
Upstate N.Y.	21	1	26	1†	12	62	82	3	78	4	104	79	-	9	22
N.Y. City	5	4	419	-	15	476	19	10	10	-	-	3	-	1	5
N.J.	11	-	32	-	3	905	47	-	39	1	7	9	-	1	3
Pa.	10	-	21	-	17	22	85	-	42	-	30	29	-	-	-
E.N. CENTRAL	23	-	277	1	23	977	275	17	5,689	4	117	241	-	30	55
Ohio	9	-	1	-	4	10	89	3	80	4	39	87	-	-	-
Ind.	4	-	-	-	-	11	32	1	823	-	6	22	-	-	-
Ill.	1	-	108	1§	17	620	67	9	2,441	-	7	29	-	22	48
Mich.	9	-	29	-	-	48	72	4	843	-	30	23	-	8	6
Wis.	-	-	139	-	2	283	15	-	1,502	-	35	80	-	-	1
W.N. CENTRAL	15	2	201	-	22	287	84	5	1,283	2	69	98	-	1	10
Minn.	5	2	18	-	20	49	25	3	751	-	10	33	-	-	-
Iowa	3	-	-	-	-	82	3	-	371	1	16	11	-	1	1
Mo.	4	-	182	-	1	31	22	-	21	-	23	8	-	-	1
N. Dak.	-	-	1	-	-	25	1	-	6	-	4	3	-	-	1
S. Dak.	-	-	-	-	-	-	2	2	87	-	3	13	-	-	-
Nebr.	2	-	-	-	-	1	4	-	3	-	1	3	-	-	-
Kans.	1	-	-	-	1	99	27	-	44	1	12	27	-	-	7
S. ATLANTIC	76	4	115	-	10	578	318	4	227	18	214	581	-	13	4
Del.	1	-	32	-	-	1	4	-	-	2	4	222	-	2	-
Md.	18	-	3	-	2	29	31	-	21	1	6	156	-	2	-
D.C.	8	-	-	-	1	2	5	-	1	-	-	-	-	-	-
Va.	14	-	1	-	-	59	54	1	67	4	42	23	-	1	-
W. Va.	2	-	-	-	-	2	1	1	30	3	44	18	-	-	-
N.C.	9	-	2	-	2	3	42	-	16	4	83	33	-	1	-
S.C.	3	-	2	-	-	301	32	-	12	-	-	11	-	-	-
Ga.	3	-	-	-	1	92	60	-	40	4	21	83	-	1	-
Fla.	18	4	75	-	4	89	89	2	40	-	14	35	-	6	4
E.S. CENTRAL	8	-	2	-	-	63	91	1	1,215	2	24	28	-	3	2
Ky.	1	-	-	-	-	5	16	-	212	-	1	2	-	2	2
Tenn.	1	-	-	-	-	55	34	1	947	-	6	8	-	1	-
Ala.	1	-	-	-	-	1	33	-	56	2	12	18	-	-	-
Miss.	5	-	2	-	-	2	8	N	N	-	5	-	-	-	-
W.S. CENTRAL	31	58	394	1	4	618	132	3	703	13	106	112	-	10	55
Ark.	1	-	-	-	-	283	17	-	278	-	7	8	-	2	-
La.	-	-	-	-	-	4	10	1	204	9	26	7	-	-	-
Okla.	4	-	2	-	1	39	17	N	N	4	73	69	-	5	-
Tex.	26	58	392	1†	3	292	88	2	221	-	-	28	-	3	55
MOUNTAIN	21	4	461	-	19	311	68	1	182	4	108	158	-	22	20
Mont.	-	-	127	-	1	7	3	-	4	1	6	7	-	6	2
Idaho	2	-	-	-	-	1	5	-	3	-	28	31	-	1	-
Wyo.	1	-	-	-	2	-	-	-	-	-	5	1	-	1	-
Colo.	6	-	5	-	4	7	20	-	28	2	37	43	-	-	1
N. Mex.	1	-	297	-	9	36	4	N	N	1	8	16	-	-	-
Ariz.	8	4	30	-	1	253	23	1	136	-	23	36	-	4	2
Utah	1	-	-	-	1	6	9	-	8	-	1	21	-	10	12
Nev.	2	-	2	-	1	1	4	-	3	-	-	3	-	-	3
PACIFIC	214	1	710	15	93	545	561	8	284	37	330	213	1	173	197
Wash.	15	1	34	1§	4	148	68	2	41	3	52	68	-	1	11
Oreg.	5	-	2	14§	73	8	25	N	N	28	42	10	-	2	1
Calif.	190	-	674	-	12	369	455	6	224	3	118	127	1	109	181
Alaska	3	-	-	-	-	-	4	-	6	2	6	2	-	2	-
Hawaii	1	-	-	-	4	20	9	-	13	1	112	6	-	59	4
Guam	-	-	2	-	-	5	4	-	5	-	-	-	-	1	3
P.R.	1	4	709	-	-	33	5	1	7	1	14	11	-	2	58
V.I.	-	-	-	-	-	-	-	1	10	-	-	-	-	-	-
Pac. Trust Terr.	-	-	1	-	-	-	1	-	5	-	1	-	-	1	2
Amer. Samoa	-	-	-	-	-	2	-	-	3	-	-	-	-	-	1

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

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

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending August 8, 1987 and August 2, 1986 (31st Week)

Reporting Area	Syphilis (Civilian) (Primary& Secondary)		Toxic-shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1987	Cum. 1986	1987	Cum. 1987	Cum. 1986	Cum. 1987	Cum. 1987	Cum. 1987	Cum. 1987
UNITED STATES	20,257	15,350	7	12,268	12,658	112	171	370	2,864
NEW ENGLAND	328	295	1	394	391	-	19	4	5
Maine	1	15	1	17	30	-	1	-	2
N.H.	3	10	-	12	11	-	-	-	-
Vt.	1	6	-	9	12	-	1	-	-
Mass.	158	158	-	219	195	-	11	2	-
R.I.	8	16	-	30	27	-	2	-	1
Conn.	157	90	-	107	116	-	4	2	2
MID. ATLANTIC	3,856	2,207	-	2,107	2,568	-	20	9	223
Upstate N.Y.	122	113	-	316	381	-	7	6	22
N.Y. City	2,800	1,253	-	997	1,335	-	1	-	-
N.J.	414	408	-	372	449	-	12	1	10
Pa.	520	433	-	422	403	-	-	2	191
E.N. CENTRAL	546	621	2	1,482	1,495	1	20	36	100
Ohio	67	83	2	272	259	1	6	30	7
Ind.	36	69	-	143	163	-	4	-	12
Ill.	294	329	-	634	665	-	7	1	32
Mich.	107	111	-	369	334	-	2	4	16
Wis.	42	29	-	64	74	-	1	1	33
W.N. CENTRAL	91	140	-	380	365	36	9	46	663
Minn.	12	24	-	78	93	-	4	-	164
Iowa	14	6	-	24	30	3	2	-	179
Mo.	46	76	-	208	182	24	3	18	36
N. Dak.	-	4	-	5	5	1	-	-	85
S. Dak.	8	2	-	21	16	5	-	1	151
Nebr.	7	11	-	15	7	1	-	1	16
Kans.	4	17	-	29	32	2	-	26	32
S. ATLANTIC	6,979	4,606	-	2,653	2,424	5	13	127	759
Del.	47	31	-	28	27	1	-	1	-
Md.	363	264	-	245	171	-	3	33	244
D.C.	209	182	-	84	81	-	-	-	33
Va.	179	224	-	272	204	2	1	6	235
W. Va.	6	14	-	71	69	-	1	5	36
N.C.	390	309	-	287	322	1	1	40	5
S.C.	468	403	-	265	319	-	-	28	34
Ga.	929	898	-	416	373	-	-	13	122
Fla.	4,388	2,281	-	985	858	1	7	1	50
E.S. CENTRAL	1,110	1,025	-	1,011	1,109	4	2	49	210
Ky.	10	47	-	260	262	1	1	6	108
Tenn.	448	369	-	237	319	1	1	32	51
Ala.	281	327	-	325	347	-	-	9	51
Miss.	371	282	-	189	181	2	-	2	-
W.S. CENTRAL	2,517	3,128	2	1,427	1,639	44	9	85	417
Ark.	163	158	-	168	219	22	1	10	83
La.	425	523	-	144	266	3	-	-	11
Okla.	92	85	1	145	156	18	2	67	23
Tex.	1,837	2,362	1	970	998	1	6	8	300
MOUNTAIN	415	364	1	294	295	12	10	12	225
Mont.	8	6	1	9	14	1	-	10	109
Idaho	4	7	-	17	11	1	-	-	3
Wyo.	1	-	-	-	-	-	-	1	46
Colo.	67	87	-	29	30	3	-	-	6
N. Mex.	36	45	-	61	66	1	8	-	2
Ariz.	202	150	-	145	137	3	2	-	47
Utah	16	9	-	16	20	1	-	1	4
Nev.	81	60	-	17	17	2	-	-	8
PACIFIC	4,415	2,964	1	2,520	2,372	10	69	2	262
Wash.	73	99	1	153	117	4	5	-	-
Oreg.	161	65	-	62	83	3	1	-	-
Calif.	4,169	2,777	-	2,150	2,018	2	60	2	259
Alaska	3	-	-	34	33	1	-	-	3
Hawaii	9	23	-	121	121	-	3	-	-
Guam	2	1	-	25	33	-	-	-	-
P.R.	577	535	-	183	173	-	-	-	41
V.I.	3	-	-	2	1	-	-	-	-
Pac. Trust Terr.	122	166	-	113	36	-	16	-	-
Amer. Samoa	2	-	-	-	3	-	1	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending August 8, 1987 (31st Week)

Reporting Area	All Causes, By Age (Years)						P&I**
	All Ages	≥65	45-64	25-44	1-24	<1	Total
NEW ENGLAND	597	411	118	38	14	16	43
Boston, Mass.	158	100	33	15	3	7	22
Bridgeport, Conn.	34	24	7	1	2	-	1
Cambridge, Mass.	28	23	5	-	-	-	3
Fall River, Mass.	26	19	5	1	1	-	-
Hartford, Conn.	30	22	6	2	-	-	-
Lowell, Mass.	28	22	4	1	-	1	2
Lynn, Mass.	19	16	3	-	-	-	-
New Bedford, Mass.	21	17	4	-	-	-	1
New Haven, Conn.	68	48	12	6	2	-	2
Providence, R.I.	48	30	9	2	2	5	1
Somerville, Mass.	5	4	1	-	-	-	1
Springfield, Mass.	48	28	10	4	3	3	7
Waterbury, Conn.	26	18	6	2	-	-	-
Worcester, Mass.	58	40	13	4	1	-	3
MID. ATLANTIC	2,557	1,650	510	262	72	62	141
Albany, N.Y.	45	28	11	3	1	2	4
Allentown, Pa.	15	12	3	-	-	-	-
Buffalo, N.Y.	112	78	22	9	1	2	9
Camden, N.J.	35	18	11	3	1	2	-
Elizabeth, N.J.	14	6	2	6	-	-	2
Erie, Pa.†	47	31	9	4	2	1	3
Jersey City, N.J.	43	25	9	5	-	3	-
N.Y. City, N.Y.	1,381	856	278	174	48	25	62
Newark, N.J.	38	17	7	8	3	3	2
Paterson, N.J.	24	18	4	-	1	1	2
Philadelphia, Pa.	388	254	77	29	8	20	28
Pittsburgh, Pa.†	85	58	24	3	-	-	3
Reading, Pa.	36	29	4	2	1	-	3
Rochester, N.Y.	111	82	19	6	3	1	11
Schenectady, N.Y.	27	23	3	1	-	-	2
Scranton, Pa.†	33	28	4	1	-	-	-
Syracuse, N.Y.	56	35	15	3	3	-	4
Trenton, N.J.	30	24	4	1	-	1	2
Utica, N.Y.	20	12	4	4	-	-	1
Yonkers, N.Y.	17	16	-	-	-	1	3
E.N. CENTRAL	2,355	1,536	493	171	70	85	72
Akron, Ohio	68	52	9	5	2	-	-
Canton, Ohio	45	32	10	2	1	-	3
Chicago, Ill.§	564	362	125	45	10	22	16
Cincinnati, Ohio	106	75	22	5	3	1	7
Cleveland, Ohio	168	107	34	10	6	11	5
Columbus, Ohio	169	97	42	14	7	9	3
Dayton, Ohio	119	73	31	9	4	2	5
Detroit, Mich.	293	158	71	40	13	11	6
Evansville, Ind.	36	28	4	1	1	2	1
Fort Wayne, Ind.	55	43	8	3	-	1	-
Gary, Ind.	19	11	3	4	1	-	-
Grand Rapids, Mich.	66	48	15	-	2	1	2
Indianapolis, Ind.	184	121	31	13	7	12	4
Madison, Wis.	29	18	4	3	3	1	2
Milwaukee, Wis.	147	104	29	6	2	6	2
Peoria, Ill.	44	34	10	-	-	-	5
Rockford, Ill.	52	38	11	1	1	1	2
South Bend, Ind.	44	35	5	3	1	-	1
Toledo, Ohio	108	70	23	6	6	3	7
Youngstown, Ohio	39	30	6	1	-	2	1
W.N. CENTRAL	817	538	191	55	12	20	48
Des Moines, Iowa	53	36	10	5	-	1	3
Duluth, Minn.	27	21	4	1	-	1	1
Kansas City, Kans.	42	23	12	6	1	-	2
Kansas City, Mo.	125	77	34	6	2	6	5
Lincoln, Nebr.	26	17	6	2	1	-	3
Minneapolis, Minn.	146	97	32	13	2	2	6
Omaha, Nebr.	84	61	16	2	-	5	9
St. Louis, Mo.	153	97	41	9	3	3	8
St. Paul, Minn.	85	59	18	6	2	-	4
Wichita, Kans.	76	50	18	5	1	2	7

ReportingArea	All Causes, By Age (Years)						P&I**
	All Ages	≥65	45-84	25-44	1-24	<1	Tota
S. ATLANTIC	1,140	679	235	133	40	51	43
Atlanta, Ga.	154	85	31	28	8	2	2
Baltimore, Md.	207	134	41	14	8	10	6
Charlotte, N.C.	104	54	31	11	3	5	4
Jacksonville, Fla.	106	72	18	11	5	-	1
Miami, Fla.	88	42	13	23	3	7	1
Norfolk, Va.	48	28	7	5	2	6	4
Richmond, Va.	64	40	11	4	3	6	4
Savannah, Ga.	56	35	13	4	3	1	2
St. Petersburg, Fla.	82	67	11	1	-	3	5
Tampa, Fla.	67	40	15	8	-		6
Washington, D.C.	148	70	41	23	5	9	8
Wilmington, Del.	16	12	3	1	-	-	-
E.S. CENTRAL	723	455	169	56	18	25	30
Birmingham, Ala.	94	61	20	7	1	5	1
Chattanooga, Tenn.	50	28	14	5	1	2	4
Knoxville, Tenn.	75	51	19	3	2	-	8
Louisville, Ky.	123	83	23	12	4	1	4
Memphis, Tenn.	184	109	45	17	4	9	8
Mobile, Ala.	54	32	12	5	3	2	2
Montgomery, Ala.	36	24	10	-	-	2	2
Nashville, Tenn.	107	67	26	7	3	4	1
W.S. CENTRAL	1,209	713	273	134	48	40	41
Austin, Tex.	45	26	10	7	1	1	-
Baton Rouge, La.	34	18	10	5	1	-	-
Corpus Christi, Tex.	49	26	15	5	1	2	4
Dallas, Tex.	204	126	37	28	8	5	4
El Paso, Tex.	45	28	15	1	1	-	3
Fort Worth, Tex	107	60	17	17	5	8	3
Houston, Tex.§	308	176	74	34	13	11	7
Little Rock, Ark.	46	27	11	5	2	1	1
New Orleans, La.	109	60	30	11	4	4	-
San Antonio, Tex.	144	88	32	13	8	3	11
Shreveport, La.	43	29	7	2	-	4	5
Tulsa, Okla.	75	49	15	6	4	1	3
MOUNTAIN	619	371	122	69	35	22	17
Albuquerque, N. Mex.	73	46	14	10	2	1	2
Colo. Springs, Colo.	29	20	2	3	2	2	-
Denver, Colo.	105	66	21	7	6	5	3
Las Vegas, Nev.	100	55	22	17	-	6	3
Ogden, Utah	19	11	7	-	1	-	2
Phoenix, Ariz.	142	78	30	17	12	5	1
Pueblo, Colo.	17	13	-	3	1	-	2
Salt Lake City, Utah	38	20	10	3	2	3	1
Tucson, Ariz.	96	62	16	9	9	-	3
PACIFIC	1,816	1,183	361	162	65	40	73
Berkeley, Calif.	8	7	-	1	-	-	-
Fresno, Calif.	55	32	11	8	-	4	4
Glendale, Calif.	21	15	5	1	-	-	-
Honolulu, Hawaii	69	39	15	9	3	3	3
Long Beach, Calif.	106	72	25	7	2	-	5
Los Angeles Calif.	500	334	101	39	17	4	16
Oakland, Calif.§	84	55	15	9	4	1	3
Pasadena, Calif.	22	13	5	-	4	-	2
Portland, Oreg.	116	80	18	9	6	3	2
Sacramento, Calif.	121	77	26	13	2	3	2
San Diego, Calif.	157	95	30	13	10	9	10
San Francisco, Calif.	141	85	30	16	6	4	2
San Jose, Calif.	182	114	43	16	5	4	7
Seattle, Wash.	145	97	24	14	5	5	8
Spokane, Wash.	50	35	11	4	-	-	3
Tacoma, Wash.	39	33	2	3	1	-	6
TOTAL	11,833††	7,536	2,472	1,080	374	361	508

*Mortality data in this table are voluntarily reported from 121 cities in the United states, most of which have populations of 100,000 o more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are no included.

**Pneumonia and influenza.

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

††Total includes unknown ages.

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

Polymer-Fume Fever — Continued

owner immediately implemented these recommendations, and the workers have been free from symptoms since that time. The distributor of the mold-release spray was informed of this potential hazard and agreed to place a warning on the label.

The investigators concluded that the employees' symptoms were indicative of polymer-fume fever because they were similar to the classical features of the condition (*1*) and because 1) no symptoms occurred before the introduction of the mold-release spray containing fluorocarbon, 2) only the workers using this product experienced symptoms, 3) all three affected employees smoked in the area where the compound was used, 4) symptoms subsided by morning and did not occur on weekends, and 5) symptoms resolved after the new safety recommendations were implemented.

Reported by: Div of Surveillance, Hazard Evaluations, and Field Studies, National Institute for Occupational Safety and Health, CDC.

Editorial Note: Mold-release agents have been previously implicated as a cause of polymer-fume fever (*1*). An estimated 282,000 workers in the United States are potentially exposed to such compounds (*2*). Fluorocarbons may be deposited on cigarettes from the air or from workers' fingers. As a cigarette is smoked, fluorocarbons are then burned or "pyrolyzed", and the products of decomposition are inhaled with the cigarette smoke. The actual products of decomposition may vary and are dependent on which polymers were used and at what temperature and humidity they were burned. The most common known products of pyrolysis include inorganic fluorides, hydrogen fluoride, carbonyl fluoride, and perfluoropropane (*3*).

Manifestations of polymer-fume fever comprise chest tightness, a choking sensation, dry cough, fever, chills, and pains in the joints. Symptoms begin several hours after exposure and resolve within a day or two (*4,5*). Little information is available on the health effects of chronic exposure to the fluorocarbon produced when polytetrafluoroethylene is decomposed. There is, however, at least one case report of otherwise unexplained diffuse interstitial pulmonary fibrosis following multiple episodes of polymer-fume fever (*6*).

The following recommendations are made to help protect employees who must work with fluorocarbons:

1. List the presence of all fluorocarbons on container labels.
2. Strictly enforce a no-smoking rule in all areas where fluorocarbons are used.
3. Prohibit the presence of all tobacco products in areas where fluorocarbons are used since a spray or mist could disperse and contaminate these products.
4. Observe general sanitation procedures such as frequent handwashing, particularly after handling materials containing fluorocarbons and always before eating, smoking, or handling tobacco products.

Polymer-Fume Fever — Continued

5. Install and maintain local exhaust ventilation as close as possible to areas where high temperatures are used. A tight hood and duct design can effectively control airborne contaminants.

Polymer-fume fever should be considered in the diagnostic evaluation of any occupationally related fever of short duration and unknown origin (*7*).

References

1. Kuntz WD, McCord CP. Polymer-fume fever. J Occup Med 1974;16:480-2.
2. CDC. National occupational hazard survey—vol. III: survey analysis and supplemental tables. Cincinnati, Ohio: US Department of Health, Education, and Welfare, Public Health Service, 1978; DHEW publication no. (NIOSH)78-114.
3. CDC. Criteria for a recommended standard: occupational exposure to decomposition products of fluorocarbon polymers. Cincinnati, Ohio: US Department of Health, Education, and Welfare, Public Health Service, 1977; DHEW publication no. (NIOSH)77-193.
4. Parkes WR. Occupational lung disorders. 2nd ed. London: Butterworths, 1982:403.
5. Seaton A, Morgan WK. Toxic gases and fumes. In: Morgan WK, Seaton A, eds. Occupational lung diseases. 2nd ed. Philadelphia, Pennsylvania: WB Saunders, 1984:609-42.
6. Williams N, Atkinson GW, Patchefsky AS. Polymer-fume fever: not so benign. J Occup Med 1974;16:519-22.
7. Williams N, Smith FK. Polymer-fume fever: an elusive diagnosis. JAMA 1972;219: 1587-9.

Epidemiologic Notes and Reports

Update: Acquired Immunodeficiency Syndrome — United States

As of August 10, 1987, physicians and health departments in the United States had reported 40,051 patients (39,493 adults and 558 children) meeting the current case definition for national reporting of the acquired immunodeficiency syndrome (AIDS) (*1-3*). Of these patients, 23,165 (58% of the adults and 65% of the children) are known to have died. The number of AIDS cases reported per year continues to increase in all patient groups (Table 1). AIDS cases have been reported from all 50 states, the District of Columbia, and four U.S. territories.

AIDS surveillance is conducted by health departments in each state, territory, and the District of Columbia. Most areas employ multifaceted active surveillance programs that include four major sources of AIDS information: hospitals and hospital-based physicians, physicians in nonhospital practices, public and private clinics, and medical records systems (death certificates, tumor registries, hospital discharge abstracts, and communicable disease reports). Epidemiologic and clinical AIDS patient information is reported through state and local health departments to CDC on a standard, confidential case report form. The median interval between diagnosis of an AIDS case and notification of CDC is 2 months. At present, an estimated 6,000 to 8,000 AIDS cases (15% to 20% of the total number of cases) have been diagnosed and will be reported soon to CDC.

AIDS – Continued

In late 1985, a 3-month review of death certificates was conducted in four major U.S. cities to assess the completeness of AIDS case reporting (*4*). Data from this review suggest that 11% of AIDS cases are not reported to state and local public health departments, primarily because of breakdowns in established reporting procedures (e.g., absence of the individual responsible for reporting when the case was diagnosed).

Reported by: State and Territorial Epidemiologists. AIDS Program, Center for Infectious Diseases, CDC.

Editorial Note: In comparison to many reportable diseases, the reporting level for AIDS has been high (*5*). Previous AIDS validation studies conducted in New York City and San Francisco showed that the level of reporting exceeded 95% (*6,7*). The major reporting sources employed in active surveillance (hospitals and hospital-based physicians, physicians in non-hospital practice, public and private clinics, and medical records systems) frequently complement each other. Thus, an AIDS patient not identified by one source may be identified by another.

As described in the *MMWR* supplement being released this week, CDC, in consultation with state and local public health officials and clinical specialists, has revised the case definition for national reporting of AIDS (*8*). With this revision, AIDS cases involving patients with presumptively diagnosed indicator diseases, which were previously not reportable because they lacked biopsy or other specific confirmation required by the former surveillance case definition, will now be reportable. Inclusion of this category will allow for national reporting of an estimated 10% to 15% of patients not previously eligible for reporting (*4*). Because, historically, most health departments have not required reporting of the additional manifestations of human immunodeficiency virus (HIV) infection included in the expanded case definition (HIV dementia complex, chronic wasting syndrome, etc.), the number of cases that will be added to existing case counts as a result of this revision is unknown. Since most patients with the wasting syndrome and HIV dementia develop the opportunistic diseases included in the previous AIDS case definition, addition of these conditions to the case definition may result in earlier reporting without adding substantially to the ultimate case count.

To evaluate the impact of the revised case definition on long-term trends of overall reporting, future data analyses will include separate tallies for cases meeting the previous and the revised case definitions.

Targeted epidemiologic surveys and serologic studies as well as prompt and complete reporting are essential for effectively monitoring the HIV epidemic. They are also necessary for projecting trends and health-care costs; for identifying patterns of infection; for formulating and targeting prevention strategies; and for providing timely guidelines for risk-reduction and other information to the public, the scientific and public health communities, and members of high-risk groups.

AIDS – Continued

References

1. CDC. Update: acquired immunodeficiency syndrome (AIDS)—United States. MMWR 1983;32:688-91.
2. Selik RM, Haverkos HW, Curran JW. Acquired immune deficiency syndrome (AIDS) trends in the United States, 1978-1982. Am J Med 1984;76:493-500.

TABLE 1. Adult and pediatric acquired immunodeficiency syndrome (AIDS) cases reported by year and yearly percent increases, by transmission category – United States, June 1981 through August 10, 1987 **(Continued on page 525)**

AIDS Cases Reported From Before August 11, 1983 to August, 10, 1985					
	Before 8/11/83	8/11/83-8/10/84		8/11/84-8/10/85	
Transmission Category*	**No.**	**No.**	**(% Inc)†**	**No.**	**(% Inc)†**
Adult Male					
Homosexual/bisexual only	1,249	2,196	(76)	4,482	(104)
IV-drug abuser only	264	483	(83)	931	(93)
Both homosexual/ IV-drug abuser	181	316	(75)	580	(84)
Hemophilia/coagulation disorder	15	26	(73)	33	(27)
Other heterosexual					
Sexual contact§	2	5	(150)	21	(320)
Non-U.S. born¶	89	92	(3)	97	(5)
Transfusion	12	22	(83)	72	(227)
Undetermined	38	77	(103)	108	(40)
Male subtotal	**1,850**	**3,217**	**(74)**	**6,324**	**(97)**
Adult Female					
IV-drug abuser only	66	145	(120)	224	(54)
Hemophilia/coagulation disorder	0	0	–	4	–
Other heterosexual					
Sexual contact§	20	35	(75)	87	(149)
Non-U.S. born¶	16	14	(-13)	25	(79)
Transfusion	8	19	(138)	45	(137)
Undetermined	18	23	(28)	43	(87)
Female subtotal	**128**	**236**	**(84)**	**428**	**(81)**
Adult subtotal	**1,978**	**3,453**	**(75)**	**6,752**	**(96)**
Pediatric	**35**	**32**	**(-9)**	**75**	**(134)**
Total	**2,013**	**3,485**	**(73)**	**6,827**	**(96)**

*Transmission categories are hierarchically ordered; patients with multiple risk factors are tabulated only in the category listed first.
†Percent increase.
§Heterosexual sexual partners of persons with AIDS or at risk for AIDS.
¶Includes persons who do not have other identified risks and who were born in countries in which heterosexual transmission is believed to play a major role.

AIDS – Continued

3. CDC. Revision of the case definition of acquired immunodeficiency syndrome for national reporting—United States. MMWR 1985;34:373-5.
4. Hardy AH, Starcher ET, Morgan WM, et al. Review of death certificates to assess completeness of AIDS case reporting. Public Health Rep 1987;102:386-91.
5. Marier R. The reporting of communicable diseases. Am J Epidemiol 1977;105: 587-90.

TABLE 1. Adult and pediatric acquired immunodeficiency syndrome (AIDS) cases reported by year and yearly percent increases, by transmission category – United States, June 1981 through August 10, 1987 (Continued)

AIDS Cases Reported From August 11, 1985, to August 10, 1987, and Total for All Years					
	8/11/85-8/10/86		8/11/86-8/10/87		
Transmission Category*	**No.**	**(% Inc)†**	**No.**	**(% Inc)†**	**Total**
Adult Male					
Homosexual/bisexual only	7,382	(65)	10,777	(46)	26,086
IV-drug abuser only	1,528	(64)	1,946	(27)	5,152
Both homosexual/ IV-drug abuser	758	(31)	1,147	(51)	2,982
Hemophilia/coagulation disorder	113	(242)	169	(50)	356
Other heterosexual					
Sexual contact§	36	(71)	110	(206)	174
Non-U.S. born¶	119	(23)	164	(38)	561
Transfusion	161	(124)	276	(71)	543
Undetermined	220	(104)	476	(116)	919
Male subtotal	**10,317**	**(63)**	**15,065**	**(46)**	**36,773**
Adult Female					
IV-drug abuser only	392	(75)	527	(34)	1,354
Hemophilia/coagulation disorder	2	(-50)	2	(0)	8
Other heterosexual					
Sexual contact§	194	(123)	316	(63)	652
Non-U.S. born¶	34	(36)	56	(65)	145
Transfusion	70	(56)	154	(120)	296
Undetermined	58	(35)	123	(112)	265
Female subtotal	**750**	**(75)**	**1,178**	**(57)**	**2,720**
Adult subtotal	**11,067**	**(64)**	**16,243**	**(47)**	**39,493**
Pediatric	**189**	**(152)**	**227**	**(20)**	**558**
Total	**11,256**	**(65)**	**16,470**	**(46)**	**40,051**

*Transmission categories are hierarchically ordered; patients with multiple risk factors are tabulated only in the category listed first.
†Percent increase.
§Heterosexual sexual partners of persons with AIDS or at risk for AIDS.
¶Includes persons who do not have other identified risks and who were born in countries in which heterosexual transmission is believed to play a major role.

AIDS — Continued

6. Rauch KJ, Rutherford GW, Badran C, Neal DP, Mayer NM, Echenberg DF. Surveillance of acquired immunodeficiency syndrome in San Francisco: evaluation of the completeness of reporting [Abstract]. Paris, France: International Conference on AIDS, June 23-25, 1986.
7. Chamberland ME, Allen JR, Monroe JM, et al. Acquired immunodeficiency syndrome in New York City: evaluation of an active surveillance system. JAMA 1985;254:383-7.
8. CDC. Revision of the CDC surveillance case definition for acquired immunodeficiency syndrome. MMWR 1987;36(1S).

Notice to Readers

Publication of Revised Case Definition for AIDS Surveillance

CDC, in collaboration with public health and clinical specialists, has developed a revised case definition for surveillance of acquired immunodeficiency syndrome (AIDS). The document presenting this new definition, "Revision of the CDC Surveillance Case Definition for Acquired Immunodeficiency Syndrome", is being released as an *MMWR* supplement on August 14, 1987. The Council of State and Territorial Epidemiologists has officially recommended adopting this revised definition for national reporting of AIDS, and it is scheduled to go into effect on September 1, 1987.

Copies of the supplement (*MMWR*, Vol. 36, Supplement no. 1S) may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, telephone (202)783-3238, or from MMS Publications, C.S.P.O. Box 9120, Waltham, MA 02254, telephone (617) 893-3800.

Notice to Readers

Regional Scientific Meeting of the International Epidemiology Association, the International Clinical Epidemiology Network, and the Asia Region Field Epidemiology Training Programs — January 24-29, 1988, Pattaya, Thailand

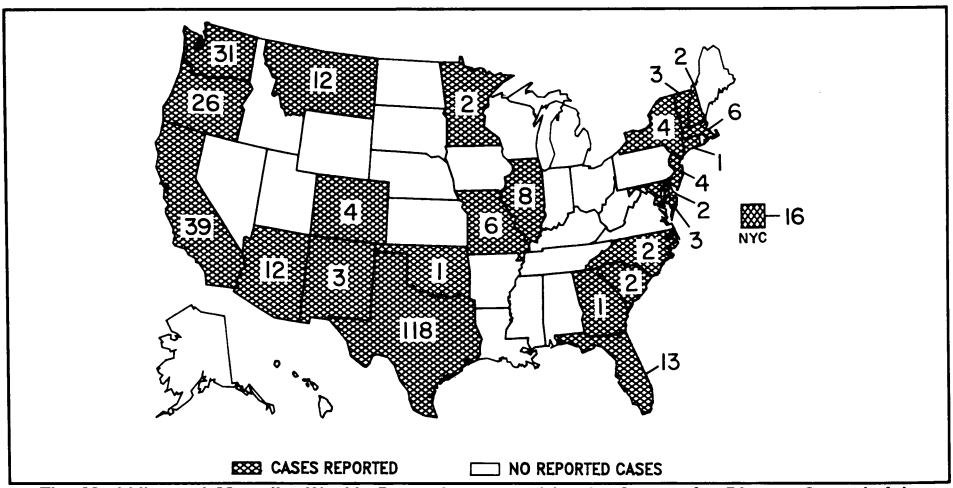
A joint tripartite conference of the International Epidemiology Association, the International Clinical Epidemiology Network, and the Asia Region Field Epidemiology Training Programs will be held January 24-29, 1988, at the Asia Pattaya Hotel in Pattaya, Thailand. Invited plenary presentations will emphasize emerging health problems in developing countries, including

Meeting – Continued

primary health-care interventions, noncommunicable diseases, AIDS, and epidemiology training. Scientific papers for presentation at both plenary and concurrent sessions are invited on all aspects of epidemiological research and investigation. The deadline for submission of abstracts is October 1, 1987.

For information on submission of abstracts, registration, and accommodations, contact: Dr. Prayura Kunasol, National Epidemiology Board, Ministry of Public Health, Bangkok 10200 Thailand (Cable: THAIHELTH BANGKOK, Fax: 66-2-215-4360, Dialcom: CDC.IHPO.FETP.THAI).

FIGURE I. Reported measles cases – United States, weeks 27-30, 1987



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

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

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