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Epidemiologic Notes and Reports

Trends in Human Immunodeficiency Virus Infection Among Civilian Applicants for Military Service — United States, October 1985-December 1986

Since October 1985, the U.S. Department of Defense has routinely tested civilian applicants for serologic evidence of infection with human immunodeficiency virus (HIV) as part of their preinduction medical evaluation (*1*). Results from the first 6 months of testing have been reported previously (*2,3*). Results for the first 15 months provide the opportunity to observe trends of infection in this population.

Between October 1985 and December 1986, 789,578 civilian applicants for military service were screened. Of these, 1,186 were confirmed as HIV-antibody positive by enzyme immunoassay and Western blot immunoelectrophoresis, for an overall rate of 1.5/1,000 individuals tested. Seroprevalence per 1,000 varied by age, sex, race and ethnicity, and region of residence. By age, it was 0.6 for 17-20 year-olds, 2.5 for 21-25 year-olds, and 4.1 for those ≥ 26 years of age. By sex, it was 1.6 for males and 0.6 for females. By race and ethnicity, seroprevalence per 1,000 was 0.8 for whites, 4.1 for blacks, 2.3 for Hispanics, 1.0 for American Indians or Alaskan Natives and Asian or Pacific Islanders. Table 1 shows the seroprevalence among civilian applicants by region of residence.

TABLE 1. Prevalence of HIV antibody* among civilian applicants for military service, by age group and region of residence — October 1985-December 1986

Region†	Age Group (Years) 17-20	21-25	≥26	All Ages
New England	0.4	1.0	3.8	0.9
Middle Atlantic	0.7	4.6	10.0	2.9
EN Central	0.4	1.8	1.9	0.9
WN Central	0.2	1.0	1.8	0.6
South Atlantic	0.9	3.4	5.4	2.1
ES Central	0.4	1.9	1.3	0.9
WS Central	0.6	2.7	3.0	1.6
Mountain	0.3	1.5	1.9	0.9
Pacific	0.8	1.5	4.0	1.5
US Territories	1.6	6.3	12.3	5.8
All Regions	0.6	2.5	4.1	1.5

*Repeatedly reactive enzyme-linked immunosorbent assay (ELISA) test confirmed by Western blot immunoelectrophoresis; reported as the number of antibody-positive applicants per 1,000 tested
†Defined in notifiable diseases table (Table III)

HIV Infection — Continued

During the 15-month observation period, the seroprevalence did not change significantly, either in the aggregate or when analyzed by age, sex, race and ethnicity (Figure 1), or geographic region. However, seroprevalence among white males showed a small but significant decline of 0.02/1,000 applicants tested per month ($p = 0.016$ by Chi Square test for trends in proportions using a logistic regression linear model).

Reported by: Health Studies Task Force, Office of the Assistant Secretary of Defense (Health Affairs), US Dept of Defense, Washington, DC. Div of Preventive Medicine and Div of Communicable Diseases and Immunology, Walter Reed Army Institute of Research, Washington, DC. Surveillance and Evaluation Br, AIDS Program, Center for Infectious Diseases, CDC.

Editorial Note: AIDS cases reported to CDC continue to increase*. However, because of the lengthy incubation period of AIDS (*4*), these cases represent infection occurring at least several years prior to the report of disease. There has been little information to indicate current trends in HIV infection. Analysis of the results of the testing of civilian applicants thus far basically shows neither an increase nor a decrease in infection level for the group as a whole or for individual subgroups. The significance of this apparent absence of change in antibody prevalence during the 15-month period studied is not yet clear.

Volunteers for military service, who are verbally screened by the recruiting official prior to arrival at the medical evaluation center, are not fully representative of the overall population in that they underrepresent the three groups in the United States with the highest prevalence of HIV infection†. Moreover, applicants do not equally represent all socioeconomic and demographic groups in the population. A growing awareness of the military serologic screening program may have increased self-deferral by persons who are HIV-antibody positive or who feel they may have been exposed to the virus. If so, this could have masked an increased frequency of infection in the population from which the applicants are drawn.

Monitoring trends in infection among civilian applicants for military service as well as among blood donors§ remains important. It is also critical to compare trends in infection among these volunteer groups with similar trends among groups not affected by self-selection bias. One such surveillance approach, in which anonymously tested sample populations without AIDS-like disease are monitored at participating hospitals, has been initiated recently by CDC. Trends in exposure risks among seropositive individuals should also be monitored to assess possible changes in the relative frequency of the various modes of transmission. Follow-up interviews of a small number of seropositive applicants have found a high proportion with typical risk exposures for AIDS (*5*). CDC is collaborating with the U.S. Department of Defense, the National Cancer Institute of the National Institutes of Health, and certain state and local health departments to develop a systematic follow-up evaluation of seropositive civilian applicants in selected cities and states.

References

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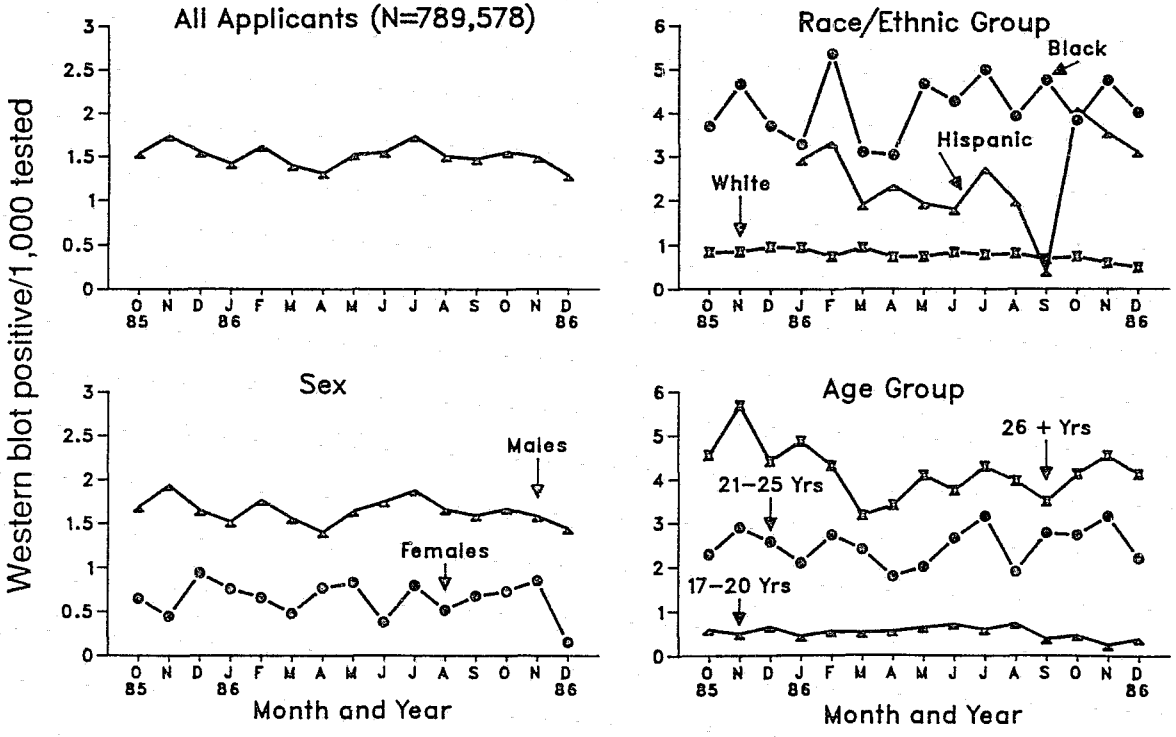
2. CDC. Human T-lymphotropic virus type III/lymphadenopathy-associated virus antibody prevalence in U.S. military recruit applicants. MMWR 1986;35:421-4.
3. Burke DS, Brundage JF, Bernier W, et al. Demography of HIV infections among civilian applicants for military service in four counties in New York City: a preliminary analysis. New York State Med J [In press].

*An average of 38.3 AIDS cases per day were reported for the period October-December 1986, compared with an average of 26.3 per day for the period October-December 1985.

†Active intravenous drug abusers, homosexual men, and hemophiliacs.

§Long-term data are not yet available for this group.

FIGURE 1. Human immunodeficiency virus antibody among civilian applicants*, by month — United States, October 1985-December 1986



*U.S. Department of Defense data.

HIV Infection – Continued

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5 Stoneburner RL, Chiasson MA, Solomon K, Rosenthal S. Risk factors in military recruits positive for HIV antibody [Letter]. N Engl J Med 1986;315:1355.

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

Disease	18th Week Ending			Cumulative, 18th Week Ending		
	May 9, 1987	May 3, 1986	Median 1982-1986	May 9, 1987	May 3, 1986	Median 1982-1986
Acquired Immunodeficiency Syndrome (AIDS)	303	203	N	6,494	4,307	N
Aseptic meningitis	75	67	75	1,515	1,497	1,406
Encephalitis: Primary (arthropod-borne & unspec)	13	6	18	262	271	318
Post-infectious	1	4	3	20	37	35
Gonorrhea: Civilian	12,549	14,517	15,686	268,252	287,371	287,371
Military	364	149	384	5,905	5,255	7,375
Hepatitis: Type A	439	300	370	8,444	7,619	7,619
Type B	439	493	468	8,540	8,688	8,450
Non A, Non B	53	61	N	1,028	1,179	N
Unspecified	60	88	114	1,144	1,705	1,812
Legionellosis	7	6	N	250	205	N
Leprosy	-	7	7	72	101	97
Malaria	9	18	18	226	249	247
Measles: Total*	142	215	81	1,276	2,526	1,084
Indigenous	133	188	N	1,100	2,426	N
Imported	9	27	N	176	96	N
Meningococcal infections: Total	38	52	58	1,208	1,139	1,209
Civilian	38	52	58	1,207	1,137	1,198
Military	-	-	-	1	2	4
Mumps	349	75	91	6,665	1,227	1,445
Pertussis	12	47	40	584	882	618
Rubella (German measles)	12	4	22	118	177	257
Syphilis (Primary & Secondary): Civilian	531	545	545	11,219	8,914	9,819
Military	1	-	4	68	79	117
Toxic Shock syndrome	1	2	N	104	123	N
Tuberculosis	327	459	441	6,720	6,790	6,967
Tularemia	1	-	4	35	21	33
Typhoid Fever	10	6	6	94	81	117
Typhus fever, tick-borne (RMSF)	7	3	15	28	30	53
Rabies, animal	100	132	132	1,664	1,906	1,906

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1987		Cum. 1987
Anthrax	-	Leptospirosis	8
Botulism: Foodborne (Ohio 1, Calif 1)	3	Plague	2
Infant	18	Poliomyelitis, Paralytic	-
Other	-	Psittacosis (Maine 1)	27
Brucellosis (Ohio 1, Tex 1)	28	Rabies, human	-
Cholera	-	Tetanus	9
Congenital rubella syndrome	3	Trichinosis	11
Congenital syphilis, ages < 1 year	-	Typhus fever, flea-borne (endemic, murine) (N Y City 1)	8
Diphtheria	1		

*Five of the 142 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 May 9, 1987 and May 3, 1986 (18th 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	6,494	75	262	20	268,252	287,371	439	439	53	60	7	72
NEW ENGLAND	236	2	12	1	9,367	6,049	5	40	1	4	-	4
Maine	11	-	1	-	282	334		1	1		-	
N H	6	-	-	-	160	176		4			-	2
Vt	4	-	2	-	68	95					-	
Mass	131	-	5	-	3,478	2,659	3	28	-	3	-	2
R I	21	-	3	1	753	623	-	-	-	-	-	
Conn	63	2	1	-	4,626	2,162	2	7	-	1	-	
MID ATLANTIC	2,028	7	28	1	43,691	48,774	21	33	3	4	-	5
Upstate N Y	261	3	15	1	5,708	5,499	17	9	3	-	-	-
N Y City	1,197	3	4	-	23,162	28,402	3	12	-	3	-	5
N J	417	1	4	-	5,494	6,505	1	12	-	1	-	-
Pa	153	-	5	-	9,327	8,368	-	-	-	-	-	
E N CENTRAL	419	4	64	-	32,076	39,239	27	51	7	3	3	1
Ohio	71	1	26	-	8,530	8,980	9	15	3	1	2	1
Ind	32	-	3	-	3,304	4,582	1	6	-	-	-	-
Ill	199	1	8	-	4,659	9,874	4	8	2	-	-	-
Mich	82	2	23	-	12,510	11,536	13	22	2	2	1	
Wis	35	-	4	-	3,073	4,267	-	-	-	-	-	
W N CENTRAL	136	4	15	-	11,047	12,339	16	7	2	-	-	-
Minn	40	-	9	-	1,840	1,865	5	1	-	-	-	-
Iowa	5	-	1	-	1,054	1,241	2	-	-	-	-	-
Mo	67	1	-	-	5,554	6,158	-	4	1	-	-	-
N Dak	1	-	-	-	103	108	-	-	-	-	-	-
S Dak	1	1	-	-	220	246	-	-	-	-	-	-
Nebr	7	-	3	-	660	880	-	-	-	-	-	-
Kans	15	2	2	-	1,616	1,841	9	2	1	-	-	-
S ATLANTIC	1,063	15	36	8	72,275	72,762	41	103	8	22	1	4
Del	8	-	1	-	1,081	1,170	-	1	-	-	-	-
Md	141	2	3	2	8,802	8,606	4	16	1	2	-	2
D C	142	1	-	-	4,916	5,561	2	4	-	-	-	-
Va	71	1	15	1	5,477	6,074	17	9	1	18	-	-
W Va	7	-	5	-	547	850	-	2	-	-	-	-
N C	37	-	8	-	10,968	11,878	1	9	2	-	-	-
S C	27	1	-	-	5,994	6,392	-	5	-	-	-	1
Ga	159	5	-	-	12,358	12,445	6	30	1	-	1	
Fla	471	5	4	5	22,132	19,786	11	27	3	2		1
E S CENTRAL	64	2	16	3	20,273	23,645	10	41	4	1		
Ky	17	1	8	1	2,055	2,778	2	9	-	-	-	
Tenn	2	-	3	-	6,974	9,272	-	16	-	-	-	
Ala	37	-	5	-	6,590	6,630	8	6	3	-	-	
Miss	8	1	-	2	4,654	4,965	-	10	1	1	-	
W S CENTRAL	593	15	28	2	31,604	34,972	35	58	4	6	-	4
Ark	16	-	-	1	3,119	3,348	6	2	1	-	-	
La	85	2	5	-	5,891	6,242	2	23	1	-	-	
Okla	22	5	9	1	3,409	4,012	2	7	-	-	-	
Tex	470	8	14	-	19,185	21,370	25	26	2	6	-	4
MOUNTAIN	149	4	8	1	7,205	8,710	51	18	8	2	2	
Mont	2	-	-	-	177	239	2	4				
Idaho	3	-	-	-	255	280	3	4				
Wyo	2	-	-	-	112	201		-				
Colo	73	-	1	-	1,464	2,338	2	4	1	1		
N Mex	15	-	1	-	794	907	3	1	-			
Ariz	21	3	6	1	2,637	2,910	36	-	6		2	
Utah	9	-	-	-	237	372	4	1	-			
Nev	24	1	-	-	1,529	1,463	1	4	1	1		
PACIFIC	1,806	22	55	4	40,714	40,881	233	88	16	18	1	54
Wash	88	1	6	-	2,862	3,299	38	12	3	6		2
Oreg	37	-	-	-	1,549	1,636	59	14	4	1		
Calif	1,639	17	47	4	35,280	34,420	132	60	7	11	1	45
Alaska	5	2	1	-	667	1,068	2	1	2			
Hawaii	37	2	1		356	458	2	1				7
Guam	-	-	-	-	70	34						
P R	16	1		1	794	783	1	12				5
V I		-			82	74		1				
Pac. Trust Terr		-			175	66				1		38
Amer Samoa		-	-		37	13		1				

N Not notifiable U Unavailable

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending May 9, 1987 and May 3, 1986 (18th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal 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	226	133	1,100	9	176	2,526	1,208	349	6,665	12	584	882	12	118	17
NEW ENGLAND	15	1	58	5	58	16	120	-	16	1	16	45	-	-	1
Maine	-	-	3	-	-	-	6	-	-	-	-	2	-	-	-
N H	-	-	49	-	46	-	13	-	6	-	2	17	-	-	1
Vt	-	-	1	3 §	8	-	7	-	2	-	3	2	-	-	-
Mass	8	1	1	2 †	4	15	57	-	1	1	4	9	-	-	-
R I	4	-	-	-	-	1	11	-	2	-	-	1	-	-	-
Conn	3	-	4	-	-	-	26	-	5	-	7	14	-	-	-
MID ATLANTIC	14	12	149	-	35	873	76	13	108	3	82	87	2	5	25
Upstate N Y	9	-	9	-	8	10	52	8	46	3	65	61	2	3	17
N Y City	2	10	116	-	8	149	8	-	-	-	-	3	-	1	5
N J	1	-	6	-	2	713	-	5	33	-	4	5	-	1	3
Pa	2	2	18	-	17	1	16	-	29	-	13	18	-	-	-
E N CENTRAL	5	4	104	-	16	482	160	188	3,834	2	75	162	1	18	10
Ohio	4	1	1	-	4	-	59	1	46	-	25	63	-	-	-
Ind	-	-	-	-	-	-	20	15	481	-	1	16	-	-	-
Ill	1	3	80	-	11	285	23	119	1,948	-	5	21	1	17	7
Mich	-	-	23	-	-	-	48	51	532	2	24	17	-	1	2
Wis	-	-	20	-	1	193	10	2	827	-	20	45	-	-	1
W N CENTRAL	6	-	34	1 §	6	118	61	33	815	1	34	42	-	1	6
Minn	3	-	-	1 §	4	14	18	7	499	-	7	20	-	-	-
Iowa	1	-	-	-	-	1	3	20	232	-	3	6	-	1	-
Mo	2	-	34	-	1	5	17	-	13	-	13	4	-	-	1
N Dak	-	-	-	-	-	7	1	-	3	-	1	2	-	-	-
S Dak	-	-	-	-	-	-	1	5	38	-	2	3	-	-	-
Nebr	-	-	-	-	-	-	2	-	2	-	-	1	-	-	-
Kans	-	-	-	-	1	91	19	1	28	1	8	6	-	-	5
S ATLANTIC	40	5	42	2	4	350	217	45	118	2	131	343	-	9	1
Del	1	-	-	-	-	1	4	-	-	-	-	204	-	-	-
Md	8	-	-	-	-	21	18	1	9	-	2	44	-	2	-
D C	6	-	-	-	1	-	5	-	-	-	-	-	-	-	-
Va	6	-	-	-	-	28	37	40	48	-	33	9	-	1	-
W Va	-	-	-	-	-	2	-	1	17	1	26	4	-	-	-
N C	5	-	-	-	-	-	29	-	2	1	53	14	-	-	-
S C	3	-	-	-	-	285	20	1	10	-	-	4	-	-	-
Ga	2	-	-	-	-	1	43	-	6	-	13	47	-	1	-
Fla	9	5	42	2 †	3	12	61	2	26	-	4	17	-	5	1
E S CENTRAL	1	1	2	-	-	1	61	43	971	-	7	16	-	2	1
Ky	-	-	-	-	-	-	10	10	202	-	1	1	-	2	1
Tenn	-	-	-	-	-	1	22	33	756	-	1	5	-	-	-
Ala	-	-	-	-	-	-	23	-	13	-	3	10	-	-	-
Miss	1	1	2	-	-	-	6	-	-	-	2	-	-	-	-
W S CENTRAL	14	-	74	-	1	327	91	14	508	-	40	26	-	1	35
Ark	1	-	-	-	-	274	8	-	203	-	2	2	-	1	-
La	-	-	-	-	-	-	10	7	178	-	9	3	-	-	-
Okla	3	-	-	-	1	4	14	N	N	-	29	21	-	-	-
Tex	10	-	74	-	-	49	59	7	127	-	-	-	-	-	35
MOUNTAIN	8	29	180	1	12	150	45	4	128	-	44	87	-	6	1
Mont	-	26	42	-	1	1	-	-	-	-	1	4	-	-	-
Idaho	1	-	-	-	-	-	3	-	2	-	12	26	-	1	-
Wyo	-	-	-	-	-	-	-	-	-	-	2	-	-	1	-
Colo	1	-	-	-	-	5	15	-	22	-	17	16	-	-	-
N Mex	-	3	137	-	9	18	3	N	N	-	3	9	-	-	-
Ariz	4	-	1	-	1	126	16	4	97	-	8	23	-	-	1
Utah	-	-	-	-	-	-	5	-	5	-	1	9	-	4	-
Nev	2	-	-	1 †	1	-	3	-	2	-	-	-	-	-	-
PACIFIC	123	81	457	-	44	209	377	9	167	3	155	74	9	76	97
Wash	7	-	1	-	-	43	50	-	29	2	24	26	-	-	2
Oreg	3	-	2	-	32	2	14	N	N	-	13	5	-	1	-
Calif	110	81	454	-	8	144	307	8	124	-	70	40	2	60	94
Alaska	3	-	-	-	-	-	4	-	3	-	2	1	-	-	-
Hawaii	-	-	-	-	4	20	2	1	11	1	46	2	7	15	1
Guam	-	-	2	-	-	3	3	-	4	-	-	-	1	1	2
P R	-	46	386	-	-	8	2	2	3	-	11	4	-	1	58
V I	-	-	-	-	-	-	-	1	5	-	-	-	-	-	-
Pac Trust Terr	-	-	-	-	-	-	1	1	3	-	1	-	-	1	-
Amer Samoa	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-

*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 May 9, 1987 and May 3, 1986 (18th 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	11,219	8,914	1	6,720	6,790	35	94	28	1,664
NEW ENGLAND	171	173	1	194	209	-	8	-	-
Maine	1	11	1	14	19	-	-	-	-
N H	1	6	-	5	9	-	-	-	-
Vt	1	6	-	4	7	-	-	-	-
Mass	86	85	-	87	104	-	6	-	-
R I	5	12	-	21	14	-	1	-	-
Conn	77	53	-	63	56	-	1	-	-
MID ATLANTIC	2,041	1,207	-	1,249	1,396	-	9	-	122
Upstate N Y	76	64	-	190	217	-	4	-	9
N Y City	1,419	671	-	605	674	-	-	-	-
N J	234	242	-	219	251	-	5	-	3
Pa	312	230	-	235	254	-	-	-	110
E N CENTRAL	179	371	-	808	853	1	15	3	47
Ohio	36	45	-	169	132	1	6	3	-
Ind	18	43	-	76	104	-	1	-	8
Ill	81	207	-	312	380	-	4	-	22
Mich	44	56	-	220	193	-	2	-	2
Wis	20	20	-	29	44	-	2	-	17
W N CENTRAL	50	96	-	193	192	10	7	-	355
Minn	5	16	-	50	47	-	2	-	75
Iowa	8	5	-	10	16	2	2	-	112
Mo	24	49	-	99	97	7	3	-	17
N Dak	-	2	-	1	3	-	-	-	42
S Dak	5	1	-	9	8	-	-	-	76
Nebr	5	8	-	11	4	-	-	-	12
Kans	3	15	-	13	17	1	-	-	21
S ATLANTIC	3,868	2,618	-	1,350	1,311	3	6	8	470
Del	35	12	-	11	18	1	-	-	-
Md	220	164	-	114	94	-	1	1	170
D C	122	129	-	45	51	-	-	-	21
Va	91	154	-	115	127	1	-	-	145
W Va	5	8	-	43	46	-	1	-	22
N C	218	188	-	129	179	1	1	2	-
S C	253	246	-	127	151	-	-	5	23
Ga	547	513	-	200	172	-	-	-	69
Fla	2,377	1,204	-	566	473	-	3	-	20
E S CENTRAL	698	597	-	546	589	2	1	5	*139
Ky	6	26	-	153	153	1	-	-	73
Tenn	293	223	-	143	160	-	1	3	38
Ala	177	206	-	180	192	-	-	-	28
Miss	222	142	-	70	84	1	-	2	-
W S CENTRAL	1,459	1,814	-	753	822	10	6	10	240
Ark	75	93	-	82	92	3	1	-	65
La	258	303	-	105	171	1	-	-	4
Okla	54	58	-	72	74	6	2	10	9
Tex	1,072	1,362	-	494	485	-	3	-	162
MOUNTAIN	248	222	-	171	144	7	3	1	133
Mont	7	2	-	8	7	1	-	1	67
Idaho	1	1	-	16	5	1	-	-	-
Wyo	22	-	-	-	-	-	-	-	35
Colo	32	65	-	-	7	1	-	-	-
N Mex	21	26	-	36	34	1	3	-	-
Ariz	121	93	-	95	68	2	-	-	29
Utah	6	4	-	6	10	1	-	-	-
Nev	38	31	-	10	13	-	-	-	2
PACIFIC	2,505	1,816	-	1,458	1,274	2	39	1	158
Wash	31	48	-	74	71	1	-	-	-
Oreg	94	35	-	43	45	1	-	-	-
Calif	2,372	1,716	-	1,247	1,084	-	37	1	157
Alaska	3	-	-	22	17	-	-	-	1
Hawaii	5	17	-	72	57	-	2	-	-
Guam	2	1	-	4	-	-	-	-	-
P R	324	299	-	86	86	-	-	-	23
V I	3	-	-	1	1	-	-	-	-
Pac Trust Terr	83	105	-	56	10	-	9	-	-
Amer Samoa	2	-	-	-	1	-	-	-	-

U Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending May 9, 1987 (18th Week)

Reporting Area	All Causes, By Age (Years)						P&I** Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	708	506	128	48	15	13	49
Boston, Mass	204	141	36	18	4	5	23
Bridgeport, Conn	58	33	10	11	1	3	2
Cambridge, Mass	16	15	1	-	-	-	2
Fall River, Mass	30	23	6	-	1	-	-
Hartford, Conn	68	48	11	6	2	1	2
Lowell, Mass	31	23	5	2	1	-	1
Lynn, Mass	21	19	2	-	-	-	-
New Bedford, Mass	22	18	2	-	-	2	3
New Haven, Conn	46	35	7	4	-	-	3
Providence, R I	63	46	10	3	4	-	5
Somerville, Mass	8	7	1	-	-	-	1
Springfield, Mass	43	33	8	1	-	1	3
Waterbury, Conn	33	23	9	1	-	-	2
Worcester, Mass	65	42	18	2	2	1	2
MID ATLANTIC	2,667	1,747	551	253	61	55	154
Albany, N Y	56	36	14	4	-	2	1
Allentown, Pa	11	8	3	-	-	-	-
Buffalo, N Y	119	89	18	8	1	3	10
Camden, N J	48	30	9	6	2	1	2
Elizabeth, N J	24	17	3	4	-	-	1
Erie, Pa †	29	22	4	2	-	1	2
Jersey City, N J	45	32	8	3	1	1	1
N Y City, N Y	1,443	916	305	165	35	22	66
Newark, N J	53	23	18	8	1	3	2
Paterson, N J	30	22	4	2	-	2	-
Philadelphia, Pa	400	257	90	31	12	10	35
Pittsburgh, Pa †	52	30	14	3	1	4	1
Reading, Pa	28	22	6	-	-	-	5
Rochester, N Y	100	77	18	4	-	1	12
Schenectady, N Y	32	25	4	-	1	2	3
Scranton, Pa †	32	28	3	1	-	-	4
Syracuse, N Y	84	60	13	7	3	1	4
Trenton, N J	41	27	6	3	4	1	1
Utica, N Y	12	10	2	-	-	-	-
Yonkers, N Y	28	16	9	2	-	1	1
E N CENTRAL	2,222	1,464	492	151	44	71	93
Akron, Ohio	81	58	18	2	-	3	3
Canton, Ohio	38	26	8	3	-	1	2
Chicago, Ill §	564	362	125	45	10	22	16
Cincinnati, Ohio	111	71	30	6	2	2	18
Cleveland, Ohio	141	81	41	7	8	6	1
Columbus, Ohio	127	78	33	9	4	3	1
Dayton, Ohio	112	76	32	3	-	1	4
Detroit, Mich	238	141	47	37	6	7	8
Evansville, Ind	42	31	8	-	2	1	1
Fort Wayne, Ind	49	40	6	2	-	1	3
Gary, Ind	13	6	4	1	1	1	-
Grand Rapids, Mich	54	35	13	2	2	2	8
Indianapolis, Ind	158	105	26	15	3	9	4
Madison, Wis	37	21	8	3	3	2	3
Milwaukee, Wis	128	93	25	7	2	1	-
Peoria, Ill	41	29	9	-	-	3	2
Rockford, Ill	41	28	10	2	-	1	3
South Bend, Ind	87	58	22	3	2	2	7
Toledo, Ohio	109	87	17	1	1	3	8
Youngstown, Ohio	51	38	10	3	-	-	1
W N CENTRAL	810	525	174	61	25	24	44
Des Moines, Iowa	66	45	14	2	1	3	7
Duluth, Minn	27	20	5	2	-	-	2
Kansas City, Kans	33	17	6	4	4	2	2
Kansas City, Mo	120	90	18	7	3	2	8
Lincoln, Nebr	39	30	7	1	1	-	1
Minneapolis, Minn	183	122	44	12	3	2	2
Omaha, Nebr	88	54	20	6	4	4	5
St Louis, Mo	125	71	28	13	5	8	14
St Paul, Minn	62	37	14	6	3	2	1
Wichita, Kans	67	39	18	8	1	1	2
S ATLANTIC	1,184	722	276	93	42	51	34
Atlanta, Ga	167	86	41	14	6	20	6
Baltimore, Md	192	113	52	21	2	4	4
Charlotte, N C	94	58	17	11	2	6	4
Jacksonville, Fla	113	72	28	6	4	3	4
Miami, Fla	101	62	22	10	5	2	2
Norfolk, Va	64	36	15	-	5	8	3
Richmond, Va	82	52	24	2	3	1	3
Savannah, Ga	29	24	3	-	2	-	2
St Petersburg, Fla	85	68	8	3	5	1	2
Tampa, Fla	81	52	18	7	4	2	-
Washington, D C	155	84	45	19	4	3	4
Wilmington, Del	21	15	5	-	-	1	-
E S CENTRAL	738	476	157	62	17	26	34
Birmingham, Ala	133	91	26	11	1	4	3
Chattanooga, Tenn	47	34	10	2	-	1	3
Knoxville, Tenn	71	45	14	6	5	1	3
Louisville, Ky	114	80	24	7	1	2	8
Memphis, Tenn	149	92	30	10	4	13	7
Mobile, Ala	56	32	13	8	1	2	3
Montgomery, Ala	44	26	10	5	1	2	-
Nashville, Tenn	124	76	30	13	4	1	7
W S CENTRAL	1,402	854	301	127	59	61	53
Austin, Tex	56	37	11	4	3	1	5
Baton Rouge, La	59	37	15	5	-	2	-
Corpus Christi, Tex	45	29	10	2	3	1	-
Dallas, Tex	197	118	37	22	17	3	8
El Paso, Tex	65	30	23	3	1	8	5
Fort Worth, Tex	100	58	19	12	6	5	5
Houston, Tex §	308	176	74	34	13	11	7
Little Rock, Ark	75	56	10	5	2	2	4
New Orleans, La	152	81	40	15	3	13	-
San Antonio, Tex	174	115	33	16	4	6	8
Shreveport, La	64	41	11	4	3	5	6
Tulsa, Okla	107	76	18	5	4	4	5
MOUNTAIN	635	418	133	42	20	22	32
Albuquerque, N Mex	80	55	17	7	-	1	6
Colo. Springs, Colo	49	35	7	4	2	1	6
Denver, Colo	108	70	25	3	3	7	2
Las Vegas, Nev	80	46	29	2	1	2	5
Ogden, Utah	26	15	5	3	-	3	1
Phoenix, Ariz	124	78	24	10	8	4	3
Pueblo, Colo	18	15	1	1	1	-	4
Salt Lake City, Utah	45	30	6	3	3	3	3
Tucson, Ariz	105	74	19	9	2	1	2
PACIFIC	1,882	1,224	387	166	58	45	102
Berkeley, Calif	18	12	3	2	-	1	1
Fresno, Calif	88	63	15	5	3	2	10
Glendale, Calif	12	11	1	-	-	-	1
Honolulu, Hawaii	62	35	18	5	2	2	9
Long Beach, Calif	80	52	19	5	-	4	3
Los Angeles, Calif	541	345	115	52	22	6	14
Oakland, Calif	65	41	14	5	2	3	1
Pasadena, Calif	22	19	1	1	1	-	1
Portland, Oreg	157	104	34	10	4	4	7
Sacramento, Calif	149	98	27	14	4	6	10
San Diego, Calif	144	98	26	12	7	1	17
San Francisco, Calif	152	95	31	20	2	4	4
San Jose, Calif	158	95	36	18	3	6	8
Seattle, Wash	139	92	25	10	7	5	5
Spokane, Wash	54	41	9	3	-	1	9
Tacoma, Wash	41	23	13	4	1	-	2
TOTAL	12,248††	7,936	2,597	1,003	341	368	595

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

** Pneumonia and influenza.

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

†† Total includes unknown ages.

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

Recommendation of the Immunization Practices Advisory Committee (ACIP)

Pertussis Immunization; Family History of Convulsions and Use of Antipyretics — Supplementary ACIP Statement

The Immunization Practices Advisory Committee (ACIP) has reviewed available data concerning the risks and benefits of pertussis vaccine for infants and children with a family history of convulsions. Based on this review, the ACIP does not believe that a family history of convulsions should be a contraindication to vaccination with diphtheria and tetanus toxoids and pertussis vaccine (DTP). In addition, the ACIP believes that antipyretic use in conjuction with DTP vaccination may be reasonable in children with personal or family histories of convulsions. Consequently, the following statement updates some of the previous recommendations regarding pertussis vaccine (*1*).

Vaccination of Children with Family Histories of Convulsions with Pertussis Vaccine

The risk of neurologic events after DTP vaccination is very small. Most neurologic events (primarily febrile seizures, but including nonfebrile seizures, encephalopathy, or other neurologic symptoms) that occasionally follow DTP vaccination occur in children without known risk factors. However, recent studies suggest that infants and children with a history of convulsions in first-degree family members (i.e., siblings and parents) have a 3.2-fold increased risk for neurologic events compared with those without such histories (CDC, unpublished data). Nevertheless, these children are still at very low risk for serious neurologic events following DTP vaccination. Convulsions within 3 days of DTP vaccination may be unrelated to vaccination, induced by vaccine components, or initiated by vaccine-associated fever in those children prone to febrile convulsions. Although children with a family history of seizures have an increased risk for developing idiopathic epilepsy, febrile seizures (including those following vaccinations) do not themselves increase the probability of epilepsy or other neurologic disorders (*2,3*).

After careful deliberation, the ACIP has concluded that a family history of convulsions in parents and siblings is not a contraindication to pertussis vaccination and that children with such family histories should receive pertussis vaccine according to the recommended schedule (*1,4*). The committee reached this decision after considering 1) the risks of pertussis disease, 2) the large number of children (5%-7%) with a family history of convulsions, 3) the clustering of these children within families, and 4) the low risk of convulsions following pertussis vaccination (*1-3,5*).

The ACIP believes that parents of infants and children with family histories of convulsions should be informed of their children's increased risk of seizures following DTP vaccination. In particular, they should be told, before the child is vaccinated, to seek immediate medical evaluation in the unlikely event of a seizure. The child's permanent medical record should document that the small risk of postvaccination seizure and the benefits of pertussis vaccination have been discussed.

Antipyretic Use in Children with Personal or Family Histories of Convulsions

There are no data on whether the prophylactic use of antipyretics following DTP vaccine can decrease the risk of febrile convulsions. However, preliminary information suggests that acetaminophen given at a dose of 15 mg/kg at the time of DTP vaccination and again 4 hours later will reduce the incidence of postvaccination fever (*6*). Thus, it is reasonable to

Pertussis — Continued

consider administering antipyretics (such as acetaminophen) at age-appropriate doses at the time of vaccination and every 4 to 6 hours for 48 to 72 hours to children at higher risk for seizures than the general population.

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Current Trends

Organic Solvents in the Workplace

On March 31, 1987, the National Institute for Occupational Safety and Health (NIOSH) released *Current Intelligence Bulletin #48: Organic Solvent Neurotoxicity.* This is another in a series of NIOSH publications on specific chemical substances, physical agents, or safety hazards found in the workplace. The document, summarized below, is now available to the public*.

Acute exposure to organic solvents can impair manual dexterity, response speed, coordination, or body balance. Epidemiologic studies of workers chronically exposed to organic solvents have demonstrated reduced function of peripheral nerves and increases in the rates of adverse neurobehavioral effects. Such effects include reversible, subjective symptoms (e.g., fatigability, irritability, and memory complaints), sustained changes in personality or mood, and impaired intellectual function (e.g., decreased learning ability, memory, and ability to concentrate). Results of studies involving the chronic exposure of animals to a limited number of organic solvents support the observations of peripheral nervous system dysfunction and neurobehavioral effects in humans.

Approximately 49 million tons of industrial solvents were produced in the United States in 1984. They are used in paints, adhesives, glues, coatings, degreasing/cleaning agents, dyes, polymers, plastics, textiles, printing inks, agricultural products, and pharmaceuticals. An estimated 9.8 million workers in these industries may be exposed to organic solvents by either skin contact or inhalation.

Employers should institute educational programs to inform workers about materials to which they are exposed, potential health risks of such exposure, and safe work practices for

*Copies of CIB #48 can be obtained without charge from the Publications Dissemination Section, Division of Standards Development and Technology Transfer, National Institute for Occupational Safety and Health, 4676 Columbia Parkway, Cincinnati, Ohio 45226; telephone: (513) 841-4287.

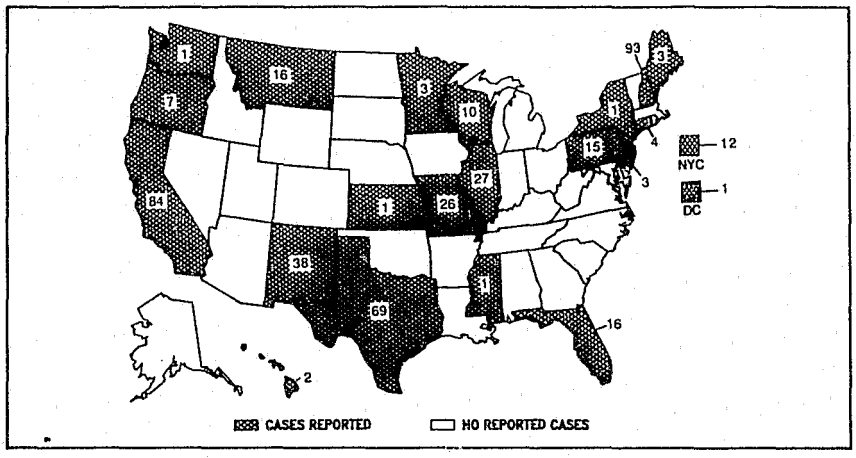
Organic Solvents – Continued

handling these materials. Employers should also assess the conditions under which workers may be exposed to organic solvents, develop programs to survey the extent of worker exposure and the effectiveness of existing controls, improve these controls as needed, and consider establishing medical surveillance for the adverse health effects of excess exposure.

As prudent public health policy, NIOSH recommends that employers take all reasonable precautions to reduce exposures at least to the concentrations specified as permissible exposure limits (PELs) by the Occupational Safety and Health Administration or to NIOSH's recommended exposure limits or the American Conference of Governmental Industrial Hygienist's threshold limit values (if the latter two values provide a greater degree of protection). The three basic methods for limiting worker exposures to organic solvents are: 1) using engineering controls such as closed-system operations and exhaust ventilation, 2) isolating workers in closed booths from which they can use automated controls to run external operations, and 3) equipping workers with carefully selected and scrupulously maintained solvent-resistant gloves, aprons, boots, face shields, safety goggles, work suits, and respiratory protection.

Reported by: Div of Standards Development and Technology Transfer, National Institute for Occupational Safety and Health, CDC.

FIGURE I. Reported measles cases — United States, weeks 14-17, 1987



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The data in this report are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

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: ATTN: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333.

Director, Centers for Disease Control
James O. Mason, M.D., Dr.P.H.
Director, Epidemiology Program Office
Carl W. Tyler, Jr., M.D.

Editor
Michael B. Gregg, M.D.
Managing Editor
Gwendolyn A. Ingraham

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