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Ectopic Pregnancy — United States, 1981-1983

During 1981, 68,000 ectopic pregnancies were reported in the United States; the number decreased to 61,800 in 1982 and increased again to 69,600 in 1983 (Table 1). Over the 14-year surveillance period of 1970-1983, the rate of ectopic pregnancy increased more than threefold from 4.5 per 1,000 pregnancies* in 1970 to 14.0/1,000 in 1983 (Table 1, Figure 1). The rate per 1,000 live births increased fourfold from 4.8 in 1970 to 19.2 in 1983, and the rate per 10,000 females 15-44 years of age increased threefold from 4.2 to 12.6 during 1970-1983. The mortality rate continued to decrease from 0.9/1,000 ectopic pregnancies in 1980 to 0.5/1,000 in 1983 (Figure 2).

Preliminary analysis has revealed that for 1981-1983, as for 1970-1980, the highest rates of ectopic pregnancy were among women 35 years of age or older and among women of black and other races. However, unlike 1970-1980, when the highest rates of ectopic

* Includes ectopic pregnancies, legally induced abortions, and live births.

TABLE 1. Numbers and rates of reported ectopic pregnancies, by year — United States, 1970-1983

Year	No.*	Rates		
		Females 15-44 yrs.†	Live births§	Reported pregnancies¶
1970	17,800	4.2	4.8	4.5
1971	19,300	4.4	5.4	4.8
1972	24,500	5.5	7.5	6.3
1973	25,600	5.6	8.2	6.8
1974	26,400	5.7	8.4	6.7
1975	30,500	6.5	9.8	7.6
1976	34,600	7.2	11.0	8.3
1977	40,700	8.3	12.3	9.2
1978	42,400	8.5	12.8	9.4
1979	49,900	9.9	14.3	10.4
1980	52,200	9.9	14.5	10.5
1981	68,000	12.7	18.7	13.6
1982	61,800	11.5	17.0	12.3
1983	69,600	12.6	19.2	14.0
Total	**563,300**	**8.3**	**11.8**	**9.2**

*Rounded to nearest 100.

†Rate per 10,000 females.

§Rate per 1,000 live births.

¶Rate per 1,000 reported pregnancies (live births, legally induced abortions, and ectopic pregnancies).

Ectopic Pregnancy — Continued

FIGURE 1. Ectopic pregnancy rates per 1,000 reported pregnancies, by year, — United States, 1970-1983

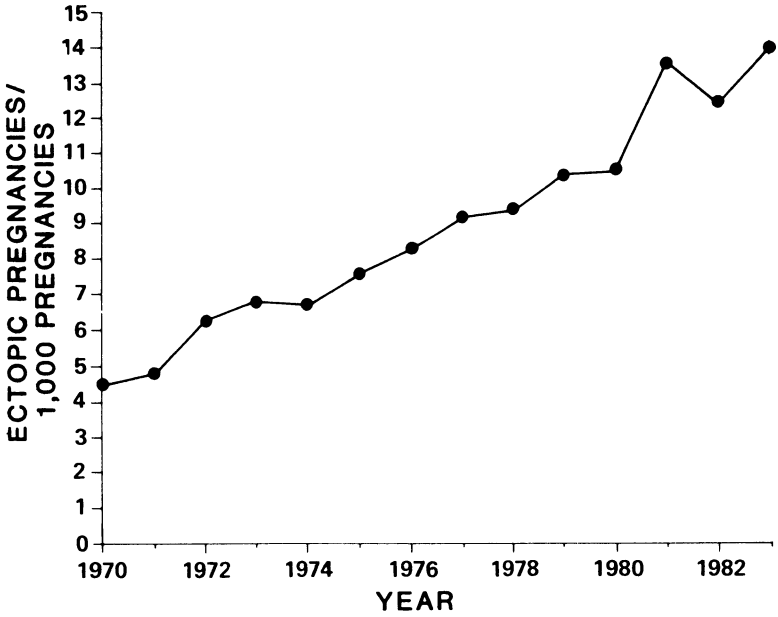
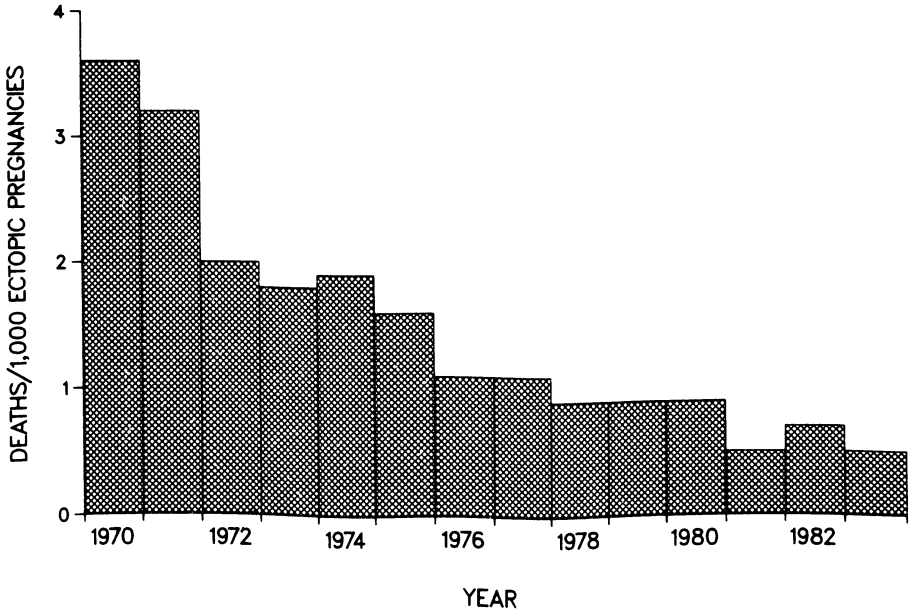


FIGURE 2. Mortality rates for women with ectopic pregnancies, by year, — United States, 1970-1983



Ectopic Pregnancy — Continued

pregnancy occurred in the Northeast and the lowest occurred in the South, during 1981-1983, the highest rates were in the West, and the lowest, in the Northeast.

As in 1970-1980, in 1981-1983 there was no substantial difference in the risk of dying from ectopic pregnancy among women of different age groups. The mortality rate was highest in the South and lowest in the West. However, women of black and other races had a threefold higher risk of death from ectopic pregnancy than white women, compared with a 3.6-fold higher risk during 1970-1980.

Reported by Pregnancy Epidemiology Br, Research and Statistics Br, Div of Reproductive Health, Center for Health Promotion and Education, CDC.

Editorial Note: CDC has previously reported on ectopic pregnancy in the United States for 1970-1980 (*1*). Data on ectopic pregnancy incidence were obtained from the National Hospital Discharge Survey of the National Center for Health Statistics. The increasing incidence of ectopic pregnancy is probably related to improved diagnostic technology, as well as to an increased incidence of pelvic inflammatory disease (*2*). There is no ready explanation for the out-of-proportion increase in the number and rate of ectopic pregnancies in 1981.

Ectopic pregnancy mortality data for 1979-1982 were obtained from CDC's Ectopic Pregnancy Mortality Surveillance. For the other years, mortality data were obtained from death certificate data from NCHS. Numbers from those two sources have been found to be comparable.

Mortality due to ectopic pregnancy dropped dramatically in the early 1970s and more slowly during the recent years (Figure 2). Overall, the mortality rate decreased sevenfold from 3.5 deaths/1,000 ectopic pregnancies in 1970 to 0.5/1,000 in 1983.

References

1. MacKay HT, Hughes JM, Hogue CJR. Ectopic pregnancy in the United States, 1979-1980. In: CDC surveillance summaries. Atlanta, Georgia: Centers for Disease Control, 1984;33(No. 2SS):1SS-7SS.
2. Washington AE, Cates W Jr, Zaidi AK. Hospitalizations for pelvic inflammatory disease: epidemiology and trends in the United States, 1975 to 1981. JAMA 1984;251:2529-33.

Horsemeat-Associated Trichinosis — France

In August and October 1985, two outbreaks of trichinosis associated with consumption of horsemeat occurred in France. Brief reports follow.

Outbreak 1. During the week of August 12, 1985, several cases of trichinosis were diagnosed in Melun, a town located 30 miles southeast of Paris. Shortly thereafter, several more cases were diagnosed from a southern district of Paris in the 14th arrondissement. An investigation was undertaken to determine the extent and source of this outbreak. Cases of trichinosis were identified through review of medical records from private and public laboratories and contact with local physicians in the two areas where the initial cases were identified. Three hundred seventy-five (92%) of 409 persons with potential trichinosis were interviewed. A case was defined as an individual with (1) a *Trichinella*-positive muscle biopsy, with recent signs and symptoms suggestive of trichinosis; (2) positive indirect immunofluorescence test (titer greater than 1:100) for *Trichinella* antibodies, with recent signs and symptoms suggestive of trichinosis; or (3) at least three of the following signs and symptoms suggestive of trichinosis: eosinophilia, fever, myalgia, and/or periorbital edema.

Three hundred twenty-five individuals met the case definition. One hundred fifty-nine (49%) of the patients were from the 14th arrondissement of Paris, and 166 (51%) were from Melun. Patients' ages ranged from 2 years to 86 years (mean 41 years). One hundred sixty-six (51%) were male. Age distribution by sex was similar.

Diagnosis was made by a positive muscle biopsy in one patient, positive serology in 234

Trichinosis – Continued

(72%), and clinical presentation in 90 (28%). Of the symptoms compatible with trichinosis, myalgia was reported among 306 (94%) of the patients; fever, among 293 (90%); facial edema, among 189 (58%); diarrhea, among 169 (52%); and rash, among 137 (42%). Twenty percent of the patients complained of neurologic symptoms, including paresis, oculomotor dysfunction, visual field changes, dyaesthesia, and dizziness. Onset of symptoms, known for 288 (89%) patients, occurred between July 29, and September 15, 1985 (Figure 3). Two patients died—an 86-year-old man, and a 65-year-old man with a history of heart disease. Four patients were pregnant; one had a miscarriage during the sixth week of pregnancy. Examination of fetus and placenta revealed no larva. The other three women delivered healthy babies.

The investigation implicated horsemeat as the source of the outbreak. All 325 patients reported consuming horsemeat—99% of whom ate it raw or rare—before onset of illness, compared with 38% of a random sample of 198 people questioned on a street in the 14th arrondissement of Paris. Family members of patients who did not eat any horsemeat but shared other food with the patients did not become infected with trichinosis. Similarly, a case-control study in a Melun prison showed that all cases and no controls had ingested horsemeat. Although several butchers in Paris and Melun sell horsemeat, all patients purchased their horsemeat exclusively from one of two shops between July 22 and August 5. The butchers from

(Continued on page 297)

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

Disease	18th Week Ending			Cumulative, 18th Week Ending		
	May 3, 1986	May 4, 1985	Median 1981-1985	May 3, 1986	May 4, 1985	Median 1981-1985
Acquired Immunodeficiency Syndrome (AIDS)	195	82	N	4,306	2,293	N
Aseptic meningitis	63	84	84	1,459	1,248	1,366
Encephalitis: Primary (arthropod-borne & unspec.)	6	22	18	260	317	317
Post-infectious	4	3	3	30	48	34
Gonorrhea: Civilian	13,123	14,832	18,226	274,042	269,233	307,418
Military	138	347	439	5,197	6,425	8,293
Hepatitis: Type A	277	402	402	7,528	7,404	7,894
Type B	469	455	464	8,587	8,536	7,900
Non A, Non B	60	72	N	1,145	1,445	N
Unspecified	91	105	147	1,704	1,817	2,522
Legionellosis	6	9	N	186	210	N
Leprosy	6	9	7	99	146	75
Malaria	17	17	19	244	247	247
Measles: Total*	170	81	81	2,227	1,082	1,082
Indigenous	160	48	N	2,153	864	N
Imported	10	33	N	74	218	N
Meningococcal infections: Total	45	58	62	1,104	1,070	1,247
Civilian	45	58	62	1,102	1,067	1,245
Military	-	-	-	2	3	5
Mumps	42	77	96	1,150	1,435	1,526
Pertussis	38	26	26	739	521	521
Rubella (German measles)	4	16	27	180	151	418
Syphilis (Primary & Secondary): Civilian	552	498	529	8,528	8,623	10,366
Military	-	3	4	72	70	124
Toxic Shock syndrome	3	10	N	127	138	N
Tuberculosis	418	411	441	6,780	6,775	7,598
Tularemia	-	3	4	19	29	36
Typhoid fever	6	14	5	78	99	126
Typhus fever, tick-borne (RMSF)	3	17	17	32	51	53
Rabies, animal	128	116	142	1,829	1,683	2,040

TABLE II. Notifiable diseases of low frequency, United States

	Cum 1986		Cum 1986
Anthrax	-	Leptospirosis	15
Botulism: Foodborne	4	Plague	-
Infant	21	Poliomyelitis, Paralytic	-
Other	-	Psittacosis (Tex. 1, N. Mex. 2)	19
Brucellosis (Va. 1)	18	Rabies, human	-
Cholera	-	Tetanus (R.I. 1)	13
Congenital rubella syndrome (Calif. 1)	2	Trichinosis	7
Congenital syphilis, ages < 1 year	11	Typhus fever, flea-borne (endemic, murine) (Tex. 2)	8
Diphtheria	-		

*Eight of the 170 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 3, 1986 and May 4, 1985 (18th Week)

Reporting Area	AIDS	Aseptic Menin-gitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionel-losis	Leprosy
			Primary	Post-in-fectious			A	B	NA,NB	Unspeci-fied		
	Cum 1986	1986	Cum 1986	Cum 1986	Cum 1986	Cum 1985	1986	1986	1986	1986	1986	Cum 1986
UNITED STATES	4,306	63	260	30	274,042	269,233	277	469	60	91	6	99
NEW ENGLAND	171	-	9	1	6,286	8,270	8	36	4	7	-	2
Maine	9	-	-	-	334	338	-	-	-	-	-	-
N H	7	-	2	-	175	173	-	-	-	-	-	-
Vt	2	-	2	1	95	85	-	1	1	-	-	-
Mass	92	-	2	-	2,659	3,058	6	24	2	7	-	2
R I	9	-	-	-	623	611	2	1	1	-	-	-
Conn	52	-	3	-	2,400	4,005	-	10	-	-	-	-
MID ATLANTIC	1,641	3	43	1	48,774	37,612	12	38	4	3	-	9
Upstate N Y	123	1	15	-	5,499	5,328	3	5	2	-	-	1
N Y City	1,163	-	10	-	28,402	17,161	-	2	1	2	-	7
N J	268	2	5	-	6,505	7,177	-	-	-	-	-	-
Pa	87	-	13	1	8,368	7,946	9	31	1	1	-	1
E N CENTRAL	228	8	52	4	31,679	38,504	17	50	4	7	2	4
Ohio	30	2	15	2	8,980	9,750	8	29	3	1	1	-
Ind	26	1	5	2	4,029	3,864	1	4	1	3	-	-
Ill	106	2	10	-	5,209	10,849	4	2	-	-	-	3
Mich	52	3	21	-	11,536	11,016	4	15	-	3	1	1
Wis	14	-	1	-	1,925	3,025	-	-	-	-	-	-
W N CENTRAL	81	1	9	6	12,345	13,675	15	19	3	2	-	1
Minn	38	1	5	-	1,865	2,001	-	6	-	-	-	1
Iowa	7	-	4	-	1,241	1,462	2	1	-	-	-	-
Mo	20	-	-	-	6,158	6,328	8	9	3	2	-	-
N Dak	2	-	-	-	113	96	-	-	-	-	-	-
S Dak	1	-	-	-	246	252	1	-	-	-	-	-
Nebr	3	-	-	-	881	1,304	-	-	-	-	-	-
Kans	10	-	-	6	1,841	2,232	4	3	-	-	-	-
S ATLANTIC	583	19	44	11	66,599	57,510	15	99	12	5	1	1
Del	10	-	3	-	1,170	1,299	1	2	1	-	-	-
Md	59	4	10	-	8,173	9,487	2	22	2	-	-	-
D C	86	-	-	-	5,561	4,916	-	1	-	-	-	-
Va	61	2	16	-	6,098	6,210	2	10	3	-	-	1
W Va	2	-	6	-	850	854	-	3	-	-	-	-
N C	26	-	8	1	11,878	10,364	-	10	2	-	-	-
S C	16	-	-	-	6,392	6,911	-	13	1	-	-	-
Ga	79	3	-	-	6,682	-	3	17	1	-	-	-
Fla	244	10	1	10	19,795	17,469	7	21	2	5	1	-
E S CENTRAL	43	2	19	1	23,658	23,482	5	44	1	1	-	-
Ky	12	-	8	-	2,778	2,574	1	3	-	-	-	-
Tenn	19	2	1	1	9,285	9,240	-	21	1	1	-	-
Ala	8	-	9	-	6,630	7,375	3	17	-	-	-	-
Miss	4	-	1	-	4,965	4,293	1	3	-	-	-	-
W S CENTRAL	344	7	22	1	34,977	38,106	57	37	5	29	2	7
Ark	10	-	-	-	3,346	3,656	4	4	1	1	-	-
La	51	-	2	-	6,249	7,780	-	-	-	-	-	-
Okla	16	2	5	-	4,012	3,928	8	3	2	2	-	-
Tex	267	5	15	1	21,370	22,742	45	30	2	26	2	7
MOUNTAIN	116	4	12	1	9,052	8,887	23	28	6	6	-	7
Mont	3	-	-	1	239	263	1	-	-	-	-	-
Idaho	1	2	-	-	282	294	2	-	-	-	-	-
Wyo	2	-	2	-	201	220	-	-	-	-	-	-
Colo	65	1	2	-	2,338	2,665	2	6	-	4	-	3
N Mex	6	-	1	-	907	1,054	-	-	-	-	-	-
Ariz	22	1	5	-	2,910	2,635	17	15	5	-	-	2
Utah	6	-	1	-	372	376	-	3	1	2	-	-
Nev	11	-	1	-	1,803	1,380	1	4	-	-	-	2
PACIFIC	1,099	19	50	4	40,672	43,187	125	118	21	31	1	68
Wash	34	1	5	-	3,074	3,071	16	13	3	-	1	7
Oreg	23	-	-	-	1,636	2,194	17	16	6	-	-	-
Calif	1,023	18	43	4	34,420	36,192	91	86	12	31	-	52
Alaska	9	-	2	-	1,084	1,064	1	2	-	-	-	-
Hawaii	10	-	-	-	458	666	-	1	-	-	-	9
Guam	-	-	-	-	34	67	3	-	-	2	-	1
P R	48	U	2	-	748	1,313	U	U	U	U	U	-
V I	-	-	-	-	74	162	-	-	-	-	-	-
Pac Trust Terr	-	-	-	-	66	322	12	-	-	-	-	1
Amer Samoa	-	-	-	-	13	-	1	-	-	-	-	-

N Not notifiable U Unavailable

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending May 3, 1986 and May 4, 1985 (18th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported *		Total									
	Cum. 1986	1986	Cum. 1986	1986	Cum. 1986	Cum. 1985	Cum. 1986	1986	Cum. 1986	1986	Cum. 1986	Cum. 1985	1986	Cum. 1986	Cum. 1985
UNITED STATES	244	160	2,153	10	74	1,082	1,104	42	1,150	38	739	521	4	180	151
NEW ENGLAND	13	-	16	-	-	89	80	1	35	-	43	26	-	1	6
Maine	-	-	-	-	-	-	17	-	-	-	2	2	-	-	-
N.H.	-	-	-	-	-	-	3	-	10	-	15	15	-	1	2
Vt.	1	-	-	-	-	-	11	-	-	-	2	2	-	-	-
Mass.	8	-	15	-	-	87	17	-	1	-	9	4	-	-	4
R.I.	1	-	1	-	-	-	11	1	6	-	1	1	-	-	-
Conn.	3	-	-	-	-	2	21	-	18	-	14	2	-	-	-
MID. ATLANTIC	28	87	871	4	7	74	179	3	66	-	85	62	-	25	37
Upstate N.Y.	6	2	4	4 †§	6	35	53	-	27	-	59	32	-	17	8
N.Y. City	8	54	154	-	1	24	36	-	5	-	3	9	-	5	12
N.J.	3	31	713	-	-	7	27	1	16	-	5	1	-	3	5
Pa.	11	-	-	-	-	8	63	2	18	-	18	20	-	-	12
E.N. CENTRAL	8	8	230	-	2	356	138	11	542	1	142	76	-	7	11
Ohio	2	-	-	-	-	41	60	1	58	-	63	13	-	-	-
Ind.	-	-	-	-	-	1	14	-	16	-	16	11	-	-	-
Ill.	3	8	133	-	-	219	30	-	276	-	18	12	-	4	5
Mich.	3	-	-	-	-	48	33	10	100	1	17	7	-	2	5
Wis.	-	-	97	-	2	47	1	-	92	-	28	33	-	1	1
W.N. CENTRAL	6	9	102	4	7	5	61	-	55	8	45	45	-	7	8
Minn.	2	2	10	2 †	2	2	13	-	1	4	24	11	-	-	-
Iowa	1	-	-	-	1	-	7	-	10	1	6	3	-	-	-
Mo.	2	-	2	2 †	3	2	22	-	13	-	4	9	-	1	-
N. Dak.	-	-	-	-	-	-	-	-	2	-	2	6	-	-	1
S. Dak.	-	-	-	-	-	-	1	-	1	3	3	-	-	-	-
Nebr.	1	-	-	-	-	-	7	-	-	-	-	1	-	-	-
Kans.	-	7	90	-	1	1	11	-	28	-	6	15	-	6	7
S. ATLANTIC	30	13	297	-	8	126	231	6	89	25	221	123	-	6	19
Del.	-	-	1	-	-	-	1	-	-	22	107	-	-	-	-
Md.	4	5	16	-	5	16	30	-	6	-	24	43	-	-	1
D.C.	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-
Va.	6	-	3	-	1	16	43	-	15	-	9	3	-	-	1
W. Va.	-	-	2	-	-	3	3	1	27	-	4	-	-	-	6
N.C.	3	-	-	-	-	1	38	-	7	-	15	7	-	-	-
S.C.	2	8	264	-	-	-	24	-	11	-	3	-	-	-	2
Ga.	3	-	-	-	1	8	34	1	6	2	51	46	-	-	-
Fla.	12	-	11	-	1	80	56	4	17	1	8	24	-	6	9
E.S. CENTRAL	5	1	2	-	-	-	62	1	15	1	16	4	-	1	1
Ky.	2	-	-	-	-	-	11	-	2	-	1	1	-	1	1
Tenn.	-	-	1	-	-	-	27	1	11	-	5	1	-	-	-
Ala.	2	-	-	-	-	-	17	-	1	1	10	2	-	-	-
Miss.	1	1	1	-	-	-	7	-	1	-	-	-	-	-	-
W.S. CENTRAL	18	-	302	-	24	65	81	7	91	-	26	61	-	35	14
Ark.	-	-	271	-	2	-	12	1	7	-	2	9	-	-	1
La.	4	-	-	-	-	7	9	-	-	-	3	2	-	-	-
Okla.	2	-	-	-	4	-	12	N	N	-	21	50	-	-	-
Tex.	12	-	31	-	18	58	48	6	84	-	-	-	-	35	13
MOUNTAIN	6	24	141	-	8	273	45	3	128	-	86	22	-	1	3
Mont.	-	-	-	-	1	134	5	-	3	-	1	3	-	-	-
Idaho	1	-	-	-	-	11	1	-	2	-	26	-	-	-	1
Wyo.	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Colo.	1	-	2	-	3	5	8	-	6	-	18	8	-	-	-
N. Mex.	-	-	16	-	4	2	5	N	N	-	9	3	-	-	1
Ariz.	2	24	123	-	-	121	13	3	113	-	23	4	-	1	1
Utah	1	-	-	-	-	-	5	-	1	-	9	4	-	-	-
Nev.	1	-	-	-	-	-	6	-	3	-	-	-	-	-	-
PACIFIC	130	18	192	2	18	94	227	10	129	3	75	102	4	97	52
Wash.	10	2	37	-	7	1	30	-	5	-	26	16	1	2	2
Oreg.	9	-	-	-	2	3	18	N	N	-	5	16	-	-	1
Calif.	111	16	136	2 †§	8	83	170	9	112	2	40	65	3	94	37
Alaska	-	-	-	-	-	-	8	-	4	-	1	2	-	-	-
Hawaii	-	-	19	-	1	7	1	1	8	1	3	3	-	1	12
Guam	1	-	3	-	-	10	-	-	2	-	-	-	-	2	1
P.R.	3	U	-	U	-	40	2	U	15	U	4	1	U	58	8
V.I.	-	-	-	-	-	9	-	-	7	-	-	-	-	-	-
Pac. Trust Terr.	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*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 3, 1986 and May 4, 1985 (18th Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic-shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1986	Cum. 1985	1986	Cum. 1986	Cum. 1985	Cum. 1986	Cum. 1986	Cum. 1986	Cum. 1986
UNITED STATES	8,528	8,623	3	6,780	6,775	19	78	32+4	1,829
NEW ENGLAND	173	191	-	204	237	-	3	1	2
Maine	11	7	-	19	16	-	-	-	-
N.H.	6	3	-	4	10	-	-	-	-
Vt.	6	-	-	7	4	-	-	-	-
Mass.	85	99	-	104	143	-	2	1	-
R.I.	12	6	-	14	21	-	-	-	1
Conn.	53	76	-	56	43	-	1	-	1
MID. ATLANTIC	1,216	1,140	-	1,394	1,264	-	7	1	168
Upstate N.Y.	64	88	-	209	202	-	1	1	25
N.Y. City	671	704	-	674	652	-	4	-	1
N.J.	242	243	-	257	128	-	2	-	3
Pa.	239	105	-	254	282	-	-	-	139
E.N. CENTRAL	256	416	2	862	827	-	4	3+1	35
Ohio	45	52	1	133	146	-	-	2	3
Ind.	41	34	-	96	103	-	-	-	7
Ill.	92	214	-	383	366	-	-	-	13
Mich.	56	96	1	205	168	-	3	1 1	4
Wis.	22	20	-	45	44	-	1	-	8
W.N. CENTRAL	96	91	-	187	168	6	4	1	265
Minn.	16	23	-	47	33	-	1	-	26
Iowa	5	14	-	16	27	1	-	-	61
Mo.	49	35	-	92	76	5	3	-	23
N. Dak.	2	-	-	3	2	-	-	-	62
S. Dak.	1	4	-	8	7	-	-	-	64
Nebr.	8	6	-	4	7	-	-	-	5
Kans.	15	9	-	17	16	-	-	1	24
S. ATLANTIC	2,370	2,127	-	1,299	1,374	4	8	9 +2	431
Del.	12	16	-	16	14	-	-	-	-
Md.	164	153	-	94	113	1	1	-	260
D.C.	129	126	-	51	67	-	1	-	-
Va.	154	117	-	127	114	1	2	1	74
W. Va.	8	4	-	46	32	-	-	-	10
N.C.	186	248	-	195	173	1	2	2	1
S.C.	246	253	-	151	166	-	-	5 2	13
Ga.	256	-	-	172	206	1	-	1	52
Fla.	1,215	1,210	-	447	489	-	2	-	21
E.S. CENTRAL	596	762	-	592	604	3	-	8+1	109
Ky.	25	31	-	155	119	2	-	1	27
Tenn.	223	219	-	160	182	1	-	2 1	56
Ala.	206	244	-	193	209	-	-	2	26
Miss.	142	268	-	84	94	-	-	3	-
W.S. CENTRAL	1,814	2,195	-	822	744	5	4	8	267
Ark.	93	113	-	92	83	3	-	-	58
La.	303	363	-	171	119	-	-	-	6
Okla.	56	60	-	74	80	2	1	6	21
Tex.	1,362	1,659	-	485	462	-	3	2	182
MOUNTAIN	212	287	1	140	165	-	3	1	317
Mont.	2	1	-	7	19	-	-	-	118
Idaho	2	2	-	5	6	-	-	-	-
Wyo.	-	5	-	-	3	-	-	1	143
Colo.	65	63	-	2	18	-	1	-	-
N. Mex.	26	36	-	34	32	-	-	-	3
Ariz.	93	163	-	68	76	-	1	-	53
Utah	4	3	1	11	5	-	1	-	-
Nev.	20	14	-	13	6	-	-	-	-
PACIFIC	1,795	1,414	-	1,280	1,392	1	45	-	235
Wash.	27	52	-	72	68	-	2	-	-
Oreg.	35	32	-	46	48	-	-	-	-
Calif.	1,716	1,302	-	1,084	1,161	-	41	-	227
Alaska	-	1	-	17	50	1	-	-	8
Hawaii	17	27	-	61	65	-	2	-	-
Guam	1	2	-	-	14	-	-	-	-
P.R.	284	310	U	81	108	-	2	-	15
V.I.	-	1	-	1	1	-	-	-	-
Pac. Trust Terr.	105	22	-	10	26	-	25	-	-
Amer. Samoa	-	-	-	1	-	-	-	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending May 3, 1986 (18th Week)

Reporting Area	All Causes, By Age (Years)						P&I** Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	702	486	130	44	15	27	65
Boston, Mass.	181	109	39	13	7	13	21
Bridgeport, Conn.	59	38	13	4	2	2	6
Cambridge, Mass.	22	17	4	1	-	-	7
Fall River, Mass.	23	16	6	-	-	1	-
Hartford, Conn.	67	43	20	3	-	1	4
Lowell, Mass.	27	22	3	1	1	-	1
Lynn, Mass.	22	17	4	-	-	1	1
New Bedford, Mass.	27	25	2	-	-	-	3
New Haven, Conn.	46	28	7	7	2	2	5
Providence, R.I.	66	48	8	6	2	2	5
Somerville, Mass.	11	10	-	1	-	-	-
Springfield, Mass.	44	32	9	1	-	2	4
Waterbury, Conn.	30	22	3	4	1	-	2
Worcester, Mass.	77	59	12	3	-	3	6
MID ATLANTIC	2,918	1,924	603	262	44	85	149
Albany, N.Y.	55	39	10	2	-	4	-
Allentown, Pa.	22	20	2	-	-	-	-
Buffalo, N.Y.	118	86	21	6	-	5	9
Camden, N.J.	38	24	9	3	-	2	-
Elizabeth, N.J.	27	19	6	2	-	-	1
Erie, Pa.†	36	23	12	1	-	-	4
Jersey City, N.J.	56	32	15	7	1	1	-
N.Y. City, N.Y.	1,482	977	296	163	21	25	64
Newark, N.J.	83	35	17	13	4	14	5
Paterson, N.J.	33	22	3	3	-	5	-
Philadelphia, Pa.	517	327	121	34	13	22	35
Pittsburgh, Pa.†	55	38	16	-	-	1	-
Reading, Pa.	39	33	5	1	-	-	2
Rochester, N.Y.	121	77	28	11	4	1	12
Schenectady, N.Y.	33	24	6	2	-	1	3
Scranton, Pa.†	25	17	6	2	-	-	-
Syracuse, N.Y.	90	65	16	8	-	1	7
Trenton, N.J.	36	24	7	2	1	2	-
Utica, N.Y.	24	19	5	-	-	-	3
Yonkers, N.Y.	28	23	2	2	-	1	4
E.N. CENTRAL	2,210	1,478	459	125	65	83	94
Akron, Ohio	69	48	12	3	3	3	2
Canton, Ohio	32	24	6	-	-	2	1
Chicago, Ill.§	564	361	124	47	11	21	17
Cincinnati, Ohio	97	59	27	7	3	1	11
Cleveland, Ohio	161	106	28	13	1	13	2
Columbus, Ohio	123	79	30	4	6	4	6
Dayton, Ohio	103	73	23	3	2	2	3
Detroit, Mich.	241	136	60	16	16	13	5
Evansville, Ind.	55	46	5	3	1	-	-
Fort Wayne, Ind.	50	33	9	2	5	1	4
Gary, Ind.	10	4	3	2	1	-	1
Grand Rapids, Mich.	41	33	3	1	2	2	2
Indianapolis, Ind.	190	130	42	8	4	6	4
Madison, Wis.	29	23	3	1	2	-	5
Milwaukee, Wis.	140	110	21	2	2	5	5
Peoria, Ill.	38	28	8	1	1	-	7
Rockford, Ill.	37	28	4	1	-	4	2
South Bend, Ind.	34	23	8	2	-	1	3
Toledo, Ohio	114	69	32	6	3	4	11
Youngstown, Ohio	82	65	11	3	2	1	3
W.N. CENTRAL	733	520	139	38	12	24	25
Des Moines, Iowa	73	53	12	4	1	3	2
Duluth, Minn.	27	21	6	-	-	-	1
Kansas City, Kans.	33	25	6	1	1	-	-
Kansas City, Mo.	95	65	17	9	1	3	7
Lincoln, Nebr.	35	27	7	-	1	-	5
Minneapolis, Minn.	87	61	13	6	2	5	1
Omaha, Nebr.	84	55	18	7	-	4	3
St. Louis, Mo.	174	131	27	5	5	6	2
St. Paul, Minn.	64	43	15	4	1	1	1
Wichita, Kans.	61	39	18	2	-	2	3
S. ATLANTIC	1,433	826	340	154	50	61	47
Atlanta, Ga.	143	84	43	6	7	3	5
Baltimore, Md.	239	147	57	22	10	3	4
Charlotte, N.C.	54	35	13	3	2	1	2
Jacksonville, Fla.	117	79	29	4	3	2	2
Miami, Fla.	120	78	28	7	-	7	-
Norfolk, Va.	71	42	15	5	2	7	9
Richmond, Va.	87	53	21	4	2	7	3
Savannah, Ga.	53	32	18	-	3	-	4
St. Petersburg, Fla.	107	77	18	6	2	4	4
Tampa, Fla.	81	54	19	5	1	1	7
Washington, D.C.	324	119	71	90	17	26	6
Wilmington, Del.	37	26	8	2	1	-	1
E.S. CENTRAL	794	520	191	35	16	32	43
Birmingham, Ala.	129	78	34	4	2	11	2
Chattanooga, Tenn.	54	39	14	1	-	-	6
Knoxville, Tenn.	76	52	18	3	3	-	9
Louisville, Ky.	155	92	41	9	3	10	6
Memphis, Tenn.	142	103	32	2	3	2	4
Mobile, Ala.	63	40	15	3	-	5	6
Montgomery, Ala.	57	40	11	2	1	3	2
Nashville, Tenn.	118	76	26	11	4	1	8
W.S. CENTRAL	1,375	835	341	119	46	31	62
Austin, Tex.	60	42	13	4	1	-	2
Baton Rouge, La.	69	42	20	3	4	-	3
Corpus Christi, Tex.	40	24	8	6	1	1	3
Dallas, Tex.	158	100	40	13	2	3	1
El Paso, Tex.	78	40	20	10	5	-	9
Fort Worth, Tex.	99	58	26	6	5	4	3
Houston, Tex.	297	170	77	34	10	6	11
Little Rock, Ark.	83	46	21	5	4	7	8
New Orleans, La.	108	68	25	12	-	3	-
San Antonio, Tex.	216	132	50	19	12	3	12
Shreveport, La.	76	48	20	5	2	1	1
Tulsa, Okla.	91	65	21	2	-	3	9
MOUNTAIN	619	384	135	51	27	22	28
Albuquerque, N.Mex.	80	52	17	6	4	1	2
Colo. Springs, Colo.	43	26	13	2	2	-	2
Denver, Colo.	113	62	23	16	9	3	4
Las Vegas, Nev.	80	48	21	7	1	3	5
Ogden, Utah	13	6	3	2	1	1	2
Phoenix, Ariz.	144	93	33	7	5	6	5
Pueblo, Colo.	14	10	3	-	-	1	1
Salt Lake City, Utah	42	26	5	5	1	5	2
Tucson, Ariz.	90	61	17	6	4	2	5
PACIFIC	1,926	1,292	349	167	61	57	115
Berkeley, Calif.	16	12	4	-	-	-	-
Fresno, Calif.	83	55	13	9	3	3	3
Glendale, Calif.	39	36	2	-	1	-	3
Honolulu, Hawaii	65	44	18	2	-	1	5
Long Beach, Calif.	120	83	19	8	3	7	18
Los Angeles, Calif.	502	326	92	55	22	7	15
Oakland, Calif.	113	72	20	7	6	8	6
Pasadena, Calif.	38	26	4	5	-	3	1
Portland, Oreg.	117	86	21	4	2	4	5
Sacramento, Calif.	158	104	29	16	6	3	14
San Diego, Calif.	148	100	30	11	4	3	16
San Francisco, Calif.	131	82	18	23	2	6	5
San Jose, Calif.	162	107	30	14	7	4	11
Seattle, Wash.	136	87	28	12	3	6	5
Spokane, Wash.	62	44	14	-	2	2	7
Tacoma, Wash.	36	28	7	1	-	-	1
TOTAL	12,710††	8,265	2,687	995	336	422	628

* 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.

Trichinosis — Continued

these two shops and their families were also infected with trichinosis. Records indicated that each shop received half of a single horse carcass on July 22. The carcass had been shipped as "fresh meat" to France from a slaughterhouse in Connecticut, which ships 8,000-9,000 horses to Europe each year. The establishment is inspected by the U.S. Department of Agriculture, but inspection did not include examination of meat samples for trichinae. Because horses are obtained by the slaughterhouse from multiple sources and are not individually identified on leaving the processing plant, the implicated horse could not be traced to farm of origin. No meat from the implicated horse was available for inspection.

Outbreak 2. Although not fully investigated at this time, a second outbreak of trichinosis occurred in France beginning October 3, 1985. Preliminary reports from physicians and hospitals suggest that up to 900 individuals were infected with trichinosis, most coming from three foci in Paris and its surroundings: Paris 12, Nogent/Marne, and Vitry/Seine. Six provincial foci were also involved but with smaller numbers of patients.

Imported horsemeat was again implicated as the source of the infection. All patients reported eating horsemeat purchased from one shop in each of the foci. Five of nine butchers selling the horsemeat at these shops and their families were infected. Records indicate that all of the implicated shops received portions of the same horse imported from West Germany. Three quarters of the horse were sold as fresh meat in the three main foci of the outbreak on September 12. The remaining quarter was deboned and vacuum-packed in 5- to 20-kg portions and was delivered to the six secondary provincial foci over the next 2 weeks.

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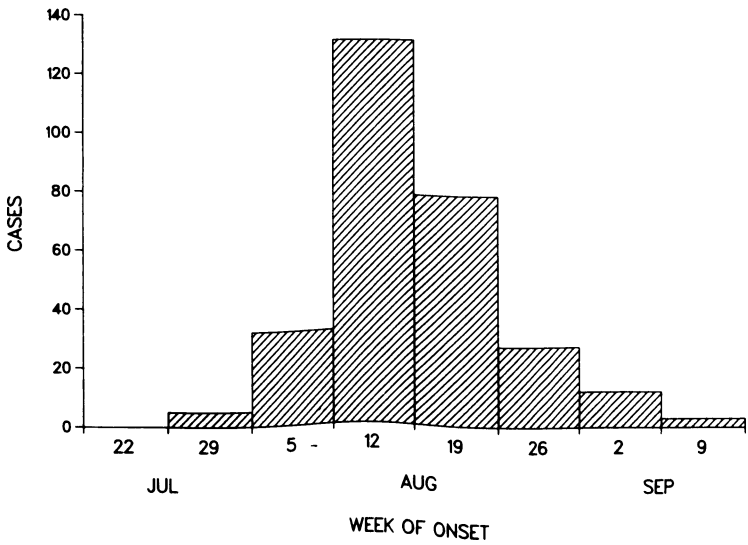
Editorial Note: Horsemeat has rarely been implicated as a source of trichinosis. The first reported outbreaks due to this meat source occurred in Italy in 1975 (*1*) and in France in 1976 (*2*). In both instances, the infected horsemeat had been imported from Eastern Europe. How horses become infected with trichinosis is unknown. Horses are commonly observed to be herbivorous; however, experimental studies prompted by the outbreak in Italy indicate that horses will ingest meat placed in their feed and will become infected with trichinosis when

FIGURE 3. Horsemeat-associated trichinosis, by week of onset — France, 1985



Trichinosis — Continued

fed infective larvae (*3*). The unusually large numbers of cases involved in the two 1985 outbreaks are related to the size of the implicated animal species (the carcass of the horse associated with outbreak 1 was 278 kg) and the preference among French consumers for raw or lightly cooked horsemeat, prepared as steaks, in soups, or ground ("steak tartare"). At the time of the second outbreak, the French Ministry of Agriculture temporarily banned importation of horsemeat from all countries and will currently accept it only if certified trichinae-free by an approved inspection procedure.

Little is known about *Trichinella* infection in horses in the United States, but it is assumed to be extremely rare. Between late October and December 31, 1985, samples from 20,000 horses killed in the United States were examined for *Trichinella*, with negative results. Trichinosis in horses in the United States would presumably represent an unlikely public health hazard because few citizens eat horsemeat, and those who do probably cook it. Since 1975, 30 to 289 U.S. trichinosis cases have been reported per year, approximately 80% of which were associated with the ingestion of pork (*4*).

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Blood Lead Levels among Office Workers — New York City

On February 15, 1985, morning and afternoon water samples from drinking fountains in the Jacob K. Javits Federal Building (JFB) in New York City were collected because of the poor taste of the water. The U.S. Environmental Protection Agency (EPA) tested samples from five of the 41 floors of the 19-year-old JFB for the presence of heavy metals. . Elevated levels of lead were reported for the afternoon samples from fountains at the north end of the building; concentrations ranged from 100 μg/l to 210 μg/l; the EPA standard maximum contaminant level for lead in drinking water is 50 μg/l. Levels of copper were also elevated (up to 5,900 μg/l).

Repeated testing for lead content of the water from the intake pipes into the building, from the JFB storage tanks, and/or from the drinking fountains and bathroom sinks on the floors of the JFB was undertaken by the EPA on April 18, by a private engineering firm on April 29 and June 10, by the New York City Department of Environmental Protection on May 13, and by the New York City Department of Health (NYCDH) on May 15 and May 17. The highest concentrations of lead were found in water from the north intake pipe sampled through a freshly lead-soldered spigot and were 14,400 μg/l on April 29 and 1,070 μg/l on May 15. Of 68 water samples taken from drinking fountains and sinks on 12 floors of the JFB (including the originally tested five floors) and tested by either the NYCDH in May or the private engineering firm in June, 67 samples had acceptable levels of lead; one sample, from an unused fountain, had an elevated lead level of 151 μg/l.

On May 20, the use of drinking water from the entire JFB was temporarily discontinued in favor of bottled water. The intake pipes, which contained lead solder and had sampling taps with lead solder joints, were subsequently replaced with stainless steel pipes; the mechanical

Blood Lead Levels — Continued

water chillers, which had copper tubing, were repaired; and the corrosiveness (acidity) of the water was decreased.

Because of the uncertainty of employee exposure to lead and the duration of any exposure, a voluntary screening program for blood lead was offered July 9 and July 10 to all of the approximately 10,000 federal employees who worked in the JFB to determine the extent of lead absorption (Table 2). Three hundred sixty-nine (4%) of the employees were tested for blood lead levels. Each employee provided demographic information and exposure-related data concerning the average daily amount of water consumed in the JFB. Blood lead determinations were made at the NYCDH Toxicology Laboratory by atomic absorption spectrophotometry (extraction method) with a lower limit of detection of 10 μg/dl.

Of the 369 employees, 188 (51%) were women. The women ranged in age from 16 years to 74 years (median 37 years); the men ranged in age from 23 years to 69 years (median 42 years). Six women reported they were pregnant, and one woman reported she was possibly pregnant. Two hundred thirty-eight (64%) of the employees resided in New York City; the others lived in New York City suburbs.

Of the employees tested, 85% had blood lead levels of 10 μg/dl or lower. The highest detected blood lead level, found in one employee, was 27 μg/dl. The percentage of employees with blood lead levels greater than 10 μg/dl increased significantly with increasing age, with a drop-off among persons aged at least 60 years ($p < 0.05$) (Table 1). Blood lead levels did not differ significantly among persons when categorized by sex, agency of employment, floor of employment, self-reported average daily consumption of water while at work, or place of residence. Of the seven pregnant or possibly pregnant women, six had blood lead levels of 10 μg/dl or less, and one had a level of 13 μg/dl.

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Editorial Note: The water in the JFB intake pipe was apparently contaminated with lead from solder in the pipes and from the lead-soldered sampling tap. If the drinking water on all floors was contaminated with excess lead, either the level was insufficiently elevated, the duration of exposure was too short, or the amount of consumption was too small to result in any evident increase in absorption and blood lead levels among the employees. Nevertheless, the water distribution and chilling systems have been repaired, and the water in the JFB is now being filtered and chilled to decrease the concentration of heavy metals. The water is being monitored quarterly to ensure good drinking water quality; the initial tests revealed that all water samples had lead levels within standard limits.

None of the 369 adults tested had abnormal absorption of lead from the environment, as evidenced by the blood lead levels. The majority of office workers tested had blood lead levels of 10 μg/dl or less. A national survey of adults revealed a mean blood lead level of 9.2 μg/dl in 1980, a 37% decline over 4 years (*1*). Overall, for the 4 years 1977-1980, the national survey revealed age-group-specific mean levels for adults of between 13.1 μg/dl and 15.3 μg/dl,

TABLE 2. Jacob K. Javits Federal Building employee blood lead levels, by age — New York City, July 9-10, 1985

Blood lead level (μg/dl)	Age (years)						
	< 30	30-39	40-49	50-59	≥ 60	Unknown	Total
≤ 10	43	116	70	44	34	5	**312**
11-19	0	16	10	18	5	1	**50**
20-27	0	0	4	3	0	0	**7**
Total	**43**	**132**	**84**	**65**	**39**	**6**	**369**

Blood Lead Levels — Continued

with the peak among persons aged 45-54 years (*2*). The results of the New York City survey parallel the national survey. In addition, nationally, blood lead levels were higher among urban residents (*2*).

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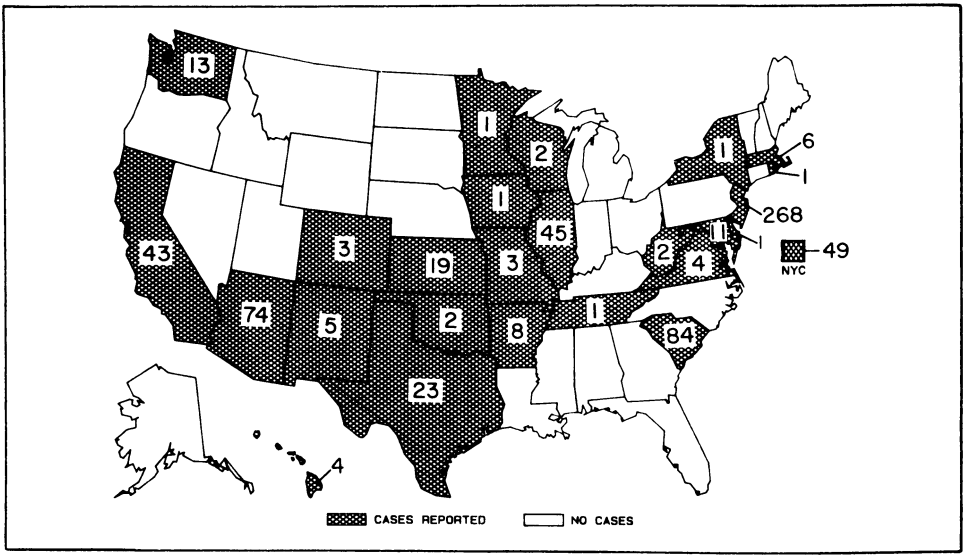
FIGURE I. Reported measles cases — United States, weeks 14-17, 1986



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