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MORBIDITY AND MORTALITY WEEKLY REPORT

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Current Trends

Screening for Diabetic Eye Disease — Mississippi

Diabetes mellitus is a major cause of visual impairment and blindness in the United States. Diabetes predisposes people to retinopathy and maculopathy, diseases of the small vessels that nourish the retina. People with diabetes are also at increased risk for developing glaucoma and cataracts.

Of the estimated 5 million people with diabetes in the United States, 25%-50% may have retinopathy, and 10% of those may be at risk for visual loss. Proliferative retinopathy is more prevalent among people with insulin-dependent (Type I) diabetes, but since many more people have non-insulin-dependent (Type II) diabetes, there may be as many people with proliferative retinopathy and Type II diabetes as there are with Type I diabetes. All people with diabetes are at risk for developing diabetic maculopathy, but those with Type II diabetes appear to be at increased risk. People with diabetes are 1.3 times more likely to have glaucoma and 1.6 times more likely to have cataracts than nondiabetic individuals.

Early age of onset and long duration of diabetes are risk factors for the development of diabetic retinopathy. Poor glycemic control and coexistent hypertension may accelerate the natural history of retinopathy. Pregnancy increases the risk of visual loss in diabetic women with serious preexisting retinopathy.

The Diabetic Retinopathy Study, conducted by the National Institutes of Health's National Eye Institute, demonstrated that panretinal photocoagulation can delay or prevent severe visual loss in more than 50% of eyes with proliferative retinopathy (7). Surgical vitrectomy can restore vision in some people with severe visual loss due to vitreous hemorrhage or macular detachment. Some studies have suggested that focal photocoagulation may preserve vision in some people with diabetic macular edema. Medical and surgical therapies are often effective in treating open-angle glaucoma, and surgery can be effective in restoring vision in up to 95% of people with senile cataracts and no significant retinopathy.

In January 1983, the Mississippi Diabetes Control Program instituted a comprehensive screening and treatment program for diabetic eye disease in its public health eye clinics. Patients are examined clinically and with fluorescein angiography. Treatment is provided as indicated by the examination, and patients are tracked and placed into a system for annual re-examination to assure follow-up and to assess the impact of the intervention. To date, 48 individuals with diabetes have been screened at the public health eye clinic in Greenville. Twenty-seven percent had diabetic retinopathy by clinical examination; by fluorescein angiography, 31% were found to have retinopathy, including 8% with preproliferative retinopathy. Four percent had increased intraocular pressure, and 17% had cataracts. Twenty-five percent had other non-diabetes-related eye conditions. Based on these findings, seven of the 48 patients required treatment, including one with a detached retina, one with intraocular hypertension,

Diabetic Eye Disease – Continued

one with glaucoma, and four with blepharitis. Although none required treatment for retinopathy, six required careful follow-up at less than the usual yearly interval.

Reported by E Thompson, MD, B Parker, Bureau of Personal Health Svcs, Mississippi State Dept of Health; Div of Diabetes Control, Center for Prevention Svcs, CDC.

Editorial Note: Epidemiologic studies are needed to more clearly define risk factors for the development of diabetic eye disease. It is clear, however, that timely diagnosis and treatment can preserve vision in large numbers of people with diabetic eye disease. Programs like that being conducted by Mississippi help prevent visual impairment and blindness caused by diabetic eye disease.

Reference

1. The Diabetic Retinopathy Study Research Group. Photocoagulation treatment of proliferative diabetic retinopathy. Clinical application of diabetic retinopathy study (DRS) findings. (DRS report no. 8). Ophthalmology 1981;88(7):583-600.

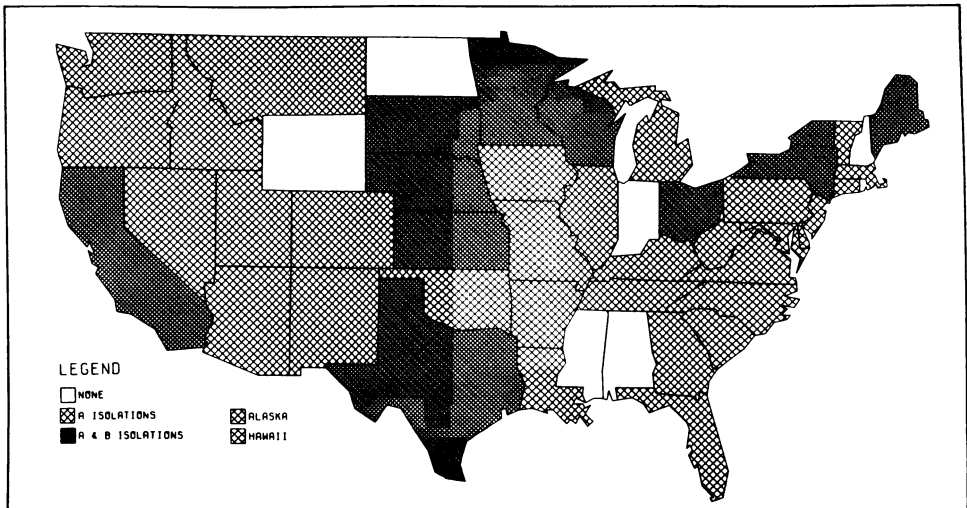
Update: Influenza Activity – United States

Although influenza type A(H3N2) virus isolates from 42 states have accounted for more than 90% of influenza isolates reported to CDC this season (1), in recent weeks, influenza type A(H1N1) virus has been reported from 20 states (Figure 1). Influenza type B has now been reported from 12 states (California, Kansas, Kentucky, Maine, Minnesota, Nebraska, New York, Ohio, Pennsylvania, South Dakota, Texas, and Wisconsin).

Influenza morbidity reports collected weekly from each state continue to indicate a decline in activity. For the week ending March 25, 1983, three states (Iowa, Nebraska, and Kentucky) reported widespread activity, and seven states reported regional activity. For the same week, an excess in the ratio of pneumonia and influenza (P&I) deaths to total deaths was reported from 121 cities for the eleventh consecutive week. The observed ratio was 5.2, and the expected ratio was 4.1

Reported by Respective state epidemiologists and laboratory directors; Div of Surveillance and Epidemiologic Studies, Epidemiology Program Office, Epidemic Investigations Br, Hospital Infections Program,

FIGURE 1. Influenza virus isolations – United States, 1982-1983 season, to March 25



Influenza — Continued

Statistical Svcs Activity, WHO Collaborating Center for Influenza, Influenza Br, Div of Viral Diseases, Center for Infectious Diseases, CDC.

References

1. CDC. Update: Influenza activity—United States. MMWR 1983;32(11):146-7.

Epidemiologic Notes and Reports

Human Rabies — Michigan

The first case of human rabies acquired in the United States since May 1981 occurred recently in Michigan. The patient, a 5-year-old female, possibly bitten by a bat in late August 1982, died on March 9, 1983, 32 days after onset of symptoms.

The child developed right-arm pain and fever after a fall. On February 7, an acute sprain of the right arm was diagnosed. By February 11, she had malaise, anorexia, sore throat, left-heel pain, and right-arm weakness. She appeared ill but was alert and cooperative after hospitalization, and had point tenderness at her right wrist, elbow, shoulder, and left heel. The white blood cell (WBC) count was 12,800, and a bone scan of the right wrist showed evidence of osteomyelitis. Over the next 48 hours, she became irritable, with temperatures to 39.3 C (103.9 F), progressive right-arm weakness, urinary incontinence, and difficulty swallowing saliva and water.

On February 13, she became lethargic and hypertensive, and was transferred to another hospital. Rabies was considered, but no clear history of animal exposure could be obtained. Cerebrospinal fluid (CSF) revealed 10 WBC and negative bacterial cultures. CAT and brain scans were normal; an EEG was diffusely abnormal without focal findings. The next day, she became obtunded and developed progressive respiratory distress requiring mechanical ventilation. The presumptive diagnosis was post-infectious encephalopathy, and treatment with high-dose steroids was initiated. By February 17, she was comatose.

On February 23, the family remembered a possible bat bite in late August 1982.

Sera collected on February 23, 18 days after the onset of symptoms, showed low titers of rabies antibody by rapid fluorescent focus inhibition test (RFFIT) and by immunoadherence hemagglutination (IAHA) at the Michigan Department of Public Health (MDPH). Antibody was not present in the CSF. Since skin biopsy and mouse inoculation were negative, the serum results were not considered sufficient to confirm the diagnosis of rabies. Sera and CSF collected around February 28, showed no titer rise, but on March 4, the serum and CSF showed rises to 1:25 and 1:17, respectively, by RFFIT. A presumptive diagnosis of rabies was made. On March 9, the patient had a cardiac arrest and died. The MDPH identified rabies virus from the brain by direct FA. Of 254 persons at the two hospitals who had contact with potentially infectious secretions from the patient, 54 received post-exposure prophylaxis.

Reported by FW Moler, MD, Community Health Center of Branch County, BC Johnson, MD, Branch-Hillsdale-St. Joseph District Health Dept, Coldwater, E Daniel, MD, J Gilsdorf, MD, TC Shope, MD, Mott Children's-University of Michigan Hospitals, Ann Arbor, D Budzko, PhD, GH Burgoyne, PhD, BS Berlin, MD, GR Anderson, DVM, B Wentworth, PhD, D Coohon, DVM, KR Wilcox, MD, State Epidemiologist, Michigan State Dept of Public Health; Div of Field Svcs, Epidemiology Program Office, Div of Viral Diseases, Center for Infectious Diseases, CDC.

Editorial Note: This is the first case of human rabies reported in Michigan since 1948. Despite its rarity, rabies should be considered in any undiagnosed neurologic disease. No source of exposure has been identified in approximately 40% of human cases in the United States in the past 10 years.

Without treatment, rabies antibody titers typically rise to levels of 1:10,000-1:60,000. Concurrent steroid therapy has been shown to prevent antibody formation in rabies vaccine recipients (1), and like interferon, appears to have little effect on clinical illness.

Rabies - Continued

The IAHA test, recently developed at MDPH (2), was used here as a rapid diagnostic aid. Results can be obtained in approximately 4 hours. This test currently has had limited field evaluation, and further assessment of its value in rabies diagnosis is needed.

References

1. Burns KF, Shelton DF, Lukeman JM, Grogan EW. Cortisone and ACTH impairment of response to rabies vaccine. Public Health Rep 1960;75(5):441-5.
2. Budzko DB, Charamella LJ, Jelinek D, Anderson GR. Rapid test for detection of rabies antibody in human serum. J Clin Microbiol 1983;17(3):481-4.

Current Trends**Human Arboviral Encephalitis - United States, 1982**

In 1982, 185 laboratory-confirmed cases of human arboviral encephalitis* were reported from 23 states (Figure 2); at least four cases were fatal. This is a 48% increase from the 125 cases reported in 1981, but is far below the peak of 2,113 cases reported in 1975 (Table 1).

*These data, reported to the Division of Vector-Borne Viral Diseases, are a subset of all encephalitis cases reported through state health departments to CDC.

(Continued on page 165)

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

Disease	12th Week Ending			Cumulative, 12th Week Ending		
	March 26, 1983	March 27, 1982	Median 1978-1982	March 26, 1983	March 27, 1982	Median 1978-1982
Aseptic meningitis	53	73	58	960	913	762
Encephalitis: Primary (arthropod-borne & unspec.)	16	23	12	193	180	138
Post-infectious	3	3	3	15	9	36
Gonorrhea: Civilian	16,680	16,860	16,914	206,364	214,983	218,491
Military	275	483	483	5,363	6,290	6,428
Hepatitis: Type A	499	392	556	5,603	5,264	6,215
Type B	433	409	318	4,881	4,520	3,571
Non A, Non B	85	33	N	715	407	N
Unspecified	186	172	238	1,799	1,960	2,372
Legionellosis	10	10	N	127	68	N
Leprosy	4	4	2	54	33	34
Malaria	18	16	16	142	171	171
Measles: Total	111	14	518	302	172	2,786
Indigenous	106	N	N	260	N	N
Imported*	5	N	N	42	N	N
Meningococcal infections: Total	87	80	80	751	798	798
Civilian	87	80	80	740	794	794
Military	-	-	2	11	4	9
Mumps	78	227	269	976	1,461	3,363
Pertussis	41	19	22	302	226	243
Rubella (German measles)	25	56	110	246	477	1,078
Syphilis (Primary & Secondary): Civilian	745	760	477	7,671	7,928	6,015
Military	3	N	5	104	86	86
Toxic-shock syndrome	14	N	N	86	N	N
Tuberculosis	450	425	563	4,866	5,304	5,548
Tularemia	4	1	1	37	17	21
Typhoid fever	2	6	9	68	90	91
Typhus fever, tick-borne (RMSF)	1	1	-	13	18	12
Rabies, animal	160	143	131	1,229	1,118	1,118

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1983		Cum. 1983
Anthrax	-	Plague	-
Botulism: Foodborne	6	Poliomyelitis: Total	1
Infant	12	Paralytic	1
Other	-	Psittacosis (Miss. 1, Idaho 2)	18
Brucellosis	21	Rabies, human	2
Cholera	-	Tetanus (Miss. 1, La. 1)	12
Congenital rubella syndrome	8	Trichinosis (N.J. 2)	8
Diphtheria	-	Typhus fever, flea-borne (endemic, murine)	3
Leptospirosis	4		

*Five of the 111 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
March 26, 1983 and March 27, 1982 (12th week)

Reporting Area	Aseptic Menin- gitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionel- losis	Leprosy	Malaria
		Primary	Post-in- fectious			A	B	NA,NB	Unspeci- fied			
		1983	Cum. 1983	Cum. 1983	Cum. 1983	Cum. 1982	1983	1983	1983	1983	1983	Cum. 1983
UNITED STATES	53	193	15	206,364	214,983	499	433	85	186	10	54	142
NEW ENGLAND	-	8	-	5,402	4,850	5	46	3	8	3	-	2
Maine	-	-	-	299	234	3	2	-	-	-	-	-
N.H.	-	-	-	153	177	-	1	-	1	-	-	-
Vt.	-	-	-	85	104	-	-	-	-	-	-	-
Mass.	-	5	-	2,406	2,243	1	6	-	6	-	-	-
R.I.	-	-	-	284	371	-	-	-	-	1	-	1
Conn.	-	3	-	2,175	1,721	1	37	3	1	2	-	1
MID ATLANTIC	12	28	3	26,721	25,946	51	72	10	21	-	4	22
Upstate N.Y.	4	9	-	3,773	4,123	15	17	4	5	-	-	8
N.Y. City	1	6	-	11,413	11,273	8	16	-	2	-	4	8
N.J.	1	4	-	4,905	4,531	10	19	3	13	-	-	4
Pa.	6	9	3	6,630	6,019	18	20	3	1	-	-	2
E.N. CENTRAL	6	46	2	26,639	30,772	62	59	9	15	1	2	5
Ohio	5	22	1	7,713	8,597	39	20	-	8	-	1	-
Ind.	-	4	1	3,497	3,758	14	9	2	-	-	-	-
Ill.	-	-	-	4,949	8,151	1	2	1	1	-	1	1
Mich.	1	19	-	7,903	7,442	8	28	5	6	1	-	4
Wis.	-	1	-	2,577	2,824	-	-	1	-	-	-	-
W.N. CENTRAL	2	13	1	9,908	9,743	8	20	5	3	-	-	5
Minn.	-	-	-	1,422	1,488	3	4	1	-	-	-	11
Iowa	-	12	-	1,026	1,104	2	1	2	-	-	-	2
Mo.	1	-	-	4,759	4,344	2	11	2	2	-	-	1
N. Dak.	-	-	-	102	124	-	-	-	-	-	-	-
S. Dak.	-	-	-	280	291	-	-	-	-	-	-	-
Nebr.	1	1	-	552	607	-	1	-	-	-	-	-
Kans.	-	-	1	1,767	1,785	1	3	-	1	-	-	1
S. ATLANTIC	4	31	3	54,185	54,923	43	47	9	10	-	1	20
Del.	-	-	-	1,008	848	1	2	-	-	-	-	-
Md.	1	4	-	6,861	7,372	2	10	-	2	-	-	3
D.C.	-	-	-	3,609	2,730	-	2	-	1	-	-	2
Va.	-	12	1	4,628	4,652	3	5	3	2	-	-	5
W. Va.	-	-	-	540	625	3	-	-	-	-	-	1
N.C.	2	6	-	7,411	9,057	5	8	-	-	-	-	-
S.C.	-	1	-	5,278	5,140	9	2	-	-	-	-	3
Ga.	-	1	-	12,398	8,818	-	-	-	-	-	-	1
Fla.	1	7	2	12,452	15,681	20	18	6	5	-	1	5
E.S. CENTRAL	4	9	2	18,048	17,801	83	22	2	4	-	-	2
Ky.	1	-	-	2,238	2,414	71	-	1	1	-	-	-
Tenn.	2	1	-	7,133	6,784	4	10	1	-	-	-	-
Ala.	1	8	2	5,500	5,362	2	10	-	3	-	-	1
Miss.	-	-	-	3,177	3,241	6	2	-	-	-	-	1
W.S. CENTRAL	4	16	-	29,481	30,312	67	46	-	78	1	3	9
Ark.	-	-	-	2,415	2,512	-	2	-	5	-	-	1
La.	1	2	-	4,765	5,420	18	11	-	2	-	-	-
Okla.	2	4	-	3,497	3,203	7	4	-	5	1	-	5
Tex.	1	10	-	18,804	19,177	42	29	-	66	-	3	3
MOUNTAIN	-	9	2	6,277	7,844	67	23	8	15	-	11	8
Mont.	-	-	-	316	338	1	-	-	-	-	-	-
Idaho	-	-	-	323	306	2	-	1	-	-	-	-
Wyo.	-	1	-	182	224	-	-	-	-	-	-	-
Colo.	-	2	-	1,803	2,105	17	9	1	1	-	2	4
N. Mex.	-	-	-	859	1,006	5	1	2	1	-	-	2
Ariz.	-	1	2	1,501	2,176	37	5	3	11	-	9	2
Utah	-	5	-	303	338	1	2	1	1	-	-	-
Nev.	-	-	-	990	1,351	4	6	-	1	-	-	-
PACIFIC	21	33	2	29,703	32,792	113	98	39	32	5	33	69
Wash.	-	3	-	2,104	2,781	4	4	4	-	-	3	2
Oreg.	-	-	-	1,514	1,877	7	5	2	-	-	1	3
Calif.	18	28	2	24,794	26,734	102	86	33	32	5	21	64
Alaska	1	-	-	694	827	-	-	-	-	-	-	-
Hawaii	2	2	-	597	573	-	3	-	-	-	8	-
Guam	U	-	-	26	31	U	U	U	U	U	-	-
P.R.	1	-	-	611	689	9	12	-	13	-	-	1
V.I.	-	-	-	69	53	-	-	-	-	-	-	-
Pac. Trust Terr.	U	-	-	-	104	U	U	U	U	U	-	-

N Not notifiable

U Unavailable

TABLE III. (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending
March 26, 1983 and March 27, 1982 (12th week)

Reporting Area	Measles (Rubeola)					Menin- gococcal infections	Mumps			Pertussis			Rubella		
	Indigenous		Imported*		Total		1983	Cum. 1983	Cum. 1982	1983	Cum. 1983	Cum. 1982	1983	Cum. 1983	Cum. 1982
	1983	Cum. 1983	1983	Cum. 1983											
UNITED STATES	106	260	5	42	172	751	78	976	1,461	41	302	226	25	246	477
NEW ENGLAND	1	1	-	1	5	35	7	47	94	1	13	19	1	7	8
Maine	-	-	-	-	-	6	3	8	20	-	-	-	-	-	-
N.H.	-	-	-	-	-	1	-	10	8	-	2	4	-	-	8
Vt.	-	-	-	-	-	-	1	7	4	-	2	-	-	-	1
Mass.	1	1	-	-	2	11	1	10	46	1	8	6	1	6	-
R.I.	-	-	-	-	-	2	1	4	7	-	1	7	-	-	-
Conn.	-	-	-	1	3	15	1	8	9	-	1	2	-	-	-
MID ATLANTIC	3	3	4	8	24	112	9	74	88	3	55	28	2	15	31
Upstate N.Y.	-	-	1†	2	13	39	1	28	24	2	27	16	1	9	18
N.Y. City	3	3	3†	5	9	13	-	5	16	-	7	4	-	2	10
N.J.	-	-	-	1	-	16	1	14	18	1	8	3	-	1	3
Pa.	-	-	-	-	2	44	7	27	30	-	13	5	1	3	-
E.N. CENTRAL	65	109	-	10	22	120	36	497	831	11	77	69	3	33	57
Ohio	-	-	-	1	-	56	21	303	569	-	30	15	-	1	-
Ind.	57	69	-	-	1	19	-	9	17	-	3	8	-	-	8
Ill.	8	40	-	4	12	15	3	31	38	9	36	21	-	14	16
Mich.	-	-	-	5	9	27	12	127	136	2	5	7	3	9	18
Wis.	-	-	-	-	-	3	-	27	71	-	3	18	-	9	15
W.N. CENTRAL	-	-	-	-	-	48	1	69	51	4	15	10	1	16	16
Minn.	-	-	-	-	-	8	-	10	3	3	4	3	-	3	1
Iowa	-	-	-	-	-	6	-	29	15	-	2	-	-	-	-
Mo.	-	-	-	-	-	23	1	4	4	-	2	4	-	-	9
N. Dak.	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
S. Dak.	-	-	-	-	-	2	-	-	-	-	-	1	-	-	1
Nebr.	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Kans.	-	-	-	-	-	8	-	26	29	1	7	1	1	13	5
S. ATLANTIC	7	72	-	4	17	172	1	41	120	11	44	24	-	19	15
Del.	-	-	-	-	-	-	-	3	3	-	-	3	-	-	-
Md.	-	1	-	-	1	22	-	8	10	-	-	-	-	1	4
D.C.	-	-	-	-	1	1	-	-	-	-	-	1	-	-	-
Va.	-	1	-	1	10	24	-	9	16	10	20	3	-	1	5
W. Va.	-	-	-	-	1	1	1	10	58	-	2	3	-	-	1
N.C.	-	-	-	-	-	34	-	4	4	-	1	2	-	1	-
S.C.	-	-	-	3	-	22	-	2	5	-	2	3	-	-	1
Ga.	4	6	-	-	-	27	-	5	2	-	14	5	-	4	1
Fla.	3	64	-	-	4	41	-	-	22	1	5	4	-	12	3
E.S. CENTRAL	-	-	-	-	4	48	2	18	17	1	4	5	1	5	11
Ky.	-	-	-	-	1	9	1	7	7	1	2	-	1	5	11
Tenn.	-	-	-	-	3	15	-	8	6	-	2	4	-	-	-
Ala.	-	-	-	-	-	18	-	-	2	-	-	-	-	-	-
Miss.	-	-	-	-	-	6	1	3	2	-	-	1	-	-	-
W.S. CENTRAL	30	30	-	11	4	95	7	89	52	-	35	12	7	42	33
Ark.	-	-	-	11	-	5	-	1	3	-	1	-	-	-	-
La.	-	-	-	-	-	17	-	-	-	-	2	-	-	-	-
Okla.	-	-	-	-	-	14	-	-	-	-	7	2	-	-	1
Tex.	30	30	-	-	4	59	7	88	49	-	25	10	7	42	32
MOUNTAIN	-	-	-	1	-	24	2	33	31	6	46	13	1	11	16
Mont.	-	-	-	-	-	1	1	1	3	-	1	-	-	2	1
Idaho	-	-	-	-	-	2	-	1	2	-	2	1	-	2	-
Wyo.	-	-	-	-	-	1	-	2	1	4	1	-	-	1	4
Colo.	-	-	-	1	-	12	-	3	8	4	28	4	-	-	1
N. Mex.	-	-	-	-	-	4	-	-	-	-	4	3	-	-	2
Ariz.	-	-	-	-	-	1	-	21	8	1	6	4	-	4	1
Utah	-	-	-	-	-	3	-	6	6	-	1	-	-	1	5
Nev.	-	-	-	-	-	-	1	1	2	-	-	-	1	1	2
PACIFIC	-	45	1	7	96	97	13	108	177	4	13	46	9	98	290
Wash.	-	1	-	-	14	16	2	17	33	-	1	8	1	1	14
Oreg.	-	4	-	-	-	11	-	-	-	-	1	5	-	5	2
Calif.	-	39	1†	7	81	68	11	78	139	3	11	33	8	92	271
Alaska	-	-	-	-	-	-	-	8	4	-	-	-	-	-	1
Hawaii	-	1	-	-	1	2	-	5	1	-	-	-	-	-	2
Guam	U	-	U	-	-	-	U	-	1	U	-	-	U	-	1
P.R.	-	26	-	-	38	6	4	36	12	-	3	4	U	1	3
V.I.	-	-	-	5	-	-	-	-	-	-	-	-	-	1	-
Pac. Trust Terr.	U	-	U	-	-	-	U	-	-	U	-	-	U	-	-

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

U: Unavailable

†International

§Out-of-state

TABLE III. (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending
March 26, 1983 and March 27, 1982 (12th week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic- shock Syndrome	Tuberculosis		Tula- remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1983	Cum. 1982	1983	1983	Cum. 1983	Cum. 1983	Cum. 1983	Cum. 1983	Cum. 1983
UNITED STATES	7,671	7,928	14	450	4,866	37	68	13	1,229
NEW ENGLAND	188	155	-	12	125	-	3	1	2
Maine	3	-	-	-	9	-	-	-	2
N.H.	6	-	-	1	13	-	-	-	-
Vt.	1	-	-	1	2	-	-	-	-
Mass.	124	108	-	7	55	-	3	1	-
R.I.	3	10	-	-	13	-	-	-	-
Conn.	51	37	-	3	33	-	-	-	-
MID ATLANTIC	898	1,051	8	54	937	-	17	-	26
Upstate N.Y.	43	111	-	-	169	-	3	-	19
N.Y. City	554	651	-	24	367	-	8	-	-
N.J.	172	122	-	18	206	-	6	-	-
Pa.	129	167	8	12	195	-	-	-	7
E.N. CENTRAL	344	509	2	55	738	-	9	1	80
Ohio	121	78	-	18	105	-	3	-	10
Ind.	45	61	-	2	90	-	1	-	4
Ill.	95	272	-	12	337	-	2	-	42
Mich.	60	70	2	21	171	-	3	1	-
Wis.	23	28	-	2	35	-	-	-	24
W.N. CENTRAL	92	151	1	16	167	12	1	3	165
Minn.	41	23	-	5	27	-	-	-	33
Iowa	4	7	-	3	23	-	-	-	50
Mo.	31	93	-	-	82	8	1	2	23
N. Dak.	-	3	1	-	-	-	-	1	16
S. Dak.	-	-	-	5	16	-	-	-	12
Nebr.	5	4	-	-	4	2	-	-	10
Kans.	11	21	-	3	15	2	-	-	21
S. ATLANTIC	2,012	2,179	1	93	927	11	10	2	480
Del.	10	5	-	-	7	-	-	-	-
Md.	104	128	-	6	101	5	4	1	206
D.C.	78	142	-	6	31	-	-	-	1
Va.	153	155	-	10	77	1	3	-	187
W. Va.	5	6	1	5	46	-	2	-	24
N.C.	194	176	-	5	92	4	-	-	2
S.C.	150	108	-	2	82	-	-	-	6
Ga.	376	452	-	23	173	1	-	-	45
Fla.	942	1,007	-	36	318	-	1	1	9
E.S. CENTRAL	543	601	-	30	470	5	1	3	114
Ky.	34	29	-	9	130	-	-	-	23
Tenn.	151	161	-	4	128	4	1	1	78
Ala.	215	206	-	13	139	-	-	2	13
Miss.	143	205	-	4	73	1	-	-	-
W.S. CENTRAL	1,995	1,968	-	94	494	7	1	2	236
Ark.	48	48	-	6	37	5	-	1	37
La.	391	410	-	19	75	2	-	-	6
Okla.	51	37	-	6	59	-	-	-	27
Tex.	1,505	1,473	-	63	323	-	1	1	166
MOUNTAIN	182	223	1	14	133	1	4	-	40
Mont.	4	1	-	1	12	-	-	-	29
Idaho	1	14	-	2	10	-	-	-	-
Wyo.	3	9	-	-	2	-	-	-	-
Colo.	46	72	1	-	8	-	1	-	-
N. Mex.	67	43	-	5	24	1	-	-	2
Ariz.	36	44	-	4	57	-	3	-	9
Utah	8	5	-	-	11	-	-	-	-
Nev.	17	35	-	2	9	-	-	-	-
PACIFIC	1,417	1,091	1	82	875	1	22	1	86
Wash.	39	34	-	6	51	-	2	-	-
Oreg.	26	34	-	8	43	-	-	-	-
Calif.	1,323	992	1	62	717	1	19	1	80
Alaska	7	6	-	6	4	-	-	-	6
Hawaii	22	25	-	6	60	-	1	-	-
Guam	-	-	U	U	-	-	-	-	-
P.R.	112	149	-	7	117	-	-	-	13
V.I.	7	-	-	-	-	-	-	-	-
Pac. Trust Terr.	-	-	U	U	-	-	-	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending
March 26, 1983 (12th week)

Reporting Area	All Causes, By Age (Years)						P&I** Total	Reporting Area	All Causes, By Age (Years)						P&I** Total
	All Ages	≥65	45-64	25-44	1-24	<1			All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	713	498	139	34	17	25	63	S. ATLANTIC	1,482	913	358	111	42	58	63
Boston, Mass.	208	125	49	15	8	11	28	Atlanta, Ga.	153	103	31	9	3	7	6
Bridgeport, Conn.	40	29	9	1	-	-	6	Baltimore, Md.	411	258	105	24	12	12	11
Cambridge, Mass.	30	21	9	1	-	1	2	Charlotte, N.C.	87	50	25	6	5	1	4
Fall River, Mass.	23	19	9	-	-	-	2	Jacksonville, Fla.	115	72	27	8	5	3	10
Hartford, Conn.	67	45	13	4	2	3	2	Miami, Fla.	118	65	37	11	3	2	2
Lowell, Mass.	27	21	5	1	-	-	1	Norfolk, Va.	49	29	11	2	1	6	3
Lynn, Mass.	22	17	5	1	-	-	1	Richmond, Va.	84	55	21	4	-	4	10
New Bedford, Mass.	29	23	3	1	-	-	3	Savannah, Ga.	26	18	6	2	-	-	1
New Haven, Conn.	38	28	3	4	-	3	3	St. Petersburg, Fla.	118	93	17	7	-	-	4
Providence, R.I.	74	55	14	2	1	2	6	Tampa, Fla.	70	40	17	4	4	5	2
Somerville, Mass.	12	11	1	-	-	-	1	Washington, D.C.	176	79	44	33	9	11	4
Springfield, Mass.	45	28	10	3	3	1	7	Wilmington, Del.	75	51	17	1	-	6	6
Waterbury, Conn.	27	18	7	2	-	-	3	E.S. CENTRAL	713	439	190	43	22	19	46
Worcester, Mass.	71	58	8	1	1	3	2	Birmingham, Ala.	95	61	25	5	1	3	3
MID ATLANTIC	2,652	1,806	540	180	60	66	133	Chattanooga, Tenn.	62	42	14	2	3	1	10
Albany, N.Y.	48	38	7	1	1	1	1	Knoxville, Tenn.	57	37	14	4	2	-	2
Allentown, Pa.	19	17	2	-	-	-	-	Louisville, Ky.	111	57	36	10	4	4	10
Buffalo, N.Y.	157	106	38	8	2	3	20	Memphis, Tenn.	153	93	44	11	5	-	8
Camden, N.J.	46	26	10	5	2	3	4	Mobile, Ala.	88	59	21	4	2	2	3
Elizabeth, N.J.	27	23	4	-	-	-	-	Montgomery, Ala.	42	24	10	4	1	3	1
Erie, Pa.†	50	44	5	-	-	-	5	Nashville, Tenn.	105	66	26	3	4	6	9
Jersey City, N.J.	50	35	6	6	-	3	2	W.S. CENTRAL	1,338	822	312	92	58	54	59
N.Y. City, N.Y.	1,452	977	292	117	40	26	56	Austin, Tex.	56	33	12	6	3	2	3
Newark, N.J.	37	19	11	3	-	4	-	Baton Rouge, La.	74	58	12	3	1	-	4
Paterson, N.J.	33	17	10	4	-	2	4	Corpus Christi, Tex.	36	24	9	1	1	-	-
Philadelphia, Pa.†	308	189	77	17	8	17	11	Dallas, Tex.	149	94	34	12	2	7	-
Pittsburgh, Pa.†	60	41	17	1	1	-	6	El Paso, Tex.	49	32	6	6	2	3	6
Reading, Pa.	36	31	4	1	-	-	3	Fort Worth, Tex.	111	69	30	6	3	3	8
Rochester, N.Y.	116	89	15	7	3	2	11	Houston, Tex.	341	179	90	32	24	16	9
Schenectady, N.Y.	27	19	6	1	1	-	1	Little Rock, Ark.	55	41	9	2	1	2	7
Scranton, Pa.†	29	24	5	-	-	-	-	New Orleans, La.	147	91	33	9	8	6	1
Syracuse, N.Y.	74	52	13	5	1	3	3	San Antonio, Tex.	168	113	37	7	7	4	12
Trenton, N.J.	32	21	9	2	-	-	-	Shreveport, La.	46	27	10	1	1	7	3
Utica, N.Y.	21	17	3	-	-	-	2	Tulsa, Okla.	106	61	30	7	5	3	6
Yonkers, N.Y.	30	21	6	3	-	3	-	MOUNTAIN	716	510	111	36	28	27	40
E.N. CENTRAL	2,140	1,376	473	143	74	74	82	Albuquerque, N.Mex	72	53	12	1	4	2	2
Akron, Ohio	86	45	30	4	3	4	-	Colorado Springs, Colo.	44	29	11	3	1	-	14
Canton, Ohio	49	40	8	1	-	-	2	Denver, Colo.	132	87	24	9	5	7	5
Chicago, Ill.	415	259	105	30	9	12	9	Las Vegas, Nev	70	38	21	9	2	-	4
Cincinnati, Ohio	153	108	47	9	6	7	2	Ogden, Utah	32	23	2	1	5	1	2
Cleveland, Ohio	154	85	47	9	4	6	9	Phoenix, Ariz. §	180	164	1	2	6	3	2
Columbus, Ohio	139	87	33	9	4	5	-	Pueblo, Colo.	24	17	4	3	-	-	-
Dayton, Ohio	106	58	23	14	6	5	4	Salt Lake City, Utah	60	34	12	4	1	9	-
Detroit, Mich.	253	155	45	28	15	10	4	Tucson, Ariz.	102	65	24	4	4	5	11
Evansville, Ind.	41	29	6	1	1	4	1	PACIFIC	1,909	1,272	412	123	42	59	113
Fort Wayne, Ind.	42	22	15	4	1	-	4	Berkeley, Calif.	23	16	2	4	-	1	1
Gary, Ind.	21	10	5	2	3	1	-	Fresno, Calif.	80	55	16	3	2	4	3
Grand Rapids, Mich.	55	40	9	3	-	3	2	Glendale, Calif.	18	12	5	-	1	-	-
Indianapolis, Ind.	141	99	26	8	1	7	2	Honolulu, Hawaii	62	37	19	1	4	1	9
Madison, Wis.	47	31	7	4	4	1	7	Long Beach, Calif.	115	68	36	8	1	2	5
Milwaukee, Wis.	125	90	19	6	5	5	4	Los Angeles, Calif.	627	416	134	44	15	18	40
Peoria, Ill.	33	26	6	-	1	-	4	Oakland, Calif.	82	49	17	11	-	5	4
Rockford, Ill.	40	25	8	2	3	2	4	Pasadena, Calif.	31	24	4	2	1	-	1
South Bend, Ind.	68	42	18	3	3	2	5	Portland, Oreg.	123	81	28	4	4	6	3
Toledo, Ohio	111	76	23	8	3	1	6	Sacramento, Calif.	73	46	16	4	2	5	3
Youngstown, Ohio	61	49	8	2	1	-	-	San Diego, Calif.	143	103	27	3	3	6	13
W.N. CENTRAL	786	519	168	42	26	31	43	San Francisco, Calif.	144	93	36	9	4	2	6
Des Moines, Iowa	67	54	7	5	1	-	10	San Jose, Calif.	157	101	34	17	2	3	14
Duluth, Minn.	26	15	5	3	1	2	1	Seattle, Wash.	138	96	30	8	3	1	4
Kansas City, Kans.	37	19	9	4	1	4	-	Spokane, Wash.	88	50	41	3	3	-	3
Kansas City, Mo.	124	86	29	2	5	2	11	Tacoma, Wash.	43	34	5	2	-	2	1
Lincoln, Nebr.	40	26	8	3	2	1	2	TOTAL	12,449 ^{††}	8,155	2,703	804	369	413	642
Minneapolis, Minn.	40	26	8	3	2	1	2								
Omaha, Nebr.	83	60	13	4	5	6	1								
St. Louis, Mo.	180	109	49	8	6	8	5								
St. Paul, Minn.	75	60	12	2	-	1	2								
Wichita, Kans.	66	34	20	6	3	3	6								

* 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 4 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.

Encephalitis — Continued

California encephalitis (CE) accounted for 130 (70%) of all encephalitis cases. Ohio reported the greatest number, 37, followed by Wisconsin with 29. No fatalities were reported. CE cases were concentrated in the eastern United States, with most occurring in the Great Lakes area. Jamestown Canyon virus, a member of the CE virus complex, was confirmed by the New York State Laboratories as the etiologic agent producing encephalitis in an elderly population.

St. Louis encephalitis (SLE) virus, which caused 34 (18%) cases, was the second most commonly occurring etiologic agent. Most SLE cases were reported from Texas (14), Mississippi (eight), and Louisiana (four); Illinois and the southeastern states reported the others. At least two cases were fatal, but information on the clinical results of eight cases is not yet available.

Five states reported 12 eastern equine encephalitis (EEE) cases; two (17%)—one each in Florida and Georgia—were fatal. The largest number of cases (four) occurred in Georgia, and these were concentrated in the southern part of the state.

TABLE 1. Reported arboviral encephalitis cases, by etiology* — United States, 1955-1982

Year	SLE	WEE	EEE	CE	Other	Total
1955	107	37	15			159
1956	563	47	15			625
1957	147	35	5			187
1958	94	141	2			237
1959	118	14	36			168
1960	21	21	3			45
1961	42	27	1			70
1962	253	17	0			270
1963	19	56	0	1	1†	77
1964	470	64	5	42		581
1965	58	172	8	59		297
1966	323	47	4	64		438
1967	11	18	1	53		83
1968	35	17	12	66	1§	131
1969	16	21	3	67	1§	108
1970	15	4	2	89		110
1971	57	11	4	58	20¶	150
1972	13	8	0	46	3**	70
1973	5	4	7	75		91
1974	74	2	4	30		110
1975	1,815	133	3	160	2††	2,113
1976	379	1	0	47		427
1977	132	41	1	65		239
1978	26	3	5	109		143
1979	32	3	3	139		177
1980	125	0	8	49		182
1981	15	19	0	91		125
1982	34	9	12	130		185§§
Total	4,999	972	159	1,440	28	7,598

*SLE—St. Louis encephalitis; WEE—western equine encephalitis; EEE—eastern equine encephalitis; CE—California encephalitis.

†Tensaw.

§Venezuelan equine encephalitis (VEE).

¶VEE—19 cases; Powassan encephalitis (POW)—1 case.

**VEE—2 imported cases; POW—1 case.

††POW—2 cases.

§§Preliminary data.

Encephalitis — Continued

Nine cases of western equine encephalitis were reported during 1982, all in the western United States, and no fatalities were reported. Texas reported the largest number of cases (four).

Temporal distribution of encephalitis cases for which onset dates were provided is shown in Figure 3. Most cases (86%) occurred from July through September; no cases with onset after October have been reported. These data are consistent with periods of peak vector density. Age and sex distribution of encephalitis patients in 1982 were typical of previous years, with SLE and EEE cases occurring in the young and elderly age groups, CE cases affecting mainly young age groups, and males (64%) affected more frequently by all types than females (Table 2).

A major epizootic of EEE involving pheasants, quail, and several hundred horses occurred on the East and Gulf coasts during the summer months. Reported WEE cases in horses were sporadic in the west.

Reported by Div of Vector-Borne Viral Diseases, Center for Infectious Diseases, CDC.

FIGURE 2. Human arboviral encephalitis cases, by virus type* — United States, 1982

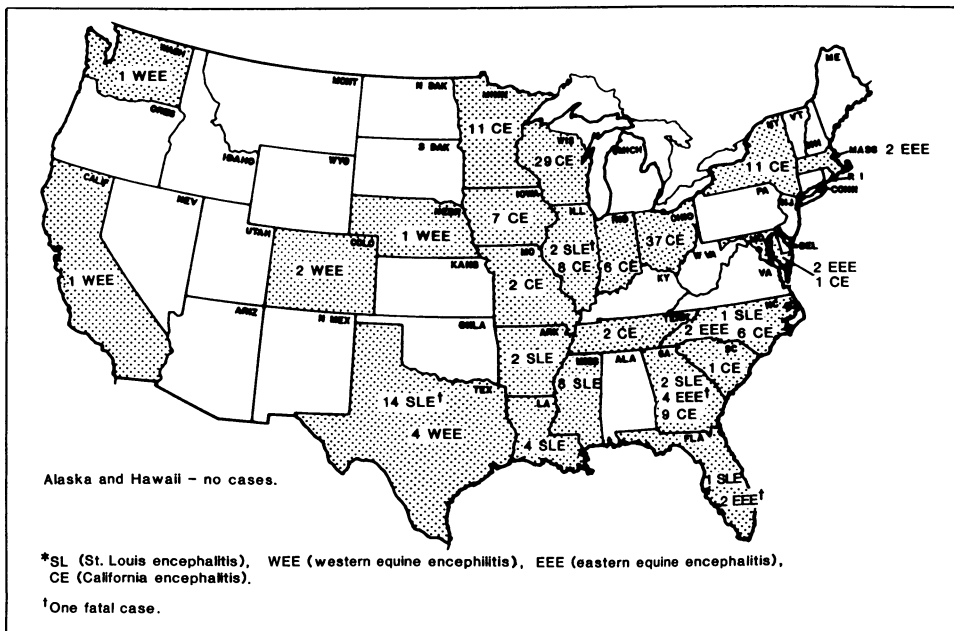
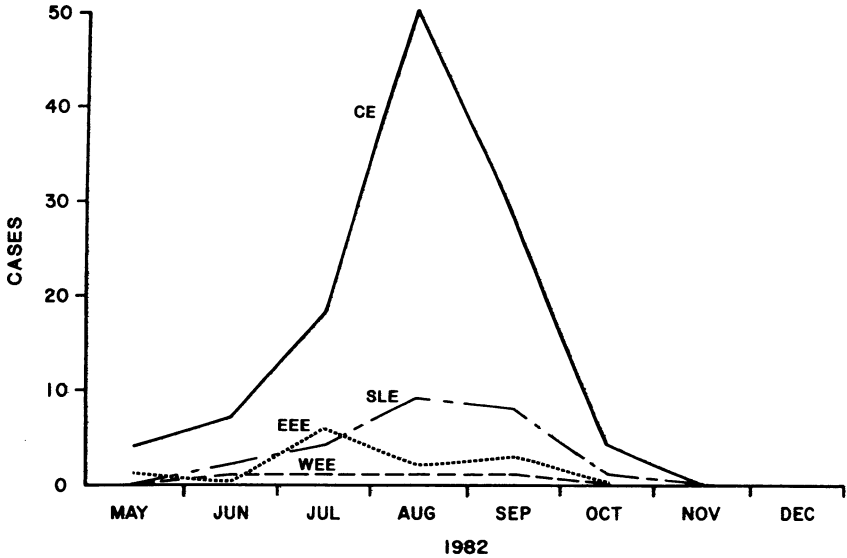


TABLE 2. Distribution of patients with arboviral encephalitis by age group, virus, and sex — United States, 1982

Age group (years)	SLE		EEE		WEE		CE	
	M	F	M	F	M	F	M	F
0-9	0	0	2	1	0	0	43	20
10-19	0	3	2	0	1	0	9	6
20-29	1	0	0	0	0	0	1	2
30-39	0	1	1	0	1	0	0	0
40-49	3	1	1	1	1	0	0	1
50-59	3	1	0	1	0	0	0	0
≥60	3	4	1	1	0	0	2	0
Total	10	10	7	4	3	0	55	29

*Encephalitis — Continued***FIGURE 3. Arboviral encephalitis cases, by month of onset — United States, 1982****Notice to Readers*****Morbidity and Mortality Weekly Report Subscriptions***

CDC has been requested to include the following information:

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Erratum, Vol. 32, No. 11

- p. 147. In the article, "Phototoxic Reaction among Dock Workers—Tennessee," the last sentence of the first paragraph on p. 153 should read: "Wart-like skin lesions or papules on the nose, jaw, palm, or hand were observed among four exposed workers."

The *Morbidity and Mortality Weekly Report* is prepared by the Centers for Disease Control, Atlanta, Georgia, and distributed by the National Technical Information Service, Springfield, Virginia. 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.

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