



Reported Morbidity
June, 1980

MONTHLY MORBIDITY REPORT

Provisional Statistics

from

EPIDEMIOLOGY UNIT AND PUBLIC HEALTH STATISTICS

NEW RABIES VACCINE

Human diploid cell rabies vaccine (HDCV), manufactured by Merieux Institute in France, has recently been licensed by the Food and Drug Administration. In late June 1980, the vaccine became available for distribution in the United States.

HDCV represents a significant advance in the pre- and postexposure prophylaxis of rabies. It is an inactivated virus vaccine prepared from fixed rabies virus grown in human diploid cell tissue culture. The vaccine is supplied as 1 milliliter (ml) single dose vials of lyophilized vaccine with accompanying diluent.

HDCV has been shown to be a very effective vaccine. It

has been used with human rabies immune globulin (RIG) or equine antirabies serum (ARS) to treat 45 persons bitten by rabid dogs or wolves in Iran, 31 persons bitten by rabid animals in Germany, and 77 persons bitten by rabid animals in the United States. In these studies no person contracted rabies after receiving HDCV, indicating that the vaccine is effective. The antibody response to HDCV is superior to that induced by duck-embryo vaccine (DEV), the only other vaccine currently available in the United States. All persons treated with at least 5 doses of HDCV and RIG have developed an adequate titer, while only 85% - 90% of persons treated with 16 - 23 doses of DEV and RIG

BULLETIN

DEATH FROM TRICHINOSIS

CASE REPORT

A 50 year old white female from Evangeline Parish had onset of muscle soreness, headache, periorbital edema, diarrhea, fever, nausea, and weakness on May 1, 1980. Her condition worsened and she was admitted to a local hospital on May 19th where her WBC count varied between 12,800 and 30,300. The WBC differential showed 16% eosinophils on one occasion and 10% on another. On June 2nd, the patient began having seizures and labored respirations. She was airlifted to New Orleans for emergency treatment. After she was medically stabilized, she had a quadriceps muscle biopsy done which was positive for *Trichinella spiralis*. CAT scan showed a small area of hemorrhage in the central nervous system. The patient was placed on steroids. She initially showed some improvement but then her condition worsened and on June 12, she died. At autopsy, massive cerebral edema was found secondary to bilateral cortical vein and sagittal sinus thromboses. The hemorrhage discovered on CAT scan was also confirmed. Incidentally, both hemorrhages and thromboses are known complications of trichinosis. Conversation with family members indicates that the patient prepared and ate pork sausage frequently but there is no definite history of ingestion of raw sausage.

Further investigation revealed that there are 15 patients in Evangeline and Jefferson Davis Parishes who fit the clinical syndrome of trichinosis. Ten of the 15 cases gave a definite history of eating raw smoked sausage. The 15 cases include 6 males and 9 females and cases range in age from 19 - 50 years, with a mean of 35.3 years. Onset dates are from 5/1/80 through 5/22/80 and incubation times vary from 4 - 20 days. Ten of the 15 cases were hospitalized. One additional patient had a muscle biopsy which was positive for *Trichinella spiralis*.

EDITORIAL COMMENT

This is the first death from trichinosis reported in the United States since 1975 and the first in Louisiana in at least 25 years. Also, this is the third outbreak in Southwestern Louisiana in the last 16 months. In February - March 1979 there was an outbreak involving 20 cases in Allen and Calcasieu Parishes and 9 cases occurred in Acadia Parish in February - March 1980. All outbreaks have been related to the consumption of raw or partially cooked pork products.

Trichinella larvae are killed by heating pork to at least 137° F. The smoking process often does not allow for a temperature of 137° F to be reached and therefore all smoked pork products should be cooked before being consumed. In making sausage at home, tasting even small bits of the raw sausage to assure an adequate mixture of spices can be risky.

Since there are only approximately 100 cases of trichinosis reported each year in the United States, these 3 outbreaks represent a significant percentage of the entire number of cases reported over the last 16 months. Pork sausage is very popular in Louisiana, especially in the Southwestern part of the state, and this may account for the concentration of cases in that area. Physicians should be alert to the diagnosis of trichinosis in any patient who has muscle aches and pain with fever, weakness, periorbital edema, or increased eosinophil count.

Muscle biopsy can be used to make a definitive diagnosis but acute and convalescent sera should be submitted to the local health department for bentonite flocculation testing. The Communicable Disease Section of the DHHR is available for consultation on any suspect trichinosis case (504-568-5005).

develop an adequate titer. The average peak titers of rabies antibody after vaccination with HDCV is more than 10 times higher than that seen after DEV. Not only does the new vaccine appear more effective than the old vaccine in inducing antibody responses, but it also appears on initial studies to have lower rates of all adverse reactions.

Postexposure Prophylaxis

HDCV - A total of five 1-ml doses IM. The first dose should be given as soon as possible after exposure to rabies and other doses given on days 3, 7, 14, and 28 after the first dose. This compares with 23 injections required with the older DEV vaccine.

For persons who have not previously been immunized with rabies vaccine and do not have documented adequate rabies titers, postexposure prophylaxis should always include both vaccine and immune globulin (preferably RIG). RIG is given only once with the first vaccination. A serum specimen for rabies antibody testing should be collected on day 28 at the time the last dose is given. If an adequate antibody titer ($\geq 1:16$) is detected, no further treatment is necessary. If the antibody titer is nondetectable or low ($< 1:16$), this information should be reported to the Louisiana Communicable Disease Control Section

(504-568-5005). A repeat serum specimen for rabies antibody testing should then be collected 2 - 3 weeks after the last dose was given. If this titer is still low, a booster dose should be given and another serum specimen collected 2 - 3 weeks later.

It is anticipated that the demand for the new vaccine will exceed the supply for the first 3 to 6 months. During this period of time, the vaccine will be distributed through selected state-affiliated hospitals to insure availability to those at greatest risk, e.g. persons exposed to proven rabid animals. It is recommended that during this period of short supply, DEV rather than HDCV be used for pre-exposure prophylaxis of high risk groups (e.g. animal handlers, veterinarians, travellers to rabies endemic areas, etc.). The two hospitals in Louisiana stocking the new vaccine are LSU Medical Center in Shreveport and Charity Hospital in New Orleans. Distribution of the vaccine will be coordinated by the LSU Infectious Disease Department in Shreveport (318-226-3000) and the office of Hospital Infections Control at Charity Hospital in New Orleans (504-568-3152). At night and on weekends, the Pharmacies at each hospital should be contacted (LSU Medical Center - Shreveport - 318 - 226 - 3194 and Charity Hospital - New Orleans - 504 - 568 - 5223). The Communicable Disease Control Section of the State DHHR (504 - 568 - 5005) has further information concerning the new vaccine, its availability, and the indications for its use.

REVIEW INFLUENZA SEASON - 1979-80

Louisiana's influenza vaccination and surveillance program began September 17, 1979. The goal of the program was to immunize 40,000 high risk individuals, defined as those over 65 and those with chronic diseases (e.g. Diabetes, Emphysema). Through the state network of health units and hospitals, 39,213 immunizations were given. A survey of 181 primary care physicians in Region II (Baton Rouge) and Region VII (Shreveport) was undertaken to estimate the number of vaccinations given by the private sector. When the results from this survey were extrapolated to the total number of primary care physicians in the state, it was estimated that 160,000 immunizations were given by private physicians in the state. The vaccine this past year contained 3 antigens: A/Brazil/78 (H₁N₁), A/Texas/77 (H₃N₂) and B/Hong Kong/72. No serious adverse reactions were reported following influenza immunization.

The program also included a markedly expanded surveillance system for the early detection of influenza outbreaks. This included monitoring illnesses at 7 Charity Hospitals and 4 randomly selected nursing homes and following absentee levels in 33 schools and 2 major

industrial plants.

Although strains of influenza A(H₁N₁ and H₃N₂) were isolated, the predominant type seen in the United States this past season was Type B. Influenza primarily affected young people; 85% of 429 influenza B viruses isolated in the country were from individuals under 27 years of age. Influenza B was associated with outbreaks of Reye's Syndrome in several states.

In Louisiana, our surveillance system detected only a modest amount of influenza activity. There were no regional or localized outbreaks and levels of absenteeism in schools and industry were not excessive. Type B influenza was confirmed in a few cases but no cases of Reye's Syndrome were reported following flu-like illnesses.

It cannot be proven that the expanded immunization program was responsible for a mild flu season. However, our program together with a major contribution from the private sector, did achieve its goal of vaccinating many of the high risk residents in the state. We thank all those who cooperated this past year in our flu immunization and surveillance program.

SELECTED REPORTABLE DISEASES (By Place of Residence)

STATE AND PARISH TOTALS	VACCINE PREVENTABLE DISEASES					ASEPTIC Meningitis	HEPATITIS A AND UNSPECIFIED	HEPATITIS B	LEGIONNAIRES DISEASE	MALARIA**	HEMINGOCOCCAL INFECTIONS	SHIGELLOSIS	TUBERCULOSIS, PULMONARY	TYPHOID FEVER	OTHER SALMONELLOSIS	UNDERNUTRITION SEVERE	GONORRHEA	SYPHILIS, PRIMARY AND SECONDARY	RABIES IN ANIMALS (PARISH TOTALS CUMULATIVE, 1980)
	MEASLES	RUBELLA*	MUMPS	PERTUSSIS	TETANUS														
Reported Morbidity June, 1980																			
TOTAL TO DATE 1979	244	25	30	9	1	38	305	126	0	3	99	47	299	3	57	6	11062	454	17
TOTAL TO DATE 1980	13	9	64	4	1	37	405	118	0	37	61	149	222	0	44	2	11085	609	7
TOTAL THIS MONTH	0	1	7	0	0	16	68	24	0	8	12	18	46	0	13	1	1969	97	1
ACADIA						1	4										16		
ALLEN							1										7		
ASCENSION											1		1				3		
ASSUMPTION																	8		
AVOYELLES																	13		1
BEAUREGARD							3										5		
BIENVILLE																	6		
BOSSIER							2						2				28		
CADDO			4			1	1						5		3		194	3	3
CALCASIEU							2	2					2				88	3	
CALDWELL																	4		
CAMERON																	2		
CATAHOULA																	7	1	
CLAIBORNE													1				12		
CONCORDIA																	4	1	
DESOTO																	1		
EAST BATON ROUGE													2		1		204	18	
EAST CARROLL											1						8	2	
EAST FELICIANA																	5	1	
EVANGELINE																	1		
FRANKLIN																	13		
GRANT																	1		
IBERIA								1					3				12		
IBERVILLE								1									10	1	
JACKSON													1				7		
JEFFERSON						2	17	4			2		1				96	3	
JEFFERSON DAVIS																	9		
LAFAYETTE			1			4	8	4				1			1		21	3	
LAFOURCHE							1										10		
LASALLE																	2		
LINCOLN																	10		
LIVINGSTON							1					1					1		
MADISON									1					1			24	4	
MOREHOUSE																	23		
NATCHITOCHE																	1		
ORLEANS							5	5		8	1		9		1		650	37	
OUACHITA						3	13								2		104	4	
PLAQUEMINES												1	2				6		
POINTE COUPEE																	2		
RAPIDES							1							1			101	10	
RED RIVER																	2		1
RICHLAND														1			7		
SABINE							1										2		
ST. BERNARD							1	1							1		6		
ST. CHARLES							1										12		
ST. HELENA																1			
ST. JAMES												1	2				4	1	
ST. JOHN								1				1	1				5	1	
ST. LANDRY								3					2		1		15	2	
ST. MARTIN						1											7	1	
ST. MARY							1	1					1		1		3		
ST. TAMMANY												1			1		20		
TANGIPAHOA							2					5	1				21		
TENSAS																	1		
TERREBONNE												1		1	1		22		
UNION																	7		
VERMILION							3						5				2		
VERNON																	62		
WASHINGTON			1										12				10		
WEBSTER																	10		2
WEST BATON ROUGE																	10		
WEST CARROLL												1					4		
WEST FELICIANA							4										1	1	
WINN																	6		
OUT OF STATE																	11		

* Includes Rubella, Congenital Syndrome.

** Acquired outside United States unless otherwise stated.

From January 1, 1980 through June 30, 1980, the following cases were also reported: 1 - Leptospirosis; 2 - Brucellosis; 1 - Blastomycosis; 1 - Cryptococcosis; 22 - Trichinosis; 1 - Poliomyelitis, non-paralytic; 1 - Rocky Mountain Spotted Fever.



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Deaths (Exclusive of Stillbirths) by Place of Occurrence, Reallocated to Usual Residence
of the Deceased and Shown by Age, Sex, and Race
Louisiana, January - June, 1980

(Provisional Statistics)

PARISH AND CITIES Over 10,000	TOTAL (By Place of Occurrence)	TOTAL (By Place of Residence)	RATE (Per 1,000 Population)	AGE					Not Stated	MALE		FEMALE	
				Under 1 Year	1-14 Years	15-34 Years	35-64 Years	65 Years & Over		White	Nonwhite	White	Nonwhite
TOTAL	16567	16162	8.0	531	239	1018	4421	9968	15	6060	2885	4864	2353
ACADIA	234	234	8.4	6	4	12	74	138	-	101	23	92	15
ADONIS	86	86	9.4	3	3	15	25	48	-	29	11	37	7
ALLEN	101	120	11.4	1	1	13	33	66	-	54	20	35	11
ASCENSION	82	126	15.4	1	1	11	17	71	-	59	17	32	21
ASSUMPTION	36	84	7.8	4	4	25	34	48	-	25	33	29	17
AVYELLES	149	186	9.4	8	1	17	25	121	-	70	17	96	23
BEAUREGARD	95	108	7.8	4	4	14	30	67	-	46	12	45	19
BIENVILLE	33	74	8.7	3	2	7	15	51	-	30	17	18	9
BOSSIER	151	229	16.3	13	7	37	74	120	-	92	43	65	27
CADDO	102	132	13.2	6	3	13	50	68	-	62	18	43	19
CHALMERS	1557	1087	8.8	26	6	46	278	124	-	175	247	319	162
CHALMERS	1478	933	8.5	23	13	42	243	512	-	275	247	319	162
CALCASKI	399	570	7.0	15	4	42	167	342	-	256	70	175	57
LAKE CHARLES	409	294	7.3	6	2	21	50	175	-	115	53	62	44
SULLY	110	172	15.4	1	1	3	22	44	-	34	4	31	7
CALDWELL	51	13	2.6	1	1	1	1	4	-	2	1	1	1
CAMERON	20	26	13.2	1	1	1	1	3	-	1	1	1	1
CATAHOULA	36	48	8.2	1	1	1	1	3	-	1	1	1	1
CLAYTON	66	88	10.5	1	1	4	19	61	-	20	26	17	14
CONCORDIA	79	79	7.0	1	3	2	18	52	-	23	24	21	14
COUSHATTO	79	117	14.8	1	1	4	26	85	-	43	27	24	23
BATON ROUGE	1286	1079	8.3	42	21	84	326	836	-	531	256	273	216
BATON ROUGE	1164	885	7.7	36	14	63	268	304	-	275	206	215	155
E. CALIBRE	46	46	8.0	2	2	1	10	32	-	25	18	25	18
E. FELICIANA	135	89	10.9	2	2	2	31	52	-	28	18	25	18
E. WANGELIN	135	159	11.7	1	1	13	31	103	-	88	20	40	11
FRANKLIN	93	127	13.7	4	4	1	31	90	-	31	15	40	14
GRANT	23	69	9.3	1	1	1	1	45	-	32	3	25	5
IBERIA	231	242	7.3	5	7	16	53	97	-	37	37	45	15
N. IBERIA	149	137	7.9	3	2	8	27	44	-	24	19	25	17
IBERVILLE	106	140	9.0	6	2	8	43	81	-	45	40	26	16
JACKSON	67	92	10.9	1	1	1	15	74	-	28	6	39	7
JEFFERSON	1305	1382	6.4	62	17	93	416	773	-	662	114	542	86
KENTON	17	149	5.1	1	1	1	1	74	-	1	23	17	7
GEORGE	21	172	10.9	1	1	1	5	93	-	62	14	55	18
HASHEM	4	35	NA	1	1	1	1	1	-	1	21	1	14
WESTWEGE	6	79	12.7	1	1	9	22	44	-	17	6	32	7
JEFFERSON DAVIS	114	118	7.4	2	2	4	3	76	-	52	12	46	22
JENNINGS	78	54	8.6	1	1	4	13	34	-	22	5	22	5
LAKE CHARLES	554	339	6.1	3	3	3	13	23	-	173	56	113	47
LAKE CHARLES	554	268	6.2	5	5	22	74	158	-	114	47	82	14
LAKE CHARLES	230	250	6.3	6	4	30	30	139	-	133	17	82	14
LAKE CHARLES	103	70	8.0	4	4	5	19	45	-	25	16	24	7
LASALLE	57	76	9.8	4	1	5	19	48	-	48	1	27	1
LINGOIN	163	140	7.3	4	4	1	16	97	-	45	30	37	20
RUSTON	140	77	5.5	1	1	1	1	18	-	12	23	16	1
LIVINGSTON	129	168	6.2	3	1	17	49	108	-	34	12	60	1
MAISON	57	66	9.2	1	1	1	14	51	-	11	29	16	2
MORFISSE	137	146	8.7	6	6	8	24	102	-	46	35	40	26
MASTROP	105	79	10.5	1	1	5	18	49	-	23	17	24	15
NATCHITOCHE	149	195	10.5	3	4	18	52	121	-	71	42	47	38
NATCHITOCHE	106	86	8.1	1	1	4	9	29	-	23	7	27	7
ORLEANS	3769	3058	11.0	89	26	198	879	1859	-	837	797	745	624
ORLEANS	466	427	6.4	16	7	22	110	272	-	161	67	135	64
MONROE	361	221	7.0	9	6	9	54	143	-	64	43	65	49
WEST MONROE	96	94	19.7	3	3	5	24	62	-	42	7	40	5
PLAQUEMINE	48	110	8.0	1	3	15	30	60	-	58	15	28	7
PRINCE LOUIS	62	93	15.0	2	3	3	24	63	-	24	24	24	7
RAPIDES	790	544	8.6	11	3	30	147	348	-	215	91	161	77
ALEXANDRIA	471	268	10.0	6	3	12	81	186	-	86	64	4	17
RED RIVER	39	44	9.3	3	3	2	12	27	-	20	4	12	4
REICHLAND	141	118	10.8	2	1	4	24	71	-	37	24	30	27
SABINE	81	104	10.2	1	1	4	84	145	-	45	11	44	7
ST. BERNARD	169	250	9.9	3	3	12	34	84	-	127	4	108	4
ST. CHARLES	61	96	5.4	4	4	5	27	60	-	36	9	36	6
ST. HELENA	19	30	5.9	2	1	1	7	19	-	10	12	15	2
ST. JAMES	68	85	8.4	1	1	6	20	55	-	19	24	30	12
ST. JOHN	55	112	7.4	3	3	6	35	66	-	29	37	28	15
ST. LANDRY	302	375	8.9	11	8	20	133	233	-	114	82	118	61
LOUISIANA	154	98	9.4	4	3	3	29	42	-	17	17	16	8
EUNICE	67	67	10.7	3	2	3	7	42	-	26	17	36	8
ST. MARTIN	91	145	7.8	14	4	8	44	75	-	54	30	43	1
ST. MARY	183	225	7.2	8	9	25	60	123	-	92	34	58	41
MORGAN CITY	172	63	7.2	1	1	1	12	45	-	25	4	26	8
ST. TAMMANY	327	360	7.2	9	9	25	106	212	-	174	31	131	24
SLIDELL	122	85	6.4	3	3	5	34	42	-	46	7	31	3
TANGIPAHOA	311	321	8.2	6	6	20	92	197	-	117	56	98	54
HAMMOND	17	51	6.7	1	1	6	6	28	-	17	15	17	12
TENSAS	29	37	9.0	1	1	1	6	6	-	5	10	6	6
TERREBONNE	290	297	6.4	16	13	31	83	154	-	136	47	90	24
HOUMA	170	139	6.6	13	4	9	60	63	-	54	28	41	16
UNION	93	119	11.7	5	4	4	19	90	-	49	18	37	13
VERMILION	172	194	8.0	5	1	10	46	130	-	82	20	79	15
ARREVILLE	84	79	12.2	3	3	2	23	51	-	28	15	26	10
VERNON	113	146	6.0	1	1	14	7	92	-	78	16	47	5
WASHINGTON	173	197	9.0	1	1	1	51	99	-	72	25	71	29
BOGALUSA	108	103	11.5	2	2	4	28	42	-	35	28	38	27
WEBSTER	177	220	10.5	2	2	11	11	155	-	35	10	31	14
MINDEN	94	85	11.7	3	3	3	22	59	-	30	20	31	13
W. BATON ROUGE	26	74	8.0	2	2	2	19	51	-	20	22	18	3
W. CALIBRE	27	57	8.9	3	3	3	19	38	-	32	6	18	3
W. FELICIANA	30	26	8.9	3	3	3	7	16	-	7	5	11	1
WINN	58	81	9.4	1	1	1	17	34	-	15	6	23	9
UNKNOWN	-	12	-	-	-	-	-	-	-	4	6	-	-
OUT OF STATE **	143	548	-	27	5	74	205	237	-	315	65	148	20

* CITIES ARE INCLUDED IN PARISH TOTALS.
** NOT INCLUDED IN STATE TOTALS.
RATES EQUAL NUMBER OF DEATHS PER 1,000 POPULATION.
NA - 1980 POPULATION ESTIMATES NOT AVAILABLE.