



Reported Morbidity
August, 1981

MONTHLY MORBIDITY REPORT

Provisional Statistics

PUBLIC HEALTH STATISTICS and
DIVISION OF DISEASE CONTROL

INFLUENZA VACCINE 1981-82

Louisiana's influenza immunization program for high risk individuals will begin on September 14, 1981. The predominant influenza viruses causing illness in Louisiana during 1980-81 were H₃N₂ influenza A strains, antigenically related to A/Bangkok/1/79. All age groups were affected. Also, H₁N₁ influenza A virus was detected among children and young adults. The disease occurred in a sporadic pattern and caused no documented outbreaks in Louisiana. No illness caused by influenza B virus was detected.

The vaccine for the present season will consist of the same three antigens as last year (A/Bangkok/79, A/Brazil/78, B/Singapore/79). However, because of the poor efficacy demonstrated last year, the concentration of the vaccine antigens has been doubled this year.

Persons 29 years old and older will require only 1 dose. Because of lack of previous contact with H₁N₁ strains, persons less than 29 years of age who did not receive at least 1 dose of the 1978-79, 1979-80, or 1980-81 trivalent vaccine will require 2 doses of the 1981-82 vaccine. Those who did receive vaccine between 1978 and 1981 will require only 1 dose.

Annual influenza vaccination is recommended for older persons (over 65) and for all individuals at

increased risk of adverse consequences from infections of the lower respiratory tract. Conditions predisposing to such risk include acquired or congenital heart disease associated with altered circulatory dynamics, chronic pulmonary dysfunction, chronic renal disease, diabetes mellitus and other metabolic disorders predisposing to infection, chronic anemia, and immune deficiency states. There has been no evidence to suggest that influenza vaccination of pregnant women poses any special maternal or fetal risk; thus, pregnant females should be evaluated for vaccination according to the same criteria applied to other individuals. Present influenza vaccines have been associated with few side effects. These include local reactions, infrequent systemic symptoms of toxicity attributed to the inactivated virus itself, and rarely, hypersensitivity reactions in persons with allergy to egg protein.

Influenza vaccine will be available, free of charge, to all eligible persons as outlined above through the Parish Health Units. Individuals may also be vaccinated through their private physicians. Any questions relating to the influenza vaccination program should be directed to the Division of Disease Control, Vaccine Preventable Disease Section (504-568-5007).

BULLETIN

HUMAN DIPLOID CELL RABIES VACCINE AVAILABILITY

Eli Lilly and Company has announced that it will discontinue domestic sales of duck embryo rabies vaccine on November 30, 1981. The only other rabies vaccine licensed for human use in the United States is the human diploid cell vaccine (HDCV) produced by Merieux Institute. Although licensed and used in the United States since June 1980, HDCV is not directly available to the private medical sector. In Louisiana, it must be obtained from the pharmacy of one of the state operated general hospitals. The cost of the vaccine is approximately twice that of post-exposure treatment with duck embryo vaccine. It has proven to be highly immunogenic and to cause low reaction rates.

Hospitals that have agreed to stock HDCV vaccine in their pharmacies and to make it available to physicians are:

New Orleans Charity Hospital – New Orleans
504-568-3238

Earl K. Long Hospital – Baton Rouge
504-358-1101

E. A. Conway Hospital – Monroe
318-387-8460 Ext. 330

Huey P. Long Hospital – Pineville
318-448-0811 Ext. 309

Lafayette Charity Hospital – Lafayette
318-233-2525 Ext. 375

L.S.U. Medical Center – Shreveport
318-226-3194

Human Rabies Immune Globulin (HRIG) is available from:

Cutter Laboratories
2631 Delaware Street
Kenner, Louisiana 70062
Telephone: 504-469-8479.

CAMPYLOBACTER INFECTIONS*

Although recognized since the early 1900's as causing a variety of diseases in domestic animals, bacteria of the genus *Campylobacter* have only recently become appreciated as important human pathogens. Recent studies have identified campylobacter more frequently than any other bacterial pathogen in patients with diarrhea. Campylobacters were previously classified with the vibrios because of similar morphology (the word "campylobacter" is from the Greek, meaning "curved rod"). Because of clear differences in DNA composition and biochemical/growth characteristics these organisms are now considered taxonomically distinct. Of the several campylobacter species identified, only *C. fetus* (previously *Vibrio fetus*) has been described as pathogenic for humans. *C. Fetus* subspecies *jejuni* is the agent most often associated with campylobacter enteritis. *C. fetus* subspecies *intestinalis* is the agent most frequently isolated in systemic campylobacter infection.

Campylobacter Enteritis - Enteritis is the most commonly recognized manifestation of campylobacter infection at the present time. Illness often begins with intermittent cramping abdominal pain. Diarrhea is typically described as mild to moderate but can be profuse and watery, becoming mucoid or bloody later in the illness. Vomiting or dehydration are not usually prominent. Fever and other constitutional symptoms appear early in the illness in a majority of reported cases. Severity of illness is variable but in most cases symptoms last several days and are self-limited. Protracted or relapsing illness sometimes occurs, and at least five deaths have been reported in the medical literature. Untreated children may excrete the organism for several weeks following onset of symptoms. A syndrome difficult to distinguish from ulcerative colitis on clinical, sigmoidoscopic or histologic grounds has recently been described in association with *C. fetus* infection. Thus campylobacter should be considered in the differential diagnosis of acute colitis.

Direct phase contrast microscopy of stool has been used for rapid presumptive diagnosis of campylobacter enteritis. Stool culture onto selective medium is confirmatory. At present serologic testing has only limited usefulness in evaluating individual cases unless the organism is also isolated from the patient or related cases. Cross reactions with presumably non-pathogenic campylobacter strains make interpretation of titers difficult without an epidemiologically related isolate.

No controlled clinical trials of treatment for campylobacter enteritis have yet been done. The need for antimicrobial therapy to alter the natural course of campylobacter enteritis has not been well established, but treatment may be indicated in severe or protracted cases. *In vitro* susceptibility testing of *C. fetus* subspecies *jejuni* has shown high sensitivity of the organism to erythromycin, gentamicin and tetracycline, lesser sensitivity to chloramphenicol and ampicillin, and resistance to some cephalosporins. Erythromycin has been clinically successful in treating campylobacter enteritis and has been shown to rapidly eradicate the organism from stools. Erythromycin resistant strains have been observed, however, emphasizing the need to carefully consider risks and benefits of antibiotic treatment.

* SOURCE: Communicable Disease Report, State of Washington Health Services Division, December 1979.

Although the incidence of campylobacter enteritis is unknown, several surveys of patients with diarrhea have detected the organism in 5-10% of cases, more frequently than any other bacterial pathogen including salmonella and shigella. Campylobacter enteritis has been reported from Europe, North America, Australia and Africa. Campylobacter enteritis affects all age groups but is most frequently identified in young children. Age variation in incidence, however, cannot be determined from available data. One study of 100 ill children showed a male/female ratio of 3:2.

Epidemiologic features of campylobacter transmission have not been clearly defined. Incubation period has been estimated at 2-5 days, occasionally longer. Potential sources of infection are often numerous, making clear implication of a single mechanism difficult. Campylobacter infection has long been recognized in veterinary medicine and infected animals may be a prominent reservoir for infection. Campylobacter species have been identified as pathogens and/or commensals in sheep, fowl, cattle, monkeys, dogs and cats. A survey of four Denver kennels found *C. fetus* subspecies *jejuni* in 37 of 173 dogs (21%) and 4 of 75 cats (5%). In one kennel 10 of 30 puppies three months of age or younger were positive, in comparison to 1 of 20 older dogs. Campylobacter enteritis has been observed in residents of households with dogs having diarrhea and shedding campylobacter in stools. Unpasteurized milk has been implicated in several outbreaks and is probably an important source of human infection. The organism has been isolated from commercially processed poultry. Handling of carcasses and consumption of contaminated chicken have been temporally related to illness in several instances. Investigation of a campylobacter outbreak in a Vermont town showed illness related to town water consumption during a period of inadequate chlorination. The importance of personal contact in acquisition of campylobacter infection is unknown. Outbreaks in several Belgian day care centers have been mentioned, but full details not yet reported in the literature.

Systemic Campylobacter infection - slightly over 100 cases of non-enteric campylobacter infection have been reported in the medical literature. Most of these involve *C. fetus* subspecies *intestinalis*. Most patients have had major underlying medical conditions. Some cases have had occupational exposure to animals. Clinical syndromes include bacteremia, endocarditis, meningitis and thrombophlebitis. Cases of pericarditis, peritonitis, salpingitis, septic arthritis, lung abscess and chest wall abscess have also been reported. Mortality from meningitis (40%) or endocarditis (43%) is higher than that in patients with non-localized infection. Anecdotal reports have favored chloramphenicol, aminoglycosides and tetracycline as therapeutic agents.

REFERENCES

1. Karmali MA, Fleming TC: Campylobacter enteritis. *Canad Med Assoc J* 120:1525-1532, 1979.
2. Rettig PJ: Campylobacter infections in human beings. *J Ped* 94:855-864, 1979.
3. Blaser MJ, Berkowitz ID, La Force FM, et al: Campylobacter enteritis: clinical and epidemiologic features. *Ann Int Med* 91:179-185, 1979.
4. Lambert ME, Schofield PF, Ironside AG, et al: Campylobacter colitis. *Brit Med J* 1:857-859, 1979.

SELECTED REPORTABLE DISEASES (By Place of Residence)

STATE AND PARISH TOTALS REPORTED MORBIDITY AUGUST, 1981	VACCINE PREVENTABLE DISEASES					ASEPTIC MENINGITIS	HEPATITIS A AND UNSPECIFIED	HEPATITIS B	LEGIONNAIRES DISEASE	MALARIA**	MENINGOCOCCAL INFECTIONS	SHIGELLOSIS	TUBERCULOSIS, PULMONARY	TYPHOID FEVER	OTHER SALMONELLOSIS	UNDERNUTRITION SEVERE	GONORRHEA	SYPHILIS, PRIMARY AND SECONDARY	RABIES IN ANIMALS (PARISH TOTALS CUMULATIVE, 1981)
	MEASLES	RUBELLA*	MUMPS	PERTUSSIS	TETANUS														
TOTAL TO DATE 19 80	11	10	63	23	2	54	548	192	1	42	65	183	322	0	85	6	15280	870	7
TOTAL TO DATE 19 81	2	9	4	5	2	64	587	236	1	4	96	65	265	2	124	1	14580	1107	27
TOTAL THIS MONTH	0	0	0	0	0	17	121	38	1	0	5	21	41	0	24	0	1787	126	5
ACADIA						2		3							1		19		
ALLEN							3	1									2		
ASCENSION																	3		
ASSUMPTION																	7		
AVOYELLES							2										7		1
BEAUREGARD													2				7		
BIENVILLE																	4		3
BOSSIER						1									1		29	3	1
CADDO								4				14	5		6		177	13	1
CALCASIEU						3	1	7			1	3					92	6	
CALDWELL																	3		
CAMERON																	1		
CATAHOULA							3						1				2		
CLAIBORNE																	2		
CONCORDIA							2					1					3		
DESOTO																			2
EAST BATON ROUGE							2						1		1		122	7	
EAST CARROLL																	11	2	
EAST FELICIANA															1		1	1	1
EVANGELINE											1		1				2		1
FRANKLIN													1				8		
GRANT													1				3	1	
IBERIA							3	1									13	1	
IBERVILLE													1				4		
JACKSON																	8		
JEFFERSON						6	39	2			1		2		2		99	2	
JEFFERSON DAVIS											1						8		
LAFAYETTE						2		2					2				58	5	
LAFOURCHE																	19	2	1
LASALLE													1						1
LINCOLN																	12	1	
LIVINGSTON													2				2		
MADISON																	13		
MOREHOUSE																	17		
NATCHITOCHE							3						2		1		1		7
ORLEANS						1	25	10			1	2	13		3		685	53	
OUACHITA							9						3				106	3	
PLAQUEMINES								1									6		
POINTE COUPEE													1				1	1	2
RAPIDES													1		2		54		4
RED RIVER																	1		
RICHLAND																	1	4	
SABINE																	3	2	
ST. BERNARD							6										3		1
ST. CHARLES																	4	2	
ST. HELENA																	1		
ST. JAMES							1										8		
ST. JOHN							1										9		
ST. LANDRY								1									8	5	
ST. MARTIN													1				5		
ST. MARY							2										5	1	
ST. TAMMANY							1	1									26	5	
TANGIPAHOA								2									18	1	
TENSAS																			
TERREBONNE						2	16	2	1						2		20		
UNION																		1	1
VERMILION												1			2		1		
VERNON																	3		1
WASHINGTON							2	1									6		
WEBSTER																	24		1
WEST BATON ROUGE																	1		
WEST CARROLL															1		4	2	
WEST FELICIANA																	1		
WINN																	2		
OUT OF STATE															1		22		

* Includes Rubella, Congenital Syndrome.

** Acquired outside United States unless otherwise stated.

From January 1, 1981 through August 31 1981 the following cases were also reported: 1 - Leptospirosis;
1 - Psittacosis;
3 - Reyes Syndrome.

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