



MONTHLY MORBIDITY REPORT

Provisional Statistics

PUBLIC HEALTH STATISTICS and
DIVISION OF DISEASE CONTROL

INFLUENZA IN LOUISIANA JANUARY-FEBRUARY 1984

Influenza appears to have been widespread in the New Orleans area during January and February. This report summarizes two outbreaks investigated by the Division of Disease Control. In addition to the investigation of illness, we looked at flu vaccine efficacy and the use of Amantadine in preventing the spread of influenza. The results of these interventions will be reported at a later date.

OUTBREAK I: INFLUENZA AT A HOME FOR MENTALLY RETARDED CHILDREN, PLAQUEMINES PARISH

An anonymous caller informed the Epidemiology Section of a large number of cases of febrile illness at a home for retarded children in Belle Chasse (a suburb of New Orleans) on Wednesday, January 4. An investigation was begun on January 5. The facility was visited, charts of all 44 residents were reviewed, and throat swabs for viral isolation and acute sera were obtained from seven ill children. Most residents of this facility are profoundly retarded, with a variety of congenital and traumatic brain diseases. The record system was very good. Temperatures are taken routinely on all children, and in the month of December there had been only two isolated fevers, both low grade. On January 5, the first day we visited, there were 16 children with temps greater than 101. Onset of the first fever in a resident had been on January 1, with 33 more within the next 48 hours. Definition of a case was any child

with a rectal temp of greater than 101. Eventually, 38 of the 44 residents (86.4%) fit the case definition. Mean age of the ill children is 14.1 years. None had ever received an influenza vaccination. Two of the cultures taken on January 5 were reported positive for influenza A, H₁N₁, on January 10. The virus was similar to A/England 80, the 1983 CDC reference H₁N₁ strain.

Sick leave records were examined and all recently ill staff members were contacted by phone or in person. A self-administered questionnaire was later given to all staff. It appears that there were at least four staff members who developed febrile respiratory illnesses within 72 hours prior to the first resident case. In all, 24 employees and volunteers were identified who fit the case definition (24 of 71, or 33.8%).

Mean length of illness in residents was 3.6 days, defined as the number of days with at least one recorded temp of 101 or greater. Mean length of illness (febrile days) in staff was 6.0 days. Mean age of ill staff was 33.8 years (range 16.1-56.8 years). Illness was characterized by fever (100%), sore throat (95.8%), cough (91.7%), headache (91.7%) and coryza (91.7%) in staff members. Nausea and/or vomiting, or diarrhea were reported in 14 (58%).

Seven residents and one staff member were confirmed as having H₁N₁ influenza A infection by culture, paired serology, or both.

A press release concerning the outbreak was released by the Department of Health And Human Resources on January 11.

OUTBREAK II: INFLUENZA AT A STATE SCHOOL FOR MENTALLY RETARDED CHILDREN AND ADULTS, PLAQUEMINES PARISH

After reading the newspaper article about the first outbreak, the medical director of a local state school called the Epidemiology Section on Friday, January 13, to report a similar illness in residents of that facility. An investigation was begun on Saturday, January 14.

The state school is a large residential facility in suburban New Orleans. It houses 465 residents and has a staff of approximately 920. Residents are generally cohorted by level of function in seven "villages", designated by letters A through H. Each village is a self contained unit, with a central office surrounded by 3-6 housing modules where the residents live. Each module houses 15-30 residents. The villages and modules are all physically separated and each village has a complete staff (nurses, aids, dietitians, therapists, etc.). In general, A-village contains ambulatory residents with few, if any, medical problems. G- and H-villages are the other extremes. H-village contains 54 residents with severe underlying medical problems such as tracheostomies, seizure disorders, spastic quadriplegia, and are essentially non-ambulatory. G-village residents are only slightly better, with many having seizures and spastic quadriplegia. Most are non-ambulatory. G1, one of three housing modules in G-Village, houses all the residents who are blind and deaf, generally as a result of congenital rubella syndrome. A total of 69 residents are housed in G-village.

The first febrile illness at the school was in residents of G3 module on January 11. When our investigation began on January 14, 19 residents were or had been febrile.

Influenza A, H₁N₁, similar to A/England 80, was identified from throat swabs from three residents of G3. By January 17, 20 of 22 residents had become febrile (attack rate 90.9%). Mean age of ill residents was 18.4 years. Mean length of illness was 2.7 days. Influenza vaccine is routinely given to all residents unless parents or guardians specifically refuse it. Ninety-five percent of G3 residents had received the 1983 formulation, including one resident from whom influenza was isolated. Employees were interviewed and a questionnaire was administered, similar to the one used for employees involved in the earlier outbreak. Seven employees (26%) were identified who had a febrile respiratory illness. Four of these had onset of fever 24-72 hours prior to the first resident cases. None of the employees had received the 1983 vaccine.

An attempt was made to cohort the residents and staff of G3 and H-village. Movement of residents was restricted and employees were kept from being assigned to work other uninfected villages and modules. The employees of all three residents modules in G-village have a central time keeper and some mixing was unavoidable. Surveillance for flu-like illness in employees was begun by time keepers. Despite these efforts, febrile illness appeared in residents of G1 module, which is directly adjacent to G3, on January 22. Fifteen residents developed fevers within the next 72 hours. Influenza A, H₁N₁, was isolated from throat cultures of five of these residents. Attack rate was 71.4%. All the residents of G1 had received the 1983 influenza vaccine.

Twelve residents and one staff member were confirmed as having been infected with H₁N₁ influenza A by culture, paired serology, or both.

In an attempt to prevent influenza in the remaining uninfected housing unit of G village and the residents of H village, Amantadine was begun in approximately 75 residents of these areas of January 27

and continued for four weeks. No flu-like illness was observed in these residents, despite ongoing illness in staff members. One resident of H village had serologic evidence of recent H₁N₁ infection during the period of Amantadine prophylaxis. Residents were monitored closely for occurrence of side effects, especially seizures. This data is still being analyzed, and details will appear in a later issue.

Community surveillance for flu-like illness was intensified. A marked increase in school absenteeism and visits to student health services in local colleges was observed, especially during the last week of January.

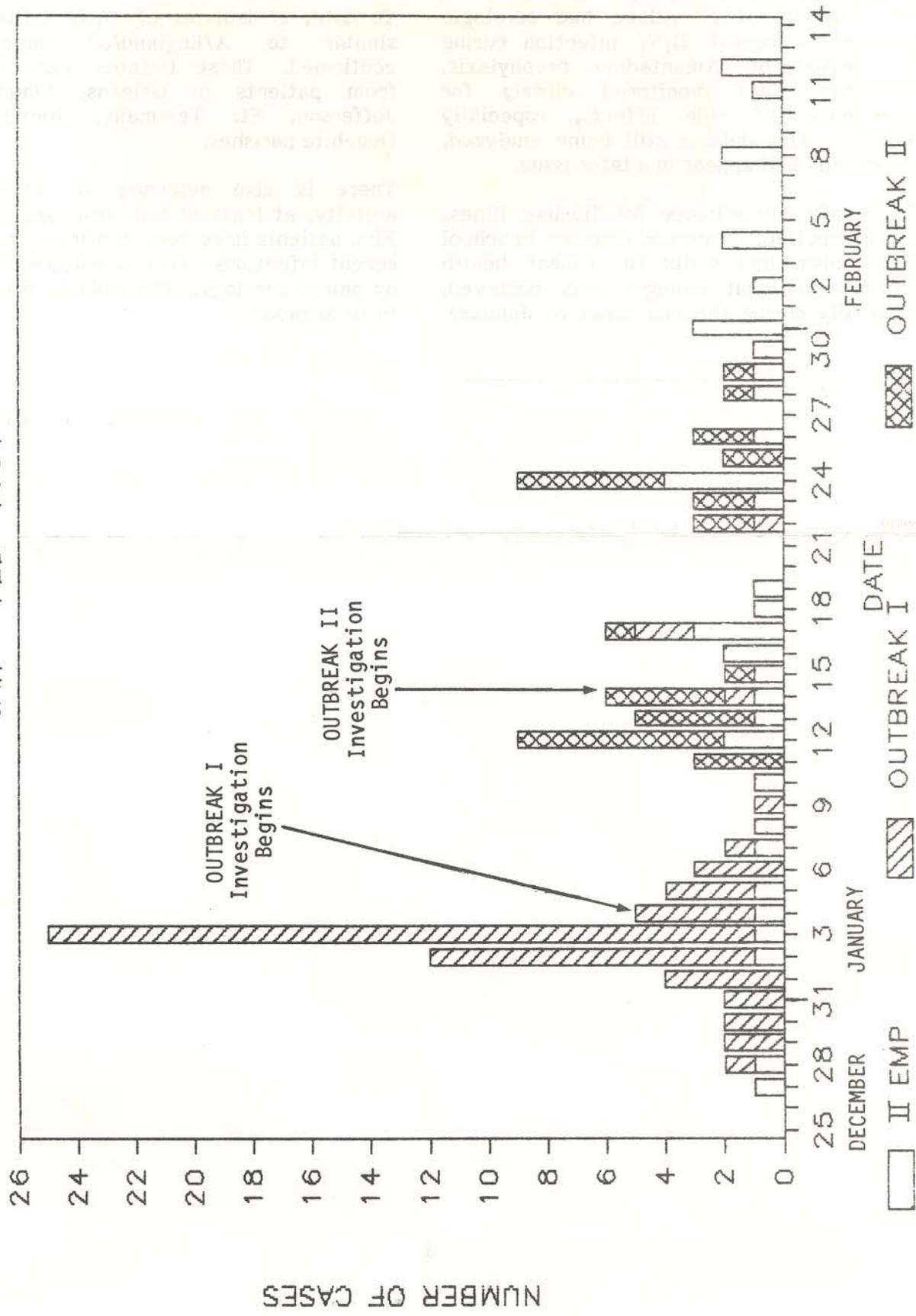
At least ten elementary schools in the New Orleans area were closed on January 27.

To date, 27 isolates of H₁N₁ influenza A, similar to A/England/80 have been confirmed. These isolates were obtained from patients in Orleans, Plaquemines, Jefferson, St. Tammany, Rapides and Ouachita parishes.

There is also evidence of influenza B activity, at least in the New Orleans area. Five patients have been confirmed as having recent infections - two by culture and three by paired serology. The isolates are similar to B/Singapore.

INFLUENZA IN LOUISIANA

JAN - FEB 1984



SELECTED REPORTABLE DISEASES (By Place of Residence)

STATE AND PARISH TOTALS REPORTED MORBIDITY MARCH, 1984	VACCINE PREVENTABLE DISEASES					ASEPTIC MENINGITIS	HEPATITIS - A AND UNSPECIFIED **	HEPATITIS B	LEGIONELLOSIS	MALARIA ***	MENINGOCOCCAL INFECTIONS	SHIGELLOSIS	TUBERCULOSIS, PULMONARY	TYPHOID FEVER	OTHER SALMONELLOSIS	UNDERNUTRITION SEVERE	GONORRHEA	SYPHILIS, PRIMARY AND SECONDARY	RABIES IN ANIMALS (PARISH TOTALS CUMULATIVE, 1984)
	MEASLES	RUBELLA*	MUMPS	PERTUSSIS	TETANUS														
TOTAL TO DATE 1983	0	9	0	2	2	7	224	81	1	0	17	15	97	0	42	4	4701	425	6
TOTAL TO DATE 1984	0	0	0	1	0	6	79	84	0	1	17	11	60	1	25	3	6669	323	7
TOTAL THIS MONTH	0	0	0	0	0	0	25	29	0	1	2	3	21	0	10	1	2235	96	7
ACADIA							2										16	5	
ALLEN																		2	
ASCENSION							1											3	
ASSUMPTION																		14	
AVOUELLES											1							12	
BEAUREGARD							2											5	
BIENVILLE																		5	
BOSSIER																			2
CADDO							1						5				193	5	3
CALCASIEU							2	1									79	2	
CALDWELL																			
CAMERON																			
CATAHOULA																		1	
CLAIBORNE																		4	
CONCORDIA																		2	2
DESOTO																		1	
EAST BATON ROUGE										1		1			2		163	17	
EAST CARROLL							1											4	
EAST FELICIANA																		5	1
EVANGELINE													2		1			1	
FRANKLIN							1						1					2	
GRANT																		1	
IBERIA													1					19	
IBERVILLE																		2	
JACKSON																		3	
JEFFERSON								2							1		123	6	
JEFFERSON DAVIS								1								1		10	
LAFAYETTE							5	1										66	3
LAFOURCHE															1			27	2
LASALLE																		3	
LINCOLN																		14	
LIVINGSTON																		2	1
MADISON												1						8	1
MOREHOUSE																		11	1
NATCHITOCHE							1											3	
ORLEANS							2	14				2	4		1		848	39	
OUACHITA							1					1						95	
PLAQUEMINES																		5	
POINTE COUPEE																		1	
RAPIDES													2					119	4
RED RIVER																		1	
RICHLAND													1					6	
SABINE																		1	
ST. BERNARD											1								
ST. CHARLES							1	1										11	1
ST. HELENA																			
ST. JAMES																		6	2
ST. JOHN								1					1					7	
ST. LANDRY																		33	
ST. MARTIN							2	1										8	
ST. MARY																		12	1
ST. TAMMANY								3										24	
TANGIPAHOA							3	1					1					12	2
TENSAS																			
TERREBONNE															1			64	1
UNION																		2	
VERMILION								1										6	1
VERNON																		123	
WASHINGTON															2			16	
WEBSTER								1							1			21	
WEST BATON ROUGE																			1
WEST CARROLL																			
WEST FELICIANA								1										3	
WINN																		4	
OUT OF STATE																		3	

* Includes Rubella, Congenital Syndrome.

** Includes Hepatitis Non A, Non B.

*** Acquired outside United States unless otherwise stated.

From January 1, 1984 - March 31, 1984, the following cases were also reported:

3-Amebiasis, 23-H-Flu Meningitis, 1-Rocky Mountain Spotted Fever, 1-Tularemia.

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