Louisiana

DEPARTMENT OF HEALTH
AND HUMAN RESOURCES

MONTHLY MORBIDITY REPORT

Provisional Statistics

FROM THE

OFFICE OF PUBLIC HEALTH STATISTICS

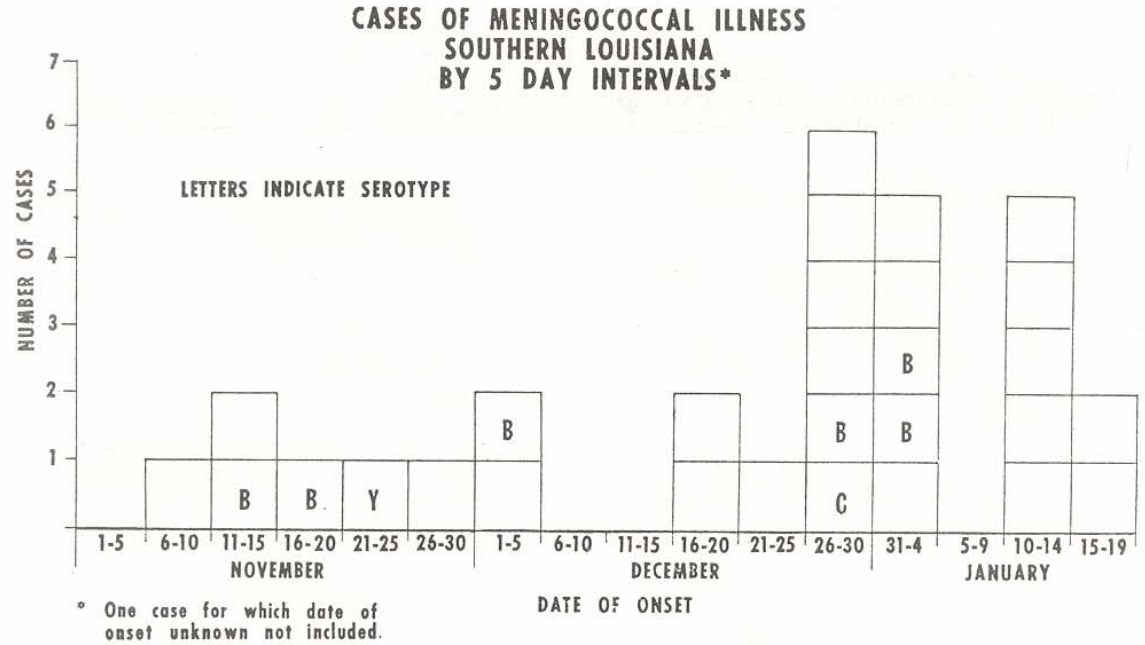
Reported Morbidity
December, 1976

MENINGOCOCCAL DISEASE ALERT

An alarming increase in cases of meningococcal meningitis seen at Charity Hospital in New Orleans has prompted an investigation of meningococcal illness in southern Louisiana by the Epidemiology Unit. As of January 17, the Epidemiology Unit knew of 30 cases occurring since November 1 (Figure 1). Criteria for diagnosis are either a positive culture for Neisseria meningitidis from blood or cerebral spinal fluid (22 cases) or a strong clinical impression of meningococcal disease (usually based on combination of meningitis and petechial or purpuric rash). Cases have been sought through official reports, contact with Hospital Infection Control nurses at the major greater New Orleans hospitals, and rumor tracing.

The known cases are spread over seven parishes (Orleans - 14, Jefferson - 6, St. Mary - 3, Plaquemines - 2, Terrebonne - 2, St. Bernard - 1, East Baton Rouge - 1, and one unknown to date). The fourteen New Orleans cases are scattered throughout the city. The ages range from one month to 84 years, with seventeen under three years. Sex distribution is equal. Twenty-five of the 30 cases are white, five are black. Thus far, there have been three fatalities. There are no known connections between cases except

Figure I



* One case for which date of onset unknown not included.

for two cousins who play together frequently. Their onsets were sixteen days apart. Interestingly, when the diagnosis of the first case was established, all members of the household, including the second case, took Rifampin for two days.

Sero-typing has been carried out thus far in eight cases, six of which are group B, the most prevalent strain in the United States at this time. One case was group C and one was group Y. Unfortunately, there is no vaccine available for group B meningococcus although vaccine has recently become available for types A and C.

To what extent does the current group of cases represent an increase over the expected number of cases for this time of year? Last winter there were no cases reported in December, five each in January and February, and 12 in March. Seventy-two cases were reported in 1971, 53 in 1972, 51 in 1973, 53 in 1974, and 40 in 1975. Generally about half of these cases occurred during the winter months. In comparing the 30 cases this winter with the number in previous winters, it is important to note that the active search procedure currently being used turns up some cases not ordinarily reported.

The distribution of cases over a broad geographic area and representation of three serotypes weigh against the current situation representing a major epidemic. However, there clearly is an increased number of cases, and it is impossible to predict with certainty whether this represents the beginning of an epidemic period or whether we are already beyond the peak period. The Epidemiology Unit is watching the situation closely, and urgently requests telephone reports (504-568-5006) of suspect cases.

The following recommendations regarding the management of meningococcal disease were made by a group of medical consultants in New Orleans on February 27, 1975, and still represent the official state policy.

MENINGOCOCCAL DISEASE

Reprinted from Louisiana Monthly Morbidity Report, February, 1975

Most physicians are aware of the necessity for prompt recognition and aggressive treatment of meningococcal disease, but there is confusion about management of asymptomatic case contacts. A case of meningococcal menigitis in a community often causes fear which borders on panic, and people having little or no contact with the patient often expect prophylactic medication.

For the purpose of updating recommendations of the Division of Health regarding the management of meningococcal disease, a meeting of a group of medical consultants was held in New Orleans on February 27, 1975. The following is a list of recommendations and pertinent facts evolving from this meeting:

1. Household contacts (especially children under 5 years of age), romantic contacts, and persons who have given mouth to mouth resuscitation to cases of meningococcal disease should be placed under close clinical surveillance (twice daily temperature reading and observation of other signs or symptoms consistent with the disease for 5 days). If any objective signs such as fever, headache, sore throat, exanthem, otitis, or stiff neck are observed the patient should be hospitalized immediately.

2. There is no evidence that school room, school bus, office, hospital, or other casual type contact with a case places a person at any higher risk of developing the disease than other persons in the general population.

3. When a case of meningococcal disease occurs in a school, it is unnecessary for school officials to send notices home to the parents of asymptomatic children nor to suggest that they consult their private doctors for prophylaxis. Such actions are unwarranted and are often responsible for creating community panic. School officials should consult the local health unit for advice.

4. When a person dies with meningococcal disease, there is no justification for requiring a closed casket funeral or for restricting attendance at the funeral of the deceased.

5. There is no satisfactory chemo-

prophylaxis for meningococcal disease. Sulfonamides are no longer recommended because of the emergence of resistant strains (unless the strain is known to be sulfonamide sensitive). Minocylcine and rifampin have been shown to reduce carrier rates in adults; however, neither of these agents have been proven effective in preventing meningococcal disease when used as chemoprophylaxis in a controlled study. There have been recent reports of widespread vestibular reaction following administration of minocycline, and there is evidence of the emergence of rifampin resistant strains of meningococci. Penicillin for chemoprophylaxis is effective only when administered in therapeutic doses. Meningococcal menigitis has been observed to develop in patients receiving penicillin "prophylaxis." Ampicillin, erythromycin, oxytetracycline, chloramphenical, cephalexin, doxycycline, ethoxzolamide, nalidixic acid, coumermycin, and immune serum globulin have been demonstrated to be of little or no value in eliminating meningococci from asymptomatic subjects.

6. When a case of meningococcal disease is diagnosed, the patient should be treated immediately in a local hospital rather than being sent to a medical facility some distance removed, especially if he is being transferred because of his contagiousness. If it becomes necessary to transfer a diagnosed or suspected case, immediate local treatment should not be withheld.

7. Crystalline penicillin G is the drug of choice for the treatment of meningococcal disease. The recommended dose for children is 400,000 units/kg/day in divided intravenous doses, or 15 to 20 million units intravenously per day for adults. For patients sensitive to penicillin, give chloramphenicol 100 mg./kg/day in divided intravenous doses for children or approximately 4 grams/day for adults.

8. Rifampin and minocycline should not be used for treating meningococcal disease.

9. Neisseria meningitidis cultures from blood, spinal fluid, or skin lesions should be forwarded to the Division of Health for serotyping.

10. Nasopharyngeal cultures from asymptomatic contacts of cases are not indicated. Done in this context, they serve no useful purpose.

REFERENCES

Artenstein MS: Prophylaxis for meningococcal disease. *JAMA* 231:1035-1037, 1975.

Center for Disease Control: *Morbidity and Mortality Weekly Report* 22(7): 58-59, February 17, 1973.

Center for Disease Control: *Morbidity and Mortality Weekly Report* 24(2): 9-11, January 11, 1975.

Devine, et al: Rifampin: levels in serum and saliva and effect on the meningococcal carrier state. *JAMA* 214:1055-1059, 1970.

Gutter, et al: Effect of rifampin and minocycline on meningococcal carrier rates. *J Inf Dis* 124:199-205, 1971.

Sanders E, et al: Prevention of meningococcal infections. *J of Inf Dis* 121:449-450, 1970.

Weidmer, et al: Effectiveness of rifampin in eradicating the meningococcal carrier state in a relatively closed population: emergence of resistant strain *J Inf Dis* 124:172-178, 1971.

SELECTED REPORTABLE DISEASES

(By Place of Residence)

STATE AND PARISH TOTALS Reported Morbidity December, 1976	ASEPTIC MENINGITIS	DIPHTHERIA	ENCEPHALITIS	ENCEPHALITIS, POST INFECTIOUS	HEPATITIS A AND UNSPECIFIED	HEPATITIS B	TUBERCULOSIS, PULMONARY	MENINGOCOCCAL INFECTIONS	PERTUSSIS	RABIES IN ANIMALS	RUBELLA*	SEVERE UNDERNUTRITION	SHIGELLOSIS	TYPHOID FEVER	OTHER SALMONELLOSIS	TETANUS	MEASLES	GONORRHEA	SYPHILIS, PRIMARY AND SECONDARY
TOTAL TO DATE 1975	139	0	39	11	575	189	517	40	57	7	295	12	122	13	232	5	33	21465	539
TOTAL TO DATE 1976	67	0	42	4	579	174	490	57	15	8	93	10	118	3	116	2	306	18862	578
TOTAL THIS MONTH	3	0	13	0	99	22	19	13	1	0	0	0	36	0	6	0	25	1413	34
ACADIA					8													17	
ALLEN			1															1	
ASCENSION																			1
ASSUMPTION																		4	
AVOYELLES																		2	
BEAUREGARD					1										1			3	
BIENVILLE													2					25	
BOSSIER			1		1														
CADDO			1		4	4	1										1	157	2
CALCASIEU						2												94	2
CALDWELL																		1	
CAMERON																			
CATAHOULA															1			1	
CLAIBORNE																		3	
CONCORDIA							1											2	
DESOTO																		2	
EAST BATON ROUGE	1				4	1	2	1							1			122	1
EAST CARROLL																		1	
EAST FELICIANA																			
EVANGELINE																			
FRANKLIN																		4	1
GRANT																		3	
IBERIA					2													14	
IBERVILLE					2													1	
JACKSON																		4	
JEFFERSON			1		30		3	1					2				1	59	3
JEFFERSON DAVIS					2		1											12	
LAFAYETTE			2															28	
LAFOURCHE					2													10	
LASALLE																			
LINCOLN																		10	
LIVINGSTON					1													1	
MADISON								1										2	
MOREHOUSE																		20	
NATCHITOCHES																		8	
ORLEANS	2				20	7	8	4	1				30		1		13	484	8
OUACHITA			2		2		1											93	4
PLAQUEMINES					3												9	2	
POINTE COUPEE																		1	
RAPIDES					3	1	1											70	
RED RIVER																		1	
RICHLAND			2		1													4	
SABINE																		11	
ST. BERNARD					2			1									1	1	
ST. CHARLES			1															2	2
ST. HELENA																		3	
ST. JAMES																		6	1
ST. JOHN					2													3	2
ST. LANDRY					1													2	
ST. MARTIN																		7	1
ST. MARY			2					2										2	
ST. TAMMANY						1							2					17	1
TANGIPAHOA								1										15	
TENSAS																			
TERREBONNE					2			2										2	
UNION																		10	
VERMILION							1												1
VERNON					4										2			15	1
WASHINGTON					1	6												4	
WEBSTER																		18	
WEST BATON ROUGE																		12	3
WEST CARROLL					1														
WEST FELICIANA																		15	
WINN																		1	
OUT OF STATE																		1	

* Includes Rubella, Congenital Syndrome

From January 1 through December 31, the following cases were also reported: 5-Brucellosis; 2-Leptospirosis; 2-Malaria contracted outside the U.S.A.