



Reported Morbidity
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DEPARTMENT OF HEALTH AND HUMAN RESOURCES
OFFICE OF HEALTH SERVICES AND ENVIRONMENTAL QUALITY
BOX 60630 NEW ORLEANS, LOUISIANA 70160

MONTHLY MORBIDITY REPORT

Provisional Statistics

PUBLIC HEALTH STATISTICS and
DIVISION OF DISEASE CONTROL

SPECIAL ISSUE

RECOMMENDATIONS FOR THE MANAGEMENT OF CASES AND CONTACTS OF MENINGOCOCCAL AND *HEMOPHILUS INFLUENZAE* TYPE b INFECTIONS

The Office of Health Services and Environmental Quality (OHSEQ) recently convened a special committee of infectious disease internists and pediatricians to update its recommendations on Meningococcal disease. Also, the committee of consultants was asked to make recommendations for the management of cases and contacts of invasive *Hemophilus influenzae* Type b infections. A summary of the committee's recommendations follows.

MENINGOCOCCAL DISEASE

A. Cases:

1. When meningococcal disease is highly suspected, the patient should be started on Parenteral antibiotics immediately and transported to a hospital as soon as possible (i.e. antibiotics should be given in doctor's office or clinic). If it becomes necessary to transfer a diagnosed or suspected case, immediate treatment should not be withheld, but should be continued until the patient's condition is stable enough to allow for safe transfer.
2. Crystalline penicillin G. is the drug of choice for the treatment of a case of meningococcal disease. The recommended dose for children is 300,000-400,000 units/kg/day in six divided intravenous doses, or 15 to 20 million units intravenously per day for adults. For patients allergic to penicillin, the treatment of choice is chloramphenicol 100 mg/kg/day in 4 divided intravenous doses for children over the age of 3 months or approximately 4 grams/day for adults. Chloramphenicol blood concentrations, particularly in children, should be monitored to preclude dose-related bone marrow suppression. (Rifampin, although used for chemoprophylaxis, is not effective for treating cases of meningococcal disease.)
3. *Neisseria meningitidis* cultured from blood, spinal fluid, skin lesions, or other sites from symptomatic patients should be forwarded to the Central Laboratory of OHSEQ, 325 Loyola Avenue, New Orleans, Louisiana 70112, for sera grouping.

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HEMOPHILUS INFLUENZAE TYPE b INFECTION

The OHSEQ Committee suggested that invasive *Hemophilus influenzae* Type b (Hib) infections be officially declared reportable. The Committee recommended that all household and day care center contacts under 4 years of age be placed under careful clinical surveillance as described for contacts of meningococcal disease cases.

Recently the American Academy of Pediatrics (AAP) published recommendations, quoted at the end of this report, for managing contacts of infants with invasive Hib infections. After lengthy discussion of these recommendations, the OHSEQ Committee felt that there is as yet insufficient published data to warrant complete adoption of the AAP recommendations. Specifically the committee expressed uncertainty regarding an AAP recommendation that rifampin prophylaxis be administered to all day care center and household contacts (children and adults) in centers or households where there are children less than 4 years of age.

However, the committee agreed that when a second Hib infection is detected in a day care center the probability of transmission is sufficiently high to warrant chemoprophylaxis intervention. Under these circumstances the health department should be telephoned immediately and arrangements made for the administration of chemoprophylaxis to the contacts. The health department should supervise the administration of rifampin to insure simultaneous and appropriate prophylaxis of all contacts. It is important that all children and adults in the

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MENINGOCOCCAL DISEASES (continued from page 1)

4. If *Neisseria meningitidis* is discovered as an incidental finding on a throat culture done for another purpose in a person without recent exposure to meningococcal disease, no treatment is indicated.
5. When a person dies with meningococcal disease there is no justification for requiring a closed casket funeral nor for restricting attendance at the funeral.
6. All cases of meningococcal disease should be immediately reported to the parish health unit.

B. Contacts:

1. Close contacts of persons with confirmed meningococcal disease have a risk of developing meningococcal illness about 1,000 times greater than the general population. About one-third of secondary cases develop within four days after hospitalization of the index patient.
2. Close contacts are defined as household members, day care center or nursery school classmates, personnel who resuscitated, intubated, or suctioned the patient before antibiotics were begun, and persons who had intimate contact with the patient's oral secretions. There is no evidence that schoolroom (other than day care center or nursery school), school bus, office, hospital, (other than noted above) or other casual contact with a case places a person at any increased risk of developing the disease.
3. All close contacts should be administered an appropriate chemoprophylactic drug regimen and placed under close clinical surveillance. Objective symptoms and signs of illness such as fever, headache, sore throat, exanthem, or stiff neck warrant immediate medical evaluation for possible meningococcal infection. Chemoprophylaxis is an adjunct to and not a substitute for close clinical observation.
4. Rifampin is currently the drug recommended for chemoprophylaxis of contacts, unless the organism is known to be sensitive to sulfadiazine. The dosages are 600 mg twice a day for adults, 10 mg/kg twice a day for children 1 month - 12 years of age, and 5 mg/kg twice a day for neonates. Dosages of sulfadiazine are 1 g twice a day for adults, 500 mg twice a day for children 1 - 12 years of age, and 500 mg once daily for children less than 1 year of age. Treatment with rifampin or sulfadiazine should be continued for two days.

NOTE: Penicillin, (the drug of choice for the treatment of cases), ampicillin, erythromycin, oxytetracycline, chloramphenicol, cephalixin, doxycycline, nalidixic acid, and immune serum globulin are of little or no value in eliminating meningococci from the asymptomatic subject, and are not recommended for chemoprophylaxis.

Also, because rifampin is not known to be safe during pregnancy, it should not be given under these circumstances; pregnant close contacts of meningococcal cases should be placed under close clinical observation. Contacts placed on rifampin prophylaxis should be advised that urine, saliva and tears will likely turn orange/red, transiently. Soft contact lenses may be stained. Contraception provided by birth control pills may be temporarily interrupted during prophylaxis.

5. When a case of meningococcal disease occurs in a day care center or nursery school, that facility's director should report the case to the local health unit and ask for advice. Arrangements will need to be made to insure that all children and employees receive appropriate chemoprophylaxis and clinical surveillance.
6. When a case of meningococcal disease occurs in a school (other than a day care center or a nursery school), it is not necessary for school officials to send notices home to the parents of asymptomatic children to suggest that they seek prophylaxis. Such actions are unwarranted and are often responsible for creating community confusion and panic. School officials should consult the local health unit for advice.

C. Meningococcal Vaccine:

When serogroup A or C *Neisseria meningitidis* is identified as the cause of an outbreak in a defined population, the use of vaccine should be considered as an adjunct to clinical observation and chemoprophylaxis. Currently there is no vaccine for group B organisms. Vaccine has been recommended for household contacts of cases of serogroups A and C. However, under normal circumstances, the time required for shipping isolates from sporadic cases to the laboratory for typing renders this recommendation impractical. Physicians are encouraged to consult with health department personnel when considering the use of vaccine in contacts.

HEMOPHILUS INFLUENZAE TYPE b INFECTION (continued from page 1)

day care center receive prophylaxis to eliminate all possible asymptomatic carriers.

The committee agreed with the AAP that a twin or immunocompromised sibling of a case is at increased risk of infection, in which instance all members of the household should receive rifampin prophylaxis. Although adults are at low risk of secondary *H. influenzae* infection, eradication of the Hib reservoir of colonization surrounding a case requires treatment of all household contacts.

Physicians who elect to follow the AAP recommendations for rifampin chemoprophylaxis are warned not to confuse the recommended rifampin dosage for Hib disease contacts (adults: 600 mg twice a day for 2 days, children under 12 years: 10 mg/kg twice a day for 2 days) with that recommended for meningococcal disease contacts (adults: 600 mg once a day for 4 days, children: 20 mg/kg once a day for 4 days).

The recommendations of the American Academy of Pediatrics Committee on Infectious Diseases for the management of *Hemophilus influenzae* type b contacts as published in the 1982 Red Book are as follows:

"The Committee considered at length the problem of management of contacts of infants suffering from invasive *Hemophilus influenzae*, type b infections. Investigation in this area is ongoing and any recommendations are likely to be modified as additional data become available. Currently we recommend:

- a) Rifampin prophylaxis for all household contacts (children and adults) in households where there are children less than 4 years of age (up to but not including the 4th birthday). In such households there are particular risk for siblings of affected children

who are: 1) a twin, or 2) immunocompromised.

- b) Nursery school and day care center contacts should be considered as a "household." Rifampin prophylaxis is definitely recommended for children attending such centers and also for adults. The utility of prophylaxis for adults has not been firmly established. Family contacts of attendees should not receive prophylaxis.

Some experts advise no prophylaxis unless two cases of invasive disease occur among attendees. This conflicting advice points out the uncertainty of the value of prophylaxis in nursery school and day care centers. Recommendations in this area may change with further experience.

- c) It is not known if rifampin administration is safe during pregnancy; therefore, we do not recommend prophylaxis of pregnant women who are contacts of affected infants, or who are known carriers of *Hemophilus influenzae*, type b.
- d) Children with invasive disease most often still carry the organism in their nasopharynx despite standard systemic antimicrobial treatment. Thus, prior to discharge all children with invasive diseases should receive rifampin prophylaxis to avoid introduction of the organisms into their households.
- e) Rifampin should be given orally once daily for 4 days in a 20 mgm/kgm dose, up to 600 mgm total dose (adult dosage). Many pharmacies do not routinely stock rifampin and there is no suspension available. The contents of a capsule must be mixed with simple syrup and fractional doses calibrated from the suspension's concentration."

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 ***	MENINGOCOCCAL INFECTIONS	SHIGELLOSIS	TUBERCULOSIS, PULMONARY	TYPHOID FEVER	OTHER SALMONELLOSIS	UNDERNUTRITION SEVERE	GONORRHEA	SYPHILIS, PRIMARY AND SECONDARY	RABIES IN ANIMALS (PARISH TOTALS CUMULATIVE, 1982)
	MEASLES	RUBELLA *	MUMPS	PERTUSSIS	TETANUS														
REPORTED MORBIDITY APRIL, 1982																			
TOTAL TO DATE 1981	0	8	3	3	0	14	251	114	0	3	65	20	126	0	45	1	6733	524	14
TOTAL TO DATE 1982	0	0	3	0	2	27	317	84	0	2	24	28	126	0	49	0	7516	581	8
TOTAL THIS MONTH	0	0	2	0	1	7	81	24	0	1	7	9	20	0	9	0	1592	157	3
ACADIA								2									12	1	
ALLEN																			
ASCENSION																	4	3	
ASSUMPTION							1										8	1	
AVOYELLES																	1		
BEAUREGARD																	2		
BIENVILLE																	3		
BOSSIER												3			1		17	3	1
CADDO					1	3	2	3		1	1	2	1		1		126	27	
CALCASIEU							4	4					2				98	1	
CALDWELL								1									2		
CAMERON																	1		
CATAHOULA																	1		
CLAIBORNE																	3	1	
CONCORDIA								1									1		
DESOTO													1				2		
EAST BATON ROUGE													2				114	14	1
EAST CARROLL							3										7		
EAST FELICIANA																	1	2	
EVANGELINE												1					1		
FRANKLIN											1		1						
GRANT																	4		
IBERIA							4						1				8	1	
IBERVILLE																	7		
JACKSON																	1		
JEFFERSON						2	19	1					4				107	2	
JEFFERSON DAVIS																	7	1	
LAFAYETTE							7	2				1	1		1		34	6	
LAFOURCHE			1														23		
LASALLE																			
LINCOLN								1									3	2	
LIVINGSTON							1										4		
MADISON																	7		
MOREHOUSE							8	1									19	1	
NATCHITOCHES																	2	1	1
ORLEANS			1				13	2			1		2		1		640	72	
OUACHITA							3										86	6	
PLAQUEMINES							3										1		
POINTE COUPEE																	3	1	
RAPIDES								1					1				59	3	1
RED RIVER								1											
RICHLAND																	3		
SABINE													1				7		
ST. BERNARD							2										4	1	
ST. CHARLES								1									5	1	
ST. HELENA																	2		
ST. JAMES																	5		
ST. JOHN																			
ST. LANDRY							1										13		
ST. MARTIN																	6	1	
ST. MARY							5										3		
ST. TAMMANY															2		15		
TANGIPAHOA							2	1			1		1				19		
TENSAS																	3		
TERREBONNE						1	1				1	3					28	2	
UNION																	10		2
VERMILION															1		5	1	
VERNON							1	1			1		1				4		1
WASHINGTON											1						3		
WEBSTER															1		21		
WEST BATON ROUGE																	3		
WEST CARROLL							1												
WEST FELICIANA																	2	1	
WINN								1									1		
OUT OF STATE															1		12		

* Includes Rubella, Congenital Syndrome.

** Includes 7 cases of Hepatitis, Non-A and Non-B, reported January - April, 1982.

*** Acquired outside United States unless otherwise stated.

From January 1, 1982 - April 30, 1982 the following cases were also reported:

2 - Cryptococcosis: 1 - Histoplasmosis: 1 - Psittacosis: 2 - Infectious Mononucleosis



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