



Bulletin No. 18

August 8, 1980

Meningococcal Meningitis - Update

A 12-year-old girl from Newtok was recently diagnosed and treated for meningococcal meningitis at the Bethel Hospital. All family contacts were promptly started on Rifampin prophylaxis. We thought we would review our experience with meningococcal meningitis in Alaska and update public health recommendations.

(Reported by Dr. John Mott, Bethel Hospital, Bethel, Alaska.)

The number of cases of meningococcal meningitis has decreased greatly since the outbreak of sero group Group A disease which occurred in 1976 and 1977. During those two years a total of 56 cases of meningococcal meningitis were reported and 32 of the cases were known to be Group A. The identification of a high-risk group (attack rate 83/100,000 vs normal attack rate 3/100,000) in adult Natives with history of high alcohol use resulted in a limited vaccination campaign using Group A Meningococcal Vaccine in 1976-1977. An aggressive program provided epidemiologic investigation to see that contacts of all cases received antibiotic prophylaxis.

In 1978, a total of 12 cases occurred and only one case was known to be Group A. In 1979, only six cases occurred and only one case was Group A.

Through August 1980, six cases of meningococcal meningitis are known to have occurred. Disappointingly, only one isolate was forwarded to the State Laboratory for serotyping, so we do not know if more cases of Group A are occurring. We are very interested in serotyping all isolates of Neisseria meningitidis associated with invasive disease. We also test each isolate for antibiotic sensitivity. Please help us with this effort.

Meningococcal meningitis germs are spread from person to person by direct contact of droplets and discharges from the nose and throat of infected persons. The incubation period is from two to ten days. Up to 33% of secondary cases occur within four days after the hospitalization of the index case, but increased risk to close contacts of acquiring the disease persists through 30 days.

Chemoprophylaxis is recommended for all household members of the case of meningococcal disease. If other persons who have been in close intimate contact with a case over a substantial length of time can be identified, they should also be treated. School room classmates and hospital contacts of cases are usually not considered close contacts and should not receive treatment. Prophylaxis should not be delayed while culture or sensitivity results are pending. Routine throat cultures of contacts of cases are not recommended. The drug of choice for chemoprophylaxis is Rifampin and the recommended dosage is:

Adults	600 mgs. every 12 hours for 4 doses
Children	1 year to 12 years - 10mgs/kilogram/dose every 12 hours for 4 doses
Children	less than 1 year - 5 mgs/Kilogram/dose every 12 hours for 4 doses

We urge all health care providers to maintain a very high index of suspicion of this disease so that rapid diagnoses will be possible. We wish to thank all health care providers for their rapid reporting of patients suspected of having meningococcal meningitis. If the diagnosis is suspected, immediately contact Dr. John Middaugh, State Medical Epidemiologist, 272-7534 (Office) or 333-9349 (Home) so that contacts can be identified and treated.