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FACT SHEET

Meningococcal Meningitis Disease

Meningococcal meningitis is a severe infection of the fluid of a person's spinal cord and the fluid surrounding the brain. It is caused by a viral or bacterial infection. It is important to know if it is a virus or bacterium because the seriousness of the disease and the treatment will be different. Viral meningitis is less severe and settles without specific treatment whereas bacterial meningitis is quite severe and cause brain damage, hearing loss, or learning disability. Identifying the type of bacteria responsible is important for the correct antibiotics regimens. Haemophilus influenza type b (Hib) used to be the leading cause of bacterial meningitis until vaccines and routine immunizations have reduced the occurrence. The two main causes of bacterial meningitis today are streptococcus pneumoniae (see pneumoccoccal disease) and Neisseria meningitides.

Cause: The bacteria, *Neisseria meningitides is most serious*. Meningococcal meningitis usually occurs as a single, isolated event. Clusters or outbreaks are rare in the United States.

Symptoms: The symptoms include high fever, headache, stiff neck, and a rash. These symptoms can develop from just several hours to 1 to 2 days. Other symptoms may be nausea, vomiting, discomfort when looking into bright lights, confusion and being sleepy. Newborns and small infants may appear slow or inactive, irritable vomit or not be feeding well. Seizures may develop for any age.

Spread: This bacteria is spread by direct contact with nose or throat discharges of an infected person by coughing or kissing. They cannot be spread by casual contact or by breathing into the air where an infected person has been. Many people carry these particular bacteria in their nose and throat and not have signs of illness, while others may develop serious symptoms.

Incubation: The symptoms may appear 2-10 days after exposure, but usually appear within 3-4 days.

Contagious Period: From the time a person is first infected until the bacteria are no longer present in nose and throat discharges, he/she remains contagious. The duration varies according to the treatment used. Patients should be excluded from school, daycare, or work until 24 hours after therapy has begun and the illness has subsided.

Precautions: Droplet for 24 hours after antibiotic has been started.

Reportable: Immediately by the provider or laboratory to the local or state health department to ensure follow up of close contacts and identify outbreaks.

Diagnosis and Treatment: *Early diagnosis and treatment are very important*. If symptoms occur, the patient should see a doctor immediately. The diagnosis is usually made by growing bacteria from a sample of spinal fluid. The spinal fluid is obtained by performing a spinal tap.

Certain antibiotics are very effective in eliminating the bacteria from the nose and throat. Penicillin is the drug of choice. If a third generation cephalosporin or ciprofloxacin was not given as treatment, the patient should receive rifampin (see dosage below) prior to discharge from the hospital to ensure elimination of the organism.

Only people who have been in close contact (household members, intimate contacts, health care personnel performing mouth to mouth resuscitation, day care center playmates) need to be considered for preventive treatment. Such people are advised to obtain a prescription, usually for rifampin, from their physician. Casual contact, like that which might occur in a regular classroom, office, or factory setting is usually not significant enough to cause concern. Those who have been in close contact with someone diagnosed with meningococcal meningitis should watch for early signs of illness -- especially fever -- and seek treatment promptly.

Prevention: Presently, there is a vaccine what will protect against four of the strains of meningococcal meningitis.

There are two vaccines against N. meningitides available in the U.S. Both vaccines can prevent 4 types of meningoccal disease, including 2 of the 3 types most common in the U.S. serogroup C, Y and W-135) along with a type that causes epidemics in Africa. The vaccines cannot prevent all types of the disease but offer protection to those who might have otherwise gotten the disease.