



# MENINGOCOCCAL ILLNESS

Meningococcal Illnesses are caused by a bacterium called *Neisseria meningitidis* (*N. meningitidis*) and are serious, sometimes fatal illnesses. The most common illness is meningitis, an infection of the coverings of the brain. Meningitis caused by *N. meningitidis* must be treated immediately with hospitalization and IV (intravenous) antibiotics. The disease usually starts suddenly with fever, chills, and lethargy (i.e., a feeling of tiredness) and a rash with fine red “freckles” or purple splotches. With meningitis, older children and adults may complain of severe headache, neck pain and neck stiffness. In younger children, unusual irritability, poor appetite, excessive and high-pitched crying, vomiting and fever may be seen.

## **Who gets this disease?**

Meningococcal illnesses affect children less than 5 years primarily affecting infants less than 24 months. It peaks again in adolescents 16-21 years of age. There is a high incidence *N. meningitidis* with people living in crowded living conditions such as barracks and institutions. Freshman college students living in dormitories have a higher incidence than other college students not living in dorms. This illness can affect any age group.

## **How is it spread?**

The bacterium is passed from person to person when they are in very close contact. It is spread through infectious droplets of respiratory tract secretions (e.g., sneezing, coughing, nasal discharge, saliva). It can also be passed if people touch infected secretions then put their hands in their noses, eyes or mouths. However, the bacteria cannot live on environmental surfaces – they quickly shrivel and die.

People can carry the germs, without knowing it, in their noses, mouths or throats without ever getting sick themselves. This is called “carrying” the germ or being a “carrier”. The germs can be spread from carriers to other people who may then develop a meningococcal illness. Obviously, sick people can also pass the germs on.

The time from exposure to illness can be from 2-10 days, but it is usually one to four days. After one infection has occurred in a facility, there will be more than the usual number of people carrying the germ, so the risk of spread and serious disease becomes greater.

## **How is it diagnosed and treated?**

Meningococcal infections are diagnosed by signs and symptoms and by examining a sample of blood and/or spinal fluid for white blood cells and bacteria. Spinal fluid is obtained by a physician, who performs a lumbar puncture (i.e., spinal tap).

People with these infections almost always require hospitalization and are treated with antibiotics for 5-7 days.

## **How can the spread of this disease be prevented?**

1. Meningitis Conjugate Vaccine is recommended for all children 11-12 years of age. It is also recommended for all children 13-18 years of age who have not been previously vaccinated. Unvaccinated college freshmen living in a dormitory should be vaccinated.
2. Meningitis Quadrivalent vaccine is available for children 2 years old and older.
3. If a person develops a meningococcal illness in a childcare center, all parents and staff must be notified immediately.

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4. If a person develops a meningococcal illness, close contacts of this patient (including family members and person having intimate contact such as sleeping together, hugging and kissing) are at increased risk of developing the illness. In this situation, a physician or public health professional may recommend: 1) watching for early symptoms of meningococcal illness, and/or 2) taking a preventive antibiotic to eliminate the bacteria from the body before disease begins.
5. Any child or adult who is a close contact and who develops symptoms such as fever or headache require prompt evaluation by a healthcare provider **regardless** of whether or not this person has taken the preventive antibiotic.
6. Monitor the situation closely for two to three weeks. Make sure all ill children are seen by their doctors and that you are notified if another person develops meningococcal disease.
7. Notify parents or guardians about the occurrence of this illness and urge them to contact their *healthcare provider* for specific medical advice.
8. Childcare centers should contact the NH Department of Health & Human Services, Bureau of Infectious Disease and Control for recommendations about preventing spread of this illness and for assistance in implementing them.

## **Who should be excluded?**

Children with meningococcal disease are too ill to attend childcare.

## **Reportable?**

Yes. Meningococcal illnesses are reportable by New Hampshire law to the NH Department of Health & Human Services, Bureau of Infectious Disease and Control at (603) 271-4496.