What is meningococcal invasive disease?
Meningococcal (muh-nin-jo-cok-ul) disease is a serious illness caused by a type of bacteria (germs) called *Neisseria meningitidis*. The disease may result in inflammation of the lining of the brain and spinal cord (meningococcal meningitis) and/or a serious blood infection (meningococcal septicemia). Meningococcal disease can become deadly in 48 hours or less. Even with treatment, 10-15% of people die. Others have long-term complications such as brain damage, learning problems, skin scarring, hearing loss, and loss of arms and/or legs.

Who gets meningococcal invasive disease?
Although it can occur in people of all ages, infants, preteens, teens, and young adults have the highest rates of meningococcal invasive disease in the United States. College students and military recruits are also slightly more at risk for the disease because of time spent in crowded living conditions like dorms or barracks. People with certain medical conditions or immune system disorders including a damaged or removed spleen are also at higher risk.

How do people get meningococcal invasive disease?
The bacteria are spread from person-to-person through the exchange of saliva (spit), coughs, and sneezes. You must be in direct (close) or lengthy contact with an infected person’s secretions to be exposed. Examples of close contact include:

- Kissing
- Sharing items that come in contact with the mouth (water bottles, eating utensils, cigarettes and smoking materials, cosmetics (lip balm)
- Living in the same house
- Sleeping in the same residence (sleep overs)

About 1 out of 10 people carry meningococcal bacteria in their nose and throat, but don’t get sick. These people are known as carriers. Although carriers do not have any signs or symptoms, they can still spread the bacteria and make others sick. Since so many people carry the bacteria, most cases of meningococcal invasive disease appear to be random and are not linked to other cases.

Can people with meningococcal invasive disease pass the illness to others?
The infectious period for meningococcal disease is considered to be from 10 days before the person got sick to 1 day after he or she starts on antibiotics. This means that people who were in close contact with the sick person during this time are at higher than average risk to get meningococcal invasive disease.

People who are identified as close contacts should receive antibiotics to prevent them from getting the disease. The bacteria are NOT SPREAD by casual contact activities like being in the same work or school room as the sick person. The bacteria that cause meningococcal invasive disease are less infectious than the viruses that cause the common cold or flu.
What are the symptoms of meningococcal invasive disease?

- Confusion
- Fatigue (feeling very tired)
- Fever and chills
- In later stages, a dark purple rash
- Nausea and vomiting
- Rapid breathing
- Sensitivity to light
- Severe headache
- Stiff neck

How is meningococcal invasive disease diagnosed?

A health care provider diagnoses meningococcal invasive disease by obtaining the history of symptoms, performing a physical examination, and examining blood and spinal fluid.

What is the treatment for meningococcal invasive disease?

It is important that treatment be started as soon as possible. Most people with meningococcal disease are hospitalized and treated with antibiotics. (NOTE: It is very important to finish your antibiotics even if you begin to feel better, unless otherwise directed by your health care provider.) Depending on the severity of the infection, other treatments may also be necessary. These can include such things as breathing support, medications to treat low blood pressure, and wound care for parts of the body with damaged skin.

How can meningococcal invasive disease be prevented?

Meningococcal conjugate vaccine is the best way to prevent meningococcal invasive disease. The vaccine protects against four of the five types of bacteria (A, C, W, and Y) that cause almost all cases of meningococcal invasive disease worldwide. When you are 11-12 years old, you will need the first dose. When you are 16 years old, you will need a booster shot (an additional dose).

There are also vaccines to prevent against meningococcal type B (MenB) disease. If you are 10 or older and at increased risk, it is recommended that you receive a MenB vaccination. When you are 16 through 23 years old, you can receive a MenB vaccination, in addition to the meningococcal conjugate vaccine, to have broader protection. Ask your healthcare provider if you should receive this vaccine.

Where can I get additional information?

- Your health care provider
- Your local health department
  [http://www.state.nj.us/health/lh/directory/lhdselectcounty.shtml](http://www.state.nj.us/health/lh/directory/lhdselectcounty.shtml)
- NJ Department of Health
- Meningococcal Disease: Are You Protected? Brochure
- Centers for Disease Control and Prevention (CDC)

This information is intended for educational purposes only and is not intended to replace consultation with a health care professional.

Adapted from Centers for Disease Control and Prevention

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