Meningococcal Disease

What is meningococcal disease?
Meningococcal disease is caused by a bacteria called *Neisseria meningitidis*. It can lead to serious blood infections. When the linings of the brain and spinal cord become inflamed, it is called meningitis. The disease strikes quickly and can have serious complications, including death.

Who gets meningococcal disease?
Anyone can get meningococcal disease. Some people are at higher risk. This disease occurs more often in people who are:
- Teenagers or young adults
- Infants younger than one year of age
- Living in crowded settings, such as college dormitories or military barracks
- Traveling to areas outside of the United States, such as the “meningitis belt” in Africa
- Living with a damaged spleen or no spleen
- Being treated with Soliris® or, who have complement component deficiency (an inherited disorder)
- Exposed during an outbreak
- Working with meningococcal bacteria in a laboratory

What are the symptoms?
Symptoms appear suddenly - usually 3 to 4 days after a person is infected. It can take up to 10 days to develop symptoms. Symptoms may include:
- A sudden high fever
- Headache
- Stiff neck (meningitis)
- Nausea and vomiting
- Red-purple skin rash
- Weakness and feeling very ill
- Increased eye sensitivity to light

How is meningococcal disease spread?
It spreads from person-to-person by coughing or coming into close or lengthy contact with someone who is sick or who carries the bacteria. Contact includes kissing, sharing drinks, or living together. Up to one in 10 people carry meningococcal bacteria in their nose or throat without getting sick.

Is there treatment?
Early diagnosis of meningococcal disease is very important. If it is caught early, meningococcal disease can be treated with antibiotics. But, sometimes the infection has caused too much damage for antibiotics to prevent death or serious long-term problems. Most people need to be cared for in a hospital.

Public health fact sheets are available at www.macombgov.org/publichealth.
What are the complications?
Ten to 15 percent of those who get meningococcal disease die. Among survivors, as many as one in five will have permanent disabilities. Complications include:
- Hearing loss
- Brain damage
- Kidney damage
- Limb amputations

What should someone do if they have been in contact with a diagnosed case of meningococcal disease?
Only people who have been in close contact (household members, intimate contacts, health care personnel performing mouth-to-mouth resuscitation, daycare center playmates, etc.) need to be considered for preventive treatment. Such people are usually advised to obtain a prescription for a special antibiotic (either rifampin, ciprofloxacin or ceftriaxone) from their physician. Casual contact, as might occur in a regular classroom, office or factory setting, is not usually significant enough to cause concern.

What is the best way to prevent meningococcal disease?
The single best way to prevent this disease is to be vaccinated. Vaccines are available for people 6 weeks of age and older. Various vaccines offer protection against the five major strains of bacteria that cause meningococcal disease:
- All teenagers should receive two doses of vaccine against strains A, C, W and Y. The first dose is given at 11 to 12 years of age, and the second dose (booster) at age 16.
  - It is very important that teens receive the booster dose at age 16 in order to protect them through the years when they are at greatest risk of meningococcal disease.
  - Talk to your health care provider or contact the Macomb County Health Department if your teen has not received two doses of vaccine against meningococcal strains A, C, W and Y.
- Teens and young adults can also be vaccinated against the “B” strain.

Others who should receive the vaccine include:
- Infants, children and adults with certain medical conditions
- People exposed during an outbreak
- Travelers to the “meningitis belt” of sub-Saharan Africa
- Military recruits

Is there an increased risk for meningococcal disease if I travel?
- Meningococcal disease and outbreaks occur in the United States and around the world. The disease is more common in the “meningitis belt” of sub-Saharan Africa. The risk is highest in people who visit these countries and who have prolonged contact with local populations during an epidemic.
- To reduce your risk of illness, wash your hands often, maintain healthy habits such as getting plenty of rest and try not to come into contact with people who are sick.

For more information, go to the Centers for Disease Control and Prevention website www.cdc.gov and search the disease you are interested in their A to Z Index in the blue bar at the top of the page.