What is bacterial meningococcal disease?

Meningococcal disease is a severe bacterial infection that typically occurs as meningitis (brain infection) and/or septicemia (bloodstream infection).

What causes bacterial meningococcal disease?

Although many different bacteria can cause meningitis, the bacteria Neisseria meningitidis is the most common cause of meningococcal disease. Four Neisseria meningitides subtypes (A, C, W, Y and B) cause most cases of meningococcal disease in the United States. Because most current college students have been vaccinated against types A, C, W and Y, type B (MenB) has been the cause of all meningococcal bacterial disease outbreaks on college campuses in the last few years. An outbreak occurs when multiple cases of the same serogroup (types) happen in a population over a short time period.

What are the symptoms?

Meningococcal disease can progress rapidly; early symptoms may not be recognized and are difficult to distinguish from other more common infections like influenza. Meningitis symptoms:

- Sudden onset of fever
- Headache
- Stiff neck
- Confusion
- Photophobia (sensitivity to light)
- Nausea/vomiting
- Drowsiness
- When meningococcemia is present, a dark purple or red rash may be present

Septicemia (meningococcemia) symptoms:

- Fatigue
- Vomiting
- Cold hands and feet
- Cold chills
- Severe aches or pain in the muscles, joints, chest or abdomen (belly)
- Rapid breathing
- Diarrhea
- In the later stages, a dark purple or red rash may be present

Most people exposed to the bacteria only carry it in their throats for a short period of time and do not become ill. If illness occurs, it typically happens within a few days of exposure to the bacteria. The disease is unpredictable, and no one really knows all the reasons why some carriers become sick while others do not and why some people have more severe disease than others.

How is bacterial meningococcal disease spread?

Neisseria meningitidis bacteria are generally transmitted through direct exchange of respiratory and throat aerosols and secretions by close personal contact. The bacteria are more easily transmitted in crowded settings.
such as parties and bars, etc. Smoking cigarettes/e-cigarettes/marijuana/hookahs damages the lining of the throat and increases the risk of developing meningococcal disease.

**What should I do if I have had close contact with a person who has a bacterial meningococcal illness?**

Close contact includes activities such as kissing, sneezing or coughing on someone, sharing water bottles, lipsticks, mouth pieces on musical instruments, sharing eating/drinking utensils, or sharing cigarettes with someone who is sick. If you have had a close contact with a person who has been diagnosed with a meningococcal illness, you should come to the NAU Campus Health Center.

**What vaccines are available to treat Meningococcal B?**

There are 2 available vaccines for Meningococcal B, Bexsero® (2 dose series) and Trumenba® (2 or 3 dose series). The same vaccine must be used for all doses. Both of these vaccines are new and were released for administration by the FDA in December 2014. Campus Health Services currently offers the both vaccines.

**What vaccine can be administered at the Immunization clinic on campus?**

The Immunization Clinic can administer either vaccine. Bexsero is given as a 2 dose series, administered at least one month apart. Trumenba is given as 2 doses 6 months apart or 3 doses, time zero, 1 month later and then 6 months from the first dose. Immunizations require an appointment which can be done online at our website: www.campushealth.nau.edu or by calling the appointment line: 928-523-8995.

**Should faculty and staff get vaccinated?**

Faculty and other staff without close contacts with cases should receive a vaccine if they have certain other medical conditions that may put them at greater risk of becoming infected if exposed.

**I received a meningitis vaccine when I was in high school. Do I need to get it again, if it is determined that I was in close contact with a diagnosed person?**

It is important to understand that the Meningococcal B (MenB) Vaccine is a new vaccine (approved by the FDA in 2014). Many college students have already received a vaccine as an adolescent that protects against four types of meningococcal disease (A, C, W, Y), but does not protect against serotype B.

**I don’t live in a residence hall. Do I still need to get vaccinated?**

Meningitis is spread through close contact such as kissing, sneezing or coughing on someone, sharing water bottles, or sharing eating/drinking utensils. Even though you live off campus, you may still be at risk for exposure.

The CDC recommends that students receive vaccinations for meningococcal Meningitis B.

**How can I prevent against the spread of meningococcal disease?**

- Get vaccinated against meningococcal disease
- Don’t smoke
- Cough into a sleeve or tissue
- Wash or sanitize your hands often
- If you are sick, stay home
Meningococcal Vaccines

Two MenB vaccines were approved by the Food and Drug Administration (FDA) in 2014 and 2015:

Bexsero® is approved for use in people 10-25 years of age as a 2-dose series. ▷
Trumenba® is approved for use in people 10-25 years of age as a 2 or 3-dose series.

Two FDA approved 4-strain (MCV4) conjugate vaccines have been available for many years:

Menveo® is approved for use in people 2 to 55 years of age.

Menactra® is approved for use in people 9 months to 55 years of age. Campus Health Services currently offers the Menactra vaccine.

Many college students have already received a 4-strain vaccine as an adolescent. The newer MenB vaccines complement the 4-strain vaccine and provide protection against serogroup B disease. Since it has only recently been licensed, few people have received MenB vaccine.

If you would like more information about meningococcal disease please visit https://www.cdc.gov/meningitis/.

There is always some (very small) risk of meningococcal disease in the community, but fortunately, it is a rare disease.

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