What is meningococcal disease?

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

What causes meningococcal disease?

The bacteria *Neisseria meningitidis* is the cause of meningococcal disease. Four *Neisseria meningitides* subtypes (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 disease outbreaks on college campuses in the last few years.

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.
What vaccines are available to treat Meningococcal B?

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

What vaccine is available at Campus Health Services?

The Immunization Clinic at Campus Health Services can administer the Bexsero® vaccine. This is a 2 dose series, administered at least one month apart. Immunizations require an appointment which can be done online at our website: http://nau.edu/Medical-Services/ or by calling the appointment line: 928-523-8995.

How can students receive the second dose of Bexsero® vaccine?

Students can schedule an appointment for the 2nd vaccine approximately 30 days after the 1st dose of the Bexsero® vaccine.

Should faculty and staff get vaccinated?

Meningococcal vaccination is recommended for some adults. Please see http://www.cdc.gov/vaccines/vpd-vac/mening/who-vaccinate.htm for further information if you feel you might be at risk.

I received a meningitis vaccine when I was in high school. Do I need to get it again?

It is important to understand that the Meningococcal B (MenB) Vaccine is a new vaccine (approved by the FDA in December of 2014). Many college students have already received a vaccine as an adolescent that protects against four types of meningococcal disease (A, C, W, Y). The vaccine 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 eating/drinking utensils. Even though you live off campus you may still be at risk of exposure.

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 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.

**How is 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.

**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 would like more information about meningococcal disease please visit [http://www.cdc.gov/meningitis/index.html](http://www.cdc.gov/meningitis/index.html). There is always some (very small) risk of meningococcal disease in the community, but fortunately, it is a rare disease.