



CALHOUN COUNTY

## Public Health Department

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269-969-6370

Fact Sheet

# Bacterial Meningitis

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## What is bacterial meningitis?

Meningitis is an infection of the membranes surrounding the brain and spinal cord. Meningitis can be caused by a bacterial, fungal, or viral infection. Bacterial meningitis is swelling of the membranes around the spinal cord or brain caused by bacteria.

Many kinds of bacteria may cause meningitis. The most common are *Streptococcus pneumoniae* (Pneumococcus), *Neisseria meningitidis* (Meningococcus), *Listeria monocytogenes*, and *Haemophilus influenzae* type B (Hib). Bacterial meningitis is a relatively rare disease and usually occurs in a single isolated event, however outbreaks can occur.

## Who can get bacterial meningitis?

Anyone can get bacterial meningitis. However, risk of infection is highest in:

- People in the same household, daycare center, or who have had close personal contact with someone who has bacterial meningitis
- Pre-teens and adolescents
- Infants
- College freshmen living in dormitories
- Military personnel living in barracks
- People who travel outside of the United States to areas where bacterial meningitis is more common such as sub-Saharan Africa
- Adults weakened by illness, medicine, or old age can also become ill from these infections
- Individuals with high alcohol consumption
- Individuals that have chronic nose and ear infections
- Individuals that sustained a head injury, had brain or spinal surgery, or have a widespread blood infection

## **What are the symptoms of bacterial meningitis?**

Symptoms can develop within hours after exposure, but typically appear within 3 – 7 days.

Symptoms in anyone over the age of 2 years include fever, severe headache, vomiting and nausea, stiff neck and back, sensitivity to light, confusion. In anyone under the age of 2 years, the classic symptoms of fever, headache, and neck stiffness may be absent or hard to detect. Infants infected can appear slow or inactive, be irritable, have vomiting, be feeding poorly, have a bulging fontanelle (the “soft spot” on a baby’s head), and have abnormal reflexes.

People with bacterial meningitis can have seizures, go into a coma, and even die. For this reason, **anyone who thinks they may have meningitis should see a doctor as soon as possible.**

## **How is bacterial meningitis spread?**

Bacterial meningitis is spread by direct contact with the nose or throat discharge of an infected person. This includes kissing, sharing utensils or drinking glasses, coughing, or sneezing.

A person may spread the bacteria from the time they are first infected until the bacteria are no longer present in discharges from the throat or nose. The length of time that a person is communicable varies according to the treatment used.

Some people carry the bacteria in their nose and throat without any signs of illness, but they can still spread the bacteria to others.

## **How common is bacterial meningitis?**

Bacterial meningitis is relatively rare in the United States. Clusters of more than a few cases are very uncommon.

## **What is the treatment for bacterial meningitis?**

It is important to see a doctor right away for prompt diagnosis and treatment. Bacterial meningitis is treated using antibiotics. Sometimes doctors will recommend that close contacts (household members, daycare center contacts, etc.) be given preventive treatment (prophylaxis) to reduce the chance that they will develop the illness.

There is a 10 percent death rate from bacterial meningitis, but if diagnosed and treated early enough, most people recover.

### **Are there complications from bacterial meningitis?**

It is important to continue to see your doctor on a regular basis after being diagnosed. Some possible complications include hearing, vision, and speech problems, muscle weakness, seizures, and learning delays (both physical and mental). Up to 25% of patients who recover may have chronic damage to the nervous system. Bacterial meningitis is fatal 10% to 14% of the time.

### **How can bacterial meningitis be prevented?**

#### **Vaccination**

There are vaccines for 4 types of bacteria that can cause meningitis:

- Meningococcal vaccines help protect against *N. meningitidis*
- Pneumococcal vaccines help protect against *S. pneumoniae*
- *Haemophilus influenzae* serotype b (Hib) vaccines help protect against Hib
- [Bacille Calmette-Guérin](#) vaccine helps protect against tuberculosis disease, but is not widely used in the United States

There are vaccines against Hib and Pneumococcus that are given as part of routine baby and toddler shots that help to protect against the bacteria.

The CDC recommends MenACWY vaccine for:

- All children aged 11-12 years old, with a booster dose at 16 years old.
- Children and adults who are at higher risk of disease due to:
  - Complement component deficiency
  - Compromised spleen function
  - HIV

The CDC recommends the MenB vaccine be given to people who are 10 years old or older who have risk factors for meningococcal disease.

#### **Prophylaxis**

When someone has bacterial meningitis, a doctor may recommend antibiotics to help prevent people around the patient from getting sick. Doctors call this prophylaxis. CDC recommends prophylaxis for:

- Close contacts of someone with meningitis caused by *N. meningitidis*

- Household members of someone with a serious Hib infection when the household includes one or more people at increased risk of Hib based on age, vaccination status, and/or immunocompromising conditions

Doctors or local health departments recommend who should get prophylaxis.

### **Healthy Pregnancy Practice**

Pregnant women should talk to their doctor or midwife about getting tested for group B *Streptococcus*. Women receive the test when they are 36 through 37 weeks pregnant.

### **Healthy Habits**

- Don't smoke and avoid cigarette smoke as much as possible
- Get plenty of rest
- Avoid close contact with people who are sick
- Wash your hands often with soap and water (use hand sanitizer if soap and water aren't available)
- Cover your mouth and nose with a tissue when you cough or sneeze (use your upper sleeve or elbow if a tissue isn't available)

### **How do I get more information on bacterial meningitis?**

Calhoun County Public Health Department

Phone: 269-969-6383

 [www.facebook.com/CCPublicHealthDepartment/](https://www.facebook.com/CCPublicHealthDepartment/)

Centers for Disease Control and Prevention

Phone: 800-232-4636 (800-CDC-INFO)

Website: <http://www.cdc.gov/meningitis/bacterial.html>

Spanish: <https://www.cdc.gov/meningitis/bacterial-sp.html>

Cleveland Clinic

Website: [my.clevelandclinic.org/health/diseases/11039-bacterial-meningitis](https://my.clevelandclinic.org/health/diseases/11039-bacterial-meningitis)

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*Updated 8/2023*