

Meningitis

Patient and Family Education

What is meningitis?

Meningitis is an infection of the fluid and meninges (coverings) of the brain and spinal cord. Meningitis can make children very sick, but death from meningitis is not very common.

What causes meningitis?

There are two types of meningitis - viral (also called aseptic) and bacterial.

- Many kinds of viruses can cause viral meningitis. The most common type of viral meningitis is enterovirus.
- Only a few kinds of bacteria (germs) cause bacterial meningitis.

A virus or bacteria can enter the body through the nose or mouth and travel to different places in the body. For most people, this causes an infection in the nose, throat or ear. Usually, the infection stops there. It becomes meningitis when the virus or bacteria travels through the bloodstream to the brain and spinal cord.

What is the difference between viral and bacterial meningitis?

- Viral meningitis is the most common form. It is usually less severe.
- Bacterial meningitis is very serious. The bacteria can destroy the tissue that they infect.

Is meningitis easy to catch?

You cannot catch meningitis simply from being in the same room for a short time with someone who has it. The germs that cause meningitis are spread from person to person by direct contact. This may include:

- Sharing a pacifier, toothbrush, eating utensils, or drinking glasses
- Drooling
- Shaking hands
- Kissing
- Breathing, sneezing or coughing on each other
- The virus may also be found in the stool of the infected person

Catching the virus or bacteria doesn't mean your child will get meningitis. Most people usually only get an ear, nose or throat infection.

Are children more likely than adults to catch meningitis?

Yes, for two reasons.

- Children have not yet built up antibodies against viruses and bacteria.
- Also, small children have closer contact with each other than adults do.

Is there a season for meningitis?

Viral meningitis occurs more in the summer and fall. Bacterial meningitis occurs more in the winter.

In case of an urgent concern or emergency, call 911 or go to the nearest emergency room right away.

This is general information and is not specific medical advice for your child. Always consult your child's doctor or other healthcare provider if you have any questions or concerns about the care or health of your child.

Meningitis, continued

What are the symptoms of meningitis?

Symptoms depend on the bacteria or virus that causes the illness. They also depend on how severe the disease is. Your child may have one or more of the following symptoms:

For children over 1 year old:

- The illness may start like a cold or flu and then develop into meningitis
- Fever (temperature over 100.4°F)
- Severe headache
- Stiff neck
- Bright lights that hurt the eyes
- Not able to eat or drink
- Nausea, vomiting and diarrhea
- Confusion
- Sluggish or listless
- May have a rash that does not go away when the skin is pressed.

For babies less than 1 year old:

- Fever (temperature over 100.4°F)
- Poor feeding
- Vomiting
- Change in temperament
 - Very irritable, even when held and soothed
 - High pitched cry
 - Arching of the back
 - Sleeps more than usual
 - Lethargy (does not smile or show interest in playing for at a least a few minutes during any four hour period)
- May have a rash that does not go away when the skin is pressed.

Many illnesses can cause these same symptoms, so meningitis can be hard for a parent to recognize.

What tests may my child have?

- Blood tests
- Spinal tap (a test to check the spinal fluid for bacteria. A needle is placed in the lower back to obtain the spinal fluid. Spinal fluid is the fluid in the coverings around the spinal cord and brain).
- CT scan (a special type of X-ray) to check for other problems in the brain.

What is the treatment?

Treatment depends on the cause of the meningitis. Your child's doctor will talk with you about specific care for your child. Some general guidelines may include:

- Viral there is no specific treatment
 - Antibiotics are not needed, but may be given until the cause of the meningitis is known.
 - Supportive care with rest, fluids and medicine for fever and headache.
- Bacterial
 - Intravenous (IV) antibiotics and fluids.
 - Steroids may be given to help reduce the inflammation of the meninges.
 - Supportive care with rest, fluids, oxygen and medicine for fever and headache.

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Meningitis, continued

Can meningitis be prevented?

There are 4 vaccines to help prevent certain kinds of meningitis:

- The Hib vaccine protects against haemophilus influenza B. It is one of the shots babies get during their regular immunizations.
- The pneumococcal conjugate vaccine (PCV7) is for children less than 2 years of age. It is one of the shots babies get during their regular immunizations.
- The pneumococcal vaccine (PPV) is for anyone older than 2 years of age. This vaccine may be given to certain high-risk children.
- The meningococcal vaccine is given to all children at 11 12 years of age. If a child did not get the vaccine at this age, it can be given anytime during the teen years. It is also given to adults who are at higher risk for meningitis, including college students and military recruits.

Good handwashing can also help prevent the spread of meningitis.

- Have your child wash his hands well if he has come in contact with someone with meningitis
- Wash hands before eating, after using the bathroom and after spending time in a public place.

What problems can result from bacterial meningitis?

Most children who get treatment right away recover well. Some severe problems may include:

- Blindness
- Speech loss
- Brain damage
- Seizures
- Paralysis

What should I do if one of my child's friends has meningitis?

It depends on whether or not your child had very close contact with the sick child.

- If your child had close contact, call your child's doctor or local health department **right away**. Depending on the type of meningitis, your child may need an antibiotic or vaccine.
- If your child did not have close contact with the other child, your child does not need to see the doctor unless he has symptoms.

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