Meningitis

Meningitis (men-in-JITE-es) is an infection of the tissue layer (meninges) around the brain and spinal cord.

What causes meningitis?
Meningitis is usually caused by a virus or bacteria in the cerebral spinal fluid (CSF), or liquid surrounding the brain and spinal cord. Viral meningitis is more common in the summer, and bacterial meningitis is more common during the winter. However, both can occur year-round. Fungal meningitis, caused by a fungus, is rare. This usually affects children with weak immune systems.

During a lumbar puncture:
• A healthcare provider holds your child in a position curled up like a ball.
• Another healthcare provider inserts a small needle between the bones of the spinal column into the spinal fluid space in the low back. This is below where the spinal cord ends.
• The pain is similar to the pain during an IV (tube into a vein) poke.

It can take 24–48 hours to get the results of blood and lumbar puncture tests.

How is meningitis treated?
Your child will be admitted to the hospital while you wait for the blood and lumbar puncture test results. The healthcare provider will usually give your child IV antibiotics. They may also give your child medicine for a viral infection caused by the herpes virus in some cases.

Your child will be under droplet isolation precautions for the first 24 hours after starting antibiotics. This means their illness can be spread by droplets from the mouth or nose when speaking, coughing, or sneezing. Healthcare providers must wear a mask and gloves at all times in your child’s hospital room.

Antibiotics treat bacterial meningitis, the most serious type of meningitis. Once the healthcare provider knows whether your child has meningitis and what type they have, they may stop the antibiotics.

Bacterial meningitis treatment
• Your child will receive antibiotics for at least 14–21 days.
• Your child usually has a special IV called a PICC (peripheral indwelling central catheter) line inserted so they can have some antibiotics at home.
• The healthcare provider may need to test the spinal fluid during and after treatment to make sure the antibiotics are working. This means your child may need more spinal taps.

• People who’ve been in close contact with your child while they were contagious may also need to take antibiotics to reduce their risk of getting bacterial meningitis.

Viral meningitis treatment
• The healthcare provider will stop the antibiotics, which are only effective against bacteria, not viruses.
• The healthcare provider may give your child an antiviral drug to treat certain types of viruses.
• Your child may not need medicine for viral meningitis, because the illness often goes away on its own. However, they may take medicine to help with symptoms like headaches, vomiting, and fever.

What happens while my child is in the hospital?
Your child may spend some time in the intensive care unit, where nurses will watch them closely. If your child is very sick, they may need IV fluids and feedings through an NG tube (tube from the nose to the stomach) for nutrition. Many children with meningitis are sensitive to light and noise, so nurses may reduce the light and noise around your child.

What are the risks of meningitis?
Some children develop problems after meningitis. These may include:
• Infected fluid in the head
• Hearing loss
• Learning problems
• Neurological problems

Children with bacterial meningitis usually have a hearing test before or shortly after going home. However, some problems may not show up for weeks or months. If you or your child’s healthcare provider suspect these problems, your child may need a CT scan or MRI (detailed images of the inside of the body).

How can meningitis be prevented?
Several vaccines can help prevent meningitis, including:
• Hib vaccines: Protect against bacteria that can cause bacterial meningitis
• Pneumococcal vaccines: Protect against many types of pneumococcal meningitis, which can cause bacterial meningitis

Hib and pneumococcal vaccines are part of the childhood immunization schedule. Your child receives them at 2, 4, and 6 months old. They also receive a booster at 12–15 months old and again before starting school.

If your child has an increased risk for meningitis between 2 months and 10 years old, they may receive the meningococcal vaccine during this time. Other children should get the meningococcal vaccine at 11 or 12 years old and a booster vaccine at 16 years old. This vaccine is required by most colleges. The Advisory Committee on Immunization Practices (ACIP) suggests children receive the vaccine less than 5 years before starting college or joining the military.