

Meningitis in children

Emergency Department factsheets



What is meningitis?

Meningitis is the inflammation of the meninges (the membrane lining of the brain and spinal cord).

What causes meningitis?

Meningitis is mostly caused by two types of germs — viruses or bacteria.

Viral meningitis

If meningitis is caused by a virus, it is called viral meningitis.

Viral meningitis is usually not as severe as bacterial meningitis, except in cases where the virus has also caused inflammation of the brain (encephalitis). Diseases which can cause viral meningitis or encephalitis include measles, mumps and polio. These can all be prevented with immunisation.

Viral meningitis usually goes away without specific treatment, as antibiotics do not work on viruses.

Bacterial meningitis

If meningitis is caused by a bacteria, it is called bacterial meningitis.

The two most common bacteria that cause meningitis include the meningococcus and the pneumococcus. These bacteria are naturally found in the nose and throat of one in ten people. They can be spread from person to person by coughing, sneezing, kissing, or sharing eating and drinking utensils. Very close contact is needed for the infection to be transferred to another person.

Bacterial meningitis can be very dangerous and cause long term problems including hearing loss and learning disability. It is important to attend follow-up appointments with your Paediatrician to monitor for these long term problems.

What are the symptoms?

Children with meningitis can get sick very quickly. Symptoms can occur within hours or over a few days. Unfortunately there are no exact symptoms to look for and not all occur at once. Many of these symptoms may also be caused by other illnesses.

Common symptoms are:

- high fever
- headache
- vomiting and loss of appetite
- lethargy and drowsiness
- irritability.

Other symptoms may include:

- stiff neck
- complaining that the light hurts their eyes (photophobia)
- rash (see below)
- a bulging soft spot at top/front of head (fontanelle) on a baby
- confusion
- fits (seizures)
- change in breathing pattern (fast or slow)
- difficulty walking or calf pain.

Rash

Not all children with meningitis will have a rash. The typical rash caused by meningitis is reddish or purple spots or bruises that do not turn white or disappear when you push on them.

Treatment

If you are worried your child may have meningitis, you must take them to your local doctor or hospital immediately.

If meningitis is suspected some tests will help to make a diagnosis and to find the cause. This will probably include a lumbar puncture and blood tests.

A lumbar puncture is a safe test where the doctor puts a needle into your child's lower back, between the bones of the spine, to take a sample of cerebrospinal fluid (CSF) – fluid that circulates around the brain and spinal cord. This is then tested in the laboratory to identify any infection.

The treatment of meningitis depends on the cause or type of germ involved. Your child will probably be given antibiotics directly into a vein (intravenous), until the type of meningitis (viral or bacterial) is diagnosed.

Children with viral meningitis may require very little treatment. The treatment does not include antibiotics, as antibiotics do not work on viruses. The way a child is affected by the illness is different for each child. Your child may be discharged home directly from the emergency service or they may stay in hospital for a number of days.

Children with bacterial meningitis will be treated with antibiotics, fluids and other medicines (e.g. steroids) that are given intravenously. Usually these antibiotics can cure bacterial meningitis. Children will usually stay in hospital for a number of days.

Once your child has improved and is safe to go home you will be given a plan of how to look after your child until they fully recover. This will include follow-up with your local doctor and appointments at the hospital with a Paediatrician.

If your child admitted to hospital with meningitis the staff caring for your child will need to make sure the infection does not spread to other people.

There are some ways to prevent meningitis from spreading.

- Your child will be placed in a single room. He/she will not be able to visit the playroom.
- Hospital staff will wear a mask, eye protection, gloves and a gown when they care for your child, at least for the first 24 hours after your child has been on antibiotics.
- Washing your hands with soap and water before and after touching your child and before leaving your child's room.
- In some types of meningitis, you and others that have had close contact with your child may need to take oral antibiotics as a precaution. You will be contacted by someone from the Public Health Unit to find out who may have had very close contact with your child.

Immunisations

Several of the bacteria that cause meningitis are prevented by the routine immunisations your child receives. To get full protection, a child needs to have all the recommended vaccine doses, preferably on time.

- Meningococcal C: 12 months
- Pneumococcal: 6 weeks, 4 & 6 months
- HiB: 6 weeks, 4, 6 & 12 months

Please talk to your local doctor or health service for more information.

Home care

- Most children with meningitis recover completely, but it can take some time.
- Frequent ongoing symptoms can include tiredness, headaches, difficulty concentrating, clumsiness & balance problems or mood swings.
- Some children may be left with permanent damage or disability, particularly after bacterial meningitis. Your doctor will be able to discuss any specific concerns for your child in more detail.
- Make sure your child is up-to-date with their immunisations.
- Viral meningitis - keep your child away from child care, school or other places until well.
- Bacterial meningitis - keep your child away from child care, school or other places until they are well and they have finished the full course of antibiotics.

Follow-up

If your child is discharged directly from the emergency service, early review (within 24 hours) is advisable with your local doctor as needed.

Seeking help

In a medical emergency, go to the nearest hospital emergency department or call an ambulance (dial 000).

See your local doctor or health care professional if the condition is not improving or keeps coming back.

For other medical problems see your local doctor or health-care professional.

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