

MENINGITIS

Meningitis is an infection of the protective membranes that surround the brain and spinal cord.

This infection causes these membranes (the meninges) to become inflamed, which in some cases can damage the nerves and brain.

SIGNS AND SYMPTOMS OF MENINGITIS

Anyone can get meningitis, but babies and young children under five years of age are most at risk. A baby or young child with meningitis may:

- have a high fever, with cold hands and feet
- vomit and refuse to feed
- feel agitated and not want to be picked up
- become drowsy, floppy and unresponsive
- grunt or breathe rapidly
- have an unusual high-pitched or moaning cry
- have pale, blotchy skin, and a red rash that doesn't fade when a glass is rolled over it
- have a tense, bulging soft spot on their head (fontanelle)
- have a stiff neck and dislike bright lights
- have convulsions or seizures

The above symptoms can appear in any order, and some may not appear at all.

The rash can be harder to see on dark skin, in which case check for spots on paler areas like the palms of the hands, soles of the feet, on the tummy, inside the eyelids and on the roof of the mouth.

HOWEVER, DON'T WAIT FOR A RASH TO DEVELOP. IF YOUR CHILD IS UNWELL AND GETTING WORSE, SEEK MEDICAL HELP IMMEDIATELY.

In older children, teenagers and adults, the symptoms of meningitis can include:

- a fever, with cold hands and feet
- vomiting
- drowsiness and difficulty waking up
- confusion and irritability
- severe muscle pain
- pale, blotchy skin, and a distinctive rash (although not everyone will have this)
- a severe headache
- stiff neck
- sensitivity to light (photophobia)
- convulsion or seizures

Again, these symptoms can appear in any order, and not everyone will get all of them.

DON'T WAIT FOR A RASH TO DEVELOP. SEEK IMMEDIATE MEDICAL HELP IF SOMEONE IS UNWELL AND DISPLAYS THE SYMPTOMS OF MENINGITIS.

MENINGITIS

THE GLASS TEST

If you press the side of a clear glass firmly against the skin and the rash doesn't fade, it's a sign of meningococcal septicaemia.

A person with septicaemia may have a rash of tiny "pin pricks" that later develops into purple bruising.

A FEVER WITH A RASH THAT DOESN'T FADE UNDER PRESSURE IS A MEDICAL EMERGENCY, AND YOU SHOULD SEEK IMMEDIATE MEDICAL HELP.

TYPES OF MENINGITIS

There are two types of meningitis. They are:

- bacterial meningitis caused by bacteria such as *Neisseria meningitidis* or *Streptococcus pneumoniae* and through close contact
- viral meningitis caused by viruses that can be spread through coughing, sneezing and poor hygiene

BACTERIAL MENINGITIS

Bacterial meningitis is very serious and should be treated as a medical emergency. If the bacterial infection is left untreated, it can cause severe brain damage and infect the blood (septicaemia).

In 2011-12, there were around 2,350 cases of bacterial meningitis and septicaemia in the UK. The number of cases has dropped since the introduction of vaccines that protect against many of the bacteria that can cause meningitis, including the meningitis C vaccine, MMR vaccine and pneumococcal vaccine.

It's essential to know the signs and symptoms, and to get medical help if you're worried. Bacterial meningitis most commonly affects children under five years of age, particularly babies under the age of one. It's also common among teenagers aged 15 to 19.

VIRAL MENINGITIS

Viral meningitis is the most common, and less serious, type of meningitis. It's difficult to estimate the number of viral meningitis cases, because symptoms are often so mild that they're mistaken for flu.

Viral meningitis is most common in children and more widespread during the summer. Read more about the causes of meningitis.

DIAGNOSING MENINGITIS

Diagnosing meningitis can be difficult because it often comes on quickly and can be easily mistaken for flu, as many of the symptoms are the same.

However, it's very important to seek immediate medical help if you notice any of the symptoms of meningitis, particularly in a young child.

This may mean going to the accident and emergency (A&E) department of your local hospital in the middle of the night.

MENINGITIS

DON'T WAIT FOR A PURPLE RASH TO APPEAR, BECAUSE NOT EVERYONE WITH MENINGITIS GETS ONE.

If meningitis is suspected, treatment will usually be started before the diagnosis is confirmed. This is because some of the tests can take several hours to complete, and it could be dangerous to delay treatment.

The doctors will carry out a physical examination to look for signs of meningitis (see above) or signs of septicaemia, such as a rash. They will also carry out a number of other tests to confirm the diagnosis.

TREATING MENINGITIS

Viral meningitis usually gets better within a couple of weeks, with plenty of rest, painkillers for the headache and anti-sickness medication for the vomiting.

Bacterial meningitis is treated with intravenous antibiotics (delivered through a vein in the arm). Admission to hospital will be needed, with severe cases treated in intensive care, so the body's vital functions can be monitored and supported.

If antibiotics don't work, you will need to be in hospital for a week or less. If the infection is more severe, you may need to stay in for longer.

OUTLOOK

Several decades ago, the outlook for bacterial meningitis wasn't good, and almost everyone who had the condition would die.

Nowadays, most deaths are caused by septicaemia (blood poisoning) rather than meningitis. Meningococcal disease, meningitis or septicaemia caused by *Neisseria meningitidis* bacteria results in about 1 death in every 10 cases.

Up to a quarter of people may experience complications of meningitis, such as hearing loss, after having bacterial meningitis.

VACCINATION

CHILDREN

The best way to prevent meningitis is by ensuring vaccinations are up-to-date. Children in the UK should receive the available vaccines as part of the childhood vaccination programme. Read more about meningitis vaccination.

TEENAGERS AND ADULTS

Teenagers and university students are to be offered a vaccination to prevent meningitis W disease. This is because cases of meningitis and septicaemia (blood poisoning) caused by Men W bacteria are rising, because of a particularly deadly strain.

From August 2015, all 17 and 18-year-olds in school year 13 and first-time university students up to the age of 25 will be offered the Men ACWY vaccine as part of the NHS vaccination programme. The Men ACWY vaccine protects against four different causes of meningitis and septicaemia meningococcal (Men) A, C, W and Y diseases.

MENINGITIS

It's also important to check your travel vaccinations are up-to-date before travelling in certain parts of the world.

MENINGITIS B VACCINE

In March 2014, the Joint Committee on Vaccination and Immunisation (JCVI) the independent government advisory group recommended that the meningitis B vaccine be routinely used in the UK.

The JCVI has said that the vaccine should be offered to babies at 2, 4 and 12 months of age.

However, a number of issues, such as cost and supply, still need to be addressed, so it's likely to be many months before the vaccine is introduced.

ADDITIONAL INFORMATION

MENINGITIS UK
25 Cleeve Wood Road, Downend, Bristol, BS16 2SF
Tel : 0117 373 73 73
www.meningitisuk.org

MENINGITIS RESEARCH FOUNDATION
Midland Way, Thornbury, Bristol, BS35 2BS
Tel : 01454 281811
www.meningitis.org