What is meningitis?

Meningitis is an illness where the covering of the brain and spinal cord become inflamed. It can be caused by viruses, bacteria or other agents. **Viral meningitis** is rarely serious and is not helped by antibiotics. **Bacterial meningitis** is less common than viral meningitis, but is a serious illness and needs urgent treatment with antibiotics. The most common of the bacteria that cause meningitis is the **meningococcus**. These bacteria can also cause **blood poisoning (septicaemia)** which is the more serious form of the disease.

Where are the bacteria found?

These bacteria are very common. At any one time 10-20% of us carry the meningococcus in our nose and throat without knowing it.

How do we pick up the bacteria?

We can pick up the meningococcus if we have very close prolonged contact (e.g. living in the same house or mouth kissing) with someone carrying it. The contact has to be close because the bacteria are weak and cannot live for more than a few seconds outside the body.

The bacteria cannot be picked up from water supplies, swimming pools or household objects like pillow or cups.

If the bacteria are so common, why do so few of us develop the illness?

Even though we come into contact with the meningococcus regularly, our bodies are able to fight off the infection. A tiny number of people who pick up the bacteria develop meningitis or septicaemia or both within 2-12 days of doing so. We do not yet fully understand why the bacteria cause such severe illness in these people. It may be due to weakness in their body defence systems.

It is rare for two or more cases to occur together. The majority occur as single cases, with no increased risk to others, e.g. in the school or workplace.

What precautions are taken if there is a case?

The risk to contacts is generally low but increases in people who live in the same household as a case of meningococcal disease. For this reason a short course of antibiotics is offered to such contacts. The antibiotics are given to kill the meningococci that they may be carrying in their nose or throat, and so reduce the risk of infection to others. These close contacts may still develop the disease despite taking the antibiotics and should be aware of the signs and symptoms as below.

Other contacts are not usually offered antibiotics as their risk is far lower and because the antibiotics can also destroy organisms that live in the nose and throat that may give protection against the disease.

Vaccines are available against some strains of the meningococcus (groups A, C W135 and Y). They are also given to the household and very close contacts if the patient is confirmed to have a group A, C W135 or Y meningococcal infection. Men B vaccination is available in the UK, but is not part of the primary immunisation schedule. At present it is only recommended for ‘at risk’ contacts (asplenia, splenic dysfunction or known complement deficiency) of cases who have
been diagnosed with a meningitis group B infection; and for contacts of meningitis B clusters and outbreaks.

**What to watch out for**

**Meningitis**
- Severe headache
- Stiff neck
- Dislike of bright lights
- Fever
- Vomiting
- Drowsiness or altered consciousness
- Dislike of bright lights
- Neck stiffness
- Rash of small red-purple spots or bruises anywhere on the body.

If such a non-fading rash is present, the disease is in an advanced stage and urgent treatment should be sought.

In babies watch for the following & remember these may not all be present
- Fever
- Refusing feeds or vomiting
- Arching of the head and back
- Bulging of the soft spot on the head
- Blank and staring expression
- Abnormally drowsy
- Agitated and fretful
- Turning away from light
- Shrill moaning cry especially when handled
- A rash as above

**Septicaemia**
- Rash (develops anywhere on body)
- Fever/vomiting
- Cold hands and feet/shivering
- Rapid breathing (or abnormal breathing)
- Stomach/joint/muscle pain
- Drowsy and less responsive/vacant

**Not all of these symptoms may be present or show at once**

Fever • severe headaches • vomiting • drowsiness or altered consciousness • dislike of bright lights • neck stiffness • rash of small red-purple spots or bruises anywhere on the body.

**The rash may not fade when pressed firmly using a glass. If such a non-fading rash is present, the disease is in an advanced stage and urgent treatment should be sought.**

**Find out more**

Meningitis Now information about meningitis and the work of the meningitis trust

The Meningitis Research Foundation [www.meningitis.org](http://www.meningitis.org); 0808 800 3344

NHS choices – Meningitis [http://www.nhs.uk/conditions/Meningitis/Pages/Introduction.aspx](http://www.nhs.uk/conditions/Meningitis/Pages/Introduction.aspx)