

Fact Sheet

Meningococcal infection



What is meningococcal infection?

Meningococcus is a bacterium (germ), which can invade the bloodstream. This is called meningococcal septicaemia or blood poisoning. It can also invade the lining of the brain (the meninges). This is called meningococcal meningitis. It is treatable with antibiotics.

Meningococcal septicaemia – what are the symptoms?

Meningococcal septicaemia can be very serious, it is a medical emergency and the local doctor should be called urgently, or the child taken immediately to the hospital. Children or young adults with meningococcal septicaemia are usually very ill. They usually have a high fever and can sometimes develop a red or purple rash (this looks like purple dots or bruises) however, it is important not to wait to see for a rash as it does not always develop. A useful test is to press a glass against the rash; if it stays the same colour and doesn't fade, then this is a more worrying rash. Children or adults with meningococcal septicaemia usually have many of the following symptoms:

- High fever.
- Red or purple rash.
- Cool hands and feet.
- Look pale.
- Lethargy and/or drowsiness.
- Have a fast heart rate.
- Diarrhoea and/or vomiting.
- Joint or muscle pains.

It is important to remember that not all these symptoms can show at once.

Meningococcal meningitis – what are the symptoms?

Meningitis is an infection of the lining of the brain (see also the [Meningitis](#) fact sheet). About half the children or adults with meningococcal meningitis have the same rash as those with meningococcal septicaemia. Some have no rash.

Children or adults with meningitis usually have many of the following symptoms:

- Fever.
- Headache.
- Stiff neck.
- Lethargy and/or drowsiness.
- Irritability or confusion.
- Loss of appetite or vomiting.
- Complain that light hurts their eyes.
- Look pale or unwell.
- Have cold hands and feet.
- Have a fast heart rate.
- Joint or muscle pains.
- May become unconscious.
- May have convulsions.



Purple rash on a child's arm

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

Remember that not all these symptoms can show at once.

Carriers

10-30% of the population can carry a meningococcus in their throat at any time without getting sick. These people are "carriers" and they do not become ill at all. We don't fully understand why some people get sick and others don't. People who smoke are more likely to be carriers.

How are meningococci spread?

The meningococcus bacteria is spread from the upper respiratory tract from one person to another person as a result of close contact with his/her nose or mouth, eg. saliva. This may occur for example through coughing, sneezing or kissing. When in contact with a carrier, a person may also become a carrier or they may develop the disease. Becoming sick with meningococcal disease is more likely in the very young, following a recent cold or with exposure to a lot of tobacco smoke, particularly indoors or in a car.

What is the outlook?

Most children and adults with meningococcal septicaemia or meningitis will recover with antibiotic treatment, without suffering any long-term problems. The illness can sometimes be devastating and about one in 10-20 people die from it. Sometimes, survivors of meningitis have long-term problems, such as

deafness. Skin lesions can sometimes be severe enough to require skin-grafting. Very rarely children or young adults may get gangrene and lose fingers, toes or even one or more limbs. With early antibiotic treatment most cases get completely better.

What is the treatment?

The bacteria respond rapidly to treatment with an antibiotic, such as penicillin. Other treatment, such as a drip to give fluids, is also needed.

Prevention

No vaccine offers 100% protection against meningococcal disease. So even if you child has had their meningococcal vaccination, please take them to your doctor or to hospital straight away if they have any symptoms of meningococcal disease.

There are 5 main serogroups (or strains) of meningococci, they are called A, B, C, W₁₃₅ and Y. In Australia, the most common cause of meningococcal disease is serogroup B. There is no licensed vaccine against serogroup B meningococcal disease. All serogroups can affect people of any age but serogroup B cases occur especially in children aged less than 5 years old.

The next most common is serogroup C. A vaccine against serogroup C meningococcal disease has been used in Australia since 2003. All children aged 12 months of age are offered this vaccine as part of the National Immunisation Program. The duration of protection is unknown but may be many years if given at 12 months of age.

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Older children and adolescents were also eligible for free vaccine until the end of June 2007. If they missed out on the free meningococcal serogroup C vaccination and you would still like them to receive this vaccine, talk to your doctor. Your doctor will need to give you a prescription and you will need to buy the vaccine from the pharmacy.

There is another vaccine which is used for serogroup A, C, W135 and Y meningococcal disease. This vaccine doesn't work in the same way as the serogroup C vaccine we talked about above. The serogroup A, C, W135 and Y vaccine doesn't provide more than a few years protection and is usually given to people travelling overseas for example to parts of Africa where lots of serogroup A disease occurs or to people attending the Hajj pilgrimage.

When a child comes into hospital with meningococcal infection, a member of the Public Health Unit will contact your family to arrange antibiotics and to ask a few questions about where you child has been in the last few days before getting sick. This is so that the Public Health Unit can check that there are no other meningococcal disease cases that have occurred at the same time as your child getting sick and to make sure that any one who needs antibiotics can get them. If pregnant, another antibiotic will be given instead. As meningococcal infection

is an infection that has to be notified to the Public Health Unit (PHU) in your area, you will also be contacted by the PHU whose role would be to assist in contacting recent close contacts of your child (e.g. child care).

Remember

- The great majority of children with fever and rash do not have a milder viral infection and do not have meningococcal disease.
- However, as meningococcal infection is serious, if you suspect your child may have meningococcal infection because of the symptoms mentioned above, take your child to your doctor or hospital straight away, even if they have had the meningococcal C vaccination.
- If your child has turned 12 months of age and has not yet received their meningococcal C vaccine, contact your doctor.

This fact sheet is for education purposes only.
Please consult with your doctor or other health professional to make sure this information is right for your child.

This document was reviewed on Thursday 5th July 2007.

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