

## What is the 'meningococcus'?

The meningococcus is a bacterium that can be found at the back of the throat or in the nose in about 10% of the community at any given time. Although most people who 'carry' this germ in their throat or nose remain quite well, they are able to spread it to others, a few of whom may subsequently become very ill. (It is probably spread in the fine droplets that are shed through coughing, sneezing and spluttering.)

## What is meningococcal disease?

Meningococcal disease is a severe infection that occurs when the meningococcal germ 'invades' the body from the throat or nose. It does not occur in people who carry the germ but rather occurs in people who have very recently (within the previous 7 days) acquired the germ from a healthy 'carrier'.

Meningococcal disease occurs in two main forms or it can occur as a combination of these two forms.

Meningococcal septicaemia occurs when the germ invades the bloodstream and causes blood poisoning. Meningococcal meningitis occurs when the germ infects the outer lining around the brain and spinal cord.

Meningococcal septicaemia, also known as meningococcaemia, can be very serious and cause death after even a very short illness. The patient usually is obviously sick, has a fever and may have marked joint or muscle pains; and there is often a rash. The rash may start anywhere on the body as tiny red or purple spots but they soon spread and enlarge to look like fresh bruises; the rash usually does not fade when pressure is applied to it, eg. with the thumb.

## The rash must be taken seriously as the person requires urgent medical attention.

The typical symptoms of meningococcal meningitis include fever, a stiff neck, severe headache, dislike of bright lights, vomiting, joint or muscle pains, drowsiness and even coma; there may also be a rash with the same symptoms as those described above. The symptoms of meningococcal meningitis in young babies may differ from those detailed above and include: refusing feeds, vomiting, a high pitched moaning cry, irritability and a dislike of being handled, a blank staring expression, lethargy or drowsiness and a pale blotchy complexion.

## How easy is it to catch meningococcal disease?

Although the germ is spread in droplets that are shed from the nose or throat, it is fortunately not easy to catch the disease. This is because the meningococcal germ does not survive for long outside the body. Close and prolonged contact with a carrier is usually required for the germ to spread to other people.

Because the germ is not easily spread, meningococcal disease is uncommon. Young children under 5 years of age, and young adults (15-24 years of age) are at highest risk of acquiring meningococcal disease, and

there is usually a seasonal increase in the winter to early spring months.

Even though it is hard to catch and uncommon, meningococcal disease is a feared infection that is often featured in the media. This is because it can be fatal, even in healthy young adults, and because outbreaks of meningococcal disease, although very infrequent, can occur.

## How can meningococcal disease be prevented?

Cigarette smoking, both active and passive, appears to increase the risk of a person developing meningococcal disease. This is yet another reason to stop smoking and to stop adults smoking near young children.

There is a small, but real increased risk for those who live in the same house as a person with meningococcal disease to also develop the disease. This is because the carrier who infected the patient is able to spread the germ to others. There is no accurate and quick test to identify the carrier so all of the 'household contacts' of the patient are regarded as potential carriers.

Instead, public health authorities attempt to contact these household contacts to explain to them the nature of the disease and to dispense a short course of an antibiotic. The purpose of the antibiotic is to eliminate the germ from the nose or throat of the carrier. Cases of disease may occur despite taking the antibiotic so the contacts must also be told to be aware for the symptoms of the disease.

Sometimes other contacts are also identified by public health authorities and given the above-mentioned advice and antibiotic. However it is very important that the public health authorities are involved in the identification of other contacts because the antibiotic should be used very carefully.

## Is there a vaccine against meningococcal disease?

There is no vaccine to protect against Australia's most common strain of the meningococcal germ (the group B strain). However a vaccine is being trialled in New Zealand to protect against New Zealand's specific group B strain. There is a safe, effective vaccine that protects against Australia's second commonest meningococcal strain (the group C strain).

Commencing January 2003 this vaccine was included on the Australian Standard Vaccination Schedule for all children at 12 months of age. Nationally there is a catch-up program (2003-2006) to vaccinate all children and adolescents who turned 1-19 during 2003, ie: born 1984 -2001. For individuals born prior 1984, the vaccine can be obtained at a cost from some council immunisation clinics or by prescription from a medical practitioner.

## Disclaimer

The information provided on 'Meningococcal C Vaccination Program' is intended for educational purposes only. It should not replace advice provided by your doctor, nor should it be used for diagnosing; treating or managing the illness/disease described. Always seek the medical advice of your doctor if you have any health concerns.

## How can you tell if a baby has meningococcal disease?

## How can you tell if someone has meningococcal disease?

Not all these symptoms may show at once

Not all these symptoms may show at once



Fever



Fretfulness



Child is difficult to wake



Pale or blotchy skin



Rash or red-purple spots or bruises



High pitched moaning cry



Refusing feeds or vomiting



Fever



Headache



Drowsiness or confusion-coma



Neck stiffness, joint pains



Rash of red-purple spots or bruises



Dislike of bright lights



Vomiting

See page 37 from the CDNA Meningo Guidelines at:  
[http://www.health.gov.au/pubhlth/cdi/pubs/pdf/mening\\_guide.pdf](http://www.health.gov.au/pubhlth/cdi/pubs/pdf/mening_guide.pdf)

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### References:

- CDNA Meningococcal Disease in Australia: Guidelines for the early clinical and public health management. (June 2001)
- NHMRC (2003) The Australian Immunisation Handbook, 8<sup>th</sup> edition (in print).
- Guidelines for the early clinical and public health management of Meningococcal Disease in Australia. *CDI 2001*
- Changes to the management of meningococcal disease in Australia. *CDI Vol 28 No.2 2004*

### Websites (Australia):

- The Meningitis Centre:  
<http://www.ichr.uwa.edu.au/affiliations/meningitis/>
- The Immunise Australian Campaign:  
<http://immunise.health.gov.au/>
- [http://www.health.gov.au/pubhlth/cdi/pubs/pdf/mening\\_guide.pdf](http://www.health.gov.au/pubhlth/cdi/pubs/pdf/mening_guide.pdf)

Updated October 2004