

Meningococcal disease - immunisation

Meningococcal disease is any infection caused by bacteria (germs) called meningococci, also known as *Neisseria meningitidis*. Although meningococcal disease is uncommon, it is very serious. Meningococcal disease commonly occurs in one of two forms – meningitis, which means inflammation of the protective covering of the brain and spinal cord, or septicaemia, meaning infection within the blood stream and widespread through the body.

There are different groups of meningococci, but group B and group C have been responsible for most cases in Victoria. The meningococcal C vaccine provides good protection against serogroup C strains and the number of cases of C serogroups has decreased following the introduction of this vaccine.

Unfortunately there is no vaccination currently available in Australia for serogroup B, although there is a vaccine being trialled in 2012.

Meningococcal bacteria live naturally in the back of the nose and throat of approximately ten per cent of the population. Occasionally, a disease-causing meningococcal strain is passed to someone who has no immunity to these bacteria, and this can result in a case of meningococcal disease. If infection is diagnosed early and antibiotics are given quickly, most people make a complete recovery.

Symptoms of meningococcal disease

Symptoms may include:

- Headache
- Photophobia (dislike of bright lights)
- Fever
- Vomiting and diarrhoea
- Neck stiffness or aching
- Backache
- Joint pains and sore muscles
- General malaise
- Drowsiness, confusion
- Rash of red-purple pinprick spots or larger bruises.

Infants and young children may also present with irritability, fretfulness, grunting and moaning, along with refusing to take feeds.

Symptoms can appear very quickly, and people with meningococcal disease can get much worse within a few hours. If you or someone close to you has symptoms consistent with meningococcal disease, it is important that the affected person seeks medical attention immediately.

How meningococcal bacteria are spread

Meningococcal bacteria are difficult to spread. They are only passed from person to person by regular, close, prolonged household and intimate contact with secretions from the back of the nose and throat. They cannot be picked up from water supplies, swimming pools, buildings or factories.

Research shows that low levels of contact with an infected person's saliva are unlikely to transmit meningococci bacteria. In fact, saliva has been shown to slow down the growth of meningococci.

Serotype C vaccines

There are two different types of serogroup C vaccines – ‘conjugate vaccines’ and ‘polysaccharide vaccines’.

Conjugate vaccines

The conjugate vaccines can be given depending on a person’s age and medical risk factors, such as having a spleen removed. These protect against serogroup C disease and two new conjugate vaccines (Menveo and Menactra) also protect against serogroups A, Y and W-135. and provide long-lasting immunity.

Since 2003, a single dose of conjugate meningococcal serogroup C vaccine has been offered free to all children in Australia on turning 12 months of age, along with their other routine immunisations. If your child was born from 2002 and has not received the vaccine, a ‘catch-up’ immunisation can be arranged with your doctor.

Immunisation with the conjugate vaccine is also recommended (at a cost) for:

- Any person who has had meningococcal disease (including group C), and was not immunised before having the disease
- Any member of a household who is in close contact with someone who has contracted the disease
- Any person with a damaged (or no) spleen
- Laboratory staff who frequently handle the meningococcal bacteria.

Polysaccharide vaccines

The meningococcal polysaccharide vaccines provide protection against serogroups A, C, Y and W-135. Unfortunately, protection is only provided for about three years with these vaccines. They are available (at a cost) and cover several serogroups not commonly seen in Australia. They are useful for people travelling to places such as Africa, and for pilgrims to the Hajj in Saudi Arabia, where these serogroups are more common. These vaccines are not recommended for children under the age of two years.

Before immunisation for meningococcal disease

Before receiving the meningococcal vaccine, tell your doctor or nurse if you or your child:

- Has had any other vaccines in the last six months
- Is unwell with a temperature over 38.5°C on the day of immunisation
- Has ever had a serious reaction to any vaccine or if they have allergies.

Side effects of the meningococcal vaccine

Severe reactions to the vaccine are rare and are much less common than the effects that occur with the disease itself. There is a very rare risk of a serious allergic reaction to any vaccine. It is important to stay at the clinic where the immunisation was given for 15 minutes after the immunisation.

Some people may experience a mild reaction to the vaccine and these may include:

- A mild temperature
- Loss of appetite
- Irritability or crying – your child may appear generally unsettled
- Some swelling, soreness or redness at the injection site
- Headache (usually occurs in adolescents/adults).

The side effects of immunisation can be reduced by:

- Drinking extra fluids
- Not overdressing
- Taking paracetamol to reduce fever – check the label for the correct dose (especially for children)
- Placing a cold, wet cloth over the sore injection spot.

If you are concerned about any reaction to the vaccine, contact your doctor or hospital.

Immunisation and HALO

The immunisations you may need are decided by your health, age, lifestyle and occupation. Together, these factors are referred to as HALO.

Where to get help

- In an emergency, call triple zero (000)
- Your doctor
- Immunisation, Department of Health Victoria Tel. 1300 882 008
- Your local maternal and child health centre
- NURSE-ON-CALL Tel. 1300 60 60 24 – for expert health information and advice (24 hours, 7 days)
- Emergency department of your local hospital
- National Immunisation Infoline Tel. 1800 671 811

Things to remember

- There are different groups of meningococci, but group B and group C have been responsible for most cases in Victoria.
- Meningococcal C vaccine provides good protection against serogroup C strain of meningococcal disease.
- There is no vaccination currently available in Australia for serogroup B, although there is a vaccine being trialled in 2012.
- It is important to go back to the doctor or hospital for immediate medical assistance if you are concerned about any reaction to immunisation.

This page has been produced in consultation with, and approved by:

Department of Health - Communicable Disease Prevention and Control Unit

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