
Meningococcal disease – immunisation

Summary

- Meningococcal disease is caused by different strains of disease designated by letters of the alphabet, including meningococcal strains A, B, C, W and Y.
 - Meningococcal vaccines are available against B strain, and a combination vaccine against ACWY strains.
 - Meningococcal vaccines are available to protect against disease strains A, B, C, W and Y.
 - The National Immunisation Program schedule provides a free meningococcal ACWY vaccine for children at 12 months of age or a free catch-up dose for unimmunised people under 20 years of age who have not previously had their meningococcal C vaccine at 12 months.
 - Commencing from April 2019, a free meningococcal ACWY school based vaccination program will be provided on the National Immunisation Program for secondary school students in Year 10, or age equivalent. Young people aged 15 to 19 years of age, who have not already received the vaccine in school, will be able to be vaccinated by their immunisation provider. Meningococcal vaccines are recommended for infants, children, adolescents, young adults, people at increased risk of meningococcal disease due to certain medical conditions or immunosuppressive medications and anyone wishing to protect themselves from meningococcal disease.
 - Common immunisation side effects are usually mild and temporary (occurring in the first few days after immunisation).
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Meningococcal disease is any infection caused by bacteria called *Neisseria meningitidis* (also known as meningococcal bacteria). Although meningococcal disease is uncommon, it is very serious. About 10 per cent of the population carry meningococcal bacteria in their throat without becoming unwell. These people are known as 'carriers'. These people can pass the disease on to someone else. Invasive meningococcal disease occurs when these bacteria, enter the bloodstream to cause **septicaemia** (infection in the blood, also known as 'bacteraemia') or meningitis (inflammation of the membrane covering of the brain). Occasionally, severe infection can also occur in the joints, throat, lungs or intestines.

Symptoms include limb pain, sudden high fever, headache, vomiting, stiff neck or sore muscles, sometimes followed by a red or purple rash.

The disease can progress very quickly and can lead to death or permanent disability. Up to 10 per cent of infected people die, even if they are treated with the right antibiotics. In cases of meningococcal disease an average of one in 10 people die, two in 10 people will be left with a disability and 10/10 will be hospitalised.

There are different strains (serogroups) of meningococcal bacteria designated by letters of the alphabet, including meningococcal serogroups A, B, C, W and Y..In recent years some of these meningococcal strains have increased across Australia.

Meningococcal bacteria are passed from person to person by close, prolonged household and intimate contact. In a small number of people, the bacteria can enter the bloodstream and cause invasive meningococcal disease, which can develop very quickly and causes death in about five to 10 per cent of cases.

Immunisation against meningococcal disease

Immunisation against meningococcal bacteria is the best protection against meningococcal disease. It is important to know that even if you have had meningococcal disease, you may not develop lifelong immunity and are still advised to be immunised against this life-threatening disease.

Meningococcal ACWY vaccination

Immunisation against meningococcal serogroup ACWY disease is available for free in Victoria as part of the

National Immunisation Program schedule for:

- children aged 12 months
- children from 13 months to under 20 years of age, who have not previously had their meningococcal C vaccine at 12 months.
- From April 2019 the vaccine is free to all young people in Year 10 of secondary school, as well as those young people not in secondary school and aged 15 to 19 years.

Young people in this age group are more likely to spread the disease to others. One in five people in this age group carry the bacteria that causes meningococcal disease. Immunisation experts have advised that immunising this age group can prevent spread to other age groups. By offering a free vaccination to this age group, we can help protect the wider community by reducing the spread of the disease.

Eligible young people not in secondary school (either away on the day the vaccine was given or do not attend secondary school) can attend either a local government community immunisation session, or a General Practitioner (GP) to receive the free meningococcal ACWY vaccine. A consultation fee may be charged by the GP. Contact your local government to find out when and where immunisation sessions are held:

- Find **my local government**
- Find my **nearest immunisation provider**

Immunisation against meningococcal serogroups A, C, W and Y is available in a four-in one combined vaccine for purchase by anyone wishing to protect themselves or their family. It is recommended for high risk groups including:

- travellers to countries where epidemics of meningococcal disease occur
- people with poor functioning or no spleen, a complement component disorder, HIV, current or future treatment with eculizumab or a haematopoietic stem cell transplant
- laboratory personnel who frequently handle meningococcal bacteria.

Meningococcal B vaccination

Immunisation against meningococcal serogroup B disease is available on private prescription, but is not available free under the National Immunisation Program schedule. This vaccine is recommended for high risk groups, including:

- infants and young children, Children aged less than five years, particularly infants aged less than two years, have the highest numbers of meningococcal disease caused by meningococcal B strains • adolescents aged 15 to 19 years
- Special risk and immunosuppressed patients -children and adults with medical conditions that place them at a high risk of meningococcal disease, such as a poor functioning or no spleen, a complement component disorder, HIV, current or future treatment with eculizumab or a haematopoietic stem cell transplantlaboratory personnel who frequently handle meningococcal bacteria.

Meningococcal serogroup B vaccine commonly causes fever in children younger than two years of age and skin reactions at the injection site. Paracetamol is recommended 30 minutes before or as soon as practicable after meningococcal B vaccine for children younger than two years of age. Two further doses of paracetamol are recommended six hours apart, regardless of whether fever is present.

Vaccine recommendations for high risk groups.

Speak to your doctor about which vaccine you should have (and how long protection will last) if you are in one of these high-risk groups, including:

- infants and young children, particularly those aged less than two years
- adolescents aged 15 to 19 years
- people who have close household contact with those who have meningococcal disease and who have not been immunised
- people who are travelling to places, such as Africa, that have epidemics caused by serogroups A, C, W and Y
- pilgrims to the annual Hajj in Saudi Arabia – Saudi Arabian authorities require a valid certificate of vaccination

to enter the country

- people who work in a laboratory and who handle the meningococcal bacteria
- special risk and immunosuppressed patients -children aged from six weeks and over, and adults who have high-risk conditions, such as a poor functioning or no spleen, a complement component disorder, HIV, current or future treatment with eculizumab or a haematopoietic stem cell transplant.

Pregnancy and meningococcal disease immunisation

Meningococcal vaccines are not usually recommended for women who are pregnant, but they might be given if your doctor thinks your situation puts you at risk of the disease.

Meningococcal pre-immunisation checklist

Before immunisation, tell your doctor or nurse if you (or your child):

- are unwell on the day of immunisation (have temperature over 38.5 °C)
- have ever had a serious reaction to any vaccine
- have had a serious reaction to any component of the vaccine
- have had a severe allergy to anything
- are pregnant.

Side effects of the meningococcal vaccines

Vaccines against meningococcal bacteria are effective and safe, although all medications can have unwanted side effects.

Side effects from these vaccines are uncommon and are usually mild, but may include:

- localised pain, redness and swelling at the injection site
- occasionally, an injection-site lump that may last many weeks, but treatment is not needed
- low-grade temperature (fever)
- children can be unsettled, irritable, may cry, or be generally unhappy, drowsy and tired
- meningococcal B vaccine commonly causes fever, localised pain, redness and swelling at the injection site
- Fever and high fever is common in children aged two to 12 months when meningococcal B vaccine is given (see below).

Managing fever after meningococcal immunisation

Common side effects following immunisation are usually mild and temporary (occurring in the first few days after immunisation). Specific treatment is not usually required.

There are a number of treatment options that can reduce the side effects of the vaccine, including:

- drinking extra fluids and not overdressing if there is a fever
- although routine use of paracetamol after vaccination is not recommended (meningococcal B vaccine is the exception), if fever is present, paracetamol can be given – check the label for the correct dose or speak with your pharmacist, (especially when giving paracetamol to children).

Meningococcal B vaccine for children less than two years of age

Fever is common in children aged two to 12 months when meningococcal B vaccine is given on the same day with other vaccines commonly given to infants, compared to when meningococcal B and other routine vaccines are given on separate days.

It is recommended to use paracetamol with every dose of meningococcal B vaccine administered to children less than two years of age, to reduce the chance and severity of fever that may develop following immunisation with meningococcal B vaccine.

The first dose of paracetamol (15 mg/kg per dose) is recommended 30 minutes before immunisation. This should be followed by two more doses of paracetamol given six hours apart, regardless of whether fever is present.

Managing injection site discomfort

Many vaccine injections may result in soreness, redness, itching, swelling or burning at the injection site for one to two days. Paracetamol might be required to ease the discomfort. A cold compress on the injection site may relieve discomfort.

Concerns about immunisation side effects

If a side effect following immunisation is unexpected, persistent or severe, or if you are worried about yourself or your child's condition after an immunisation, see your doctor or immunisation nurse as soon as possible or go directly to a hospital. Immunisation side effects may be reported to SAEFVIC, the Victorian vaccine safety and central reporting service on Tel. [1300 882 924](tel:1300882924) #1.

You can discuss with your immunisation provider how to report adverse events in other states or territories. It is also important to seek medical advice if you (or your child) are unwell, as this may be due to other illness rather than because of the vaccination.

Rare side effects of meningococcal immunisation

There is a very small risk of a serious allergic reaction (anaphylaxis) to any vaccine. This is why you are advised to stay at the clinic or medical surgery for at least 15 minutes following immunisation in case further treatment is required. If any other reactions are severe and persistent, or if you are worried, contact your doctor for further information.

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**.

Talk to your doctor or immunisation provider if you think you or someone in your care has health, age, lifestyle or occupation factors that could mean immunisation is necessary.

You can check your immunisation HALO using the [Immunisation for Life infographic](#).

Where to get help

- In an emergency, always call triple zero (000)
- Emergency department of your nearest hospital
- Your GP
- Your local government immunisation service
- **Maternal and Child Health Line** (24 hours) Tel. [13 22 29](tel:132229)
- **NURSE-ON-CALL** Tel. [1300 60 60 24](tel:1300606024) -- for expert health information and advice (24 hours, 7 days)
- **Immunisation Section**, Department of Health and Human Services, Victorian Government Tel. [1300 882 008](tel:1300882008)
- **National Immunisation Information Line** Tel. [1800 671 811](tel:1800671811)
- **The National Immunisation Program**, Australian Government
- Pharmacist
- **SAEFVIC**, the Victorian vaccine safety service Tel. [1300 882 924](tel:1300882924) #1

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

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