

## WHAT IS MENINGOCOCCAL DISEASE AND HOW IS IT SPREAD?

Meningococcal disease is caused by a bacteria called *Neisseria meningitidis*, commonly known as meningococcus. Around the world there are 13 strains of meningococcal disease, but the two most common strains of meningococcal disease in Australia are B and C.<sup>1</sup> It is a rare but devastating disease.

Meningococcal germs can be transmitted from person to person by saliva or respiratory droplets during sneezing and coughing or intimate kissing. Environments where people are in close contact, such as day-care centres, school camps, parties and nightclubs, make it easier for the germs to spread. At nightclubs, there's a risky combination of crowding, smoking, kissing, sharing drinks and shouting above the noise, which can scatter tiny droplets into the air that can be breathed in by someone close by.<sup>2</sup>

## HOW SERIOUS IS MENINGOCOCCAL DISEASE?

Although these germs can live harmlessly in our throat and nose, meningococcal disease can be a serious illness. Around 20% percent of people will be carrying these bacteria at any one time without ever becoming ill ('healthy carriers'). In fact, all of us will carry them at some stage in our lives.<sup>2</sup>

It can cause infections, including pneumonia, arthritis and conjunctivitis, but more serious complications can result as septicaemia (blood poisoning), meningitis (inflammation of the lining that covers the brain and spinal cord) or a combination of both.<sup>3</sup> About 5 to 10% of people, who develop septicaemia and or meningitis, will die, even with appropriate antibiotic treatment. Approximately 10 to 30% of children and adolescents who survive are left with permanent effects such as; limb deformity, skin scarring, deafness and neurologic deficits.<sup>1</sup>

Meningococcal infections can progress rapidly to serious disease or death in previously healthy persons.

## WHAT ARE THE SYMPTOMS OF MENINGOCOCCAL DISEASE?

Symptoms in babies and young children may include irritability, difficulty walking or lethargy, refusal to eat, a high pitched cry, and a bulging fontanelle (soft spot on the top of the head).

The clinical symptoms of meningococcal septicaemia and meningitis may be non-specific and can easily resemble the onset of a cold or 'flu but can include:

- a sudden onset of fever
- rash
- headache
- neck stiffness
- muscle ache
- cold hands
- thirst
- joint pain
- photophobia
- altered consciousness
- nausea and vomiting

Not all symptoms or signs may be present at disease onset.

The characteristic rash of meningococcal disease, is described as "a rash, which may start off as a spot, scratch mark or blister, as a faint pink rash or as red or purple pinpricks on the skin, then develop into the distinctive purple bruising".<sup>2</sup> Be aware that the rash, which does not disappear with gentle pressure on the skin, is not always present.

## IS THERE A VACCINE AVAILABLE TO PROTECT FROM MENINGOCOCCAL DISEASE?

There are several meningococcal vaccines available on the Australian market. Combination vaccines to protect against A, C, W 135, Y, are recommended for travel to certain countries. Meningococcal C vaccine is included on the funded childhood immunisation program for all 12 month old children and is also available for older age groups on the private market. A Meningococcal B vaccine has recently become available on the private market.

1 [http://www.ncirs.edu.au/assets/provider\\_resources/fact-sheets/meningococcal-vaccines-fact-sheet.pdf](http://www.ncirs.edu.au/assets/provider_resources/fact-sheets/meningococcal-vaccines-fact-sheet.pdf)

2 <http://www.meningococcal.org.au/new-page-1/>

3 <http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home~handbook10part4~handbook10-4-10#4-10-12>

4 [http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/1C08CC86CFF8FE00CA257E29000F7E06/\\$File/ATAGI-advice-bexsero.pdf](http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/1C08CC86CFF8FE00CA257E29000F7E06/$File/ATAGI-advice-bexsero.pdf)

# ABOUT MENINGOCOCCAL B DISEASE

## WHO IS AT RISK OF MENINGOCOCCAL B DISEASE?

- People of any age, but mainly children aged less than five years; teenagers and young adults
- People exposed to cigarette smoke
- People with a poor functioning spleen or who have had their spleen removed

Vaccination for meningococcal C is given at 12 months of age as part of routine free childhood immunisation program in Australia, but this vaccine DOES NOT provide protection from Meningococcal B. Any person, who is unwell and gets worse quickly, should seek urgent medical attention.

Meningococcal B is the strain responsible for more than 80% of reported Invasive Meningococcal disease in Australia.<sup>4</sup>

## IS THERE A VACCINE AVAILABLE TO PROTECT FROM MENINGOCOCCAL B DISEASE?

**Yes.** A Meningococcal B vaccine was launched in Australia in March 2014 and is available by private script from your doctor that offers protection against approximately 76% of Meningococcal B strains in Australia.<sup>4</sup>

## HOW MANY DOSES OF VACCINE DO I NEED?

This will depend on how old the individual is when they commence the course.

### RECOMMENDED NUMBER OF DOSES OF MENINGOCOCCAL B VACCINE BY AGE GROUP

Age at commencement of vaccine course	Number of doses required for primary immunisation	Recommended interval between primary doses	Recommended age for single booster dose
6 weeks – 5 months	3 doses	8 weeks	12 months
6–11 months	2 doses	8 weeks	12 months, or 8 weeks after previous dose, whichever is later
≥12 months†	2 doses	8 weeks	The need for a booster dose for this age group is as yet uncertain.

† There are currently no data on the use of Meningococcal B vaccine in persons aged >50 years; however, it is recommended that Meningococcal B vaccine can be used in older persons who are at increased risk of Invasive Meningococcal Disease.

## HOW MUCH DOES THE VACCINE COST?

This vaccine is not subsidised by the Government. Prices will differ between pharmacies so it is wise to phone a few pharmacies and ask for a price. If you have private health insurance, ask your insurance company if a rebate is available to you. The vaccine may also be cheaper if you have a loyalty membership with a pharmacy.

## ARE THERE SIDE EFFECTS FROM THE VACCINE?

As with any medications, there is a risk of side effects. Mostly, these are mild and will resolve in 1 – 3 days.

- pain, redness and swelling at the injection site
- irritability
- drowsiness
- decreased appetite
- headaches
- rash
- nausea
- Fever (It is recommended Paracetamol is given 30 minutes before or as soon as practicable after this vaccine, with two further doses 6 hours apart in children under 2 years of age.)<sup>4</sup>

**Speak with your Local Council Immunisation Service Provider or Local Doctor about vaccination.**