

What is meningococcal disease?

Meningococcal disease is a rare, but potentially devastating bacterial infection of the blood and/or membranes that line the spinal cord and brain.

How do people get meningococcal disease?

The bacteria that cause meningococcal disease can live harmlessly in the nose and throat and can be spread from one person to another by close contact. **They can be spread through behaviours, including:**1

- coughing & sneezing
- kissing
- living in close quarters

Approximately 10% of the general population will carry the bacteria at any one time, without ever becoming ill, however in a small number of people the bacteria can cause disease.²

What are the symptoms of meningococcal disease?

Early symptoms can be hard to notice because they begin mildly - similar to those of a cold or the flu. However, symptoms can progress quickly and may include the following:

- Nausea
- Confusion
- Fever or cold chills
- Tiredness
- Vomiting
- Diarrhoea
- Cold hands and feet

- Severe aches or pain in the muscles, joints, chest or belly
- Stiff neck
- Rapid breathing
- A dark purple rash
- Sensitivity to light

It can be even harder to notice these symptoms in babies and they may not appear at all. Instead, a baby may become slow or inactive, be irritable or vomit.



Act fast and don't wait for a rash!

In the later stages of meningococcal disease, the bacteria can enter the bloodstream and multiply, damaging the walls of the blood vessels. This can cause a dark purple rash, however it may not always appear. If you're concerned about your child's health, act fast - don't wait for a rash and seek medical attention immediately.

Can meningococcal disease be serious?

While meningococcal disease is rare, it can be fatal within 24 hours. Up to one in ten of those infected may die, and around one in five may suffer serious long-term disabilities including brain damage, deafness or loss of limbs.¹⁻³



Up to 1 in 10 may die.1,2



Up to 1 in 5 may have permanent disability.^{1,3}

JOLIE-ANN'S STORY

Jolie-Ann's mum, Ashley shares her story.

At 11 months old we brought her to the hospital because we noticed she wasn't acting like herself. Doctors couldn't properly diagnose her, and the condition worsened so we returned to the hospital for the third time that day.

After 85 days in the hospital, she ended up getting vocal cord paralysis, scarring all over her body, and lost a leg muscle after nearly 20 surgeries.

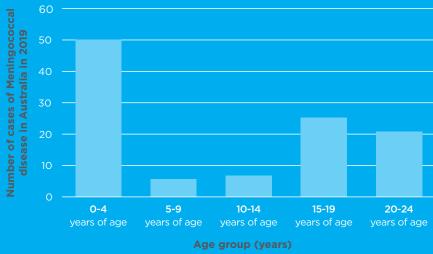
If you think something is wrong with your baby, don't wait to see if things get worse. If your gut is telling you something is wrong, act on it. I trusted my instincts and that's what saved her life.



Who's at risk?

Meningococcal disease can strike at any age. Babies (less than one year of age) and children (under 5 years of age) are most at risk, followed by adolescents (15 - 19 years of age). The highest incidence of meningococcal disease occurs in infants aged 3 to 5 months of age.⁴

The following graph shows the number of cases of meningococcal disease in Australians aged 0 - 24 years in 2019⁵



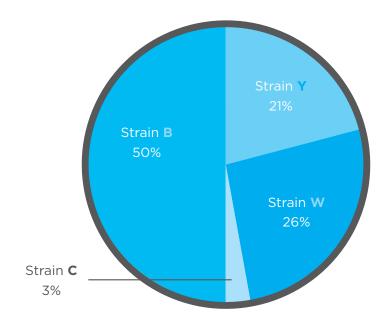
During the early years of life, children have an underdeveloped immune system, meaning they may be more likely to pick up a strain of meningococcal bacteria that they are not immunised against or don't have natural immunity to.

In adolescence, changes in social behaviour that result in close physical contact can result in increased spread and risk of meningococcal disease. A higher number of meningococcal disease cases occurs among adolescents and young adults aged 15 to 24 years.⁴

Are there different types of meningococcal disease?

Globally, there are 13 different strains of meningococcal bacteria, of which there are five main strains that most commonly cause disease (A, B, C, W and Y).

Currently in Australia, strains B, W and Y cause the majority of disease, with cases in 2019 caused by:⁵



Treatment and Prevention

Early recognition and treatment of meningococcal disease offers the best chance of recovery.

While good hygiene practices are important in helping to prevent the spread of germs, vaccination may also be an option to help prevent meningococcal disease.

No single vaccine can protect against all strains of meningococcal disease, but different vaccines are available to help protect against the most common ones.

If you're concerned about you or your child's health, act fast and don't wait for a rash and seek medical attention immediately.

THORN'S STORY

At 7 months old, Thorn's mum, Kylie, noticed he was restless, squinting at the light and had a small rash. She took him to their GP and was immediately sent to the hospital. In under 12 hours, Thorn had multi-organ failure and remained in the ICU for four weeks.

His ongoing poor health has had a tremendous impact on Thorn's psychological well-being and ability to learn.

"In surviving meningococcal disease and living with what it has done to me, I have learnt to be myself, to not be afraid to ask for anything and most of all not be ashamed of my disability. This has given me my sense of strength" Thorn said.



SPEAK TO YOUR DOCTOR FOR MORE INFORMATION ON MENINGOCOCCAL DISEASE AND HOW YOU CAN HELP PROTECT YOUR FAMILY.



Share what you now know

Make sure your friends and family know the facts about meningococcal disease

For more information, and to hear from parents who have experience with meningococcal disease, visit knowmeningococcal.com.au

Just scan the code below



References: 1. World Health Organization. Meningococcal meningitis Fact sheet N°141. WHO; February 2018. http://www.who.int/mediacentre/factsheets/fs141/en/ (accessed Feb 2021).

2. CDC VPD manual Chapter 8: Meningococcal disease. http://www.cdc.gov/vaccines/pubs/surv-manual/chpt08-mening.pdf (accessed Feb 2021).

3. Rosenstein NE, et al. *N Engl J Med.* 2001;344:1378-88.

4. Australian Technical Advisory Group on Immunisation (ATAGI). Australian Immunisation Handbook, Australian Government Department of Health, Canberra, 2018, immunisationhandbook.health.gov.au (accessed Feb 2021).

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