

A baby with brown hair and blue eyes, wearing a pink long-sleeved shirt with a pattern and a white diaper, stands on a colorful patterned rug. The baby is holding a green toy frog in their right hand. In the background, there are several teddy bears and other toys on the floor, and a bed with a green blanket is visible in the upper part of the frame. The lighting is bright and natural, suggesting a window nearby.

TEDDY BEARS

Are you missing information about meningococcal disease?

Missing information could mean missing out on a whole lot more. Make sure you know the facts about meningococcal disease.

Visit knowmeningococcal.com.au to learn more.

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 which may not always appear. If you're concerned about your child's health, act fast and don't wait for a rash and **seek medical attention immediately.**

Is meningococcal disease 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}

LILLIANA'S STORY

In 2018, Lilliana was 8 months old and on holiday with her family in Thailand when she suddenly became feverish and developed a purple rash over her body. Lilliana's mum, Elisha, rushed her to hospital. She would go on to spend weeks in hospital in Thailand and then in Australia, fighting for her life.

“For the first two days, it was touch and go. We were in a foreign country and it was a frightening time.”

Elisha said.

While Lilliana does require ongoing treatment, Elisha said she's incredibly brave. **“She is an inspiration. Lilliana has been through so much but whenever you see her, she's always smiling and bubbling with energy.”**

In sharing Lilliana's story, Elisha wants Australians to be more aware about meningococcal disease and go talk to their doctor for more information about the disease and how to help protect their family.

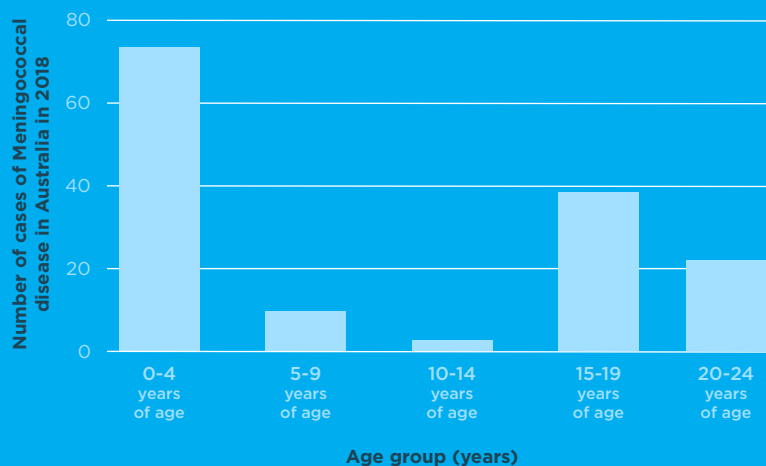


LILLIANA AND ELISHA

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 2018⁵



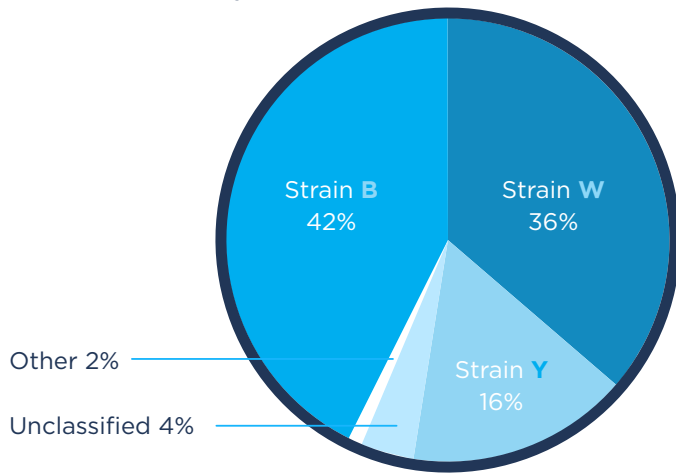
During the early years of life, children have an undeveloped immune system, meaning they are more likely to pick up a strain of meningococcal bacteria that they are not immunised against or don't have natural immunity to.

In adolescence, changes in social behaviour that result in close physical contact can result in increased spread and risk of meningococcal disease. A high 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. In recent years the number of reported cases of meningococcal disease has increased with cases in 2018 caused by:⁵



Treatment and Prevention

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

While practising good hygiene can help to protect against the spread of germs, vaccination is an effective way 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.



THORN

**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 Nov 2019). **2.** CDC VPD manual Chapter 8: Meningococcal disease. <http://www.cdc.gov/vaccines/pubs/surv-manual/chpt08-mening.pdf> (accessed Nov 2019). **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 Nov 2019) **5.** Department of Health. Invasive Meningococcal Disease National Surveillance Report: Quarter 4, 2018. <https://www1.health.gov.au/internet/main/publishing.nsf/Content/ohp-meningococcal-W.htm> (accessed Nov 2019).



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