



Australian Government

Australian Institute of
Health and Welfare

Meningococcal disease in Australia

Quick facts

The number of meningococcal disease notifications, hospitalisations and deaths have decreased since routine childhood vaccination against meningococcal serogroup C began in 2003.

Since 2014, notification rates of invasive meningococcal disease have increased as the number of infections caused by serogroups B, W and Y have increased.

From July 2018, the Australian National Immunisation Program was updated to include infant vaccinations against meningococcal serogroups A, C, W and Y.

What is meningococcal disease?

Meningococcal disease is a rare bacterial disease caused by *Neisseria meningitidis*. These bacteria are found in the back of the nose and throat of some people, most of whom remain healthy. Meningococcal bacteria can be spread by people who are healthy as well as by those experiencing symptoms. Meningococcal disease usually only spreads with close contact for a long time.

There are different types of meningococcal bacteria, called serogroups. The main serogroups which cause disease are A, B, C, W and Y.

Meningococcal disease symptoms include fever, headache, neck stiffness, joint pain, and a rash. The infection develops in places usually free of bacteria (for example the blood stream and the membranes around the brain and spinal cord). This is known as invasive meningococcal disease (IMD). Up to 1 in 10 patients with IMD die. Of those that survive, 10–20% have long-term health problems.

Vaccination against meningococcal disease

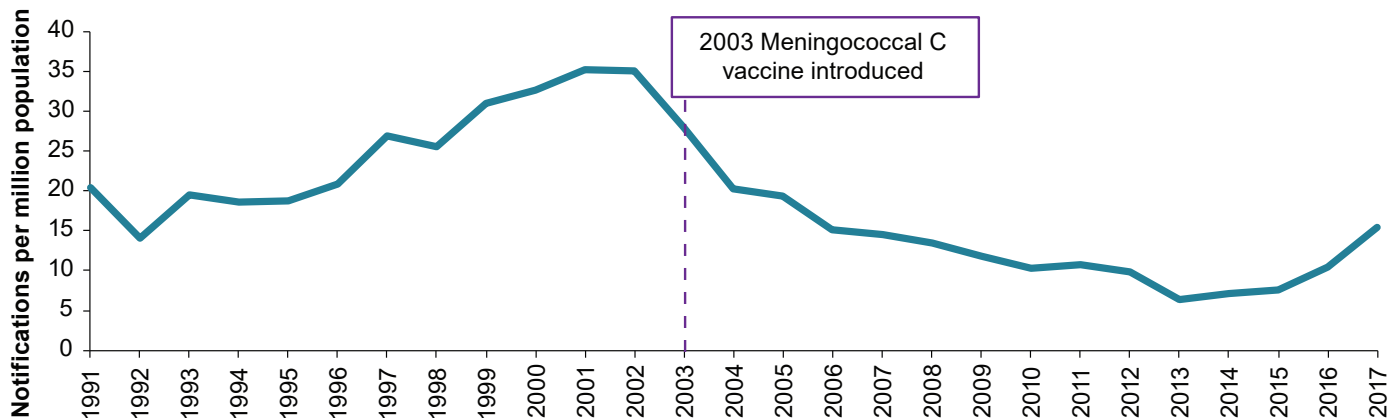
The Australian National Immunisation Program (NIP) has provided vaccination against meningococcal serogroup C since 2003. From July 2018, all infants will be vaccinated against serogroups A, C, W and Y, through the NIP, with adolescents also becoming eligible for this vaccine from April 2019.

Although meningococcal infection is rare in Australia, vaccination is important because the vaccine protects not only the vaccinated person, but unvaccinated people also. This is because the disease is less likely to spread and so people who are not immune are less likely to be exposed to it.

In 2017, 95% of Australian 2 year olds were vaccinated against meningococcal C; however, vaccination rates vary by where a child lives.

Invasive meningococcal disease notifications

IMD is a nationally notifiable disease in Australia, which means that diagnosed cases of IMD are reported to state or territory health departments. This way, a public health response can be undertaken to try and prevent further cases. There were 381 notifications of IMD in Australia in 2017. After commencement of the vaccine program in 2003, notification rates of IMD declined from 28 per million population in 2003 to 6 per million in 2013. Since 2014, notification rates have increased as the number of infections caused by serogroups B, W and Y have increased.

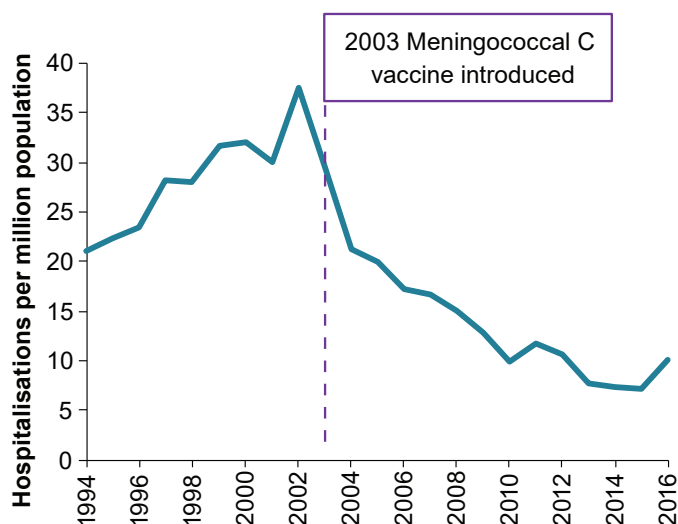


Source: AIHW analysis of NNDSS data extracted on 06 August 2018.

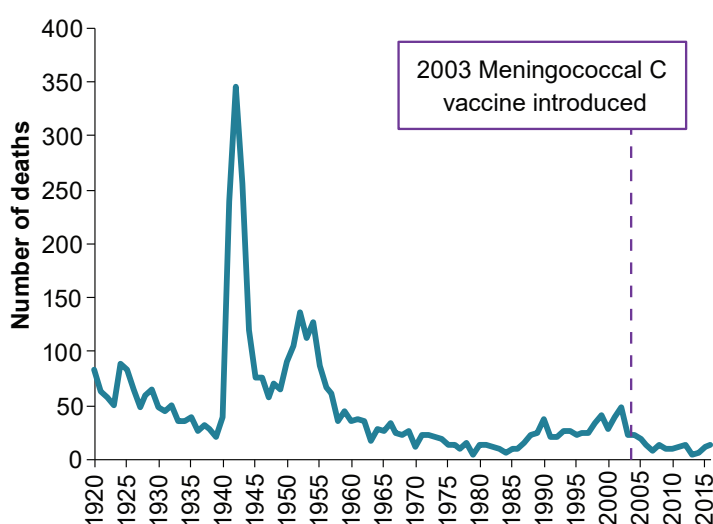
Hospitalisations and deaths due to meningococcal disease

In 2016, there were 245 hospital admissions for meningococcal disease in Australia. The rate of hospital admissions has decreased since the introduction of vaccination against serogroup C in 2003 (left figure). Between 1994 and 2003, there was an average of 28 meningococcal hospital admissions per million population per year, compared with 13 per million per year between 2004 and 2016.

Between 1997 and 2016, meningococcal disease caused 396 deaths in Australia, almost a third (32%) of which were in children aged under 5 years. Between 1997 and 2003, there was an average of 34 meningococcal disease deaths per year, compared with an average of 12 per year between 2004 and 2016. In children aged under 5, the average number of deaths per year decreased from 10 per year between 1997 and 2003, to 4 per year between 2004 and 2016.



Source: AIHW analysis of National Hospital Morbidity Database.



Sources: AIHW analysis of National Mortality database; AIHW 2010 GRIM books.

This fact sheet is part of the [Vaccine-preventable diseases](#) release. For more information see [Immunisation](#) on the AIHW website.

© Australian Institute of Health and Welfare 2018

Vaccine-preventable diseases fact sheets. Cat no. PHE 236. Any enquiries about copyright and/or this fact sheet should be directed to: Australian Institute of Health and Welfare, GPO Box 570, Canberra ACT 2601, Tel: (02) 6244 1000, Email: <info@aihw.gov.au>.