Whooping cough (pertussis) is a serious, contagious respiratory infection caused by the bacterium *Bordetella pertussis*. The disease is spread when an infected person coughs, or through close contact.

Whooping cough usually begins with cold-like symptoms. The cough gradually worsens and there may be bouts of uncontrolled coughing, which may be followed by vomiting, choking, or a gasping breath that causes a distinctive 'whooping' sound. Infants may experience periods of not breathing (apnoea). The cough may be less severe in older children, adolescents and adults.

The most common complication from whooping cough is pneumonia (lung infection). About 1 in 125 babies under the age of 6 months with whooping cough dies from pneumonia or brain damage.

**Quick facts**

Young babies are at most risk from the complications of whooping cough, although people of any age can be affected.

There are regular outbreaks of whooping cough, with the highest rates in children.

**Vaccination against whooping cough**

Whooping cough vaccination began in Australia in the early 1940s. The Australian National Immunisation Program (NIP) provides whooping cough vaccination for infants, young children and through state and territory school vaccination programs. Since July 2018, the NIP also provides vaccination for pregnant women during each pregnancy, to help protect newborns until they are old enough to be vaccinated. This follows on from maternal vaccination programs funded by the states and territories over the previous few years.

In 2017, almost 94% of Australian 5 year olds were vaccinated against whooping cough; however, vaccination rates vary by where a child lives.
**Whooping cough notifications**

Whooping cough is a nationally notifiable disease in Australia, which means that diagnosed cases are reported to state or territory health departments. There were 20,106 notifications of whooping cough in Australia in 2016. About 1 in 33 were in infants under 12 months.

Despite an established vaccination program whooping cough is still common in Australia, with regular outbreaks every few years. In 2009 rates were highest in infants, while in 2011, 2015 and 2016, rates were highest in children aged 1–14 years.

![Graph showing notifications per million population](image)

Source: AIHW analysis of NNDSS data extracted on 16 January 2018.

**Hospitalisations and deaths due to whooping cough**

In 2016, there were 445 hospital admissions for whooping cough in Australia, with over one-third (38%) of these in children aged under 1 year. Rates of hospital admissions for whooping cough are highest among infants (left figure).

Death due to whooping cough is now uncommon in Australia. The average number of deaths per year due to whooping cough between 1910 and 1942 was 291, compared with 16 per year between 1943 and 1996 and 2 per year over the past 20 years (right figure).

![Graph showing hospitalisations per million population](image)

Source: AIHW analysis of National Hospital Morbidity Database.

![Graph showing number of deaths](image)

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

This fact sheet is part of the [Vaccine-preventable diseases](https://www.aihw.gov.au/health-topics/vaccine-preventable-diseases) release. For more information see [Immunisation](https://www.aihw.gov.au/) on the AIHW website.