Whooping cough (pertussis) is a bacterial infection of the nose and throat caused by *Bordetella pertussis*.

**Whooping cough is a notifiable condition**

### How whooping cough is spread

Whooping cough is spread when an infected person talks, coughs or sneezes small droplets containing infectious agents into the air. The droplets in the air may be breathed in by those nearby. Infection may be spread by contact with hands, tissues and other articles soiled by infected nose and throat discharges. Whooping cough is highly infectious, spreading to 70 to 100% of susceptible household contacts and 50 to 80% of susceptible school contacts.

Maternal antibody does not usually give adequate protection against whooping cough, so babies can be infected before they are old enough to be vaccinated. However, if a mother has recently had a booster dose of whooping cough vaccine, the maternal antibodies may protect the infant in the first weeks of life.

In recent years many cases of whooping cough have been recognised in adults and adolescents due to waning immunity. These individuals are a significant source for the transmission of infection to infants.

Epidemics usually occur every 3 to 4 years.

### Signs and symptoms

The illness often begins with cold-like symptoms:

- runny nose
- sore watery red eyes
- low-grade fever
- general unwellness.

However, these symptoms are not present in all people.

After 3 to 7 days, a dry cough develops:

- the cough is usually present for many weeks and may last for months
- the cough is classically paroxysmal, that is, a prolonged fit of coughing occurs
- frequently, the coughing is immediately followed by a deep breath in, resulting in the typical whoop – hence the name ‘whooping cough’ – but some people do not whoop
- the cough may be followed by vomiting.

Whooping cough kills about 250,000 children worldwide every year and many surviving children are left with brain damage. Other serious complications include:

- pneumonia (lung infection or inflammation)
- bleeding into the nose, eyes or brain
- development of hernias.

### Diagnosis

Diagnosis is most accurately made by PCR (polymerase chain reaction) testing in a pathology laboratory of mucus from the nose and throat, combined with clinical history, although blood tests are still used in some places.
Whooping cough (pertussis)

Incubation period
*(time between becoming infected and developing symptoms)*

4 to 21 days, most commonly 7 to 10 days.

Infectious period
*(time during which an infected person can infect others)*

Whooping cough is highly infectious when the ‘cold-like’ symptoms occur in the early stages. Without treatment, a person is infectious for the first 3 weeks of coughing. With appropriate antibiotic therapy, the person is no longer infectious to others 5 days after starting antibiotics.

Treatment

Appropriate antibiotic therapy, given in the early stages of infection, may prevent or lessen the severity of symptoms. Treatment within 2 weeks of onset of the cough reduces the spread of the disease, though it may not lessen symptoms.

Prevention

Protection against whooping cough is provided by a whooping cough containing vaccine as part of the routine childhood immunisation. The whooping cough vaccine, in combination with other vaccines, is now recommended to be given at 6 weeks of age, 4 months and 6 months with boosters at 18 months, 3½ to 4 years and in adolescence. Whooping cough vaccine is now recommended in the third trimester of every pregnancy (ideally at 28 to 32 weeks). It is also recommended for other groups. See the Vaccine page or for further information, including who and when you should be immunised.

Anyone, particularly childcare, preschool, school or work contacts of a person with whooping cough should seek medical advice if he or she develops any symptoms of whooping cough. A contact is any person who has been close enough to an infected person to be at risk of having acquired the infection from that person.

Cover your nose and mouth when sneezing or coughing. Dispose of soiled tissues appropriately. Wash hands after contact with soiled articles, such as tissues.

If there is a young child under 6 months of age in the same household as the person with whooping cough or a woman in the late stages of pregnancy, it is recommended that all household members receive preventive antibiotics. It is important that anyone with suspicious symptoms see their doctor so that an accurate diagnosis can be made and treatment commenced, if necessary.

Exclusion periods

Exclude a person with whooping cough from childcare, preschool, school and work until 5 days after starting antibiotic treatment. If not treated, he/she should be excluded for 21 days from the start of any cough. If working in a childcare setting, seek advice from SA Health’s Communicable Disease Control Branch before returning back to work.

For exclusion of contacts in a childcare setting, seek advice from SA Health’s Communicable Disease Control Branch. The exclusion of children who have been in contact with another child with whooping cough in a childcare setting depends on the age of the children in the childcare setting, their immunisation status and whether there have been other recent cases of whooping cough infection in the childcare setting.
Useful links


- Immunisation programs
- Vaccines


- Exclusion periods from childcare, preschool, school and work
- When you have a notifiable condition