



Pertussis (Whooping Cough)

What is pertussis?

Pertussis is a highly contagious disease of the respiratory tract (nose and throat) caused by the bacteria *Bordetella pertussis*.

How is it spread?

The bacteria are found in respiratory secretions of infected people. These people can pass the infection to other people by coughing or sneezing. Pertussis can also be spread by direct contact with infected mouth or nose secretions e.g. by sharing eating utensils during a meal, sharing food or kissing.

What are the symptoms?

The symptoms generally develop 7 to 10 days after exposure, but may take up to 20 days.

Pertussis usually starts with cold-like symptoms and an irritating cough, or the cough may be the first symptom. The irritating cough gradually changes over 1-2 weeks into episodes of coughing bouts, often followed by dry retching or vomiting. These coughing bouts can be very severe and frightening.

In some people, particularly children, they may end with a crowing noise (the whoop) as air is drawn back into the chest, and the child may vomit.

Very young babies may hold their breath instead of whooping and may sometimes turn blue. Adolescents and adults may only have a persistent cough.

How serious is pertussis?

Pertussis is an important cause of infant death worldwide even in countries where many people are vaccinated. The case fatality rate in unvaccinated infants <6 months is estimated to be 0.8%. Death from pertussis is rare in people aged 10-70 years. A high proportion of hospitalisations and almost all deaths from pertussis occur in infants too young to have received the required number of vaccines to protect them. The most common complication of pertussis in infants is pneumonia that can

be complicated by seizures and prolonged decreased oxygen to the head causing brain damage.

What is the infectious period?

A person is infectious during the cold-like symptoms in the early stages, through to 5 days after starting antibiotics or, if left untreated, for the first 3 weeks of coughing.

Who is at risk?

Epidemics usually occur every 3-4 years and in 2011 38,732 cases were reported in Australia. Pertussis can affect any age group, Adults can give the infection to young babies before they are fully protected by vaccination. These young babies are at risk of severe disease.

What is the treatment?

An antibiotic called azithromycin is usually prescribed to prevent the disease from being passed on to others; however it has little effect on the course of the illness for the individual. The coughing may last for weeks or months.

How can pertussis be prevented?

Immunisation works to prevent a person contracting disease or can reduce the severity of the illness. For children, the pertussis component is combined with diphtheria and tetanus vaccine (DTPa) (and sometimes hepatitis B, *Haemophilus influenzae* type B (Hib) and polio vaccine) and is given as a series of injections in infancy and in early childhood as part of the Immunise Australia Program.

Those few children who develop pertussis, even though they have been immunised, have a much milder infection with fewer complications than those children who do not receive the vaccine at all.

A booster vaccine formulated for adults (dTpa vaccine consisting of adult diphtheria, tetanus and acellular pertussis) became available for use in Australia, in 2003.

Who is eligible to receive free adult diphtheria, tetanus, pertussis (dTpa) vaccine?

- All children 13 years of age (offered to students in year 8 in the Northern Territory)
- Pregnant women – the best time to administer the dTpa vaccine is between 28 and 32 weeks of pregnancy but can be given anytime from 28 weeks of pregnancy up to and immediately after delivery. Pertussis vaccine should be given to women every pregnancy
- All fathers and carers in the same household of an infant under 7 months of age who have not received a pertussis containing vaccine in the last 10 years. The vaccine can be given from the mother's 28th week of pregnancy.

The booster vaccination is free for the above clients and can be obtained from a GP, remote health clinic or Community Care Centre.

Who else is the adult diphtheria tetanus and pertussis (whooping cough) vaccine recommended* for?

- Any adult working with or caring for young children including healthcare workers and childcare workers
- Adults requiring a booster dose of diphtheria and tetanus containing vaccine for wound management
- Those planning to travel overseas
- Anyone who wants to be vaccinated.

*If they have not had a pertussis containing vaccine in the last 10 years.

The booster vaccination for these people will incur a cost and is available from a GP.

Minimum interval between dTpa and other tetanus containing vaccines

The dTpa vaccine can be administered at any time following a previously administered dose of tetanus toxoid containing vaccine.

How can pertussis be controlled?

People with infectious pertussis (prior to and for the first 3 weeks of the cough) should stay away from work, school and childcare until they have completed 5 days of appropriate antibiotics.

Preventive antibiotic treatment is recommended for 'high risk' contacts of infectious pertussis cases e.g. young babies and for people from households or other settings who could pass on the disease to young babies.

For more information contact the Centre for Disease Control in your region

Alice Springs	8951 7540
Darwin	8922 8044
Katherine	8973 9049
Nhulunbuy	8987 0357
Tennant Creek	8962 4259

or

<http://www.nt.gov.au/health/cdc>