



WHOOPING COUGH

The risk of contracting whooping cough and suffering complications is more pronounced in babies. A major issue with adults acquiring the disease is that they can unknowingly pass it on to newborns or young children. And anyone who has witnessed a baby or small child coughing uncontrollably and turning blue trying to breathe during a bout of whooping cough (pertussis) would do everything in their power to prevent it.

Whooping cough is only found in humans. Around 1 out of 5 sufferers of whooping cough will develop pneumonia (a severe lung infection) and 1 out of 100 die. Complications can include uncontrollable, violent shaking, potentially fatal pauses in breathing (apnoea), and brain disease (encephalopathy).

WHAT IS WHOOPING COUGH?

Pertussis is an extremely contagious infection of the respiratory tract caused by the bacterium *Bordetella pertussis*. The whooping cough bacteria adhere to cilia, the slender thread-like projections that line part of the human upper respiratory system. The more common name for pertussis is 'whooping cough', owing to the sound made during the intake of large gasping breaths following a bout of uncontrollable coughing. This high-pitched whoop or cough may be absent in very young infants, older children and adults.

WHAT ARE THE SYMPTOMS OF PERTUSSIS?

Whooping cough symptoms typically appear 7 – 10 days following infection and at first resemble those of a cold: blocked or runny nose, tiredness, cough and mild fever. Typically the cough will gradually worsen and severe bouts of uncontrollable coughing can develop, at times triggering vomiting and choking - these awful symptoms are often worse at night. If not treated early, people with whooping cough are infectious for a period of around 3 weeks.

Whooping cough complications can be life-threatening, particularly in newborns and premature infants, when the infection can cause apnoea (temporary cessation of breathing), pneumonia, low blood pressure leading to organ failure, seizures, brain damage and, in some cases, death. Hospitalisation rates are high among babies under 12 months of age infected with pertussis.

Disease outcomes in older children and adults are not as severe. However, among adults, asthmatics and smokers have a higher risk of developing pneumonia. Coughing bouts can lead to associated complications such as fainting, dizziness, incontinence, rib fractures and broken blood vessels in the whites of the eyes.

The period of infectiousness can extend for three weeks after the onset of the cough and the infection itself can linger for one to two months.

WHERE IS PERTUSSIS FOUND?

Pertussis is found in all regions of the world and, despite established immunisation programs over the past 50 years, it remains a challenging disease to control. One major stumbling block is the waning of immunity gained from immunisation or infection over time, leading to renewed susceptibility to infection. Parents, relatives or carers are the most likely source of infection for infants and the highest rates of disease occur in infants under 6 months and children aged between 5 and 9 years.

Outbreaks are cyclical, generally happening every 3 to 4 years. The largest outbreak of whooping cough since reporting began in 1991 occurred between 2008 and 2012 in all states and territories of Australia.

WHOOPING COUGH RISK TO TRAVELLERS

Getting vaccinated against whooping cough is highly recommended if you are travelling. And if you need any health information regarding pertussis, talk with your doctor or immunisation provider.

In Australia, the whooping cough vaccine comes in combination with tetanus, diphtheria, and other vaccines in some formulations. This means travellers who last had a tetanus dose more than 10 years ago (5 years for high-risk itineraries such as hiking etc.) are recommended to receive a booster dose of a tetanus-containing vaccine before departure - this can be combined with pertussis toxoid if 10 years or more have elapsed since the last dose was given.

HOW IS WHOOPING COUGH TRANSMITTED?

Whooping cough or pertussis is spread when an infected individual coughs or sneezes bacteria into the air and is inhaled by others nearby. Whooping cough is highly contagious so when you breathe in the air that an infected person has just coughed or sneezed into, you are likely to contract it.

Some sufferers can have the disease and not show symptoms or they may only have mild symptoms, but they can still spread the infection.

Whooping cough may spread very quickly through families, schools and childcare centres. You may still acquire pertussis infection even if you have been vaccinated, particularly if you haven't had a booster vaccination against whooping cough in the past 10 years.

HOW IS WHOOPING COUGH TREATED?

Diagnosis is preferably made through testing of nose/throat swabs and early treatment, which is best started before coughing develops. Treatment is carried out with the appropriate antibiotics.

In the early stages of whooping cough, antibiotics are used as a treatment that can prevent a more severe case and help to halt or slow the infection from spreading in the community. Babies are often treated in hospitals and some need intensive care.

Even after treatment with the relevant antibiotics, the 'cough' can remain for many weeks.

However, whooping cough can largely be prevented through vaccination. The vaccines are given as an injection which is only available as a combination provided by recognised immunisation providers such as Travelvax. Under the National Immunisation Program (NIP) you may get the funded whooping cough vaccination if you are eligible.

WHAT IS WHOOPING COUGH VACCINATION?

Australian children receive whooping cough vaccines as part of the standard [childhood immunisation](#) schedule. As mentioned, in Australia, the vaccine for adults is only available in combination with diphtheria and tetanus, with or without another antigen (the inactivated poliomyelitis vaccine (IPV)).

Whooping cough vaccines are recommended for any adult who wishes to reduce their likelihood of becoming infected and in particular for those in close contact with infants (e.g. family members, carers, healthcare workers, childcare workers). Vaccination is also recommended for women between 20 and 32 weeks in each pregnancy as it confers protection to the newborn; in these cases, it is funded under the National Immunisation Program (NIP).

COMBINATION VACCINE - DIPHTHERIA, TETANUS AND WHOOPING COUGH PLUS POLIO

While pertussis vaccines give good protection from whooping cough infection, immunity fades over time which means booster doses are necessary. The vaccines are given in a combined immunisation which minimises the number of injections required, especially for babies and children. Whooping cough, diphtheria and tetanus all need a primary course of vaccinations and booster doses throughout life. The vaccines are given as follows:

Adults: In the combination vaccines, pertussis toxoid is given with Tetanus/Diphtheria or Tetanus/ Diphtheria/ Polio

vaccines.

Children under 10 years: Pertussis toxoid is given in combination with Tetanus/Diphtheria and others.

WHOOPING COUGH VACCINE SCHEDULE

BABIES & YOUNG CHILDREN

The primary [childhood immunisation](#) of whooping cough vaccines are given from 6-8 weeks of age: three doses are administered at least 4 weeks apart, with boosters at 18 months, 4 years of age and again at 11-17 years of age (depending on the state/territory schedule).

PREGNANT WOMEN

Pregnant women can have a funded whooping cough vaccine combination from 20 weeks gestation, with recommendations that they have it between 20 and 32 weeks. However, the vaccine combination may be given to pregnant women up until delivery and if the mother is breastfeeding.

OTHER ADULTS

A single booster of tetanus/diphtheria-containing vaccine (preferably also containing pertussis) is given at 50 and 65 years of age. But boosters are administered every 10 years for travellers to countries where health services are difficult to access. This timeframe is reduced to every 5 years for those travellers who will be undertaking activities with a high risk of injury, i.e. mountaineering, bike riding, rock climbing and caving in areas remote from good medical care.

LEVEL OF PROTECTION

p>In Australia, the pertussis vaccine is only available in combination with tetanus and diphtheria and may also include inactivated hepatitis B, poliovirus and *Haemophilus influenzae* type b.

The childhood formulation of diphtheria, tetanus and acellular pertussis-containing vaccine is known by the acronym DTPa. A different acronym in lower case letters (dTpa) used for the adult formulation means it has less diphtheria toxoid and whooping cough antigens than the DTPa child formulation. Adolescents and adults are recommended to receive this dTpa vaccine.

The first dose of the childhood schedule of the combination vaccine significantly reduces the incidence of severe pertussis disease in young [infants](#) with protection increasing with the doses given at ages 4 and 6 months, however, immunity fades over time so booster doses are recommended. In adults, there is [evidence](#) of a 92% to 95% efficacy after two and a half years, however whooping cough antibody levels are seen to decline progressively in mothers in the 12 months after delivery.

POSSIBLE WHOOPING COUGH VACCINATION SIDE EFFECTS

The side effects can include pain, redness or swelling at the injection site, as well as transient fever, headache and malaise.

In babies, whooping cough vaccine side effects can include decreased appetite, fever and crying. For a child who had DTPa (diphtheria, tetanus, and whooping cough) as their primary vaccination, boosting with the same vaccine produced extensive limb swelling in 2 per cent of recipients, however, the condition resolves after several days.

Acute allergic reactions occur in 1 per 1 million doses.

WHERE CAN I GET A WHOOPING COUGH VACCINATION FROM?

If you're searching online for 'pertussis vaccination near me or nearby' or need any kind of immunisations be aware that

you can get pertussis shots in Australia at any authorised immunisation provider, a community health centre, and travel clinics such as Travelvax.

Getting vaccinated against whooping cough is highly recommended if you are travelling. And if you need any health information regarding pertussis, talk with your doctor or immunisation provider.

FAQS

WHAT IS THE WHOOPING COUGH VACCINATION CALLED?

Whooping cough vaccines for adults are called dTpa which means diphtheria-tetanus and pertussis vaccine. A dTpa vaccination is recommended for adults wishing to reduce their likelihood of contracting pertussis.

WHO NEEDS WHOOPING COUGH OR PERTUSSIS VACCINE?

All children and adults who care for, have contact with, or work with children should be vaccinated against whooping cough. The combined vaccination or booster dose is recommended for all travellers before departure if they haven't had a booster in the past 10 years.

WHOOPING COUGH VACCINATION: HOW LONG DOES IT LAST?

It depends on whether you are a child, adult or pregnant woman when you have your first whooping cough shot. That is why booster shots are recommended for various ages and situations.

ARE YOU FULLY PROTECTED AFTER THE WHOOPING COUGH VACCINE?

If whooping cough is active in the community, a fully immunised person of any age can still contract the infection, however it will generally be less serious if they are vaccinated.

DO I NEED A WHOOPING COUGH SHOT TO BE AROUND A NEWBORN?

Yes. If you are planning to have contact with a newborn then it is highly recommended to get a whooping cough vaccination.

HOW LONG AFTER THE WHOOPING COUGH VACCINE CAN I SEE A BABY?

At least two weeks after vaccination. It takes about two weeks before antibodies are developed to fight against whooping cough after you've been vaccinated, although a booster shot will have a faster action.

WHEN SHOULD GRANDPARENTS GET THE WHOOPING COUGH VACCINE?

All family members including grandparents and any caregivers should make sure their pertussis vaccine is up to date and if not, have their whooping cough vaccination booster shot around two weeks before meeting the newborn.

SHOULD BOTH PARENTS GET THE WHOOPING COUGH VACCINE?

Yes. Especially if you're expecting a baby, both parents should get the whooping cough vaccine.

IS THE WHOOPING COUGH VACCINE COVERED BY MEDICARE?

If you are eligible for Medicare benefits (you and your eligible family members are included on your card) the vaccines are free if you fall in the required categories (see below) under the National Immunisation Program (NIP).

CAN THE WHOOPING COUGH VACCINE HARM MY BABY?

The dTpa vaccine is very safe for pregnant women and their unborn babies. The whooping cough vaccination during pregnancy will not increase your risk for pregnancy complications. The most common side effects that occur in 1 in 4 children vaccinated against whooping cough are fever, redness, swelling and/or tenderness at the injection site.

CAN YOU GET SICK FROM THE WHOOPING COUGH VACCINE?

More severe side effects are extremely rare but they may include allergic reactions that may be serious. See the above answer for more info.

~~DO YOU HAVE TO PAY FOR THE WHOOPING COUGH VACCINE?~~

If you have a Medicare card or you are on your family's card and you are eligible under the [NIP](#) it is free, otherwise you must pay. Your provider may charge for a visit.

~~HOW MUCH DOES THE WHOOPING COUGH VACCINE COST?~~

The combined tetanus/pertussis/diphtheria vaccine costs about \$45.00-\$50.00 per dose.

~~DO FATHERS GET A FREE WHOOPING COUGH VACCINE?~~

In most cases fathers are not eligible for the dTpa vaccine under the NIP and must pay for it.

~~WHO IS ELIGIBLE FOR A FREE WHOOPING COUGH VACCINE?~~

Children aged 6 weeks to two months, four and six months, 18 months, and schoolchildren between 10 and 15 years are eligible for a free whooping cough vaccination under the [NIP](#). These are also free for pregnant women in the third trimester, preferably from weeks 20 and 32 of each pregnancy.

More information on Whooping cough is available during your pre-travel consultation with Travelvax. Call 1300 360 164 for the location of the clinic nearest to you.