

Whooping Cough (Pertussis)

Link to content

<http://www.immunisation.ie/en/ChildhoodImmunisation/VaccinePreventableDiseases/WhoopingCough/#d.en.1044>

What is whooping cough?

Whooping cough is also known as pertussis. The disease causes long bouts of coughing and choking making it hard to breathe. The child may turn blue from lack of air, or vomit after a coughing spell. Between these coughing spells a child gasps for air causing the characteristic 'whoop' sound. Not all children get the 'whoop'. A child with whooping cough can have difficulty eating, drinking or even breathing. The disease can last up to three months.

Whooping cough is most serious in babies under 12 months of age, often requiring admission to hospital and may be fatal.

How do people get whooping cough?

Whooping cough is a very contagious disease; it is very easily spread from person to person. It is caused by bacteria called Bordetella Pertussis that live in the mouth, nose and throat. Whooping cough is spread by personal contact, coughing and sneezing. Infection is often transmitted to young children in the home from older siblings or adults who may be harbouring the bacteria in their nose and throat.

Who gets whooping cough?

Whooping cough can occur at any age. Although most reported cases occur in children less than five years, cases are reported amongst adolescents and adults every year. Cases when they do occur are usually children who are not vaccinated or children who are not fully vaccinated. Many reported cases occur among infants, some of whom are too young to have received the three primary doses of vaccine necessary to provide protection. This is why it is so important for children to receive the 6 in 1 vaccine at 2, 4 and 6 months to help protect those who are too young to receive the vaccine.

How serious is whooping cough?

Whooping cough is a serious illness and may result in death. More than half of the babies under one year with whooping cough are hospitalised.

Of the people who get whooping cough

- 1 in 500 dies from pneumonia or brain damage. (90% of deaths are in children under the age of 6 months)
- 1 in 125 will have fits (1 in 70 if less than 6 months)
- 1 in 1000 will get encephalitis (inflammation of the brain) (1 in 500 if less than 6 months old)
- 1 in 20 will get pneumonia (1 in 10 if less than 6 months)

- 1 in 5 will need to go to hospital (1 in 2 if less than 6 months)

Serious illness is less common in older children.

What are the symptoms of whooping cough?

Different parts of the body may be affected including the lungs and brain.

Respiratory (Breathing)

Most cases of whooping cough involve some degree of collapsed lung and/or pneumonia.

Babies may stop breathing. Pneumonia may be severe enough to lead to death.

Approximately half the deaths from whooping cough are due to pneumonia. Those who survive usually do not experience permanent lung damage.

Central nervous system (Brain)

There may be altered consciousness or convulsions. This is most likely due to a lack of oxygen or small amounts of bleeding into the brain. Death, permanent brain damage or full recovery are equally likely to result from this form of the disease. Around half of babies under 6 months who have whooping cough may be admitted to hospital. Up to 1 in 70 babies can suffer convulsions. Around 1 in 1000 may develop encephalopathy (inflammation of the brain).

Nutritional (Feeding)

Frequent vomiting and loss of appetite may result in severe weight loss.

How can pertussis be prevented?

Pertussis can be prevented by vaccination.

The pertussis vaccine is given to children as part of the 6 in 1 vaccine

(http://www.immunisation.ie/en/EXTRADOWNLOADS/Text_15375_en.html) at 2, 4 and 6 months of age. The 6 in 1 vaccine protects against Diphtheria, Hepatitis B, Hib (haemophilus Influenzae B) Pertussis, Polio and Tetanus.

Booster vaccine doses are given at 4-5 years of age (4 in 1 vaccine)(

http://www.immunisation.ie/en/EXTRADOWNLOADS/Text_16653_en.html) which protects against Diphtheria, Pertussis (Whooping Cough), Polio and Tetanus) and again between 11-14 years of age (Tdap vaccine)

(http://www.immunisation.ie/en/EXTRADOWNLOADS/Text_15376_en.html) which protects against Diphtheria, Pertussis (Whooping Cough) and Tetanus

If your child requires vaccination, or you are unsure of your child's vaccination status, contact your GP for advice.

Is the pertussis vaccine safe?

Yes. The vaccines that protect against pertussis are generally safe with few minor adverse reactions.

Of the people who are immunised;

- 1 in 10 have redness and swelling where the injection was given or have a fever.
- About 1 in 2500 may cry for more than three hours after immunisations.
- More serious side effects, such as fitting may occur in 1 in 12,500 children vaccinated. Most of these events have no long-term consequences.
- Very rarely, severe nervous system problems have been reported.

If your child requires vaccination, or you are unsure of your child's vaccination status, contact your GP for advice.

Where can I find out more?

- Health Protection Surveillance Centre website for more detailed information
<http://www.immunisation.ie/en/ChildhoodImmunisation/VaccinePreventableDiseases/WhoopingCough/#d.en.10448>
- Royal College of Physicians of Ireland Immunisation Guidelines for Ireland, 2008 and subsequent updates available at
http://www.immunisation.ie/en/Publications/Text_15503_en.html
- Centers for Disease Control and Prevention-Epidemiology and Prevention of Vaccine Preventable Diseases "The Pink Book-12th edition. April 2011 available at
<http://www.cdc.gov/vaccines/pubs/pinkbook/index.html>
- Centers for Disease Control and Prevention-Parents Guide to Childhood Immunization -. 2010- available at <http://www.cdc.gov/vaccines/pubs/parents-guide/default.htm#pguide>
- Department of Health UK. Immunisation against infectious diseases "The Green Book"2006 and subsequent updates available at
http://www.dh.gov.uk/en/Publichealth/Healthprotection/Immunisation/Greenbook/DH_4097254