# **Pertussis**

Pertussis, also known as whooping cough is typically spread by the respiratory route when, for example, an infected person coughs or sneezes

Pertussis, also known as whooping cough, is a highly infectious disease, caused by the bacterium Bordetella pertussis. It is typically spread by the respiratory route when, for example, an infected person coughs or sneezes.

Pertussis starts with non-specific catarrhal ('common cold') symptoms. Typically, an intermittent, uncontrollable cough then develops, causing spasms. Coughing fits, may end with the characteristic "whoop", as the person gasps for breath, or by vomiting. Young infants do not always develop a "whoop" following the coughing spasms, but may instead experience difficulty breathing or even stop breathing for a short time.

Symptoms are often worse at night and the illness can last for two to three months. Pertussis can affect people of all ages, but infants under six months of age are at highest risk of severe complications and death.

### **Prevention**

The best way to protect against pertussis is through vaccination. Pertussis vaccination is not routinely offered to adults and children over 10 years old (apart from pregnant women or as part of outbreak control). Travellers should always ensure they are up to date with their routine vaccines according to the NHS vaccination schedule.

Good personal hygiene, including hand washing, and covering the mouth/nose when coughing or sneezing, can also help to minimise the risk of acquiring and spreading the infection.

Country-specific vaccine recommendations for pertussis are not routinely provided on TravelHealthPro country pages.

### Pertussis vaccine

The main aim of the UK vaccination schedule is to reduce the risk of severe pertussis in infancy. The primary UK vaccination course consists of three doses of an acellular pertussis-containing vaccine at eight, twelve and sixteen weeks of age. A reinforcing dose should be administered at around three years and four months.

Pregnant women are advised to have a pertussis containing vaccine ideally between 20 and 32 weeks gestation (minimum 16 weeks gestation) to protect their baby from birth until they reach the age of routine immunisation against this disease.

Neither the pertussis vaccination or the natural infection provide lifelong cover. There is evidence of waning protection 10 - 15 years after completing a primary vaccine course. However, pertussis vaccine prevents severe disease, so vaccinated individuals who subsequently develop pertussis are unlikely to be at risk of serious complications.



## Vaccine schedules

Vaccine	Schedule and age range
6-in-1 (DTaP/IPV/Hib/HepB) diphtheria, tetanus, pertussis, polio, Haemophilus influenza type b and hepatitis B	Three doses: given at 8, 12 and 16 weeks of age
4-in-1 (dTaP/IPV) diphtheria, tetanus, pertussis	Single pre-school booster dose: given at 3
and polio	years, 4 months old or soon after
Boostrix-IPV (dTaP/IPV) diphtheria, tetanus, pertussis and polio	Single booster dose: offered to pregnant women (ideally between 20-32 weeks)

In recent years, in response to large outbreaks of pertussis, several countries outside the UK have recommended pertussis vaccination for adults, family, and close contacts of newborns, with the rationale that vaccination might protect the infant. However, maternal vaccination during pregnancy is thought to be more effective than the 'cocooning' approach. Vaccination of adults in these circumstances is not recommended for UK travellers. See our <u>pertussis (whooping cough)</u> and travel factsheet for further details.

#### Resources

- UKHSA: Immunisation against infectious disease. Pertussis.
- UKHSA: Pertussis: guidance, data and analysis
- World Health Organization: Pertussis
- Further details on the vaccines can be found on the <u>Summary of Product Characteristics</u> (SPC) on the electronic medicines compendium