

Pertussis, commonly known as “whooping cough”, is a respiratory infection caused by the bacterium *Bordetella pertussis*. It is highly infectious in unvaccinated people.

» SYMPTOM OVERVIEW¹

▶ Early symptoms (first two weeks):

The initial manifestation of pertussis often mirrors that of a common cold.

Key symptoms include:

Runny or stuffy nose | Mild to occasional coughing | Apnoea and cyanosis, which can be detected if lips or nailbeds develop a blue tint | Extreme fatigue

▶ Severity and duration

Pertussis tends to be most severe in babies. Although the infection is generally milder in teens and adults and usually does not require hospitalisation, they can have serious cases of whooping cough, with strong symptoms.¹ The typical infection duration spans two to three weeks. However, prolonged symptoms such as chronic cough can last for six weeks or more.

Due to severe (or prolonged) cough episodes, adults might suffer from issues like rib fractures, significant weight loss, bladder control loss, syncope, falls and exacerbation of existing chronic medical conditions.² The most common complication of pertussis is bacterial pneumonia.²

▶ Progression and acute symptoms (one to six weeks, can extend up to 10 weeks)

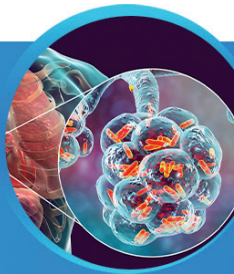
As the illness progresses, the symptoms intensify and can include:

Violent and uncontrollable coughing fits, termed “paroxysms” | Distinctive “whoop” sound during coughing episodes | Fatigue post-coughing, but a general sense of wellness between coughing fits | Vomiting after coughing fits | Difficulty breathing

▶ Recovery phase

Recovery is characterised by a gradual recuperation, with a reduction in the severity of coughing. However, fits can occasionally recur. Notably, during this phase, patients might:

- Experience general weakness.
- Become more susceptible to other respiratory infections.



» TYPES OF VACCINE³

DTP is the general global name of the vaccine that includes diphtheria, tetanus and pertussis.



DTap:

The DTap formulation is available for children aged six weeks to six years.



Tdap:

The Tdap formulation is a booster dose (with reduced quantity of the diphtheria and pertussis antigens)² for people aged seven years and older.

» COMMON SIDE EFFECTS OF PERTUSSIS VACCINE

- Localised symptoms such as pain, redness or swelling at the injection site. Other symptoms include fever, headache, fatigue, nausea, vomiting and diarrhoea.⁵
- Pharmacists should emphasise the importance of consulting healthcare providers if these symptoms intensify or persist.

» PERTUSSIS VACCINATION IN ADULTS

Vaccines are the best protection against pertussis and its complications. All adolescents and adults should receive a Tdap vaccine booster every 10 years after completing the primary vaccination schedule in childhood.³

Although vaccination is recommended in all adults, it should be emphasised in the following groups:



Individuals with chronic respiratory conditions

Adults living with asthma or COPD may be at increased risk of pertussis.⁴ Such individuals face a higher probability of hospitalisation upon contracting the infection and have a higher likelihood of experiencing asthma or COPD exacerbations.⁴



Older adults*

Older adults are at increased risk of developing complications from pertussis.⁵



Pregnant individuals

- Tdap should be given during each pregnancy (between 27-36 weeks) to protect infants from life-threatening complications from pertussis.
- For individuals not previously vaccinated with Tdap (i.e., during adolescence, adulthood, or a previous pregnancy), if Tdap is not administered during pregnancy, Tdap should be administered immediately postpartum.⁵



Adults who have or anticipate having close contact with an infant up to 12 months old should also receive a booster to protect the infant.⁵

» ROLE OF PHARMACISTS



Pharmacists should stand ready to provide advice and address any questions regarding the pertussis vaccine.



Pharmacists play a pivotal role in promoting vaccination awareness and uptake, and advocating for vaccination.

*Age recommendations for vaccinations of older adults may vary per country. Check your local and national guidelines.

» REFERENCES AND ACKNOWLEDGMENTS

For the bibliography and additional information, check the FIP vaccination microsite:

www.fip.org/letstalkaboutvaccines



Supported by an unrestricted grant from Sanofi

» RESOURCES

- International Pharmaceutical Federation (FIP). FIP vaccination handbook for pharmacists: Procedures, safety aspects, common risk points and frequent questions. The Hague: International Pharmaceutical Federation; 2021.
- International Pharmaceutical Federation (FIP). Building vaccine confidence and communicating vaccine value: A toolkit for pharmacists. The Hague: International Pharmaceutical Federation; 2021.
- International Pharmaceutical Federation (FIP). An overview of pharmacy's impact on immunisation coverage: A global survey. The Hague: International Pharmaceutical Federation; 2020.
- International Pharmaceutical Federation (FIP). Expanding immunisation coverage through pharmacists. The Hague: International Pharmaceutical Federation; 2021.
- Centers for Disease Control and Prevention. Epidemiology and prevention of vaccine-preventable diseases. Hall E., Wodi A.P., Hamborsky J., et al., eds. 14th ed. Washington, D.C. Public Health Foundation, 2021. Available at: <https://www.cdc.gov/vaccines/pubs/pinkbook/index.html>