

LOWER RESPIRATORY TRACT INFECTIONS

Whooping Cough

Notifiable disease. Suspected and confirmed cases should be notified to [UKHSA](#) within 3 days.

Also known as pertussis, is a highly infectious disease caused by *Bordetella pertussis*. It is spread by aerosol droplets released during coughing. [Pertussis: guidelines for public health management - GOV.UK](#)

Symptoms:

- Typical symptoms e.g., paroxysmal cough (coughing fits), whooping and post-tussive vomiting may not be present in older children and adults. Pertussis should be considered as a cause of chronic episodic cough in older age groups.
- In young infants, the 'whoop' may be absent, and coughing spasms may be followed by periods of apnoea and/or cyanosis.

Treatment:

- Arrange for hospital admission (inform the hospital of the need for appropriate isolation) if:
 - 6 months of age or younger and acutely unwell
 - has significant breathing difficulties (for example apnoea episodes, severe paroxysms, or cyanosis)
 - has a significant complication (e.g., seizure or pneumonia)
- **If admission is not necessary and the onset of the cough is within the previous 14 days**→ prescribe antibiotic treatment **at dose and duration as outlined in table below.**
- **If the infected patient has household or other close contact who is in the [priority Group 1](#) for public health action** (see below for definition of Group 1)→ the window for prescribing antibiotics from the onset of cough can be increased to 21 days (usually 14 days).
- **A macrolide antibiotic is recommended first-line.**

Antibiotic Treatment and Prophylaxis		
Medicine	Dose	Duration
Clarithromycin ^{1,2}	In neonates, infants, and children: Under 8 kg: 7.5mg/kg twice a day 8 – 11 kg: 62.5mg twice a day 12 – 19 kg: 125mg twice a day 20 – 29 kg: 187.5mg twice a day 30 – 40 kg: 250mg twice a day In children aged ≥12 and adults: 500mg twice a day	7 days
Erythromycin ³ (Preferred in pregnancy)	Adults: 500mg four times a day	7 days
Azithromycin ²	In neonates, infants, and children: 10mg/kg (maximum 500mg) daily In adults: 500mg daily	3 days
Co-trimoxazole (Only use if macrolide is contraindicated or not tolerated)	Contraindicated during pregnancy and is not licensed for use in infants younger than six weeks of age. Infants 6 weeks to 5 months: 120mg twice a day Infants and children 6 months to 5 years: 240mg twice a day Children 6 to 11 years: 480mg twice a day Children ≥12 years and adults: 960mg twice a day	7 days

¹ Prescribe clarithromycin for infants less than 1 month of age
² Prescribe azithromycin or clarithromycin for children aged 1 month or older, and non-pregnant adults
³ From 36 weeks gestation, this is recommended to reduce the risk of transmission to the newborn baby. Prior to this, it is likely to be of clinical benefit for the woman only if administered within the first 21 days of the illness or may be advised if she is likely to come into close contact with a person from a vulnerable group

Prophylaxis:

- Offer antibiotic prophylaxis ([see treatment and prophylaxis table](#)) to close contacts of the 'index case' when coughing in the 'index case' started within the previous 14 days *and* the close contact is in a priority group for public health action (Group 1 or 2 as described below):

GROUP 1 (infants at increased risk of severe complications from pertussis) includes:

- 1) <2 months of age
 - a. Born before 32 weeks gestation: unimmunised regardless of maternal vaccine status
 - b. Born after 32 weeks gestation: unimmunised whose mothers did not receive maternal pertussis vaccine after 16 weeks and at least 2 weeks before delivery
- 2) ≥2 months of age
 - a. Unimmunised regardless of maternal vaccine status
 - b. Partially immunised (less than three doses of DTaP/IPV/Hib up to 1 year of age) regardless of maternal vaccine status

GROUP 2 (people at increased risk of transmitting the infection to infants in group 1 and who have not received a pertussis-containing vaccine more than 1 week and less than 5 years ago) includes:

- Pregnant women at 32 weeks gestation or more
- Healthcare workers who work with infants and pregnant women
- People whose work involves regular close or prolonged contact with infants too young to be fully vaccinated
- People who share a household with an infant as defined in Group 1 above.

Patient advice:

- [NHS Whooping cough](#) and [Patient leaflet Whooping cough](#)
- Advise rest, adequate fluid intake, and the use of paracetamol or ibuprofen for symptomatic relief.
- Likely to cause a protracted non-infectious cough (even with antibiotic treatment) that may last for 3 months or more and has been referred to as 'the one-hundred-day cough'.
- **Exclusion from nursery, school, or work is required for suspected, confirmed, or epidemiologically linked cases. See [section 3.1.3 on UKHSA guidance](#) for further information.**
- For asymptomatic contacts, exclusion from nursery, school, or work is not required.
- Arrange to have any outstanding vaccinations after recovered from the acute illness.
- Offer immunisation to all people who have been offered antibiotic prophylaxis.
 - Up to 10 years of age: non- or partly immunised should complete the schedule of the childhood immunisation programme.
 - A booster dose of pertussis-containing vaccine is recommended for people aged ≥10 years who have not received a dose of tetanus-diphtheria-inactivated polio vaccine (Td-IPV) in the preceding month and have not received a pertussis booster in the past 5 years.
 - Pregnant women who receive a dose of pertussis-containing vaccine before the 16th gestational week should also be given a further dose after 16 weeks of pregnancy to protect the neonate.