

Pertussis – General Practitioner factsheet

Background

Pertussis is a highly infectious respiratory disease which can cause severe sequelae and death, particularly in those aged less than 12 months.

Fortunately, there is an effective public health response, meaning preventive measures can be taken to reduce the spread from cases to those at high risk of severe disease.

This involves isolation and education of patients and sometimes prescribing prophylactic antibiotics to their contacts.

It is important for GPs to;

- investigate and treat pertussis cases
- identify high risk contacts
- be aware of the public health response which may require the prescription of prophylactic antibiotics to at risk contacts.

The Northern Territory (NT) Centre for Disease Control (CDC) is guided by the [Pertussis Communicable Disease Network Australia \(CDNA\) national guidelines](#) for the public health response.

Testing

Testing is best done by PCR on nasopharyngeal swab/aspirate in the first 4 weeks of any cough onset. Thereafter blood testing for (IgA) serology is recommended.

There is no benefit in testing contacts who are asymptomatic or persons who have completed 5 days of appropriate antibiotic therapy (see Table for recommended treatment).

Case management

It is recommended that the clinical management of infants <6 months of age be discussed with a paediatrician.

Treatment

Antibiotics reduce the infectivity of the patient and when given early may reduce symptoms. If given more than 3 weeks after onset, antibiotics will not reduce transmission and are unlikely to change the course of the illness.

Azithromycin is the treatment of choice. Other options are clarithromycin and trimethoprim-sulfamethoxazole. Erythromycin is effective for prophylaxis but is not recommended due to poor tolerability and therefore should not be prescribed.

DO NOT use roxithromycin (Rulide®, Biaxig®, Roxar®) as it has not been shown to be effective against pertussis.

Table – Recommended antibiotic treatment and post exposure prophylaxis for pertussis

Age group	Azithromycin	Clarithromycin	Trimethoprim-sulfamethoxazole (TMP-SMX)
<1 month	10mg/kg orally daily for 5 days	Not recommended	Not recommended
1-5 months	10mg/kg orally daily for 5 days	7.5mg/kg/dose (up to 500mg) twice daily for 7 days	Child ≥1 months TMP/SMX: 4 + 20mg/kg (max 160mg/800mg) twice daily for 7 days
(≥6 months) and children	10mg/kg (max 500mg/day) single dose on day 1, then 5mg/kg (max 250mg/day) single dose for days 2-5	7.5mg/kg/dose (up to 500mg) twice daily for 7 days	TMP/SMX: 4mg + 20mg/kg (max 160mg/800mg 12-hourly) twice daily for 7 days
Adults	500mg single dose on day 1, then 250mg single dose for days 2-5	500mg twice daily for 7 days	TMP/SMX: 160mg/800mg twice daily for 7 days

Notification

Pertussis is a laboratory or doctor notifiable disease in the NT. CDC staff will contact the clinician who ordered the test as per the public health management below.

Public health management

PCR positive cases: After checking with the GP and obtaining information to contact the patient, CDC follows up the patient to ascertain whether there are any close contacts that require prophylaxis and to explain exclusion periods.

IgA (serology) positive cases: A fax/email is sent to the GP to obtain information on clinical symptoms and close contacts. If the GP identifies close contacts or is unsure, CDC will follow up the patient to ascertain whether there are any close contacts that require prophylaxis and to explain exclusion periods.

All cases should be excluded from work, childcare facilities and school until they are non-infectious, which is 5 days after appropriate antibiotic treatment or 21 days after onset of the cough.

A close contact is defined as a household member or a person with contact of <1 metre for >1 hour during the cases infectious period (within 3 weeks after cough onset).

Antibiotic prophylaxis is recommended for specified close contacts according to national guidelines. These may include;

- Household contacts where a child <6 months of age or a woman in the last month of pregnancy is present
- People who work in a healthcare or childcare setting
- Children who attend a childcare centre or playgroup where one or more pertussis cases have attended while infectious.

Antibiotics for prophylaxis can be provided by CDC free of charge.

If contacts are unwell, CDC will usually refer them back to their GP for assessment. If the case attended school while infectious, CDC will send a letter to the school for distribution to the parents of all members of the same class.

Vaccination

Immunisation is the mainstay of pertussis control.

Please ensure that children have been vaccinated according to the NT Childhood Vaccination Schedule.

Please ensure pregnant women are vaccinated between 20 and 32 weeks gestation.

Immunity following early childhood vaccination is not life-long and the following groups should be offered free adult diphtheria, tetanus and pertussis (dTpa) vaccine (Boostrix®, Adacel®);

- All children at 12 years of age (in the NT this is usually given via a school-based program in year 7).
- If vaccine is not received at age 12 years, a single dose of free dTpa vaccine can be given up until 19 years of age.
- Pregnant women – the best time to administer the dTpa vaccine is between 20 and 32 weeks of pregnancy but can be given anytime from 20 weeks of pregnancy up to and immediately after delivery. Pertussis vaccine needs to be given to women with every pregnancy.
- Encourage all people caring for young children to be vaccinated every 10 years e.g. family members, childcare and healthcare workers and any others who wish to be vaccinated. These groups will require a prescription to purchase the vaccine privately unless funded by their employer.

Contact

For more information contact your nearest [Centre for Disease Control](#).

Location	Phone
Darwin (Top End Region)	(08) 8922 8044 1800 008 002
Katherine (Big Rivers Region)	(08) 8973 9049
Tennant Creek (Central Australia Region)	(08) 8962 4259
Alice Springs (Central Australia Region)	(08) 8951 7540
Nhulunbuy (East Arnhem Region)	(08) 8987 0357