

## Pertussis on the increase – October 2008

Pertussis (whooping cough) has been on the increase recently around NSW, including the South Eastern Sydney Illawarra Area. There were 493 cases notified for 2008 in Area residents to 27 September, compared to 251 cases for the same period in 2007. The 10-14 year age group showed a disproportionate increase compared to last year.

### Case study: Pertussis in an infant

“Annie” aged 9 months, fully vaccinated for her age, presented to the family’s GP with cough, wheeze, coryza and occasional vomiting. The GP advised her mother to take her to the local hospital where she was admitted for two days. After discharge, her cough worsened, with occasional cyanotic spells observed by the mother during coughing spasms; over the next 4 days, Annie was reassessed in hospital on 2 further occasions. On the latter presentation, on day 7 of the illness, a nasopharyngeal aspirate was taken for respiratory virus screen and *Bordetella pertussis* testing. The **Bordetella PCR was positive**. Annie was commenced on Erythromycin on the same day. Annie’s family remained well and her siblings are fully vaccinated for age.

General practitioners should note the following regarding pertussis epidemiology and management

- Pertussis is a disease of **all** age groups, but may be fatal in young infants
- Immunisation has greatly reduced the incidence of pertussis, but it **can still occur** in immunised patients
- Typical symptoms are a coryzal prodrome followed by coughing spasms, post-tussive vomiting and inspiratory whoop, but not all cases have these symptoms
- Pertussis in an **infant** is a “**must not be missed**” diagnosis; babies with pertussis may present with cyanotic spells with no or minimal cough (see case below)
- It is also a “must not be missed” diagnosis in a new parent or grandparent – babies who have died of pertussis have usually contracted the infection from a parent – this is a preventable tragedy
- Ask if anyone else in the family is coughing (such as school-aged children or those in child care)
- To diagnose the infection up to 3-4 weeks after cough onset, request **pertussis PCR** from your pathology service (it is now widely available). After this time, pertussis serology may be useful in patients **over 2** years of age.
- Cases are **infectious** during the prodrome and first 3 weeks of cough.
- Spread of pertussis can be prevented by **early** use of correct antibiotics in infectious cases (treatment) and in selected contacts (prophylaxis)
- Treatment and prophylaxis regimes are the same:
  - azithromycin 500 mg (child  $\geq 6$  months: 10 mg/kg up to 500 mg) orally on day 1, then 250 mg (child  $\geq 6$  months: 5 mg/kg up to 250 mg) orally, daily for a further 4 days (child  $< 6$  months: 10 mg/kg orally, daily for 5 days); **or**
  - clarithromycin 500 mg (child  $> 1$  month: 7.5 mg/kg up to 500 mg) orally, 12-hourly for 7 days; **or**
  - erythromycin 250 mg (child  $> 1$  month: 10 mg/kg up to 250 mg) orally, 6-hourly for 7 days.
  - If an alternative is needed, use trimethoprim + sulfamethoxazole 160+800 mg (child: 4+20 mg/kg up to 160+800 mg) orally, 12-hourly for 7 days.
- Notify the Public Health Unit of **suspected** cases on 9382 8333 (Randwick) or 4221 6700 (Wollongong) and **receive advice on testing and treatment at the same time!**