Diagnosis of pertussis “ the cough of 100 days”

Clinical (this is the method of diagnosis in PNG)-
- CHILD- characteristic chronic paroxysmal cough with inspiratory whoop, post-tussive vomiting, apnoeas in young infant, subconjunctival haemorrhage and other complications
- Fulminant pneumonia may occur in a child < 6mths
- OLDER- may just have chronic cough

Microbiology-
- Polymerase chain reaction (PCR) test of a nasopharyngeal swab or throat swab specimen. PCR is an important diagnostic technique to read about. For an animation that shows you how it works, see http://www.maxanim.com/genetics/PCR/PCR.htm .
- Culture used to be done on special medium; slow growing bacterium. Culture far less sensitive than PCR.
- Serology not very useful

A FATAL CASE IN NEWCASTLE-
- 10 week infant
- 4 days:runny nose, fever, lethargy, mild cough
- respiratory failure, extensive CXR changes
- death in hospital
Child was thought to be infected by an infectious grandparent.

Questions for your reading:
- What is the differential diagnosis of chronic cough in an infant or an adult?
- What is the vaccination schedule for children in PNG and when do children receive pertussis immunisation?
- How effective is pertussis vaccination? How quickly does it wear off as a child grows older?
- Read about conjugate pneumococcal vaccination and its impact (below). Planning is occurring to implement childhood vaccination in PNG.
- What is the difference between a conjugate vaccine and a polysaccharide vaccine in terms of the immune response and protection provided?

Further reading
2. Pneumococcal vaccination with conjugate vaccine- have a look at these reference abstracts :
   - Impact in the USA http://www.ncbi.nlm.nih.gov/pubmed/21264063