

11 April 2012

Updated guidance for Primary Care on pertussis

Attached is updated advice from the Laboratory Oversight Advisory group to guide the investigation and diagnosis of pertussis infection in the greater Wellington region.

Aim of pertussis control

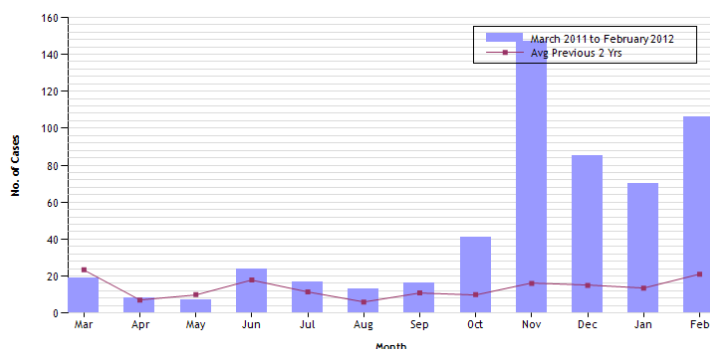
Pertussis outbreaks occur in New Zealand approximately every 5 to 6 years. Once pertussis is circulating in the community it is very difficult to stop the outbreak. Infants and children account for the majority of hospitalisations and deaths due to pertussis. The main aim of public health action and follow up is to minimise the chance that infants under 1 year and women in the last trimester will become infected.

Current situation in greater Wellington region

Pertussis continues at a very high number in the Wellington and Hutt regions with 527 suspected or confirmed notifications between 1st October 2011 and 4th April 2012, this is approximately 8 times higher than in the same time the previous year (see figure1). The increase in pertussis started later in the Wairarapa with 13 cases notified in the last 8 weeks. Notified cases will underestimate the true number of cases in the community. This outbreak is likely to continue for many months.

Since 1st October 2011 the age range of people with pertussis was from less than one month to over 80 years of age, and approximately 45% of cases have been aged 20 years and older. Adults and adolescents are often the source of infection for young babies who are most at risk of severe disease and complications. There have been 29 babies aged less than 1 year with pertussis in our region over the same time period.

Figure 1. Pertussis notifications in the greater Wellington region



Laboratory testing for pertussis

- Not all people need laboratory confirmation of pertussis.
- Testing is most important in the following situations;
 - o Young babies <12 months of age, especially if partial or no immunisation
 - o Pregnant women, especially last trimester
 - o Other persons in a household with a baby <12 months or with a pregnant woman in last trimester
 - o People who work at early childhood centres or healthcare workers including midwives
 - o Child who attends an Early Child Education Centre

Note - A PCR test for pertussis costs \$130 so please test strictly in accordance with the guidance provided.

Testing is **not** required or recommended in the following situations:

- To check if someone is no longer infectious and can return to Early Childhood Education Centre (ECEC) or school (assume non-infectious after 5 days of antibiotics or cough > 21 days)
- For a close contact of a confirmed case e.g. household or workplace
- Obvious clinical picture and not a priority person for public health follow up (see below) and no vulnerable contacts

Type of test and transport media

- PCR is the recommended test when laboratory confirmation is required
- Test within 7 days of cough onset
- Culture and serology testing for pertussis will no longer be performed
- The throat swab needs to be put in VTM (see picture below)
 - o further detail on laboratory testing can be found at www.apath.co.nz/pathology-test-guide

Figure 2. Example of VTM tube for pertussis testing



Treatment of cases and contacts - see flow chart

Note - antibiotic treatment is given to reduce pertussis transmission, it may not alter the clinical course unless started in catarrhal stage

Notification and identification of priority people for public health follow up

Notify all suspected and confirmed cases. Advise if there are any priority people for public health follow up:

- Young babies <12 months of age, especially if partial or incomplete immunisation
- Pregnant women, especially last trimester.
- Other persons in a household with a baby <12 months or a pregnant woman in last trimester
- People who work at early childhood centres or healthcare workers including midwives
- Children who attend an ECEC

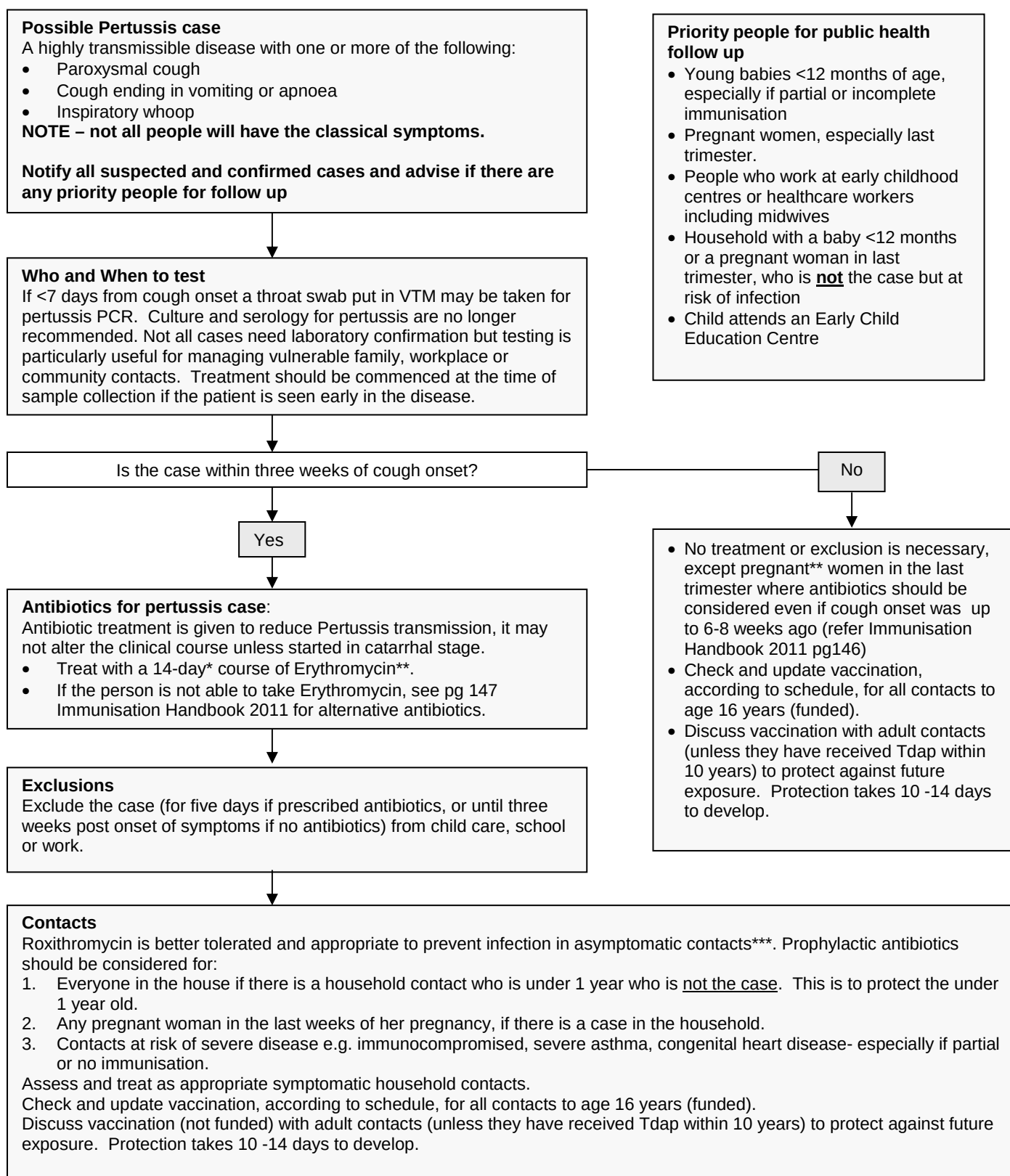
Due to the number of pertussis notifications we recommend that you complete and fax or email the one page notification form (Appendix 2) to: healthprotection@huttvalleydhb.org.nz Fax: 04 570 9373.

Immunisation

Immunisation is the best way to prevent pertussis. Check and update children and adolescent immunisations (funded to age 16 years). Tdap, adult booster vaccination is also recommended but not funded for:

- Adult household contacts of pregnant women and newborns
- Health care workers, especially those working with pregnant women, neonates or infants
- Staff working in early child care centres
- Postnatal women

Flow Chart for the Management of a Suspected Pertussis Case in Primary Care



Developed 30 March 2012

*The Ministry of Health is assessing the effectiveness of a 7 day treatment or prophylaxis regime. We will provide an update when this is available.

**Note that macrolides may cause infantile hypertrophic pyloric stenosis in babies less than three months of age and macrolide use by pregnant and breastfeeding women has been reported to be associated with an increased risk of infantile pyloric stenosis.

*** Local Infectious Diseases advice

Pertussis (Whooping Cough) Notification to Public Health



Name of notifying GP:	Practice:
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CASE IDENTIFICATION	
Name of case:	Phone (home):
Surname	Given Names
Current address:	Phone (work):
Number	Street
Suburb	City
Phone (other):	
Caregiver's name if case is child <16 years:	

CASE DEMOGRAPHY	
Date of birth: / /	Ethnic group case belongs to (tick all that apply)
Day Month Year	☐ Maori ☐ Samoan ☐ Cook Is
Sex: ☐ Male ☐ Female	NZ ☐ Chinese ☐ Indian ☐ Tongan
NHI:	Other: (such as Dutch, Japanese, Tokelauan)
Preschooler: ☐ Yes	Name of Preschool:
School: ☐ Yes	Name of School:
Current occupation:	Name of workplace:

Please indicate priority people for Public Health follow-up:

☐ Young babies <12 months of age, especially if unimmunised

☐ Pregnant women, especially last trimester.

☐ People who work with young babies e.g. at early childhood centres or healthcare workers including midwives

☐ Household with a baby <12 months or a pregnant woman in last trimester, who is **not** the case but at risk of infection

☐ Child attends an Early Child Education Centre

Please advise patient of the diagnosis before notifying Regional Public Health

CLINICAL SYMPTOMS	
Cough for more than 2 weeks	☐ Yes ☐ No ☐ Unknown
Paroxysmal cough	☐ Yes ☐ No ☐ Unknown
Cough ending in vomiting or apnoea	☐ Yes ☐ No ☐ Unknown
Inspiratory whoop	☐ Yes ☐ No ☐ Unknown
Illness onset date	/ /
Day Month Year	
Hospitalised ☐ Yes ☐ No ☐ Unknown	Date hospitalised: / /
	Day Month Year

TESTING	
PCR	☐ Yes ☐ Awaiting results
Culture	☐ Yes ☐ Awaiting results
No testing required	☐ Yes
Contact with a confirmed case of Pertussis e.g. sibling, work colleague	☐ Yes ☐ No ☐ Unknown

Please attached a copy of the patients Pertussis immunisation history if known

PATIENT MANAGEMENT	
Erythromycin for 14 days	☐ Yes
Other antibiotic: specify:	☐ Yes
No medication as patient has had cough for >21 days	☐ Yes
Exclude from work/school/childcare till 5 days of antibiotic, unless cough >21 days	☐ Yes

Notify RPH within 24 hours by Fax 04 570 9373 or email: healthprotection@huttvalleydhsb.org.nz