

## Pertussis (Bordetella pertussis)

## **Investigation Checklist for Local Health Departments**

Local health department staff should follow these steps, not necessarily in order, as a guide when investigating pertussis reports. For more detailed information, refer to the pertussis disease chapter which can be accessed via:

https://www.nj.gov/health/cd/topics/pertussis.shtml

- ☐ Review reported laboratory result(s) to understand what has been reported
  - Culture and polymerase chain reaction (PCR) positive results will meet laboratory criteria
  - Serology results, while not confirmatory, may indicate disease and should be investigated to determine if case meets clinical case definition
  - A case can still meet clinical case definition with no laboratory testing (or negative results)
  - o Single cases of Bordetella parapertussis are not reportable
- ☐ Obtain relevant clinical and epidemiologic information
  - o Interview medical provider
    - It is important to speak with someone in the office. Please do not rely only on faxing case investigation forms.
    - Inquire about cough onset/duration and presence of whoop/paroxysms/posttussive vomiting/apnea
      - If case was asymptomatic, why was test ordered?
    - If provider states they are not diagnosing with pertussis, request the alternate diagnosis (and/or inquire as to reason for ordering test)
    - Inquire about appropriate treatment for pertussis, type and dates of antibiotics prescribed
  - o Interview case/guardian this is extremely important
    - If initial contact information is unavailable or incorrect:
      - medical providers may have alternate contact info on file
      - NJIIS is a great resource
      - reverse search on the address or tax records are also possible sources of alternate contact information.
    - Verify case's demographic info (e.g., spelling of name, DOB, address, race/ethnicity, etc)
    - Verify symptoms (see below)
    - Obtain/document pertussis immunization dates
    - Exposure
      - Source of infection known?
      - Recent travel? (obtain details such as location, dates, flight information)
      - Other risk factors?



- □ Verify symptoms
  - Determine cough onset date and duration
    - Use a calendar, prompt with important events/holidays
    - o If chronic cough, did nature of cough change? If so, when?
    - It is important to determine if the cough lasted at least 14 days, for cases with only serology or no laboratory testing
      - If 14 days have not yet elapsed from cough onset, follow up with case at day 14 or later to determine if cough is still present or has ceased
  - Did case experience whoop <u>or</u> paroxysms <u>or</u> posttussive vomiting <u>or</u> apnea?
     Please inquire about EACH of these symptoms
- □ Determine infectious & incubation periods
  - Infectious period: date of cough onset + 21 days (or through day 5 of appropriate antibiotics)
  - o Incubation period: Date of last exposure to case while infectious + 21 days
- ☐ Identify close contacts exposed to case while infectious
  - Refer identified exposed close contacts to their primary medical provider for follow up and evaluation for PEP (regardless of pertussis immunization status)
  - Symptomatic contacts should be excluded from work, school, and activities until
    they have received medical evaluation and completed 5 days of appropriate
    antibiotics
  - Document assessment/prophylaxis of close contacts in the Contact Tracing section of CDRSS
  - Follow up with case/contacts at the end of one full incubation period to determine if any secondary cases occurred (those cases, in turn, should be investigated)
- ☐ Finalize CDRSS data entry, assign appropriate <u>case classification</u>, and "LHD Close" case when investigation is complete:
  - Illness onset date, specifically cough onset date
  - Demographics (including race/ethnicity)
  - Signs/symptoms (including onset dates)
    - o Cough, whoop, paroxysms, posttussive vomiting, apnea
    - o Cough duration: ≥ or < 14 days
  - Risk factors
  - Hospital admission/discharge dates (if applicable)
  - Mortality
  - o Immunizations (specifically, pertussis immunizations)
  - Treatment (document antibiotics administered to treat pertussis w/ dates)
  - Assessment/prophylaxis of close contacts
- ☐ As with all communicable disease investigations, please feel free to contact your Regional Epidemiologist or the Disease Subject Matter Expert with any questions