

## Pertussis (Bordetella pertussis)

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

Local health department staff should follow these steps, not necessarily in order, when investigating pertussis reports. For more detailed information, refer to the pertussis disease chapter which can be accessed via: <a href="https://www.nj.gov/health/cd/topics/pertussis.shtml">https://www.nj.gov/health/cd/topics/pertussis.shtml</a>

- ☐ Review reported laboratory result(s) to understand what has been reported
  - Culture and polymerase chain reaction (PCR) positive results will meet laboratory criteria
    - o If PCR positive, please inquire whether any additional pathogens were also positive, document in case.
  - 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 by interviewing medical provider:
  - It is important to speak with someone in the office. Do not rely only on faxing case investigation forms to the office.
  - Reason(s) provider ordered test: suspicion of pertussis, checking immunity (for pre-employment, school, pregnancy, etc), or other reason?
  - o Clinical presentation, asymptomatic vs symptomatic
    - o Asymptomatic: select "asymptomatic" in signs/symptoms section of case
      - If case was asymptomatic AND serology test was ordered for specific purpose of checking immunity (<u>no</u> clinical suspicion of pertussis), please inform the provider that as of 2024, no protective levels of immunity have been established, therefore serology should not be used for that purpose.
      - Document in CDRSS and close as "Not a Case".
      - If case was reported due to suspicion of pertussis infection, additional information is necessary. Please proceed with case investigation.
    - Symptomatic: obtain detailed information about pertussis-like symptoms with onset dates (see below)
      - Inquire about cough onset/duration and presence of whoop/paroxysms/posttussive vomiting/apnea
    - If provider states they are not diagnosing with pertussis, request/document the alternate diagnosis (and/or inquire as to reason for ordering test)
    - Inquire about appropriate treatment for pertussis, type and dates of antibiotics prescribed, document in Treatment Section.
- ☐ Complete public health interview with patient/guardian:
  - Extremely important and necessary part of case investigation
    - o If initial contact information is unavailable or incorrect:
      - medical provider may have alternate contact info on file
      - NJIIS is a great resource

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- 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 and onset dates (see below)
- o Obtain/document pertussis immunization dates in Immunization Section
  - Utilize NJIIS, school records, medical records
  - Inform case that NJIIS records can be downloaded via Docket App
- Exposure
  - Source of infection known?
    - If contact of a known case, link cases under Contact Tracing
  - 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 cough lasted <u>at least 14 days</u> 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 <u>end of one full incubation</u> 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:
  - o Illness onset date, specifically cough onset date
  - Demographics (including race/ethnicity)
  - Signs/symptoms (including onset dates)

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- 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)
- o Treatment (document antibiotics administered to treat pertussis w/ dates)
- o Assessment/prophylaxis of close contacts
- Pregnancy status
- ☐ As with all communicable disease investigations, please feel free to contact your Regional Epidemiologist or the Disease Subject Matter Expert with any questions

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