Pertussis (Whooping Cough) FAQ
The University of Iowa Hygienic Laboratory (UHL) and the Iowa Department of Public Health (IDPH)
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Iowa is experiencing an increase in the number of pertussis (whooping cough) cases in Iowa. This is the season when most coughs are due to viral infections and not necessarily an infection with *Bordetella pertussis*. Proper diagnosis and treatment are essential for patient treatment and prevention measures.

Treatment and Diagnosis:
A person with laboratory confirmed pertussis or has been designated a close contact of a confirmed pertussis case MUST be treated with appropriate antibiotics AND stay home for five days.

- **Symptomatic close contacts with a cough** are infectious and must stay at home for five days following the start of appropriate antibiotic treatment.
  - These contacts are presumed to be true cases of pertussis, regardless of the laboratory PCR test result.
  - They do not need to be tested, but close contacts of these individuals that are symptomatic with a cough should be tested to assist in controlling disease spread.
- **Asymptomatic close contacts** are **NOT** infectious but must be treated.
  - They may continue to engage in activities during the course of their prophylaxis.
  - They do not require testing.
- Persons who are not a contact of a case, but have symptoms compatible with pertussis (prolonged cough (>14 days) with any of the following: paroxysms of coughing, posttussive vomiting, inspiratory whoop, apnea) should be tested and treated per health care provider recommendation.
- Patients with symptoms of pertussis that have been coughing for more than 30 days are not infections and do **NOT** require treatment and/or testing for pertussis.
- Close contacts are defined by CDC and Iowa Public Health criteria ([www.idph.state.ia.us/adper/pertussis.asp](http://www.idph.state.ia.us/adper/pertussis.asp)). School age close contacts with significant exposure will receive a letter or phone call from a Public Health agency or school in conjunction with Public Health.
- Diagnosis of pertussis in ALL patients should be made on the basis of clinical and epidemiologic criteria.

Please contact IDPH at 800-362-2736 or your local public health department for information on treatment and prevention.

Laboratory Testing at UHL:
A positive PCR result DOES **NOT** mean that a patient is infectious or that they have clinically relevant disease. Laboratory tests should be used in conjunction with clinical symptoms for diagnosis and can be used to confirm but not rule out pertussis.

- The test performed at UHL is molecular (PCR) detection of *B. pertussis* DNA and detects both live and dead bacteria and cannot be used as a test of cure.
- PCR testing is very sensitive and collection instructions must be followed carefully. ([http://www.uhl.uiowa.edu/kitsquotesforms/bordetellapertussiscollectioninstructions.pdf](http://www.uhl.uiowa.edu/kitsquotesforms/bordetellapertussiscollectioninstructions.pdf)
- The best specimen for *B. pertussis* is a Dacron or rayon posterior nasopharyngeal swab or nasal wash/aspirate for detection by PCR.

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• The UHL Pertussis Collection Kit contains swabs and tubes that have been demonstrated to not interfere with our PCR test.

• Federal regulations (CLIA ’88) require the following information:
  o Use the UHL respiratory disease test request form:
    o Two patient identifiers: patient name and date of birth.
    o Patient gender.
    o The desired test MARKED on the test request form.
    o The type of specimen submitted.
    o The date the specimen was collected.
  o Patient identifiers on BOTH request form AND specimen tube(s) – they must match
  o Make sure to include your complete facility information so that results can be reported.

FAILURE TO PROVIDE THIS INFORMATION MAY LEAD TO SPECIMEN REJECTION.

• Inappropriate testing can lead to false-positive results. No test is perfect. Patients who do not meet epidemiologic and symptomatic criteria for pertussis have a greater chance of returning a FALSE POSITIVE result. This is due to the positive predictive value (PPV) of a test and is a function of disease prevalence.

Prevention:
• A person with pertussis is infectious for 21 days after cough onset or until they have completed 5 days of appropriate antibiotics. **They must stay home.**
• Adult and adolescent vaccination is highly encouraged. Pertussis is an endemic disease that can lead to significant illness. Vaccination in children and adults helps to reduce the risk of infecting babies, who are at most risk for bad disease outcomes.

Please contact UHL for testing information and to order UHL collection kits (319-335-4500).

A map of viruses isolated and positive pertussis specimens that have been tested at UHL is located at [https://www.uhl.uiowa.edu/webstats/Webstats?parameter=1](https://www.uhl.uiowa.edu/webstats/Webstats?parameter=1)