

Lababstract – April 2012

Bordetella* testing by Real-Time PCR – Addition of *Bordetella holmesii

To Health Care Providers:

Effective May 28, 2012 the Public Health Ontario Laboratories (PHL) will include testing for the detection of *Bordetella* species: *B. holmesii* by real-time PCR. PHL has been testing *Bordetella pertussis* and *Bordetella parapertussis* by real-time PCR since 2005. *B. holmesii* is associated primarily with septicaemia in patients with asplenia or immunocompromised, however it has also been linked to pertussis-like symptoms, although not as severe as those observed with *B. pertussis*.

Culture will no longer be reported routinely, as detection by the PCR assay is more sensitive.

Specimen collection requirements and test ordering

- Acceptable specimens include nasopharyngeal swabs, throat swabs, tracheal aspirates etc., in *Bordetella* transport medium.
- The *Bordetella* PCR test may be ordered using the PHL General Test Requisition, and entering “*Bordetella*” under the test description.

Turnaround Time

Results are available within 4 working days.

Interpretation of results

All reports for *Bordetella pertussis* (pertussis) test requests will include results for *B. pertussis*, *B. parapertussis* and *B. holmesii* targets as tested by the real-time PCR assay and will be reported as follows:

<i>Bordetella pertussis</i> PCR	PCR positive, negative or indeterminate
<i>Bordetella parapertussis</i> PCR	PCR positive, negative or indeterminate
<i>Bordetella holmesii</i> PCR	PCR positive, negative
All PCR Indeterminate results :	Note: A low level of DNA was detected in this sample. The clinical significance of this is not known and should be interpreted in combination with available clinical and epidemiological information. Consider collecting a second nasopharyngeal swab for repeat PCR testing if clinical illness is compatible with pertussis.
<i>Bordetella</i> PCR	Result not available due to presence of inhibitory substances in specimen. Please re-submit.

Indeterminate results for *Bordetella pertussis* will no longer be reported to the health units.

***Bordetella* testing by Real-Time PCR – Addition of *Bordetella holmesii* (Continued)**

For further information:

- Call the Customer Service Centre at 416 235 6556 or toll free at 1 877 604 4567
- For after hours emergencies, contact the After-hours Duty Officer at 416 605 3113
- For PHO Specimen Collection information, refer to <http://www.oahpp.ca/services/specimen-collection-guide.html>
- The current version of the PHL General Test Requisition form is available at <http://www.oahpp.ca/resources/requisitions.html>
- To view our Lababstracts, visit <http://www.oahpp.ca/resources/lababstracts.html>
- To subscribe to future PHO Lababstracts, please email lababstracts@oahpp.ca