# **Bordetella pertussis PCR Specimen collection**

- Call CNE Microbiology Dept at • extension 41191 to obtain collection kit
- Kit will contain items 1 and 2. .
- Two nasopharyngeal swabs and 1. UTM transport media.
- Detailed collection instructions. 2.
- Collect two nasopharyngeal ٠ swabs following instructions.
- Insert both swabs into the transport media.
- Label transport media tube with two patient identifiers.
- Place specimen inside of biohazard bag and return to WIH Microbiology Dept.





Rhode Island State Health Laboratories 50 Orms Street Providence, RI 02904 www.health.ri.gov

### COLLECTION KIT FOR B. PERTUSSIS (WHOOPING COUGH) AND B. PARAPERTUSSIS PCR - LUMINEX ARIES BORDETELLA ASSAY

### STORAGE:

Universal transport media (UTM) should be stored at a temperature range of 2-25°C until use.

## IMPORTANT INFORMATION TO ENSURE THE BEST QUALITY SPECIMEN:

- Both sides of the nasopharynx should be cultured, as this enhances the chances of recovering B. pertussis. A separate nasopharyngeal swab should be used for each side
- Only nasopharyngeal swabs with tips made of polyester (such as Dacron), or rayon are acceptable for 2 collection. The Rhode Island State Health Laboratories (RISHL) provides these swabs in addition to the Universal transport media (upon request). Cotton tipped and calcium alginate tipped swabs are unacceptable. Cotton tipped swabs are toxic to the bacteria and calcium alginate tipped swabs may contain substances that interfere with PCR.
- The nasopharynx is the required site for culture. Throat and nasal swabs are unacceptable.
- The nasopharyngeal swabs should be left in the UTM with the swab tips immersed in the liquid medium. No testing will be performed if the swabs are not in the transport tube.
- With PCR, the most rapid test, the specimen should ideally be collected during the first 3 weeks of illness but may provide accurate results for up to 4 weeks.

Therefore, for optimal laboratory results:

- · Collect the specimen as early in the course of illness as possible Collect the specimen prior to the use of antibiotics.
- Do not collect the specimen in a room that is also used for administering pertussis vaccine as this practice has been shown to cause false positive PCR results.

### COLLECTION PROCEDURE:

- Verify that the UTM has not reached the expiration date. DO NOT use expired media. Do not use the media if it shows signs of breakage, leakage, or contamination
- Label the transport media with at least 2 patient identifiers, including the patient's name. Please do not cover the expiration date on the UTM tube.

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- Fill out a RISHL requisition form completely and legibly.
- Collect the specimen as follows:
  - Gently insert the swab straight back into a nostril aiming posteriorly along the floor of the nasal cavity until reaching the posterior wall of the nasopharynx, being careful NOT to insert it upwards. The distance from the nose to the ear gives an estimate of the distance the swab should be inserted. Do not force the swab. If an obstruction is encountered, try the

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other nostril. Leave swab in place for 15-30 seconds, rotate and remove slowly. The use of a

Insert both swab tips into the same UTM tube. The swab tips must be completely immersed in

Place the inoculated UTM tube and requisition form in the plastic specimen transport bag

If there is a delay greater than three (3) days after specimen collection, samples should be frozen at

Kits containing instructions, UTM, nasopharyngeal swabs and specimen biohazard bags are available on

demand from RISHL Central Receiving area. Each kit contains enough material to test three patients.

Specimens received greater than three (3) days after specimen collection that are not frozen will

Please refer to the RISHL Clinical Specimen Submission Guidance for Bordetella pertussis/parapertussis

If there are questions regarding specimen collection, transport, or reporting of results please contact the

PCR is performed daily (M-F) on all specimens that arrive at the RISHL prior to noon.

www.cdc.gov/pertussis/clinical/diagnostic-testing/specimen-collection.html (Video

For further information and a CDC instructional video for proper collection of pertussis

www.health.ri.gov/diseases/vaccinepreventable/?parm=12

RISHL will phone all positive PCR results to the submitter (B. pertussis and B. parapertussis)

the liquid medium for proper transport. Cut any excess wire off and replace the cap tightly. Do

Repeat with the other nostril using a second polyester or rayon swab

not bend the upper ends of swabs into the transport tubes.

provided. Only one patient specimen per transport bag

Specimens should be transported to the RISHL as soon as possible after collection

The RISHL test requisition form is available as a PDF on our website.

(https://health.ni.gov/programs/laboratory/biological/about/specimensubmission/)

• Transport all specimens refrigerated at 2-8°C (up to <u>3 days</u> after collection)

receive a disclaimer on the report to interpret any negative results with caution

nasal speculum is optional

If it becomes necessary to hold a specimen prior to delivery:

-70°C and transported on dry ice.

**ORDERING KITS and HEALTH Lab Requisition Forms:** 

https://health.ri.gov/laboratorytesting/

Special Pathogens Lab at 222-5586

www.cdc.gov/pertussis/

RESULTS AND TURN AROUND TIMES:

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QUESTIONS

HOLDING and TRANSPORT: