

Bordetella pertussis and bordetella parapertussis, Molecular Detection , PCR Specimen Collection Procedure:

Two collection procedures have been created depending on the specimen collection technique used. •Nasopharyngeal (NP) Liquid Stuarts/Single Swab (Green Top) or •DeLee suction

Important Notes:

• PCR testing for *Bordetella pertussis* is performed by Mayo Medical Laboratory. Obvious advantages are gained by this approach (amplification is an extremely sensitive methodology; some researchers obtained positive results with 1 CFU. PCR has a specificity in the 88-100% range.)

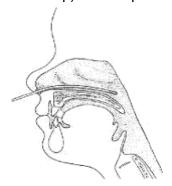
Preferred sample

Nasopharyngeal swabs - Collection

Requires 1 pernasal nasopharyngeal swab obtained using an orange cap STARSWAB II Nasopharyngeal with Charcoal system. Sample should be collected in a manner as outlined below.

Materials Required

- One Liquid Stuarts/Single Swab (Green Top)
- 1. With the patient's head immobilized, the Liquid Stuarts/Single Swab (Green Top) system swab should be gently inserted, parallel to the palate, into the nostril until resistance is met by contact with the nasopharynx and is left in place for a few seconds. Often a cough is elicited by the tickling sensation of the swab. Place the Liquid Stuarts/Single Swab (Green Top) into the plastic container with Stuart's media.



- 2. Properly label inoculated transport media tube
- 3. **Order LAB923** "Bordetella pertussis and Bordetella parapertussis, Molecular Detection, PCR"
- 4. Refrigerate and transport to Laboratory as soon as possible (within 24 hours maximum).
- 5. Liquid Stuarts/Single Swab (Green Top) system sample will be sent to the Mayo Medical Laboratory for PCR testing.

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Alternate Sample

Nasopharyngeal Wash/Aspirate - Collection

Materials Required

Standard Stock Items

Non-bacteriostatic sterile saline

- TB syringe

DeLee suction trap
10 cc syringe

<u>Procedure</u>

- 1. Draw up 1 cc of normal saline (NS) in TB syringe, and 5 cc NS in 10 cc syringe. Dispose of needles in appropriate container.
- 2. Instill 0.3 to 0.5 cc NS in each nares from the TB syringe
- 3. Immediately suction both nares with DeLee or mucoid suction trap.
- 4. Inject the 5 cc NS from the 10 cc syringe into the mucus trap through the collection tubing to wash the aspirate from the tubing.
- 5. Dispose of plastic tubing and mucus trap. Replace with solid lid (no ports).
- 6. Label specimen and media tubes in accordance with Laboratory labeling policy. Note source of specimen on label.
- 7. **Order LAB923** "Bordetella pertussis and Bordetella parapertussis, Molecular Detection, PCR "
- 8. Refrigerate and transport Nasopharyngeal Wash sample to the Laboratory as soon as possible (within 24 hours maximum).
- 9. The sample will be forwarded to Mayo Medical Laboratory for testing.

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