



SAN LUIS OBISPO COUNTY Public Health Laboratory

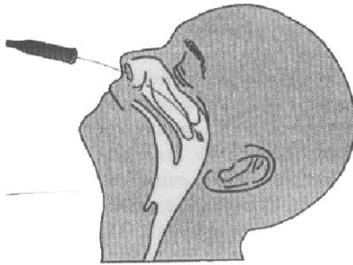
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SPECIMEN COLLECTION & TRANSPORT INSTRUCTIONS

Bordetella pertussis/parapertussis Testing by PCR

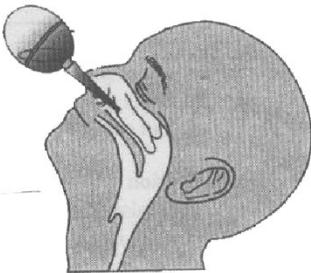
COLLECTION

Bordetella pertussis exhibits tropism and binds specifically to ciliated respiratory epithelial cells. Since the nasopharynx is lined with these cells, it is a superior site of collection for the bacterium.



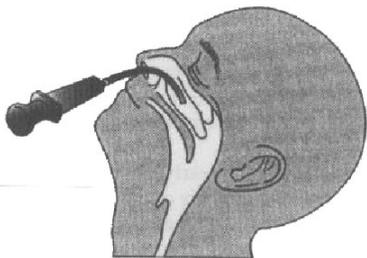
A. Nasopharyngeal Swabs

1. **Note:** Nasopharyngeal swabs are not optimal since both calcium alginate and the aluminum shaft present in most N/P swabs may inhibit PCR assays. If a swab is to be used, follow these steps:
2. Use Dacron or Rayon tipped swabs on a fine flexible wire. Bend the wire so that it mimics the curve of the nasal airway, and gently pass the swab through the nostril to the posterior nasopharynx. Do not force the swab; resistance will be felt when the posterior nasopharynx is reached.
3. Rotate the swab and leave it in place for up to 30 seconds or until the patient coughs. Using a new second swab repeat the procedure through the second nostril.
4. Place both swabs in a tube with 1ml sterile saline, seal, label and transport.



B. Nasal Wash: Bulb Method

1. Suction 3-5 ml of sterile 0.85% NaCl into a 1 to 2 oz tapered rubber bulb.
2. With the patient's head hyper-extended (approximately 70° angle) insert the bulb into one nostril until the nostril is occluded.
3. Quickly instill the sterile saline into the nostril with one squeeze of the bulb and immediately release the bulb and collect the nasal wash specimen.
4. Empty the bulb contents into a sterile container, seal, label and store @ 4°C until transport.



C. Nasal Wash: Syringe Method

1. Use a 3-5ml syringe with a 2 inch 18 gauge tubing attachment. Fill the syringe with saline.
2. Instruct the patient not to swallow during the procedure.
3. With the patient's head hyperextended (approximately 70° angle), quickly instill approximately 5ml of sterile 0.85% NaCl into one nostril and immediately aspirate the saline solution back into the syringe or
4. Tilt the head forward and allow the fluid to run out of the nares into a sterile container, or aspirate the fluid by inserting a rubber bulb syringe into each nostril.
5. Place the specimen in a sterile container, seal, label and transport.

TRANSPORT

Store specimens at 4°C and transport within 72 hours to the SLO Public Health Laboratory.