

PERTUSSIS SPECIMEN COLLECTION PROCEDURE

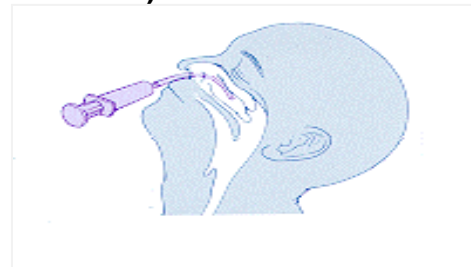
Grant County Health District

Nasal Wash – Syringe Method

Nasal Wash Collection: (Recommended method for adults and children).

Materials for Nasal Wash Collection:

Saline
3-5 ml syringe
2" 18-20 gauge tubing
Sterile Specimen Container



Procedure:

1. Attach the needle to the syringe and draw 3 ml of sterile, non-bacteriostatic saline into the barrel of the syringe. Remove needle and put it in the sharps container.
2. Attach tubing to the syringe tip. Slowly push saline through the tube and let a drop or two come out of the tip for lubrication.
3. Put on your gloves and mask/goggles.
4. Patient may be seated or lying down for specimen collection. The patient's head should be tilted back with their neck extended to allow for the pooling of the aspirate in the nasopharynx.
5. Instruct the patient to hold their breath and not to swallow during the procedure if possible. Tell the patient the procedure will not hurt, but may tickle or cause them to tear or even sneeze.
6. Insert the tubing about 3-4" (less for a child) **straight back** (not upwards) along floor of the nasal passage until reaching the posterior wall of the nasopharynx. The distance from the nose to the ear gives an estimate of the distance the tubing should be inserted.
7. Using a smooth motion without moving the tubing, quickly push and then pull the syringe plunger to inject the saline and withdraw the fluid. This must be done quickly to prevent the fluid from draining down the patient's throat.
8. Carefully remove the tubing from the nose.
9. Detach the tubing from the syringe.
10. Inject the contents of the syringe into the specimen container.
11. Plate part of the collected specimen onto the proper media with a sterile cotton tip generously dipping in the specimen container.

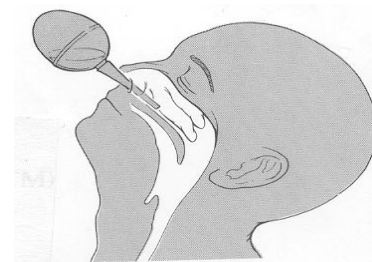
****Length and diameter of syringe, tube, or bulb as appropriate for infant, child, or adult***

Nasal Wash – Bulb Method

Nasal Wash Collection: (Generic blue bulb suction not recommended for all adults as it does not allow for a proper posterior pharyngeal specimen collection in all situations; can be used as an alternate for most children under the age of 6 yrs)*.

Materials for Nasal Wash Collection:

Saline
1-2 oz. Tapered rubber bulb*
Specimen Container



September 1, 2010

Procedure:

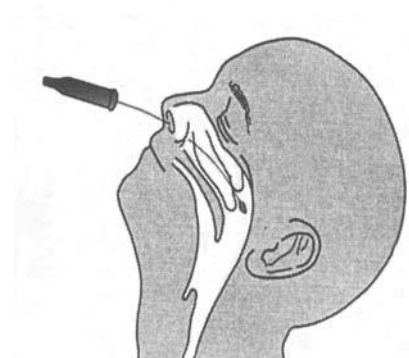
1. Suction 3-5 mL saline into a new sterile bulb
2. Insert bulb into one nostril until nostril is occluded
3. Instill saline into nostril with one squeeze of the bulb and immediately release bulb to collect recoverable specimen
4. Empty bulb into suitable dry, sterile specimen container or test tube with cap.
5. Plate onto the proper media with a sterile cotton tip generously dipping in the specimen container.

***Length and diameter of syringe, tube, or bulb as appropriate for infant, child, or adult**

Nasopharyngeal Swab Collection

(Nasopharyngeal wash methods described above are preferred)

1. Most pertussis testing should be done through commercial laboratories. For high risk situations, testing can be done through WA State Public Health Laboratories (PHL) **with prior approval from the local health jurisdiction.**
 - a. The *Bordetella pertussis* Collection Kit from PHL includes appropriate forms, two Dacron® polyester swabs, charcoal media (for pertussis culture), a sterile transport tube (for pertussis PCR), shipping materials and detailed instructions regarding collection and shipping of specimens.
2. The collection of the specimen should be performed at the clinic site where the patient is being evaluated, preferably by a clinician with experience in obtaining such samples.
3. It is recommended that both culture and a PCR specimen be collected and submitted at the same time.
4. Collect posterior nasopharyngeal specimens as soon as possible after symptoms develop. Specimens collected within three weeks of cough onset have a greater yield than those collected later. PHL recommends collection for up to four weeks after onset as long as antibiotics have not been started. In some circumstances, prior therapy with antibiotics is not a contraindication to testing, especially in patients where a secondary attack/exposure is suspected.
5. Use a Dacron® or rayon swab on a flexible wire shaft to collect a nasopharyngeal specimen. Do not use wooden shafted swabs or Calcium alginate swabs (contraindicated for PCR testing). Healthcare providers may consider piggybacking two swabs if a specimen is need for both culture and PCR.
 - a. Bend wire(s) so that it mimics the curve of the nasal airway.
 - b. Gently pass swab(s) through the nostril to the posterior nasopharynx. **DO NOT** force the swab(s). A slight resistance will be felt when the posterior nasopharynx is reached.



- c. Rotate the swab(s) and ideally leave in place for 10 seconds or until the patient coughs.

6. Aseptically streak one nasopharyngeal swab onto the charcoal transport media for culture. Leave the swab on top of the media. Do not stab the swab into the charcoal slant. Cut the top of the wire with scissors so the cap of the media tub can be screwed on. Bending the wire into the tube can introduce contamination (skin flora) into the media. If indicated, place another swab into a sterile screw top transport tube for PCR. If able to collect only one swab, use the charcoal transport media and submit a specimen for culture only. Swabs for PCR will not be accepted without a swab for culture.

7. Label each tube with the client's name. Complete all sections of the appropriate laboratory submission form.

WA PHL's Nose and Throat form available at:
<http://www.doh.wa.gov/EHSPHL/PHL/Forms/Nose&ThroatSpecs.pdf>

8. Ship specimens at ambient temperature. They should reach the testing laboratory within 24 hours of collection. (Since January 1, 2007 the required shipping label is "Biological Substance, Category B, UN 3373".)

You may contact the Special Respiratory Unit of the Communicable Disease Microbiology Laboratory at PHL (general: 206-418-5400, direct 206-418-5492) for handling and transport issues not specifically addressed in these guidelines.