Throat, Nasal, and Nasopharyngeal Swabs

All specimens collected by swab must be collected using the appropriate type of swab. If it is unclear what to use from available stock, contact the Laboratory for clarification. Requisitions that accompany the sample should have the specimen collection date and time documented. See general test requisition. Use the following procedures for collection:

A. Throat Swabs:

Obtain Copan rayon-tipped swabs to collect throat specimens. These may be packaged with blue or black labeling. **Do not use calcium alginate, cotton-tipped or wooden shaft swabs.**

1. Perform hand hygiene
2. Confirm the patient's identity using at least two patient identifiers.
3. Explain the procedure to the patient to ease anxiety and ensure cooperation.
4. Tell the patient that he might gag during the swabbing but that the procedure will most likely take less than 1 minute.
5. Put on gloves and other personal protective equipment, as needed.
6. Open and remove two collection swabs, taking care not to touch the tips with your hands to prevent contamination.
7. Ask the patient to tilt his head back.
8. Tell the patient to open his mouth wide.
9. Depress the back third of the tongue with a tongue blade, inspect the throat for swelling, pus, and red or white spots.
10. If the patient starts to gag, withdraw the tongue blade and tell him to breathe deeply through the nose. After he's relaxed, reinsert the tongue blade, but not as deeply as before. Encourage the patient to close his eyes or stare at the ceiling to promote cooperation.
11. Rub the swab tip quickly but thoroughly over both tonsils, including inflamed or purulent sites, using light pressure. Make sure you don't touch the tongue, cheeks, saliva, or teeth with the swab tip to avoid contaminating it with oral bacteria.
12. Withdraw the swab and immediately place it in transport packaging. If transport to the laboratory will occur immediately you may return both swabs into one paper sleeve for transport.
13. Discard used supplies in an appropriate container.
15. Label the specimen with 2 identifiers, in the presence of the patient to prevent mislabeling.
16. Place the specimen in a laboratory biohazard transport bag and immediately send it to the laboratory to prevent growth or deterioration of microbes.

It is recommended that swab specimens be processed as soon as possible after collection. Swabs can be held in any clean, dry plastic tube or sleeve up to 24 hours at room temperature (15-30°C), or refrigerated (2-8°C) up to 48 hours.

Throat Swab Diagram:
Nasopharyngeal Specimens for RSV, Rapid Influenza (Sophia), or Pertussis:

Obtain a “Hydraflock” sterile flocked collection device to collect a nasopharyngeal specimen.

Nasopharyngeal swabs for pertussis testing should be obtained with the Laboratory collection kit provided by the State Hygienic Laboratory. The kit contains a transport vial for the swab tip used for Pertussis testing. Do not use cotton or calcium alginate-tipped swabs.

1. Gather the appropriate equipment.
2. Perform hand hygiene.
3. Confirm the patient's identity using at least two patient identifiers.
4. Explain the procedure to the patient to ease his anxiety and ensure cooperation.
5. Tell the patient that he may gag or feel the urge to sneeze during the swabbing but that the procedure takes less than 1 minute.
6. Put on gloves. Put on a mask and other personal protective equipment as necessary.
7. Remove swab from packaging, taking care not to contaminate the swab.
8. Pass the swab gently through the patient's nostril about 3” to 4” (7.6 cm to 10.2 cm) into the nasopharynx, keeping the swab near the septum and the floor of the nose. Rotate the swab gently for 10-30 seconds, and then remove it.
9. Insert the swab into transport packaging.
10. Label the packaging with 2 identifiers in the presence of the patient to avoid mislabeling.
11. Perform hand hygiene.
12. Submit to the Laboratory as soon as possible.
13. If transport is required, minimal dilution of the sample is recommended, as dilution may result in decreased test sensitivity. Place swab in less than 1 ml of saline in a sterile tube. For RSV testing: Store at room temp or refrigerated up to 24 hours. For Influenza testing: Store up to 4 hours at room temp or 24 hours refrigerated.
Nasopharyngeal Specimens for Molecular Influenza:

Obtain a Cepheid Xpert Nasopharyngeal Sample Collection Kit for Viruses to collect a nasopharyngeal sample in the same manner as the “Hydraflock” swabs described previously. Immediately after collection, place the swab into the red topped Universal Transport Media tube provided in the kit. This swab shaft is scored to easily break for transfer into the transport media. The kit may be found stored in the refrigerator so that the transport media is cooled prior to collection. Samples should be transported at 2-8 °C. Samples can be stored for up to 72 hours at 2-8 °C before processing.

REFERENCES:

2. Quidel QuickVue Influenza A+B product insert, Quidel Corporation, San Diego, CA, 10/2010.
4. Nasopharyngeal Specimen Collection, BD Diagnostics, Sparks, MD, 02/2005.
6. Cass County Memorial Hospital intranet Homepage, Lippincott Procedures Link.
7. www.cdc.gov