

## **NASOPHARYNGEAL SPECIMEN COLLECTION**

### **POLICY**

To provide proper collection techniques for Nasopharyngeal specimen collections: The laboratory should be notified when any special procedures are done to collect the specimen to ensure the correct preservative is available, and the specimen is handled appropriately.

### **Procedure/Intervention(s):**

#### **A. Materials**

1. Suction Outlet (portable/wall)
2. Sterile suction catheter Mucus trap
3. Universal Transport Media
4. Flexible Mini-tip Flocked Swab
5. 3-5 mL syringe
6. 2" Sterile NG tube 8-french

#### **B. Nasopharyngeal Swab Method**

1. Insert the swab into one nostril.
2. Rotate the swab over the surface of the posterior nasopharynx.
3. Withdraw the swab from the collection site; insert it into a transport tube or container with UVT.
4. Repeating the procedure for the second nostril will deliver an optimal combined sample.
5. After collection, immediately transport the specimen to the laboratory for viral testing and viral antigen detection. If transport to the laboratory is delayed, place the specimen on ice or refrigerate.

#### **C. Nasopharyngeal Wash: Syringe Method**

1. Fill the syringe with saline; attach the tubing to the syringe tip.
2. Quickly instill saline into the nostril.
3. Aspirate the recoverable nasopharyngeal specimen. Recovery must occur immediately, as the instilled fluid will rapidly drain.
4. (Alternate) In appropriate cases, patients may tilt their head forward to allow the specimen to drain into a suitable sterile container.
5. (If aspirated) According to virology laboratory requirements, inject the aspirated specimen from the syringe into a sterile specimen container with suitable UVT.
6. Repeating the procedure for the second nostril will deliver an optimal combined sample.
7. After collection, immediately transport the specimen to the laboratory for viral testing and viral antigen detection. If transport to the laboratory is delayed, place the specimen on ice or refrigerate.

#### **D. Nasopharyngeal Wash: Bulb Method**

1. Suction 3-5 mL saline into a new sterile bulb.
2. Insert the bulb into one nostril until the nostril is occluded.
3. Instill saline into the nostril with one bulb squeeze and immediately release the bulb to collect the recoverable nasal specimen.
4. Empty the bulb into a sterile specimen container with suitable UVT, according to virology laboratory requirements.
5. Repeating the procedure for the second nostril will deliver an optimal combined sample.

6. After collection, immediately transport the specimen to the laboratory for viral testing and viral antigen detection. If transport to the laboratory is delayed, place the specimen on ice or refrigerate.

E. Vacuum-assisted Nasopharyngeal Aspirate Method

1. Attach mucus trap to suction outlet and catheter, leaving wrapper on the suction catheter; turn on suction and adjust to suggested pressure.
2. Without applying suction, insert a catheter into the nose, directed posteriorly and toward the opening of the external ear. NOTE: The depth of insertion necessary to reach the posterior pharynx is equivalent to the distance between the anterior nares(nostril) and the external opening of the ear.
3. Apply suction. Using a rotating movement, slowly withdraw the catheter. NOTE: Catheter should remain in the nasopharynx for a minimal period, not exceeding 10 sec.
4. Hold the trap upright to prevent secretions from entering the pump.
5. Rinse catheter (if necessary) with approximately 2.0 mL UVT; disconnect suction; connect tubing to the arm of mucus trap to seal.
6. Repeating the procedure for the second nostril will deliver an optimal combined sample.
7. After collection, immediately transport the specimen to the laboratory for viral testing and viral antigen detection. If transport to the laboratory is delayed, place the specimen on ice or refrigerate.

a. Note:

Patient Age	Catheter Size (French)*	Suction Pressure
Premature infant	6	80-100 mmHg
Infant	6	80-100 mmHg
Toddler / Preschooler	8	100-120 mmHg
School age	8	100-120 mmHg
Adolescent / Adult	8	120-150 mmHg

F. Labeling

1. Label the swab container with patient information.
2. Indicate whether or not a lesion is present.

G. Transport

1. Transport the specimen to the laboratory as soon as possible.
2. Specimens must be maintained at 2-25°C for shipping and transport. Refrigerate within 8 hours. Specimens are stable for three weeks at room temperature and refrigerated.