

How to Perform a Paediatric Nasopharyngeal Aspirate Procedure



Materials Needed:

1. N95 respirators for the healthcare worker and assistant(s)
2. Disposable gloves
3. Goggles, if available
4. Nasopharyngeal tube (connects to the sputum trap)
5. Suction machine
6. Sputum traps (mucous extractor) labeled with the patient information
7. Pulse oximetry machine, if available
8. Sterile sputum collection container
9. Completed laboratory request form(s) with patient information



Preparations:

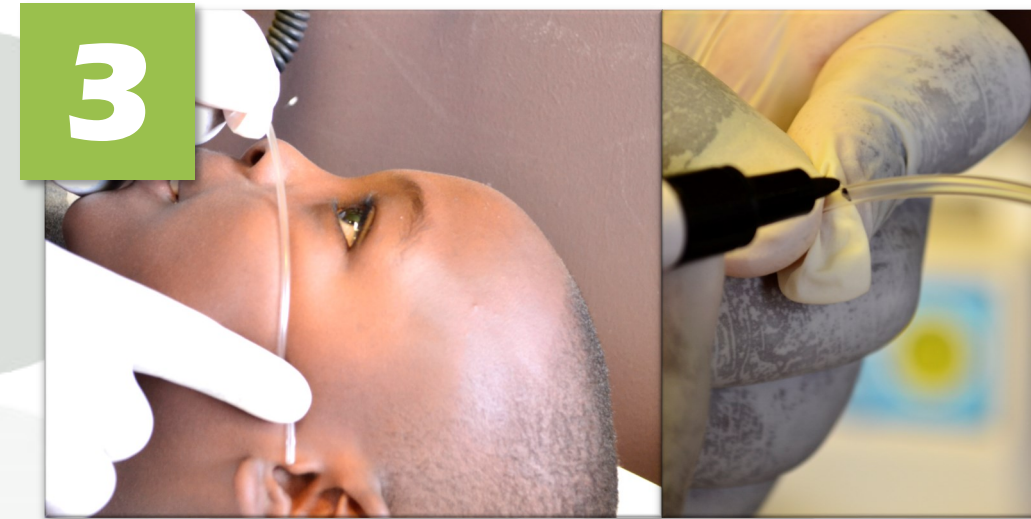
1. Set up ahead of time to minimize anxiety to child and caregiver.
2. Fill out laboratory request form(s).
3. Have a sputum bottle ready to collect sample if child coughs up sputum during the procedure.
4. Keep a suction catheter (e.g., Yankauer) nearby in case of vomiting.
5. Have the caregiver or assistant hold the child.
6. Position the child in the upright or semi-upright position; hold infants supine in the feeding position.
7. Stand or sit where you can clearly observe the child and all of the equipment.



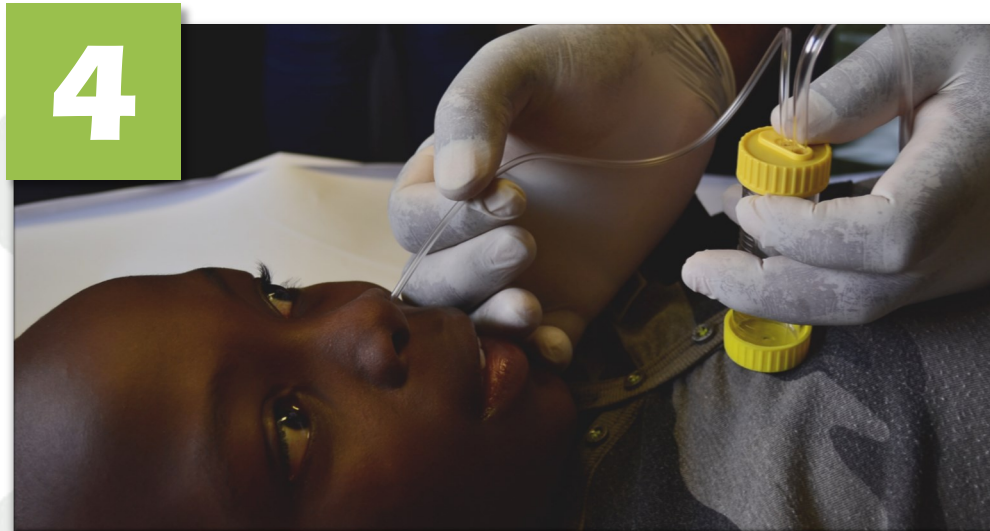
Ask patient to sneeze & **clean nostril** area with normal saline.



Connect the sputum trap to the suction machine.



Measure the distance to the nasopharynx by placing the end of the tube at tragus of the ear and extending it to the tip of the nose. **Mark the length on the tube.**



Insert the tube through the nares into the nasopharynx. If the patient does not have teeth, you can introduce the tube into the oropharynx via the mouth.



If the patient coughs during the tube insertion and produces good quality sputum, collect the sputum in the sterile sputum container. If **≥ 2 mL of sputum** has been produced, sputum collection is complete.



If the child does not produce a sputum specimen insert the tube from the sputum trap into the nasopharynx until you reach the marked length. **Use caution** to avoid causing undue trauma.



Start the suction machine at **15-20 kPa** pressure and increase only if needed. Use suction to collect the respiratory secretions only when gently pulling out the tube. Apply suction until **at least 2 mL** of sputum is collected in the sputum trap.



Ensure that the sputum container is **tightly sealed and correctly labeled**.

After the nasopharyngeal aspirate procedure:

- **Monitor the child** for several minutes after the procedure. If pulse oximetry is below baseline or there are signs of respiratory distress, give oxygen and suction excess sputum from the airway.
- **Educate caregiver** that coughing may be more frequent within 24 hours after the procedure.
- Ensure all samples are **correctly labeled** and the lab forms are **fully completed**.
- Transferring of specimens from the sputum trap to separate containers **should only be done by lab personnel** under a biosafety cabinet.
- **Keep samples out of direct sunlight.**

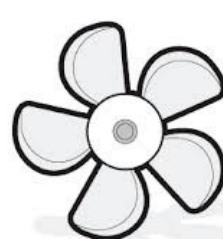
- Stop procedure immediately if:**
- Respiratory distress occurs.
 - Profuse sweating, nausea/vomiting, light-headedness, dizziness or loss of consciousness occurs.



Healthcare worker(s) must wear a N95 respirator and disposable gloves.



Child should be fasting for **4-6 hours** prior to the procedure.



Perform procedure in a well ventilated area.

Nasopharyngeal aspirate should not be performed in children with:

- Acute (active) asthma
- Wheezing
- Abnormal vital signs
- Any signs of moderate to severe respiratory distress
- Epistaxis
- Pneumothorax
- Recent eye surgery
- Recent abdominal surgery
- Fractured ribs or chest trauma