Sputum Collection Tips for Healthcare Workers

**Before collection:**
- Healthcare workers should wear appropriate respiratory protection if present for collection.
- Ensure use of a safe place for sputum collection, such as negative pressure room, outside, or in a well-ventilated room in the client’s home.
- Educate the client on collection steps.
- Plan to observe the first specimen collection. The second and third specimens should be collected at least 8 hours apart.
- Plan to collect a morning sputum. Secretions pool overnight, so a morning sputum is a better specimen.
- Instruct the client to rinse their mouth with filtered or bottled water to limit the presence of nontuberculous mycobacteria (NTM) and food.
- A lot of tap water contains NTM - handout on VDH TB website.
- If you do not have filtered or bottled water, boiled tap water can be used.

**During collection:**
- Observe at least the first sputum collection:
  - Ensure the sample is thick, not watery with spit or nasal secretions.
  - Obtain at least 5mL.
  - Instruct the client not to put their mouth on the tube, if possible.
  - Encourage the client to sit and lean forward. This is the best position for producing a strong cough.
- Try these strategies if the client cannot produce sputum:
  - Have the client breathe in steam from a hot shower or a boiling pot of water.
  - Apply percussion to the client’s back to help loosen secretions.
  - Help the client use a nebulizer with hypertonic saline to induce sputum. Inhaling the saline for about 10 minutes should help produce a cough.
  - Tightly seal the collection tube.

**After collection:**
- Label the tube with:
  - Client’s full name.
  - Unique identifier (i.e., client ID, DOB).
  - Date and time of collection.
- Place only one conical tube per biohazard bag.
- Store specimens refrigerated at 4°C (do not freeze).
- Enter specimen order into WebVISION and dispatch order.
- Ship on a cold pack within 24 hours of collection.
- Do not batch (hold onto) specimens to submit to DCLS together - the fresher the better!