

14. Handling Laboratory Specimens

All clinical specimens are considered potentially infectious and must be handled carefully to prevent contamination. Consequently, there is no need to use “Caution” labels on specimens from patients with known infections.

The accuracy of the results depends on care in collecting and transporting the specimen to the lab. The quality of the results influences the diagnosis and treatment and therefore the clinical outcome.

The risk of the health care worker being exposed to an infectious agent or contaminating the health care environment depends on maintaining continuous infection control practices.

Collecting specimens

1. Gather personal protective equipment –depending on symptoms and history of the patient:

- Gloves- when handling any body fluids or risk of contaminating hands
- Masks/respirators- if respiratory symptoms or initiating a cough from the patient with specimen collection, aerosolized excretions, risk of splash or spray
- Goggles- if risk of splash or spray to eyes

2. Care should be taken when collecting and handling specimens to avoid contamination of the outside of the container.

3. Secure lids tightly to prevent leakage.

4. Place the specimen(s) into a plastic, zip-lock type bag. Requisition should be outside the pouch that the specimen is shipped in.

5. Hand hygiene must be performed following any direct contact with blood or body fluids, after the handling or transporting of laboratory specimens and after glove removal.

If airborne spread disease is suspected specimens should be collected in a negative pressure room, if available (e.g. TB). If there is no negative pressure room then a room with good air circulation or outdoors may be the best alternative. The collector of sputum for TB testing should wear an N95 respirator or separate themselves from the area where the person is providing the sputum specimen.



Even if the patient has a controlled or non-productive cough, the irritation of having a nasopharyngeal swab done could bring on a deeper, productive cough, increasing the risk of contamination of the person taking the swab. Respiratory protection should be worn.

Make sure you are aware of correct collection method, container (with or without stabilizing solution), storage and transportation so that the specimen will provide the most accurate results in which to base diagnosis and treatment decisions.

Handling specimens

1. Always wear gloves and any other indicated barrier protection when collecting and handling laboratory specimens.
2. Place each laboratory specimen in an appropriate leak-proof primary container (e.g. vacutainer tube, specimen cup, etc.). Care should be taken when collecting and handling specimens to avoid contamination of the outside of the container.
3. Insert the requisition slip(s) into the outside pocket of the bag.
4. Seal the bag before transporting it to the laboratory.
5. If specimens require refrigeration, they should be stored in a separate fridge from vaccines, medication and food items.

See :

- [Canadian Tuberculosis Standards, 7th edition](#)