The Nebraska Biocontainment Unit (NBU)

Obtaining and Processing Laboratory Specimens

Policy:
It is the policy of the NBU to collect laboratory specimens in compliance with the Nebraska Medicine Policy and Procedure LAB06 Collection to Venous and Capillary Blood.

Purpose:
To obtain and process laboratory specimens while maintaining infection control practices.

Materials:
Required collection container (tubes, culture bottles and plates)
Biohazard Ziploc bags
Required collection devices (needles, syringes, skin cleanser, tourniquet, Band aids, Cotton Balls or 4x4s, tape)
Absorbent pad (goes in the bag with the specimen)
Bleach Wipes
Barrier devices (chux)

Procedure for handling specimens:

Registered Nurses (RN’s) donned in appropriate PPE shall draw lab(s) either peripherally, from a centrally located venous catheter, arterial line or finger stick. Other lab collection sites include urinary catheter ports, nasal/ nasal pharyngeal, fecal or others as required for a specific lab test.

Specimens shall be collected in accordance with Nebraska Medicine Nursing Policy and Procedure Manual Lab 1, Lab 2, Lab 6, Lab 7 and Lab 9.

Specimens shall be labeled in accordance with The Nebraska Medicine Policy and Procedure Labeling Policy TX06.

Specimens to be obtained from patients weighing < 10kg shall be obtained in accordance with Nebraska Medicine Clinical Laboratory Maximum Blood Draw Protocol for Pediatric Patients SS-21.
If the NBU has been activated for Viral Hemorrhagic Fevers (VHF) or Smallpox the Nebraska Public Health Lab (NPHL) shall activate the satellite lab located in room 7219 in the NBU and shall follow their procedures for handling NBU patient specimens (see appendix A).

After the NPHL staff has processed the specimen(s) they shall package them according to NPHL policy and bleach wipe the exterior of the package. They shall pass the package to the NBU Doffing Partner at the door to the NPHL satellite lab while holding the bag with a bleach wipe. The Doffing Partner shall receive the bagged specimen(s) with a bleach wipe and transport the package to the doors separating the clean and warm zones. The Tasker shall open the door and receive the bagged specimen(s) with a bleach wipe. The Tasker shall then close the door. The Doffing Partner shall perform hand hygiene and change their outer gloves.

The Tasker shall take the bagged specimens to the vestibule and place it in NPHL cooler for collection by NPHL or phlebotomy staff. The Tasker shall now remove their gloves, perform hand hygiene and don clean gloves.

Note: There will be times when specimens do not need to go through the NPHL Satellite Lab (room 7219). In those instances, the Doffing Partner shall wipe the outside of the clear plastic zip top bag with bleach wipes, carry it with a clean bleach wipe to pass to the Tasker at the doors separating the clean and warm zones. The Tasker shall receive the bagged specimen(s) with a bleach wipe and shall take the bagged specimens to the vestibule and place it in NPHL cooler for collection by NPHL or phlebotomy staff. Tasker shall now remove their gloves and perform hand hygiene and don clean gloves.

**Obtaining Blood Cultures from patients with VHF or Smallpox diagnosis:**

Draw specimen following facility protocols using plastic BD Vacutainer blood culture bottles. If drawing from a central line request MD instructions as to which line to draw from if not already provided.

**For diseases other than VHF or Smallpox:**

The Nebraska Medicine Core Laboratory (559-8780) shall conduct all specimen testing unless decided otherwise by the NBU Medical Director.

All lab orders shall be entered into the patient’s electronic health record (EHR) and acknowledged by the NBU RN.

Lab labels shall print from the CLM printer in the patient care room and will be attached to the specimen container after the specimen is obtained and the container has been decontaminated.
NBU specimen(s) going to the Nebraska Medicine Core Laboratory shall be sealed in clear plastic zip top bags by the Doffing Partner who shall wipe the outside of the bag with bleach wipes, and transport the package to the doors separating the clean and warm zones. The Tasker shall open the door and receive the bagged specimen(s) with a bleach wipe. The Tasker shall then close the door. The Doffing Partner shall perform hand hygiene and change their outer gloves.

The Tasker shall take the bagged specimens to the vestibule and place it in NPHL cooler for collection by phlebotomy staff. Tasker shall now remove their gloves and perform hand hygiene and don clean gloves.

**Procedure for Specimen Collection:**

1. NBU staff collecting the specimen shall identify the patient following The Nebraska Medicine Patient Identification Policy RI10 and print labels from the CLM printer in the patient care room.
2. Prior to collecting the specimen(s) prepare the work area by wiping hard surfaces with bleach wipes and allowing time to air dry.
3. Place barrier (chux) over the bed rail and in areas that may be exposed.
4. Prepare a surface (i.e. bedside table) to place the specimen(s) after collection by cleaning with a bleach wipe and placing a clean bleach wipe on the table to lay the specimen(s) on.
5. After specimen collection, perform hand hygiene and change gloves.
6. Use the bleach wipe the specimen(s) were laid on to pick them up and wipe prior to labeling.
7. When the specimen container(s) are dry, attach label.
8. Notify the Doffing Partner when ready to pass the specimen(s) out the room.

**Passing the specimen(s) out the patient care room:**

1. The Doffing Partner outside the patient room shall hold a biohazard lab bag with an absorbent pad inside open for the LABELED specimen container(s) to be dropped in.
2. This bag is to be sealed immediately and the external surfaces of the bag are to be wiped with a bleach wipe.
3. The packaged specimen is to be placed into a second bag which is also to be sealed (if the sample requires the specimen to be placed in ice; a sealed pouch of ice shall be put into the second bag). Ice needs to be kept separate from specimens.

**Transporting the specimen:**

The Tasker shall call security to escort laboratory staff to the laboratory.

**Special procedures: Glucometer, I-STAT, Hemochron:**
Glucometer testing:

1. NBU staff shall perform glucometer testing.
2. Testing shall be done in the patient care room following the Nebraska Medicine Policy and Procedure for glucose monitoring;
3. Take only the meter (no tote), test strip, lancet (if performing finger stick), or other blood collection device, alcohol wipe, and a cotton ball into the patient care room.
4. After the procedure, dispose of the lancet and the test strip in the sharps container.
5. Other supplies may go into the autoclave bag lined trash can.
6. Wipe the outside of meter with a bleach wipe. Change gloves then pass the glucometer out of the room to the Doffing Partner who shall return the glucose meter to the tote to upload the results to the patients EHR.

I-STAT and/or Hemochron:

I-STAT and/or Hemochron testing shall be performed in the NBU’s NPHL Satellite laboratory in room 7219. NBU staff shall obtain the sample from the patient and a NPHL Lab Technician shall perform the test. Reference: Laboratory Specimen Labeling TX06 Patient Identification RI10

Staff Accountability:

Nebraska Biocontainment Unit Leadership
Nebraska Biocontainment Unit Policy and Procedure Workgroup
Infection Control Department
Nebraska Public Health Laboratory Biosecurity Section