



ROUTINE CAPILLARY PUNCTURE BLOOD COLLECTION GUIDELINES

CAPILLARY PUNCTURE

Capillary puncture may be used for obtaining specimens in infants or in adults where venipuncture is difficult.

- Specimens from infants under the age of 6 months are typically collected by heelstick.
- Patients over the age of 6 months should have capillary specimens collected by fingerstick.
- Capillary specimens are collected in microtainers with colored caps that are used to identify the microtainers additive.

NOTE

- Capillary punctures are not suitable for blood culture testing and most coagulation tests.
- Capillary Specimens may be collected on filter paper and sent to lab for testing for specific tests only. Refer to online test directory for each tests collection requirements.
- Capillary Specimens may be used immediately for point-of-care testing.

MATERIALS

1. Lancets
2. Microtainer Blood Collection Tubes.
 - Tubes with different additives are used for collecting blood specimens for specific types of tests.
3. Recommended order of collection for microtainer specimens:
 - Lavender EDTA microtainers
 - Green –Lithium Heparin
 - Mint green-Lithium heparin PST
 - Grey
 - Gold –SST
 - Red-No additive
4. Filter paper (if required)
5. Gloves-latex free
6. Warming device
7. Antiseptic. Individually packaged 70% isopropyl alcohol wipes.
8. 2x2 Gauze
9. Sharps Disposal Container. An OSHA acceptable, puncture proof container marked "Biohazardous".
- 10 Bandages or tape



SAFETY

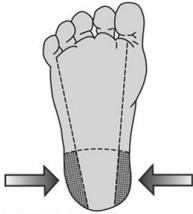
1. Observe universal (standard) safety precautions. Observe all applicable isolation procedures.
2. PPE's will be worn at all time.
3. Wash hands in warm, running water with an appropriate hand washing product, or if not visibly contaminated, with a commercial foaming hand wash product before and after each patient collection.
4. Gloves are to be worn during all blood collection procedures, and changed between patient collections.
5. A lab coat or gown must be worn during blood collection procedures.
6. Lancets are disposed of in an appropriate 'sharps' container as one unit.
7. Gloves are to be discarded in the appropriate container immediately after the blood collection procedure.
8. All other items used for the procedure must be disposed of according to proper biohazardous waste disposal policy.
9. Contaminated surfaces must be cleaned with freshly prepared 10% bleach solution. All surfaces are cleaned daily with bleach.
10. In the case of an accidental stick, immediately wash the area with an antibacterial soap, express blood from the wound, and contact your supervisor.

PROCEDURE

1. Identify the patient. Two forms of active identification are required. Ask the patient or caregiver to state the patient's name and date of birth. This information must match the requisition.
2. Reassure the patient that the minimum amount of blood required for testing will be drawn.
3. Select the appropriate microtainers for the specimens to be collected. Any microtainers containing additives should be tapped to dislodge additives from the walls and top..
4. Wash hands and put on gloves.
5. Position the patient with the arm extended to form a straight-line from shoulder to wrist.
6. Do not attempt a capillary puncture more than twice. Notify your supervisor or patient's physician if unsuccessful.

HEEL STICK

1. Position the infant with the head slightly elevated.
2. Warm the heel from which blood is to be obtained. A commercial heel warmer may be used.
3. Cleanse the heel with alcohol prep, then dry with a sterile 2x2 as alcohol can influence test results.
4. Using a sterile lancet, puncture the most medial or lateral portion of the plantar surface of the heel, medial to a line drawn posteriorly from the mid great toe to the heel.



5. Puncture no deeper than 2.4mm (approximately 0.1 inches).
6. Punctures to the posterior curvature of the heel can cause damage to the bones.
7. Previous puncture sites should be avoided. Avoid bruising the infant's heel when obtaining blood.
8. Wipe away the first drop of blood with sterile 2x2 gauze.
9. Allow another large drop of blood to form. Lightly touch the microtainer capillary collection device (or filter paper) to the LARGE drop of blood. Collect drops of blood into the collection device by gently massaging the heel. Avoid excessive pressure that may squeeze tissue fluid into the drop of blood. Fill the microtainer tube(s) as needed, adhering to the order of draw.
10. Cap, rotate and invert the microtainer to mix the blood collected.
11. When finished, clean the site and apply pressure with clean gauze to stop the bleeding. Apply an adhesive bandage.
12. Label all specimens per accepted guidelines.
13. Place labeled specimens in zip lock bag and deliver to the laboratory as soon as possible.

FINGER STICK

1. Position the patient so that the hand is easily accessible.
2. Cleanse the fingertip of the 3rd (middle) or 4th (ring) finger with an alcohol prep. Allow the finger to dry or wipe dry with a sterile 2x2 gauze.
3. Using a sterile lancet, puncture the fingertip in the fleshy part of the finger, slightly to the side of the center and across (perpendicular to) the grooves of the fingertip. This enables the blood to form as a drop on the fingertip. If the puncture is parallel to the lines of the fingerprint, the blood will not form as a drop but will run down the finger making collection difficult.
4. Wipe away the first drop of blood with a sterile 2x2 gauze.



5. Allow another large drop of blood to form. Lightly touch the microtainer capillary collection device (or filter paper) to the LARGE drop of blood. Collect drops of blood into the collection device by gently massaging the finger. Avoid excessive pressure that may squeeze tissue fluid into the drop of blood. Fill the microtainer tube(s) as needed.
6. Cap, rotate and invert the microtainer to mix the blood collected.
7. When finished, clean the site and apply pressure with a clean gauze to stop the bleeding. Apply an adhesive bandage.
8. Label all specimens per accepted guidelines.
9. Place labeled specimens in zip lock bag and deliver to the laboratory as soon as possible.

FILTER PAPER SPECIMEN COLLECTION

1. Allow the blood to soak through and completely fill the pre-printed circle on the filter paper.
2. Filter paper should touch only the blood and not the heel or finger.
3. Apply only ONE drop of blood per circle. Do not add blood to a circle already filled or partially filled with blood.
4. Apply blood to the printed side of the filter paper.
5. Make certain that the blood completely saturates all four (4) circles and is visible from both sides.
6. If the blood flow is diminished, repeat the capillary PUNCTURE to complete the collection.
7. Allow filter paper to air dry for two (2) hours at room temperature. Avoid placing sample on hot surfaces such as bili-lights or monitors.
8. Forward completed/dry collections to the laboratory as soon as possible.