

Capillary Blood Specimen Collection

1. Obtain supplies:
 - Two to three microcollection devices consisting of capillary tubes (heparinized tubes are acceptable) and a serum separator microtube; tubes are variable sizes and contain 50-200 μ l each
 - Consult local and/or state public health laboratories regarding acceptable collection devices
 - Sterile safety lancet (fully automated devices recommended)
 - Biohazard container
 - Gloves
 - Alcohol wipes
 - Sterile gauze
 - Band-aid
2. Label each serum separator microtube with patient name (or other identifier), date of birth, and date/time of specimen collection
 - If using capi-draw microcollection devices, make sure the capillary tube has not touched the serum separator gel; otherwise, capillary action may be compromised
3. Massage the puncture site to increase circulation and enrich blood flow
 - The heel is the recommended puncture site for infants 12 months of age or younger; the finger may be a suitable puncture site for children over 1 year of age
4. Clean the puncture site (heel or finger) well with alcohol; allow to dry.
5. Puncture the heel or the side of the pulp of the third or fourth finger with a sterile safety lancet.
6. Wipe away the first drop of blood with sterile gauze.
7. Touch the first capillary tube to subsequent free-flowing blood produced at the puncture site
 - Blood will fill the tube through capillary action
 - If blood flow is inadequate, gently massage the proximal portion and firmly press on the distal portion of the foot or finger (do not let blood run down the heel or finger); holding the microcollection device at a downward angle may improve collection results
8. Repeatedly touch additional capillary tubes to blood produced at the puncture site until 2-3 tubes are filled
 - Allow large blood droplets to form; avoid contact between the skin and capillary tube
 - A minimum of 100 μ l of serum is required; however, it is recommended that 2-3 capillary tubes be filled even if the 100 μ l volume requirement is met with the first tube
9. Express collected blood into the serum separator microtube by standing the microcollection device upright (capillary tube inserted in serum separator tube); after the capillary tube drains into the serum separator tube, lightly tap or shake the remaining blood out of the capillary tube.
10. Stop the bleeding and cover the puncture site with a band-aid.
11. Remove the empty capillary tubes from the microcollection devices and discard the tubes and lancet in an appropriate biohazard container; cap the serum separator tube with the attached stopper.
12. Keep collected specimens at 4°C during transport (e.g., Styrofoam container with freezer packs).
13. Upon receipt at the laboratory, specimens must be microfuged before processing.