Collecting Umbilical Cord Blood for Donation
Puget Sound Blood Center Cord Blood Services

Please call with any questions or concerns about this collection process:
OHSU: 503-494-6122 or 503-494-8311 #12064 (pager)

NOTES: Do not collect the cord blood if it will compromise the care of the mother and/or infant.
Do not collect cord blood without consent.
Do not consent donors under the age of 18 or those carrying multiple gestations.
Do not collect if Chorioamnionitis is suspected or present.
Do not collect if gestational age is less than 37 weeks.
Meconium and stained amniotic fluid are acceptable.
Cord blood is collected while the placenta is in-utero.
Please note on the “Delivery Information Form” any complications, signs of infection, or abnormalities.
In case of emergency, follow procedures established by the facility.

1. **Confirm the identity of the donor with at least two identifiers and verify donor consent has been obtained. Also verify** that donor is at least 18 years old, not carrying multiple gestations, and equal to or greater than 37 weeks gestation.

2. **Draw maternal blood samples according to hospital protocol.**
   - Please label every maternal blood sample tube with mother’s addressograph stickers. If the samples are not labeled with at least two identifiers, the unit cannot be processed unless the maternal samples are redrawn. Record employee ID and date on label.
   - Collect blood samples when an IV is started or with another sample draw, if possible.
   - Maternal blood may be drawn before or after the umbilical cord blood unit is collected.
   - Evergreen: Contact the hospital lab to draw maternal samples.
   - Overlake: After unit is collected, enter lab order for cord blood pick up and sample draw (if necessary) using the mnemonic “cord donor”.
   - Have the person who draws the samples complete the Maternal Samples form. Every blank must be completed. Missing information may cause the samples to be unusable.
   - Place the sample tubes in the separator pouch. Place the pouch in the ziptop bag.

3. Inspect the collection bag foil pouch to ensure that the pouch has not been opened. An open collection bag MUST be used within 24 hours of removal from foil pouch or discarded.

4. Remove the collection bag from the sterile pouch and IMMEDIATELY apply the collection bag base label. Cord blood received without this label must be discarded.

5. Apply maternal hospital ID label to the patient ID section of the bag or complete the patient ID section by hand. Cord blood received without a label must be discarded.

6. Place a hemostat on the tubing line near the needle. Leave room for the needle guard to be placed between the hemostat and the needle.
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7. Place the needle protection device on the tubing line in front of the hemostat, making sure that the device clicks into place and the arrow and ridges on the protection device point towards the needle.

8. Place a blue clamp on the tubing line behind the hemostat, taking care not to pinch the line closed.

9. If the delivery is a C-section, attach the sterile adaptor to the collection bag.
   - Drop the C-section adaptor onto the sterile field using sterile technique.
   - The non-sterile circulating staff member inserts needle into female end of the adaptor.

10. After the delivery and the cord has been clamped and cut, select a venipuncture site close to the cord clamp.
   - Wipe the entire umbilical cord with sterile water, or other appropriate cleansing solution available at the collection site, removing as much biologic material coating the cord as possible.
   - Scrub the site on the cord surface with ChloraPrep for at least 30 seconds.
   - Allow the site to dry for at least 30 seconds prior to venipuncture. Do not touch the cord puncture site after it has been cleaned.

   Note: Scrubbing venipuncture site using ChloraPrep is not required if cord blood is collected in a sterile field during C-section delivery.

11. Note the collection start time on the Delivery Information Form.

12. Insert the needle (bevel down) into the vein at the prepared venipuncture site and release the hemostat. Blood will start to flow into bag via gravity when it is placed at a level below the venipuncture site.

13. Place the collection bag on a clean surface below the venipuncture site.

14. As blood drains, gently agitate the collection bag to mix the blood with the anticoagulant to prevent clotting. A second person, such as a circulating nurse, can do this throughout the collection.

15. If additional punctures are needed to maximize the volume collected, clamp the cord, prep each puncture site with ChloraPrep as above, and proceed with the collection.

16. Collection is complete when the cord appears white and blood is no longer draining. The blood may flow slowly. Please have patience. Collecting more blood increases your chances of collecting a unit that will help a patient.

17. Clamp tubing with a clamp or hemostat to prevent any air from entering the collection bag.

18. Withdraw the needle from the vein and slide the needle safety device over the needle by grasping the device with one hand and pulling back on the tubing with the other. Ensure that the device locks into place.
   - If using a sterile adaptor, detach it from the collection bag needle and also slide the needle safety device over the collection bag needle. Discard adaptor into a biohazardous sharps container.

19. Use the edge of the hemostat to apply pressure to strip blood from the tubing into the collection bag to mix the blood with the anticoagulant. Repeat once.

20. Tie two knots in the tubing line. The first knot must be 6 inches away from the collection bag. (For reference, this is the approximate length of the collection bag.) The second must be further away.

21. Cut the needle off the collection bag tubing and discard it into appropriate biohazardous sharps container.

22. Gently agitate the collection bag again to ensure all blood is mixed with the anticoagulant.

23. Verify that both patient identification and the collection bag base label have been applied to the collection bag.
24. Complete the Delivery Information Form. **Every blank must be completed. Missing information may cause the unit to be discarded.** If the verification signature is missing, the unit will be discarded. The form must have the collector’s full printed name in order to determine if the collector has been properly trained.

25. Place the labeled cord blood unit in the larger zip top bag.

26. Wrap the gel wrap around the two bags containing the cord blood unit and maternal samples. Note: Use care not to dislodge the temperature monitoring device that is affixed to the inside of the gel wrap.

27. Place the gel wrap in the insulated envelope. Seal the envelope.

28. Place the insulated envelope in the Styrofoam kit box, or blue plastic kit box, depending on which was provided.

29. Place the completed paperwork—Short Screening Form, Consent, Delivery Information Form, and Maternal Samples form—on top of the insulated envelope.

30. Close the kit box. If using a Styrofoam transport box, seal the outer cardboard box. **Ensure that no donor identifying information is on the outside of the container.**

31. Send the box to the designated pick up area for delivery as soon as possible to the Puget Sound Blood Center.

32. Staff at the pick-up area notify the appropriate courier/dispatcher that a pick up is ready, if applicable.