

<p style="text-align: center;">St. Louis Cord Blood Bank <small>SSM Cardinal Glennon Children's Medical Center St. Louis University Department of Pediatrics</small></p> <p style="text-align: center;"><i>The First Gift™</i></p>	<p>METHOD OF COLLECTION OF CORD BLOOD</p>
<p>Cellular Therapy Laboratory & St. Louis Cord Blood Bank 3662 Park Avenue, St. Louis MO 63110, 314-268-2787</p>	<p>CL.06.11</p>

PRINCIPLE:

The St. Louis Cord Blood Bank (SLCBB) acts to ensure that Obstetricians/Midwives and labor and delivery staff follow the prescribed instructions for collecting high quality units.

PURPOSE:

This policy describes the procedure for collection of cord blood for the St. Louis Cord Blood Bank.

POLICY:

The procedure for collection of cord blood for both vaginal and caesarian deliveries is the same. Labor and delivery staff will obtain a Cord Blood Collection Kit from the designated storage area and ensure that the kit has not expired. The kit should remain in the patient's room during the collection process.

Nothing is more important at the time of birth than the health of the mother and baby. The delivering physician/midwife has the final decision on whether the cord blood collection should take place. The physician/midwife will deliver the infant per standard practice and will not modify their practice in an attempt to obtain larger cord blood units. The cord blood collection will be discontinued by the physician/midwife if medical complications develop that can adversely affect the health or safety of mother or baby.

PRIOR TO DELIVERY

1. Confirm the patient identity and that she desires to participate in cord blood donation.
2. Provide the patient with a copy of the consent and witness her signing the consent to donate cord blood prior to delivery and/or active labor. The observing nurse will then sign the consent as her witness and place the signed copy in the collection box. A copy of the consent is also provided to the family at this time.
3. Collect the maternal samples while starting the IV or with another sample draw using the red top tube, white top tube and purple top tube provided in the collection kit. **Fill all tubes completely. Label the tubes with maternal labels.** Ensure the information on the labels matches that on the maternal armband. Record the date and time of the collection and the collector's initials on each label.
4. Note on the L&D data form, CL.03B.XX, if the patient received more than 2,000 ml of IV fluids within 1 hour prior to the specimen collection. There is the possibility this could cause plasma dilution of the sample and affect the test results. Therefore, the donor will be rejected from eligibility, unless a redraw can be obtained. Place the following samples in the specimen biohazard bag.
 - red top – no additives
 - white top – EDTA + gel
 - purple top – EDTA
5. Have the mother complete a medical history questionnaire if not previously done.

<p style="text-align: center;">St. Louis Cord Blood Bank <small>SMM Cardinal Glennon Children's Medical Center St. Louis University Department of Pediatrics</small></p> <p style="text-align: center;"><i>The First Gift™</i></p>	<p>METHOD OF COLLECTION OF CORD BLOOD</p>
<p>Cellular Therapy Laboratory & St. Louis Cord Blood Bank 3662 Park Avenue, St. Louis MO 63110, 314-268-2787</p>	<p>CL.06.11</p>

6. Have the following supplies available for the collection:
 - a) Cord blood collection bag
 - i) Contents inside overwrap pouch, within the foil envelope, are sterile and acceptable for use in sterile field if pouch is unopened and undamaged. (Pall Medical).
 - ii) Open the external foil pouch and remove the peel pouch outside of the sterile field
 - iii) Remove and discard the desiccant.
 - iv) Open the peel pouch to release the collection bag onto the sterile field
 - v) Do not use the bag if it has expired or the fluid appears cloudy.
 - b) ChloroPrep (can be opened and placed on the sterile field)
7. If any portion of the cord blood collection kit needs to be replaced, or if you have any questions about the use of the kit, contact the St. Louis Cord Blood Bank at 314-268-2787 or 888-453-2673.

AT DELIVERY

8. Obstetrician/Midwife will deliver infant per standard practice, clamp and cut the umbilical cord, all without modifying delivery practice due to cord blood collection.
9. Obstetrician/Midwife will cleanse the cord above the clamp with ChloroPrep solution using a back-and-forth scrub for at least 30 seconds and allow to dry.
10. Obstetrician/Midwife will remove the needle cover and insert the needle (bevel side down) from the collection bag into umbilical vein slightly above the clamp. Lower the bag and by gravity flow **COLLECT AS MUCH BLOOD AS POSSIBLE**. The quality of the collection is directly dependent on volume. A larger volume of cord blood collected increases the likelihood of the unit meeting criteria for patient use. While filling, gently rotate the bag to mix the blood with anticoagulant to avoid clotting. At least 95 ml (including 35 ml of anticoagulant) of collection is needed for processing.
11. When blood flow has ceased or the vein collapses, close the pinch clamp and withdraw needle from umbilical vein.
12. Slide the Phlebotomist Protection Device (PPD) over needle hub with a swift motion until the needle is locked inside the PPD. The needle is completely retracted when the white base of the needle hub is visible outside of the PPD.
13. While holding the tubing above the bag, open the tethered cap on the blue air vent and allow the blood to drain from the tubing into the collection bag.
14. Make 2 tight knots in the tubing anywhere in the tubing below the closed pinch clamp.
15. Cut off the covered needle above the closed pinch clamp and dispose in a sharps container.
16. **Attach a maternal label to the bag** and record the time and date of collection on the label and the initials of person affixing the label to the bag.
17. Place the cord blood collection into the biohazard specimen bag and close the bag.
18. If an additional puncture is needed to maximize the volume collected, clamp the cord above the last puncture site, prep the puncture site with a new ChloroPrep and proceed with the collection.
19. Complete the labor and delivery data sheet.
20. Ensure all of the following items are enclosed in the collection box:
 - Maternal Blood Samples (enclosed in the biohazard bag)
 - Cord Blood Collection Bag (enclosed in the biohazard bag)
 - Signed/Witnessed Consent

<p>St. Louis Cord Blood Bank <small>SMM Cardinal Glennon Children's Medical Center St. Louis University Department of Pediatrics</small></p> <p><i>The First Gift™</i></p>	<p>METHOD OF COLLECTION OF CORD BLOOD</p>
<p>Cellular Therapy Laboratory & St. Louis Cord Blood Bank 3662 Park Avenue, St. Louis MO 63110, 314-268-2787</p>	<p>CL.06.11</p>

Labor and Delivery Data Sheet

Medical History Questionnaire if not previously completed

21. Secure the opening of the collection box with tape.
22. Place in designated area for courier pick-up. The collection should be stored at room temperature.

PROCEDURAL NOTE:

The collection of maternal samples for infectious disease testing must be completed within 7 days before or after delivery. However, maternal samples must be received at the SLCBB within 48 hours of Collection (TS.01.XX).

MATERIALS:

Collection kit,
Maternal labels (provided by delivery hospital)

RELATED FORMS:

CL.03B.XX Labor and Delivery Data
CL.05A.XX Consent

RELATED POLICIES/PROCEDURES:

CL.XX.XX Collection Manual SOP's
TS.01.XX Shipment of Maternal Samples to the ARC-NL for Infectious Disease Testing

REFERENCES:

PALL Medical collection bag insert

Addendum

Collection of Cord Blood for Directed Donation

There are instances where the cord blood to be collected is already designated for a recipient. These unique cases are called Directed Donation. The delivery hospital will receive, in advance, a specific medical record flag and instructions. The collection method remains the same. However, when the mother arrives at the hospital to deliver, the hospital and/or family are instructed to call the St. Louis Cord Blood Bank so the bank may anticipate the collection. Additionally, when the collection is complete, notify the St. Louis Cord Blood Bank so that the bank may prepare for its arrival. If the mother delivers on a weekend when transportation might not usually be available, the collection should still take place. The St. Louis Cord Blood Bank will make special transportation arrangements for this Directed Donation.

Contact Numbers for Directed Donation: 314-268-2787 or 888-453-2673