Insception Lifebank
CANADA'S #1 CORD BLOOD PROGRAM

by CooperSurgical®

Healthcare provider instructions

How you can make a difference in quality assurance

Your role in this collection process is critical. Simply by adhering to the following instructions, you can make a big difference when it comes to assuring the quality of the cord blood and cord tissue collection and the usability of the sample.

We appreciate your careful consideration and compliance to the specific techniques we've outlined in this guide. Doing so will help to ensure that your patients can take full advantage of advancements in cellular therapy in the future.

There are four key factors that impact the quality of the collection, each of which is highlighted in this booklet and is listed below:

Prior to delivery

1 Perform birthing person/maternal blood draw

At delivery

- 2 Collect cord blood
- 3 Collect cord tissue (if applicable)

After collection

- Return kit to patient
- Please make note of the critical quality steps.

Prior to delivery



IMPORTANT: Please verify the expiration date of the collection kit prior to use.

The expiration date is located on the box.

If the collection kit has expired, please contact Insception Lifebank at **1.866.606.2790**

Perform birthing person/maternal blood draw



BIRTHING PERSON/MATERNAL BLOOD DRAW: Failure to collect a blood sample from the birthing person could impact a family's ability to use their newborn stem cells in the future.

Birthing person/maternal blood draw is required within 7 days of delivery.

Use the blood collection tubes **provided**. If provided tubes cannot be used, use substitute tubes with the same colored tops.

- 1. Fill tubes completely.
- 2. Gently invert tubes end over end 5-7 times never shake.
- 3. Keep tubes vertical until the tube with the red top has clotted.
- 4. Record the birthing person's name and date of birth, as well as the collection date and time, on each blood collection tube. Do not obscure the barcode label.
- 5. Record birthing person/maternal blood draw information on the Maternal Serology Requisition.
- 6. Place tubes into shuttle. Place shuttle into the plastic bag.
- 7. Seal bag and return to kit.

FOR MULTIPLE BIRTHS: Only a single set of **birthing person/maternal blood** collection tubes are necessary (3 tubes). However, **each baby will need a separate kit** for their own cord blood and cord tissue collection, using the following instructions.

At delivery

2 Collect cord blood

Collect cord blood as soon as the cord is clamped and cut, while the placenta remains in utero. All required equipment is provided in this kit.

Collection procedures are designed to protect the health and safety of the donor. If the health of either the individual giving birth or the child is deemed to be at risk, immediately stop the collection process.



STERILITY: Disinfect the cord using proper swabbing technique prior to inserting the collection needle.

- **1.** After clamping and cutting the umbilical cord, swab fetal end of cord with ChloraPrep® or 70% alcohol. Clean insertion area with a single motion. Do not wipe over a cleaned area with the same swab.
- 2. Close white clamp on tubing to maintain a closed collection system.
- **3.** Remove cap and insert needle into umbilical vein with a single needle insertion, bevel side down.
- **4.** Open the white clamp to allow the blood to begin flowing. Extend tubing to its full length, keeping the collection bag lower than the insertion site to increase collection volume and speed. A typical collection will take 3 to 5 minutes. As the blood flow slows, it may be helpful to "milk" the cord towards the bag and, as a last attempt to maximize the collection volume, you can massage the uterus.

MULTIPLE NEEDLE STICKS: If multiple needle sticks are necessary due to a collapsed vein or clot, practice aseptic technique: Close the white clamp and remove the needle. Wipe the new insertion site with ChloraPrep® or 70% alcohol (do not reuse the same pad). Reinsert the needle and reopen the white clamp.



VOLUME: Greater cell quantity can improve medical outcomes.

- **5.** When blood flow stops, leave needle in vein and use the attached white clamp to close tubing near the "Y" connection. Figure 1
- **6.** Exercise special caution: Remove needle from vein and slide safety guard over needle. Pull tubing to secure needle inside protective cover.



Figure 1: Clamp tubing

- 7. Cut tubing between clamp and needle safety guard.
 Discard needle according to standard procedures. Note:
 Do not return needle in collection kit. Figure 2
- **8.** Open blue cap on sterile clearance vent to empty any blood remaining in the tubing into bag. Figure 3
- **9.** Loop tubing and tie a knot as close to the sterile clearance vent as possible, leaving at least 8 inches of tubing between the knot and bag. Pull tightly. Do not use sutures. **Figures 4-5**
- **10.** Invert the collection bag a few times to ensure that the CPD anticoagulant mixes with the cord blood to prevent clotting.



KNOT TIE: Proper knot tie allows for closed processing.

- **11.** Complete and verify the Cord Blood Label for identity and accuracy. Affix this label to the back of the bag. Do not obscure this barcode.
- **12.** Place blood collection bag into plastic bag with absorbent pad, seal the bag, and return to kit.
- **13.** Complete MD / DO / Midwife and baby information sections of the Data Collection Sheet and place form back inside collection kit.



LOW VOLUME: Low volume collections may still yield suitable stem cell concentrations and should be returned to our lab.



Figure 2: Remove needle



Figure 3: Open sterile clearance vent

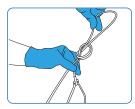


Figure 4: Loop tubing



Figure 5: Knot tubing

IF COLLECTING AFTER PLACENTAL DELIVERY: Follow the steps above, taking care to collect blood from only the fetal side of the placenta.

FOR MULTIPLE BIRTHS: Individual collections are required for each baby with separate collection bags. Clearly label the collection bag with the name of the baby and return the collection kit assigned to that baby.

THE CORD BLOOD COLLECTION SYSTEM IS FOR SINGLE USE ONLY.

At delivery

3 Collect cord tissue (if applicable)



IMPORTANT: Verify that the client intends to have cord tissue collected. Consult the "Birthing Person" section of the Data Collection Sheet. **Unless the client has checked the box in that area**, proceed to cord tissue selection.

- 1. To proceed with the collection, remove the CordCup container from the kit, keeping it outside of the sterile field.
- 2. Place the cup on a flat surface. Hold it firmly to prevent spilling fluid, and carefully unscrew the cap. Figure 6
- 3. Clean and cut a 4- to 8-inch segment of the umbilical cord. Figure 7
- **4.** Coil the cord tissue segment inside the cup, and screw the cap into place until tightly sealed.

NOTE: Some overflow of fluid is expected. However, it's important that ample fluid remains to protect the cord during shipping. You may return a smaller cord segment if necessary. **Figure 8**

- **5.** Complete and verify the Cord Tissue Label for identity and accuracy. Do not obscure the barcode.
- **6.** Place the cup into the plastic bag with the absorbent pad, seal the bag, and return it to the kit.



Figure 6: Unscrew cap



Figure 7: Cut



Figure 8: Coil segment into cup

NO FORMALIN: To avoid a non-processable cord tissue sample, please do not use formalin in cord tissue collection.

FOR MULTIPLE BIRTHS: Individual collections are required for each baby with separate collection cups from separate kits. Clearly label each collection cup with the name of the baby and return the collection kit assigned to that baby.

THE CORD TISSUE SYSTEM AND CORDCUP CONTAINER ARE FOR SINGLE USE ONLY.

After collection

Return kit to the patient

- 1. Verify that the following items are returned to the kit:
 - Cord blood
 - Cord tissue (if applicable)
 - Birthing person/maternal blood collection tubes
 - Data Collection Sheet with healthcare provider section completed
 - Maternal Serology Requisition
- 2. Close the kit and return to the patient for shipping via the medical courier.



IMPORTANT: It's important that the call to the medical courier be made within **1-2 hours** of the birth because receipt of the kit in a timely manner is imperative to the health of the sample. For that reason, you may need to assist in contacting the medical courier if the patient is unable to do so on their own.