# INDIANA HEMOPHILIA & THROMBOSIS CENTER PROCEDURE FOR COLLECTING, PROCESSING & SHIPPING THE CORD BLOOD SAMPLE

Coagulation tests and assays requiring the use of citrated plasma must be drawn using a two-syringe (tube) technique to avoid any contamination with tissue juice (thromboplastin). Syringes or blue top citrated vacutainers may be used. Of importance is that the first syringe (or vacutainer tube) be discarded and the second syringe (or vacutainer tube) with free flowing, uncontaminated blood be used for any coagulation test. Please sure the vacutainer tubes are properly filled.

#### **COLLECTION:**

- 1. Double-clamp the umbilical cord and cut, as noted in the diagram on page 3.
- 2. Draw 2 mi. of blood from the cord with either the syringe or the blue top tube and discard.
- 3. Draw 4.5 mi. of blood and place into the blue top tube or use the blue top tube with the vacutainer system (extra blue tubes been provided in case they are needed).
- 4. Mix blood by inverting the tube 5 10 times.
- 5. If blood cannot be processed immediately, place sample on ice. Process sample within 2 hours of collection.

#### **PROCESSING:**

- 1. Immediately centrifuge the sample for 20 minutes at a minimum of 2000 RPM.
- 2. Using the plastic pipettes provided, remove the plasma from the tube taking care not to disturb the cells (remove only 3/4 of plasma from the tube).
- 3. Aliquot plasma into the 5 plastic tubes provided, putting at least 0.5 ml. into each tube. Cap and freeze plasma immediately.
- 4. Label all tubes with the baby's name, birth date and mother's name.
- 5. Freeze samples until time of shipment.
- 6. Please send the following information along with the specimens;
  - 1. The patient's bleeding history, if known.
  - 2. Any other test results your lab has obtained.
  - 3. A list of tests you are requesting.
  - 4. A copy of the patient's face sheet if available.

### **SHIPPING:**

- 1. Fill in all highlighted information on the MACL requisition (if provided).
- 2. Place frozen samples in the plastic bag provided.
- 3. Fill the styrofoam shipping container halfway with dry ice.
- 4. Place the plastic bag containing the specimens on top of the dry ice.
- 5. Add dry ice until the container is full.
- 6. Place the lid on the container and tape the requisition (if provided) on the lid.
- 7. Seal the outside carton and affix the preprinted FedEx air bill to the carton. Specimens should be shipped to:

Mid America Clinical Laboratories (MACL)

**Special Coagulation Laboratory** 

2560 N. Shadeland

Indianapolis, IN 46219

- 8. Call Fed Ex at 1-800-463-3339 for package pickup.
  - Note: Do not ship specimens on Friday or Saturday.
- 9. Call the Special Coagulation Laboratory at MACL, Indianapolis, 317-803-0410 to alert the staff that a specimen has been shipped.

## CLAMPING PROCEDURE FOR THE COLLECTION OF CORD BLOOD

After double-clamping the cord, cut between the clamps and remove the segment (see diagram below). Draw 1-2 ml. of blood from the umbilical vein and discard. With the needle still in place, draw 4.5 ml. of blood into a properly citrated syringe or blue top vacutainer (be sure to discard the first blood). Then proceed with steps 4 - 8 on page one.

