

Postnatal Donation – Provider Information



In Indiana, the [Postnatal Donation Initiative](#) established that the Indiana State Department of Health would take the lead in promoting awareness concerning a pregnant woman's option to donate postnatal fluid, including umbilical cord blood, as well as postnatal tissue, including the placenta and tissue extracted from the umbilical cord.

What exactly do we collect?

We, as the providers of obstetrical care, are in a perfect position to collect cord blood postnatally. Cord blood is blood from the fetal circulation and is what remains in the umbilical cord and placenta after birth. Within it are hematopoietic stem *cells* that can be used to treat some diseases and may be beneficial for research. Generally 85mL (approximately 3 oz.) are collected after delivery so that an adequate number of stem cells are retrieved.

What are stem cells and how are they utilized?

Stem cells are pluripotent with the potential to differentiate into many other terminal cell types. The uses of these cells range from metabolic diseases, immunologic conditions and cancer—with the potential for an expanding array of diagnoses with future advances in medicine. Cord blood stem cells are amenable for the treatment of a wide variety of diseases including cardiovascular, hepatic, ophthalmic, orthopedic, neurological, and endocrine diseases. Current medical application of stem cells include various forms of leukemia and lymphoma, aplastic anemia, and sickle cell disease. With continued research it is the hope that one day stem cells will be used in the treatment of Alzheimer's disease, cerebral palsy, multiple sclerosis, and many more life altering conditions.

Where is cord blood stored?

Cord blood is stored frozen in either public or private banks. They are different.

Public versus Private cord blood banks—what are the differences?

Public banks collect cord blood that is stored and used for anyone who may need it—like a traditional blood bank. Donated cord blood can be used by a patient who is a match for the donated specimen. These types of banks do not charge to collect cord blood but donors forfeit their rights to use their individual donation. These donors are screened before birth, with a detailed medical history of the parents and their families.

Private banks store cord blood for "directed donation." Directed donation allows the donor and his or her family to choose the cord blood recipient. Private banks require an initial fee for collection as well as a yearly storage fee. Some health care providers may have a financial or other conflict of interest in a private bank, which should be disclosed.

How do I collect cord blood?

Each bank has specific directions on how to collect and ship the cord blood units. Depending on which bank you use, it will be important to become familiar with their individual collection, packaging, and shipping procedures.

Collection is usually performed after the baby is born and the placenta has been delivered. Blood should be collected as soon as possible following delivery to avoid clotting and to maximize sample retrieval. Each collection kit should contain specific instructions regarding collection. General instructions for collection are as follows: The placenta is suspended from a collection stand and the umbilical cord is subsequently sterilized. A 16 gauge needle, which is connected to the collection bag (which contains anticoagulant solution), is inserted into the umbilical vein for sample retrieval.

What are the contraindications to collect cord blood?

Each bank has certain criteria that would be considered contraindications for the collections of cord blood. While each bank may differ slightly, the most common contraindications for all banks are the following:

- HIV
- Hepatitis B & C
- Recent incarceration
- Recent travel to malaria endemic areas of the world
- Cancer
- Autoimmune diseases
- Recent STD's
- Drug use

In addition, cord blood should never be collected if the collection would compromise the safety of mother or baby. Early cord clamping for cord blood collection should never take precedence over treating fetal anemia or hypovolemia.

If you decide to store cord blood, you will need to choose a cord blood bank. Listed are some questions to ask yourself when deciding on a bank:

- **Does the bank meet the proper accreditation requirements?:** Cord blood banks should be regulated and inspected by the FDA.
- **How is the cord blood shipped?:** After cord blood collection, cells begin to die which is why it is important for cord blood to be shipped in a timely manner.
- **How quickly is cord blood processed?:** Cord blood should be processed within 48 hours.
- **Does the bank have clinical experience with transplants?:** Banks should have experience with releasing cord blood for transplant and for experimental therapies.

What will happen to the donated cord blood if a private bank goes out of business?

Fortunately, if a cord blood bank goes out of business, another company usually takes over the frozen inventory. The cord blood bank will transfer the units to another cord blood facility that will take over the storage and billing. All of this is typically communicated to the customer.

What resources are available to learn more?

- <https://bethematch.org/>
- <http://bloodcell.transplant.hrsa.gov/>
- <http://parentsguidecordblood.org/>

What public and private banks are available in Indiana?

- *Private Banks:*
 - [Americord: Cook General BioTechnology](#), Indianapolis, IN
 - [Southerncord: Cook General BioTechnology](#), Indianapolis, IN
- *Public Banks:*
 - None at this time

- *Cord Blood Donation Collection Agency:*
 - [Life Line Stem Cell](#) (limited collection area)

How do I contact the available banks to get kits delivered to my hospital?

Contact information is available on each bank's website.

Are there any legal ramifications to my collecting cord blood postnatally?

In the State of Indiana there are no legal ramifications for collecting cord blood as long as the mother was given the information about donation, signed a consent form, and is aware of the donation.

Do patients need to sign a consent form in order to donate to a cord blood bank?

Collection of cord blood requires informed consent, which is usually provided by the mother, however, involvement of the father in the consenting process is encouraged. Parents should be educated on cord blood collection and its possible uses. In addition to consent, parents need to fill out a medical/ social questionnaire.

Is there anything that can be done with donated samples that are not eligible for use in transplant?

If cord blood is ineligible for transplant, it can be used for research. This research is a valuable part of learning about the full potential of stem cells and their use for the treatment of illness and disease.