

Cord-Blood Banking

Cord blood is the blood that remains in the umbilical cord and placenta following birth. Until recently, in most cases the umbilical cord and placenta were discarded after birth without a second thought. But during the 1970s, researchers discovered that umbilical cord blood could supply the same kinds of blood-forming (hematopoietic) stem cells as a bone marrow donor. And so umbilical cord blood began to be collected and stored.

Why would I store my baby's blood in a cord blood bank?

The cord blood of your baby serves as an abundant source of stem cells, which are genetically distinctive to your baby and family. Stem cells can transform into other types of cells in the body and create new growth and development; they are the building block of the immune system. This transformation of cells provides physicians with a way to treat leukemia and some inherited disorders.

Banking your baby's blood and stem cells in a cord blood bank provides you with a type of insurance. Hopefully, you will not need to access your baby's stem cells to address a medical problem, but using a cord blood bank can give you peace of mind that this valuable resource is there if you need it. The stem cells from your baby's cord blood may be able to treat certain diseases or conditions of a parent or sibling.

How is cord blood collected?

The cord blood collection process is simple, safe, and painless which poses no risk to the mother or newborn. Cord blood collection does not interfere with delivery and is possible with vaginal or cesarean deliveries as it is done after your baby has been born and the cord has been cut. Cord blood may only be collected during the first 15 minutes following the birth and it is usually completed in less than five minutes by your health care provider. It should be processed by the laboratory within 48 hours. These cells become medical waste unless you make prior arrangements for them to be collected.

How much does cord blood banking cost?

There are usually two fees associated with private cord blood banking. The first is the initial fee which includes enrollment, collection and storage for at least the first year, and the second is an annual storage fee. Some facilities offer a variety of options for the initial fee with predetermined periods of storage.

What if I do not want to store the cord blood?

Whether it is through foundations, non-profit blood banks or medical institutions, there are some locations that will collect, process, and use the stem cells from your baby's cord blood to help other people. There is no cost to you, and it is just like donating blood. If you do not choose to store your baby's blood, consider donating. Your donation of cord blood could make a difference in someone else's life.

Where can I learn more about cord blood banking and arrange for cord blood banking services?

There are options available to you to privately bank your cord blood and cord tissue, as well as public options for donating your cord blood. The following websites have links for more information:

www.parentsguidecordblood.org

www.marlow.org/HELP/Donate_Cord_Blood_Share_Life/index.html

www.aabb.org/Content/Accreditation/Cord_Blood/cord.htm

The *first* successful stem cell transplantation took place in 1988, when *French* researchers took umbilical cord blood from a newborn and gave it to a 5-year-old sibling who had *Fanconi's anemia*, a severe type of anemia that causes skeletal defects.