

Cord Blood

1.) What is cord blood?

The term “cord blood” is used for the blood remaining in the umbilical cord and the placenta after the birth of a baby. Cord Blood contains stem cells that can grow into blood and immune system cells, as well as other types of cells. Today cord blood is often used as a substitute for bone marrow in stem cell transplants. Over 80 diseases are treated this way, including cancers, blood disorders, genetic and metabolic diseases.

2.) How is cord blood collected and banked?

Cord blood collection does not cause harm or pain to either the mother or the baby. The cord blood is drawn after the baby has been delivered and the cord is clamped and cut. The cells in cord blood remain viable for a couple of days at room temperature, providing sufficient time for the blood to be shipped to a laboratory where the stem cells in the blood are processed and cryogenically frozen. Once properly frozen, stem cells can remain viable for decades.

3.) What types of banks store cord blood?

There are two types of cord blood banks:

Family Banks- Family banks (also known as private) store cord blood exclusively for use by the baby’s family. The parents have custody of the cord blood until the child is an adult. The cord blood might someday be needed by the donor baby, or (more commonly) it could be used by a relative who is a close enough match (typically a sibling).

Public Banks- Public banks store donated cord blood for potential use by patients in need. The blood is listed on a registry by its tissue type, and the donor remains anonymous. Most of the donations received by public banks are too small to qualify for long-term storage and are used for research or discarded. If you give your child’s cord blood to a public bank, your donation may save a life, but you have no guarantee that you can retrieve the blood later for use by your family.

Cord Blood

4.) Can my child use his or her own cord blood?

Most of the diseases for which children receive stem cell transplants require that the cells come from another donor, not the patient. If a child has cancer or a genetic disease, they cannot be treated with their own cord blood.

The odds that a child will have a transplant by age 20 are 1 in 2,500 for transplants from donors and 1 in 5,000 for transplants with their own cells. In the US, 1 in 217 people have a stem cell transplant by age 70.

5.) What is cord blood donation?

Cord blood donation costs the parents nothing, but can give hope to a patient in need. The parents sign an informed consent which gives a “public” cord blood bank permission to list their child’s cord blood on a database that can be searched to find a match for a transplant patient. The cord blood is listed purely by its tissue type, with no information about the identity of the donor.

The majority of programs that accept cord blood donations require the mother to sign up between the 28th and 34th week of pregnancy. This cannot be over-stressed; time and time again, mothers who want to donate are turned away because they did not inquire about donation until it was too late.

The main reason for this requirement is to give the cord blood bank enough time to complete the enrollment process. For the safety of any person who might receive the cord blood donation, the mother must pass a health history screening. And for ethical reasons, the mother must give informed consent.

6.) What are the costs of banking cord blood?

Family banks currently charge the family between \$1,300 and \$2,200 to process and store cord blood privately. Family banks generally also charge

Cord Blood

a \$125 annual storage fee.

Public banks do not charge parents for donating cord blood. It costs about \$30,000 to obtain a cord blood collection from a public bank, and that cost is charged to the patient's health insurance.

7.) Who is eligible to bank cord blood?

Except in cases of rare medical complications, most mothers are eligible for family banking. For all forms of cord blood banking, be sure to discuss your decision with your healthcare provider.

In order to donate cord blood to a public bank, the mother must:

1. Contact a public bank that either collects donations at the hospital where she will deliver or accepts donations using a mail-in kit,
2. Register by the 34th week of pregnancy, and
3. Pass a health history screening.

*Information from the Parent's Guide to Cord Blood Foundation