## What is the Parent's Guide to Cord Blood Foundation?

The Foundation responsible for this brochure is a 501(c)3 nonprofit charity dedicated to educating parents about cord blood.

We are the only organization worldwide that maintains databases of both public and family (also known as private) cord blood banks. Since 1998, our website has provided parents with accurate and balanced medical information about cord blood banking options. Our founder, Frances Verter, PhD, is both a mother who lost a child to cancer plus a scientist who publishes in the field of cell therapy.

The information in this pamphlet is subject to review by the Foundation's Scientific and Medical Advisory Panel. Our panel includes prominent doctors and scientists, as well as nurses and educators who work closely with expectant parents.

## Where can I find more information?

#### ParentsGuideCordBlood.org

23110 Georgia Ave. Brookeville, MD 20833 info@parentsguidecordblood.org

This space to be used for a sticker giving the name and address of your medical practice, state's department of health, or other organization.



Cord Blood Registry (CBR) has provided a donation to help make possible the printing of this brochure. CBR is not responsible for the content of this brochure and its involvement is limited to such sponsorship.



## Parent's Guide to Cord Blood

FOUNDATION®



The blood in a baby's umbilical cord has the power to save lives. By choosing to bank this cord blood, parents could help their child, a family member, or even a stranger. Many states in the U.S. have passed laws requiring expectant parents to receive information about cord blood banking. This brochure is intended to address the educational requirements of those laws and to answer basic questions that parents-to-be may have.

Please ask your health care provider or search our website to learn more about your options for banking your child's cord blood.

# Mission Statement

The Parent's Guide to Cord Blood is dedicated in memory of

Shai Miranda Verter Dec. 9, 1992 - Sept. 2, 1997 The primary mission of the Parent's Guide to Cord Blood is to educate parents with accurate and balanced information about cord blood medical research and cord blood storage options.

The second mission of the Parent's Guide to Cord Blood is to conduct analyses of medical research or policy developments that could impact the field of cell therapy with cord blood and other perinatal stem cells.



Important information about cord blood banking.

#### What is cord blood?

The term "cord blood" refers to the blood that remains in the umbilical cord and the placenta after the birth of a baby. In the past this blood was discarded as medical waste. We now know that cord blood is one of the richest sources of human stem cells. These stem cells may be cryopreserved for later use in medical therapies, such as stem cell transplantation or new emerging therapies.

#### What are cord blood stem cells?

Scientists consider cord blood cells to be adult stem cells, not embryonic stem cells. There are a variety of valuable cell types in cord blood. The most important are blood-forming stem cells that can repopulate the immune system during a stem cell transplant. There are also mesenchymal stromal cells that have value for preventing inflammation and promoting healing. Researchers are developing various cellular therapies based on cells from cord blood.

## How is cord blood collected and stored?

Cord blood collection is a non-invasive procedure that is performed after the baby has been delivered and the umbilical cord is clamped and cut. The cord blood is then shipped to a laboratory in an insulated package that maintains stable temperature. The stem cells should be separated from the blood and cryopreserved within 48 hours of birth. Once cryogenically frozen, stem cells remain viable for decades.

## Delayed cord clamping and cord blood banking

The motivation for delaying cord clamping is to enable some of the stem cell–rich blood in the umbilical cord to return to the baby. It is possible to both delay cord clamping and collect cord blood. But to do both, the delay should be no longer than 30–60 seconds. This is consistent with recommendations from the American College of Obstetricians and Gynecologists (ACOG). Studies have shown that delays longer than one minute do not help the baby to receive more cord blood, but they do make it difficult to collect the remaining blood in the umbilical cord.

## What are established uses of cord blood stem cells?

Since 1988, cord blood is routinely used in life–saving stem cell transplants. More than 80 diseases are treated this way, including cancers, blood disorders, genetic and metabolic diseases. Cord blood has some advantages over other sources for stem cell transplants. One is that cord blood triggers less chronic graft versus host disease, which helps to promote long term survival with better quality of life. Another advantage is that those patients who have rare genetic types and cannot find a matching bone marrow donor are able to receive a cord blood transplant. In 2025, a publication in the journal Pediatrics established that cord blood helps patients with cerebral palsy to improve their gross motor skills.

### How are cord blood stem cells used in research?

Cells from cord blood have been tested in a wide range of clinical trials. One area of research is to use the cells from cord blood as the starting material for immunotherapies, which could treat cancer or auto-immune disease. Cells from cord blood have also been tested in regenerative medicine therapies which help the body to repair itself. There have been many studies of cord blood for neurodevelopmental disorders in children, stroke in adults, and arthritis of the knee. It is not possible to predict which cord blood therapies may be approved in the future.

### Will my child or a sibling need to use cord blood?

Many of the children treated with cord blood receive cells from a sibling. Most of the 80 diseases for which children receive stem cell transplants are not common. The exceptions are blood disorders like Thalassemia and Sickle Cell, which are very common in certain parts of the world. In the United States, the odds that a child will have a stem cell transplant by age 20 are 1 in 2,500 for transplants from donors and 1 in 5,000 for transplants with their own cells. By comparison, cerebral palsy is the most common motor disability in childhood. The odds that child will be born with cerebral palsy are 1.5 in 1000 for full term births, but 1 in 10 for premature babies.

## What types of banks store cord blood?

#### 1. Public Banks

Public banks store donated cord blood for potential use by transplant patients. Donors to public banks do not get paid and remain anonymous, but your donation may someday save a life. Most of the donations received by public banks are too small to qualify for long-term storage and are used for research or discarded.

#### 2. Family Banks

Family banks (also known as private) store cord blood exclusively for use by the baby's family. The cord blood might someday be needed by the donor baby or a close relative (typically a sibling). Parents pay to store in family banks and they have custody of the cord blood until the child is an adult.

### What are the costs of banking cord blood?

Public banks do not charge parents for donating cord blood. Pricing plans for family banks vary around the world and many family banks are constantly running a special offer. Parents need to research this topic before they sign a contract.

### Who is eligible to bank cord blood?

Family banks can accept any mother that does not have a contagious blood disease, whereas public banks are very particular. Most public banks only collect donations from select hospitals, so the mother must give birth there to donate. Second, public banks are required to obtain a maternal health history and informed consent. Finally, public banks only keep very large donations. For all forms of cord blood banking, inform your healthcare provider that you plan to collect at birth. If you have been given a collection kit, make sure to bring it with you.



#### Parents Guide Cord Blood.org

#### Is there help for families in need?

Some family cord blood banks have charity programs that help with the cost of banking when a family member has a diagnosis that can be treated with cord blood. Parents need to inquire about these programs.

### What should I do with my child's cord blood?

Most parents do not have the opportunity to donate cord blood, they only have the option to bank privately or discard the cord blood. Each family should consider their own health history and their tolerance for medical risk. Whatever choices you have and whatever decision you make, remember there is no single correct answer for all families. Only you know which choice feels right for you and your family.

