CORD BLOOD GUIDE

CORDBLOODGUIDE.COM

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Introduction

Cord blood banking is a way for expecting parents to protect their child from diseases that may occur in the future.

Stored cord blood cells currently treat over 80 diseases - a number that has more than doubled in the past seven years.

With dozens of conditions in current and upcoming clinical trials for cord blood therapy, stored cord blood will become more valuable over time.

In this guide, we'll explain what cord blood cells are, how the banking process works and why you should consider storing these valuable cells.

First, a few quick facts on cord blood safety:

- **Cord blood banking doesn't put your child in any danger**
- **No cells are taken away from your baby**
- **Your child won't experience any pain**
- **Cord blood is usually done in a different room**
- **Your family will have a normal birth procedure**

First and foremost, cord blood banking is completely safe for your child. In a normal birthing procedure, the umbilical cord is cut and clamped and then thrown away as medical waste. For families banking cord blood, the birthing process is identical; however, after being cut and clamped, the umbilical cord is taken to a different room and placed into a machine that removes the blood to be stored.

Cord blood banking is completely safe for your child.

Why bank cord blood?

As a parent, you want the best for your child. We've already talked about the safety of cord blood removal, but that's just the first step to cord blood banking.

After your child is born and cord blood has been stored, you can use it for several different purposes (see "What are my options for cord blood banking?" for more details on your banking choices).

Stem cells from stored cord blood can protect your child, a family member, or even a patient on the other side of the world from over 80 dangerous conditions.

After your child's stem cells are frozen, they can be used in a life-saving medical procedure called a "cord blood transplant."

There are two major options for storing your child's cord blood.

For a fee, you can store your child's cord blood in a private bank, where their stem cells remain safe for decades. You can use these cells at any point in the future for your child or any close family members. Since the cells possess your child's genetic structure, they will transfer back into your child's or a close relative's system easily.

Your other option is donating the cord blood, or public banking. If you decide to donate your baby's cord blood, your family will pay no fees, and the donated unit could be used to help a transplant patient anywhere in the world. In some cases, the donated cord blood is actually used in a clinical trial, where it may help provide the research to establish new and improved treatments.

When you make the decision to store your child's cord blood, you can:

- **Protect your family from over 80 diseases**
- **Help doctors treat patients with autoimmune diseases and even certain cancers**
- **Donate your cord blood to a clinical trial, where scientists test emerging therapies**
- **Help medical researchers develop cutting-edge treatments for conditions like cerebral palsy, autism, and rheumatoid arthritis**

What is cord blood?

The blood in a baby's umbilical cord contains valuable red and white cells, along with hematopoietic stem cells, which are also found in bone marrow.

These stem cells have the ability to change into multiple cell types or repair damaged cells, depending on the needs of the body. Stem cells improve the body's natural healing system while boosting its defense against outside diseases.

Hematopoietic cells are the foundation of every blood cell, and can divide into three different types of cells:

- **Red blood cells –** responsible for moving oxygen through the body
- **White blood cells –** make up the immune system and protect the body from disease
- **Platelets –** control bleeding

When hematopoietic cells are transplanted, they will divide into different cells based on the body's needs and restore any major damage. Thousands of patients are diagnosed with the more than 80 diseases that are currently treated by cord blood cells.

Hematopoietic cells have been used in over 1 million patient transplants around the world. While cord blood is still a relatively new treatment, the number of units in private and public registries is growing rapidly. There are currently well over 1 million cord blood units stored in private banks alone.

How is cord blood collected and banked?

When a baby is delivered, medical staff will cut and clamp the umbilical cord. The clamping is done just like a normal procedure and is completely painless for both the mother and her baby.

In a normal birth, the umbilical cord is incinerated, like any other biological product. When parents have elected to store their baby's cord blood, the umbilical cord is clamped and removed from the room as usual. Instead of being discarded, the cord is put into a machine that removes the blood. A needle is then placed into the cord to pull out any leftover blood. Staff will then collect the blood into bags and send it to a cord blood bank.

It's important to note that you and your baby are nowhere near the machine that extracts blood from the umbilical cord. After your child is born, you can take them home and enjoy your time together. The mother and child will experience no difference in their birthing procedure.

Once the blood arrives at a bank, stem cells are removed and tested for:

- **Cell Count**
- **HLA Type**
- **Diseased Cells**

After the cells are tested, they are cryogenically frozen at the bank, usually in temperatures less than -150 degrees Celsius. This enables long-term storage, and the cells are available at any point in the future.

How is cord blood used in medicine today?

Hematopoietic cells are currently the only treatment option for patients with certain blood and immune disorders, including types of myeloma, leukemia and lymphoma.

Patients with these diseases receive large doses of chemotherapy and radiation therapy, which destroy the diseased cells in their body. This is followed by a stem cell transplant. These new cells will multiply and repopulate the patient's cell structure, effectively treating the cancer.

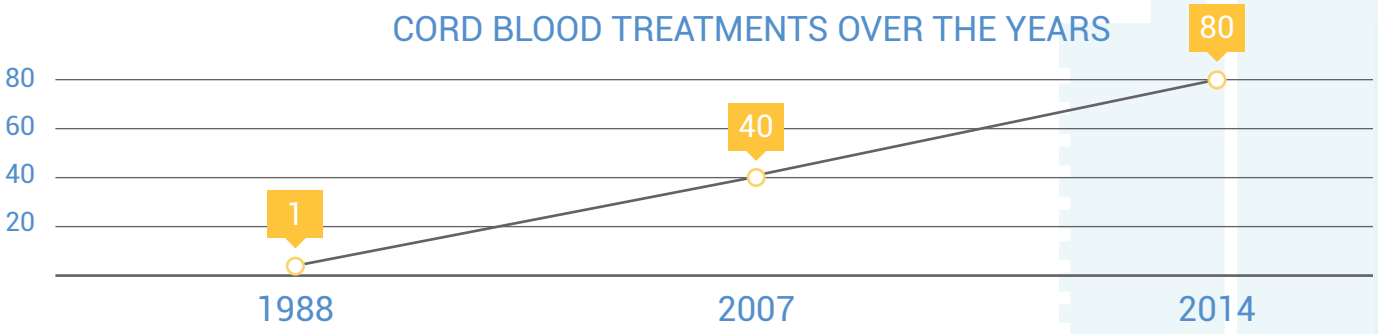
Clinical trials are also testing new ways to use cord blood. Hundreds of trials have been approved by the FDA, and researchers discover new treatments every year.

Current diseases being tested for treatment by cord blood in clinical trials include:

- **Autism**
- **Hearing loss**
- **Spinal cord injuries**
- **Brain damage**
- **Heart failure**
- **Multiple sclerosis**

Cord blood is often used with traditional treatments like chemotherapy. For patients with cancer, chemotherapy is used to destroy as many cancerous cells as possible. In some cases, the patient also undergoes surgery to remove cancerous or diseased organs. After the medical team has eliminated most of the harmful cells, they will give a follow-up stem cell transplant. This provides the patient with new, healthy cells; transplanted cord blood has been proven to generate new blood cells, which further improves the patient's recovery time.

In 2007, cord blood cells were approved as a treatment for 40 diseases. In the next 7 years, that number more than doubled. In the next several years, cord blood may treat hundreds of diseases, which means stored cells become more valuable over time.



What are my options for cord blood banking?

Parents have the option to store their child's cord blood privately for use within their family. They can also bank publicly, allowing the cord blood to be used by other patients or researchers in clinical trials.

There are two types of cord blood banks:

- **Public Banks**
- **Private Banks**

Public banks store cord blood for free, and list it on national and international registries. While this costs nothing for the parents, they don't have guaranteed access to their child's cells - the cord blood is considered a donation, and any patient that needs it can use it. Many public donations aren't used in treatment, but are given to researchers for clinical trials.

Private banks, also known as family banks, store cord blood for an individual family. There is a fee, but only the family can access their stem cells. If the family needs cord blood later in life, either for the baby or a close relative, they will always have cord blood as a treatment option.

Public banks

Public cord blood banks accept cord blood donations. This means parents choose to give their child's cord blood to a public bank. This costs nothing for parents, and the donated cells are entered into a registry that allows medical staff across the globe to request them.

Donated cord blood could be used to save someone anywhere in the world.

Sometimes, families that donate cord blood later need stem cells for treatment of various diseases. In these situations, and if the stem cells are still available, the family can use their publicly banked cord blood for treatment.

The biggest downside to public banking is that the donated cells can be used by anyone—if the child needs their own cells in the future, they may not have access to them.

How cord blood registries work

When parents decide to donate their baby's cord blood, they must sign up with a public bank. This allows the organization to collect and store cord blood. During this process, the bank tests the HLA type of every donation, and lists them on national and international registries. When a patient needs transplant cells, their doctor searches these registries for potential matches.

By donating cord blood, you could help advance new treatment options for patients all over the world.

Requirements for public banking

Mothers that want to donate their child's cord blood have to pass certain requirements. Public banking requirements vary between different banks and states. If you're thinking about public banking, contact your hospital to see if they partner with any cord blood organizations. These companies can give you an exact list of health requirements.

Although these will vary based on the bank, these are some common guidelines:

To be considered for a public donation, you:

- Must be 18 or older
- Must not be related to the child's father by blood (first cousins, etc.)
- Must be in the 28th-34th week of pregnancy
- Have not had any piercings or tattoos with shared or non-sterile materials (ink, needles, etc.)
- Are not delivering your child in a hospital based in Puerto Rico or Alaska

Your baby:

- Does not have any fetal abnormalities
- Is a single birth (no twins, triplets, etc.)

Health history:

- You haven't had anemia, hereditary spherocytosis, hereditary elliptocytosis, hypogammaglobulinemia, polycythemia
- You have never received a red blood cell or transfusion support
- You haven't been exposed to hepatitis B or C, HIV or AIDS, West Nile, or Tuberculosis
- You haven't used a needle to take a non-prescription drug in the last 12 months
- In the last 12 months, you haven't developed syphilis
- You, your child's father, and any other children of yours have never had any type of cancer
- You haven't been diagnosed with malaria in the past three years

Medications:

- You haven't had contact with a person with a smallpox vaccine during your pregnancy
- You have never been treated with chemotherapy
- You haven't taken remicade, interferon, infliximab, etanercept, methotrexate, 6-mercaptopurine, imuran, cyclosporine or tacromilus

Private banks

When parents store their child's cord blood in a private bank, they are the only ones with access to the stem cells. In most cases, the child receives ownership of these cells when they turn 18. These cells can be used in treatment at any point in the future for the child, siblings and any close relatives.

Families pay an initial processing and storage fee, followed by annual storage payments — as long as the parents keep stem cells at a private bank, they will have to pay storage fees. However, the cells are not available on any registry, so they will always be available to the family when they need them.

Cord blood kept in private storage is owned by the family. Privately banked cells will always be available to any family members that need them.

Public vs. private banks

Public banks

In order to donate, a mother must meet the public bank's individual guidelines. While there is a chance of the family using their own child's cord blood, donated cells are available to any matching patient that needs them.

Benefits of public banking:

- **Giving your child's cells to a public bank adds to both national and international registries**
- **Your baby's cord blood can treat a patient living anywhere in the world**

Private banks

Family banks will store cord blood for the family's use only, and the mother doesn't have to pass a health screening. If the family can afford it, private banks offer personal security and peace of mind—the list of diseases treated by cord blood increases every year.

Benefits of private banking:

- **Only your family has access to the stem cells**
- **There is no chance of your cells being discarded or used for a clinical trial. The bank will store your child's cells as long as you want**

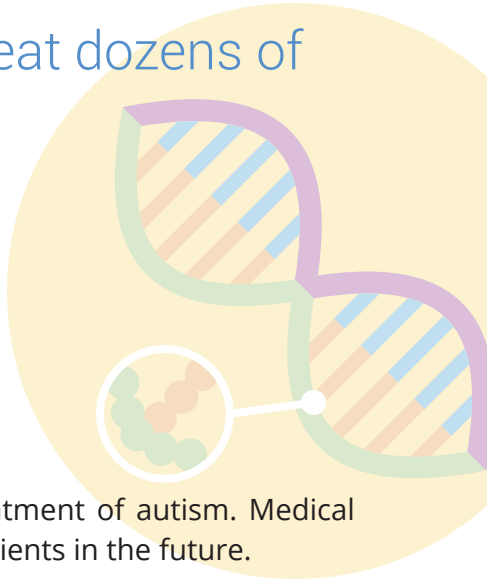
How will stem cells be used in the future?

While the current benefits of cord blood are impressive—diseases like leukemia and anemia are treated with stem cells—researchers continue to find new and innovative therapies.

The FDA has approved hundreds of clinical trials for cord blood stem cells. These trials are researching cord blood's effects on serious illnesses like autism, hearing loss and heart disease. Within the next several years, these valuable cells may become even more useful.

In the future, cord blood could be used to treat dozens of other conditions, including:

- **Diabetes**
- **Alzheimer's**
- **Heart failure**
- **Stroke**



Case studies on cord blood treatments

Autism

In 2012, the FDA approved a clinical trial to test cord blood for the treatment of autism. Medical experts believe stem cells will dramatically improve therapy for autism patients in the future.

While autism is generally thought of as a communication disorder, the disease may be caused by genetics, lowered oxygen levels, and inflammation. While traditional treatments focused on the surface symptoms, stem cells may be able to treat the root of autism. Doctors could reverse inflammation and increase oxygen levels, reversing the effects of autism.

If cord blood may be used as a treatment for Crohn's, medical experts believe it may be just as effective for autism.

Doctors are in a late-stage clinical trial for Crohn's disease and cord blood. This condition has a comparable inflammation pattern to autism. If cord blood may be used as a treatment for Crohn's, medical experts believe it may be just as effective for autism.

Heart failure

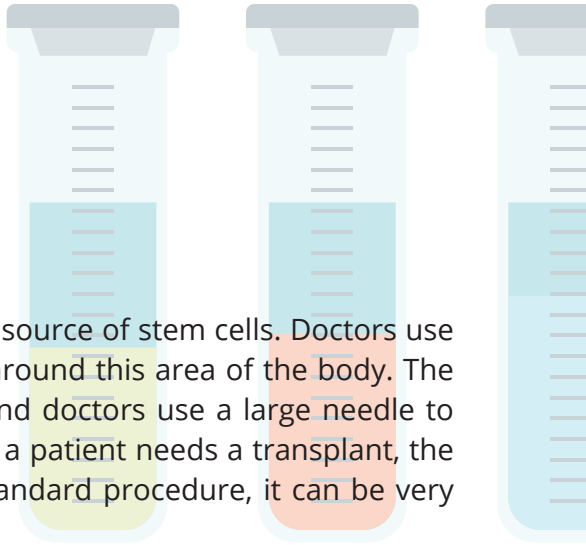
Heart failure occurs when the heart can't pump enough blood into the body. This can be caused by coronary artery disease, hypertension, and other dangerous conditions. Stem cells may be able to reverse the effects of heart failure. When a cell transplant is administered, cord blood cells naturally travel to damaged areas of the heart and speed up the healing process. In trials, dormant cells were also activated by stem cell transplants, leading to further healing and improvements. Once these cells regulated blood flow throughout the body, they turned into new muscle cells, which made the heart stronger.

Types of stem cells

Cord blood contains hematopoietic stem cells - these cells form the foundation for every major cell type in the body.

Hematopoietic cells are found in three major places inside the body:

- **Bone marrow**
- **Peripheral blood**
- **Cord blood**



Bone marrow

Bone marrow, which is collected from the hip, is the most popular source of stem cells. Doctors use bone marrow for most transplants, since stem cells are plentiful around this area of the body. The patient goes through a procedure where they are put to sleep, and doctors use a large needle to pull the liquid marrow out. This liquid is filtered and frozen. When a patient needs a transplant, the medical staff thaws out the stored stem cells. While this is the standard procedure, it can be very painful, and patients may experience other complications.

In the next few years, cord blood could become the most useful and popular stem cell treatment within the medical community.

Peripheral blood

Using peripheral blood for stem cells requires the donor to take special drugs. This causes stem cells to leave the bone marrow and travel through the blood, where they can be collected and stored. Doctors usually give a medication several days beforehand, and use a catheter to draw stem cells out of the blood. The process takes several hours and is usually repeated over the course of a few days to get the most stem cells possible.

Cord blood

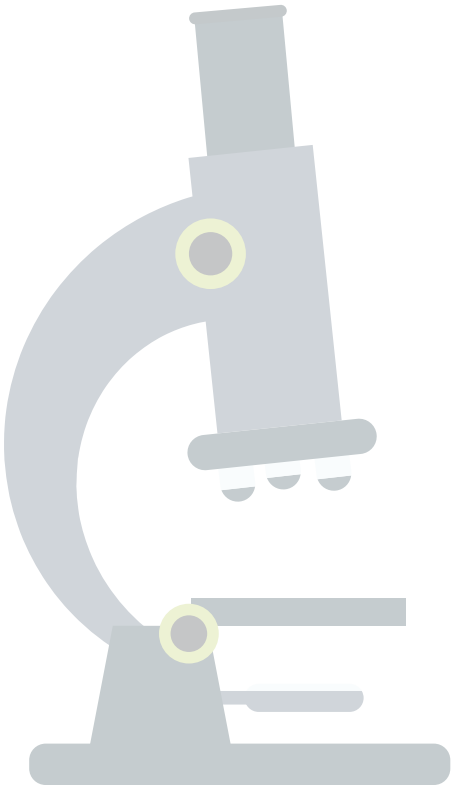
Cord blood cells, first tested for treatment in 1988, are taken from the umbilical cord and kept at a long-term storage facility. While the amount of cells collected during a cord blood retrieval are

smaller, the cells multiply more quickly. Researchers are studying new ways to improve the amount of stem cells collected. Since the cells don't require an exact match, they are also more versatile, and collection is completely painless for the mother and her child.

Which stem cell source should you choose?

In most cases, the right stem cell source depends on the patient, disease, and treatment team. While bone marrow transplants are the standard, many doctors feel the collection procedure is too painful and may even be dangerous. Peripheral blood transplants are faster, but the donor has a high chance for severe graft-versus-host disease, where the body begins to attack itself.

Cord blood has its own drawbacks—fewer stem cells are collected, and doctors only have once chance to collect stem cells, which is right after birth. However, the cells from an umbilical cord are more adaptable than any other stem cells available, and multiply very quickly. In the next few years, cord blood could become the most useful and popular stem cell treatment within the medical community.



What is the cost of cord blood banking?

Public or donation banking is free for eligible mothers, and the costs of private storage vary based on the cord blood bank. Many banks allow payment plans.

Public banking is free for eligible mothers. Publicly banked cells can be used by any matching patient. While there is a small chance the donating family will use their own cells in the future, these cells may also be needed by another patient.

In some cases, private banks offer free banking to families with a dangerous illness.

Pricing for private banks varies, but first-year processing costs are typically between $1,000 and $2,500 in the U.S. The annual storage cost is usually around $100 to $150. As long as the family wants to keep these cells in storage, they will continue paying a yearly fee.

In some cases, private banks offer free banking to families with a dangerous illness. These charity programs enable family members to bank cells for free in order to fight their illness. These programs are funded by charitable organizations, and sometimes the banks themselves.

What diseases are treated with cord blood?

Over 80 diseases are currently treated using cord blood stem cells.

Conditions like lymphoma, leukemia and anemia are FDA-approved for treatment by a cord blood transplant. More conditions are added every year — since 2007, the list of diseases treated by cord blood has more than doubled. In the next several years, the list of treatments may be in the hundreds.

Stored cord blood is becoming more valuable than ever. Some of the diseases that can be treated by cord blood cells include:

Lymphoma

Stem cells from cord blood have been used for lymphoma treatment for over 20 years. Researchers continue experimenting with more effective stem cell therapies for this disease, which means treatment options will greatly increase in the next several years.

Lymphoma is a cancer located in the lymphatic system that fights off diseases within our immune system. Cancer in this area may affect lymph nodes, thymus glands, bone marrow, and other critical organs. Treatment for this disease is limited to chemotherapy, radiation therapy, medications, and stem cell transplants.

Researchers are experimenting with new methods to treat lymphoma using cord blood, with the number of successful treatments growing every year.

Leukemia

Leukemia is a deadly form of cancer, and one of the most common cancers among infants. Doctors traditionally use chemotherapy and stem cells for treatment. In the past several years, studies have shown that cord blood is a viable option for treating leukemia patients quickly and effectively.

A huge benefit for cord blood patients is the adaptability of the cells. Compared to bone marrow, cord blood can be used in more patients without requiring an exact donor match. This means doctors have more options when looking for a suitable donor for their patient. Since nearly half of leukemia patients have trouble finding a match, cord blood can be a powerful treatment option.

Aplastic anemia

Aplastic anemia is caused by damaged bone marrow, which slows down blood cell production. Patients that go through radiation treatments or have been exposed to certain chemicals and drugs have an increased chance for this dangerous condition. Although the disease is rare, it can lead to infections, fatigue and severe bleeding.

Cord blood is becoming one of the most popular treatment options for patients with this type of anemia. According to a recent report, survival rates for aplastic anemia patients that receive a stem cell transplant are over 90%.

What is cord tissue banking?

Cord tissue refers to the actual umbilical cord material, which is located in the lining that surrounds cord blood and contains mesenchymal (MSC) stem cells.

These cells treat several new areas and aren't usually found in umbilical cord blood. MSCs create new bone, muscle and cartilage tissue, and can also change into nerve cells.

While the FDA hasn't approved treatments using cord tissue cells, several clinical trials are testing cord tissue for dangerous illnesses, including:

- **Parkinson's disease**
- **Alzheimer's disease**
- **Lung cancer**

MSCs will behave like cord blood cells when transplanted, improving the immune system and traveling to damaged areas in the body.

Many banks allow parents to store both cord blood and cord tissue cells. MSCs, the primary type of cells found in cord tissue, work alongside the cells found in cord blood, HSCs. This means that if you choose to store both the cord blood and cord tissue, you will have more treatment options available to your family in the future.

After cord blood is removed from your child's umbilical cord, up to 8 inches of the cord are cut and placed into a medical container. The tissue travels with the cord blood to a banking facility, where it's tested for treatment and placed into long-term storage.

While it depends on the bank and hospital your child is born in, medical staff may collect pieces of the cord along with the donated blood if you decide to participate in public banking.

Will my family ever need cord blood?

With new treatments discovered every year, the likelihood of using cord blood is difficult to estimate.

However, older patients have a much higher chance of needing treatment for various diseases than younger people. Hospital data shows 1 in 200 patients aged 70 or older have a disease that can be treated with cord blood.

Cord blood is currently being tested in dozens of FDA-approved clinical trials for conditions like cerebral palsy and autism. If these trials are successful, the chances of using stem cells will rise dramatically.

The odds of using cord blood

The likelihood of your child having one of these dangerous conditions:

- **About 1 in 400 children are diagnosed with cerebral palsy**
- **About 1 in 160 children are diagnosed with autism**
- **About 1 in 100 children inherit rheumatoid arthritis from a parent**

For families with an inherited disease, like multiple sclerosis (MS), privately banking cord blood may provide life-saving treatment. MS causes tremors, fatigue, loss of vision, and other life-changing side effects. Since cord blood is currently in clinical trial for treatment of multiple sclerosis, saving your baby's stem cells now could protect them, or a sibling, from MS in the future.

While there are no guarantees, you can give your family greater medical security by storing cord blood in a private or public facility.

Can my child use their own cord blood?

If you donate your child's cord blood to a public bank, you may not have access to it later in life. The only way to ensure access to your child's cord blood is by private banking.

Children can use their own cord blood to treat dangerous illnesses. However, donated cord blood cells have a higher chance of being used than privately banked cells, and public banking is completely free.

Unfortunately, there are a few drawbacks to public banking:

1 You may not get your child's cord blood back.

You don't have guaranteed access to your baby's donated cord blood cells, even if you need them. Once your child's stem cells are sent to a public bank they are entered on a registry, where anyone who needs them for a treatment can get access to them.

2 You may not find a public bank close to you.

Even if you want to donate your child's cord blood, you may not be able to find a public bank close to you. Private banks offer a temperature-controlled shipping container for the umbilical cord, but public banks partner with certain hospitals based on their location.

Researchers are testing new ways to use cord blood. Many of these methods involve using the child's own cord blood, along with donated cells, which means private banks will become more valuable.

Clinical trials are looking at cord blood as a treatment for many dangerous diseases, like cerebral palsy. In these situations, a child will be able to use their own stem cells, making private banks even more valuable.

Cord blood stored in a private bank can also help siblings and close relatives in case they need a stem cell transplant.

Who can bank cord blood?

For mothers looking into private banking, the requirements are usually minimal, since these banks don't have to follow strict guidelines.

However, public banks must adhere to FDA guidelines, so they can't accept cord blood from mothers with a history of certain illnesses.

The banking process for either type of bank usually has 3 major steps:

1. The mother, or family, must contact the public bank associated with their hospital. Mothers looking for private banking aren't limited by location, since these banks will collect the cord blood in a temperature-safe container and transport it.

2. Mothers must register by their 34th week of pregnancy, which allows the bank time to prepare and process files and administrative documents. Private banks often offer a special discount for early registration, and others may even allow mothers to sign up after the 34th week.

3. Mothers must pass a health screening. Public banks usually have strict guidelines, while private banks accept most families.

   In some cases, parents are mailed a collection kit, which they must bring to the hospital where their child will be born. If you are considering cord blood banking, speak with your healthcare provider, and make sure the staff at your hospital is trained in cord blood collection. Most private banks offer free training to hospitals, as long as they are informed ahead of time.

What if someone in my family can be treated with cord blood?

Hematopoietic cells are currently the only treatment option for patients with certain blood and immune disorders, including types of myeloma, leukemia and lymphoma.

Families with stored cord blood can use the cells to treat a disease in siblings and close relatives. If your family already has cord blood stored in a private bank, your doctors will make sure the cells match for treatment. If the cells match your relative's HLA structure, a transplant is possible and can cure a wide variety of diseases, including certain types of cancer.

If you haven't stored cord blood, and a family member has a condition that can be treated with stem cells, you may qualify for a charity program. These programs allow you to store your baby's cord blood for free, and it will be used in treatment for the relative that needs a transplant.

To qualify for a charity program — also called a "medical case of need" — your doctor must perform several medical tests and the family needs to complete an application. Public banks only help siblings, but private banks can treat parents, siblings and close relatives.

Financial Aid and Charity Programs

Private Bank Charity Programs

✚ Cord Blood Registry
Program Name - Newborn Possibilities
Eligible Family - Sibling or biological parent
Covers - Transplants and clinical trials
Over 5,000 children have received free cord blood banking through this program

✚ FamilyCord
Program Name - Immediate Need Transplant Program
Eligible Family - Sibling or biological parent
Covers - Transplants

✚ ViaCord
Program Name - Sibling Connection
Eligible Family - Siblings
Covers - Transplants

✚ Xytex
Program Name - Cord Trust Program
Eligible Family - Siblings
Covers - Transplants and clinical trials
While the processing fees are always covered, some banks will charge an annual storage fee. Check with your specific bank for their individual programs.

Public Bank Charity Programs

Carolinas Cord Blood Bank
Eligible Family - Siblings
Covers - Transplants

CORD:USE
Eligible Family - Siblings
Covers - Transplants

Lifeforce Cryobanks
Eligible Family - Siblings
Covers - Transplants

M.D. Anderson Cord Blood Bank
Eligible Family - Siblings
Covers - Transplants

Puget Sound Blood Center
Eligible Family - Siblings
Covers - Transplants

StemCyte
Eligible Family - Siblings
Covers - Transplants

Texas Cord Blood Bank
Eligible Family - Siblings
Covers - Transplants

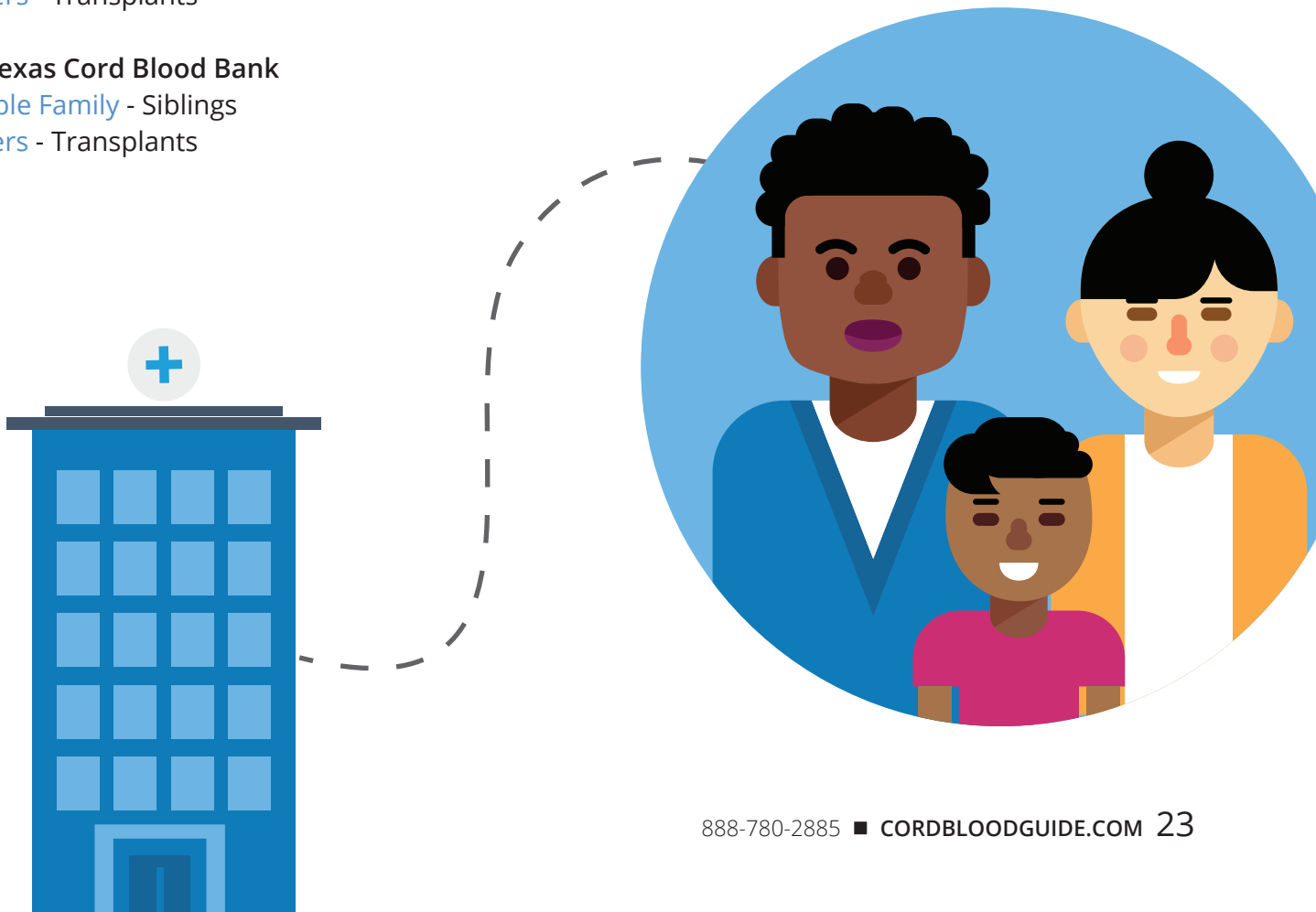
High-Risk Charity Programs

Americord Registry
Babies with acquired neurological conditions - including cerebral palsy - are fully reimbursed for all banking costs if they participate in a clinical trial.

Carolina Cord Blood Bank
Babies with certain conditions - such as hydrocephalus - may receive banking through Duke Medical Center.

Cord Blood Registry - Newborn Possibilities
Babies with a high risk for neurological disease, and infants diagnosed with a prenatal condition, may receive banking and five years of storage free.

Miracle Babies - In partnership with ViaCord
Babies born before 34 weeks at the Sharp Mary Birth Hospital for Women & Newborns may receive free storage for both umbilical cord blood and cord tissue.



Why choose cord blood banking?

The final decision on cord blood banking is a personal choice. Some would rather donate the blood to a public bank, while others think the potential benefits and personal security of a private bank are well worth the cost.

If you are an expecting parent, this guide was created to give you honest insight on the benefits and drawbacks of cord blood banking.

The choice to bank your baby's cord blood is, ultimately, yours alone. By educating yourself on cord blood banking, you can make the most informed decision possible–one that's right for you and your family.

Some things to consider:

- **Parents that make the decision to bank their child's cord blood privately will have access to potentially life-saving stem cells.**
- **For families that choose public banking, your child's cord blood could be used to find new treatments or heal a patient anywhere in the world.**

Deciding whether and how to bank your child's cord blood is a personal decision. If you're having trouble choosing, talk to family members and close friends. Seeking out medical advice, especially from a family doctor, is another great resource for parents that want to know more about cord blood banking.

Although not everyone chooses to bank their child's cord blood, doing so can provide peace of mind for the future. As treatments continue to develop in various clinical trials, the number and types of disorders treated by cord blood stem cells will only increase. It's hard to know what the future holds, but having every possible treatment option available to your family can give you a feeling of comfort and personal security.

For more information on cord blood banking, including advice on which option is right for your family, visit

cordbloodguide.com