

The **Ultimate** Guide to Cord Blood Banking

Everything You Need to Know to Decide if
Cord Blood Banking is Right for Your Family



TINYHOOD x **ViaCord**
From Revvity

Our Mission

At Tinyhood, we believe families thrive when they have the information they need to make decisions that are right for them. And it's our mission to make accessing that information easier than ever.

We've brought together the world's leading parenting experts to create a one-stop shop for parenting advice. Through on-demand classes, downloadable handouts, and expert articles, we break down parenting's trickiest topics and provide step-by-step solutions. Everything can be watched or read on your time, at your own pace.

TLDR; Tinyhood is parenting for the modern age



Introduction

There's a lot to consider when it comes to making a birth plan. Who do you want in the room with you? What pain relief options are you going to use? Are you going to breastfeed? And do you want to preserve or “bank” your baby’s cord blood?

For many parents, this last question is one of the trickiest because they aren’t really sure what cord blood banking even is and why someone might choose to do it. That’s why we made this guide.

In this guide, we are going to talk about what cord blood banking is, the potential benefits it can offer your child or your family, the types of cord blood banks available, how to arrange cord blood banking for your baby if you decide this option is right for your family, and more.

Table of Contents

Cord Blood Basics	4
What is Cord Blood?	4
What is Cord Blood Banking?	4
Why is Cord Blood Valuable?	5
What Is Cord Blood Used for?	6
Current Uses	6
Using Cord Blood	7
What Is the Typical Process for Cord Blood Banking?	8
Before Labor & Birth	8
After Labor & Birth	9
Choosing a Cord Blood Bank	10
Private & Public Banks	10
Things to Consider When Choosing a Private Cord Blood Bank	12
Questions to Ask a Private Cord Blood Bank	14
A Private Bank to Consider: ViaCord	15
Frequently Asked Questions	16
Appendix	18

Cord Blood Basics

WHAT IS CORD BLOOD?

Cord blood is blood from the baby that remains in the baby's umbilical cord and placenta after birth. After the umbilical cord is cut, it's common for this blood and tissue to be discarded. However, some families choose to save their baby's umbilical cord blood because of the stem cells it contains. Parents do this through what's called "cord blood banking," or sometimes called newborn stem cell banking or stem cell preservation.

WHAT IS CORD BLOOD BANKING?

Cord blood banking is the process of collecting a baby's cord blood, processing it to extract the stem cells, and then cryogenically freezing and storing the stem cells at a storage facility (typically a laboratory) for potential future medical use.

There are two types of cord blood banks (we'll talk about them in more detail later in this guide):

- **Private Cord Blood Banks:** Where parents pay to store their child's cord blood, which is available only for the family's potential use.
- **Public Cord Blood Banks:** Where parents donate their child's cord blood (at no cost). It's made available to anyone who may need a stem cell donor transplant.

Cord blood must be collected immediately after birth, as this is the only opportunity to do so before the umbilical cord and placenta are discarded. The process of collecting cord blood:

- Is safe & painless for both baby and mom
- Can fit into any birth plan
- Can be done with delayed cord clamping
- Can be done after either a vaginal or a Cesarean birth
- Doesn't interfere with bonding time with baby



WHY IS CORD BLOOD VALUABLE?

Cord blood contains many types of cells, but the type that gets the most attention is called Hematopoietic stem cells (HSCs). Cord blood is a rich source of HSCs, and they are responsible for building and maintaining our blood and immune system throughout life.

People sometimes think of stem cells as the building blocks of our bodies. What makes stem cells so remarkable is their ability to develop into different cell types (like blood, muscle, or neural cells), replenish themselves, and replace damaged cells with healthy ones. That's why stem cells are often described as a "biological repair kit for the body."

Hematopoietic stem cells found in cord blood are known as "blood-forming" cells because they can develop into all blood cell types like red blood cells (for oxygen), white blood cells (for fighting infection), and platelets (for clotting). This makes HSCs valuable in certain areas of medicine, like stem cell transplants, where a patient's blood and immune system is impaired or needs replacement. Researchers are also using cord blood in clinical trials to explore potential new applications with the hope that it can do even more in the future.



What is Cord Blood Used For?

CURRENT USES

There are currently two areas of medicine where cord blood can potentially be used: stem cell transplants and regenerative medicine clinical trials (research).

Stem Cell Transplants

Stem cell transplants use HSCs from cord blood to regenerate new blood and immune systems. Cord blood has been used as a source of stem cells in hematopoietic stem cell transplants for over 30 years, offering life-saving treatment for certain patients with blood and immune disorders. Who can use the stem cells in a transplant depends on the type of transplant. There are 2 types of stem cell transplants:

- **Allogeneic transplant:** This is when the patient requires stem cells from another person (donor) for treatment. Since most conditions that can use cord blood in treatment are inherited genetic diseases, the child's own blood cannot be used, as all their stem cells contain the genes that have caused the condition. An allogeneic transplant may come from a sibling's cord blood; however, the donor can also be a relative or someone unrelated to the child, so long as there is a good match between the donor and recipient.
- **Autologous transplant:** This is when the patient receives a stem cell transplant using their own stored cord blood that was collected at birth. Currently, autologous transplants are rare. This is because many treatable conditions affect the patient's own stem cells, meaning all their stem cells contain the genes that have caused that disease. These conditions require an allogeneic transplant. However, there are instances in which a child's own cord blood can sometimes be used as part of treatment, such as in treatment for neuroblastoma (a certain type of cancer).

Approved (Proven) Uses for Cord Blood

According to the U.S. Food & Drug Administration (FDA), cord blood can be used in hematopoietic stem cell transplants to help treat certain blood and immune disorders affecting the blood-forming system. These include:

- Certain cancers, like leukemias and lymphomas
- Some inherited metabolic disorders
- Some inherited immune system deficiencies
- Blood disorders like sickle cell anemia

Regenerative Medicine Clinical Trials (Research)

Regenerative medicine is an exciting and still-developing field that uses living cells to encourage the body's natural ability to heal itself. While research continues to evolve in cord blood's potential regenerative applications, there are currently no FDA-approved uses for it in this field.

Cord blood has been studied in regenerative medicine research and clinical trials for various conditions, including:

- Cerebral palsy
- Type 1 diabetes
- Cardiovascular
- Autoimmune diseases

Stem cell science is ever-evolving and changing. Banking your child's cord blood preserves a valuable source of stem cells that may be used for currently approved stem cell transplants, clinical trials, or future medical breakthroughs.

USING CORD BLOOD

When it comes to using cord blood, it's important to keep in mind that just because you have access to cord blood, it does not guarantee that you can use it in a treatment or that the treatment will work. There are multiple factors that determine who may be able to use the cells, including the medical condition being treated and the availability of a compatible donor (match). Only a doctor can determine when it can be used, and ultimately, the treating physician will make the final decision.



What Is the Typical Process for Cord Blood Banking?

BEFORE LABOR & BIRTH

1

Decide between a public or private cord blood bank

Consider if you want your family to have direct access to your child's stem cells. If the answer is yes, then privately bank. If not, explore donation.

2

Talk with your healthcare provider

During a prenatal visit, let your doctor know you are considering cord blood banking. Some providers charge a fee to collect cord blood, so make sure to ask about this.

3

Research and choose a bank

Typically, this process begins in the second trimester. If you opt to bank privately, verify the bank is a reputable business by checking things like their accreditations and registration status with governing bodies. You can also check for unbiased customer reviews. If you plan to donate, research public cord blood banks that work with your birthing hospital.

4

Order your cord blood collection kit

Most private cord blood banks offer online ordering on their website, or through a representative over the phone. Typically, the collection kit is mailed to your home so you can bring it with you to the hospital on the day of delivery. Make sure to order early so you can receive your kit with plenty of time before your due date, in case baby comes early.

5

Inform your provider & update your birth plan

Tell your provider about your plans for cord blood banking. You can offer to connect them to the cord blood bank so they have a chance to ask any questions. If creating a birth plan, make a note about collecting cord blood.

6

Ensure you provide consent

Informed consent for cord blood collection must generally be given before labor begins. This is usually included in the paperwork you complete during the ordering & setup process.

AFTER LABOR & BIRTH

It's important to note that cord blood can be collected after either a vaginal or cesarean birth. The process is essentially the same.

1

The umbilical cord is clamped & cut

A baby is born with the umbilical cord attached. The cord will be clamped and then cut, so the baby can be moved to be cleaned and cared for.

2

Cord blood is collected

Your care provider will insert a needle into the clamped umbilical cord and draw the blood out and into a special collection bag.

Note: If you choose to delay cord clamping, you should still be able to collect and store the remaining cord blood. Check with the cord blood bank to see what their policy is if the volume of cord blood collected is low.

3

Cord blood goes to the lab

The completed collection kit will be transported to the cord blood bank's processing and storage lab. Transport methods vary — some banks send a courier to pick up the kit bedside, others may require you to arrange shipping. Check with your bank so you know what to expect. The lab will likely notify you when the kit arrives safely.

4

Cord blood is tested

Reputable and accredited cord blood banks perform necessary testing, including microbial testing, to ensure the safety and quality of the cord blood.

5

Cord blood is stored

The collected cord blood will undergo processing to extract the stem cells. The cells will then be cryogenically frozen and stored in a long-term storage tank. Some private banks send you a report about your stem cell collection, like the volume of blood collected, how many cells were stored, etc.

Choosing a Cord Blood Bank

PRIVATE & PUBLIC BANKS

One of the important decisions you'll make when it comes to cord blood banking is whether you want to bank your child's cord blood privately or donate to a public bank. Which do you choose? It depends on your reasons for banking in the first place.

By storing your child's blood with a private bank, you ensure the stem cells will be available only for your family. By donating to a public bank, you're making the stem cells available to anyone who may need them for an allogeneic (donor) transplant.

	Private Bank	Public Bank
Use	Available for your child and family use only	Available to anyone in need of matched donor cells
Control of Cells	Controlled by the family	Controlled by the public bank or registry
Clinical Trials	Can be available for use in clinical trials using cord blood as research evolves	May be harder to gain access to cord blood unit for clinical trials
Collection	Can be collected anywhere with a trained care provider	Not available at all hospitals or birth centers; can only be collected at participating locations
Cost to Bank	Ranges depending on the bank and what additional services you choose to add to cord blood banking, i.e., bank cord tissue cells, and genetic testing	Free

Private Cord Blood Banks

- Families have the ability to directly access their child's stored cord blood. (A physician must determine if it is suitable for a specific treatment or clinical trial.)
- Parents pay a company to collect, process, and store their child's cord blood. The cost of the service typically consists of an initial fee (collection kit, shipping, processing, and storage of the cord blood) and an annual stem cell storage fee, paid once a year.
- Some families choose to bank privately when a family member has a known medical condition and could potentially benefit from cord blood transplantation, like siblings of the baby being born.
- Private cord blood banks may offer additional services, like cord tissue banking (stores a different type of stem cell) and newborn genetic health insight testing (a proactive approach to managing a child's health).

Public Cord Blood Banks

- Parents choose to donate their baby's cord blood, at no cost, to a public cord blood bank.
- Families will not have direct access to their donated stem cells; however, if ever needed, they will be able to use donated cord blood from the public bank.
- Donated cord blood will be searchable on a national registry and available to any patient in need of an allogeneic (donor) stem cell transplant.
- Public cord blood banks have specific requirements for things like the number of stem cells collected, volume of blood, and maternal health factors. Due to these strict requirements, many donated units are not eligible for storage and may be discarded or used for research instead.
- Not all hospitals are equipped or participate in public cord blood donation programs. This is why, if interested in public cord blood banking, it's important to check with your hospital to see if this option is available.

THINGS TO CONSIDER WHEN CHOOSING A PRIVATE CORD BLOOD BANK

No two private cord blood banks are the same. When you do your research, consider these important factors:

Accreditations

Accreditations should be the first thing you look for when researching private banks. They signal a reputable bank that meets recognized quality, safety, and regulatory standards, which can impact the quality and reliability of your banked stem cells, should you ever need to use them. Two important ones to look for are:

- **FDA Registered (U.S. Food & Drug Administration)**

In the United States, all cord blood banks must be registered with the U.S. Food and Drug Administration (FDA). Search [here](#) to verify if a bank is registered.

- **AABB Accredited (Association for the Advancement of Blood & Biotherapies)**

AABB accreditation is a strong indicator of quality and safety in all aspects of cord blood banking. Look [here](#) to check for AABB accreditation.

Experience

The more experience, the better when it comes to private cord blood banks. Consider the number of years the bank has been in operation, how many cord blood units they've processed and stored, and how many cord blood units they've released for families to use in a stem cell transplant or regenerative medicine clinical trial.

Cost & Payment Options

Private cord blood banking is a paid service. The total cost, fee structure, and billing cycle vary from bank to bank. Some private banks offer payment plans, some offer savings if you pay the entire fee upfront, and some don't charge any payment for you until your baby is born. To help you budget and avoid any surprise fees, ask for transparent pricing, including pricing plan fees, cancellation fees, a guarantee that fees will not change or increase over time, etc.

Other Service Options

Some private cord blood banks offer more than cord blood banking, like umbilical cord tissue banking and genetic health insight tests using a sample of collected cord blood. Ask the cord blood bank about these services to understand how your family could benefit or how they may complement your cord blood banking.

Processing & Storage Methods and Facilities

Cord blood processing and storage methods differ among private cord blood banks and may influence the quality (i.e., number of stored cells), viability, and potential future use of your stored cells. For example, private banks can use stem cell storage bags with 2 compartments or 5 compartments. This is important because multi-compartment bags offer the flexibility for potentially using the cord blood in multiple treatments at different times.

The private bank's storage lab will be home to your child's stem cells for years, even decades, so you'll want to consider the storage facility itself. It's important to know things like where the lab is located and who owns the lab (the company or a third party). You'll also want to ask about things like what systems are in place at the lab to protect your stored cord blood (like 24/7 monitoring, backup systems, and disaster preparedness).

Quality guarantee

Many private cord blood banks offer a monetary guarantee that says if your cord blood stem cells fail to engraft in a stem cell transplant (do not successfully settle in the patient's bone marrow and begin producing new blood cells), then the private bank will give you money to help with the cost of securing another source of stem cells. Not every private bank offers these guarantees, though, so ask for details as you do your research.

Reputation

To find unbiased reviews of cord blood banks, you'll want to look at sources that are independent from the bank and transparent. Good places to look are the [Better Business Bureau](#), parenting forums, and nonprofit websites like [Parent's Guide to Cord Blood Foundation](#).



QUESTIONS TO ASK A PRIVATE CORD BLOOD BANK

When you are doing your research into private cord blood banks, it can be helpful to ask questions like:

How many years have you been banking cord blood?

Is the cord blood bank owned by a parent company?

How many cord blood units has your bank released for treatment?

Does your bank store cord blood in a multi-compartment bag? (This is important because it helps give you maximum flexibility should you need to use the collected cord blood.)

What does your listed pricing include? (processing fees, annual storage fees, shipping)

How many cells can I expect to store? What happens if the recommended minimum number of cells is not collected?

What is your quality guarantee should the transplanted stem cells fail to engraft?

What happens if in a few years I no longer want to store my cells?

Can you release the sample quickly if it's ever needed for treatment?

Is the annual storage fee fixed, or might it increase later?

What happens if I miss a payment?



A Private Bank to Consider: ViaCord

Empowering families to plan for a healthier future.

As a leader in private cord blood banking, **ViaCord** has been a trusted choice of parents and healthcare providers for over 30 years. With hundreds of thousands of stem cell units banked, and having helped over **600 families use their banked cord blood** in a stem cell transplant or regenerative medicine clinical trial, parents count on ViaCord's experience, quality, and service for confidence and peace of mind.

Like you, ViaCord understands that a family's health and well-being mean everything. That's why they empower expectant parents to plan for theirs. ViaCord believes your newborn's umbilical cord is a unique opportunity to plan for your family's future health. Their comprehensive service offerings include not only **cord blood banking** but also b and innovative genetic health insight tests, like **Newborn Digestive Health, Whole Genome Sequencing, Genetic Insights Panel**, and **DNA Guardian**, to help parents proactively navigate their family's health journey with confidence.



Special ViaCord Savings for Tinyhood Members

- Save \$100 on ViaCord Cord Blood Banking (Promo Code: TH100CB)
- Save \$200 on ViaCord Cord Blood + Tissue Banking (Promo Code: TH200CBT)

ViaCord's website (www.viacord.com) has lots of helpful information and they even offer free online webinars led by healthcare professionals and cover everything you need to know about cord blood and cord tissue banking to make an informed decision for your family, and you'll even have the chance to ask questions.

[View ViaCord's Online Webinar Schedule](#)

Frequently Asked Questions

1. Is cord blood banking safe for the baby? Does it interfere with delivery?

Cord blood banking is safe for babies and parents. It does not interfere with labor & birth and will not change other aspects of your birth plan.

2. How long can cord blood be preserved?

Stem cell preservation has only existed for the last 30 years, so we are still learning exactly how long cord blood can be preserved. To date, there is no evidence to suggest that cord blood will ever expire. Some studies show that 27-year and 29-year cord blood can still be used. Right now, no one knows exactly how long preserved cord blood lasts.

3. How much does cord blood banking cost? Is it covered by insurance?

Cord blood banking is not covered by most insurance companies. The cost ranges depending on many factors, including things like the bank you use, the services offered, what is stored, etc. And if you choose to bank privately, remember every bank has different fees associated with it, so make sure to ask about fees when doing your research.

4. Are there any additional medical fees for collecting the blood at the hospital?

Some providers charge a fee for collecting stem cells, so make sure to discuss your interest in cord blood banking with your provider to understand any additional costs.

5. When should I discuss with my provider if I want to bank cord blood and/or tissues?

Discuss cord blood banking with your provider sometime during your second or early third trimester. This will give you time to order and receive a collection kit if your hospital doesn't have one on hand.

6. Can we do both delayed cord clamping and collect cord blood?

Yes, and this is something you should also discuss with your provider. The American College of Obstetricians and Gynecologists recommends a delay in umbilical cord clamping for at least 30–60 seconds after birth. This will not prevent you from being able to collect a viable amount of cord blood. Blood can be collected once the cord is clamped and cut.

(continued on next page)

7. Can I bank cord blood if I have a C-Section?

Yes, the process for banking cord blood is similar to if you had a vaginal delivery. The cord will be clamped, cut, and blood will be collected from the cord.

8. Can I also bank cord tissue?

Yes, cord tissue can also be banked. Cord tissue is the tissue of the umbilical cord (not the blood). These tissues are full of another type of stem cell called Mesenchymal Stem Cells (MSCs). MSCs have anti-inflammatory and regeneration properties. They have the potential to develop into bone, tissue, cartilage, and nerve cells. MSCs are part of ongoing research in clinical trials around the world.

9. Is the cord blood genetically tested?

ViaCord is the only private cord blood bank that offers genetic testing using a sample of cord blood isolated during the banking process. Parents can choose to add genetic tests to their cord blood banking service. For families banking cord blood, ViaCord offers genetic tests that provide insights into the risk of developing celiac disease and primary lactose intolerance, potential disease-causing variants in genes associated with actionable, childhood-onset conditions, and medication sensitivities. This information can help parents make proactive and informed decisions about their child's health and well-being.

10. Who can use my child's stem cells?

There are specific factors that determine who may be able to use your child's stem cells, including the medical condition being treated and the availability of a compatible donor (match). Match means compatibility between the patient and donor is adequate to be considered for clinical use.

If you bank privately, your child's stem cells are available for potential use by that child and by genetically matched family members, including siblings. Your baby is a 100% match to their own stem cells. Your baby may be able to use his or her own cord blood in the treatment of certain non-genetic diseases and cancers, or regenerative medicine research. Siblings are up to a 75% match. A physician will typically look for a family member as the first source of donated stem cells for a transplant. If you bank publicly, your child's stem cells can be used by any potential match. Ultimately, the treating physician will make the final decision of using the stem cells or not.

(continued on next page)

11. Can my child use their own stem cells?

The use of a child's own stem cells is limited, but your child may be able to use their own cord blood in the treatment of certain non-genetic diseases and cancers. There is also ongoing research on the use of a child's own stem cells in regenerative medicine. The chances of your child using their own stem cells in an autologous transplant are low. There are ongoing regenerative medicine clinical trials for conditions like cerebral palsy, where children have been treated with their own cord blood.

12. Where can I learn more about donating my baby's cord blood to a public bank?

To learn more about donating umbilical cord blood to a public bank, check out the National Marrow Donor Program [here](#).

Appendix

- [Stem Cell Education Guide](#)
- [Cleveland Clinic - Hematopoiesis](#)
- [FDA Cord Blood Use](#)
- [Clinical Trials Using Stem Cells](#)
- [Standard Diseases Treated by Cord Blood Transplant](#)
- [Cord Blood Used for Over 30 Years in Transplants](#)
- [Sibling Genetic Match](#)
- [HSCs & Generating Cell Types Found in the Bloodstream](#)



Disclaimer: Banking cord blood does not guarantee that treatment will work and only a doctor can determine when it can be used. Cord tissue stem cells have not been used in treatment yet. Research is ongoing. Genomic testing services are not for use in Diagnostic Procedures. The content shall not be used to make a diagnosis or to replace or overrule a health care provider's judgement. Always consult with a qualified and licensed physician or other medical care provider.