

A Parent's Guide to Cord Blood

Cord Blood Donation

Congratulations on your upcoming arrival! As you draw closer to the birth of your baby, you likely have many questions regarding the delivery process, including your umbilical cord blood options.

What is umbilical cord blood?

Umbilical cord blood is the blood that remains in the umbilical cord and placenta after a baby is born and their cord is clamped. This blood is rich in blood forming stem cells and can be used in place of bone marrow for stem cell transplant. These transplants are used to treat blood cancers and certain diseases and disorders, such as leukemia, lymphoma, and sickle cell disease. Unfortunately, the vast majority of umbilical cord blood is routinely discarded as medical waste.

Donated umbilical cord blood is used for about 10% of stem cell transplants facilitated through Be The Match®. You have likely heard of the need to "find a matching donor" for bone marrow transplant. Unfortunately, patients from diverse racial and ethnic backgrounds have a challenging time finding that perfect match. But cord blood with a less-perfect match can be used with similar clinical outcomes, which means that racial and ethnic minorities have another opportunity for treatment. Saving and preserving cord blood in a frozen state, called cord blood banking, provides options for patients who would otherwise not have access to a potentially life-saving transplant resource.

What is the difference between private cord blood storage vs. public cord blood banking?

Parents may consider either private banking or public donation for their baby's cord blood. Private cord **blood banking** is when a company collects and stores the cord blood on behalf of the family, in case the family needs it in the future. The cost of the private banking ranges from \$3,500-\$5,200 and should be arranged prior to your baby's delivery with your company of choice. Alternatively, public cord blood donation is free to the donating family and can be arranged either in advance or up until the time you are in active labor.

For both options, the cord blood is collected after your baby is delivered, and the umbilical cord is clamped and cut. This blood is taken only from the umbilical cord and placenta, not the newborn.

With public cord blood donation, cord blood is collected and sent to a local cord blood bank, where it is evaluated and, if meets rigorous banking standards, stored until there is a patient in need of a transplant. The banked unit is listed with Be The Match® and made available to transplant centers worldwide.

For private cord blood banking, the collection is saved for the family in a private setting. This differs from public donation in that it is not available for other patients in need. Furthermore, a child's own cord blood cannot be used to treat diseases such as leukemia, since it likely contains the predisposition for the blood cancer being treated.

The American College of Obstetricians and Gynecologists (ACOG) states "Public umbilical cord blood banking is the recommended method of obtaining umbilical cord blood for use in transplantation, immune therapies, or other medically validated indications." For more information on both options, please speak to your healthcare provider.

If I choose to donate my baby's umbilical cord blood to the public bank, where does it go?

The cord blood unit will be sent to Bloodworks Northwest lab to be evaluated according to US FDA regulatory standards for banking and transplantation. If it meets all standards, eligible cord blood donations will be listed on the Be The Match® Registry and will be accessible internationally to transplant clinicians searching for a match for their patient. Maternal samples collected from the donor will be tested for infectious diseases.





If I have a c-section can I donate?

Yes. The collection kits are equipped with supplies designed to collect cord blood from both vaginal and C-section births.

Can I do delayed cord clamping and donate cord blood?

Yes. Delayed cord clamping is the process of allowing the cord to continue to pulse for a period of time after delivery prior to clamping. ACOG recommends delayed cord clamping of 30-60 seconds, which still leaves enough cord blood for your donation.

I am planning on skin-to-skin contact immediately after birth. Can I still donate?

Yes. Donating your cord blood is so simple it's likely you won't even notice. After the cord is clamped and cut, your baby is placed on your chest and your provider will then begin the process of collection. You get to focus on your baby and enjoy the moment, and nothing about cord blood donation interrupts this bonding time.

Is it confidential?

Yes. When you donate your baby's cord blood, the unit is assigned a unique donor ID number. If the unit meets criteria for banking, you will be contacted with a follow-up series of questions. Personal identifiers belonging to you and your baby are never released if the unit is selected for transplant.

Will I have time to enroll if I haven't printed the forms or forgot them at home?

Yes. If your hospital is participating as a collection site, let your labor and delivery team know you are donating umbilical cord blood to the public cord blood bank. They can provide you with a consent form to sign.

Where can I get more info?

More information on your local public cord blood donation options can be found at:

bloodworksnw.org/cordblood.

If I have a medical condition can I still donate?

Possibly. Donation eligibility requires an absence of certain risk factors in the baby's immediate family (including baby's parents and siblings). If you have further questions about eligibility, please contact the Cord Blood Program at **cordblood@bloodworksnw.org.**

I'm planning to save my placenta. Can I still donate the umbilical cord?

Yes. The umbilical cord is the piece that connects your baby to the placenta. When the cord is clamped and cut, the placenta is not touched and remains intact. If you are planning to save your placenta, please talk to your healthcare provider.

Where can I get more info from the American College of Obstetrics and Gynecology and the American Academy of Pediatrics?

acog.org: https://www.acog.org/womens-health/faqs/cord-blood-banking

aappublications.org: Cord Blood Banking for Potential Future Transplantation | American Academy of Pediatrics

Ask your provider if public cord blood donation is an option at your birthing center. Preregistration is easy and convenient but not required—just make sure cord blood donation is part of your birth plan. Share your plan with your labor nurse and doctor. The hospital can provide you with simple enrollment materials if needed.

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