

Diseases Treated with Stem Cells

Since 1988, doctors have been using cord blood in lifesaving treatments. Stem cell research holds so much promise that the number of diseases and injuries being treated is growing rapidly. For the most updated list, visit cordblood.com

Leukemias, Lymphomas and Other Blood Cancers

Acute Biphenotypic Leukemia
Acute Lymphocytic Leukemia (ALL)
Acute Myelogenous Leukemia (AML)
Acute Undifferentiated Leukemia
Adult T Cell Leukemia/Lymphoma
Chronic Lymphocytic Leukemia (CLL)
Chronic Myelogenous Leukemia (CML)
Hodgkin's Lymphoma
Juvenile Chronic Myelogenous Leukemia (JCML)
Juvenile Myelomonocytic Leukemia (JMML)
Multiple Myeloma
Myeloid/Natural Killer (NK) Cell Precursor Acute Leukemia
Non-Hodgkin's Lymphoma
Polymorphous Leukemia
Plasma Cell Leukemia
Waldenstrom's Macroglobulinemia

Other Cancers

Brain Tumors[†]
Ewing Sarcoma
Neuroblastoma
Ovarian Cancer[†]
Renal Cell Carcinoma[†]
Rhabdomyosarcoma
Small-Cell Lung Cancer[†]
Testicular Cancer[†]
Thymoma (Thymic Carcinoma)

Bone Marrow Failure Disorders

Amegakaryocytosis
Aplastic Anemia (Severe)
Blackfan-Diamond Anemia
Congenital Cytopenia
Congenital Dyserythropoietic Anemia
Dyskeratosis Congenita
Fanconi Anemia
Paroxysmal Nocturnal Hemoglobinuria (PNH)
Pure Red Cell Aplasia

Hemoglobinopathies

Beta Thalassemia Major
Sickle Cell Disease

Histiocytic Disorders

Familial Erythrophagocytic Lymphohistiocytosis
Hemophagocytosis
Langerhans' Cell Histiocytosis (Histiocytosis X)

Myelodysplastic/Myeloproliferative Disorders

Acute Myelofibrosis
Agnogenic Myeloid Metaplasia (Myelofibrosis)
Amyloidosis
Chronic Myelomonocytic Leukemia (CMML)
Essential Thrombocythemia
Polycythemia Vera

Refractory Anemias (RA) including:

- Refractory Anemia with Excess Blasts (RAEB)
- Refractory Anemia with Excess Blasts in Transformation (RAEB-T)
- Refractory Anemia with Ringed Sideroblasts (RARS)

Inherited Metabolic Disorders

Adrenoleukodystrophy
Fucosidosis
Gaucher Disease
Hunter Syndrome (MPS-II)
Hurler Syndrome (MPS-IH)
Krabbe Disease
Lesch-Nyhan Syndrome
Mannosidosis
Maroteaux-Lamy Syndrome (MPS-VI)
Metachromatic Leukodystrophy
Mucopolidosis II (I-cell Disease)
Neuronal Ceroid Lipofuscinosis (Batten Disease)
Niemann-Pick Disease
Sandhoff Disease
Sanfilippo Syndrome (MPS-III)
Scheie Syndrome (MPS-IS)
Sly Syndrome (MPS-VII)
Tay Sachs
Wolman Disease

Inherited Immune System Disorders

Chronic Granulomatous Disease
Congenital Neutropenia
Leukocyte Adhesion Deficiency
Severe Combined Immunodeficiencies (SCID) including:
- Adenosine Deaminase Deficiency
- Bare Lymphocyte Syndrome
- Chediak-Higashi Syndrome
- Kostmann Syndrome
- Omenn Syndrome
- Purine Nucleoside Phosphorylase Deficiency
- Reticular Dysgenesis
Wiskott-Aldrich Syndrome
X-Linked Lymphoproliferative Disorder

Other Inherited Disorders

Cartilage-Hair Hypoplasia
Congenital Erythropoietic Porphyria (Gunther Disease)
DiGeorge Syndrome
Osteopetrosis

Other

Chronic Active Epstein Barr
Evans Syndrome
Multiple Sclerosis[†]
Rheumatoid Arthritis[†]
Systemic Lupus Erythematosus[†]
Thymic Dysplasia

Clinical Trials[†]

Neonatal Brain Injury
Cerebral Palsy
Type 1 Diabetes

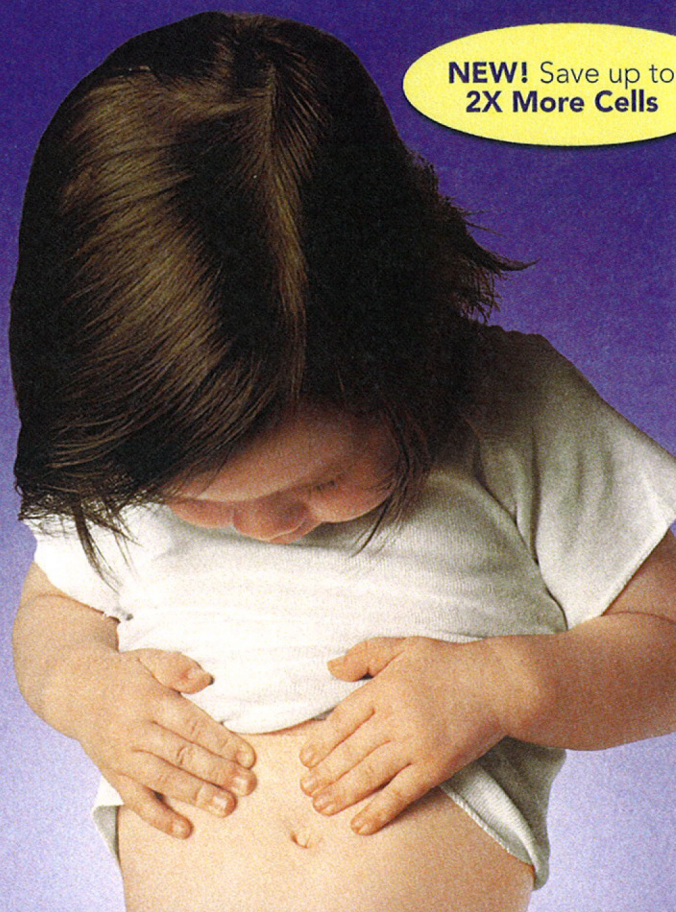
This list includes some diseases that have been treated with bone marrow or peripheral blood stem cells but have not yet been treated with cord blood stem cells. Source: Medical literature and clinicaltrials.gov

[†]Not eligible for CBR's Designated Treatment Program.*

PATIENT INFORMATION

Facts About Cord Blood Banking And Cord Tissue Banking

**NEW! Save up to
2X More Cells**



An Important Decision for Your Family

Cbr cord blood
registry®

THE NAME TO TRUST®

1-888-CORD BLOOD • cordblood.com



***“Having fully
banking for
recommend***

***“When we found out that saving our baby’s
cord blood with CBR could save our baby’s life
someday—or someone else in the family—there
was no question that it was worth it. And it costs
less than my daily coffee.”***

—Erica C.

CBR client who banked cord blood for all three children

Why is it so important to save my baby’s umbilical cord blood?

Cord blood, which is the blood that remains in your baby’s umbilical cord after the cord has been cut, is an invaluable source of *stem cells* that are unique to your baby and family. These cells can be used in a variety of medical treatments. Having cord blood available can be lifesaving to your newborn or a family member and can help you protect your baby:

- **Your baby’s cord blood stem cells may be used by your family to treat nearly 80 serious diseases**, including leukemia, other cancers, and blood disorders.
- **Cord blood stem cells are showing significant potential to treat conditions that have no cure today**—like juvenile diabetes and brain injury.
- **Saving your baby’s cord blood can bring you peace of mind knowing you may have secured the best treatment option for your family**—giving you an important advantage for a healthy future.

Take advantage of your one chance to save your baby’s cord blood—*immediately after birth*. Collecting cord blood is safe for the mother and newborn and may take place following C-sections.

“This revolutionary technology [regenerative medicine] has the potential to develop therapies for previously untreatable diseases and conditions. Examples of diseases regenerative medicine can cure include diabetes, heart disease, renal failure, osteoporosis, and spinal cord injuries.”

—U.S. Department of
Health and Human Services¹



home or auto insurance, saving your newborn’s stem cells could the lifesaving potential of stem cells is priceless.

NEW!

Cord Tissue Banking

One-Time Preparation Fee	\$595**
First Year of Storage	\$125*
One-Step Shipping (included with cord blood banking)	\$0
Total First-Year Fees	\$720

Prices subject to change. All major credit cards accepted. Prepayment discounts are available.

*After the first-year fees, an annual storage charge of \$125 (for each service) maintains your account

**Cord tissue banking is \$595 when you also bank cord blood. Banking cord tissue only is \$1,095 plus \$150 for shipping and \$125 for the first year of storage.

3 Easy Steps to Banking with CBR

- 1 Ask your doctor for a CBR Collection Kit**, or order one by calling 1-888-267-3256
- 2 Take your kit to the hospital when you go into labor**
- 3 Make one call** after the collection for courier pickup and express shipment to our lab



Cbr cord blood
registry®
THE NAME TO TRUST®

⁹ Institute of Neurological Disorders and Stroke workshop on perinatal and childhood stroke. *Pediatrics* 2002;109:116-123
¹⁰ Pappa KI, Anagnostou NP. Novel sources of fetal stem cells: where do they fit on the developmental continuum? *Regen Med* May 2009;4(3):423-433
¹¹ ClinicalTrials.gov. Mesenchymal Stem Cell Trials. Available at <http://www.clinicaltrials.gov/ct2/results?intr=mescenchymal-stem+cell>. Accessed February 4, 2010
¹² Rubinstein P, Carrier C, Scaradavou A, et al. Outcomes among 562 recipients of placental-blood transplants from unrelated donors. *N Engl J Med* Nov 26 1998;339(22):1565-1577
¹³ Rosenthal J, Brown H, Harris D. Stem Cell Recovery Following Implementation of an Automated Cord Blood Processing System in a High Volume Laboratory. *Biol Blood Marrow Transplant* 2008;14(2):S42
¹⁴ Harris D, McGaffey A, Brown H. The effect of collection bag anticoagulant on umbilical cord blood stem cell yield. *Transfusion* 2008;48(s2):206A
¹⁵ Sustain Lane 2008 US City Ranking: Natural Disaster Risk. Available at <http://www.sustainlane.com/us-city-rankings/categories/natural-disaster-risk>. Accessed June 15, 2009
Source for Ob/Gyn claim: Blind survey, GfK Market Measures, funded by CBR © Cbr Systems, Inc. • 0510 • MA00795 18

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*researched cord blood
my own family, I now strongly
it to my patients.**

—Dr. Robert Sears

Pediatrician Robert Sears, MD, FAAP, is a noted author, CBR medical advisor, CBR client, and the father of three boys.

Priceless Protection, Peace of Mind

Compared to the other ways you already protect your family, such as offer the most valuable protection of all. Because if you ever need it,

Cord Blood Banking

One-Time Processing Fee	\$1,920
First Year of Storage	\$125*
One-Step Shipping SM Service	\$150
Total First-Year Fees	\$2,195

No fees are due until your baby arrives.

Payment plans as low as **\$61/month** for 48 months.

Save both cord blood and cord tissue for only **\$81/month** for 48 months.

See cordblood.com for payment plan terms and conditions.



CBR Gift Registry

Friends and family can contribute to the gift of a lifetime. For more information visit:

cordblood.com/giftregistry

Ask your doctor for a CBR Collection Kit today, or call

1-888-CORD BLOOD (1-888-267-3256)

Monday - Friday, 6:00 am - 9:00 pm PT • Saturday - Sunday, 6:00 am - 4:00 pm PT

And visit cordblood.com

How can my family use my baby's cord blood?

Your baby's cord blood may be used by your family in two areas of medicine. **Transplant medicine** uses stem cells to help treat serious diseases, such as cancers or blood disorders.

Regenerative medicine is a new and rapidly advancing area of medicine focusing on developing treatments using stem cells to repair damaged tissues and organs, which may help your baby in case of disease or injury.

Transplant Medicine

Regenerative Medicine

How is cord blood used?

Cord blood is used like bone marrow to regenerate a healthy blood and immune system after chemotherapy.

Based on current research, doctors believe that cells in cord blood can induce healing and may help in regenerating cells to repair tissues, such as nerve and heart.

Who can use cord blood?

- Your baby*
- Your baby's siblings
- You (baby's biological parents)^{2,3}

(Ultimate use will depend on the physician's determination of disease type and HLA matching for donor and recipient.)

- Your baby
(In current clinical studies using cord blood, the child's own cord blood is required.)

*For some conditions, a sibling's cord blood may be preferable.

New uses for cord blood stem cells are being discovered rapidly, however, banking cord blood does not guarantee that the cells will provide a cure or be applicable for every situation. Ultimate use will be determined by the treating physician. Use in regenerative medicine is still considered experimental.



This important pregnancy information is being provided to you because your decision about cord blood banking must be made before your baby is born.

1. United States Department of Health & Human Services. 2020. A new Vision—A Future for Regenerative Medicine. Available at: <http://www.hhs.gov/reference/newfuture.shtml#head2>. Accessed May 12, 2009. 2. Harris D, Schumacher M, LeCascio J, et al. Immunoreactivity of umbilical cord blood and post partum maternal peripheral blood with regard to HLA haplotypic transplantation. *Bone Marrow Transplantation*. 1994;14:63-68. 3. Bailen K, Barker J, Stewart S, et al. Collection and preservation of cord blood for personal use. *Biol Blood Marrow Transplant*. 2008;14:356-363. 4. Wagner J, Kernan N, Steinbuch M, Broxmeyer H, Gluckman E. Allogeneic sibling umbilical-cord blood transplantation in children with malignant and non-malignant disease. *The Lancet*. 1995;346:214-219. 5. Gluckman E, Rocha V, Boyer-Chammard A, et al. Outcome of cord blood transplantation from related and unrelated donors. *New England Journal of Medicine*. 1997;337(6):373-381. 6. Nefield JJ, Pasquini MC, Logan BR, Verter F, Horowitz MM. Lifetime probabilities of hematopoietic stem cell transplantation in the U.S. *Biol Blood Marrow Transplant*. Mar 2008;14(3):316-322. 7. Linden J, Preti R, Dracker R. New York state guidelines for cord blood banking. *Journal of Hematotherapy*. 1997;6:535-541. 8. Lynch JK, Hirtz DG, DeVeer G, Nelson KB. Report of the National

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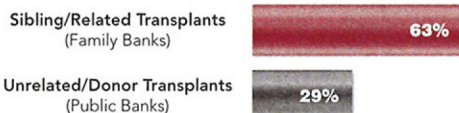
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Is it important to have my family's own stem cells available?

Yes. For regenerative medicine therapies, the child's own cord blood is required. For transplant medicine, using your own family's cord blood can have significant advantages including fewer complications, improved survival (see chart), and a better quality of life without the need for anti-rejection medications.^{4,5} Siblings have up to a 75% chance of using each other's cord blood, compared to only 25% with bone marrow.

Higher Survival with Your Family's Own Cord Blood



How likely is it that my family will need to use stem cells?

Although no one can predict future illness or injury, published estimates of the odds of needing stem cells for current uses in transplant medicine are 1 in 217.⁶ The most common diseases treated with cord blood are not hereditary and occur without warning.

Based on current data, cord blood stem cells should remain useful indefinitely,⁷ so your family may be able to use the cells for diseases and injuries that occur decades from now. The fastest growing use of cord blood stem cells for CBR families has been in regenerative medicine for the potential treatment of brain injury and juvenile diabetes.

If you don't save your baby's cord blood today, you may be passing up the best medical treatment option for tomorrow.

Cord Blood Bank

Most Experience with Client Treatments

When families need us most, we are there. CBR has helped more clients use their stem cells for lifesaving transplants and regenerative medicine therapies—double that of any other family bank. All of the cord blood units released for client use have been viable for use in treatments.

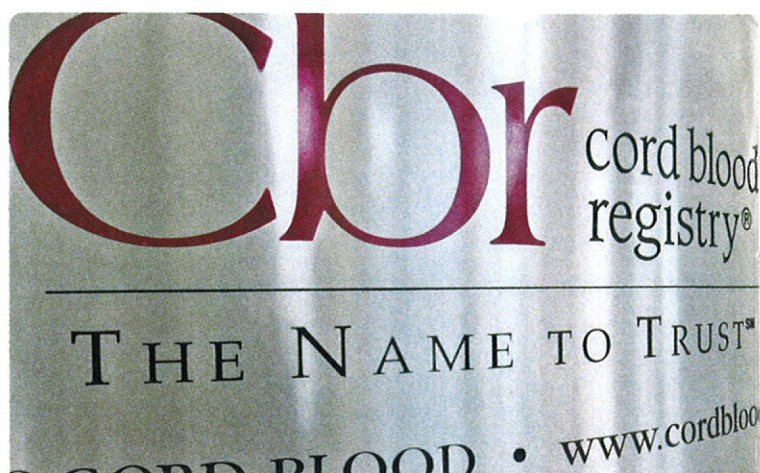


"We saved our youngest son Keldan's cord blood because of the peace of mind banking would give us. We never expected we would need it to save Keegan's life. But we did."

—Wendy Doheney
Mother of Keldan and Keegan
(leukemia survivor)

Long-Term Stability You Can Count On

CBR leaves nothing to chance, including the highly safe location of our laboratory in Tucson, Arizona. Tucson is one of the safest cities in the nation in terms of risk from hurricanes, floods, earthquakes, winter storms, and other natural disasters.¹⁴ Additionally, our track record of long-term stability and financial strength means you can rest assured that we will be here for you in the future.



"Cord blood was Chloe's chance for a new life."

"At nine months old, Chloe couldn't use her right hand or leg. We were devastated when she was unexpectedly diagnosed with a brain injury [stroke] that occurred before she was born. Thankfully, we had saved her cord blood stem cells with CBR, which enabled her to have an experimental cord blood treatment. Now, after her cord blood infusion, Chloe is able to catch a ball and run—fast."

—Ryan and Jenny Levine

Parents of Chloe.
Strokes occur in as many as 1 in 4,000 babies per year.⁸

Cord Blood Registry® The Largest, Most Experienced

More Families and Doctors Choose CBR

CBR has saved cord blood for more than 325,000 newborns. Our superior technology, leadership in regenerative medicine, and strong commitment to families have shaped who we are today: the #1 choice of Ob/Gyns and expectant families. As the leading innovator in newborn stem cell banking for more than 15 years, CBR is the only bank to provide storage for stem cells contained in both umbilical cord blood and umbilical cord tissue.

CBR CellAdvantage® Saves More Cord Blood Cells Than Any Other Bank

Having more cells for treatment is important because it can increase survival for someone in your family if it is needed for transplant¹¹ or offer the chance for multiple uses in regenerative medicine. That's why it is our goal to collect the highest volume of cord blood and to save the greatest number of stem cells for your family. CBR's unique CellAdvantage system for collecting and processing cord blood saves up to **twice the number of cells for your family.*** The combination of CBR's new collection bag technology and our proprietary dry heparin anticoagulant (which helps preserve the cord blood during transport to the lab) improves our ability to save every stem cell possible for your child. Because it is found naturally in the human body, heparin is ideal for protecting cells and has been safely used for decades.

**CBR CellAdvantage
Saves Up to
2X More Cells**

*Based on published data and data on file.^{12,13}

NEW! Cord Tissue Banking Only from CBR®

*Introducing a new resource for protecting your family's health—banking your baby's umbilical **cord tissue**.*

CBR now offers you the opportunity to save a segment of your baby's umbilical cord (cord tissue)—which is one of the richest sources of a type of valuable stem cell called *mesenchymal stem cells* (MSCs).⁹ This type of cell holds tremendous promise in a number of emerging medical treatments. Cord tissue cells are different from those found in cord blood and may help repair the body in different ways.

Today, with more than 80 clinical trials¹⁰ underway using MSCs, a broad range of debilitating health conditions and everyday injuries may soon be successfully treated, including spinal cord injury, heart repair following a heart attack, bone repair, and cartilage regeneration.

Saving the different types of genetically unique cells from both your baby's cord tissue and cord blood provides the greatest level of protection and peace of mind knowing that if needed, the cells you have stored can be a powerful resource for your family's future health.

For more information about the value of banking your newborn's cord tissue, please visit:

cordblood.com

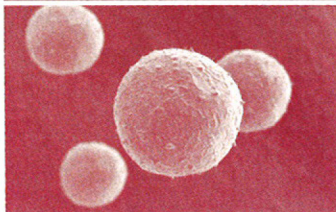
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The Healing Potential of Your Newborn's Stem Cells

Stem cells may help restore health by regenerating cells or stimulating healing. Collecting both your baby's cord blood and cord tissue provides the greatest level of protection and peace of mind.

CORD BLOOD



Hematopoietic Stem Cells (HSCs)

A rich source of hematopoietic stem cells, which create the blood and immune system

- Proven effective for 20+ years in transplant medicine and used to treat nearly 80 serious diseases, including cancers and blood disorders
- Recent promise in treating brain injury and juvenile diabetes
- Survival is improved when a family's own cells are used (and a lower risk of rejection)
- Immediately available if ever needed for treatment
- Access to stem cells with a known genetic history
- Cells should last in storage indefinitely

Infant Stroke, Brain Injury
(Cerebral Palsy)

Cancers
(Leukemia, Lymphoma)

Juvenile Diabetes

Immune Disorders

Blood Disorders
(Sickle Cell Anemia)

Autoimmune Diseases
(Multiple Sclerosis)

Heart Attack

Type II Diabetes

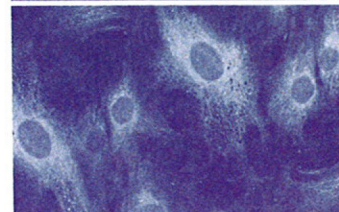
Spinal Cord Injury

Arthritis

Bone Repair

Cartilage/Joint Repair

CORD TISSUE



Mesenchymal Stem Cells (MSCs)

A rich source of mesenchymal stem cells, which create structural and connective tissue and have a role in supporting immune repair

- 80+ clinical trials using MSCs underway
- Strong potential to repair heart tissue, regrow blood vessels, and fix connective tissue
- Cells may be expanded, giving your family a potentially unlimited supply

CORD TISSUE BANKING
Only from CBR

New uses for cord blood stem cells are being discovered rapidly; however, banking cord blood does not guarantee that the cells will provide a cure or be applicable for every situation. Ultimate use will be determined by the treating physician. Use in regenerative medicine is still considered experimental. Medical treatments using cord tissue are still under development and have not yet been used in humans.

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