

A close-up photograph of a newborn baby's back, focusing on the umbilical cord stump. The cord is a small, reddish, fleshy protrusion from the skin. The background is softly blurred, showing the baby's head and other parts of its body. The text "cord blood saves lives..." is overlaid in a teal, cursive font on the lower part of the image.

*cord blood saves lives...*

### *...by providing a rich source of blood stem cells*

that can be used to treat over 80 different diseases including leukemia, lymphoma, thalassemia, Tay-Sachs and sickle cell anemia. It is not experimental – it is being used around the world to treat thousands of children and adults every year.

The future is hopeful for new applications with these stem cells. They are on the horizon as an innovative treatment in regenerative medicine helping those with joint pain, injury and degenerative conditions.<sup>1</sup> Clinical trials are giving hope that stem cells will provide future treatment options for heart disease, stroke, Alzheimer's, cerebral palsy, Parkinson's and many other diseases and conditions.<sup>2</sup>

**Thousands of Canadians are diagnosed each year with blood cancers and disorders that require stem cell treatment YET Canada's inventory of stored cord blood is far behind that of other developed countries.**

VICTORIA ANGEL IS WORKING TO CHANGE THIS

**Victoria Angel**  
PUBLIC CORD BLOOD BANK



ALYSHA was four years old when she was diagnosed with a rare form of leukemia. She underwent treatments to kill the cancerous cells in her bone marrow. As a result she required a stem cell transplant. Specialists at SickKids and McMaster University Medical Centre treated her and found a suitable cord blood sample from a public bank in the United States. Alysha and her family are thankful to the unknown mother who donated her baby's cord blood.

## cord blood is too precious to waste

However almost all umbilical cords are discarded at birth, WHY?

- Expectant parents are unaware of the life-saving potential of umbilical cord blood
- Pregnant parents are unaware that they can donate their baby's cord blood
- Few organizations have the expertise needed to extract stem cells from cord blood and make them available to doctors, patients and researchers

## VICTORIA ANGEL IS WORKING TO CHANGE THIS

A stem cell transplant is the only treatment option for many patients with blood disorders, and although stem cells can also be obtained through bone marrow or peripheral blood collection, cord blood stem cells have a number of proven benefits:

- Once collected, stored and frozen, cord blood stem cells are readily available when a match is found. Quick treatment is important to sick patients
- Cord blood stem cells are more primitive and adaptive, therefore there are fewer incidents of transplant complications<sup>5</sup>
- Cord blood stems cells do not require an exact tissue match<sup>6</sup>

**“Banked public cord blood is a game changer in a pediatric transplantation.”**

DR. DONNA WALL

Director, Manitoba Blood and Marrow Transplant Program, CancerCare Manitoba  
Board Member, Victoria Angel Public Cord Blood Bank

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DR. ELISABETH SEMPLE  
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Scientific Director, Cells for Life Cord Blood Institute

## DID YOU KNOW

- Blood cancers are the fourth most common cancer in Canada and account for more than 43% of all childhood cancers. Their incidence is rising in young adults between 18 and 35 years old.<sup>5</sup>
- In 2011, 50 different countries used cord blood in medical treatments. Canada was the 8th highest user in the world.<sup>4</sup>
- Families with mixed ethnic backgrounds or from minority groups have unique tissue types that make it particularly difficult to find a suitable treatment sample. Cord blood stem cells make it easier for them because an exact tissue match is not required.
- Victoria Angel helps doctors, patients, and scientists by providing cord blood stem cells for medical treatment and research.



## VICTORIA ANGEL

Patrizia Durante was diagnosed with leukemia when she was 27 weeks into her first pregnancy. Prior to the delivery of her baby, she had the foresight to ask her doctors to collect and store her child's umbilical cord blood.

After radiation and chemotherapy treatments, Patrizia's leukemia returned. She needed a stem cell transplant. A fifteen-minute transfusion of her baby's cord blood was all it took. Within two months, her blood showed signs of improvement. Patrizia is now cured and her daughter, Victoria Angel, is a happy and healthy girl.

To honour this remarkable family, Dr. Michael Virro and his wife, Jane, founded the charitable public cord blood bank and named it Victoria Angel Registry of Hope.

## who we are

Victoria Angel Public Cord Blood Bank is a charitable organization that provides help to patients in need of an umbilical cord stem cell transplant now and in the future by preparing and providing donated cord blood units for both medical treatment and research.

With years of experience, Victoria Angel adheres to the world-wide standards of public cord blood banking and has passed regulatory inspection by Health Canada. The stem cell laboratory, located at Toronto General Hospital, is accredited by internationally recognized organizations: American Association of Blood Banks and the Foundation for Accreditation of Cellular Therapies. As such, we can provide high quality cord blood units both nationally and internationally to those looking for a stem cell match and treatment.

## what we do

Our clinical educators reach out to expectant parents and health care professionals to raise awareness of the benefits of donating cord blood. Through information sessions, workshops and webinars, our trained staff work to encourage parents to reduce the loss of life-saving stem cells to medical waste each year.

Victoria Angel screens interested donors and provides collection kits at no charge to those who meet the medical criteria. Parents take the kit with them to the birth and our bedside pick-up service delivers the collected cord blood to the laboratory. The cord blood is processed to extract, freeze and store the stem cells. If a donated sample does not qualify for medical use, it will be used for research.

Victoria Angel maintains detailed information about each stored sample. Physicians submit their patient's tissue type in order to find a suitable match. If available, Victoria Angel coordinates the sample's release and transport.

**Our program is in place and fully operational but we need your support!**

**WITH MORE FUNDING, WE CAN ACCEPT MORE DONATED CORD BLOOD!**

Financial donations go directly toward the following activities:

- Collecting and storing samples for transplant
- Increasing the chance of finding a match for patients of various ethnic backgrounds
- Providing stem cells to scientists so that new and better treatments can be discovered for the future
- Educating expectant parents about the incredible gift they can give by donating cord blood
- Making public cord blood banking available and accessible to more Canadians



*It is simple* the more stem cells that are stored,  
the greater the capacity to find a match and save a life. With your support  
we can provide hope and help to patients in Canada and around the world.

**Victoria Angel**  
PUBLIC CORD BLOOD BANK