Cord blood banking

Preparing for the birth of a child is a precious time with lots of decisions to make such as donating your baby’s cord blood stem cells to a public cord blood bank or storing the stem cells privately.

Public cord blood banking is the option recommended by Health Canada, the Society of Obstetricians and Gynaecologists of Canada (SOGC) and the Canadian Pediatric Society. The SOGC suggests that private or family banking may be considered in situations when an HLA-matched sibling or other direct family member has a known condition requiring a stem cell transplant (SOGC’s Journal of Obstetrics and Gynaecology Canada1).

This guide highlights common questions and considerations when choosing the option that is best for your family.

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| What are my options for cord blood banking? | • Donate publicly, including with Canadian Blood Services’ Cord Blood Bank, at four designated locations: blood.ca/cordblood.  
• When cord blood is not donated, it is usually discarded as biomedical waste. | • Arrange with a for-profit private cord blood bank to collect and store your baby's stem cells. |
| What are the chances of the stem cells being used? | • Publicly banked cord blood units are 30 times more likely to be used than privately banked units.  
• Approximately, 5 per cent of the world's publicly donated inventory of cord blood stem cells have been used for stem cell transplants to treat patients of all ages around the world. | • According to Health Canada, there is a 1 in 20,000 (0.005%) to 1 in 250,000 (0.0004%) chance of using one's own stem cells from a private bank.  
• Something to consider: what is the usage rate of the private bank? For example, how many cord blood units are issued each year for transplant? |
| Is there a risk to the baby or mother? | • There are no significant risks to mother or baby.  
• The collection happens after the baby and placenta are safely delivered. | • There are no significant risks to mother or baby.  
• The collection happens after the baby is delivered, but before the placenta is delivered. |
| Why donate cord blood stem cells? Is it a proven, useful “insurance” for my child in the future? | • Canadian Blood Services’ Cord Blood Bank collects and stores high quality cord blood stem cells for future use by any patients in need of a stem cell transplant.  
• Many patients in need of a stem cell transplant will only find a match from a public cord blood bank. | • Some diseases are not treatable using one's own (autologous) stem cells because the disease is already in the stem cells – i.e., leukemia.  
• Approximately 25 per cent of patients in need of a stem cell transplant will find a match within their own family. |
| Who has access to the stem cells? | • Publicly donated cord blood units are available to any patient who is a suitable match either in Canada, or worldwide. | • A privately stored cord blood unit is typically available only to immediate family members. It is best to confirm with the private cord blood bank before signing the contract. |
| What is the cost to donate publicly or store privately? | • There is no cost to donate your baby's cord blood to Canadian Blood Services’ Cord Blood Bank.  
• All costs are covered as part of the provincial healthcare system. | • Costs can vary. For example, up-front/collection fees can range from approximately $900 to $3,000.  
• Annual storage fees can range from $100 to $180.  
• Private banks may also pay a physician fee for collection and referral services.  
• It is best to consult with the private cord blood bank. |
| What are the important factors to consider when choosing a cord blood bank? | • Licensing, accreditation, reputation and reliability are essential factors.  
• Canadian Blood Services’ Cord Blood Bank is:  
  • licensed by Health Canada, and  
  • accredited by NetCord-FACT (Foundation for Accreditation of Cellular Therapy), AABB and WMDA (World Marrow Donor Association). | • Licensing, accreditation, reputation and reliability are essential factors.  
• Something to consider: is the private bank licensed by Health Canada and accredited by a third-party organization such as NetCord-FACT, AABB or WMDA? |

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| **What happens if the bank closes or if I no longer wish to store?** | • If you donate your baby’s cord blood to Canadian Blood Services’ Cord Blood Bank it cannot be transferred to another bank.  
• You can choose to withdraw your consent to store your baby’s cord blood unit at any time. If it has not already been used, it will be discarded. | • Private banking policies can vary. We recommend consulting with the private cord blood bank up-front.  
• Once stored privately, cord blood units cannot be transferred to Canadian Blood Services’ Cord Blood Bank. |
| **Stem cell research – what are the potential uses for stem cells in the future?** | • Many clinical trials and other research studies using cord blood stem cells are ongoing. When a donor’s consent to research is given, Canadian Blood Services provides non-qualifying stem cells to researchers to further advances in medicine.  
• Please note, there is currently no clinically approved use of cord blood stem cells for regenerative medicine in Canada, e.g., for Autism or Cerebral Palsy. | • Many people store their baby’s cord blood stem cells as insurance with the hope that it will be possible to use for treating diseases and/or genetic disorders that are currently not approved. |
| **What are the criteria for storing a cord blood unit for a transplant?**  
*Is “stem cell count” an important consideration for banking?* | • Transplant physicians select cord blood units with high stem cell counts because it is better for the patient.  
• More stem cells:  
  • help the treatment begin working more quickly once given to the patient;  
  • can result in shorter hospital stays for patients;  
  • leads to a better patient outcome, overall.  
• While some information may suggest that stem cells can be multiplied in a lab to increase the overall number and make the cord blood unit more effective for patient use, research in this area is ongoing; there is no proven method approved by Health Canada to date. | • Private banks may have different criteria. Please consult with the private cord blood bank.  
• Some considerations include:  
  • Does the private cord blood bank store any number of stem cells collected from the umbilical cord blood?  
  • Can the private bank guarantee the cord blood unit will have enough stem cells to be useful in the future, either if needed as a child, or when he/she becomes an adult? |
| **Can I donate cord blood if I am not a resident of Canada, or a Canadian citizen?** | • Yes. If you are a non-resident visiting Canada, simply provide your permanent address. | • Requirements for private banking can vary. Please consult with the private cord blood bank. |
| **If I am visiting and I donate, can I access the cord blood unit after I return to my country?** | • Cord blood units are accessible worldwide to any patient in need through a search initiated by your country’s stem cell registry. The selected unit will be sent to the patient being treated, where ever they reside, as per the process determined by the stem cell registry.  
• Cord blood units are free for Canadian patients. | • Access to privately banked cord blood can vary. Please consult with the private cord blood bank. |
| **What do I need to do to arrange for cord blood banking?** | • To register with Canadian Blood Services’ Cord Blood Bank:  
  • Visit us at: blood.ca/cordblood (preferred method), or  
  • Return a signed paper consent form and ask your clinic to send the form to the hospital prior to your delivery.  
  • Also, inform your nurse, the admitting clerk and/or doctor you are donating cord blood on the day of delivery.  
  • No other actions are required for collection or transport of the collected unit. | • Arrangements for private cord blood banking can vary. Please consult with the private cord blood bank. |

**Cord blood banking**

Canadian Blood Services provides a list of reputable sources of information about cord blood banking on our website. Learn more by visiting our FAQs page at blood.ca/cordblood, e-mail us at cordblood@blood.ca, or call 1 888 2 DONATE (1.888.236.6283).