

# Canadian Blood Services: A Partner in Health Research



# **OVERVIEW**

Canadian Blood Services (CBS) provides an indispensable, life-saving service to Canadians from coast-to-coast-to-coast. But what many do not know is how integral CBS is to Canada's health research ecosystem. In addition to collecting and managing Canada's national blood supply and plasma, stem cells, and organ and tissue donations, CBS conducts research and collaborates with external partners; develops educational tools, knowledge dissemination tools, and best and leading practices; and administers research grants, training fellowships, and educational grants.

# RESEARCH

CBS, through its <u>Innovation and Portfolio Management</u>, supports research projects in transfusion medicine, cellular therapies (in particular, stem cell transplantations) and organ and tissue transplantation by providing investigators with access to a range of products for research.

In 2021, CBS distributed 1,742 blood products to 58 Canadian researchers and 73 cord blood products to four researchers.

# **Investigators can request:**

- Blood Products Through the Blood4Research Program, blood that is not for patient use is processed and provided to investigators for research.
- Cord Blood Products Through the Cord Blood for Research Program, cord blood products that
  do not meet the criteria for storage in the cord blood bank but still contain enough cells
  for meaningful research are available.
- Plasma Protein and Related Products While plasma proteins and related products are primarily distributed to Canadian hospitals for patient use, in some cases investigators may request small quantities to support discovery or clinical research that will benefit Canadian patients.
- Data Sets Through the Data4Research Program, CBS distributes data sets to investigators to facilitate research.

# **RESEARCH NETWORK**

CBS has seven research labs and four development labs that hosts a team of discovery, development and social scientists, and medical experts. They undertake discovery and clinical research, conduct product and process development research, translate knowledge through leading practices, and build capacity through training and education.

CBS also engages with both international and national research networks, including several of HealthCareCAN's members that collaborate with and receive funding from CBS and which are leading to discoveries and advancements in the fields of transfusion, cellular therapies, and transplantation medicine:

- The <u>Children's Hospital of Eastern Ontario</u>'s pilot study of red blood cell transfusion versus IV iron therapy to manage iron deficiency anemia.
- Nova Scotia Health Authority's digital strategy for the dissemination of Choosing Wisely Canada guidelines in transfusion medicine.
- The Ottawa Hospital Research Institute's PREMISE: Point-of-care hemoglobin accuracy and transfusion outcomes in non-cardiac surgery study and the Calgary Plasma study examining the feasibility of implementing source plasma donation with alternative screening eligibility criteria for men who have sex with men.
- <u>Unity Health Toronto</u>'s study on anti-RBC monoclonal antibodies as a replacement for IVIg and anti-D in ITP.
- University Health Network's Pediatric Transfusion Camp.

In 2021, CBS supported 160 national research investigators, by providing 38 investigators with financial support, 102 with research and data products, and 20 with both. To appreciate the full breadth of CBS's national partnership network and support, select an Institution from its <a href="Funded Research Projects">Funded Research Projects</a> database.

### **FUNDING HEALTH RESEARCH**

CBS offers multiple competitive funding programs open to Canadian researchers interested in pursuing projects that align with CBS priorities. These range from grants, awards, fellowships, to program support. CBS also seeks partners to leverage its research funding and currently is in partnership with the Canadian Institutes of Health Research to provide operating grants and new investigator awards.

In 2021, CBS distributed 193 grants and awards. Of this, 56 grants were directed to research programs, 71 to development and research programs, 20 to external grants and awards, and 13 to research laboratory support programs.

To view the full list of CBS's research funding opportunities that includes the deadlines for their next competitions, please click here.

For researchers interested in transfusion, cell therapies and transplantation science, CBS may also provide research teams with in-kind support, including requests for letters of support for research grant proposals; access to unique research equipment and facilities; access to unique expertise; provision of unique research samples or data, as well as support to disseminate research findings.

### RESEARCH AT RISK

Research conducted by, done in collaboration with, and supported by CBS is in jeopardy. Donations of blood, plasma, platelets and stem cells is down significantly due to the COVID-19 pandemic. The number of Canadians who donate regularly has decreased by 31,000 donors since the start of the pandemic, resulting in the smallest donor base in a decade. Fewer donors mean the supply of research products is reduced, putting advancements in transfusion medicine, cell therapies and transplantation at risk. It is vital that HealthCareCAN members join CBS in calling on Canadians to become donors.

# FOR MORE INFORMATION

For additional information on CBS and how they can be a valuable partner in your research enterprise, we encourage you to contact us.

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