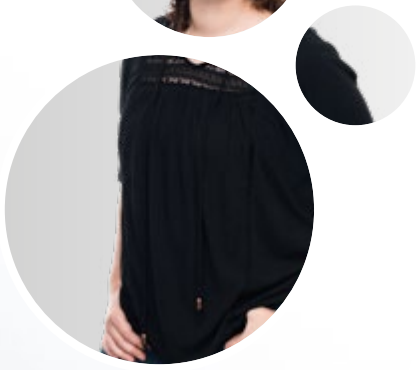
Strategic partner for
the Québec health system



BLOOD PRODUCTS

STABLE PRODUCTS

STEM CELLS

HUMAN TISSUES

MOTHER'S MILK

HÉMA-QUÉBEC

2017–2018
ANNUAL REPORT

Héma-Québec in numbers 2017–2018

173,244
registered donors*
(all types of donations)

1.6
whole blood donations
per donor on average

357,039
total visits to blood
drives or centres
(all types of donations)

2,416
mobile blood drives organized
(including blood drives in
mobile units)

304,920
blood products delivered
to hospitals

12,111
registered plasma
donors

6.1
plasma donations per
donor on average

427,822
stable products
delivered to hospitals

105,160
litres of plasma sent for
fractionation

1,347
employees

*Donors who presented themselves at a blood drive at least once.

4,704
requests for analyses received from hospitals

1,008
human tissue donors

5,464
donor recommendations received

5,451
human tissues delivered to hospitals

44
research projects

2,229
new donors registered in the Stem Cell Donor Registry

45,690
registered donors in the Stem Cell Donor Registry

4,120
registered donors in the Public Cord Blood Bank

11
units of cord blood distributed

853
registered donors in the Public Mothers' Milk Bank

11,767
bottles of mother's milk delivered to hospitals

MISSION

To efficiently meet the needs of the Québec population
for quality blood and other biological products of human origin.

VISION

To become a strategic partner for the Québec health system.

VALUES

- INTEGRITY/HONESTY
- RESPECT
- COMMITMENT
- ACCOUNTABILITY

TABLE OF CONTENTS

Héma-Québec's 2017–2018 annual report covers the financial year from April 1, 2017, to March 31, 2018.

Martine Carré,
Luc Vermeersch
and Smaranda Ghibu

LEADERS' MESSAGES

Message from the Chair of the Board of Directors

To improve is to change...

Almost 20 years ago, the Québec population entrusted Héma-Québec with the mission of giving life.

The last two decades have been devoted to developing, affirming and consecrating our expertise. In the early years, we focused on positioning the organization as a North American leader in supplying blood products. Rebuilding the trust of the Québec population and our partners was a critical challenge after the worst public health crisis in Canadian history had shaken the sector.

We have been able to win back public trust not only by focusing on commitment and the involvement of community partners but also by aiming for the highest standards of quality, security, sufficiency and transparency.

Our expertise enabled the organization to accept new responsibilities and position itself as an expert in biological products of human origin. Expanding our horizons beyond existing services in blood products, human tissues and stem cells, Héma-Québec has more recently adopted an ambitious strategy to provide plasma and operate a mother's milk bank.

This strategic new positioning is in response to an evolving context:

- a declining demand for labile blood products;
- changes impacting the Québec heath system; and
- new developments in the practice of medicine.

Our organization has therefore worked extensively to develop a transformation strategy, which has led to a redesigned organizational structure adapted to our new vision of positioning Héma-Québec as a partner of the Québec health system. Issues pertaining to the organizational transformation have been front and centre in the work of the Board of Directors and its committees.

The Board of Directors also experienced change over the past year. I am especially pleased to welcome five new women to our ranks: Cindy Dumas-Lavergne, Anne Bourhis, Dr. Patricia Pelletier, Dr. Patricia Hudson and Caroline Banville.

In addition, the Board actively recruited a new President and CEO to replace Serge Maltais following his departure. During this especially demanding period of transformation, Smaranda Ghibu and Luc Vermeersch acquitted their interim

management responsibilities brilliantly (as Acting President and Acting Chief Executive Officer, respectively). They have earned our sincere gratitude for their efforts in meeting this major challenge. In fact, the entire management team deserves credit for their unwavering commitment.

I would also like to thank the current directors for their ready availability and sustained contribution under exceptional circumstances pertaining to both the recruitment of a new President and CEO and the ongoing organizational transformation.

Furthermore, on behalf of the Board of Directors, I offer a sincere expression of appreciation to outgoing directors Michèle Beaupré Bériau, Christine Beaubien, René Carignan and Daniel Beaupré for their substantial contribution to the Board's activities.

Finally, a word of appreciation to the donors, volunteers, community partners across the province and entire Héma-Québec staff, who dedicate themselves day after day with so much passion to the gift of life.

Martine Carré
Chair of the Board of Directors

Message from the Acting President and Chief Executive Officer

Héma-Québec in transformation

The past year was certainly a hectic one. One after another, numerous projects were carried out to implement changes that will enable Héma-Québec to move in a new direction and realize the organization's vision of consolidating and affirming its role as a strategic partner of the Québec health system. These changes will also strengthen our position as an expert in human biological products.

As a result, much of our attention was focused on issues pertaining to the organizational transformation, culminating in a new structure. This work was carried out meticulously and carefully with a deep awareness that the people who make it possible to achieve our mission are the organization's main asset. At the same time, we are grateful to every member of the sizeable team at Héma-Québec for their steadfast involvement and commitment to progress.

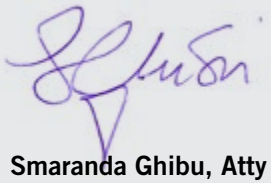
The decision to redefine Héma-Québec's structure arose from a desire to facilitate the realization of new strategic orientations and ensure the optimal use of the organization's expertise. This has involved repositioning our various activities to foster the development of strategic partnerships with stakeholders in the Québec health system, in addition to reviewing our business model to maximize each of our activity sectors while improving governance and stability at Héma-Québec and modernizing operations.

We focused on our offering and the creation of value for target clients through the dedicated management of each activity sector, while strengthening relations with Québec hospitals. We also implemented an integrated strategy that will increase donor recruitment and loyalty across the board, recognize and attract committed volunteers, and pool the various logistical components (procurement, transportation and inventory management).

In recent months, considerable effort and resources have gone into this large-scale endeavour. Priorities have been adjusted and the timeline for certain objectives in the strategic plan revised because of the organizational transformation.

Moreover, integrated risk management has been the subject of particular attention. Our work has enabled the organization to rethink its guiding principles of risk management and reassess the very foundations of risk tolerance. This reflection has provided a basis for undertaking the implementation of an integrated risk management program whose purpose is to de-compartmentalize management in keeping with best practices.

Finally, we finished the year with a sense of having fulfilled our duty and now look forward to next year—which marks Héma-Québec's twentieth anniversary—as the beginning of a new chapter.



Smaranda Ghibu, Atty
Acting President
Vice-President, Public Relations and General Secretariat

Luc Vermeersch, CPA, CA
Acting Chief Executive Officer
Vice-President, Finance and Strategic Project Management

Administrative organization

Activity sectors

BLOOD PRODUCTS

Exclusive distribution for Québec.

Donor recruitment and qualification.

Collection, analysis, processing and delivery of products to hospitals.

STABLE PRODUCTS

Exclusive distribution for Québec.

Purchase of medications manufactured primarily from plasma, management of the supply and distribution to hospitals.

STEM CELLS

First cord blood bank operating in Canada.

Donor recruitment and management of the Stem Cell Donor Registry for Québec.

Donor recruitment, processing and banking of cord blood units.

HUMAN TISSUES

Only public human tissue bank in Québec.

Ensuring that health system professionals are aware of the importance of referring potential donors.

Collection and processing of human tissues and distribution to hospitals.

MOTHER'S MILK

Only public mother's milk bank in Québec.

Donor recruitment and qualification.

Processing and analysis of milk and distribution to hospitals.

Breakdown of employees by sector

- 4% Medical Affairs and Innovation
- 6% Information Technology
- 7% Donor Experience
- 8% Administration
- 9% Quality and Regulatory Affairs
- 11% Supply Chain
- 11% Innovative Biological Products and Reference Laboratories
- 44% Labile Blood Products

2 FACILITIES

1 REGIONAL BLOOD DRIVE SERVICE*

4 GLOBULE BLOOD DONOR CENTRES

4 PLASMAVIE PLASMA DONOR LOUNGES (including 2 with a blood donation area)

3 MOBILE BLOOD COLLECTION UNITS

* Departure site for staff working at blood drives.

Presence across Québec

- Facilities
- GLOBULE Blood Donor Centre
- Regional blood drive service
- PLASMAVIE Plasma Donor Lounge
- PLASMAVIE with a blood donation area
- Drop-off point for mother's milk

Saguenay

Saint-Laurent

Québec

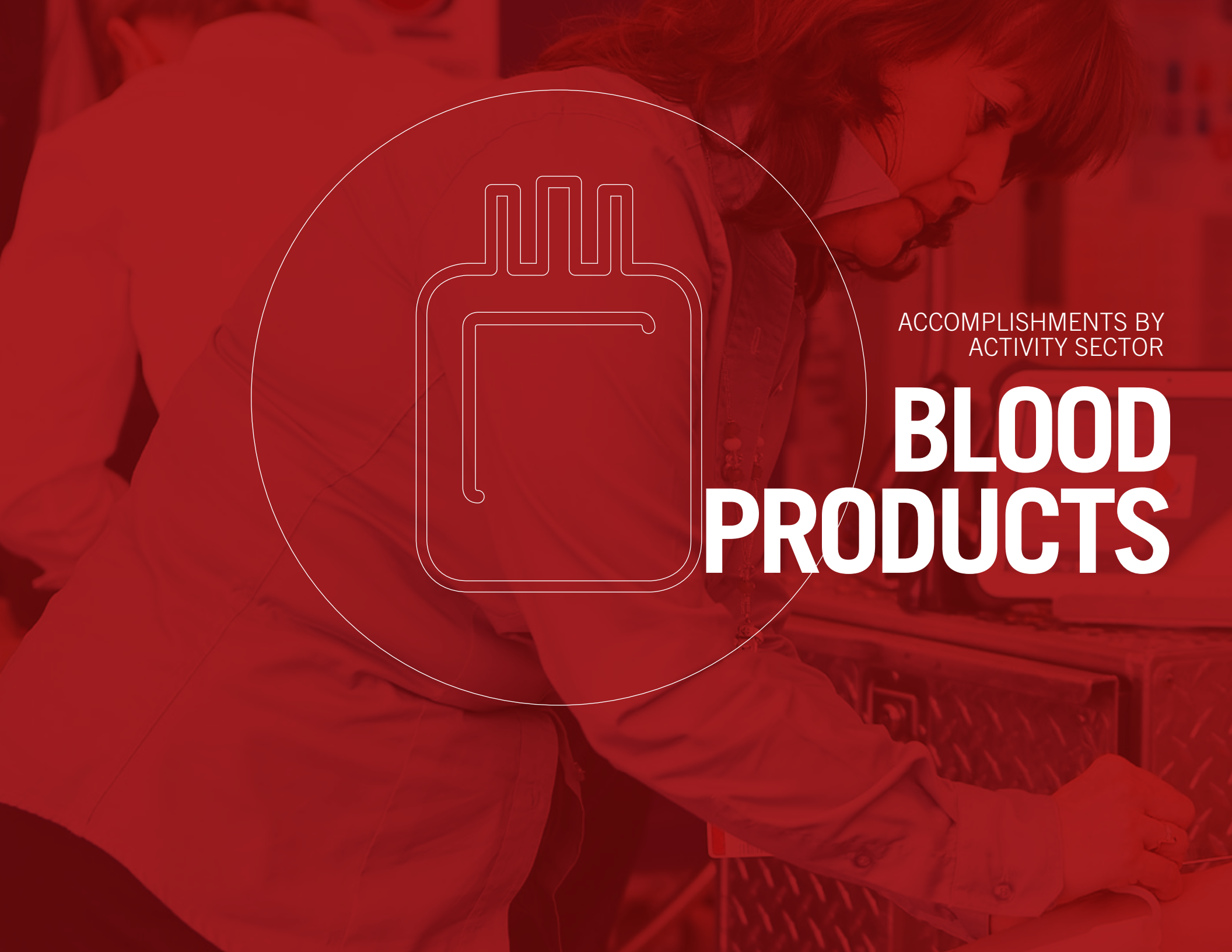
Trois-Rivières

Montréal

Laval

Brossard

Sherbrooke



ACCOMPLISHMENTS BY
ACTIVITY SECTOR

BLOOD PRODUCTS

Justine makes her first blood donation.

ISSUES AND PRIORITIES

Hemovigilance for donors: attenuating adverse reactions

Héma-Québec documents all reactions following a blood donation, regardless of the severity. Adverse reactions are infrequent and mostly benign. Analysis of this data makes it possible to adopt preventive measures in order to attenuate the reactions that may occur and ensure a positive donor experience.

In 2017–2018, reactions declined 5.1% from the previous year. Adverse reactions occurred in 6.7% of donations and were benign in 95.6% of cases.

Most frequent are vasovagal reactions, which account for almost two-thirds of cases. A vasovagal reaction occurs when the donor presents one or more symptoms such as:

- a sudden sensation of intense heat or cold;
- weakness, dizziness or discomfort;
- nausea.

To avoid such reactions, preventive measures were deployed at all collection sites in June 2017. Upon registering, all donors were given a bottle of water and a salty snack and encouraged to consume both before the donation. The combination of water and salt attenuates the loss of volume when giving blood.

A comparison of the incidence of vasovagal reactions before and after implementation shows that the new measures resulted in a 13.1% reduction in vasovagal reactions overall and a 23.9% reduction in cases involving loss of consciousness.

ADVERSE REACTIONS

20,611
REACTIONS

for

309,056
DONATIONS

Adverse reactions
occurred in **6.7%** of donations.

Rate and type of possible complication per 100 donations

4.4
VASOVAGAL REACTIONS
including 4.1 mild reactions

1.6
REACTIONS DURING A DONATION BY APHERESIS*
(e.g., citrate reaction)

0.6
ARM REACTIONS
(e.g., hematoma, bruising, allergy)

*These reactions can occur only during a donation by apheresis.

RISK MANAGEMENT

Emerging pathogens: hepatitis E under study

Héma-Québec constantly monitors blood-borne bacteria, viruses and parasites. The appearance of a new pathogen may lead to the introduction of additional qualification measures for giving blood.

Fifteen pathogens are currently being monitored, including the hepatitis E virus (HEV). This virus is transmitted primarily by eating meat that is insufficiently cooked, consuming contaminated water or, much more rarely, receiving a blood transfusion. For anyone in good health, HEV is not a very serious infection. It can be, however, for certain at-risk recipient populations.

An initial study was conducted in 2013 in collaboration with Canadian Blood Services to determine whether the rate of HEV among Canadian blood donors justified additional measures to protect the blood supply. While some donors showed signs of previous infection, none carried the virus. For this reason, no measures were implemented, but it was determined that a study involving a larger donor sample was needed to broaden the study.

A second pan-Canadian study began in the fall of 2016 and continued through 2017–2018. Three times as many donors were studied using more sensitive tests. A risk analysis is currently being conducted to determine whether additional measures should be taken.

Studies pertaining to the qualification criteria for MSM

Evolution of the criteria

In 2013, Health Canada gave Héma-Québec the green light to change its blood donation eligibility criteria for men who have had sex with men (MSM). The exclusion was changed from permanent to temporary. All MSM donors were deemed eligible on condition they had not had sex with another man in the last five years.

Health Canada then responded favourably to a new request by Héma-Québec and Canadian Blood Services to reduce the exclusion period to 12 months. This criterion has been in effect since August 15, 2016.

EXCLUSION PERIOD FOR GIVING BLOOD

Research projects

In announcing the new criteria, Health Canada asked Canadian providers of blood products to evaluate whether the criteria applicable to MSM could be revised, on the basis of conclusive data, so as to disregard donors' association with a risk group. Since few studies have looked at this issue, in January 2017, Canadian Blood Services and Héma-Québec organized an international conference bringing together scientists, representatives of Health Canada, recipient groups and groups representing the lesbian, gay, bisexual, transsexual and queer (LGBTQ+) community. This meeting marked the starting point for calls for proposals to conduct relevant research into the issue. In 2017–2018, about ten research projects were selected.

Under this program, Héma-Québec is participating in a pan-Canadian study designed to determine the feasibility of selecting donors based on the notion of at-risk behaviour. That study began in fall 2017. Another study is assessing the acceptability and feasibility of implementing a program that would allow the Montréal MSM community to donate plasma for fractionation. These projects will continue next year.

Promoting blood donation in Black communities

In addition to the ABO blood groups, there are 35 additional blood groups. When someone receives frequent transfusions, some of these other groups must be taken into consideration in order to avoid the development of antibodies that cause transfusion reactions. A donor and frequent recipient who share a similar genetic background are more compatible.

While the overall demand for labile blood products has been decreasing for several years now, the situation is quite different for phenotyped products (products for which the characteristics of other blood groups are determined by serology). This is particularly true when treating patients with sickle cell anemia, a hereditary blood disease whose treatment can involve many transfusions at regular intervals. This condition especially affects Black communities.

For this reason, the need for donors from Black communities has more than doubled in recent years. Today, more than 100 patients from these communities require frequent transfusions. The treatment cycle for one patient with sickle cell anemia lasts six to eight weeks and requires 8 to 14 bags of red blood cells from as many different compatible donors. This represents about 10,000 bags of red blood cells annually.

Extensive efforts are being made by Héma-Québec to mobilize more donors from the Black community, namely:

- a partnership with the *Association d'anémie falciforme du Québec*;
- organizing blood drives in collaboration with Black community groups and leaders;
- greater focus on recruiting activities; and
- participation in various events, including Black History Month.

These various initiatives have made it possible to recruit more than 6,000 new blood donors from the Black community. Despite these encouraging results, however, increasing the pool of donors remains a constant challenge.

Joël Nawej Karl,
donor and blood drive
organizer.

Replacing iron lost in Black women after a blood donation

Black women in good health have a physiologically lower hemoglobin level than do Caucasian women. This means that about one-third of those who register at blood drives are excluded from donating blood because they do not meet the usual hemoglobin criterion. Héma-Québec has been authorized by Health Canada to conduct a study that, if the results are conclusive, would allow for the adoption of a qualification criterion adapted to the physiological reality of female blood donors from the Black community.

For nearly three years, Héma-Québec has been running a program to assess iron levels in female blood donor candidates from the Black community and provide iron supplements to them. With the initial objective of recruiting 500 female donors having been met, efforts are now being focused on building loyalty among those recruited.

Activities carried out over the last financial year in the GLOBULE Blood Donor Centres of the Montréal and Québec City metropolitan areas and at about 600 targeted blood drives helped recruit 736 female donors. Since the launch of the program, 1,019 women from Black communities have participated. This initiative resulted in a 29% increase in the number of donations by Black women who, without the program, would have been excluded from donating blood due to their hemoglobin levels.

Pathogen reduction

Pathogen reduction technologies are used in some European countries and the United States to deactivate diseases or viruses that may be found in blood platelets or plasma (no technology is currently approved for red blood cells). These technologies are considered a proactive method of pathogen reduction, as opposed to the traditional approach of targeting and excluding donors deemed to be at risk and using blood tests to screen for infection. This pathogen reduction procedure therefore mitigates risk at the point of entry into the transfusion chain.

In 2007, a conference on pathogen reduction involving international experts recommended introducing these technologies as they become available, provided they are shown to be safe and effective.

Héma-Québec is studying the possibility of incorporating pathogen reduction technologies into its activities and continues to evaluate the operational impact of these technologies on the transport and production chains, planning and management of blood drives, and product quality.

Donations confirmed positive by communicable disease marker

Héma-Québec tests all donations it collects for blood-borne diseases. If a positive result is obtained, the donation is destroyed and the donor is notified. As the following table shows, the number of infections detected in donors has not changed significantly in recent years.

CONFIRMED POSITIVE DONATIONS BY MARKER

	2013–2014	2014–2015	2015–2016	2016–2017	2017–2018
Human immunodeficiency virus (HIV)	0	1	0	0	0
Hepatitis C virus (HCV)	22	12	12	13	14
Hepatitis B virus (HBV)*	16	14	5	10	20
Human T-cell lymphotropic virus (HTLV)	0	1	2	1	2
Syphilis	23	17	8	17	11
Total donations	**277,956**	**276,473**	**276,956**	**305,201**	**301,900**

* Results related to recent donor immunization are excluded as they are false positives.

Prevalence of HIV and HCV in Héma-Québec donors versus the general population

The number of infections detected in blood donors remains well below that observed in the population. These results demonstrate the effectiveness of the blood donation qualification questionnaire used as a safety measure.

	POPULATION	HÉMA-QUÉBEC
HIV	0.2% (1/500)	0% (0/301,900)
HCV (hepatitis C virus)	0.8% (1/125)	0.005% (1/21,564)

Audits

Periodic audits of Héma-Québec's operational processes by regulatory agencies reflect the level of quality control applied by the organization to its operations.

Each year, Health Canada inspects Héma-Québec's facilities in Montréal and Québec City. The GLOBULE Blood Donor Centres and PLASMAVIE Plasma Donor Lounges are inspected every two years. Observations were reported and action plans are in place to make the necessary changes. Facility licences have been renewed.

HEALTH CANADA

PLASMAVIE in Gatineau
APRIL 2017

Québec City facility
JUNE 2017

GLOBULE in Québec–Laurier Québec
JUNE 2017

Montréal facility
NOVEMBER 2017

GLOBULE in Laval–Centre Laval
NOVEMBER 2017

Facility licences renewed in accordance with the *Blood Regulations*

***Bureau de normalisation du Québec* (BNQ)**

Leuko-platelet and erythrocyte immunology laboratories–APRIL 2017

ISO 15189 certification renewed

A donor completing the questionnaire at a mobile blood drive.

MAIN ACTIVITIES AND ACCOMPLISHMENTS

Labile blood product supply strategy

Héma-Québec's labile blood product supply strategy aims to improve the efficiency of operations while maintaining a safe and sufficient supply. The strategy focuses specifically on the following strategic goals:

- increase the number of collections in donor centres;
- increase workforce adaptability;
- develop a culture focused on continuous improvement, problem solving and accountability;
- anticipate the needs of our partners and clients in hospitals.

Decrease in demand

The demand for labile blood products continues to decrease, not only here but across North Amercia and in Europe. Following a 3.7% decrease in 2017–2018, it now stands 17.9% lower than it was in 2012–2013.

Shipments of red blood cells to hospitals decreased by 3.2% this year (16.5% since 2012–2013), while the demand for platelets decreased by 2.6% (7.5% since 2012–2013).

Demand for plasma used for transfusion purposes declined by 12.2% and is now down 40.2% since 2012–2013.

BLOOD PRODUCTS DELIVERED TO HOSPITALS

	2013–2014	2014–2015	2015–2016	2016–2017	2017–2018
Total red blood cells (packed)	**232,838**	**224,203**	**219,315**	**212,705**	**205,888**
Platelet pools[1]	4,388	4,891	5,632	3,853	3,797
Platelets collected by apheresis	35,459	32,652	33,853	35,161	34,198
Total platelets[2]	**39,847**	**37,543**	**39,485**	**39,014**	**37,995**
Plasma from whole blood 250 ml	25,961	13,319	15,207	29,280	25,287
Plasma collected by apheresis 250 ml	10,464	16,945	14,323	7,940	7,488
Plasma collected by apheresis 500 ml	5,488	6,086	2,834	45	0[4]
Equivalent plasma (apheresis 500 ml x 2)	10,976	12,172	5,668	90	0[4]
Total plasma[3]	**47,401**	**42,436**	**35,198**	**37,310**	**32,775**
Granulocytes	**258**	**33**	**30**	**13**	**60**
Cryoprecipitates	**21,367**	**22,758**	**23,335**	**25,542**	**25,494**
Cryoprecipitate supernatants	**5,064**	**7,703**	**2,733**	**1,914**	**2,708**
Grand total	**346,775**	**334,676**	**320,096**	**316,498**	**304,920**

[1] Platelets from five whole blood donations pooled together (a pool is equal to five buffy coats to which a plasma is added).

[2] "Total platelets" is the sum of "platelet pools" and "platelets collected by apheresis."

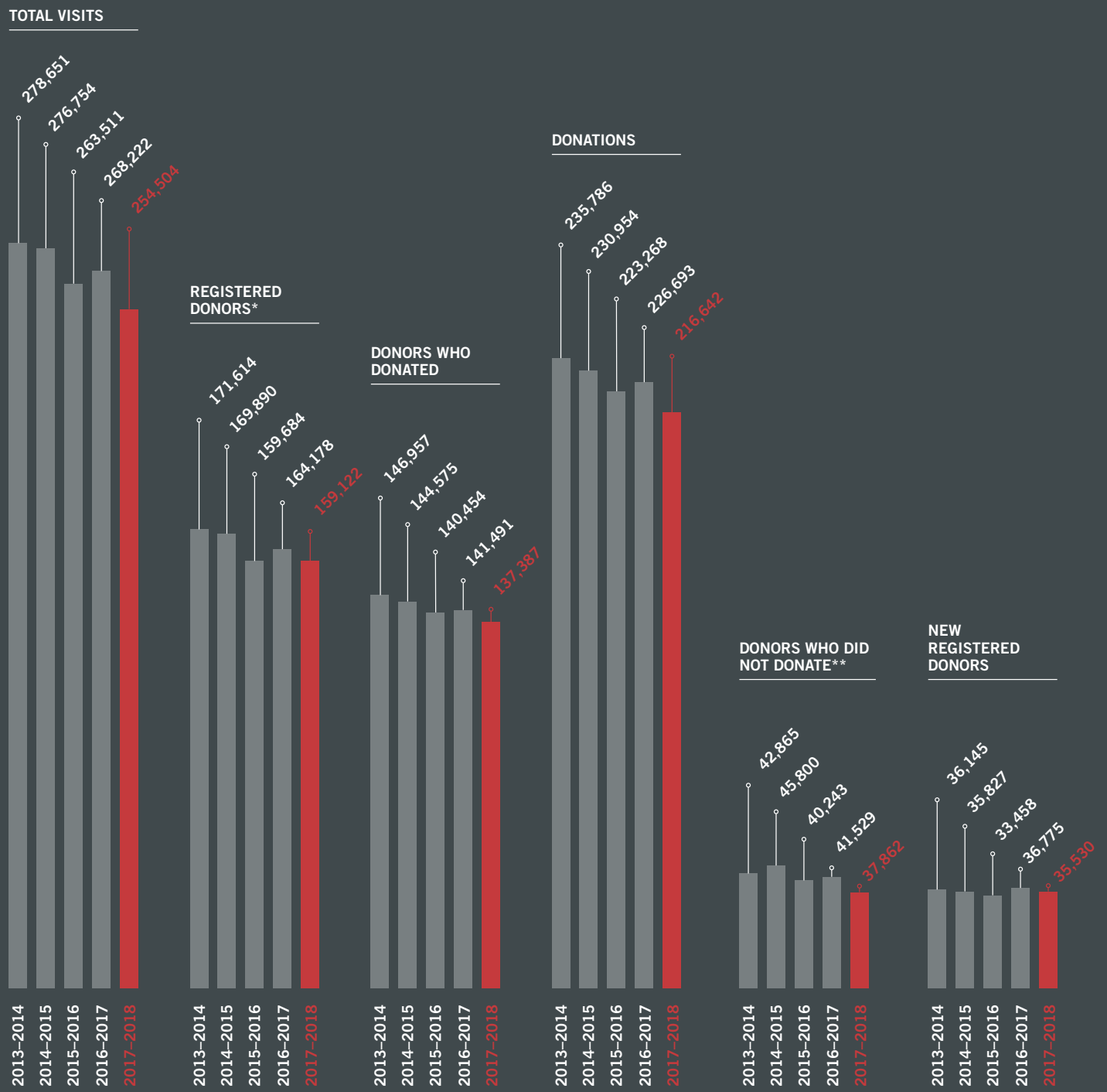
[3] "Total plasma" is the sum of "plasma from whole blood," "plasma collected by apheresis 250 ml" and "equivalent plasma (apheresis 500 ml x 2)."

[4] . Plasma collected at the Québec City GLOBULE is sent for fractionation.

Results for whole blood donation

The declining demand for blood products means that fewer donors and donations are needed.

There were 254,504 visits to blood drives or centres during the year by 159,122 donors. Of these, 137,387 had their blood drawn and made 216,642 donations. On average, blood donors make a donation 1.6 times a year.



* Donors who attended a drive at least once..

** The number of donors who did not donate represents the number of times a donor registered but did not make a donation because an exclusion was issued the same day or within seven days following the registration.

Number of hours worked per product collected

Workforce adaptability measures implemented in recent years have led to consistent advances in hours worked per product collected. This improvement is primarily the result of a more optimal use of resources at blood drives.

The indicator improved for the fourth consecutive year: in 2017–2018, 1.48 hours of work were required per product collected, which is very close to the target of 1.43 set by the organization for the period.

The graph above illustrates the number of hours worked per product collected at mobile blood drives and in GLOBULE Blood Donor Centres for the following five job categories: nurse, blood drive agent, blood drive technical assistant, registration clerk and driver.

Limit rate increases for labile blood products

Despite the context of declining demand, Héma-Québec is making significant efforts to fulfill its mission at the lowest possible cost.

In 2017–2018, the price of packed red blood cells, the main labile product distributed by Héma-Québec, was $357.78, compared with $336.98 the previous year. This represents an increase of 6.2% compared with the fee in 2016–2017. This increase is partly (3%) attributable to a grant received in 2016 to compensate for implementing and funding the *Act to amend the Supplemental Pension Plans Act mainly with respect to the funding of defined benefit pension plans.* The $4.7M grant, of which $2.1M was allocated to the cost of packed red blood cells, contributed to lowering the fee in 2016–2017. It was not renewed this past year. In addition, non-recurring items of $1.1M, together with a decline in distributions of packed red blood cells, contributed to driving the fee up 3.2%.

Breakdown of whole blood collections

Héma-Québec is working to increase the proportion of whole blood collected in donor centres, where the unit cost per collection is 25% lower than at a mobile drive. Collection rates among the various sites remain stable.

Collections in GLOBULE Blood Donor Centres

At GLOBULE Blood Donor Centres, donations by apheresis make it possible to collect products targeted to meet specific needs. This strategy is advantageous in a context of declining demand. Over the past year, the number of products collected at GLOBULE Centres decreased slightly. An average of 1,787 donors registered at the centres each week.

PRODUCTS COLLECTED IN GLOBULE BLOOD DONOR CENTRES

	2013–2014	2014–2015	2015–2016	2016–2017	2017–2018
Whole blood	33,014	39,303	41,578	43,319	43,045
Apheresis platelets	37,548	35,299	36,980	37,950	36,521
Apheresis plasma 500 ml	10,712	12,201	8,676	0[1]	0
Apheresis plasma 750 ml	–	–	4,550[2]	12,619	14,164
Apheresis red blood cells (packed)	8,658	6,847	4,594	3,911	3,871
Apheresis plasma 250 ml (including MC[3])	11,338	18,748[4]	22,044	23,210	21,834
Granulocytes	275	33	38	37	150
Total products collected	**101,545**	**112,431**	**118,460**	**121,046**	**119,585**

[1] Plasma collections at the Québec City GLOBULE are now 750 ml and are sent for fractionation.

[2] Year in which plasma collection for fractionation began.

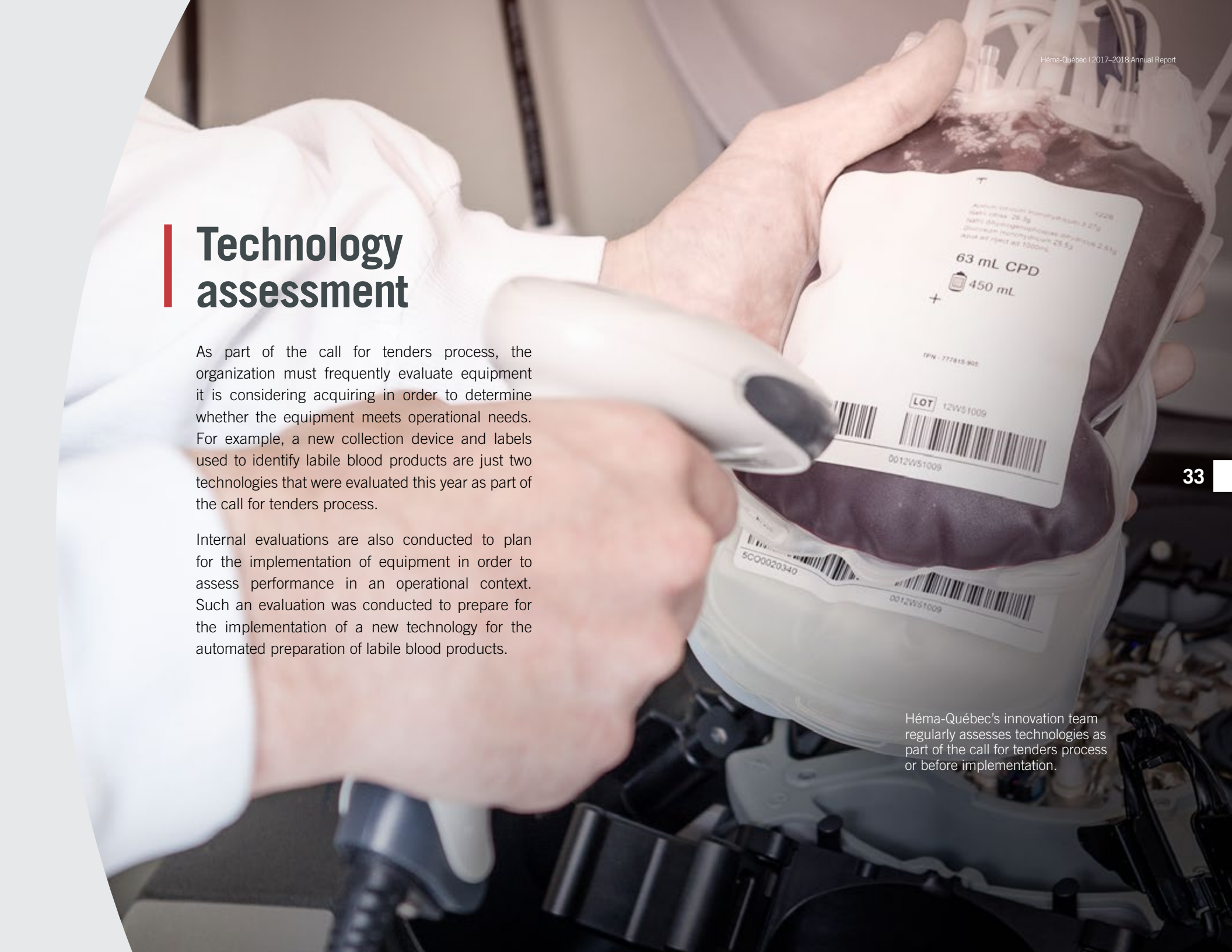
[3] MC: donations made through multiple collections.

[4] The possibility of collecting plasma concurrently with each platelet donation (possible every 14 days instead of every 56 days) accounts in part for the increase in 250 ml plasma collections.

Technology assessment

As part of the call for tenders process, the organization must frequently evaluate equipment it is considering acquiring in order to determine whether the equipment meets operational needs. For example, a new collection device and labels used to identify labile blood products are just two technologies that were evaluated this year as part of the call for tenders process.

Internal evaluations are also conducted to plan for the implementation of equipment in order to assess performance in an operational context. Such an evaluation was conducted to prepare for the implementation of a new technology for the automated preparation of labile blood products.



Héma-Québec's innovation team regularly assesses technologies as part of the call for tenders process or before implementation.

ACCOMPLISHMENTS BY
ACTIVITY SECTOR

STABLE PRODUCTS


Plasmavie

ISSUES AND PRIORITIES

The number of
LITRES OF PLASMA
sent for fractionation was up
9.7%
from 2016–2017

Increasing plasma collection at the best possible cost

Proteins derived from plasma are widely used to manufacture drugs, which are referred to as stable products. Thousands of Quebecers need these products to treat immune deficiencies or other diseases, such as hemophilia. For this reason, collecting plasma for the manufacture of medications is a key issue.

Plasma that has been donated is sent to a high-tech fractionation plant, where proteins are extracted and used to manufacture drugs. The finished products are then returned to Héma-Québec, which acts as the sole supplier for Québec.

Immunoglobulins are Québec's most widely used plasma product. In 2017–2018, the volume of plasma sent for fractionation met 21.5% of the need for immunoglobulins in Québec, with the rest coming from the United States. Héma-Québec wants to gradually increase the proportion of immunoglobulins derived from Québec plasma (self-sufficiency rate). To do this, the organization aims to send 150,000 litres of plasma for fractionation in 2020. In 2017–2018, this volume was 105,160 litres, compared with 95,881 litres in 2016–2017 and 71 684 litres in 2015-2016. The organization's target of 95,000 litres was substantially exceeded with no corresponding increase in donor centres.

The organization also aims to decrease the cost per litre of plasma collected for fractionation. This past year, Héma-Québec outperformed its objective of $330/litre in limiting costs to $286.50/litre.

Plasma donor recruitment

Donor recruitment is a core element of the plasma self-sufficiency strategy. In October 2017, the deployment of a new strategy to recruit plasma donors and develop loyalty provided an opportunity to optimize the organization's various actions aimed at raising awareness, encouraging participation and developing commitment among plasma donors.

Héma-Québec is specifically working to increase the average number of annual donations per donor from 6.1 to 8. It is important to note that plasma donations can be made every six days (up to 50 times a year), as opposed to whole blood donations, where the donor must wait 56 days between collections.

The *Association des bénévoles du don de sang* contributed greatly to the recruitment of plasma donors over the past year, in particular by deploying teams of volunteers in all regions where a PLASMAVIE Lounge operates. These efforts are in addition to the various programs in place at PLASMAVIE centres aimed at fostering the habit of donating regularly or increasing donation frequency. These programs build commitment and are a source of donor pride, as donors not only participate but are also involved in recruiting.

RISK MANAGEMENT

Audits

HEALTH CANADA

Medical instruments (Floseal)–AUGUST 2017

Report issued in accordance with the *Medical Devices Regulations*

Adverse reactions to WinRho®

Héma-Québec distributes WinRho®, a human immune globulin preparation containing Rh antigens (D antigen) manufactured from plasma. This product is administered primarily to pregnant women with a negative blood type when the father's type is positive, a situation that can result in incompatibility between the blood groups of the mother and child, causing anemia in the child. WinRho® can prevent the incompatibility by blocking the mother's immune system from reacting.

In the last few months, the biovigilance system has reported an increase in adverse reactions following administration of this product. Consequently, Héma-Québec, the supplier and Health Canada have joined efforts to identify possible causes for the increased rate of reactions to the product.

While no direct cause has been identified, Héma-Québec and the *Ministère de la Santé et des Services sociaux* have taken certain joint actions aimed at minimizing the number of reactions.

As at March 31, 2018, Héma-Québec, together with the supplier and Health Canada, is monitoring the situation more closely.

Plasma bags.

MAIN ACTIVITIES AND ACCOMPLISHMENTS

Plasma collected for the manufacture of medications

Plasma collection

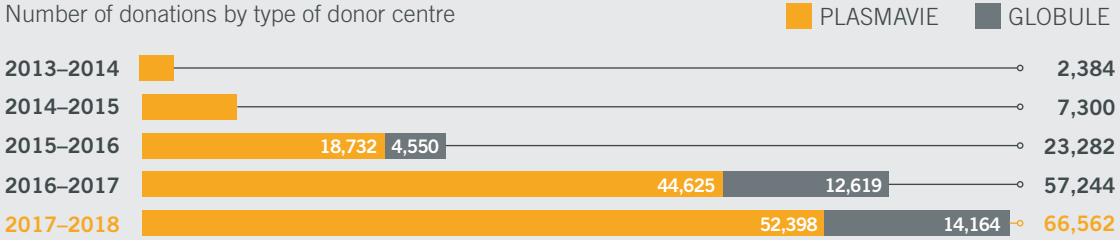
Héma-Québec increased its plasma supply by relying mainly on a network of centres dedicated to plasma donation operating under the PLASMAVIE banner.

One GLOBULE Blood Donor Centre is also involved in collecting plasma donations. In 2017–2018, donors at the Québec City GLOBULE provided 14,000 donations of plasma.

The number of registered donors increased 24% in 2017–2018, while the number of donations was up 16%. The PLASMAVIE Plasma Donor Lounges improved their performance slightly to reach 96% of their annual target.

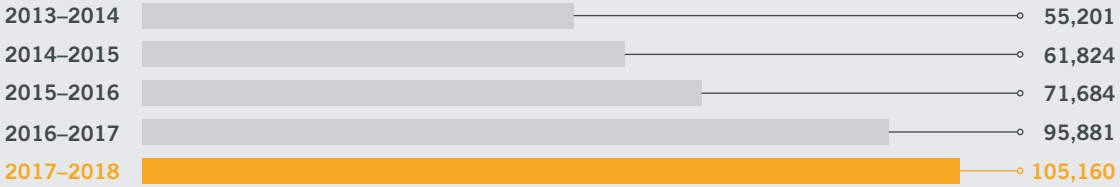
PLASMA COLLECTED FOR THE MANUFACTURE OF MEDICATIONS

Number of donations by type of donor centre

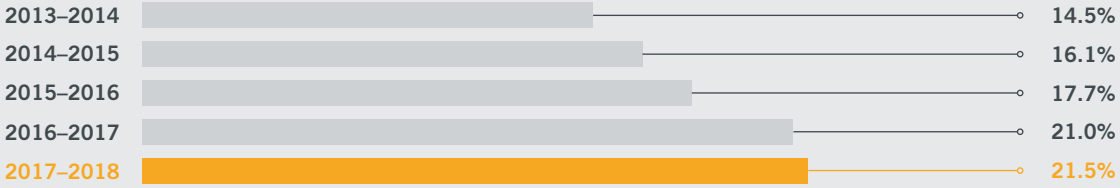


QUANTITY OF PLASMA SENT FOR FRACTIONATION

Litres



IMMUNOGLOBULIN SELF-SUFFICIENCY RATE



* Based on the quantity of plasma sent for fractionation relative to immunoglobulin distributions made during the year.

PLASMA DONATION IN NUMBERS

16%
increase in the number of donations since 2016–2017

12,111
DONORS MADE
66,562
DONATIONS

1,594
APPOINTMENTS PER WEEK
on average

6.1
DONATIONS PER YEAR ON AVERAGE
per donor

25%
of donors made
8 OR MORE DONATIONS
8+

Freezing plasma

The quicker plasma is frozen, the more proteins can be extracted from it. Freezing plasma right at the collection site therefore offers operational benefits.

In the past, plasma units were frozen in Héma-Québec's laboratories in Montréal and Québec City. In 2016–2017, PLASMAVIE Plasma Donor Lounges in Gatineau and Sherbrooke expanded operations to include onsite freezing of the plasma units they collect. This past year, the Saguenay and Trois-Rivières Lounges did likewise. Once the freezing process has begun, the plasma must reach a temperature of -25°C within 12 hours before being shipped for fractionation. This new process serves to better preserve certain proteins, including factor VIII. More of this product can now be manufactured from plasma collected in Québec.

Labelling of plasma bags is also being done at the PLASMAVIE centres. This means that units can now be shipped directly for fractionation to extract proteins without first having to make a stop at a laboratory in Montréal or Québec City. Only a sample of each donation, required for qualification testing, is now sent to the laboratories.

Implementation of self-registration at PLASMAVIE centres

The plasma donor registration process at PLASMAVIE Lounges has been optimized. Anyone who has previously donated plasma can now complete the registration and qualification questionnaires simultaneously for a more streamlined donation process.

Distribution of stable products to hospitals

Héma-Québec has the exclusive mandate of distributing stable products in Québec. Its role is to:

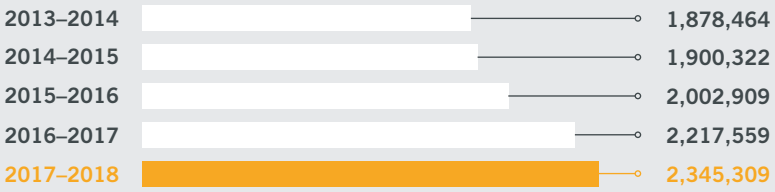
- negotiate the purchase of the safest and most effective products from suppliers at the best terms possible;
- manage the supply; and
- distribute the products to hospitals.

The organization distributes about 50 different stable products, four of which are made from plasma collected in Québec. This activity accounts for much of Héma-Québec's budget, representing 65% of total expenditure.

Intravenous (IVIg) and subcutaneous (SCIg) polyvalent immunoglobulins

Immunoglobulins are the most sought-after stable products. They are used, among other things, to treat patients with immune deficiencies or certain neurological disorders. These are the products for which the organization aims to increase self-sufficiency. Distribution of immunoglobulins has grown steadily in recent years, more specifically by 24.9% since 2013–2014. Demand grew by 5.8% in 2017–2018.

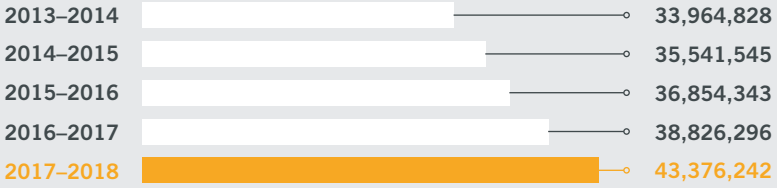
Grams



Recombinant factor VIII

Recombinant factor VIII, used to treat hemophiliacs, is the second most important stable product in terms of demand. Its distribution increased 11.7% in 2017–2018 and has grown 27.7% since 2013–2014.

International units

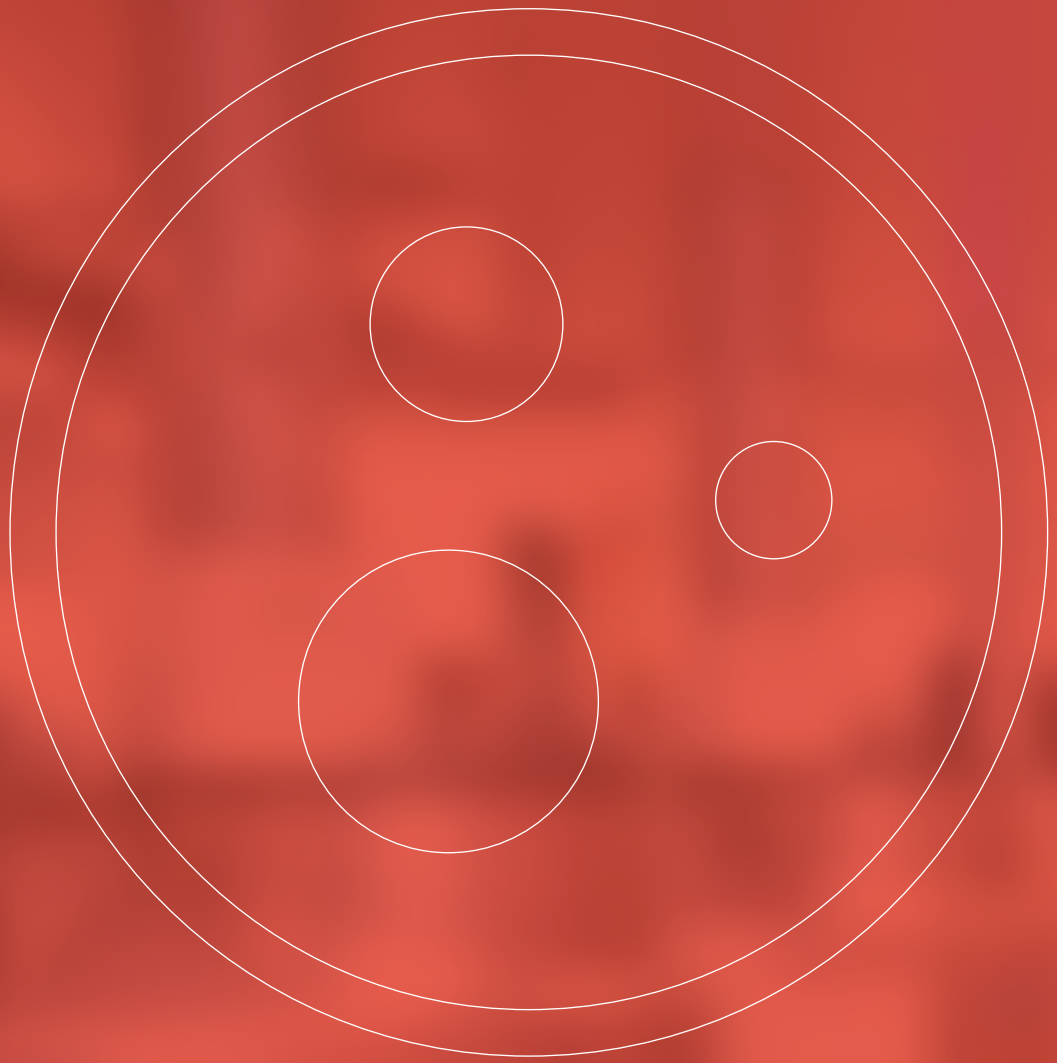


A public call for tenders was launched for recombinant factor VIII in 2017–2018. The call for tenders process ensures accessibility to products while enabling the Québec health system to obtain the best possible price. To be considered in a call for tenders, a supplier must offer a product as safe and effective as the one currently distributed.

A selection committee was formed, and its membership includes specialized physicians from Québec hemophilia treatment centres and recipient representatives named by the *Société canadienne de l'hémophilie*.

The call for tenders will result in savings estimated at nearly $40M over a four-year period compared with previous contractual agreements.

Héma-Québec has worked in close collaboration with Québec hemophilia treatment centres in preparing the transition between the former and new products and in informing patients.



ACCOMPLISHMENTS BY
ACTIVITY SECTOR

STEM CELLS

Rosalie, cord
blood recipient.

ISSUES AND PRIORITIES

Diversifying the Québec registry

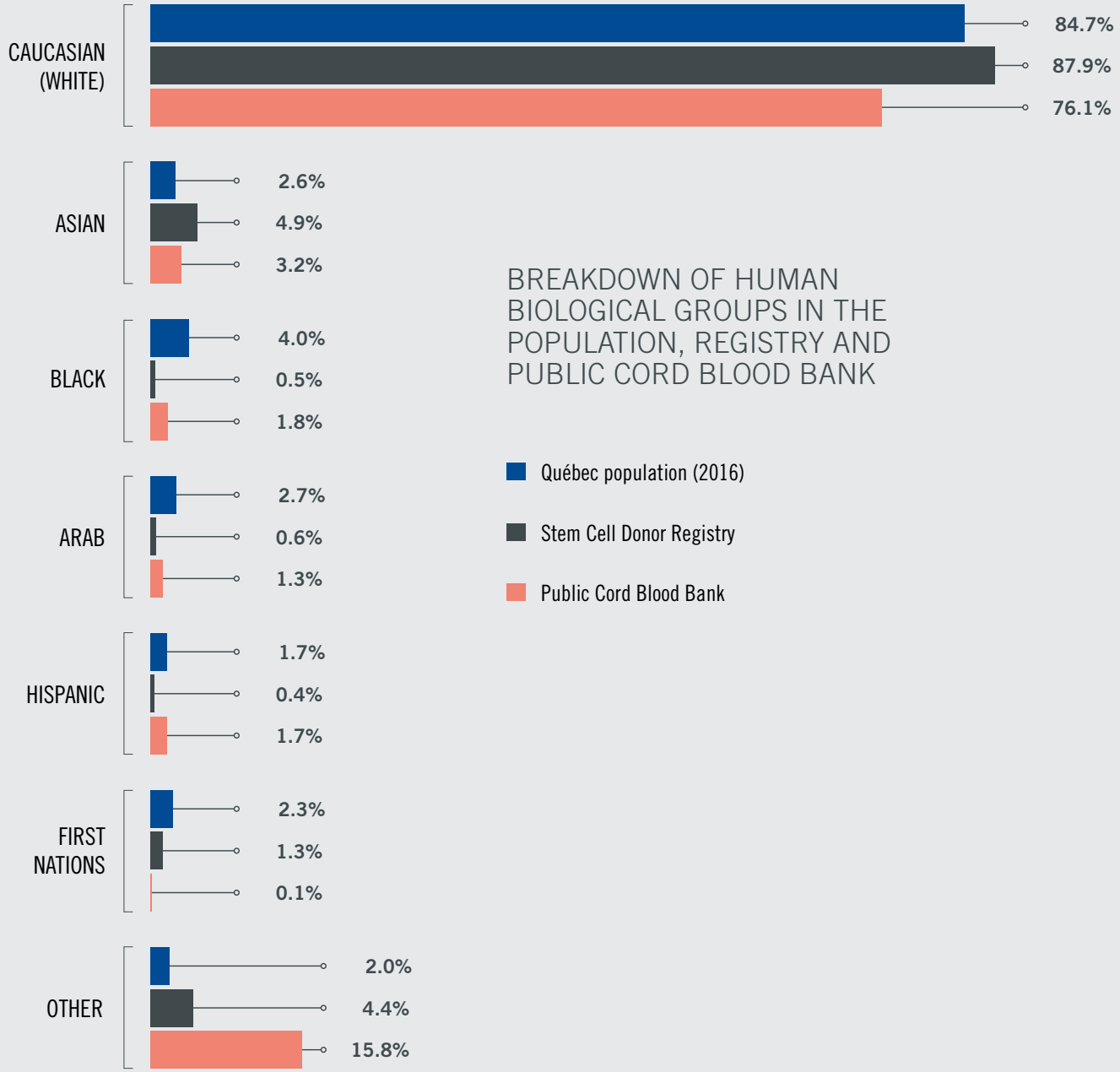
For the most part, the Héma-Québec Stem Cell Donor Registry comprises individuals of Caucasian background, as is the case with registries worldwide. The situation is similar with the Public Cord Blood Bank. This is an important issue because a diversified registry (reflecting the composition of the Québec population) would better meet potential needs. Since the characteristics of the grafted cells must be as close as possible to those of the patient, donors whose genetic background closely matches that of the patient are targeted.

In practical terms, HLA markers determine stem cell compatibility. This is a special system requiring very specific research, since more than 18,000 markers are currently known and the number increases every year. Finding a compatible donor for a patient waiting for a stem cell transplant is therefore a challenge.

An action plan to improve the diversity of the registry was developed this past year and will be implemented in spring 2018.

Marie-Claude, donor and Héma-Québec's employee.

BREAKDOWN OF HUMAN BIOLOGICAL GROUPS IN THE POPULATION, REGISTRY AND PUBLIC CORD BLOOD BANK



Better representation of First Nations

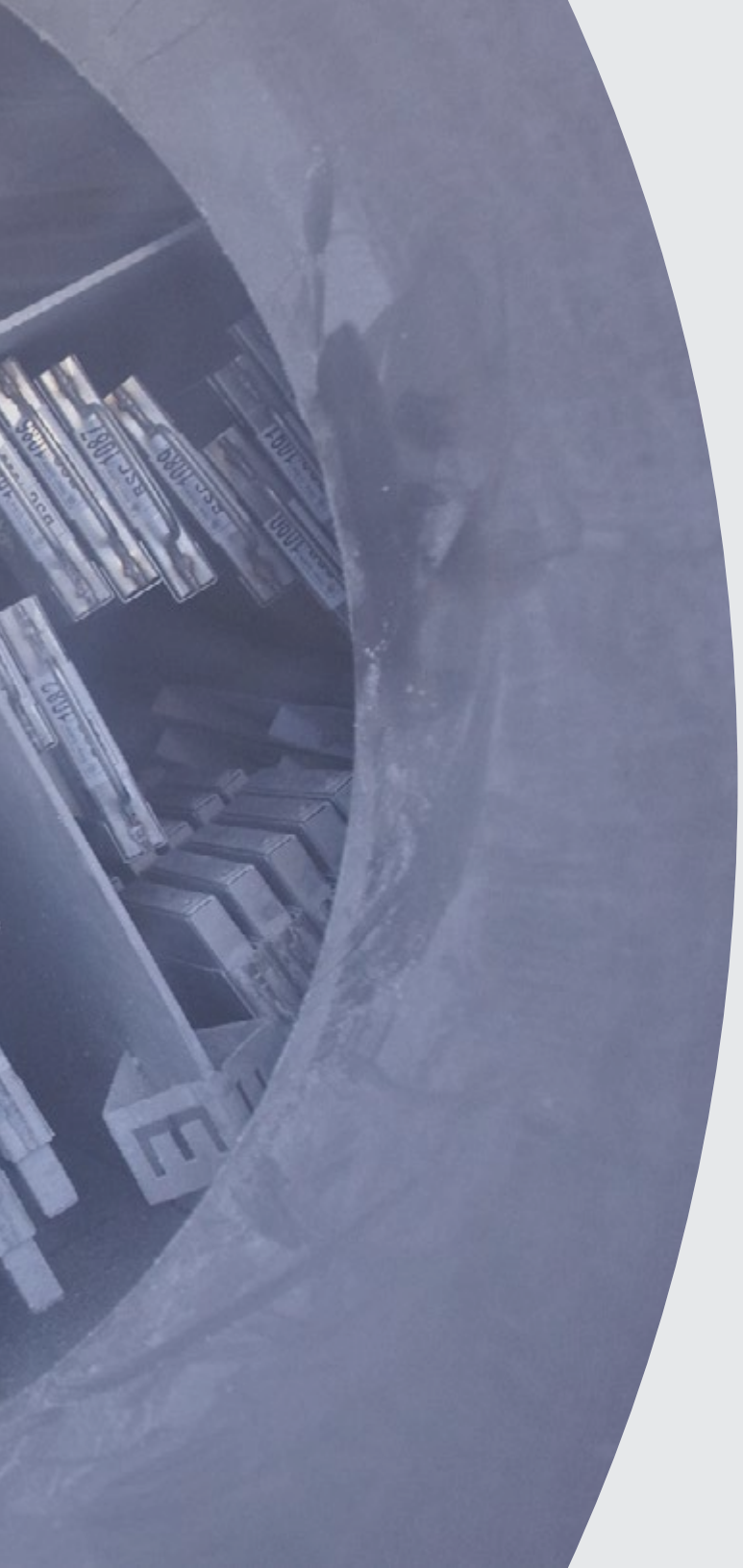
Because of a genetic profile that is unique in the world, First Nations are very poorly represented in Canadian registries and absent from international ones. The limited existing data on their HLA typing makes searches even more complex, as it is difficult to evaluate the various compatible combinations.

A research study involving Aboriginal communities was launched two years ago to address this issue. Funded in part by the *Fondation Héma-Québec*, this study has several objectives, including:

- evaluating HLA combinations in the various communities and demonstrating differences between them;
- checking whether their HLA typing has similarities with other populations worldwide;
- encouraging First Nations individuals aged 18 to 35 to join the Stem Cell Donor Registry;
- facilitating the search for stem cell donors for First Nations patients.

Over the course of the year, efforts continued among the Wendake Huron and Kahnawake Mohawk communities to promote the Registry and solicit the participation of First Nations members in the population-based study. To date, these efforts have resulted in the recruitment of 84 participants for the study and 18 donors for the Registry.

In February 2018, an agreement was ratified with the La Romaine community (*Unamen Shipu*). Ongoing efforts with other communities are being pursued to ensure that the registry represents populations across Québec and that the HLA characteristics of First Nations are better understood in order to facilitate the search for unrelated stem cell donors.



RISK MANAGEMENT

Audits

NetCord–FACT
(International Standards for Cord Blood Collection, Banking, and Release for Administration)

Public Cord Blood Bank–OCTOBER 2017

NetCord-FACT certification renewal process ongoing

MAIN ACTIVITIES AND ACCOMPLISHMENTS

Stem Cell Donor Registry

2,229
REGISTRATIONS IN 2017–2018

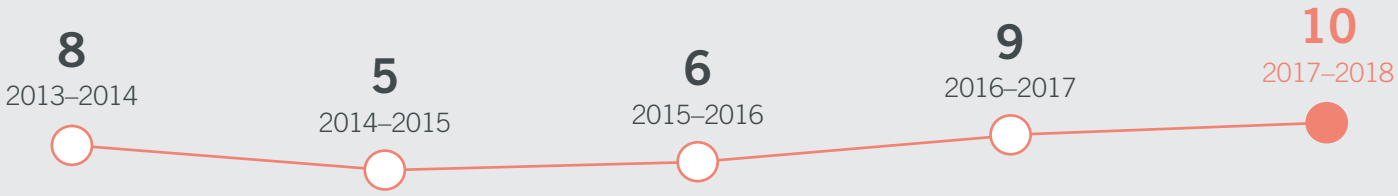
45,690
DONORS REGISTERED

32 MILLION
POTENTIAL DONORS
worldwide

135
QUEBECERS RECEIVED AN UNRELATED TRANSPLANT,
including 14 from cord blood

10
QUEBECERS DONATED STEM CELLS DURING THE YEAR
3 of these donations went to Québec patients

QUÉBEC STEM CELL DONORS

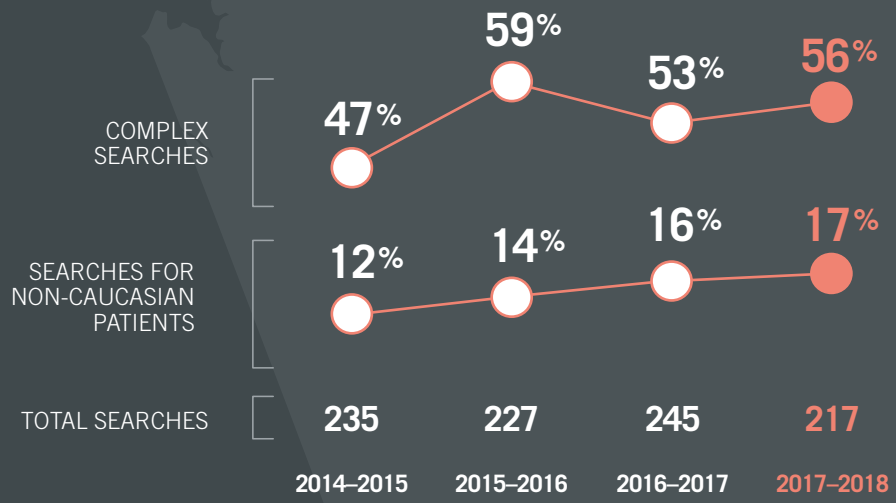


Searches for compatible donors: the challenge of diversity

The number of donor searches for non-Caucasian patients is increasing year by year, reflecting the growing diversity of the Québec population. The increase in complex searches demonstrates the importance of having a registry with greater diversity.

A search is considered complex when it is not possible to find a perfectly compatible donor or only one perfectly compatible donor has been identified.

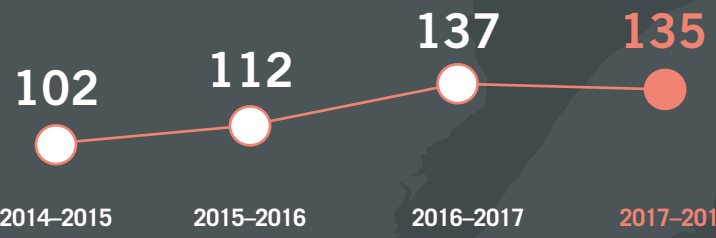
EVOLUTION OF SEARCHES FOR COMPATIBLE DONORS



Pre-transplant coordination service

The Registry team facilitated the distribution of 135 products intended for Québec patients in 2017–2018. It also collaborates with the transplant teams at six hospitals by expediting communication with international registries.

PRE-TRANSPLANT COORDINATION

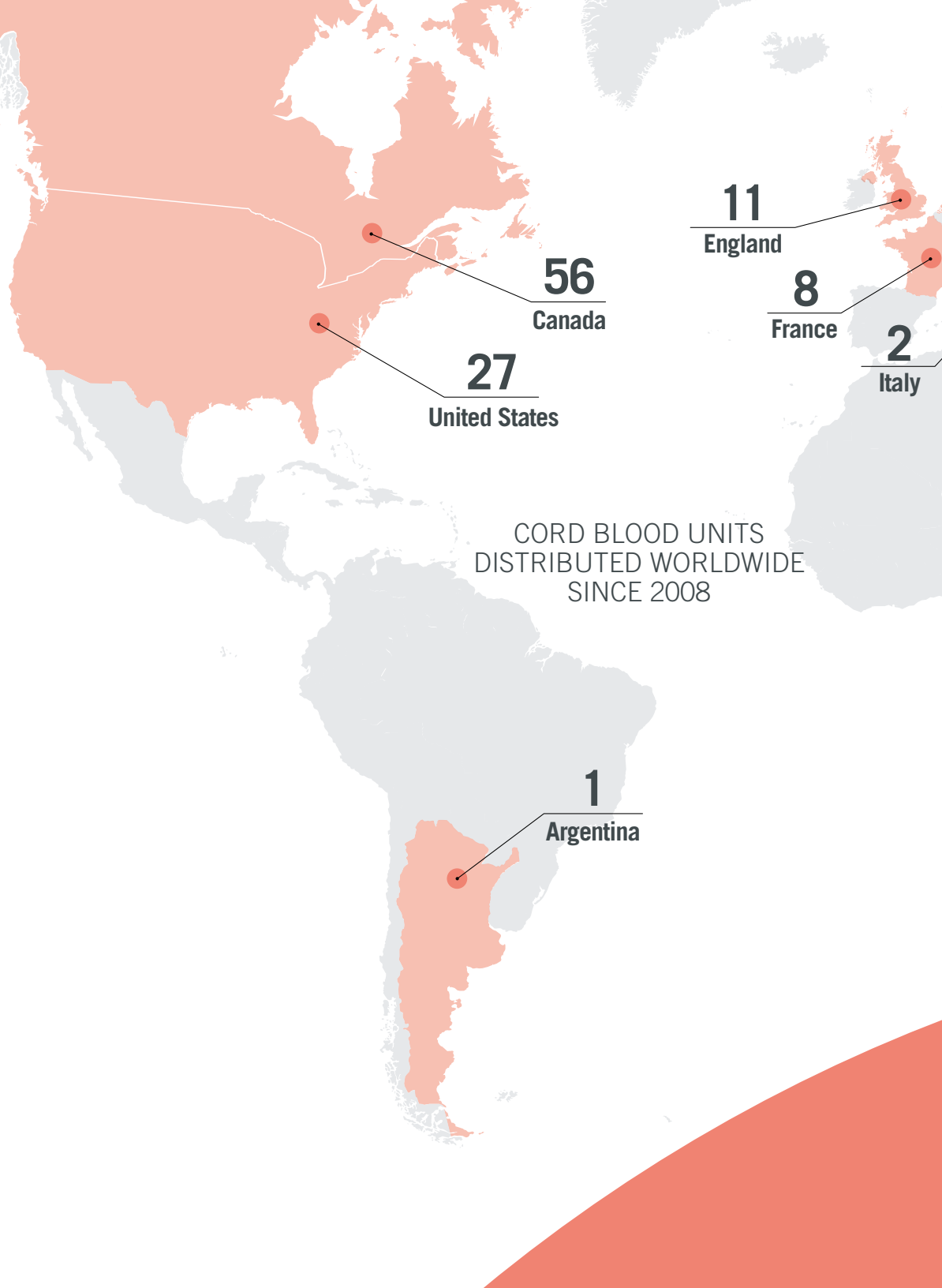


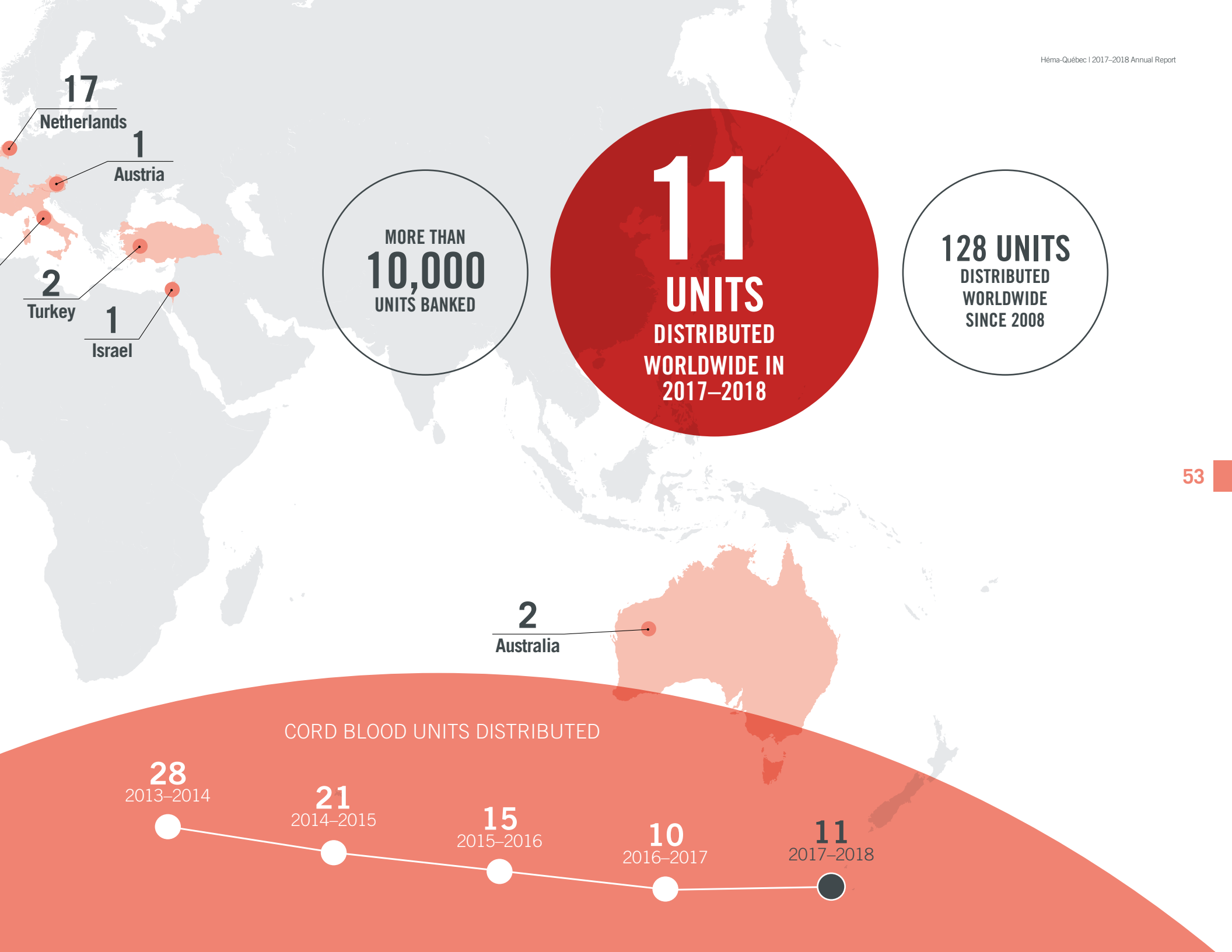
Public Cord Blood Bank

The Public Cord Blood Bank (PCBB) provides access to a source of stem cells to complement those taken from bone marrow or peripheral blood. The PCBB is an integral part of the Stem Cell Donor Registry.

Cord blood is collected at the time of childbirth by Héma-Québec's partner hospitals. Given that the vast majority (76%) of units in the Bank are from Caucasian mothers and that Héma-Québec faces the challenge of better reflecting the composition of the Québec population, efforts have been made to target hospitals frequented by mothers from other communities. This year, the Jewish General Hospital in Montréal became a partner of Héma-Québec for the collection of cord blood.

As at March 31, 2018, the PCBB had a total of 10,776 units. During the year, 11 cord blood units were distributed. The decline in distributions since 2013–2014 is an international trend attributable to the advent of new therapies.




17
Netherlands
1
Austria
2
Turkey
1
Israel
MORE THAN
10,000
UNITS BANKED
11
UNITS
DISTRIBUTED
WORLDWIDE IN
2017–2018
128 UNITS
DISTRIBUTED
WORLDWIDE
SINCE 2008
2
Australia
CORD BLOOD UNITS DISTRIBUTED
28
2013–2014
21
2014–2015
15
2015–2016
10
2016–2017
11
2017–2018

From recruitment to banking

Zika: a direct impact on the recruitment of cord blood donors

Once again this year, mitigation measures implemented due to the risks associated with the Zika virus for cord blood donations have had a significant impact on the activities of the PCBB.

In 2017–2018, 9.5% of registrations were denied based on this criterion, not counting those who do not register because they have travelled to an at-risk area. Over the course of the year, 584 units were banked compared with 950 in 2015–2016 (prior to implementation of the criterion), which represents a 40% decline over two years. Héma-Québec is collaborating with hospitals to combine efforts to deal with the situation and optimize recruitment.

Greater awareness among hospital professionals

The number of units of cord blood collected depends not only on the number of registered mothers giving birth at partner hospitals but also on the qualification rate for cord blood units collected. To be placed in the reserve, a unit of cord blood must meet strict qualification criteria (defined minima for both the volume collected and the number of stem cells in the product). These criteria are designed to ensure the optimal quality of products offered and to maximize the probability of a successful transplant into patients whose health is precarious.

In order to improve the qualification rate for cord blood units, Héma-Québec has prepared an information tool for obstetricians in partner hospitals concerning qualification performance.

Cord blood units are frozen to -150°C.

ACCOMPLISHMENTS BY
ACTIVITY SECTOR

HUMAN TISSUES

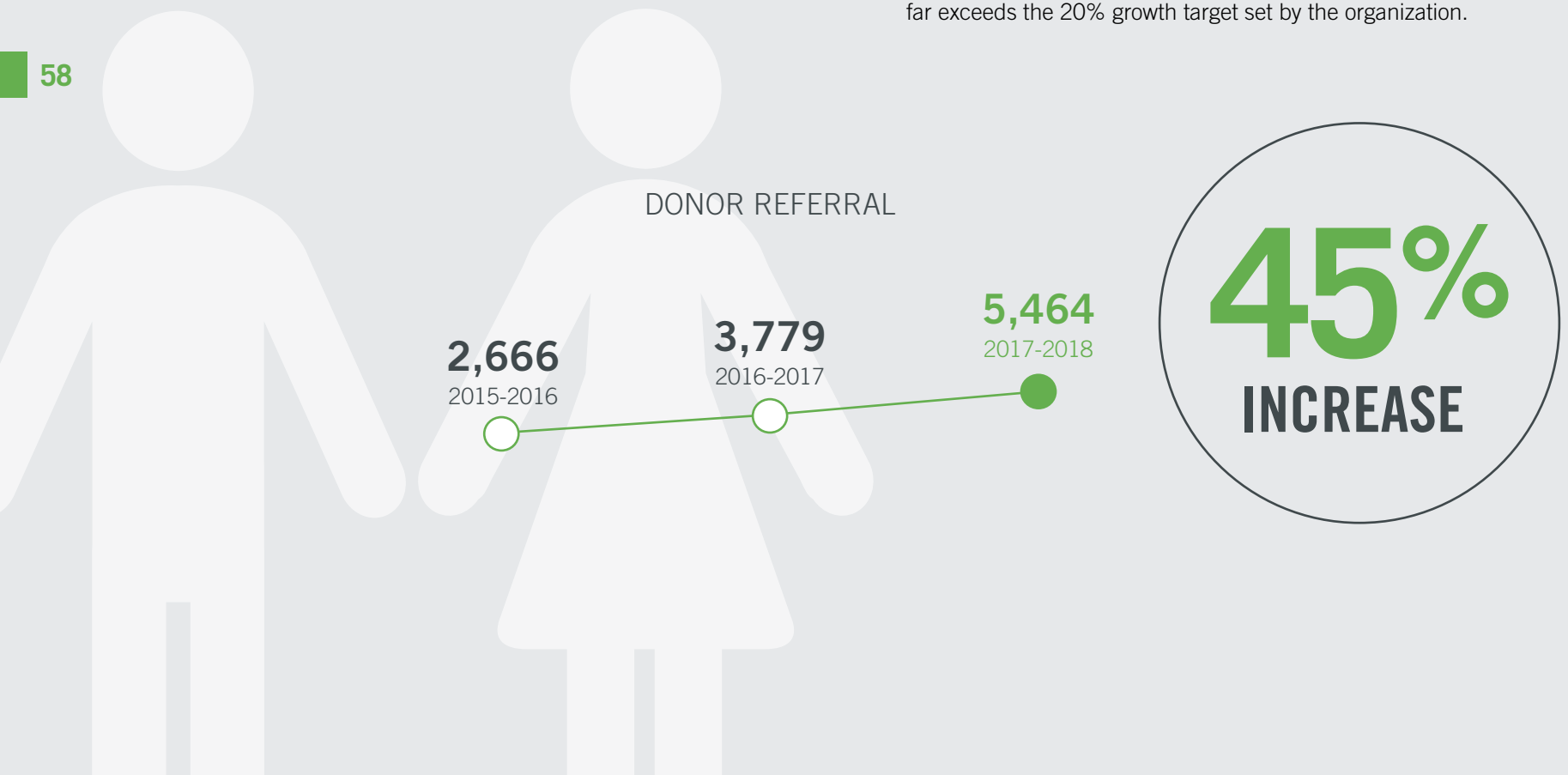
Claudie-Ann, customer service agent (human tissues), handles musculoskeletal products.

ISSUES AND PRIORITIES

Human tissue donor referral

As part of its activities pertaining to human tissues, Héma-Québec must make healthcare professionals aware of the importance of referring potential donors. These referrals are vital to ensuring a greater supply.

In 2017–2018, Héma-Québec received 5,464 referrals of potential donors, which represents a 45% increase over the previous year and far exceeds the 20% growth target set by the organization.



Raising awareness among hospital professionals

Efforts to raise awareness among partners in hospitals is yielding results and providing an opportunity to underscore the importance of donor referrals for Québec's human tissue reserve. Outreach specifically emphasized the importance of systematically referring potential donors up to the age of 60, as more tissues can be collected from this group than from older donors. These efforts resulted in a 48% increase in referrals of donors in the target age group.

Partnership

Since fall 2017, a closer collaboration with *Urgences-santé* has increased referrals of potential donors of human tissues during interventions by paramedic ambulance technicians. The results are promising: in 2017–2018, *Urgences-santé* recommended 151 donors to Héma-Québec compared with just 24 the previous year.

This initiative is in addition to existing partnerships with coroners and the *Unité de coordination clinique des services préhospitaliers d'urgence* at Hôtel-Dieu in Lévis.

HUMAN TISSUES: FROM DONOR REFERRALS TO TRANSPLANT

Skin is stored at a temperature of -80°C.

RISK MANAGEMENT

Audits

Activities pertaining to the production of heart valves (medical instruments)–
AUGUST 2017

Report issued in accordance with the *Medical Devices Regulations*

Human tissue quality system related to the production of heart valves (medical instruments)–
JANUARY 2018

ISO 13485 certification renewed for medical instruments

Human tissue qualification

The qualification process for human tissues involves testing for the presence of microorganisms. Analyses of bacterial cultures are conducted before and after processing tissues to check for the presence of microorganisms. If the analysis is positive, the bacteria are identified to determine whether or not the tissue can be used.

Since March 19, 2018, most of the work to identify bacteria in positive cultures is now being done in Héma-Québec laboratories through a new process developed internally and using an automated device. Previously, these analyses were outsourced to the *Laboratoire de santé publique du Québec* (LSPQ). Héma-Québec continues to collaborate with the LSPQ for the analysis of certain microorganisms and the identification of complex strains.

The new procedure has shortened analysis times, which means that human tissues can be processed and added to the reserve more quickly.

MAIN ACTIVITIES AND ACCOMPLISHMENTS

Human tissue distribution

1,008
DONORS WHO DONATED

5,451
TISSUES DISTRIBUTED
of which 12% were outside Québec

93%
OF THE TISSUES DISTRIBUTED
were collected and prepared by Héma-Québec

14%
INCREASE IN TOTAL DISTRIBUTION
exceeding the target of 10%

DIVERSIFICATION OF THE OFFER
TO BETTER MEET NEEDS

Héma-Québec collects the following human tissues:


Ocular tissues (corneas, eyeballs...)


Heart valves


Skin tissues


Arterial tissues (abdominal aortas, arteries...)


Musculoskeletal tissues (tendons, bone chips, femoral heads...)

49%
OF TOTAL DISTRIBUTION
are musculoskeletal products

21%
INCREASE IN DISTRIBUTION
of musculoskeletal products

19%
OF PRODUCTS DISTRIBUTED
are skin tissues intended for severe burn victims

85%
OF CORNEAS DISTRIBUTED
were collected by Héma-Québec

Growth in local cornea distributions: ▲ **14%**

Decrease in imported cornea distributions: ▼ **21%**

HUMAN TISSUE DISTRIBUTION

	2013–2014	2014–2015	2015–2016	2016–2017	2017–2018
Valve and vascular products	40	61	39	59[1]	54
Skin products	1,340	1,090	1,489	1,036	1,060
Musculoskeletal products (tendons, bone chips, femoral heads)	1,292	1,371	1,768	2,214	2,678
Corneas	561	448	606	689	783
Scleras	445	416	460	468	511
IMPORTS					
Imported human tissues	85	28	73	32	53
Imported corneas	249	337	205	176	139
Imported amniotic membranes	–	92[2]	94	108	173
Total	**4,012**	**4,080**	**4,734**	**4,782**	**5,451**

[1] The distribution of arterial tissues collected and manufactured by Héma-Québec began in 2016–2017.

[2] Year in which the distribution began.

Héma-Québec and the eye banks: a strong partnership ensuring a constant supply of corneas

Ensuring a steady supply of corneas is a constant challenge. Unlike most other human tissues, which can be stored for several years, corneas must be transplanted within 14 days of collection.

Héma-Québec is responsible for qualifying donors, collecting corneas and supplying them to Québec surgeons. The *Banque d'yeux du Québec* (Québec Eye Bank) and the eye bank at the *Centre universitaire en ophtalmologie* qualify and prepare corneas in accordance with applicable standards and store them prior to the transplant. Close collaboration between Héma-Québec and the eye banks, including the sharing of expertise, ensures that Québec patients receive timely access to sufficient quantities of quality tissues.

The demand for corneas has grown 14% since 2013–2014 and was up 7% over the past year.

A new method of cornea preparation

In 2017–2018, the *Banque d'yeux du Québec* and the eye bank at the *Centre universitaire en ophtalmologie* began preparing corneas for Descemet membrane endothelial keratoplasty (DMEK), which involves a fine membrane supporting the endothelial cells forming the posterior surface of the cornea. In this procedure, only the Descemet membrane is replaced, instead of transplanting the entire corneal structure.

The procedure has become quite popular because it delivers better results in terms of post-operative visual acuity, requires less operating-room time and lowers the risk of rejection by the recipient. Until now, this product was imported by Héma-Québec from the United States.

Héma-Québec and the eye banks are therefore better meeting the needs of Québec corneal specialists. Cornea imports also declined 21% and accounted for only 15% of corneas distributed in 2017–2018.

Diversifying the offer of spongy bone chip tissues

Over the past year, Héma-Québec validated and implemented new equipment to produce spongy bone chips. Expanding the offer will make it possible to better meet transplant needs.

ACCOMPLISHMENTS BY
ACTIVITY SECTOR

MOTHER'S MILK

Mévick received mother's milk at birth.

ISSUES AND PRIORITIES

Meeting the needs of premature infants born at 32 weeks or earlier

The Public Mothers' Milk Bank is mandated to supply pasteurized human milk to premature infants born at 32 weeks or earlier and requiring medical care, in cases where the mother is unable to breastfeed. The current offer is insufficient to meet the overall demand.

Measures were put in place over the past year to increase the amount of qualified milk available in order to meet the need.

Pilot project to recruit donors in Estrie area

Since November 2017, the PLASMAVIE Plasma Donor Lounge in Sherbrooke has been a drop-off point where registered, qualified mothers in the region can bring bottles of their milk. As at March 31, four months after implementation, 49 mothers were registered and 23 had provided milk. The objective is to register 80 mothers each year.

This project is now an integral component of the organization's activities, and more PLASMAVIE Lounges are slated to become drop-off points for mother's milk.

Optimization of operations

A collaboration with the Toyota Production System Support Center (TSSC) focused on optimizing operations aimed at increasing the production capacity of the milk bank. TSSC shared their manufacturing know-how – also known as the Toyota Production System (TPS) – to help equip Héma-Québec staff with the knowledge and tools necessary to create and apply their own methods to production improvements. A number of adjustments were made to the milk bank, including optimization of the storage and production spaces to improve flow of processes, a standardization of task sequences to reduce production time, and the elimination of tasks providing no added value. The revised process is 55% faster and eliminated 57% of production waste. This partnership was supplemented by a public awareness campaign to help increase donor registration to the Public Mothers' Milk Bank.

RISK MANAGEMENT

Microbiological testing of mother's milk

The process for qualifying mother's milk includes microbiological testing before and after pasteurization. Testing ensures that the finished product ready for distribution meets applicable standards.

Since June 26, 2017, post-pasteurization testing of mother's milk has been conducted at Héma-Québec's laboratories. Prior to that date, all testing was outsourced to the *Laboratoire de santé publique du Québec* (LSPQ). The second phase of the project, to repatriate pre-pasteurization testing, began progressively last fall. Since March 19, all testing is being done in the organization's laboratories.

Collaboration with the LSPQ has facilitated a transfer of knowledge to the Héma-Québec laboratory team. Relations with the LSPQ continue in more complex cases.

Finally, Héma-Québec has been evaluating an automated method for counting bacteria that could optimize the process of categorizing the milk received from each donor before it is combined into a batch.

MAIN ACTIVITIES AND ACCOMPLISHMENTS

Héma-Québec estimates that 40,000 bottles need to be distributed each year to meet the needs of premature infants born at 32 weeks or earlier. Given that mothers participating in the Public Mothers' Milk Bank supply milk for six months on average, the challenge is to have about 300 active donors at all times.

In 2017–2018, 458 mothers out of a pool of 853 registered mothers sent milk to Héma-Québec. As at March 31, 291 mothers were donating.

Their donations made it possible to send 11,767 bottles to hospitals, which represents a 19% increase over 2016–2017. At the end of the financial year, total distribution since the start of activities in April 2014 had reached 25,488 bottles.

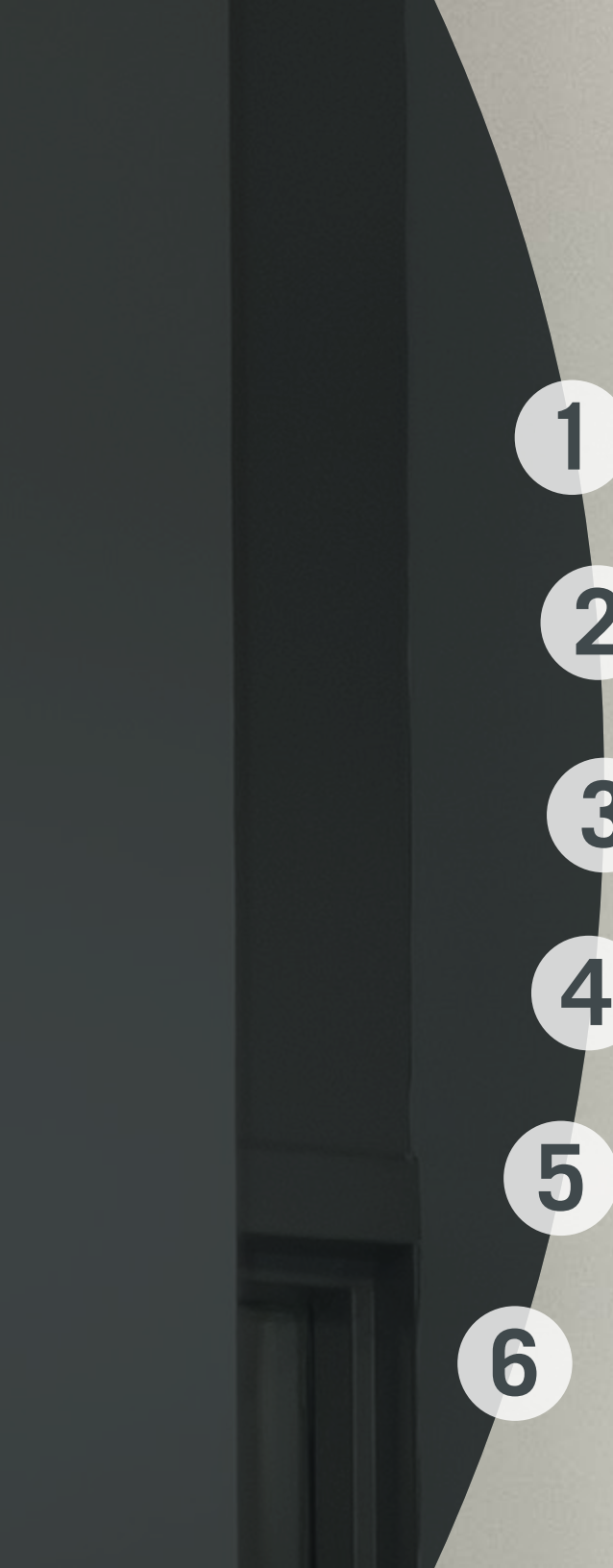
11,767
BOTTLES DISTRIBUTED

853
REGISTERED DONORS

458
ACTIVE DONORS
in 2017–2018

William received mother's milk at birth.

RESULTS RELATIVE
TO THE 2017–2020 STRATEGIC PLAN



The strategic plan focuses on **six strategic orientations**, each representing a specific challenge to meet in positioning the organization as a strategic partner serving the Québec health system.

1. Compare our practices with those of the leaders in our field, and take the necessary steps to achieve our objectives for the benefit of our partners, and assume our responsibility for the results.

2. Keep up with the latest developments in human biological products and be proactive so that the healthcare network can benefit from this expertise.

3. Manage risks in an integrated manner at all levels of the organization in accordance with best practices.

4. Modernize and streamline our processes in order to be more effective.

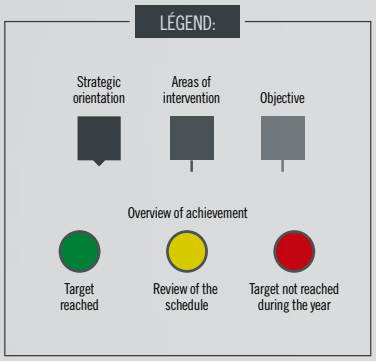
5. Take advantage of digital technology to improve our communication with our partners.

6. Develop the skills of our employees and mobilize them by implementing a talent and succession management program.

2017–2018 CORPORATE OBJECTIVES

RESULTS AS OF MARCH 2018

The review of the timeline for certain objectives needs to be understood in the context of the ongoing transformation detailed on pages 76 et 77.



STRATEGIC ORIENTATION 1

Compare our practices with those of the leaders in our field, and take the necessary steps to achieve our objectives for the benefit of our partners, and assume our responsibility for the results

AREAS OF INTERVENTION, OBJECTIVES, INDICATORS AND TARGET

1.1 Benchmarking and accountability of areas of activity

- 1.1.1 Keep a scorecard to evaluate the performance of the different areas of activity
- 1.1.2 Perform benchmarking activities
- 1.1.3 Incorporate a systematic review of activity sectors

1.2 High-performing areas of activity

- 1.2.0 Attain efficiency objectives

LABILE PRODUCTS

- 1.2.1 Reduce the number of collection hours worked per product collected

PLASMA FOR FRACTIONATION

- 1.2.2 Increase the number of litres collected and reduce the cost per litre

HUMAN TISSUES

- 1.2.3 Maintain critical mass to better serve the Québec market

MOTHER'S MILK

- 1.2.4 Meet the needs of premature infants born at 32 weeks or earlier

CORD BLOOD

- 1.2.5 Offer products most sought after by transplant physicians

STEM CELL DONOR REGISTRY

- 1.2.6 Have better representation (diversity) of the Québec population in the registry

STRATEGIC ORIENTATION 2

Keep up with the latest developments in human biological products and be proactive so that the healthcare network can benefit from this expertise

AREAS OF INTERVENTION, OBJECTIVES, INDICATORS AND TARGET

2.1 Value-added products and services for the health network

- 2.1.1 Evaluate the possibility of creating a provincial transfusion medicine research group
- 2.1.2 Establish a governance framework to analyze requests for new products and services
- 2.1.3 Recover by-products and production waste

2.2 Knowledge of the environment

- 2.2.1 Institutionalize active monitoring practices by area of activity

STRATEGIC ORIENTATION 3

Manage risks in an integrated manner at all levels of the organization in accordance with best practices

AREAS OF INTERVENTION, OBJECTIVES, INDICATORS AND TARGET

3.1 Overall risk management culture

- 3.1.1 Conduct monitoring of best practices

3.2 Program that reflects the latest best practices

- 3.2.1 Optimize governance and the risk management program
- 3.2.2 Implement succession plans (ERP, BCP and others)
- 3.2.3 Manage priority risks

STRATEGIC ORIENTATION 4

Modernize and streamline our processes in order to be more effective

AREAS OF INTERVENTION, OBJECTIVES, INDICATORS AND TARGET

4.1 An effective management model that focuses on accountability and a comprehensive view of processes

- 4.1.1 Choose a common streamlining methodology
- 4.1.2 Streamline and optimize four complex processes
- 4.1.3 Optimize priority sub-processes among the seven mapped production processes as at March 31, 2017
- 4.1.4 Finalize the review of non-compliances
- 4.1.5 Prepare the redesign of controlled documents
- 4.1.6 Introduce the “Streamline Héma-Québec” theme for the *Boîte à idées*

4.2 Culture of accountability and synergetic partnership

- 4.2.1 Gain maturity in project management

STRATEGIC ORIENTATION 5

Take advantage of digital technology to improve our communication with our partners

AREAS OF INTERVENTION, OBJECTIVES, INDICATORS AND TARGET

5.1 Foundations for digital transformation

- 5.1.1 Develop the IT strategy
- 5.1.2 Develop digital expertise
- 5.1.3 Build technological fundamentals

5.2 Digital technology for the benefit of partners

- 5.2.1 Deploy a digital business capacity tailored to the needs of donors and volunteers (for all areas of activity)

5.3 Digital technology for the benefit of employees

- 5.3.1 Optimize the quality management software package
- 5.3.2 Optimize the workforce planning process

STRATEGIC ORIENTATION 6

Develop the skills of our employees and mobilize them by implementing a talent and succession management program

AREAS OF INTERVENTION, OBJECTIVES, INDICATORS AND TARGET

6.1 Integrated and open-ended talent and succession management program

- 6.1.1 Implement a succession management process for critical and key positions
- 6.1.2 Develop a strategy for assigning and developing individuals bound for critical and key positions
- 6.1.3 Create an integrated talent and succession management program that fosters the development of skills related to business needs
- 6.1.5 Implement a computerized, integrated system to manage performance, talent and succession
- 6.1.6 Empower and support managers in their role as talent developers to foster the emergence of a culture of learning

6.2 Motivational and inspiring leaders

- 6.2.2 Create leadership development path 2.0 for demonstration of new skills and behaviour related to business needs
- 6.2.4 Creation of a (non-regulatory) training program for unionized staff

Héma-Québec in transformation

A review of the Héma-Québec business model in the light of the organization's strategic plan and vision has led to a new organizational structure. The Board of Directors was closely involved in this exercise, lending their expertise to help ensure the greatest possible coherence between Héma-Québec's new vision, the modified organizational structure and the ensuing transformation. Specifically, the transformation will serve to:

- simplify the organization and modernize operations;
- focus on the offer and value to be created for target client groups;
- consolidate all contact points for Québec hospitals;
- increase donor recruitment and loyalty across all activity sectors;
- offer an optimal donor experience;
- highlight the contribution of volunteers and foster recruitment;
- pool logistical activities and maximize the supply, transport and management of inventories;
- eliminate silos and create synergies by positioning support activities across sectors;
- acquire and develop key talent from within.

To ensure a successful transition, a new business model has been developed (see the next page).

One of the most significant highlights is the merger of the Medical Affairs division with that of Research and Development. These two divisions are now under the Medical Affairs and Innovation division. The new structure will allow greater synergy between research and medical teams in order to better support the business scientifically and medically, as well as foster more innovation in transfusion medicine.

Operations have been grouped by activity sector. This reorganization will increase efficiency and ensure greater accountability for results.

Finally, continuous improvement and strategic project management have been grouped so that improvement initiatives can be planned upstream of projects. These sectors now fall under the Finance and Strategic Project Management division.

In the light of these changes, senior management has developed a transition plan to ensure the continuity of operations and implementation of the strategic plan.

The context of transformation motivated a review of the timeline for implementing certain objectives initially scheduled for 2017–2018.

HÉMA-QUÉBEC
in transformation

BUSINESS MODEL

OPERATIONS DIVISION

LABILE BLOOD PRODUCTS

- GLOBULE Blood Donor Centres
- PLASMAVIE Plasma Donor Lounges
- Mobile blood drives
- Production of blood products

INNOVATIVE BIOLOGICAL PRODUCTS AND REFERENCE LABORATORIES

- Human tissues
- Mother's milk
- Reference laboratories
- Stem cells

OPERATIONAL SUPPORT DIVISION

DONOR EXPERIENCE

- Marketing
- Recruitment and relations with donors and volunteers

QUALITY AND REGULATORY AFFAIRS

- Product qualification
- Quality assurance
- Audits and investigations
- Equipment and process validation
- Regulatory compliance

SUPPLY CHAIN

- Procurement and inventory management
- Logistics and transportation
- Stable products
- Partnerships with hospitals
- Inventory management

FINANCE AND STRATEGIC PROJECT MANAGEMENT

- Management accounting and financial strategy
- Cash flow
- Infrastructure and industrial safety
- Project management and continuous improvement

PUBLIC RELATIONS AND GENERAL SECRETARIAT

- Public relations
- Risk management
- Legal affairs
- General secretariat

HUMAN RESOURCES

- Human resources and employee services
- Regulatory training and skill development
- Labour relations
- Health and safety

MEDICAL AFFAIRS AND INNOVATION

- Medical affairs – microbiology and hematology
- Biological risk management
- Innovation
- Operational research
- Scientific information

INFORMATION TECHNOLOGY

- Information technologies
- Management and production systems
- Information security
- System validation

I Partnerships serving the health system

Héma-Québec's vision is to become a strategic partner for the Québec health system. In addition to meeting the needs of the Québec population as a supplier of human biological products, the organization also offers specialized services.

Specialized laboratory services

Analysis services for hospitals

Héma-Québec is an acknowledged reference centre offering medical biology services to Québec health system institutions. In 2017–2018, Héma-Québec laboratories received 4,704 requests from hospitals for specialized analyses, especially for erythrocyte and leuko-platelet immunology, erythrocyte genotyping and HLA typing case studies. The organization also responds to requests for screening tests (HIV, hepatitis B and C, syphilis, etc.) for donors who have given blood, stem cells or organs in hospitals.

HLA typing for cord blood units and adult donors in the Stem Cell Donor Registry is also performed in Héma-Québec laboratories. In addition, genotyping of blood donors has been integrated operationally since 2016, providing better compatibility for patients with specific transfusion medicine needs.

Since June 2016, Héma-Québec has also been performing genetic testing to correctly identify the RhD blood group in women aged 45 or younger when the results of hospital testing are inconclusive. These analyses allow for an informed treatment decision to prevent disease in infants where the RhD blood group of the mother and fetus differ. About 20% of the 625 test requests received in 2017–2018 served to confirm that no additional treatment was required.

SPECIALIZED TESTS PERFORMED

	2013–2014	2014–2015	2015–2016	2016–2017	2017–2018
Erythrocyte immunology (patient cases)	1,430	1,550	1,591	1,558	1,470
Platelet immunology (patient cases)	483	461	476	472	482
Erythrocyte genotyping (patient cases)	2,832 (588)[1]	548[1]	575	862[2]	1,090
Erythrocyte genotyping (donors)	–	–	–	1,128[3]	2,693
HLA A, B, C, DR, DQ typing	7,700	14,804[4]	11,176[4]	5,333	4,483
Screening for virologic markers with serology and nucleic acid testing (hospital donors)	1,620	1,776	1,641	1,741	1,715

[1] The number of erythrocyte genotyping tests refers to the genotypes tested for patient cases. Several genotypes can be tested for a given patient and, up until 2015, the genotyping analyses performed have varied based on the request. Since 2015, patient cases have been tested using a new genotyping platform with systematic complete genotyping. In order to better reflect estimates, erythrocyte genotyping is now expressed in number of patient cases.

[2] Increase mainly explained by the addition of a new test to confirm weak RhD results.

[3] Year in which donor genotyping began.

[4] Increase due to the record growth in Stem Cell Donor Registry registrations in 2014-2015.

The demand for phenotyped red blood cells used in the treatment of sickle cell anemia grew 3.6% in 2017–2018, whereas the need for regular red blood cells fell 3.2%. See page 20 for more information about the need for these products.

PHENOTYPED RED BLOOD CELLS DELIVERED TO QUÉBEC HOSPITALS

4,704
REQUESTS FOR SPECIALIZED TESTING
RECEIVED 2017–2018

Testing service for Transplant Québec

Héma-Québec's specialized laboratories support *Transplant Québec* by performing qualification testing to determine whether a candidate for organ donation is carrying a blood-borne virus or infection. The results must be obtained quickly prior to collecting the tissue or organ for transplant. Tests are performed with specialized equipment not available in hospitals.

Through its on-call service to handle laboratory requests outside of regular working hours, Héma-Québec is committed to providing results within eight hours of receipt.

133
SAMPLES
processed in 2017–2018

77%
OF TESTING PERFORMED
outside regular working hours

95%
OF RESULTS SENT
within 8 hours

Study on the impact of nutrient solutions on the survival and proliferation of bacterial contaminants in packed red blood cells

In the process of transforming labile blood products, a nutrient solution is added to the red blood cells to extend their survival during storage. Over the past year, Héma-Québec conducted a study in collaboration with Canadian Blood Services on the impact of nutrient solutions and transformation processes on the survival and proliferation of bacterial contaminants in packed red blood cells. The purpose of the study was to determine whether certain nutrient solutions had the property of limiting or stopping the growth of potential bacterial contaminants. The study results have contributed to improving understanding of the blood product conservation process and were the subject of two scientific papers presented at international conferences.

Evaluation of the blood supply system by the *Société canadienne de l'hémophilie*

In November 2017, the *Société canadienne de l'hémophilie* (SCH) published a new edition of its Report Card on Canada's Blood System. The goal is to inform the population about the state of the country's blood system by evaluating its various components, including Héma-Québec. The latest report specifically concludes that the system is extremely safe. A high level of confidence is expressed concerning the safety of both labile and stable blood products. Regarding the blood supply, although Héma-Québec was given a perfect score for labile blood products, the SCH identified certain areas for improvement when it comes to plasma-derived products while also underscoring

Héma-Québec's efforts in recent years, including the organization's plasma supply strategy. Finally, Héma-Québec's efforts over the years in the areas of accountability and transparency were acknowledged. The inclusion of recipient representatives as stakeholders in the call for tenders process for stable products is one example of current collaboration.

Public Cord Blood Bank: study aimed at developing a standardized international method

Héma-Québec steered a research project aimed at standardizing the testing technique used by the various cord blood banks. Since 2016, testing of thawed cord blood samples has been a regulatory requirement of NetCord FACT, which accredits the Public Cord Blood Bank. At the same time, the members of a working group looking into cord blood on behalf of the World Marrow Donor Association (WMDA), an international collaborative network of which Héma-Québec is a member, discussed the absence of common standards for all banks. The main consequence of this situation is that transplant centres face a greater challenge in selecting a unit of cord blood.

Since Héma-Québec's Public Cord Blood Bank already employs an optimized and validated testing method, the organization's teams submitted a project to the working group aimed at standardizing the technique, in collaboration with two specialized laboratories and five cord blood banks. Recommendations were issued by the working group concerning parameters to follow in testing cord blood. These results will equip cord blood banks with a tool to better serve transplant centres in the selection of the best product for their patients.

The Héma-Québec Human Tissue Bank is contributing to a national skin reserve

The lack of availability of skin tissues for seriously burned patients can have serious consequences and even result in death. It is therefore important to be able to respond to the need immediately in the event of a major fire. For this reason, a national skin reserve is needed to respond to such disasters without compromising the day-to-day activities of tissue banks.

In 2016, Héma-Québec took the initiative to set up a pan-Canadian committee that includes Canadian Blood services and several Canadian human tissue banks in order to determine the quantities of skin to be kept in reserve and to identify the banks capable of producing a greater quantity and ensuring its storage.

The committee recommended having a national reserve of 150,000 cm^2. Héma-Québec has committed to maintaining a reserve of 100,000 cm^2 of skin. A second reserve is located in Ontario.

In 2017–2018, Héma-Québec maintained an average reserve of 125,000 cm^2. In the event of a catastrophe with multiple burn victims occurring anywhere in Canada, Héma-Québec's reserve can be called upon without compromising the organization's regular activities in meeting the needs of the Québec population.

Integrated risk management

The adoption of an integrated risk management policy standardizes risk management across all levels of the organization. This policy defines the organizational governance framework, as well as the process for identifying, analyzing and processing risks in accordance with best practices.

In addition, the crisis management program has now been integrated with risk management. This program includes plans for specific situations, as well as a business continuity plan (BCP) for situations that could persist. The BCP was updated in 2017–2018, while other relief plans were revised in accordance with the periodic review schedule.

The new process is specifically geared to deal with and monitor risks proactively and provide a better response capacity should a situation arise.

Reducing the risk of connection error

During apheresis donations, an anticoagulant is added to the blood to prevent the collected component from coagulating in the device. In some cases, the donor also receives a solution to replace the volume collected and ensure maximum comfort.

One of the risks associated with this type of collection is a connection error (i.e., mixing up the bags containing the anticoagulant and the solution). This is one of the most significant risks associated with our activities.

Héma-Québec has implemented additional measures aimed at reducing the risk of a connection error. Preventive actions for plasma collection devices already implemented in 2016–2017 remain in effect.

As for apheresis devices that collect plasma, platelets and packed red blood cells, a device with a distinctive connector for the anticoagulant is now available. This device was implemented at the start of the year but could not be fully used, as the anticoagulant that is compatible with the connector was not yet on the market in Canada. Temporary verification methods were therefore introduced. Given that Health Canada certification for the compatible coagulant was obtained towards the end of the financial year, the organization projects that this solution will come into use during summer 2018. The new device practically eliminates the risk of a connection error during apheresis collection.

Overhaul of the non-compliance management process completed

Management of non-compliances provides an opportunity to detect deviations in the ways a task is performed in the production of a human biological product, to assess and document the associated risks and take any corrective actions required.

Simplification of the non-compliance management process was finalized this past year. Not only has the system in place been standardized and optimized, it will now ensure better trend monitoring, as well as improved risk management. The new computerized process was implemented in October and offers a real-time snapshot of problems so that corrective measures can be applied more quickly. Before the overhaul, 65% of documents pertaining to non-compliance management were in print form.

Furthermore, introduction of this new process, which is standardized across the organization, has resulted in 200 fewer non-compliances monthly on average since implementation in comparison with the first seven months of the financial period.

Mapping of processes: simplifying and optimizing

The mapping of processes helps to create a visual representation of the interconnectedness among the organization's various sectors involved in one or more processes. It provides a critical tool for projects in the areas of continual improvement, training and risk analysis.

After mapping the operational processes for all activity sectors in 2016–2017, Héma-Québec finished mapping three other processes this year:

- procurement of goods and services;
- talent acquisition and workforce management; and
- management of computer service requests.

The mapping work completed over the course of the year represents an important first step in simplifying and optimizing operational processes.

Optimizing the workforce planning process

The review of the workforce planning process is specifically intended to:

- plan human resource requirements more efficiently;
- improve the ability to foresee activities and anticipate workforce needs accordingly;
- update processes, methods, practices and technological work tools to better meet needs; and
- increase employee satisfaction and involvement.

The first phase of the project was completed in 2017–2018 and has served to detail needs and confirm the existence of technological solutions to meet them. A benchmarking exercise looking at other organizations and an analysis of existing technological solutions on the market were conducted.

A review of the process was also initiated. This exercise specifically served to detail the long-term integrated planning process the organization wants to implement, as well as the associated business needs that will have to be met by the information solution selected.

Finally, the Board of Directors approved the second phase, during which the process review will continue and the development of computer solutions will commence.

Digital technologies serving partners and employees

Héma-Québec wants to take advantage of the potential of digital technologies in ways that respect the values and expectations of donors and volunteers while benefiting Héma-Québec employees. The organization possesses a network of screens that can be used to connect employees in a new way that complements the intranet. In 2017–2018, this communication system was extended to all facilities.

Screens were also installed in the reception areas at the Montréal and Québec City facilities so that visitors can view information displayed about Héma-Québec. Early in the next financial year, more screens will be installed in all GLOBULE Blood Donor Centres and PLASMAVIE Plasma Donor Lounges, where donors, volunteers and visitors will benefit from better access to information.

New candidate management system

A new candidate management system was implemented in July 2017. This system is a talent management computer solution that supports and optimizes the organization's recruitment process. It enables anyone who is interested to create a personal profile, monitor the processing of submitted applications and create job alerts. Since it was launched, improvements have made the system more user friendly.

GOVERNANCE

BD

Activities and Composition of the Board of Directors and its Committees

MC

Management Committee

I At a glance

Structure of the Board of Directors

- Members appointed by the government
- Four-year term, renewable twice
- 13 members belonging to one or another of the following categories:

  > blood donation donors and volunteers

  > recipients

  > presidents and CEOs and executive directors of a public (health) institution

  > physicians

  > public health community

  > scientific research community

  > business community

  > *Ordre des comptables professionnels agréés du Québec*

  > Héma-Québec (President and Chief Executive Officer)

Independence and remuneration of members

All members of the Board of Directors are independent of Héma-Québec except for the President and CEO of Héma-Québec.

The members of the Board of Directors are not remunerated.

They may be compensated for actual loss of salary or revenues (in accordance with the provisions of a government decree) resulting from their attendance at Board of Director or other meetings.

Parity and diversity

including 2 members of cultural communities

Meetings in 2017–2018

8

BOARD OF DIRECTORS MEETINGS

including 1 special meeting and 1 joint meeting with the Management Committee

35

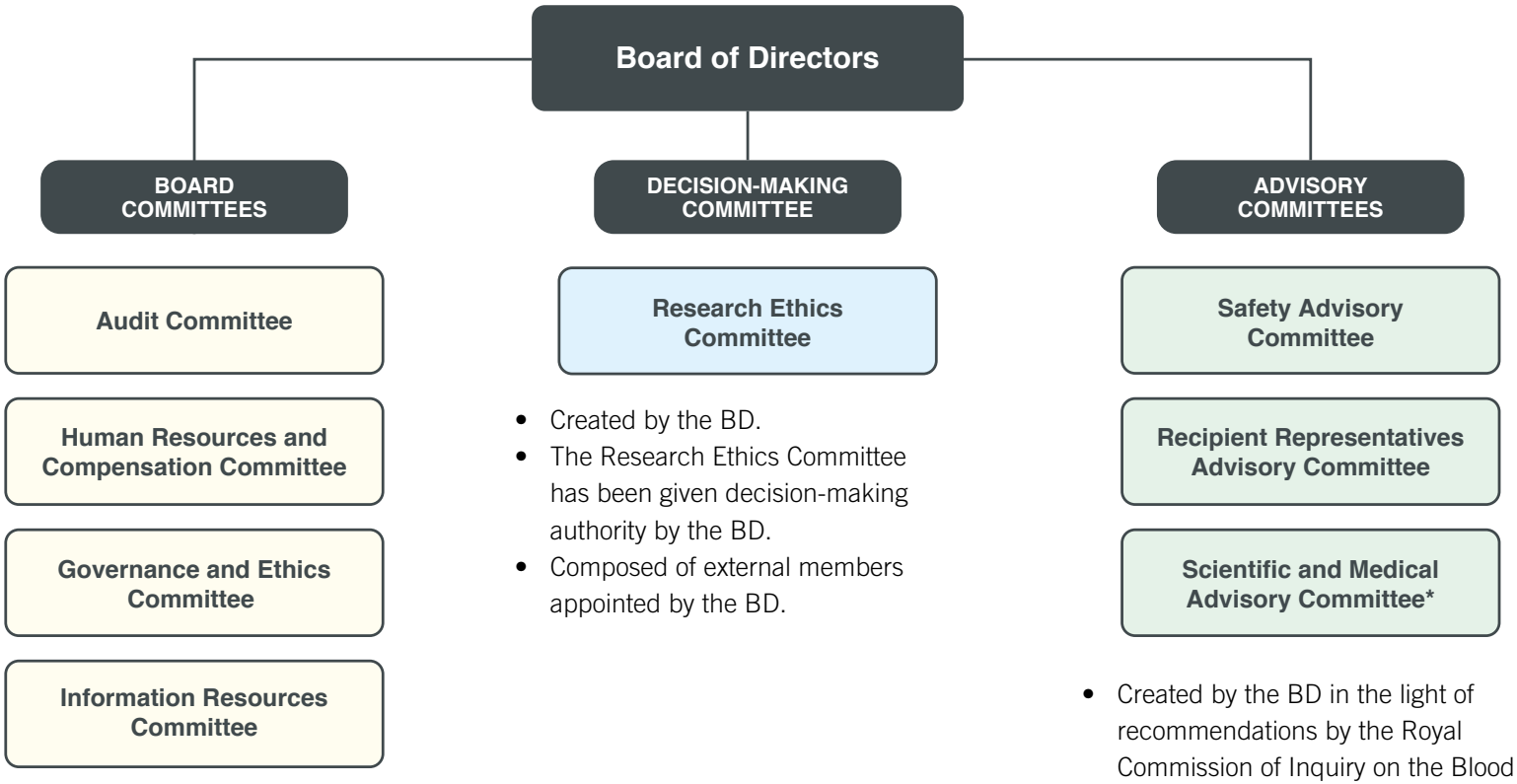
MEETINGS OF BOARD OF DIRECTORS COMMITTEES

including 6 special meetings

The attendance rate at Board of Director and committee meetings was

87.6%

Organizational chart of the Board of Directors and its committees



- Created by the BD.
- Composed exclusively of directors, except for the Information Resources Committee, which also includes external experts.

- Created by the BD.
- The Research Ethics Committee has been given decision-making authority by the BD.
- Composed of external members appointed by the BD.

- Created by the BD in the light of recommendations by the Royal Commission of Inquiry on the Blood System in Canada (Krever Report).
- Composed of external members appointed by the BD.
- Report to the BD and make recommendations concerning their specific field of expertise.

* Because of Héma-Québec's ongoing review of research governance, activities of the Scientific and Medical Advisory Committee have been suspended.

ACTIVITIES AND COMPOSITION OF THE BOARD OF DIRECTORS AND ITS COMMITTEES

Changes in senior management

Serge Maltais, former President and CEO, left Héma-Québec at the start of the year. Following his departure, the Board of Directors (BD) appointed Smaranda Ghibu, Vice-President, Public Relations and General Secretariat, Acting President, and Luc Vermeersch, Vice-President, Finance and Strategic Project Management, Acting Chief Executive Officer.

At the same time, the BD initiated a recruitment process for the position of President and CEO. A selection committee, composed of members of the BD and supported by an executive recruitment firm, was set up. At the end of this process, the committee presented a recommendation to the BD, which will appoint the selected candidate.

Composition of the Board of Directors

Four new members of the BD were appointed by the government in 2017–2018: Anne Bourhis, Dr. Patricia Pelletier, Dr. Patricia Hudson and Caroline Banville. These directors replaced members whose term had expired.

Members stepping down in 2017–2018 were Michèle Beaupré Bériau, Christine Beaubien, René Carignan and Daniel Beaupré.

The membership of the BD is set out in the table on page 94.

The Governance and Ethics Committee continued to work with groups and associations to find candidates who fit the target skill profiles established by the Board of Directors. The goal is to maintain a proper balance of experience and expertise on the Board, based on the organization's activities, as well as to ensure the representation of:

- the various groups in the transfusion chain, pursuant to the *Act respecting Héma-Québec and the Biovigilance Committee*; and
- the diversity of the Québec population.

More specifically, in 2017–2018 these efforts were aimed at preparing files for the government in view of filling a position in the scientific research category.

Strategic plan

At the annual joint meeting of the BD and Management Committee held in January 2018, the status of objectives for 2017–2018 was discussed in detail. The many changes that occurred during this transformational year are one of the main reasons for changes to priorities. As a result, timelines for achieving certain objectives (targets) were revised and the BD decided, together with senior management, to add two years to the current plan.

At the same meeting, the 2018–2019 objectives were reviewed in detail. Changes were proposed in keeping with status reports.

Transformation

The BD and its committees (more specifically, the Human Resources and Compensation Committee) participated actively in the process leading to the development of the new organizational structure described on pages 76 and 77 of this annual report.

Furthermore, a special committee (composed of members of the BD and senior management) met at various key stages to provide support for this ambitious project.

The new structure was thus approved by the BD at its meeting in October 2017. Its deployment was then announced to employees in November 2017.

Integrated risk management

In November 2017, a strategic discussion of integrated risk management took place at a meeting of the Audit Committee specially dedicated to this matter in view of a joint meeting of the BD and Management Committee.

At that meeting, held in January 2018, discussion focused primarily on the risk management framework (philosophy, principles and risk tolerance, including an evaluation grid for each risk category). The roles and responsibilities of the BD and the Management Committee, as well as governance rules, were also discussed.

It was agreed that the Audit Committee would retain overall responsibility for risk management, while other committees would monitor risks pertaining to their sphere of action (human resources, information technology, etc.).

Once approved by the BD, the main concepts were reworked in the form of a policy, which was approved by the BD in February 2018. This policy will be monitored frequently at various BD meetings.

Members of the Board of Directors

RECIPIENTS

Martine Carré
Chair
Corporate Director
Leucan Member

BUSINESS COMMUNITY

Jean-Frédéric Lafontaine Atty
Vice-Chair
Director, Government Relations – Québec
AstraZeneca Canada Inc.

HÉMA-QUÉBEC

Smaranda Ghibu Atty
Secretary
Acting President
Héma-Québec

COLLÈGE DES MÉDECINS DU QUÉBEC

Dr. Jean-Marie Leclerc
Hematologist-Oncologist
Centre hospitalier universitaire Sainte-Justine

Dr. Patricia Pelletier
Director of Transfusion Medicine Service
Centre universitaire de santé McGill

SCIENTIFIC RESEARCH COMMUNITY

Anne Bourhis
Full Professor
Department of Human Resources Management
HEC Montréal

PUBLIC HEALTH

Dr. Patricia Hudson

Scientific Director
Direction des risques biologiques et de la santé au travail
Institut national de santé publique du Québec

PRESIDENTS AND CEOS AND EXECUTIVE DIRECTORS OF PUBLIC INSTITUTIONS*

Caroline Barbir

President and General Manager
Centre intégré de santé et de services sociaux de Laval

DONORS AND VOLUNTEERS

Wilson Sanon

President, Founder and Executive Director
Association d'anémie falciforme du Québec

BIOVIGILANCE COMMITTEE OBSERVER

Vacant

BUSINESS COMMUNITY

Caroline Banville

Partner
Consulting and Deals
PricewaterhouseCoopers

Pierre Thivierge, CPA, CA

President, Octium Solutions Inc.
Chief Financial Officer,
Quadra Chimie ltée

ORDRE DES COMPTABLES PROFESSIONNELS DU QUÉBEC

Cindy Dumas-Lavergne, CPA, CA

Internal Auditor
Société québécoise des infrastructures

* Within the meaning of the *Act respecting health services and social services.*

Board Committees

EXECUTIVE COMMITTEE

Martine Carré, Chair of the Board of Directors

Jean-Frédéric Lafontaine Atty, Vice-Chair of the Board of Directors

Smaranda Ghibu Atty, Secretary of the Board of Directors

Pierre Thivierge, CPA, CA, Director

Dr. Jean-Marie Leclerc, Director

GOVERNANCE AND ETHICS COMMITTEE

Jean-Frédéric Lafontaine Atty, Chair

Martine Carré

Wilson Sanon

Dr. Patricia Hudson

AUDIT COMMITTEE

Pierre Thivierge, CPA, CA, Chair

Dr. Jean-Marie Leclerc

Jean-Frédéric Lafontaine Atty

Cindy Dumas-Lavergne, CPA, CA

HUMAN RESOURCES AND COMPENSATION COMMITTEE

Anne Bourhis, Chair

Martine Carré

Caroline Barbir

INFORMATION RESOURCES COMMITTEE

DIRECTOR MEMBRES	**Caroline Banville,** Chair
	Martine Carré
	Cindy Dumas-Lavergne, CPA, CA
EXTERNAL MEMBRES	**Michèle Bureau** **Consultant, Information Technology and Electronic Affairs** *Bureau et Associés inc.*
	Robert Charbonneau Consultant, Information Technology

Advisory Committees

RECIPIENT REPRESENTATIVES ADVISORY COMMITTEE

Fields represented	Members
COCQ-SIDA	*Chair* **Michel Morin**
ASSOCIATION DES PATIENTS IMMUNODÉFICIENTS DU QUÉBEC	**Martine Allard**
	Geneviève Solomon
SOCIÉTÉ CANADIENNE DE L'HÉMOPHILIE – SECTION QUÉBEC	**Marius Foltea**
	Pascal Mireault
CANADIAN TRANSPLANT ASSOCIATION	**Karina Prévost**
ASSOCIATION D'ANÉMIE FALCIFORME DU QUÉBEC	**Delano George**
LEUCAN	**Pierre Verret**
MUSCULAR DYSTROPHY CANADA	**Marie-Hélène Bolduc**
ASSOCIATION DES GRANDS BRÛLÉS	**Éric Claveau**
LEUKEMIA & LYMPHOMA SOCIETY OF CANADA	**Pascale Rousseau**
BOARD OBSERVERS	**Martine Carré**
	Wilson Sanon

SAFETY ADVISORY COMMITTEE

Fields represented	Members
PUBLIC REPRESENTATIVE	*Chair* **David Page** National Director of Health Policy *Société canadienne de l'hémophilie,* Montréal, Canada
INFECTIOUS DISEASES	**Dr. Susan Stramer** Vice-President of Scientific Affairs Biomedical Services American Red Cross, Gaithersburg, United States
	Dr. Hans L. Zaaijer Professor, Medical Microbiology Sanquin Blood Supply Foundation, Academic Medical Centre, Amsterdam, Netherlands
	Dr. Louis M. Katz Chief Medical Officer America's Blood Centers, Washington, United States
	Dr. Jutta Preiksaitis Professor of Medicine, Division of Infectious Diseases University of Alberta, Edmonton, Canada
EPIDEMIOLOGY	**Dr. Steven Kleinman** Biomedical Consultant Victoria, Canada
TRANSFUSION MEDICINE AND PRACTICES	**Dr. Luiz Amorim** President and Chief Executive Officer Hemorio, Rio de Janeiro, Brazil
	Dr. Rebecca Cardigan National Head of Component Development NHS Blood and Transplant, Cambridge, United Kingdom
	Dr. James P. AuBuchon President and Chief Executive Officer Bloodworks Northwest, Seattle, United States
	Dr. Reinhard Henschler Medical Director Swiss Red Cross Blood Centres, Zurich and Chur, Switzerland
	Dr. Pierre Tiberghien Professor of Medicine, Immunology Senior Advisor for Medical and Scientific Affairs, Europe and International *Établissement français du sang,* La Plaine Saint-Denis (Paris), France
CANADIAN BLOOD SERVICES	**Dr. Margaret Fearon** Medical Director, Medical Microbiology Canadian Blood Services, Toronto, Canada
REPRESENTATIVE OF THE RECIPIENT REPRESENTATIVES ADVISORY COMMITTEE	**Marius Foltea** *Société canadienne de l'hémophilie, section Québec,* Montréal, Canada
BOARD OBSERVER	**Dr. Patricia Pelletier** Director of Transfusion Medicine Service *Centre universitaire de santé McGill*, Montréal, Canada

RESEARCH ETHICS COMMITTEE

Fields represented	Members
LAW	**Geneviève Cardinal Atty** Head of the Research Ethics Office Chair of the Research Ethics Committee, C*entre hospitalier universitaire Sainte-Justine,* Montréal, Canada
LAW, SUBSTITUTE LEGAL EXPERT	**Mélanie Champagne Atty** Lawyer Borden Ladner Gervais, Montréal, Canada
RESEARCH FIELD SPECIALISTS	*Chair* **Clermont Dionne** Full Professor Rehabilitation Department Faculty of Medicine, *Université Laval* Researcher *Centre de recherche du CHU de Québec – Université Laval* Population Health and Optimal Health Practices, Québec, Canada
	Michel Vincent Associate Professor Department of Molecular Biology, Medical Biochemistry and Pathology Institute for Integrative Systems Biology, Faculty of Medicine, *Université Laval,* Québec, Canada
	Jacques J. Tremblay Full Professor Department of Obstetrics, Gynecology and Reproduction Faculty of Medicine, *Université Laval* Researcher *Centre de recherche du CHU de Québec – Université Laval,* Reproduction, Mother and Child Health, Québec, Canada
BLOOD DONORS	**Pierre McDuff** Founding Member *Association des bénévoles du don de sang,* Montréal, Canada
RECIPIENT REPRESENTATIVES ADVISORY COMMITTEE, ETHICIST	**Michel Morin** Assistant Director COCQ-Sida, Montréal, Canada
SUBSTITUTE ETHICIST	**Johane de Champlain Atty** Vice-Chair and Ethics Advisor *Comité central d'éthique de la recherche (MSSS),* Montréal, Canada

MANAGEMENT COMMITTEE

Smaranda Ghibu Atty

Acting President

Vice-President, Public Relations and General Secretariat

Luc Vermeersch, CPA, CA

Acting Chief Executive Officer

Vice-President, Finance and Strategic Project Management

Acting Vice-President, Supply Chain

Annie Gingras

Vice-President, Quality and Regulatory Affairs

Acting Vice-President, Innovative Biological Products and Reference Laboratories

François Janelle

Acting Vice-President, Information Technology

Luc Lévesque

Vice-President, Labile Blood Products

Acting Vice-President, Donor Experience

Dr. Marc Germain

Vice-President, Medical Affairs and Innovation

Acting Vice-President, Innovative Biological Products and Reference Laboratories

Roselyne Zombecki

Vice-President,
Human Resources

LEGISLATIVE REQUIREMENTS

Compliance with Laws

Directors' Code of Ethics

COMPLIANCE WITH LAWS

Sustainable Development Act

The organizational action plan set out in the Government Sustainable Development Strategy 2015–2020 is structured around the following directions and objectives:

Government direction 1–Strengthen sustainable development governance throughout the civil service

- **Objective 1.1**–Strengthen the use of ecoresponsible management practices in the public administration
- **Objective 1.2**–Strengthen the use of the principles of sustainable development by government ministries and public bodies
- **Objective 1.5**–Strengthen access to and participation in cultural life as a lever for social, economic and land development

Government direction 2–Sustainably develop a prosperous economy: green and responsible

- **Objective 2.1**–Support the development of green and responsible business practices and models

Government direction 5–Improve public health through prevention

- **Objective 5.2**–Act to ensure that living environments are healthy and safe

Government direction 6–Ensure sustainable land development and support community vitality

- **Objective 6.2**–Strengthen community capabilities to support dynamic economic and social land development

Some of the objectives in the government strategy have not been included in the sustainable development plan as they are not applicable to Héma-Québec's situation. The plan's objectives are prioritized in order to optimize actions that can contribute to realizing the government's objectives. The following table identifies actions in the plan and the ensuing results.

Integrating volunteers into the plasma donation recruitment program is part of the sustainable action plan.

	ACTIONS BY HÉMA-QUÉBEC	RELATED OBJECTIVES	MEASUREMENT POINTS	RESULTS
1	Optimize deliveries to hospitals in connection with the opening of PLASMAVIE Lounges	1.2 6.2	• Number of deliveries	• No change from last year.
2	Promote carpooling	1.2	• Number of users • Number of carpoolers registered	• 80 employees registered for carpooling.
3	Continue the annual distribution of trees and plants	1.2 1.5 6.2	• Number of sites that participated • Number of persons who participated	• More than 1,500 plants distributed to about 500 employees in all the organization's facilities (10).
4	Maintain and develop tools for working remotely	1.2	• Number of training sessions • Number of participants	• Continuance of measures implemented in 2016–2017: > Videoconference rooms set up to meet organizational needs, reducing GHG emissions associated with travel for meetings. > The Campus eLearning platform is now being used for all regular training courses (six times annually), and blood drive staff (approximately 400 people) can access it from home. Certificates for these courses are issued electronically. > Knowledge acquisition for all staff members who have to follow regulatory procedures (about 800 people) can be validated online.
5	Add contractual clauses incorporating sustainable development principles into calls for tenders and contracts	1.2 2.1	• Number of calls for tenders and contracts affected	• About ten contracts include specific clauses pertaining to ecological concerns and sustainable development. • Recovery, recycling or ecological disposal of electronic equipment.
6	Promote the use of hybrid and electric vehicles	1.2 2.1	• Use of electric and hybrid vehicles	• Addition of a new hybrid vehicle to the fleet. • Electric and hybrid vehicles in Héma-Québec's fleet travelled 132,941 km. • Ongoing analysis to assess the feasibility of installing electric vehicle charging stations in the parking lots of the various facilities.
7	Minimize the expiry of blood products	1.2 6.2	• Internal expiry rate • Follow-up and awareness raising among hospital clients	• Expiry rate: > Red blood cells: down from 0.05% in 2016–2017 to 0.03% in 2017–2018. > Platelets: up slightly from 2.4% in 2016–2017 to 2.7% in 2017–2018.

	ACTIONS BY HÉMA-QUÉBEC	RELATED OBJECTIVES	MEASUREMENT POINTS	RESULTS
8	Continue efforts towards becoming a paperless company	1.2	• Amount of paper for recycling/trash	• Implementation of a computerized system to manage non compliances. • Amount of materials recycled at the Montréal* facility unchanged: > Cardboard: 27.5 metric tons (mt) > Paper: 7.8 mt > Plastic: 1.5 mt *Data not available for other facilities.
9	Encourage alternative methods to individual car transport	1.2 2.1	• Number of participants	• Approximately 10% of employees (147) subscribe to public transit incentive programs.
10	Continue photography courses and review the display concept	1.5	• Number of participants • Report for each of the events	• Exhibition displayed at the organization's ten facilities.
11	Develop local partnerships in connection with PLASMAVIE Lounges	1.5 6.2	• Number of jobs created • Number of local suppliers	• Locally outsourced improvements to premises as part of the initiative to perform freezing and labelling onsite. • Recruitment efforts and organization of activities with the community.
12	Maintain the annual influenza vaccination program for staff	5.2	• Number of employees vaccinated	• 300 employees vaccinated on a voluntary basis in all the organization's facilities.
13	Update the program for reimbursement of expenses related to physical activity and sporting events	5.2	• Number of employees participating	• 118 people received a partial refund for physical activity expenses. • 36 people received a refund for participation in one or more sporting events.
14	Continue training on the principles of the *Sustainable Development Act*	6.2	• Number of training sessions and presentations	• Employees provided with publications aimed at reinforcing eco-responsible behaviours and promoting the activities of the green committee in relation to the sustainable development action plan.
15	Include volunteers in the plasma donation recruitment program	6.2	• Number of participants	• More than 150 volunteers contributed to the program locally.
16	Maintain the commitment of mobile blood drive organizing committees to serve the mission of Héma-Québec	6.2	• Number of blood drives organized with their collaboration	• 2,416 mobile blood drives organized in partnership with organizing committees.

Act respecting the Ministère du Conseil exécutif

The directors of Héma-Québec are held to the highest ethical and professional standards, thereby fostering and preserving public trust and transparency in the management of Québec's biovigilance system.

Under the *Regulation respecting the ethics and professional conduct of public office holders,* Héma-Québec directors adopted a governance framework and director code of ethics in 1999. It is reviewed annually by the Governance and Ethics Committee, and the directors sign a form every year attesting that they undertake to comply with it.

Lastly, the directors' declarations of interests are verified at the beginning of every Board or committee meeting and included in the minutes. Furthermore, no case has ever been brought forward under the director code of ethics, and no breach of conduct was reported in 2017–2018.

The director code of ethics for Héma-Québec can be consulted on page 115.

Regulation respecting the distribution of information and the protection of personal information

Pursuant to division III of the *Regulation respecting the distribution of information and the protection of personal information,* Héma-Québec attests to having published the required documents and information on its website.

Requests for acces to information

In 2017–2018, 11 requests for access to documents held by Héma-Québec and 13 requests for access to personal information or corrections were received. All of the requests were processed within the time frame prescribed by the *Act respecting access to documents held by public bodies and the protection of personal information.*

PROCESSING REQUESTS FOR ACCESS TO INFORMATION

Nature of the request	Processing time		Decision rendered	
Administrative documents	0 to 20 days	5	Accepted (in whole)	9
	21 to 30 days	6	Accepted (in part)	1[1]
	31 days or longer	0	Refused (in whole)	1[1]
			Other	0
	Total	11	Total	11
Personal information	0 to 20 days	12	Accepted (in whole)	7
	21 to 30 days	1	Accepted (in part)	5[1]
	31 days or longer	0	Refused (in whole)	0
			Other	1[2]
	Total	13	Total	13
Correction	0 to 20 days	0	Accepted (in whole)	0
	21 to 30 days	0	Accepted (in part)	0
	31 days or longer	0	Refused (in whole)	0
			Other	0
Total number of access requests subjected to reasonable accommodation measures			0	
Number of review notices received from the *Commission d'accès à l'information*			0	

[1] Sections of the Act cited: 21, 29, 53, 54, 57, 59, 67, 88.1.
[2] Sections of the Act cited: 1.

Information Security Committee

The Information Security Committee (ISC) provides support for information security management and coordination activities, specifically by monitoring the measures put in place to ensure the integrity, security and confidentiality of the information collected and held by Héma-Québec. In accordance with the *Regulation respecting the distribution of information and the protection of personal information,* the persons in charge of information security and access to information and personal information sit on the committee. In 2017–2018, new members were added to the Committee to diversify the areas of expertise represented. As a result, the organization has developed a broader understanding of the issues it faces regarding security and the protection of corporate and personal information, as well as better coordination with the government's policy on information security.

Tools were specifically developed to improve information security and raise employee awareness pertaining to governance and cybersecurity alongside the work of the ISC. A training program was also designed to give staff a greater understanding of these matters. Finally, the Committee conducted intrusion tests consistent with best practices in order to validate the security of its industrial park.

Policy on the use and quality of French within the government

In accordance with the *Politique gouvernementale relative à l'emploi et à la qualité de la langue française dans l'administration* (policy on the use and quality of French within the government), the standing committee chaired by the mandatary of the Charter of the French Language ensures the implementation of the language policy within the organization.

Over the past year, the committee developed and made available to employees a new tool intended to encourage the use of good French and standardize terminology across the organization.

Policy for the funding of public services

In accordance with the *Policy for the funding of public services,* information about the Héma-Québec fees to which the policy applies is provided on the following page. Invoicing to parties other than Québec hospitals represents less than 0.05% of the organization's total budget.

INVOICING OTHER THAN TO QUÉBEC HOSPITALS (thousands of dollars)	REVENUES	COSTS	FUNDING LEVEL ACHIEVED
Labile and stable product sectors	425	484	88%
Innovative product sectors (human tissues and stem cells)	1,427	1,425	100%

As a not-for-profit organization, Héma-Québec targets a funding level of 100%. This was met for stable and innovative products, whereas labile products fell a bit short. The gap is fully explained by the sale of granulocytes, for which the actual collection cost proved higher than the amount budgeted.

Héma-Québec fees are revised on April 1 of each year and indexed based on budgeted expenses and volumes. Fees are set for each sector.

Labile products

Héma-Québec employs an activity-based accounting model to determine production and distribution costs, which are used to set fees (covering the full cost) for each labile product. The fees are submitted for approval to SigmaSanté, the joint procurement management organization designated by the *ministère de la Santé et des Services sociaux.*

Stable products

Héma-Québec uses full cost-plus pricing to set the fees for stable products invoiced to parties other than Québec hospitals.

Héma-Québec acts as the distributor of these products. The organization purchases products through calls for tenders and manages the reserve. Several suppliers are in the United States, and so purchases are subject to variations in the exchange rate.

Innovative products (human tissues and stem cells)

For other sectors, fees are primarily set by the market, since Héma-Québec does not have exclusive rights to their distribution in Québec.

Act respecting workforce management and control within government departments, public sector bodies and networks and state-owned enterprises

The *Act respecting workforce management and control within government departments, public sector bodies and networks and state-owned enterprises* was adopted by the National Assembly in December 2014 to strengthen the mechanisms for managing and controlling the workforces of public organizations. Héma-Québec certifies that it has complied with the provisions of the act to which it is subject. In particular, in accordance with the prescribed conditions and terms, it submitted to the *Conseil du trésor* the required information regarding authorized service contracts.

SERVICE CONTRACTS VALUED AT $25,000 OR MORE

	Number	Value
Service contracts with a physical person	4	$245,000
Service contracts with a party other than a physical person	13	$753,055
Total service contracts	17	$998,055

Héma-Québec also periodically informed the Minister of Health and Social Services about its number of employees, providing a breakdown per job category, in accordance with the terms established by the *Conseil du trésor.*

The target set for Héma-Québec for 2017–2018 represented a 0.2% decrease in paid hours compared with 2014–2015.

Certain investments in the health and social services network announced during the fiscal year may have had additional unforeseen impacts on the staffing of institutions and contributed, in some cases, to overruns in staffing targets set by the Minister of Health and Social Services.

Héma-Québec reports a 6% increase in paid hours compared with the 2014–2015 target. The gap between the target and actual paid hours for 2017–2018 is attributable to the workforce increase (specifically in PLASMAVIE Plasma Donor Lounges), which is part of the self-sufficiency strategy.

STAFFING BREAKDOWN BY PAID HOURS FOR THE PERIOD FROM APRIL 1, 2017, TO MARCH 31, 2018

Category	Values observed	Hours worked	Overtime hours	Total hours paid	Full-time equivalent	Number of employees as of March 31
Managerial staff	2014–2015	286,780	10	286,790	158	164
	2017–2018	304,747	5	304,752	167	170
Professional staff	2014–2015	361,515	3,806	365,321	199	221
	2017–2018	383,588	2,044	385,631	211	216
Nursing staff	2014–2015	309,742	17,586	327,328	170	234
	2017–2018	382,712	10,546	393,257	210	259
Office staff, technicians and related workers	2014–2015	988,086	39,556	1,027,642	543	632
	2017–2018	1,021,020	30,150	1,051,170	561	633
Labourers, maintenance and service staff	2014–2015	118,199	9,156	127,355	65	70
	2017–2018	117,090	11,689	128,779	64	69
Students and trainees	2014–2015	419	5	424	–	–
	2017–2018	1,584	9	1,593	1	–
TOTAL*	**2014–2015**	**2,064,741**	**70,118**	**2,134,859**	**1,134**	**1,321**
	2017–2018	**2,210,741**	**54,442**	**2,265,183**	**1,214**	**1,347**
	Variance	**7.1%**	**-22.4%**	**6.1%**	**7.1%**	**2.0%**

* Totals may be off by plus or minus 1 due to rounding.

Act to facilitate the disclosure of wrongdoings relating to public bodies

Public confidence in Héma-Québec is based not only in the organization's ability to distribute human biological products that are safe and of high quality, but also in every action taken and decision made. The organization's integrity depends on sound financial management and the application of organizational values (integrity/honesty, respect, accountability and commitment).

To earn that confidence and comply with the *Act to facilitate the disclosure of wrongdoings relating to public bodies,* Héma-Québec has adopted a policy on the disclosure of wrongdoings, which replaces the policy on reporting financial irregularities and environmental incidents previously in effect. The goal of the new policy is to encourage and facilitate the disclosure of wrongdoings relating to Héma-Québec that have been or are about to be committed, while protecting anyone making such a disclosure from reprisals.

Over the past year, no disclosures have been made nor information communicated to the person responsible for following up disclosures.

DIRECTORS' CODE OF ETHICS

Preamble

Héma-Québec's mission is to efficiently provide adequate quantities of safe, optimal blood components and substitutes, human tissues, and cord blood to meet the needs of all Quebecers as well as to provide and develop expertise along with specialized and innovative services and products in the fields of transfusion medicine and human tissue transplantation. This mandate is pursuant to the *Act respecting Héma-Québec and the biovigilance committee* and to the recommendations of the Commission of Inquiry into the Blood System in Canada, headed by the Honourable Horace Krever.

Héma-Québec's directors, who are public administrators in accordance with the *Act respecting the Ministère du Conseil exécutif* (R.S.Q. M-30), are held to the highest ethical and professional standards, thereby fostering and preserving public trust and transparency in its mission.

I Code of Ethics

1. GENERAL PROVISIONS

Definitions

In this code of ethics, unless the context dictates otherwise, the terms and expressions below are used as follows:

1.1 "Director or member of the Board of Directors": Person appointed to the Héma-Québec Board of Directors by the government, as well as the President and Chief Executive Officer, who is an ex officio member of the Board of Directors and acts as Secretary;

1.2 "Conflict of interest": Any real, apparent, potential or future situation in which a director may be inclined to give preference to his or her personal interest, or the interest of a related party, to the detriment of Héma-Québec;

1.3 "Board": Héma-Québec's Board of Directors;

1.4 "Related party": Individuals related by blood, adoption or marriage, or who have been living in a conjugal relationship for at least one year, as well as any organization, partnership or other entity in which the director or his/her friends and family may have a controlling interest.

Application and interpretation

1.5. This code of ethics applies to Héma-Québec's directors.

1.6 The code of ethics is not a substitute for any statutory, regulatory or ethical provision applicable to Héma-Québec directors, including those set out in the *Regulation respecting the ethics and professional conduct of public office holders.* Where such provisions differ, Héma-Québec directors shall abide by the more stringent provision. Moreover, in case of doubt, they must act in the spirit of the principles described in the provisions.

1.7 The code of ethics in no way rules out the drafting of additional guidelines or rules pertaining to certain more specific sectors of activity or situations.

2. MANAGEMENT DUTIES

2.1 Directors are appointed to contribute to the fulfillment of Héma-Québec's mission as part of their mandate. In carrying out their duties, they must adhere to the obligations imposed upon them by the laws, the constitution and the rules and regulations and act within the limits of the power conferred upon them.

2.2 The director must perform his/her duties with care and reserve:

2.2.1 The director must be rigorous and independent, and act in the best interests of Héma-Québec.

2.2.2 The behavior of a director must be impartial.

2.2.3 The director must act within the limits of his/her mandate.

2.2.4 The director must be courteous and his/her relationships must be characterized by good faith so as to maintain the trust and consideration required by his/her role.

2.2.5 The director must not in any way participate in illicit activities.

2.2.6 In the carrying out of his/her duties and responsibilities, the director must make decisions without regard for any partisan political consideration. Moreover, he/she must demonstrate restraint in the public expression of personal opinions in matters directly concerning the activities of Héma-Québec and in which the Board of Directors has been involved.

2.3 The director must act with honesty, loyalty and solidarity:

2.3.1 The director must act with integrity and impartiality in the best interests of Héma-Québec.

2.3.2 The director must actively take part in the development and implementation of the general directions of Héma-Québec, which in no way precludes his or her right to dissent.

2.3.3 The director must be loyal and upstanding to his/her colleagues and honest in his/her dealings with them.

2.3.4 The director must dissociate the fulfillment of his/her duties from the promotion or exercise of his/her professional or business activities, save for the President and Chief Executive Officer, who is at the exclusive service of Héma-Québec.

2.4 The director must act with skill, diligence and efficiency:

2.4.1 The director must exercise his/her skills and abilities, demonstrating diligence and effectiveness in carrying out his/her mandate. He/she must also demonstrate independent professional judgment.

2.4.2 The director is responsible and accountable for all his/her actions taken in the performance of his/her duties.

2.4.3 The director must make informed decisions, taking into account any necessary expertise if need be and considering each file in its entirety.

2.4.4 All members of the Board of Directors must actively participate in the Board's work and attend meetings regularly. They must also be assiduous when taking part in Board committees.

2.4.5 The director must show discernment in the courses of action and choices he/she favors.

2.5 The director must act according to the rules of confidentiality:

2.5.1 The director must respect the confidential nature of any information that comes to his/her attention in the course of his/her duties or by virtue of his/her position.

The first clause is not intended to restrict necessary communications between Board members.

2.5.2 The director must not use confidential information that comes to his/her attention during the course of his/her duties for the purpose of obtaining a direct or indirect advantage, now or in the future, for him/herself or a related party.

3. CONFLICTS OF INTEREST

General provisions

3.1. The director must at all times maintain a high level of independence and avoid any situation in which there could be a personal advantage, direct or indirect, either now or in the future, which could jeopardize his/her independence, integrity or impartiality.

3.2 The director must prevent any conflict of interest or appearance thereof and avoid putting him/herself in a position that could ultimately prevent him/her from fulfilling his/her duties.

3.3 The director must avoid any situation which could compromise his/her capacity to fulfill his/her duties in an impartial, objective, professional and independent manner.

3.4 The director shall not commingle the assets of Héma-Québec with his/her own; he/she shall not use the assets of Héma-Québec for his/her personal gain or the gain of a related party.

3.5 The director may not use Héma-Québec's services or information for his/her personal benefit or for the benefit of a related party.

3.6 The director may not exercise his/her duties in his own interest or in the interest of a related party.

3.7 The director must not accept a current or future advantage from anyone if he/she has knowledge, evidence or reason to believe that this current or future advantage is granted to him/her for the purpose of influencing his/her decision.

3.8 The director shall not make a commitment to a third or related party nor grant that party any guarantee with regard to a vote he/she may be required to cast or to any decision whatsoever that may be made by the Board of Directors.

3.9 The director must avoid any situation in which he/she could be in a conflict of interest. Without limiting the scope of the foregoing, the director:

3.9.1 Is in a conflict of interest when the interests in question are such that he/she may be brought to show preference for some of them to the detriment of Héma-Québec, or where his/her judgment and loyalty could be negatively affected.

3.9.2 Is not independent from a given decision if there is a personal advantage or advantage to a related party, now or in the future, as described in article 3.1.

Preventive measures

3.10 At the start of each meeting, the director must declare any existing conflict of interest to the Chair and ensure the disclosure is recorded in the minutes.

3.11 The President and Chief Executive Officer may not, under penalty of dismissal, have a direct or indirect interest in a corporate body, partnership or other entity which could lead to a conflict of interest between him/herself and Héma-Québec. However, dismissal shall not be invoked if the interest is devolved upon the President and Chief Executive Officer by succession or gift, provided he/she renounces it or disposes of it promptly.

Any other director having a direct or indirect interest in a corporate body, partnership, or other entity which could lead to a conflict of interest between him/herself and Héma-Québec must, under penalty of dismissal, declare this interest in writing to the Chair of the Board and, if need be, abstain from participating in any deliberation or decision related to said corporate body, partnership or other entity in which he/she has an interest. The director must

also withdraw from the meeting for the duration of the deliberations and vote concerning the matter.

3.12 The director must demonstrate impartiality:

3.12.1 The director shall not solicit, accept or demand any gift, favor, other advantage or consideration, for him/herself or a related party, either directly or indirectly, now or in the future, which could compromise his/her independence, integrity or impartiality; such is the case of gifts, favors, advantages or considerations other than what is customary and of modest value.

3.12.2 The director must not award, offer to award or promise to award to a third party a gift, favor or other advantage or consideration that could compromise his/her independence, integrity or impartiality.

4. POLITICAL ACTIVITIES

4.1. Any director who intends to run for public office must inform the Chair of the Board of Directors.

4.2 A Chair of the Board of Directors or President and Chief Executive Officer who wishes to run for public office must tender his/her resignation.

5. POST-MANDATE MEASURES

5.1. After his/her mandate expires, the director must maintain confidentiality and refrain from disclosing any non-public data, information, debate or discussion to which he/she was privy by virtue of his/her position at Héma-Québec.

5.2 In the year following the expiration of his/her mandate, the director may not participate, either on his/her own behalf or that of a third party, in a procedure, negotiation or other operation to which Héma-Québec is a party and with regard to which he/she has information that is not available to the public.

As well, the director must refrain from offering advice based on information that is not publicly available regarding Héma-Québec or another corporate body, partnership or entity with which he/she has had significant direct dealings in the course of the year preceding the conclusion of his/her mandate.

5.3 A director who has relinquished his/her duties must act in such a way so as not to reap undue advantage from his/her previous duties in the service of Héma-Québec.

6. RESPONSIBILITIES AND SANCTIONS

6.1. Compliance with the code of ethics is an integral part of the duties and obligations of directors.

6.2 A director who observes an ethical failure, perceived or real, must inform the Chair of the Board of Directors. If this failure involves the Chair of the Board of Directors, the director must inform the Chair of the Governance Committee.

6.3 The Chair of Héma-Québec's Board of Directors or, in the cases involving him or her, the Chair of the Governance Committee, must investigate to ensure that the code of ethics is respected and applied.

6.4 A director who infringes upon any of the provisions in the code of ethics leaves him/herself open to the sanctions outlined in the Regulation respecting the ethics and professional conduct of public office holders, in accordance with the procedure established in said regulation.

6.5 Héma-Québec's Board of Directors shall revise this code of ethics on an annual basis to ensure that it adequately reflects changes in the laws, rules, regulations and situations specific to Héma-Québec.

6.6 Each director undertakes to sign the code of ethics agreement form appended hereto at the start of his/her mandate and every year thereafter.

This code was adopted by the Board of Directors on May 7, 2014.

FINANCIAL STATEMENTS

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MANAGEMENT'S REPORT

The financial statements of Héma-Québec in this Annual Report were drawn up by Management, which is responsible for their preparation, presentation and the significant judgments and estimates included therein. This responsibility involves the selection of appropriate accounting policies that comply with Canadian Public Sector Accounting Standards. The financial information presented elsewhere in this Annual Report is consistent with that provided in the financial statements.

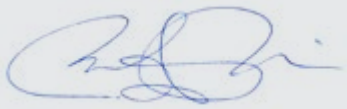
To fulfil its responsibilities, Management maintains a system of internal accounting controls designed to provide reasonable assurance that assets are safeguarded and that transactions are duly approved and properly recorded on a timely basis and in a manner suitable for preparing reliable financial statements.

Héma-Québec recognizes that it is responsible for conducting its affairs in accordance with the statutes and regulations governing it.

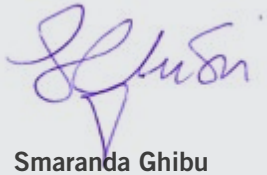
The Board of Directors monitors the manner in which Management carries out its financial reporting responsibilities and approves the financial statements. It is assisted in its responsibilities by the Audit Committee whose members are not part of Management. The Committee meets with Management and the Auditor General of Québec, reviews the financial statements, and recommends their approval to the Board of Directors.

The Auditor General of Québec has audited the financial statements of Héma-Québec in accordance with Canadian generally accepted auditing standards. His independent auditor's report states the nature and scope of the audit and expresses his opinion.

The Auditor General of Québec has full and unrestricted access to the Audit Committee to discuss any matter related to his audit.



Benoit Morin, PhD, MBA
President and Chief Executive Officer
(as of June 4, 2018)



Smaranda Ghibu
Acting President
(until June 3, 2018)
Vice-President, Public Relations
and General Secretariat

Luc Vermeersch, CPA, CA
Acting Chief Executive Officer
(until June 3, 2018)
Vice-President, Finance and
Strategic Project Management

Montréal, June 13, 2018

INDEPENDENT AUDITOR'S REPORT

To the National Assembly

Report on the Financial Statements

I have audited the accompanying financial statements of Héma-Québec, which comprise the statement of financial position as at March 31, 2018, and the statements of operations and accumulated surplus, remeasurement gains and losses, changes in net debt and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information included in the notes to the financial statements.

Management's responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian Public Sector Accounting Standards, and for such internal control as Management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by Management, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Opinion

In my opinion, the financial statements present fairly, in all material respects, the financial position of Héma-Québec as at March 31, 2018, and the results of its operations, its remeasurement gains and losses, changes in its net debt and its cash flows for the year then ended, in accordance with Canadian Public Sector Accounting Standards.

Report on other legal and regulatory requirements

As required by the *Auditor General Act* (CQLR, chapter V-5.01), I report that, in my opinion, the accounting principles in these standards have been applied on a basis consistent with that of the previous year.

For the Auditor General of Québec,

Roch Guérin CPA auditor, CA

Roch Guérin, CPA auditor, CA
Senior Manager

Montréal, June 13, 2018

STATEMENT OF OPERATIONS AND ACCUMULATED SURPLUS FOR THE YEAR ENDED MARCH 31, 2018 (in thousands of dollars)

	2018 BUDGET	2018 ACTUAL	2017 ACTUAL
REVENUES			
Blood products (note 4)	410,532	406,444	410,839
Grants from the Gouvernement du Québec	33,679	28,089	35,559
Innovative products	11,927	10,716	9,955
Interest	191	485	193
Other	3,475	4,822	3,611
	459,804	**450,556**	**460,157**
EXPENSES (note 5)			
Stable products	302,088	264,038	297,833
Labile products	125,298	116,800	117,958
Innovative products	32,418	30,044	31,619
	459,804	**410,882**	**447,410**
OPERATING SURPLUS FOR THE YEAR (before undernoted)	**–**	**39,674**	**12,747**
Transfer of the surplus for the year (note 6)	–	(39,674)	–
Transfer of the prior year's surplus (note 6)	–	(11,343)	(16,977)
Cancellation of cellular production operations (note 6)	–	–	(1,404)
OPERATING SHORTFALL FOR THE YEAR	**–**	**(11,343)**	**(5,634)**
ACCUMULATED OPERATING SURPLUS, BEGINNING OF YEAR		11,343	16,977
ACCUMULATED OPERATING SURPLUS, END OF YEAR		**–**	**11,343**

The accompanying notes are an integral part of the financial statements.

STATEMENT OF REMEASUREMENT GAINS AND LOSSES FOR THE YEAR ENDED MARCH 31, 2018 (in thousands of dollars)

	2018	2017
ACCUMULATED REMEASUREMENT LOSSES, BEGINNING OF YEAR	(1,112)	(13,558)
Unrealized gains (losses) attributable to the following:		
Derivatives	2,079	(1,140)
Exchange rates	123	28
Amount reclassified to operating surplus		
Derivatives	1,140	13,443
Exchange rates	(28)	115
Net remeasurement gains for the year	**3,314**	**12,446**
ACCUMULATED REMEASUREMENT GAINS (LOSSES), END OF YEAR	**2,202**	**(1,112)**

The accompanying notes are an integral part of the financial statements.

STATEMENT OF FINANCIAL POSITION AS AT MARCH 31, 2018 (in thousands of dollars)

	2018	2017
FINANCIAL ASSETS		
Cash and cash equivalents	12,645	3,024
Accounts receivable (note 7)	5,082	8,843
Non-interest bearing advance from the Gouvernement du Québec	–	5,834
Inventories held for sale (note 8)	54,353	56,005
Derivatives	2,079	–
	74,159	**73,706**
LIABILITIES		
Line of credit (note 11)	–	20,006
Accounts payable and accrued liabilities (note 9)	34,064	29,967
Deferred grants from the Gouvernement du Québec (note 10)	5,674	5,563
Non-interest bearing advance from the Gouvernement du Québec	25,742	–
Derivatives	–	1,140
Debt (note 12)	42,674	46,809
Employee future benefit liability (note 13)	11,487	11,095
	119,641	**114,580**
NET DEBT	**(45,482)**	**(40,874)**
NON-FINANCIAL ASSETS		
Tangible capital assets (note 14)	42,107	45,541
Prepaid expenses	3,165	3,314
Supply inventories	2,412	2,250
	47,684	**51,105**
ACCUMULATED SURPLUS	**2,202**	**10,231**
Accumulated operating surplus (note 6)	–	11,343
Accumulated remeasurement gains (losses)	2,202	(1,112)
	2,202	**10,231**
Contractual commitments (note 16)		
Contingencies (note 17)		

The accompanying notes are an integral part of the financial statements.

ON BEHALF OF THE BOARD OF DIRECTORS,

Martine Carré
Chair of the Board of the Directors

Pierre Thivierge, CPA, CA
Chair of the Audit Committee

STATEMENT OF CHANGES IN NET DEBT FOR THE YEAR ENDED MARCH 31, 2018 (in thousands of dollars)

	2018 BUDGET	2018 ACTUAL	2017 ACTUAL
OPERATING SHORTFALL FOR THE YEAR	**–**	**(11,343)**	**(5,634)**
Changes due to tangible capital assets:			
Additions	(13,099)	(5,029)	(5,791)
Amortization	9,692	8,165	8,222
Loss on disposal and write-off	1	298	472
Proceeds on disposal	–	–	13
	(3,406)	**3,434**	**2,916**
Change due to other non-financial assets:			
Acquisition of prepaid expenses		(3,320)	(3,861)
Use of prepaid expenses		3,469	4,164
Acquisition of supply inventories		(17,327)	(17,543)
Use of supply inventories		17,165	18,223
		(13)	**983**
Net remeasurement gains for the year		3,314	12,446
(Increase) decrease in net debt	**(3,406)**	**(4,608)**	**10,711**
NET DEBT, BEGINNING OF YEAR	(40,874)	(40,874)	(51,585)
NET DEBT, END OF YEAR	**(44,280)**	**(45,482)**	**(40,874)**

–

The accompanying notes are an integral part of the financial statements.

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED MARCH 31, 2018 (in thousands of dollars)

	2018	2017
OPERATING ACTIVITIES		
Operating shortfall for the year	(11,343)	(5,634)
Items not affecting cash and cash equivalents		
Amortization of tangible capital assets	8,165	8,222
Effective rate debt adjustment	54	84
Loss on disposal and write-off of tangible capital assets	298	472
Unrealized foreign exchange gain on cash and non-cash working capital items denominated in foreign currencies	95	144
	(2,731)	**3,288**
Changes in assets and liabilities related to operating activities		
Accounts receivable	3,761	3,097
Inventories held for sale	1,652	(8,343)
Accounts payable and accrued liabilities	3,572	(11,729)
Deferred grants from the Gouvernement du Québec	111	4,298
Advance from the Gouvernement du Québec	31,576	(12,069)
Prepaid expenses	149	303
Supply inventories	(162)	680
Employee future benefit liability	392	216
Cash flows related to operating activities	**38,320**	**(20,259)**
CAPITAL ACTIVITIES		
Additions to tangible capital assets	(4,504)	(6,420)
Proceeds on disposal of tangible capital assets	–	13
Cash flows related to capital activities	**(4,504)**	**(6,407)**
FINANCING ACTIVITIES		
Line of credit	(20,006)	20,006
Increase in debt	4,277	15,212
Debt repayment	(8,466)	(17,739)
Cash flows related to financing activities	**(24,195)**	**17,479**
CHANGE IN CASH AND CASH EQUIVALENTS	**9,621**	**(9,187)**
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	3,024	12,211
CASH AND CASH EQUIVALENTS, END OF YEAR	**12,645**	**3,024**
ADDITIONAL INFORMATION		
Interest paid	1,111	1,136
Interest received	455	192
Additions to tangible capital assets funded by accounts payable and accrued liabilities	667	142

The accompanying notes are an integral part of the financial statements.

1. INCORPORATION AND NATURE OF OPERATIONS

Héma-Québec, constituted on March 26, 1998 by letters patent issued under Part III of the *Companies Act* (CQLR, chapter C 38), is continued in accordance with the provisions of the *Act respecting Héma-Québec and the biovigilance committee* (CQLR, chapter H-1.1). Héma-Québec's mission is to efficiently meet the needs of the Québec population for quality blood and other biological products of human origin. Héma-Québec operates in a regulated environment in compliance with the requirements of the *Food and Drug Act* (R.S.C. 1985, c. F-27) and its related regulations. To fulfil its mission, Héma Québec also meets the requirements and regulations of several Canadian and international standards. Under the *Income Tax Act* (R.S.C. 1985, c. 1 (5th Supp.)) and the *Taxation Act* (CQLR, chapter I-3), Héma-Québec is not subject to income taxes.

2. ACCOUNTING CHANGES

Adoption of new accounting standards

On April 1, 2017, Héma-Québec prospectively adopted the following five new standards.

PS 2200, Related Party Disclosures

Section PS 2200 defines a related party and establishes disclosures required for related party transactions. Disclosure of information about related party transactions and the relationship underlying them is required when they have occurred at a value different from that which would have been arrived at if the parties were unrelated, and they have, or could have, a material financial effect on the financial statements.

PS 3210, Assets

Section PS 3210 provides guidance for applying the definition of assets set out in Section PS 1000, Financial Statement Concepts, and establishes general disclosure standards for assets. Disclosure of information about the major categories of assets that are not recognized is required. When an asset is not recognized because a reasonable estimate of the amount involved cannot be made, the reasons for this should be disclosed.

PS 3320, Contingent Assets

Section PS 3320 defines and establishes disclosure standards on contingent assets. Disclosure of information about contingent assets is required when the occurrence of the confirming future event is likely.

PS 3380, Contractual Rights

Section PS 3380 defines and establishes disclosure standards on contractual rights. Disclosure of information about contractual rights is required and should include descriptions about their nature and extent and the timing.

PS 3420, Inter-Entity Transactions

Section PS 3420 establishes standards on how to account for and report transactions between public sector entities that comprise a government's reporting entity from both a provider and recipient perspective.

The adoption of these standards had no impact on Héma-Québec's results or financial position, with any impacts limited to disclosures in the notes to financial statements.

3. SIGNIFICANT ACCOUNTING POLICIES

Basis of accounting

For the preparation of its financial statements, Héma-Québec mainly uses the *CPA Canada Public Sector Accounting Handbook*, with which any other source used in applying accounting policies is required to be consistent.

Use of estimates

The preparation of the financial statements of Héma-Québec in accordance with Canadian Public Sector Accounting Standards requires Management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the recognition of amounts of revenues and expenses for the financial statement reporting period. The main estimates consist of the useful life of capital assets, the valuation of inventories held for sale, the allowance for pay equity, the provision for the removal of cell production activities and the employee future benefit liability. Actual results could differ from Management's best estimates.

Financial instruments

Financial instruments comprise financial assets and liabilities as well as derivatives. Their measurement depends on their classification, as described below.

Cash and cash equivalents	Cost
Trade accounts and other receivables	Cost
Trade accounts payable, salaries and accrued vacation	Cost
Line of credit	Cost
Advance from the Gouvernement du Québec	Cost
Derivatives	Fair value
Debt and accrued interest payable	Amortized cost using the effective interest method

Héma-Québec uses derivative financial instruments to manage currency risk. Unrealized gains and losses on foreign exchange contracts are recognized until the settlement period in the statement of remeasurement gains and losses, and upon settlement, the accumulated balance of remeasurement gains or losses is reclassified as a foreign exchange gain or loss under expenses in the statement of operations and accumulated surplus.

Fair value hierarchy

Financial instruments recorded at fair value are classified using a fair value hierarchy that reflects the significance of the inputs used in making the measurements. The fair value hierarchy requires the use of observable market data whenever available. The fair value hierarchy has the following levels:

Level 1 : The fair value of the instrument is determined using quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: The fair value of the instrument is determined using inputs other than quoted prices included within Level 1 that are observable either directly (i.e., as prices) or indirectly (i.e., derived from prices).

Level 3: The fair value of the instrument is determined using inputs that are not based on observable market data (unobservable inputs).

Derivative financial instruments are classified within Level 2 of the fair value hierarchy (the fair value of derivatives is based on inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices).

3. SIGNIFICANT ACCOUNTING POLICIES (cont'd)

REVENUES

Revenues are accounted for on an accrual basis. Revenues resulting from the sale of products are recognized once all the risks and rewards of ownership have been transferred to clients, while revenues from services are recognized as the services are rendered.

Revenues derived from Gouvernement du Québec grants are recognized in the period where events giving rise to such revenues occurred, provided the grants are authorized and all eligibility criteria, if any, are met. Grants are presented as deferred grants where transferor imposed stipulations create an obligation that meets the definition of a liability. Deferred grants are transferred to revenues as the liability is settled.

EXPENSES

Employee benefit plans

Héma-Québec offers its employees defined benefit pension plans. Contributions are made by both Héma-Québec and plan members. Certain employees also have defined contribution plans. In addition, Héma-Québec provides its employees with certain post-employment benefits reported under "other plans," while providing certain retirees with health and life insurance benefits.

The cost of retirement benefits for the period is actuarially determined using the projected benefit method prorated on service. The cost of retirement benefits is measured using net current period benefit cost, amortization of actuarial gains and losses, and employee future benefit obligation interest expense, less the expected return on plan assets. Plan amendments give rise to a past service cost, which is recognized as an expense in the year of the amendments.

Employee future benefit obligations are actuarially determined using the projected benefit method prorated on services and Management's best estimates as to the expected rate return on plan investments, inflation rate, discount rate, rate of compensation increase, employee retirement ages and assumed health care cost trends.

Assets and expected return on plan assets are valued using a five-year smoothed market value method.

Actuarial gains or losses arise from, in particular, the difference between the actual return on plan assets and the expected return on plan assets, as well as the difference between plan experience and the actuarial assumptions used to determine the employee future benefit obligation, as well as changes to these assumptions. Actuarial gains and losses are amortized over the average expected remaining service life of participating employees.

A valuation allowance is recorded for any excess of the adjusted value of the accrued benefit asset (that is, the value of the accrued benefit asset less unamortized net actuarial losses) over the expected future benefit (that is, any withdrawable surplus or reduction in future contributions).

An employee future benefit asset or liability is presented in the statement of financial position to reflect the difference at year end between the value of employee future benefit obligations and the value of plan assets, net of unamortized actuarial gains and losses and valuation allowance.

3. SIGNIFICANT ACCOUNTING POLICIES (cont'd)

FINANCIAL ASSETS

Cash and cash equivalents

Héma-Québec's policy consists in presenting in the cash and cash equivalents line item bank balances, including bank overdrafts whose balances fluctuate frequently from being positive to overdrawn, as well as the line of credit used to make up cash deficiencies when they are held by the same institution.

Inventories held for sale

Inventories held for sale, consisting of stocks of blood products (labile and stable) and innovative products (cord blood, human tissues and mother's milk), are measured at the lower of cost and net recoverable amount, with cost determined using the average cost method. The net recoverable amount is the estimated selling price less costs to sell.

Foreign currency translation

Foreign currency transactions are accounted for at the average monthly exchange rate. Monetary assets and liabilities denominated in foreign currency are translated at the exchange rate in effect on the statement of financial position date, whereas non-monetary items are translated at the historical average monthly exchange rate. Exchange rate fluctuations give rise to foreign exchange gains or losses that are recognized until the settlement period in the statement of remeasurement gains and losses and, upon settlement, the accumulated balance of remeasurement gains or losses is reclassified as a foreign exchange gain or loss in expenses in the statement of operations and accumulated surplus.

LIABILITIES

Advance from the Gouvernement du Québec

The ministère de la Santé et des Services sociaux (MSSS) annually confirms a budgetary level with Héma-Québec for the acquisition of blood products by hospitals. Héma-Québec therefore records, under Advance from the Gouvernement du Québec, the amounts received from the MSSS, which acts as a third party payor the purchase of labile and stable products on behalf of hospitals. Any payment below the amount from sales of blood products to hospitals becomes an amount receivable from the government, while any payment exceeding the sales of blood products to hospitals is recovered in accordance with a timeline agreed upon between the MSSS and Héma-Québec.

NON-FINANCIAL ASSETS

By their nature, the non-financial assets of Héma-Québec are normally used to provide future services.

Tangible capital assets

Tangible capital assets are recorded at cost, which consists of expenses directly attributable to their acquisition, and amortized on a straight-line basis over their useful lives commencing on the date they are ready for commissioning, using the following periods:

Building, betterment to building and other	from 10 to 25 years
Machinery and automotive equipment	5 and 10 years
Office furniture and equipment	5 and 10 years
Computer hardware and software	3 years
Systems development	5 and 7 years

3. SIGNIFICANT ACCOUNTING POLICIES (cont'd)

NON-FINANCIAL ASSETS (cont'd)

Tangible capital assets (cont'd)

Land and tangible capital assets under construction or development are not amortized.

When conditions indicate that a tangible capital asset no longer contributes to Héma-Québec's ability to provide goods and services, or that the value of future economic benefits associated with the tangible capital asset is less than its net book value, the cost of the tangible capital asset is reduced to reflect the decline in the asset's value. Writedowns are accounted for as expenses for the year in the statement of operations and accumulated surplus and are not subsequently reversed.

INTER-ENTITY TRANSACTIONS

Inter-entity transactions are transactions entered into between entities controlled or subject to joint control by the Gouvernement du Québec.

Assets received for no consideration from a Gouvernement du Québec reporting entity are recognized at their carrying amount. Services received at no cost are not recognized. The other inter-entity transactions were carried out at the exchange amount, which is the amount of the consideration agreed for the item transferred or service provided.

4. BLOOD PRODUCTS

The budgeted prices for all blood products are submitted every year to SigmaSanté, which is the joint procurement group designated by the Minister of Health and Social Services under Division VI of the *Act respecting Héma-Québec and the biovigilance committee*. Following consultations with the Blood System Procurement and Financing Management Committee (PFMC), the budgeted prices are confirmed by SigmaSanté. The PFMC is an advisory committee to the Direction de la biovigilance, which falls under the purview of the Direction générale des services de santé et médecine universitaire. The PFMC's role is to make recommendations on financial and accounting issues relating to the supply of blood products.

(tabular amounts are in thousands of dollars, unless otherwise indicated)

5. EXPENSES

				2018	2017
	STABLE PRODUCTS	**LABILE PRODUCTS**	**INNOVATIVE PRODUCTS**	**TOTAL**	**TOTAL**
Stable products	224,727	–	–	224,727	264,735
Salaries and benefits	5,368	82,573	11,255	99,196	97,983
Medical and blood drive supplies	2,107	22,070	5,961	30,138	31,728
Building and premises	597	9,847	171	10,615	11,149
Amortization of tangible capital assets	965	6,830	370	8,165	8,222
Foreign exchange loss	7,884	36	201	8,121	12,233
Purchase of cord blood, stem cells, labile products and human tissues	–	2	4,923	4,925	5,475
Freight and shipping	80	3,991	710	4,781	4,712
Purchased services	7,508	(8,810)	5,086	3,784	3,438
Advertising and public relations	10	3,251	228	3,489	3,774
Information technology	1	3,315	11	3,327	3,307
Interest on long-term debt	–	977	–	977	1,118
Insurance	–	668	–	668	734
Other interest and bank charges	–	295	27	322	254
Loss on disposal of tangible capital assets	–	298	–	298	53
Other expenses	200	5,112	1,086	6,398	6,362
Subtotal	**249,447**	**130,455**	**30,029**	**409,931**	**455,277**
Plasma for fractionation*	13,399	(13,399)	–	–	–
Change in inventories**	1,192	(256)	15	951	(7,867)
Total	**264,038**	**116,800**	**30,044**	**410,882**	**447,410**

** Some expenses related to plasma extraction are reallocated to stable products based on litres of plasma shipped to the fractionator.*

*** Change in inventories include stable products, plasma for fractionation, labile products, cord blood, human tissues and mother's milk.*

(tabular amounts are in thousands of dollars, unless otherwise indicated)

6. ACCUMULATED OPERATING SURPLUS

As required by the provisions of section 25 of the *Act respecting Héma-Québec and the biovigilance committee,* any funding surpluses resulting from the application of prices are paid into the General Fund of the Consolidated Revenue Fund, unless a prior agreement between the Minister of Health and Social Services and Héma-Québec is entered into on the use of the surplus.

In his letter of December 20, 2017, the Minister of Health and Social Services informed us that, going forward, accumulated surpluses for a fiscal year are to be used to finance the subsequent fiscal year, until such time as the MSSS instructs us otherwise. Accordingly, the $39.674 million surplus for the year was recovered and applied as a reduction of advances to finance the sale of labile and stable products of the next fiscal year.

Héma-Québec also remitted the accumulated operating surplus of $11.343 million as at March 31, 2017, as requested by the Minister of Health and Social Services ($16.977 million in 2017). This recovery is made against the advances to finance the sale of labile and stable products.

In addition, in March 2017, Héma-Québec decided to terminate its cell production activities. The amounts estimated, committed and written off totalled $1.404 million, and are reported separately in the statement of operations and accumulated surplus

7. ACCOUNTS RECEIVABLE

	2018	2017
Commodity taxes	1,643	2,144
Trade accounts receivable	1,910	2,280
Other receivables	1,529	4,419
	5,082	**8,843**

8. INVENTORIES HELD FOR SALE

	2018	2017
Stable products	31,390	36,553
Plasma for fractionation	17,931	14,546
Labile products	3,011	2,870
Cord blood	1,016	1,083
Human tissues	904	932
Mother's milk	101	21
	54,353	**56,005**

9. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

	2018	2017
Trade accounts payable	17,527	14,081
Salaries and accrued vacation	12,769	13,078
Benefits	2,716	1,737
Deferred revenues	981	999
Accrued interest payable	71	72
	34,064	**29,967**

(tabular amounts are in thousands of dollars, unless otherwise indicated)

10. DEFERRED GRANTS FROM THE GOUVERNEMENT DU QUÉBEC

In December 2017, the MSSS authorized Héma-Québec to defer the surplus balance of the grant, to be used only for the purposes intended. The changes are explained as follows:

	2018	2017
Balance, beginning of year	5,563	1,265
Grants awarded	33,763	41,122
Transfer to revenues: Synagis products and other services	(28,089)	(30,859)
Supplementary financing for pension plans	–	(4,700)
MSSS recovery	(5,563)	(1,265)
Balance, end of year	**5,674**	**5,563**

11. CREDIT FACILITIES

Héma-Québec was authorized by the Minister of Health and Social Services to establish a borrowing plan under section 78 of the *Financial Administration Act* (CQLR, chapter A-6.001). Under this borrowing plan, Héma-Québec may borrow over the short term or under credit facilities from financial institutions or the Québec Minister of Finance, as manager of the Financing Fund, and over the long term from said Minister. The authorized amount for the April 1, 2018 to March 31, 2021 period is for requirements not exceeding $94.6 million and the authorized amount for the previous plan ending March 31, 2018 was $94.6 million. The borrowings provided for under these plans serve primarily to fund bank overdrafts, asset acquisitions and renewals, loan renewals and the implementation of product safety improvement projects. Héma-Québec's borrowing terms comprise rates similar or equivalent to Gouvernement du Québec rates. Under this plan, Héma-Québec's line of credit was undrawn as at March 31, 2018 ($20 million drawn down as at March 31, 2017).

Héma-Québec also has a $15 million revolving line of credit with a financial institution under terms that may be changed at the bank's option. As at March 31, 2018 and 2017, this line of credit, which is repayable at any time, was undrawn.

12. DEBT

	2018	2017
Borrowings from the Financing Fund repayable in monthly instalments of 583 (principal only) (602 in 2017), at fixed rates ranging from 1.24% to 3.09% (1.24% to 3.09% in 2017), maturing from 2019 to 2028	29,921	32,574
Borrowings from the Financing Fund repayable in monthly instalments of 124 (principal only) (124 in 2017), at fixed rates ranging from 1.80% to 3.93% (1.80% to 3.93% in 2017), renewable from 2020 to 2023 and maturing from 2024 to 2031	12,753	14,235
	42,674	**46,809**

Assuming renewal under the same terms, principal repayments on debt over the upcoming fiscal years are as follows:

2019	8,105
2020	7,331
2021	5,914
2022	5,206
2023	4,255
2024 and thereafter	11,863

(tabular amounts are in thousands of dollars, unless otherwise indicated)

13. EMPLOYEE FUTURE BENEFIT LIABILITY

Héma-Québec has several funded and unfunded defined benefit plans to ensure that pension, post-retirement and post employment benefits are paid to most employees. The actuarial valuations of the retirement plans were carried out as at December 31, 2015. The employee future benefit obligations shown as at March 31, 2018 and retirement benefit expense for the fiscal year then ended are based on an extrapolation of the latest actuarial valuations.

The defined benefit plans are based on years of service and final average salary. They also provide for partial indexation of pension benefits based on inflation.

The actuarial valuations of the other post-retirement and post-employment benefit plans were carried out as at January 1, 2016. The employee future benefit obligations shown as at March 31, 2018 and retirement benefit expense for the fiscal year then ended are based on an extrapolation of that latest actuarial valuation.

Héma-Québec also has defined contribution plans under which the commitment is limited to the total value of the individual accounts of plan participants.

Actuarial gains and losses are amortized over the expected average remaining service life of active participating employees, which is 11 years for the unionized employee pension plan, 13 years for the non-unionized employee pension plan, 6 years for the supplemental pension plan, 15 years for the extended health and life insurance plans and 2 years for post-employment benefits.

CLASSIFICATION OF EMPLOYEE FUTURE BENEFIT LIABILITY

	2018	2017
Pension plans	4,807	4,519
Other plans	6,680	6,576
Total employee future benefit liability	**11,487**	**11,095**

RECONCILIATION OF FINANCIAL POSITION

	2018		2017	
	PENSION PLANS	**OTHER PLANS**	**PENSION PLANS**	**OTHER PLANS**
Pension plan assets	242,663	–	219,133	–
Employee future benefit obligation	228,178	5,674	212,191	5,614
Financial position surplus (deficit)	**14,485**	**(5,674)**	**6,942**	**(5,614)**
Unamortized actuarial gains	(7,811)	(1,006)	(2,416)	(962)
Valuation allowance	(11,481)	–	(9,045)	–
Employee future benefit liability, end of year	**(4,807)**	**(6,680)**	**(4,519)**	**(6,576)**

(tabular amounts are in thousands of dollars, unless otherwise indicated)

13. EMPLOYEE FUTURE BENEFIT LIABILITY (cont'd)

EMPLOYEE FUTURE BENEFIT OBLIGATION

	2018		2017	
	PENSION PLANS	**OTHER PLANS**	**PENSION PLANS**	**OTHER PLANS**
Employee future benefit obligation, beginning of year	212,191	5,614	192,008	5,852
Current period benefit cost	11,904	3,454	11,318	3,404
Interest expense on obligation	11,246	96	10,315	92
Benefits paid	(7,098)	(3,446)	(7,621)	(3,584)
Actuarial loss (gain)	(65)	(44)	6,171	(150)
Employee future benefit obligation, end of year	**228,178**	**5,674**	**212,191**	**5,614**

PENSION PLAN ASSETS

	2018		2017	
	PENSION PLANS	**OTHER PLANS**	**PENSION PLANS**	**OTHER PLANS**
Pension plan assets, beginning of year	219,133	–	196,163	–
Employer contributions	8,661	–	9,099	–
Employee contributions	5,413	–	5,036	–
Expected return on plan assets	11,799	–	10,751	–
Benefits paid	(7,098)	–	(7,621)	–
Actuarial gain on plan assets	4,755	–	5,705	–
Pension plan assets, end of year	**242,663**	**–**	**219,133**	**–**

MARKET VALUE OF PLAN ASSETS AS AT MARCH 31

	2018		2017	
Bonds	63,708	26%	60,803	27%
Shares	44,652	18%	50,035	22%
Other	135,101	56%	115,403	51%
Total	**243,461**	**100%**	**226,241**	**100%**

ACTUAL RETURN ON PLAN ASSETS

	2018	2017
Expected return on plan assets	11,799	10,751
Actual return on plan assets	16,554	16,456
Actuarial gain on plan assets	**4,755**	**5,705**
Actual rate of return	7.44%	8.25%

(tabular amounts are in thousands of dollars, unless otherwise indicated)

13. EMPLOYEE FUTURE BENEFIT LIABILITY (cont'd)

EMPLOYEE FUTURE BENEFIT EXPENSE FOR THE YEAR

	2018		2017	
	PENSION PLANS	**OTHER PLANS**	**PENSION PLANS**	**OTHER PLANS**
Current period net benefit cost	6,491	3,454	6,282	3,404
Amortization of actuarial losses	575	–	553	–
Change in valuation allowance	2,436	–	3,004	–
Benefit expense	**9,502**	**3,454**	**9,839**	**3,404**
Interest expense on obligation	11,246	96	10,315	92
Expected return on plan assets	(11,799)	–	(10,751)	–
Benefit interest expense	**(553)**	**96**	**(436)**	**92**
Total benefit expense	**8,949**	**3,550**	**9,403**	**3,496**

SIGNIFICANT ASSUMPTIONS

	2018		2017	
	PENSION PLANS	**OTHER PLANS**	**PENSION PLANS**	**OTHER PLANS**
Employee future benefit obligation as at March 31				
Discount rate	5.30%	2.80%	5.30%	2.70%
Rate of compensation increase	3.40%	3.40%	3.40%	3.40%
Inflation rate	2.15%	–	2.15%	–
Benefit expense for the years ended March 31				
Unionized employee plan discount rate	5.30%	2.70%	5.35%	2.50%
Non-unionized employee plan discount rate	5.30%	2.70%	5.45%	2.50%
Expected rate of return on plan assets:				
Unionized employee plan	5.30%	–	5.35%	–
Non-unionized employee plan	5.30%	–	5.45%	–
Rate of compensation increase	3.40%	3.40%	3.45%	3.45%
Demographic factors				
Mortality	CPM-2014 projected using improvement scale CPM-B		CPM-2014 projected using improvement scale CPM-B	

(tabular amounts are in thousands of dollars, unless otherwise indicated)

14. TANGIBLE CAPITAL ASSETS

	2018						
	LAND	BUILDING, BETTERMENT TO BUILDING AND OTHER	MACHINERY AND AUTOMOTIVE EQUIPMENT	OFFICE FURNITURE AND EQUIPMENT	COMPUTER HARDWARE AND SOFTWARE	SYSTEMS DEVELOPMENT	TOTAL
Cost							
Opening balance	2,140	47,440	30,028	4,711	12,833	16,541	113,693
Additions	–	1,703	1,391	46	803	1,086	5,029
Disposals and write-off	–	(230)	(1,189)	(2)	(708)	–	(2,129)
Closing balance*	**2,140**	**48,913**	**30,230**	**4,755**	**12,928**	**17,627**	**116,593**
Accumulated amortization							
Opening balance	–	25,997	18,051	4,174	10,988	8,942	68,152
Amortization for the year	–	2,500	2,523	98	1,131	1,913	8,165
Disposals and write-off	–	(26)	(1,101)	–	(704)	–	(1,831)
Closing balance	**–**	**28,471**	**19,473**	**4,272**	**11,415**	**10,855**	**74,486**
Net book value	**2,140**	**20,442**	**10,757**	**483**	**1,513**	**6,772**	**42,107**

	2017						
	LAND	BUILDING, BETTERMENT TO BUILDING AND OTHER	MACHINERY AND AUTOMOTIVE EQUIPMENT	OFFICE FURNITURE AND EQUIPMENT	COMPUTER HARDWARE AND SOFTWARE	SYSTEMS DEVELOPMENT	TOTAL
Cost							
Opening balance	2,140	47,078	28,086	4,660	12,942	15,232	110,138
Additions	–	801	2,937	105	639	1 309	5,791
Disposals and write-off	–	(439)	(995)	(54)	(748)	–	(2,236)
Closing balance*	**2,140**	**47,440**	**30,028**	**4,711**	**12,833**	**16,541**	**113,693**
Accumulated amortization							
Opening balance	–	23,586	16,470	4,088	10,534	7 003	61,681
Amortization for the year	–	2,541	2,432	108	1 202	1 939	8,222
Disposals and write-off	–	(130)	(851)	(22)	(748)	–	(1,751)
Closing balance	**–**	**25,997**	**18,051**	**4,174**	**10,988**	**8,942**	**68,152**
Net book value	**2,140**	**21,443**	**11,977**	**537**	**1,845**	**7,599**	**45,541**

* The closing balance includes the following tangible capital assets under development:

	LAND	BUILDING, BETTERMENT TO BUILDING AND OTHER	MACHINERY AND AUTOMOTIVE EQUIPMENT	OFFICE FURNITURE AND EQUIPMENT	COMPUTER HARDWARE AND SOFTWARE	SYSTEMS DEVELOPMENT	TOTAL
2018	–	1,151	931	–	176	738	2,996
2017	–	135	1,238	–	154	475	2,002

15. RISK MANAGEMENT AND FINANCIAL INSTRUMENTS

Risk management

In the normal course of its operations, Héma-Québec is exposed to various financial risks, described below. Management assesses these risks and implements strategies to minimize their impact on its performance.

I. Credit risk

Credit risk is the risk that one entity's failure to discharge an obligation under a financial instrument will cause a financial loss for the other party. Héma-Québec is exposed to credit risk resulting from the possibility that parties may default on their financial obligations, where there is a concentration of transactions with a same party or a concentration of third-party financial obligations with similar economic characteristics that would be affected in the same way by future developments. Héma Québec's financial instruments exposed to credit risk include the following line items: cash and cash equivalents, trade accounts receivable and other receivables.

The credit risk associated with cash and cash equivalents is limited as the counterparty is a Canadian chartered bank which is assigned a high credit rating by national rating agencies.

Credit risk arising from trade accounts receivable is limited as they primarily involve public bodies that are Gouvernement du Québec reporting entities. Such receivables are collectible during the following year.

Other receivables primarily include amounts receivable under contractual agreements with suppliers. Credit risk is limited as these receivables are provided for under the contracts and Héma-Québec has met its purchase obligations. These amounts are collectible within 60 days after the end of the fiscal year.

The carrying amount of Héma-Québec financial instruments exposed to credit risk represents the maximum amount of credit risk to which the organization is exposed and totalled $16.1 million ($15.6 million in 2017) in the statement of financial position. None of these financial instruments was impaired and Management estimates that the credit quality of all instruments which have not been impaired or are past due is strong as at the date of the financial statements.

II. Liquidity risk

Liquidity risk is the risk that Héma-Québec will not have the necessary funds to meet a demand for cash or fund its obligations associated with financial liabilities as they come due. Liquidity risk also includes the risk that Héma-Québec will not be able to liquidate its financial assets on a timely basis at a reasonable price.

Héma-Québec actively manages its cash and cash equivalents that arise from its operations and believes it has sufficient liquidity and credit facilities to ensure the necessary funds to meet its current and long-term financial obligations at a reasonable cost, if required. Credit facilities are disclosed in note 11.

(tabular amounts are in thousands of dollars, unless otherwise indicated)

15. RISK MANAGEMENT AND FINANCIAL INSTRUMENTS (cont'd)

II. Liquidity risk (cont'd)

As at March 31, 2018 and 2017, the contractual maturities of the financial liabilities were as follows:

	2018				
	2019	**2020**	**2021 AND THEREAFTER**	**TOTAL**	**CARRYING VALUE**
Trade accounts payable, salaries and accrued vacation	30,296	–	–	30,296	30,296
Advance from the Gouvernement du Québec	25,742	–	–	25,742	25,742
Interest on debt	973	803	2,354	4,130	3,945
Debt	8,105	7,331	27,238	42,674	42,859
Total non-derivative financial instruments	**65,116**	**8,134**	**29,592**	**102,842**	**102,842**

	2017				
	2018	**2019**	**2020 AND THEREAFTER**	**TOTAL**	**CARRYING VALUE**
Trade accounts payable, salaries and accrued vacation	27,159	–	–	27,159	27,159
Line of credit	20,006	–	–	20,006	20,006
Interest on debt	1,032	862	2,805	4,699	4,483
Debt	8,411	7,499	30,899	46,809	47,025
Total non-derivative financial instruments	**56,608**	**8,361**	**33,704**	**98,673**	**98,673**
Derivative financial instruments	1,140	–	–	1,140	1,140
Total finacial instruments	**57,748**	**8,361**	**33,704**	**99,813**	**99,813**

III. Market risk

Market risk is the risk that the market value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk is threefold, comprising interest rate risk, currency risk and other price risk.

Héma-Québec is exposed to interest rate risk and currency risk.

Interest rate risk:

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

Héma-Québec is subject to a cash flow risk with respect to the use of its line of credit bearing interest at a variable rate. Héma-Québec considers it has little exposure to this risk.

Héma-Québec's debt bears interest on a fixed rate basis. Accordingly, Héma-Québec's exposure to interest rate risk related to its cash flows is minimal, as Héma-Québec does not intend to early repay it.

(tabular amounts are in thousands of dollars, unless otherwise indicated)

15. RISK MANAGEMENT AND FINANCIAL INSTRUMENTS (cont'd)

III. Market risk (cont'd)

Currency risk:

In the normal course of operations, Héma-Québec purchases its stable products primarily in U.S. dollars and is therefore exposed to fluctuations in that currency. Héma-Québec has established a currency risk management policy and enters into derivative financial instruments to manage currency risk exposures particularly through foreign exchange contracts. To manage the currency risk related to the purchase of stable products and medical and blood drive supplies, stem cells, cord blood and human tissues, Héma-Québec entered into 26 foreign exchange contracts to cover 90% of its expected foreign currency requirements in an amount of US$156 million at a rate of 1.276 for the period from April 3, 2018 to March 14, 2019 (in 2017, 26 foreign exchange contracts in an amount of US$158.6 million at a rate of 1.337 for the period from April 3, 2017 to March 15, 2018).

As at March 31, 2018, unrealized losses on foreign exchange contracts in the amount of $2 million were recognized in the statement of remeasurement gains and losses (unrealized losses of $1 million as at March 31, 2017) and were measured based on the difference between the foreign currency contract purchase rates and the rate of 1.2894 on quoted prices (unadjusted) in active markets for identical instruments (1.3299 as at March 31, 2017).

The statement of financial position includes the following amounts in Canadian dollars with respect to financial assets and liabilities denominated in foreign currencies:

	2018	2017
U.S. DOLLARS		
Cash and cash equivalents	8,863	455
Trade accounts receivable and other receivables	897	2,604
Trade accounts payable	4,145	1,313
EUROS		
Trade accounts payable	152	61
OTHER CURRENCIES		
Trade accounts payable	8	–

Based on the financial assets and liabilities denominated in foreign currencies held by Héma-Québec as at the date of the financial statements, a 5% change in the U.S. dollar exchange rate (2% in 2017), corresponding to market volatility in the last 12 months, would not have any material effect on the operating surplus or on the remeasurement gains and losses.

(tabular amounts are in thousands of dollars, unless otherwise indicated)

16. CONTRACTUAL OBLIGATIONS

Héma-Québec has entered into long-term leases expiring at various dates over the next 20 years for its operating facilities and administrative premises. In some instances, the leases for premises include renewal options of up to 10 years. The lease expense for the premises for the year ended March 31, 2018 amounted to $3.3 million ($3.6 million in 2017).

Future minimum payments under long-term leases total $37.4 million ($35 million as at March 31, 2017) and are as follows:

2019	3,461
2020	2,991
2021	2,989
2022	2,986
2023	2,885
2024 and thereafter	22,133

17. CONTINGENCIES

Héma-Québec is exposed to various claims and legal actions in the normal course of operations. Management believes that potential outlays arising from those disputes have been sufficiently provisioned and foresees no adverse material effect on the financial position or results of Héma-Québec.

18. RELATED PARTY TRANSACTIONS

Héma-Québec is related to all entities controlled or jointly controlled by the Gouvernement du Québec. It is also related to its key management personnel, their close relatives and to entities for which one or more of these persons have the power to determine the financial and administrative decisions. Key management personnel consists of members of the Board of Directors and Management Committee and the President and Chief Executive Officer of Héma-Québec.

Héma-Québec has entered into no significant transactions with related parties at a value different from that which would have been arrived at had the parties not been related.

19. COMPARATIVE FIGURES

Certain prior-year figures have been reclassified to conform to current-year presentation.

HÉMA-QUÉBEC

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Edition
Laurent Paul Ménard

Coordination, research and writing
Annik Lapierre

Revision
Julie Vaudry

Graphic design
Stanko Josimov

Photos
Marc Couture
Fotografika
Stanko Josimov

Montréal facility
4045, boulevard Côte-Vertu
Saint-Laurent (Québec)
H4R 2W7

Québec City facility
1070, avenue des Sciences-de-la-Vie
Québec (Québec)
G1V 5C3

www.hema-quebec.qc.ca

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