



2013–2014 ANNUAL REPORT

HÉMA-QUÉBEC



BLOOD
PRODUCTS

STEM
CELLS



HUMAN
TISSUES



MOTHER'S
MILK



CELL
PRODUCTION

Beyond blood

HÉMA-QUÉBEC IN NUMBERS...

325,137

Registered blood donors
(whole blood + apheresis)

47,000

Registered stem
cell donors

1,566,038

Individuals registered with the
*Registre des consentements
au don d'organes et de tissus*

16,000

Volunteers

1,292

Employees

Labile blood products
delivered to hospitals

506,163

Stable products
delivered to hospitals

357,060

Human tissues
delivered to hospitals

4,012

55,201

Litres of plasma sent
to fractionation

9,463

Units of cord blood
in the bank

3,321

Analyses performed by the
Reference and Stem Cell
Laboratory

75

Research projects

Number of blood
drives organized

3,551

Organizing
committees

2,081

\$371 MILLION

Annual revenue

MESSAGE

from the Chair of the Board of Directors
and the President and Chief Executive Officer



BEYOND BLOOD

For the first time since it was founded, Héma-Québec has recorded a decrease in the deliveries of labile blood products intended for transfusion. Deliveries of red blood cells and platelets, the two components in highest demand, declined by 5.6% and 3% respectively in 2013–2014.

While this decrease in volumes was foreseeable, it has occurred more quickly and to a greater degree than we had estimated. The trend, which started in the United States following the crisis of 2008, is the result of circumstances that go beyond the economic context alone. New practices in transfusion medicine have also played a significant role.

Despite these difficult circumstances, Héma-Québec has continued making the major changes identified in its *2012–2015 Strategic Plan*. The main objective: to be an efficient and innovative organization while maintaining the highest quality standards. Significant improvements in productivity have allowed us to absorb the costs related to inflation despite lower volumes of labile product orders. Increased collections at the permanent donor centres, adjustments in workforce management and sustained efforts in continuous improvement enabled us to meet this ambitious objective. Increases in workforce and supplier costs have been offset by productivity gains rather than a reduction in services or higher costs for the clients.

The 2012–2015 *Strategic Plan* provides for an increase in volumes or the development of new activities to maintain the current workforce level in a context of increased efficiency. The lower demand for labile products makes this an even greater challenge. Significant actions have therefore been taken to increase the number of collections of plasma for fractionation, a component for which demand is growing. We created a first permanent plasma donor centre in Trois-Rivières, under the banner PLASMAVIE. This centre welcomes the donors since November 2013. This Québec first is also intended to increase the rate of plasma self-sufficiency, which is at 14.5%, while the objective is 30%.

While activities related to blood products remain essential, Héma-Québec's mission goes well beyond blood. The adoption of the *Act to amend the Act respecting Héma-Québec and the haemovigilance committee* in May 2013 confirms this reality. Héma-Québec's framework law allows the government to assign the organization new roles for any human-derived biological product and expand its mandate with regard to stem cells to allow for a rapid response to scientific progress and the needs of Québec patients. The first result of the new legislation was the creation of the first mother's milk bank in Québec.

The organization's experience and know-how acquired as a manufacturer and distributor of human-derived biological products will be put to use to establish this mother's milk bank, which will complement the 45 medical products manufactured or distributed by Héma-Québec to meet the needs of Quebecers.

Every year in Québec, a hundred or so patients receive transplants of stem cells from the bone marrow, peripheral blood or units of umbilical cord blood. Since 2004, Héma-Québec has been operating the first and only Public Cord Blood Bank in Canada. Stem cell-related activities are growing. In 1989, the year the unrelated bone marrow donor registry was established, only 17 donors donated their bone marrow in Canada. Today, in Québec alone and as a result of advances in medical knowledge and growth in the number of donors registered in the Registry, more than one hundred Québec patients receive stem cell transplants

from unrelated donors each year. Héma-Québec's Public Cord Blood Bank has carved out an enviable place for itself on the international scene, ranking 11th worldwide in 2013–2014 as a cord blood exporter.

In terms of human tissues, the new supply system implemented by Héma-Québec, combined with the sustained efforts of all the partners involved, helped to further reduce the number of Quebecers waiting for a corneal transplant. Héma-Québec continued to ensure a sufficient supply of human tissues for Québec hospitals and meet the needs of Québec patients while considerably increasing distributions in the other provinces of Canada in 2013–2014.

Moreover, the development of therapeutic innovations in regenerative medicine is opening up new horizons. Héma-Québec is now firmly committed to manufacturing standardized cell and tissue products for clinical studies. Eventually, Héma-Québec also plans to produce approved cellular medications on a large scale. Cell and tissue products, which are made from stem cells, represent a treatment hope for numerous diseases in neurology, cardiology, oncology, orthopedics, hematology and other fields. Up to now, however, the development of cell therapies in Québec has been hampered by major obstacles. Several cell products cannot be manufactured due to a lack of both production capacity and the financial resources needed to start clinical studies. Héma-Québec intends to overcome this difficulty by making its operational, scientific and regulatory expertise available to Québec stakeholders involved in standardized cell and tissue production. The objective is to accelerate the transition from research to clinical use and to provide medications to Québec hospitals at a lower cost.

In this way, we can deploy our expertise in regulatory affairs, quality management and supply logistics, as well as in donor recruitment and voluntary donation marketing. The environment in which we operate is changing, and our mission and actions are being adapted accordingly.



Martine Carré, MA
Chair of the Board of Directors



Jean De Serres, MD, MSc, MBA
President and Chief Executive Officer



MISSION

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; to provide and develop expertise along with specialized and innovative services and products in the fields of transfusion medicine and human tissue transplantation.

VISION

To excel and innovate for better health.

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INTRODUCTION

Héma-Québec's 2013–2014 annual report covers the financial year ended March 31, 2014.

The first part of this report provides a portrait of the organization. It presents Héma-Québec's mission, vision and administrative organization.

The second part presents the highlights of the year and the context in which its activities took place.

The third part presents the results attained during the second year following the implementation of the *2012–2015 Strategic Plan*.

The fourth part is dedicated to the activities of the Board of Directors, while the fifth part reports on the actions taken in response to legislative and government requirements as well as measures taken with respect to sustainable development.

The sixth part lists the organization's medical and scientific publications and presentations.

Finally, the last section presents the financial statements.



ADMINISTRATIVE ORGANIZATION

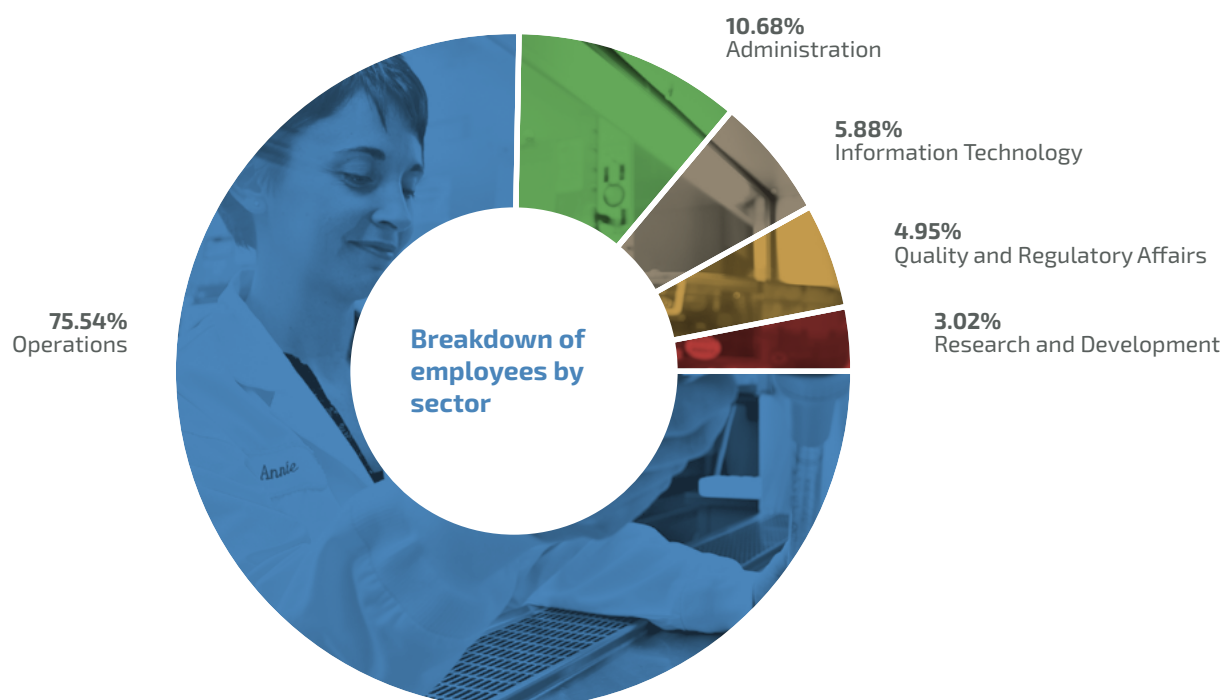
Héma-Québec is a non-profit organization founded in 1998. It is administered by a Board of Directors made up of members who represent all of the stages in the production chain, from donor to recipient. Thus, the Board includes representatives of donors, volunteers, recipients, physicians and hospital administrators, the public health sector, the scientific community and the business community.

In terms of product safety, Héma-Québec is governed by the rules established by Health Canada. In Québec, the blood management system is part of the health system. As a supplier, Héma-Québec is responsible for recruiting donors, collecting blood, testing and processing them and delivering the finished products to hospitals.

Supplying cell and tissue products to the hospitals is also an important component of its mandate. Héma-Québec collects, manufactures and distributes human tissues such as corneas, skin, bones, heart valves and tendons. It is also responsible for the Stem Cell Donor Registry for Québec, including the only Public Cord Blood Bank in operation in Canada, and provides stems cells.

Héma-Québec also established the only Public Mothers' Milk Bank in Québec, whose purpose is to meet the needs of premature newborns. It recruits and screens donor mothers, and then processes and tests the milk, which it will begin distributing to hospitals in April 2014.

Finally, it employs 1,292 people, has two facilities, including a dozen laboratories, and manages four GLOBULE Blood Donor Centres and the PLASMAVIE Plasma Donor Lounge.



CONTEXT AND HIGHLIGHTS

ISSUES AND PRIORITIES

Héma-Québec enjoys international recognition in the life sciences sector. In order to continue to excel and innovate, it must adapt to a constantly changing environment and seize opportunities for development.

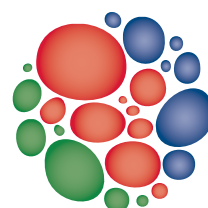
ACT RESPECTING HÉMA-QUÉBEC AND THE BIOVIGILANCE COMMITTEE: EXPANDED MANDATE

On May 28, 2013, the National Assembly adopted Bill 29 modifying the *Act respecting Héma-Québec and the haemovigilance committee*, giving the green light for the creation of the Public Mothers' Milk Bank. Moreover, the new *Act respecting Héma-Québec and the Biovigilance Committee* allows the government to assign Héma-Québec new responsibilities for any human biological product, including the expansion of its mandate with regard to stem cells. This will favor a rapid response to the development of regenerative medicine, specifically in the field of cell production, and the needs of Québec patients. The provisions of the law previously limited the assignment of new responsibilities to Héma-Québec beyond those related to blood and blood derivatives, and human tissues.

C-LAVIE: SPRINGBOARD TO THE PRODUCTION OF CELLULAR MEDICATION

Héma-Québec processes and distributes a wide range of human-derived products, including more than 25 medications prepared from blood, and 17 human tissues and stem cell products. Recent scientific advances suggest, however, that within a few years most of these products could be manufactured from stem cells in a laboratory.

Certain stem cell-based medications from outside Québec are already used in the Québec health network, but they are very expensive. The reality is that the development of cell therapies in Québec is hampered by major obstacles. Several cell products simply do not make it to the large-scale distribution stage due to



c.lavie

a lack of production capacity and the financial resources needed to start clinical trials.

Héma-Québec proposes to overcome this difficulty by making its expertise in the production of biological medications and its scientific and regulatory know-how available to Québec stakeholders, in conjunction with the efforts of Québec and Canadian researchers, and for the benefit of the patients.

In fall 2013, Héma-Québec announced the construction of the C-LAVIE complex on the site of the Michelet innovation space in Québec City. This industrial cell production facility is the cornerstone of the cell production strategy and will fill a void in this field in Canada. This initiative is complementary to the cell therapy research effort in Québec and is a response to the needs that hospitals and patients have for approved products. Through this complex, Héma-Québec will facilitate the development of new products and access to them by the Québec health network.

IMPLEMENTATION OF THE PUBLIC MOTHERS' MILK BANK

The adoption of Bill 29 enabled Héma-Québec to begin the process of implementing a public mother's milk bank for very premature babies hospitalized in Québec. Héma-Québec is the only supplier of blood products in North America to offer a model that includes the management of a mother's milk bank. Neonatology and premature newborn units in Québec will thus



The first PLASMAVIE Plasma Donor Lounge welcomed its first donors in November 2013 in Trois-Rivières.

be able to benefit from its expertise in quality, safety and the production of human-derived biological medications.

The objective of the Public Mothers' Milk Bank is to efficiently provide mother's milk to meet the needs of premature babies born at 32 weeks or less who cannot be breastfed by their mothers. It was established within a very short time frame. Registration of mothers began in February 2014. The goal is to recruit about 300 mothers per year. The distribution of mother's milk to hospitals offering neonatal care is scheduled to start at the end of April 2014.

PLASMAVIE, ANOTHER STEP TOWARD PLASMA SELF-SUFFICIENCY

In 2013–2014, the intravenous polyvalent immunoglobulin (IVIg) sufficiency rate was 14.5%, which means that a volume of plasma collected locally and sent for fractionation was able to meet 14.5% of the need for IVIg in Québec. The missing 85.5% of the volume is manufactured from plasma collected in the United States from paid donors (the law prohibits the compensation of donors in Québec).

From 1998 to 2003, IVIg use has grown an average of 18.2% per year. During the same period, the sufficiency rate went from 27.3% to 13.9%, while the volume of plasma sent for fractionation remained relatively stable at 33,500 litres per year. For the 2003–2014 period, the increased demand continued on a more moderate basis, but still with an average annual increase of 8.3%. As for the sufficiency rate, it averaged out at 16% during this period.

A conference on IVIg organized by Héma-Québec and attended by national and international experts as well as stakeholders,

determined in 2006 that an objective of 30% sufficiency was needed. This rate corresponds to the proportion of use of the product to treat immunosuppressed patients. However, in order to reach and maintain a self-sufficiency rate of 30% in 2020, 200,000 litres of plasma will have to be collected per year.

To accomplish this goal of self-sufficiency, two obstacles will have to be overcome with regard to plasma collection (the very high cost of collecting it and the ability to recruit a large number of unpaid donors), in addition to ensuring the establishment of an IVIg manufacturer in Canada, which Héma-Québec and the Canadian Red Cross have been attempting to do in vain for decades. In the past year, Héma-Québec has been working to attract such a manufacturer to Québec in order to overcome this obstacle.

In order to deal with the challenges of recruiting donors and achieve a competitive cost for the collection of plasma, Héma-Québec has created the first collection centre intended exclusively for the collection of plasma for fractionation. This first PLASMAVIE Plasma Donor Lounge was opened in Trois-Rivières in November 2013.

Five months after its opening, the results are promising: 2,384 collections have been made, surpassing the objective of 2,000 collections that was set for March 31, 2014. Moreover, slightly more than 10% of the donors have already made eight or more donations. The reorganization of the work structure, the contribution from the city of Trois-Rivières and a review of our processes enabled us to considerably reduce the costs and compete with those of imported plasma. Given the success of this pilot project, we plan on establishing several other centres over the next few years.

RISK MANAGEMENT

Optimal safety and quality

Héma-Québec applies rigorous standards in order to earn the trust of the public and its clients. The safety and quality of the products distributed and the services provided are of prime importance. For this reason, it performs systematic, structured and transparent risk management based on the best information available.



The regulatory testing laboratory conducts tests on all blood donations.

LABILE BLOOD PRODUCTS

REVIEW OF THE EXCLUSION CRITERION FOR MEN WHO HAVE HAD SEXUAL RELATIONS WITH OTHER MEN

In May 2013, Health Canada responded favorably to the requests submitted by Héma-Québec and Canadian Blood Services to modify the permanent exclusion from giving blood for any man who has had a sexual relation with another man. On July 22, 2013, the permanent exclusion was changed to a temporary exclusion, in Québec and all other Canadian provinces.

For several years, men wanting to give blood were asked the following question: "Since 1977, have you had sex with another man, even once?" The men who answered "yes" were permanently excluded from giving blood. The modification has reduced the period during which a donor is not eligible to give blood to five years from the date of the last sexual relation with another man.

Recent scientific data and the progress made with respect to transfusion safety have made it possible to review the exclusion policy applied to men who have had sex with another man. Such a change is scientifically justified and does not compromise the very high level of safety of blood products. Moreover, no increase in the number of donations confirmed HIV positive was noted in the months following the implementation of the new criterion (see the table on page 12).

REVIEW OF THE CRITERION CONCERNING THE HEMOGLOBIN LEVEL IN MEN

Hemoglobin, which is found in red blood cells, carries oxygen throughout the body. Since a blood donation results in a loss of red blood cells, a significant loss can cause anemia, namely a reduction of the capacity of the blood to carry oxygen. For this reason, before each donation, Héma-Québec makes sure that the quantity of red blood cells is enough to allow the donor to give blood without the risk of causing anemia. This is called the hemoglobin test.

For over 20 years, the minimum hemoglobin rate for a donor to be eligible to give blood was set at 125 g/L, regardless of gender. Since the normal hemoglobin rate is generally higher for men, Héma-Québec decided to set the eligibility threshold to 130 g/L for men. Moreover, for the past few years now, the hemoglobin rate has been verified by a test that allows for the use of different criteria based on gender. Héma-Québec therefore submitted a request to Health Canada to this effect. The modification was accepted and will be implemented at the beginning of the next financial year.

DONATIONS CONFIRMED POSITIVE FOR MARKERS OF TRANSMISSIBLE DISEASES

Héma-Québec analyzes all the blood donations it collects in order to detect blood-borne diseases. If a positive result is obtained, the donation is destroyed and the donor is notified. There have been

no statistically significant variations in the number of infections detected in donors in recent years.

Donations confirmed positive according to the markers					
	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014
Human immunodeficiency virus (HIV)	2	1	1	1	0
Hepatitis C virus (HCV)	15	18	21	7	22
Hepatitis B virus (HBV)	22	25	27	25	16
Human T-cell lymphotropic virus (HTLV)	5	3	2	7	0
Syphilis	19	11	18	24	23
Total number of donations	275,890	275,717	291,306	290,787	277,956

DECLARATIONS OF ERRORS AND ACCIDENTS

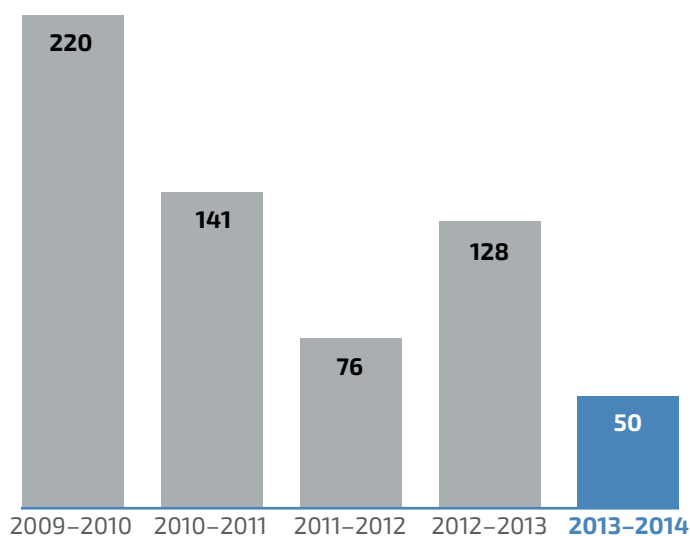
All of the activities pertaining to the collection, processing, analysis and delivery of products are governed by procedures and standards. Any unexpected deviation from such procedures, whether as a result of human error or another cause, is recorded and analyzed so as to assess the risk of compromising product safety and effectiveness. Such deviations are considered errors. "Accidents" are situations that could occur at any time during the process despite compliance with procedures. In both cases, the products concerned are immediately removed from the inventory and destroyed.

This year, there were a total of 50 errors and accidents, which represents a decrease of 61% compared to 2012–2013. This reduction is mainly attributable to measures related to two selection criteria for apheresis donors. First, a new procedure for apheresis donations eliminated donor qualification errors resulting from the interval between donations. Second, corrective action was taken to better document serum protein dosage results during plasma donations by apheresis.

A trend still remains with respect to errors and accidents representing events related to the obligation to ensure that the loss of red blood cells caused by collections required for testing before a plasma donation by apheresis does not exceed 200 ml

per period of 56 days. This trend can be explained by calculation errors or problems that occur during a plasmapheresis donation.

Total errors and accidents



CONTROL TESTS

Pursuant to regulatory requirements, Héma-Québec is required to conduct quality control tests on 1% of its monthly production. The results of these tests, detailed in the adjacent table, show

that the manufacturing processes meet or surpass the standards. These tests allow us to verify the quality and compliance of our processing methods.

Labile blood product quality control				
Products	Tests performed	Number of products tested	Compliance percentage	Acceptable percentage of tested bags
Red blood cells*	Residual leukocytes	2,898	99.9% ¹	100%
	Hemoglobin (whole blood) ≥ 35 g	2,479	99.96% ¹	100%
	Hemoglobin (whole blood) ≥ 40 g		99.96%	90%
	Hemoglobin (apheresis blood cells)	410	100%	95%
	Hematocrit	2,889	100%	90%
	Hemolysis	2,983	98% ²	100%
	Sterility	2,983	100%	100%
Washed red blood cells	Hemoglobin	57	100%	90%
	Hematocrit	57	100%	90%
	Hemolysis	57	95%	90%
	Sterility	57	100%	100%
Deglycerolized red blood cells	Hemoglobin	48	100%	90%
	Hematocrit	48	100%	90%
	Hemolysis	48	73% ³	90%
	Sterility	48	100%	100%
Platelet pools	Residual leukocytes	129	100%	100%
	Platelet enumeration	129	100%	75%
	pH	156	99%	95%
	Sterility	156	99% ¹	100%
Platelets by apheresis	Residual leukocytes	384	100%	100%
	Platelet enumeration	5,112	86%	75%
	pH	315	99%	95%
	Sterility	319	100%	100%
Granulocytes by apheresis	Granulocyte count	262	90%	75%
	Sterility	270	100%	100%
Fresh frozen plasmas by apheresis	Factor VIII	135	100%	75%
	Fibrinogen	135	100%	100%
Frozen plasmas*	Factor VIII	1,435	98%	75%
Cryoprecipitates	Fibrinogen	285	99.7%	75%

*Including red blood cells from whole blood and those collected by apheresis.

¹One-time events, no trend demonstrated.

²The Canadian Standards Association (CSA) standard pertaining to the hemolysis of packed red blood cells is in the process of being revised.

³Investigation in progress; corrective action will be taken once it is completed.

AUDITS

The purpose of process and quality control is to assess process management and, ultimately, deliver products of the highest quality. Every year, Health Canada inspects the two Héma-Québec facilities. It also reviews the operations of the GLOBULE Blood Donor Centres and the PLASMAVIE Plasma Donor Lounge every two years.

In 2013–2014, Health Canada conducted several inspections spread out over six Héma-Québec sites. No major observations were made and each site was deemed compliant. Four facility licences were renewed and two new licences were issued.

The American Association of Blood Banks (AABB) also evaluated our activities and our certification was renewed.

These results demonstrate once again that Héma-Québec observes the strictest safety standards and measures and that product safety is a priority for the organization.

STEM CELLS

CONTROL TESTS

The stem cell quality control tests performed by Héma-Québec serve to evaluate the quality and compliance of the processing methods.

AUDITS

The results of periodic inspections of Héma-Québec's operating procedures conducted by regulatory agencies reflect the level of quality control Héma-Québec has over its operations.

The renewal of the licences and certifications of the Public Cord Blood Bank and the Reference and Stem Cell Laboratory is scheduled for 2014–2015.

Stem cell quality control			
Products	Test performed	Number of products tested	Compliance percentage
Stem cells (post-processing)	Sterility	1,799	97%*

*The stem cell collection method is more susceptible to bacterial contaminants; however, the result observed is highly comparable to the results obtained by other cord blood banks.



Laboratory housing the umbilical cord blood units of the Héma-Québec public bank. The units are kept in vapor-phase liquid nitrogen tanks.

HUMAN TISSUES

CONTROL TESTS

In order to ensure compliance with the safety standards in effect, sterility tests are performed on samples of the human tissues collected. Moreover, samples collected after processing are used to verify the quality and compliance of tissue processing and disinfecting methods.

Given the limited number of products collected, a certain variability may be noted, without any statistically significant trend.

AUDITS

In the past year, Health Canada evaluated all of the processes surrounding human tissues. Héma-Québec was once again deemed compliant with the *Safety of Human Cells, Tissues and Organs for Transplantation Regulations* following the audit.



Every human tissue is processed according to the highest standards of quality.

Human tissue quality control

Products	Tests performed	Number of products tested	Rejection (% of unacceptable microorganisms)
Skin tissues	Pre-processing microbiological culture	116	3.0%
	Post-processing microbiological culture	108	4.0%
Musculoskeletal tissues	Pre-processing microbiological culture	1,512	3.0%
	Post-processing microbiological culture	782	0.1%
Heart tissues	Pre-processing microbiological culture	47	17.0%
	Post-processing microbiological culture	47	6.0%

PRINCIPAL ACTIVITIES AND ACCOMPLISHMENTS

Operational efficiency

Héma-Québec diligently responds to the requests of all hospitals. Since most labile blood products have a limited shelf life, it must constantly adjust its supply strategy according to the needs of hospital blood banks. This situation requires an excellent ability to adapt, optimal understanding of the issues, donor recruitment and retention programs, and adequate inventory management.



Red blood cells are kept in refrigerators at a temperature of 5 °C.

REVIEW OF THE SUPPLY STRATEGY AS PART OF THE 2012–2015 STRATEGIC PLAN

Héma-Québec adopted a new strategic supply plan in order to respond to the objectives of the 2012–2015 *Strategic Plan* to improve its collection efficiency and prepare to increase plasma collection (see page 10). This new strategy, which was approved by the Board of Directors in October 2013, focuses specifically on the following strategic choices:

- increase the number of collections performed at the permanent sites compared to mobile blood drives;
- automate the collection process;
- increase workforce adaptability;
- increase the volume of plasma for fractionation;
- seize opportunities for synergy and keep pace with the needs of its hospital partners and clients.

LABILE BLOOD PRODUCTS

DECREASE IN THE DEMAND

In 2013–2014, an adjustment had to be made with regard to collections due to a significant decrease in the demand for blood products. After years of growth, 2013–2014 was marked by a decline that translated into a 5.6% decrease in red blood cell deliveries to hospitals and a 3% decrease in platelets, which

are the main products distributed by Héma-Québec. Despite the decrease in the demand and the cancellation of blood drives, Héma-Québec managed to increase its efficiency to absorb the inflation, without causing massive job losses, which was the case for several similar organizations.

Labile blood products delivered to hospitals					
	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014
Total red blood cells	233,446	236,699	246,363	246,593	232,838
Platelet pools ¹	0	3,387	7,609	6,343	4,388
Whole blood platelets	31,770	21,396	0	0	0
Platelets collected by apheresis	27,990	30,550	31,762	34,748	35,459
Equivalent platelets (pools + apheresis X 5)	139,950	169,685	196,855	205,455	199,235
Total platelets	171,720⁴	191,081³	196,855²	205,455²	199,235²
Plasma from whole blood – 250 ml	53,040	41,771	32,992	30,914	25,961
Plasma collected by apheresis – 250 ml	1,397	8,997	10,163	11,368	10,464
Plasma collected by apheresis – 500 ml	7,341	6,047	6,083	6,250	5,488
Equivalent plasma (apheresis 500 ml X 2)	14,682	12,094	12,166	12,500	10,976
Total plasma⁵	69,119	62,862	55,321	54,782	47,401
Granulocytes	164	90	40	99	258
Cryoprecipitates	20,508	20,913	20,744	20,657	21,367
Cryoprecipitate supernatants	6,742	4,278	6,966	8,274	5,064
Grand total	501,699	515,923	526,289	535,860	506,163

¹Platelets from whole blood grouped into a pool (a pool is equivalent to five buffy coats).

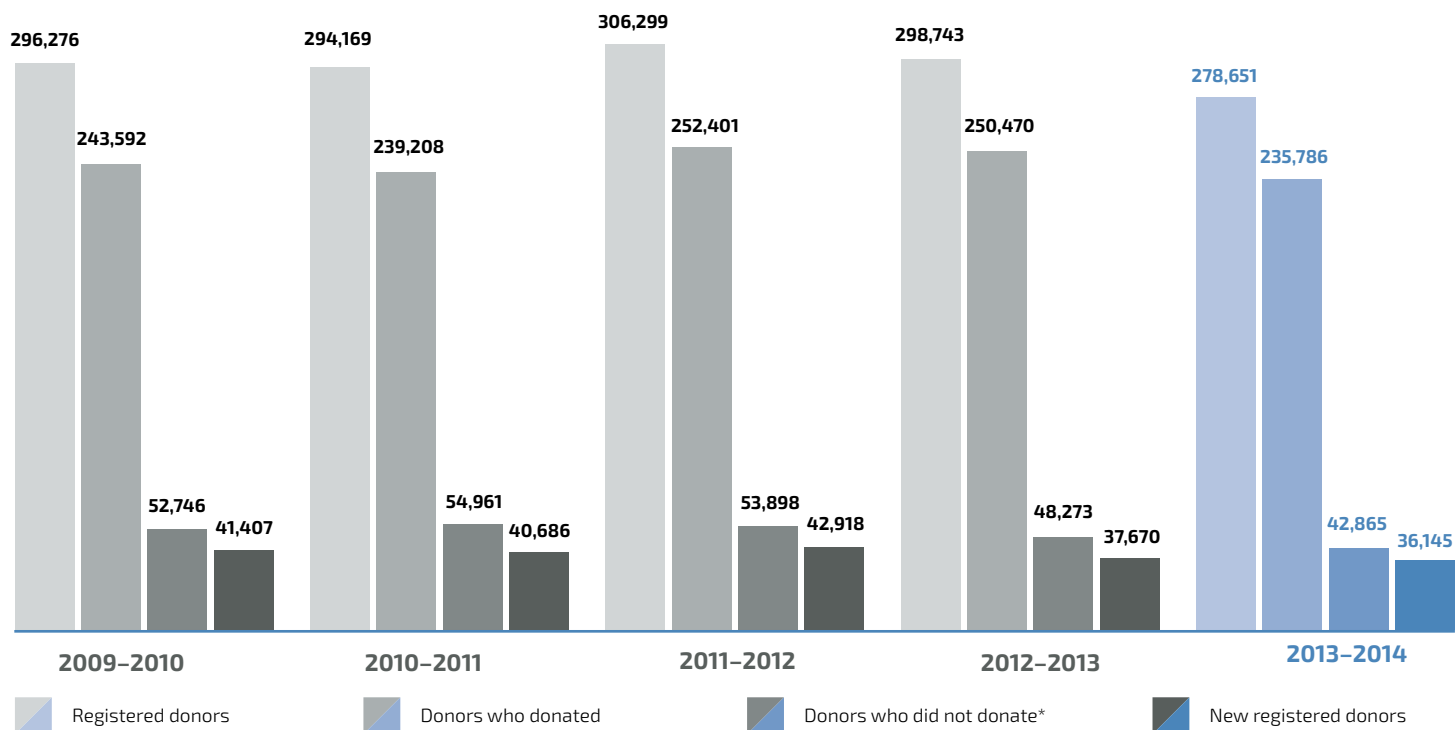
²For the past three years, "total platelets" corresponds to the sum of "platelet pools" and "platelets collected by apheresis" multiplied by five.

³In 2010–2011, "total platelets" corresponds to the sum of "platelet pools" and "platelets collected by apheresis" multiplied by five, plus "platelets from whole blood".

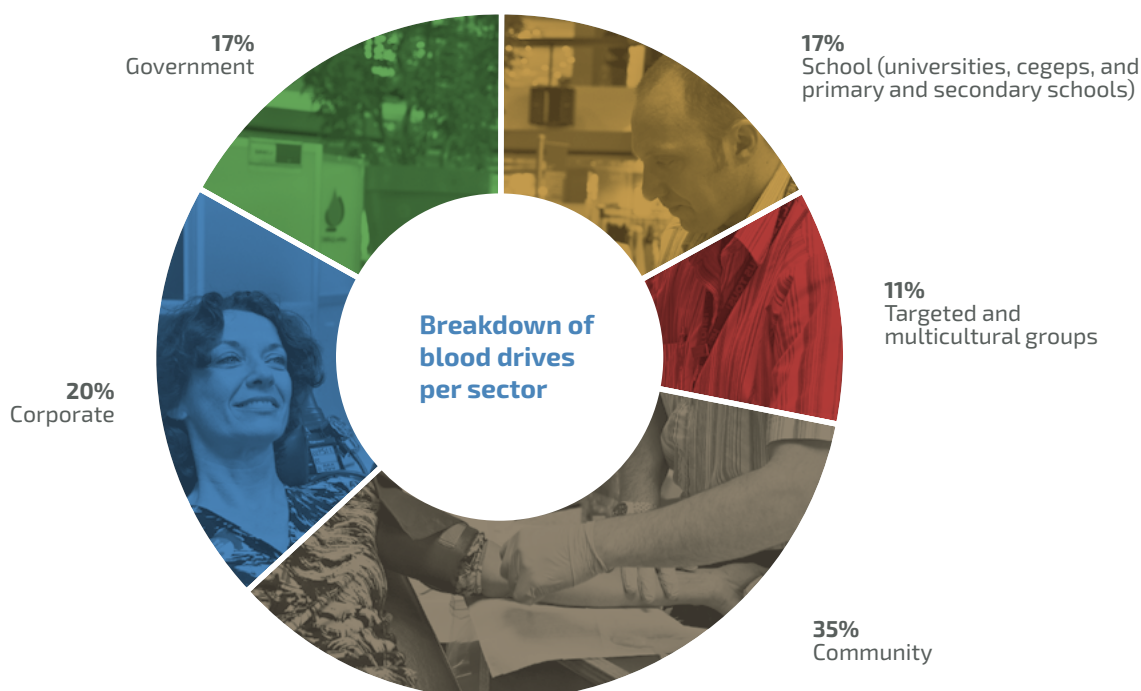
⁴In 2009–2010, "total platelets" corresponds to "platelets collected by apheresis" multiplied by five, plus "platelets from whole blood".

⁵"Total plasma" is the sum of "plasma from whole blood," "plasma collected by apheresis – 250 ml" and "equivalent plasma (apheresis 500 ml X 2)".

Results for whole blood donations



*The number of donors who did not donate corresponds to the registered donors who did not make any donations, but for whom an exclusion was issued the same day or within seven days following registration. This category also includes registered donors who were not excluded but who did not complete a donation because they left, or experienced problems with a vein or discomfort.



GLOBULE BLOOD DONOR CENTRES: A KEY PART OF THE SUPPLY STRATEGY

The GLOBULE Blood Donor Centres welcomed an average of 1,500 donors per week and are a key part of Héma-Québec's supply strategy, since all donations by apheresis are performed there. These types of donations make it possible to collect specific products according to the needs of patients. The unit cost

per collection in the GLOBULE Centres is also 43% lower than that for the mobile blood drives.

A new GLOBULE Blood Donor Centre opened its doors in December 2013 at Quartier DIX30 in the Montérégie, where there is a large pool of active blood donors.

Collections in GLOBULE Blood Donor Centres

	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014
Whole blood	34,751	30,473	32,139	32,440	33,014
Apheresis platelets	29,686	32,430	33,659	36,788	37,548
Apheresis plasma 500 ml	9,736	9,400	9,781	10,004	10,712
Apheresis red blood cells	**3,411	8,494	8,911	9,120	8,658
Apheresis plasma 250 ml (including MC*)	**1,827	9,836	10,947	11,174	11,338
Granulocytes	164	90	58	138	275
Total volumes collected	79,575	90,723	95,495	99,664	101,545

*MC: donations made through multiple collections.

**Corresponds to the year in which this type of collection began.



The new Quartier DIX30 GLOBULE Blood Donor Centre opened its doors in December 2013.

STABLE PRODUCTS

Plasma fractionation serves to isolate and purify certain proteins, such as albumin, clotting factors and immunoglobulins. These blood derivatives, also called stable products, are used as medication for patients suffering from immune deficiencies as well as to treat many other diseases, particularly neurological diseases.

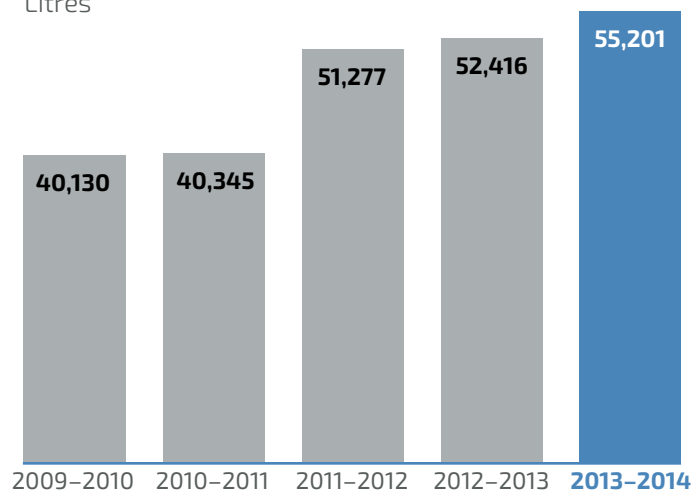
Héma-Québec distributes approximately 30 stable products, including three derived from Québec plasma sent for fractionation. In the past year, 55,201 litres of Québec plasma were sent for fractionation, compared to 52,416 litres in 2012–2013, for an increase of 5.3%. However, the 8.5% increase in the demand

for immunoglobulins, one of the products manufactured from plasma, is exerting downward pressure on our self-sufficiency rate, despite the increase in the quantity of plasma sent for fractionation.

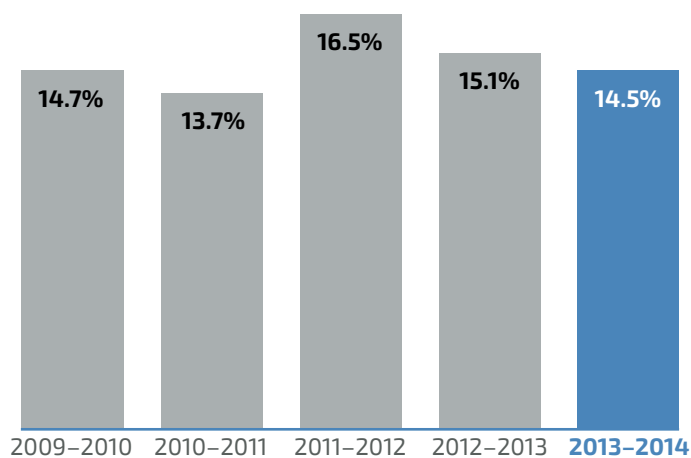
The opening of the first PLASMAVIE Plasma Donor Lounge represents a major step toward supplying plasma locally to increase our immunoglobulin self-sufficiency. In the long run, Héma-Québec expects the Trois-Rivières PLASMAVIE Plasma Donor Lounge to collect approximately 10,000 litres of plasma per year.

QUANTITY OF PLASMA SENT FOR FRACTIONATION

Volume
Litres



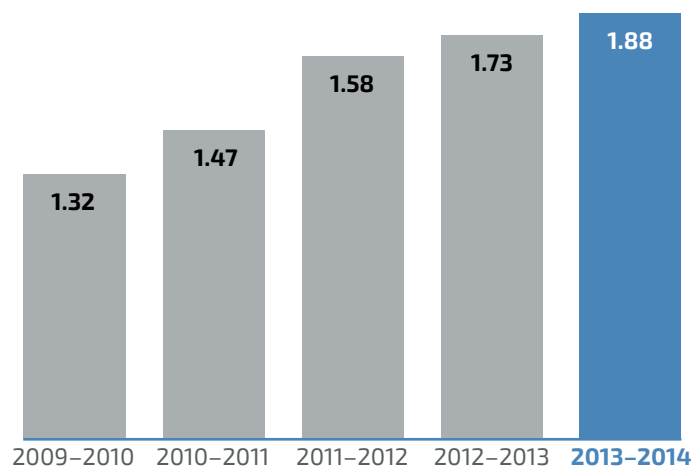
Rate of immunoglobulin self-sufficiency*



*Based on the quantity of plasma sent for fractionation compared to immunoglobulin distributions made over the course of a year.

DISTRIBUTION OF STABLE PRODUCTS TO HOSPITALS

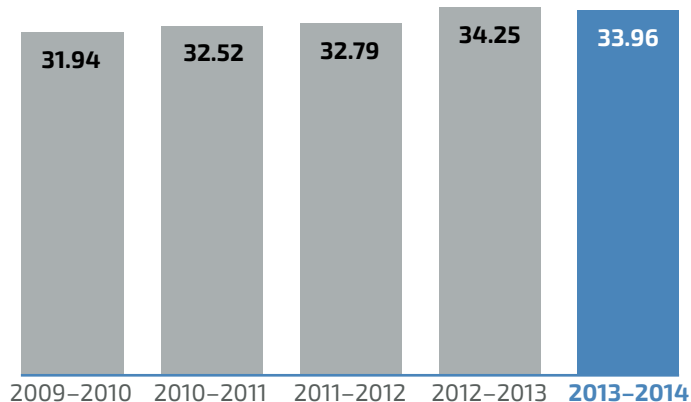
Intravenous (IVIg) and subcutaneous (SCIg) polyvalent immunoglobulins
Grams (in millions)



Recombinant factor VIII

International units (in millions)

After immunoglobulins, recombinant factor VIII is the second most important stable product in terms of distribution. This medication is intended for hemophiliacs.



REFERENCE AND STEM CELL LABORATORY

The Reference and Stem Cell Laboratory responds to many requests for phenotyped blood, erythrocyte or platelet immunology studies, erythrocyte genotyping studies and HLA typing.

Although there seems to be a decrease in erythrocyte genotyping, these analyses translate into an increase in the number of cases

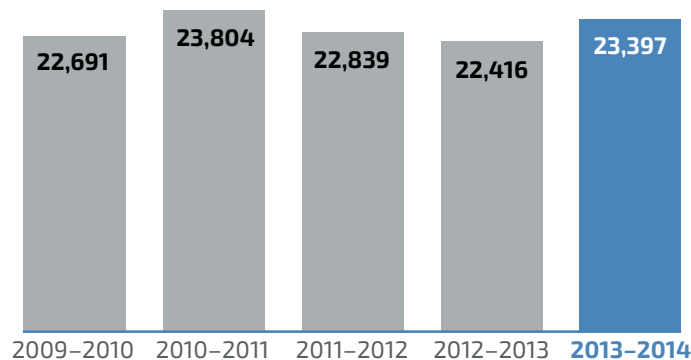
analyzed and a decrease in genotyping per patient. For the past two years, we have also noted a significant increase of more than 30% in HLA typing, resulting from the increase in registrations with the Stem Cell Donor Registry.

Number of specialized analyses performed					
	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014
Erythrocyte immunology	1,621	1,435	1,654	1,342	1,430
Platelet immunology	333	374	394	383	483
Erythrocyte genotyping (patient cases)	3,243	3,488	4,574	4,721 (550)*	2,832 (588)*
HLA A, B, C, DR, DQ typing	5,224	5,672	5,925	7,292	7,700

*The number of erythrocyte genotyping analyses represents the genotypes tested for patient cases. Several genotypes can be tested for a given patient and, up to now, the genotyping analyses performed have varied based on the request. Starting in 2015, the patient cases will be tested using a new genotyping platform with systematic complete genotyping. In order to better reflect estimates, erythrocyte genotyping will be expressed in number of patient cases from now on.

Phenotyping performed for Québec hospitals

Analyses



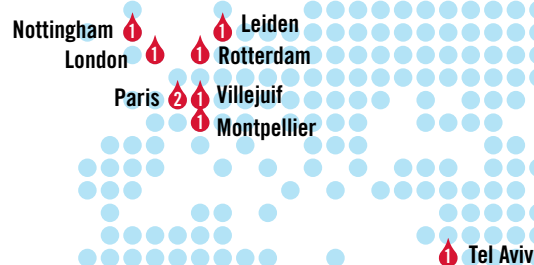
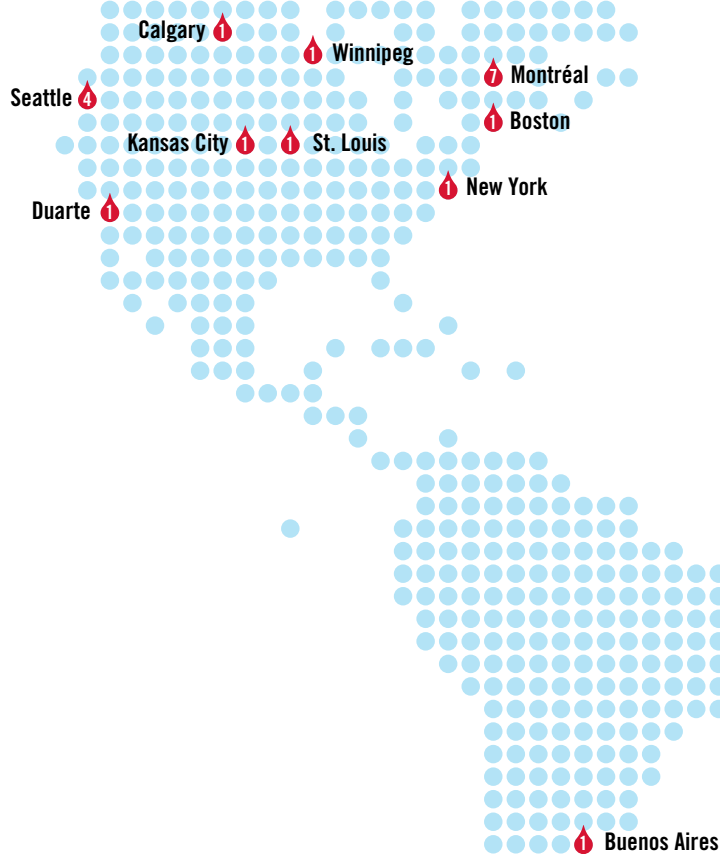
INDICATING GENOTYPE ON RED BLOOD CELL LABELS

Blood transfusion is essential for the treatment of many diseases; however, in certain cases, particularly with patients who receive frequent transfusions, the body may react against certain antigens present on the surface of red blood cells and produce antibodies that cause transfusion reactions.

Since December 1, 2013, genotype results for which there is no reagent available for phenotyping are indicated on the labels, and are also available in the computer system. This ensures better traceability and allows for multi-criteria searches. This initiative, which is highly innovative in the field, has facilitated the management of orders for phenotyped red blood cells for specific patients and has improved the service provided to hospitals.



28 CORD BLOOD UNITS DELIVERED IN 2013–2014



STEM CELLS

DELIVERIES OF CORD BLOOD UNITS

Québec's Public Cord Blood Bank is the first and only public bank of this type operating in Canada. It is developing its activities at a sustained pace and has shown very good results locally, nationally and internationally. Héma-Québec's Public Cord Blood Bank supply stood at 9,463 cords at the end of the year. In all, Héma-Québec delivered 28 cord blood units in 2013–2014, compared with 10 in 2012–2013. Of these units, seven were delivered in Québec, one in Alberta, one in Manitoba, and 19 abroad.

After the first full year of offering its cords through Bone Marrow Donors Worldwide registry, Héma-Québec currently ranks 11th in the world as an exporter of cord blood in terms of the percentage of cords it exports out of the number of units in reserve.

HUMAN TISSUES

SHORTER WAIT TIME FOR CORNEAL TRANSPLANTS

The number of Quebecers waiting for a corneal transplant decreased from 704 in February 2011 to 271 in March 2014. This represents a 62% improvement. This progress was achieved through a new supply process and sustained efforts from all the partners involved.

Since January 2009, Héma-Québec has been responsible for qualifying donors, collecting eyeballs, implementing the regulatory framework for these activities and providing surgeons with corneas. This mandate is the result of a partnership agreement signed with the *Hôpital Maisonneuve-Rosemont* for the management of the Québec Eye Bank in Montréal. A similar partnership agreement was signed in the Québec City area with the *Centre hospitalier affilié universitaire de Québec* (CHA) in January 2012. This new system has made it possible to considerably increase the availability of the product. The distribution of corneas in Québec has grown constantly, reaching 810 in 2013–2014.

Over the last year, Héma-Québec has continued its efforts to find other uses for the corneas that cannot be transplanted by making them available to Québec researchers, both in Québec City and Montréal.

IMPLEMENTATION OF PRE-CUT CORNEAS

Since May 2013, Héma-Québec has been offering ophthalmologists specialized in corneal transplants a new type of product: pre-cut corneas. In 2013–2014, 80 pre-cut corneas were distributed. Prior to this, the product, which enables surgeons to reduce operating time, was imported from the United States. In making this product available, Héma-Québec aims to better meet the needs of Québec corneal specialists.

DISTRIBUTION OF HUMAN TISSUES

Better supply from Québec

Héma-Québec distributed 4,012 human tissues in 2013–2014. This 6.4% increase over the previous year is the result of, among other things, an increase in the production of Québec human tissues. Imports of tissues and corneas decreased by 16.9% during the same period. More specifically, cornea imports decreased 18.6% and only account for 30.7% of the corneas distributed in the past year, compared with 41% in 2012–2013. This decrease can be attributed to the improvement of an operational process allowing us to qualify a larger number of corneas. Distribution growth was strong for local corneas (+30.7%), sclera (+16.8%) and skin tissues (+8.9%). For the other tissues, the distribution remained relatively stable.

Human tissue distribution					
	2009–2010	2010–2011	2011–2012	2012–2013	2013–2014
Valve and vascular allografts	58	66	49	47	40
Skin tissues	926	1,632	1,322	1,231	1,340
Tendons	108	229	207	291	303
Cancellous bones, including lyophilized	299	419	460	749	768
Compact bones and femoral heads	170	219	256	241	221
Imported human tissues	664	544	259	96	85
Local corneas	151*	170	429	429	561
Imported corneas	255*	429	257	306	249
Sclera	-	-	79*	381	445
Grand total	2,631	3,708	3,318	3,771	4,012

*Corresponds to the year in which the distribution began.

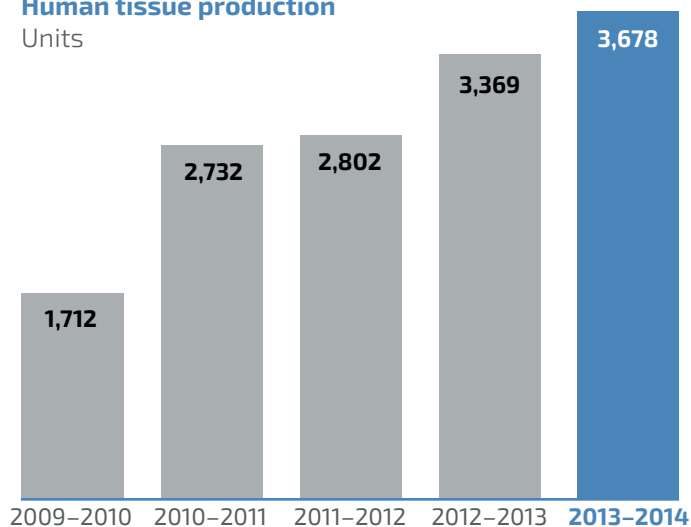
Distribution of human tissues in the rest of Canada is growing

While continuing to ensure a sufficient supply of human tissues for Québec hospitals in order to meet the needs of Québec patients, Héma-Québec increased the distributions of human tissues in the other provinces of Canada by 24% in 2013–2014. These out-of-province distributions, made possible through partnerships concluded with most of the provinces, represent 28% of all distributions. Héma-Québec is thereby able to increase efficiency through scale economies, while allowing all of the Canada to benefit from its expertise.

PRODUCTION OF HUMAN TISSUES

In the past year, Héma-Québec increased its production of human tissues by 9%. It intends to continue its efforts in order to ensure a sufficient supply of human tissues manufactured in Québec.

Human tissue production Units



Certain human tissues are preserved by cooling them down to very low temperatures, typically -196°C (the boiling point of liquid nitrogen).

RESULTS FOR THE YEAR

RESULTS PERTAINING TO THE 2012–2015 STRATEGIC PLAN

This section of the report covers the results obtained with respect to the objectives set out in Héma-Québec's 2012–2015 *Strategic Plan*.

The results obtained for 2013–2014 are presented and commented in relation to the general objectives of the strategic plan:

- to be a global model of quality
- to be a Québec model of efficiency
- to be a global model of innovation

Moreover, three areas of focus were identified and are included in these objectives: culture, processes and resources.

2013–2014 was the second year in the period covered by this strategic plan. This report does not cover all of the issues and objectives defined in the plan, but only those for which activities were undertaken in the past year and for which results are available. At the end of three years, all of the plan objectives will be dealt with.

OBJECTIVE 1: TO BE A GLOBAL MODEL OF QUALITY

Héma-Québec adheres to the highest safety standards and measures and makes sure that the safety of blood products, stem cells and human tissues is a priority for its personnel. These manufacturing process inspections, which are performed every year by representatives of Health Canada at Héma-Québec's two facilities, one in Montréal and one in Québec City, and every two years at the GLOBULE Blood Donor Centres, are intended to verify that the supplier of blood products and biological medication for Québec complies with the most rigorous quality and safety standards and meets the requirements of the establishment licence. No major observation was reported as part of the various audits conducted in the past year.

AREAS OF FOCUS – PROCESSES/RESOURCES

Quality system overhaul

As part of the thought process involved in the quality system overhaul, the mandate of the Quality and Regulatory Affairs division, formerly called "quality and standards," has been redefined so as to make a distinction between quality

management and regulatory compliance. Accordingly, Héma-Québec has begun a migration toward a single quality system that is optimal, dynamic and puts quality at the forefront of all processes, and not simply as a response to regulatory requirements.

Following a rigorous examination of the system in place and recommendations by working groups on various aspects of this system, such as document management and non-compliances, an organizational restructuring of the Quality and Regulatory Affairs division was initiated. In addition to the distinction between quality management and regulatory compliance, this restructuring is focused on process optimization and performance evaluation. Moreover, in order to improve quality management, a new mandate was assigned to the audits department for the development and management of an investigation program. This program will help to identify the underlying causes of problems and propose corrective and preventive actions.

Finally, in order to increase the efficiency and effectiveness of business structures and processes, the Regulatory Training department was added to Human Resources. This will also help to optimize the use of the expertise, skills and experience of each member of our team, alongside the changes in culture being implemented at Héma-Québec.

AREA OF FOCUS - PROCESSES

A new technique for identifying group O apheresis platelets

As part of Héma-Québec's commitment to ensuring a sufficient and effective supply of blood products, a new technique approved by Health Canada for identifying group O apheresis platelets was introduced in May 2013. This technique makes it possible to identify group O apheresis platelets that can be transfused to other groups without transfusion reactions. The implementation of this measure allows for a more efficient use of platelets and a reduction in expirations of this blood component, which has a shelf life of five days.

OBJECTIVES 2: TO BE A QUÉBEC MODEL OF EFFICIENCY

The significant decrease in the anticipated volumes of orders for labile products, which started in the third quarter of the previous year, was offset by increases in efficiency. These gains are the result of actions initiated as part of the *2012–2015 Strategic Plan*. The decrease in demand for blood products seems to be a lasting phenomenon, inasmuch as it has been noted for a few years now elsewhere in the world. Data from the National Blood Collection Utilization Survey (NBCUS) indicate, among other things, a decrease of 9.1% in deliveries of red blood cells in the United States for the period spanning from 2008 to 2011.

The decrease in demand for red blood cells and platelets was absorbed through gains in efficiency. Héma-Québec not only managed to maintain the rates at the same level, it did so while absorbing wage and supply inflation.

Another significant factor: Héma-Québec ratified letters of understanding, ensuring greater workforce adaptability, with all but one of the unions. In a context of a sharp decrease in demand for blood products in Québec, this agreement has enabled the organization to avoid job cuts in all of the unionized units, except the one with which an agreement remains to be signed. This measure also generated gains in efficiency.

AREA OF FOCUS - PROCESSES

Stabilization of fees after adjustments for inflation

Adjustments in practices and new measures generated gains in efficiency allowing Héma-Québec to achieve a surplus of close to \$1.1 million in terms of labile blood products.

The efforts put forth allowed for rate increases to be kept below the inflation rate. The actual cost of red blood cells for 2013–2014 is \$341.38 compared to \$345.04 in 2012–2013. Sustained continuous improvement efforts and efficiency gains on several levels have enabled the organization to perform better than the inflation rate in a context of lower demand for labile blood products.

Double platelet donations

Héma-Québec is continuing to diversify the types of donations that enable it to achieve greater operating flexibility in the supply of blood components. Double platelet donations (thrombapheresis) are encouraged. This process is used to collect a double quantity of platelets from a donor without having to significantly prolong the duration of the donation. The proportion of these collections at the GLOBULE Blood Donor Centres increased from 48.5% in 2012–2013 to 51.3% in 2013–2014. The increase in double thrombapheresis collections has resulted in savings of close to a quarter-million dollars compared to the processing of whole blood donations collected at blood drives.

Five minutes for 4,000 litres of plasma

The whole blood collected at blood drives is separated into various blood components through a centrifugation process, following which the plasma is separated from the red blood cells through automated extractors. An operational modification has helped to maximize plasma yield, by optimizing the centrifugation conditions for whole blood.

The optimized protocol, which requires only five additional minutes of centrifugation, has had little impact on operations and has resulted in a considerable gain in plasma, i.e., approximately 4,000 additional litres per year.

Implementation of the hemoglobin test prior to the interview

A total of 4–6% of donors are excluded following the hemoglobin test. Since March 17, 2014, this test is performed at approximately 65% of blood drives, at the start of the process, when the donor registers. Donors with hemoglobin levels that are too low therefore do not have to wait needlessly for the interview. In addition to providing better service to donors, this also helps to optimize resources. Implementation of this procedure is ongoing and will be completed for all blood drives in summer 2014.

AREA OF FOCUS - CULTURE

To excel and innovate for better health

In order to continue to excel and innovate in a highly regulated environment, Héma-Québec focuses on effective management and the empowerment of each employee. It fosters the development of a culture based on excellence and continuous improvement by adopting new practices, specifically with respect to communication, team work and workforce adaptability.

The activities implemented in the past year that will help to accelerate the implementation of our vision and the change in our culture include:

- A review of the performance management process to allow for a better definition of expectations and anticipated results and provide better follow-up throughout the year.
- The launch of a leadership development fast track, an innovative form of training intended for directors and

managers allowing them to communicate and implement the various changes in their teams by mobilizing their colleagues.

- An employee engagement survey, which provided Héma-Québec with a detailed portrait of staff engagement. Numerous meetings were held to communicate the results and mobilize the personnel by involving them in the search for possible solutions to be implemented in their team. An action plan was also implemented for the entire organization and will continue to be deployed over the coming months.

Moreover, increased communication with the employees was at the core of the entire deployment process for the culture change plan. Finally, given the need to review the culture, numerous discussions were held with union partners to adapt labour relations to the organization's situation and promote workforce adaptability.

Introduction of a problem-solving program

The problem-solving program is one of the actions put forth to promote a change in culture that is conducive to innovation and continuous improvement. Its main purpose is to enable the teams to quickly determine the fundamental causes of problems in order to eliminate them at the source. Problems can affect several areas, including quality, equipment, work organization, health and safety, and communications. Such tools and work habits help to motivate the personnel, promote team work and develop an effective management model. Moreover, the ideas generated and the solutions proposed translate into increased efficiency and quality. The problem solving program, which was introduced in May 2013, is used by about ten teams.

Continued implementation of the Kaizen method

Once again this year, the Kaizen method is one of the initiatives used to promote continuous improvement and personnel engagement. The word Kaizen comes from the combination of two Japanese words, "kai" and "zen," which respectively mean "change" and "good." The method is used to analyze and optimize processes by involving those who are directly or indirectly linked to them.

In spring 2013, the procurement planning teams in Montréal and Québec City conducted a review of their processes in order to optimize the processing of information from the time hospitals' annual needs for blood products are established until analysis is performed after blood drives. The exercise helped to reduce tasks with no added value and duplications in order to make time for quality work, reduce the amount of paper used, standardize the processes and improve dialogue between the teams at the Montréal and Québec City facilities.

The Kaizen method was also used to reorganize the regulatory analysis laboratory and the labile product processing laboratories at the Montréal and Québec City facilities. The changes made served to better distribute the daily work load, reduce tasks with no added value and simplify production flows, thereby generating productivity gains estimated at 2,000 person-hours per year and reducing the area used by 1,640 square feet.

Moreover, Kaizen participants took advantage of this opportunity to design ergonomic workstations and create an environment that promotes interaction and team work.

AREA OF FOCUS – RESOURCES

Requests for investments totalling \$23.5 million were authorized during the year. These requests included several innovation and efficiency projects. These investments will result in gains, both in terms of efficiency and quality, that will essentially compensate for the investment costs. Moreover, during the past year, capital expenditures rose 97%, mainly due to the projects presented in this section.

Automation and computerization of processes

eProgesa: design phase completed

2013–2014 marked a turning point in the deployment of the eProgesa computer application project, which is intended to replace the current version of the Progesa software. As of March 31, 2014, the design phase was essentially complete. This phase involved analyzing operating needs and developing the software parameters to meet such needs.

This blood drive process optimization and automation project will increase efficiency significantly, in particular through the electronic entry of all information pertaining to the blood donation and the implementation of the self-administered blood donation eligibility questionnaire, which will replace the paper form. Ultimately, this project will ensure increased product safety and the sustainability of the system and will improve customer service by reducing the time needed to give blood.

Computerization of the Public Mothers' Milk Bank operations from the outset

The operations of the future Public Mothers' Milk Bank will be managed entirely by computer, from the day the bank opens. This is a first in the organization's history. Computerization facilitates the management and follow-up of files and products in the various departments. It makes it possible to ensure the traceability and security of the tests and production, prepare various reports, standardize business processes in accordance with certification rules, and issue labels.

Computer equipment at blood drives

In April 2013, the computer equipment for the mobile blood drives was replaced. The lightness and ease of operation of the equipment, increased efficiency of the computer technicians handling this equipment and increased strength of the Wi-Fi signal are just some of the advantages of this project. It is also estimated that the work load associated with handling this equipment has decreased from 210 hours per month, day and evening, to 56 hours per month, days only.

Regional mobile blood drive service in Brossard

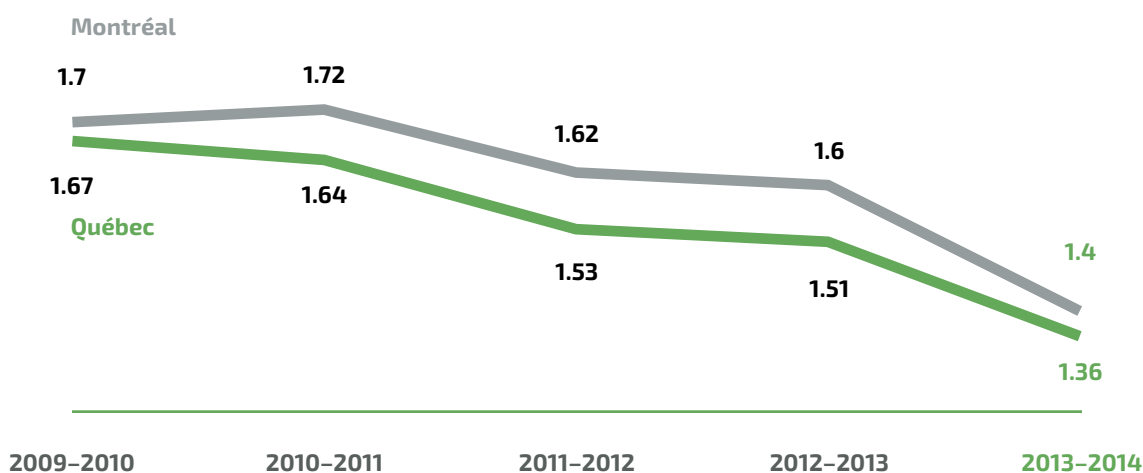
Since more than one-third of the mobile blood drives organized in the Greater Montréal area take place in the Montérégie, deployment of these drives from the Montréal facility was a major

operational and financial issue. On May 21, 2013, Héma-Québec opened a regional service outlet in Brossard, which serves as the starting point for the personnel working at blood drives and provides storage for the equipment needed for blood drives.

Significant improvements in efficiency were observed during this first year of operation, including:

- 14% improvement in the performance of the blood drives conducted in the Montérégie from the centre, which contributed to a reduction in the number of hours worked per product collected at mobile blood drives, which decreased from 1.6 hours to 1.4 hours at the Montréal facility;
- an increase in employee productive time of approximately 1 hour per employee per work shift;
- a reduction in travel time, i.e., approximately 40 kilometres less per vehicle per blood drive;
- a 60% reduction in travel costs;
- expansion of the pool of candidates, with the proximity of these stations on Montréal's South Shore;
- improvement in work life quality for employees living in the area.

Number of hours worked per product collected in mobile blood drives



The graph above illustrates the number of hours worked per product collected in mobile blood drives for the following four employment types: nurse, blood donation collection agent, blood drive technical assistant and registration clerk.

OBJECTIVES 3: TO BE A GLOBAL MODEL OF INNOVATION

AREA OF FOCUS – PROCESSES

Continued realignment of research and development activities

Héma-Québec formalized the new objectives of its research and development activities that will allow it to become a global model of innovation. This realignment specifically translates into the consolidation of development projects focused on cell production. Following the reorganization of the facilities used for research and development, the organization acquired equipment enabling the manufacturing of cellular biotherapy products in a completely closed system and a highly controlled environment. These major investments are essential and will contribute to the development of expertise that will be transferred to the future cell production facility: C-LAVIE.

Innovations in research and development

In 2013–2014, Héma-Québec developed a protocol for the purification of plasminogen, a blood derivative, which allowed for the treatment of a rare disease: ligneous conjunctivitis. This disease is caused by a lack of plasminogen, a protein found in plasma. Characterized by the recurrent formation of fibrin membranes on the eye, this disease can occasionally cause blindness in young children. Treatment with the purified plasminogen preparation developed by Héma-Québec enabled the complete resorption of the fibrin membranes in the eyes of a young patient suffering from ligneous conjunctivitis.

In addition, Héma-Québec, in partnership with *Université Laval*, developed a method for synthesizing nanoparticles (very small particles) that can be used, among other things, in the genotyping or phenotyping of donors for antigens that are pertinent to transfusion. This new method, for which a patent application has been submitted, makes it possible to produce a large quantity of nanoparticles at a low cost.

Finally, a Héma-Québec researcher contributed to an invention developed in collaboration with researchers from *Université Laval* and the University of Washington. This invention involves the detection of extracellular mitochondria in platelet concentrates. Mitochondria are structures found inside most cells as well as in blood platelets. The invention enables the detection of markers of mitochondria deterioration in order to reduce the risk of transfusion reactions associated with platelet concentrates containing an excess of free mitochondria. A patent application was also been submitted for this invention in the past year.

AREA OF FOCUS – RESOURCES

Restructuring of the Research and Development division

In response to the organizational changes underway, adjustments were needed in the organization of research and development activities. The Cellular Engineering department was split into two sections: innovation and cell production. New people were also recruited to strengthen Héma-Québec's expertise in cell production.

While the Evaluation and Optimization Group (EOG) continued to provide support throughout the organization and take part in several innovations, scientific teams from the two new divisions also carried out several projects supporting the activities of the Reference and Stem Cell Laboratory, thereby expanding the support provided for operations.

This restructuring will also allow for the development of a cell technology and production transfer capacity.

Increase in investment and innovation budgets

Héma-Québec increased its capital investments by 97% compared to the previous year. These investments are also 3.2 times greater than those made in 2012–2013.

As for the research and development budget, it should be reminded that the objective set in the strategic plan was to increase the amount allocated for this activity from 5% of the total budget allocated to labile products to 5% of the budget for labile products and that for tissues and stem cells. In 2013–2014, this objective was met.

Moreover, investment requests totalling \$23.5 million were authorized. The investment budgets for the construction of the future C-LAVIE complex account for a significant portion of these requests. These requests also include the acquisition of equipment and the reorganization of the Québec City facility in preparation for cell production, as well as various innovation and efficiency projects. These investments will generate efficiency gains that will compensate for the investment costs.

ADMINISTRATION

ACTIVITIES AND STRUCTURE OF THE BOARD OF DIRECTORS

This section summarizes the activities of the Board of Directors and its committees. The second year of implementation of the 2012–2015 strategic planning marked a major turning point, which is reflected in the deployment of new activities. 2013–2014 was also marked by a decrease in demand for certain labile blood products (particularly red blood cells and platelets), which has led the entire organization to think and act differently.

2013–2016 procurement strategy

Last October, the Board of Directors approved the procurement strategy covering the period from 2013 to 2016. One of the main components of this strategy is the shift toward increasing the number of collections made in blood donor centres as opposed to mobile blood drives.

2015–2020 strategic planning

The main objectives of the 2015–2020 strategic planning were presented to the Board of Directors for adoption next year. More in-depth discussions also took place at the annual meeting of the Board and the Management Committee. Furthermore, the new objectives were submitted to Board advisory committees, including the Recipient Representatives Advisory Committee and the Safety Advisory Committee. These consultations provided a better understanding of international trends with regard to blood product safety.

Cell production

In May 2013, the Board approved the construction and funding of a cell production facility, C-LAVIE. The Board was informed about developments in the cell production projects at each of its meetings. It also approved an examination process that includes several criteria, namely the confirmation of the clinical need in Québec, technical feasibility, intellectual property and freedom of operation, the investment required, ethical acceptability and the permission of Health Canada to proceed with clinical studies. From the very first steps in this examination process, the Cell and Tissue Production Advisory Committee, made up of experts in the field, including members of research centres such as the *Centre d'excellence en thérapie cellulaire* (CETC) and the *Centre LOEX* of *Université Laval*, studies each of the projects and then provides opinions to Héma-Québec's Board of Directors and management.

More specifically this year, Héma-Québec's Research Ethics Committee approved a research project aimed at providing a better understanding of the use of white blood cells in cancer treatment, which could ultimately lead to the development of medication.

Finally, the agreements or contracts in the field of cell production concluded between Héma-Québec and various partners are systematically submitted to the Audit Committee.

Structure of the Board of Directors

The activities of the Board of Directors have been affected by the departure of certain directors. The Governance and Ethics Committee reviewed the candidate files to make sure that they satisfy the skill profiles sought and established by the Board of Directors. After submitting the candidates' files, it also conducted the necessary follow-up with the Québec government to proceed to nominating the directors. In addition to the representativeness of various groups required under the *Act respecting Héma-Québec* and the *Biovigilance Committee*, the committee is looking to recruit more new directors with expertise in governance and knowledge of the production of biological medication, which is the main focus of Héma-Québec's activities. The goal is to maintain a Board with a good balance of experience and expertise aligned with the organization's activities.

Review of the project approval process

A new project approval process establishes guidelines according to the nature of the projects submitted to the Board: new product lines or new services, sustainability, efficiency and safety, major projects. This revised process takes into consideration overall expenses and not just the value of capital assets. It also includes an accountability procedure, specifically in the case of cost overruns or changes in the scope of a project. Moreover, a complete list of projects is submitted to the Board of Directors twice a year, once when the budget is presented in the fall and once at the end of the financial year in the spring. Finally, the process was reviewed to standardize methods and supporting documents. Developments in Héma-Québec's major projects, such as eProgesa and the PLASMAVIE Plasma Donor Lounge, are also monitored rigorously by the Audit Committee or the Information Resources Committee, as applicable.

Risk management

Héma-Québec's risk management policy clearly establishes the responsibilities of the Board of Directors and committees. The Audit Committee is primarily responsible for risk management and each committee monitors the risks that come under its jurisdiction. In keeping with this sharing of responsibilities, the Information Resources Committee has begun a thought process with the purpose of establishing the information risks that it could monitor.

Moreover, a review of the risk management framework is underway. This framework serves specifically to establish the gravity and frequency of risks. In order to improve the review process, a decision was made to request advice from the advisory

committees of the Board of Directors. For example, the Safety Advisory Committee formulated comments on the evaluation of medical risks (viruses and other pathogens) for both donors and recipients.

Culture change

The culture change is central to the shift initiated by Héma-Québec on the heels of the 2012–2015 strategic planning. Throughout the year, the Human Resources and Compensation Committee was informed about the actions resulting from this new direction. The results of the staff engagement survey and the related action plan were also presented. Moreover, the committee took stock of major progress in workforce adaptability, the result of discussions between employee groups and management.

Board of Directors	
Categories represented	Members
RECIPIENTS	<i>Chair</i> Martine Carré Corporate Director
PUBLIC HEALTH	<i>Vice-Chair</i> Michèle Beaupré Bériau Secretary General, <i>Institut national de santé publique du Québec</i>
HÉMA-QUÉBEC	<i>Secretary</i> Dr. Jean De Serres President and Chief Executive Officer, Héma-Québec
BUSINESS COMMUNITY	Christine Beaubien Corporate Director President, <i>Groupe BSC</i>
ASSOCIATION QUÉBÉCOISE D'ÉTABLISSEMENTS DE SANTÉ ET DE SERVICES SOCIAUX (AQESSS)	René Carignan, CPA, CA Associate Executive Director of Finance, Administrative and Clinical Support, McGill University Health Centre
	Lucie Letendre, CPA, CGA Executive Director, <i>Centre de santé et de services sociaux de Trois-Rivières</i>
COLLÈGE DES MÉDECINS DU QUÉBEC	Dr. Annie Lagacé Anesthesiologist, <i>Hôpital du Sacré-Cœur de Montréal</i>
	Dr. Jean-Marie Leclerc Hematologist-oncologist, <i>Centre hospitalier universitaire Sainte-Justine</i>
SCIENTIFIC RESEARCH COMMUNITY	Dr. Serge Montplaisir Professor, Department of Microbiology and Immunology, <i>Université de Montréal</i>
	Dr. Patricia Pelletier Assistant Professor, Department of Medicine, McGill University
DONORS AND VOLUNTEERS	Vacant
ORDRE DES COMPTABLES PROFESSIONNELS AGRÉÉS DU QUÉBEC	Vacant
BIOVIGILANCE COMMITTEE OBSERVER	Vacant

BOARD COMMITTEES

Executive Committee

Martine Carré, Chair of the Board of Directors

Michèle Beaupré Bériau, Vice-Chair of the Board of Directors

Dr. Jean De Serres, Secretary of the Board of Directors

René Carignan, CPA, CA, Director

Dr. Patricia Pelletier, Director

Governance and Ethics Committee

Michèle Beaupré Bériau, Chair

Martine Carré

Dr. Annie Lagacé

Audit Committee

René Carignan, CPA, CA, Chair

Christine Beaubien

Lucie Letendre, CPA, CGA

Dr. Serge Montplaisir

Human Resources and Compensation Committee

Martine Carré, Chair

Christine Beaubien

Lucie Letendre, CPA, CGA

Dr. Serge Montplaisir

Information Resources Committee

Christine Beaubien, Chair

DIRECTOR MEMBERS

Martine Carré

René Carignan, CPA, CA

EXTERNAL MEMBERS

Michèle Bureau
Consultant, Information Technology and Electronic Affairs,
Bureau et Associés Inc.

Robert Charbonneau
Advisor, Information Technology

Pierre Montminy
Senior Advisor
Responsible for IT practices, *E3 Services Conseils*

ADVISORY COMMITTEES

Recipient Representatives Advisory Committee	
Fields represented	Members
COCQ-SIDA	<i>Chair</i> Michel Morin
ASSOCIATION DES PATIENTS IMMUNODÉFICIENTS DU QUÉBEC	Martine Allard
ASSOCIATION DES PATIENTS IMMUNODÉFICIENTS DU QUÉBEC	Jacques Dagnault
CANADIAN HEMOPHILIA SOCIETY, QUÉBEC BRANCH	Marius Foltea
CANADIAN HEMOPHILIA SOCIETY, QUÉBEC BRANCH	Pascal Mireault
CANADIAN TRANSPLANT ASSOCIATION	Gaston Martin
ASSOCIATION D'ANÉMIE FALCIFORME DU QUÉBEC	Delano George
ASSOCIATION D'ANÉMIE FALCIFORME DU QUÉBEC	Wilson Sanon
LEUCAN	Pierre Verret
BOARD OBSERVER	Dr. Annie Lagacé
BOARD OBSERVER	Martine Carré

Safety Advisory Committee

Fields represented	Members
PUBLIC HEALTH	<i>Chair</i> Dr. Bryce Larke Virologist Virology, ProVLab, Edmonton, Canada
INFECTIOUS DISEASES	Dr. Susan Stramer Executive Scientific Officer Scientific Support Office American Red Cross Gaithersburg, United States
EPIDEMIOLOGY	Dr. Steven Kleinman Biomedical Consultant, Victoria, Canada
TRANSFUSION MEDICINE AND PRACTICES	Dr. Luiz Amorim Medical Director Hemobras, Brasilia, Brazil
	Dr. Georges Andreu Official Representative of the Director General Institut National de la Transfusion Sanguine, Paris, France
	Dr. James P. Aubuchon President and Chief Executive Officer Puget Sound Blood Center, Seattle, United States
	Dr. Louis M. Katz Executive Vice-President, Medical Affairs America's Blood Centers, Washington, United States
	Dr. Hans L. Zaaier Professor Sanquin Blood Supply Foundation, Academic Medical Centre, Amsterdam, Netherlands
TISSUES	Dr. Douglas Michael Strong Research Professor, Department of Orthopedics and Sports Medicine and Department of Surgery University of Washington School of Medicine, Seattle, United States
CANADIAN BLOOD SERVICES	Dr. Margaret Fearon Executive Director, Medical Microbiology Canadian Blood Services, Toronto, Canada
PUBLIC REPRESENTATIVE	David Page General Manager Canadian Hemophilia Society, Montréal, Canada
REPRESENTATIVE OF THE RECIPIENT REPRESENTATIVES ADVISORY COMMITTEE	Marius Foltea Canadian Hemophilia Society, Québec branch Montréal, Canada
BOARD OBSERVER	Dr. Patricia Pelletier Assistant Professor, Department of Medicine, McGill University, Montréal, Canada

Scientific and Medical Advisory Committee

Fields represented	Members
IMMUNOLOGY	<p><i>Chair</i> Yves St-Pierre Professor INRS - Institut Armand-Frappier, Laval, Canada</p> <hr/> <p>Srini V. Kaveri Director Centre de Recherche des Cordeliers Équipe 16 - INSERM - U 872, Paris, France</p>
DIAGNOSTIC TECHNOLOGY	<p>Michel Houde Senior Consultant, Medical Device Certification and Management Support MMA Group (MMA Certification), Montréal, Canada</p>
TRANSFUSION MEDICINE	<p>Dr. Jean-François Hardy Chairholder, ABDV-Héma-Québec-Bayer chair in Transfusion Medicine, Université de Montréal</p> <p>Professor, Anesthesiology Université de Montréal, Montréal, Canada</p> <hr/> <p>Dr. Vincent Laroche Hematologist and Blood Bank Director and Associate Director of Clinical Research Centre hospitalier affilié universitaire de Québec</p> <p>Hematologist and Blood Bank Director Québec Heart and Lung Institute, Québec, Canada</p>
BIOTECHNOLOGY	<p>Bernard Massie Director Bioprocess Centre, National Research Council of Canada (Biotechnology Research Institute), Montréal, Canada</p>
INDUSTRIAL RESEARCH	<p>Denis Riendeau Pre-clinical Research Consultant Montréal, Canada</p>
HEMATOPOIESIS	<p>Julie Audet Assistant Professor Institute of Biomaterials and Biomedical Engineering University of Toronto, Toronto, Canada</p>
CANADIAN BLOOD SERVICES	<p>William P. Sheffield Associate Director, Research Scientist, R&D Canadian Blood Services, Toronto, Canada</p> <p>Professor, Pathology and Molecular Medicine McMaster University, Hamilton, Canada</p>
REPRESENTATIVE OF THE RECIPIENT REPRESENTATIVES ADVISORY COMMITTEE	<p>Marius Foltea Canadian Hemophilia Society, Québec branch Montréal, Canada</p>
HÉMA-QUÉBEC BOARD OF DIRECTORS OBSERVER	<p>Dr. Serge Montplaisir Professor, Department of Microbiology and Immunology Université de Montréal, Montréal, Canada</p>

Cell and Tissue Production Advisory Committee

Members

*Chair***Dr. François Auger**

Director, Centre LOEX, Université Laval, Québec, Canada

Dr. Amit Bar-Or

Director, Montreal Neurological Institute and Hospital, Montréal, Canada

Dr. Elie Haddad

Professor, Department of Pediatrics – Université de Montréal, Montréal, Canada

Dr. Jacques GalipeauProfessor, Hematology and Medical Oncology, Pediatrics and Medicine
Emory University/Winship Cancer Institute, Atlanta, United States**Dr. Réjean Lapointe**Associate Professor, Faculty of Medicine – Université de Montréal
Centre de recherche du CHUM (Notre-Dame), Montréal, Canada**Christiane Maroun**Translational Research Director
Mirati Therapeutics**Dr. Denis-Claude Roy**Director, Centre d'excellence en thérapie cellulaire (CETC)
Hôpital Maisonneuve-Rosemont, Montréal, Canada*Héma-Québec Board of Directors Observer***Dr. Serge Montplaisir**Professor, Department of Microbiology and Immunology
Université de Montréal, Montréal, Canada

Research Ethics Committee

Fields represented	Members
LAW	<i>Chair</i> Suzanne Courchesne Attorney Borden Ladner Gervais, Montréal, Canada
LAW, SUBSTITUTE LEGAL EXPERT	Mélanie Champagne Attorney Borden Ladner Gervais, Montréal, Canada
RESEARCH FIELD SPECIALISTS	Clermont Dionne Population Health Research Unit <i>Centre de recherche du CHA de Québec, Québec, Canada</i>
	Michel Vincent Centre for Research on Protein Function, Structure and Engineering <i>Université Laval, Québec, Canada</i>
	Jacques J. Tremblay <i>Centre de recherche du CHUQ (CHUL), Ontogeny and reproduction, Québec, Canada</i>
BLOOD DONORS	Pierre McDuff Association of Blood Donation Volunteers, Montréal, Canada
RECIPIENT REPRESENTATIVES ADVISORY COMMITTEE, ETHICIST	Michel Morin COCQ-Sida, Montréal, Canada
SUBSTITUTE ETHICIST	Johane de Champlain Attorney <i>Fonds de la recherche en santé du Québec, Montréal, Canada</i>

LEGISLATIVE REQUIREMENTS

COMPLIANCE WITH LAWS

The laws, regulations or policies that include accountability obligations for the Héma-Québec annual report are:

- the *Sustainable Development Act*;
- the *Act respecting the Ministère du Conseil exécutif*, which provides for the publication of the director code of ethics and cases handled under this code;
- the *Regulation respecting the distribution of information and the protection of personal information*;
- the *Act to implement certain provisions of the Budget Speech of 30 March 2010, reduce the debt and return to a balanced budget in 2013–2014* – better known as Bill 100;
- the *Policy on the use and quality of French within the government*;
- the *Policy for the funding of public services*.

SUSTAINABLE DEVELOPMENT ACT

Through the *Government Sustainable Development Strategy*, the Québec government challenges all departments and public agencies by proposing that they adopt some of the 29 objectives included in its strategy. To comply with these legal requirements and contribute to the improved well-being, health and quality of life of Quebecers, Héma-Québec has established its own strategic plan and identified six objectives. This plan was developed around five key directions.

In 2012–2013, the Government of Québec deferred the review of the *Government Sustainable Development Strategy* to 2015. As part of this two-year extension, it asked all departments and agencies governed by the *Sustainable Development Act* to choose one objective from among the 21 included in Agenda 21 for Culture and to implement new actions to achieve this objective by March 31, 2015. Héma-Québec selected Objective 5, *cultural action from a sustainability perspective*. This is integrated in Government Objective No. 24.

Several sustainable development actions were completed in 2013–2014. Here is a brief summary.

GOVERNMENT OBJECTIVE NO. 1

Make people increasingly aware of the sustainable development concept and principles. Promote knowledge and experience sharing in this area and assimilate knowledge and know-how facilitating its implementation.

Several awareness-raising actions were taken with the staff to achieve this objective:

- sustainable development awareness-raising campaign encouraging employees to adopt eco-friendly and sustainable behaviors (expanding the mandate of the Green Committee, presentation of Agenda 21 for Culture, publication of *Astuce écolo* (eco tip) once a month);
- permanent electronic distribution of sustainable development guidelines, objectives and actions;
- training on taking the 16 principles of sustainable development into account, offered on the intranet;
- conferences offered to employees providing tips for a sustainable office and composting.

GOVERNMENT OBJECTIVE NO. 4

Continue developing and promoting a culture of prevention and define conditions that are beneficial for health, safety and the environment.

Several actions were taken to achieve this objective:

- promotion of physical activity through the *Policy concerning the partial reimbursement of physical activities practiced by the employees* for a fourth year;
- payment of registration fees for taking part in sports events;
- medical-health program to immunize all employees who handle blood products against hepatitis B;
- annual flu vaccination program for all employees;
- active Health and Safety Committees;
- ergonomic evaluations of workstations performed for office personnel;
- maintenance of the hotline for managers whose employees are experiencing psychological issues or work adjustment difficulties and are interested in obtaining problem-solving methods (this service is offered in conjunction with the Héma-Québec employee assistance program).

GOVERNMENT OBJECTIVE NO. 6

Apply environmental management measures and an ecoresponsible procurement policy to departments and government agencies.

Identify potential markets in which sustainable development criteria can be applied and use these criteria in calls for tenders and in the marketplace.

Several actions are carried out, on a continuous basis, to incorporate sustainable development criteria in all Héma-Québec activities. Sustainable development clauses are systematically added to all calls for tenders and contracts issued by the various departments, when applicable.

Héma-Québec promotes the acquisition and use of recycled materials, including recycled paper and cardboard containing post-consumer fibres, and ensures compliance with Energy Star certification in the selection and purchase of new electronic appliances. Moreover, Héma-Québec gives a second life to its old equipment through firms that specialize in dismantling and recycling materials.

GOVERNMENT OBJECTIVE NO. 7

Promote reduction in the amount of energy, natural resources and materials used to produce and market goods and services.

Several actions were taken to achieve this objective:

- Acquisition of a third electric vehicle in August 2013. This model can cover a distance of 50 kilometres on a single charge before the gas motor is used.
- Replacement of the refrigerated vehicles used to ship products to hospitals, thereby enabling us to reduce our

energy consumption. The six new vehicles are equipped with refrigeration systems that function independently from the vehicle motor and only when needed to maintain the required temperature. These vehicles are also equipped with systems to reduce polluting emissions.

- In the pursuit of its objective to reduce mailings, in 2013–2014, Héma-Québec collected 25,000 additional email addresses from its donors, bringing the total number of email addresses to 57,260, which it used to transmit close to 90,000 additional invitations.

GOVERNMENT OBJECTIVE NO. 14

Focus on family life and facilitate the conciliation of work, school and personal life.

In 2013–2014, Héma-Québec's *Policy on reconciling work and personal life* continued to enable a growing number of employees to benefit from means to better combine their work responsibilities and the needs of their personal lives. Enjoying greater flexibility in the organization of their work time, employees and their managers benefit from tools that enable them to create a stimulating environment and a better quality of life at work.

GOVERNMENT OBJECTIVE NO. 24

Increase citizens' involvement in their community.

In order to achieve this objective, Héma-Québec continued its awareness-raising efforts, in collaboration with the Association of Blood Donation Volunteers (ABDV), particularly among students in cegeps and universities, where 26,241 donors took part in 176 blood drives. The ABDV was also involved in promoting the new permanent blood donor centres. Maintaining the number of active volunteers contributing to blood drives and Héma-Québec's activities is also a priority.

In cooperation with Héma-Québec, the ABDV volunteers visited more than 300 businesses to raise awareness about the GLOBULE Blood Donor Centres and encourage their employees to go and give blood just a few steps from their place of work.

Finally, working with ABDV volunteers, Héma-Québec multiplied the presence of ABO stands in public places and reached more than 2,500 individuals.

OBJECTIVE 5 OF QUÉBEC'S AGENDA 21 FOR CULTURE

Foster cultural development among citizens as well as access to and participation in cultural activities. Encourage amateur cultural activities and cultural mediation. Include citizens in the cultural policy development process at all levels. Treat cultural activities as an opportunity for learning and building citizenship.

In response to a commitment by the Government of Québec to incorporate culture into its sustainable development policies and initiatives, Héma-Québec set itself an objective of increasing the civic commitment of its employees by focusing on leisure activities and participation in cultural events.

In 2013–2014, introductory photography courses were offered to the organization's employees during their lunch hour. Two photo enthusiasts working for Héma-Québec volunteered to share their knowledge with colleagues who wanted to learn the basics of photography.

ACT RESPECTING THE MINISTÈRE DU CONSEIL EXÉCUTIF (CQLR, C. M-30)

Public administrators, including those 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 blood system.

Pursuant to the *Regulation respecting the ethics and professional conduct of public office holders*, the directors of Héma-Québec adopted a governance framework and director code of ethics in 1999. It was reviewed in depth in 2006. Since then, it is reviewed annually by the Governance and Ethics Committee, and the directors sign a form every year certifying that they are committed to respecting it. Finally, a verification of the directors' declarations of interests is performed at the beginning of every Board or committee meeting and included in the minutes.

In addition, no incident was handled under the governance framework or director code of ethics and no failure to comply was reported.

You can consult Héma-Québec's governance framework and director code of ethics on page 43.

REGULATION RESPECTING THE DISTRIBUTION OF INFORMATION AND THE PROTECTION OF PERSONAL INFORMATION

In keeping with section 4 of the *Regulation respecting the distribution of information and the protection of personal information*, Héma-Québec attests to having published the required documents or information on its Web site.

REQUESTS FOR ACCESS TO INFORMATION

Three requests for access to information and/or documents held by Héma-Québec and eight requests for access to personal information were received between April 1, 2013 and March 31, 2014. All of the requests were handled within the time frame prescribed in the *Act respecting access to documents held by public bodies and the protection of personal information*.

Among these requests, six were accepted, three were partially accepted in order to protect information of a financial, commercial, technical and/or personal nature of a third party and two were refused.

INFORMATION SECURITY COMMITTEE

The Information Security Committee provides support for information security management and coordination activities, in particular by monitoring the measures implemented 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 person in charge of information security, the person in charge of access to information and personal information and the person in charge of document management all sit on the committee.

In terms of information security, in the past year Héma-Québec conducted hacking tests to validate the security of its equipment. Héma-Québec also began a review of its digital information security strategy, establishing a security optimization committee made up of members of its staff and external security and governance experts. Finally, the Information Security Committee began a study to establish Héma-Québec's position with respect to the various cloud computing solutions offered.

With regard to raising employee awareness, Héma-Québec renewed its annual campaign, "Information security: a shared responsibility", and offered its managers refresher training on the security, integrity and confidentiality of the information held by the organization.

Finally, the committee made sure these principles are applied to the information published on its intranet.

ACT TO IMPLEMENT CERTAIN PROVISIONS OF THE BUDGET SPEECH OF 30 MARCH 2010, REDUCE THE DEBT AND RETURN TO A BALANCED BUDGET IN 2013–2014

In accordance with section 2 of the Act, Héma-Québec applied a salary scale increase of 1.75% for executive, professional, technical and administrative support staff for 2013–2014.

POLICY ON THE USE AND QUALITY OF FRENCH WITHIN THE GOVERNMENT (POLITIQUE GOUVERNEMENTALE RELATIVE À L'EMPLOI ET À LA QUALITÉ DE LA LANGUE FRANÇAISE DANS L'ADMINISTRATION)

This policy is currently being developed 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).

POLICY FOR THE FUNDING OF PUBLIC SERVICES

In accordance with the *Policy for the funding of public services*, Héma-Québec publishes its financial statements in its annual report. These financial statements include, among other things, the fee presentation and approval method for the products supplied by Héma-Québec to the population of Québec.

Pursuant to the *Act respecting Héma-Québec and the Biovigilance Committee*, the methods used to determine the fees for products supplied by Héma-Québec and the means for revising and indexing them are submitted to a yearly process carried out by SigmaSanté, the public supply management organization designated by the Minister of Health and Social Services. Héma-Québec submits its budget rates to SigmaSanté every year so that this organization can ratify them after consultation with the Blood System Procurement and Financing Management Committee (PFMC). It should be noted that the PFMC is responsible for making recommendations on financial and accounting issues relating to the supply of blood products.

As indicated in the attached 2013–2014 financial statements, Héma-Québec is able to confirm that it has achieved its financial objective. Increased employee productivity has fully absorbed the inflation and costs of the decreased demand for blood products. Héma-Québec was even able to generate surpluses that may be used to carry out its projects, provided an agreement is reached with the Minister.

MANAGEMENT COMMITTEE



From left to right:

Marco Décelles, CPA, CMA

Vice-President and Chief Operating Officer

Charles Vachon, MSc, MBA

Vice-President, Quality and Regulatory Affairs

Roger Carpentier, CRIA

Vice-President, Human Resources

Smaranda Ghibu, BCL, LLB

Vice-President, Corporate Affairs

Jean De Serres, MD, MSc, MBA

President and Chief Executive Officer

Yves Blais, PhD, MBA

Vice-President, Research and Development

Guy Lafrenière, CPA, CMA, MBA

Vice-President, Administration and Finance

Marc Germain, MD, PhD

Vice-President, Medical Affairs, and Medical Director, Human Tissues

Simon Fournier, DEC

Vice-President, Information Technology

GOVERNANCE FRAMEWORK AND DIRECTOR CODE OF ETHICS

PREAMBULE

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 Haemovigilance Committee* and to the recommendations of the Commission of Inquiry into the Blood System in Canada, headed by the Honourable Horace Krever.

As public administrators in the meaning of the *Act respecting the "ministère du Conseil exécutif"* (R.S.Q. M-30), Héma-Québec's directors are held to the highest ethical and professional standards, fostering and preserving public trust and transparency in the management of Québec's blood system.

GOVERNANCE FRAMEWORK

In making decisions and setting policies, Héma-Québec privileges the following principles and values:

1. Safety of the blood supply

Supply safety involves finding a balance between product safety and sufficiency. An inadequate supply could also have consequences for recipients. Decisions are primarily based on safety, but an adequate supply also factors into the method used to apply decisions.

2. Transparency

The success of a blood supply system depends on its credibility, and the trust and commitment it inspires. Transparency is the underlying attitude. Transparency calls for authenticity and an accessible decision-making process.

3. Giving blood is a privilege

Giving blood is a uniquely selfless act that must remain free. Blood donation is not a right and must not be used for other purposes.

4. Respect for donors and volunteers

Donors are the starting point of all Héma-Québec's operations. As donation is a selfless act, Héma-Québec must show donors respect and not undermine their integrity and dignity. Volunteers are also an essential part of Héma-Québec's mission. Volunteers must be treated with respect.

5. Efficiency

When appropriate, a review of benefits and expenses, including a cost/benefit analysis and decision analysis, may be carried out.

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 fulfilment 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 law, 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 behaviour 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, 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 fulfilment 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 favours.
- 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 fulfil 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 see that it 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 as well as to the Minister 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, favour, 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, favours, 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, favour 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 version was adopted by the Board of Directors on May 5, 2010.

Since Héma-Québec was founded in 1998, no case has ever had to be dealt with under the *Governance Framework and Code of Ethics for Directors*; 2013–2014 was no exception.

OUTREACH

PUBLICATIONS

- Blake JT, Hardy M, Delage G, Myhal G.** (2013) "Déjà-vu all over again: using simulation to evaluate the impact of shorter shelf life for red blood cells at Héma-Québec." *Transfusion*, 53 (7): 1544–1558.
- Brouard D, Ratelle O, St-Louis M, Boudreau D.** (2013) "Direct molecular detection of SRY gene from unamplified genomic DNA by metal-enhanced fluorescence and FRET." *Analytical Methods*, 5 (24): 6896–6899.
- Delage G, Myhal G, Grégoire Y, Simmons-Coley, GM.** "Donors' psychological reactions to deferral following false-positive screening test results." *Vox Sanguinis*, DOI: 10.1111/vox.12143 (posted online on March 20, 2014).
- Ditto B, Gilchrist PT, Holly CDE, Dubuc S, Delage G, France CR.** (2013) "The effects of leg crossing and applied tension on blood donor return." *Vox Sanguinis*, 105 (4): 299–304.
- Dzik WH, Beckman N, Murphy MF, Delaney M, Flanagan P, Fung M, Germain M, Haspel RL, Lozano M, Sacher R, Szczepiorkowski Z, Wendel S.** (2013) "Factors affecting red blood cell storage age at the time of transfusion." *Transfusion*, 53 (12): 3110–3119.
- Germain M, Delage G, Blais C, Maunsell E, Décary F, Grégoire Y.** (2013) "Iron and cardiac ischemia: a natural, quasi-random experiment comparing eligible with disqualified blood donors." *Transfusion*, 53 (6): 1271–1279.
- Germain M, Delage G, Grégoire Y, Robillard P.** (2013) "Donation by donors with an atypical pulse rate does not increase the risk of cardiac ischaemic events." *Vox Sanguinis*, 104 (4): 309–316.
- Germain M, Robillard P, Delage G, Goldman M.** "Allowing blood donation from men who had sex with men more than 5 years ago: a model to evaluate the impact on transfusion safety in Canada." *Vox Sanguinis*, DOI: 10.1111/vox.12109 (posted online on October 29, 2013).
- Godin G, Amireault S, Vézina-Im LA, Sheeran P, Conner M, Germain M, Delage G.** (2013) "Implementation intentions intervention among temporarily deferred novice blood donors." *Transfusion*, 53 (8): 1653–1660.
- Godin G, Germain M.** (2013) "Predicting first lifetime plasma donation among whole blood donors." *Transfusion*, 53 (Suppl. 5): 157S–161S.
- Godin G, Germain M, Conner M, Delage G, Sheeran P.** "Promoting the return of lapsed blood donors: a seven-arm randomized controlled trial of the question-behavior effect." *Health Psychology*, DOI: 10.1037/a0033505 (posted online on August 19, 2013).
- Flegel WA, Johnson ST, Keller MA, Klapper EB, Khuu HM, Moulds JM, Seltsam AW, Stack GE, St-Louis M, Tormey CA, Wagner FF, Weinstock C, Yazer MH, Denomme GA.** "Molecular immunohematology round table discussions at the AABB Annual Meeting, Boston 2012." *Blood Transfusion*, DOI: 10.2450/2013.0022–13 (posted online on October 18, 2013).
- Itoua Maïga R, Lemieux J, Roy A, Simard C, Néron S.** (2014) "Flow cytometry assessment of in vitro generated CD138⁺ human plasma cells." *BioMed Research International*, DOI: 10.1155/2014/536482.
- Loubaki L, Tremblay T, Bazin R.** (2013) "In vivo depletion of leukocytes and platelets following injection of T cell-specific antibodies into mice." *Journal of Immunological Methods*, 393 (1–2): 38–44.
- O'Brien SF, Xi G, Fan W, Yi QL, Osmond L, Delage G, Goldman M.** (2014) "Are donors in Canada compliant with deferral for tattoos and piercing?" *Blood Transfusion*, 12 (1): 141–142.
- Ritamo I, Cloutier M, Valmua L, Néron S, Rabinäa J.** (2014) "Comparison of the glycosylation of in vitro generated polyclonal human IgG and therapeutic immunoglobulins." *Molecular Immunology*, 57 (2): 255–262.
- Simard C, Néron S.** (2014) "Feasibility study: phospho-specific flow cytometry enabling rapid functional analysis of bone marrow samples from patients with multiple myeloma." *Cytometry. Part B. Clinical Cytometry*, 86 (2): 139–144.
- St-Amour I, Paré I, Alata W, Coulombe K, Ringuette-Goulet C, Drouin-Ouellet J, Soulet D, Bazin R, Calon F.** (2013) "Brain bioavailability of intravenous immunoglobulin and its transport through the blood brain barrier in a mouse model." *Journal of Cerebral Blood Flow & Metabolism*, 33 (12): 1983–1992.
- St-Amour I, Paré I, Tremblay C, Coulombe K, Bazin R, Calon F.** (2014) "IVIg protects the 3xTg-AD mouse model of Alzheimer's disease from memory deficit and Aβ pathology." *Journal of Neuroinflammation*, 11: 54.
- St-Louis M.** "Molecular blood grouping of donors." *Transfusion and Apheresis Science*, DOI: 10.1016/j.transci.2014.02.012 (posted online on March 6, 2014).

St-Louis M, Constanzo-Yanez J, Éthier C, Lavoie J, Deschênes É, Perreault J. "Red blood cell antigen portrait of self-identified Black donors in Quebec." *Transfusion Medicine*, DOI: 10.1111/tme.1210 (posted online on January 31, 2014).

St-Louis M, Lavoie J, Caron S, Paquet M, Perreault J. (2013) "A novel JK*02 allele in a French Canadian family." *Transfusion*, 53 (11 Suppl. 2): 3024.

St-Louis M, Lebrun A, Goldman M, Lavoie M. (2013) "Alloimmunization of patients by blood units harboring distinct DEL variants." *Immunohematology*, 29 (4): 136–140.

Thibault L, Beauséjour A, Jacques A, Ducas É, Tremblay M. (2014) "Overnight storage of whole blood: cooling and transporting blood at room temperature under extreme temperature conditions." *Vox Sanguinis*, 106 (2): 127–136.

Trépanier P, Chabot D, Bazin R. (2014) "Intravenous immunoglobulin modulates the expansion and cytotoxicity of CD8+ T cells." *Immunology*, 141 (2): 233–241.

Trépanier P, St-Amour I, Bazin R. (2013) "Cationized IVIg as a potential substitute to IVIg for the treatment of experimental immune thrombocytopenia." *International Immunopharmacology*, 16 (4): 409–413.

Van Der Meer PF, Reesink HW, Panzer S, Wong J, Ismay S, Keller A, Pink J, Buchta C, Compennolle V, Wendel S, Biagini S, Scurocchio P, Thibault L, Germain M, Georgsen J, Bégué S, Dernis D, Raspollini E, Villa S, Rebullia P, Takahashi M, de Korte D, Lozano M, Cid J, Gulliksson H, Cardigan R, Tooke C, Fung MK, Luban NLC, Vassallo R, Benjamin R. (2014) "Should DEHP be eliminated in blood bags?" *Vox Sanguinis*, 106 (2): 176–195.

INSTITUTIONAL AND SCIENTIFIC PRESENTATIONS

14th ANNUAL NETWORK FOR THE ADVANCEMENT OF TRANSFUSION ALTERNATIVES (NATA) SYMPOSIUM, VIENNA, AUSTRIA, APRIL 18 AND 19, 2013

Oral presentation

Du Pont-Thibodeau G, Robitaille N, Gauvin F, Thibault L, Rivard GÉ, Tucci M, Lacroix J. "Association between bradykinin levels and hypotensive reactions after platelet concentrate transfusion."

IMMUNOLOGY 2013 – THE AMERICAN ASSOCIATION OF IMMUNOLOGISTS (AAI) ANNUAL MEETING, HONOLULU, UNITED STATES, MAY 3 TO 7, 2013

Oral presentation

Bonnaure G, Néron S. "N-acetylcysteine modulation of JAK2 and JAK3 results in decreased STAT3 activation in human B lymphocytes."

Posters

Bonnaure G, Néron S. "N-acetylcysteine modulation of JAK2 and JAK3 results in decreased STAT3 activation in human B lymphocytes."

Chabot D, Trépanier P, Bazin R. "The involvement of CD62L in the effect of IVIg on the cytotoxic activity of CD8 T cells."

Padet L, Bazin R. "IVIg suppresses allogeneic mixed lymphocyte reactions by induction of anti-inflammatory monocytes (CD14+, HLA-DR+++) with CD80+ and PDL1+++ expression."

Trépanier P, Bazin R. "Inhibition of the CD8 T cell response and cytotoxicity by human intravenous immunoglobulin."

81st CONFERENCE OF THE ASSOCIATION FRANCOPHONE POUR LE SAVOIR (ACFAS), QUÉBEC CITY, CANADA, MAY 6 TO 10, 2013

Oral presentation

Gervais St-Amour C, Néron S. "Les albumines bovine et humaine modulent différemment l'expression de CD38 sur des cellules humaines cultivées en milieu sans sérum."

Poster

Lemieux J, Boire G, Fernandes A, Néron S. "Patron de cytokines inflammatoires dans le sérum et lupus érythémateux disséminé."

Invited lecture

Bazin R. "Développement de peptides inhibiteurs de l'activation du système du complément."

PROTEO ANNUAL SYMPOSIUM 2013, LAVAL, CANADA, MAY 17, 2013

Invited lecture

Bazin R. "La recherche à Héma-Québec."

ANNUAL MEETING OF THE INTERNATIONAL SOCIETY OF BLOOD TRANSFUSION (ISBT), AMSTERDAM, THE NETHERLANDS, JUNE 2 TO 5, 2013

Poster

Robillard P, Gauvin F, Robitaille N, Laroche V, Gregoire Y. "Epidemiology of blood component utilization in two adult and one pediatric hospitals."

11th ANNUAL INTERNATIONAL CORD BLOOD SYMPOSIUM, SAN FRANCISCO, UNITED STATES, JUNE 6 TO 8, 2013

Posters

Fournier D, Cayer MP, Pichette J, Delage G, Chevrier MC, Thibault L. "Antimicrobial components in cord blood plasma."

Fournier D, Cayer MP, Pouliot MC, Chevrier MC, Thibault L. "Evaluation of a multiplex PCR assay for the detection of bacterial contamination in cord blood."

CANADIAN SOCIETY FOR TRANSFUSION MEDICINE (CSTM) ANNUAL CONFERENCE, EDMONTON, CANADA, JUNE 7 TO 9, 2013

Oral presentation

Loubaki L, Bazin R. "MiR-146a promotes IVIg-mediated inhibition of TLR4 signaling in LPS-treated human monocytes."

Posters

Bazin R, Tremblay T, Courtemanche J, Paré I, Rouleau P, Émond H, Drouin M. "A high-throughput one-step method for the screening of IgA deficiency in blood donors."

Bédard C, Jacques A, Ducas É, Dussault N, Lalonde P, Thibault S, Beaudin M, Thibault L. "A new casing design for the storage of frozen blood products to reduce the breakage."

Jacques A, Daoud H, Bédard C, Chevrier MC, Thibault L. "Quality of red blood cell units washed with the haemonetics ACP 215 automated system and stored in AS-3 additive solution."

Jacques A, Daoud H, Bédard C, Laforce-Lajoie A, Chevrier MC, Thibault L. "Post-thaw quality of SAGM and AS-3 leukoreduced red blood cells after deglycerolization and suspension in AS-3 with an automated closed system."

Jacques A, Daoud H, Chevrier MC, Thibault L. "Reducing the IgA content of red blood cell units using the haemonetics ACP 215 automated system."

Padet L, Bazin R. "IVIg suppresses allogeneic mixed lymphocyte reactions by induction of anti-inflammatory monocytes (CD14+, HLA-DR+++) with CD80+ and PDL1+++ expression."

St-Louis M, Constanzo-Yanez J, Éthier C, Lavoie J, Deschênes É, Perreault J. "Major red blood cell antigens in self-identified Black donors in Québec."

St-Louis M, Deschênes É, Perreault J, Éthier C, Paquet J, Beauchêne V, Constanzo-Yanez J. "RH antigen expression affected by myeloproliferative syndrome."

St-Louis M, Perreault J, Éthier C, Constanzo-Yanez J, Paré MJ, St-Onge B, Cormier N, Deschênes É. "An hrS- (RH19) patient and the challenge to find compatible blood."

Thibault L, Cayer MP, Pichette J, Delage G, Fournier D, Chevrier MC. "Antibacterial activity of cord blood."

Thibault L, Cayer MP, Poulis MC, Fournier D, Chevrier MC. "Multiplex qPCR assay for the detection of bacterial contamination in cord blood."

Thibault L, Fissette É, Jacques A, Dion J, Renaud B, Richard M, de Grandmont MJ, Gagné LP. "Optimization of whole blood centrifugation process to improve plasma recovery."

Invited lectures

Bazin R. "Immunotherapy of Alzheimer's disease."

Thibault L. "Influence of RBC processing on the immunomodulation of immune cells."

XXVI^e CONGRÈS DE LA SOCIÉTÉ FRANÇAISE DE TRANSFUSION SANGUINE (SFTS), PARIS, FRANCE, JUNE 10 TO 13, 2013

Poster

Germain M, Delage G, Robillard P, Golman M. "Interdiction temporaire au don de sang des hommes ayant eu des relations sexuelles avec d'autres hommes : impact sur le risque de transmission du VIH par transfusion au Canada."

AMERICA'S BLOOD CENTERS (ABC) INTERIM MEETING, MD WORKSHOP, MILWAUKEE, UNITED STATES, AUGUST 3, 2013

Oral presentation

Germain M. "Screening allogeneic blood donors for pulse rate abnormalities: does it prevent cardiac ischemic events?"

15th INTERNATIONAL CONGRESS OF IMMUNOLOGY, MILAN, ITALY, AUGUST 22 TO 27, 2013

Oral presentation

Loubaki L, Bazin R. "MiR-146a promotes IVIg-mediated inhibition of NFκB activation in LPS-treated human monocytes."

Poster

Padet L, Bazin R. "IVIg suppresses allogeneic mixed lymphocyte reactions by induction of anti-inflammatory monocytes (CD14+, HLA-DR+++) with CD80+ and PDL1+++ expression."

RED CELL GENOTYPING 2013: CLINICAL BENEFITS, NATIONAL INSTITUTES OF HEALTH, BETHESDA, UNITED STATES, SEPTEMBER 19, 2013.

Invited lecture

Blais Y. "The future of red cell genotyping."

5th ANNUAL GENERAL MEETING OF THE RÉSEAU DE THÉRAPIE CELLULAIRE ET TISSULAIRE (THÉCELL) DU FONDS DE RECHERCHE DU QUÉBEC – SANTÉ (FRSQ), MONTRÉAL, CANADA, SEPTEMBER 17, 2013

Posters

Émond H, Dumont N, Boyer L, Çelebi B, Drouin M, Bazin R, Mantovani D, Roy DC, Pineault N. "Modulation de la prise de greffe et de l'expansion des progéniteurs hématopoïétiques de sang de cordon par des facteurs solubles provenant des ostéoblastes."

Rhéaume ME, Fournier D, Chevrier MC, Bazin R. "Optimisation du potentiel thérapeutique des cellules souches de sang de cordon ombilical."

2013 BEST COLLABORATIVE, DENVER, UNITED STATES, OCTOBER 9, 2013

Oral presentation

Germain M. "Quality control of blood components: a potential source of data to analyse donor variability."

ANNUAL MEETING OF THE AABB AND CTTXPO, DENVER, UNITED STATES, OCTOBER 12 TO 15, 2013

Oral presentations

Dumont N, Émond H, Çelebi B, Bazin R, Mantovani D, Roy DC, Pineault N. "Identification of the mechanisms responsible for the improved platelet recovery achieved with MSC and osteoblast-conditioned medium."

Loubaki L, Bazin R. "MiR-146a promotes IVIg-mediated inhibition of TLR4 signaling in LPS-treated human monocytes."

Loubaki L, Padet L, Bazin R. "miRNAs as potential therapeutic targets in graft-versus-host disease."

Bazin R, Tremblay T, Courtemanche J, Paré I, Rouleau P, Émond H, Drouin M. "A high-throughput one-step method for the screening of IgA deficiency in blood donors."

Brouard D, Ratelle O, Boudreau D, St-Louis M. "Let's go nano! Super luminescent nanoparticles for bioimaging and blood genotyping applications."

Germain M. "To give or not to give: social and psychological aspects of blood donation."

Delage G, Grégoire Y, Lebrun A. "Evaluation of double red cell donors with high ferritin levels."

Posters

Bédard C, Jacques A, Ducas É, Dussault N, Lalonde P, Thibault S, Beaudin M, Thibault L. "Reduced breakage of frozen blood products with a new design of storage casing."

Fissette É, Jacques A, Dion J, Renaud B, Gagné LP, Richard M, de Grandmont MJ, Thibault L. "Improving plasma recovery by the optimization of whole blood centrifugation process."

Jacques A, Daoud H, Bédard C, Chevrier MC, Thibault L. "Comparison of AS-3 and SAGM red blood cell units washed with the haemonetics ACP 215 automated system and stored in AS-3 additive solution."

Jacques A, Daoud H, Bédard C, Chevrier MC, Thibault L. "Optimizing the washing procedure of the haemonetics ACP 215 automated system for making allogeneic IgA-deficient red blood cell units."

Jacques A, Daoud H, Bédard C, Laforce-Lavoie A, Chevrier MC, Thibault L. "Preliminary results for post-thaw quality of SAGM and AS-3 leukoreduced red blood cells after deglycerolization and suspension in AS-3 with the ACp 215 automated system."

Robillard P, Jacques A, Deschênes É, Bédard C, Thibault L. "Painful and red vein syndrome associated with transfusion of red blood cells."

Thibault L, Cayer MP, Pichette J, Fournier D, Delage G, Chevrier MC. "Bacterial growth inhibition by cord blood constituents."

Thibault L, Cayer MP, Pouliot MC, Fournier D, Chevrier MC. "Application of a real-time PCR assay for bacterial contamination screening in cord blood."

Germain M, Delage G, Robillard P. "The case of leaky blood collection devices: a 'quick and dirty' assessment to evaluate and mitigate the risk."

Lebrun A, Ceneston N, Constanzo-Yanez J, Chevrier M, Delage G. "Hemoglobin (Hb) level, safe enough to qualify donors?"

Cayer M, Pichette J, Fournier D, Delage G, Chevrier M, Thibault L. "Bacterial growth inhibition by cord blood (CB) constituents."

Godin G, Germain M. "Predicting first lifetime plasma donation among whole blood donors."

Godin G, Germain M. "The promotion of plasma donation: a randomized trial of recruitment strategies among whole blood donors."

52nd ANNUAL MEETING OF AMERICA'S BLOOD CENTERS (ABC), PALM SPRINGS, UNITED STATES, MARCH 22 TO 25, 2014

Invited lecture

Delage G, Cruz J. "A review of recent clinical trials in transfusion medicine."

FINANCIAL STATEMENTS

FOR THE YEAR ENDED MARCH 31, 2014

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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.

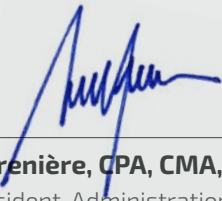
To fulfil its mandate, management maintains a system of internal accounting controls designed to provide reasonable assurance that assets are safeguarded and that transactions are duly approved and properly recorded on a timely basis and in a manner suitable for preparing reliable financial statements.

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.

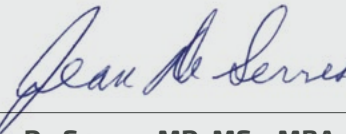
The Auditor General of Québec has audited the financial statements of Héma-Québec in accordance with Canadian generally accepted auditing standards. His independent auditor's report states the nature and scope of the audit and expresses his opinion.

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



Guy Lafrenière, CPA, CMA, MBA

Vice-President, Administration and Finance



Jean De Serres, MD, MSc, MBA

President and Chief Executive Officer

Montréal, June 18, 2014

INDEPENDENT AUDITOR'S REPORT

To the National Assembly

Report on the financial statements

I have audited the financial statements of Héma-Québec, which comprise the statement of financial position as at March 31, 2014, 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 in the accompanying notes.

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 we 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.

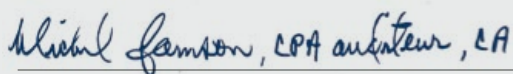
Opinion

In my opinion, these financial statements present fairly, in all material respects, the financial position of Héma-Québec as at March 31, 2014 and the results of its operations, remeasurement of gains and losses, changes in 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, these principles have been applied on a basis consistent with that of the previous year.

Acting Auditor General of Québec,



Michel Samson, CPA auditor, CA

Montréal, June 18, 2014

STATEMENT OF OPERATIONS AND ACCUMULATED SURPLUS FOR THE YEAR ENDED MARCH 31, 2014 (in thousands of dollars)

	2014 BUDGET	2014 ACTUAL	2013 ACTUAL
REVENUES			
Blood products (note 3)	328,063	314,865	324,749
Grants from the Government of Québec	36,477	32,404	34,216
Human tissue	3,290	2,888	2,712
Cord blood	550	2,120	1,838
Stem cells	–	1,445	–
Interest	316	452	384
Other	2,150	3,370	2,330
	370,846	357,544	366,229
EXPENSES (note 4)			
Stable products	209,909	207,286	208,643
Labile products	137,590	120,939	130,292
Other services	23,347	23,362	23,724
	370,846	351,587	362,659
OPERATING SURPLUS (before undernoted)	–	5,957	3,570
Credits issued to Québec hospital centres pertaining to previous year	–	–	(3,009)
ANNUAL OPERATING SURPLUS	–	5,957	561
ACCUMULATED OPERATING SURPLUS, BEGINNING OF YEAR		4,485	3,924
ACCUMULATED OPERATING SURPLUS, END OF YEAR (note 5)		10,442	4,485

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

STATEMENT OF REMEASUREMENT GAINS AND LOSSES FOR THE YEAR ENDED MARCH 31, 2014 (in thousands of dollars)

	2014	2013
ACCUMULATED REMEASUREMENT GAINS (LOSSES), BEGINNING OF YEAR	396	(4,011)
Unrealized gains (losses) attributable to the following:		
Derivatives	7,071	794
Exchange rate	108	(398)
Amount reclassified to the statement of operations		
Derivatives	(794)	4,011
Exchange rate	398	–
Net remeasurement gains for the year	6,783	4,407
ACCUMULATED REMEASUREMENT GAINS, END OF YEAR	7,179	396

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

STATEMENT OF FINANCIAL POSITION FOR THE YEAR ENDED MARCH 31, 2014 (in thousands of dollars)

	2014	2013
FINANCIAL ASSETS		
Cash and cash equivalents	33,923	30,365
Accounts receivable (note 6)	7,186	3,832
Inventories held for sale (note 7)	41,231	44,876
Derivatives (note 14)	7,071	794
	89,411	79,867
LIABILITIES		
Accounts payable and accrued liabilities (note 8)	33,419	49,170
Deferred grants from the Government of Québec	11,639	5,566
Non-interest bearing advance from the Government of Québec	24,289	10,818
Debt (notes 9 and 10)	44,452	42,536
Employee future benefits liability (note 11)	4,595	7,479
	118,394	115,569
NET DEBT	(28,983)	(35,702)
NON-FINANCIAL ASSETS		
Tangible capital assets (note 12)	43,747	37,320
Prepaid expenses (note 13)	2,857	3,263
	46,604	40,583
ACCUMULATED SURPLUS	17,621	4,881
Accumulated operating surplus (note 5)	10,442	4,485
Accumulated remeasurement gains	7,179	396
	17,621	4,881
Contractual commitments (note 15)		
Contingencies (note 16)		

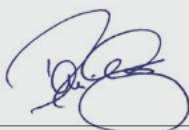
The accompanying notes are an integral part of the financial statements.

ON BEHALF OF THE BOARD OF DIRECTORS,



Martine Carré, MA

Chair of the Board of Directors



René Carignan, CPA, CA

Chair of the Audit Committee

STATEMENT OF CHANGES IN NET DEBT FOR THE YEAR ENDED MARCH 31, 2014

(in thousands of dollars)

	2014 BUDGET	2014 ACTUAL	2013 ACTUAL
ANNUAL OPERATING SURPLUS	–	5,957	561
Acquisition of tangible capital assets	(26,774)	(11,551)	(5,866)
Amortization of tangible capital assets	8,363	5,078	5,367
Loss (gain) on disposal of tangible capital assets	–	46	(82)
Proceeds on disposal of tangible capital assets	–	–	551
	(18,411)	(6,427)	(30)
Acquisition of prepaid expenses	–	(3,313)	(4,096)
Use of prepaid expenses	–	3,719	3,415
	–	406	(681)
Net remeasurement gains for the year	–	6,783	4,407
Decrease (increase) in net debt	(18,411)	6,719	4,257
NET DEBT, BEGINNING OF YEAR	(35,702)	(35,702)	(39,959)
NET DEBT, END OF YEAR	(54,113)	(28,983)	(35,702)

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

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED MARCH 31, 2014 (in thousands of dollars)

	2014	2013
OPERATING ACTIVITIES		
Annual operating surplus	5,957	561
Items not affecting cash and cash equivalents		
Amortization of tangible capital assets	5,078	5,367
Effective rate debt adjustment (note 10)	(150)	–
Loss (gain) on disposal of tangible capital assets	46	(82)
	10,931	5,846
Change in assets and liabilities		
Increase in accounts receivable	(3,354)	(1,281)
Decrease (increase) in inventories held for sale	3,645	(11,063)
(Decrease) increase in accounts payable and accrued liabilities	(16,010)	20,528
Increase (decrease) in deferred grants from the Government of Québec	6,073	(2,143)
Increase in advance from the Government of Québec	13,471	2,881
Decrease (increase) in prepaid expenses	406	(681)
Decrease in employee future benefits liability	(2,884)	(360)
Cash flows from operating activities	12,278	13,727
INVESTING ACTIVITIES RELATED TO TANGIBLE CAPITAL ASSETS		
Acquisition of tangible capital assets	(11,292)	(5,349)
Proceeds on disposal of tangible capital assets	–	551
Cash flows used in investing activities related to tangible capital assets	(11,292)	(4,798)
FINANCING ACTIVITIES		
Increase in debt	10,800	8,300
Debt repayment	(8,734)	(4,273)
Cash flows from financing activities	2,066	4,027
Unrealized exchange gain (loss) on cash and non-cash working capital items denominated in foreign currencies	506	(398)
INCREASE IN CASH AND CASH EQUIVALENTS	3,558	12,558
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	30,365	17,807
CASH AND CASH EQUIVALENTS, END OF YEAR	33,923	30,365
ADDITIONAL INFORMATION		
Interest paid	1,160	1,241
Interest received	442	377
Acquisition to tangible capital assets funded by accounts payable and accrued liabilities	1,117	858

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 1998, chapter 41). Héma-Québec's mission is to efficiently provide adequate quantities of safe, optimal blood components and substitutes, human tissue and cord blood to meet the needs of all Quebecers; to provide and develop expertise, services and specialized and innovative products in the fields of transfusion medicine and human tissue transplantation. Héma-Québec operates in a regulated environment in compliance with the requirements of the *Food and Drug Act* and under a licence from the Biologics and Genetic Therapies Directorate of Health Canada. Under its incorporating statute, Héma-Québec is a legal person not established for pecuniary gain (not-for-profit organization) and is not subject to income taxes.

2. SIGNIFICANT ACCOUNTING POLICIES

In preparing its financial statements, Héma-Québec primarily uses the *CPA Canada Public Sector Accounting Handbook* (PSA). The use of any other primary source in the application of accounting principles must be consistent with the PSA.

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 allowance for pay equity 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 assessment 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
Advance from the Government of Québec	Cost
Derivatives	Fair value
Debt	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 recorded up until the period in which the remeasurement of gains and losses is settled, and upon settlement, the accumulated balance of remeasured gain or loss will be reclassified to the statement of operations.

REVENUES

Revenues are accounted for on an accrual basis. Revenues resulting from 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.

2. SIGNIFICANT ACCOUNTING POLICIES (cont'd)

REVENUES (cont'd)

Revenues derived from Government of Québec grants are recognized in the period that the events giving rise to such revenues occurred, when the grants are authorized and the eligibility criteria are met, as required. Grants are presented as deferred grants where the provisions imposed by the transferor create an obligation that meets the definition of a liability. Deferred grants are reduced, and an equivalent amount of grant revenues are accounted for as the conditions relative to the liability are met.

EXPENSES

Employee benefit plans

Héma-Québec offers its employees defined benefit and defined contribution pension plans. Contributions are made by both Héma-Québec and plan members. Héma-Québec also provides its employees with certain post-employment benefits accounted for 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.

The market-related value approach is used to calculate the value of assets and expected return on assets smoothed over a five-year period.

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.

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.

FINANCIAL ASSETS

Cash and cash equivalents

Héma-Québec's policy consists in presenting bank balances, in cash and cash equivalents, 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.

Inventories held for sale

Inventories held for sale, consisting of inventories of blood, labile and stable products, cord blood and human tissue, are measured at the lower cost and recoverable amount, with cost determined using the average cost method. Recoverable value is the estimated selling price less the related variable selling expenses.

2. SIGNIFICANT ACCOUNTING POLICIES (cont'd)

FINANCIAL ASSETS (cont'd)

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. Fluctuations in foreign exchange give rise to foreign exchange gains or losses recorded under remeasurement of gains and losses until the settlement period, at which point the accumulated balance of remeasurement of gains and losses is reclassified under the statement of operations.

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 rates:

Building	25 years
Betterment	10 and 20 years
Leasehold improvements	lease term
Machinery, automotive and other 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

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. Write-downs are accounted for as expenses for the year in the statement of operations and are not subsequently reversed.

3. BLOOD PRODUCTS

The budgeted prices for all blood products are submitted every year to SigmaSanté, which is the body designated by the Minister of Health and Social Services to manage joint supplies under Section 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 Québec government's 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.

4. EXPENSES

				2014	2013
	STABLE PRODUCTS	LABILE PRODUCTS	OTHER SERVICES	TOTAL	TOTAL
Stable products	190,546	–	–	190,546	203,215
Salaries and benefits	349	78,174	10,461	88,984	89,073
Medical and blood drive supplies	–	25,618	4,405	30,023	35,675
Building and premises	2	9,024	138	9,164	9,141
Amortization of tangible capital assets	4	4,646	428	5,078	5,367
Purchased services	3,346	(3,192)	4,438	4,592	5,694
Freight and shipping	44	4,080	249	4,373	4,349
Exchange (gain) loss	(3,745)	(252)	–	(3,997)	3,694
Purchase of cord blood, stem cells and human tissue	–	–	3,484	3,484	2,569
Advertising and public relations	10	2,951	131	3,092	3,934
Interest on long-term debt	–	1,005	–	1,005	1,255
Insurance	–	847	–	847	760
Other interest and bank charges	–	99	–	99	201
Loss (gain) on disposal of tangible capital assets	–	36	10	46	(82)
Other expenses	92	7,920	1,183	9,195	9,730
Subtotal	190,648	130,956	24,927	346,531	374,575
Plasma for fractionation*	10,589	(10,589)	–	–	–
Change in inventories**	6,049	572	(1,565)	5,056	(11,916)
Total	207,286	120,939	23,362	351,587	362,659

*Some expenses related to plasma for fractionation are incurred for labile products and reallocated to stable products on the basis of costs incurred. The costs are allocated based on units shipped.

**Change in inventories includes labile and stable products, human tissue, cord blood and plasma for fractionation.

5. ACCUMULATED OPERATING SURPLUS

As required by the provisions of section 25 of the *Act respecting Héma-Québec and the Biovigilance Committee* in effect since June 5, 2013, 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 and Héma-Québec is entered into on the use of the surplus.

To carry out its construction project for a cell production facility, the C-LAVIE complex, on a lot in the Michelet innovation space technology park, the Minister of Health and Social Services has authorized Héma-Québec to reserve \$3,500 thousand of its accumulated operating surplus of \$3,570 thousand for the year ended March 31, 2013 to finance the project.

Héma-Québec and the Minister are currently holding discussions to define the terms and conditions of an agreement for reserving the \$5,957 thousand surplus from fiscal 2013–2014 for the project.

5. ACCUMULATED OPERATING SURPLUS (cont'd)

			2014	2013
	SURPLUS RESERVE	OPERATIONS	TOTAL	TOTAL
ACCUMULATED SURPLUS:				
Beginning balance	–	4,485	4,485	3,924
Restriction to surplus reserve – C-LAVIE complex	3,500	(3,500)	–	–
Investments in tangible capital assets	(49)	–	(49)	–
Annual operating surplus	–	5,957	5,957	561
Ending balance	3,451	6,942	10,393	4,485
ACCUMULATED SURPLUS INVESTED:				
Beginning balance	–	–	–	–
Investments in tangible capital assets	49	–	49	–
Ending balance	49	–	49	–
ACCUMULATED OPERATING SURPLUS, END OF YEAR	3,500	6,942	10,442	4,485

6. ACCOUNTS RECEIVABLE

	2014	2013
Sales taxes	1,731	1,761
Trade accounts receivable	2,085	1,450
Other receivables	3,370	621
	7,186	3,832

7. INVENTORIES HELD FOR SALE

	2014	2013
Stable products	26,868	32,703
Plasma for fractionation	6,268	5,162
Labile products	2,975	3,547
Blood drive equipment	2,095	2,105
Cord blood	1,606	–
Human tissue	778	818
Laboratory equipment	641	541
	41,231	44,876

8. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

	2014	2013
Trade accounts payable	20,536	36,313
Salaries and accrued vacation	10,367	8,227
Benefits	1,530	1,653
Grants from the Government of Québec	–	2,000
Deferred revenues	986	977
	33,419	49,170

9. 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 the said Minister. The authorized amount for the period beginning April 1, 2013 and ending March 31, 2015 aims to make up funding needs not exceeding \$62,000 thousand and the authorized amount for the previous plan ended March 31, 2013 was \$33,000 thousand. The borrowings provided for under these plans serve primarily to fund bank overdrafts, asset acquisition and renewal, loan renewals and the implementation of product safety improvement projects. Héma-Québec's borrowing terms comprise rates similar or equivalent to Government of Québec rates.

Héma-Québec also has a \$15,000 thousand revolving line of credit with a financial institution under terms that may be changed at the bank's option. This line of credit is repayable at any time and was undrawn as at March 31, 2014 and 2013.

10. DEBT

	2014	2013
Borrowings repayable in monthly instalments of 450 (principal only), at fixed rates ranging from 1.59% to 4.57%, maturing from 2015 to 2023	17,276	14,003
Borrowings repayable in monthly instalments of 200 (principal only), at fixed rates ranging from 2.72% to 3.93%, renewable from 2016 to 2020 and maturing from 2021 to 2030	27,176	28,533
	44,452	42,536

Recognition of the debt using the effective interest method represents an adjustment to existing debt of \$150 thousand.

The balance of borrowings from the Financing Fund totalled \$44,091 thousand as at March 31, 2014 and \$38,797 thousand as at March 31, 2013.

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

2015	7,775
2016	6,215
2017	5,196
2018	4,461
2019	3,667
2020 and thereafter	17,138

11. EMPLOYEE FUTURE BENEFITS 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 as at December 31, 2012. The employee future benefit obligations shown as at March 31, 2014 and retirement benefit expense for the fiscal year ended as at that date are based on an extrapolation of the latest actuarial valuations. The actuarial valuations resulted in certain changes to actuarial assumptions, as well as plan amendments to increase employee contribution rates. 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.

Actuarial valuations of the other post-retirement and post-employment benefit plans were carried out as at March 31, 2013. The employee future benefit obligations shown as at March 31, 2014 and retirement benefit expense for the fiscal year ended as at that date 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 for active participating employees, which is 12 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 health and life insurance plans and 2 years for post-employment benefits.

CLASSIFICATION OF EMPLOYEE FUTURE BENEFITS LIABILITY

	2014	2013
Pension plans	(1,650)	1,366
Other plans	6,245	6,113
Total employee future benefits liability	4,595	7,479

RECONCILIATION OF FINANCIAL POSITION

	2014		2013	
	PENSION PLANS	OTHER PLANS	PENSION PLANS	OTHER PLANS
Employee future benefit obligation	161,594	5,891	150,341	6,108
Pension plan assets	157,874	–	135,193	–
Financial position – deficit	3,720	5,891	15,148	6,108
Unamortized actuarial gains (losses)	(5,370)	354	(13,782)	5
Employee future benefit liability (asset), end of year	(1,650)	6,245	1,366	6,113

11. EMPLOYEE FUTURE BENEFIT LIABILITY (cont'd)**EMPLOYEE FUTURE BENEFIT OBLIGATION**

	2014		2013	
	PENSION PLANS	OTHER PLANS	PENSION PLANS	OTHER PLANS
Employee future benefit obligation, beginning of year	150,341	6,108	139,677	6,771
Current period benefit cost	10,403	2,296	10,349	2,526
Interest expense on obligation	8,301	132	7,754	155
Benefits paid	(5,906)	(2,296)	(5,294)	(2,465)
Cost of plan amendments	33	–	222	–
Actuarial gain	(1,578)	(349)	(2,367)	(879)
Employee future benefit obligation, end of year	161,594	5,891	150,341	6,108

PENSION PLAN ASSETS

	2014		2013	
	PENSION PLANS	OTHER PLANS	PENSION PLANS	OTHER PLANS
Pension plan assets, beginning of year	135,193	–	120,975	–
Employer contributions	11,009	–	9,458	–
Employee contributions	4,612	–	4,225	–
Expected return on plan assets	7,702	–	6,884	–
Benefits paid	(5,906)	–	(5,294)	–
Actuarial gain (loss) on plan assets	5,264	–	(1,055)	–
Pension plan assets, end of year	157,874	–	135,193	–

MARKET VALUE OF PLAN ASSETS AS AT MARCH 31

	2014		2013	
Shares	107,553	64%	88,240	65%
Bonds	52,123	31%	41,489	30%
Other	8,617	5%	7,189	5%
Total	168,293	100%	136,918	100%

ACTUAL RETURN ON PLAN ASSETS

	2014	2013
Expected return on plan assets	7,702	6,884
Actual return on plan assets	12,966	5,829
Actuarial gain (loss) on plan assets	5,264	(1,055)
Rate of actual return	9.26%	4.66%

11. EMPLOYEE FUTURE BENEFIT LIABILITY (cont'd)**EMPLOYEE FUTURE BENEFIT EXPENSE FOR THE YEAR**

	2014		2013	
	PENSION PLANS	OTHER PLANS	PENSION PLANS	OTHER PLANS
Current period net benefit cost	5,791	2,296	6,124	2,526
Amortization of actuarial losses	1,570	–	1,666	–
Cost of plan amendments	33	–	222	–
Benefit expense	7,394	2,296	8,012	2,526
Interest expense on obligation	8,301	132	7,754	155
Expected return on plan assets	(7,702)	–	(6,884)	–
Benefit interest expense	599	132	870	155
Total benefit expense	7,993	2,428	8,882	2,681

SIGNIFICANT ASSUMPTIONS

	2014		2013	
	PENSION PLANS	OTHER PLANS	PENSION PLANS	OTHER PLANS
Employee future benefit obligation as at March 31				
Discount rate	5.70%	3.50%	5.50%	3.00%
Rate of compensation increase	3.75%	3.75%	3.75%	3.75%
Inflation rate	2.50%	–	2.50%	–
Benefit expense for the years ended March 31				
Discount rate	5.50%	3.00%	5.50%	3.10%
Expected rate of return on plan assets	5.50%	–	5.50%	–
Rate of compensation increase	3.75%	3.75%	3.75%	3.75%
Demographic factors				
Mortality	CPM-RPP2014 projected using improvement scale CPM-B		95% of the sex-distinct UP-94 table projected generationally with a Scale AA improvement	

12. TANGIBLE CAPITAL ASSETS

2014							
	LAND	BUILDING, BETTERMENT AND LEASEHOLD IMPROVEMENTS	MACHINERY, AUTOMOTIVE AND OTHER EQUIPMENT	OFFICE FURNITURE AND EQUIPMENT	COMPUTER HARDWARE AND SOFTWARE	SYSTEMS DEVELOPMENT	TOTAL
Cost							
Beginning balance	2,140	39,494	20,363	4,289	11,336	8,525	86,147
Acquisitions	–	2,988	5,427	125	993	2,018	11,551
Disposals	–	–	(590)	(83)	(752)	–	(1,425)
Ending balance*	2,140	42,482	25,200	4,331	11,577	10,543	96,273
Accumulated amortization							
Beginning balance	–	17,321	13,576	3,912	9,656	4,362	48,827
Depreciation for the year	–	1,989	1,544	166	909	470	5,078
Disposals	–	–	(575)	(52)	(752)	–	(1,379)
Ending balance	–	19,310	14,545	4,026	9,813	4,832	52,526
Net book value	2,140	23,172	10,655	305	1,764	5,711	43,747
2013							
	LAND	BUILDING, BETTERMENT AND LEASEHOLD IMPROVEMENTS	MACHINERY, AUTOMOTIVE AND OTHER EQUIPMENT	OFFICE FURNITURE AND EQUIPMENT	COMPUTER HARDWARE AND SOFTWARE	SYSTEMS DEVELOPMENT	TOTAL
Cost							
Beginning balance	2,140	38,497	20,334	4,282	10,493	5,460	81,206
Acquisitions	–	997	661	7	1,136	3,065	5,866
Disposals	–	–	(632)	–	(293)	–	(925)
Ending balance*	2,140	39,494	20,363	4,289	11,336	8,525	86,147
Accumulated amortization							
Beginning balance	–	15,312	12,231	3,681	9,140	3,552	43,916
Depreciation for the year	–	2,009	1,510	231	807	810	5,367
Disposals	–	–	(165)	–	(291)	–	(456)
Ending balance	–	17,321	13,576	3,912	9,656	4,362	48,827
Net book value	2,140	22,173	6,787	377	1,680	4,163	37,320

*The ending balance includes the following tangible capital assets under construction or development:

	LAND	BUILDING, BETTERMENT AND LEASEHOLD IMPROVEMENTS	MACHINERY, AUTOMOTIVE AND OTHER EQUIPMENT	OFFICE FURNITURE AND EQUIPMENT	COMPUTER HARDWARE AND SOFTWARE	SYSTEMS DEVELOPMENT	TOTAL
2014	–	49	542	6	169	2,291	3,057
2013	–	309	–	–	49	1,453	1,811

13. PREPAID EXPENSES

	2014	2013
Deferred emphyteutic lease charges – Université Laval	1,216	1,276
Municipal and school taxes	599	566
IT licenses and support contract	532	576
Laboratory equipment service and maintenance contract	271	270
Insurance	109	467
Other	130	108
	2,857	3,263

14. 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 party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. 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 cash and cash equivalents, trade accounts 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 is limited as the main receivables are associated with the sale of cord blood, stem cells and human tissue or services mainly for government organizations that are included in the Government of Québec's reporting entity. Such receivables are collectible during the year.

Other receivables include mainly a discount receivable under a contractual agreement with a supplier. Credit risk is limited as this receivable is provided for under the contract and Héma-Québec has met its purchase obligations. This amount is collectible within 60 days after the end of the fiscal year.

The carrying value of Héma-Québec financial instruments exposed to credit risk represents the maximum amount of credit risk to which the organization is exposed and totals \$39,378 thousand (\$32,436 thousand in 2013) in the statement of financial position. None of these financial instruments was written down and management estimates that the credit quality of all instruments which have not been written down 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 may not have the necessary funds to meet its cash needs or to finance its obligations in respect of its financial liabilities as they mature. 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.

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

Héma-Québec actively manages its cash balance and its cash flows 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 9.

As at March 31, 2014, the contractual maturities of the financial liabilities were as follows:

	2015	2016	2017 AND THEREAFTER	TOTAL	CARRYING VALUE
Trade accounts payable, salaries and accrued vacation	30,806	–	–	30,806	30,806
Advance from the Government of Québec	24,289	–	–	24,289	24,289
Interest on debt	1,249	1,057	4,622	6,928	6,731
Debt	7,775	6,215	30,462	44,452	44,649
Total non-derivative financial instruments	64,119	7,272	35,084	106,475	106,475
Derivative financial instruments	(7,071)	–	–	(7,071)	(7,071)
Total financial instruments	57,048	7,272	35,084	99,404	99,404

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 due to changes in market interest rates. Héma-Québec's debts bear interest on a fixed rate basis. Accordingly, Héma-Québec's exposure to both cash flow interest rate risk and market risk is minimal since Héma-Québec does not intend to repay them in advance.

A 0.5% increase or decrease in interest rates (0.5% as at March 31, 2013) would not impact the annual operating surplus or the remeasurement of gains or losses for the years ended March 31, 2014 and 2013.

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 of 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, Héma Québec entered into 26 foreign exchange contracts to purchase 90% of its expected foreign currency commitments in the amount of \$163,300 thousand at a rate of 1.0622 for the period from April 3, 2014 to March 18, 2015 (in 2013, 26 foreign exchange contracts in the amount of \$142,000 thousand at a rate of 1.01041 for the period from April 4, 2013 to March 18, 2014).

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

As at March 31, 2014, unrealized gains on foreign exchange contracts in the amount of \$7,071 thousand were recorded in the statement of remeasurement gains and losses (\$794 thousand as at March 31, 2013) and are measured based on the difference between the foreign currency purchase contract rates and the rate of 1.1055 on quoted prices (unadjusted) in active markets for identical instruments, as at March 31, 2014 (1.016 as at March 31, 2013).

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

	2014	2013
U.S. dollars:		
Cash and cash equivalents	179	4,306
Trade accounts receivable	2,275	–
Trade accounts payable	7,092	20,970

A 5% change in the U.S. dollar exchange rate (3% in 2013), corresponding to market volatility in the last 12 months, would not have any material effect on the annual surplus from operations or on the remeasurement of gains and losses taking into account the financial assets and liabilities denominated in foreign currencies held by Héma-Québec as at the date of the financial statements.

Fair value:

The fair value financial asset category only comprises derivatives, which are classified as Level 2 of the fair value measurement hierarchy (the fair value of derivatives being determined 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)).

15. CONTRACTUAL OBLIGATIONS

Héma-Québec has entered into long-term leases expiring at various dates over the next twenty-one years for its operating facilities and administrative premises. In some instances, the leases for premises include a renewal option of up to five years.

The lease expense for the premises for the year ended March 31, 2014 amounted to \$2,616 thousand (\$2,342 thousand in 2013). Future minimum payments under long-term leases are as follows:

2015	2,842
2016	2,831
2017	2,573
2018	2,460
2019	2,217
2020 and thereafter	24,854

16. CONTINGENCIES

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

17. RELATED PARTY TRANSACTIONS

In addition to the related party transactions already disclosed in the financial statements and measured at the exchange amount, Héma-Québec is related to all government departments, special funds, agencies and public enterprises controlled directly or indirectly by the Government of Québec or subject to joint control or common significant influence by the Government of Québec. Héma-Québec has not entered into any commercial transactions with these related parties that were not in the normal course of operations and subject to business terms that are usual and customary. These transactions are not disclosed separately in the financial statements.

18. COMPARATIVE FIGURES

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

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