

HÉMA-QUÉBEC

THE ONGOING PLAN TO INCREASE THE COLLECTION OF PLASMA FOR FRACTIONATION AT HÉMA-QUÉBEC: SUCSESSES AND LESSONS LEARNED

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WHERE ARE WE?



HÉMA-QUÉBEC IS...

A great team
dedicated to
the gift of life



1358

EMPLOYEES



CLOSE TO

225,901

BLOOD, STEM CELL, MOTHER'S MILK
AND HUMAN TISSUE DONORS



THOUSANDS

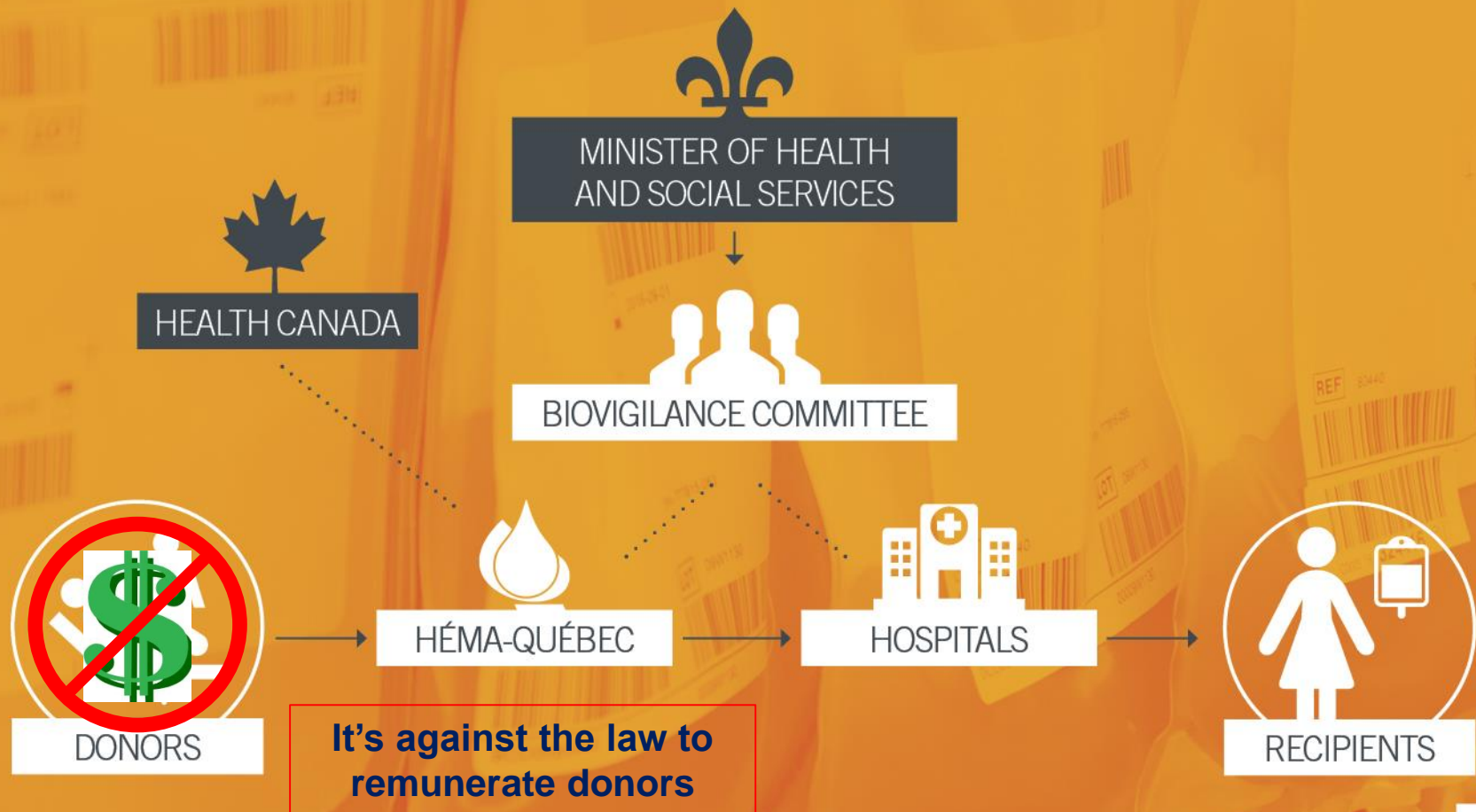
OF VOLUNTEERS



2018-19 ANNUAL REVENUE OF

\$427M

BLOOD AND BIOLOGICAL PRODUCTS OF HUMAN ORIGIN SYSTEM IN QUÉBEC



IMPROVING SELF-SUFFICIENCY IN PLASMA INTENDED FOR MEDICATION MANUFACTURING

FOR 2018-19

SELF-SUFFICIENCY RATE

IN IMMUNOGLOBULIN

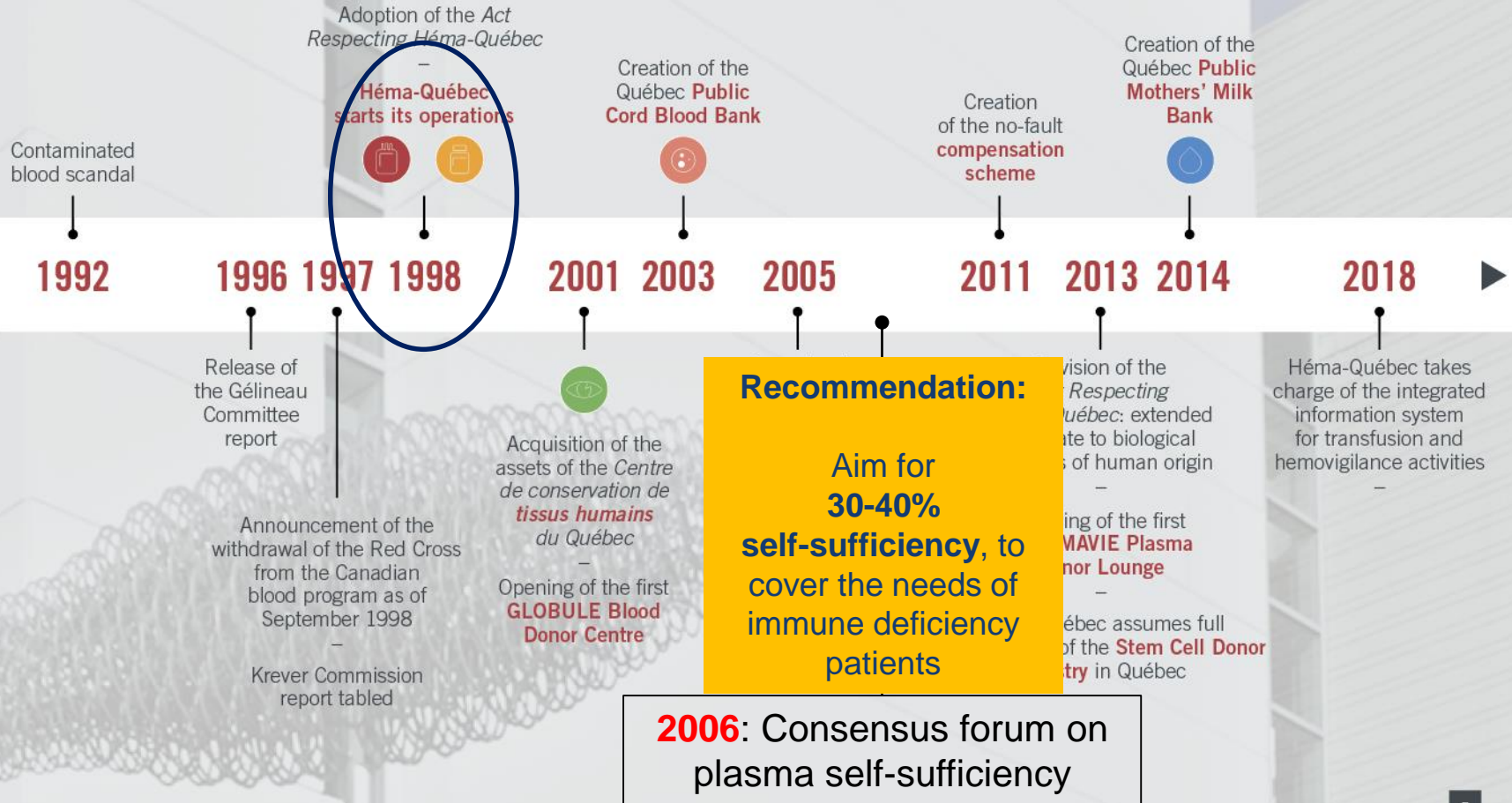
OF **21.3%**



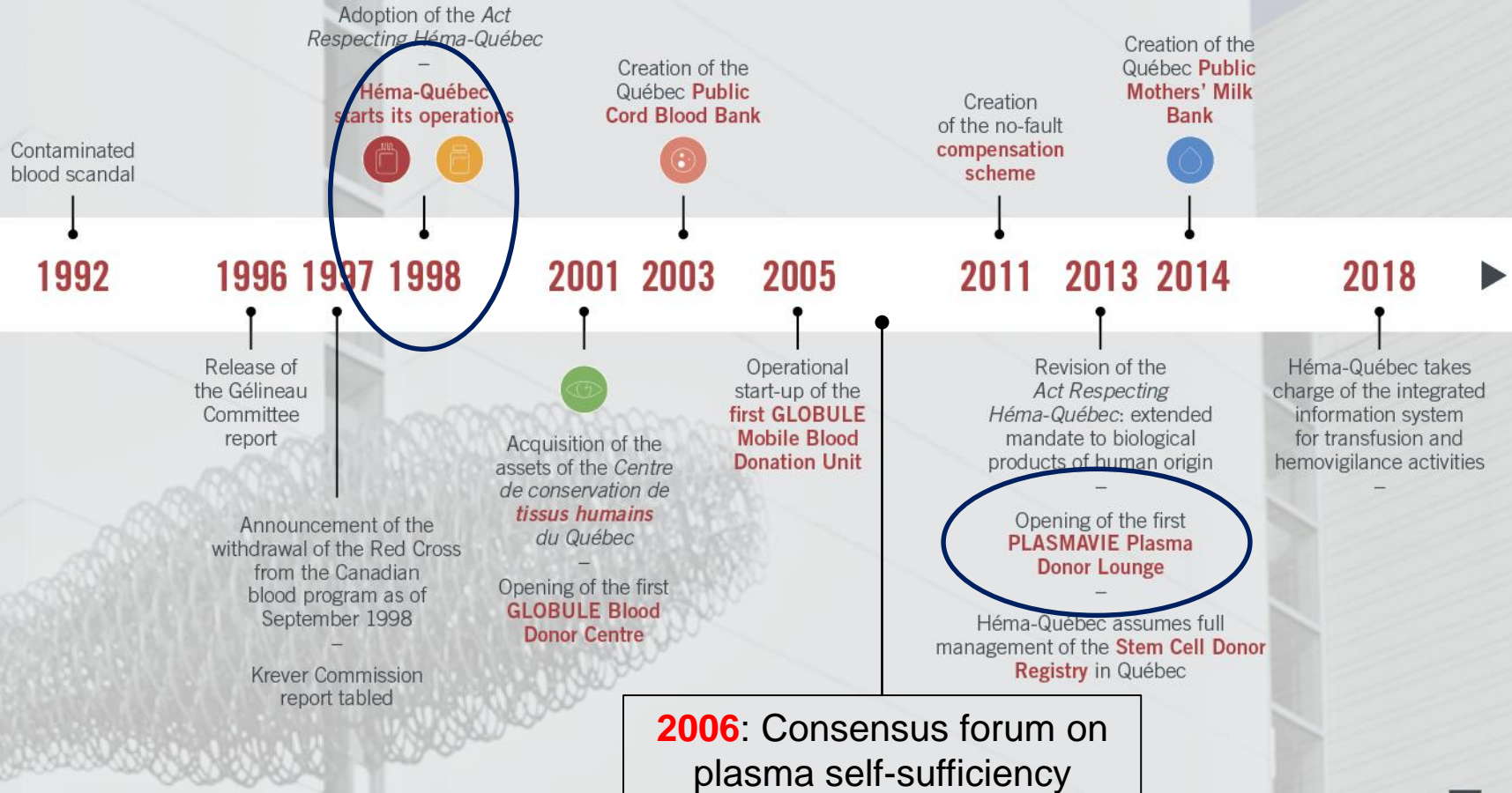
113,149

LITRES OF PLASMA
collected for purposes of manufacturing medications

FROM SUPPLIER OF BLOOD PRODUCTS TO EXPERT IN BIOLOGICAL PRODUCTS OF HUMAN ORIGIN



FROM SUPPLIER OF BLOOD PRODUCTS TO EXPERT IN BIOLOGICAL PRODUCTS OF HUMAN ORIGIN



RATIONALE FOR DECIDING TO OPEN FIXED PLASMA COLLECTION SITES (PLASMAVIE BANNER)

- The choice of fixed collection sites was the preferred approach, based on:
 - *International experience*
 - *The possibility offered to donate frequently (up to once a week), thus increasing efficiency*
 - *The greater plasma volume that can be collected (compared to recovered plasma from whole blood donations)*
 - *The possibility to promote and reinforce the donation behavior in a circumscribed community*
 - *The technical difficulties associated with apheresis donations on mobile blood drives.*

PLASMAVIE BANNER

Trois-Rivières 2013



Saguenay 2015



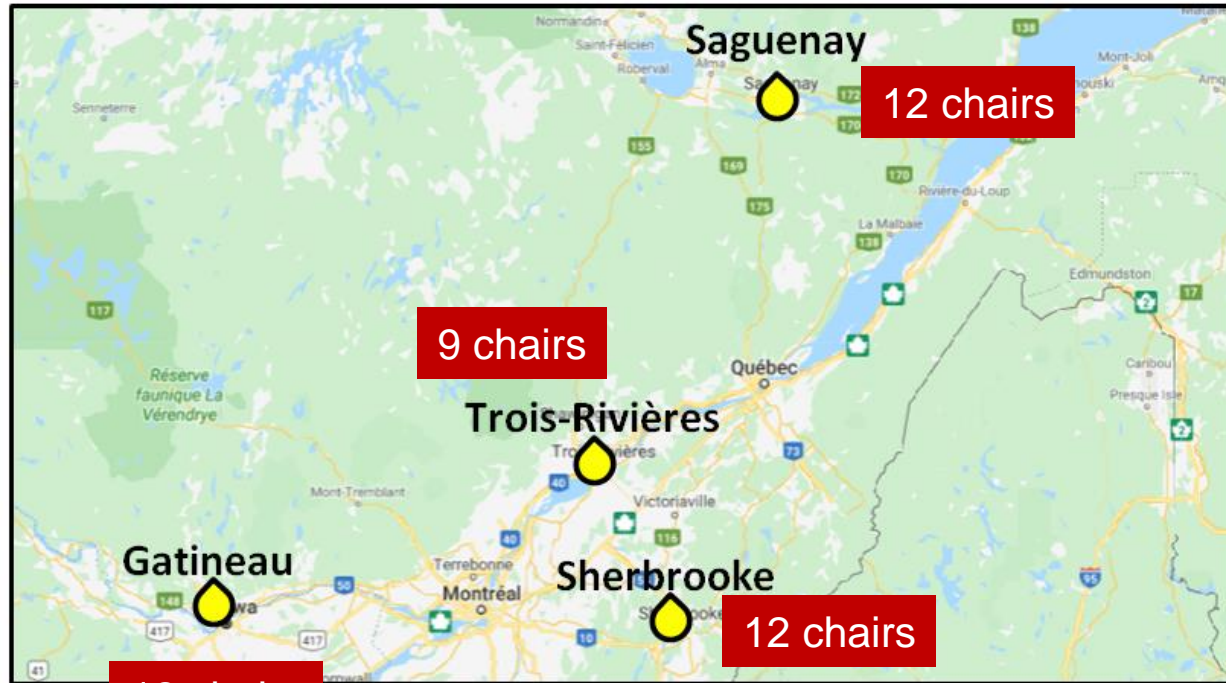
Sherbrooke 2016



Gatineau 2016



PLASMAVIE LOCATIONS



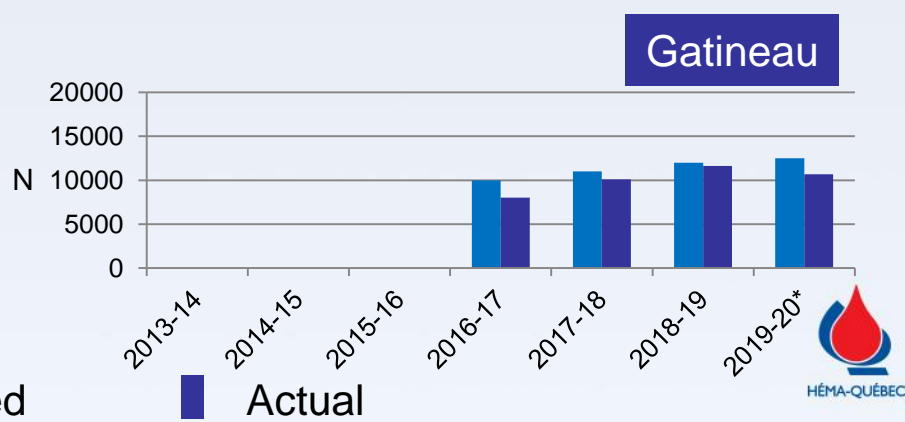
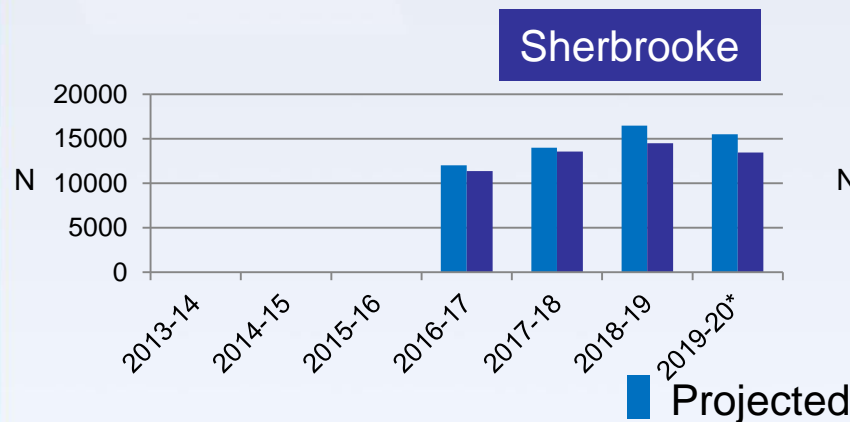
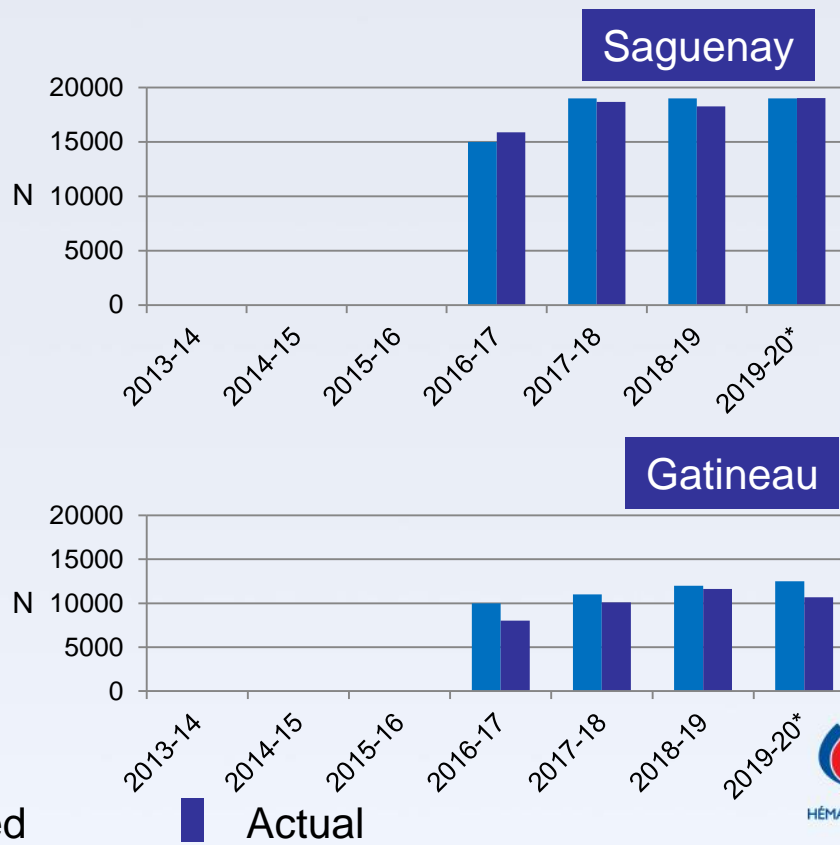
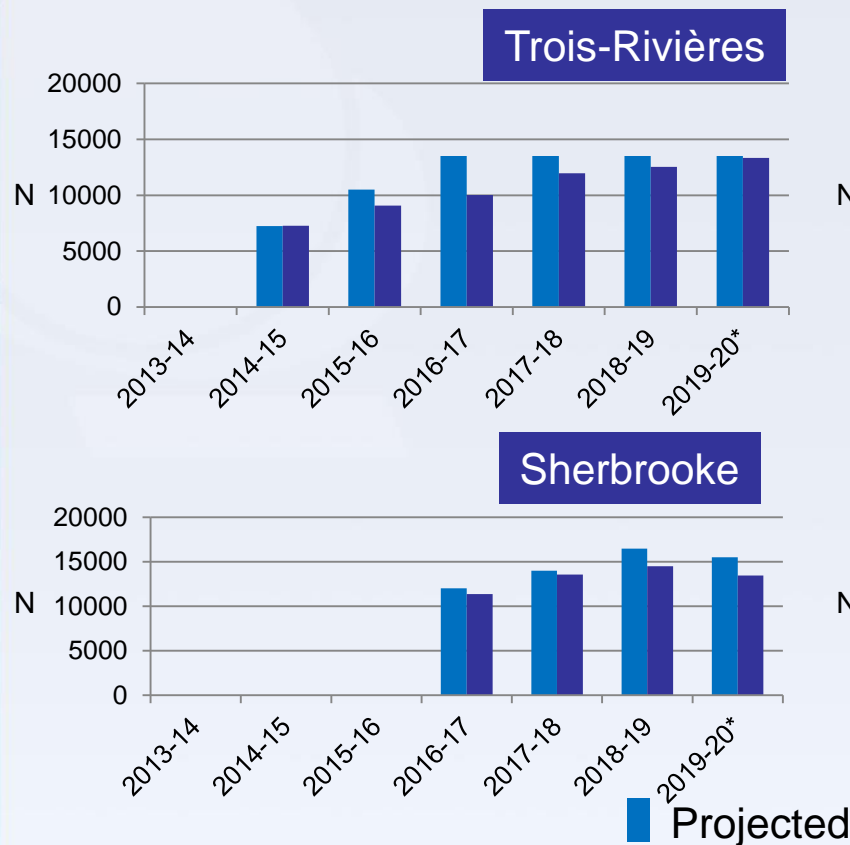
Sherbrooke Lounge



Sherbrooke collection area



THE 'PLASMAVIE' BANNER: PROJECTED AND ACTUAL NUMBER OF PLASMA UNITS COLLECTED

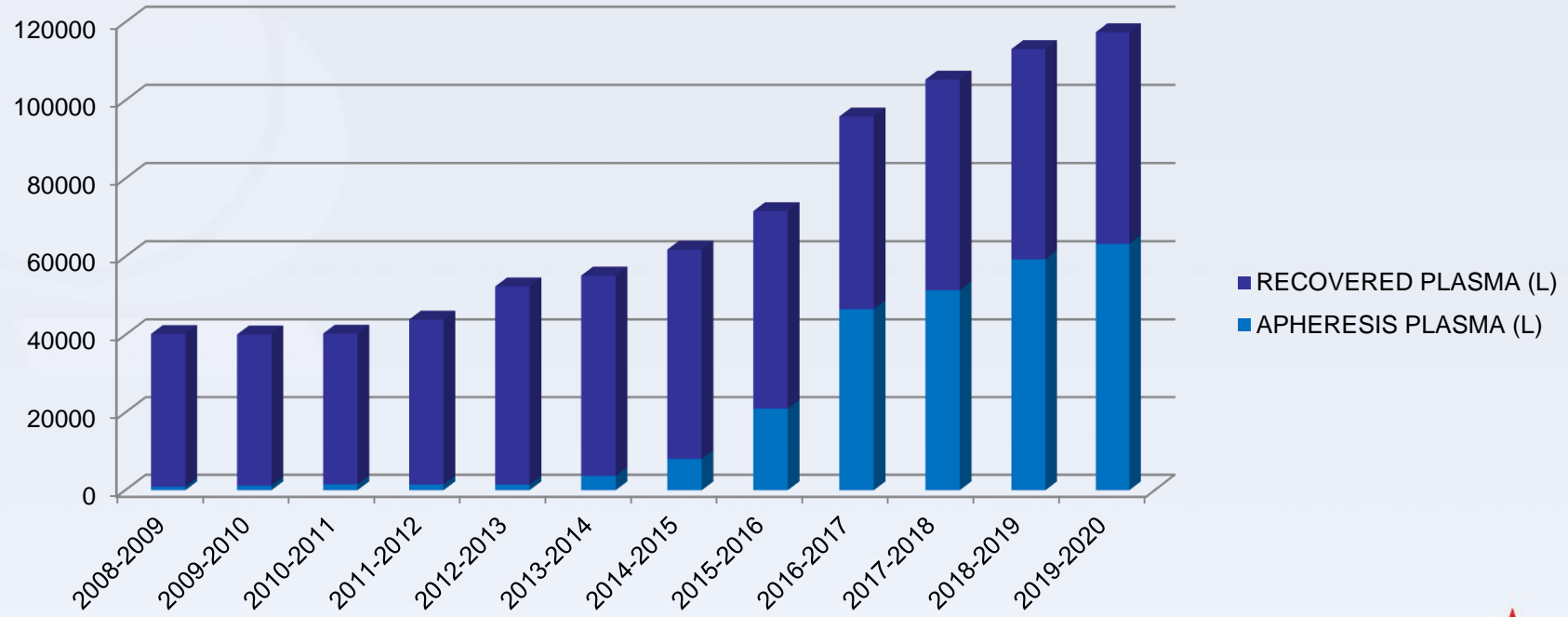


PLASMAVIE CENTERS : PROJECTED AND ACTUAL FREQUENCY OF DONATION

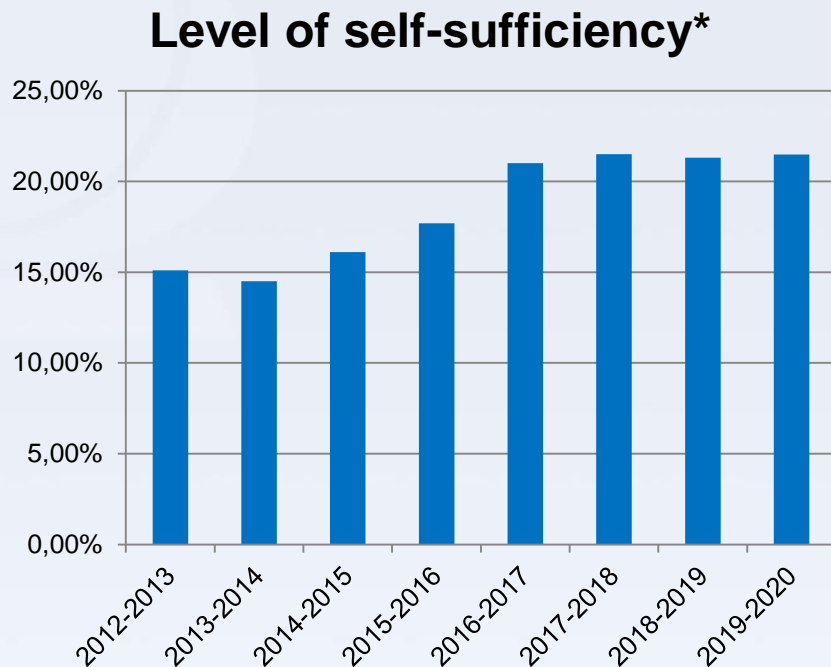
Average number of plasma units per donor, per centre (2018-2019)

Centre	Nb of active donors	Nb of active donors (at maturity)	Average annual donations per donor	Average annual donations per donor (at maturity)
Gatineau	1892	2500	6,14	8
Saguenay	3014	2500	6,06	8
Sherbrooke	2589	2500	5,60	8
Trois-Rivières	1755	1700	7,14	8
Total	9250	9200	6,23	8

VOLUME (LITRES) OF PLASMA SENT BY HÉMA-QUÉBEC FOR FURTHER MANUFACTURING

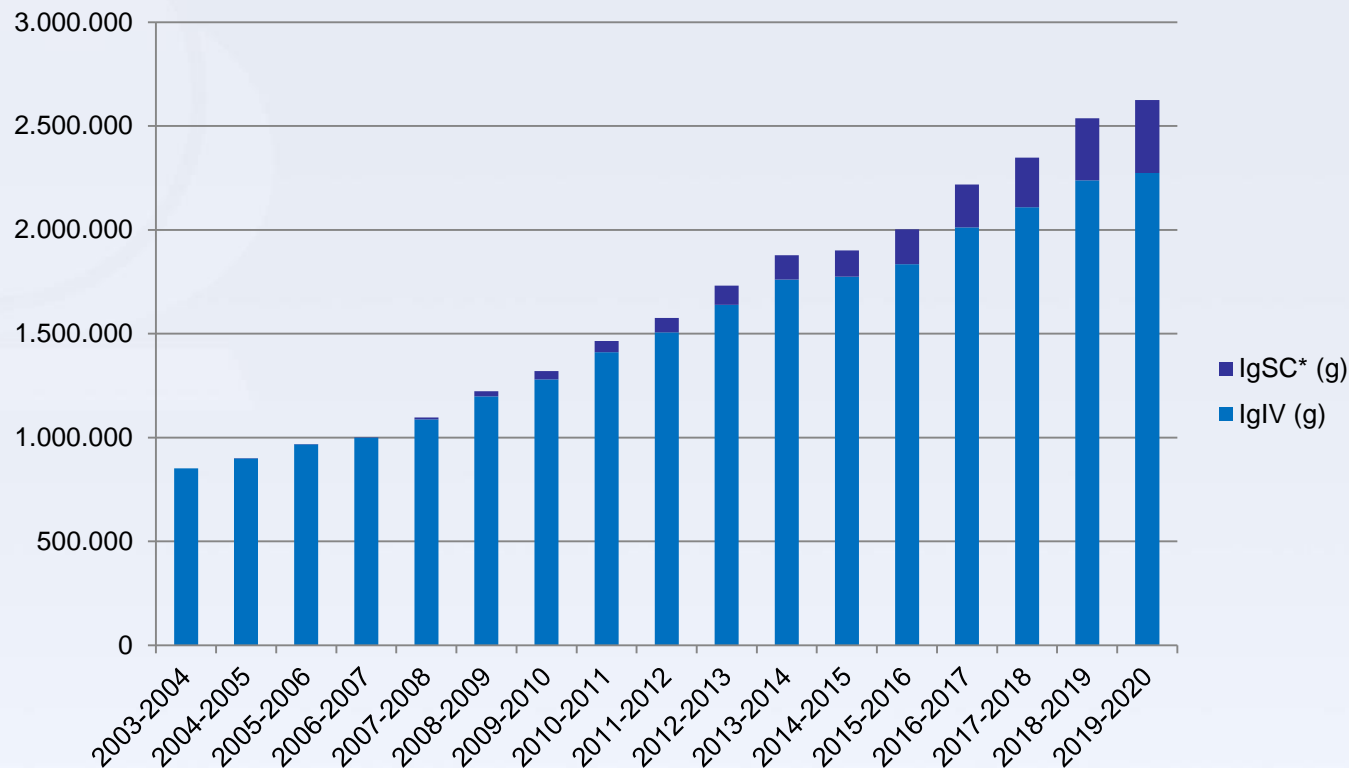


LEVEL OF SELF-SUFFICIENCY IN PLASMA FOR THE PREPARATION OF IMMUNE GLOBULINS



**Based on the quantities of plasma sent for fractionation, relative to the total amount of immunoglobulin distributed that same year*

EVOLVING DEMAND (IN GRAMS) FOR IMMUNE GLOBULINS



IMPROVING THE EFFICIENCY OF PLASMAVIE CENTERS: A CULTURE OF CONTINUOUS IMPROVEMENT AND INNOVATION

- The staff at the center of all projects
 - *Involving the staff who are executing the task*
 - *Re-examining each and every step to improve the process*
 - *Bringing efficiency and productivity throughout the process*
 - *Standardization whenever possible*

- Six Sigma certification (yellow belt) for center manager
 - *To ensure the ongoing application of continuous improvement methodology*
 - *To achieve the objectives*

4 MAJOR PROCESS IMPROVEMENTS

In the last 3 years, several projects were implemented:

- Self-registration
- 'Pike 20'
- Time optimization – Novista project
- Plasma frozen on site

SELF-REGISTRATION

- Linear process
 1. *Donor is welcomed by a smiling volunteer*
 2. *Brought to a cabin for self-registration*
 3. *Joined by the agent for the medical questionnaire*
 4. *Then directed to the donation chair*
 5. *Back to the lounge with the volunteer*
- Known donors are able to register themselves
- This speeds up the process both for donors and staff
- Same attendant through the whole process: increased bonding, better customer service

'PIKE 20'

Objective:

Registration to venipuncture in 20 minutes on average
(was previously done in 24 min 18 sec)

Achievements

The project will help raise an additional 6700 donations in 2019-2020

- *Major improvement in the workflow sequence*
- *Direct involvement of the staff*
- *28 % reduction in preparation time : **17 min 25 sec***
- *Reduction of overall collection time (from registration to the end of collection) to **56 min per donation on average***

'NOVISTA' PROJECT

- 🔴 Single software used throughout the process
 - *No more back and forth between 2 software applications*
- 🔴 Tubes taken directly from the sampling bag
 - *Increase in volumes collected*
 - *21 ml increase per donation*
 - *Reduction of red blood cell loss for donor*
- 🔴 Total donated plasma volume tracked annually instead of twice a year
- **Implemented on December 8, 2019**
 - *Preliminary results: Potentially another 25 % time reduction between registration and venipuncture*

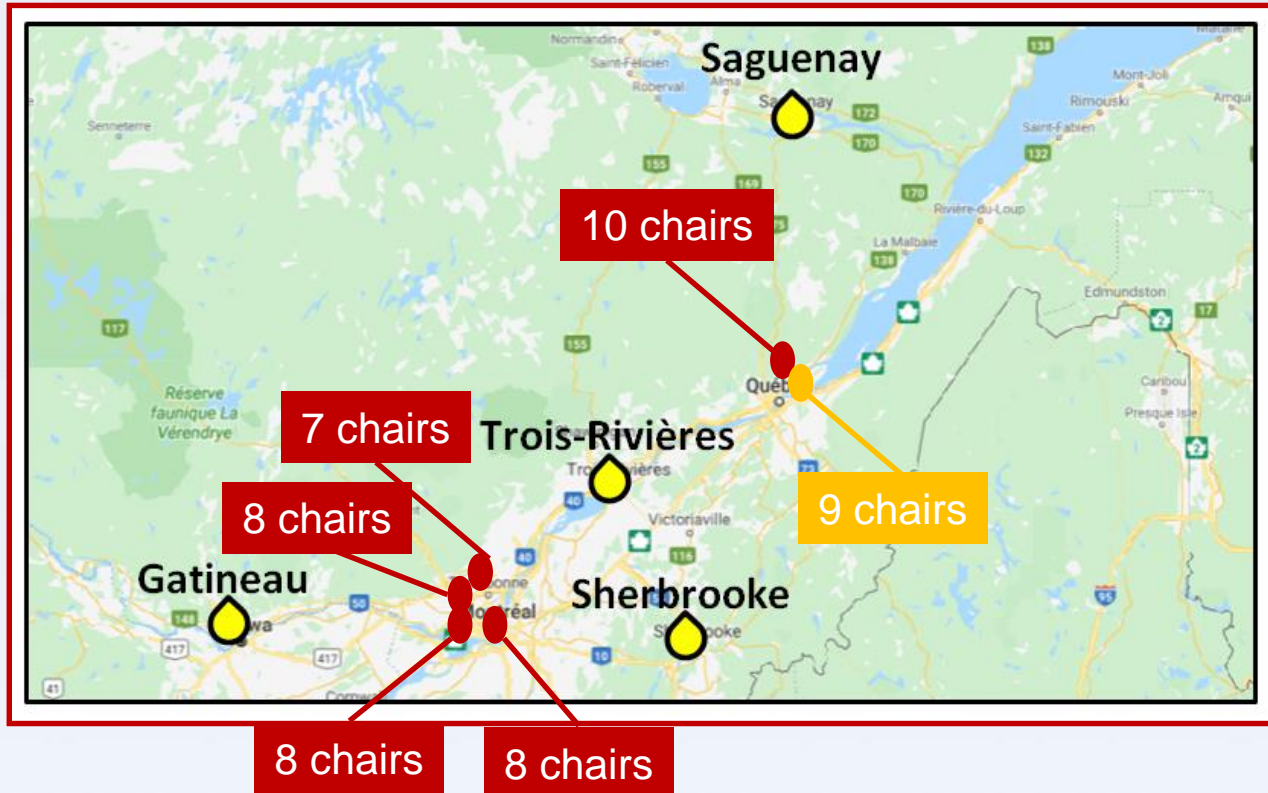
THE PLASMAVIE EXPERIENCE : LESSONS LEARNED

- Plasma donation remains not well known in the general population
- Geomatics analyses show that donors do not travel very far from their home to donate:
 - *In Trois-Rivières: 80% of donors reside within a 20 km radius from the donation center*
- An annual frequency of 8 donations is an ambitious goal
- Plasma donors are recruited mainly within the population of whole blood donors, however:
 - *Retention rate is quite good among those donors who donate for the first time a plasma unit*
- Recruitment strategies need to be optimised, piloted and tested

THE PLASMAVIE EXPERIENCE : LESSONS LEARNED

- Smaller but more efficient centers: optimal footprint 307 M²
 - *8 beds, 13,000-15,000 donations/year, 11 employees*
- Number of employees needed when opening a new center
 - *Smaller team, to be increased over time*
- Time needed to reach maturity between 4 to 6 years
- Hours worked / donation ratio
 - *Target : 1.4 -> Year to date : Average of 1.52*
- Employee versatility is an important factor
- The involvement of the floor staff in projects is crucial

OTHER ONGOING INITIATIVE: ADDING PLASMA APHERESIS CAPACITY TO OTHER FIXED COLLECTION SITES



PLASMA COLLECTION AND SOURCING AT HÉMA-QUÉBEC: A CONTINUALLY EVOLVING STRATEGY

● The decision to increase plasma self-sufficiency is re-examined on a regular basis; recent international trends and expert opinions have reinforced Héma-Québec's stance:

- *Efforts have been deployed successfully by some countries, e.g. Australia, New Zealand*
- *CBS contemplates a similar plan*
- *Experts deplore the fact that 64% of the total plasma supply comes from the United States (IPFA, Atlanta, Sept. 11-12, 2017)*
- *Experts recommend that countries increase their domestic sourcing of plasma (Strengers PF, Klein HG Plasma is a strategic resource. Transfusion 2016)*
- *Health Canada: Protecting Access to Immune Globulins for Canadians - Final Report Of The Expert Panel On Immune Globulin Product Supply And Related Impacts In Canada. 2018.*
- *The large expected increase in the market value of plasma*

THANK YOU!

Those who made possible this presentation:

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Always in motion

Innovating one step at time

Hand in hand with our employees

Towards success