



# 2020–2021: Mid-Year Review

Presentation by Dr. Graham Sher, Chief Executive Officer

Open Board Meeting  
December 3, 2020



**Canadian  
Blood  
Services**

BLOOD  
PLASMA  
STEM CELLS  
ORGANS  
& TISSUES

# What we'll cover today

**Major achievements**

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**Operations review**

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**Strategy review**

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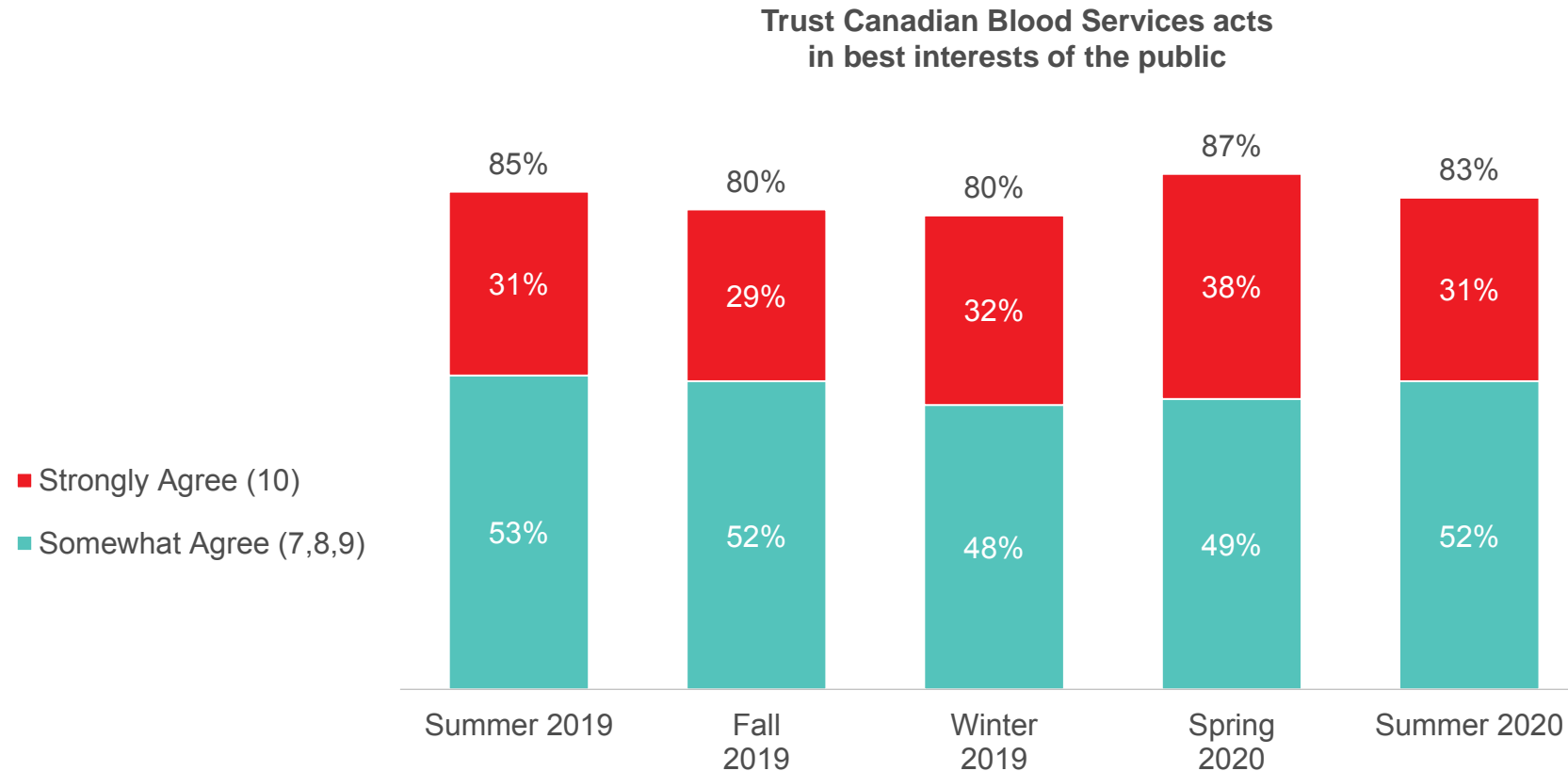
**Financial review**

# We continued to build on our success with key achievements in the first half of 2020–2021

- With national system partners, successfully managed volatile supply and demand issues with fresh blood.
- Transitioned Calgary production and distribution operations to a new location.
- Devised short and long-term plans to respond to COVID-19-related global immune globulin shortages.
- Continued supplying convalescent plasma for clinical trials; participating in seroprevalence study.
- Renewed focus on diversity, equity and inclusion.
- Continued emphasis on employee and donor wellness and safety throughout the pandemic.

# Trust in Canadian Blood Services

*Public trust in Canadian Blood Services increased during the height of the pandemic.*





# Operations review

# Fresh blood products

# We have managed volatile supply and demand during the COVID-19 pandemic

Continued to meet hospital demand and maintain well-balanced fresh blood product inventory despite instability by:

- Working with the National Emergency Blood Management Committee (NEBMC) and other health system partners.
- Adjusting collection plans in response to significant drop in red blood cell demand in Q1, followed by resurgence in Q2.
- Shifting collections away from mobile venues, achieving 69 per cent of collections from fixed donor centres.

# Hospital order fill rates

*Consistently met hospital demand throughout the first half of this year for nearly all fresh blood products.*

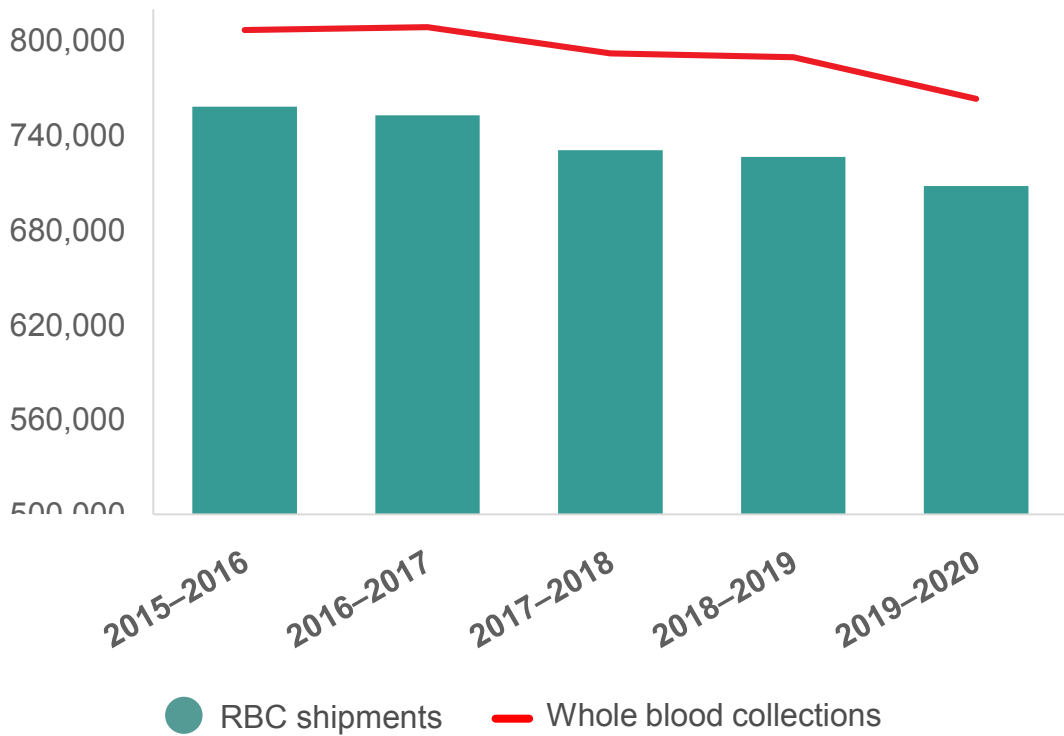
Product	Target	Q1–Q2
Red blood cells (excluding O negative)	98%	99%
O negative	95%	100%
Platelets	98%	99%
Plasma (excluding AB)	98%	100%
AB plasma	95%	98%
Cryoprecipitate	98%	97%



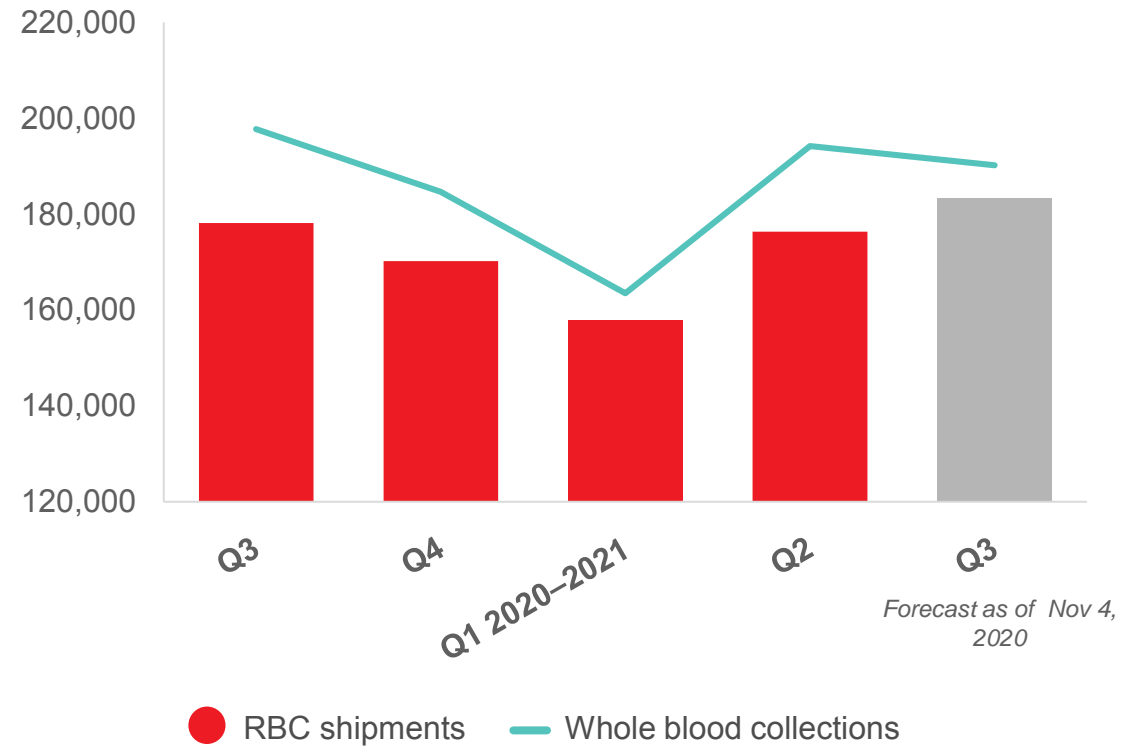
# Red blood cell shipments and whole blood collections

After a decline in Q1, red blood cell shipments and whole blood collections returned to near normal levels.

**Five-year historical trend**  
Number of units



**Recent four quarters**  
Number of units

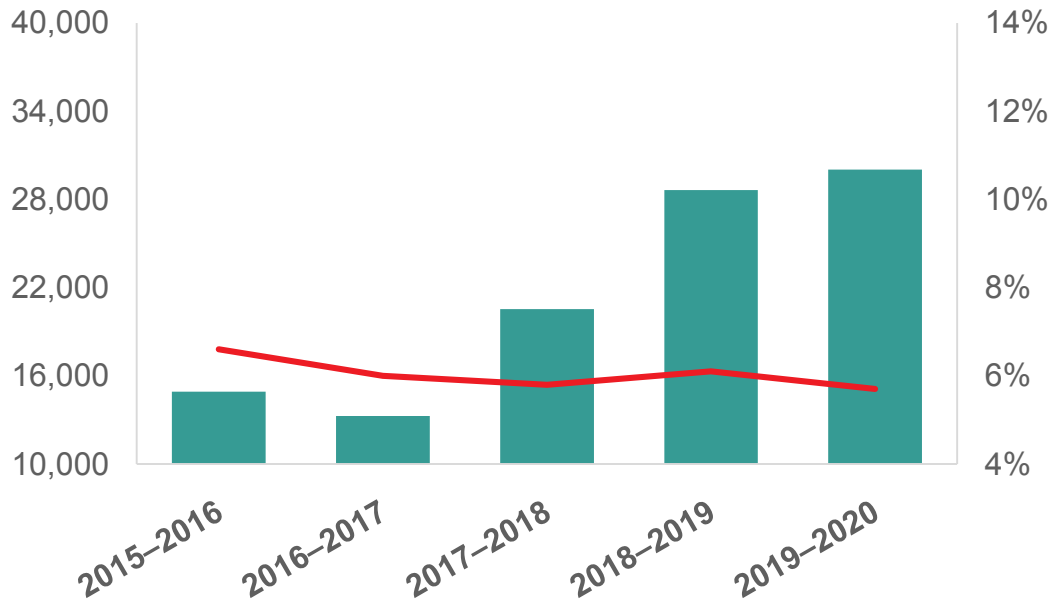


# Red blood cell inventory and discard rates

*Discard rates have returned to low levels after peaking in Q1.*

### Five-year historical trend

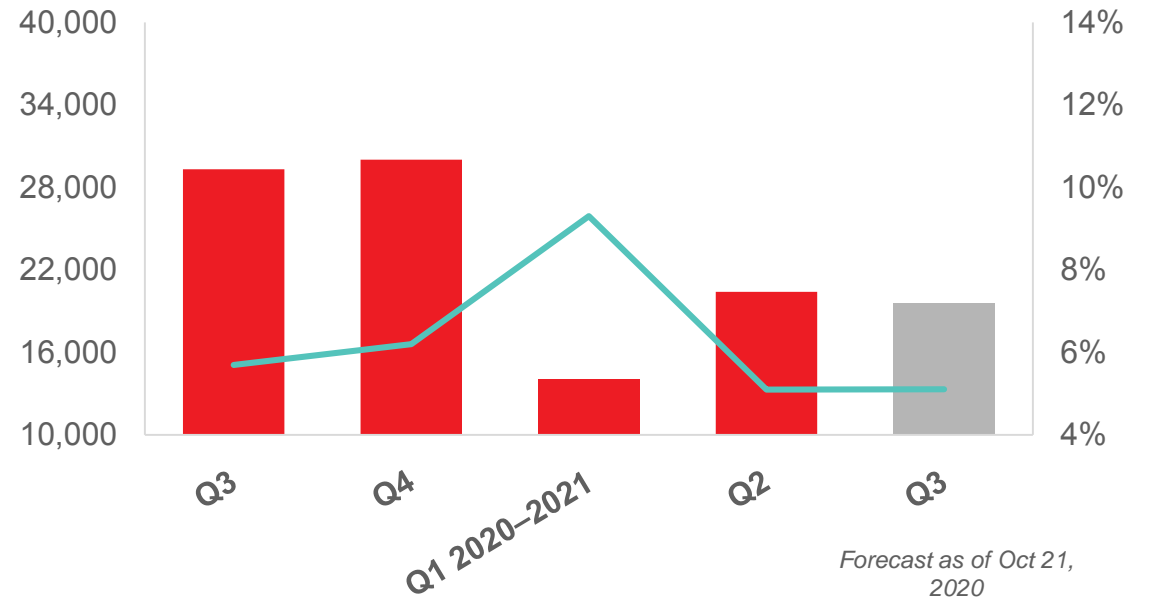
Number of units



● RBC inventory    — Discard rate (%)

### Recent four quarters

Number of units



*Forecast as of Oct 21, 2020*

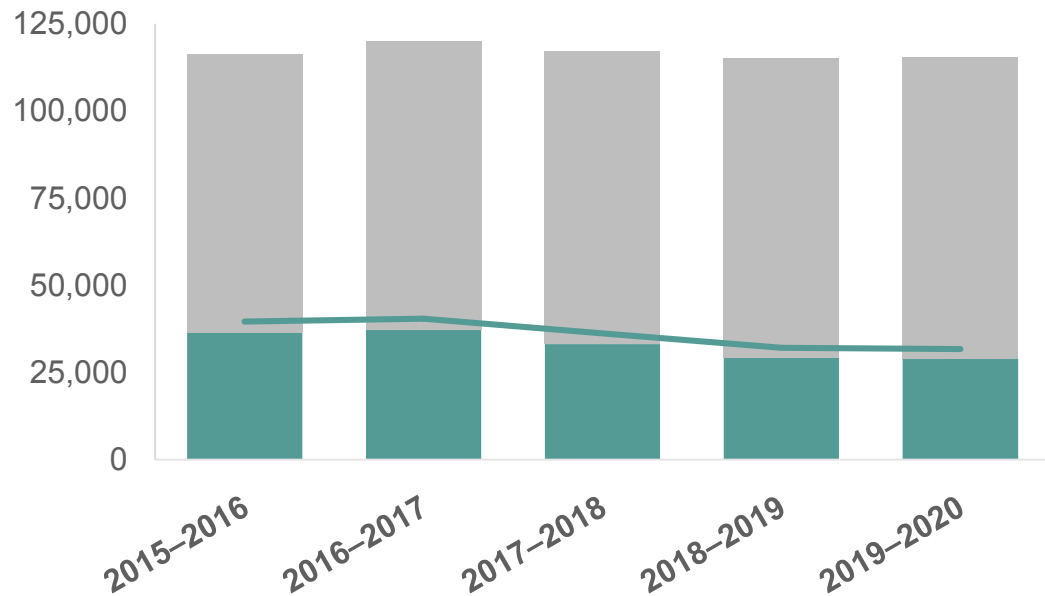
● RBC inventory    — Discard rate (%)

# Platelet shipments and collections

*In Q1 overall platelet demand decreased and returned to normal levels in Q2.*

### Five-year historical trend

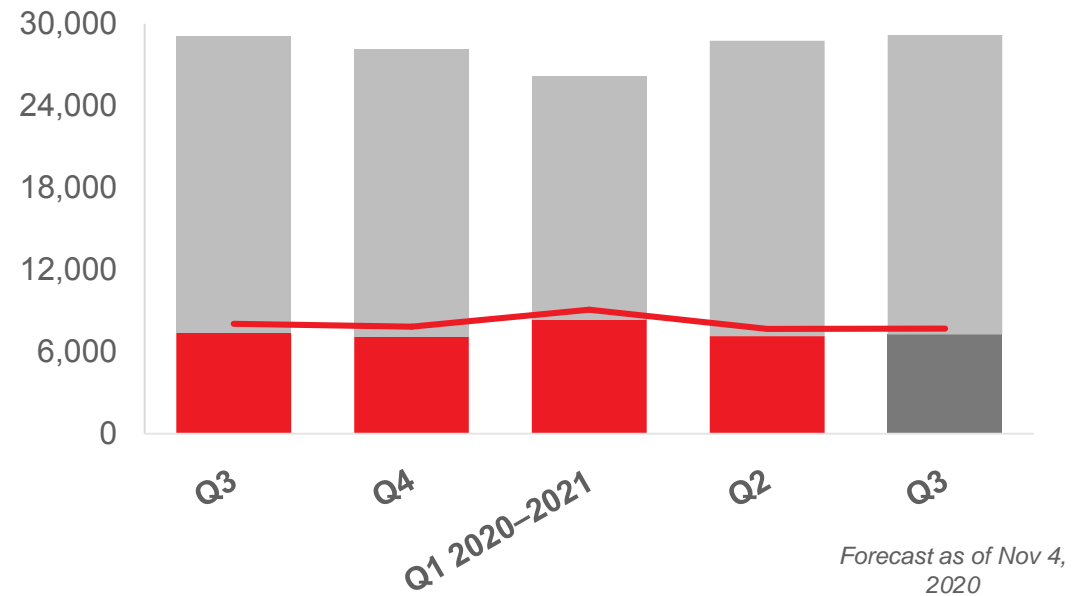
Number of units



● Apheresis platelet shipments    
 ● Pooled platelet shipments    
 — Apheresis platelet collections

### Recent four quarters

Number of units



● Apheresis platelet shipments    
 ● Pooled platelet shipments    
 — Apheresis platelet collections

# Plasma protein and related products

# We continued to mature our plasma protein and related products program

- The interim product selection process with CADTH is currently being used to assess two new products: Vonvendi and Emicizumab.
- Contracted a national courier service that some hospitals use to deliver products to patients' homes during the pandemic.

# COVID-19 has caused unprecedented supply chain disruptions for industries around the world

- Global immune globulin shortages are worsening as a result of supply chain disruptions and decreased plasma collections in the U.S.
- Risk of shortages of specific vial sizes and brands in the next fiscal year is being managed with all system partners including the P/T Ministries of Health, the NEBMC, vendors, patient groups, clinicians and hospitals.

# Risk mitigation strategies in response to COVID-19

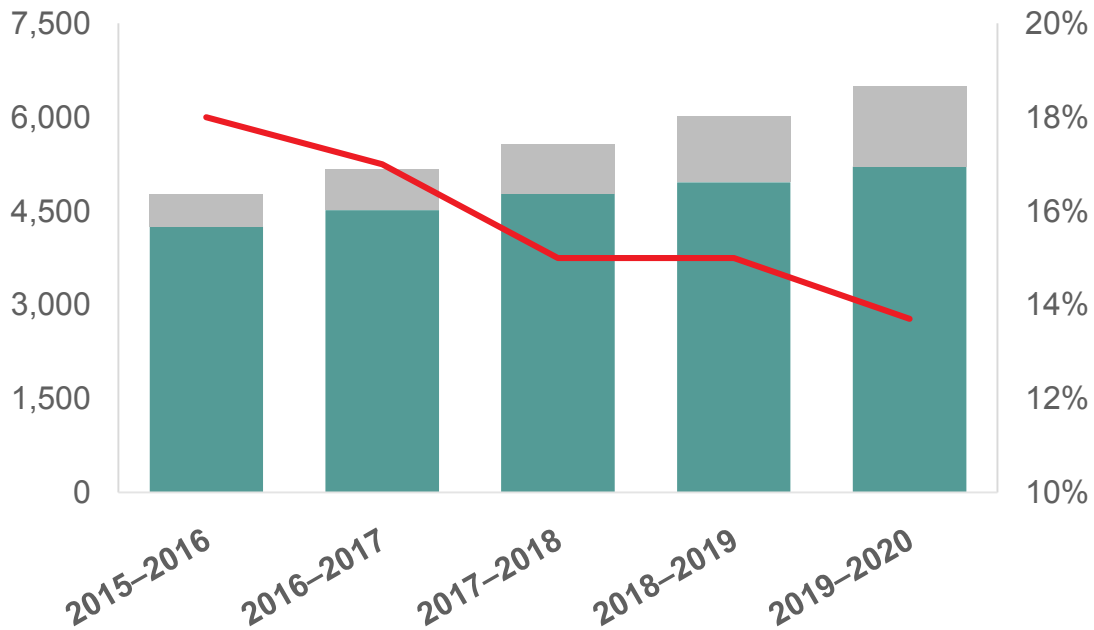
- Holding higher than normal inventory levels.
- Regular communication with vendors to actively monitor impacts to their supply chains.
- Planning to significantly increase plasma collection in Canada; accelerated urgency needed to build up domestic supply and mitigate COVID-19 related impacts.

# Immune globulin utilization and sufficiency

Demand decreased in Q1 and recovered in Q2.

### Five-year utilization trend

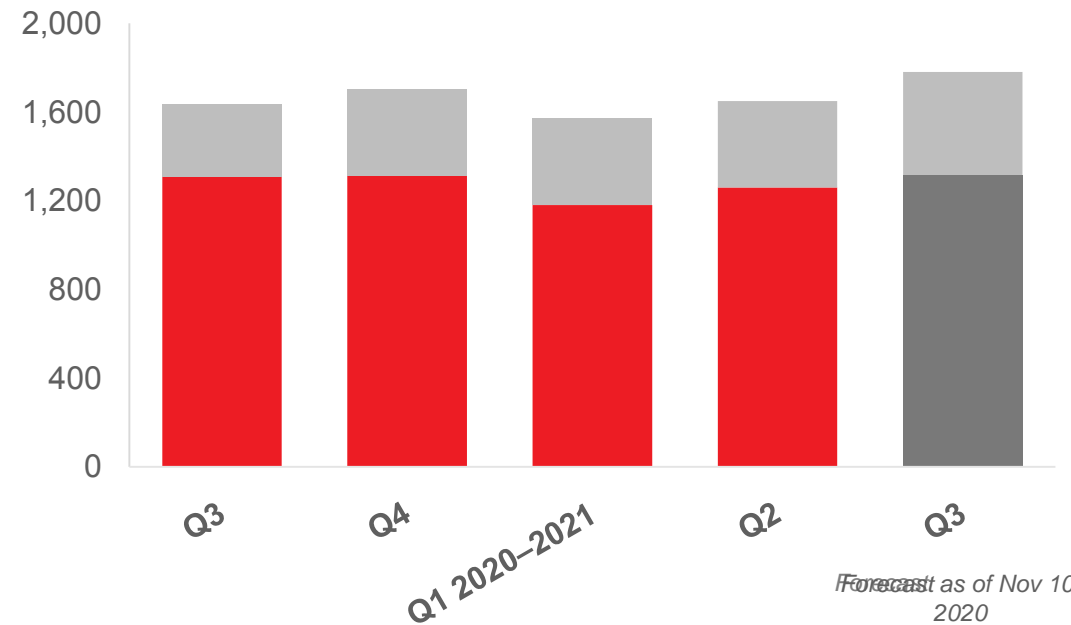
Thousands of grams



● IVIg ● Subcutaneous Ig — Ig sufficiency (%)

### Recent four quarters

Thousands of grams



● IVIg ● Subcutaneous Ig

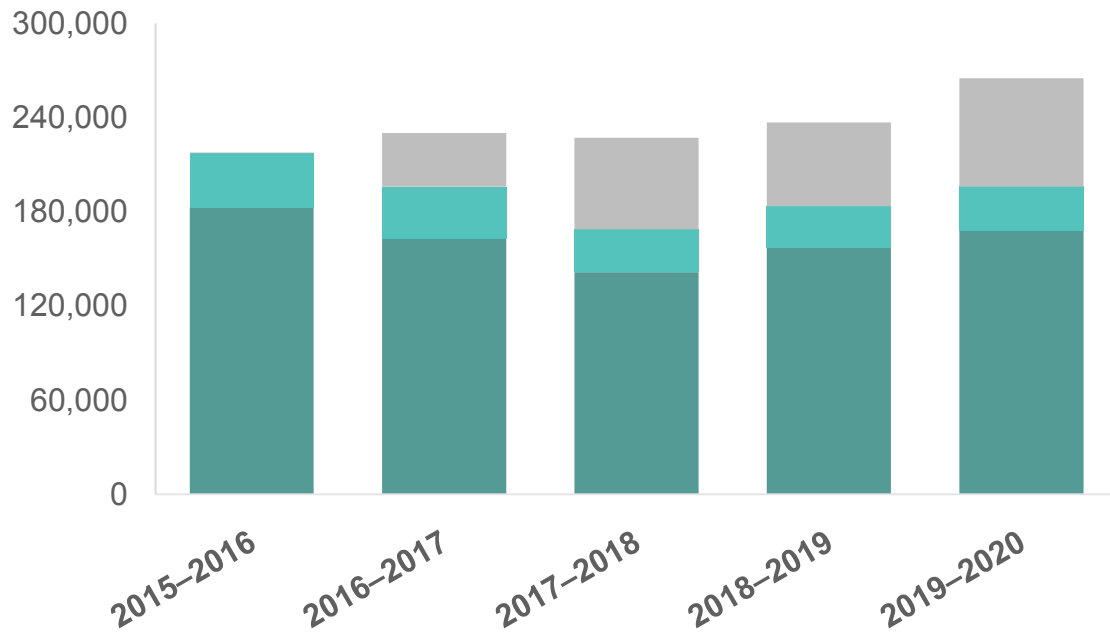
Forecast as of Nov 10, 2020



# Factor VIII concentrate

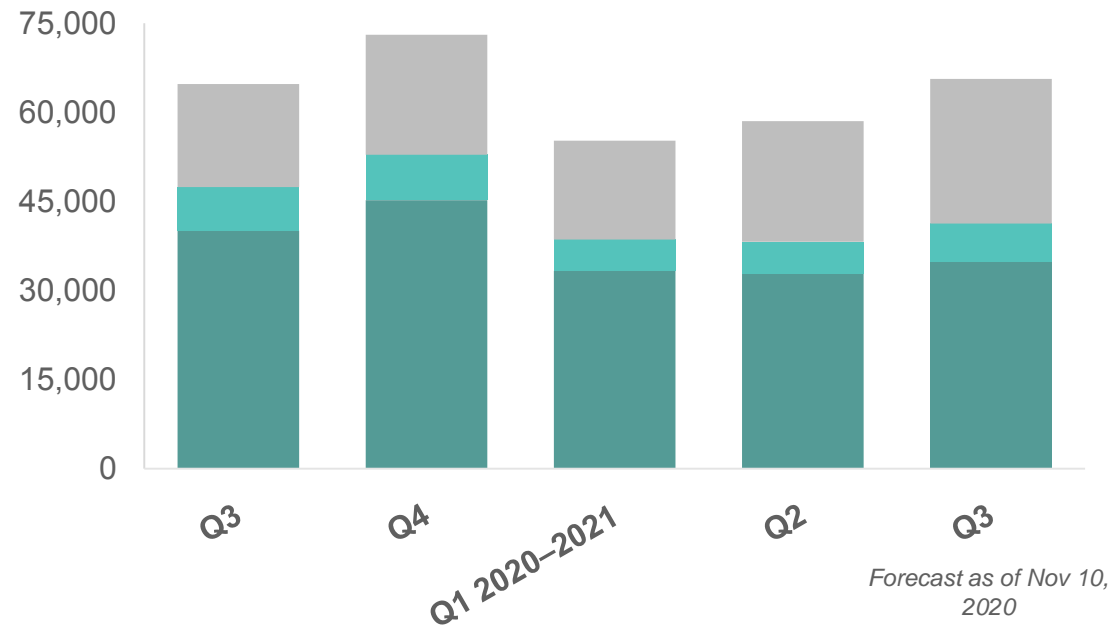
Lower than usual volumes in Q1 and Q2 as result of the pandemic.

**Five-year utilization trend**  
Thousands of international units



● Standard half-life ● Plasma-derived ● Extended half-life

**Recent four quarters**  
Thousands of international units



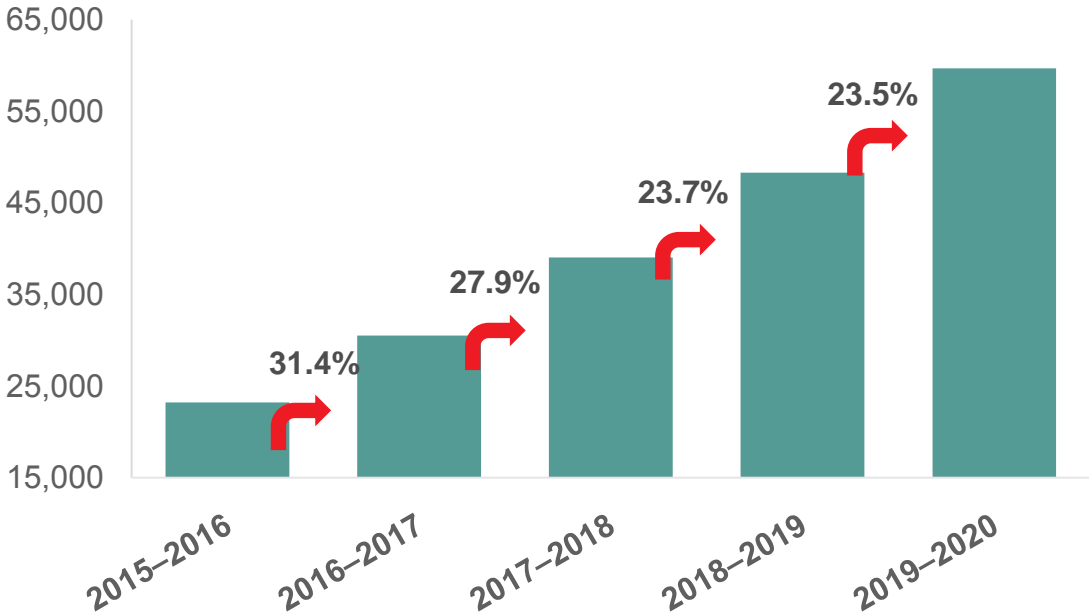
Forecast as of Nov 10, 2020

● Standard half-life ● Plasma-derived ● Extended half-life

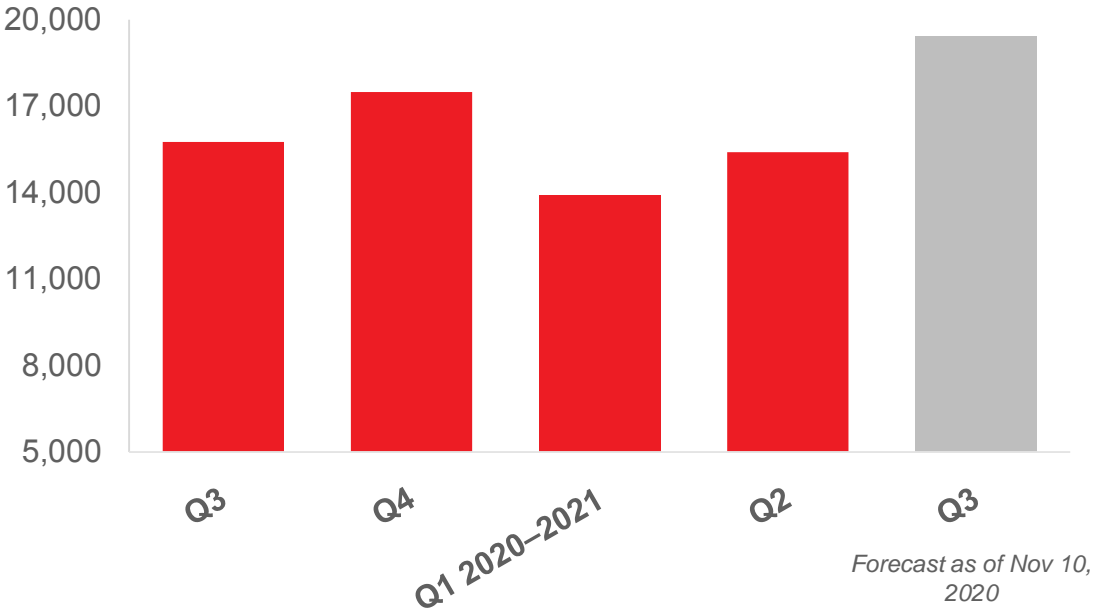
# C1 inhibitor

Usage decreased in Q1 and Q2.

**Five-year utilization trend**  
Thousands of international units



**Recent four quarters utilization**  
Thousands of international units



# Stem cells

# Normal programs and operations have resumed or been adapted

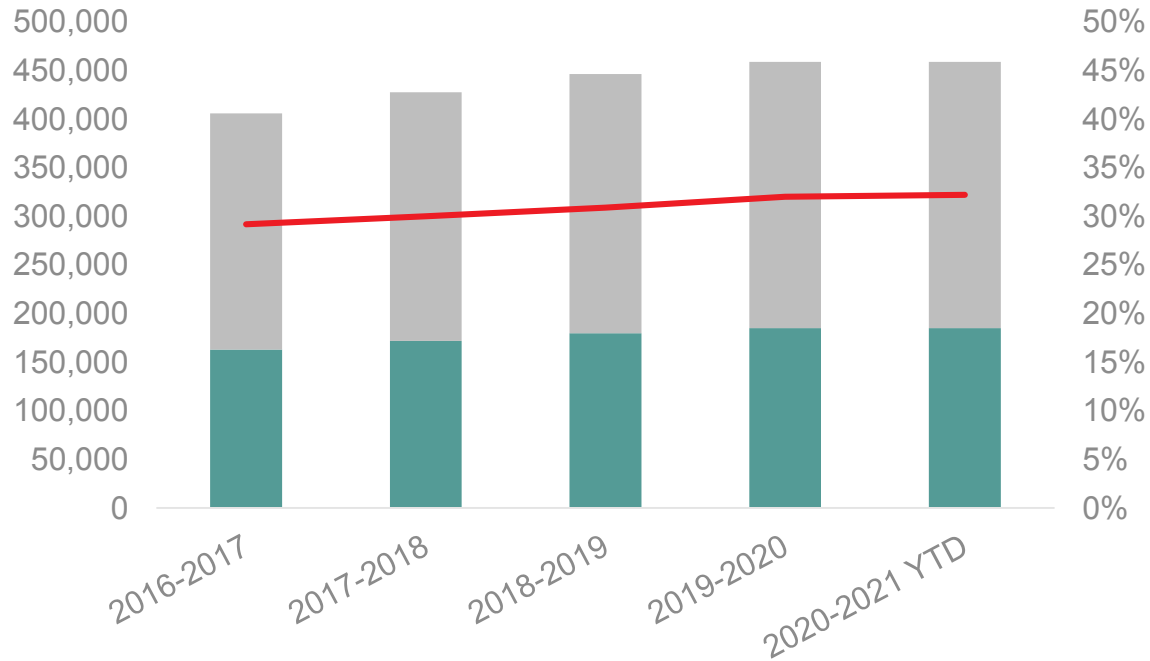
- International border restrictions have generated:
  - Increased interest in Canadian donors for Canadian recipients.
  - Increased demand for cord blood units.
- Cord blood collection and processing have resumed.
- Cord Blood for Research Program has resumed.
- Community recruitment of stem cell registrants remains indefinitely on hold.
  - Shifting to digital recruitment.
  - Focus on improving the current online registration process.
  - Focus on improving commitment, retention and availability of current donors.

# Stem cell registry

Stem cell transplant activities returned to normal in Q2.

## Stem cell registry composition

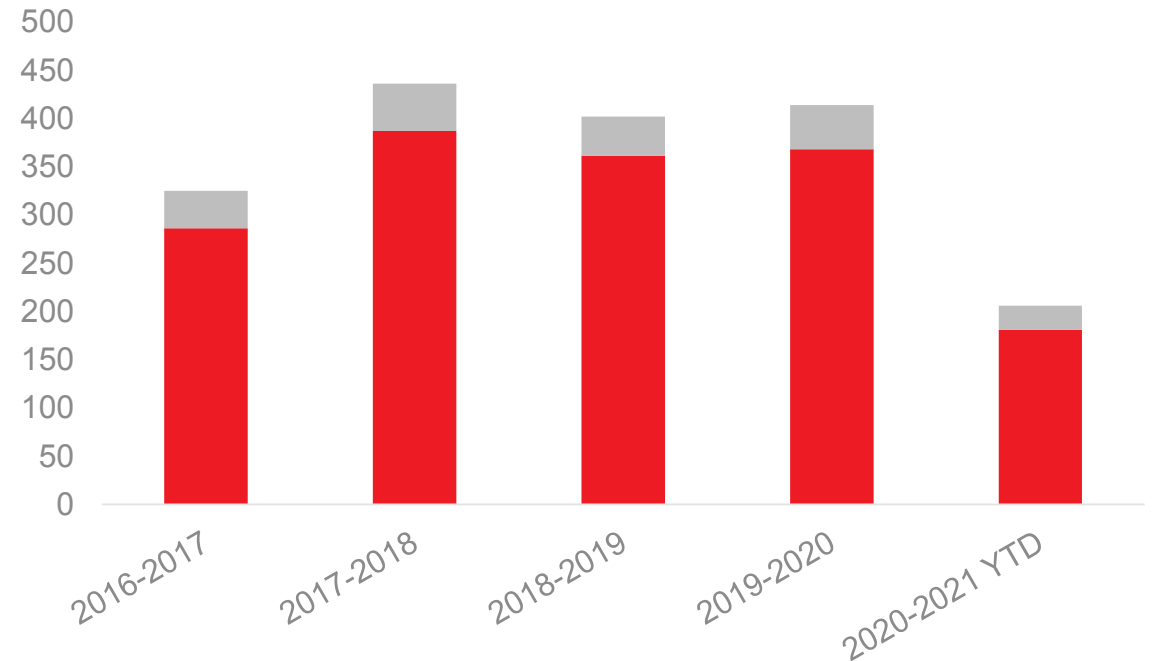
Number of searchable registrants



● Number of male registrants
 ● Number of female registrants
 — Registrants from diverse groups (%)

## Canadian stem cell transplants\*

Number of Canadian transplant patients



● International donor
 ● Canadian donor

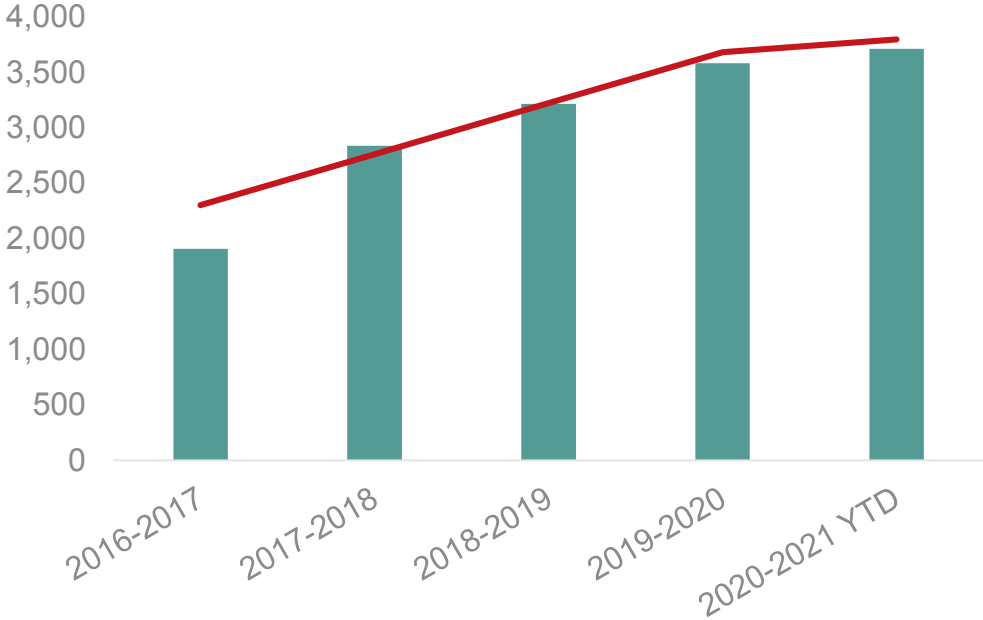
\* Transplant data does not include cord blood units

# Cord blood bank — cumulative bank size

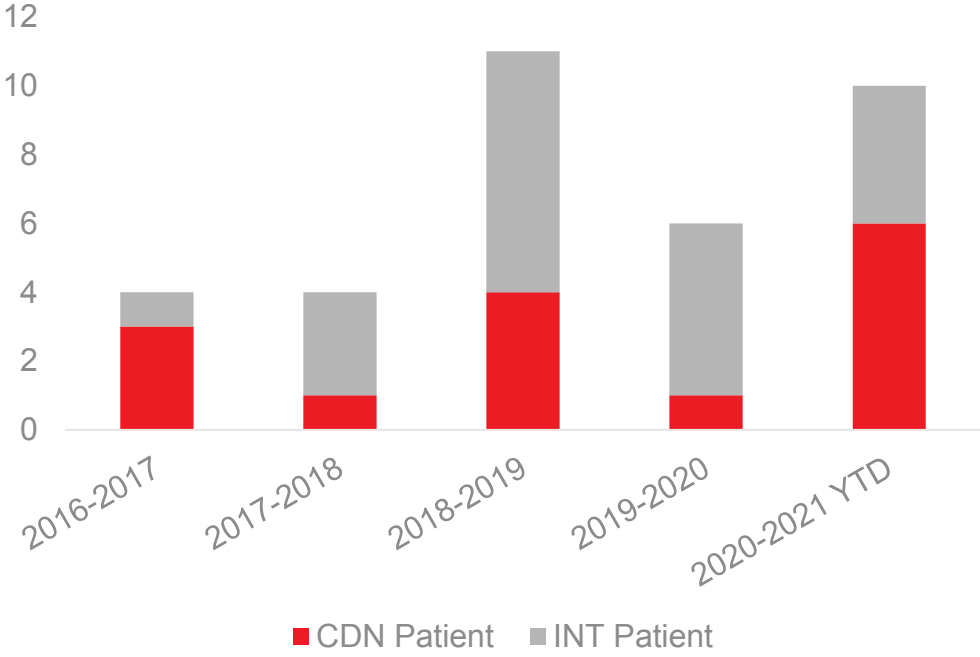
*Saw a significant increase in cord blood units used for transplant in Q1 and Q2.*

### Five-year historical trend

Number of cord units listed in bank



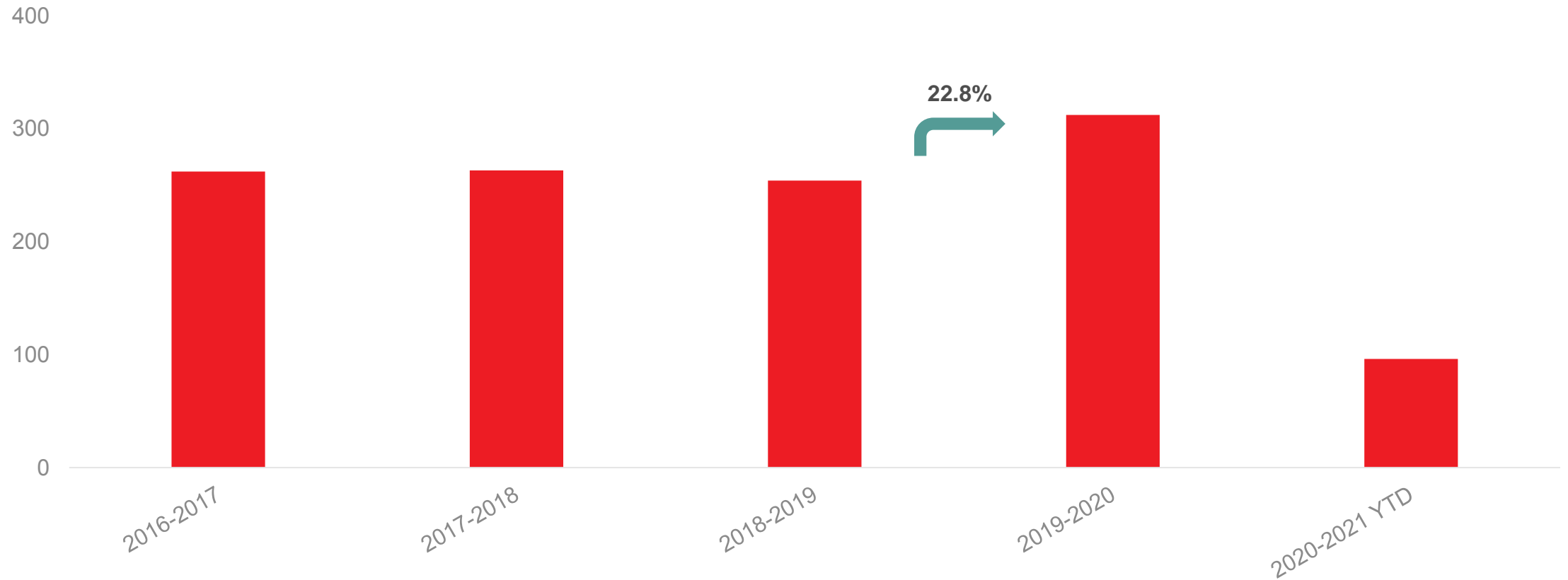
### CBUs distributed for transplant



# Autologous stem cell program

*Experienced a decline in Q1 due to the pandemic with recovery started in Q2.*

**Five-year historical trend**  
Number of autologous transplants facilitated



# Organs and tissues

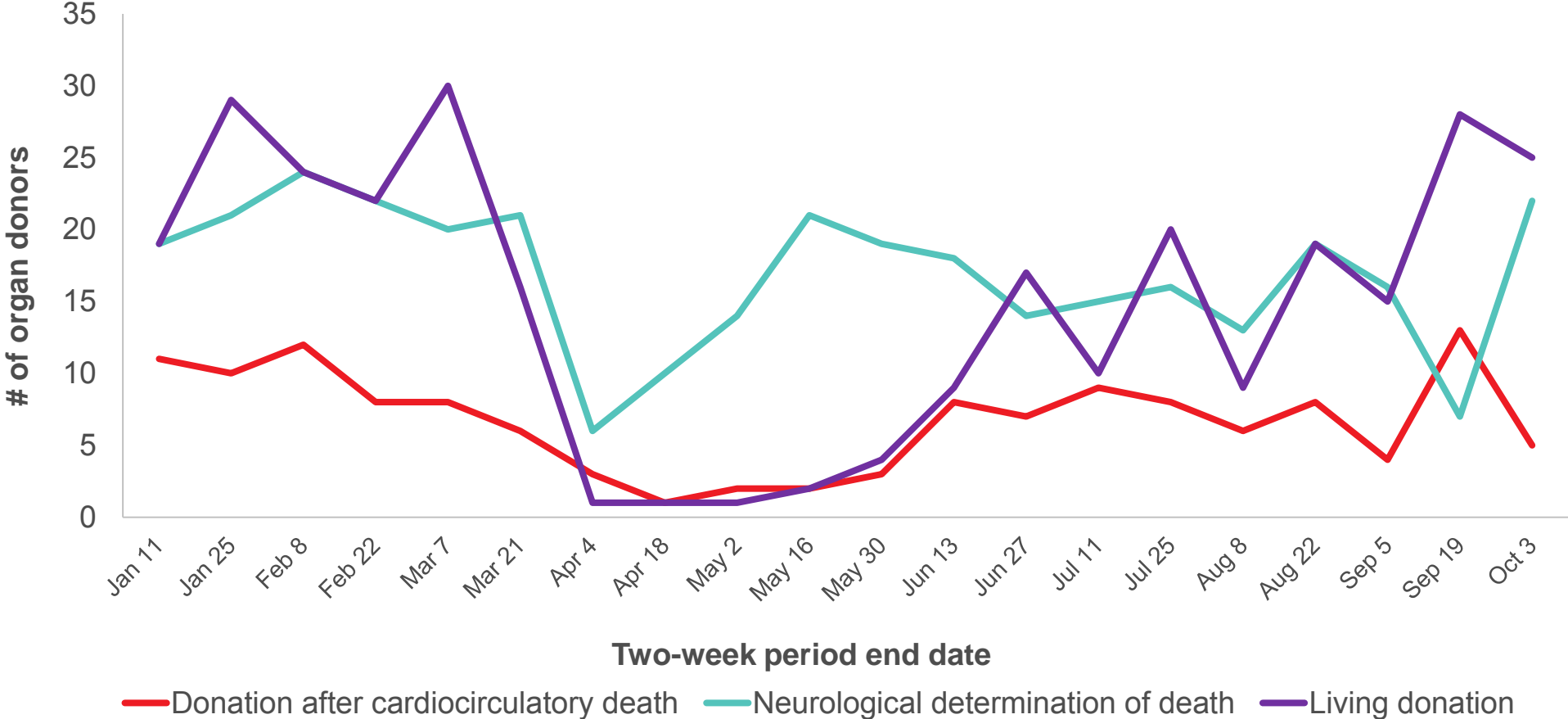


# Impact of COVID-19 pandemic on activities

- The Kidney Paired Donation program was paused for eight weeks.
- The Highly Sensitized Patient program continued to operate. Programs were more selective with candidates being considered for transplant.
- National and international meetings were held virtually to inform the development of [national guidance documents](#), national data collection and evidence gathering.

# Organ donations in Canada during COVID-19

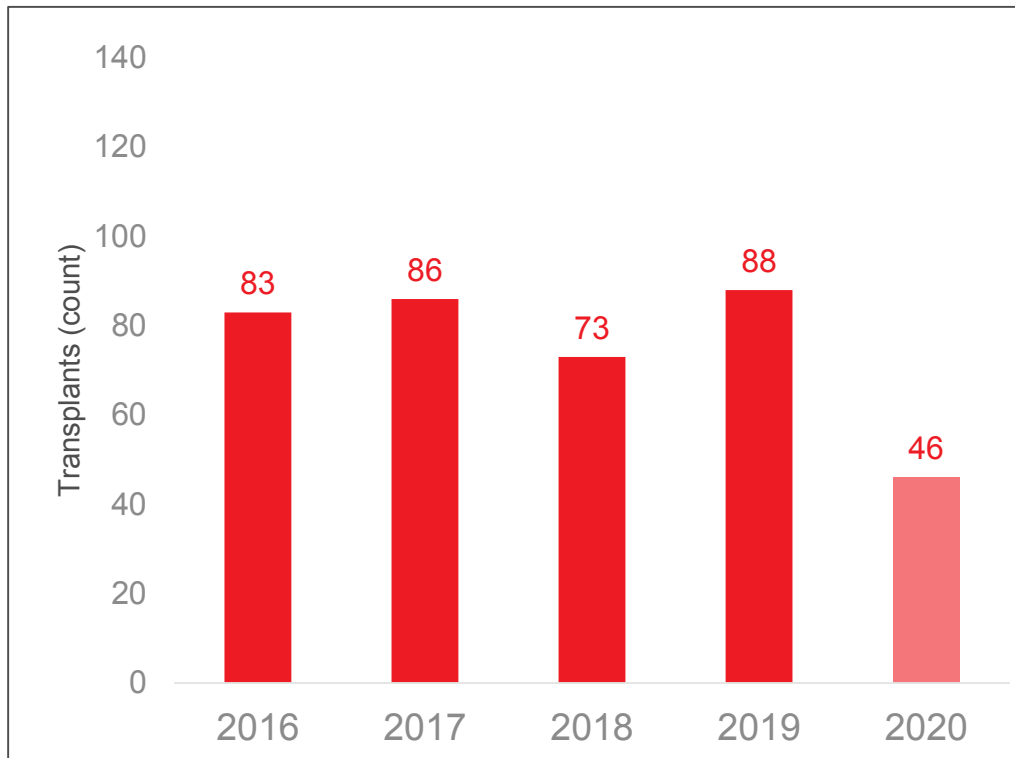
The number of organ donors declined in March and April in the early weeks of the COVID-19 pandemic.



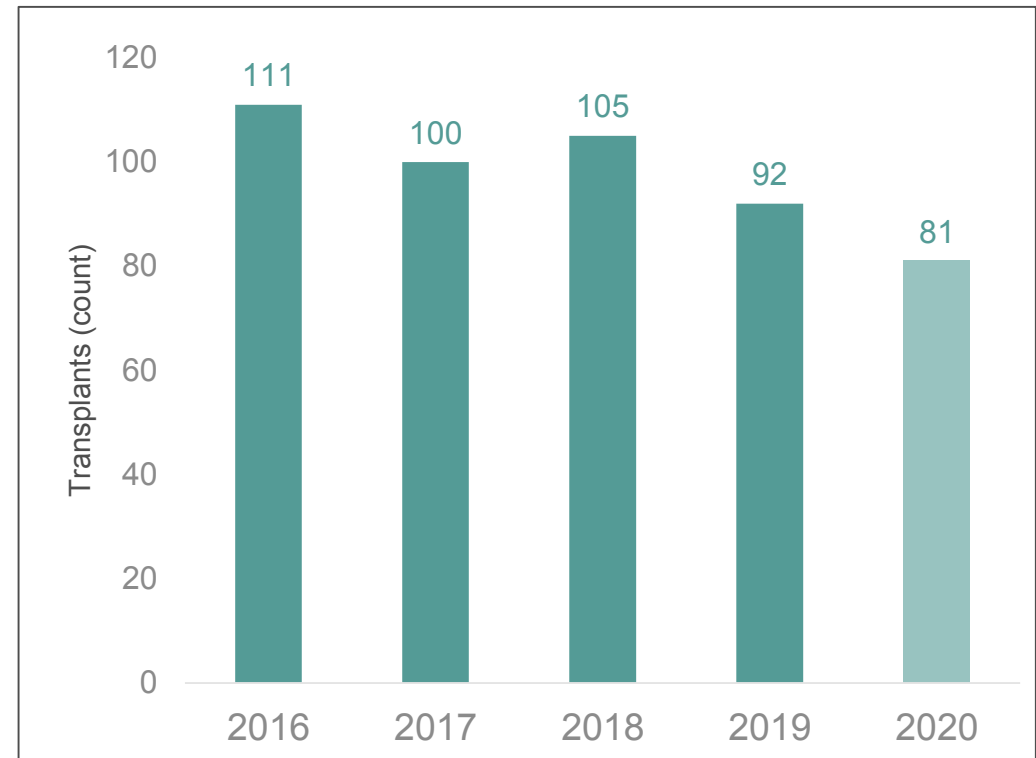
# Interprovincial organ sharing programs: kidney transplants facilitated

*Transplantation rates in both programs were adversely affected by the COVID-19 pandemic in 2020.*

### Kidney Paired Donation (KPD) program



### Highly Sensitized Patients (HSP) program



*Lighter bars reflect projections for year-end 2020 based on transplants to date.*

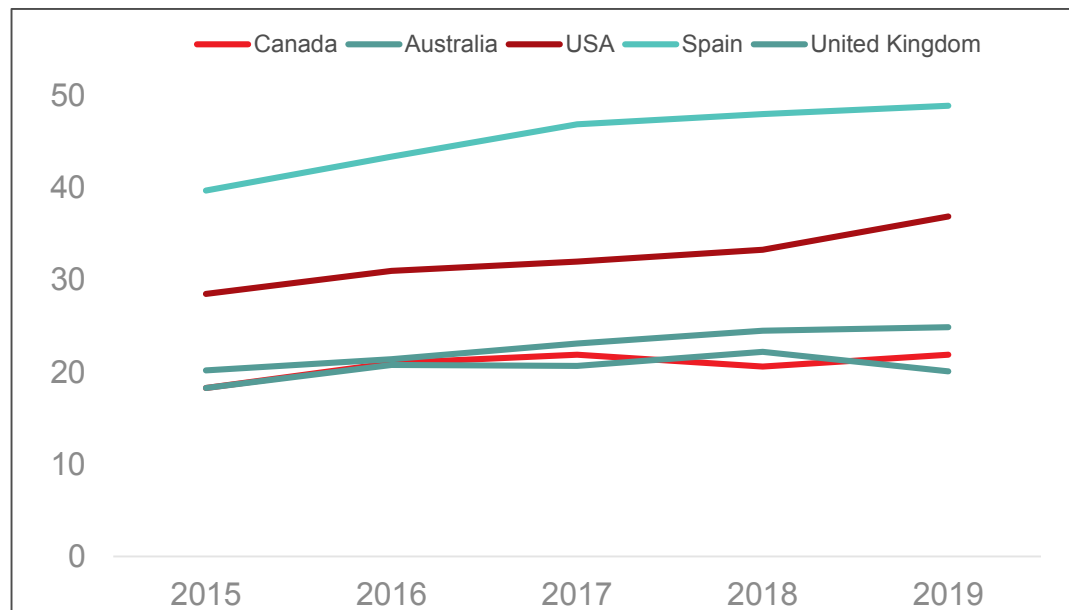
# Worked with partners and stakeholders to mature our national programs and improve system performance

- Continued work with Health Canada's Organ Donation and Transplantation Collaborative to improve Canada's OTDT system.
  - Priorities include a national data strategy, appropriate governance framework for Canada's ODT partner network and further interprovincial sharing of organs.
- The project to share hearts for hard-to-match patients interprovincially is on track for implementation in summer 2021.
- Finalized recommendations from the national consensus forum on improving access to cornea donation and transplantation services in Canada.
- Developed a new interactive reporting dashboard for organ and tissue donation and transplantation system progress data.

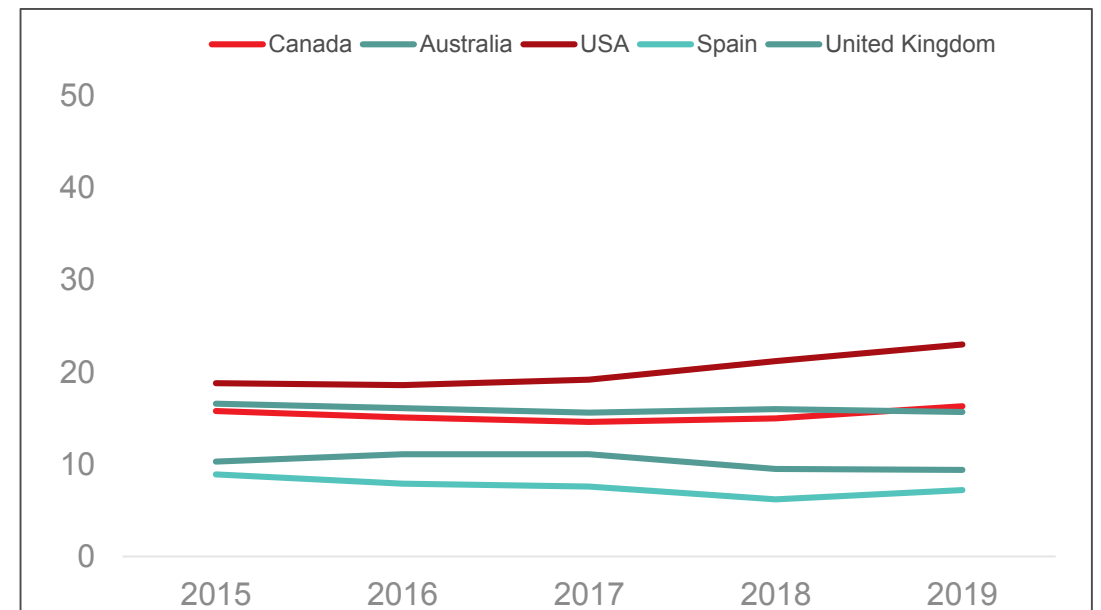
# Living and deceased donation rates compared internationally

Canada's national deceased donation rate increased to 21.9 donors per million population in 2019 from 20.6 in 2018. The national living donation rate increased to 16.3 dpmp in 2019 from 15.0 dpmp in 2018.

### Deceased donation rate

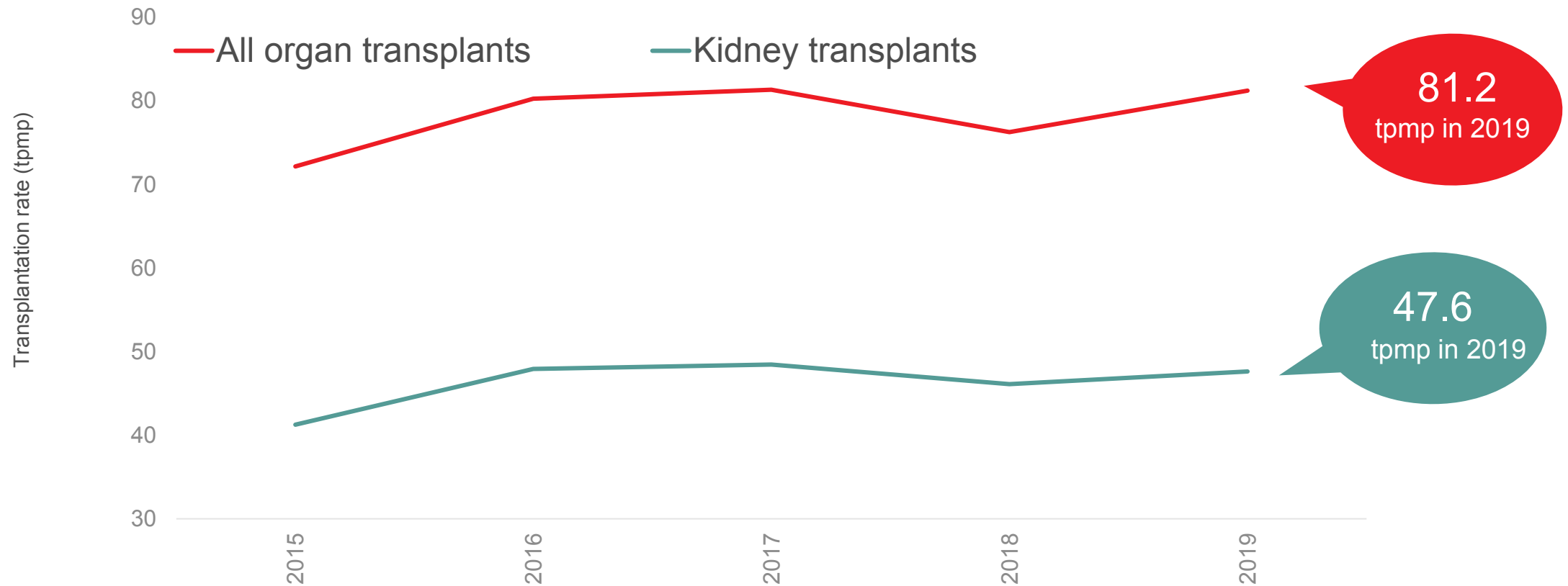


### Living donation rate



# Organ transplantation rates in Canada over time

Canada's national organ transplantation rate increased to 81.2 transplants per million population (tpmp) in 2019 from 76.3 in 2018.



# Research contributions

# We contributed to research advancements in transfusion science

- Successfully processed the first pathogen-reduced pooled platelet product in our development facility. This milestone will enable the next phase of work (with regional implementation in 2021–2022).
- Health Canada-funded programs continue to advance learnings to establish evidence-informed alternative screening and collection approaches including an in-flight source plasma project.
- There have been four publications related to the men who have sex with men research and more in preparation. A total of 19 research projects have been funded over the last few years.

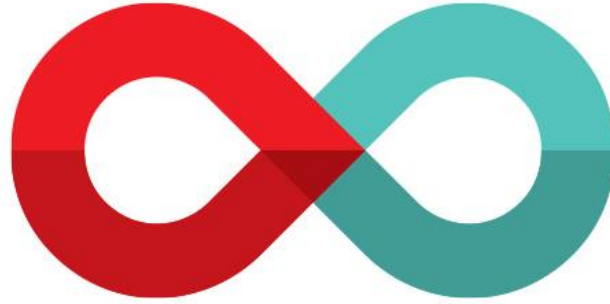


# Canadian Blood Services is supporting therapeutic studies for COVID-19

- Supplied convalescent plasma to three Health Canada-approved clinical trials to evaluate the safety and efficacy of this treatment for COVID-19 patients.
- Currently 220 donors in the program who have donated from 1 to 14 times.
- Approximately 360 patients have been enrolled in the clinical trials with 1,291 units collected, 464 units from Canadian Blood Services qualifying as convalescent plasma.
- Recently published work on the relationship between blood group and COVID-19 disease severity.

# Continuing to evaluate COVID-19 immunity among blood donors to inform public health policies

- We're contributing to the review of pandemic impacts by continuing to support the Federal COVID-19 Immunity Task Force.
- Initial COVID-19 antibody development levels (e.g., seroprevalence) are 0.7% across Canada.
- COVID-19 is not considered a transfusion-transmissible disease.



# Strategy review

*Meet changing patient needs by providing lifesaving products and services*

# We continued to innovate our products and services to meet patient needs

- The Ottawa stem cell manufacturing facility is processing stem cell products that are sent for further manufacturing into licensed CAR-T cell therapies (an emerging cancer therapy).
- The project to introduce INTERCEPT pathogen inactivation technology for platelets has moved into the project planning phase.
- Continued working with collaborators on freeze-dried plasma initiatives.

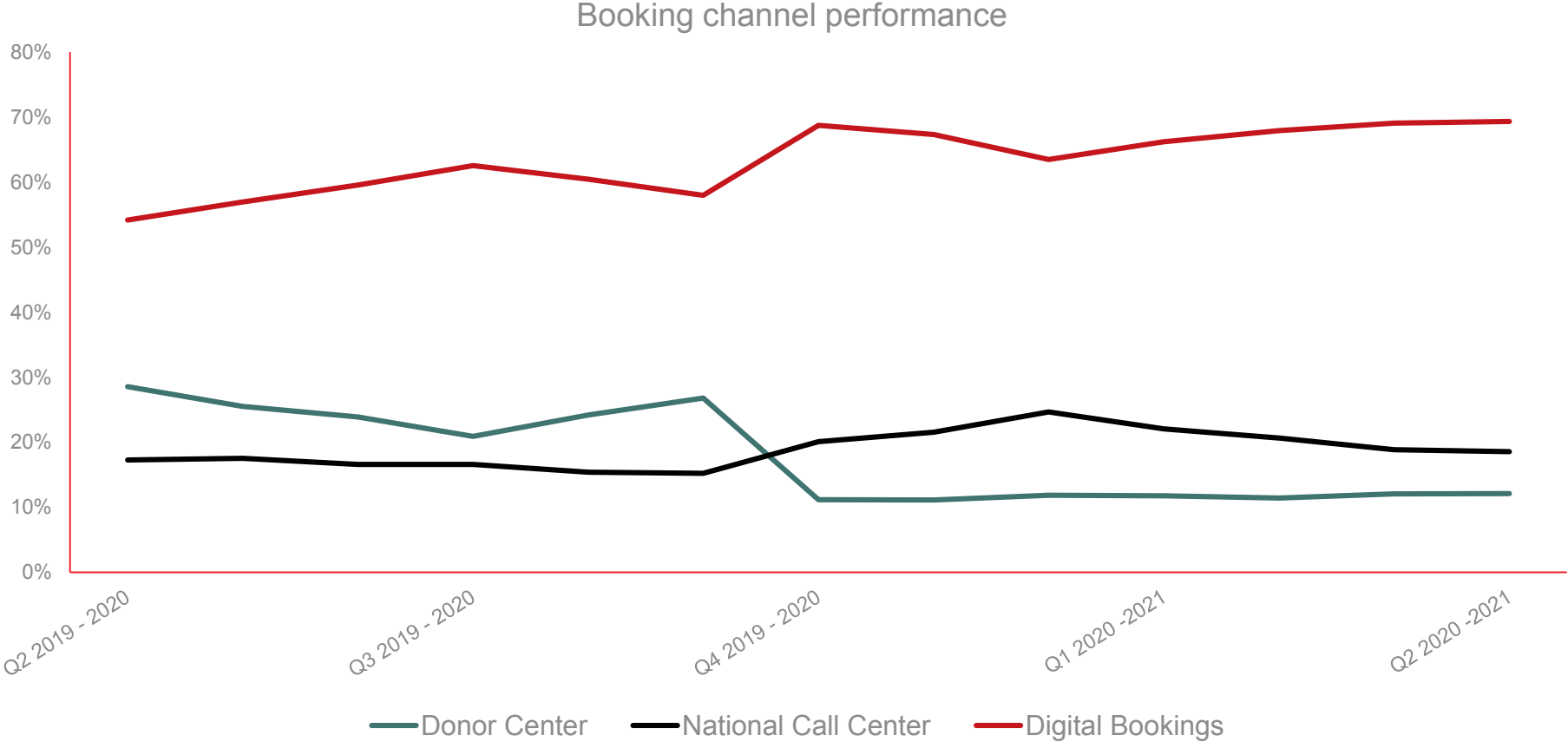
*Build and deepen relationships  
with donors of the future*

# We continued to focus on the donor experience during the pandemic

- Increased digital appointment bookings
- Completed foundational work to improve donor diversity, including evaluation of diversity targets and research to understand barriers to donation in various communities
- Approved plans to expand our technology capabilities to help us better understand and learn from interactions with donors

# Digital bookings

Digital appointments continued to rise to almost 70 per cent in Q2.



*Build and deepen relationships  
with donors of the future*

**Donor  
satisfaction and  
engagement  
continued to be  
strong in the  
first two  
quarters**

**83%**

**Donor satisfaction  
score**

*Target = 75%*

**85%**

**Donor net promoter  
score**

*Target = 78%*

*Ensure a secure supply of  
Canadian plasma for immune  
globulin*

**We are  
mitigating the  
impacts of  
COVID-19 on  
global supply of  
immune globulin  
and increasing  
Canada's plasma  
supply**

- The plasma sufficiency rate for immune globulin is currently just below 13 per cent.
- The impacts of COVID-19 on global immune globulin supply chains and the associated price hikes are expected to outlast the pandemic itself.
- Canadian Blood Services must significantly increase our plasma collections, beyond the three new sites, as immediate risk mitigation for the country.
- Planning underway for eight additional collection centres over the next three years.



*Ensure a secure supply of  
Canadian plasma for immune  
globulin*

## Opened the first of three plasma donor centres

- Continued to progress with plasma donor centres and donor recruitment strategy, despite ongoing pandemic-related challenges.
- Sudbury temporary plasma donor centre started its operations on Aug 25.
- To the end of October:
  - 1,471 units collected.
  - 882 unique donors visited the Sudbury plasma donor centre.
  - 1,000 litre milestone surpassed early in the first week of November.

*Ensure a secure supply of Canadian plasma for immune globulin*

# Progressing with three plasma collection centres



**Sudbury (Lasalle)**  
December 1, 2020



**Kelowna**  
June 22, 2021



**Lethbridge**  
December 22, 2020

*Create an engaging and empowering employee experience*

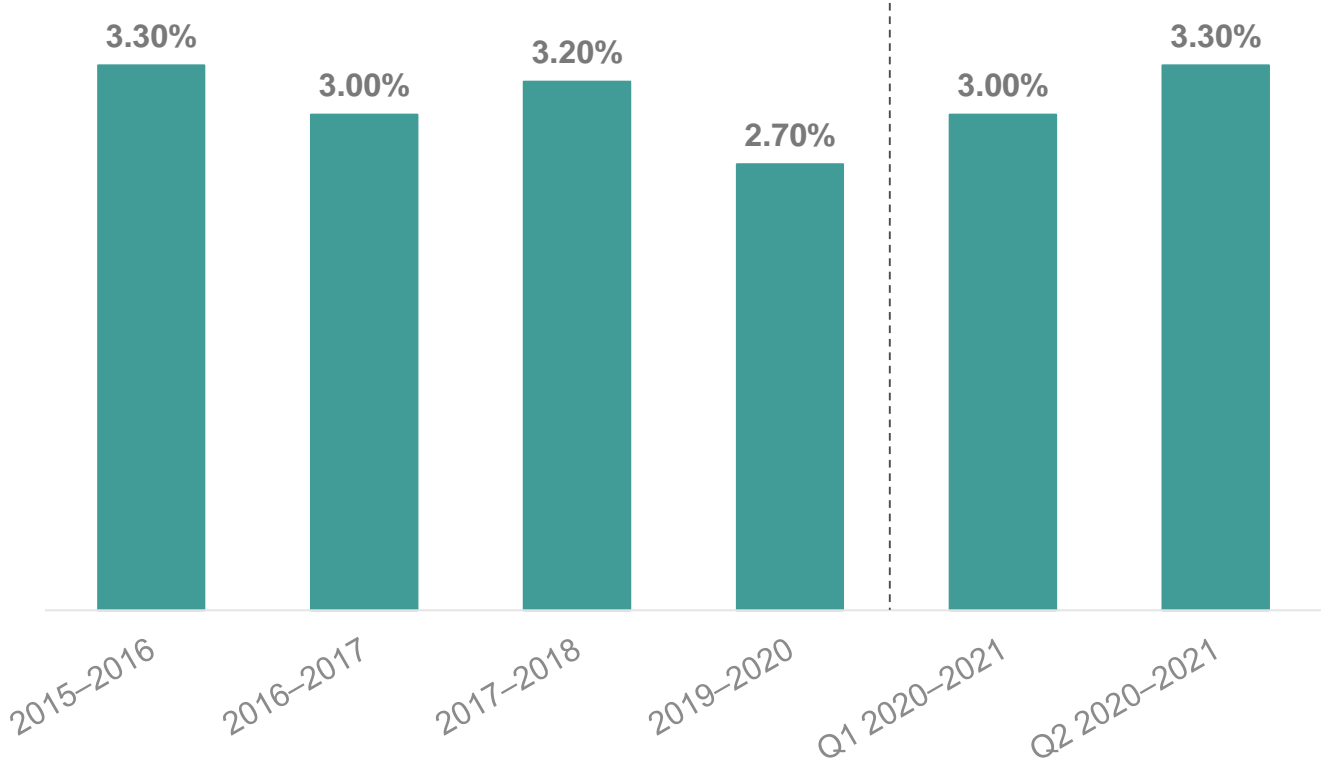
# We have identified critical areas to enhance the employee experience

- Refine and extend services to support employee well-being:
  - New portal for working caregivers.
  - Availability of virtual drop-in counselling when needed – no appointment necessary.
  - Flu vaccines to be available for employees subject to availability.
- Wellness program participation reached 19.5 per cent, exceeding the 15 per cent target
- Significant increase in communication about the employee assistance program translated into higher utilization rates (13.5 per cent actual vs. 12 per cent target)
- Continue to take a measured and phased approach for employees that need to return to work in an office setting.

# Occupational health and safety

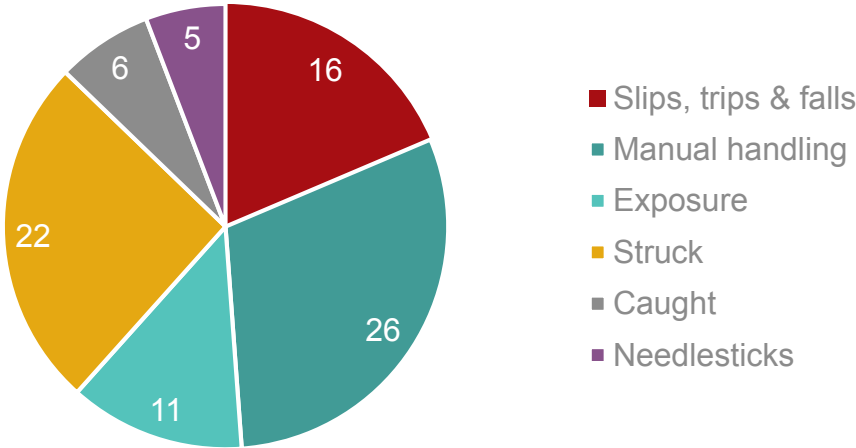
Increase in injury frequency rate in Q1 and Q2 is in part due to COVID related events.

### Total injury frequency rate



### Total injury frequency rates are consistently below 3.5%

Top three types of injuries are struck by, manual handling, and slips, trips and falls

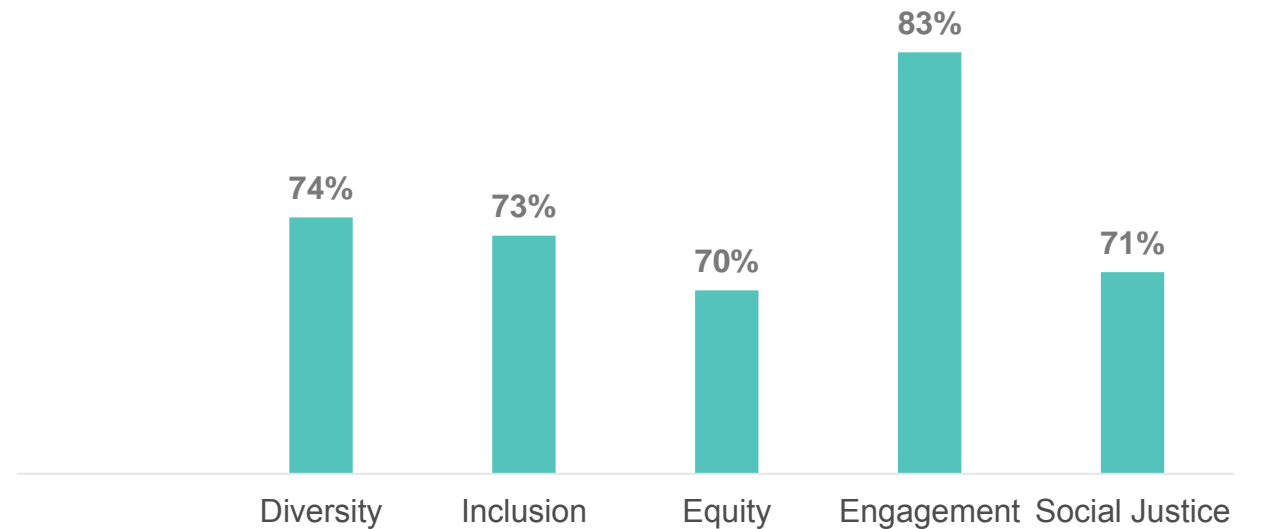


*Create an engaging and empowering employee experience*

# Diversity, Equity and Inclusion employee survey: What have we learned?

- 62 per cent of employees responded to a confidential survey about the organization's demographics and evaluated organizational efforts in five dimensions related to Diversity, Equity and Inclusion (DEI).
- Employees are deeply engaged in our mission and purpose, while recognizing that there is work to be done to create a diverse, equitable, and inclusive organization.

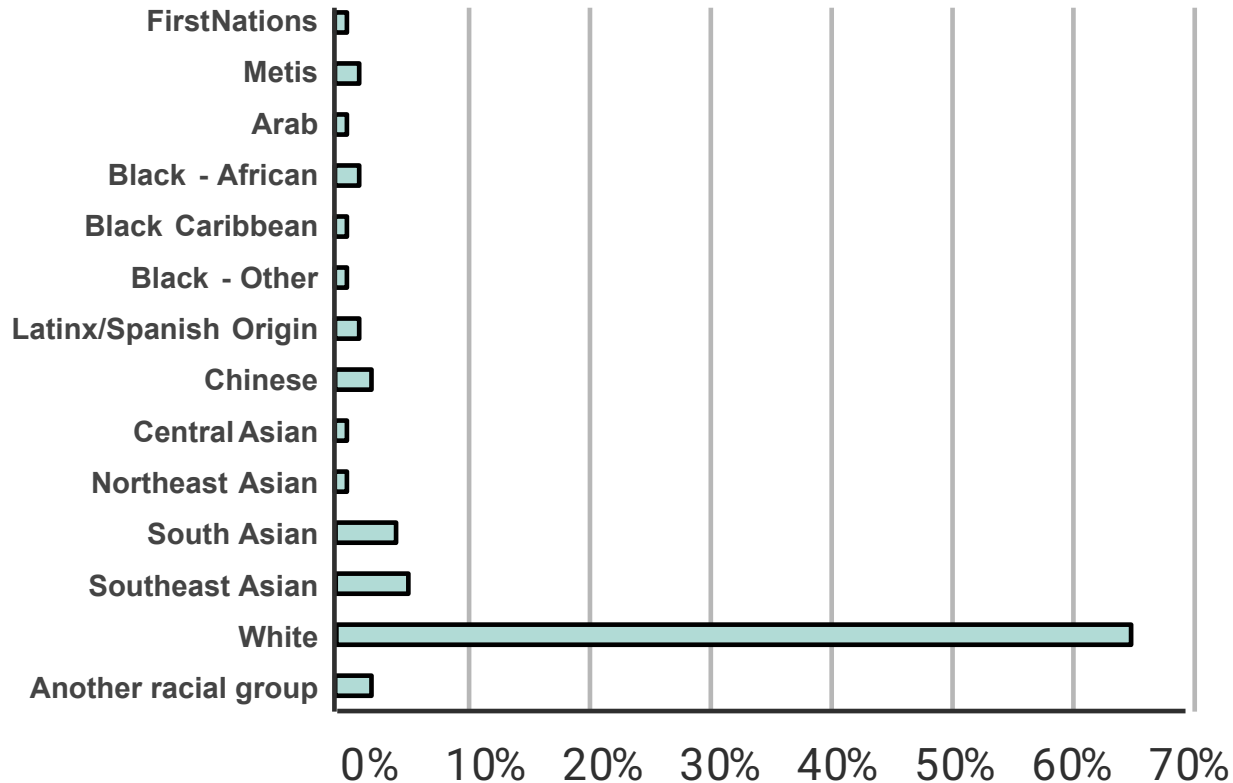
**DEI employee perceptions**



Graph shows % who responded agree or strongly agree

# Demographics by racial or ethnic group

Overall employee composition

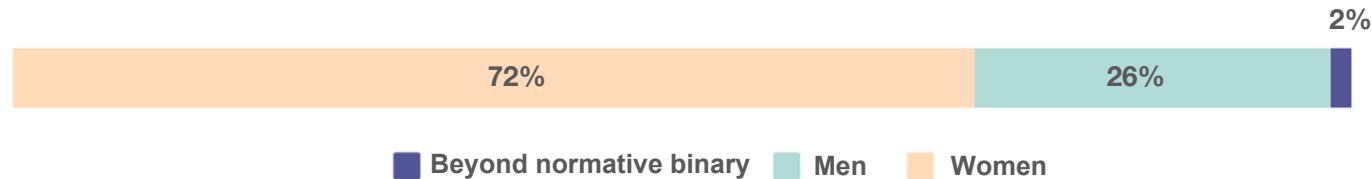


- At the aggregate racial identity perspective our organization reflects much of the diversity we see across Canada, recognizing important areas requiring improvement and focus.
- Employee identified as approximately 65% White, 21% racialized and 3% Indigenous.
- At the director level 88% identified as White, 15% racialized and 3% Metis and 100% identified as white in the executive level.
- Racialized and white employees have similar overall perceptions of DEI work at Canadian Blood Services and would like to see many of the same changes.

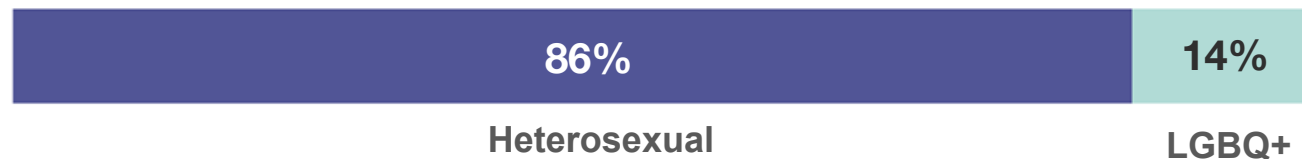
Q: What racial groups do you belong to? Select all that apply  
 Base Size (Excluding 'Prefer not to answer'): Race [n=1876]

Create an engaging and empowering employee experience

# Gender and sexual orientation are important aspects of employee identity



- Women represent the largest group of employees and are generally well represented in management layers except the executive layer.

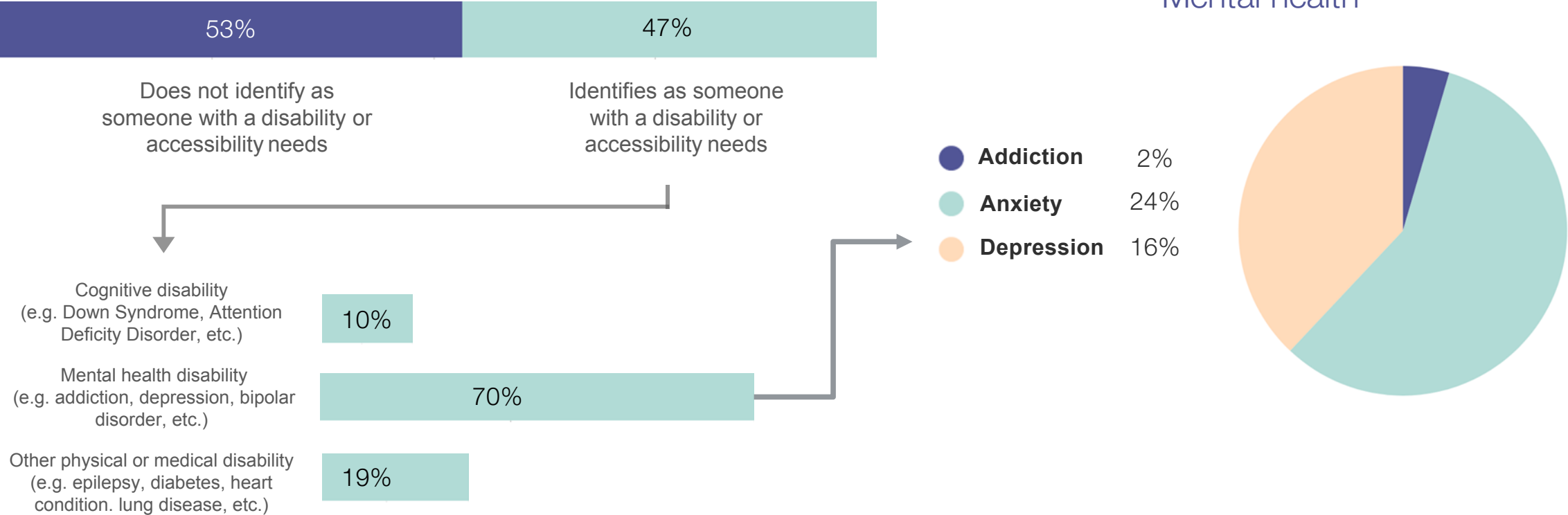


- LGBQ+ employees represent 14 per cent of employees. They expressed similar sentiments regarding diversity, equity and inclusion as other employees.
- Among LGBQ+ employees 41 per cent share their identities and 15 per cent partially share their identities with others.
- Transgender employees reported less positive experiences and perceptions related to DEI.
- The percentage of non-heterosexual leaders ranges from 14 per cent at the supervisor level to 8 per cent at the director level.

# Disability and accessibility needs

*Mental health is an important consideration for employee supports.*

Mental health





*Create an engaging and empowering employee experience*

# There are five key areas around which we will dedicate concrete action

1. Psychological safety, some employees feel comfortable expressing themselves while others fear reprisal or recrimination.
2. Equitable and transparent processes, most notably around career progression.
3. Strong and sustained action around DEI, notably speed and consistency.
4. DEI education as a first step to addressing bias and racism.
5. Diversity in the senior leadership ranks, employees recognize opportunity to improve diversity in the executive team.

*Create an engaging and  
empowering employee  
experience*

**There are five  
vulnerable groups  
identified as  
requiring specific  
supports and  
attention**

- Transgender employees
- Racialized employees
- Indigenous employees
- Front-line employees
- Employees struggling with mental health

*Create an engaging and empowering employee experience*

## What's next?

**We are committed to sustained action to advance diversity, equity and inclusion**

- Launched two new executive sponsored employee resources groups for Black, Indigenous and people of colour and for employees with disabilities.
- Started the education journey with formal DEI and Indigenous engagement education at our executive levels.
- Continue to improve our mental health and front-line employee supports.
- System changes will assess and improve diversity of candidate pipelines, career advancement and promotion processes among other changes.
- We will enhance the mechanism to combat discrimination and harassment, bolstering our existing policies.

# Diversity, equity and inclusion journey (employees)



CCDI assessment

Synte-gration

Program kick-off

Indigenous Engagement Strategy  
Specialized consultancies

Anonymous survey

EMT DEI session

Employee focus groups

EMT indigenous cultural awareness session

Employee resource groups launch  
Co-design sessions

Build people capabilities through DE&I awareness and education

System changes (candidate pipelines, advancement, promotion)

Policy changes (harassment, discrimination)

Indigenous awareness and education

2017

2018

2019

2020

2021

*Achieve organizational  
excellence*

# We continued our commitment to excellence through several key initiatives

- Progress continued on a number of initiatives:
  - Continued to advance online ordering pilot with BC hospitals, working toward a national rollout.
  - Continue our journey to mature our quality management system through automation.
- The organization is operating in a state-of-control; albeit with opportunities to improve the timeliness of deviation approval and in the corrective/preventive action program.

*Achieve organizational  
excellence*

# Transitioned Calgary production and distribution operations to a new location

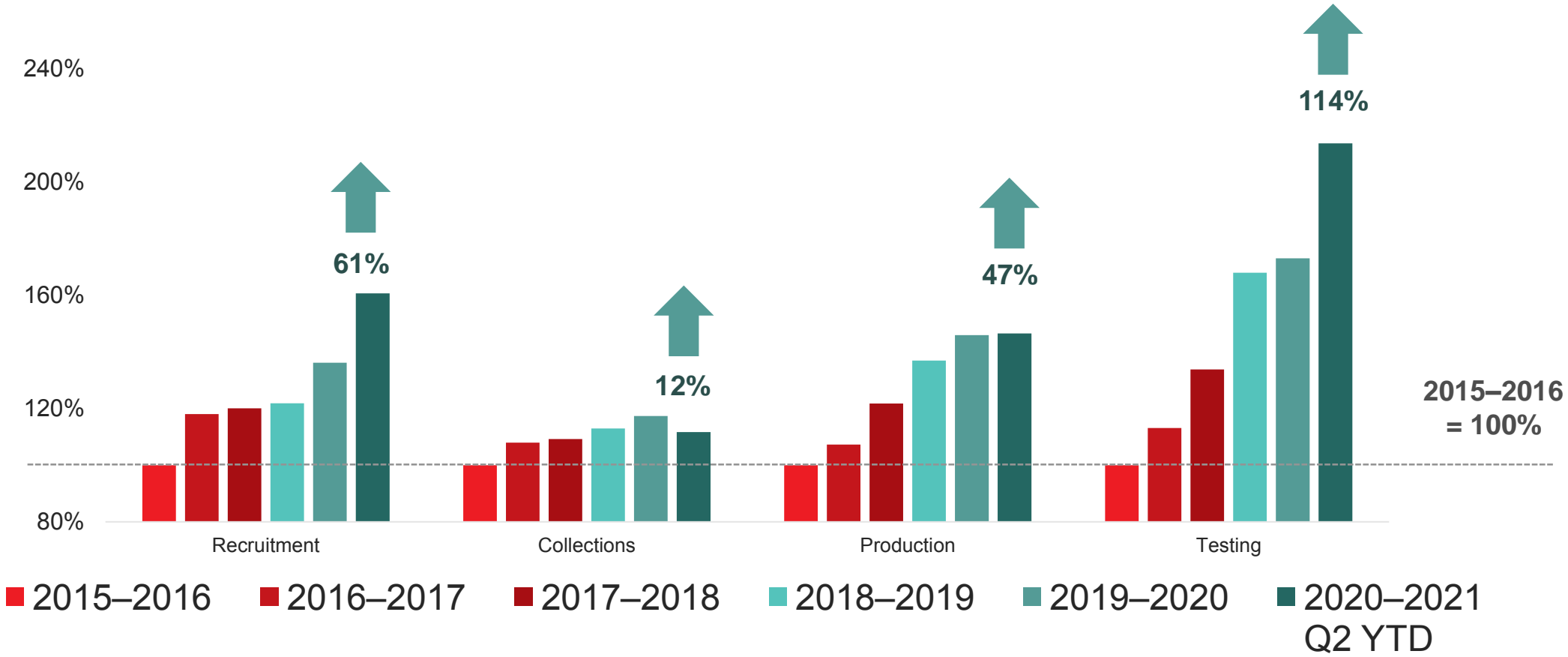


**Canadian  
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# Year-end / year-to-date productivity results

*Productivity shows strong but mixed results. The pandemic has introduced challenges increasing productivity in collection environments due to new safety and wellness requirements to protect donors.*

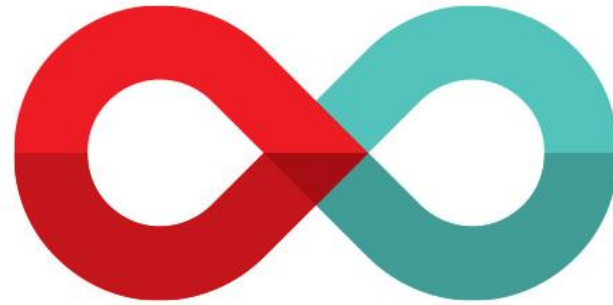


# Quality indicators

*Overall the quality index showed acceptable results; some reported errors and recalls being addressed through QMS.*

Performance indicator	Target	Actual (Q1)	Actual (Q2)
Number of fresh blood products recalled due to errors, accidents or post-donation information	≤ 300	197	375
Number of serious errors or accidents related to fresh blood products	0	2	3
Number of Health Canada critical observations	0	0	0
Number of adverse transfusion reactions	<20	6	14
Number of type A non-conformance reports	≤ 2	1	1
Number of serious stem cell events	0	0	0
Number of recalled plasma units for fractionation	<150	51	118
Timely execution of supplier recalls	0	0	0
Number of risk indicators meeting target	8 out of 8	7 out of 8	6 out of 8





## Financial results

# 2020–2021 summary financial results

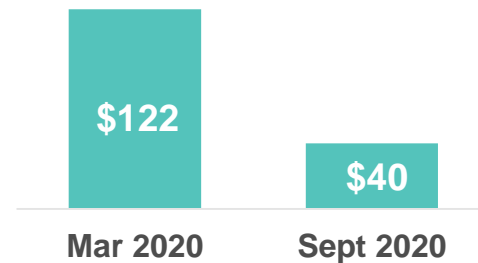
As at Sept. 30, 2020 (charts in millions of dollars).

## WORKING CAPITAL

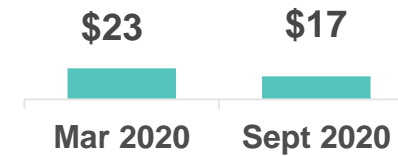


## ASSETS

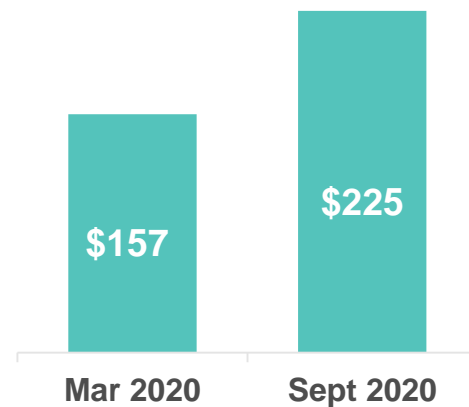
### UNRESERVED CASH



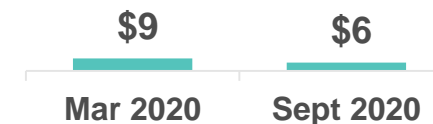
### RECEIVABLES



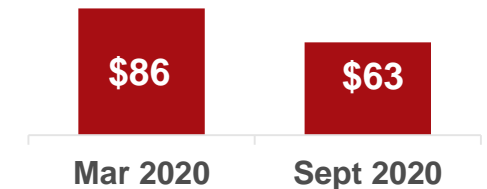
### INVENTORY



### PREPAIDS



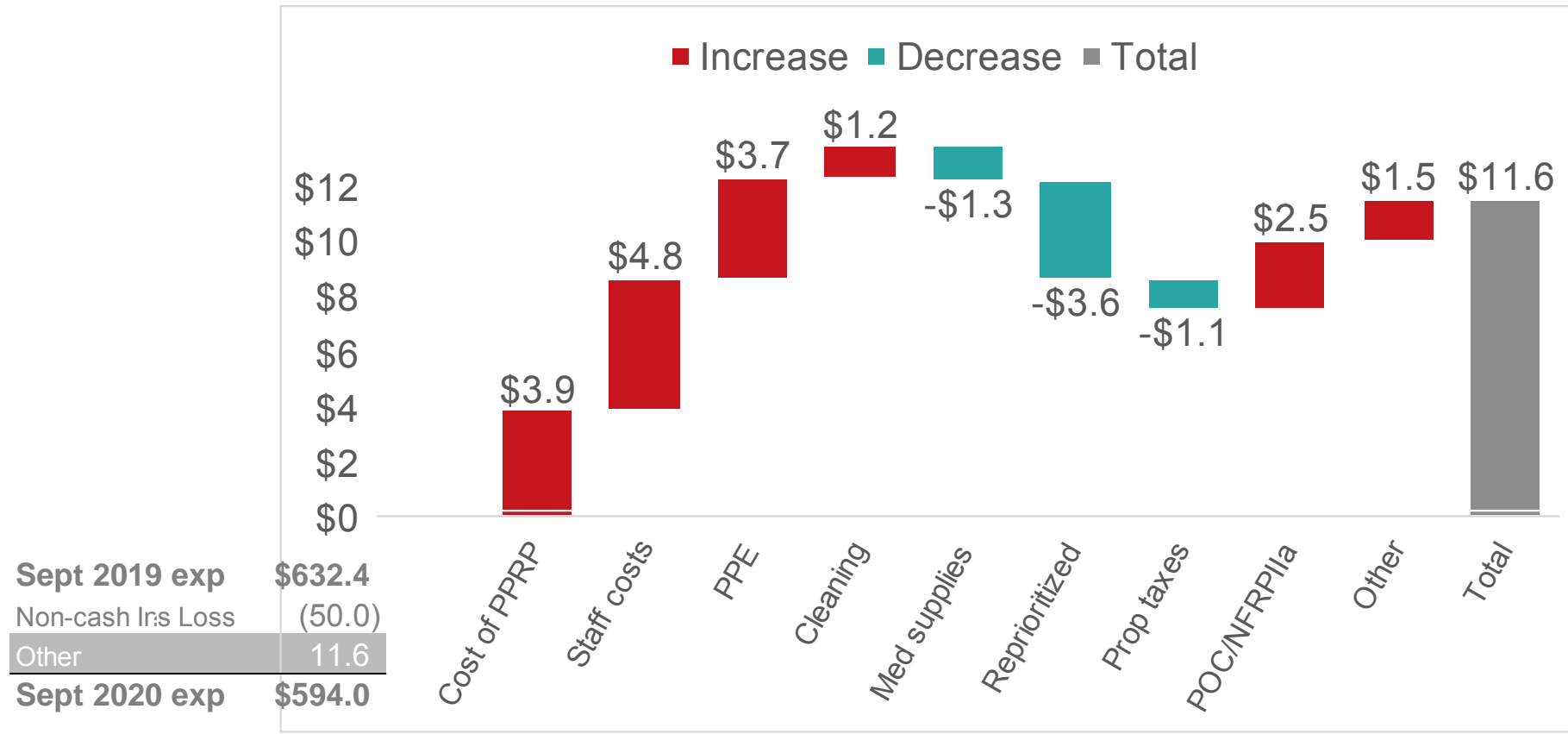
## ACCOUNTS PAYABLE & OTHER



# 2020–2021 summary financial results

For the six months ended Sept 30, 2020 (charts in millions of dollars).

## TOTAL CONSOLIDATED YEAR-OVER-YEAR CHANGE IN EXPENSES



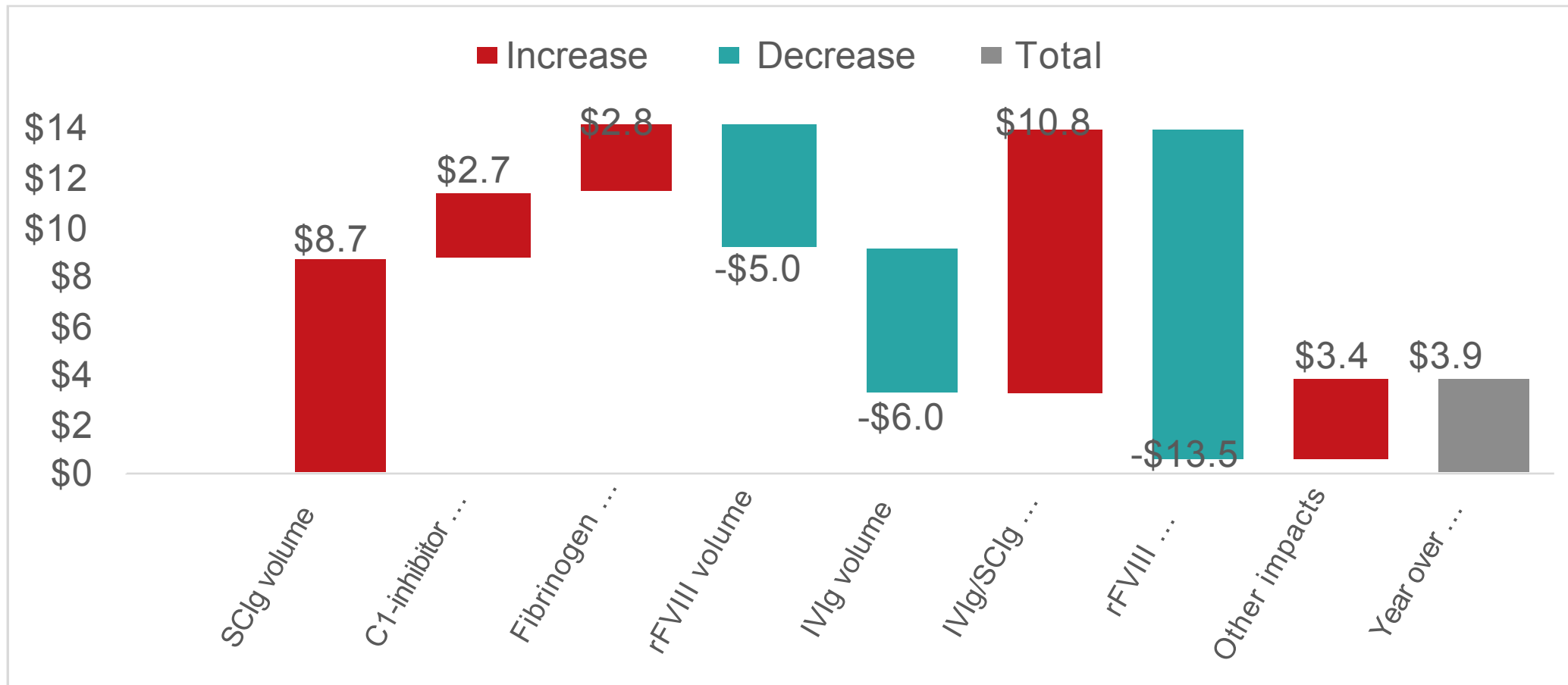
**Key takeaways**

- Additional COVID-19 costs driving increases
- Proactive cost reduction

# 2020–2021 summary financial results

For the six months ended Sept 30, 2020 (charts in millions of dollars).

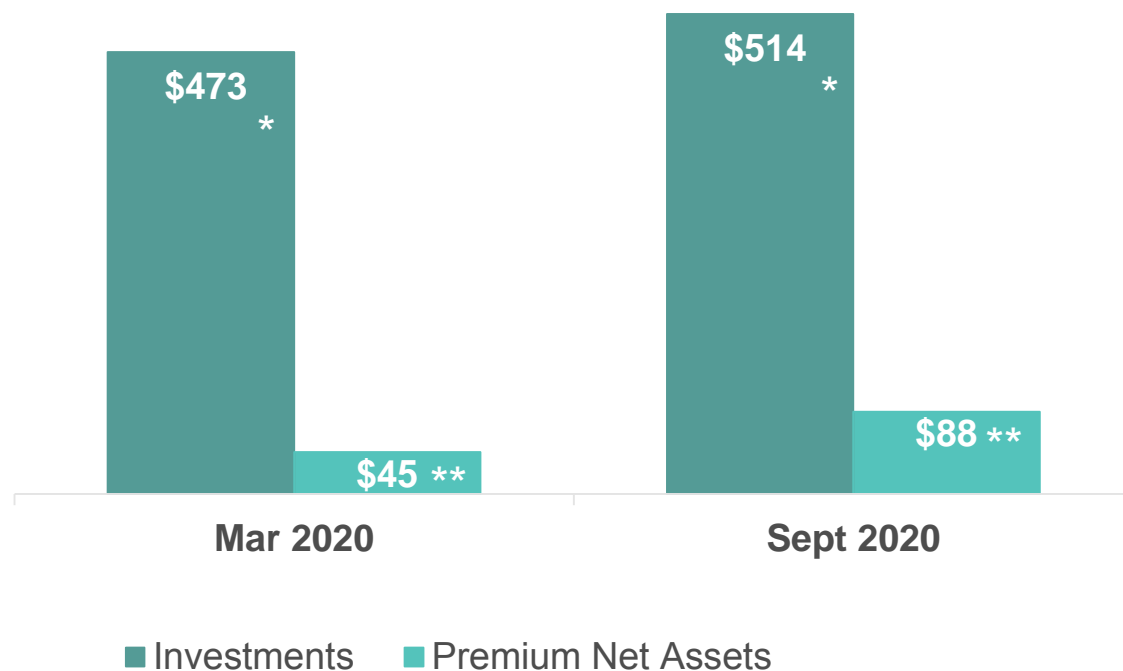
Year-over-year change in costs: plasma protein and related products



# 2020–2021 summary financial results

As at Sept 30, 2020 (charts in millions of dollars).

## INVESTMENTS, CAPTIVE INSURANCE OPERATIONS



\* NPO accounting standards basis (fixed income measured at amortized cost), including short-term notes

\*\* IFRS accounting standards basis (fixed income measured at fair value), net of investment mgt fees

## INVESTMENT RETURNS



**Market returns:**

\$43.1 million or 9.09% \*\*

Returns reflect market rebounds since early pandemic days

# We delivered strategic change in the first half of 2020–2021 and effectively responded to the COVID-19 crisis

- In the first half of the year despite ongoing COVID-19 challenges we continue to deliver strategic changes and achievements of key performance indicators.
- Our ability to rapidly reprioritize and reallocate resources allowed us to continue delivering our products and services amidst a global crisis.
- We will continue to closely monitor demand and supply as we enter a possible second wave of pandemic.

# Together, we are Canada's Lifeline

