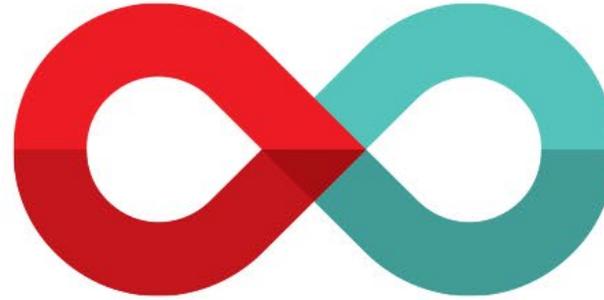




Bilal,
blood donor



Cara,
*blood recipient and cord
blood stem cell donor*



2020–2021: End of Year Review

Presentation by Dr. Graham Sher, Chief Executive Officer
Open Board Meeting
June 18, 2021



**Canadian
Blood
Services**

BLOOD
PLASMA
STEM CELLS
ORGANS
& TISSUES

What we'll cover today

Major achievements

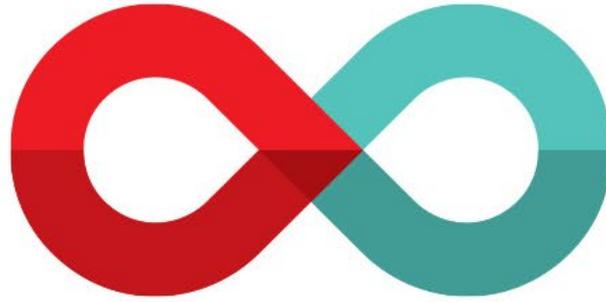
Operations review

Strategy review

Financial review

Continued to build on success with key achievements in 2020–2021

- Continued to meet customer needs despite unprecedented demand and supply volatility
- Maintained operations in a state of control
- Accelerated efforts in plasma and immunoglobulin security of supply
- Contributed to the national COVID-19 response
- Continued focus on maintaining and improving the mental and physical health of all employees



Gagandeep,
blood donor

Cole,
blood recipient



Operations review

Fresh blood products

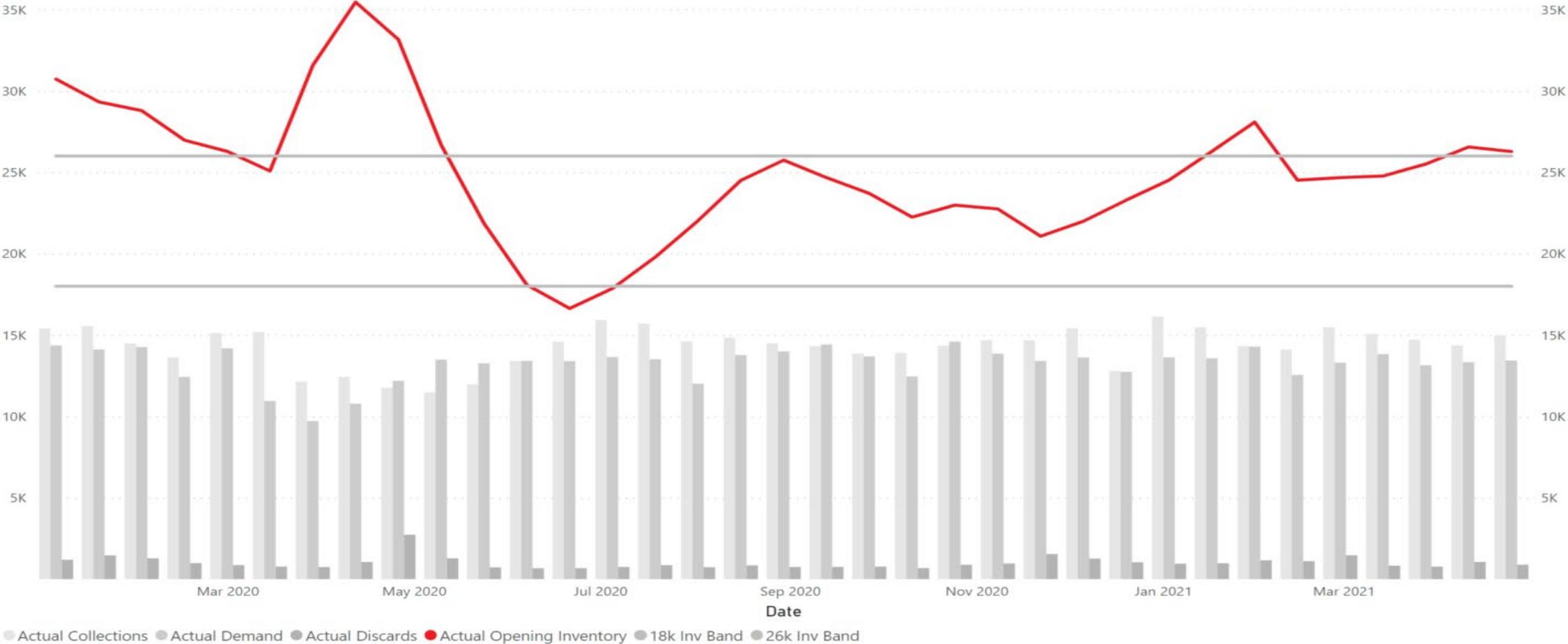
Managed volatile demand and supply during the COVID-19 pandemic

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

- Adjusted collection plans throughout the year.
- Shifted collections volume to fixed donor centres.
- Remained responsive to supply disruptions through business continuity plans, a national network and the agility to pivot collections and donor recruitment.
- Worked with the National Emergency Blood Management Committee (NEBMC) and other health system partners.

Inventory management

We have confidence in our ability to manage inventory through potential future waves.

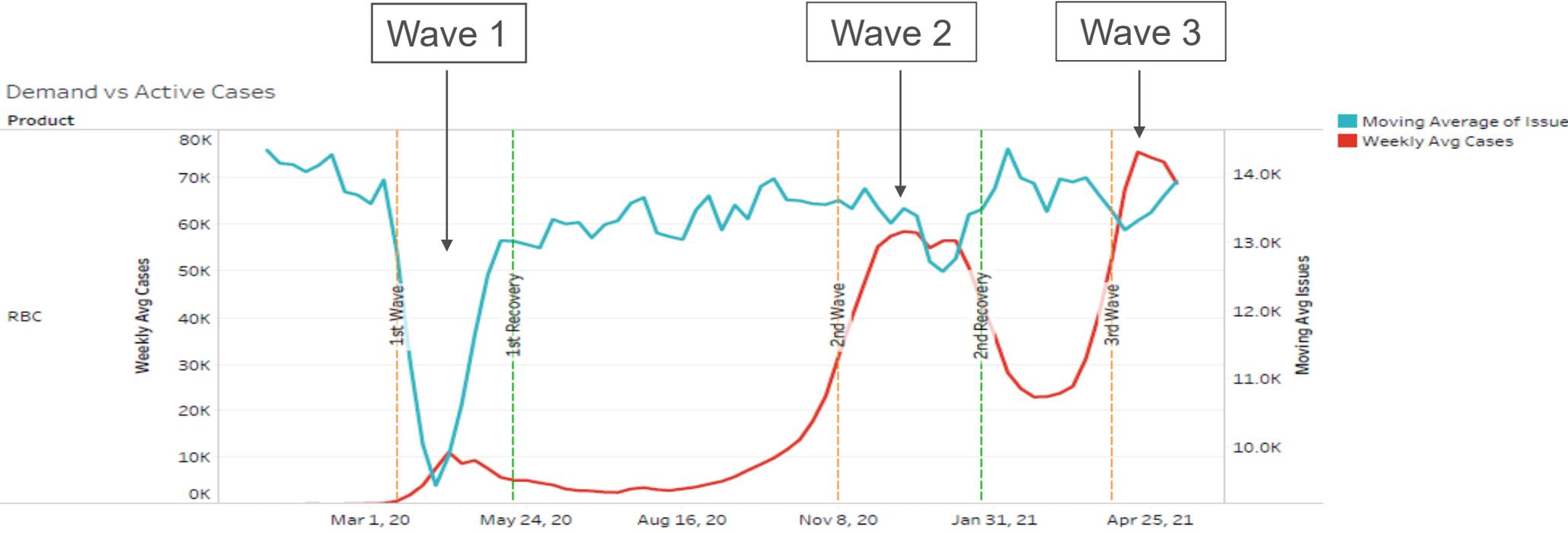


Hospital order fill rates

Consistently met hospital demand throughout the year for fresh blood products.

Product	Target	2020-2021 result
Red blood cells (excluding O negative)	98%	98.7%
O negative	95%	99.9%
Platelets	98%	99.1%
Plasma (excluding AB)	98%	99.8%
AB plasma	95%	97.4%
Cryoprecipitate	98%	97.0%

Red blood cell demand shaped inventory management decisions

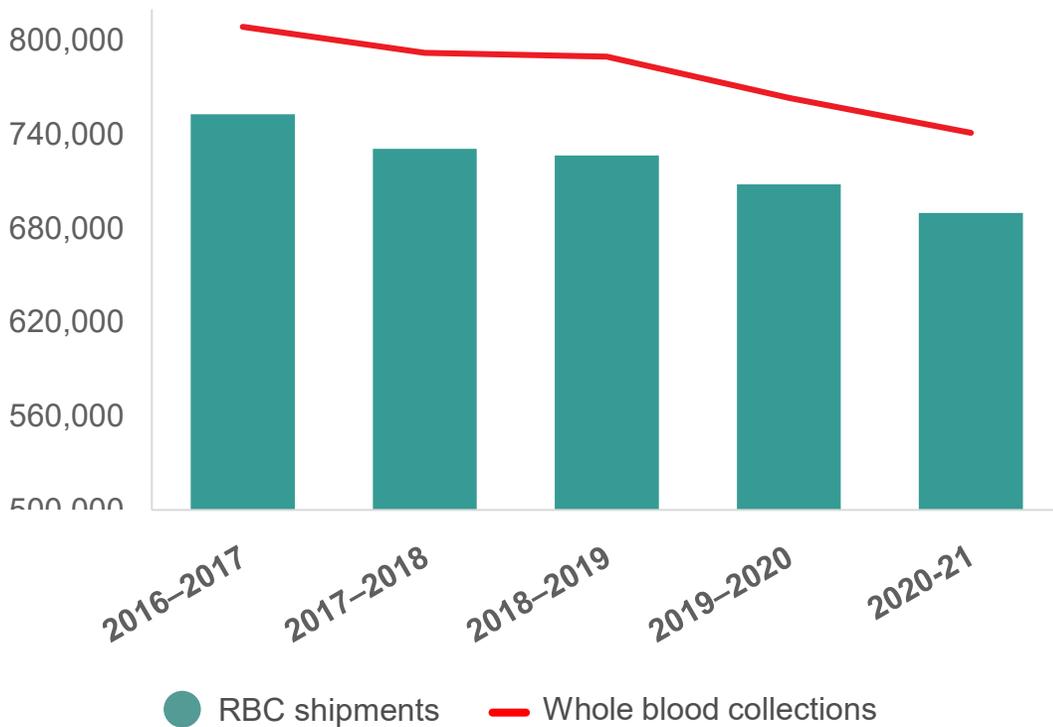


Hospital demand for red blood cells is showing to be less affected by the pandemic waves over time, even though the volume of active cases has increased.

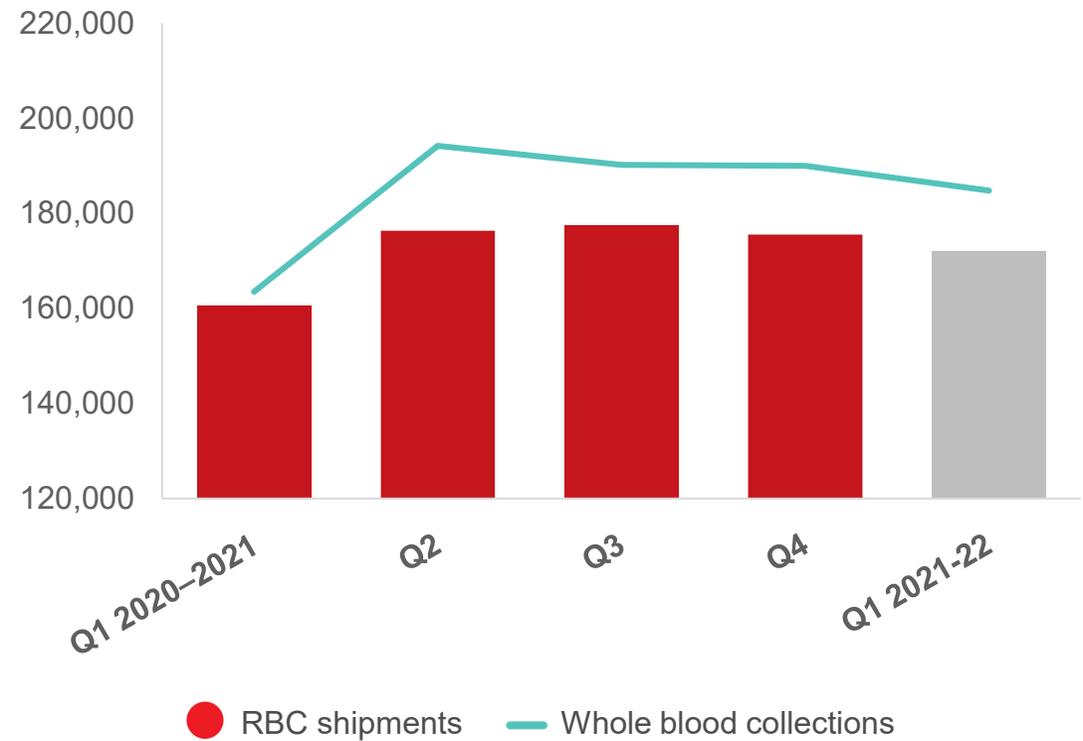
Red blood cell shipments and whole blood collections

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

Five-year historical trend
Number of units



Last fiscal year
Number of units

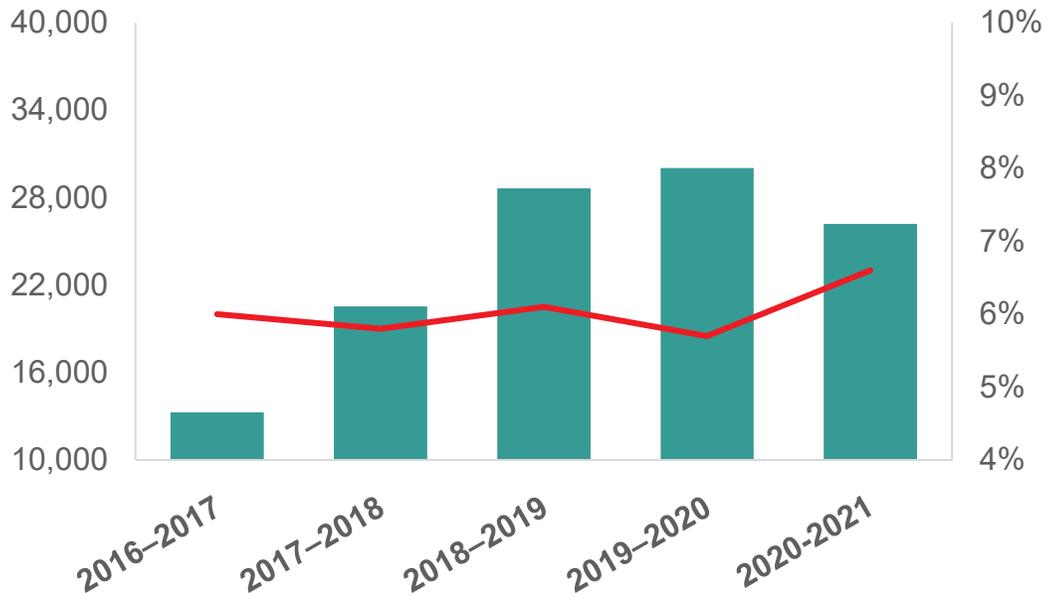


Red blood cell inventory and discard rates

Discard rates were slightly elevated in Q3 and Q4 due to exceptional events, holding a higher inventory and increased expiry.

Five-year historical trend

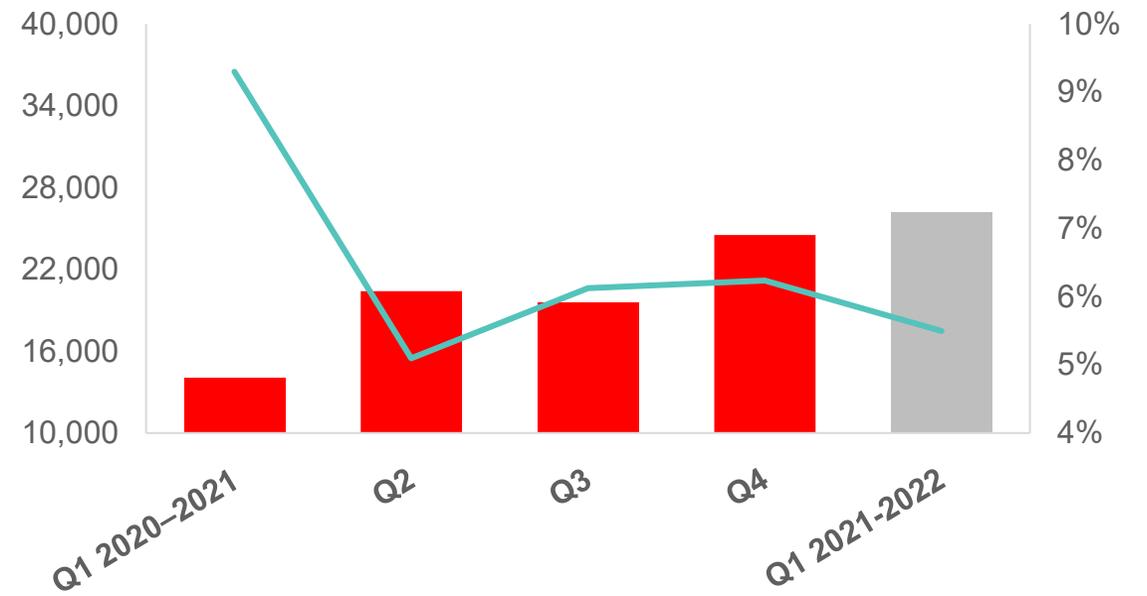
Number of units



● RBC inventory — Discard rate (%)

Last Fiscal Year

Number of units



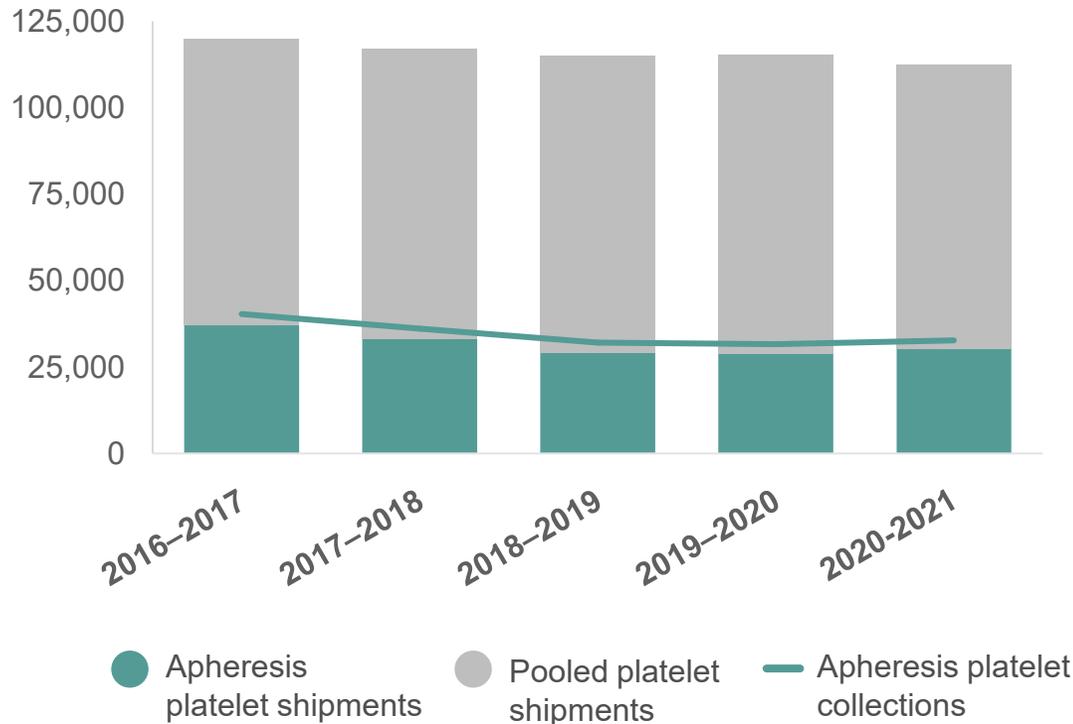
● RBC inventory — Discard rate (%)

Platelet shipments and collections

Overall platelet demand has returned to approximately normal levels after a decrease in Q1 at the start of the pandemic.

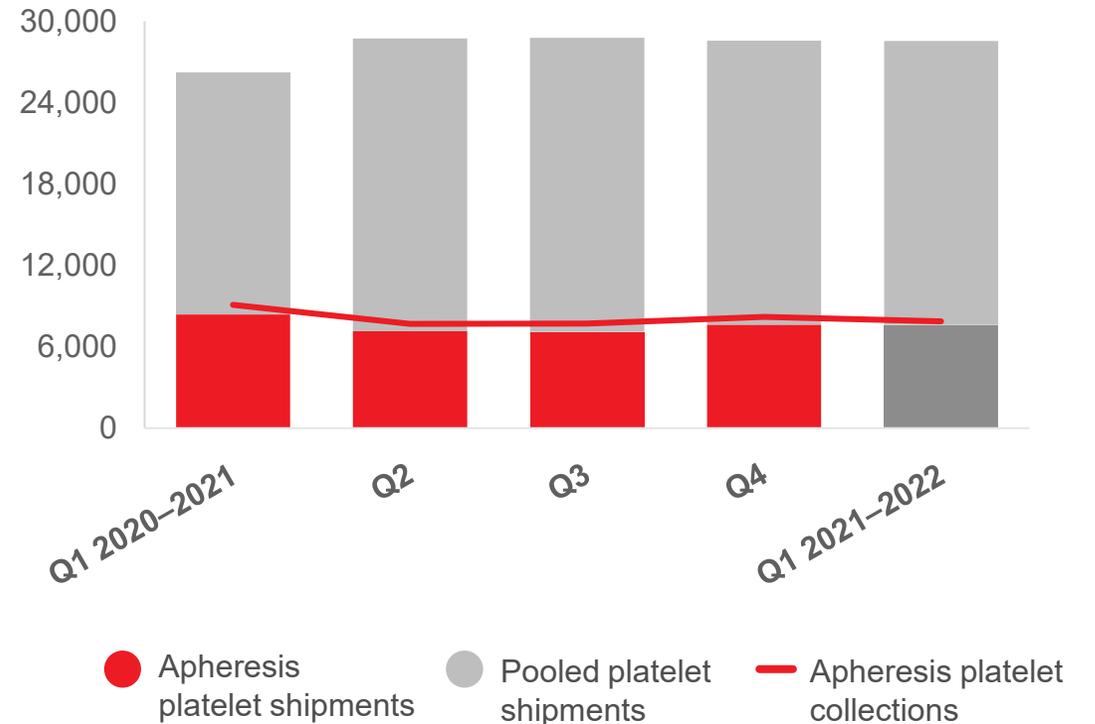
Five-year historical trend

Number of units



Last Fiscal Year

Number of units



Safety and surveillance

Residual risk of HIV, HCV and HBV remains low and in line with previous year's results.

Donor status	Number of donations	Percentage of donations	HIV		HCV		HBV	
			#	Rate	#	Rate	#	Rate
First time	75,293	9.8	0	—	36	47.8	35	46.5
Repeat	690,516	90.2	0	—	2	0.3	3	0.4
			Residual risk					
			1 in 12.9 million donations		1 in 27.1 million donations		1 in 2.0 million donations	

= number of confirmed positive donations

Rate = prevalence rate per 100,000 allogeneic donors

Note: Numbers and figures on this table are based on the 2020 calendar year

Transmission risk remains low among other blood-borne viruses

West Nile Virus

- Twelve positive donations were screened out in 2020.
- Increase in positive tests from previous year.

Babesia

- Parasite passed to humans from ticks.
- Monitoring continues and risk remains low.

Hepatitis E

- Virus from undercooked pork.
- Risk is low in Canada; focus on increasing surveillance and awareness.

Plasma protein and related products

New processes were adopted to increase efficiency and adapt to changing environments

- The newly developed joint Canadian Blood Services-CADTH *Interim Plasma Protein Product Review Process* was applied for the first time.
- At the request of stakeholders, Canadian Blood Services organized a home delivery program for plasma protein and related products (PPRP) and is providing regular inventory updates on our website.

Previous supply chain concerns during COVID-19 have been alleviated with proactive demand and supply management

- Supply of immunoglobulin (Ig) products have been secured to meet forecasted demand in 2021–2022.
- This increase in supply has implications on inventory, working capital and potentially on patients.
- Ongoing work with hospitals to prepare for the potential brand switch in an effort to minimize patient impact.

Continued to mature the plasma protein and related products program

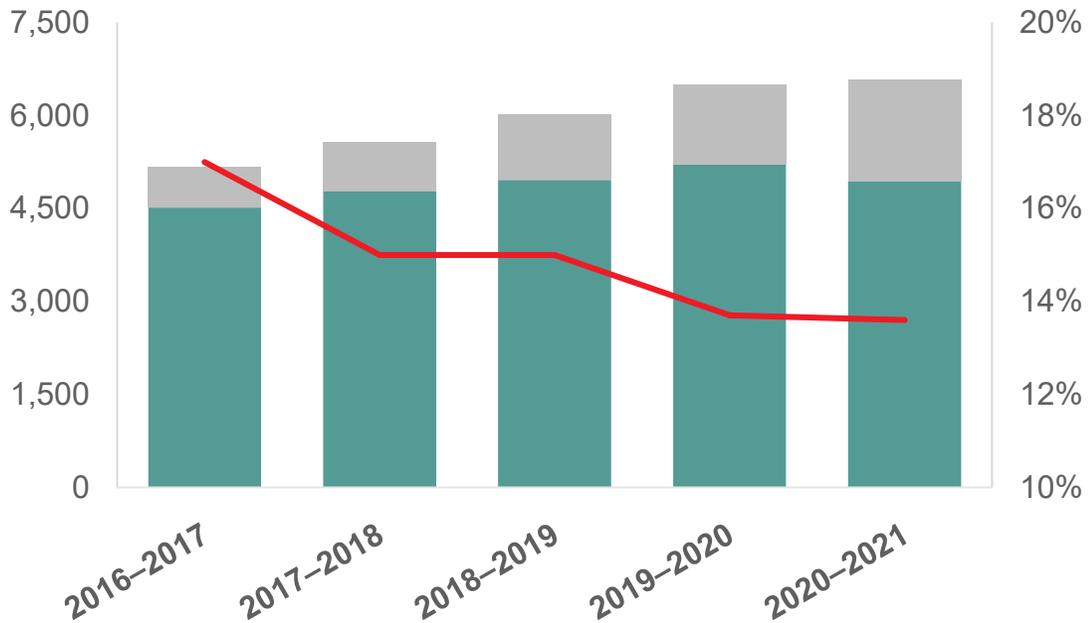
- Novel hemophilia drug (Emicizumab):
 - The Canadian Blood Services-CADTH interim review process is complete.
 - Recommendation that provinces and territories add Emicizumab to the formulary with criteria for non-inhibitor patients.
- Recombinant von Willebrand Factor (Vonvendi):
- The vendor has advised that they are postponing launch in Canada until further notice. As a result, the review of Vonvendi is on-hold.
 - Canadian Blood Services is in the process of informing affected stakeholders.
 - At this time, it is unclear when the review will resume, and further information will be shared when obtained from the vendor.

Immunoglobulin utilization and sufficiency

Short term demand for IVIg decreased, but it is anticipated to return to normal growth levels in the coming years.

Five-year utilization trend

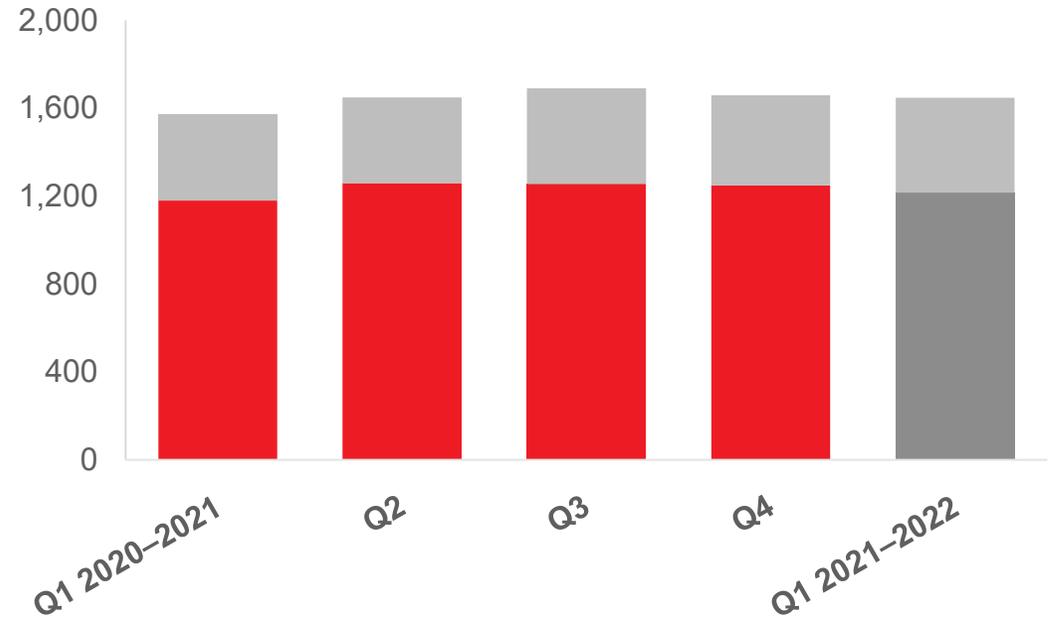
Thousands of grams



● IVIg ● Subcutaneous Ig — Ig sufficiency (%)

Last fiscal year

Thousands of grams



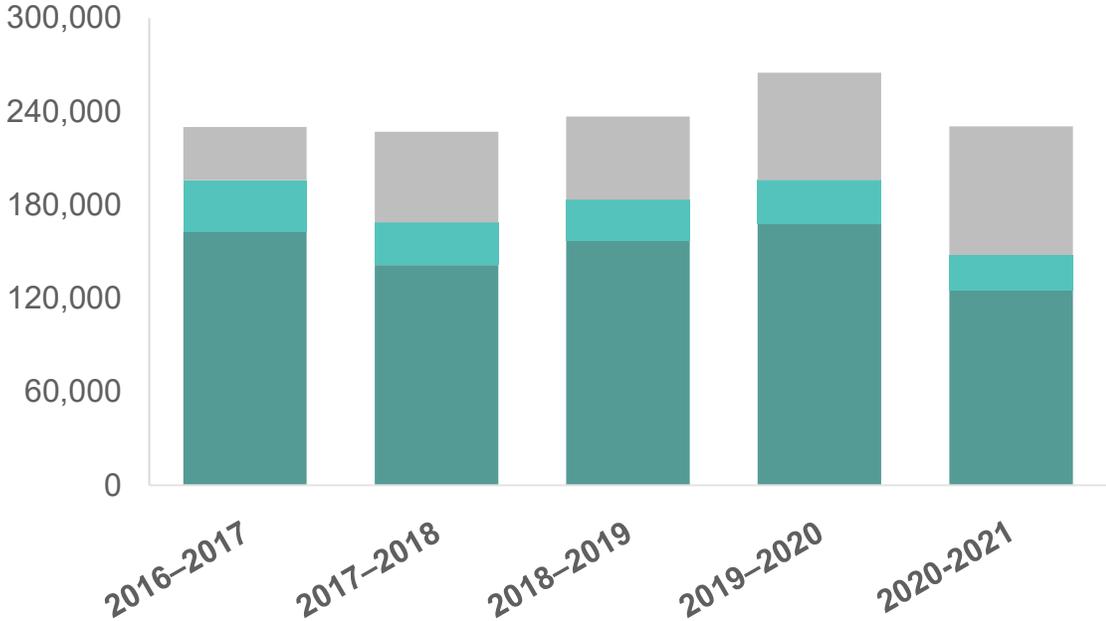
● IVIg ● Subcutaneous Ig

Factor VIII concentrate

Lower than usual volumes in 2020–2021 as result of the pandemic.

Five-year utilization trend

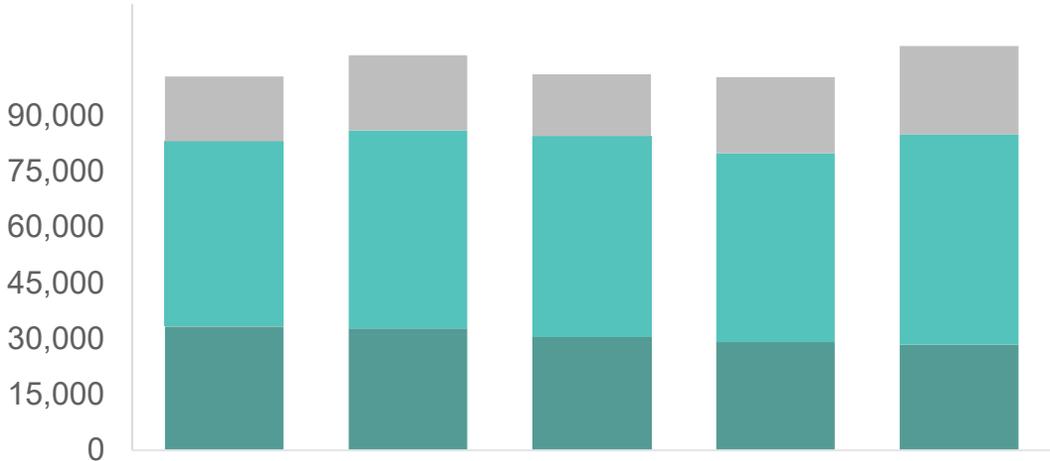
Thousands of international units



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

Last fiscal year

Thousands of international units

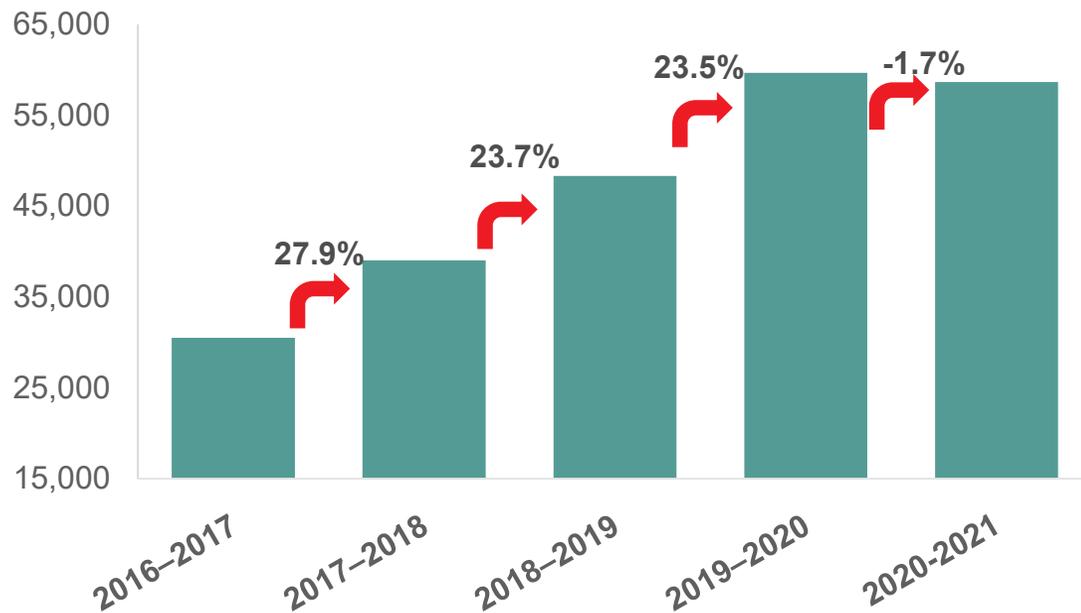


● Standard half-life ● Plasma-derived ● Extended half-life

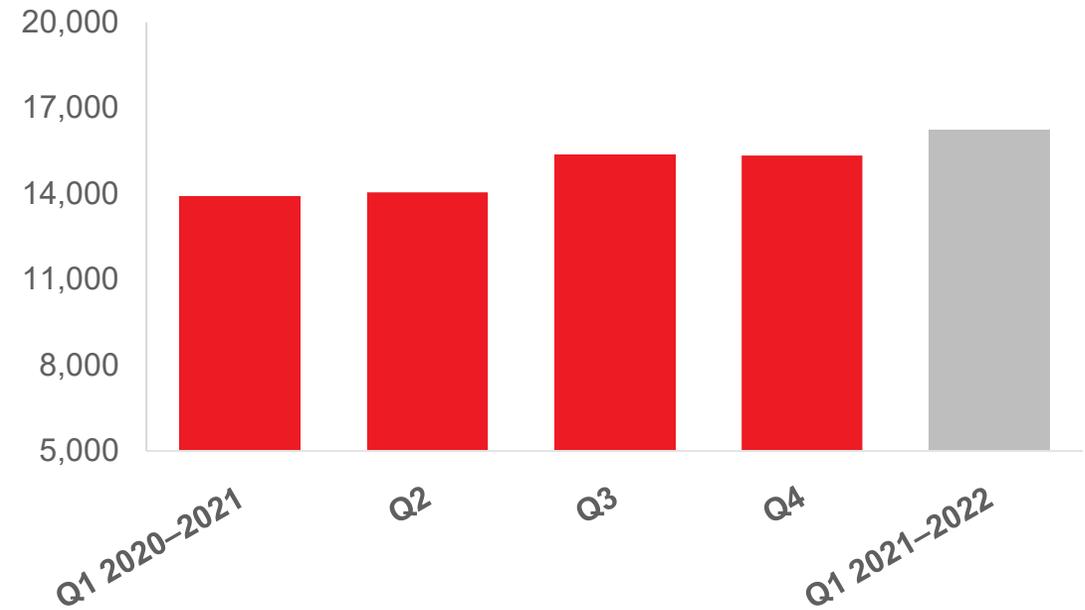
C1 inhibitor

Usage decreased in Q1 and Q2 due to high provisioning in Q4 2019–2020.

Five-year utilization trend
Thousands of international units



Last fiscal year
Thousands of international units



Stem cells

Stem cell programs have adapted to minimize impact to operations, employees, donors and patients

- Demand for cord blood units highest since inception of the bank.
- Stem cell registry recruitment was a challenge this year due to pandemic restrictions.
- A greater focus on digital recruitment with results to be realized in 2021–2022.
- Awarded Canadian Foundation for Innovation grant to support the development of a national cellular therapy research platform.

Stem cell registry

Number of searchable registrants declined this year due to suspension of in-person recruitment events and removing registrants no longer available to donate.

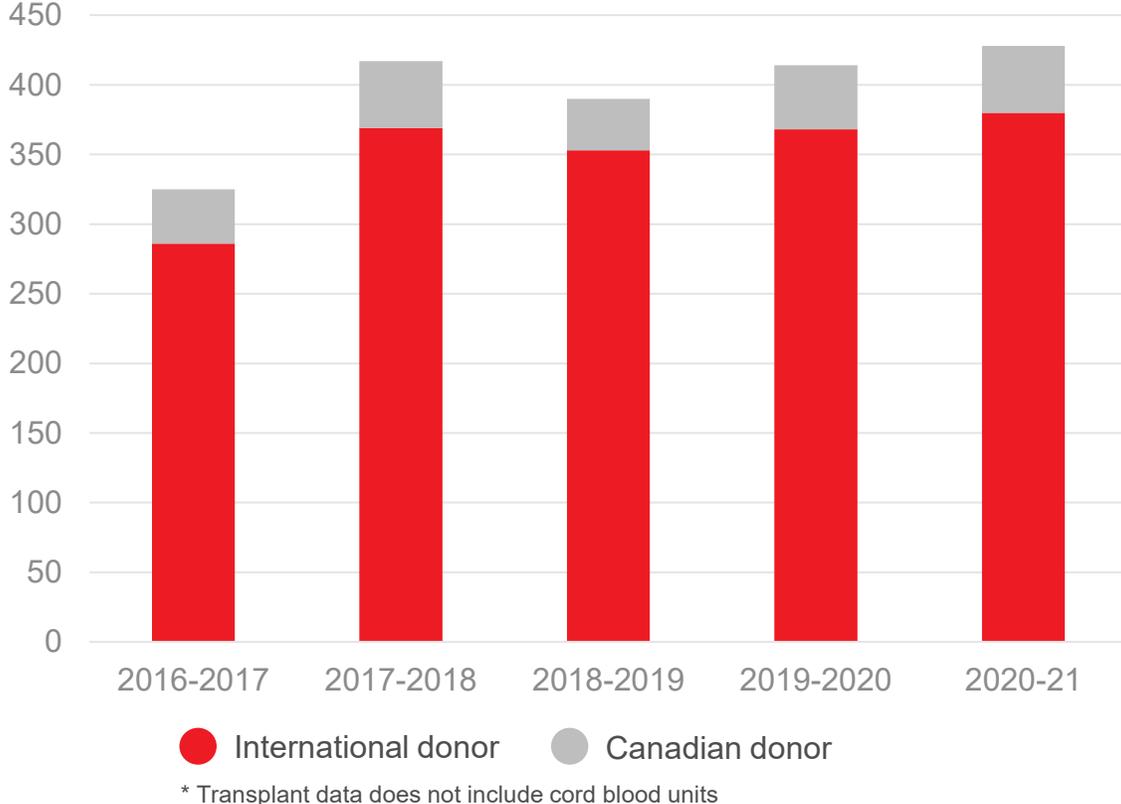
Stem cell registry composition

Number of searchable registrants



Canadian stem cell transplants*

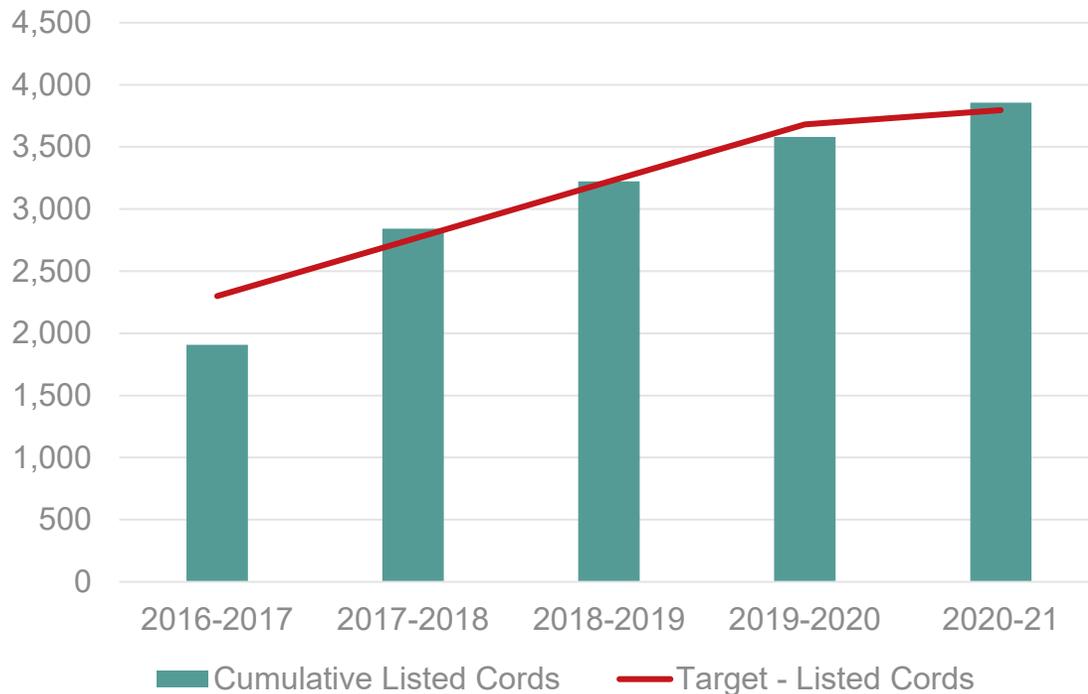
Number of Canadian transplant patients



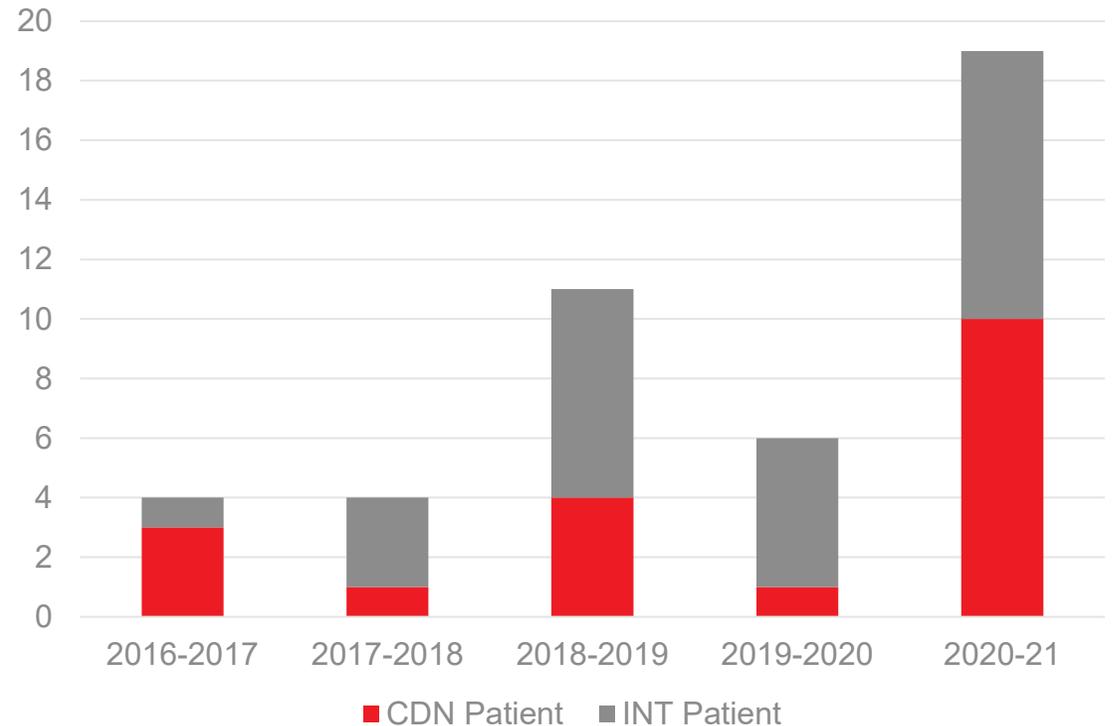
Cord blood bank — cumulative bank size

Significant increase in cord blood units used for transplant in 2020–2021 for both Canadian and international patients.

Five-year historical trend
Number of cord units listed in bank



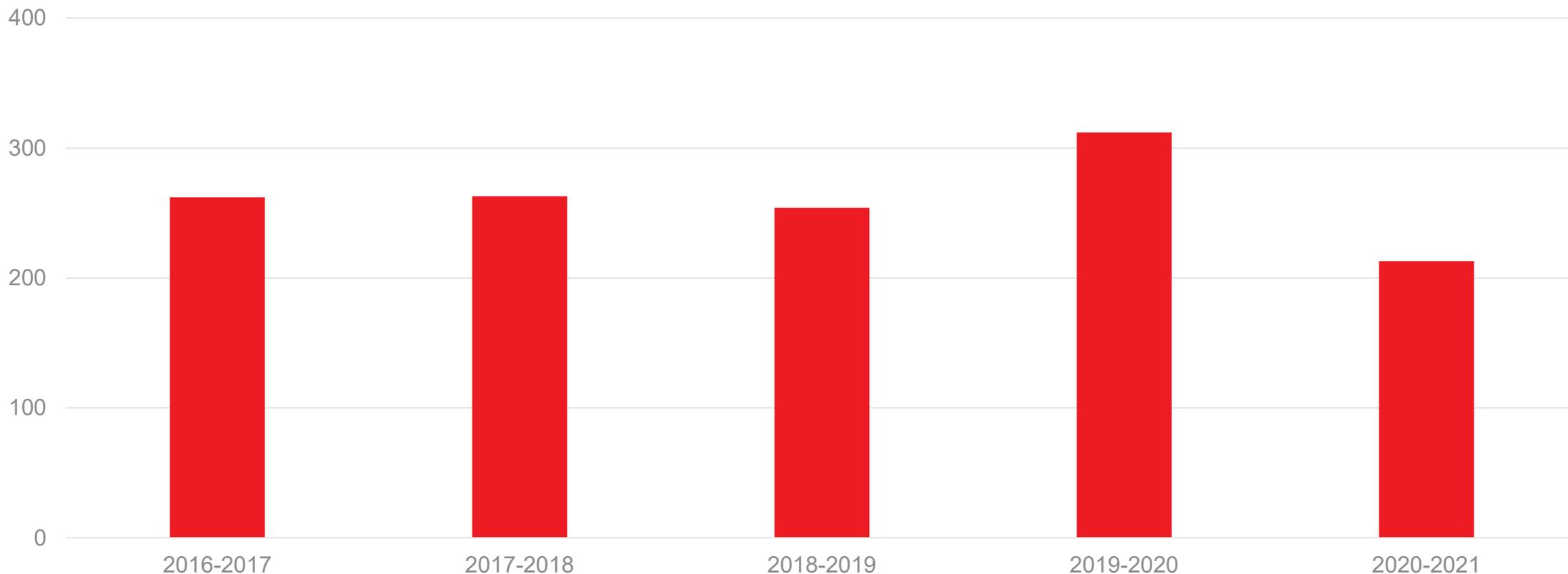
CBU's distributed for transplant



Autologous transplants facilitated

Experienced a decline this year due to the pandemic and suspension of non-essential transplants.

Five-year historical trend
Number of autologous transplants facilitated



Organs and tissues

Impact of COVID-19 pandemic on activities

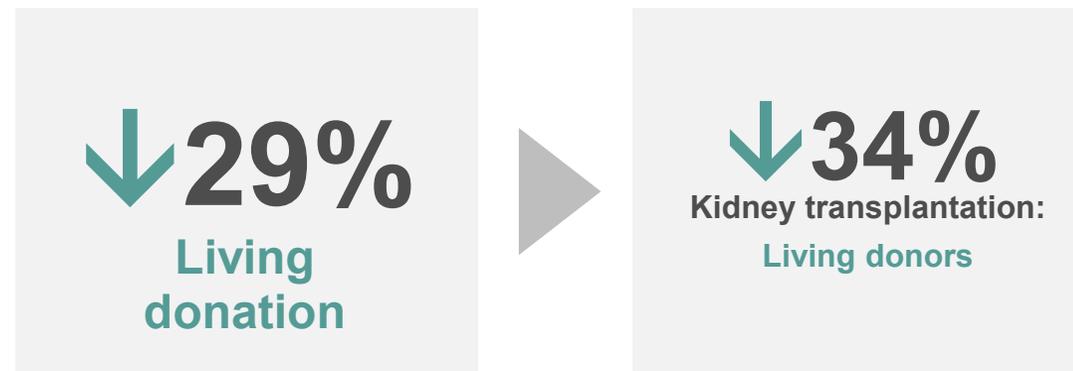
- National donation and transplants rates decreased significantly.
- The pandemic also impacted the Kidney Paired Donation (KPD) program and the Highly Sensitized Patient program.
- Significant work to support the community in its response to the pandemic, lead to system improvement.
- Realized long-term goal of making kidney shipping standard practice for KPD (rather than donors travelling).

Impact of COVID-19 on national donation and transplantation rates: 2020 compared to prior year

Deceased donation

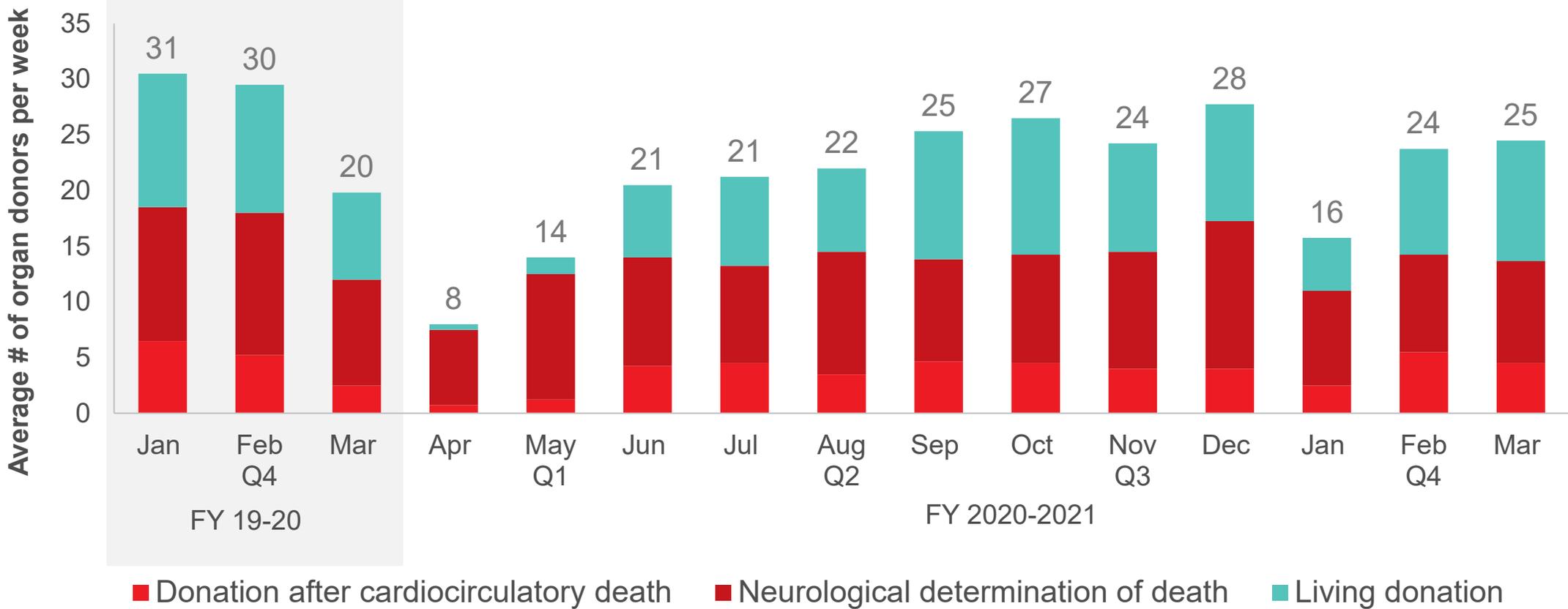


Living donation



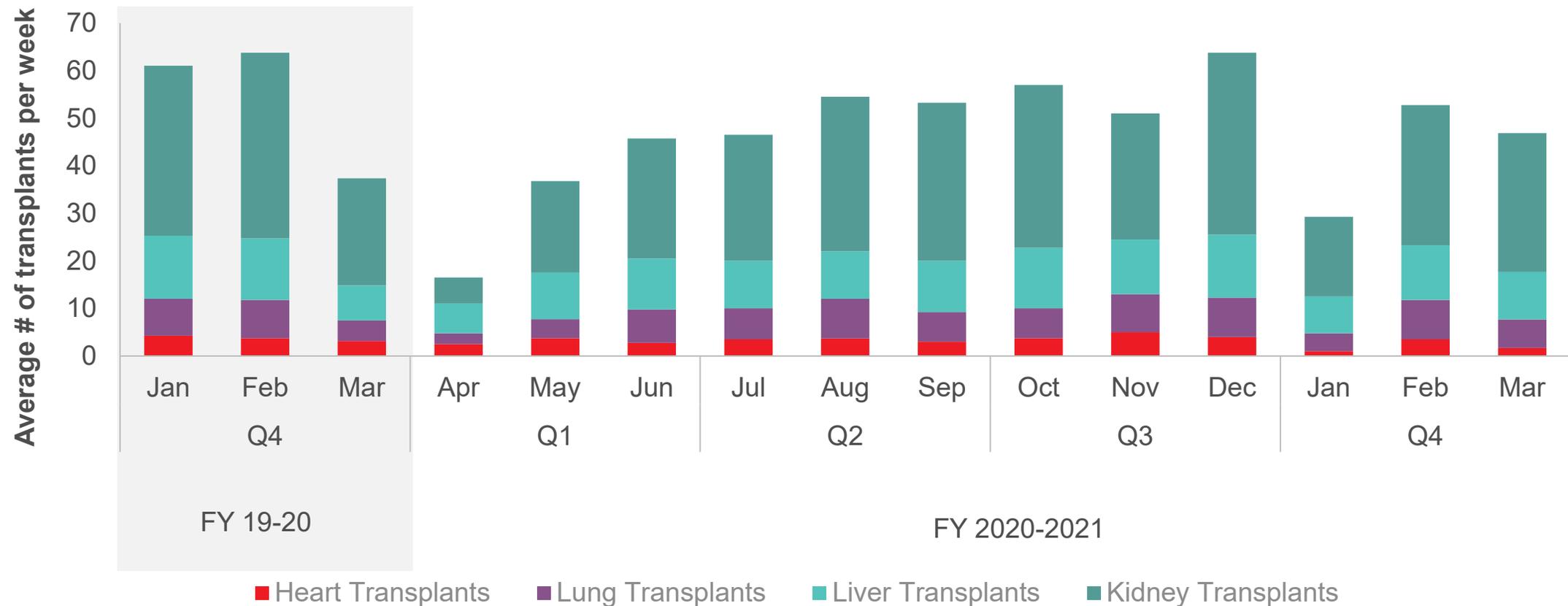
Organ donors in Canada during COVID-19

The number of organ donors declined significantly in the first weeks of the COVID-19 pandemic and began increasing again in Q1.



Transplantation in Canada during COVID-19

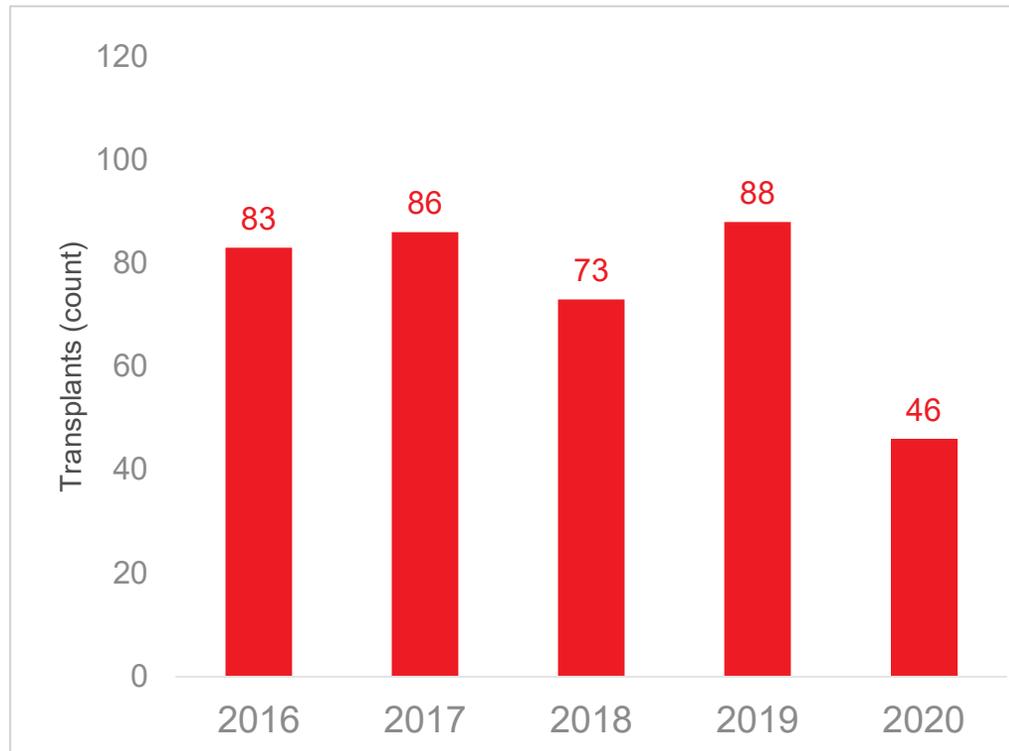
In Q1 the number of transplants started to rebound after a significant decline in the first weeks of the COVID-19 pandemic.



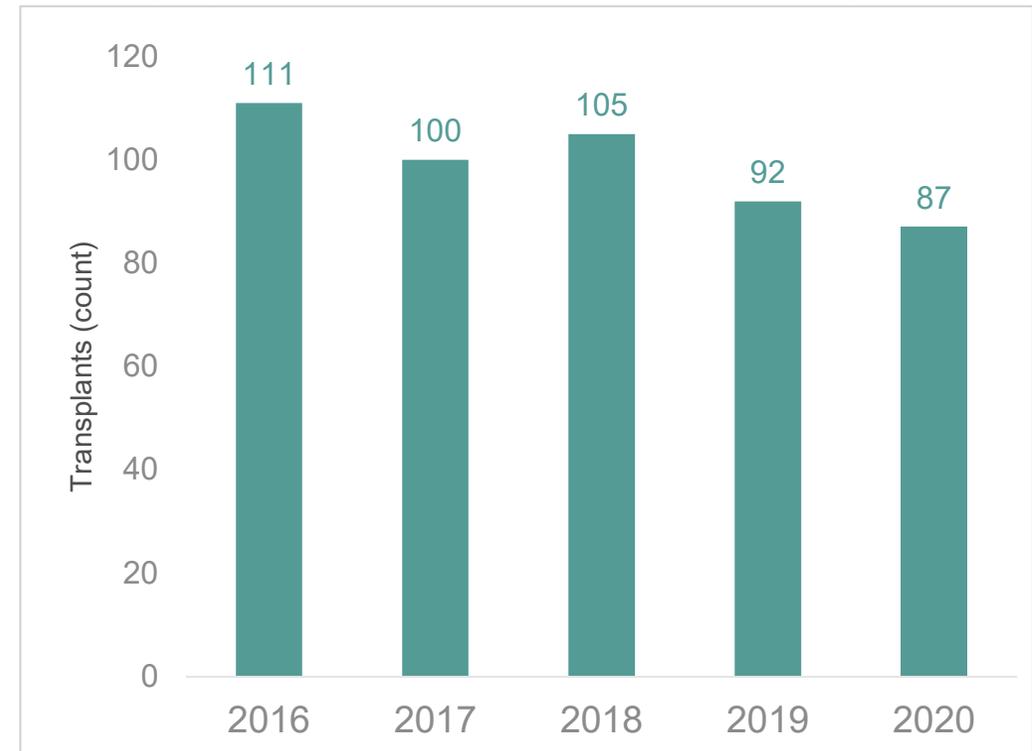
Interprovincial organ sharing programs: Kidney transplants facilitated

The number of transplantations facilitated by both programs decreased.

Kidney Paired Donation (KPD) program



Highly Sensitized Patients (HSP) program



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

- *Her Last Project* broadcast on national television.
- Released report on access to cornea donation and transplantation services.
- Continued to work in partnership with Health Canada's Organ Donation and Transplantation Collaborative.

Research contributions

Contributed to research advancements in transfusion science

- Twelve of the 19 research projects studying the eligibility criteria for men who have sex with men have now completed.
- Canadian Blood Services Research Ethics Board reviewed more than 50 applications, supporting transfusion and transplantation research by providing access to research samples and data, including several COVID-19-related studies.

Supported clinical decision making for better patient outcomes

- Research conducted by the Quality Utilization Efficacy Safety Transfusion (QUEST) program and Canadian Blood Services to improve patient safety
- The International Collaboration for Transfusion Medicine Guidelines (ICTMG) supported by Canadian Blood Services published two Systematic Reviews

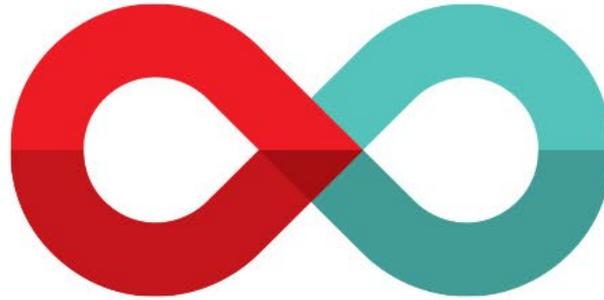
Continuing to evaluate COVID-19 immunity among blood donors to inform public health policies

- Contributing to the review of pandemic impacts by continuing to support the Federal COVID-19 Immunity Task Force.
- 160,400 donor samples tested to date.
- Monitoring the percentage of donors with vaccine related COVID-19 antibodies vs. natural infection related antibodies to determine effectiveness.
- COVID-19 antibody development levels (i.e. seroprevalence) are 2.78% across Canada.
- Donors in lower income neighbourhoods had nearly four times the seroprevalence of high income.
- Racialized groups of donors were two times more likely to be positive than self identified white donors (3.37% compared to 1.66%).
- COVID-19 is not considered a transfusion-transmissible disease.

Canadian Blood Services supported therapeutic studies for COVID-19 convalescent plasma (CCP) use

- Provision of CCP for three Canadian clinical trials (CONCOR-1, CONCOR KIDS, REMAP CAP) to evaluate the safety and efficacy of this treatment for COVID-19 patients in hospitals.
- 2,099 units collected from 522 donors between April 29, 2020 and Feb. 2, 2021.
- Trials were stopped by investigators at end of January 2021. Though interim results indicated that CCP does not improve outcomes in patient groups studied, the trials were valuable in contributing to knowledge around COVID-19.

Q&A



Albert,
plasma donor



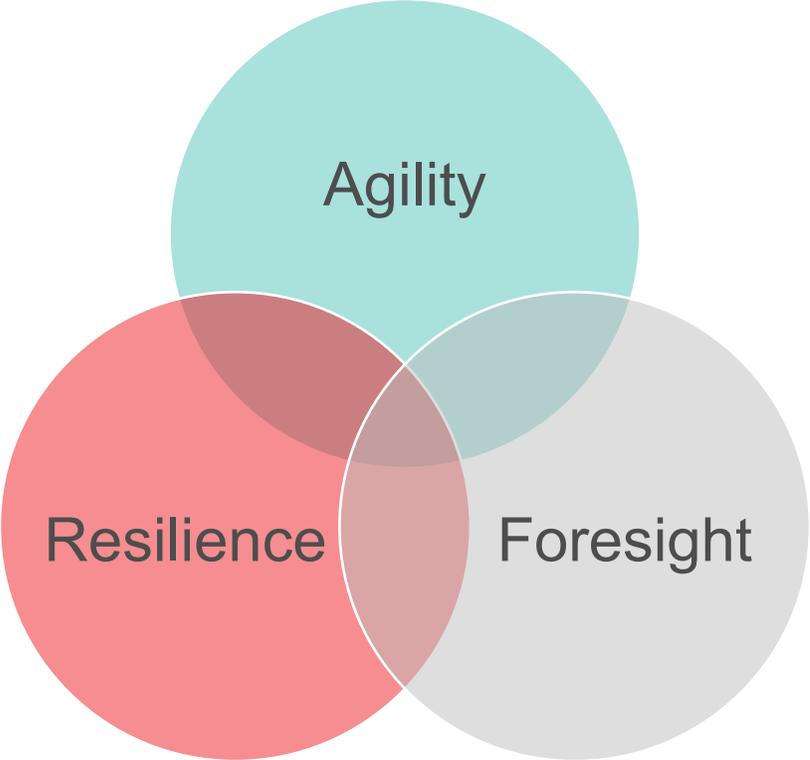
Linda,
plasma recipient

Strategy review

Preparing for the post-pandemic future

2020–2021

Q2 Q3 Q4



Automation and digital transformation



Future of work



Products and services



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

Continued to innovate products and services to meet patient needs

- The roadmap for pathogen inactivation technologies has been completed. A phased approach to implementation is underway, beginning in Ottawa.
- Working with collaborators to develop longer shelf-life products (cold platelets, freeze-dried plasma) and new products (whole blood).





*Build and deepen
relationships with the
donors of the future*

Continued to focus on the donor experience during the pandemic

- Ongoing increase in digital appointment bookings (see next slide).
- Two-thirds of donors now arrive at donor centres prepared with their Q-pass.
- Established whole blood donor diversity targets.
- Expanded the technology capabilities to increase knowledge around donor and registrant interactions.

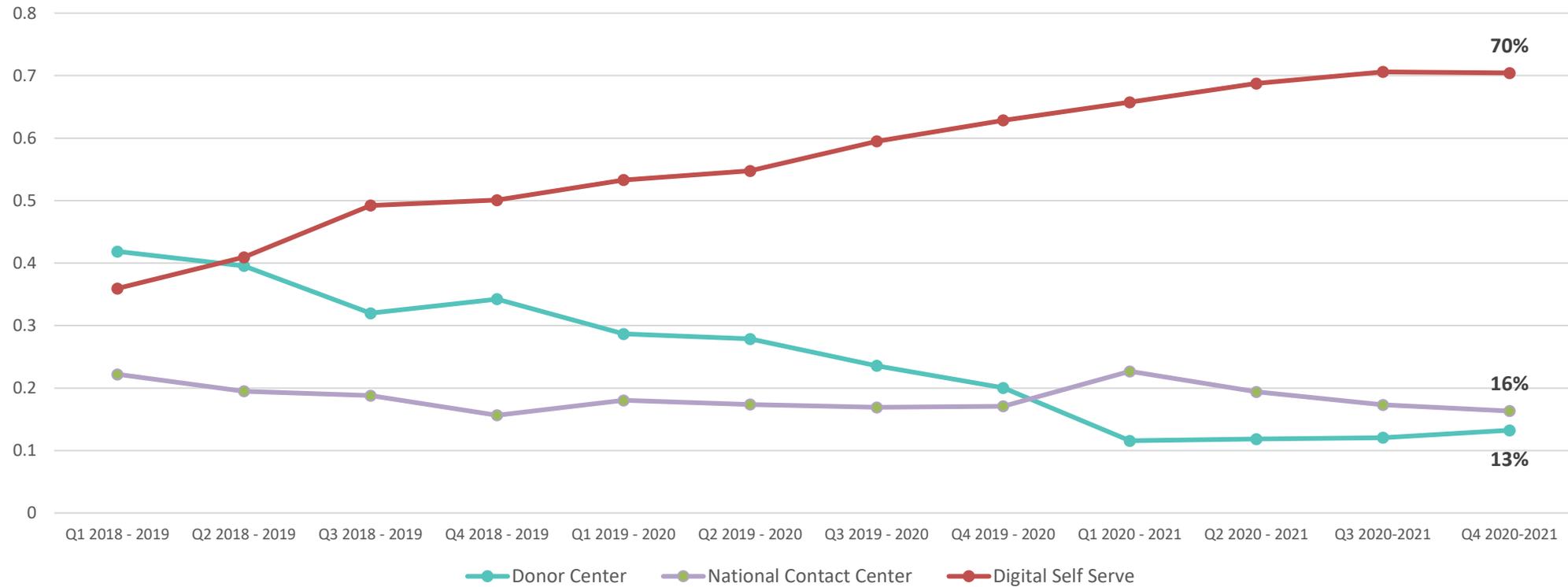


Build and deepen relationships with the donors of the future

Digital bookings

Digital appointments rose to an all-time high of approximately 74% in Q4 2020-21

Booking Channel Performance





*Build and deepen
relationships with the
donors of the future*

**Donor satisfaction
and engagement
continued to be
strong at the close of
the fiscal year**

84%

**Donor satisfaction
score**

Target = 75%

86%

**Donor net promoter
score**

Target = 78%



*Build and deepen
relationships with the
donors of the future*

Working to expand donor eligibility for men who have sex with men

- In May 2021, we made a submission to Health Canada for an alternative screening and collection approach in our source plasma program.
- If approved, these will first take effect in London and Calgary.
- We are further evolving our work to have the necessary evidence to make a submission for all collection types by the end of 2021.
- This submission will request the removal of the time-based deferral criterion for men who have sex with men.
- Instead, we will shift to sexual behaviour-based screening for all donors.



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

Growing domestic supply for Canadian patients

- First two plasma donor centres opened on time in Sudbury and Lethbridge.
- Kelowna on track to open in June.
- New model for collecting source plasma is efficient and highly effective.



New state-of-the-art facility in
Sudbury



Bill Alston, first plasma
donor in Lethbridge



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

Growing domestic supply for Canadian patients

To the end of March:

- 9,543 units collected totaling 6,456 litres
- 3,364 unique donors
- Exceeded annual volume targets by 12 per cent.
- Appointment slots fully booked six weeks ahead



Brandon,
plasma recipient, and his family



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

Mitigated the impacts of COVID-19 on global supply of immunoglobulin and increasing Canada's plasma supply

- Risk around supply of immunoglobulin escalated due to the pandemic (disruption of global supply chains, exposure of domestic vulnerabilities).
- Canadian Blood Services collecting more plasma in new sites and current operations.
- Secured additional immunoglobulin on the global market.
- Global risk indicators demand more aggressive response.



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

Mitigated the impacts of COVID-19 on global supply of immunoglobulin and increasing Canada's plasma supply

- Plan for establishing eight additional plasma collection centres by 2024 accepted by provincial and territorial funders.
- This will begin to reverse the current downward trend in Canada's source plasma sufficiency levels.



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

Growing domestic supply for Canadian patients



**Ottawa
March 2022**



Winnipeg planning underway



**Brampton
March 2022**



Create an engaging and empowering employee experience

Identified critical areas to enhance the employee experience

- Shifted strategic focus to safeguard the well-being of employees.
- Canadian Blood Services selected as one of the National Capital Region's top employers under the Canada's Top 100 Employers competition.
- Launched a leader well-being pulse check.
- Enhanced the engagement of the leadership community.



Create an engaging and empowering employee experience

Proactively acted throughout the year to support the mental and physical well-being of the workforce

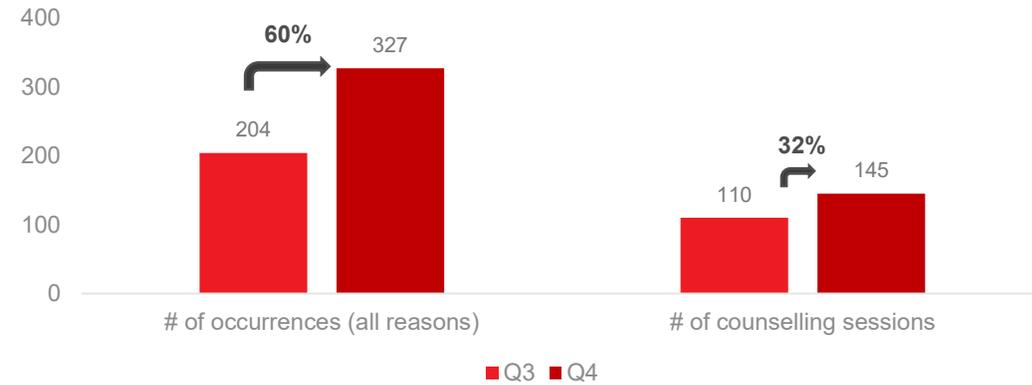
- As part of Bell Let's Talk, hosted three live panel discussions to address stigma and promote candid conversations about mental health.
- Completed a pilot of the Mental Health First Aid training.
- Conducted a leader pulse survey to gain a deeper line of sight into leader and team well-being.



Create an engaging and empowering employee experience

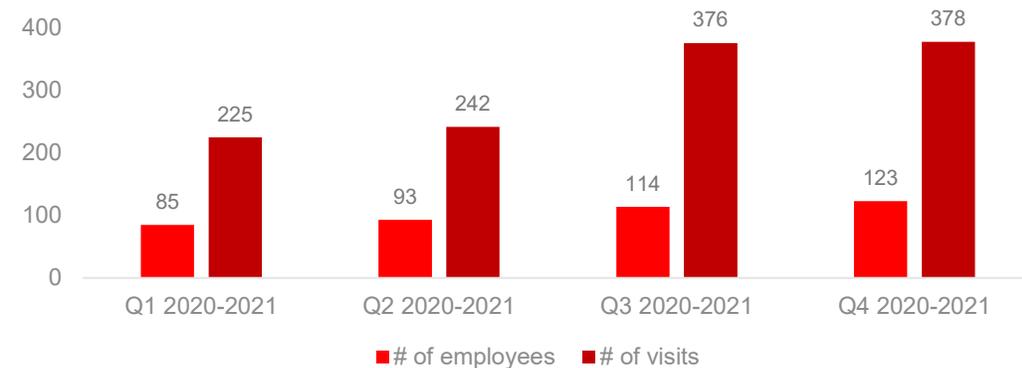
Proactively acted throughout the year to support mental and physical well-being of the workforce

Employee Assistance Plan Usage (EAP)



Employees significantly increased use of the EAP program

Employee Use of Psychological Services



Use of psychological services through Manulife remained relatively stable from Q3 to Q4.



Create an engaging and empowering employee experience

Diversity, equity and inclusion

- Enrolled in the federal government's 50/30 Challenge to ensure a focus on accountability and results.
- Issued public anti-racism statement and commitment to diversity, equity and inclusion.
- Creating new DEI function and hiring senior DEI role
- Delivered mandatory Respect in the Workplace training for all employees
- Fostered inclusion by generating significant internal dialogue about importance of DEI - including most recent Town Hall.
- Launched new employee resource groups, sponsored by executives, and involved them directly in shaping DEI direction.



*Create an engaging and
empowering employee
experience*

Diversity, equity and inclusion – looking forward

- A corporate priority with a resourced program of activity:
 - Employee Diversity, Equity and Inclusion
 - Partnerships with diverse communities
 - Removing barriers for donor/registrant diversity
 - Building relationships with Indigenous Peoples
 - Evolving donor eligibility for all components
 - Removing barriers for trans donors

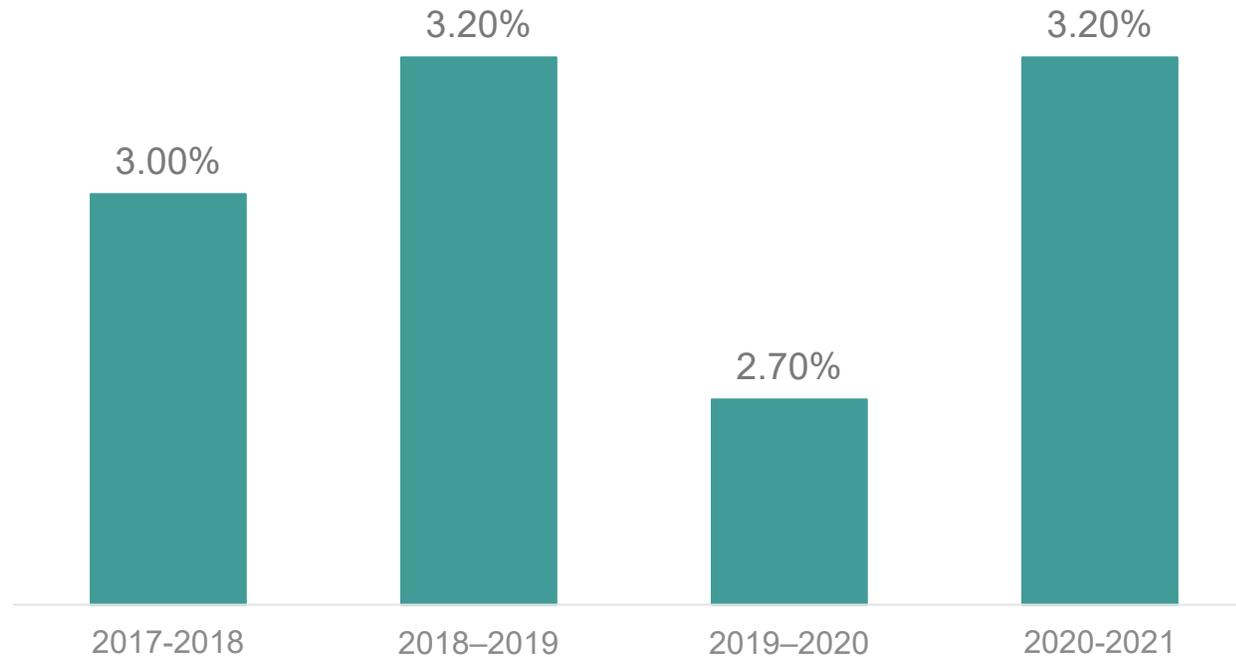


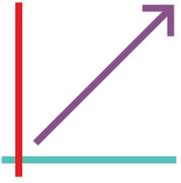
Create an engaging and empowering employee experience

Occupational health and safety

Increase in injury frequency rate in 2020–2021 mostly due to manual material handling incidents. Common injuries of this nature include sprains, strains and repetitive strain injuries.

Total injury frequency rate





*Achieve organizational
excellence*

Continued the commitment to excellence through several key initiatives

Progress continued on a number of initiatives:

- Completed development and rollout efforts of hospital disposition system replacement, onboarding 330 hospitals.
- Continued advancing hospital online ordering.
- Continued the journey to leverage technology and data to improve the processes.
- Connected mobile donor centres was fully deployed.
- The operations remained largely in a state of control with a small gap remaining in the timeliness to approve quality events.



Achieve organizational excellence

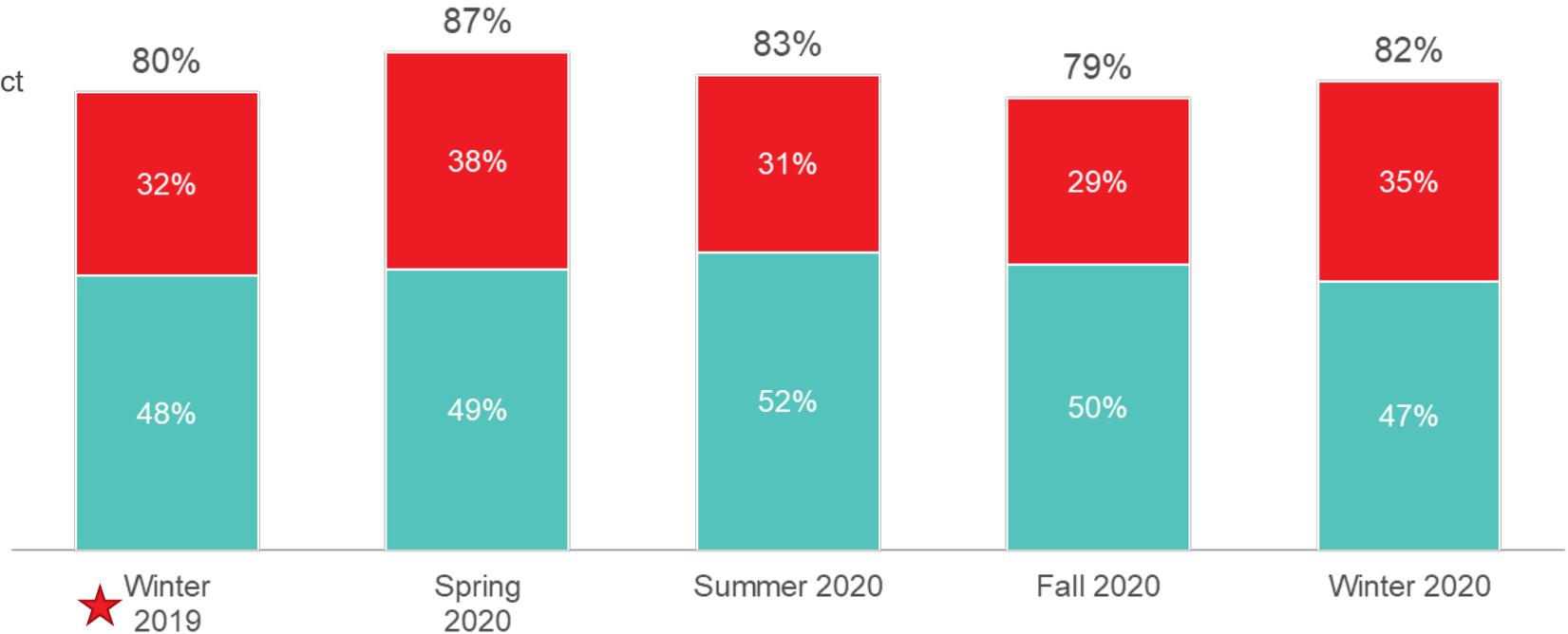
Trust in Canadian Blood Services

Public trust in Canadian Blood Services remains strong, trending above seasonal norms.

- 97% of donors continue to feel it is safe to donate blood at this time.
- 99% of donors feel confident in the ability of Canadian Blood Services to protect the health and safety of donors.
- 71% say that the pandemic has no impact on their donation intention.

- Strongly Agree (10)
- Somewhat Agree (7,8,9)

Trust Canadian Blood Services acts in best interests of the public





Achieve organizational excellence

Quality indicators

Overall the quality index showed acceptable results; one serious error/accident that is being addressed through the quality management system processes.

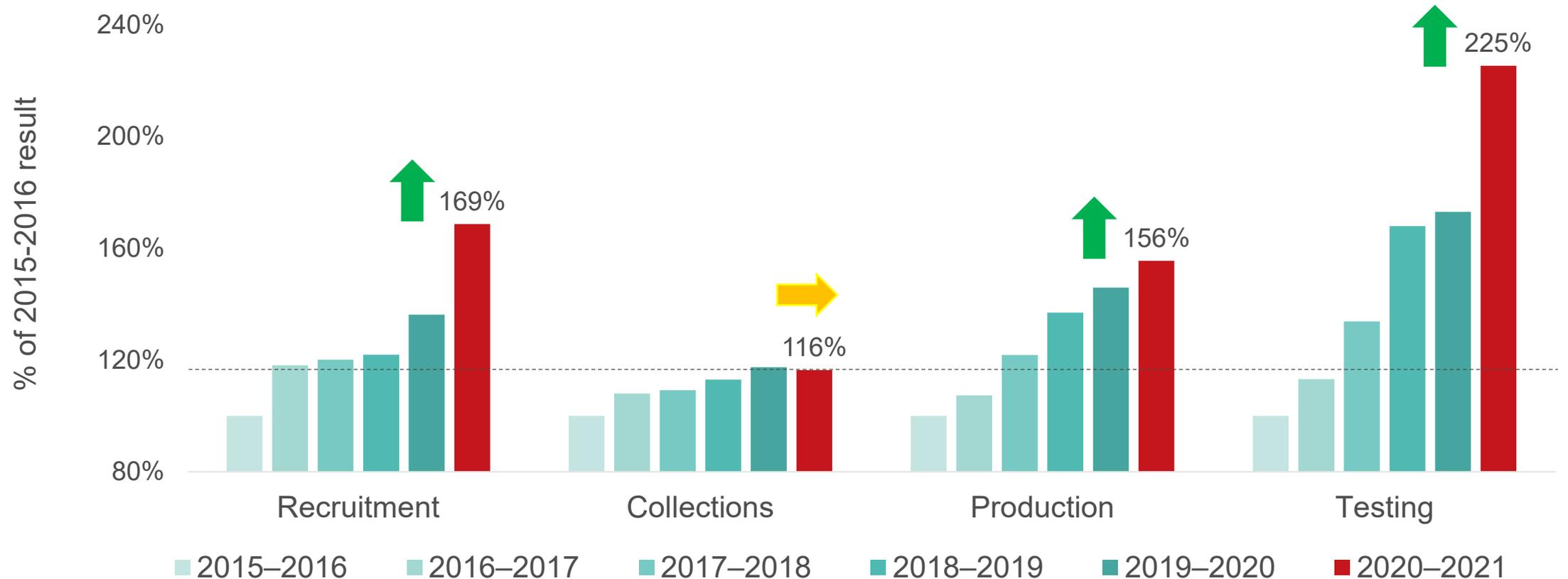
Performance indicator	Target	Quarterly Average
Number of fresh blood products recalled due to errors, accidents or post-donation information	≤ 300	259
Number of serious errors or accidents related to fresh blood products	0	2
Number of Health Canada critical observations	0	0
Number of adverse transfusion reactions	<20	12
Number of type A non-conformance reports	≤ 2	1
Number of serious stem cell events	0	0
Number of recalled plasma units for fractionation	<150	97
Timely execution of supplier recalls	0	No recall
Number of risk indicators meeting target	8 out of 8	7 out of 8



Achieve organizational excellence

Year-end productivity results

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





Achieve organizational excellence

Hospital and physician satisfaction

99%

**Hospital customer
satisfaction**

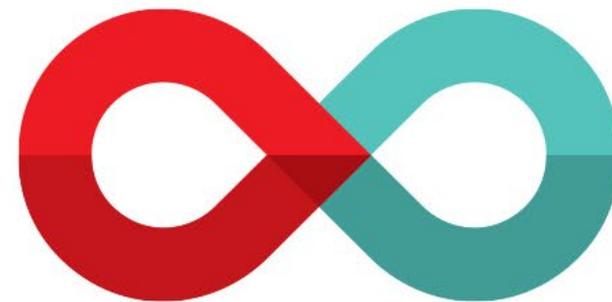
Target \geq 95%

97%

**Physician satisfaction
with services**

Target \geq 85%

Q & A



Cara and Jasper,
*cord blood stem
cell donors*

Crystal,
*cord blood stem
cell recipient*



Financial results

2020–2021 summary financial results

As at March 31, 2021 (charts in millions of dollars).

WORKING CAPITAL



ASSETS

UNRESERVED CASH



RECEIVABLES



INVENTORY



PREPAIDS



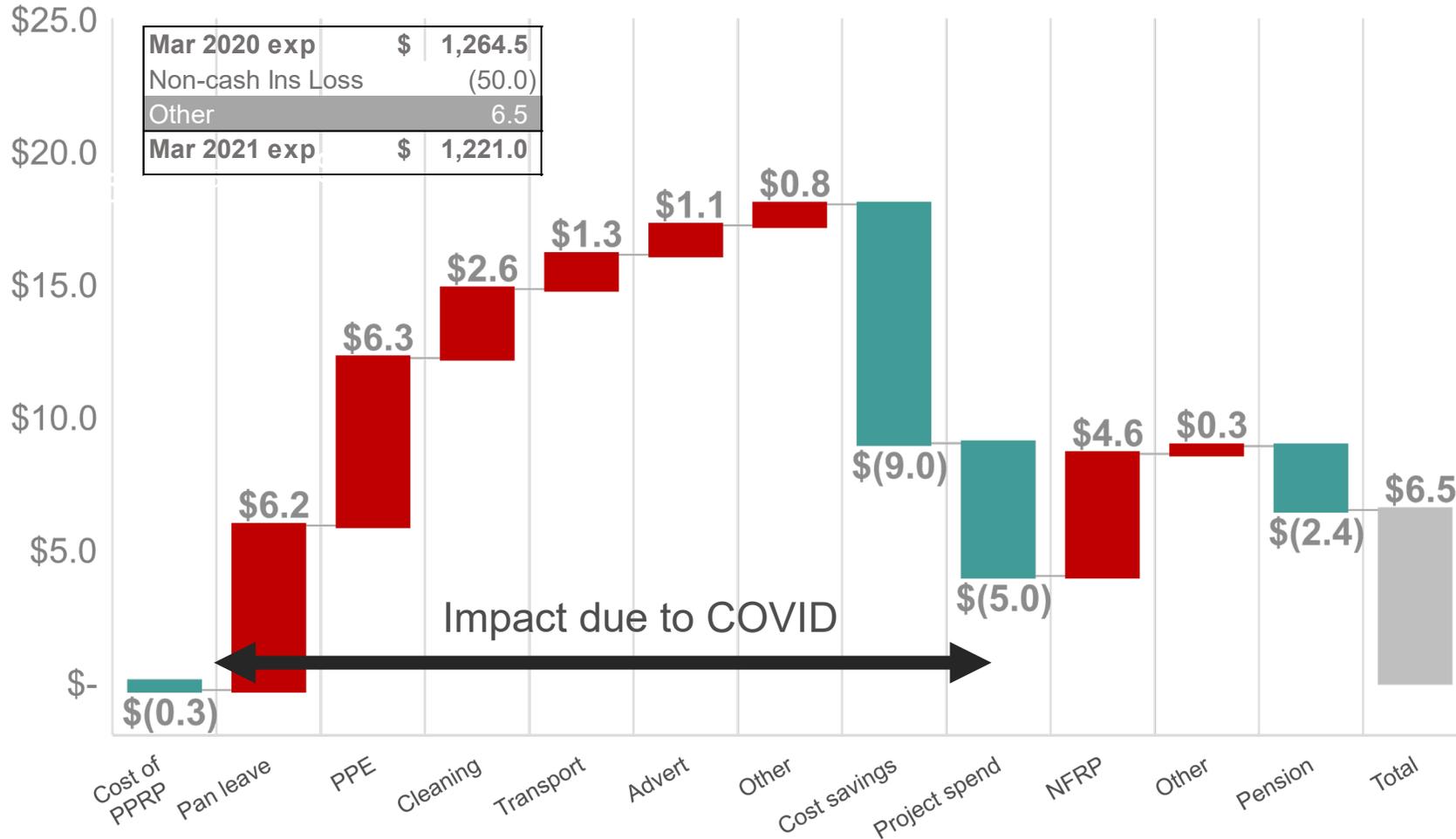
LIABILITIES

ACCOUNTS PAYABLE & OTHER



2020–2021 summary financial results

For the year ended March 31, 2021 (charts in millions of dollars).



Key takeaways

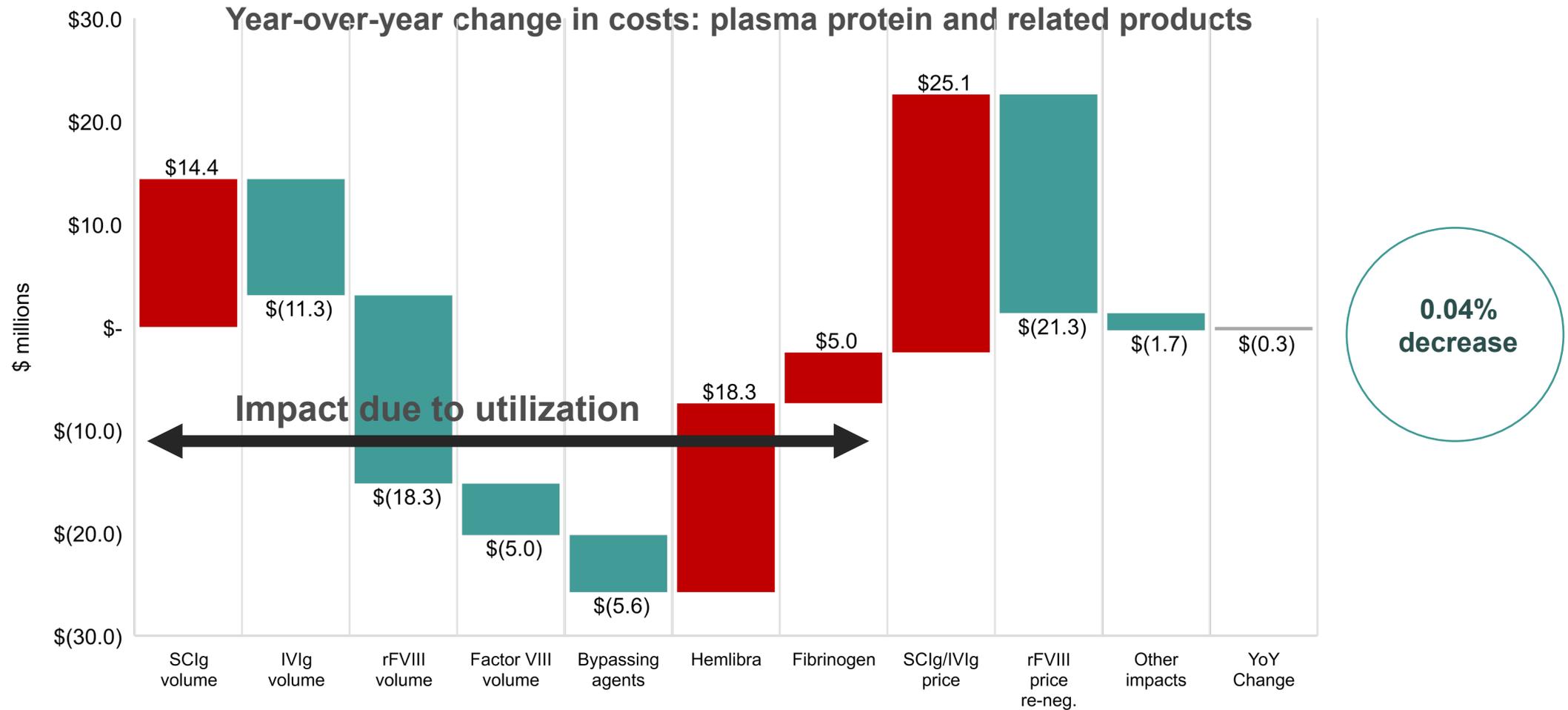
Managed COVID-19 costs through cost reductions and reprioritized project spend

COVID-19 costs and NFRP IIa ^{\$1,168M} drove overall increases

PPRP costs have held steady

2020–2021 summary financial results

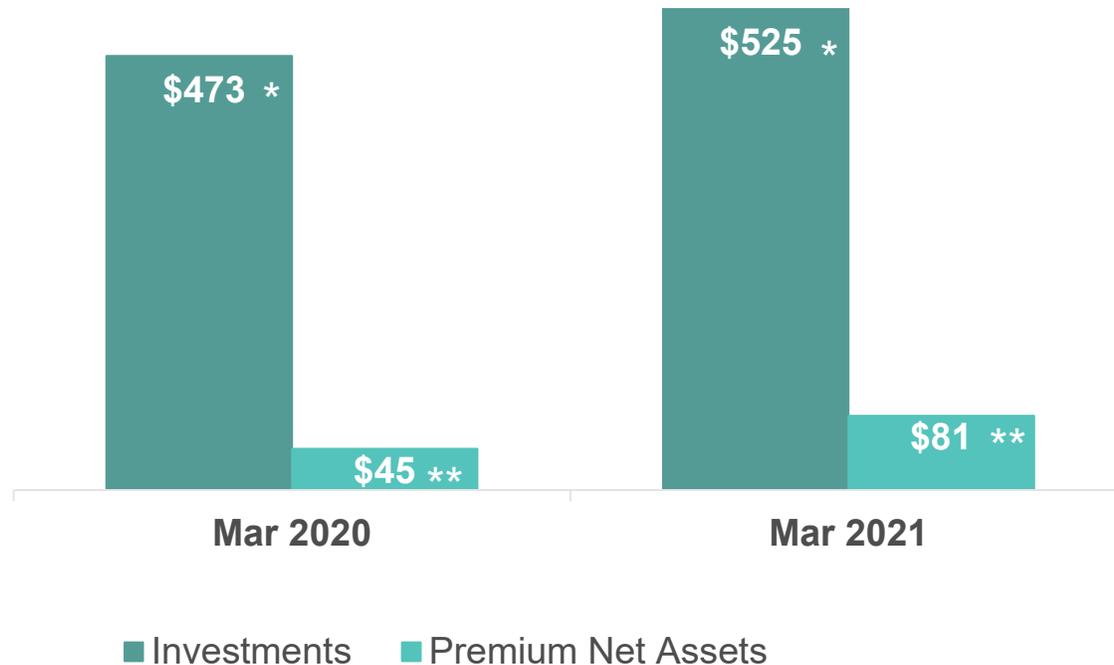
For the year ended March 31, 2021 (charts in millions of dollars).



2020–2021 summary financial results

As at March 31, 2021 (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:

\$39.4 million or 8.49% **

Returns reflect market rebounds since early pandemic days

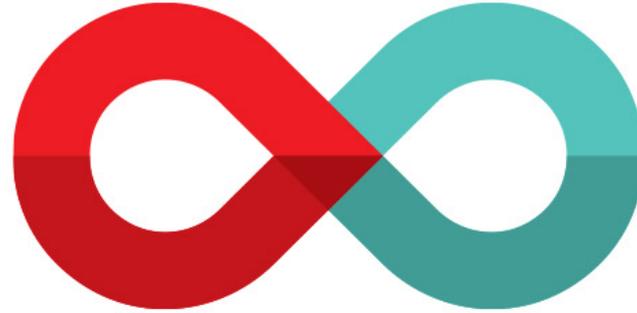
Delivered strategic change in 2020–2021 and effectively responded to the COVID-19 crisis

- 2020–2021 was an extraordinarily challenging year. Yet, Canadian Blood Services was able to continue delivering products and services and advancing strategic priorities.
- The efforts we invested to transform the organization paid off by allowing us to rapidly adapt to a volatile environment.
- We will continue to work hard to prepare for and thrive in a post-pandemic future.

Together, we are Canada's Lifeline



Brenda,
blood donor



Aizad,
blood recipient

Q&A