

BLOOD SERVICES GROUP

SECURING THE FUTURE

We constantly seek out the latest technologies and methodologies to ensure the sustainability and safety of our nation's blood supply.

KNOWLEDGE AND INNOVATION

We maintain a high standard of blood services through our world-class knowledge base and commitment to innovation.

EASING OF RESTRICTION FOR DONORS FROM vCJD-RISK AREAS

We have revised our restrictions on donors who have previously lived in the vCJD-risk areas of France, Ireland and the United Kingdom. This is in light of recent international data indicating minimal risk of variant Creutzfeldt-Jakob Disease (vCJD) transmission through leucodepleted blood components. From October 2023, the easing of the restrictions only applies to apheresis donation which is able to remove the white blood cells during collection of specific blood components.

This allows us to accept donors who have lived in vCJD-risk areas, among whom a greater proportion are RhD negative, which is an uncommon blood type in Singapore.



NATIONAL GUIDELINES ON CLINICAL TRANSFUSION

HEALTH SCIENCES AUTHORITY
2023



PUBLICATION OF NATIONAL GUIDELINES ON CLINICAL TRANSFUSION

In collaboration with a multidisciplinary workgroup of specialists from various healthcare institutions, we published the National Guidelines on Clinical Transfusion. This provides significant updates to 2011's HSA-Ministry of Health (MOH) Clinical Practice Guidelines on Clinical Blood Transfusion.

The aims of these guidelines are to:



Promote effective and safe clinical transfusion practices



Enhance patient safety and effective utilisation of blood components among clinicians



Harmonise indications for blood transfusion in Singapore

The guidelines were disseminated to all medical professionals via MOH Alerts and uploaded onto the HSA website in December 2023.

ONLINE HAEMOVIGILANCE REPORTING USING FORMSG

In March 2023, we piloted the online haemovigilance reporting of adverse events and transfusion-related incidents with two public hospitals. This was then rolled out to all other hospitals in October 2023. Benefits of online haemovigilance submission include timely reporting of incidents, secure data storage, removal of paper reporting and reduction in physical storage space requirements.

RIGHT-SITE PRE-TRANSFUSION TESTING BY PRIVATE HOSPITALS

Previously, our Crossmatch Laboratory performed centralised pre-transfusion testing of blood components for all private hospitals. In 2016, we began the preparation work to right-site pre-transfusion testing. This included training laboratory staff from private hospitals. The right-siting process started in January 2022, and concluded in January 2024.

Right-siting of pre-transfusion testing at the private hospitals shortens the turnaround time to supply compatible blood to patients.



Enhanced patient safety



Lower risk of errors



Faster processing of patient samples



Shorter waiting time for patients needing transfusion



Better maintenance of cold chain

LAUNCH OF SECOND BLOOD COLLECTION TRAINING CENTRE

In addition to Bloodbank@HSA, we designated Bloodbank@Westgate Tower (BB@WT) as our second training centre to boost the training capacity for the National Blood Programme. This initiative seeks to ensure the organisation's long-term sustainability by providing a steady pipeline of skilled and knowledgeable staff, equipped to deliver quality services.



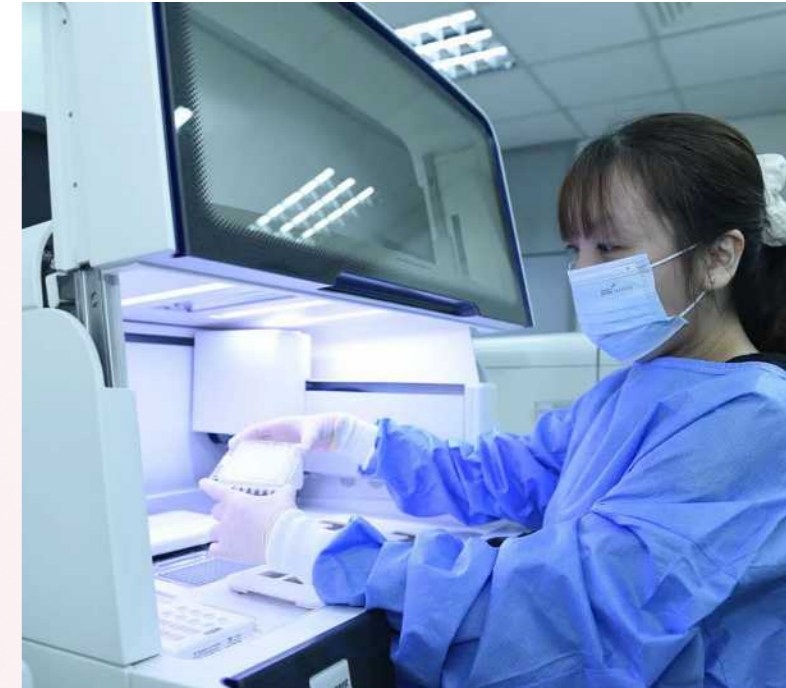
Training capabilities of BB@WT include registration, haemoglobin testing, phlebotomy and capping procedures



To date, 6 batches of internal and external staff have been successfully trained

INTRODUCTION OF NEXT GENERATION SEQUENCING FOR HLA GENOTYPING

In July 2023, our Tissue Typing and Platelet Reference Laboratory implemented Next Generation Sequencing (NGS) for HLA Genotyping, which will generate HLA high resolution typing results in a single system. NGS frees up technologists' hands-on time as this single higher throughput testing system replaces the need for running multiple tests. This initiative has also enabled us to provide higher quality and better resolution HLA tissue typing results for solid organ and haematopoietic stem cell transplant patients and donors, while reducing overall costs.



Reduced fees



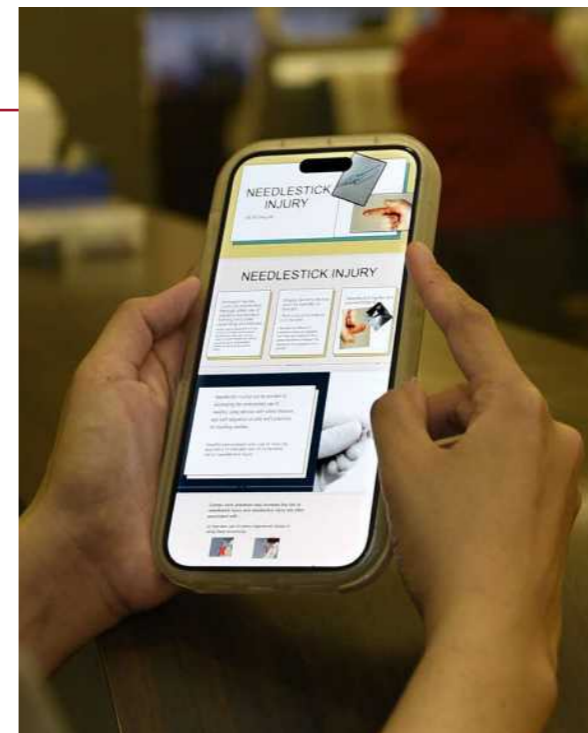
Higher throughput capabilities



Higher resolution capabilities



Maintained competitive edge



NEW eLEARNING PLATFORM FOR BLOOD COLLECTION STAFF

To empower our staff to take control of their own training and skills development, we introduced a new flexible and accessible eLearning app. This platform offers a variety of learning content on topics related to blood collection, infection controls and blood safety. It also features assessment functions to evaluate staff's understanding and their degree of knowledge retention.

TECHNOLOGY AND INFRASTRUCTURE

To fully leverage the capabilities of our staff and optimise our operations, we are dedicated to establishing the appropriate technology and infrastructure for our Bloodbanks, ensuring safety and maintaining the highest quality standards.

SETTING UP OF BLOODBANK@ONE PUNGGOL

As part of our ongoing efforts to make blood donation more accessible, we launched our fifth Bloodbank, Bloodbank@One Punggol (BB@OP) in August 2023. Minister for Health, Mr Ong Ye Kung officiated the opening of BB@OP.

Situated within the One Punggol integrated community hub, BB@OP offers a convenient and accessible facility for our donors living, working and studying in Punggol and the North-East region. It features smart digital solutions, including self-help BMI machines, refreshment vending machines and an enhanced queue management system.



STREAMLINING PROCESSES AT OUR BLOODBANKS

Donor registration and haemoglobin testing are two critical checkpoints in the blood donation process. They help to ensure the safety of donors and recipients.

To improve the blood donation experience and to enhance the efficiency of our processes, we combined registration and haemoglobin testing into one station. This was first implemented in January 2023 at Bloodbank@Westgate Tower, and subsequently with the learnings gleaned, rolled out to our latest BB@OP.

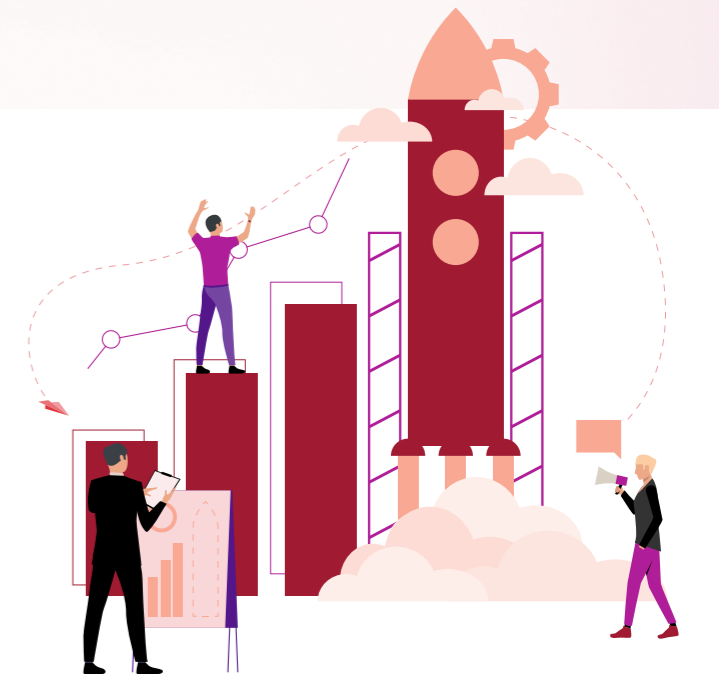
Through positive and constructive feedback received from our donors, we will be embarking on phased improvement works to implement a combined registration and haemoglobin testing station for the rest of our Bloodbanks in 2024.

ENHANCING USER EXPERIENCE THROUGH TECHNOLOGY ADOPTION

Over the past year, several technological solutions were introduced to enhance user experience and operational efficiency at our Bloodbanks.

Refreshment vending machines – Vendors can now utilise the vending machine inventory management system to track usage and efficiently arrange for the replenishment of refreshments, thereby reducing the need for extensive manpower oversight and management.

Self-service BMI machines – Through self-service BMI machines, donors can fast track the registration process by checking their own weight eligibility for blood donation. Donors are also able to monitor their BMI.



Enhanced Queue Management System (QMS) via Software as a Service (SaaS) – With SaaS, we have been able to:

- Reduce the amount of QMS equipment required in our IT Rack
- Remotely diagnose and quickly resolve QMS system issues, reducing the need for onsite technicians