

**RWANDA BIOMEDICAL CENTRE
BIOMEDICAL SERVICES DEPARTMENT
BLOOD TRANSFUSION DIVISION**

ANNUAL REPORT 2022



Preamble

In Rwanda, blood transfusion services started in 1976. Between then and 1985, blood donation was exclusively based on family replacement. From 1985 up-to-date, blood is exclusively from voluntary non-remunerated blood donors. During the 1994 genocide against the Tutsis much of the socio-economic fabric of Rwanda was destroyed as well as its health infrastructures, the healthcare system was extremely suffered and there were health inequalities between urban and rural areas including access to blood transfusion.

As Rwanda committed to achieving SDG 3 (Sustainable Development Goal 3): reproductive, maternal, newborn and child health and infectious diseases, the GoR (Government of Rwanda) realized that blood was pivotal and committed to supporting blood service in order to increase blood safety and availability to all patients in need. Today, blood transfusion is free of charge to all patients and blood is donated voluntarily by non-remunerated blood donors countrywide.

In 2022, RBC (Rwanda Biomedical Centre) through BTB (Blood Transfusion Division) collected 78,838 blood units from 567 blood collection sites. Transfusing health facilities demanded 119,272 blood units and the centre supplied 118,626 blood units, which made 99.46% of hospital satisfaction. RBC now is projecting to satisfy all demands at 100% by 2025.

RBC thanks everyone who supported blood services in Rwanda in one way or another in 2022. You saved lives of thousands people.



Prof. Claude Mambo MUVUNYI
Director General
Rwanda Biomedical Centre

Essential Abbreviations

ABCP	Annual Blood Collection Plan
AfSBT	Africa Society for Blood Transfusion
BCBs	Blood Collection Buses
BBU	Bio-Banking Unit
BCUs	Blood Component Units
BDRs	Blood Donor Representatives
BIOS	Biomedical Services
BTD	Blood Transfusion Division
CNTS	Centre de Transfusion Sanguine
CoK	City of Kigali
DA	Direct Antiglobulin
DH	District Hospital
DNA	Deoxyribo-Nucleic Acid
FFP	Fresh Frozen Plasma
FY	Financial Year
GoR	Government of Rwanda
HBV	Hepatitis B Virus
HC	Health Centre
HCS	Health Care System
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Viruses
IA	Indirect Antiglobulin
IBBS	International Blood Banking Standards
IBD	Irregular Blood Donors
IC25	Intwari Club 25
KCFZ	Kigali Car-Free Zone
MDGs	Millennium Development Goals
MoD	Ministry of Defence
MoH	Ministry of Health
NAT	Nucleic Acid Testing
NBD	New Blood Donors
NIC	National Itorero Commission
pRBCs	Packed Red Blood Cells
QMS	Quality Management System
RBC	Rwanda Biomedical Centre
RBD	Regular Blood Donors
RCBTs	Regional Centers for Blood transfusion
RDF	Rwanda Defense Forces
RFL	Rwanda Forensic Laboratory
RH	Referral Hospital
RNP	Rwanda National Police
RPT BD	Repeat Blood Donor
SDG	Sustainable Development Goal
THF	Transfusing Health Facilities
THF	Transfusing Health Facilities
TTIs	Transfusion Transmitted Infections
UAS	Unmanned Aerial Systems
US	United States
WBD	Whole Blood Donations
WHO	World Health Organization

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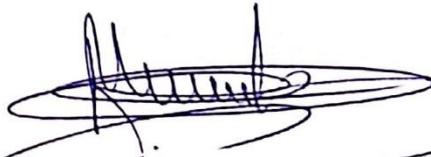
Message of Head of Biomedical Services Department

When a patient is in need of blood, most of time there is no other alternative than transfusion. This precious product (blood) is only obtained from healthy human beings.

It is in this regard that we need continued support, commitment, engagement and donors with a big heart to tirelessly donate their valuable gift of life (blood). The Biomedical Services Department will continue to support and ensure availability of safe blood and blood products.

We appreciate the efforts of BTB (Blood Transfusion Division) staff and their outstanding work day and night to ensure that blood is available whenever it is needed. We also thank trustworthy blood donors and partners who always have blood services on their mind.

We look forward to making more progress towards our strategic goal of meeting the transfusing facilities' demands up to 100% by 2025. Today, we stand at 99.46% of the hospital satisfaction. The journey continues.


Dr Isabelle MUKAGATARE
Head of Biomedical Services Department
Rwanda Biomedical Centre



Message of Blood Transfusion Division Manager

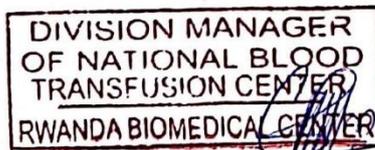
The mission of BTD (Blood Transfusion Division) is to provide safe, effective and adequate blood and blood products to all patients in need. Its vision is to be a centre of excellence in the region by conforming to the IBBS (International Blood Banking Standards). This can only be achieved through the continual professional development and conforming to relevant technological advances in blood transfusion services.

BTD has put much emphasis on improving the quality of donor recruitment and retention via the promotion of exclusively voluntary non-remunerated blood donation in low risk population and distribution of 100% TTIs (Transfusion Transmissible Infections) screened blood components.

More so, BTD has managed to establish QMS (Quality Management System) based on the AfSBT (Africa Society for Blood Transfusion) standards to guarantee a high level assurance of blood safety. BTD holds the AfSBT level 3 accreditation.

Today, BTD is very proud of its contribution to the welfare of health care consumers in Rwanda through blood transfusion medicine.

We continue to serve the nation.



Dr Thomas MUYOMBO
Blood Transfusion Division Manager
Rwanda Biomedical Centre

Background of blood transfusion services in Rwanda

An effective blood transfusion service is one of the essential components of a good HCS (Health Care System). In Rwanda, BTD (Blood Transfusion Division) was established in 1976 after WHO (World Health Organization) recommended that all nations should have functional blood transfusion establishment.

In 2007, BTD was given its present mission of “*Providing safe, effective and adequate blood to all patients in need*” by Law No: 26/2007 of 27/06/2007 under the name of CNTS (Centre de Transfusion Sanguine) and started operating as a semi-autonomous institution. In 2010, BTD was made one of the divisions of the RBC (Rwanda Biomedical Centre) under the MoH (Ministry of Health) of Rwanda by the Law No: 54/2010 of 25/01/2011.

BTD comprises of six (units): Five (5) RCBTs (Regional Centres for Blood Transfusion) and one (1) BBU (Bio-Banking Unit). RCBTs are located in all administrative provinces and the CoK (City of Kigali) and are responsible for mobilization and recruitment of blood donors as well as blood collection, processing and distribution. BBU is new in (BTD) and is responsible for CTB (Cornea Tissue Banking). BBU is located at Kanombe Military Hospital, in the CoK.

In 2022, BTD collected blood from 5 fixed and 567 mobile collection sites countrywide and served 81 public and private THFs (Transfusing Health Facilities).

According to WHO, countries should collect blood units equivalent to 1% of their population to satisfy their need of blood products. This means that Rwanda with about 12 million people should collect 120,000 blood units per year.

In 2022, BTD collected 78,838 blood units (7.9 donations per 1,000 populations) and hospital demands were met at the rate of 99.46%. The goal of BTD in its strategic plan 2020 - 2025 is to serve up to 100% by 2025.

Mission, vision and main services

Mission

“To provide safe, effective and adequate blood and blood products to all patients in need”

Vision

“To be a Centre of excellence by conforming to the International Blood Banking Standards.”

Main Services

BTD has two major services: Blood donor mobilization and laboratory.

Blood donor mobilization undergoes the following activities:

- Blood donor education, recruitment and retention
- Blood collection preparations
- Blood donor selection and counseling
- Blood collections
- Notifications

Laboratory undergoes the following activities:

- Serology
- Immuno – Hematology
- Component production
- Distribution
- Quality management system

2022 main achievements

BLOOD COLLECTION BUSES

In 2022, BTD was honored to receive 2 (two) professional (BCBs) Blood Collection Buses. These buses were donated to RBC by IMBUTO FOUNDATION through MoD (Ministry of Defence). To carry out blood collection camps in urban areas, BTD used to install tents and other mobile logistics. These drills sometimes challenge the division especially when it comes weather conditions (windy or rainy periods), and it affects the expected yield; consequently, it affects the hospital satisfaction as well. With professional blood collection buses, all activities continue despite challenging weather condition. Currently, the 2 BCBs are operating from **September 2022**.

INTWARI CLUB 25

The IC25 (INTWARI CLUB 25) refers to the group of donors who shall voluntarily pledge to donate 25 times whole blood over a period of every 7 years or to donate 25 times by apheresis over a period of every 2 years. The main objective is to achieve the national blood self-sufficiency and raise awareness of blood donation to general population especially youth communities. IC25 was launched on **14th February 2023** at Kigali Convention Center.

CORNEA TISSUE BANK

BBU (Bio-Banking Unit) is new in RBC (Rwanda Biomedical Centre) through BTD (Blood Transfusion Division) and is responsible for CTB (Cornea Tissue Banking). BBU will open the doors in **2023** at Rwanda Military Hospital.

BLOOD DELIVERY USING DRONES

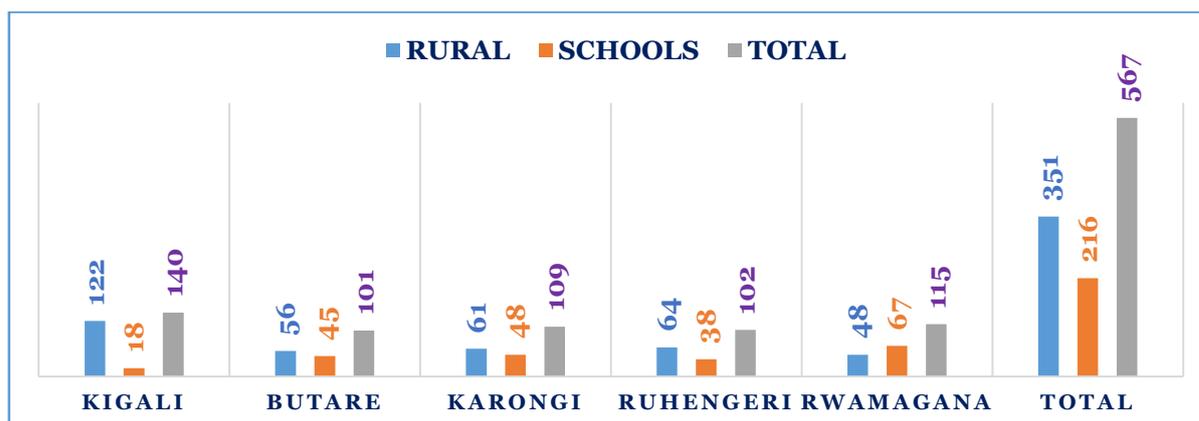
In a bid to improve accessibility to blood and other essential medicines and to shorten the turnaround time between ordering and receiving blood, Rwanda has embraced using UAS (Unmanned Aerial Systems) / drones as an effective and efficient mode of delivering blood to patients. Rwanda leads the world in the use of the drone technology in delivering blood and other medicines in case of emergency. BTD is delivering blood using drones **since 2018**.

AfSBT LEVEL 3 ACCREDITATION

Since 2017, RBC / Blood Transfusion Division has an AfSBT Level 3 accreditation. In recent colorful event took place on February 14, 2023, this accreditation has been renewed at the **3rd** time. BTD will maintain this accreditation for a period of 4 years (2023 – 2026).

KEY PERFORMANCE INDICATORS FOR 2022

Blood collection sites - 2022

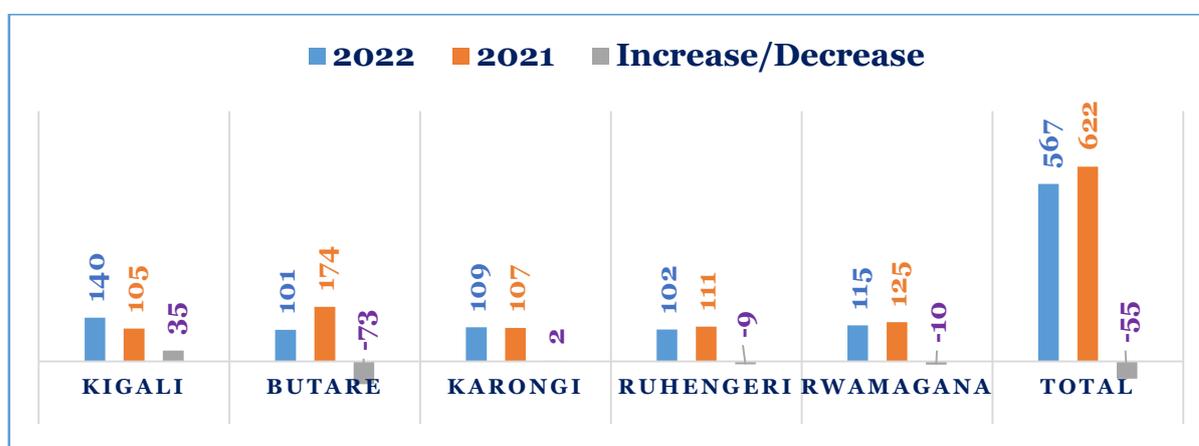


Source: RBC/ BTD e-Progesa and quality data indicators 2022

In 2022, BTB collected blood from 567 rural and schools blood collection sites countrywide and five (5) fixed sites located in each RCBT catchment. Besides the latter, there are other occasional sites:

- RDF Barracks, RNP camps,
- Embassies,
- Churches,
- KCFZ (Kigali Car-Free Zone) and other sites established in different areas.

Blood collection sites - 2022 vs 2021

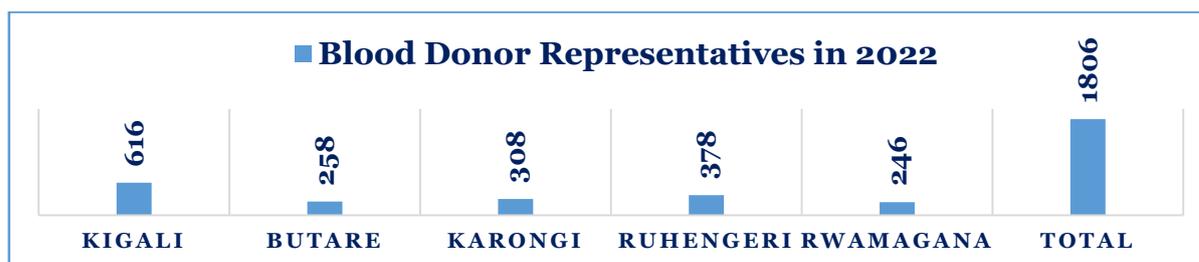


Source: RBC/BTD e-Progesa database and quality data indicators 2022

Every year, RCBTs (Regional Centres for Blood Transfusion) decide to close a blood collection site after assessing its performance during the previous year. If the yield decreased down up to 50%, a blood collection site is closed. Blood collection site can be closed temporarily or forever.

However, RCBTs re-open or create new sites to fill the gap and increasing the yield needed by THF (Transfusing Health Facilities). Throughout the year 2022, RCBTs closed 55 blood collection sites; consequently, the total blood collections sites in 2022 were 567 from 622 that BTB had in 2021.

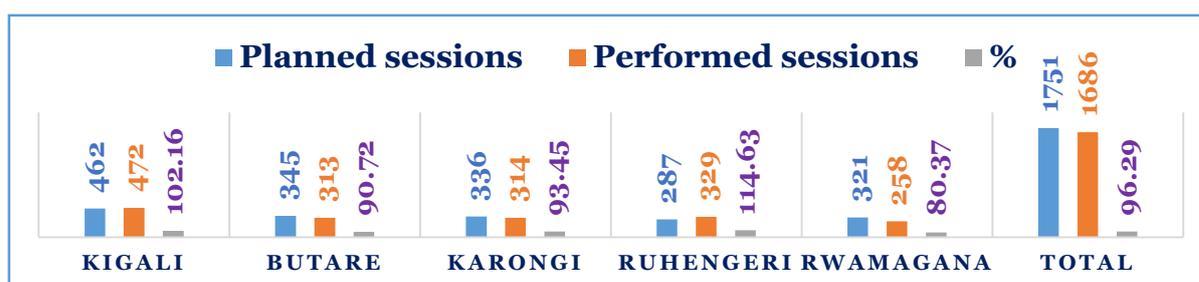
Blood donor representatives – 2022



Source: RBC/BTD e-Progesa database and quality data indicators 2022

BDRs (Blood Donor Representatives) are small committees between 3 and 5 people representing blood donors in their communities. They play a big role in identifying potential blood donors and keep encouraging them to continue donating blood. They closely work with BTD staff in preparing blood collections on the dates fixed by both parties. BDRs follow-up on blood donors after donating blood while BTD staff went back. In fact, BDRs work as a bridge between BTD and blood donors. In 2022, BDRs were 1,806 countrywide.

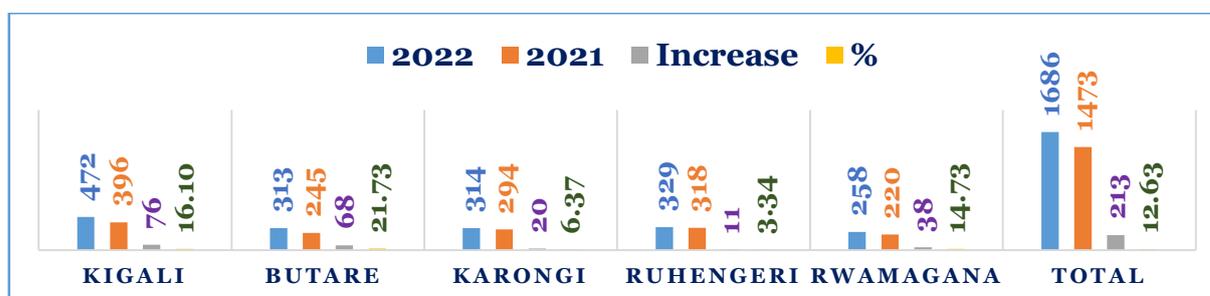
Blood collection sessions – 2022



Source: RBC/BTD e-Progesa database and quality data indicators 2022

On the ABCP (Annual Blood Collection Plan) 2022, RCBTs planned to carry out 1,751 blood collections sessions. At the end of the year, they performed 1,686 blood collections sessions which makes 96.29% performance rate.

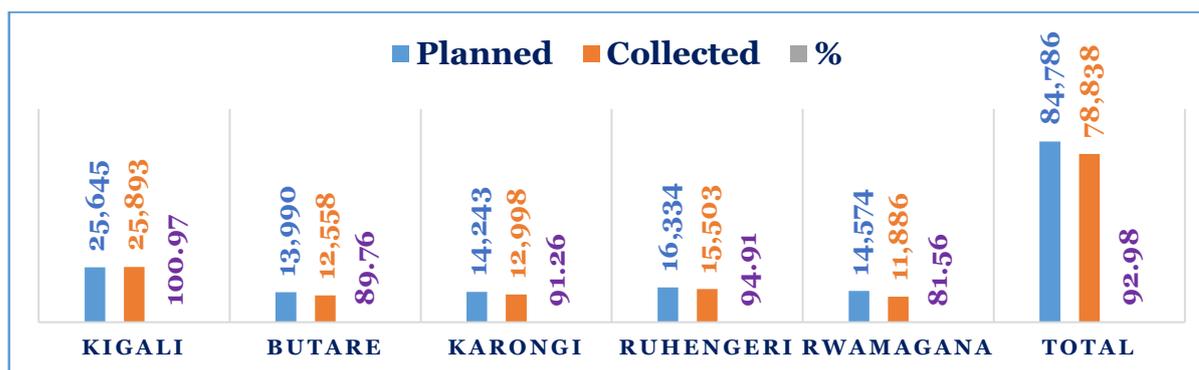
Blood collection sessions – 2022 vs 2021



Source: RBC/BTD e-Progesa database and quality data indicators 2022

In 2022, blood collection sessions were 1,686 while in 2021 they were 1,473. RCBTs increased more 213 blood collections which makes 12.63%.

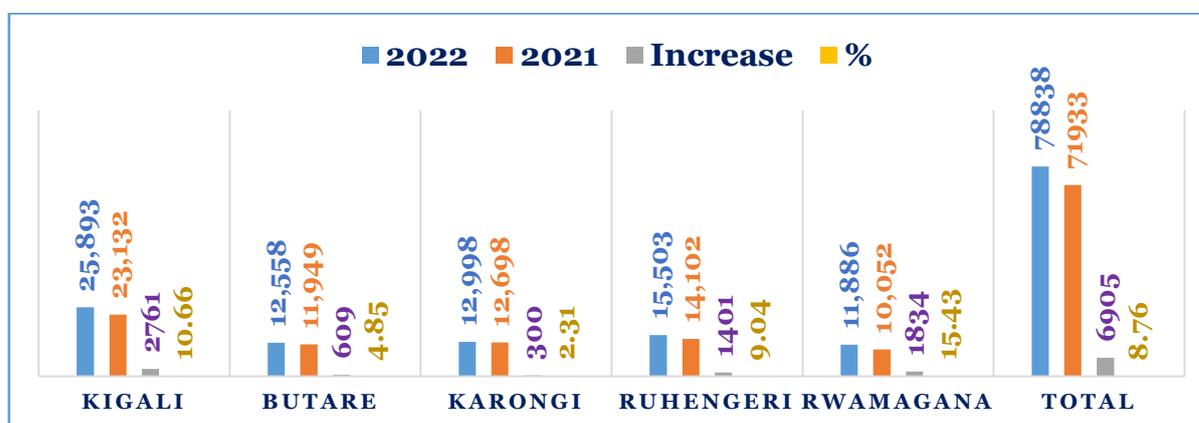
Blood units in 2022



Source: RBC/BTD e-Progesa database and quality data indicators 2022

On the ABCP 2022, RCBTs planned to collect 84,786 blood units. At the end of the year, they collected 78,838 units. This makes 92.98% performance rate.

Collected blood units - 2022 vs 2021



Source: RBC/BTD e-Progesa database and quality data indicators 2022

In 2022, RCBTs collected 78,838 blood units while in 2021 they collected 71,933 blood units. This makes an increase of 6,905 blood units which is 8.76%.

Donations by gender

BLOOD DONATIONS / UNITS BY GENDER					
RCBTs	M	%	F	%	TOT
KIGALI	18,498	71.44	7,395	28.56	25,893
BUTARE	8,453	67.31	4,105	32.69	12,558
KARONGI	8,154	62.73	4,844	37.27	12,998
RUHENGERI	12,601	81.28	2,902	18.72	15,503
RWAMAGANA	8,814	74.15	3,072	25.85	11,886
TOTAL	56,520	71.69	22,318	28.31	78,838

Source: RBC/BTD e-Progesa database and quality data indicators 2022

Throughout 2022, the number of blood units donated by male donors was 56,520 blood units or 71.69% while female is 28.31% with 22,318 blood units. The low number of donations by the female population is caused by the criteria excluding them to donate blood; including but not limited to menstruation, pregnancy, breast-feeding etc.

Donations / units by blood groups

TOTAL DONATIONS BY BLOOD GROUPS									
RCBTs	O+	O-	A+	A-	B+	B-	AB+	AB-	TOTAL
KIGALI	12,519	5,853	4,649	1,109	1,103	358	235	67	25,893
BUTARE	6,251	490	2,823	173	2,202	127	462	30	12,558
KARONGI	6,457	411	3,026	134	2,335	133	486	16	12,998
RUHENGERI	7,364	484	3,809	206	2,840	134	649	17	15,503
RWAMAGANA	5,967	373	2,819	127	2,003	89	493	15	11,886
TOTAL	38,558	7,611	17,126	1,749	10,483	841	2,325	145	78,838

Source: RBC/BTD e-Progesa database and quality data indicators 2022

O-positive (O+) is the most common blood type by average percentage. In 2022, out of 78,838 whole blood units that were collected by RCBTs, O+ blood units were 38,558 (48.9%). The least common blood type was AB-negative (AB-). The AB- blood units were 145 out of 78,838 total collected units. Which is 0.18%.

Blood donors by blood groups

TOTAL BLOOD DONORS BY BLOOD GROUPS									
RCBTs	O+	O-	A+	A-	B+	B-	AB+	AB-	TOTAL
KIGALI	8,291	666	3,790	235	3,020	163	670	33	16,868
BUTARE	4,588	328	2,070	123	1,631	87	337	20	9,184
KARONGI	4,465	268	2,140	96	1,681	91	348	12	9,101
RUHENGERI	5,034	316	2,605	152	1,983	94	440	12	10,636
RWAMAGANA	2,658	187	1,257	59	877	35	219	6	5,298
TOTAL	25,036	1,765	11,862	665	9,192	470	2,014	83	51,087

Source: RBC/BTD e-Progesa database and quality data indicators 2022

Among 51,087 blood donors who donated in 2022, the most common blood type by average percentage was O+ (25,036 = 49%) while the least was AB- (83 = 0.16%).

Blood donors by ages

TOTAL BLOOD DONORS BY AGES											
AGES	18-25		26-35		36-45		46-60		61+Above		TOT
	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%	
KIGALI	5,463	32.4	4,297	25.5	4,683	27.8	2,382	14.1	43	0.3	16,868
BUTARE	4,664	50.8	1,665	18.1	1,690	18.4	1,139	12.4	26	0.3	9,184
KARONGI	5,498	60.4	1,396	15.3	1,317	14.5	864	9.5	26	0.3	9,101
RUHENGERI	4,318	40.6	3,154	29.7	2,246	21.1	903	8.5	15	0.1	10,636
RWAMAGANA	1,539	29.0	1,615	30.5	1,498	28.3	626	11.8	20	0.4	5,298
TOTAL	21,482	42.0	12,127	23.7	11,434	22.4	5,914	11.6	130	0.3	51,087

Source: RBC/BTD e-Progesa database and quality data indicators 2022

Among 51,087 blood donors who donated in 2022, those who are between 18 and 25 years old were the most blood donors; they were 21,482 (42%) while 130 (0.3%) who donated the least were blood donors with 61 years old and above.

Regularity : Blood units donated by new, irregular and regular donors

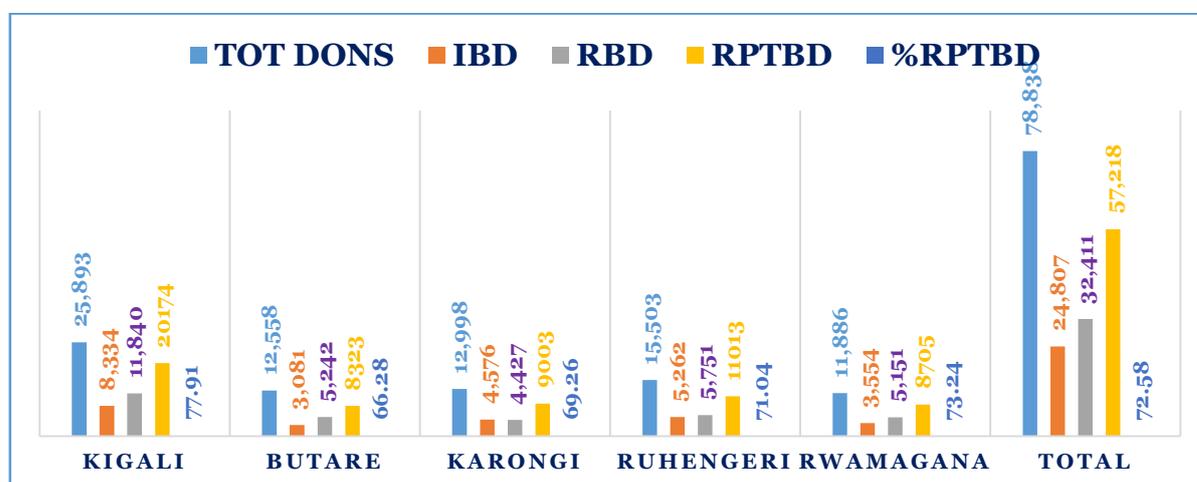
DONATIONS BY REGULARITIES							
RCBTs	NBD	%	IBD	%	RBD	%	TOT
KIGALI	5,719	22.09	8,334	32.19	11,840	45.73	25,893
BUTARE	4,235	33.72	3,081	24.53	5,242	41.74	12,558
KARONGI	3,995	30.74	4,576	35.21	4,427	34.06	12,998
RUHENGERI	4,490	28.96	5,262	33.94	5,751	37.10	15,503
RWAMAGANA	3,181	26.76	3,554	29.90	5,151	43.34	11,886
TOTAL	21,620	27.42	24,807	31.47	32,411	41.11	78,838

Source: RBC/BTD e-Progesa database and quality data indicators 2022

Who are New, Irregular and Regular blood donors ?

NBD (New blood donor)	RBD (Regular blood donor)	IBD (Irregular blood donor)
NBD is a person who donates blood for the first time.	RBD is a person who has donated at least three (3) times with at most 12 months' intervals.	IBD is a person who donated blood more than twice but fails to donate at least once in 12 months.

Blood units donated by Repeat Blood Donors

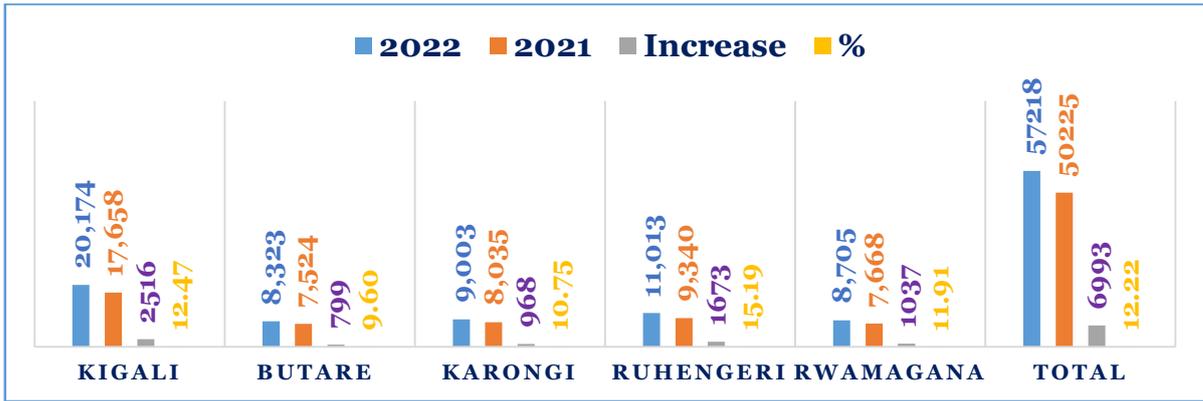


Source: RBC/BTD e-Progesa database and quality data indicators 2022

Who are RPT BDs (Repeat Blood Donors) ?

REPEAT BLOOD DONORS
RPT BD (Repeat Blood Donors / Donations) are both (IBD) Irregular Blood Donors plus (RBD) Regular Blood Donors.

Blood units donated by Repeat Blood Donors – 2022 vs 2021

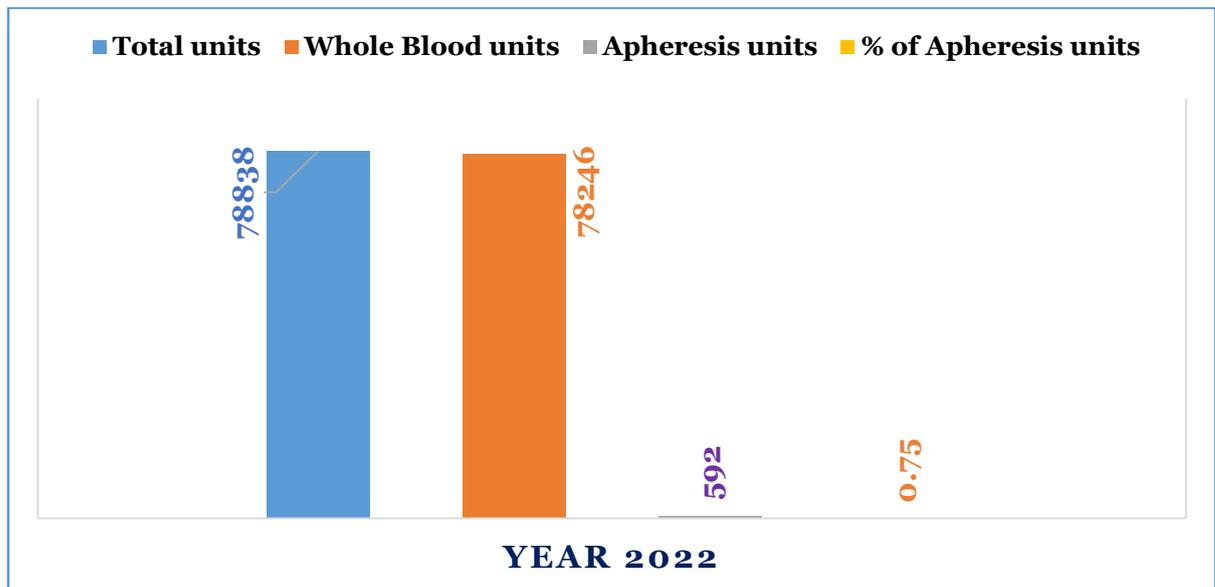


Source: RBC/BTD e-Progesa database and quality data indicators 2022

Collected blood units using apheresis technology

An apheresis machine is a state-of-the-art modern technology. The machine receives blood drawn from a patient or donor's body and separates it into various components: plasma, platelets, white and red blood cells. It then isolates and collects one of these components while others are returned to the body. This technology has improved hospital satisfaction especially concerning platelets, mostly used for treating cancer patients.

Apheresis vs WBDs (Whole Blood Donations)



Source: RBC/BTD e-Progesa database and quality data indicators 2022

During the year 2021, BTD continued to use aphaeresis technology. Of the 71,933 Blood units, 532 platelet units were collected using apheresis. With the use of apheresis technology, BTD was able to collect the required platelets therapeutic doses for patients in need from a limited number of blood donors. Normally to get the equivalence of one apheresis platelets dose, you need 5 to 6 whole blood donors. With apheresis, BTD was also able to collect multiple doses from a single donor and shortened the platelet donation interval from 3 months to 2 weeks.

DIAGNOSTIC CAPACITY

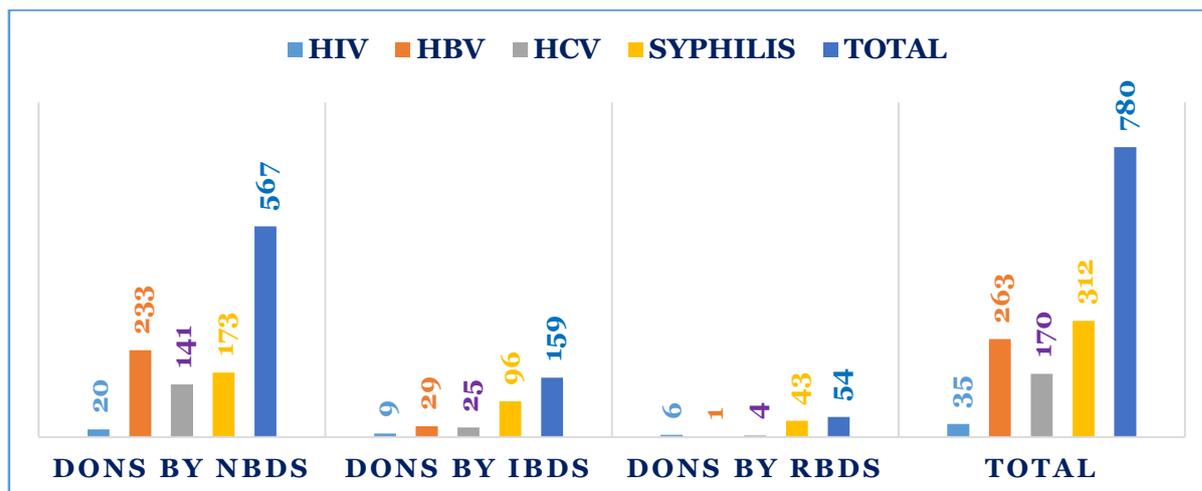
BTD uses high technology equipment for testing and processing of blood components like **architect i2000sr** for testing TTIs (Transfusion Transmission Infections): *HIV, HCV, HBV and Syphilis*, and **QWALYS 3 model** (An automated machine used for immunohematology tests) for testing blood groups, DA (Direct Antiglobulin), IA (Indirect Antiglobulin) tests etc. In addition to the above equipment, there are **T-ACE machines** that are used for separation of whole blood into blood components: *PRBCs (packed red blood cells), platelets, FFP (flesh frozen plasma) and cryoprecipitate*. With the use of this technology, BTD managed to test all blood that was collected for TTIs. In 2022, all non-conforming blood was discarded and BTD laboratory tested and availed 78,838 blood units. These units were separated into **118,626 BCU (Blood Component Units)** prior to issuance to THF (Transfusing Health Facilities). In 2022, the prevalence rate of TTIs per total donations was **0.99%**.

Confirmed HIV, HBV, HCV and syphilis reactive

HIV						
TTI	HIV				HIV %	HIV % PER
RCBTs	ND	ID	RD	TOT	PER TTIs	TOT. DONS
KIGALI	6	1	0	7	4.02	0.03
BUTARE	8	1	0	9	6.34	0.07
KARONGI	0	3	0	3	3.00	0.02
RUHENGERI	2	2	3	7	3.06	0.05
RWAMAGANA	4	2	3	9	6.67	0.08
TOTAL	20	9	6	35	4.49	0.04
HBV						
TTI	HBV				HBV %	HBV % PER
RCBTs	ND	ID	RD	TOT	PER TTIs	TOT. DONS
KIGALI	48	6	0	54	31.03	0.21
BUTARE	28	7	1	36	25.35	0.29
KARONGI	33	3	0	36	36.00	0.28
RUHENGERI	87	7	0	94	41.05	0.61
RWAMAGANA	37	6	0	43	31.85	0.36
TOTAL	233	29	1	263	33.72	0.33
HCV						
TTI	HCV				HCV %	HVC % PER
RCBTs	ND	ID	RD	TOT	PER TTIs	TOT. DONS
KIGALI	34	13	1	48	27.59	0.19
BUTARE	34	4	1	39	27.46	0.31
KARONGI	23	2	0	25	25.00	0.19
RUHENGERI	30	5	0	35	15.28	0.23
RWAMAGANA	20	1	2	23	17.04	0.19
TOTAL	141	25	4	170	21.79	0.22
SYPHILIS						
TTI	SYPHILIS				SYPH %	SYPH % PER
RCBTs	ND	ID	RD	TOT	PER TTIs	TOT. DONS
KIGALI	32	21	12	65	37.36	0.25
BUTARE	29	23	6	58	40.85	0.46
KARONGI	23	6	7	36	36.00	0.28
RUHENGERI	61	24	8	93	40.61	0.60
RWAMAGANA	28	22	10	60	44.44	0.50
TOTAL	173	96	43	312	40.00	0.40

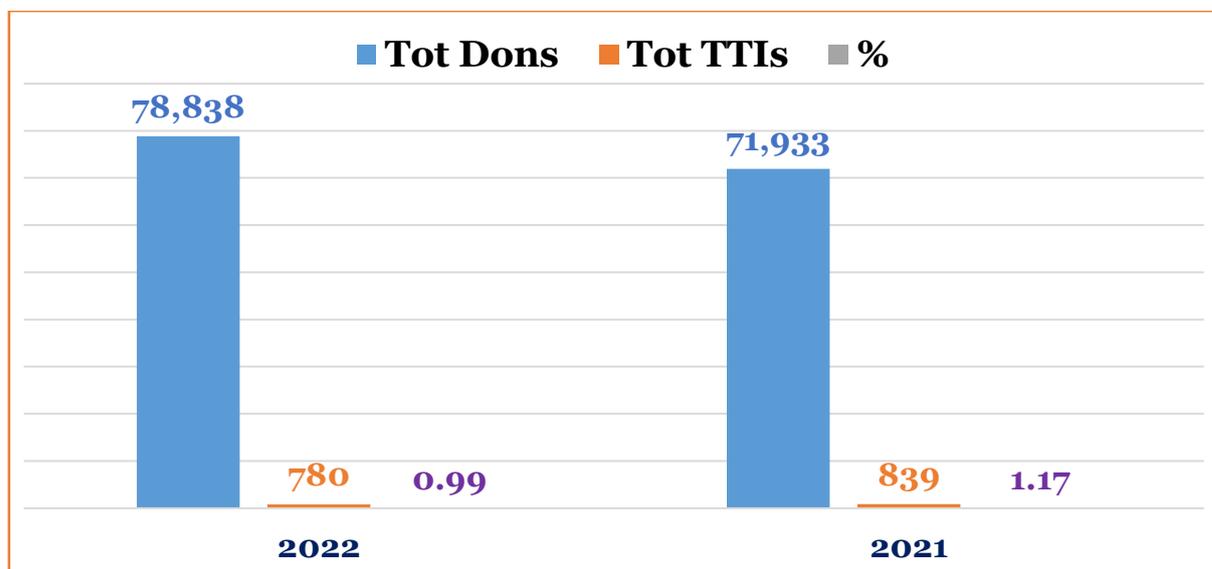
Source: RBC/BTD e-Progesa database and quality data indicators 2022

TTIs among New, Irregular and Regular blood donors



Source: RBC/BTD e-Progesa database and quality data indicators 2022

TTIs 2022 vs 2021



Source: RBC/BTD e-Progesa database and quality data indicators 2022

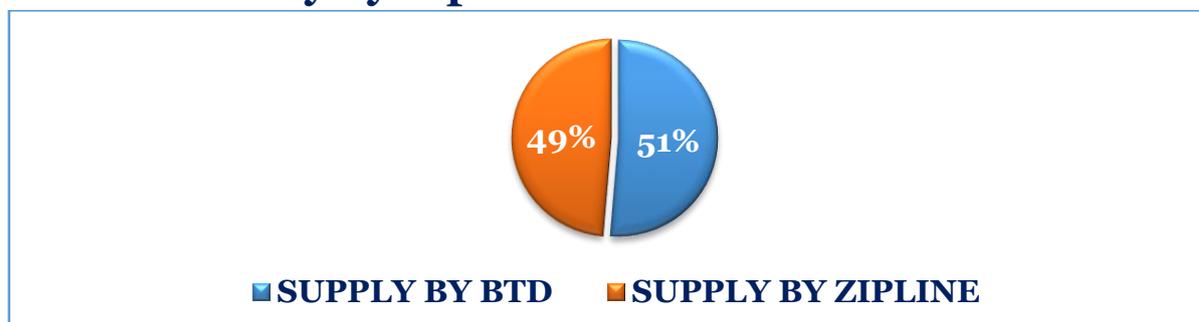
Hospital satisfaction - 2022

HOSPITAL SATISFACTION BY RCBTs			
RCBTs	DEMANDS	SUPPLY	%
KIGALI	46,541	46,299	99.48
BUTARE	7,371	7,371	100.00
KARONGI	3,412	3,349	98.15
RUHENGERI	3,229	3,202	99.16
RWAMAGANA	655	647	98.78
ZIPLINE	58,064	57,758	99.47
TOTAL	119,272	118,626	99.46

Source: RBC/BTD e-Progesa database and quality data indicators 2022

In 2022, the total hospital satisfaction for all blood components was 99.46% (demands: 119,272 vs supply: 118,626 blood components units). i.e, BTD laboratory prepared / produced 118,626 blood components units from 78,838 whole blood units received from blood collection sessions countrywide throughout the year.

Blood delivery by Zipline's vs BTD - 2022



Source: RBC/BTD e-Progesa database and quality data indicators 2022

Hospital satisfaction for all components 2022 vs 2021



Source: RBC/BTD e-Progesa database and quality data indicators 2022

Hospital satisfaction in 2022 increased to 99.46% from 97.57% in 2021. BTD achieved this through application of concerted efforts like increasing the target for collected blood, strengthening the hemovigilance system and expanding Zipline operation zone which increased confidence of HTFs in our services and improved equitable use of blood products.

BTD vs ZIPLINE supply and served Transfusing Health Facilities

BTB vs ZIPLINE SUPPLY		THFs SERVED BY BTB & ZIPLINE		
% OF SUPPLY BY BTB	% OF SUPPLY BY ZIPLINE	BTB	ZIPLINE	TOT THFs
44.49	55.51	36	40	76
100.00	0.00	2	0	2
100.00	0.00	3	0	3
100.00	0.00	0	0	0
100.00	0.00	0	0	0
51.31	48.69	41	40	81

Source: RBC/BTD e-Progesa database and quality data indicators 2022

General conclusion

For a wealthy country a healthy people is key. RBC (Rwanda Biomedical Centre) through BTB (Blood Transfusion Division) has mandate of providing adequate blood and blood product to all patients in need with no-exception. BTB does everything possible to satisfy hospital demand preventing any death that can occur due to unavailability of blood product.

BTB played a pivotal role in insuring that Rwanda emerges as one of the top performing African countries in the MDGs (Millennium Development Goals): (4) Reducing child mortality by two-thirds, between 2000 and 2015, the under-five mortality rate, (5) improving maternal health by reducing by three-quarters, between 2000 and 2015, the maternal mortality ratio and (6) combating HIV/AIDS, malaria and other diseases. As the country builds upon these achievements to work towards the newly established SDGs (Sustainable Development Goals).

BTB commits to scaling up the heights of blood safety by strengthening its blood collection strategies, blood and blood products treatment, quality management system, customer care and other strategies towards availing adequate blood and blood product to all patients in need.

Future plans and projections

100% hospital satisfaction

While the hospital satisfaction rate stood at 97.57% in 2021, and 99.46% in 2022, BTD is projecting to satisfy health facilities' demands by 100% in 2025.

NAT (Nucleic Acid Testing)

BTD is planning to introduce the NAT (Nucleic Acid Testing). It is a molecular technology for screening blood donations aimed at reducing the risk of TTIs (Transfusion Transmitted Infections) in the recipients, thus providing an additional layer of blood safety. NAT technology is highly sensitive and specific for viral nucleic acids.

It is based on amplification of targeted regions of viral ribonucleic acid or deoxyribonucleic acid (DNA) and detects them earlier than the other screening methods thus, narrowing the window period of HIV, HBV and hepatitis C virus (HCV) infections.

NAT also adds the benefit of resolving false reactive donations on serological methods which is very important for donor notification and counseling. This technology is planned to be implemented in the Financial Year 2023 – 2024.

Plasma Plant

Blood plasma fractionation is a general process of separating the various components of plasma, a component of blood obtained through blood fractionation; to save plasma that is usually unused from wastage.

RBC is planning to cooperate with advanced plasma fractionation plants and start exporting its excess manufacturing of stable blood products that are needed in managing various hematological plasma for disease conditions.

Partners and sponsors

Africa Society of Blood Transfusion

Airtel Rwanda

Belgian Red Cross

Global Fund

Imbuto Foundation

Indian Association in Rwanda

Infinix

Local Leaders

National Itorero Commission

National Youth Council

Religious congregations

Rwanda Belgian Embassy

Rwanda Defense Force

Rwanda National Police

Rwanda Red Cross

Rwanda Revenue Authority

Rwanda US Embassy

Schools, Universities and colleges

ZIPLINE Rwanda

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GALLERY

Blood collection buses



INTWARI CLUB 25 official launch and AfSBT level 3 accreditation ceremony – 14/02/2023



Left to right: Stella Matutina TUYISENGE / WHO, Dr Isabelle MUKAGATARE / HoD of Biomedical Services Department, Prof. Claude Mambo MUVUNYI / RBC DG



In the middle: Prof. Claude Mambo MUVUNYI / RBC DG and Dr. Mohammed Farouk, Executive Director / AfSBT during hand over of Level 3 accreditation certificates to all RCBTs.