

ANNUAL STATISTICS REPORT 2021



NBTS

National Blood Transfusion Service
Sri Lanka



01 CONTENTS

Contents	Page
Table of contents	02
List of Tables	03
List of Figures	04
Introduction	05
Geographical Distribution of Blood Banks	06
Blood Collection in 2021	07
Preparation of Blood Components	17
Platelet Aphaeresis Donations in 2021	21
Statistics of RCC Cross Matches & Issues	22
Statistics of Other Blood Component Usage	25
Screening of Donated Blood for Transfusion Transmitted Infections	28
Red Cell Concentrate (RCC) Discards	30
Blood Grouping Done at All Blood Banks	36
Number of Special Procedures Done at Blood Banks	39
Staff Availability of All Blood Banks	42
Statistics of HLA Laboratory	45
Statistics of Reference Immuno-haematology Laboratory	46
Statistics of Reagent Laboratory	47
Quality Management Unit	48
Statistics of Teaching and Training Unit	50
NAT Facility at National Blood Centre	51
Stem Cell Transplantation	52
Frozen Red Cell (FRC)	53

02 LIST OF TABLES

Tables	Page
Table 1: Details of Blood Collection (in 450ml Units)	7
Table 2: Comparison of Annual Blood Collection	10
Table 3: Comparison of Monthly Blood Collection in 2019, 2020 and 2021	11
Table 4: Total Blood Collection Clusterwise	12
Table 5: Comparison of Cluster Blood Collection with Previous Years	13
Table 6: Monthly Variation in Total Blood Collection	14
Table 7: ABO and Rh Broup Distribution of Blood Collection	16
Table 8: Details of Component Production	17
Table 9: Comparison of Component Preparation with Previous Years	20
Table 10: Platelet Aphaeresis Donations	21
Table 11: Distribution of Red Blood Cell Requests, Cross Matches and Issues	22
Table 12: Statistics of Other Blood Component Issues	25
Table 13: Comparison of Blood component Issues in 2019, 2020 and 2021	27
Table 14: Prevalence of TTI Markers and Comparison with Previous Years	28
Table 15: RCC Discards by Blood Banks	30
Table 16: Comparison of RCC Discards with Previous Years	33
Table 17: Monthly Comparison of Total Donations, RCC Issues with RCC Discards	34
Table 18: Monthly Comparison of Total PC Production, PC Issues with PC Discards	35
Table 19: Number of Blood Grouping Done at Each Blood Bank	36
Table 20: Number of Special Procedures Done at Each Blood Bank	39
Table 21: Staff Availability of Each Blood Bank	42
Table 22: HLA Molecular Typing and PRA - 2021 (At NBC)	45
Table 23: HLA Serology Typing & Compatibility Testing - 2021 (At NBC)	45
Table 24: HLA Laboratory Statistics (At Blood Bank/National Hospital Kandy)	45
Table 25: Comparison of Reference Immuno-heamatology Laboratory Statistics	46
Table 26: Reference lab - Detailed Investigations	46
Table 27: Comparison on Statistics of Reagent Preparation	47
Table 28: Quality Monitoring of Blood Components and Reagents	48
Table 29: Quality Control Laboratory Performance	48
Table 30: Training Programs Conducted for Staff Categories of NBTS	50
Table 31: Other Staff Categories	50
Table 32: CME Programme	50
Table 33: Summary of Nucleic Acid Testing	51
Table 34: Comparison on Statistics of Stem Cell Transplantation	52
Table 35: Statistics of Frozen Red Cell Procedure for The Year 2021	53

03 LIST OF FIGURES

Figure	Page
Figure 1: Distribution of Total Blood Collection by Mode of Collection	10
Figure 2: Yearly Comparison of Blood Collection	10
Figure 3: Comparison of Monthly Blood Collection in 2019, 2020 and 2021	11
Figure 4: Total Blood Collection Clusterwise	12
Figure 5: Comparison of Cluster Blood Collection with Previous Year	13
Figure 6: Monthly Variation in Blood Collection	14
Figure 7: Monthly Variation in Number of Mobiles	15
Figure 8: Gender Distribution of Blood Donation in Sri Lanka	15
Figure 9: Donor Population According to Their Number of Donations	15
Figure 10: Donor Population According to Their Age Category	16
Figure 11: ABO Distribution of Donor Population	16
Figure 12: Rh Distribution of Donor Population	16
Figure 13: Comparison of Blood Component Preparation	20
Figure 14: Prevalence of TTI and Comparison with Previous Years	28
Figure 15: HIV Screening Positive And Confirmed Positive Prevalence In Total Collected Blood	29
Figure 16: Hepatitis Prevalence In Donated Blood	29
Figure 17: Comparison of VDRL, TPPA And MP Positive Prevalence	29
Figure 18: Distribution of RCC discards in percentage	33
Figure 19: Comparison of Total RCC Discards with Previous Years	33
Figure 20: Comparison of RCC Discards with Previous Years	34
Figure 21: Monthly Comparison of Collection, Issues with RCC Discards	34
Figure 22: Monthly Comparison of Production, Issues with Platelet Discards	35

04 INTRODUCTION

National Blood Transfusion Service (NBTS), Sri Lanka is a special campaign coming under the Ministry of Health. It is the sole supplier of blood and blood products to all government hospitals and majority of private sector hospitals. There are 106 Hospital Based Blood Banks & 2 standalone Blood Centers affiliated to 24 cluster centers depending on the geographic distribution. Out of 106 Hospital based Blood Banks, 102 Hospital based blood banks are functioning.

Vision

To be a unique model for the world securing Quality assured blood services, through a nationally coordinated system.

Mission

To ensure the quality, safety, adequacy and cost effectiveness of the blood supply and related laboratory, clinical, academic and research in accordance with national requirement and WHO recommendations .

National Blood Transfusion Service

The Director NBTS, being the chief executive officer of the organization, is responsible for implementation and supervision of the common decisions taken by the organization.

Each cluster Centre is headed by a Consultant Transfusion Physician. They also provide clinical guidance to blood banks within the cluster.

This report compiles the consolidated statistics of the performance of blood banks of the National Blood Transfusion Services for the year 2021.

05

GEOGRAPHICAL DISTRIBUTION OF BLOOD BANKS

Nothern	
Vavuniya	Jaffna
Vavuniya	Jaffna
Chettikulam	Kilinochchi
Mannar	Point Pedro
	Mullativu
	Thelippalai

Eastern		
Batticaloa	Trincomalee	Ampara
Batticaloa	Trincomalee	Ampara
Valachchenai	Kantale	Akkarepattu
Kattankudy	Kinnniya	Dehiattakandiya
Kalawanchikudi	Muththur	Kalmunai - North
		Kalmunai - South
		Mahaoya
		Sammanthurai
		Pothuvil

North Central
Anuradhapura
Anuradhapura
Padaviya
Thambuththegama
Medawachchiya
Polonnaruwa
Polonnaruwa
Medirigiriya

North Western	
Kurunegala	Chilaw
Kurunegala	Chilaw
Dambadeniya	Marawila
Kuliyapitiya	Puttalam
Nikaweratiya	
Galgamuwa	



Uva
Badulla
Badulla
Diyatalawa
Mahiyanganaya
Welimada
Monaragala
Monaragala
Bibile
Wellawaya

Central	
Kandy	Peradeniya
Kandy	Peradeniya
Theldeniya	Nawalapitiya
Matale	Gampola
Dambulla	
Nuwaraeliya	
Nuwaraliya	
Dikkoya	
Rikillagaskada	

SOUTHERN	
Karapitiya	Matara
Karapitiya	Matara
Mahamodara	SRBC - Kamburugamuwa
Balapitiya	Deniyaya
Elpitiya	New DGH - Kamburugamuwa
Udugama	Kamburupitiya
	Hambantota
	Hambantota
	Tangalla
	Tissamaharamaya
	Walasmulla

Sabaragamuwa	
Ratnapura	Kegalle
Ratnapura	Kegalle
Embilipitiya	Mawanella
Balangoda	Karawanella
Kahawatta	Warakapola

Western				
Colombo	Ragama	Gampaha	Maharagama	Kalutara
NBC	CNTH	Gampaha	CIM - Apeksha	Kalutara
NHSL	Kiribathgoda	Wathupitiwala	Awissawella	Horana
CSHW	Negombo	Meerigama	Homagama	Kethumathi
CSTH	Welisara	Minuwangoda		Panadura
DMH				
LRH				
SJGH				
Accidenr Ser.				
IDH - Angoda				
CEBH - Mulleriyawa				
NINDT - Maligawatta				
Army Hospital				
KDU				
NFTH				

Cluster	Blood Bank	Number of mobiles	In-house Donations	Mobile Donations	Total Donations
Ampara	Akkareipattu	13	487	747	1,234
	Ampara	117	911	6,485	7,396
	Kalmunai North	7	287	231	518
	Kalmunai South	15	514	480	994
	Mahaoya	6	368	385	753
	Pothuvil	6	54	196	250
	Sammanthurai	2	160	55	215
Anuradhapura	Anuradhapura	336	2,105	22,468	24,573
	Medawachchiya	-	-	-	-
	Padaviya	12	138	824	962
	Thambuttegama	0	0	0	0
Badulla	Badulla	184	963	11,622	12,585
	Diyatalawa	29	361	1,234	1,595
	Mahiyanganaya	15	361	976	1,337
	Welimada	8	175	0	175
Batticaloa	Batticaloa	75	841	3,907	4,748
	Kalawanchikudi	0	1	0	1
	Kattankudy	5	15	286	301
	Valachchenai	4	48	0	48
Chilaw	Chilaw	79	766	5,736	6,502
	Marawila	41	297	2,629	2,926
	Puttlam	53	412	3,346	3,758
CIM	Apeksha	160	5,911	12,516	18,427
	Awissawella	12	744	702	1,446
	Homagama	1	0	63	63
CNTH	CNTH	160	2,001	12,512	14,513
	Kiribathgoda	-	-	-	-
	Negambo	53	344	3,438	3,782
	Welisara	0	0	0	0
Colombo	Accident Service	0	0	0	0
	Army Hospital	0	157	0	157
	CEBH-Mulleriyawa	0	0	0	0
	CSHW	0	0	0	0
	CSTH	12	250	708	958
	DMH	0	0	0	0
	IDH - Angoda	0	0	0	0
	KDU	12	926	777	1,705
	LRH	0	0	0	0

Cluster	Blood Bank	Number of Mobiles	In-house Donations	Mobile Donations	Total Donations
	NBC	549	13, 234	40, 020	53, 254
	NFTH	0	0	0	0
	NHSL	12	358	765	1,123
	NINDT-Maligawaththa	0	0	0	0
	SJGH	25	508	1,745	2,253
Gampaha	Gampaha	54	757	3,223	3,980
	Meerigama	5	154	217	371
	Minuwangoda	30	152	2,043	2,195
	Wathupitiwala	45	651	1,940	2,591
Hambantota	Hambantota	91	449	5,515	5,964
	Tangalle	51	390	2,711	3,101
	Tissamaharama	10	127	594	721
	Walasmulla	0	0	0	0
Jaffna	Jaffna	126	2,203	4,682	6,885
	Kilinochchi	18	491	759	1,250
	Mulathiv	7	115	228	343
	Point Pedro	22	144	595	739
	Tellippalai	64	233	2,082	2,315
Kalutara	Horana	8	595	515	1,110
	Kalutara	135	714	8,336	9,050
	Kethumathie	13	311	879	1,190
	Panadura	4	220	345	565
Kandy	Dambulla	24	530	1,628	2,158
	Kandy	164	2,727	15,116	17,843
	Matale	45	242	2,379	2,621
	Theldeniya	0	67	0	67
Karapitiya	Balapitiya	21	232	1,462	1,694
	Elpitiya	13	163	647	810
	Karapitiya	169	1,279	14,358	15,637
	Mahamodara	11	100	597	697
	Udugama	0	117	0	117
Kegalle	Karawanella	0	0	0	0
	Kegalle	107	583	6,467	7,050
	Mawanella	15	223	899	1,122
	Warakapola	0	0	0	0

Cluster	Blood Bank	Number of Mobiles	In-house Donations	Mobile Donations	Total Donations
Kurunegala	Dambadeniya	18	368	1,419	1,787
	Galgamuwa	0	0	0	0
	Kuliyapitiya	31	623	2,168	2,791
	Kurunegala	273	2,812	25,567	28,379
	Nikaweratiya	32	349	2,497	2,846
Matara	Deniyaya	0	0	0	0
	Kamburugamuwa	168	1,135	16,905	18,040
	Kamburupitiya	0	340	0	340
	Matara	25	247	1,356	1,603
	New DGH Kamburugamuwa	0	0	0	0
Monaragala	Bibila	6	339	236	575
	Monaragala	115	599	6,355	6,954
	Wellawaya	0	22	0	22
Nuwara Eliya	Dikkoya	0	0	0	0
	Nuwara Eliya	175	1,378	9,354	10,732
	Rikillagaskada	15	413	1,196	1,609
Peradeniya	Gampola	32	91	2,105	2,196
	Nawalapitiya	27	300	2,020	2,320
	Peradeniya	126	947	8,675	9,622
Polonnaruwa	Dehiattakandiya	4	457	252	709
	Medirigiriya	0	246	0	246
	Polonnaruwa	154	977	9,147	10,124
Ratnapura	Balangoda	13	358	749	1,107
	Embilipitiya	40	309	3,203	3,512
	Kahawatta	0	257	0	257
	Ratnapura	153	632	10,624	11,256
Trincomalee	Kantale	0	123	0	123
	Kinniya	0	19	0	19
	Muththur	5	104	167	271
	Trincomalee	48	555	2,811	3,366
Vavniya	Chettikulam	-	-	-	-
	Mannar	10	206	523	729
	Vavniya	48	624	2,157	2,781
Total		4,773	62,498	322,556	385,054

Table 1: Details of Blood Collection

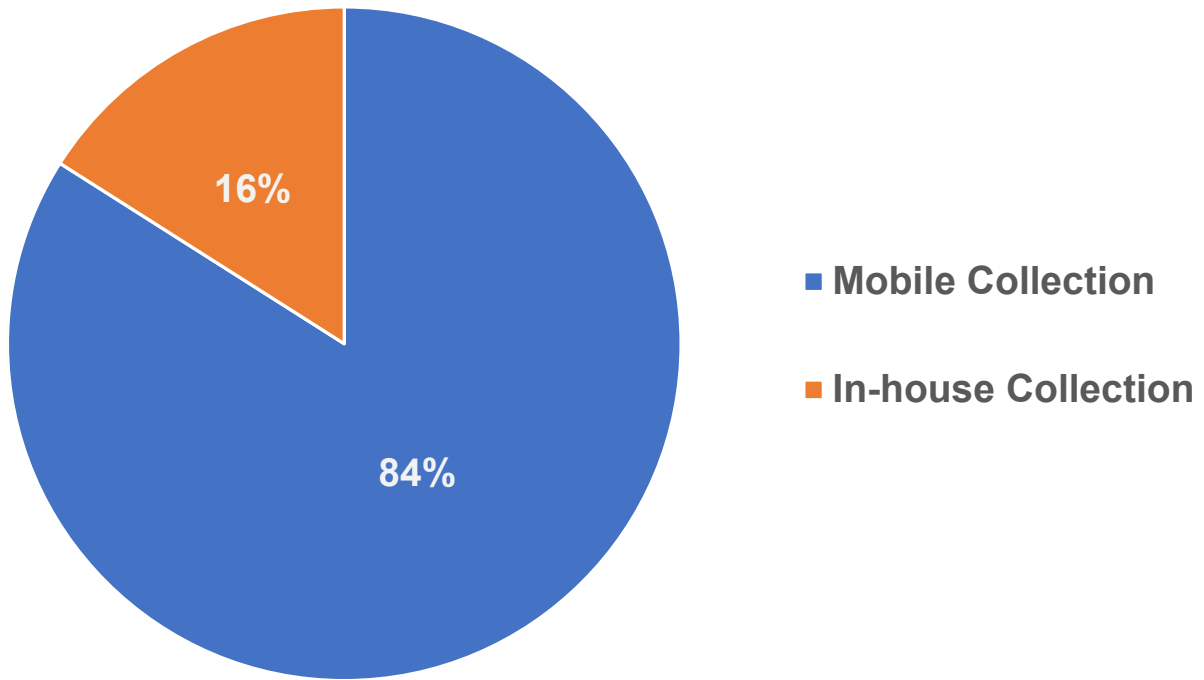


Figure 1: Distribution of total blood collection by mode of collection

Comparison of Annual Blood Collection

Year	Voluntary Collection	Replacement Collection	Total Collection
2015	395,500	0	395,500
2016	414,175	0	414,175
2017	423,668	0	423,668
2018	450,640	0	450,640
2019	444,515	0	444,515
2020	397,833	0	397,833
2021	385,054	0	385,054

Table 2: Comparison of Annual Blood Collection

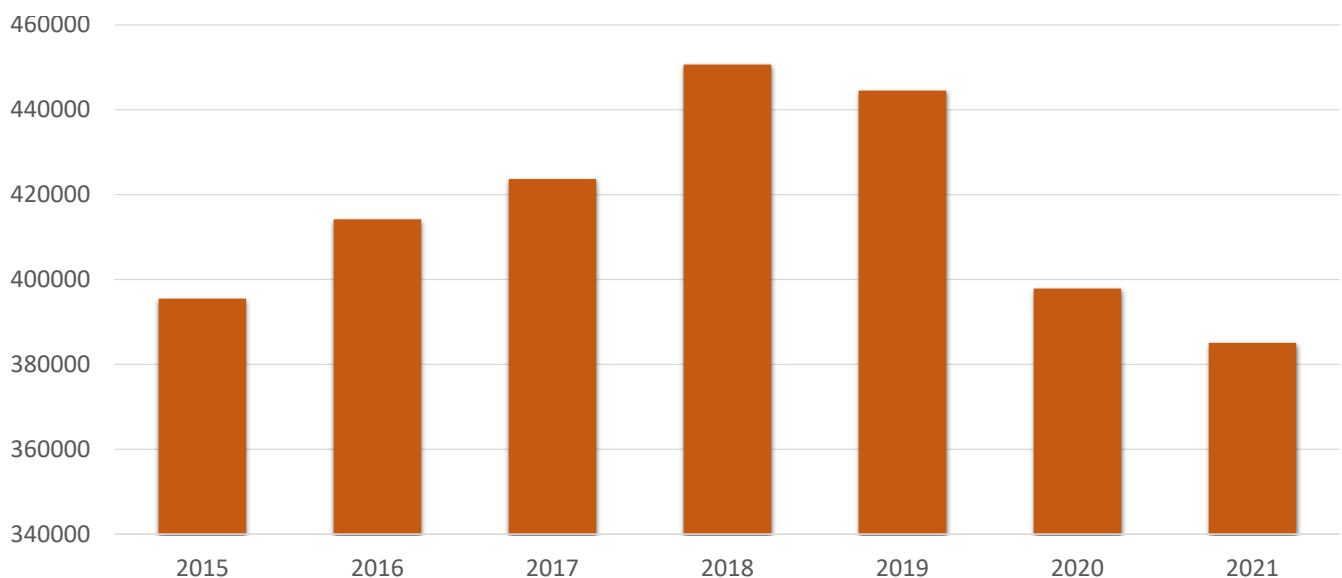


Figure 2: Yearly Comparison of Blood Collection

Month	2019	2020	2021
January	37,922	38,122	29,083
February	40,335	38,987	30,200
March	37,043	29,335	35,865
April	32,587	17,550	31,035
May	35,864	33,403	35,692
June	38,975	40,557	26,291
July	37,868	30,730	29,143
August	38,425	38,512	30,803
September	33,901	37,989	37,380
October	35,513	27,203	31,810
November	34,894	32,536	33,670
December	41,188	32,909	34,082
Total	444,515	397,833	385,054

Table 3: Comparison of Monthly Blood Collection in 2019, 2020 and 2021

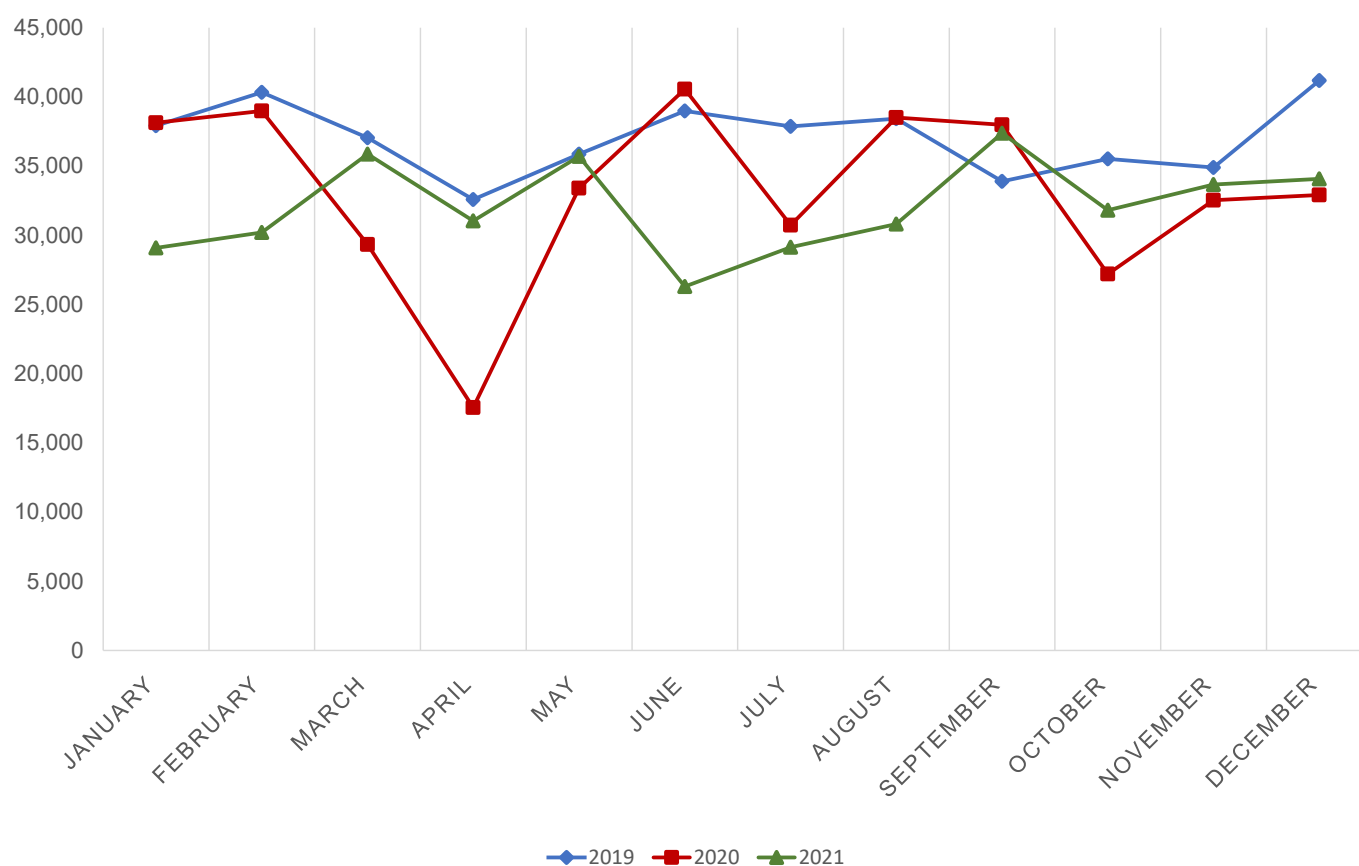


Figure 3: Comparison of Monthly Blood Collection In 2019, 2020 & 2021

Blood Collection Cluster wise

Cluster	Number of Mobiles	In-house Donations	Mobile Donations	Total Donations
Ampara	166	2,781	8,579	11,360
Anuradhapura	348	2,243	23,292	25,535
Badulla	236	1,860	13,832	15,692
Batticaloa	84	905	4,193	5,098
Chilaw	173	1,475	11,711	13,186
CIM	173	6,655	13,281	19,936
CNTH	213	2,345	15,950	18,295
Colombo	610	15,435	44,015	59,450
Gampaha	134	1,714	7,423	9,137
Hambantota	152	966	8,820	9,786
Jaffna	237	3,186	8,346	11,532
Kalutara	160	1,840	10,075	11,915
Kandy	233	3,566	19,123	22,689
Karapitiya	233	1,891	17,064	18,955
Kegalle	122	806	7,366	8,172
Kurunegala	354	4,152	31,651	35,803
Matara	193	1,722	18,261	19,983
Monaragala	121	960	6,591	7,551
Nuwara Eliya	190	1,791	10,550	12,341
Peradeniya	185	1,338	12,800	14,138
Polonnaruwa	158	1,680	9,399	11,079
Ratnapura	206	1,556	14,576	16,132
Trincomalee	53	801	2,978	3,779
Vavniya	58	830	2,680	3,510
Total	4773	62,498	322,556	385,054

Table 4 : Total Blood Collection Clusterwise

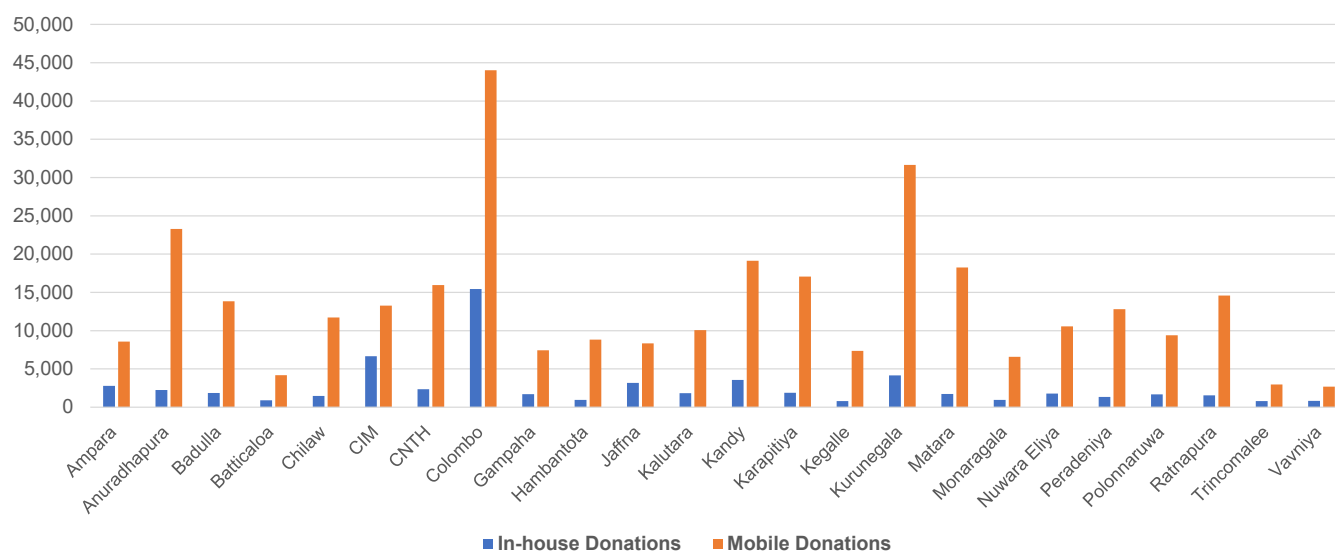


Figure 4: Total Blood Collection Clusterwise

Comparison Of Cluster Collection With Previous Years

Cluster	2019	2020	2021	Total Donations
Ampara	11,814	11,460	11,360	11,360
Anuradhapura	23,696	25,379	25,535	25,535
Badulla	16,173	17,055	15,692	15,692
Batticaloa	5,384	4,559	5,098	5,098
Chilaw	12,778	11,346	13,186	13,186
CIM	27,031	21,521	19,936	19,936
CNTH	22,208	17,211	18,295	18,295
Colombo	82,965	62,589	59,450	59,450
Gampaha	13,104	10,595	9,137	9,137
Hambantota	5,094	8,200	9,786	9,786
Jaffna	12,793	11,037	11,532	11,532
Kalutara	13,668	13,212	11,915	11,915
Kandy	30,587	25,984	22,689	22,689
Karapitiya	22,019	20,869	18,955	18,955
Kegalle	7,559	7,874	8,172	8,172
Kurunegala	46,158	39,688	35,803	35,803
Matara	23,361	21,959	19,983	19,983
Monaragala	8,401	9,437	7,551	7,551
Nuwara Eliya	3,205	6,698	12,341	12,341
Peradeniya	16,429	13,405	14,138	14,138
Polonnaruwa	13,024	11,250	11,079	11,079
Ratnapura	17,860	18,299	16,132	16,132
Trincomalee	5,340	4,536	3,779	3,779
Vavniya	3,864	3,670	3,510	3,510

Table 5: Comparison of Cluster Blood Collection with Previous Years

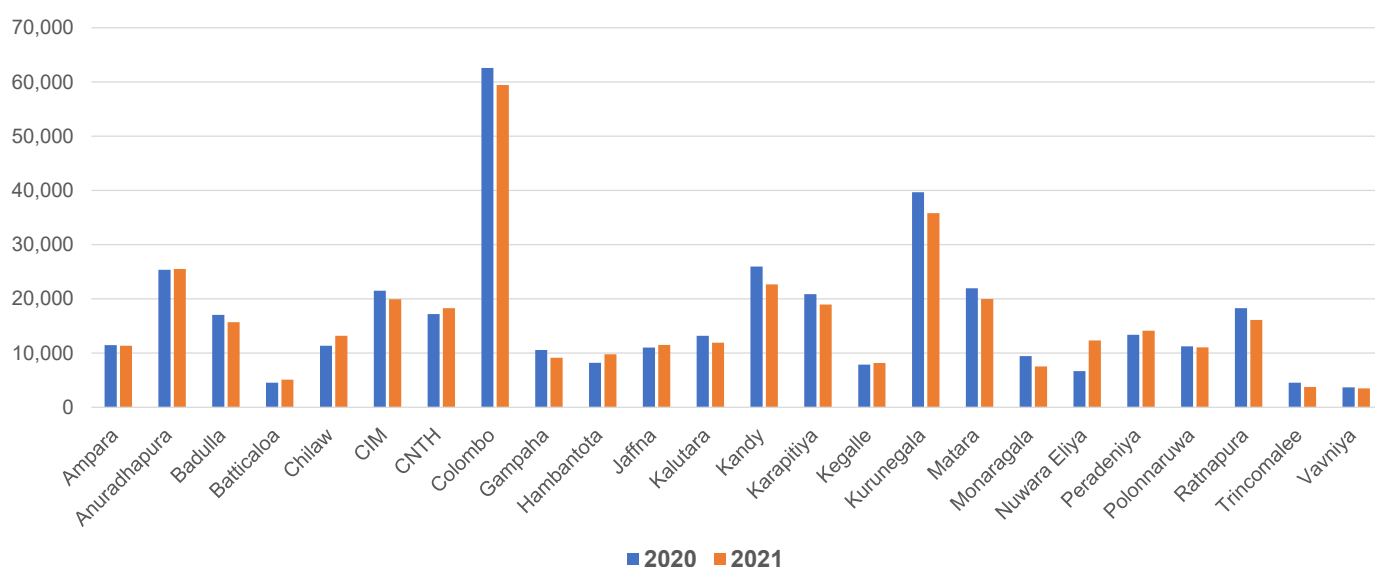


Figure 5: Comparison of Cluster Blood Collection with Previous Year

Month	Number of Mobiles	In-house Donations	Mobile Donations	Total Donations
January	361	3,734	25,349	29,083
February	354	3,721	26,479	30,200
March	465	4,776	31,089	35,865
April	433	3,916	27,119	31,035
May	337	10,757	24,935	35,692
June	293	6,171	20,120	26,291
July	409	4,597	24,546	29,143
August	366	6,849	23,954	30,803
September	430	4,764	32,616	37,380
October	418	4,125	27,685	31,810
November	441	4,206	29,464	33,670
December	466	4,882	29,200	34,082
Total	4,773	62,498	322,556	385,054

Table 6: Monthly Variation In Total Blood Collection

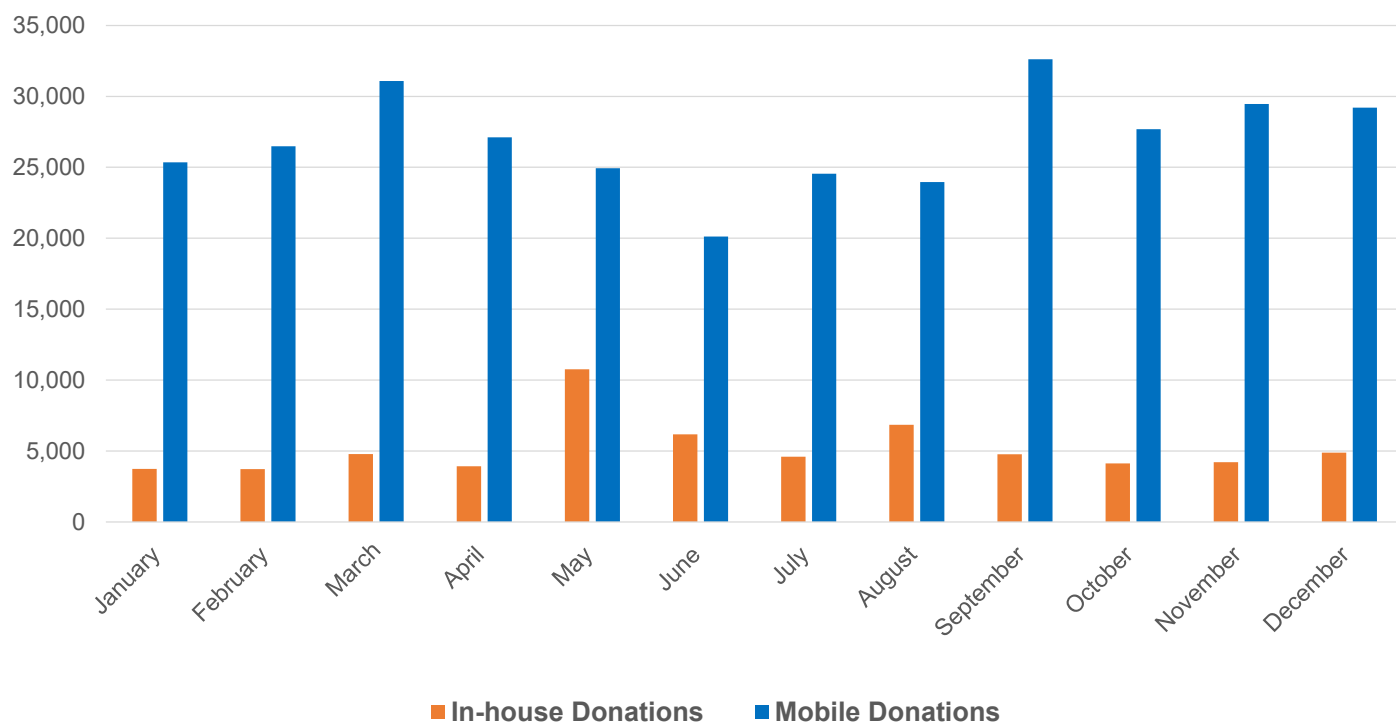


Figure 6: Monthly Variation In Blood Collection

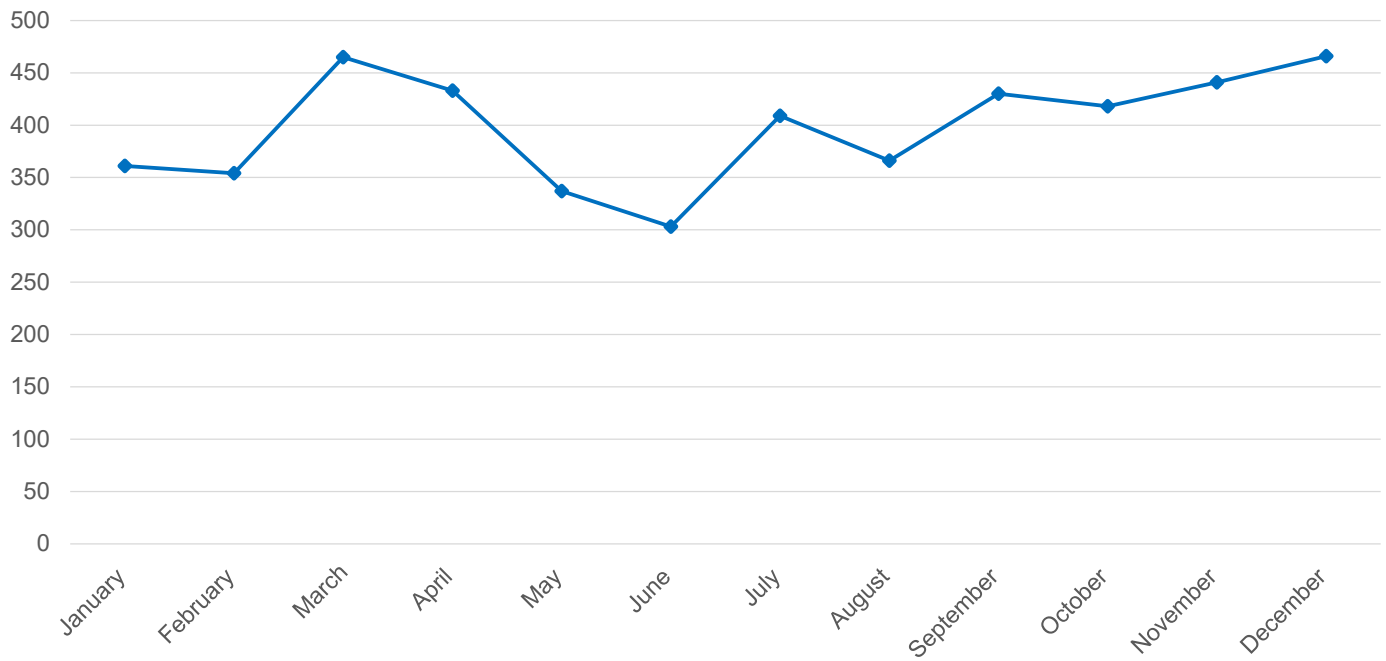


Figure 7: Monthly Variation In Number of Mobiles

Gender Distribution Of Blood Collection

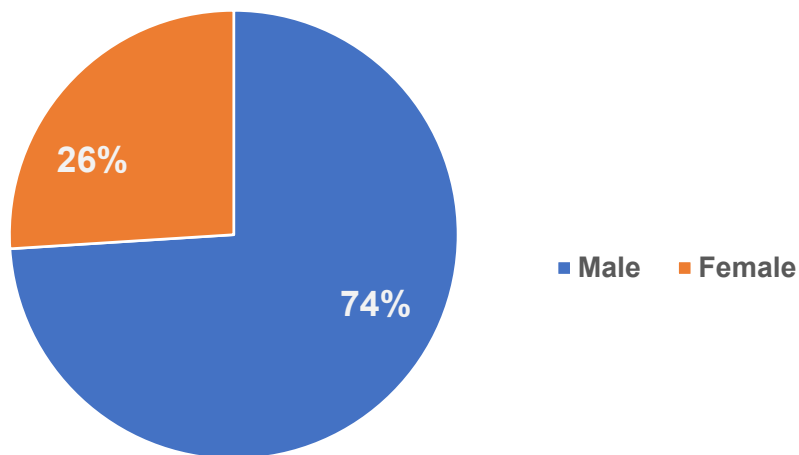


Figure 8: Gender Distribution of Blood Donation In Sri Lanka

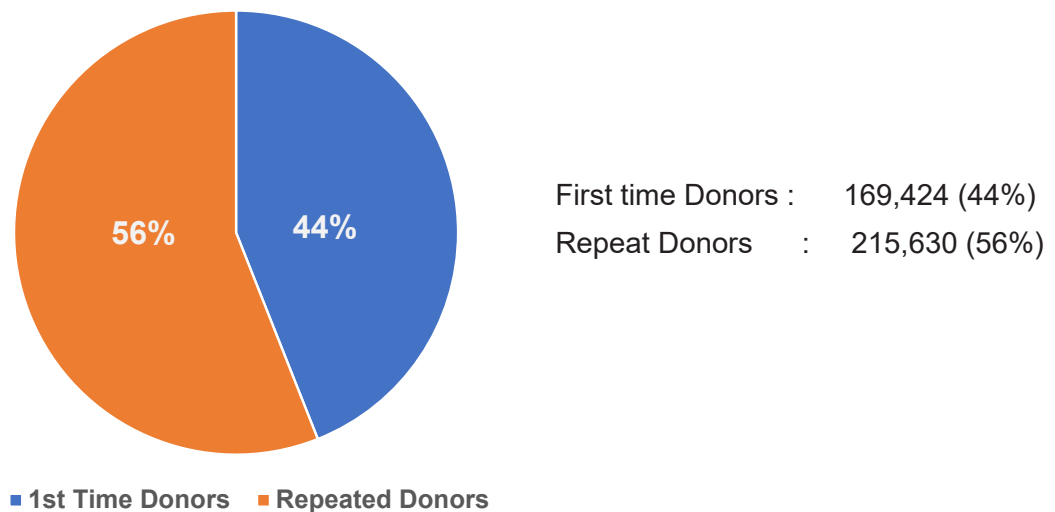


Figure 9: Donor Population According To Their Number of Donations

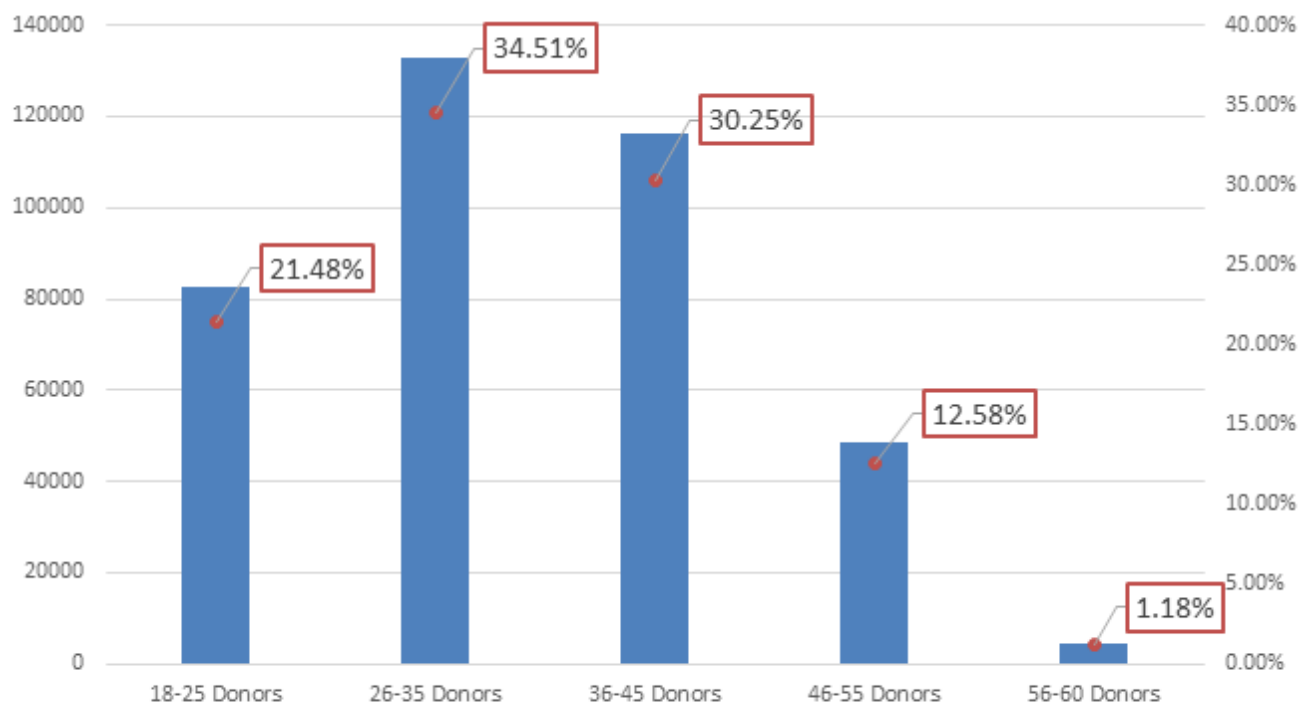


Figure 10: Donor Population According To Their Age Category

ABO And Rh Group Distribution of Blood Collection

	A	B	AB	O	Bombay O	Other	Total
Rh D Positive	79,417	101,761	20,478	160,495	212	120	362,482
Percentage	20.63%	26.43%	5.32%	41.68%	0.06%	0.03%	94.1379
Rh D Negative	4,882	5,877	1,263	10,490	1,0133	5,0665	22,518
Percentage	1.2678%	1.5262%	0.3278%	2.7241%	0.0003%	0.0013%	5.8478%
Weak D	11	16	4	21	2	0	55
Percentage	0.00289%	0.00421%	0.00105%	0.00552%	0.00052%	0.00%	0.01421%
Total	84,311	107,654	21,744	171,006	215	125	385,054

Table 7 :ABO And Rh Group Distribution of Blood Collection

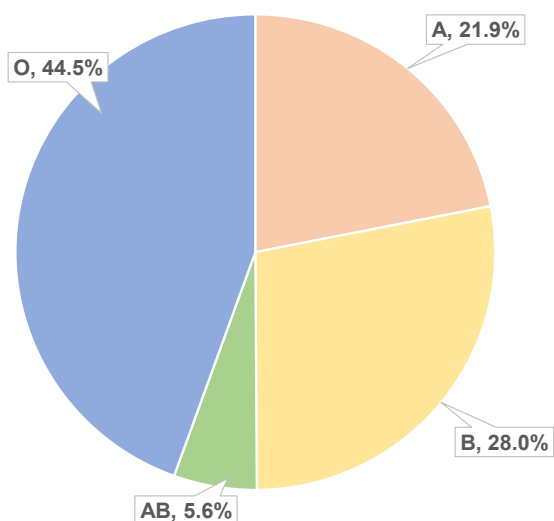


Figure 11: ABO Distribution of Donor Population

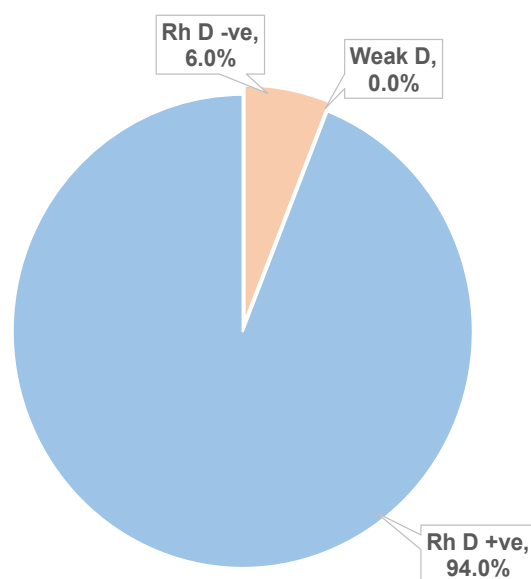


Figure 12: Rh Distribution of Donor Population

07 Preparation of Blood Components

Cluster	Blood Bank	RCC	PC	FFP	CSP	Cryo	Stored Plasma	Buffy Coat
Ampara	Akkarepattu	368	0	0	0	0	245	0
	Ampara	9,961	7,228	9,959	1,581	1,619	0	0
	Kalmunai North	243	0	1	5	0	237	0
	Kalmunai South	400	0	0	0	0	218	0
	Mahaoya	277	0	0	0	0	150	0
	Pothuvil	0	0	0	0	0	0	0
	Sammanthurai	79	0	0	0	0	55	0
Anuradhapura	Anuradhapura	27,201	22,042	27,201	4,364	2,473	0	0
	Medawachchiya	-	-	-	-	-	-	-
	Padaviya	135	0	0	0	0	0	0
	Thambuttegama	0	0	0	0	0	0	0
Badulla	Badulla	15,288	12,701	12,701	256	662	11	0
	Diyatalawa	0	0	0	0	0	0	0
	Mahiyanganaya	457	257	492	0	0	396	0
	Welimada	19	0	19	0	0	0	0
Batticaloa	Batticaloa	5,094	2,377	4,744	586	550	242	0
	Kalawanchikudi	0	0	0	0	0	0	0
	Kattankudy	0	0	0	0	0	0	0
	Valachchenai	0	0	0	0	0	0	0
Chilaw	Chilaw	12,475	7,510	10,446	1,015	1,015	40	0
	Marawila	248	0	258	0	0	0	0
	Puttlam	319	25	304	0	0	0	0
CIM	Apeksha	18,859	18,859	18,859	0	0	0	6,212
	Awissawella	816	0	788	0	0	0	0
	Homagama	62	0	0	0	0	0	0
CNTH	CNTH	18,694	9,979	16,655	3,459	3,615	156	9,380
	Kiribathgoda	-	-	-	-	-	-	-
	Negambo	340	0	19	0	0	321	0
	Welisara	0	0	0	0	0	0	0
Colombo	Accident Service	0	0	0	0	0	0	0
	Army Hospital	6	6	6	0	0	0	0
	CEBH - Mulleriyawa	0	0	0	0	0	0	0
	CSHW	0	0	0	0	0	0	0
	CSTH	165	0	191	0	0	0	0
	DMH	0	0	0	0	0	0	0
	IDH-Angoda	0	0	0	0	0	0	0
	KDU	0	0	0	0	0	0	0
	LRH	0	0	0	0	0	0	0

Cluster	Blood Bank	RCC	OC	FFP	CSP	Cryo	Stored Plasma	Buffy Coat
	NBC	57,382	33,529	40,096	15,633	16,935	0	7,155
	NFTH	0	0	0	0	0	0	0
	NHSL	0	0	0	0	0	0	0
	NINDT-Maligawaththa	0	0	0	0	0	0	0
	SJGH	2,245	1,686	2,141	145	145	0	0
Gampaha	Gampaha	5,247	1,593	5,159	64	64	0	0
	Meerigama	224	0	115	0	0	113	0
	Minuwangoda	13	0	22	0	0	13	0
	Wathupitiwala	2,556	1,127	2,055	614	614	0	0
Hambantota	Hambantota	9,345	5,549	6,703	2,429	2,651	222	4,761
	Tangalle	208	170	204	0	0	0	0
	Tissamaharama	0	0	0	0	0	0	0
	Walasmulla	0	0	0	0	0	0	0
Jaffna	Jaffna	10,807	6,828	8,180	2,401	2,405	92	3,605
	Kilinochchi	459	0	459	0	0	0	0
	Mulathiv	89	0	89	0	0	0	0
	Point Pedro	81	0	81	0	0	0	0
	Tellippalai	0	0	0	0	0	0	0
Kalutara	Horana	220	5	220	0	0	0	0
	Kalutara	11,244	6,531	10,366	1,059	1,065	146	2,005
	Kethumathie	0	0	0	0	0	0	0
	Panadura	146	0	137	0	0	0	0
Kandy	Dambulla	615	0	490	0	0	278	0
	Kandy	19,251	12,968	16,376	221	2,599	0	6,735
	Matale	2,945	2,113	2,944	515	515	0	0
	Theldeniya	0	0	0	0	0	0	0
Karapitiya	Balapitiya	1,582	0	0	0	0	1,582	0
	Elpitiya	751	0	0	0	0	257	0
	Karapitiya	15,710	11,491	15,710	769	769	0	3,866
	Mahamodara	575	0	0	0	0	497	0
	Udugama	16	0	11	0	0	0	0
Kegalle	Karawanella	0	0	0	0	0	0	0
	Kegalle	7,851	4,460	5,412	2,076	2,076	0	0
	Mawanella	197	0	0	0	0	187	0
	Warakapola	0	0	0	0	0	0	0
Kurunegala	Dambadeniya	351	0	0	0	0	351	0
	Galgamuwa	0	0	0	0	0	0	0
	Kuliyapitiya	429	0	451	0	1	4	0
	Kurunegala	34,592	30,338	28,352	2,707	2,707	0	30,338
	Nikaweratiya	334	0	334	0	0	0	0
Matara	Deniyaya	0	0	0	0	0	0	0
	Kamburugamuwa	19,805	13,064	19,719	5,894	5,899	86	7,024

Cluster	Blood Bank	RCC	PC	FFP	CSP	Cryo	Stored Plasma	Buffy Coat
	Kamburupitiya	0	0	0	0	0	0	0
	Matara	0	0	0	0	0	0	0
	New DGH Kamburugamuwa	0	0	0	0	0	0	0
Monaragala	Bibila	0	0	0	0	0	0	0
	Monaragala	7408	4491	6375	1172	1260	0	0
	Wellawaya	0	0	0	0	0	0	0
Nuwara Eliya	Dikkoya	0	0	0	0	0	0	0
	Nuwara Eliya	10,677	5,980	8,214	778	778	0	0
	Rikillagaskada	412	0	0	0	0	0	0
Peradeniya	Gampola	77	0	77	0	0	0	0
	Nawalapitiya	300	2	87	23	0	189	0
	Peradeniya	14,359	10,573	9,539	2,025	2,891	854	1,193
Polonnaruwa	Dehiattakandiya	455	0	0	0	0	0	0
	Medirigiriya	189	0	0	0	0	0	0
	Polonnaruwa	10,212	6,082	10,243	630	631	0	2,495
Ratnapura	Balangoda	0	0	0	0	0	0	0
	Embilipitiya	0	0	0	0	0	0	0
	Kahawatta	0	0	0	0	0	0	0
	Ratnapura	15,979	8,095	16,183	1,290	1,999	0	0
Trincomalee	Kantale	0	0	0	0	0	0	0
	Kinniya	0	0	0	0	0	0	0
	Muththur	0	0	0	0	0	0	0
	Trincomalee	3,819	2,334	3,338	938	830	0	0
Vavniya	Chettikulam	-	-	-	-	-	-	-
	Mannar	24	0	0	0	0	0	0
	Vavniya	1,759	1,062	1,254	448	448	0	0
Total		382,422	251,055	326,349	53,097	57,216	6,942	84,769

Table 8: Details of Component Production

	2015	2016	2017	2018	2019	2020	2021
RCC	393,348	408,959	417,792	446,098	443,235	395,319	382,422
Platelets	244,071	248,644	252,865	263,720	274,499	272,613	251,055
FFP	344,788	369,299	378,983	390,671	399,052	344,779	326,349

Table 9: Comparison of Component Preparation with Previous Years

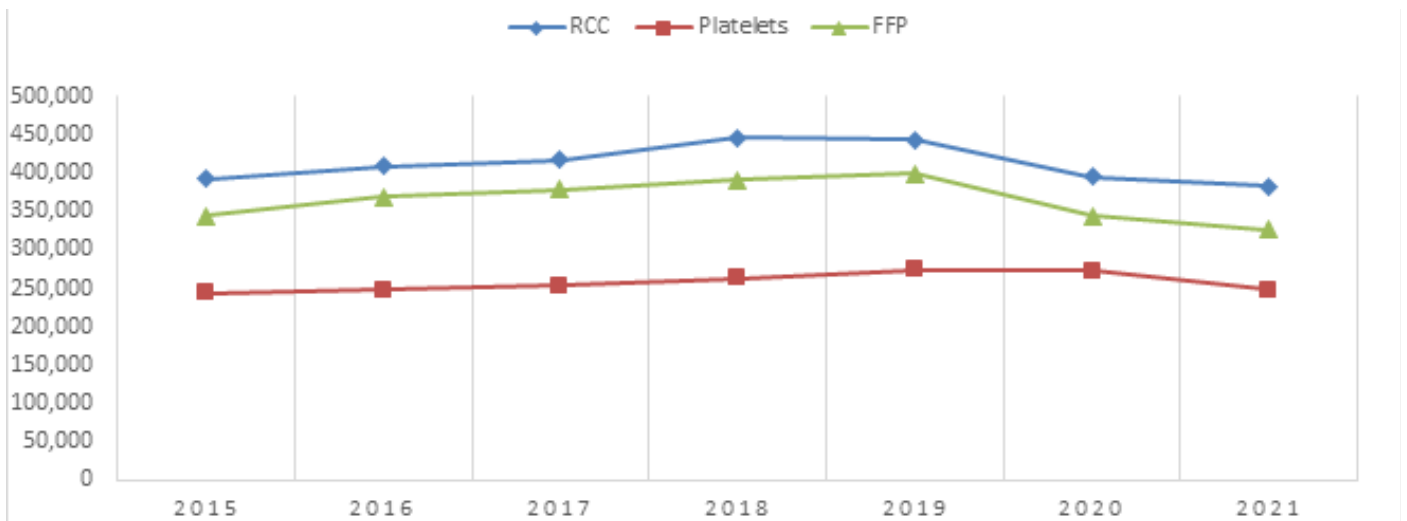


Figure 13: Comparison of Blood Component Preparation

Blood Bank	No. of procedures	No. of Units collected
Ampara	3	21
Anuradhapura	7	74.6
Apeksha	275	3,006
Army Hospital	14	144
Badulla	4	29
Batticaloa	25	195
CNTH	3	12
Jaffna	40	487
Kalutara	1	6
Kamburugamuwa	3	34
Kandy	258	2,824
NBC	345	4,915
Total	978	11,747.6

Table 10: Platelet Aphaeresis Donations

Cluster	Blood Bank	Requests	Cross Matches	Issues	C:I Ratio
Ampara	Akkarepattu	4,354	4,350	1,445	3
	Ampara	12,334	8,805	6,409	1.4
	Kalmunai North	2,416	2,112	735	2.9
	Kalmunai South	5,123	4,930	1,528	3.2
	Mahaoya	1,460	1,471	766	1.9
	Pothuvil	571	704	256	2.8
	Sammanthurai	1,255	1,346	241	5.6
Anuradhapura	Anuradhapura	47,466	31,122	21,843	1.4
	Medawachchiya	-	-	-	-
	Padaviya	536	517	432	1.2
	Thambuttegama	4,200	4,149	1,444	2.9
Badulla	Badulla	19,635	9,665	7,797	1.2
	Diyatalawa	4,516	4,955	1,395	3.6
	Mahiyanganaya	9,770	9,473	3,166	3
	Welimada	4,655	4,587	1,107	4.1
Batticaloa	Batticaloa	20,738	19,635	8,229	2.4
	Kalawanchikudi	0	0	0	0
	Kattankudy	71	71	30	2.4
	Valachchenai	860	796	162	4.9
Chilaw	Chilaw	14,116	8,080	6,228	1.3
	Marawila	9,853	9,459	3,341	2.8
	Puttlam	11,141	11,076	4,676	2.4
CIM	Apeksha	30,023	26,160	16,326	1.6
	Awissawella	8,001	6,749	2,386	2.8
	Homagama	1,523	1,429	519	2.8
CNTH	CNTH	38,018	26,851	19,020	1.4
	Kiribathgoda	-	-	-	-
	Negambo	11,255	5,762	3,532	1.6
	Welisara	7,172	7,746	903	8.6
Colombo	Accident Service	21,778	9,400	6,269	1.5
	Army Hospital	2,475	1,936	1,145	1.7
	CEBH - Mulleriyawa	1,786	1,795	642	2.8
	CSHW	10,106	4,095	1,997	2.1
	CSTH	28,094	11,078	8,930	1.2
	DMH	7,597	3,720	1,400	2.7
	IDH - Angoda	2,178	3,285	610	5.4

Cluster	Blood Bank	Requests	Cross Matches	Issues	C:I Ratio
	KDU	4,826	2,759	1,787	1.5
	LRH	10,592	9,885	4,337	2.3
	NBC	17,999	13,258	11,658	1.1
	NFTH	1,927	1,825	904	2
	NHSL	61,158	31,754	19,114	1.7
	NINDT - Maligawaththa	2,131	2,292	1,030	2.2
	SJGH	18,146	7,629	4,722	1.6
Gampaha	Gampaha	13,004	7,158	3,837	1.9
	Meerigama	622	617	366	1.7
	Minuwangoda	54	51	27	1.9
	Wathupitiwala	8,085	4,344	2,614	1.7
Hambantota	Hambantota	15,162	9,856	5,063	1.9
	Tangalle	7,266	6,827	2,598	2.6
	Tissamaharama	3,728	3,858	753	5.1
	Walasmulla	1,805	1,872	626	3
Jaffna	Jaffna	36,683	12,601	7,934	1.6
	Kilinochchi	4,628	1,940	1,414	1.4
	Mulathiv	1,180	1,912	711	2.7
	Point Pedro	1,955	2,008	524	3.8
	Tellipalai	2,421	3,188	1,394	2.3
Kalutara	Horana	8,542	8,129	3,169	2.6
	Kalutara	17,905	9,550	6,143	1.6
	Kethumathie	3,927	1,017	389	2.6
	Panadura	4,384	3,837	1,621	2.4
Kandy	Dambulla	8,545	8,254	2,429	3.4
	Kandy	59,697	27,827	19,848	1.4
	Matale	8,904	8,366	2,368	3.5
	Theldeniya	702	732	202	3.6
Karapitiya	Balapitiya	5,415	5,342	1,438	3.7
	Elpitiya	6,578	6,029	1,576	3.8
	Karapitiya	47,677	43,444	14,907	2.9
	Mahamodara	10,026	9,264	1,635	5.7
	Udugama	2,431	2,725	543	5
Kegalle	Karawanella	7,086	6,492	1,667	3.9
	Kegalle	15,668	11,868	3,729	3.2
	Mawanella	4,918	5,050	1,542	3.3
	Warakapola	3,960	3,955	1,033	3.8
Kurunegala	Dambadeniya	4,872	4,787	1,323	3.6
	Galgamuwa	2,043	1,990	731	2.7

Cluster	Blood Bank	Requests	Cross Matches	Issues	C:I Ratio
	Kuliyapitiya	8,400	8,904	2,642	3.4
	Kurunegala	66,022	44,385	30,378	1.5
	Nikaweratiya	9,073	8,720	2,634	3.3
Matara	Deniyaya	821	758	395	1.9
	Kamburugamuwa	0	0	0	0
	Kamburupitiya	4,420	4,629	1,074	4.3
	Matara	18,688	10,912	6,593	1.7
	New DGH - Kamburugamuwa	210	264	80	3.3
Monaragala	Bibila	3,538	3,875	1,353	2.9
	Monaragala	13,122	13,305	5,267	2.5
	Wellawaya	596	437	442	0.99
Nuwara Eliya	Dikkoya	2,762	4,802	1,864	2.6
	Nuwara Eliya	7,181	6,390	2,294	2.8
	Rikillagaskada	2,306	3630	896	4.1
Peradeniya	Gampola	6066	6004	2013	3
	Nawalapitiya	8,675	8,360	1,516	5.5
	Peradeniya	23,807	11,160	8,770	1.3
Polonnaruwa	Dehiattakandiya	2,604	2,638	903	2.9
	Medirigiriya	1,858	1,763	821	2.1
	Polonnaruwa	23,366	12,010	8,909	1.3
Ratnapura	Balangoda	7,812	8,015	1,510	5.3
	Embilipitiya	12,385	12,463	4,101	3
	Kahawatta	4,536	4,516	1,058	4.3
	Ratnapura	25,327	12,040	9,597	1.3
Trincomalee	Kantale	927	719	363	2
	Kinniya	1,344	1,494	271	5.5
	Muththur	1,266	1,492	390	3.8
	Trincomalee	8,211	5,069	3,292	1.5
Vavniya	Chettikulam	-	-	-	-
	Mannar	3,317	3,317	1,273	2.6
	Vavniya	7,280	5,831	3,262	1.8
Total		1,057,648	749,503	376,576	1.9

Table 11: Distribution of Red Blood Cell Requests, Cross Matches And Issues

10 STATISTICS OF OTHER BLOOD COMPONENT USAGE

Cluster	Blood Bank	Platelets	AP	FFP	Cryo	CSP/ Plasma	Buffy coat
Ampara	Akkarepattu	54	0	262	90	0	0
	Ampara	1,186	21	1,555	268	1	0
	Kalmunai North	109	0	226	81	0	0
	Kalmunai South	207	0	479	210	0	0
	Mahaoya	6	0	20	0	0	0
	Pothuvil	0	0	7	10	0	0
	Sammanthurai	32	4	109	10	0	0
Anuradhapura	Anuradhapura	5,340	218.6	4,820	1,230	32	0
	Medawachchiya	-	-	-	-	-	-
	Padaviya	0	0	10	0	0	0
	Thambuttegama	155	0	175	59	0	0
Badulla	Badulla	3,459	46	3,454	544	0	0
	Diyatalawa	516	0	410	118	0	0
	Mahiyanganaya	455	0	1,037	70	13	0
	Welimada	29	29	116	40	0	0
Batticaloa	Batticaloa	1,998	195	2,668	479	21	0
	Kalawanchikudi	0	0	0	0	0	0
	Kattankudy	0	0	0	0	0	0
	Valachchenai	0	0	0	0	0	0
Chilaw	Chilaw	859	0	2,510	525	190	0
	Marawila	224	0	1,066	52	0	0
	Puttlam	440	0	1,234	384	80	0
CIM	Apeksha	47,891	2,701	5,413	926	0	642
	Awissawella	331	0	708	576	4	0
	Homagama	202	0	162	10	2	0
CNTH	CNTH	2,884	98	3,693	4,323	30	90
	Kiribathgoda	-	-	-	-	-	-
	Negambo	516	14	1,453	531	0	0
	Welisara	240	0	353	300	28	0
Colombo	Accident Service	4,151	0	4,429	1,895	59	0
	Army Hospital	275	160	466	255	0	0
	CEBH Mulleriyawa	178	0	124	30	0	4
	CSHW	282	0	847	863	0	0
	CSTH	2,773	16	4,449	909	50	0
	DMH	323	26	544	583	0	0
	IDH-Angoda	578	16	268	386	0	0
	KDU	818	6	680	149	39	0

Cluster	Blood Banks	Platelets	AP	FFP	Cryo	CSP/ Plasma	Buffy coat
	LRH	2,592	84	2,777	1,924	191	307
	NBC	7,790	276	1,572	1,057	63	79
	NFTH	51	18	96	0	9	0
	NHSL	8,668	1,480	10,036	4,379	79	63
	NINDT - Maligawaththa	102	17	116	55	20	0
	SJGH	2,897	0	2,609	925	260	0
Gampaha	Gampaha	989	6	1,830	401	15	0
	Meerigama	36	0	118	0	0	0
	Minuwangoda	0	0	0	0	0	0
	Wathupitiwala	587	0	735	265	51	0
Hambantota	Hambantota	1,045	0	1,343	203	51	0
	Tangalle	291	0	559	290	0	0
	Tissamaharama	20	0	168	40	32	0
	Walasmulla	95	0	15	40	0	0
Jaffna	Jaffna	2,573	182	3,473	887	11	0
	Kilinochchi	250	17	635	82	0	0
	Mulathiv	0	2	175	48	0	0
	Point Pedro	45	0	265	40	0	0
	Tellippalai	1,277	166	167	20	0	0
Kalutara	Horana	584	0	1,011	276	27	0
	Kalutara	1,957	0	5,413	250	41	0
	Kethumathie	24	0	74	50	0	0
	Panadura	175	0	757	123	10	
Kandy	Dambulla	333	6	489	140	0	0
	Kandy	9928	3416	8626	3519	391	28
	Matale	423	0	769	378	5	0
	Theldeniya	64	7	45	5	0	0
Karapitiya	Balapitiya	125	0	536	149	0	0
	Elpitiya	116	0	385	90	0	0
	Karapitiya	8445	107	12587	2401	198	0
	Mahamodara	374	0	401	803	0	0
	Udugama	0	0	115	8	0	0
Kegalle	Karawanella	309	6	383	567	0	0
	Kegalle	1162	0	2134	201	1	0
	Mawanella	348	0	645	17	29	6
	Warakapola	42	0	208	70	63	0
Kurunegala	Dambadeniya	175	0	274	441	0	0
	Galgamuwa	12	0	27	20	0	0
	Kuliyapitiya	425	0	2366	121	0	0

Cluster	Blood Banks	Platelets	AP	FFP	Cryo	CSP/ Plasma	Buffy coat
	Kurunegala	6197	0	4935	1498	14	8
	Nikaweratiya	161	0	395	364	0	0
Matara	Deniyaya	0	0	4	0	0	0
	Kamburugamuwa	--	-	-	-	-	-
	Kamburupitiya	192	0	316	118	12	0
	Matara	2234	3	2527	1612	6	15
	New DGH - Kamburupitiya	91	0	35	60	0	0
Monaragala	Bibila	66	0	234	20	0	0
	Monaragala	604	0	798	871	6	10
	Wellawaya	29	0	22	0	0	0
Nuwara Eliya	Dikkoya	320	0	557	85	0	0
	Nuwara Eliya	498	0	884	145	32	0
	Rikillagaskada	186	0	133	0	0	0
Peradeniya	Gampola	644	0	719	126	0	0
	Nawalapitiya	394	22	522	161	150	0
	Peradeniya	4524	50	5154	1257	58	0
Polonnaruwa	Dehiattakandiya	74	0	42	0	0	0
	Medirigiriya	13	0	184	0	0	0
	Polonnaruwa	2219	16	1175	450	3	0
Ratnapura	Balangoda	255	0	423	14	0	0
	Embilipitiya	743	0	962	848	393	0
	Kahawatta	15	0	55	50	0	0
	Ratnapura	3639	113	4379	1393	187	0
Trincomalee	Kantale	38	0	142	10	0	0
	Kinniya	0	0	25	10	0	0
	Muththur	0	0	14	0	0	0
	Trincomalee	794	6	843	543	0	0
Vavniya	Chettikulam	-	-	-	-	-	-
	Mannar	303	2	535	154	0	0
	Vavniya	332	0	1041	361	0	0
Total		155,405	9,552.6	134,736	46,341	3,117	1,244

Table 12: Statistics of Other Blood Component Issues

	RCC	FFP	PC	AP	Cryo	CSP/ Plasma	Buffy Coat
2019	406,200	148,562	147,627.8		47,776	5,746	1,263
2020	375,848	146,470	155,363	10,215.5	44,454	3,872	662
2021	376,576	134,736	155,405	9,552.6	46,341	3,117	1,244

Table 13: Comparison of Blood Component Issues In 2019, 2020 And 2021

11 SCREENING OF DONATED BLOOD FOR TRANSFUSION TRANSMITTED INFECTIONS

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total Number Of Units	330200	351605	380808	380367	395500	414175	423668	450640	444515	397833	385054
HIV Screening Positives	512 (0.155%)	529 (0.150%)	625 (0.164%)	648 (0.170%)	646 (0.163%)	696 (0.168%)	764 (0.180%)	797 (0.177%)	694 (0.156%)	533 (0.134%)	422 (0.109%)
HIV Confirmed Positives	7 (0.002%)	16 (0.004%)	16 (0.004%)	26 (0.006%)	21 (0.005%)	25 (0.006%)	28 (0.0066%)	29 (0.006%)	44 (0.009%)	34 (0.008%)	56 (0.014%)
Hepatitis B Repeat Reactives	411 (0.124%)	405 (0.115%)	273 (0.071%)	394 (0.103%)	409 (0.103%)	505 (0.122%)	618 (0.146%)	510 (0.113%)	528 (0.118%)	252 (0.063%)	751 (0.195%)
Hepatitis C Repeat Reactives	1033 (0.313%)	1025 (0.291%)	953 (0.250%)	657 (0.172%)	800 (0.202%)	847 (0.204%)	905 (0.214%)	898 (0.199%)	804 (0.181%)	613 (0.154%)	495 (0.128%)
VDRL Positives	593 (0.179%)	892 (0.253%)	1016 (0.266%)	1265 (0.332%)	1125 (0.284%)	1027 (0.247%)	1411 (0.333%)	1577 (0.349%)	1344 (0.302%)	960 (0.241%)	1496 (0.388%)
TPPA/TPHA Positives	122 (0.036%)	170 (0.048%)	180 (0.047%)	152 (0.039%)	175 (0.044%)	152 (0.036%)	152 (0.036%)	107 (0.024%)	119 (0.026%)	96 (0.024%)	153 (0.039%)
MP Positives	0	0	0	0	0	0	0	0	0	0	01

Table 14: Prevalence of TTI markers and comparison with previous years

(Scr.+ve) - Screening positive; (conf.+ve) – confirmed positive; (rpt.+ve) – repeat positive; MP- Malaria parasites; VDRL – Venereal Disease Research Laboratory ; TPPA- Treponema pallidum particle agglutination assays)

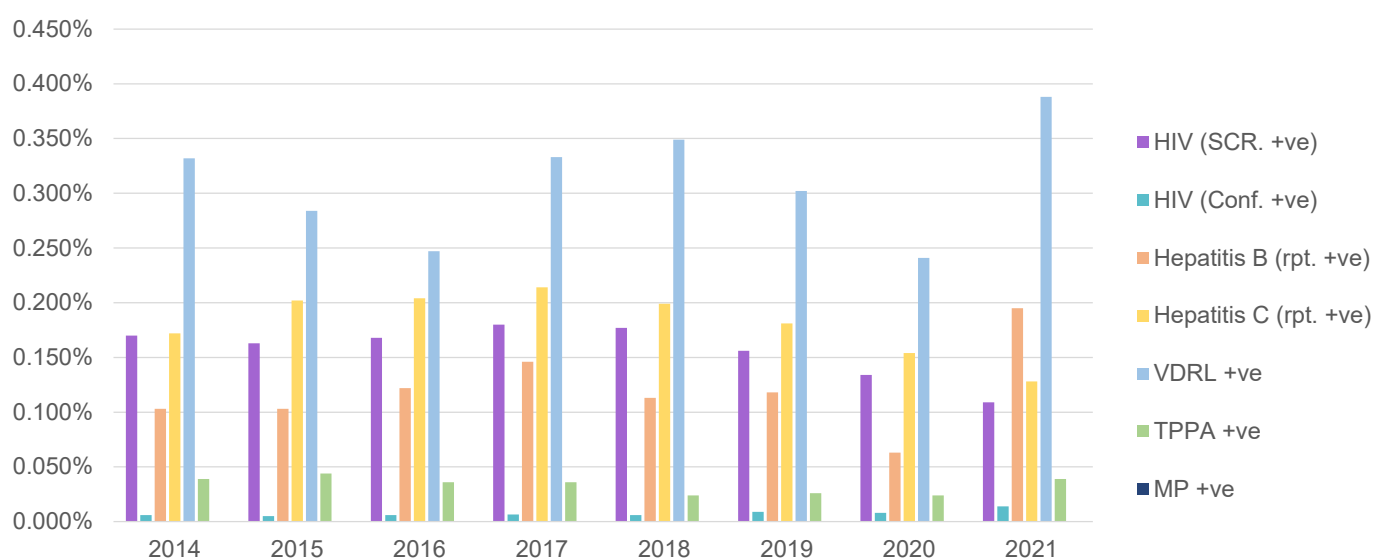


Figure 14: Prevalence of TTI and Comparison with Previous Years

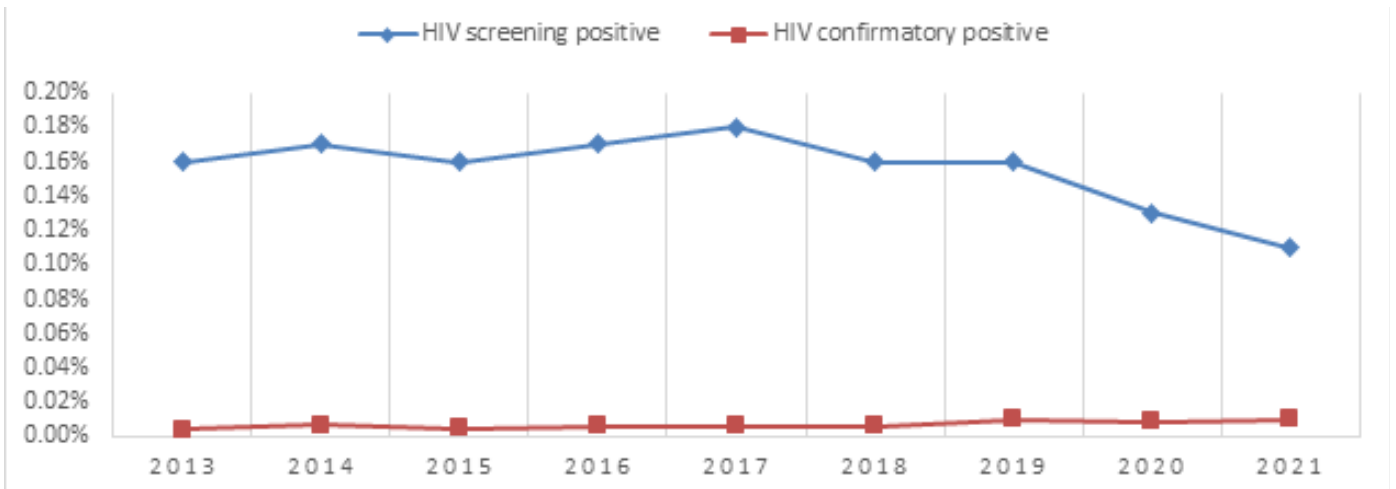


Figure 15: HIV Screening Positive And Confirmed Positive Prevalence In Total Collected Blood

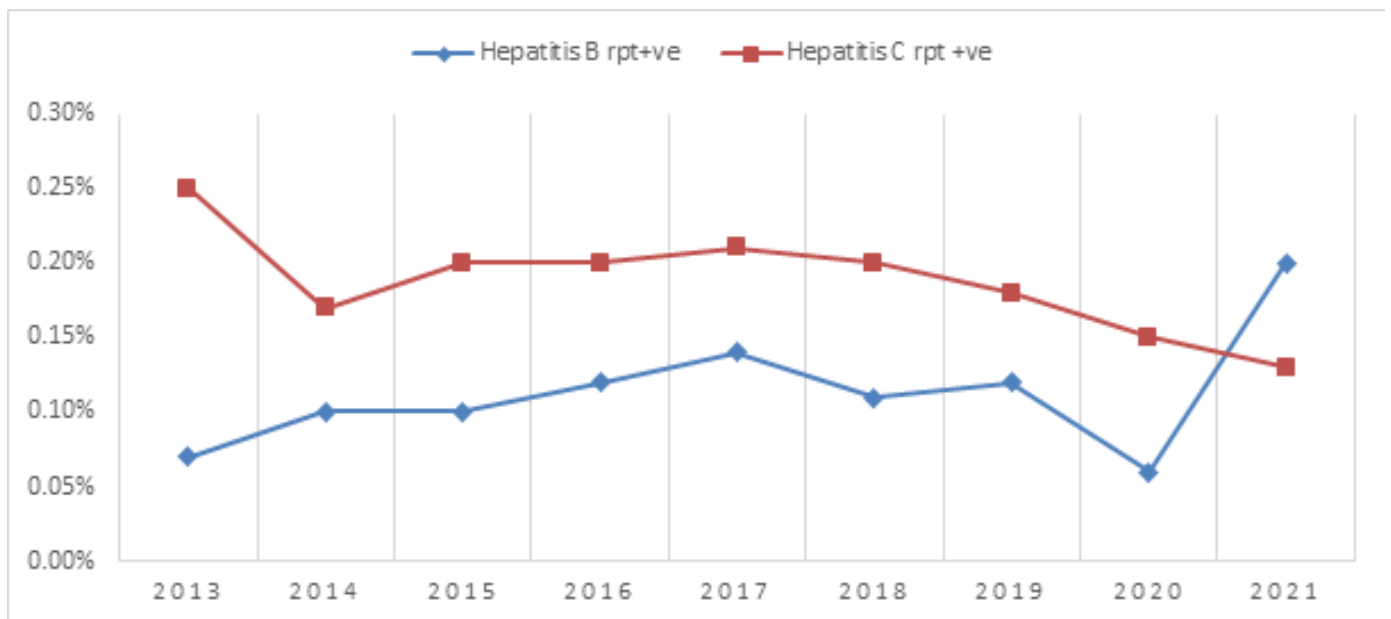


Figure 16: Hepatitis Prevalence In Donated Blood

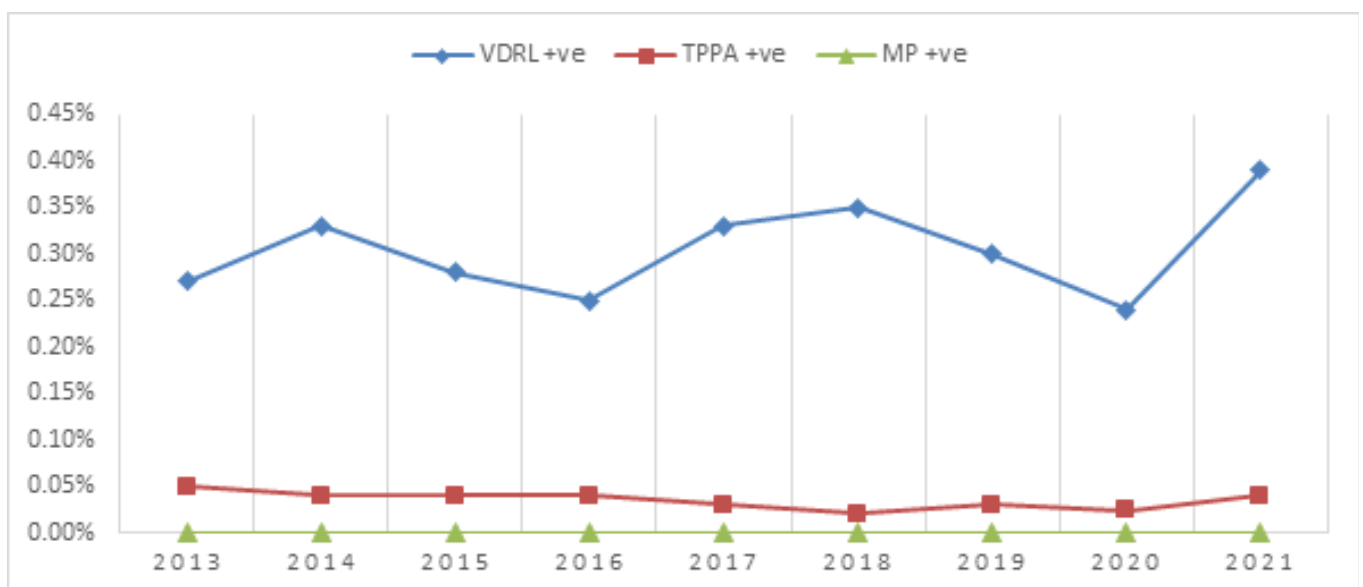


Figure 17: Comparison Of VDRL, TPPA And MP Positive Prevalence

12 RED CELL CONCENTRATE (RCC) DISCARDS

Cluster	Blood Bank	Scr +ve	Out Dated	Other	Total	RCC Discard Rate
Ampara	Akkarepattu	0	0	1	7	0
	Ampara	203	180	90	446	2.63
	Kalmunai North	2	11	2	15	1.47
	Kalmunai South	0	57	11	61	3.59
	Mahaoya	0	0	0	0	0.00
	Pothuvil	0	0	0	0	0.00
	Sammanthurai	1	6	1	8	2.41
Anuradhapura	Anuradhapura	259	139	58	456	0.62
	Medawachchiya	-	-	-	-	-
	Padaviya	1	1	4	6	0.23
	Thambuttegama	0	0	0	0	0.00
Badulla	Badulla	200	179	7	386	2.19
	Diyatalawa	27	383	65	475	20.48
	Mahiyanganaya	22	11	15	48	0.34
	Welimada	0	2	3	5	0.18
Batticaloa	Batticaloa	36	128	70	234	1.5
	Kalawanchikudi	0	0	0	0	0
	Kattankudy	0	0	0	0	0
	Valachchenai	0	0	0	0	0
Chilaw	Chilaw	76	46	52	174	0.72
	Marawila	0	34	74	108	0.99
	Puttlam	19	5	2	26	0.11
CIM	Apeksha	162	126	165	453	0.75
	Awissawella	13	30	10	53	1.23
	Homagama	0	31	1	32	5.63
CNTH	CNTH	226	253	34	513	1.30
	Kiribathgoda	-	-	-	-	-
	Negambo	55	133	40	228	3.54
	Welisara	0	286	0	286	24.05
Colombo	Accident Service	0	213	0	213	3.29
	Army Hospital	0	43	0	43	3.62
	CEBH	0	184	0	184	22.28
	CSHW	0	12	8	20	0.59
	CSTH	0	3	11	14	0.03
	DMH	0	2	8	10	0.14

Cluster	Blood Bank	Scr +ve	Out Dated	Other	Total	RCC Discard Rate
	IDH-Angoda	0	4	1	5	0.65
	KDU	0	68	2	70	3.66
	LRH	0	18	1	19	0.41
	NBC	518	203	107	828	1.63
	NFTH	0	327	2	329	26.52
	NHSL	0	530	115	645	2.68
	NINDT	0	20	31	51	1.85
	SJGH	20	21	7	48	0.44
Gampaha	Gampaha	71	24	18	113	0.61
	Meerigama	5	15	5	25	3.84
	Minuwangoda	0	0	1	1	0.00
	Wathupitiwala	10	92	8	110	3.38
Hambantota	Hambantota	174	9	28	211	0.17
	Tangalle	0	0	0	0	0.00
	Tissamaharama	0	3	0	3	0.40
	Walasmulla	0	3	0	3	0.48
Jaffna	Jaffna	121	13	35	169	0.16
	Kilinochchi	13	6	0	19	0.42
	Mulathiv	0	8	0	8	1.11
	Point Pedro	0	5	2	7	0.94
	Tellippalai	5	12	1	18	0.85
Kalutara	Horana	0	165	27	192	4.91
	Kalutara	218	241	103	562	3.59
	Kethumathie	9	36	30	75	7.76
	Panadura	2	80	18	100	4.65
Kandy	Dambulla	13	247	28	288	9.09
	Kandy	0	196	5	201	0.98
	Matale	19	337	40	396	12.19
	Theldeniya	0	3	0	3	1.46
Karapitiya	Balapitiya	12	113	24	149	7.12
	Elpitiya	5	164	19	188	9.30
	Karapitiya	216	873	40	1129	5.44
	Mahamodara	3	94	3	100	5.42
	Udugama	0	3	1	4	0.55
Kegalle	Karawanella	0	15	0	15	0.89
	Kegalle	8	12	39	62	0.40
	Mawanella	0	9	11	20	0.58
	Warakapola	0	18	5	23	1.70

Cluster	Blood Bank	Scr +ve	Out Dated	Other	Total	RCC Discard Rate
Kurunegala	Dambadeniya	15	6	25	46	0.44
	Galgamuwa	0	1	0	1	0.14
	Kuliyapitiya	44	26	25	95	0.95
	Kurunegala	227	62	69	358	0.20
	Nikaweratiya	45	50	8	103	1.83
Matara	Deniyaya	0	0	1	1	0
	Kamburugamuwa	307	340	22	669	0
	Kamburupitiya	0	9	1	10	0.83
	Matara	0	285	0	285	4.14
	New DGH - Kamburugamuwa	0	0	0	0	0
Monaragala	Bibila	0	59	2	61	4.17
	Monaragala	84	287	10	381	5.08
	Wellawaya	0	77	1	78	14.81
Nuwara Eliya	Dikkoya	0	26	4	30	1.37
	Nuwara Eliya	0	21	6	27	0.90
	Rikillagaskada	1	37	5	43	3.94
Peradeniya	Gampola	7	154	16	177	7.03
	Nawalapitiya	4	85	21	110	5.23
	Peradeniya	3	54	126	183	0.60
Polonnaruwa	Dehiattakandiya	0	0	7	7	0
	Medirigiriya	0	0	5	5	0
	Polonnaruwa	111	0	18	129	0
Ratnapura	Balangoda	0	227	29	256	12.85
	Embilipitiya	0	31	21	52	0.75
	Kahawatta	0	13	6	19	1.21
	Ratnapura	282	179	15	476	1.78
Trincomalee	Kantale	0	0	0	0	0.00
	Kinniya	0	0	2	2	0.00
	Muththur	0	0	0	0	0.00
	Trincomalee	43	118	56	217	3.36
Vavniya	Chettikulam	-	-	-	-	-
	Mannar	1	18	1	20	1.39
	Vavniya	10	81	27	118	2.40
Total		3, 928	8, 734	1, 991	14, 653	2.23

Table 15: RCC Discards by Blood Banks

RCC Discards

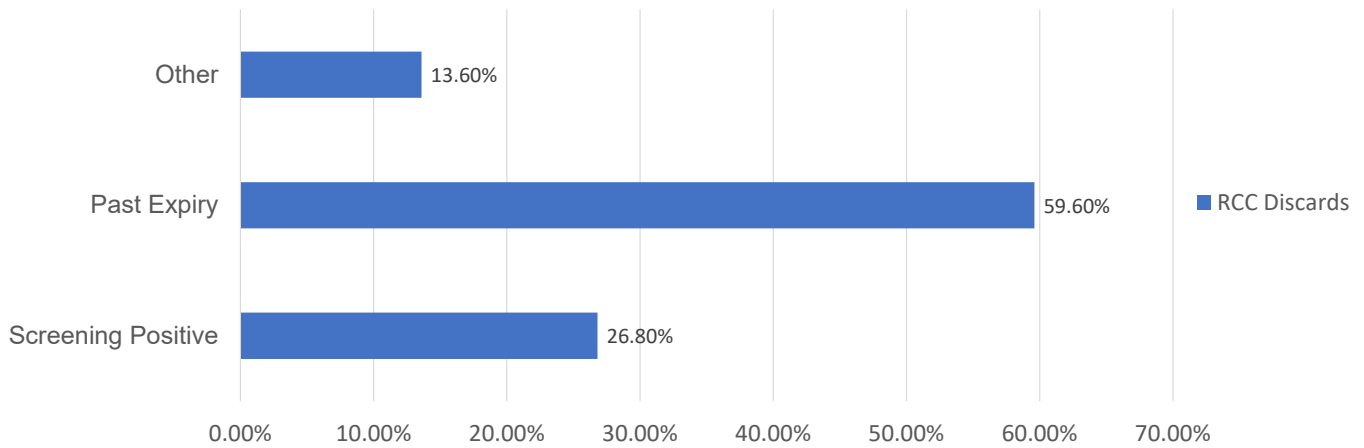


Figure 18: Distribution of RCC discards in percentage

Year	Passed Expiry Discards	Screening Positives	Other	Total Discards	RCC Discard Rate
2015	20,124	3,930	4,350	28,404	5.14
2016	18,545	3,797	3,711	26,052	4.53
2017	18,153	3,966	3,283	25,402	4.34
2018	23,617	3,586	2,192	30,341	5.34
2019	32,838	3,160	1,965	39,065	7.40
2020	21,307	2,250	1,605	26,043	5.27
2021	8,734	3,928	1,991	14,653	2.23

Table 16: Comparison of Rcc Discards With Previous Years

RCC Discards

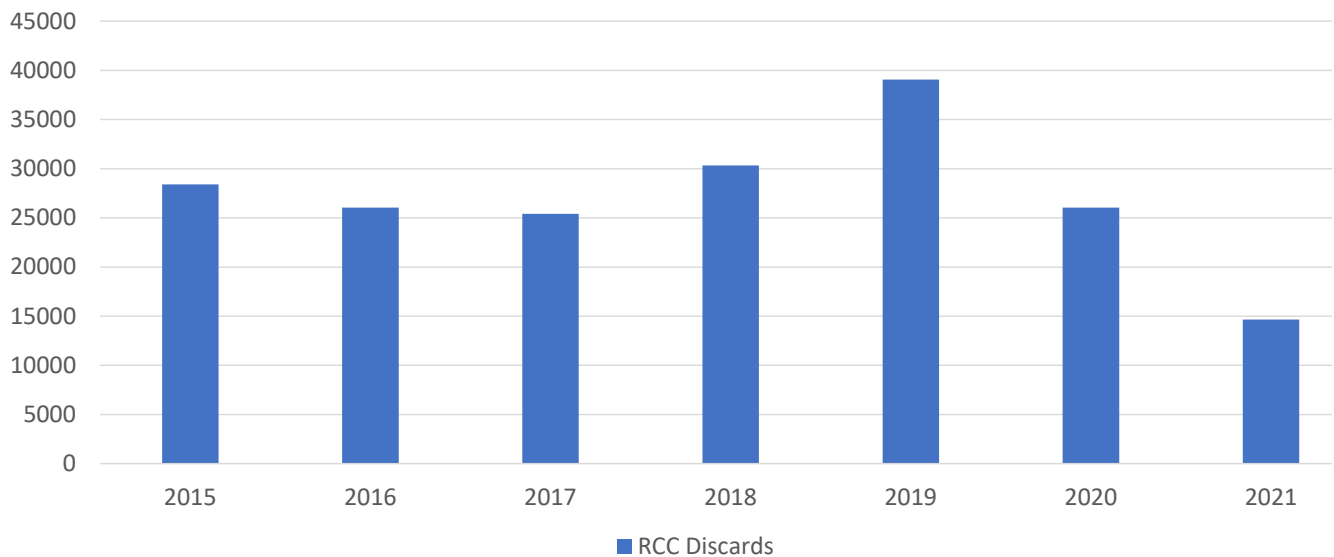


Figure 19: Comparison of Total Rcc Discards With Previous Years

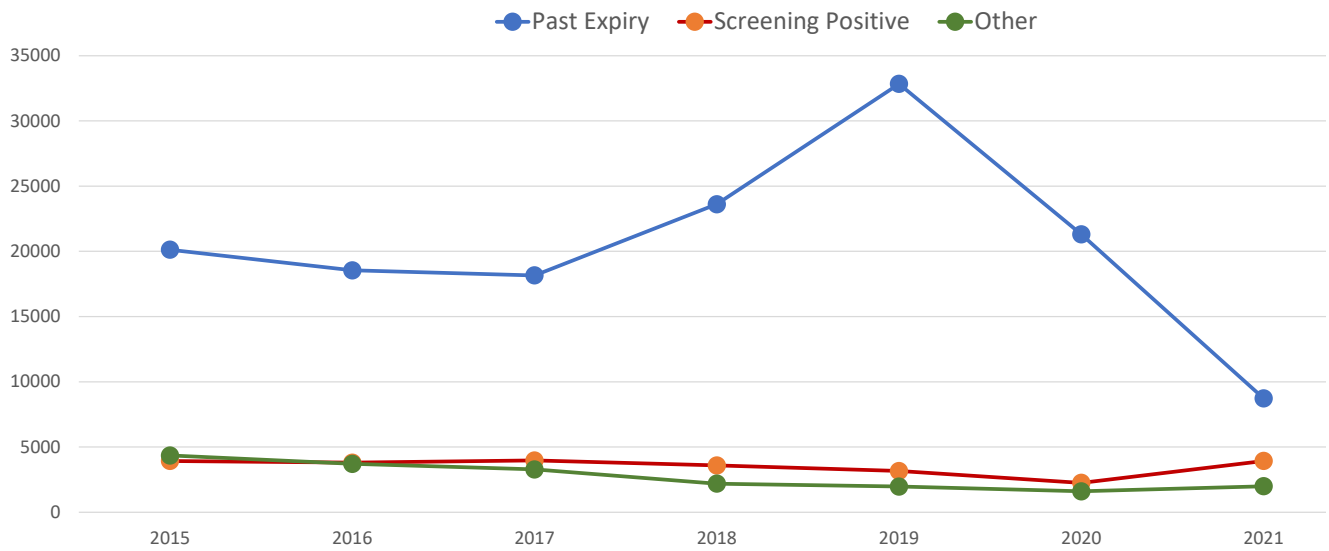


Figure 20: Comparison of RCC Discards with Previous Years

Period	Total Donations	RCC Issues	Out Dated, RCC	RCC Discard Rate
January	29,083	31,485	1,068	3.28
February	30,200	28,794	722	2.45
March	35,865	34,388	476	1.37
April	31,035	32,624	513	1.55
May	35,692	26,893	1,109	3.96
June	26,291	30,411	501	1.62
July	29,143	32,219	1,532	4.54
August	30,803	26,945	417	1.52
September	37,380	30,334	431	1.40
October	31,810	33,819	806	2.33
November	33,670	32,597	687	2.06
December	34,082	36,067	472	1.29
Total	385,054	376,576	8,734	2.23

Table 17: Monthly Comparison of Total Donations, RCC issues with RCC discards.

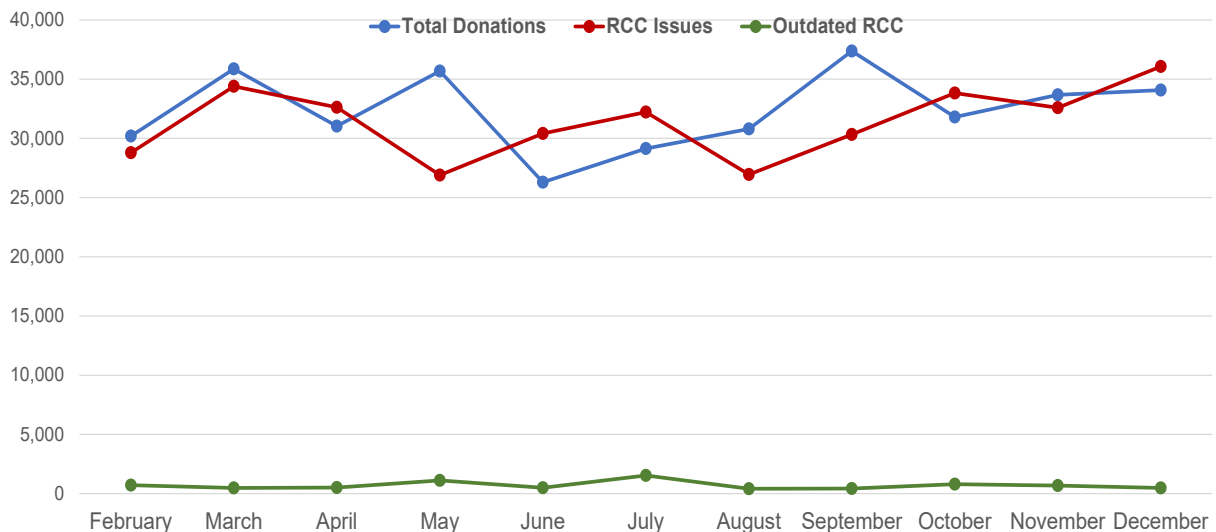


Figure 21: Monthly Comparison of Collection, Issues with RCC Discards

Period	Total PC Production	Total PC Issues	Out Dated PC	Discard Percentage
January	21,526	11,912	8,200	39.4
February	21,272	10,934	7,917	40.3
March	23,835	13,652	8,775	37.9
April	21,129	13,288	8,432	37.4
May	23,695	11,856	8,758	40.7
June	17,411	13,464	6,052	30.3
July	18,361	13,135	6,128	30.5
August	19,022	11,470	7,384	37.7
September	21,273	14,302	6,145	27.8
October	19,476	13,376	6,917	33.4
November	21,221	13,178	7,488	35.4
December	22,834	14,838	7,069	31.5
Total	251,055	155,405	89,265	35.2

Table 18: Monthly Comparison of Total PC Production, PC Issues with PC Discards.

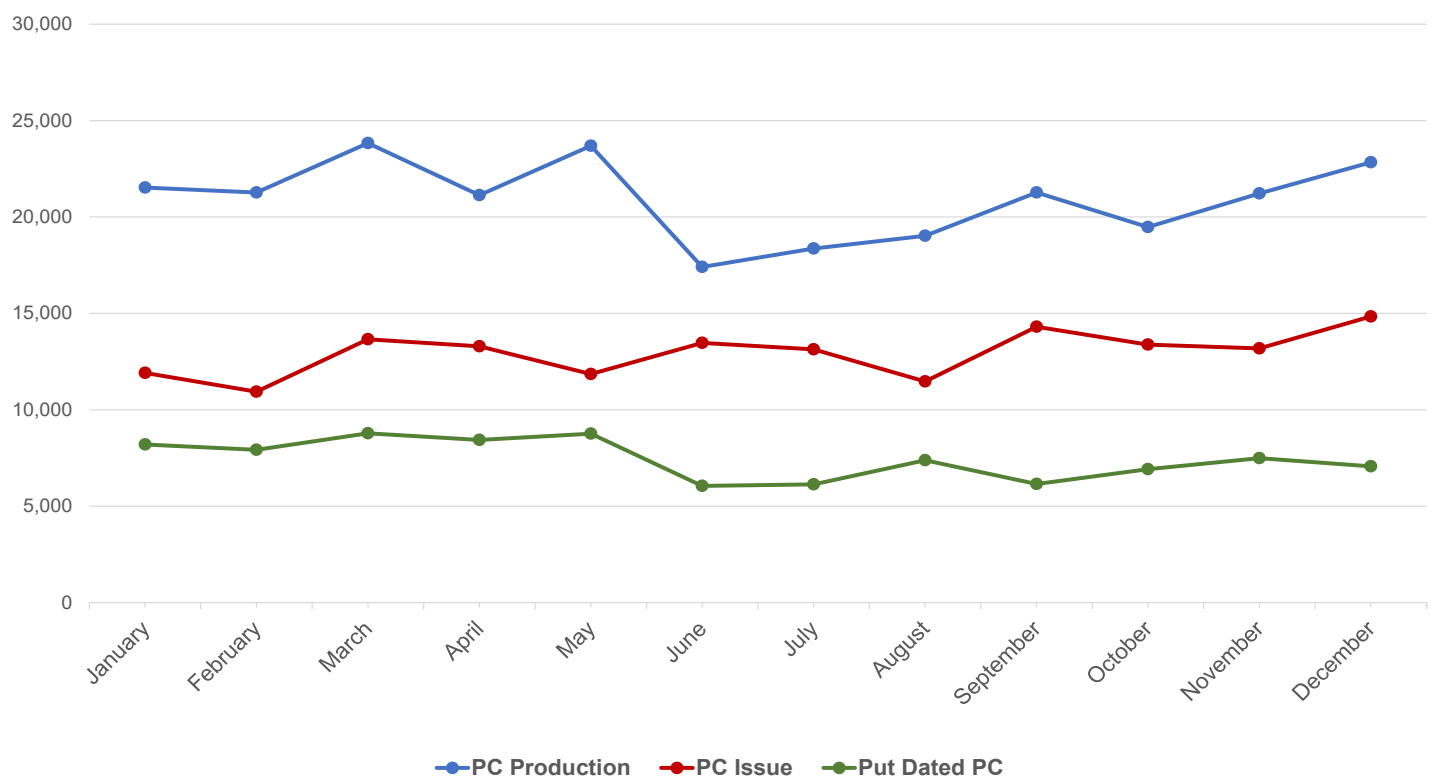


Figure 22: Monthly Comparison of Platelet Production, Issues And Discards

13

BLOOD GROUPING DONE AT ALL BLOOD BANKS

Cluster	Blood Bank	Donor Grouping	Repeat	In ward	ANC	OPD/ Clinics	Pvt. Sect.	Other	Total
Ampara	Akkarepattu	609	1073	3219	1275	174	0	23	6373
	Ampara	10599	8760	11821	2141	460	0	2097	35878
	Kalmunai North	5	2076	2034	1191	270	4	0	5580
	Kalmunai South	766	1917	1236	1558	359	639	751	7226
	Mahaoya	666	1471	901	591	58	0	0	3687
	Pothuvil	0	532	135	431	73	0	0	1171
	Sammanthurai	81	322	1239	666	131	2	0	2441
Anuradhapura	Anuradhapura	26537	30446	32685	5621	4654	481	398	100822
	Medawachchiya	-	-	-	-	-	-	-	-
	Padaviya	940	65	287	171	44	0	9	1516
	Thambuttegama	0	1437	3651	258	41	0	466	5853
Badulla	Badulla	12593	9027	12669	2121	610	14	2676	39710
	Diyatalawa	1467	4431	5053	436	0	0	0	11387
	Mahiyanganaya	961	7776	9465	1132	500	0	531	20365
	Welimada	175	4593	2882	33	158	0	0	7841
Batticaloa	Batticaloa	5031	709	18919	2256	656	0	931	28502
	Kalawanchikudi	-	-	-	-	-	-	-	-
	Kattankudy	95	71	340	24	76	0	14	620
	Valachchenai	37	802	183	1357	18	0	583	2980
Chilaw	Chilaw	12530	6503	12160	3030	576	368	0	35167
	Marawila	296	4077	10568	663	219	384	0	16207
	Puttlam	2087	6338	7414	2533	1179	234	2006	21791
CIM	Apeksha	18493	21322	19031	0	348	23	295	59512
	Awissawella	1179	2554	6900	1757	6594	18	0	19002
	Homagama	63	610	989	520	37	0	2	2221
CNTH	CNTH	18243	21421	30251	273	2023	10	299	72520
	Kiribathgoda	-	-	-	-	-	-	-	-
	Negambo	3784	3794	7465	1338	1422	1587	0	19390
	Welisara	0	1299	2885	0	67	0	204	4455
Colombo	Accident Service	0	6624	13435	0	0	0	0	20059
	Army Hospital	9	1242	1601	75	134	0	313	3374
	CEBH	0	961	1284	103	22	0	39	2409
	CSHW	0	2465	16822	7438	0	0	0	26725
	CSTH	225	8041	17589	237	289	0	0	26381
	DMH	0	3535	6485	7335	0	1307	9292	27954

Cluster	Blood Bank	Donor Grouping	Repeat	In ward	ANC	OPD/ Clinics	Pvt. Sect.	Other	Total
	IDH-Angoda	0	808	1223	0	25	0	1084	3140
	KDU	0	1884	5017	305	60	456	0	7722
	LRH	0	5736	8354	0	513	0	10	14613
	NBC	53567	11013	843	0	0	7039	0	72462
	NFTH	0	1182	1058	46	113	434	91	2924
	NHSL	0	17419	30568	0	331	0	0	48318
	NINDT	0	1241	967	0	39	0	0	2247
	SJGH	2251	3426	18250	3382	1499	0	2468	31276
Gampaha	Gampaha	5199	5944	10348	235	345	12	0	22083
	Meerigama	279	779	580	1	68	81	0	1788
	Minuwangoda	0	63	36	3	8	0	18	128
	Wathupitiwala	2492	2961	6983	24	184	23	0	12667
Hambantota	Hambantota	9410	8872	12788	872	451	54	548	32995
	Tangalle	1317	2237	6785	1100	447	729	776	13391
	Tissamaharama	0	1077	2744	764	99	50	380	5114
	Walasmulla	0	884	1382	422	96	0	0	2784
Jaffna	Jaffna	11533	9221	18457	4290	0	49	4254	47804
	Kilinochchi	0	1434	895	1110	251	0	376	4066
	Mulathiv	140	1912	533	1140	317	65	273	4380
	Point Pedro	480	766	1880	1730	225	0	0	5081
	Tellippalai	2315	0	176	555	104	0	257	3407
Kalutara	Horana	511	2884	8668	1610	89	0	111	13873
	Kalutara	10016	4304	12718	5612	799	79	834	34362
	Kethumathie	1139	1420	3786	178	2330	65	31	8949
	Panadura	563	2105	2154	0	156	0	0	4978
Kandy	Dambulla	2156	724	8254	127	398	178	719	12556
	Kandy	19014	731	27571	2208	963	0	0	50487
	Matale	2595	545	9510	12	2272	1	1047	15982
	Theldeniya	0	427	264	11	65	212	215	1194
Karapitiya	Balapitiya	1590	2998	4124	176	347	39	423	9697
	Elpitiya	752	2963	4841	181	445	0	348	9530
	Karapitiya	15694	15694	21804	0	932	2328	10453	66905
	Mahamodara	554	2669	15812	2961	18	1532	0	23546
	Udugama	117	2746	1611	346	141	0	477	5438
Kegalle	Karawanella	0	1773	9742	1531	62	0	0	13108
	Kegalle	7047	7664	8877	944	11658	104	2527	38821
	Mawanella	205	1797	4010	733	114	72	653	7584
	Warakapola	0	707	5493	390	0	0	2060	8650

Cluster	Blood Bank	Donor Grouping	Repeat	In ward	ANC	OPD/ Clinics	Pvt. Sect.	Other	Total
Kurunegala	Dambadeniya	1208	739	4323	433	102	0	0	6805
	Galgamuwa	0	824	1102	13	145	0	445	2529
	Kuliyapitiya	1289	1525	7105	941	232	218	183	11493
	Kurunegala	28379	572	44104	4686	766	5	5814	84326
	Nikaweratiya	334	477	6394	909	637	0	0	8751
Matara	Deniyaya	0	673	575	19	50	0	0	1317
	Kamburugamuwa	18395	239	0	0	0	0	3	18637
	Kamburupitiya	0	1683	3324	169	247	0	1038	6461
	Matara	1602	7565	12813	6888	566	0	6051	35485
Monaragala	Bibila	396	1263	2720	441	70	0	0	4890
	Monaragala	7296	6585	7416	2742	1087	0	0	25126
	Wellawaya	16	402	30	1073	73	0	198	1792
Nuwara Eliya	Dikkoya	0	1886	382	281	145	3	0	2697
	Nuwara Eliya	10716	10716	7008	533	596	0	0	29569
	Rikillagaskada	409	588	2612	591	134	0	0	4334
Peradeniya	Gampola	94	2596	7431	770	117	23	856	11887
	Nawalapitiya	1633	1738	6390	100	143	107	546	10657
	Peradeniya	14127	4706	1113	1330	86	0	0	21362
Polonnaruwa	Dehiattakandiya	602	898	1933	615	75	0	308	4431
	Medirigiriya	246	1171	1457	11	3	0	0	2888
	Polonnaruwa	10193	11174	11535	7425	377	253	0	40957
Ratnapura	Balangoda	0	2592	6486	1702	697	0	0	11477
	Embilipitiya	3188	4734	7038	2194	1008	65	167	18394
	Kahawatta	22	1762	4594	76	98	0	659	7211
	Ratnapura	16142	10171	20517	3443	583	29	2733	53618
Trincomalee	Kantale	0	464	388	3	110	0	293	1258
	Kinniya	0	0	1377	1239	170	0	256	3042
	Muththur	0	0	57	471	100	0	227	855
	Trincomalee	3855	4530	7599	1634	341	233	0	18192
Vavniya	Chettikulam	-	-	-	-	-	-	-	-
	Mannar	98	0	689	1162	192	0	2524	4665
	Vavniya	2750	1141	2297	2794	372	43	0	9397
Total		3,91,397	3,81,194	7,21,636	1,24,251	56,478	19,652	74,455	17,69,063

Table 19: Number of Blood Grouping Done at Each Blood Bank

14

NUMBER OF SPECIAL PROCEDURES DONE AT BLOOD BANKS

Cluster	Blood Bank	Therapeutic Phlebotomy	Therapeutic Leukophoresis	Adult Red Cell Exchanges	TPE-Cycles Manual	TPE-Cycles
Ampara	Akkarepattu	0	0	0	0	0
	Ampara	8	0	5	0	89
	Kalmunai North	0	0	0	0	0
	Kalmunai South	0	0	0	0	0
	Mahaoya	0	0	0	0	0
	Pothuvil	0	0	0	0	0
	Sammanthurai	0	0	0	0	0
Anuradhapura	Anuradhapura	0	0	9	8	197
	Medawachchiya	-	-	-	-	-
	Padaviya	0	0	0	0	0
	Thambuttegama	0	0	0	0	0
Badulla	Badulla	228	0	0	0	138
	Diyatalawa	0	0	13	0	0
	Mahiyanganaya	0	0	0	0	0
	Welimada	4	0	0	0	0
Batticaloa	Batticaloa	0	0	0	0	43
	Kalawanchikudi	0	0	0	0	0
	Kattankudy	0	0	0	0	0
	Valachchenai	0	0	0	0	0
Chilaw	Chilaw	0	0	0	0	0
	Marawila	0	0	0	0	0
	Puttlam	0	0	0	0	0
CIM	Apeksha	0	0	0	0	0
	Awissawella	0	0	0	0	0
	Homagama	0	0	0	0	10
CNTH	CNTH	271	3	0	0	241
	Kiribathgoda	-	-	-	-	-
	Negambo	97	0	0	0	0
	Welisara	0	0	0	0	0
Colombo	Accident Service	0	0	0	0	0
	Army Hospital	2	0	0	5	12
	CEBH	8	0	0	0	0
	CSHW	0	0	0	0	12
	CSTH	83	1	0	0	194
	DMH	0	0	0	0	0

Cluster	Blood Bank	Therapeutic Phlebotomy	Therapeutic Leukapheresis	Adult Red Cell Exchanges	TPE-Cycles Manual	TPE-Cycles
	IDH - Angoda	24	0	0	0	0
	KDU	15	0	0	0	31
	LRH	0	0	0	0	524
	NBC	0	0	0	0	0
	NFTH	34	0	0	0	0
	NHSL	0	3	0	0	1108
	NINDT	7	0	0	0	22
	SJGH	134	16	0	23	139
Gampaha	Gampaha	69	0	0	0	27
	Meerigama	0	0	0	0	0
	Minuwangoda	1	0	0	0	0
	Wathupitiwala	62	0	0	0	0
Hambantota	Hambantota	80	0	0	0	16
	Tangalle	0	0	0	0	0
	Tissamaharama	13	0	0	0	0
	Walasmulla	0	0	0	0	0
Jaffna	Jaffna	198	0	1	0	225
	Kilinochchi	24	0	0	0	0
	Mulathiv	0	0	0	0	0
	Point Pedro	0	0	0	0	0
	Tellipalai	0	0	0	0	0
Kalutara	Horana	57	0	0	0	13
	Kalutara	30	0	0	0	255
	Kethumathie	0	0	0	0	0
	Panadura	63	0	0	0	43
Kandy	Dambulla	0	0	0	0	0
	Kandy	0	1	0	55	566
	Matale	60	0	0	0	0
	Theldeniya	0	0	0	0	0
Karapitiya	Balapitiya	0	0	0	0	0
	Elpitiya	31	0	0	0	0
	Karapitiya	0	2	0	25	438
	Mahamodara	0	0	0	0	0
	Udugama	0	0	0	0	0
Kegalle	Karawanella	0	0	0	0	0
	Kegalle	29	0	0	0	30
	Mawanella	0	0	0	0	0
	Warakapola	0	0	0	0	0

Cluster	Blood Bank	Therapeutic Phlebotomy	Therapeutic Leukopheresis	Adult Red Cell Exchanges	TPE-Cycles Manual	TPE-Cycles
Kurunegala	Dambadeniya	0	0	0	0	0
	Galgamuwa	0	0	0	0	0
	Kuliyapitiya	0	0	0	0	0
	Kurunegala	125	0	0	23	133
	Nikaweratiya	0	0	0	0	0
Matara	Deniyaya	0	0	0	0	0
	Kamburugamuwa		0	0	0	0
	Kamburupitiya	19	0	0	0	0
	New DGH - Kamburugamuwa	0	0	0	0	0
	Matara	129	0	0	0	104
Monaragala	Bibila	0	0	0	0	0
	Monaragala	112	0	0	0	5
	Wellawaya	0	0	0	0	0
Nuwara Eliya	Dikkoya	0	0	0	0	0
	Nuwara Eliya	0	0	0	1	5
	Rikillagaskada	0	0	0	0	0
Peradeniya	Gampola	0	0	0	0	0
	Nawalapitiya	0	0	0	0	0
	Peradeniya	0	0	0	0	118
Polonnaruwa	Dehiattakandiya	0	0	0	0	0
	Medirigiriya	0	0	0	0	0
	Polonnaruwa	94	0	16	73	0
Ratnapura	Balangoda	0	0	0	0	0
	Embilipitiya	0	0	0	0	0
	Kahawatta	0	0	0	0	0
	Ratnapura	77	1	0	7	154
Trincomalee	Kantale	0	0	0	0	0
	Kinniya	0	0	0	0	0
	Muththur	0	0	0	0	0
	Trincomalee	0	0	8	0	16
Vavniya	Chettikulam	-	-	-	-	-
	Mannar	0	0	0	0	0
	Vavniya	0	0	0	0	9
Total		2,188	27	47	220	4,828

Table 20: Number of Special Procedures Done at Each Blood Bank

Cluster	Blood Bank	CTP	MOs	NS	NOs	MLTs	PHLT	PHIs	Lab/O	Junior Staff
Ampara	Akkarepattu	0	3	0	4	0	0	0	0	3
	Ampara	1	6	0	7	2	1	2	0	7
	Kalmunai North	0	3	0	5	0	0	0	0	3
	Kalmunai South	0	3	0	4	0	0	0	0	0
	Mahaoya	0	2	0	4	0	0	0	0	1
	Pothuvil	0	2	0	3	0	0	0	0	1
	Sammanthurai	0	3	0	3	0	0	0	0	1
Anuradhapura	Anuradhapura	2	8	0	14	4	1	3	0	8
	Medawachchiya	-	-	-	-	-	-	-	-	-
	Padaviya	0	2	0	4	0	0	0	0	2
	Thambuttegama	0	3	0	2	0	0	0	0	1
Badulla	Badulla	1	6	1	10	2	0	3	2	11
	Diyatalawa	0	5	1	4	0	0	0	0	4
	Mahiyanganaya	0	3	0	4	0	0	0	0	3
	Welimada	0	4	0	3	0	0	0	0	1
Batticaloa	Batticaloa	1	6	0	11	1	0	0	0	5
	Kalawanchikudi	-	-	-	-	-	-	-	-	-
	Kattankudy	0	1	0	2	0	0	0	0	1
	Valachchenai	0	1	0	2	0	0	0	0	1
Chilaw	Chilaw	1	6	0	10	2	0	1	0	4
	Marawila	0	5	0	6	0	0	0	0	1
	Puttlam	0	4	0	6	0	0	0	0	4
CIM	Apeksha	1	12	1	18	4	0	1	2	12
	Awissawella	0	4	0	7	0	0	0	0	2
	Homagama	0	7	0	6	0	0	0	0	1
CNTH	CNTH	1	13	0	18	4	1	1	1	10
	Kiribathgoda	-	-	-	-	-	-	-	-	-
	Negambo	1	5	0	6	0	0	0	0	3
	Welisara	0	3	0	5	0	0	0	0	2
Colombo	Accident Service	0	8	0	8	0	0	0	0	5
	Army Hospital	0	3	0	6	1	0	0	0	3
	CEBH - Mulleriyawa	0	5	0	3	0	0	0	0	1
	CSHW	1	9	0	6	0	0	0	0	3
	CSTH	1	9	1	8	0	0	0	0	4
	DMH	1	7	0	8	0	0	0	0	4

Cluster	Blood Bank	CTP	MOs	NS	NOs	MLTs	PHLT	PHIs	Lab/O	Junior Staff
	IDH-Angoda	0	5	0	3	0	0	0	0	1
	KDU	1	3	0	7	0	0	0	0	3
	LRH	1	10	1	10	0	0	0	0	7
	NBC	4	36	0	37	34	4	11	7	46
	NFTH	1	1	0	4	0	0	0	0	1
	NHSL	1	16	0	16	0	0	0	0	8
	NINDT	0	2	0	4	0	0	0	0	2
	SJGH	1	8	0	6	3	0	0	0	5
Gampaha	Gampaha	1	7	9	0	1	0	0	0	4
	Meerigama	0	3	0	3	0	0	0	0	1
	Minuwangoda	0	3	0	6	0	0	0	0	1
	Wathupitiwala	0	8	0	8	1	0	0	0	4
Hambantota	Hambantota	1	8	0	11	2	1	0	0	5
	Tangalle	0	5	0	8	0	0	0	0	6
	Tissamaharama	0	4	0	3	0	0	0	0	1
	Walasmulla	0	2	0	3	0	0	0	0	0
Jaffna	Jaffna	1	7	1	7	2	0	1	0	6
	Kilinochchi	0	3	0	3	0	0	0	0	4
	Mulathiv	0	2	0	2	0	0	0	0	4
	Point Pedro	0	3	0	3	0	0	0	0	1
	Tellipalai	0	2	0	3	0	0	0	0	2
Kalutara	Horana	0	6	0	6	0	0	0	0	1
	Kalutara	1	8	1	12	2	1	1	0	2
	Kethumathie	0	7	0	7	0	0	0	0	1
	Panadura	0	6	0	5	0	0	0	0	1
Kandy	Dambulla	0	5	0	5	0	0	0	0	4
	Kandy	1	10	1	17	5	1	3	1	7
	Matale	1	7	0	8	1	0	0	0	3
	Theldeniya	0	1	0	4	0	0	0	0	0
Karapitiya	Balapitiya	0	6	0	7	0	0	0	0	3
	Elpitiya	0	3	1	7	0	0	0	0	3
	Karapitiya	1	10	0	17	3	1	2	1	7
	Mahamodara	0	8	0	7	0	0	0	0	4
	Udugama	0	3	0	4	0	0	0	0	2
Kegalle	Karawanella	0	2	0	6	0	0	0	0	2
	Kegalle	1	6	0	11	2	0	0	0	3
	Mawanella	0	4	0	8	0	0	0	0	4
	Warakapola	0	5	0	5	0	0	0	0	2

Cluster	Blood Bank	CTP	MOs	NS	NOs	MLTs	PHLT	PHIs	Lab/O	Junior Staff
Kurunegala	Dambadeniya	0	4	0	5	0	0	0	0	1
	Galgamuwa	0	2	2	0	0	0	0	0	1
	Kuliyapitiya	0	6	0	8	0	0	0	0	2
	Kurunegala	0	13	0	19	6	1	4	0	10
	Nikaweratiya	0	4	0	5	0	0	0	0	3
Matara	Deniyaya	0	2	0	2	0	0	0	0	1
	Kamburugamuwa	0	4	0	14	4	3	2	2	8
	Kamburupitiya	0	5	0	5	0	0	0	0	3
	Matara	1	0	0	10	1	0	0	0	5
	New DGH - Kamburugamuwa	0	3	0	5	0	0	0	0	3
Monaragala	Bibila	0	2	0	3	0	0	0	0	2
	Monaragala	1	6	0	7	1	1	1	0	7
	Wellawaya	0	1	0	1	0	0	0	0	1
Nuwara Eliya	Dikkoya	0	4	0	3	0	0	0	0	1
	Nuwara Eliya	1	5	0	7	1	1	0	0	5
	Rikillagaskada	0	3	0	3	0	0	0	0	1
Peradeniya	Gampola	0	5	0	7	0	0	0	0	1
	Nawalapitiya	1	5	0	5	0	0	0	0	3
	Peradeniya	1	6	0	13	2	0	2	1	7
Polonnaruwa	Dehiattakandiya	0	2	0	4	0	0	0	0	3
	Medirigiriya	0	3	0	4	0	0	0	0	3
	Polonnaruwa	1	6	0	8	2	1	0	0	11
Ratnapura	Balangoda	0	5	0	7	0	0	0	0	0
	Embilipitiya	0	4	0	6	0	0	0	0	7
	Kahawatta	0	3	0	5	0	0	0	0	0
	Ratnapura	1	7	0	10	3	0	1	2	6
Trincomalee	Kantale	0	2	3	0	0	0	0	0	0
	Kinniya	0	2	0	4	0	0	0	0	1
	Muththur	0	4	0	3	0	0	0	1	0
	Trincomalee	1	3	0	8	2	0	0	0	5
Vavniya	Chettikulam	-	-	-	-	-	-	-	-	-
	Mannar	1	2	0	3	0	0	0	0	4
	Vavniya	1	4	0	4	1	0	0	0	5
Total		35	483	27	632	65	14	28	13	336

Table 21: Staff Availability of Each Blood Bank

16 STATISTICS OF HLA LABORATORY

Presently HLA Testing is carried out in National Blood Centre and Blood Bank-National Hospital Kandy, in the government sector.

HLA Typing by rSSO	No. of Tests
Renal - Patient	877
Renal - Donor	788
BMT - Patient	97
BMT - Donor	241
AP Donors	1
Platelet Refractoriness patients	26
Cadaveric Donor	26
B57 / B51 /B 27	583
Luminex PRA and Antibody Identification	No. of Tests
Renal	1313
BMT	20
Platelet Refractoriness patients	14
Others	44

(PRA - Panel Reactive Antibodies)

Table 22: HLA Molecular Typing and PRA -2021 (At NBC)

By CDC Method	No. of Tests
Class I Typing by CDC	28
B27	192
B57	46
B51	13
B15 / Others	04
Cadaveric Compatibility Tests	146
Total Compatibility Tests (with cadaveric)	689+146

Table 23: HLA Serology Typing & Compatibility Testing-2021 (At NBC)

Typing And Cross Matches	2019	2020	2021
Cross match	210	233	200
PRA (Class I , Class II)	190	160	84
Single Antigen Bead Assay	-	50	50
Transplantation			
Kidney (Patients ,Donor)	356	183	656
Bone Marrow (Patients, Donors)	06	-	13
AP Donor	276	-	-
Cadaveric Donor	20	18	11
Cadaveric Donor Q-PCR	-	04	4

Table 24: HLA Laboratory Statistics (At Blood Bank/National Hospital Kandy)

17 STATISTICS OF REFERENCE IMMUNO-HAEMATOLOGY LABORATORY

Test category	2015	2016	2017	2018	2019	2020	2021
Difficult compatibility testing	2656	2767	3003	3702	3142	409	457
Antibody Screening	1263	3266	4440	4525	6064	4692	4952
Antibody titrations	394	241	272	399	384	405	684
DAT profile	603	702	1013	1027	1323	1012	1060
Extended phenotypes	439	414	363	395	362	420	453
Cold agglutination titration	154	47	42	48	54	50	31
Iso haemagglutination test	54	97	53	102	72	14	44
Haemolysin test	55	97	156	132	178	98	95
Confirmation of Bombay O	22	15	10	14	7	15	7
Elution studies	26	30	50	82	57	87	65
Transfusion reaction investigations	49	21	39	48	67	40	39

Table 25: Comparison of Reference Immuno-Haematology Laboratory Statistics

Investigations	2018	2019	2020	2021
Blood Grouping (ABO & Rh D)	5755	7353	5817	6086
DAT	4384	5894	5522	6083
Antibody Identification	3356	4034	2792	3504
Enzyme Panels	82	69	19	15
ABO/Rh Group Confirmation	411	350	292	266
Donath-Landsteiner Test (DL)	25	13	10	5
Cross Matching	2127	2082	1203	1702
Rh Phenotyping	5270	4969	1985	7287

Table 26: Reference Lab - Detailed Investigations

18 STATISTICS OF REAGENT LABORATORY

Reagents Prepared	2015	2016	2017	2018	2019	2020	2021
PBS working solution (L)	7785	3965	-	-	-	-	-
PBS stock solution (L)	810	3965	-	-	-	-	-
Alsever's solution (L)	172	274	396	328	332	317	378
Antibody screening cells (mL)	45,650	162,800	188,800	194,580	174,552	194,832	783
Anti-A1 (mL)	775	1450	906	1281	1734	1374	573
Anti -H (mL)	475	1125	678	990	669	558	236
ABO reverse grouping cells (mL)	3,7625	120,200	132,300	147,180	129,648	138,030	5089
Lewis panel	-	-	-	-	-	200	150

Table 27: Comparison on Statistics of Reagent Preparation

19 QUALITY MANAGEMENT UNIT

Component	Number
RCC – without AS	265
RCC- BCR-AS	313
Platelets - PRPD	297
Platelets - BCD	356
Platelets -AP	88
FFP	79
Cryoprecipitate	10

Table 28: Quality Monitoring of Blood Components And Reagents

Reagent Testing	Number
QC testing of A,B,O cells	12 sets
QC testing antibody screening red cells	12 sets

Table 29: Quality Control Laboratory Performance

Special Studies

Investigation of Quality Related Incidents

Special Study Type	No. of Units
Study to detect donor Hb and HCT due to high values in RCC –PS units.	100
Study to assess the suitability of freezer vehicle to transport platelets packed in cool box	20 discarded platelet units
Analysis of platelet concentrate quality at the end of the 7th day	73
Descriptive, prospective study to determine the blood bags used for processing PC-PRPD , is directly related to the occurrence of clumps in PC-PRPD units.	173

	Component/Reagent	No of Incidents
Component Quality related incidents	RCC	57
	Platelet(SDP)	4
	Visual checking of platelets	3826
	Cryo precipitate	1
	Whole Blood	2
Consumables Quality related incidents	ABO reagent cells	1
Procedural quality related incidents	Blood grouping error	1

Evaluations Done

Evaluation Done	Number Of Products Evaluated
Anti D	4 vials
Anti A	3

Evaluation Done	Number Of Products Evaluated
Anti B	3
Anti AB	3
Anti D blend	2
AHG poly	3
AHG-IgG	1
AHG-C3d	1
Rare anti sera- Rh	4
Rare anti sera- others	13
Evaluation Done	Number Of Products Evaluated
Copper Sulphate	2
Glass test tubes	3
Triple blood bags	3

NEQAS Programs Conducted

Program	No. Of Cycles	No. of Test Kits Prepared
NEQAS Blood Group Serology	02	220 kits(1760 vials)
NEQAS TTI	02	40 kits(520 vials)

Special Quality Monitoring Tests (HBB Referrals)

Component	No. of Units
RCC	24
Platelet	40
FFP	13
Cryo	-

Summary of Tests

#	Type of test	No. of Tests
1	Full Blood Count	3251
2	PH	1513
3	Blood Culture	380
4	% Haemolysis	737
5	DAT	36
6	Antibody Screening	108
7	Microscopy testing for Agglutinations	36
8	Factor VIII Assay	91
9	Fibrinogen Assay	91
10	Evaluations	25

	Staff Category	Number of Trainees
1	Medical Officers	174
	4 weeks	154
	6 weeks	20
2	Nursing Officers	73
	NO – 6 weeks + NBTSIS	73
3	Medical Laboratory Technologists	2
4	Public Health Inspectors	1

Table 30: Training Programs Conducted For Staff Categories of NBTS

#	Staff Category	Number of trainees
1	Nephrology MD Trainees	1
2	Haematology Diploma Trainees	14
3	Microbiology MD Trainees	10
4	Medical Students	
	• University of Colombo	331
5	MLT Students	
	• MLT Students	3
	• MLS Interns	82
	• MLS Undergraduates	56
	• MLS Students	21

Table 31: Other Staff Categories

#	Topic	Participants	Number
1	Awareness programme on Donor / Mobile organizer handling and communication	Medical Officers	112
2	Training on automated blood grouping machine	Medical Laboratory Technologists NBC	30
3	Safe blood transfusion	Public Health Inspectors NBTS	34

Table 32: CME Programme

21 NAT FACILITY AT NATIONAL BLOOD CENTRE

Introduction

Nucleic Acid Testing (NAT) was introduced to the National Blood Centre (NBC) with the Project for the Introduction of State of Art Technology funded by the Netherlands.

Nucleic Acid Testing directly amplifies and detects the genetic material (DNA or RNA) of viruses in order to screen for the existence of transfusion transmitted infections in donated blood (E.g.: Human Immunodeficiency Virus(HIV), Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV).

Advantages of implementing NAT in the National Blood Transfusion Service:

- Even though there is a high cost for the infrastructure and consumables, NAT provides the following advantages,
- Safeguard the blood safety furthermore by reducing the window period by early detection of viral infections before appearance of antibodies.
- Fulfills an International requirement for the provision of plasma products for Plasma Fractionation Plants.
- Detects mutant, variant viruses that may not be detected by antibody detection methods.

Month	Total Samples	Total WL	Total Invalids	Total Reactive	Serology Reactivity			Serology Non-Reactive
					HBV	HCV	HIV	
January	2496	2795	30	0	0	0	0	0
February	2587	2860	609	0	0	0	0	0
March	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0
June	996	1139	65	1	0	1	0	0
July	3216	3710	174	2	1	0	0	1
August	6763	7608	843	8	1	0	1	6
September	6609	7376	813	1	0	0	1	0
October	3929	4501	642	1	0	0	1	0
November	59	72	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0
Total	26,655	30,061	3,176	13	2	1	3	7

Table 33: Summary of Nucleic Acid Testing

Discriminatory tests

Serology Non-Reactive	Discriminative Tests Reactive	Discriminative Tests Non-Reactive
0	0	0

22 STEM CELL TRANSPLANTATION

- Hematopoietic stem cell transplantation (HSCT) is the transplantation of multi potent hematopoietic stem cells, usually derived from
 - Bone marrow
 - Peripheral blood
 - Umbilical cord blood
 - which may be of autologous or allogeneic in origin.
- It is most often performed for patients with haematological malignancies, such as multiple myeloma or leukemia and for congenital disorders of the blood and bone marrow such as thalassemia and sickle cell disease.
- Advantages of the peripheral stem cell transplant
 - Less invasive than bone marrow harvesting
 - No need of anesthesia

	2017	2018	2019	2020	2021
Number of patients	22	27	25	28	46
Cryopreservation procedures	29	33	26	30	40
Infusion procedures	18	28	24	23	53

Table 34: Comparison on Statistics of Stem Cell Transplantation

23 FROZEN RED CELL (FRC)

Red Blood Cells (RBC) can be frozen and stored for up to 10 years.

There are two methods for frozen red cell preparation: -

1. High Glycerol method (frozen red cells are stored at -86°C)
2. Low Glycerol method (frozen red cells are stored at -120°C)

This technique has many advantages.

- Frozen Red Cells (FRC) have a long shelf life
- A stock of rare blood groups (Such as Bombay O) can be frozen and preserved for future usage.
- Patients with special conditions such as multiple red cell antibodies who require blood will get benefits out of this.

Since 2015, NBTS Sri Lanka also started this practice of freezing Red Blood Cells, like many developed countries.

Both international and local training programs have been conducted on this technology for the staff of NBTS.

Blood Group	No. of Red Cell Units Frozen	No. of Red Cell Units Deglycerolized	No. of Red Cell Units Transfused
Bombay O Rh D Positive	09	-	-
Bombay O Rh D Negative	01	-	-
A Rh D Positive	-	-	-
A Rh D Negative	04	-	-
B Rh D Positive	03	-	-
B Rh D Negative	02	-	-
AB Rh D Positive	-	-	-
AB Rh D Negative	03	-	-
O Rh D Positive	05	-	-
O Rh D Negative	13	-	-
Total	40	00	00

Table 35: Statistics of Frozen Red Cell Procedure For The Year 2021