


Supply of blood for transfusion in Latin America and Caribbean countries 2012 and 2013

Pan American Health Organization

World Health Organization
REGIONAL OFFICE FOR THE Americas

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Unidad de Medicamentos y Tecnologías Sanitarias,
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We thank the valuable contribution of the countries
whose data is presented in this document.

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Country Codes

ANU	Anguilla
ANI	Antigua ani Barbuda
ARG	Argentina
ARU	Aruba
BAH	Bahamas
BAR	Barbados
BLZ	Belize
BER	Bermuda
BOL	Bolivia
BRA	Brazil
BVI	British Virgin Islands
CAY	Cayman Islands
CHI	Chile
COL	Colombia
COR	Costa Rica
CUB	Cuba
CUR	Curaçao
DOM	Dominica
DOR	Dominican Republic
ECU	Ecuador
ELS	El Salvador
FDA	French Departments of America
GRA	Grenada
GUT	Guatemala
GUY	Guyana
HAI	Haiti
HON	Honduras
JAM	Jamaica
MEX	Mexico
MOT	Montserrat
NIC	Nicaragua
PAN	Panama
PAR	Paraguay
PER	Peru
SKT	San Kitts and Nevis
STL	Saint Lucia
STV	Saint Vincent and The Grenadines
SUR	Suriname
TCI	Turks and Caicos Islands
TRT	Trinidad and Tobago
URU	Uruguay
VEN	Venezuela

Abbreviation

CRYO	Cryoprecipitate
FFP	Fresh frozen plasma
FP	Frozen plasma
HBsAg	Hepatitis B virus surface antigen
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
HTLV	Human T cell lymphotropic virus
PL	Platelets
RBC	Red blood cells
WB	Whole blood
NR	No Reported

INTRODUCTION

INTRODUCTION

This document aims to follow up the publication entitled "*2010 and 2011 Blood supply for transfusions in Latin America and the Caribbean*", with the purpose of presenting indicators on the availability and safety of blood and its components, as well as of the national blood systems organization.

The information is based on the data provided by the health authorities from the years 2012 and 2013. A total of 19 countries/territories responded in 2012 and 18 in 2013, from the Caribean, and total of 19 countries in 2012, while 17 in 2013 responded from Latin America.

A standard Excel Form was sent to each country to facilitate the collection of indicators; however, not all countries used it, consequently the information was received in different formats, thus making data comparison difficult.

With this consideration in mind and taking some aspects that influenced the availability, timeliness and safety of blood supply for the period delivered, we see that compared to 2011, the percentage of voluntary blood donors dropped slightly in the Caribbean and Latin American regions. Conversely, an increase is observed on the number of units that are processed annually per bank in Latin America, which could be interpreted as an improvement in the concentration processes. No particular trend is observed in the Caribbean. Regarding the screening coverage, there is concern, since countries have not achieved a universal screening for transfusion transmitted diseases (ITT) recommended by PAHO / WHO (HIV, HBV, HCV, syphilis and *T. cruzi*) and a decrease in the number of countries that screened 100% for the five markers is observed. As for the national external performance evaluation programs, no changes to the ITT program are observed in the Caribbean, while improvement was recorded in the number of countries that have established national immune-hematology programs. In Latin America a decrease in both national ITT and immune-hematology is observed.

In 2013 some changes were made to the form that was sent to the countries to collect information in order to facilitate data flow and interpretation. In addition, the new format articulates regional indicators collected by PAHO and the indicators collected globally by WHO, which facilitates reporting to national authorities through one single form. Similarly, the new form seeks to expand the data collected, so as to include information on hemo-vigilance, apheresis procedures, plasma derivatives and aggregated data from blood donors, transfused patients and disposed units. The form was designed jointly by the Pan America Health Organization (PAHO) and the World Health Organization (WHO) in Geneva.

In view of the above, the year 2013 was taken as the transition year for the consolidation of information on the new form, since not all countries used it and / or some sent incomplete data.

Using partial data and as a preview to the information that could be extracted from the new form, the paper presents demographic donor and patient data, as well as the causes for discarding the various components and the relationship between use and population.

Year 2013 is also a transition year to monitor the PLAN OF ACTION FOR UNIVERSAL ACCESS TO SAFE BLOOD 2014-2019, which was approved by the 53rd Directing Council, held in October 2014. (Annex 1).

The Plan of Action sets out the base lines of the proposed indicators; therefore the data reported by the countries as of 2014 will constitute the main tool for monitoring. With this data, PAHO, will monitor and evaluate the implementation of the Action Plan and regularly report to the Governing Bodies on the progress and constraints in implementation, in addition to any adjustments, if necessary.

It is hoped that this publication will remain as a reference for national authorities; and for professionals linked to the area and for other people and institutions interested in the development and organization of blood systems of countries / territories in the Region of the Americas.

ADDITIONAL DATA

Due to the fact that few countries completed the information requested in the new form, some data may not have the necessary representativeness for a regional comparative analysis. Therefore, except for information on the causes of discarding, the rest of the additional data section merely discusses some findings.

The purpose of presenting these data, despite the above mentioned, is to illustrate the important opportunities offered by the new form to deepen the understanding of the development and projections of blood services in our region and encourage responsible national and other colleagues involved in country programs, to conduct the efforts and adjustments in the process of collecting information and making it available.

Donor Characterization

Gender of blood donors: the observation delivered was extracted from data provided by nine (9) Caribbean countries and five (5) in Latin America

Based on data received from the region of the Americas, it appears that most donors are men, showing a higher prevalence in Latin America, where the ratio of 2-1 is given, ie for every two men donors there is one woman. Figures 1 and 2.

Figure 1.
Gender of Blood Donors, Caribbean 2013
Own source based on information provided by countries 2013

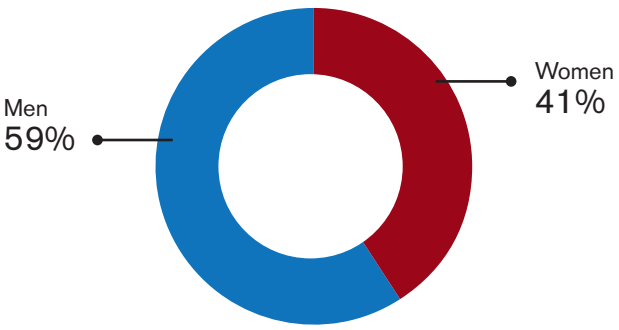
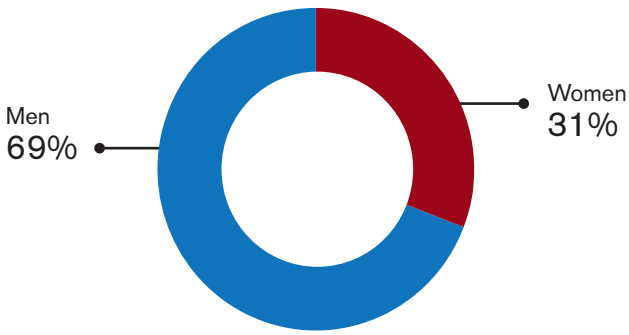


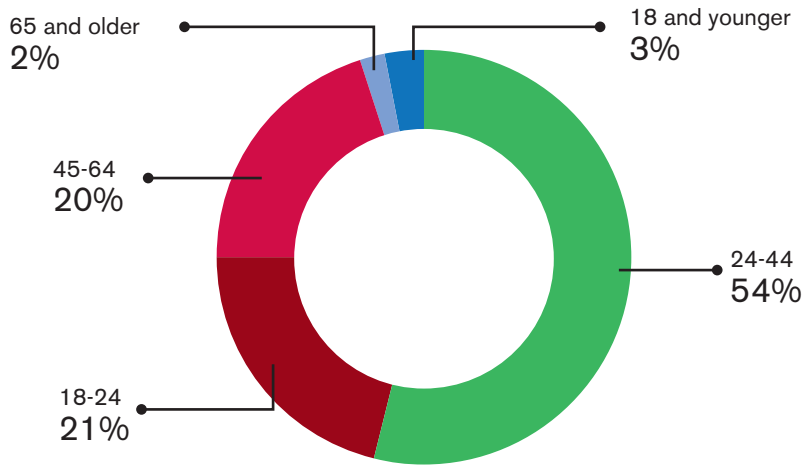
Figure 2.
Gender of blood donors, Latin America 2013
Own source based on information provided by countries 2013



Age of blood donors: The information presented was provided by six (6) Caribbean countries. The data received from the programs in Latin America did not conform to the distribution requested in age ranges, so it was impossible to compare and standardize.

Most blood donors from the Caribbean are in the age range of 24-44. Figure 3.

Figure 3.
Age of blood donors, Caribbean, 2013
Own source based on information provided by countries 2013



Characterization of the discarding of blood units and components

Causes of discarding of blood units: This analysis is based on data received from 29 countries, 16 from the Caribbean and 13 from Latin America, representing 71% of the countries of the Region.

In the Caribbean countries reactivity is the main cause of discarding, which may reflect the need to strengthen the pre donation processes, the promotion related to communication, information and community education on knowledge of transfusion-transmitted infections. Likewise, it would be appropriate to review the process and mechanisms for donor selection, including competition and training of those conducting the interview and making the decision to accept the person as a blood donor, and knowing what guidance and advice should be given to donors. The second cause of discarding is expiration, which might suggest the need to review blood supply and components management, including the operation in the network.

In Latin America the most representative discarding rate is associated with the expiry of the units, followed by reactivity and storage problems. It is therefore recommended to check supply management and promotion, selection of donors, including the conservation of the cold chain process. This is the same in the Caribbean.

All reasons for expiry are quite controllable, but there is an imperative need to determine the source of the problem, so as to establish the necessary corrective measures and to improve availability, safety of blood / components and system efficiency. Figures 5 and 6

Figure 5.
Causes for discarding blood units, Caribbean, 2013
Own source based on information provided by countries 2013

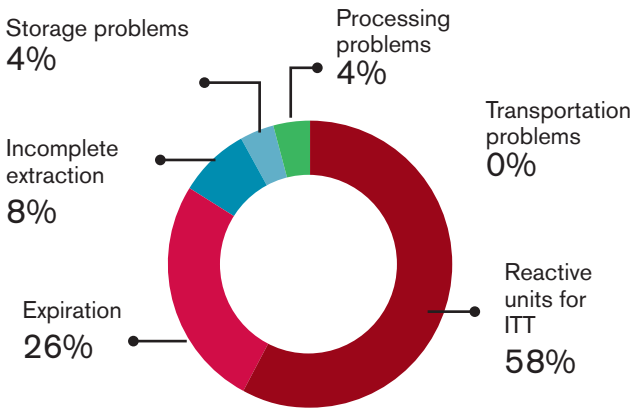
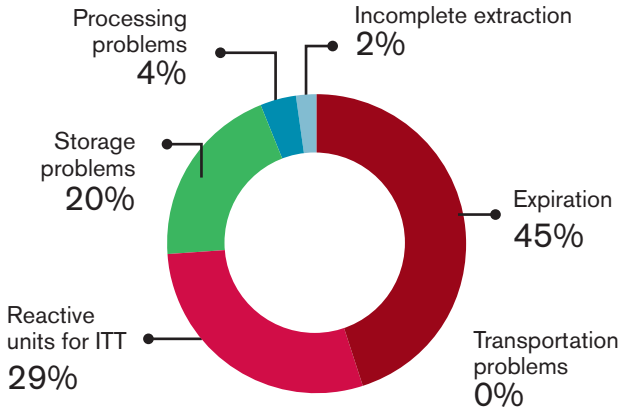


Figure 6.
Causes for discarding blood units in Latin America, 2013
Own source based on information provided by countries 2013



Use Characterization

Age of transfused patients: The data presented indicates the status of six (6) Caribbean countries and two (2) of Latin America

In the Caribbean the largest weight falls on the population between 15-44 years, followed by those aged over 60 years and under 5 years.

The low representation of data does not allow any deductive analysis and commentary for Latin America. Figures 7 and 8.

Figure 7.
Age range of transfused patients, Caribbean 2013
Own source based on information provided by countries 2013

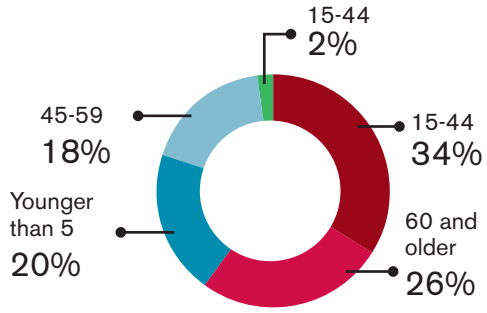
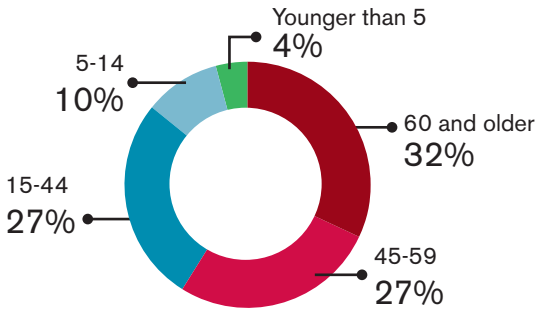


Figure 8.
Age range of transfused patients in Latin America, 2013
Own source based on information provided by countries 2013



Percentage of the population receiving a transfusion: the data presented below is for six (6) Caribbean countries and nine (9) in Latin America.

The average population receiving transfusions in the Caribbean is 0.7 while in Latin America it is 1.27 with a greater variation in the ranges.

Despite being a heavy indicator, it could support countries in their data collection planning, and at the Regional level to support the debate on the rational use of blood.
Figures 9 and 10.

Figure 9. Percentage of transfused persons, Caribbean, 2013
Own source based on information provided by countries 2013 and demographic indicators 2013 publication "PAHO Basic Health Indicators 2013".

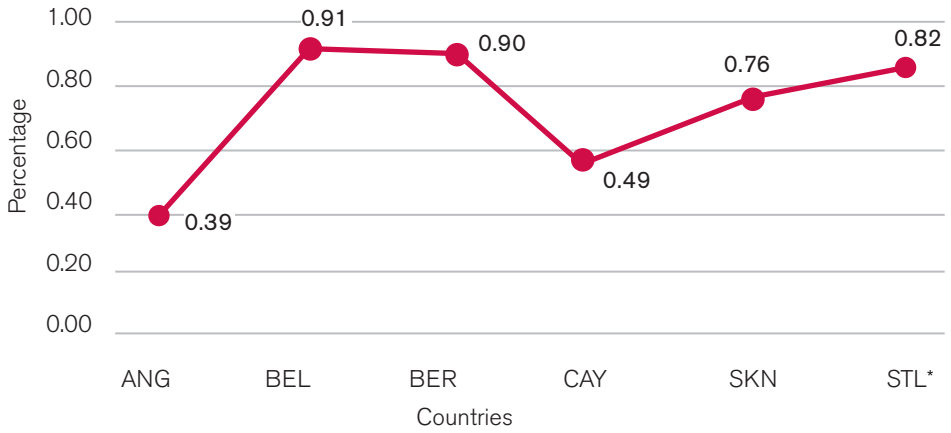
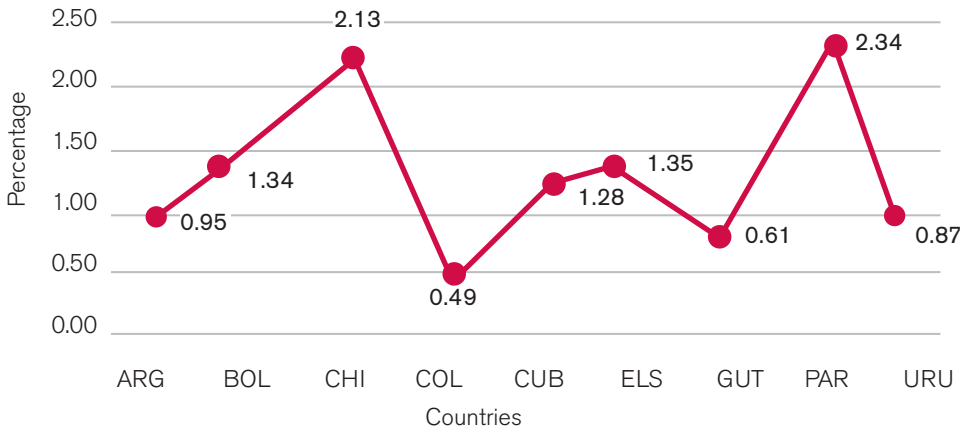


Figure 10. Percentage of the population receiving transfusions in Latin America, 2013
Own source based on information provided by countries 2013 and demographic indicators 2013 publication "PAHO Basic Health Indicators 2013".



LATIN AMERICAN COUNTRIES 2012

LATIN AMERICAN COUNTRIES 2012

TABLE 1. BLOOD COLLECTION 2012

COUNTRY	TOTAL UNITS COLLECTED	NUMBER OF DONORS			
		AUTOLOGOUS	ALLOGENEIC		
			VOLUNTARY	REPLACEMENT	REMUNERATED
ARG	1,056,710	0	384,650	672,060	0
BOL	83,391	59	30,576	52,756	0
BRA	3,335,035	2,056	1,983,857	1,349,122	0
CHI	233,165	0	55,082	178,083	0
COL	746,059	272	629,286	116,501	0
COR	70,182	3	46,136	24,043	0
CUB	401,575	NR	401,575	0	0
ECU	83,611	16	4,396	79,199	0
ELS	94,494	2	10,875	83,617	0
GUT	113,041	23	4,902	108,116	0
HON	66,519	10	10,418	55,938	153
MEX	1,768,862	1,716	48,892	1,718,254	0
NIC	72,988	NR	72,988	0	0
PAN	55,083	138	2,440	47,350	5,155
PAR	62,154	9	7,133	55,012	0
PER	166,049	295	9,377	156,377	0
DOR	106,291	34	19,874	83,529	2,854
URU	104,342	358	*NI	*NI	0
VEN	445,957	0	29,531	416,426	0

*IN = Invalid Number:
URU: inconsistency in the reported data.

TABLE 2. BLOOD COLLECTION FROM ALLOGENEIC DONORS 2012

COUNTRY	NUMBER OF UNITS COLLECTED	TYPE OF ALLOGENEIC DONOR (PERCENTAGE)		
		VOLUNTARY	REPLACEMENT	REMUNERATED
ARG	1,056,710	36.40	63.60	0
BOL	83332	36.70	63.30	0
BRA	3,332,979	59.52	40.48	0
CHI	233,165	23.62	76.38	0
COL	745,787	84.38	15.62	0
COR	70,179	65.74	34.26	0
CUB	401,575	100	0	0
ECU	83,595	5.25	94.75	0
ELS	94,492	11.51	88.49	0
GUT	113,018	4.34	95.66	0
HON	66,509	15	84.13	0.23
MEX	1,767,146	2.77	97.23	0
NIC	72988	100	0	0
PAN	54,945	4.44	86.18	9.38
PAR	62,145	11.48	88.51	0
PER	165,754	5.66	94.34	0
DOR	106,257	18.70	78.61	2.69
*URU	104,342	*NI	*NI	0
VEN	445,957	6.62	93.38	0

*IN = Invalid Number as explained in table 1

Figure 1. Percentage of blood collection ranked from greatest to least by voluntary donations, Latin America 2012

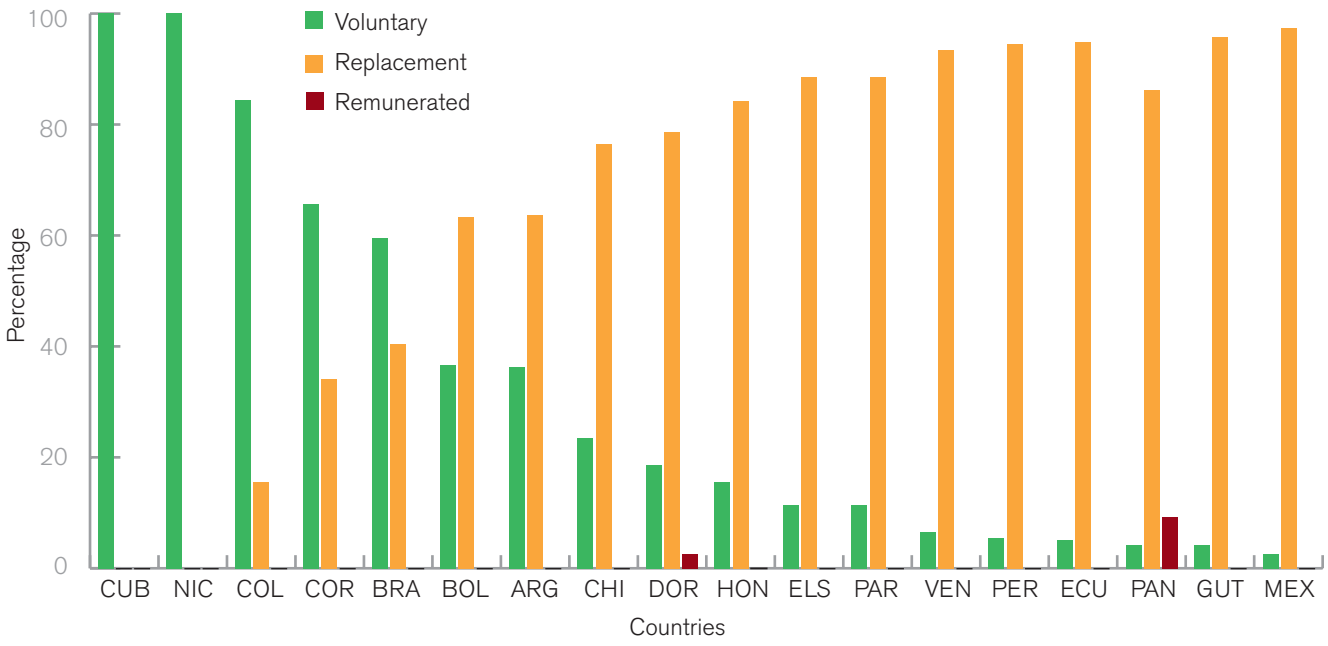


TABLE 3. SELECTION OF ALLOGENEIC DONORS 2012

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF ALLOGENEIC DONORS					
		VOLUNTARY		REPLACEMENT		REMUNERATED	
		INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED
ARG	1,056,710	431,702	46,158	801,732	128,012	0	0
BOL	83,332	44,012	12,680	78,552	25,776	0	0
BRA	3,332,979	2,438,665	454,808	1,668,832	319,710	0	0
CHI	233,165	68,665	13,583	229,444	51,361	0	0
COL	745,787	629,286	NR	116501	NR	0	0
COR	70,179	46,343	147	24,051	8	0	0
CUB	401,575	410,000	8,425	0	0	0	0
ECU	83,595	6,227	1,788	100,813	21,301	0	0
ELS	94,492	13,408	2,533	113,806	30,189	0	0
GUT	113,018	5,854	945	163,514	54,293	0	0
HON	66,509	10,445	27	73,198	17,260	192	39
MEX	1,767,146	49,530	638	2,405,379	687,125	0	0
NIC	72,988	80,241	7,253	0	0	0	0
PAN	54,945	2340	NR	47350	NR	5155	NR
PAR	62,145	7,358	211	58,216	3,181	0	0
PER	165,754	12,512	3,135	231,422	75,043	87	87
DOR	106,257	24,575	4,701	106,243	22,714	4,312	1,458
URU	104,342	NR	NR	NR	NR	0	0
VEN	445,957	NR	NR	511,350	94,924	0	0

TABLE 4. SELECTION OF ALLOGENEIC DONORS 2012

COUNTRY	NUMBER OF UNITS COLLECTED	VOLUNTARY		REPLACEMENT		REMUNERATED	
		NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED	NUMBER INTERVIEWED	% DEFERRED
ARG	1,056,710	431,702	10.69	801,732	15.96	0	0
BOL	83,332	44,012	28.81	78,552	32.81	0	0
BRA	3,332,979	2,438,665	18.65	1,668,832	19.16	0	0
CHI	233,165	68,665	19.78	229,444	22.38	0	0
COL	745787	629286	NR	116501	NR	0	0
COR	70,179	46,343	0.32	24,051	0.03	0	0
CUB	401575	410,000	2.05	0	0	0	0
ECU	83,595	6,227	28.71	100,864	21.13	0	0
ELS	94,492	13,408	18.89	113,806	26.53	0	0
GUT	113,018	5,854	16.14	163,514	33.20	0	0
HON	66,509	10,445	0.26	73,198	23.58	192	20.31
MEX	1,767,146	49,530	1.30	2,405,379	28.57	0	0
NIC	72,988	80,241	9.04	0	0	0	0
PAN	54,945	2340	NR	47350	NR	5155	NR
PAR	62,145	7,355	2.87	58,216	5.46	0	0
PER	165,754	12,512	25.06	231,422	32.43	87	100
DOR	106257	24575	19.13	10,6243	21.38	4,312	33.81
URU	104,342	NR	NR	NR	NR	0	0
VEN	445,957	NR	NR	511,350	18.56	0	0

Figure 2. Percentage of deferred donors by allogeneic donor type, Latin America 2012

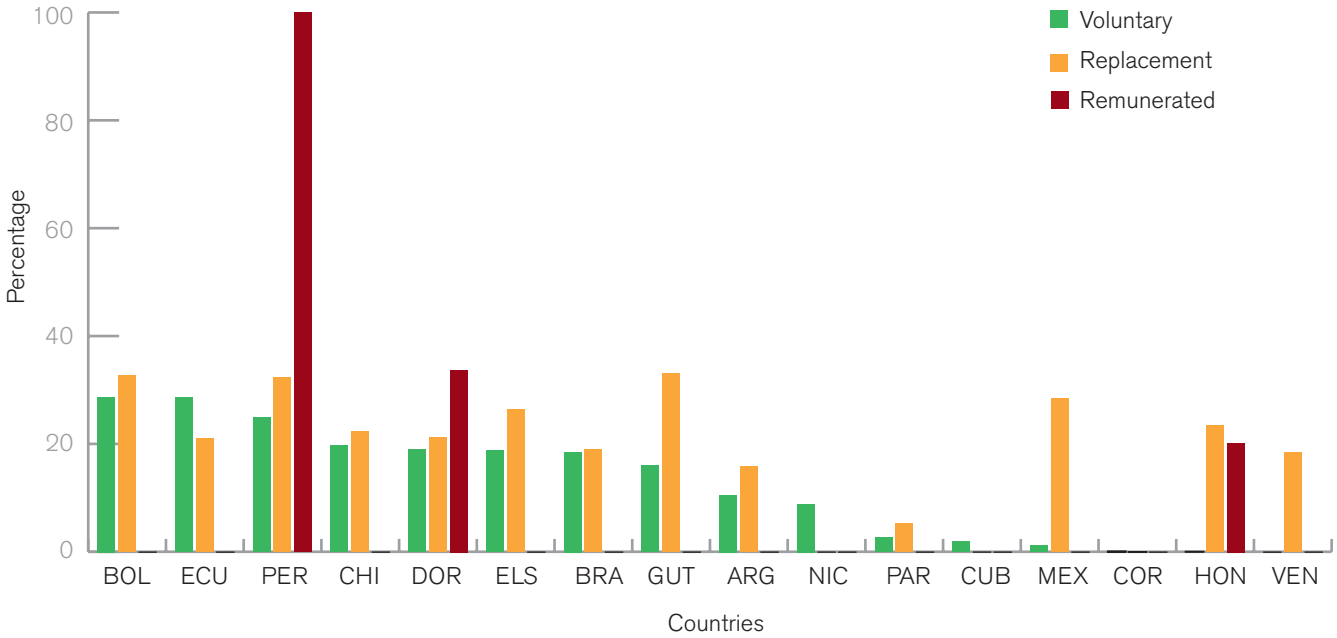


TABLE 5. EFFICIENCY OF BLOOD PROCESSING 2012

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF COLLECTING CENTERS	NUMBER OF PROCESSING CENTERS	ANNUAL PROCESSING PER BANK	DAILY PROCESSING PER BANK (260 DAYS)
ARG	1,056,710	282	222	4,760	18,31
BOL	83,391	18	18	4,633	17,82
BRA	3,335,035	544	530	6,293	24,20
CHI	233,165	46	19	12,271	47,20
COL	746,059	85	85	8,777	33,76
COR	70,182	34	30	2,339	8,99
CUB	401,575	166	46	8,730	33,58
ECU	83,611	NR	21	3,981	15,33
ELS	94,494	42	42	2,250	8,7
*GUT	113,041	*62	*58	1,949	7,49
HON	66,519	18	17	3,913	15,05
MEX	1,768,862	556	NR	NR	NR
NIC	72,988	5	2	36,494	140,36
PAN	55,083	27	27	2,040	7,85
PAR	62,154	46	5	12,431	47,81
PER	166,049	232	88	1,887	7,26
DOR	106,291	65	65	1,635	6,29
URU	104,342	74	74	1,410	5,42
VEN	445,957	319	316	1,411	5,43

TABLE 6. COVERAGE (%) OF SCREENING FOR INFECTIOUS MARKERS 2012

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	T. CRUZI	HTLV I-II	Anti-HBc
*ARG	100	100	100	100	100	100	100
BOL	100	100	100	100	100	NR	NR
BRA	100	100	100	100	100	100	100
CHI	100	100	100	100	100	100	NR
COL	100	100	100	100	100	70.53	71.20
COR	100	100	100	100	100	100	100
CUB	100	100	100	100	NR	NR	NR
**ECU	100	100	100	100	100	11.05	15.87
ELS	100	100	100	100	100	NR	NR
**GUT	100	100	100	100	100	NR	77.41
HON	100	100	100	100	100	94.02	95.64
MEX	98.43	98.36	98.47	98.20	90.69	NR	NR
NIC	100	100	100	100	100	NR	NR
PAN	100	100	100	100	100	98.33	100
PAR	98.99	98.99	98.99	98.99	98.99	98.99	98.99
PER	100	100	100	100	100	100	100
DOR	100	100	100	100	NR	100	NR
URU	100	100	100	100	100	100	100
VEN	93.38	93.38	93.38	93.38	93.38	93.38	93.38

*Units screened for anti- Brucella: 100%

**Units screened for CMV ECU 8.79% GUT:70.71%

TABLE 7. NUMBER OF UNITS NOT SCREENED FOR INFECTIOUS MARKERS 2012

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	T. CRUZI
MEX	27,750	28,977	26,989	31,819	164,735
PAR	629	629	629	629	629
VEN	29,531	29,531	29,531	29,531	29,531

TABLE 8. PROPORTION (%) OF REACTIVE/POSITIVE UNITS 2012

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	T. CRUZI	HTLV I-II	Anti-HBc
*ARG	0.17	0.18	0.36	0.82	2.07	0.2	1.37
BOL	0.23	0.34	0.30	0.68	3.34	NR	NR
BRA	0.42	0.16	0.30	0.82	0.31	0.19	1.62
CHI	0.03	0.01	0.03	0.83	0.14	0.12	NR
COL	0.22	0.16	0.49	1.50	0.43	0.29	1.77
COR	0.15	0.09	1.12	0.56	0.38	0.29	1.88
CUB	0.02	0.41	0.76	0.57	NR	NR	NR
**ECU	0.35	0.35	0.54	1.16	0.22	0.02	3.52
ELS	0.05	0.13	0.11	0.75	1.51	NR	NR
**GUT	0.27	0.38	0.61	1.90	1.02	NR	3.94
HON	0.16	0.20	0.38	0.95	1.23	0.31	2.21
MEX	0.25	0.15	0.57	0.59	0.45	NR	NR
NIC	0.06	0.22	0.34	0.60	0.27	NR	NR
PAN	0.23	0.32	0.60	1.17	0.48	0.50	1.96
PAR	0.71	0.34	0.35	7.51	2.48	0.16	2.67
PER	0.19	0.41	0.47	1.12	0.61	0.98	4.31
DOR	0.20	0.85	0.19	0.57	NR	0.24	NR
URU	0.11	0.13	0.34	0.45	0.31	0.07	0.99
VEN	0.19	0.43	0.30	1.69	0.27	0.15	2.85

*Reactive/ Positive Brucella = 1.05
** Reactive/ Positive for CMV
ECU: 0.23
GUT: 1.08

Figure 3. Proportion (%) of reactive/positive units for markers, Latin America 2012

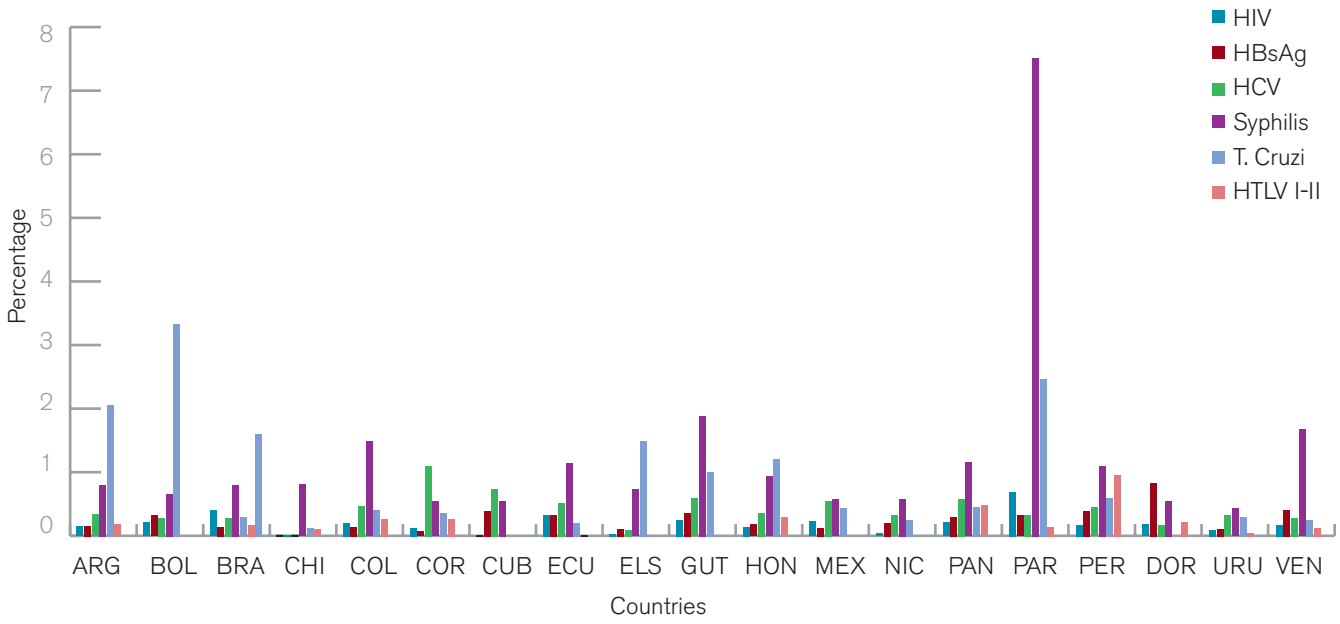


TABLE 9. AVAILABILITY OF BLOOD COMPONENTS 2012
Separation into components (Number)

COUNTRY	UNITS RECEIVED	RBC	FFP	FP	CRYO	PL
ARG	1,056,710	996,036	448,216	547,820	49,802	348,613
*BOL	83,391	*IV	65,806	9,813	5,988	33,855
BRA	3,335,035	3,231,788	2,689,156	477,826	215,615	2,031,891
CHI	233,165	223,101	180,852	36,110	18,261	157,079
COL	746,059	727,692	107,563	582,722	44,277	335,088
*COR	70,182	66,725	*NI	*NI	15,028	46,131
CUB	401,575	206,826	51,785	47,234	28,575	75,993
ECU	83,611	78,809	64,480	3,416	3,526	43,234
ELS	94,494	89,058	55,592	NR	10,992	53,085
GUT	113,041	98,650	53,603	NR	1,225	42,631
HON	66,519	27,685	25,603	NR	2,090	21,216
MEX	1,768,862	1,625,920	1,311,483	279,037	99,018	722,113
NIC	72,988	72,083	67,101	4,982	4,997	38,631
PAN	55,083	49,361	23,102	NR	3,465	28,115
PAR	62,154	32,051	25,795	5,019	568	16,169
PER	166,049	146,035	104,010	25,746	10,610	86,253
DOR	106,291	53,064	5,992	4,397	86	7,034
URU	104,342	NR	NR	NR	NR	NR
VEN	445,957	393,654	326,024	26,631	26,631	231,787

*IN = Invalid Number

BOL: The number of units of separated RBC (87732), is higher than the units received 83707

COR: the sum of units of FP and FP (65893 /15008 respectively) is higher than the units of RBC obtained 66.725.

TABLE 9a. (continued)
Blood and Blood Components Discarded (Number)

COUNTRY	WB	RBC	FFP	FP	CRYO	PL
ARG	29,644	99,603	28,337	36,155	5,136	42,211
BOL	920	4,270	17,097	7,560	1,046	12,970
BRA	8,840	308,229	964,329	44,729	3,051	279,635
CHI	5,218	7,163	NR	16,355	655	35,420
COL	16,846	105,908	145.177	607.216	13,121	261,639
COR	9	9,629	803	48,230	97	20,364
CUB	0	28,223	3,320	8,677	923	9,754
ECU	NR	NR	NR	NR	NR	NR
ELS	*NI	1,984	11,206	NR	84	3,348
GUT	3,242	12,424	15,812	NR	227	12,461
HON	3,418	3,360	12,018	NR	104	3,764
MEX	56,877	113,605	522,760	330,766	15,337	223,012
NIC	714	1,615	33,759	4,865	136	1,784
PAN	657	6,901	1,967	NR	371	5,131
PAR	1,835	6,323	8,925	1,910	164	10,987
PER	2,032	143,444	21,989	13,102	1,981	22,725
DOR	6,710	1,036	4,735	NR	1	919
URU	4602	NR	NR	NR	NR	NR
VEN	NR	17,585	NR	NR	NR	NR

*IN = Invalid Number

ELS: the number of units of WB discarded is higher that produced, 5861 versus 5436

TABLE 10. AVAILABILITY OF BLOOD COMPONENTS 2012 (%)

COUNTRY	% SEPARATED INTO COMPONENTS					% BLOOD AND BLOOD COMPONENTS DISCARDED					
	RBC	FFP	FP	CRYO	PL	WB	RBC	FFP	FP	CRYO	PL
ARG	94.26	42.42	51.84	4.71	32.99	51	10	6.32	6.60	10.31	12.11
*BOL	*NI	78.91	11.77	7.18	40.60	*NI	*NI	25.98	77.04	17.47	38.31
BRA	96.90	80.63	14.33	6.47	60.93	8.56	9.54	35.86	9.36	1.42	13.76
CHI	95.68	77.56	15.49	7.83	67.37	51.85	3.21	NR	45.29	3.59	22.55
*COL	97.54	14.42	78.11	5.93	44.91	91.72	14.55	*NI	24.91	29.63	78.08
*COR	95.07	*NI	*NI	21.41	65.73	2.08	14.43	*NI	*NI	0.65	44.14
CUB	51.50	12.90	11.76	7.12	18.92	0	13.65	6.41	18.37	3.23	12.83
ECU	94.26	77.12	4.09	4.22	51.71	NR	NR	NR	NR	NR	NR
*ELS	94.25	58.83	NR	11.63	56.18	*NI	2.23	20.16	NR	0.76	6.31
GUT	87.27	47.42	NR	1.08	37.71	22.53	12.59	29.50	NR	18.53	29.23
HON	41.62	38.49	NR	3.14	31.89	28.04	12.14	46.94	NR	4.98	17.74
*MEX	91.92	74.14	15.77	5.60	40.82	69.92	6.99	39.86	*NI	15.49	30.88
NIC	98.76	91.93	6.83	6.85	52.93	78.90	2.24	50.31	97.65	2.72	4.62
PAN	89.61	41.94	NR	6.29	51.04	12.37	13.98	8.51	NR	10.70	18.25
PAR	51.57	41.50	8.08	0.91	26.01	13.65	19.72	34.60	38.06	28.87	68
PER	87.96	62.65	15.51	6.39	51.95	10.17	9.82	21.14	50.89	18.67	26.38
DOR	49.92	5.64	4.14	0.08	6.62	8.15	1.95	79.02	NR	1.16	13.07
URU	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
VEN	88.27	73.11	5.97	5.97	51.98	NR	4.47	NR	NR	NR	NR

*IN = Invalid Number

BOL as explained in table 9

COL the number of units of FFP discarded is higher that produced 607216 versus 107563

COR: as explained in table 9

ELS: as explained in table 9a

MEX: the number of units of FP discarded is higher that produced 330766 versus 279037

Figure 4. Percentage of blood and blood components discarded, Latin America 2012

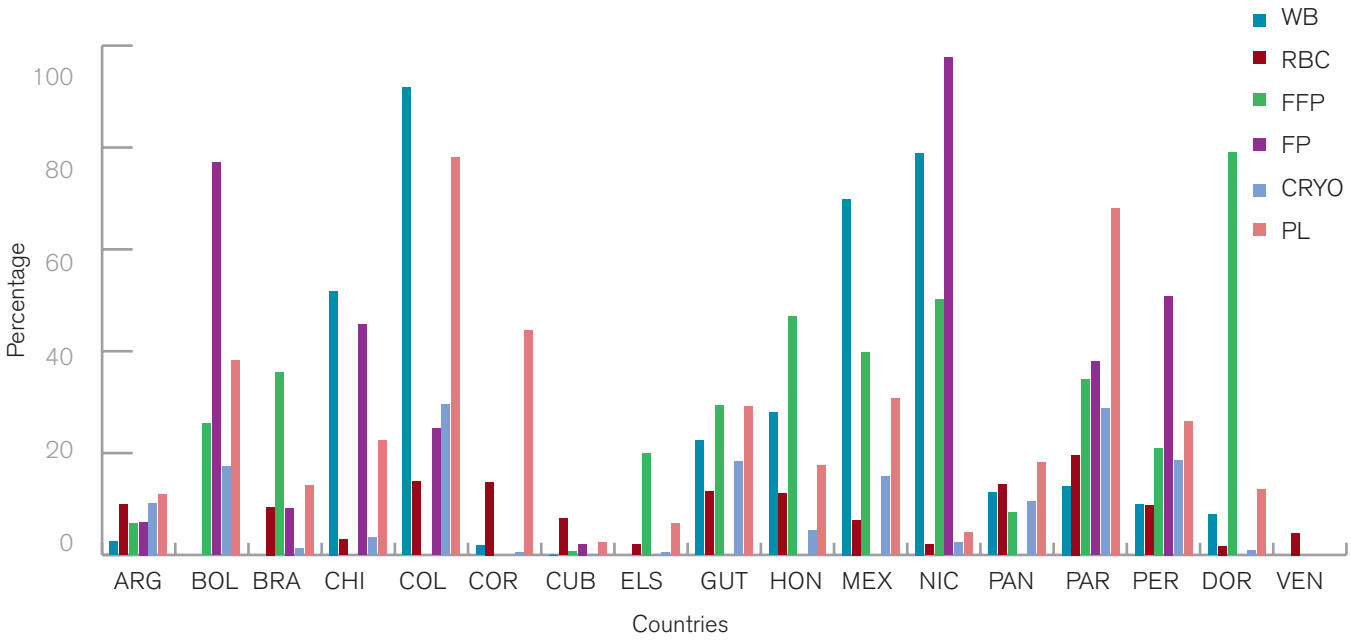


TABLE 11. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2012

COUNTRY	SPECIFIC LAW	RESPONSIBLE UNIT	SPECIFIC BUDGET	NATIONAL POLICY	NATIONAL COMMISSION
ARG	YES	YES	YES	YES	PARTIAL
BOL	YES	YES	YES	YES	YES
BRA	YES	YES	YES	YES	YES
CHI	PARTIAL	YES	YES	YES	YES
COL	YES	YES	NO	YES	YES
COR	NO	NO	NO	NO	NO
CUB	YES	YES	NO	YES	YES
ECU	YES	YES	YES	YES	NO
ELS	NO	YES	NO	PARTIAL	NO
GUT	YES	YES	YES	NR	PARTIAL
HON	PARTIAL	YES	YES	PARTIAL	PARTIAL
MEX	YES	YES	YES	YES	YES
NIC	YES	YES	YES	YES	YES
PAN	YES	NO	NO	NO	YES
PAR	YES	YES	YES	YES	NO
PER	YES	YES	YES	YES	NO
DOR	YES	YES	NO	YES	YES
URU	YES	NR	NR	NR	NR
VEN	YES	PARTIAL	YES	NO	PARTIAL

TABLE 12. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2012

COUNTRY	REFERENCE CENTER	NATIONAL PLAN	DONOR NORMS	OPERATION NORMS	CLINICAL GUIDELINES	SERVICE REGISTRATION
ARG	NO	YES	YES	YES	YES	PARTIAL
BOL	YES	YES	YES	YES	YES	YES
BRA	NO	NO	YES	YES	YES	YES
CHI	YES	YES	YES	YES	YES	YES
COL	YES	YES	YES	YES	YES	YES
COR	YES	NO	NO	PARTIAL	NO	PARTIAL
CUB	YES	YES	YES	YES	YES	YES
ECU	YES	NO	YES	YES	YES	YES
ELS	YES	YES	YES	YES	YES	YES
GUT	YES	YES	YES	YES	YES	YES
HON	NO	NO	PARTIAL	PARTIAL	YES	NO
MEX	YES	YES	YES	YES	YES	YES
NIC	YES	YES	YES	YES	YES	YES
PAN	YES	NO	YES	YES	YES	NO
PAR	YES	YES	YES	YES	YES	YES
PER	NO	NO	YES	YES	YES	YES
DOR	NO	YES	YES	YES	NO	YES
URU	NR	NR	YES	YES	NR	YES
VEN	NO	YES	YES	YES	PARTIAL	PARTIAL

TABLE 13. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2012

COUNTRY	QUALITY ASSURANCE POLICY	NATIONAL QUALITY ASSURANCE PROGRAM	EXTERNAL EVALUATION SEROLOGY-TTI	EXTERNAL EVALUATION IMMUNOHE-MATOLOGY	INSPECTION PROGRAM	CONTINUED EDUCATION
ARG	PARTIAL	YES	YES	PARTIAL	PARTIAL	YES
BOL	YES	YES	YES	YES	YES	YES
BRA	YES	YES	YES	YES	YES	YES
CHI	YES	YES	YES	YES	YES	PARTIAL
COL	YES	YES	YES	YES	YES	YES
COR	NO	NO	PARTIAL	PARTIAL	NO	NO
CUB	YES	YES	YES	YES	YES	YES
ECU	NO	YES	YES	NO	NO	NO
ELS	NO	YES	YES	YES	PARTIAL	YES
GUT	NO	NO	NO	NO	YES	YES
HON	NO	NO	NO	NO	NO	NO
MEX	YES	YES	YES	YES	YES	YES
NIC	YES	YES	NO	NO	YES	YES
PAN	NO	NO	NO	NO	YES	NO
PAR	YES	YES	NO	NO	YES	SI
PER	YES	NO	YES	YES	YES	NO
DOR	YES	YES	YES	NO	YES	NO
URU	NR	NR	YES	NR	YES	NR
VEN	PARTIAL	PARTIAL	YES	NO	PARTIAL	YES

TABLE 14. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2012

COUNTRY	STAFF CERTIFICATION	SERVICE ACCREDITATION
ARG	NO	YES
BOL	YES	YES
BRA	YES	YES
CHI	YES	YES
COL	YES	YES
COR	NO	YES
CUB	YES	YES
ECU	NO	NO
ELS	NO	NO
GUT	YES	NO
HON	NO	NO
MEX	YES	YES
NIC	PARTIAL	PARTIAL
PAN	NO	NO
PAR	NO	NO
PER	NO	NO
DOR	NO	NO
URU	NR	NR
VEN	NO	NO

TABLE 15. COUNTRIES WITH 100% SCREENING FOR INFECTIOUS MARKERS 2012

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	T. CRUZI	FIVE MARKERS	HTLV I-II
BOL	BOL	BOL	BOL	BOL	BOL	BOL	
BRA	BRA	BRA	BRA	BRA	BRA	BRA	BRA
CHI	CHI	CHI	CHI	CHI	CHI	CHI	CHI
COL	COL	COL	COL	COL	COL	COL	
COR	COR	COR	COR	COR	COR	COR	COR
CUB	CUB	CUB	CUB	CUB		CUB	
ECU	ECU	ECU	ECU	ECU	ECU	ECU	
ELS	ELS	ELS	ELS	ELS	ELS	ELS	
GUT	GUT	GUT	GUT	GUT	GUT	GUT	
HON	HON	HON	HON	HON	HON	HON	
NIC	NIC	NIC	NIC	NIC	NIC	NIC	
PAN	PAN	PAN	PAN	PAN	PAN	PAN	
PER	PER	PER	PER	PER	PER	PER	PER
DOR	DOR	DOR	DOR	DOR		DOR	DOR
URU	URU	URU	URU	URU	URU	URU	URU

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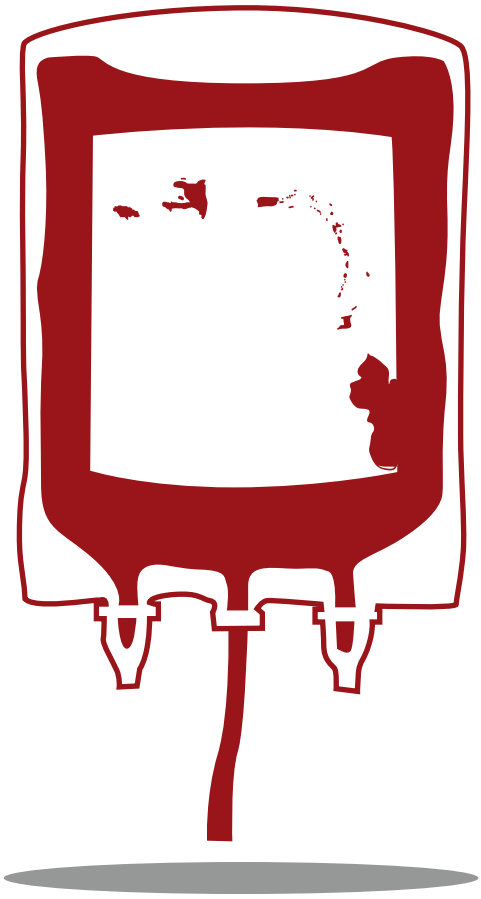

CARIBBEAN COUNTRIES 2012

CARIBBEAN COUNTRIES 2012

TABLE 1. BLOOD COLLECTION 2012

COUNTRY	TOTAL UNITS COLLECTED	NUMBER OF DONORS			
		AUTOLOGOUS	ALLOGENEIC		
			VOLUNTARY	REPLACEMENT	REMUNERATED
ANU	115	1	34	80	0
ARU	3,116	5	3,111	0	0
BAH	7,638	2	2,892	4, 744	0
BLZ	4,795	0	634	4,161	0
BER	2,179	11	2,168	0	0
BVI	381	2	0	379	0
CAY	1,026	0	1,026	0	0
CUR	6,401	3	6,398	0	0
DOM	946	0	100	846	0
*FDA	6,788	0	6,788	0	0
GRA	1,365	NR	530	835	0
GUY	7,712	0	7,712	0	0
HAI	25,608	0	18,374	7,234	0
JAM	30,947	75	7,347	23,525	0
STL	2,276	9	1,536	731	0
STV	1,195	23	72	1,100	0
SUR	9,848	2	9,846	0	0
TCI	674	0	388	286	0
TRT	20,345	55	0	20,290	0

*The information is from Guadeloupe, (Martinique and French Guiana are not included)

TABLE 2. BLOOD COLLECTION FROM ALLOGENEIC DONORS 2012

COUNTRY	NUMBER OF UNITS COLLECTED	TYPE OF ALLOGENEIC DONOR (PERCENTAGE)		
		VOLUNTARY	REPLACEMENT	REMUNERATED
ANU	114	29.82	70.18	0
ARU	3,111	100	0	0
BAH	7,636	37.87	62.12	0
BLZ	4,795	13.22	86.78	0
BER	2,168	100	0	0
BVI	379	0	100	0
CAY	1,026	100	0	0
CUR	6,398	100	0	0
DOM	946	10.57	89.43	0
*FDA	6,788	100	NR	NR
GRA	1,365	38.83	61.17	0
GUY	7,712	100	0	0
HAI	25,608	71.75	28.25	0
JAM	30,872	23.80	76.20	0
STL	2,267	67.76	32.24	0
STV	1,172	6.14	93.86	0
SUR	9,846	100	0	0
TCI	674	57.57	42.43	0
TRT	20,290	0	100	0

*The information is from Guadeloupe, (Martinique and French Guiana are not included)

Figure 1. Percentage of blood collection ranked from greatest to least by voluntary donations, Caribbean 2012

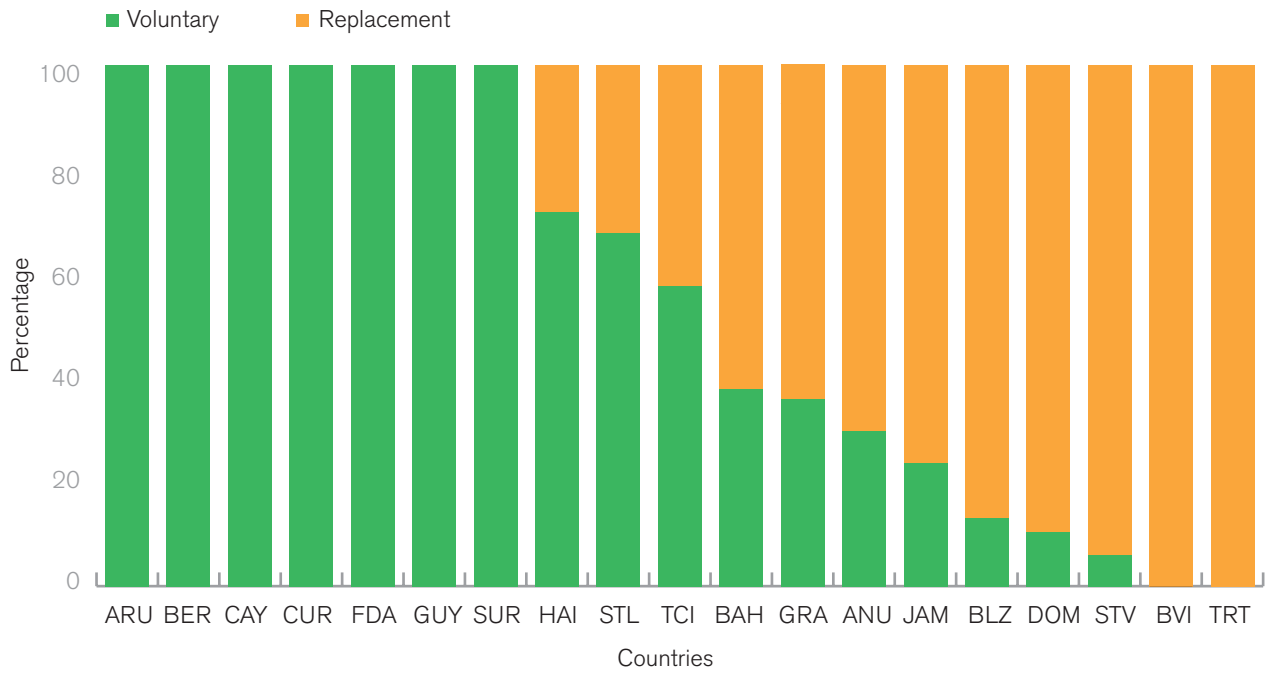

TABLE 3. SELECTION OF ALLOGENEIC DONORS 2012

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF ALLOGENEIC DONORS					
		VOLUNTARY		REPLACEMENT		REMUNERATED	
		INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED	INTERVIEWED	DEFERRED
ANU	114	NR	NR	NR	NR	NR	NR
ARU	3,111	NR	NR	NR	NR	NR	NR
BAH	7,636	3,374	456	5,860	1,052	0	0
BLZ	4,795	830	196	6,159	1,998	0	0
BER	2,168	2,497	270	0	0	0	0
BVI	379	NR	NR	NR	NR	0	0
CAY	1,026	1,162	136	0	0	0	0
CUR	6,398	NR	NR	NR	NR	0	0
DOM	946	NR	NR	NR	NR	0	0
*FDA	6,788	9,826	3,038	0	0	0	0
GRA	1,365	563	33	911	72	0	0
GUY	7,712	10,113	2,401	0	0	0	0
HAI	25,608	24,048	5,674	9,117	1,883	0	0
JAM	30,872	9,078	1,731	32,454	8,929	0	0
STL	2,267	878	315	694	285	0	0
STV	1,172	72	NR	1,100	NR	0	0
SUR	9,846	11,490	1,480	0	0	0	0
TCI	674	424	36	303	17	0	0
TRT	20,290	0	0	32,684	12,394	0	0

*The information is from Guadeloupe, (Martinique and French Guiana are not included)

TABLE 4. SELECTION OF ALLOGENEIC DONORS 2012

COUNTRY	NUMBER OF UNITS COLLECTED	VOLUNTARY		REPLACEMENT		REMUNERATED	
		NUMBER INTER-VIEWED	% DEFERRED	NUMBER INTER-VIEWED	% DEFERRED	NUMBER INTER-VIEWED	% DEFERRED
ANU	114	NR	NR	NR	NR	0	0
ARU	3,111	NR	NR	NR	NR	0	0
BAH	7,636	3,348	13.52	5,796	17.95	0	0
BLZ	4,795	830	23.61	6,159	32.44	0	0
BER	2,168	2,497	10.81	0	0	0	0
BVI	379	NR	NR	NR	NR	0	0
CAY	1,026	1,162	11.70	0	0	0	0
CUR	6,398	NR	NR	NR	NR	0	0
DOM	946	NR	NR	NR	NR	0	0
*FDA	6,788	9,826	30.92	0	0	0	0
GRA	1,365	563	5.86	911	8.12	0	0
GUY	7,712	10,113	23.74	0	0	0	0
HAI	25,608	24,048	23.59	9,117	20.65	0	0
JAM	30,872	9,078	19.07	32,454	27.51	0	0
STL	2,267	878	35.87	694	40.34	0	0
STV	1,172	72	NR	1,100	NR	0	0
SUR	9,846	11,490	12.88	0	0	0	0
TCI	674	424	8.49	303	5.61	0	0
TRT	20,290	0	0	32,684	37.92	0	0

*The information is from Guadeloupe, (Martinique and French Guiana are not included)

Figure 2. Percentage of deferred donors by allogeneic donor type, Caribbean 2012

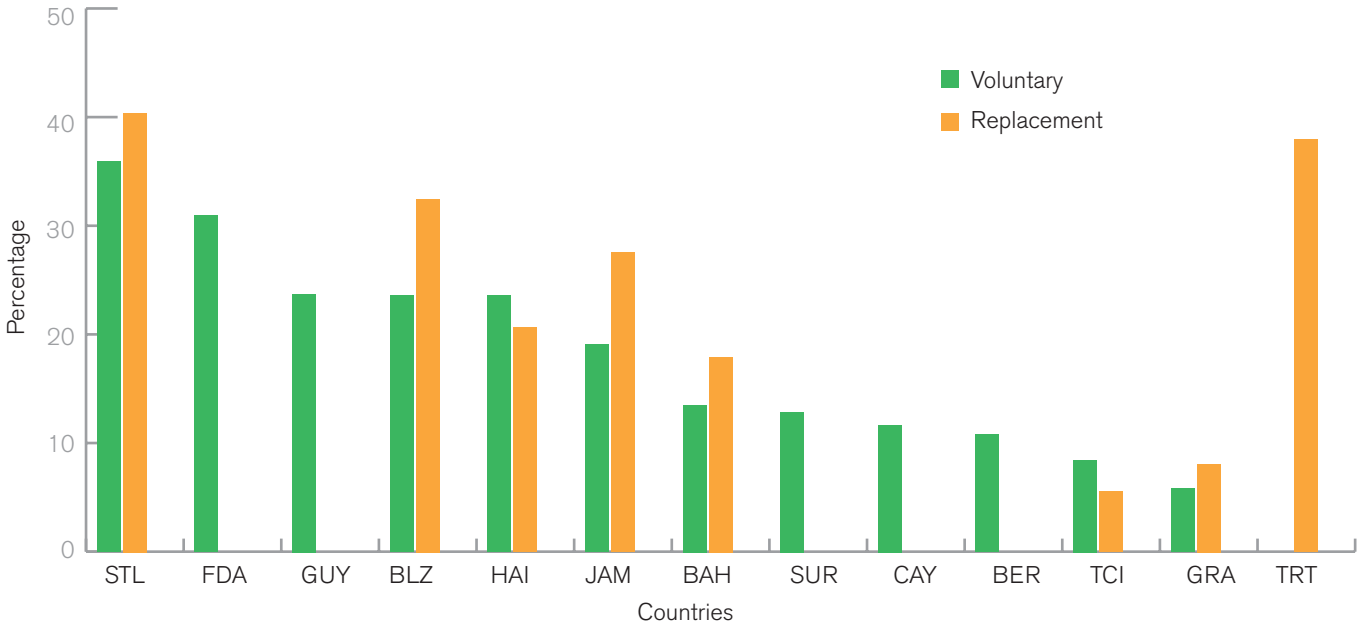

TABLE 5. EFFICIENCY OF BLOOD PROCESSING 2012

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF COLLECTING CENTERS	NUMBER OF PROCESSING CENTERS	ANNUAL PROCESSING PER BANK	DAILY PROCESSING PER BANK (260 DAYS)
ANU	115	1	1	115	0,44
ARU	3,116	1	1	3,316	11,98
BAH	7,638	3	3	2,546	9,79
BLZ	4,795	7	1	4,795	18,44
BER	2,179	1	1	2,179	8,38
BVI	381	1	1	381	1,47
CAY	1,026	2	2	513	1,97
CUR	6,401	1	1	6,401	24,62
DOM	946	1	1	946	3,64
*FDA	6,788	2	2	3,394	13,05
GRA	1,365	1	1	1,473	5,67
GUY	7,712	NR	NR	NR	NR
HAI	25,608	1	14	1,829	7,04
JAM	30,947	9	3	10,316	40
STL	2,276	2	1	2,276	8,75
STV	1,195	1	1	117,295	5
SUR	9,848	1	1	9,848	37,88
TCI	674	1	1	674	2,59
TRT	20,345	6	1	20,345	78,25

*The information is from Guadeloupe, (Martinique and French Guiana are not included)

TABLE 6. COVERAGE (%) OF SCREENING FOR INFECTIOUS MARKERS 2012

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU	100	100	100	100	0
ARU	100	100	100	100	100
BAH	100	100	100	100	100
*BLZ	100	100	100	100	NR
BER	100	100	100	100	100
BVI	100	100	100	100	100
CAY	100	100	100	100	100
CUR	100	100	100	100	100
DOM	100	100	NR	100	100
*FDA	100	100	100	100	100
GRA	NR	NR	NR	NR	NR
*GUY	100	100	100	100	100
HAI	100	100	100	100	100
JAM	100	100	100	100	100
STL	100	100	100	100	100
STV	99.50	99.50	99.50	99.50	99.50
*SUR	100	100	100	100	100
TCI	100	100	100	100	100
*TRT	100	100	100	100	100

* Units screened for T Cruzi
BLZ 100%
FDA 15%
Guadeloupe (Martinique and French Guiana are not included)
GUY 100%
SUR: 100%
TRT 100%

TABLE 7. NUMBER OF NON SCREEN FOR INFECTIOUS MARKERS 2012

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU					115
BLZ					4,795
DOM			946		
STV	6	6	6	6	6

TABLE 8. PROPORTION (%) OF REACTIVE/POSITIVE UNITS 2012

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU	0	0.88	0	0	NR
ARU	0.03	0	0	0	0
BAH	0.20	0.51	0.29	1.17	0.33
*BLZ	0.27	0.38	0.27	1.50	NR
BER	0.05	0.05	0.05	0.18	0.05
BVI	0	1.05	0.52	1.05	0.26
CAY	0	0	0	0.10	0
CUR	0	0	0	0	0
DOM	0	0.21	NR	1.16	0.95
*FDA	0.12	0.13	0	0.37	0.09
GRA	NR	NR	NR	NR	NR
*GUY	0.27	0.96	0.45	0.66	0.43
HAI	0.93	3.44	0.44	1.99	0.62
JAM	1.09	0.80	0.69	2.20	1.57
STL	0	0.83	0.08	0.78	0.57
STV	0.17	1	0.42	1.51	2.18
*SUR	0.03	0.02	0.01	0	0.03
TCI	0	0	0	0.15	0
*TRT	0.20	0.33	0.31	1.41	0.62

* REACTIVE/POSITIVE T Cruzi =
BLZ: 0.65
FDA: 0.39 Guadeloupe (Martinique and French Guiana are not included)
GUY: 0.25
SUR: 0
TRT: 0.21

Figure 3. Proportion (%) of reactive/positive units, Caribbean 2012

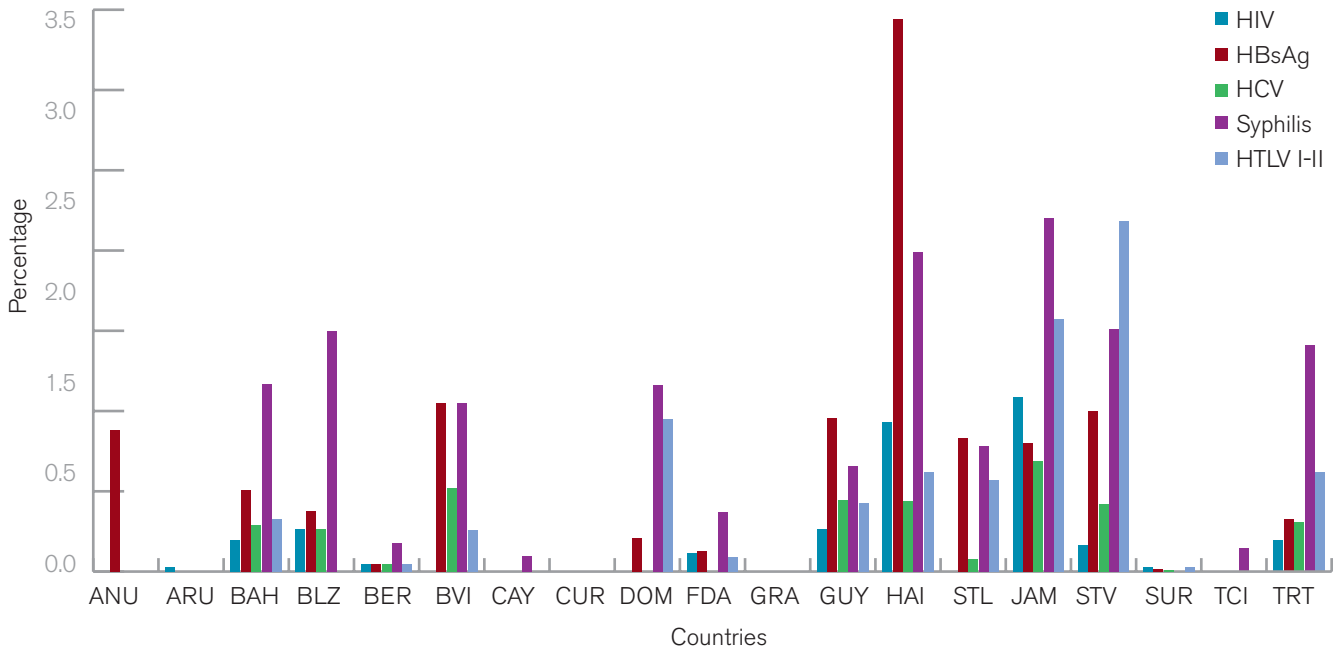

TABLE 9. AVAILABILITY OF BLOOD COMPONENTS 2012
Separation into components (Number)

COUNTRY	UNITS RECEIVED	RBC	FFP	FP	CRYO	PL
ANU	115	71	NR	NR	NR	NR
ARU	3,111	3,023	469	NR	NR	2,171
BAH	7,638	5,435	1,618	NR	NR	1,931
BLZ	4,795	1,719	751	968	NR	749
BER	2,179	2,043	427	NR	NR	NR
BVI	381	380	120	260	NR	NR
CAY	1,026	932	495	NR	NR	NR
CUR	6,401	6,337	1,332	NR	NR	3,446
DOM	946	902	514	NR	36	470
*FDA	6,788	NR	NR	NR	NR	NR
GRA	1,365	NR	NR	NR	NR	NR
GUY	7,712	4,919	1,219	NR	86	1,003
HAI	25,608	11,820	NR	NR	NR	NR
JAM	30,947	30,572	NR	NR	NR	NR
STL	2,276	NR	NR	NR	NR	NR
STV	1,195	1,183	216	NR	NR	216
SUR	9,848	9,848	2,002	NR	NR	2,234
TCI	674	155	29	126	0	5
TRT	20,345	6,726	4,393	NR	348	3,480

*The information is from Guadeloupe, (Martinique and French Guiana are not included)

TABLE 9a. (continued)
Blood and Blood Components Discarded (Number)

COUNTRY	WB	RBC	FFP	FP	CRYO	PL
ANU	10	NR	NR	NR	NR	NR
ARU	NR	50	72	NR	NR	1,563
BAH	NR	353	335	NR	NR	459
BLZ	5,440	132	107	730	NR	281
BER	NR	229	73	NR	NR	NR
BVI	0	79	NR	NR	NR	NR
CAY	54	66	193	NR	NR	NR
CUR	NR	283	63	NR	NR	2,192
DOM	NR	116	NR	NR	NR	NR
*FDA	2	1,246	53	NR	NR	358
GRA	26	252	12	3	NR	NR
GUY	2,051	NR	NR	NR	NR	NR
HAI	1,845	NR	NR	NR	NR	NR
JAM	NR	NR	NR	NR	NR	NR
STL	2	85	22	0	NR	789
STV	70	79	NR	NR	NR	156
SUR	NR	65	13	NR	NR	368
TCI	NR	NR	NR	NR	NR	NR
TRT	NR	NR	NR	NR	NR	NR

*The information is from Guadeloupe, (Martinique and French Guiana are not included)

TABLE 10. AVAILABILITY OF BLOOD COMPONENTS 2012 (%)

COUNTRY	% SEPARATED INTO COMPONENTS					% BLOOD AND BLOOD COMPONENTS DISCARDED					
	RBC	FFP	FP	CRYO	PL	WB	RBC	FFP	FP	CRYO	PL
ANU	61.74	NR	NR	NR	NR	22.72	NR	NR	NR	NR	NR
ARU	97.17	15.10	NR	NR	69.80	NR	1.65	15.35	NR	NR	72
BAH	71.16	21.18	NR	NR	25.28	NR	6.49	20.70	NR	NR	23.77
*BLZ	35.85	15.66	20.19	NR	15.62	*NI	7.68	14.25	75.41	NR	37.52
BER	93.76	19.60	NR	NR	NR	NR	11.21	17.10	NR	NR	NR
BVI	99.74	31.57	68.24	NR	NR	NR	20.79	NR	NR	NR	NR
CAY	90.84	48.25	NR	NR	NR	57.45	7.08	39	NR	NR	NR
CUR	99.00	20.81	NR	NR	53.84	NR	4.46	4.73	NR	NR	63.61
DOM	95.35	54.33	NR	3.81	49.68	NR	12.86	NR	NR	NR	NR
**FDA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
GRA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
GUY	63.78	15.81	NR	1.12	13	73.43	NR	NR	NR	NR	NR
HAI	46.16	NR	NR	NR	NR	13.38	NR	NR	NR	NR	NR
*JAM	98.79	NR	NR	NR	NR	*NI	NR	NR	NR	NR	NR
STL	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
*STV	99	18.08	NR	NR	18.08	*NI	6.68	NR	NR	NR	72.22
SUR	100	20.33	NR	NR	22.68	NR	0.66	0.65	NR	NR	15.98
TCI	23.00	4.30	18.69	0	0.74	NR	NR	NR	NR	NR	NR
TRT	33.06	21.59	NR	1.71	17.10	NR	NR	NR	NR	NR	NR

*IN Invalid number

BLZ Reported 5.440 units of whole blood discarded, however only 4,795 units were available.

JAM Reported 2237 units of whole blood discarded, while only 375 units were available

STV Reported 70 units of whole blood discarded, while only 12 units were available

**The information is from Guadeloupe, (Martinique and French Guiana are not included)

Figure 4. Percentage of blood and blood components discarded, Caribbean 2012

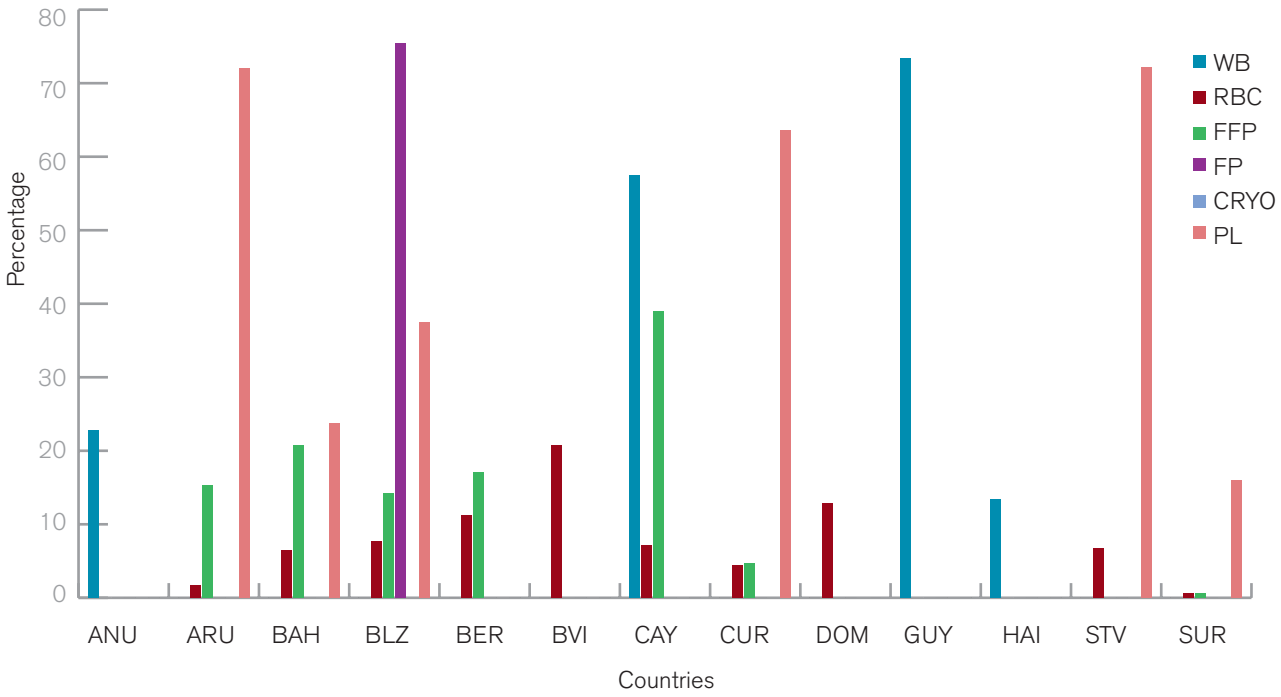

TABLE 11. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2012

COUNTRY	SPECIFIC LAW	RESPONSIBLE UNIT	SPECIFIC BUDGET	NATIONAL POLICY	NATIONAL COMMISSION
ANU	NO	NO	NO	NO	NO
ARU	NO	NO	YES	NO	NO
BAH	NO	NO	YES	YES	PARTIAL
BLZ	NO	YES	PARTIAL	YES	NO
BER	YES	YES	YES	YES	YES
BVI	NO	NO	NO	NO	NR
CAY	NO	NO	NO	NO	NO
CUR	YES	NO	YES	YES	NO
DOM	NO	YES	NO	NO	NO
*FDA	YES	YES	YES	YES	YES
GRA	NO	NO	NO	NO	NO
GUY	PARTIAL	YES	YES	YES	YES
HAI	YES	YES	YES	YES	YES
JAM	NO	YES	NO	NO	NO
STL	NO	NO	NO	NO	NO
STV	NO	NO	NO	NO	NO
SUR	YES	YES	YES	YES	YES
TCI	NO	YES	NO	NO	NO
TRT	NO	NO	NO	NO	NO

*The information is from Guadeloupe, (Martinique and French Guiana are not included)

TABLE 12. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2012

COUNTRY	REFERENCE CENTER	NATIONAL PLAN	DONOR NORMS	OPERATION NORMS	CLINICAL GUIDELINES	SERVICE REGISTRATION
ANU	NO	NO	YES	NO	NO	NO
ARU	YES	YES	YES	YES	YES	NO
BAH	NO	YES	YES	YES	NO	NO
BLZ	YES	NO	NO	YES	NO	YES
BER	NO	YES	YES	YES	YES	YES
BVI	NR	NO	YES	NO	NO	NO
CAY	NO	NO	YES	YES	NO	NO
CUR	YES	YES	YES	YES	YES	NO
DOM	NO	NO	YES	NR	NR	NR
*FDA	YES	YES	YES	YES	YES	YES
GRA	NO	NO	YES	YES	YES	YES
GUY	NO	YES	YES	YES	YES	YES
HAI	YES	YES	YES	YES	YES	YES
JAM	YES	NO	PARTIAL	YES	YES	NO
STL	YES	NO	YES	YES	NO	NO
STV	NO	NO	NO	NO	NO	NO
SUR	NO	NO	YES	YES	NO	YES
TCI	NO	NO	YES	NO	NO	YES
TRT	NO	NO	NO	NO	NR	NO

TABLE 13. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2012

COUNTRY	QUALITY ASSURANCE POLICY	NATIONAL QUALITY ASSURANCE PROGRAM	EXTERNAL EVALUATION SEROLOGY-TTI	EXTERNAL EVALUATION IMMUNOHE-MATOLOGY	INSPECTION PROGRAM	CONTINUED EDUCATION
ANU	NO	YES	NO	NO	NO	SI
ARU	NO	YES	YES	YES	YES	SI
BAH	YES	YES	YES	NO	NO	SI
BLZ	NO	YES	NO	YES	NO	PARCIAL
BER	YES	NO	YES	YES	YES	SI
BVI	NR	YES	NO	NO	NO	NO
CAY	NO	YES	YES	YES	YES	SI
CUR	YES	YES	YES	YES	YES	NO
DOM	NO	YES	NR	NO	YES	SI
*FDA	YES	YES	YES	YES	YES	SI
GRA	NR	NR	NR	NR	NR	NO
GUY	YES	YES	YES	YES	YES	SI
HAI	NO	PARTIAL	YES	NO	YES	SI
JAM	NO	YES	YES	PARTIAL	PARTIAL	NO
STL	NO	YES	NO	NO	NO	SI
STV	NO	YES	NO	NO	NO	NO
SUR	PARTIAL	YES	YES	NO	NO	NO
TCI	NO	NO	NO	NO	NO	NR
TRT	NO	NO	NO	NO	NO	SI

*The information is from Guadeloupe, (Martinique and French Guiana are not included)

TABLE 14. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2012

COUNTRY	STAFF CERTIFICATION	SERVICE ACCREDITATION
ANU	NO	NO
ARU	YES	NO
BAH	NO	NO
BLZ	NO	NO
BER	YES	YES
BVI	NO	NO
CAY	YES	NO
CUR	YES	NO
DOM	NR	NR
*FDA	YES	YES
GRA	NR	NR
GUY	YES	NO
HAI	NO	NO
JAM	NO	NO
STL	NO	NO
STV	NO	NO
SUR	YES	NO
TCI	NO	NO
TRT	NO	NO

*The information is from Guadeloupe, (Martinique and French Guiana are not included)

TABLE 15. COUNTRIES WITH 100% SCREENING FOR INFECTIOUS MARKERS 2012

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II	FIVE MARKERS
ANU	ANU	ANU	ANU	ANU		
ARU	ARU	ARU	ARU	ARU	ARU	ARU
BAH	BAH	BAH	BAH	BAH	BAH	BAH
*BLZ	BLZ	BLZ	BLZ	BLZ		
BER	BER	BER	BER	BER	BER	BER
BVI	BVI	BVI	BVI	BVI	BVI	BVI
CAY	CAY	CAY	CAY	CAY	CAY	CAY
CUR	CUR	CUR	CUR	CUR	CUR	CUR
DOM	DOM	DOM	NR	DOM	DOM	
**FDA	FDA	FDA	FDA	FDA	FDA	FDA
*GUY	GUY	GUY	GUY	GUY	GUY	GUY
HAI	HAI	HAI	HAI	HAI	HAI	HAI
JAM	JAM	JAM	JAM	JAM	JAM	JAM
STL	STL	STL	STL	STL	STL	STL
*SUR	SUR	SUR	SUR	SUR	SUR	SUR
TCI	TCI	TCI	TCI	TCI	TCI	TCI
*TRT	TRT	TRT	TRT	TRT	TRT	TRT

*Screening for T Cruzi 100%

**The information is from Guadeloupe, (Martinique and French Guiana are not included)

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LATIN AMERICAN COUNTRIES 2013

LATIN AMERICAN COUNTRIES 2013

TABLE 1. BLOOD COLLECTION 2013

COUNTRY	TOTAL UNITS COLLECTED	NUMBER OF DONORS			
		AUTOLOGOUS	ALLOGENEIC		
			VOLUNTARY	REPLACEMENT	REMUNERATED
ARG	966,059	11,455	362,750	591,854	0
BOL	102,146	76	46,171	55,899	0
CHI	229,911	NR	54,068	175,843	0
COL	740,173	217	641,920	98,036	0
COR	68,209	0	46,465	21,744	0
CUB	411,545	NR	411,545	0	0
ECU	229,018	88	130,603	98,327	0
ELS	98,088	9	14,022	84,057	0
GUT	121,921	14	5,862	116,045	0
HON	69,082	6	10,363	58,113	600
MEX	1,364,395	1,065	41,708	1,321,622	0
NIC	72,658	NR	72,658	0	0
*PAN	53,529	115	3,100	45,982	4,332
PAR	86,056	116	7,904	78,036	0
PER	204,871	118	9,340	195,403	10
DOR	110,780	46	17,687	89,893	3,154
URU	99,151	604	45,802	52,745	0

* Hospital San Miguel Arcángel and Centro Médico Paitilla not included

TABLE 2. BLOOD COLLECTION FROM ALLOGENEIC DONORS 2013

COUNTRY	NUMBER OF UNITS COLLECTED	TYPE OF ALLOGENEIC DONOR (PERCENTAGE)		
		VOLUNTARY	REPLACEMENT	REMUNERATED
ARG	954,604	38	62	0
BOL	102,070	45.23	54.77	0
CHI	229,911	23.52	76.48	0
COL	739,956	86.75	13.25	0
COR	68,209	68.12	31.88	0
CUB	411,545	100	0	0
ECU	228,930	57.05	42.95	NR
ELS	98,079	14.30	85.70	0
GUT	121,907	4.81	95.19	0
HON	69,076	15	84.13	0.87
MEX	1,363,330	3.06	96.94	0
NIC	72,658	100	NR	0
*PAN	53,414	5.79	85.90	8.09
PAR	85,940	9.20	90.80	0
PER	204,753	4.56	95.43	0.005
DOR	110,734	15.97	81.15	2.85
URU	98,547	46.48	53.52	0
TCI	674	57.57	42.43	0
TRT	20,290	0	100	0

* Hospital San Miguel Arcángel and Centro Médico Paitilla not included

Figure 1. Percentage of blood collection ranked from greatest to least by voluntary donations, Latin America 2013

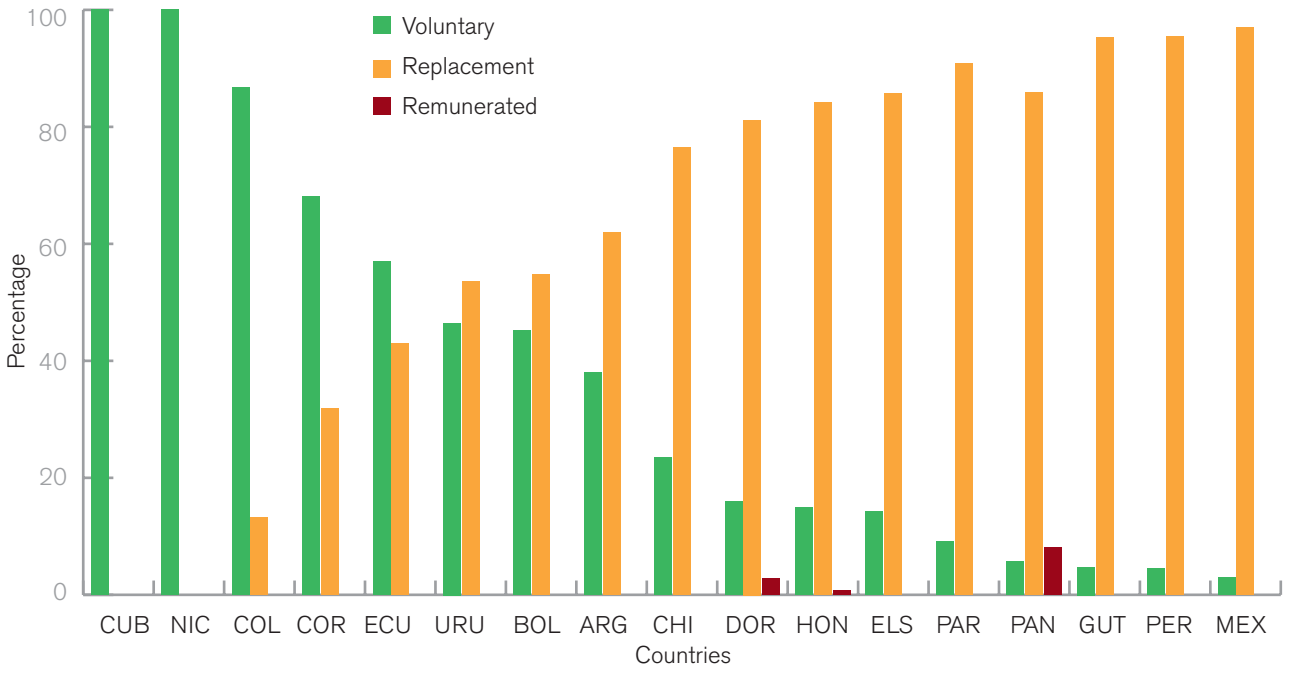

TABLE 3. SELECTION OF ALLOGENEIC DONORS 2013

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF ALLOGENEIC DONORS					
		VOLUNTARY		REPLACEMENT		REMUNERATED	
		INTER-VIEWED	DEFERRED	INTER-VIEWED	DEFERRED	INTER-VIEWED	DEFERRED
ARG	954,604	398,137	35,387	738,297	143,652	0	0
BOL	102,070	61,719	14,048	82,656	26,753	0	0
CHI	229,911	68,479	14,411	226,204	50,361	0	0
COL	739,956	797,525	155,604	119,774	21,738	0	0
COR	68,209	46,637	131	21,770	26	0	0
CUB	411,545	428,926	17,381	NR	NR	0	0
ECU	228,930	154,885	24,161	124,306	25,183	0	0
ELS	98,079	14,022	NR	118,671	33,953	0	0
GUT	121,907	7,141	1,264	172,829	55,203	0	0
HON	69,076	10,515	149	71,091	12,613	644	44
MEX	1,363,330	55,298	13,590	1,980,047	658,425	0	0
NIC	72,658	80,529	7,871	0	0	0	0
*PAN	53,414	NR	NR	NR	NR	NR	NR
PAR	85,940	8,212	308	84,462	6,425	0	0
PER	204,753	13,347	3,972	278,452	82,579	47	37
DOR	110,734	22,895	5,208	114,141	24,248	4,233	1,089
URU	98,547	57,006	11,204	71,509	18,764	0	0

* Hospital San Miguel Arcángel and Centro Médico Paitilla not included

TABLE 4. SELECTION OF ALLOGENEIC DONORS 2013

COUNTRY	NUMBER OF UNITS COLLECTED	VOLUNTARY		REPLACEMENT		REMUNERATED	
		NUMBER INTER-VIEWED	% DEFERRED	NUMBER INTER-VIEWED	% DEFERRED	NUMBER INTER-VIEWED	% DEFERRED
ARG	954,604	398,137	8.89	7382,97	19.46	0	0
BOL	102,070	61,719	22.76	82,656	32.37	0	0
CHI	229,911	68,479	21.04	226,204	22.26	0	0
COL	739,956	797,525	19.51	119,774	18.15	0	0
COR	68,209	46,637	0.28	21770	0.12	0	0
CUB	411,545	428,926	4.05	NR	NR	0	0
ECU	228,930	154,885	15.60	123,434	20.26	0	0
ELS	98,079	14,022	NR	118,671	28.61	0	0
GUT	121,907	6939	17.70	172829	31.94	0	0
HON	69,076	10,515	1.42	71,091	17.74	644	6.83
MEX	1,363,330	41,708	24.58	1,321,622	33.25	0	0
NIC	72,658	72,658	9.77	0	0	0	0
*PAN	53,414	NR	NR	NR	NR	NR	NR
PAR	85,940	8,212	3.75	84,462	7.60	0	0
PER	204,753	13,347	29.76	278,502	29.65	47	78.72
DOR	110,734	22,895	22.75	114,141	21.24	4,241	25.72
URU	98,547	57,006	19.65	71,509	26.24	0	0

* Hospital San Miguel Arcángel and Centro Médico Paitilla not included

Figure 2. Percentage of deferred donors by allogeneic donor type, Latin America 2013

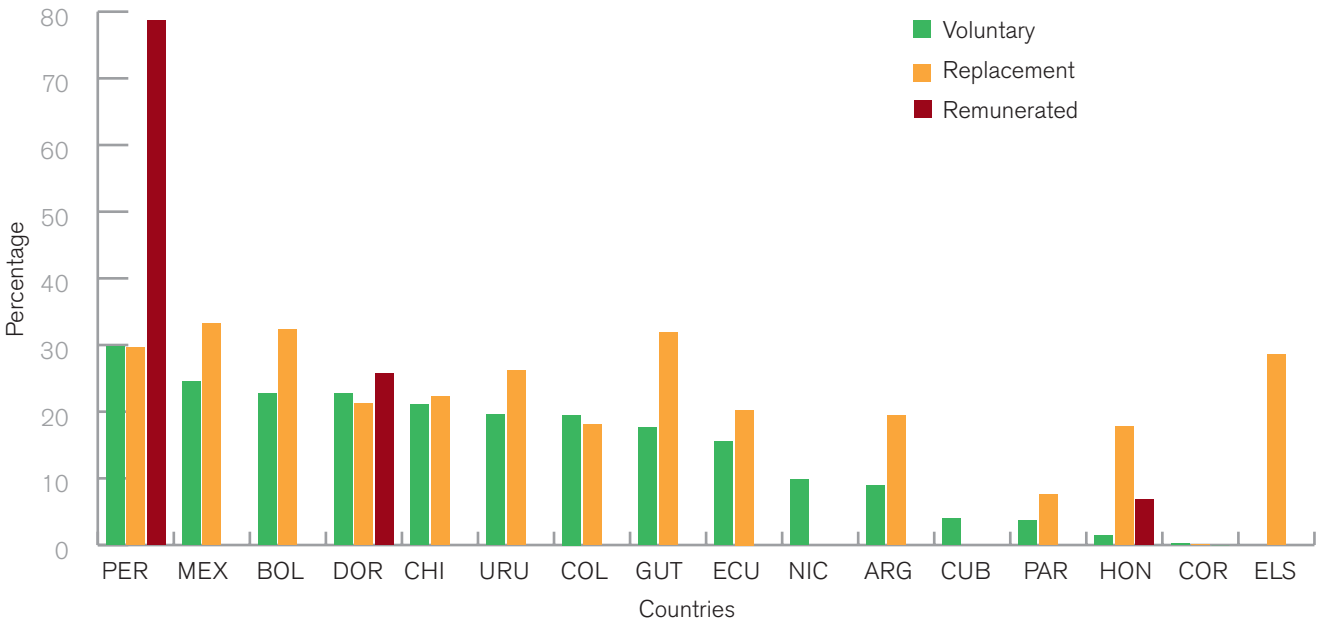

TABLE 5. EFFICIENCY OF BLOOD PROCESSING 2013

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF COLLECTING CENTERS	NUMBER OF PROCESSING CENTERS	ANNUAL PROCESSING PER BANK	DAILY PROCESSING PER BANK (260 DAYS)
ARG	966,059	NR	160	6,038	23,22
BOL	102,146	17	17	6,009	23,11
CHI	229,911	46	19	12,100	46,54
COL	740,173	87	87	8,507	32,72
COR	68,209	33	30	2,273	8,74
CUB	411,545	120	46	8,946	34,41
ECU	229,018	21	21	10,906	41,94
ELS	98,088	27	16	6,131	23,58
GUT	121,921	61	61	1,998	7,68
HON	69,082	25	19	3,636	13,98
MEX	1,364,395	556	NR	NR	NR
NIC	72,658	3	2	36,329	139,73
*PAN	53,529	**27	**27	2,141	8,23
PAR	86,056	12	7	12,293	47,28
PER	204,753	89	89	2,300	8,85
DOR	110,780	66	66	1,678	6,45
URU	99,151	61	51	1,944	7,48

* Hospital San Miguel Arcángel and Centro Médico Paitilla not included

**Data 2012

TABLE 6 COVERAGE (%) OF SCREENING FOR INFECTIOUS MARKERS 2013

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	T. CRUZI	HTLV I-II	Anti-HBc
ARG	100	100	100	100	100	100	100
BOL	91.66	91.66	91.66	91.66	91.67	NR	NR
CHI	97.14	97.57	96.40	96.80	97.67	97.59	NR
COL	100	100	100	100	100	75.44	76.32
COR	100	100	100	100	100	100	100
CUB	100	100	100	100	NR	NR	NR
*ECU	100	100	100	100	96.23	11.94	25.56
ELS	100	100	100	100	100	NR	NR
*GUT	100	100	100	100	100	NR	100
HON	100	100	100	100	100	96.23	96.23
MEX	98.45	98.45	98.44	98.27	91.85	NR	NR
NIC	100	100	100	100	100	NR	NR
**PAN	100	100	100	100	100	100	100
PAR	100	100	100	100	100	100	100
PER	100	100	100	100	100	100	100
DOR	100	100	100	100	NR	100	NR
URU	100	100	100	100	100	100	100

* Screening for CMV ECU: 11.92% GUA: 72.53%

** Hospital San Miguel Arcángel and Centro Médico Paitilla not included

TABLE 7. NUMBER OF UNITS NOT SCREENED FOR INFECTIOUS MARKERS 2013

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	T CRUZI
BOL	8,517	8,517	8,517	8,517	8,507
CHI	6,573	5,587	8,266	7,358	5,359
ECU					8,638
MEX	21,101	21,151	21,258	23,610	111,167

TABLE 8. PROPORTION (%) OF REACTIVE/POSITIVE UNITS 2013

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	T. CRUZI	HTLV I-II	Anti-HBc
ARG	0.18	0.17	0.35	0.91	2.27	0.18	1.39
BOL	0.21	0.28	0.27	0.93	2.73	NR	NR
CHI	0.06	0.01	0.02	0.32	0.15	0.09	NR
COL	0.21	0.16	0.41	1.50	0.40	0.23	1.75
COR	0.08	0.13	0.38	0.59	0.22	0.15	1.50
CUB	0.02	0.51	1.24	0.73	NR	NR	NR
*ECU	0.42	0.49	0.25	1.11	0.30	0.02	1.24
ELS	0.07	0.12	0.15	0.75	3.21	NR	NR
*GUT	0.39	0.46	0.97	2.67	1.04	NR	3.92
HON	0.15	0.28	0.35	1.01	1.06	0.14	2.23
MEX	0.29	0.18	0.68	0.70	0.53	NR	NR
NIC	0.04	0.21	0.32	0.36	0.40	NR	NR
**PAN	0.17	0.22	0.50	1.38	0.40	0.33	1.97
PAR	0.43	0.30	0.30	6.47	2.33	0.28	3.03
PER	0.23	0.38	0.56	1.19	0.5	0.88	4.19
DOR	0.16	1.03	0.21	0.66	NR	0.23	NR
URU	0.13	0.10	0.36	0.49	0.24	0.13	0.91

* Reactive/ Positive for CMV
ECU: 0.43
GUT: 1.85
** Hospital San Miguel Arcángel and Centro Médico Paitilla not included

Figure 3. Proportion (%) of reactive/positive units for five markers, Latin America 2013

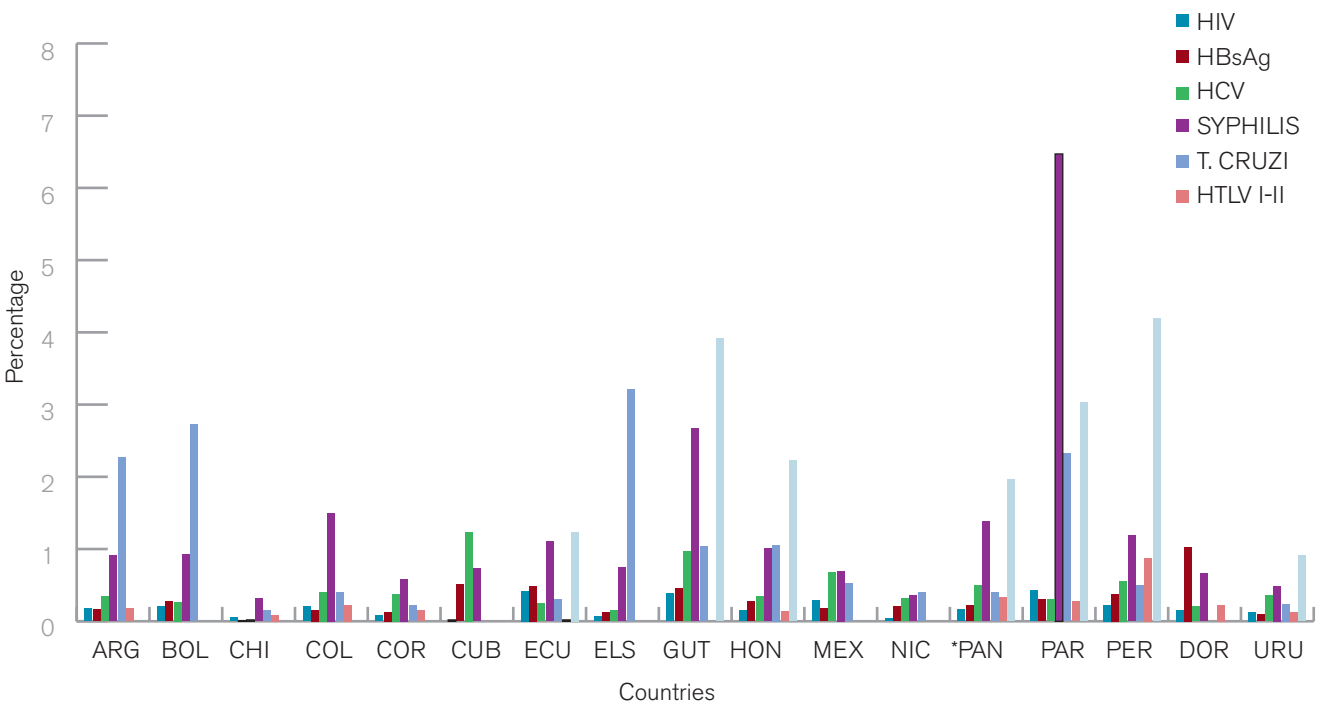

TABLE 9. AVAILABILITY OF BLOOD COMPONENTS 2013

Separation into components (number)

COUNTRY	UNITS RECEIVED	RBC	FFP	FP	CRYO	PL
ARG	966,059	859,144	412,728	369,093	16,560	474,926
BOL	102,146	90,129	76,667	9,970	6,449	31,599
CHI	229,911	174,633	99,842	23,563	11,874	98,057
COL	740,173	718,127	557,757	118,137	61,187	321,141
COR	68,209	68,190	67,187	69	15,583	45,739
CUB	411,545	407,194	37,885	46,370	26,509	72,975
ECU	229,018	220,621	174,668	27,755	5,733	99,825
ELS	98,088	97,969	65,051	NR	16,091	54,112
GUT	121,921	107,542	57,086	2,526	1,376	44,059
HON	69,082	32,234	25,878	NR	2,673	20,914
MEX	1,364,395	1,321,413	905,769	264,522	151,122	659,179
NIC	72,658	71,664	62,801	2,603	4,781	40,602
*PAN	53,529	43,469	20,603	NR	3,547	27,692
PAR	86,056	71,982	60,869	26,562	5,878	49,726
PER	204,871	185,717	138,344	29,142	18,071	105,145
DOR	110,780	59,961	7,202	5,111	59	7,671
URU	99,151	NR	NR	NR	NR	NR

* Hospital San Miguel Arcángel and Centro Médico Paitilla not included

Table 9a. (Continued)
Blood And Blood Components Discarded (Number)

COUNTRY	WB	RBC	FFP	FP	CRYO	PL
ARG	50,791	217,354	92,376	56,281	4,210	172,876
BOL	2,120	6,402	28,003	7,909	1,186	12,379
CHI	NR	16,315	36,263	NR	1,808	45,993
COL	9,003	65,178	369,560	117,613	13,532	136,981
COR	NR	12,608	33,241	30,005	2,610	23,436
CUB	NR	6,541	1,278	2,097	1,274	12,491
ECU	3,760	8,770	47,736	10,325	450	23,658
ELS	662	5,662	12,562	NR	7,693	638
GUT	3,148	14,540	16,004	NR	329	10,785
HON	5,962	2,140	6,276	NR	45	5,399
MEX	56,877	113,597	522,760	330,766	15,337	223,012
NIC	678	1,431	31,919	3,766	99	1,733
*PAN	NR	NR	NR	NR	NR	NR
PAR	1,109	11,820	9,430	3,860	251	14,960
PER	2,170	25,413	42,774	26,944	1,405	28,143
DOR	6,158	1,139	4,893	NR	0	1,281
URU	NR	6,624	NR	NR	NR	12,152

*Hospital San Miguel Arcángel and Centro Médico Paitilla not included

TABLE 10. AVAILABILITY OF BLOOD COMPONENTS 2013

COUNTRY	% SEPARATED INTO COMPONENTS					% BLOOD AND BLOOD COMPONENTS DISCARDED					
	RBC	FFP	FP	CRYO	PL	WB	RBC	FFP	FP	CRYO	PL
ARG	88.93	42.72	38.21	1.71	49.16	53.21	25.29	22.38	15.25	25.42	36.40
BOL	88.24	75.06	9.76	6.31	30.94	65.23	7.10	36.53	79.33	18.40	39.18
CHI	75.96	43.43	10.25	5.17	42.65	NR	9.34	36.32	NR	15.23	46.90
COL	97.02	75.36	15.96	8.27	43.39	40.84	9.08	66.26	99.56	22.12	42.65
*COR	99.97	98.50	0.10	22.85	67.06	NR	18.49	49.48	*NI	16.75	51.24
CUB	98.94	9.21	11.27	6.44	17.73	NR	1.61	3.37	4.52	4.81	17.12
ECU	96.33	76.27	12.12	2.50	43.59	44.78	3.98	27.33	37.20	7.85	23.70
*ELS	99.88	66.32	NR	16.40	55.17	*NI	5.78	19.31	NR	47.81	1.18
GUT	88.21	46.82	2.07	1.13	36.14	21.89	13.52	28.03	NR	23.91	24.48
*HON	46.66	37.46	NR	3.87	30.27	*NI	6.64	24.25	NR	1.68	25.82
*MEX	96.85	66.39	19.39	11.08	48.31	*NI	8.60	57.71	*NI	10.15	33.83
*NIC	98.63	86.43	3.58	6.58	55.88	68.21	2	50.83	*NI	2.07	4.27
**PAN	81.21	38.49	NR	6.63	51.73	NR	NR	NR	NR	NR	NR
PAR	83.65	70.73	30.87	6.83	57.78	7.88	16.42	15.50	14.53	4.27	30.08
PER	90.65	67.53	14.22	8.82	51.32	11.33	13.68	30.92	92.46	7.78	26.77
DOR	54.13	6.50	4.61	0.05	6.92	12.12	1.89	67.93	NR	0	16.70
URU	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

*IN= Invalid Number

COR it reports higher number of discarded of FP units that produced it. 30005 vs 69

ELS it reports higher number of discarded of WB units, that available. 662 versus 119

HON: it reports higher number of discarded of WB units, that available 5962 versus 5704

MEX: it reports higher number of discarded of WB and FP units, that available WB 42.982 vs 56.877 and FP 264.522 vs 330.766

NIC: it reports higher number of discarded of FP units that produced it, 3.766 vs 2.603

** Hospital San Miguel Arcángel and Centro Médico Paitilla not included

Figure 4. Percentage of blood and blood components discarded, Latin America 2013

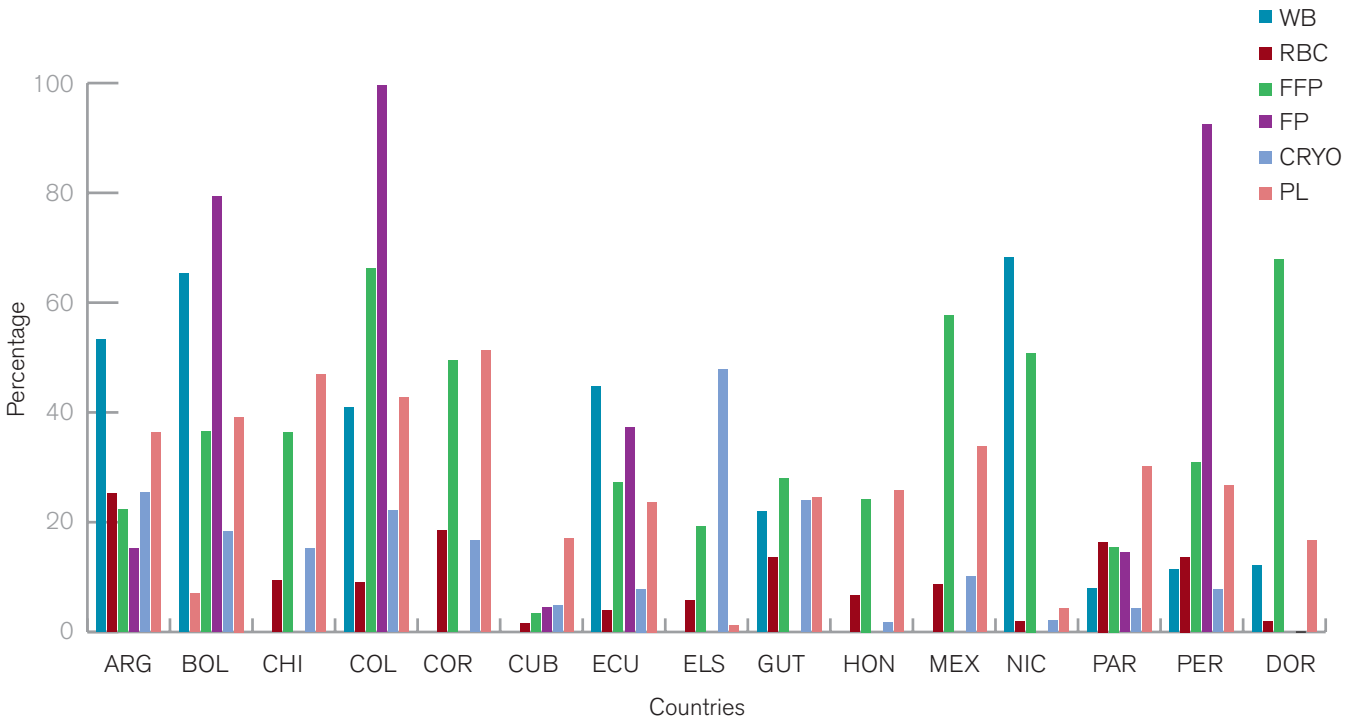

TABLE 11. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2013

COUNTRY	SPECIFIC LAW	RESPONSIBLE UNIT	SPECIFIC BUDGET	NATIONAL POLICY	NATIONAL COMMISSION
ARG	YES	YES	YES	YES	YES
BOL	YES	YES	YES	YES	YES
CHI	PARTIAL	YES	YES	YES	YES
COL	NO	YES	NO	YES	NO
COR	NO	NO	NO	NO	NO
CUB	YES	YES	NO	YES	YES
ECU	YES	YES	YES	YES	NO
ELS	NO	YES	NO	YES	NO
GUT	YES	YES	YES	PARTIAL	PARTIAL
HON	NO	YES	YES	PARTIAL	PARTIAL
MEX	YES	YES	YES	YES	NO
NIC	YES	NR	YES	YES	YES
*PAN	NR	NR	NR	NR	NR
PAR	YES	YES	YES	YES	NO
PER	YES	YES	YES	YES	NO
DOR	YES	YES	NO	YES	YES
URU	NR	NR	NR	NR	NR

*Hospital San Miguel Arcángel and Centro Médico Paitilla not included

TABLE 12. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2013

COUNTRY	REFERENCE CENTER	NATIONAL PLAN	DONOR NORMS	OPERATION NORMS	CLINICAL GUIDELINES	SERVICE REGISTRATION
ARG	YES	YES	YES	YES	YES	YES
BOL	YES	YES	YES	YES	YES	YES
CHI	YES	YES	YES	YES	YES	YES
COL	YES	NO	YES	YES	YES	YES
COR	PARTIAL	NO	NO	YES	NO	YES
CUB	YES	YES	YES	YES	YES	YES
ECU	YES	NO	PARTIAL	YES	YES	YES
ELS	YES	YES	YES	YES	YES	YES
GUT	YES	YES	YES	YES	YES	YES
HON	NO	NO	PARTIAL	YES	YES	NO
MEX	YES	YES	YES	YES	YES	YES
NIC	YES	YES	YES	YES	YES	YES
*PAN	NR	NR	NR	NR	NR	NR
PAR	YES	YES	YES	YES	YES	YES
PER	YES	NO	YES	YES	YES	YES
DOR	NO	YES	YES	YES	NO	YES
URU	NR	NR	NR	NR	NR	NR

*Hospital San Miguel Arcángel and Centro Médico Paitilla not included

TABLE 13. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2013

COUNTRY	QUALITY ASSURANCE POLICY	NATIONAL QUALITY ASSURANCE PROGRAM	EXTERNAL EVALUATION SEROLOGY-TTI	EXTERNAL EVALUATION IMMUNOHE-MATOLOGY	INSPECTION PROGRAM	CONTINUED EDUCATION
ARG	YES	YES	YES	NO	YES	YES
BOL	YES	YES	YES	YES	YES	YES
CHI	YES	YES	YES	YES	YES	YES
COL	YES	YES	YES	YES	YES	YES
COR	NO	NO	PARTIAL	PARTIAL	PARTIAL	NO
CUB	YES	YES	YES	YES	YES	YES
ECU	PARTIAL	YES	YES	NO	PARTIAL	PARTIAL
ELS	NO	YES	YES	YES	PARTIAL	YES
GUT	NO	NO	NO	NO	YES	YES
HON	NO	NO	PARTIAL	PARTIAL	PARTIAL	PARTIAL
MEX	YES	YES	YES	YES	YES	YES
NIC	NR	YES	NR	NR	YES	YES
*PAN	NR	NR	NR	NR	NR	NR
PAR	YES	YES	YES	NO	YES	YES
PER	YES	PARTIAL	YES	YES	YES	NO
DOR	YES	YES	YES	NO	YES	NO
URU	NR	NR	NR	NR	NR	NR

*Hospital San Miguel Arcángel and Centro Médico Paitilla not included

TABLE 14. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2013

COUNTRY	STAFF CERTIFICATION	SERVICE ACCREDITATION
ARG	YES	YES
BOL	YES	YES
CHI	YES	YES
COL	YES	YES
COR	YES	NO
CUB	NR	YES
ECU	NO	NO
ELS	NO	NO
GUT	YES	NO
HON	NO	YES
MEX	YES	YES
NIC	YES	NR
*PAN	NR	NR
PAR	NO	NO
PER	NO	NO
DOR	NO	NO
URU	NR	NR

*Hospital San Miguel Arcángel and Centro Médico Paitilla not included

TABLE 15. COUNTRIES WITH 100% SCREENING FOR INFECTIOUS MARKERS 2013

COUNTRY	HIV	HBSAG	HCV	SYPHILIS	T. CRUZI	FIVE MARKERS	HTLV I-II
ARG	ARG	ARG	ARG	ARG	ARG	ARG	ARG
COL	COL	COL	COL	COL	COL	COL	
COR	COR	COR	COR	COR	COR	COR	COR
CUB	CUB	CUB	CUB	CUB			
ECU	ECU	ECU	ECU	ECU			
ELS	ELS	ELS	ELS	ELS	ELS	ELS	
GUT	GUT	GUT	GUT	GUT	GUT	GUT	
HON	HON	HON	HON	HON	HON	HON	
NIC	NIC	NIC	NIC	NIC	NIC	NIC	
PAN	PAN	PAN	PAN	PAN	PAN	PAN	PAN
PAR	PAR	PAR	PAR	PAR	PAR	PAR	PAR
PER	PER	PER	PER	PER	PER	PER	PER
DOR	DOR	DOR	DOR	DOR		DOR	DOR
URU	URU	URU	URU	URU	URU	URU	URU

*Hospital San Miguel Arcángel and Centro Médico Paitilla not included

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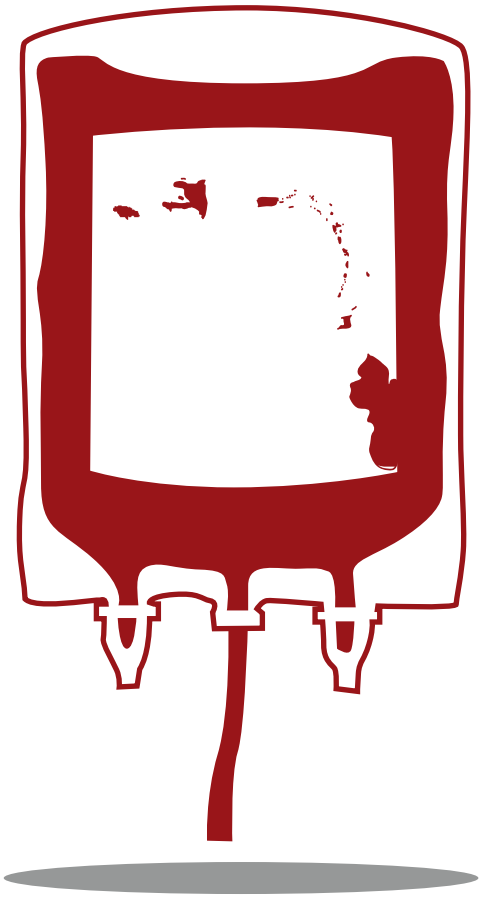

CARIBBEAN COUNTRIES 2013

CARIBBEAN COUNTRIES 2013

TABLE 1. BLOOD COLLECTION 2013

COUNTRY	TOTAL UNITS COLLECTED	NUMBER OF DONORS			
		AUTOLOGOUS	ALLOGENEIC		
			VOLUNTARY	REPLACEMENT	REMUNERATED
ANU	140	0	45	95	0
ARU	2,998	4	2,994	0	0
BAH	7,214	16	3,018	4,180	0
BLZ	5,120	0	709	4,411	0
BER	1,836	2	1,834	0	0
BVI	3,53	5	0	348	0
CAY	1,018	0	1,018	0	0
CUR	5,559	2	5,557	0	0
DOM	1,071	0	93	978	0
*FDA	10,508	0	10,508	0	0
GUY	11,148	0	10,679	469	0
HAI	27,478	0	16,255	11,223	0
JAM	30,679	78	5,043	25,558	0
SKT	331	NR	71	260	0
STL	2,174	7	1,344	823	0
STV	1,161	16	158	987	0
SUR	10,102	2	10,100	0	0
TRT	21,300	NR	NR	NR	NR

*The information is from Guadalupe (Martinique and French Guiana are not included).

TABLE 2. BLOOD COLLECTION FROM ALLOGENEIC DONORS 2013

COUNTRY	NUMBER OF UNITS COLLECTED	TYPE OF ALLOGENEIC DONOR (PERCENTAGE)		
		VOLUNTARY	REPLACEMENT	REMUNERATED
ANU	140	32.14	67.86	0
ARU	2,994	100	0	0
BAH	7,198	41.93	58.07	0
BLZ	5,120	13.85	86.15	0
BER	1,834	100	0	0
BVI	353	0	100	0
CAY	1,018	100	0	0
CUR	5,557	100	0	0
DOM	1,071	8.68	91.32	0
*FDA	10,508	100	0	0
GUY	11,148	95.79	4.21	0
HAI	27,478	59.16	40.84	0
JAM	30,601	16.48	83.52	0
SKT	331	21.45	78.55	0
STL	2,167	62.11	37.97	0
STV	1,145	13.80	86.20	0
SUR	10,100	100	0	0
TRT	21,300	NR	NR	NR

*The information is from Guadalupe (Martinique and French Guiana are not included).

Figure 1. Percentage of blood collection ranked from greatest to least by voluntary donations, Caribbean 2013

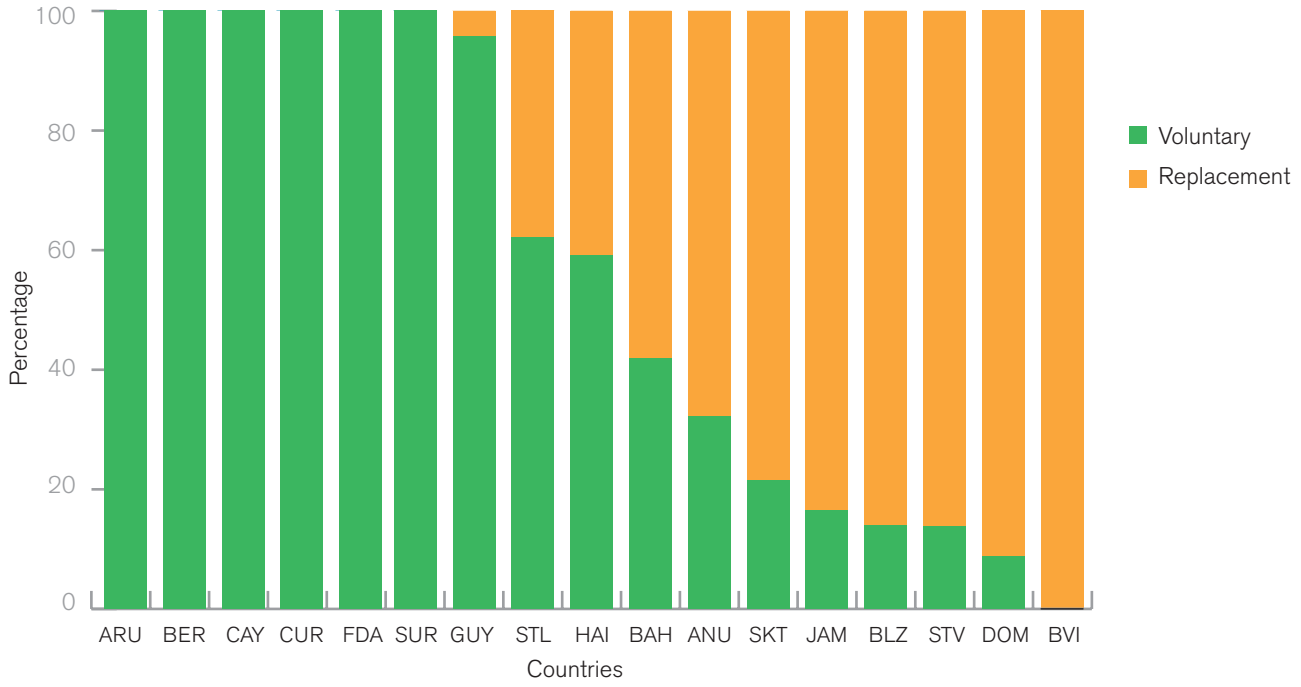

TABLE 3. SELECTION OF ALLOGENEIC DONORS 2013

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF ALLOGENEIC DONORS					
		VOLUNTARY		REPLACEMENT		REMUNERATED	
		INTER-VIEWED	DEFERRED	INTER-VIEWED	DEFERRED	INTER-VIEWED	DEFERRED
ANU	140	85	40	217	120	0	0
ARU	2,994	NR	NR	0	0	0	0
BAH	7,198	3,629	583	5,838	1,589	0	0
BLZ	5,120	954	245	6,162	1,751	0	0
BER	1,834	2,043	209	0	0	0	0
BVI	353	NR	NR	NR	NR	NR	NR
CAY	1,018	1,197	160	0	0	0	0
CUR	5,557	5,557	NR	NR	NR	NR	NR
DOM	1,071	94	0	1,540	534	0	0
*FDA	10,508	12,486	1,978	0	0	0	0
GUY	11,148	11,373	694	NR	NR	NR	NR
HAI	27,478	22,124	5,869	1,4662	3,439	0	0
JAM	30,601	NR	NR	NR	NR	NR	NR
SKT	331	71	NR	350	90	NR	NR
STL	2,174	1,770	426	1,117	294	0	0
STV	1,145	174	16	1,278	279	0	0
SUR	10,100	11,404	1,135	0	0	0	0
TRT	21,300	NR	NR	NR	NR	NR	NR

*The information is from Guadalupe (Martinique and French Guiana are not included).

TABLE 4. SELECTION OF ALLOGENEIC DONORS 2013

COUNTRY	NUMBER OF UNITS COLLECTED	VOLUNTARY		REPLACEMENT		REMUNERATED	
		NUMBER INTER-VIEWED	% DEFERRED	NUMBER INTER-VIEWED	% DEFERRED	NUMBER INTER-VIEWED	% DEFERRED
ANU	140	85	47.06	217	55.30	0	0
ARU	2,994	NR	NR	0	0	0	0
BAH	7,198	3,629	16.07	5,838	27.22	0	0
BLZ	5,120	954	25.68	6,162	28.41	NR	NR
BER	1,834	2,043	10.23	0	0	0	0
BVI	353	NR	NR	NR	NR	NR	NR
CAY	1,018	1,197	13.37	NR	NR	NR	NR
CUR	5,557	5,557	NR	NR	NR	NR	NR
DOM	1,071	94	0	1,540	34.68	0	0
*FDA	10,508	12,486	15.84	0	0	0	0
GUY	11,148	11,373	6.10	NR	NR	NR	NR
HAI	27,478	22,124	26.53	1,4662	23.46	0	0
JAM	30,601	NR	NR	NR	NR	NR	NR
SKT	331	71	NR	350	25.71	NR	NR
STL	2,174	1,750	24.07	1,117	26.32	0	0
STV	1,145	174	9.20	1278	21.83	NR	NR
SUR	10,100	11,406	9.95	NR	NR	NR	NR
TRT	21,300	NR	NR	NR	NR	NR	NR

*The information is from Guadalupe (Martinique and French Guiana are not included).

Figure 2. Percentage of deferred donors by allogeneic donor type, Caribbean 2013

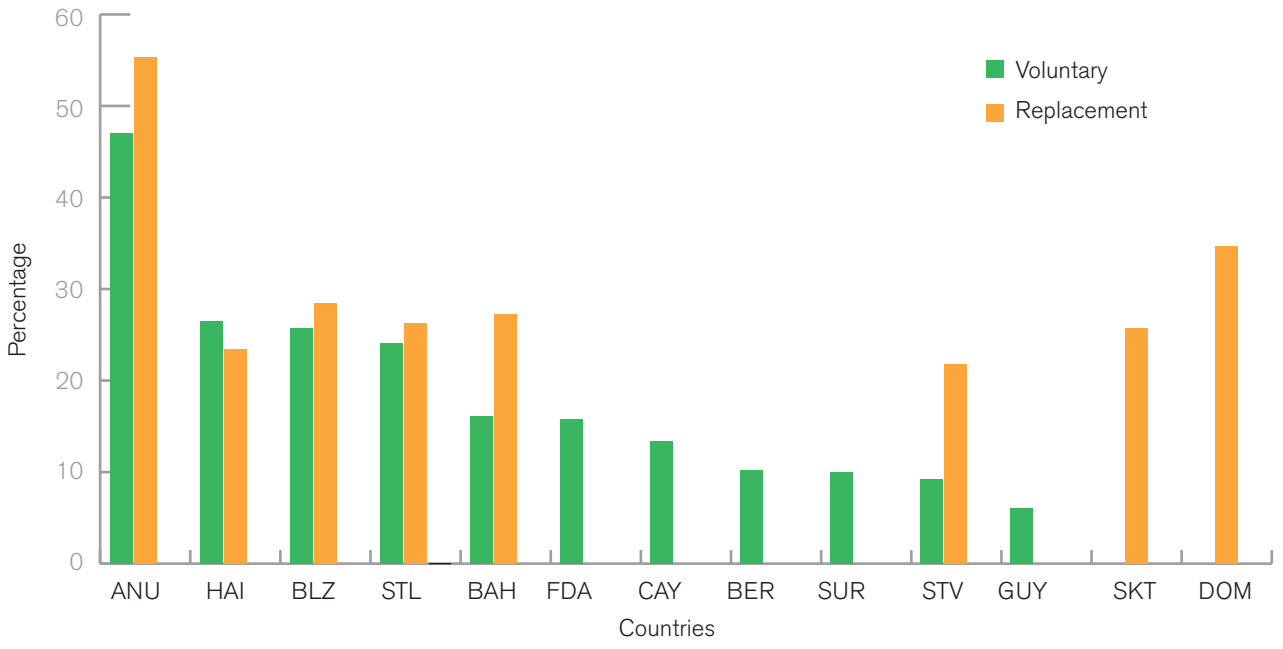

TABLE 5. EFFICIENCY OF BLOOD PROCESSING 2013

COUNTRY	NUMBER OF UNITS COLLECTED	NUMBER OF COLLECTING CENTERS	NUMBER OF PROCESSING CENTERS	ANNUAL PROCESSING PER BANK	DAILY PROCESSING PER BANK (260 DAYS)
ANU	140	1	1	140	0,54
ARU	2,998	1	1	2,998	11,53
BAH	7,214	3	3	2,405	9,25
BLZ	5,120	7	1	5,120	19,69
BER	1,836	1	1	1,836	7,06
BVI	353	1	1	353	1,36
CAY	1,018	2	2	509	1,96
CUR	5,559	1	1	5,559	21,38
DOM	1,071	1	1	1,071	4,12
*FDA	10,508	2	2	5,254	20,21
GUY	11,148	5	1	11,148	42,87
**HAI	27,478	*1	*14	1,963	8
JAM	30,679	10	3	10,226	39,33
SKT	331	2	2	166	0,64
STL	2,174	NR	NR	NR	NR
STV	1,161	1	1	1,161	4,46
SUR	10,102	1	1	10,102	38,85
TRT	21,300	6	1	21,300	81,92

*The information is from Guadalupe (Martinique and French Guiana are not included).

**Data from 2012

TABLE 6. COVERAGE (%) OF SCREENING FOR INFECTIOUS MARKERS 2013

COUNTRY	VIH	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU	100	100	100	100	0
ARU	100	100	100	100	100
BAH	100	100	100	100	100
*BLZ	100	100	100	100	NR
*BER	100	100	100	100	100
BVI	100	100	100	100	100
CAY	100	100	100	100	100
CUR	100	100	100	100	100
DOM	100	100	0	100	100
*FDA	100	100	100	100	100
*GUY	100	100	100	100	100
HAI	100	100	100	100	100
JAM	98.27	98.27	98.27	98.27	98.27
SKT	100	100	100	100	76.13
STL	100	100	100	100	100
STV	100	100	100	100	100
*SUR	98.39	98.39	98.39	98.39	98.39
*TRT	100	100	100	100	100

*Units screened for T Cruzi
BLZ: 100%
BER: 0.002%
FDA: 7.33% Guadalupe (Martinique and French Guiana are not included)
GUY 100%
SUR 98.39%
TRT 100%

TABLE 7. NUMBER OF NON SCREEN FOR INFECTIOUS MARKERS 2012

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU					140
BLZ					5,120
DOM			1,071		
JAM	532	532	532	532	532
SKT					79
SUR	163	163	163	163	163

TABLE 8. PROPORTION (%) OF REACTIVE/POSITIVE UNITS 2013

COUNTRY	VIH	HBsAg	HCV	SYPHILIS	HTLV I-II
ANU	NR	0.71	0.71	NR	NR
ARU	0	0.03	0	0	0
BAH	0.14	0.36	0.25	0.97	0.28
*BLZ	0.12	0.23	0.17	3.38	NR
*BER	0.05	0.05	0	0	0.05
BVI	0	0.85	0	1.42	0.57
CAY	0	0.30	0.10	0.10	1.08
CUR	0	0	0	0	0
DOM	0	0.19	NR	1.21	1.49
*FDA	0.13	0.11	0.10	0.54	0.17
*GUY	0.34	0.88	0.46	0.57	0.83
HAI	1.10	3.52	1.03	2.45	0.71
JAM	0.40	0.60	0.70	1.50	2.60
SKT	0	3.63	0	0	0
STL	0.09	0.64	0.05	1.10	0.87
STV	0.17	0.43	0.52	2.50	2.33
*SUR	0.01	0.05	0.03	0.03	0.01
*TRT	0.19	0.23	0.26	1.40	0.19

Reactive/Positive for T cruzi
BLZ: 0.65
BER: 0
FDA: 0.52 Guadalupe (Martinique and French Guiana are not included)
GUY: 0.009
SUR: 0
TRT: 0.29

Figure 3. Proportion (%) of reactive/positive units, Caribbean 2013

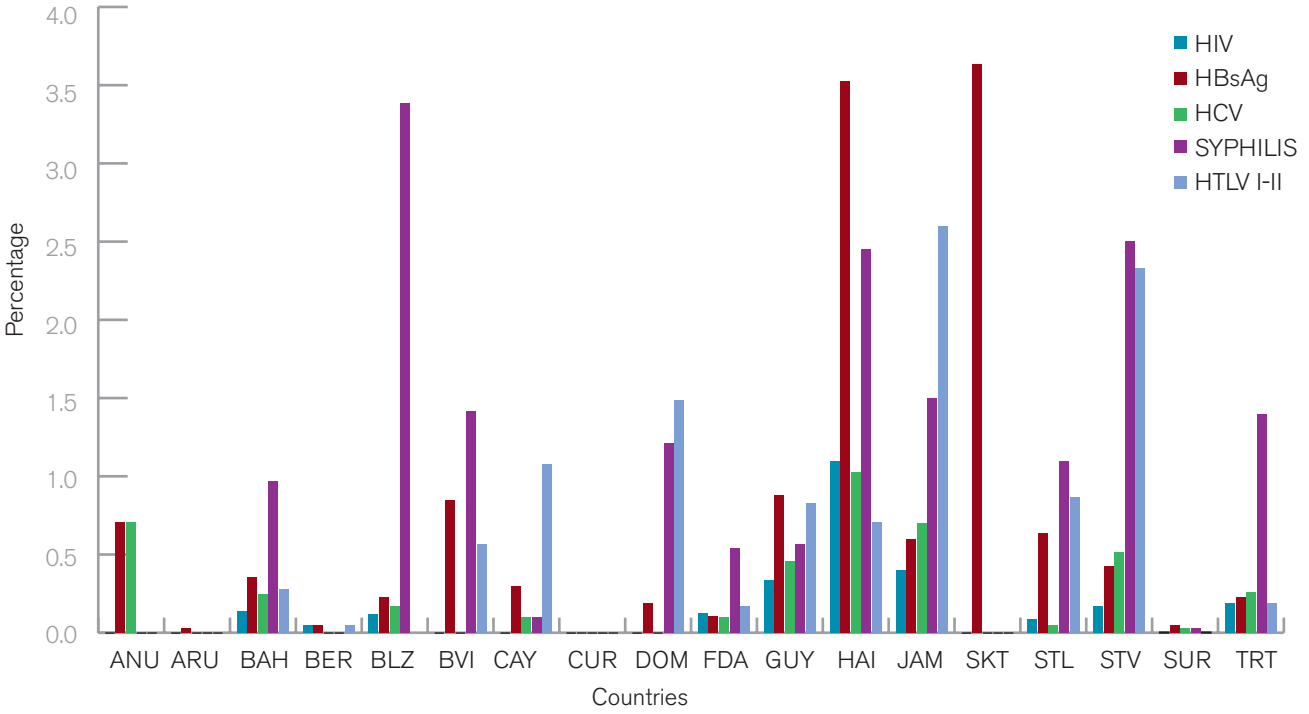

TABLE 9. AVAILABILITY OF BLOOD COMPONENTS 2013
Separation into components (Number)

COUNTRY	UNITS RECEIVED	RBC	FFP	FP	CRYO	PL
ANU	140	79	NR	NR	NR	NR
ARU	2,998	2,926	556	NR	NR	2,060
BAH	7,214	5,024	1,629	2417	NR	1,930
BLZ	5,120	2,204	1,081	1119	4	655
BER	1,836	1,593	307	NR	NR	NR
BVI	353	350	108	242	0	0
CAY	1,018	926	527	NR	NR	NR
CUR	5,559	5,506	1,101	NR	NR	2,990
DOM	1071	1,031	683	NR	23	464
*FDA	10,508	NR	NR	NR	NR	NR
GUY	11,148	11,016	6,596	NR	670	3,531
HAI	27,478	6,078	179	NR	NR	1,240
JAM	30,679	NR	2,963	327	412	1,432
SKT	331	30	30	NR	NR	NR
STL	2,174	2,077	392	129	NR	782
STV	1,161	1,145	257	NR	NR	251
SUR	10,102	9,939	1,927	NR	NR	2,124
TRT	21,300	7,756	5,253	NR	1430	4,221

*The information is from Guadalupe (Martinique and French Guiana are not included).

TABLE 9a. (continued)
Blood and Blood Components Discarded (Number)

COUNTRY	SC	GR	PFC	PC	CRYO	PL
ANU	9	NR	NR	NR	NR	NR
ARU	NR	111	146	NR	NR	1,388
BAH	58	574	566	NR	NR	940
BLZ	860	195	146	346	NR	532
BER	NR	60	56	NR	NR	NR
BVI	NR	59	15	242	NR	NR
CAY	46	117	137	NR	NR	NR
CUR	NR	268	51	NR	NR	2,128
DOM	52	94	385	NR	3	233
*FDA	NR	935	120	NR	NR	315
GUY	153	1,102	98	NR	5	266
HAI	2,326	NR	NR	NR	NR	NR
JAM	2,019	NR	NR	NR	NR	NR
SKT	63	7	7	NR	NR	NR
STL	67	178	35	1	2	477
STV	7	183	27	NR	NR	210
SUR	NR	52	6	NR	NR	429
TRT	NR	NR	NR	NR	NR	NR

*The information is from Guadalupe (Martinique and French Guiana are not included).

TABLE 10. AVAILABILITY OF BLOOD COMPONENTS 2013 (%)

COUNTRY	% SEPARATED INTO COMPONENTS					% BLOOD AND BLOOD COMPONENTS DISCARDED					
	RBC	FFP	FP	CRYO	PL	WB	RBC	FFP	FP	CRYO	PL
ANU	56.43	NR	NR	NR	NR	14.75	NR	NR	NR	NR	NR
ARU	97.60	18.55	NR	NR	68.71	NR	3.79	26.26	NR	NR	67.38
BAH	69.64	22.58	33.50	NR	26.75	5.82	11.43	34.75	NR	NR	48.70
BLZ	43.05	21.11	21.86	0.08	12.79	29.49	8.85	13.50	30.92	NR	81.22
BER	86.76	16.72	NR	NR	NR	NR	3.77	18.24	NR	NR	NR
BVI	99.15	30.59	68.56	0	0	NR	16.86	13.89	100	NR	NR
CAY	90.96	51.77	NR	NR	NR	50	12.63	26	NR	NR	NR
CUR	99.05	19.81	NR	NR	53.77	NR	4.87	4.63	NR	NR	71.17
*DOM	96.26	63.77	NR	2.15	43.32	*NI	9.12	56.37	NR	13.04	50.22
**FDA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
*GUY	98.82	59.17	NR	6.01	31.67	*NI	10	1.49	NR	0.75	7.53
HAI	22.12	0.65	NR	NR	4.51	10.87	NR	NR	NR	NR	NR
JAM	NR	9.66	1.07	1.34	4.67	NR	NR	NR	NR	NR	NR
SKT	9.10	9.10	NR	NR	NR	NR	23.33	23.33	NR	NR	NR
STL	95.54	18.03	5.93	NR	35.97	69.07	8.57	8.93	0.78	NR	61
STV	98.62	22.14	NR	NR	21.62	43.75	16	10.51	NR	NR	83.67
SUR	98.39	19.08	NR	NR	21.03	NR	0.52	0.31	NR	NR	20.20
TRT	36.41	24.66	NR	6.71	19.82	NR	NR	NR	NR	NR	NR

*IN = Invalid Number

DOM: Reported 52 units of whole blood discarded, however only 40 units were available.

GUY: Reported 153 units of whole blood discarded, however only 132 units were available.

***The information is from Guadalupe (Martinique and French Guiana are not included).

Figure 4. Percentage of blood and blood components discarded, Caribbean 2013

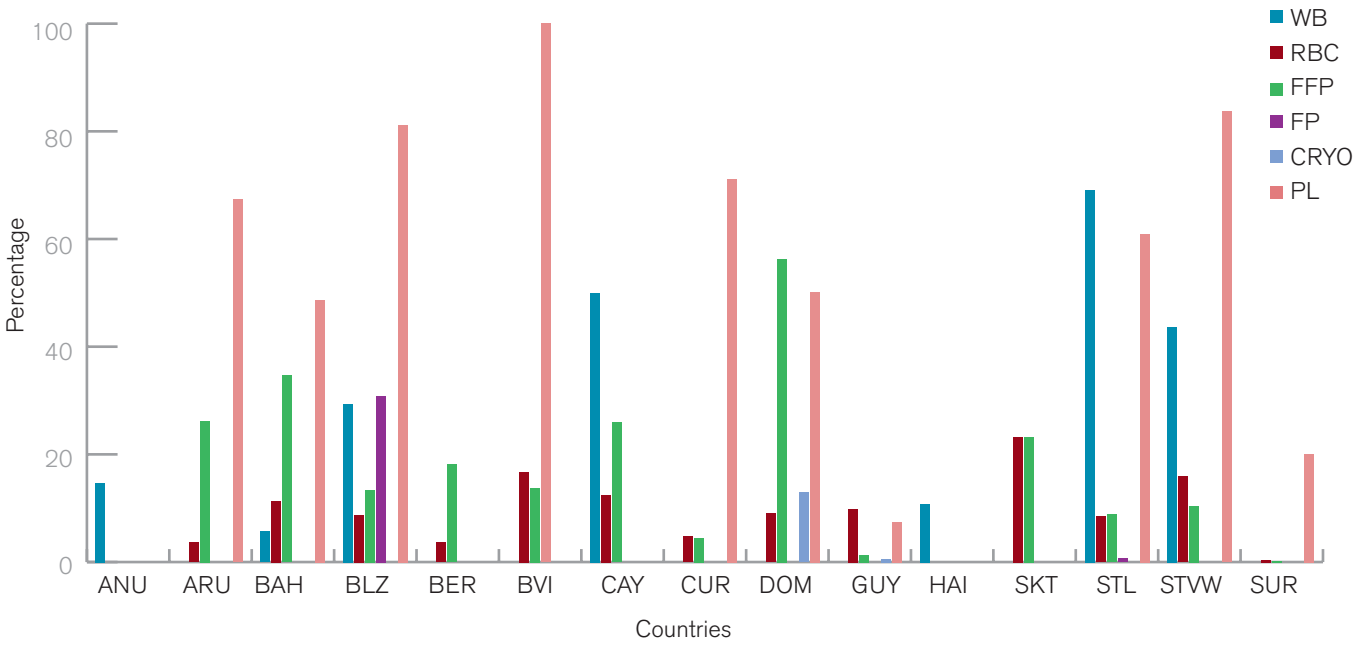

TABLE 11. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2013

COUNTRY	SPECIFIC LAW	RESPONSIBLE UNIT	SPECIFIC BUDGET	NATIONAL POLICY	NATIONAL COMMISSION
ANU	NO	NO	NO	NO	NO
ARU	NO	NO	SI	NO	NO
BAH	NO	NO	NO	PARCIAL	PARCIAL
BLZ	NO	SI	NO	NO	SI
BER	SI	SI	SI	SI	SI
BVI	NO	NO	NO	NO	NO
CAY	NO	NO	NO	NO	NO
CUR	SI	NO	SI	SI	NO
DOM	NO	NO	NO	NO	NO
*FDA	SI	SI	SI	SI	SI
GUY	NO	SI	SI	NO	NO
HAI	NR	NR	NR	NR	NR
JAM	NO	NO	SI	SI	NR
SKT	NO	NO	NO	NO	PARCIAL
STL	NO	NO	NO	NO	NO
STV	NO	NO	NO	NO	NO
SUR	SI	SI	SI	SI	SI
TRT	NO	NO	NO	NO	NO

*The information is from Guadalupe (Martinique and French Guiana are not included).

TABLE 12. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2013

COUNTRY	REFERENCE CENTER	NATIONAL PLAN	DONOR NORMS	OPERATION NORMS	CLINICAL GUIDELINES	SERVICE REGISTRATION
ANU	NO	NO	SI	NO	NO	NO
ARU	SI	SI	SI	SI	SI	NO
BAH	NO	SI	SI	SI	NO	NO
BLZ	SI	NO	SI	NO	NO	SI
BER	NO	SI	SI	SI	SI	SI
BVI	NO	NO	SI	NO	NO	NO
CAY	NO	NO	SI	SI	NO	NO
CUR	SI	SI	SI	SI	SI	NO
DOM	NO	NO	SI	NO	NO	NO
*FDA	SI	SI	SI	SI	SI	SI
GUY	NO	PARCIAL	SI	NO	NO	NR
HAI	NR	NR	NR	NR	NR	NR
JAM	SI	NO	SI	SI	SI	NO
SKT	SI	NO	PARCIAL	NO	NO	NO
STL	NO	NO	SI	SI	NO	NO
STV	NO	NO	NO	NO	NO	NO
SUR	NO	SI	SI	SI	NO	SI
TRT	NO	NO	NO	NO	NR	NO

*The information is from Guadalupe (Martinique and French Guiana are not included).

TABLE 13. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2013

COUNTRY	QUALITY ASSURANCE POLICY	EXTERNAL EVALUATION SEROLOGY-TTI	EXTERNAL EVALUATION IMMUNOHEMA-TOLOGY	INSPECTION PROGRAM	CONTINUED EDUCATION
ANU	PARTIAL	PARTIAL	NO	NO	NO
ARU	NO	YES	YES	YES	YES
BAH	YES	YES	YES	NO	NO
BLZ	NO	YES	YES	YES	NO
BER	YES	NO	YES	YES	YES
BVI	NO	YES	NO	NO	NO
CAY	NO	YES	YES	YES	YES
CUR	NO	YES	YES	YES	YES
DOM	NR	YES	YES	NO	PARTIAL
*FDA	YES	YES	YES	YES	YES
GUY	NO	YES	YES	NO	YES
HAI	NR	NR	NR	NR	NR
JAM	NO	YES	YES	NO	PARTIAL
SKT	PARTIAL	YES	NO	NO	NO
STL	NO	YES	YES	NO	NO
STV	NO	YES	NO	NO	NO
SUR	NO	YES	YES	NO	NO
TRT	NO	NO	NO	NO	NO

*The information is from Guadalupe (Martinique and French Guiana are not included).

TABLE 14. ORGANIZATION OF THE NATIONAL BLOOD SYSTEM 2013

COUNTRY	STAFF CERTIFICATION	SERVICE ACCREDITATION
ANU	NO	NO
ARU	YES	NO
BAH	YES	NO
BLZ	NO	NO
BER	YES	YES
BVI	NO	NO
CAY	YES	NO
CUR	YES	NO
DOM	NO	NO
*FDA	YES	YES
GUY	YES	NO
HAI	NR	NR
JAM	NR	NO
SKT	NO	NO
STL	YES	NO
STV	NO	NO
SUR	YES	NO
TRT	NO	NO

*The information is from Guadalupe (Martinique and French Guiana are not included).

TABLE 15. COUNTRIES WITH 100% SCREENING FOR INFECTIOUS MARKERS 2013

COUNTRY	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II	FIVE MARKERS
ANU	ANU	ANU	ANU	ANU		
ARU	ARU	ARU	ARU	ARU	ARU	ARU
BAH	BAH	BAH	BAH	BAH	BAH	BAH
BLZ	BLZ	BLZ	BLZ	BLZ		
BER	BER	BER	BER	BER	BER	BER
BVI	BVI	BVI	BVI	BVI	BVI	BVI
CAY	CAY	CAY	CAY	CAY	CAY	CAY
CUR	CUR	CUR	CUR	CUR	CUR	CUR
DOM	DOM	DOM		DOM	DOM	
*FDA	FDA	FDA	FDA	FDA	FDA	FDA
GUY	GUY	GUY	GUY	GUY	GUY	GUY
HAI	HAI	HAI	HAI	HAI	HAI	HAI
SKT	SKT	SKT	SKT	SKT		
STL	STL	STL	STL	STL	STL	STL
STV	STV	STV	STV	STV	STV	STV
TRT	TRT	TRT	TRT	TRT	TRT	TRT

*The information is from Guadalupe (Martinique and French Guiana are not included).

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SUBREGIONAL SUMMARIES

SUB-REGIONAL SUMMARIES

NUMBER OF UNITS COLLECTED							
YEAR	CENTRAL AMERICA AND SPANISH SPEAK-ING CARIBBEAN	CARIBBEAN	ANDEAN COMMUNITY	SOUTHERN CONE	MEXICO	BRAZIL	TOTAL
2010	917,492	92,972	1,593,049	1,405,362	1,699,885	3,267,551	8,976,311
2011	954,922	134,757	1,560,151	1,501,637	1,768,065	3,356,382	9,275,914
2012	980,173	133,355	1,525,067	1,456,371	1,768,862	3,335,035	9,198,863
2013	1,005,812	140,190	1,276,208	1,381,177	1,364,395	NR	5,167,782

AUTOLOGOUS DONORS														
YEAR	CENTRAL AMERICA AND SPANISH SPEAK-ING CARIBBEAN		CARIBBEAN		ANDEAN COMMUNITY		SOUTHERN CONE		MEXICO		BRAZIL		TOTAL	
	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%
2010	266	0.03	183	0.2	1,944	0.12	23,335	1.7	1,761	0.1	43,871	1.3	71,360	0.79
2011	230	0.02	116	0.1	626	0.04	26,840	1.8	2,384	0.1	2,776	0.1	32,972	0.36
2012	210	0.02	188	0.14	642	0.04	367	0.03	1,716	0.10	2,056	0.06	32,972	0.36
2013	190	0.02	132	0.09	499	0.04	12,175	0.88	1,065	0.08	NR		14,061	0.27

VOLUNTARY DONORS														
YEAR	CENTRAL AMERICA AND SPANISH SPEAK-ING CARIBBEAN		CARIBBEAN		ANDEAN COMMUNITY		SOUTHERN CONE		MEXICO		BRAZIL		TOTAL	
	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%
2010	552,692	60.24	49,684	53	656,445	41	338,218	24	40,385	2	2,078,962	64	3,716,386	41.40
2011	559,227	58.56	75,771	56	745,579	48	418,736	28	43,297	2	2,000,892	60	3,843,502	41.44
2012	569,208	58.07	68,956	52	703,166	46	446,865	31	48,892	3	1,983,857	60	3,820,944	41.54
2013	581,702	57.83	69,426	50	828,034	65	470,524	34	41,708	3	NR		1,991,394	38.53

REPLACEMENT DONORS														
YEAR	CENTRAL AMERICA AND SPANISH SPEAK-ING CARIBBEAN		CARIBBEAN		ANDEAN COMMUNITY		SOUTHERN CONE		MEXICO		BRAZIL		TOTAL	
	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%
2010	332,413	36	43.105	46	309,066	19.4	951,075	68	1,657,739	98	1,144,718	35	4,438,116	49.44
2011	362,339	38	40.847	30	770,220	49	960,249	64	1,722,384	97	1,352,714	40	5,208,753	56.15
2012	402,593	41	64.211	48	821,259	54	905,155	62	1,718,254	97	1,349,122	40	5,260,594	57.19
2013	415,834	41	49.332	35	447,665	35	898,478	65	1,321,622	97	NR		3,132,931	60.62

REMUNERATED DONORS														
YEAR	CENTRAL AMERICA AND SPANISH SPEAK-ING CARIBBEAN		CARIBBEAN		ANDEAN COMMUNITY		SOUTHERN CONE		MEXICO		BRAZIL		TOTAL	
	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%
2010	6,820	0.7	0	0	362	0.02	0	0	0	0	0	0	7,182	0.08
2011	7,049	0.7	0	0	75	0	0	0	0	0	0	0	7,124	0.08
2012	8,162	0.8	0	0	0	0	0	0	0	0	0	0	8,162	0.09
2013	8,086	0.8	0	0	10	0.001	0	0	0	0	NR		8,096	0.16

SCREENING

CENTRAL AMERICA AND SPANISH SPEAKING CARIBBEAN

NUMBER OF UNITS SCREENED							
YEAR	HIV	HBsAg	HCV	SYPHILIS	T. cruzi	HTLV I-II	HBC
2010	917,492	917,492	917,492	917,492	438,136	271,655	179,087
2011	954,922	954,922	954,922	954,922	462,449	284,009	171,488
2012	980,173	980,173	980,173	980,173	472,307	293,177	276,389
2013	1,005,812	1,005,812	1,005,812	1,005,812	483,487	298,995	310,136

PERCENTAGE OF UNITS SCREENED							
YEAR	HIV	HBsAg	HCV	SYPHILIS	T. cruzi	HTLV I-II	HBC
2010	100	100	100	100	47.75	29.61	19.52
2011	100	100	100	100	48.43	29.74	17.96
2012	100	100	100	100	48.19	29.91	28.20
2013	100	100	100	100	48.07	29.73	30.83

CARIBBEAN

NUMBER OF UNITS SCREENED					
YEAR	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
2010	92,972	92,972	92,004	92,972	86,894
2011	134,757	134,757	133,714	134,757	109,856
2012	132,034	132,034	131,088	132,034	127,124
2013	139,496	139,496	138,425	139,496	134,157

PERCENTAGE OF UNITS SCREENED					
YEAR	HIV	HBsAg	HCV	SYPHILIS	HTLV I-II
2010	100	100	98.96	100	93.46
2011	100	100	99.23	100	81.52
2012	99.01	99.01	98.30	99.01	95.33
2013	99.50	99.50	98.74	99.50	95.70

ANDEAN COMMUNITY

NUMBER OF UNITS SCREENED							
YEAR	HIV	HBsAg	HCV	SYPHILIS	T. cruzi	HTLV I-II	HBC
2010	1,590,281	1,590,075	1,590,146	1,590,093	1,590,112	1,100,229	1,130,679
2011	1,550,971	1,550,967	1,548,885	1,550,851	1,550,971	1,031,495	1,079,742
2012	1,495,545	1,495,545	1,495,545	1,495,545	1,495,545	1,117,918	1,126,947
2013	1,267,689	1,267,689	1,267,689	1,267,689	1,259,055	790,603	828,308

PERCENTAGE OF UNITS SCREENED							
YEAR	HIV	HBsAg	HCV	SYPHILIS	T. cruzi	HTLV I-II	HBC
2010	99.83	99.81	99.82	99.81	99.82	69.06	70.98
2011	99.41	99.41	99.28	99.4	99.41	66.12	69.21
2012	98.06	98.06	98.06	98.06	98.06	73.30	73.89
2013	99.33	99.33	99.33	99.33	98.66	61.95	64.90

SOUTHERN CONE

NUMBER OF UNITS SCREENED							
YEAR	HIV	HBsAg	HCV	SYPHILIS	T. cruzi	HTLV I-II	HBC
2010	1,405,362	1,405,362	1,405,362	1,405,362	1,405,362	1,405,362	1,178,061
2011	1,501,637	1,501,637	1,501,637	1,501,637	1,501,637	1,501,637	1,271,329
2012	1,455,743	1,455,743	1,455,743	1,455,743	1,455,743	1,455,743	1,222,578
2013	1,374,602	1,375,590	1,372,900	1,373,820	1,375,820	1,375,636	1,151,266

PERCENTAGE OF UNITS SCREENED							
YEAR	HIV	HBsAg	HCV	SYPHILIS	T. cruzi	HTLV I-II	HBC
2010	100	100	100	100	100	100	83.83
2011	100	100	100	100	100	100	84.66
2012	99.96	99.96	99.96	99.96	99.96	99.96	83.95
2013	99.52	99.60	99.40	99.47	99.61	99.60	83.35

MEXICO

NUMBER OF UNITS SCREENED							
YEAR	HIV	HBsAg	HCV	SYPHILIS	T. cruzi	HTLV I-II	HBC
2010	1,665,887	1,665,887	1,665,887	1,665,887	1,478,900	NR	NR
2011	1,750,384	1,750,384	1,750,384	1,750,384	1,573,578	NR	NR
2012	1,741,091	1,739,853	1,741,798	1,737,022	1,745,690	NR	NR
2013	1,343,247	1,343,247	1,343,110	1,340,791	1,253,197	NR	NR

PERCENTAGE OF UNITS SCREENED							
YEAR	HIV	HBsAg	HCV	SYPHILIS	T. cruzi	HTLV I-II	HBC
2010	98	98	98	98	87	NR	NR
2011	99	99	99	99	89	NR	NR
2012	98	98	98	98	99	NR	NR
2013	98	98	98	98	92	NR	NR

BRAZIL

NUMBER OF UNITS SCREENED							
YEAR	HIV	HBsAg	HCV	SYPHILIS	T. cruzi	HTLV I-II	HBC
2010	3,267,551	3,267,551	3,267,551	3,267,551	3,267,551	3,267,551	3,267,551
2011	3,365,382	3,365,382	3,365,382	3,365,382	3,365,382	3,365,382	3,365,382
2012	3,335,035	3,335,035	3,335,035	3,335,035	3,335,035	3,335,035	3,335,035
2013	NR	NR	NR	NR	NR	NR	NR

PERCENTAGE OF UNITS SCREENED							
YEAR	HIV	HBsAg	HCV	SYPHILIS	T. cruzi	HTLV I-II	HBC
2010	100	100	100	100	100	100	100
2011	100	100	100	100	100	100	100
2012	100	100	100	100	100	100	100
2013	NR	NR	NR	NR	NR	NR	NR

AVAILABILITY OF COMPONENTS

CENTRAL AMERICA AND SPANISH SPEAKING CARIBBEAN

SEPARATED INTO COMPONENTS						
YEAR	RBC	FFP	FP	CRYO	PL	TOTAL
2010	353,943	230,379	4,805	32,504	194,584	816,215
2011	433,905	268,701	4,968	47,272	233,780	988,626
2012	663,452	282,778	56,613	66,458	312,836	1,382,137
2013	888,223	343,693	56,679	70,619	313,764	1,672,978

BLOOD AND BLOOD COMPONENTS DISCARDED							
YEAR	WB	RBC	FFP	FP	CRYO	PL	TOTAL
2010	10,969	25,391	87,320	3,204	729	48,746	176,359
2011	17,546	33,198	67,240	39,940	1,063	56,550	215,537
2012	14,750	65,172	83,620	61,772	1,943	57,525	284,782
2013	16,608	44,061	106,173	35,868	12,050	55,763	270,523

CARIBBEAN

SEPARATED INTO COMPONENTS						
YEAR	RBC	FFP	FP	CRYO	PL	TOTAL
2010	58,467	27,109	2,406	2,033	11,513	101,528
2011	57,449	18,156	1,812	799	14,762	92,978
2012	86,065	13,585	1,354	470	15,705	117,179
2013	57,680	23,589	4,234	2,539	21,663	109,705

BLOOD AND BLOOD COMPONENTS DISCARDED							
YEAR	WB	RBC	FFP	FP	CRYO	PL	TOTAL
2010	2,852	1,271	815	60	0	2,660	7,658
2011	2,448	1,107	567	378	0	2,637	7,137
2012	9,500	3,035	943	733	0	6,166	20,377
2013	5,660	3,935	1,795	589	10	6,918	18,907

ANDEAN COMMUNITY

SEPARATED INTO COMPONENTS						
YEAR	RBC	FFP	FP	CRYO	PL	TOTAL
2010	1,461,200	1,187,197	208,538	101,994	762,151	3,721,080
2011	1,491,486	1,194,266	143,733	113,580	820,778	3,763,843
2012	1,346,190	667,883	648,328	91,032	730,306	3,483,739
2013	1,214,594	947,436	185,004	91,440	557,710	2,996,184

BLOOD AND BLOOD COMPONENTS DISCARDED							
YEAR	WB	RBC	FFP	FP	CRYO	PL	TOTAL
2010	11,204	70,966	418,277	89,102	16,841	168,280	774,670
2011	15,575	83,002	435,927	110,285	12,834	160,438	818,061
2012	19,798	271,207	646,302	165,839	16,148	297,334	1,416,628
2013	17,053	105,763	488,073	162,792	16,573	201,161	991,415

SOUTHERN CONE

SEPARATED INTO COMPONENTS						
YEAR	RBC	FFP	FP	CRYO	PL	TOTAL
2010	1,204,779	472,564	671,706	39,672	576,246	2,964,967
2011	1,309,807	563,519	725,288	50,090	721,558	3,370,262
2012	1,251,188	654,863	588,949	68,631	521,861	3,085,492
2013	1,105,759	573,439	419,218	34,312	622,709	2,755,437

BLOOD AND BLOOD COMPONENTS DISCARDED							
YEAR	WB	RBC	FFP	FP	CRYO	PL	TOTAL
2010	30,428	161,122	37,416	61,852	5,392	98,053	394,263
2011	29,370	193,584	26,318	65,987	2,639	167,773	485,671
2012	41,299	113,089	37,262	54,420	5,955	88,618	340,643
2013	51,900	252,113	138,069	60,141	6,269	245,981	754,473

MEXICO

SEPARATED INTO COMPONENTS						
YEAR	RBC	FFP	FP	CRYO	PL	TOTAL
2010	1,556,635	1,253,323	303,312	103,485	681,673	3,898,428
2011	1,622,876	1,297,014	325,862	95,249	717,081	4,058,082
2012	1,625,920	1,311,483	279,037	99,018	722,113	4,037,571
2013	1,321,413	905,769	264,522	151,122	659,179	3,302,005

BLOOD AND BLOOD COMPONENTS DISCARDED							
YEAR	WB	RBC	FFP	FP	CRYO	PL	TOTAL
2010	47,104	101,128	480,330	337,368	16,285	193,530	1,175,745
2011	50,948	107,299	521,807	337,368	15,481	217,555	1,250,458
2012	56,877	113,605	522,760	330,766	15,337	223,012	1,262,357
2013	56,877	113,597	522,760	330,766	15,337	223,012	1,262,349

BRAZIL

SEPARATED INTO COMPONENTS						
YEAR	RBC	FFP	FP	CRYO	PL	TOTAL
2010	NR	NR	NR	NR	NR	NR
2011	2,857,994	2,493,545	396,592	127,183	1,627,882	7,503,196
2012	3,231,788	2,689,156	477,826	215,615	2,031,891	8,646,276
2013	NR	NR	NR	NR	NR	NR

BLOOD AND BLOOD COMPONENTS DISCARDED							
YEAR	WB	RBC	FFP	FP	CRYO	PL	TOTAL
2010	NR	NR	NR	NR	NR	NR	NR
2011	104,122	381,548	1,142,018	317,753	9,100	425,800	2,380,341
2012	8,840	308,229	964,329	44,729	3,051	279,635	1,608,813
2013	NR	NR	NR	NR	NR	NR	NR

COUNTRY SUMMARIES

INDIVIDUAL COUNTRY SUMMARIES

LATIN AMERICAN COUNTRIES

ARGENTINA (ARG)	2010	2011	2012	2013
Number of Units Collected	1,012,680	1,101,438	1,056,710	966,059
Number of Autologous Donors	23,280	26,804	0	11,455
Percentage type of allogeneic donors				
Voluntary, altruistic donors	27.23	34.04	36.40	38
Family/Replacement donors	72.77	65.96	63.60	62
Remunerated donors	NR	NR	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
T. cruzi	100	100	100	100
HTLV I-II	100	100	100	100
Anti-HBc	100	100	100	100
Percentage of units reactive/positive				
HIV	0.34	0.26	0.17	0.18
HBsAg	0.3	0.26	0.18	0.17
HCV	0.47	0.52	0.36	0.35
Syphilis	0.91	0.74	0.82	0.91
T. cruzi	3.13	2.96	2.07	2.27
HTLV I-II	0.43	0.27	0.2	0.18
Anti-HBc	2.7	2.1	1.37	1.39
Percentage of units separated into components				
Packed red blood cells	94.81	95.73	94.26	88.93
Fresh frozen plasma	26.95	29.88	42.42	42.72
Frozen plasma	62.87	63.52	51.84	38.21
Cryoprecipitate	2	2.8	4.71	1.71
Platelets	40.89	50.76	32.99	49.16
Percentage of units discarded				
Whole Blood	47.14	41.95	51.00	53.21
Packed red blood cells	15.6	17.88	10	25.29
Fresh frozen plasma	9	5.2	6.32	22.38
Frozen plasma	9	9.67	6.60	15.25
Cryoprecipitate	26.58	8.41	10.31	25.42
Platelets	17.65	25.78	12.11	36.40

BOLIVIA (BOL)	2010	2011	2012	2013
Number of Units Collected	73,254	79,960	83,391	102,146
Number of Autologous Donors	69	74	59	76
Percentage type of allogeneic donors				
Voluntary, altruistic donors	32.92	35.1	36.70	45.23
Family/Replacement donors	67.08	64.96	63.30	54.77
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	91.66
HBsAg	100	100	100	91.66
HCV	100	100	100	91.66
Syphilis	100	100	100	91.66
T. cruzi	100	100	100	91.67
HTLV I-II	NR	NR	NR	NR
Anti-HBc	NR	NR	NR	NR
Percentage of units reactive/positive				
HIV	0.15	0.2	0.23	0.21
HBsAg	0.26	0.25	0.34	0.28
HCV	0.34	0.33	0.30	0.27
Syphilis	0.92	0.71	0.68	0.93
T. cruzi	2.32	2.16	3.34	2.73
HTLV I-II	NR	NR	NR	NR
Anti-HBc	NR	NR	NR	NR
Percentage of units separated into components				
Packed red blood cells	92.8	94.49	NI	88.24
Fresh frozen plasma	73.35	94.49	78.91	75.06
Frozen plasma	12.22	NR	11.77	9.76
Cryoprecipitate	4.69	7.45	7.18	6.31
Platelets	35.38	36.58	40.60	30.94
Percentage of units discarded				
Whole Blood	15.9	24.06	NI	65.23
Packed red blood cells	6.15	4.82	NI	7.10
Fresh frozen plasma	32.45	20.56	25.98	36.53
Frozen plasma	72.44	NR	77.04	79.33
Cryoprecipitate	39.72	22.9	17.47	18.40
Platelets	38.29	29.33	38.31	39.18

BRAZIL (BRA)	2010*	2011*	2012	2013
Number of Units Collected	3,267,551	3,356,382	3,335,035	NR
Number of Autologous Donors	43,871	2,776	2,056	
Percentage type of allogeneic donors				
Voluntary, altruistic donors	64.49	59.66	59.52	
Family/Replacement donors	35.51	40.34	40.48	
Remunerated donors	0	0	0	
Percentage of units screened				
HIV	100	100	100	
HBsAg	100	100	100	
HCV	100	100	100	
Syphilis	100	100	100	
T. cruzi	100	100	100	
HTLV I-II	100	100	100	
Anti-HBc	100	100	100	
Percentage of units reactive/positive				
HIV	0.36	0.33	0.42	
HBsAg	0.2	0.17	0.16	
HCV	0.29	0.32	0.30	
Syphilis	0.71	0.81	0.82	
T. cruzi	0.18	0.2	0.31	
HTLV I-II	0.17	0.13	0.19	
Anti-HBc	1.93	1.73	1.62	
Percentage of units separated into components				
Packed red blood cells	NR	94.88	96.90	
Fresh frozen plasma	NR	82.78	80.63	
Frozen plasma	NR	13.17	14.33	
Cryoprecipitate	NR	4.22	6.47	
Platelets	NR	54.04	60.93	
Percentage of units discarded				
Whole Blood	NR	87.19	8.56	
Packed red blood cells	NR	13.35	9.54	
Fresh frozen plasma	NR	45.8	35.86	
Frozen plasma	NR	80.12	9.36	
Cryoprecipitate	NR	7.16	1.42	
Platelets	NR	26.16	13.76	

*2010: Data reported only by 26 blood centers.
2011: Partial information. Missing information from 2 departments in the country.

CHILE (CHI)	2010	2011	2012	2013
Number of Units Collected	227,301	230,308	233,165	229,911
Number of Autologous Donors	NR	NR	0	NR
Percentage type of allogeneic donors				
Voluntary, altruistic donors	22.33	21.17	23.62	23.52
Family/Replacement donors	77.67	78.83	76.38	76.48
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	97.14
HBsAg	100	100	100	97.57
HCV	100	100	100	96.40
Syphilis	100	100	100	96.80
T. cruzi	100	100	100	97.67
HTLV I-II	100	100	100	97.59
Anti-HBc	NR	NR	NR	NR
Percentage of units reactive/positive				
HIV	0.04	0.03	0.03	0.06
HBsAg	0.02	0.02	0.01	0.01
HCV	0.03	0.03	0.03	0.02
Syphilis	0.95	1.22	0.83	0.32
T. cruzi	0.16	0.19	0.14	0.15
HTLV I-II	0.13	0.14	0.12	0.09
Anti-HBc	NR	NR	NR	NR
Percentage of units separated into components				
Packed red blood cells	93.58	97.8	95.68	75.96
Fresh frozen plasma	70.38	86.08	77.56	43.43
Frozen plasma	18.51	18.55	15.49	10.25
Cryoprecipitate	7.91	7.91	7.83	5.17
Platelets	60.72	62.44	67.37	42.65
Percentage of units discarded1				
Whole Blood	0	0	51.85	NR
Packed red blood cells	1.99	NR	3.21	9.34
Fresh frozen plasma	NR	NR	NR	36.32
Frozen plasma	NR	NR	45.29	NR
Cryoprecipitate	NR	NR	3.59	15.23
Platelets	NR	NR	22.55	46.90

1Data will be reported as of 2012.

COLOMBIA (COL)	2010	2011	2012	2013
Number of Units Collected	692,485	710,825	746,059	740,173
Number of Autologous Donors	964	426	272	217
Percentage type of allogeneic donors				
Voluntary, altruistic donors	77.94	82.54	84.38	86.75
Family/Replacement donors	22.06	17.46	15.62	13.25
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
T. cruzi	100	100	100	100
HTLV I-II	65	68	70.53	75.44
Anti-HBc	65.6	69.4	71.20	76.32
Percentage of units reactive/positive				
HIV	0.29	0.25	0.22	0.21
HBsAg	0.19	0.16	0.16	0.16
HCV	0.5	0.55	0.49	0.41
Syphilis	1.54	1.45	1.50	1.50
T. cruzi	0.41	0.56	0.43	0.40
HTLV I-II	0.4	0.47	0.29	2.23
Anti-HBc	2.07	1.91	1.77	1.75
Percentage of units separated into components				
Packed red blood cells	96.49	99.83	97.54	97.02
Fresh frozen plasma	74.61	78.5	14.42	75.36
Frozen plasma	16.13	14.78	78.11	15.96
Cryoprecipitate	5.38	7.28	5.93	8.27
Platelets	46.42	44.89	44.91	43.39
Percentage of units discarded				
Whole Blood	24.62	82.08	91.72	40.84
Packed red blood cells	7.03	9.38	14.55	9.08
Fresh frozen plasma	52.64	65.2	NI	66.26
Frozen plasma	73.95	90.07	24.91	99.56
Cryoprecipitate	29.99	20	29.63	22.12
Platelets	35.29	42.85	78.08	42.65

COSTA RICA (COR)	2010	2011	2012	2013
Number of Units Collected	71,192	71,090	70,182	68,209
Number of Autologous Donors	53	47	3	0
Percentage type of allogeneic donors				
Voluntary, altruistic donors	61.63	61.5	67.74	68.12
Family/Replacement donors	38.37	38.5	34.26	31.88
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
T. cruzi	100	100	100	100
HTLV I-II	100	100	100	100
Anti-HBc	100	100	100	100
Percentage of units reactive/positive				
HIV	0.024	0.15	0.15	0.08
HBsAg	0.077	0.1	0.09	0.13
HCV	0.065	0.62	1.12	0.38
Syphilis	0.16	0.59	0.56	0.59
T. cruzi	0.045	0.34	0.38	0.22
HTLV I-II	0.013	0.75	0.29	0.15
Anti-HBc	1.76	2.53	1.88	1.50
Percentage of units separated into components				
Packed red blood cells	100	98.77	95.07	99.97
Fresh frozen plasma	28.44	98.77	NI	98.50
Frozen plasma	NR	NR	NI	0.10
Cryoprecipitate	29.36	19.39	21.41	22.85
Platelets	86.93	75.56	65.73	67.06
Percentage of units discarded				
Whole Blood	14.8	0.85	2.08	NR
Packed red blood cells	7.4	10.88	14.43	18.49
Fresh frozen plasma	76.91	18.46	NI	49.48
Frozen plasma	NR	NR	NI	NI
Cryoprecipitate	0.05	0.01	0.65	16.75
Platelets	31.37	31.69	4.14	51.24

CUBA (CUB)	2010	2011	2012	2013
Number of Units Collected	384,472	393,325	401,575	411,545
Number of Autologous Donors	0	0	NR	NR
Percentage type of allogeneic donors				
Voluntary, altruistic donors	100	100	100	100
Family/Replacement donors	0	0	0	0
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
T. cruzi	NR	NR	NR	NR
HTLV I-II	NR	NR	NR	NR
Anti-HBc	NR	NR	NR	NR
Percentage of units reactive/positive				
HIV	0.03	0.02	0.02	0.02
HBsAg	0.41	0.32	0.41	0.51
HCV	1.34	0.63	0.76	1.24
Syphilis	0.62	0.69	0.57	0.73
T. cruzi	NR	NR	NR	NR
HTLV I-II	NR	NR	NR	NR
Anti-HBc	NR	NR	NR	NR
Percentage of units separated into components				
Packed red blood cells	NR	NR	51.50	98.94
Fresh frozen plasma	NR	NR	12.90	9.21
Frozen plasma	NR	NR	11.76	11.27
Cryoprecipitate	NR	NR	7.12	6.44
Platelets	NR	NR	18.92	17.73
Percentage of units discarded				
Whole Blood	NR	NR	0	NR
Packed red blood cells	NR	NR	13.65	1.61
Fresh frozen plasma	NR	NR	6.41	3.37
Frozen plasma	NR	NR	18.37	4.52
Cryoprecipitate	NR	NR	3.23	4.81
Platelets	NR	NR	12.83	17.12

DOMINICAN REPUBLIC (DOR)	2010	2011	2012	2013
Number of Units Collected	94,884	99,148	106,291	110,780
Number of Autologous Donors	47	67	34	46
Percentage type of allogeneic donors				
Voluntary, altruistic donors	24.11	18.24	18.70	15.97
Family/Replacement donors	73.7	80.26	78.61	81.15
Remunerated donors	2.19	1.5	2.69	2.85
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
T. cruzi	NR	NR	NR	NR
HTLV I-II	100	100	100	100
Anti-HBc	NR	NR	NR	NR
Percentage of units reactive/positive				
HIV	0.25	0.22	0.20	0.16
HBsAg	1.07	0.98	0.85	1.03
HCV	0.37	0.29	0.19	0.21
Syphilis	0.56	0.55	0.57	0.66
T. cruzi	NR	NR	NR	NR
HTLV I-II	0.24	0.3	0.24	0.23
Anti-HBc	NR	NR	NR	NR
Percentage of units separated into components				
Packed red blood cells	33.82	49.66	49.92	54.13
Fresh frozen plasma	5.36	9.42	5.64	6.50
Frozen plasma	3.88	5.01	4.14	4.61
Cryoprecipitate	0.03	2.97	0.08	0.05
Platelets	3.76	7.52	6.62	6.92
Percentage of units discarded				
Whole Blood	NR	NR	8.15	12.12
Packed red blood cells	2.25	1.69	1.95	1.89
Fresh frozen plasma	59.5	58.64	79.02	67.93
Frozen plasma	0	0	NR	NR
Cryoprecipitate	51.43	0	1.16	0
Platelets	8.01	15.35	13.07	16.70

ECUADOR (ECU)	2010	2011[1]	2012	2013
Number of Units Collected	173,748	211,818	83,611	229,018
Number of Autologous Donors	37	36	16	88
Percentage type of allogeneic donors				
Voluntary, altruistic donors	38.38	49.95	5.25	57.05
Family/Replacement donors	61.83	50.05	94.75	42.95
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
T. cruzi	100	100	100	96.23
HTLV I-II	NR	NR	11.05	11.94
Anti-HBc	14.8	18	15.87	25.56
Percentage of units reactive/positive				
HIV	0.43	0.33	0.35	0.42
HBsAg	0.35	0.26	0.35	0.49
HCV	0.52	0.35	0.54	0.25
Syphilis	0.86	0.63	1.16	1.11
T. cruzi	0.19	0.18	0.22	0.30
HTLV I-II	NR	NR	0.02	0.02
Anti-HBc	0.19	0.02	3.52	1.24
Percentage of units separated into components				
Packed red blood cells	92.47	89.91	94.26	96.33
Fresh frozen plasma	85.98	63.14	77.12	76.27
Frozen plasma	NR	NR	4.09	12.12
Cryoprecipitate	5.79	3.06	4.22	2.50
Platelets	34.57	31.03	51.71	43.59
Percentage of units discarded				
Whole Blood	76.32	41.04	NR	44.78
Packed red blood cells	3.36	4.13	NR	3.98
Fresh frozen plasma	43.55	35.22	NR	27.33
Frozen plasma	NR	NR	NR	37.20
Cryoprecipitate	23.72	13.59	NR	7.85
Platelets	22.02	14.07	NR	23.70

113,846 of the total units collected were not classified by donor type.

EL SALVADOR (ELS)	2010[1]	2011[2]	2012	2013
Number of Units Collected	84,287	90,760	94,494	98,088
Number of Autologous Donors	0	7	2	9
Percentage type of allogeneic donors				
Voluntary, altruistic donors	10.28	11.77	11.51	14.30
Family/Replacement donors	89.72	88.23	88.49	85.70
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
T. cruzi	100	100	100	100
HTLV I-II	NR	NR	NR	NR
Anti-HBc	NR	NR	NR	NR
Percentage of units reactive/positive				
HIV	0.05	0.06	0.05	0.07
HBsAg	0.16	0.16	0.13	0.12
HCV	0.1	0.13	0.11	0.15
Syphilis	1.36	1.1	0.75	0.75
T. cruzi	1.61	1.68	1.51	3.21
HTLV I-II	NR	NR	NR	NR
Anti-HBc	NR	NR	NR	NR
Percentage of units separated into components				
Packed red blood cells	93.34	96.83	94.25	99.88
Fresh frozen plasma	79.04	75.54	58.83	66.32
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	11.69	12.39	11.63	16.40
Platelets	62.8	55.64	56.18	55.17
Percentage of units discarded				
Whole Blood	25.11	1.27	NI	NI
Packed red blood cells	5.9	5.6	2.23	5.78
Fresh frozen plasma	14.11	16.26	20.16	19.31
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	0.64	1.92	0.76	47.81
Platelets	14.56	13.1	6.31	1.18

[1]Total units collected does not include 557 donors by apheresis, but these units are included in the screening and availability of blood components data.

[2]Total units collected does not include 783 donors by apheresis, but these units are included in the screening and availability of blood components data.

GUATEMALA (GUT)	2010	2011	2012	2013
Number of Units Collected	92,385	105,803	113,041	121,921
Number of Autologous Donors	50	36	23	14
Percentage type of allogeneic donors				
Voluntary, altruistic donors	4.75	4.51	4.34	4.81
Family/Replacement donors	95.25	96.13	95.66	95.19
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
T. cruzi	100	100	100	100
HTLV I-II	NR	NR	NR	NR
Anti-HBc	NR	43.45	77.41	100
Percentage of units reactive/positive				
HIV	0.46	0.26	0.27	0.39
HBsAg	0.67	0.36	0.38	0.46
HCV	0.94	0.65	0.61	0.97
Syphilis	2.56	2.1	1.90	2.67
T. cruzi	1.34	0.97	1.02	1.04
HTLV I-II	NR	NR	NR	NR
Anti-HBc	2.91	3.15	3.94	3.92
Percentage of units separated into components				
Packed red blood cells	89.76	91.58	87.27	88.21
Fresh frozen plasma	51.89	50.39	47.42	46.82
Frozen plasma	NR	NR	NR	2.07
Cryoprecipitate	0.66	0.64	1.08	1.13
Platelets	34.08	39.2	37.71	36.14
Percentage of units discarded				
Whole Blood	5.54	57.88	22.53	21.89
Packed red blood cells	10.99	12.04	12.59	13.52
Fresh frozen plasma	20.26	29.41	29.50	28.03
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	37.54	28.25	18.53	23.91
Platelets	26.5	34.93	29.23	24.48

HONDURAS (HON)	2010	2011[1]	2012	2013
Number of Units Collected	63,878	66,457	66,519	69,082
Number of Autologous Donors	27	10	10	6
Percentage type of allogeneic donors				
Voluntary, altruistic donors	15.84	17.38	15.66	15
Family/Replacement donors	83.63	82.06	84.11	84.13
Remunerated donors	0.53	0.56	0.23	0.87
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
T. cruzi	100	100	100	100
HTLV I-II	87.4	92	94.02	96.23
Anti-HBc	88.2	NR	95.64	96.23
Percentage of units reactive/positive				
HIV	0.18	0.2	0.16	0.15
HBsAg	0.24	0.2	0.20	0.28
HCV	0.47	0.52	0.38	0.35
Syphilis	1.04	0.79	0.95	1.01
T. cruzi	1.65	1.1	1.23	1.06
HTLV I-II	0.25	0.23	0.31	0.14
Anti-HBc	4.65	2.21	2.21	2.23
Percentage of units separated into components				
Packed red blood cells	38.05	40.45	41.62	46.66
Fresh frozen plasma	36.25	38.42	38.49	37.46
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	2.09	2.82	3.14	3.87
Platelets	30.58	30.97	31.89	30.27
Percentage of units discarded				
Whole Blood	8.54	4.69	28.04	NI
Packed red blood cells	23.1	14.25	12.14	6.64
Fresh frozen plasma	47.52	79.38	46.94	24.25
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	5.18	4.33	4.98	1.68
Platelets	20.98	18.88	17.74	25.82

[1]HON: Missing information from the Honduran Red Cross. Therefore, the results do not match.

MEXICO (MEX)	2010	2011	2012	2013
Number of Units Collected	1,699,885	1,768,065	1,768,862	1,364,395
Number of Autologous Donors	1,761	2,384	1,716	1,065
Percentage type of allogeneic donors				
Voluntary, altruistic donors	2.38	2.45	2.77	3.06
Family/Replacement donors	97.62	97.55	97.23	96.94
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	98	99	98.43	98.45
HBsAg	98	99	98.36	98.45
HCV	98	99	98.47	98.44
Syphilis	98	99	98.20	98.27
T. cruzi	87	89	90.69	91.85
HTLV I-II	NR	NR	NR	NR
Anti-HBc	NR	NR	NR	NR
Percentage of units reactive/positive				
HIV	0.26	0.22	0.25	0.29
HBsAg	0.17	0.16	0.15	0.18
HCV	0.56	0.56	0.57	0.68
Syphilis	0.45	0.51	0.59	0.70
T. cruzi	0.39	0.36	0.45	0.53
HTLV I-II	NR	NR	NR	NR
Anti-HBc	NR	NR	NR	NR
Percentage of units separated into components				
Packed red blood cells	94.85	95.08	91.92	96.85
Fresh frozen plasma	76.37	75.99	74.14	66.39
Frozen plasma	18.48	19.09	15.77	19.39
Cryoprecipitate	6.31	5.58	5.60	11.08
Platelets	41.54	42.01	40.82	48.31
Percentage of units discarded				
Whole Blood	2.87	2.99	69.92	NI
Packed red blood cells	6.5	6.61	6.99	8.60
Fresh frozen plasma	38.32	40.23	39.86	57.71
Frozen plasma	100	100	NI	NI
Cryoprecipitate	15.74	16.25	15.49	10.15
Platelets	28.39	30.34	30.88	33.83

NICARAGUA (NIC)	2010	2011	2012	2013
Number of Units Collected	74,842	73,912	72,988	72,658
Number of Autologous Donors	0	0	0	NR
Percentage type of allogeneic donors				
Voluntary, altruistic donors	100	100	100	100
Family/Replacement donors	0	0	0	0
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
T. cruzi	100	100	100	100
HTLV I-II	NR	NR	NR	NR
Anti-HBc	NR	NR	NR	NR
Percentage of units reactive/positive				
HIV	0.06	0.06	0.06	0.04
HBsAg	0.24	0.24	0.22	0.21
HCV	0.33	0.2	0.34	0.32
Syphilis	0.86	0.77	0.60	0.36
T. cruzi	0.22	0.24	0.27	0.40
HTLV I-II	NR	NR	NR	NR
Anti-HBc	NR	NR	NR	NR
Percentage of units separated into components				
Packed red blood cells	96.71	95.3	98.76	98.63
Fresh frozen plasma	96.71	41.53	91.93	86.43
Frozen plasma	NR	NR	6.83	3.58
Cryoprecipitate	4.1	4.05	6.85	6.58
Platelets	48.2	47.66	52.93	55.88
Percentage of units discarded				
Whole Blood	2.06	2.12	78.70	68.21
Packed red blood cells	1.86	2.75	2.24	2
Fresh frozen plasma	56.46	10.16	50.31	50.83
Frozen plasma	NR	NR	97.65	NI
Cryoprecipitate	11.7	11.24	2.72	2.07
Platelets	34.67	34.49	4.62	4.27

PANAMA (PAN)	2010[1]	2011[2]	2012	2013
Number of Units Collected	51,552	54,427	55,083	53,529
Number of Autologous Donors	NR	NR	138	115
Percentage type of allogeneic donors				
Voluntary, altruistic donors	6.8	5.95	4.44	5.79
Family/Replacement donors	35.47	35.31	86.18	85.90
Remunerated donors	8.56	9.54	9.38	8.09
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
T. cruzi	100	100	100	100
HTLV I-II	97	96.87	98.33	100
Anti-HBc	100	100	100	100
Percentage of units reactive/positive				
HIV	0.05	0.59	0.23	0.17
HBsAg	0.15	0.67	0.32	0.22
HCV	0.48	0.58	0.60	0.50
Syphilis	1.1	1.3	1.17	1.38
T. cruzi	0.5	0.67	0.48	0.40
HTLV I-II	0.25	0.3	0.50	0.33
Anti-HBc	1.5	1.7	1.96	1.97
Percentage of units separated into components				
Packed red blood cells	NR	78.99	89.61	81.21
Fresh frozen plasma	NR	34.25	41.94	38.49
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	NR	26.74	6.29	6.63
Platelets	NR	56.41	51.04	51.73
Percentage of units discarded				
Whole Blood	NR	NR	12.37	NR
Packed red blood cells	NR	8.49	13.98	NR
Fresh frozen plasma	NR	2.3	8.51	NR
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	NR	1.72	10.70	NR
Platelets	NR	10.69	18.25	NR

[1]25,301 of the total units collected were not classified by donor type. Reported 73,678 donors interviewed and 1,355 deferred donors.

[2]27,511 of the total units collected were not classified by donor type. Reported 77,851 donors interviewed and 11,511 deferred donors.

PARAGUAY (PAR)	2010	2011	2012	2013
Number of Units Collected	72,647	74,079	62,154	86,056
Number of Autologous Donors	55	36	9	116
Percentage type of allogeneic donors				
Voluntary, altruistic donors	24.79	5.71	11.48	9.20
Family/Replacement donors	75.21	94.29	88.51	90.80
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	98.99	100
HBsAg	100	100	98.99	100
HCV	100	100	98.99	100
Syphilis	100	100	98.99	100
T. cruzi	100	100	98.99	100
HTLV I-II	100	100	98.99	100
Anti-HBc	100	100	98.99	100
Percentage of units reactive/positive				
HIV	0.54	0.74	0.71	0.43
HBsAg	0.4	0.37	0.34	0.30
HCV	0.41	0.4	0.35	0.30
Syphilis	7.96	8.03	7.51	6.47
T. cruzi	2.55	2.92	2.48	2.33
HTLV I-II	0.21	0.17	0.16	0.28
Anti-HBc	3.33	3.86	2.67	3.03
Percentage of units separated into components				
Packed red blood cells	74.37	75.41	51.57	83.65
Fresh frozen plasma	63.29	59.61	41.50	70.73
Frozen plasma	10.39	NR	8.08	30.87
Cryoprecipitate	2.67	2.37	0.91	6.38
Platelets	46.29	43.53	26.01	57.78
Percentage of units discarded				
Whole Blood	17.32	41.62	13.65	7.88
Packed red blood cells	19.48	17.35	19.72	16.42
Fresh frozen plasma	28	20.39	34.60	15.50
Frozen plasma	77.71	NR	38.06	14.53
Cryoprecipitate	7.33	6.09	28.87	4.27
Platelets	41.26	45.15	68	30.08

PERU (PER)	2010[1]	2011[2]	2012	2013
Number of Units Collected	234,566	141,202	166,049	204,871
Number of Autologous Donors	874	90	295	118
Percentage type of allogeneic donors				
Voluntary, altruistic donors	4.31	4.08	5.66	4.56
Family/Replacement donors	NR	74.71	94.34	95.43
Remunerated donors	0.15	0.05	0	0.005
Percentage of units screened				
HIV	98.82	94	100	100
HBsAg	98.73	94	100	100
HCV	98.76	94	100	100
Syphilis	98.74	94	100	100
T. cruzi	98.75	94	100	100
HTLV I-II	98.53	93.86	100	100
Anti-HBc	98.78	93.98	100	100
Percentage of units reactive/positive				
HIV	0.41	0.22	0.19	0.23
HBsAg	0.46	0.41	0.41	0.38
HCV	0.76	0.44	0.47	0.56
Syphilis	1.34	1.11	1.12	1.19
T. cruzi	0.62	0.46	0.61	0.5
HTLV I-II	123	1.08	0.98	0.88
Anti-HBc	4.4	4.7	4.31	4.19
Percentage of units separated into components				
Packed red blood cells	82.67	85.21	87.96	90.65
Fresh frozen plasma	66.96	62.42	62.65	67.53
Frozen plasma	NR	NR	15.51	14.22
Cryoprecipitate	10.02	8.3	6.39	8.82
Platelets	56.87	48.18	51.95	51.32
Percentage of units discarded				
Whole Blood	0.82	1.54	10.17	11.33
Packed red blood cells	7.42	4.1	9.82	13.68
Fresh frozen plasma	40.61	10.79	21.14	30.92
Frozen plasma	NR	NR	50.89	92.46
Cryoprecipitate	8.14	2.01	18.67	7.78
Platelets	23.75	8.62	26.38	26.77

[1]In 2010, 223,255 of the units collected were not classified by donor type. Units received for screening 234,566; but screened for: HIV 231,798; HBsAg 231,592; Syphilis 231,610; T. cruzi 231,629; Anti-HBc 231,698.

[2]Partial information. 27,856 of the units collected were not classified by donor type. Reported 140,407 units received for screening.

URUGUAY (URU)	2010	2011	2012	2013
Number of Units Collected	92,734	95,812	104,342	99,151
Number of Autologous Donors	NR	NR	358	604
Percentage type of allogeneic donors				
Voluntary, altruistic donors	NR	NR	NI	46.48
Family/Replacement donors	NR	NR	NI	53.52
Remunerated donors	NR	NR	NI	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
T. cruzi	100	100	100	100
HTLV I-II	100	100	100	100
Anti-HBc	100	100	100	100
Percentage of units reactive/positive				
HIV	0.09	0.13	0.11	0.13
HBsAg	0.1	0.15	0.13	0.10
HCV	0.34	0.37	0.34	0.36
Syphilis	0.57	0.49	0.45	0.49
T. cruzi	0.23	0.39	0.31	0.24
HTLV I-II	0.11	0.11	0.07	0.13
Anti-HBc	1.17	1.15	0.99	0.91
Percentage of units separated into components				
Packed red blood cells	NR	NR	NR	NR
Fresh frozen plasma	NR	NR	NR	NR
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	NR	NR	NR	NR
Platelets	NR	NR	NR	NR
Percentage of units discarded				
Whole Blood	NR	NR	NR	NR
Packed red blood cells	NR	NR	NR	NR
Fresh frozen plasma	NR	NR	NR	NR
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	NR	NR	NR	NR
Platelets	NR	NR	NR	NR

VENEZUELA (VEN)	2010	2011	2012	2013
Number of Units Collected	418,996	416,346	445,957	NR
Number of Autologous Donors	NR	0	0	
Percentage type of allogeneic donors				
Voluntary, altruistic donors	4	6.38	6.62	
Family/Replacement donors	NR	93.62	93.38	
Remunerated donors	NR	NR	0	
Percentage of units screened				
HIV	100	100	93.38	
HBsAg	100	100	93.38	
HCV	100	100	93.38	
Syphilis	100	100	93.38	
T. cruzi	100	100	93.38	
HTLV I-II	100	100	93.38	
Anti-HBc	100	100	93.38	
Percentage of units reactive/positive				
HIV	0.26	0.23	0.19	
HBsAg	0.66	0.53	0.43	
HCV	0.36	0.32	0.30	
Syphilis	1.84	1.81	1.69	
T. cruzi	0.32	0.33	0.27	
HTLV I-II	0.19	0.21	0.15	
Anti-HBc	3.11	3.12	2.85	
Percentage of units separated into components				
Packed red blood cells	88.42	95	88.27	
Fresh frozen plasma	74.1	81.39	73.11	
Frozen plasma	20.97	9.29	5.97	
Cryoprecipitate	6.62	9.04	5.97	
Platelets	52.81	81.34	51.98	
Percentage of units discarded				
Whole Blood	NR	NR	NR	
Packed red blood cells	NR	NR	4.47	
Fresh frozen plasma	NR	NR	NR	
Frozen plasma	NR	NR	NR	
Cryoprecipitate	NR	NR	NR	
Platelets	NR	NR	NR	

CARIBBEAN COUNTRIES

ANGUILLA (ANU)	2010	2011	2012	2013
Number of Units Collected	134	165	115	140
Number of Autologous Donors	3	1	1	0
Percentage type of allogeneic donors				
Voluntary, altruistic donors	9.92	9.76	29.82	32.14
Family/Replacement donors	90.08	90.24	70.18	67.86
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
HTLV I-II	0	0	0	0
Percentage of units reactive/positive				
HIV	0	0.61	0	NR
HBsAg	0.75	0	0.88	0.71
HCV	0.75	0	0	0.71
Syphilis	0.75	0	0	NR
HTLV I-II	NR	NR	NR	NR
Percentage of units separated into components				
Packed red blood cells	67.16	72.73	61.74	56.43
Fresh frozen plasma	NR	NR	NR	NR
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	NR	NR	NR	NR
Platelets	NR	NR	NR	NR
Percentage of units discarded				
Whole Blood	37.5	32.35	22.72	14.75
Packed red blood cells	NR	NR	NR	NR
Fresh frozen plasma	NR	NR	NR	NR
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	NR	NR	NR	NR
Platelets	NR	NR	NR	NR

ANTIGUA AND BARBUDA (ANI)	2010[1]	2011	2012	2013
Number of Units Collected	1,321	NR	NR	NR
Number of Autologous Donors	3			
Percentage type of allogeneic donors				
Voluntary, altruistic donors	5			
Family/Replacement donors	95			
Remunerated donors	0			
Percentage of units screened				
HIV	100			
HBsAg	100			
HCV	93.10			
Syphilis	100			
HTLV I-II	0			
Percentage of units reactive/positive				
HIV	0.91			
HBsAg	1.67			
HCV	0.53			
Syphilis	0.46			
HTLV I-II	NR			
Percentage of units separated into components				
Packed red blood cells	61.38			
Fresh frozen plasma	10.2			
Frozen plasma	3.64			
Cryoprecipitate	0			
Platelets	10.7			
Percentage of units discarded				
Whole Blood	5.76			
Packed red blood cells	2.6			
Fresh frozen plasma	28.89			
Frozen plasma	0			
Cryoprecipitate	NR			
Platelets	8.51			

[1]2009 data in place of 2010. HCV testing could not be done on all units due to unavailability of reagent. Screened units 1,318.

ARUBA (ARU)	2010	2011	2012	2013
Number of Units Collected	2,830	2,835	3,116	2,998
Number of Autologous Donors	0	0	5	4
Percentage type of allogeneic donors				
Voluntary, altruistic donors	100	100	100	100
Family/Replacement donors	0	0	0	0
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
HTLV I-II	100	100	100	100
Percentage of units reactive/positive				
HIV	0.07	0.04	0.03	0
HBsAg	0	0.04	0	0.03
HCV	0.04	0	0	0
Syphilis	0.04	0.04	0	0
HTLV I-II	0.07	0.04	0	0
Percentage of units separated into components				
Packed red blood cells	100	100	97.17	97.60
Fresh frozen plasma	80.33	19.05	15.10	18.55
Frozen plasma	0	0	NR	NR
Cryoprecipitate	0	0	NR	NR
Platelets	29.07	78.62	69.80	68.71
Percentage of units discarded				
Whole Blood	0	0	NR	NR
Packed red blood cells	2.5	2.15	1.65	3.79
Fresh frozen plasma	0	0	15.35	26.26
Frozen plasma	0	0	NR	NR
Cryoprecipitate	0	0	NR	NR
Platelets	93.63	27.9	72	67.38

BAHAMAS (BAH)	2010	2011	2012	2013
Number of Units Collected	NR	7,287	7,638	7,214
Number of Autologous Donors		4	2	16
Percentage type of allogeneic donors				
Voluntary, altruistic donors		43.95	37.87	41.93
Family/Replacement donors		50.42	62.12	58.07
Remunerated donors		0	0	0
Percentage of units screened				
HIV		100	100	100
HBsAg		100	100	100
HCV		100	100	100
Syphilis		100	100	100
HTLV I-II		100	100	100
Percentage of units reactive/positive				
HIV		0.13	0.20	0.14
HBsAg		0.48	0.51	0.36
HCV		0.21	0.29	0.25
Syphilis		0.96	1.17	0.97
HTLV I-II		0.29	0.33	0.28
Percentage of units separated into components				
Packed red blood cells		87.18	71.16	69.64
Fresh frozen plasma		30.73	21.18	22.58
Frozen plasma		0	NR	33.50
Cryoprecipitate		0.21	NR	NR
Platelets		27.69	25.28	26.75
Percentage of units discarded				
Whole Blood		NR	NR	5.82
Packed red blood cells		2	6.49	11.43
Fresh frozen plasma		5.4	20.70	34.75
Frozen plasma		0	NR	NR
Cryoprecipitate		0	NR	NR
Platelets		13.18	23.77	48.70

BARBADOS (BAR)	2010[1]	2011	2012	2013
Number of Units Collected	4,781	NR	NR	NR
Number of Autologous Donors	119			
Percentage type of allogeneic donors				
Voluntary, altruistic donors	15			
Family/Replacement donors	85			
Remunerated donors	0			
Percentage of units screened				
HIV	100			
HBsAg	100			
HCV	100			
Syphilis	100			
HTLV I-II	100			
Percentage of units reactive/positive				
HIV	0.10			
HBsAg	0.27			
HCV	0.33			
Syphilis	0.13			
HTLV I-II	0.36			
Percentage of units separated into components				
Packed red blood cells	37.63			
Fresh frozen plasma	37.25			
Frozen plasma	NR			
Cryoprecipitate	0.38			
Platelets	36.50			
Percentage of units discarded				
Whole Blood	7.75			
Packed red blood cells	5.84			
Fresh frozen plasma	6.79			
Frozen plasma	NR			
Cryoprecipitate	NR			
Platelets	17.94			

[1]2009 data in place of 2010. Not included 50 platelets apheresis collected and screened.

BELIZE (BLZ)	2010	2011	2012	2013
Number of Units Collected	4,558	4,617	4,795	5,120
Number of Autologous Donors	0	0	0	0
Percentage type of allogeneic donors				
Voluntary, altruistic donors	10.03	13.78	13.22	13.85
Family/Replacement donors	89.97	86.22	86.78	86.15
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
HTLV I-II	NR	NR	NR	NR
Percentage of units reactive/positive				
HIV	0.13	0.33	0.27	0.12
HBsAg	0.51	0.65	0.38	0.23
HCV	0.26	0.48	0.27	0.17
Syphilis	0.59	1.13	1.5	3.38
HTLV I-II	NR	NR	NR	NR
Percentage of units separated into components				
Packed red blood cells	40.7	34.76	35.85	43.05
Fresh frozen plasma	25.54	13.08	15.66	21.11
Frozen plasma	15.16	21.68	20.19	21.86
Cryoprecipitate	0	0	NR	0.08
Platelets	18.56	13.06	15.62	12.79
Percentage of units discarded				
Whole Blood	13.21	18.49	NI	29.49
Packed red blood cells	5.88	7.04	7.68	8.85
Fresh frozen plasma	0.34	8.44	14.25	13.50
Frozen plasma	8.68	35.16	75.41	30.92
Cryoprecipitate	0	0	NR	NR
Platelets	51.89	71.14	37.52	81.22

BERMUDA (BER)	2010	2011	2012	2013
Number of Units Collected	2,456	2,412	2,179	1,836
Number of Autologous Donors	11	18	11	2
Percentage type of allogeneic donors				
Voluntary, altruistic donors	100	100	100	100
Family/Replacement donors	0	0	0	0
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
HTLV I-II	100	100	100	100
Percentage of units reactive/positive				
HIV	0.12	0.17	0.05	0.05
HBsAg	0	0	0.05	0.05
HCV	0.08	0.04	0.05	0
Syphilis	0	0.04	0.18	0
HTLV I-II	0.04	0	0.05	0.5
Percentage of units separated into components				
Packed red blood cells	92.31	91.69	93.76	86.76
Fresh frozen plasma	19.02	13.07	19.60	16.72
Frozen plasma	0	0	NR	NR
Cryoprecipitate	0	0	NR	NR
Platelets	4.62	4.72	NR	NR
Percentage of units discarded				
Whole Blood	NR	NR	NR	NR
Packed red blood cells	6.38	5.1	11.21	3.77
Fresh frozen plasma	31.61	21.41	17.10	18.24
Frozen plasma	0	0	NR	NR
Cryoprecipitate	0	0	NR	NR
Platelets	87.61	86.73	NR	NR

BRITISH VIRGIN ISLANDS (BVI)	2010	2011	2012	2013
Number of Units Collected	445	422	381	353
Number of Autologous Donors	0	0	2	5
Percentage type of allogeneic donors				
Voluntary, altruistic donors	0	0	0	0
Family/Replacement donors	100	100	100	100
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
HTLV I-II	85.39	100	100	100
Percentage of units reactive/positive				
HIV	0.22	0	0	0
HBsAg	0	1.18	1.05	0.85
HCV	0	0.47	0.52	0
Syphilis	0	0	1.05	1.42
HTLV I-II	1.32	0.24	0.26	0.57
Percentage of units separated into components				
Packed red blood cells	45.62	37.68	99.74	99.15
Fresh frozen plasma	45.62	37.68	31.57	30.53
Frozen plasma	0	0	68.24	68.56
Cryoprecipitate	NR	0	NR	0
Platelets	NR	0	NR	0
Percentage of units discarded				
Whole Blood	NR	NR	NR	NR
Packed red blood cells	NR	NR	20.79	16.86
Fresh frozen plasma	NR	NR	NR	13.89
Frozen plasma	NR	NR	NR	100
Cryoprecipitate	NR	NR	NR	NR
Platelets	NR	NR	NR	NR

CAYMAN ISLANDS (CAY)	2010	2011	2012	2013
Number of Units Collected	1,006	1,020	1,026	1,018
Number of Autologous Donors	0	2	0	0
Percentage type of allogeneic donors				
Voluntary, altruistic donors	100	100	100	100
Family/Replacement donors	0	0	0	0
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
HTLV I-II	100	100	100	100
Percentage of units reactive/positive				
HIV	0	0.1	0	0
HBsAg	0.1	0	0	0.30
HCV	0	0.39	0	0.10
Syphilis	0.1	0.39	0.10	0.10
HTLV I-II	0	0.49	0	1.18
Percentage of units separated into components				
Packed red blood cells	80.22	91.9	90.84	90.96
Fresh frozen plasma	24.65	35.1	48.25	51.77
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	NR	NR	NR	NR
Platelets	NR	NR	NR	NR
Percentage of units discarded				
Whole Blood	NR	5	57.45	50
Packed red blood cells	6.82	10.58	7.08	12.63
Fresh frozen plasma	89.92	41.9	39	26
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	NR	NR	NR	NR
Platelets	NR	NR	NR	NR

CURACAO (CUR)	2010	2011	2012	2013
Number of Units Collected	7,541	6,615	6,401	5,559
Number of Autologous Donors	0	12	3	2
Percentage type of allogeneic donors				
Voluntary, altruistic donors	100	100	100	100
Family/Replacement donors	0	0	0	0
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
HTLV I-II	100	100	100	100
Percentage of units reactive/positive				
HIV	0	0.03	0	0
HBsAg	0	0	0	0
HCV	0	0.02	0	0
Syphilis	0	0.02	0	0
HTLV I-II	0	0.02	0	0
Percentage of units separated into components				
Packed red blood cells	100	95.28	99.00	99.05
Fresh frozen plasma	73.2	22.79	20.81	19.81
Frozen plasma	0	0	NR	NR
Cryoprecipitate	0	0	NR	NR
Platelets	9.95	46.33	53.84	53.77
Percentage of units discarded				
Whole Blood	0	NR	NR	NR
Packed red blood cells	2.65	NR	4.46	4.87
Fresh frozen plasma	0	NR	4.73	4.63
Frozen plasma	0	NR	NR	NR
Cryoprecipitate	0	NR	NR	NR
Platelets	38.4	NR	63.61	71.17

DOMINICA (DOM)	2010	2011	2012	2013
Number of Units Collected	877	1,043	946	1,071
Number of Autologous Donors	2	2	0	0
Percentage type of allogeneic donors				
Voluntary, altruistic donors	4	8.93	10.57	8.68
Family/Replacement donors	96	91.07	89.43	91.32
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	NR	NR	NR	0
Syphilis	100	100	100	100
HTLV I-II	100	100	100	100
Percentage of units reactive/positive				
HIV	0	0.3	0	0
HBsAg	0.3	0.9	0.21	0.19
HCV	NR	NR	NR	NR
Syphilis	1.3	1.3	1.16	1.21
HTLV I-II	0.7	1.2	0.95	1.49
Percentage of units separated into components				
Packed red blood cells	92.36	96.36	95.35	96.26
Fresh frozen plasma	56.44	62.2	54.33	63.77
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	6.5	2.4	3.81	2.15
Platelets	25.31	44.77	49.68	43.32
Percentage of units discarded				
Whole Blood	62.69	55.26	NR	NI
Packed red blood cells	7.65	2.49	12.86	9.12
Fresh frozen plasma	NR	NR	NR	56.37
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	NR	NR	NR	13.04
Platelets	74.32	50.32	NR	50.22

FRENCH DEPARTMENTS OF AMERICA (FDA)	2010	2011	*2012	*2013
Number of Units Collected	NR	21,800	6,788	10,508
Number of Autologous Donors		6	0	0
Percentage type of allogeneic donors				
Voluntary, altruistic donors		100	100	100
Family/Replacement donors		0	0	0
Remunerated donors		0	0	0
Percentage of units screened				
HIV		100	100	100
HBsAg		100	100	100
HCV		100	100	100
Syphilis		100	100	100
HTLV I-II		100	100	100
Percentage of units reactive/positive				
HIV		NR	0.12	0.13
HBsAg		NR	0.13	0.11
HCV		NR	0	0.10
Syphilis		NR	0.37	0.54
HTLV I-II		NR	0.09	0.17
Percentage of units separated into components				
Packed red blood cells		100	NR	NR
Fresh frozen plasma		0	NR	NR
Frozen plasma		0	NR	NR
Cryoprecipitate		0	NR	NR
Platelets		2	NR	NR
Percentage of units discarded				
Whole Blood		NR	NR	NR
Packed red blood cells		NR	NR	NR
Fresh frozen plasma		0	NR	NR
Frozen plasma		0	NR	NR
Cryoprecipitate		0	NR	NR
Platelets		NR	NR	NR

*Guadalupe (Martinique and French Guiana are not included)

GRENADA (GRA)	2010[1]	2011	2012	2013
Number of Units Collected	1,426	NR	1,365	NR
Number of Autologous Donors	5		NR	
Percentage type of allogeneic donors				
Voluntary, altruistic donors	26		38.83	
Family/Replacement donors	74		61.17	
Remunerated donors	0		0	
Percentage of units screened				
HIV	100		NR	
HBsAg	100		NR	
HCV	100		NR	
Syphilis	100		NR	
HTLV I-II	100		NR	
Percentage of units reactive/positive				
HIV	0		NR	
HBsAg	1.05		NR	
HCV	0.07		NR	
Syphilis	0.42		NR	
HTLV I-II	0.84		NR	
Percentage of units separated into components				
Packed red blood cells	100		NR	
Fresh frozen plasma	12.34		NR	
Frozen plasma	0		NR	
Cryoprecipitate	0.21		NR	
Platelets	2.45		NR	
Percentage of units discarded				
Whole Blood	0		NR	
Packed red blood cells	13.04		NR	
Fresh frozen plasma	11.93		NR	
Frozen plasma	NR		NR	
Cryoprecipitate	NR		NR	
Platelets	17.14		NR	

[1]2009 data in place of 2010.

GUYANA (GUY)	2010	2011	2012	2013
Number of Units Collected	7,738	6,361	7,712	11,148
Number of Autologous Donors	NR	0	0	0
Percentage type of allogeneic donors				
Voluntary, altruistic donors	79	91.92	100	95.79
Family/Replacement donors	21	8.08	0	4.21
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
HTLV I-II	100	100	100	100
Percentage of units reactive/positive				
HIV	0.26	0.16	0.27	0.34
HBsAg	0.22	1.57	0.96	0.88
HCV	0.48	0.31	0.45	0.46
Syphilis	0.21	0.77	0.66	0.37
HTLV I-II	0.05	0.82	0.43	0.83
Percentage of units separated into components				
Packed red blood cells	NR	NR	63.78	98.82
Fresh frozen plasma	NR	NR	15.81	59.17
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	NR	NR	1.12	6.01
Platelets	NR	NR	13	31.67
Percentage of units discarded				
Whole Blood	NR	NR	73.43	NI
Packed red blood cells	NR	NR	NR	10
Fresh frozen plasma	NR	NR	NR	1.49
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	NR	NR	NR	0.75
Platelets	NR	NR	NR	7.53

HAITI (HAI)	2010	2011	2012	2013
Number of Units Collected	14,899	19,751	25,608	27,478
Number of Autologous Donors	NR	NR	0	0
Percentage type of allogeneic donors				
Voluntary, altruistic donors	83.9	70.45	71.75	59.16
Family/Replacement donors	16.1	29.55	28.25	40.84
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
HTLV I-II	100	NR	100	100
Percentage of units reactive/positive				
HIV	1.17	1.08	0.93	1.10
HBsAg	3.81	3.52	3.44	3.52
HCV	0.58	0.58	0.44	1.03
Syphilis	2.8	2.66	1.99	2.45
HTLV I-II	0.72	0.72	0.62	0.71
Percentage of units separated into components				
Packed red blood cells	81.05	63.24	46.16	22.12
Fresh frozen plasma	0.64	0	NR	0.65
Frozen plasma	NR	0	NR	NR
Cryoprecipitate	NR	0	NR	NR
Platelets	NR	0	NR	4.51
Percentage of units discarded				
Whole Blood	NR	NR	13.38	10.87
Packed red blood cells	NR	NR	NR	NR
Fresh frozen plasma	NR	0	NR	NR
Frozen plasma	NR	0	NR	NR
Cryoprecipitate	NR	0	NR	NR
Platelets	NR	0	NR	NR

JAMAICA (JAM)	2010	2011[1]	2012	2013
Number of Units Collected	28,402	27,307	3,947	30,679
Number of Autologous Donors	0	45	75	78
Percentage type of allogeneic donors				
Voluntary, altruistic donors	11	16.07	23.80	16.48
Family/Replacement donors	89	83.93	76.20	83.52
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	98.27
HBsAg	100	100	100	98.27
HCV	100	100	100	98.27
Syphilis	100	100	100	98.27
HTLV I-II	100	100	100	98.27
Percentage of units reactive/positive				
HIV	0.58	0.6	1.09	0.40
HBsAg	1.19	0.78	0.80	0.60
HCV	0.63	0.6	0.69	0.70
Syphilis	1.92	1	2.20	1.50
HTLV I-II	1.71	2.14	1.57	2.60
Percentage of units separated into components				
Packed red blood cells	45.22	55.29	98.79	NR
Fresh frozen plasma	41.34	51.78	NR	9.66
Frozen plasma	5.87	3.52	NR	1.07
Cryoprecipitate	6.88	4.25	NR	1.34
Platelets	15.66	16.33	NR	4.67
Percentage of units discarded				
Whole Blood	12.71	NR	NI	NR
Packed red blood cells	NR	3.27	NR	NR
Fresh frozen plasma	NR	NR	NR	NR
Frozen plasma	NR	NR	NR	NR
Cryoprecipitate	NR	NR	NR	NR
Platelets	NR	NR	NR	NR

[1]Total units collected does not include 2,187 units collected from "uniform recruits", but these units are included in the screening and availability of components data.

MONTSERRAT (MOT)	2010	2011	2012	2013
Number of Units Collected	128	89	NR	NR
Number of Autologous Donors	1	0		
Percentage type of allogeneic donors				
Voluntary, altruistic donors	99.22	100		
Family/Replacement donors	0	0		
Remunerated donors	0	0		
Percentage of units screened				
HIV	100	100		
HBsAg	100	100		
HCV	100	100		
Syphilis	100	100		
HTLV I-II	100	100		
Percentage of units reactive/positive				
HIV	0	0		
HBsAg	0.8	0		
HCV	0.8	1.12		
Syphilis	0	0		
HTLV I-II	0.8	13.48		
Percentage of units separated into components				
Packed red blood cells	85.94	78.65		
Fresh frozen plasma	0	0		
Frozen plasma	0	0		
Cryoprecipitate	0	0		
Platelets	0	1.12		
Percentage of units discarded				
Whole Blood	5.56	42.11		
Packed red blood cells	25.45	44.29		
Fresh frozen plasma	0	0		
Frozen plasma	0	0		
Cryoprecipitate	0	0		
Platelets	0	0		

SAINT KITTS & NEVIS (SKT)	2010	2011	2012	2013
Number of Units Collected	425	368	NR	331
Number of Autologous Donors	0	0		0
Percentage type of allogeneic donors				
Voluntary, altruistic donors	12	11.69		21.45
Family/Replacement donors	88	88.31		78.55
Remunerated donors	0	0		0
Percentage of units screened				
HIV	100	100		100
HBsAg	100	100		100
HCV	100	100		100
Syphilis	100	100		100
HTLV I-II	0	0		76.13
Percentage of units reactive/positive				
HIV	0	0		0
HBsAg	6.35	4.07		3.63
HCV	1.88	1.9		0
Syphilis	1.65	1.36		0
HTLV I-II	NR	NR		0
Percentage of units separated into components				
Packed red blood cells	14.35	10.05		9.10
Fresh frozen plasma	14.35	10.05		9.10
Frozen plasma	NR	0		NR
Cryoprecipitate	NR	0		NR
Platelets	NR	0		NR
Percentage of units discarded				
Whole Blood	17.58	NR		NR
Packed red blood cells	22.95	13.51		23.33
Fresh frozen plasma	36.07	13.51		23.33
Frozen plasma	NR	0		NR
Cryoprecipitate	NR	NR		NR
Platelets	NR	0		NR

SAINT LUCIA (STL)	2010	2011	2012	2013
Number of Units Collected	2,078	2,304	2,276	2,174
Number of Autologous Donors	8	5	9	7
Percentage type of allogeneic donors				
Voluntary, altruistic donors	65	66.94	67.76	62.11
Family/Replacement donors	35	33.06	32.24	37.97
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	100
HBsAg	100	100	100	100
HCV	100	100	100	100
Syphilis	100	100	100	100
HTLV I-II	100	100	100	100
Percentage of units reactive/positive				
HIV	0.04	0.13	0	0.09
HBsAg	0.28	0.52	0.83	0.64
HCV	0	0	0.08	0.05
Syphilis	1.58	1.17	0.78	1.10
HTLV I-II	0.52	0.73	0.57	0.87
Percentage of units separated into components				
Packed red blood cells	97.16	99.83	NR	95.54
Fresh frozen plasma	34.46	23.96	NR	18.03
Frozen plasma	0	7.94	NR	5.93
Cryoprecipitate	0	0	NR	NR
Platelets	33.78	52.65	NR	35.97
Percentage of units discarded				
Whole Blood	62.5	100	NR	69.07
Packed red blood cells	8.42	5.52	NR	8.57
Fresh frozen plasma	15.36	17.39	NR	8.93
Frozen plasma	0	14.21	NR	0.78
Cryoprecipitate	0	0	NR	NR
Platelets	52.85	46.99	NR	61

SAINT VINCENT AND THE GRENADINES (STV)	2010	2011	2012	2013
Number of Units Collected	1,043	1,157	1,195	1,161
Number of Autologous Donors	31	17	23	16
Percentage type of allogeneic donors				
Voluntary, altruistic donors	6	5.97	6.14	13.80
Family/Replacement donors	94	94.03	93.86	86.20
Remunerated donors	NR	NR	0	0
Percentage of units screened				
HIV	100	100	99.50	100
HBsAg	100	100	99.50	100
HCV	100	100	99.50	100
Syphilis	100	100	99.50	100
HTLV I-II	100	100	99.50	100
Percentage of units reactive/positive				
HIV	0.2	0.3	0.17	0.17
HBsAg	0.3	0.6	1	0.43
HCV	0.5	0.6	0.42	0.52
Syphilis	2.1	1.9	1.51	2.80
HTLV I-II	1.9	3.4	2.18	2.33
Percentage of units separated into components				
Packed red blood cells	96.93	92.91	99	98.62
Fresh frozen plasma	22.05	14.35	18.08	22.14
Frozen plasma	0	0	NR	NR
Cryoprecipitate	0	0	NR	NR
Platelets	4.22	14.17	18.01	21.62
Percentage of units discarded				
Whole Blood	31.25	100	NI	43.75
Packed red blood cells	6.92	5.02	6.68	16
Fresh frozen plasma	25.65	18.07	NR	10.51
Frozen plasma	0	0	NR	NR
Cryoprecipitate	0	0	NR	NR
Platelets	47.73	0.61	72.22	83.67

SURINAME (SUR)	2010	2011	2012	2013
Number of Units Collected	10,884	10,917	9,848	10,105
Number of Autologous Donors	0	4	2	2
Percentage type of allogeneic donors				
Voluntary, altruistic donors	100	100	100	100
Family/Replacement donors	0	0	0	0
Remunerated donors	0	0	0	0
Percentage of units screened				
HIV	100	100	100	98.39
HBsAg	100	100	100	98.39
HCV	100	100	100	98.39
Syphilis	100	100	100	98.39
HTLV I-II	100	100	100	98.39
Percentage of units reactive/positive				
HIV	0.03	0	0.03	0.01
HBsAg	0.05	0.02	0.02	0.05
HCV	0.03	0.02	0.01	0.03
Syphilis	0.03	0.05	0	0.03
HTLV I-II	0.01	0	0.03	0.01
Percentage of units separated into components				
Packed red blood cells	99.98	100	100	98.39
Fresh frozen plasma	18.67	17.66	20.33	19.08
Frozen plasma	0	NR	NR	NR
Cryoprecipitate	0	NR	NR	NR
Platelets	16.65	19.84	22.68	21.03
Percentage of units discarded				
Whole Blood	NR	NR	NR	NR
Packed red blood cells	0.38	0.3	0.66	0.52
Fresh frozen plasma	3.7	2.68	0.65	0.31
Frozen plasma	0	NR	NR	NR
Cryoprecipitate	0	NR	NR	NR
Platelets	11.65	20.83	15.98	20.20

TRINIDAD AND TOBAGO (TRT)	2010	2011	2012	2013
Number of Units Collected	NR	17,613	20,345	21,300
Number of Autologous Donors		NR	55	NR
Percentage type of allogeneic donors				
Voluntary, altruistic donors		NR	0	NR
Family/Replacement donors		NR	100	NR
Remunerated donors		NR	0	NR
Percentage of units screened				
HIV		100	100	100
HBsAg		100	100	100
HCV		100	100	100
Syphilis		100	100	100
HTLV I-II		100	100	100
Percentage of units reactive/positive				
HIV		0.22	0.20	0.19
HBsAg		0.31	0.33	0.23
HCV		0.28	0.31	0.2
Syphilis		1.27	1.41	1.40
HTLV I-II		0.44	0.62	0.19
Percentage of units separated into components				
Packed red blood cells		NR	33.06	36.41
Fresh frozen plasma		NR	21.59	24.66
Frozen plasma		NR	NR	NR
Cryoprecipitate		NR	1.71	6.71
Platelets		NR	17.10	19.82
Percentage of units discarded				
Whole Blood		NR	NR	NR
Packed red blood cells		NR	NR	NR
Fresh frozen plasma		NR	NR	NR
Frozen plasma		NR	NR	NR
Cryoprecipitate		NR	NR	NR
Platelets		NR	NR	NR

TURKS AND CAICOS ISLANDS (TCI)	2010	2011	2012	2013
Number of Units Collected	NR	674	674	NR
Number of Autologous Donors		0	0	
Percentage type of allogeneic donors				
Voluntary, altruistic donors		57.57	57.57	
Family/Replacement donors		42.4	42.43	
Remunerated donors		0	0	
Percentage of units screened				
HIV		100	100	
HBsAg		100	100	
HCV		100	100	
Syphilis		100	100	
HTLV I-II		100	100	
Percentage of units reactive/positive				
HIV		0	0	
HBsAg		0	0	
HCV		0	0	
Syphilis		0.15	0.15	
HTLV I-II		0	0	
Percentage of units separated into components				
Packed red blood cells		39.95	23	
Fresh frozen plasma		7.47	4.30	
Frozen plasma		0	18.69	
Cryoprecipitate		0	0	
Platelets		1.29	0.74	
Percentage of units discarded				
Whole Blood		NR	NR	
Packed red blood cells		0	NR	
Fresh frozen plasma		0	NR	
Frozen plasma		0	NR	
Cryoprecipitate		NR	NR	
Platelets		0	NR	

[1]Partial information in availability of components data; data based only on voluntary donations.

ANNEX

Pan American Health Organization
World Health Organization
REGIONAL OFFICE FOR THE Americas

53rd DIRECTING COUNCIL

66th SESSION OF THE REGIONAL COMMITTEE OF WHO FOR THE AMERICAS

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PLAN OF ACTION FOR UNIVERSAL ACCESS TO SAFE BLOOD

Introduction

1. This document is presented with a two-fold purpose: for the countries of the Region to use this Plan as a reference when drafting their national plans and strategies, tailoring it to their own needs; and for them to monitor and evaluate its implementation in order to reach the targets set for 2019.

2. The countries of the Region reaffirmed their commitment to universal health coverage at the last PAHO/WHO Directing Council in 2013. The commitment of the Member States is also expressed in the targets of the PAHO/WHO Strategic Plan 2014-2019, in which universal health coverage is one of the main unifying elements. Universal access to blood transfusions and safe blood products is an essential service for universal health coverage, helping to save millions of lives and improving the health of people who need them. Blood transfusions have been identified as one of the eight key life-saving interventions in health centers that offer emergency obstetric services *(1)*.

3. Transfusions are also necessary for the care of: *a)* children with severe anemia; *b)* patients with hemoglobin disorders such as thalassemia and sickle cell anemia; *c)* people injured in accidents; *d)* cancer patients; *e)* people who undergo major surgery and other surgical interventions such as transplants; and *f)* patients with chronic age-related diseases such as bleeding resulting from vascular problems or orthopedic surgery, among other causes. These groups are particularly vulnerable to blood scarcity and unsafe blood, since they are exposed to transfusion-transmitted infections such as HIV and hepatitis B and C.

4. In light of the above, this Plan of Action seeks to promote universal, timely access to safe blood in order to save lives and improve the health conditions of all patients who need it.

5. In this regard, the Plan is the result of: *a)* the systematization of the priorities and recommendations of the WHO Global Strategic Plan for Universal Access to Safe Blood Transfusion *(2)*; *b)* the work done in the Region for over a decade *(3)*; *c)* the results of the evaluation of the Regional Plan of Action for Transfusion Safety 2006-2010 *(4)*; *d)* the contributions made by the PAHO/WHO expert group and external experts; and *e)* the contributions received from the national blood programs in the Region.

Background

6. Every year, over 500,000 women die worldwide during pregnancy, childbirth, or the postpartum period, and 99% of these deaths occur in the developing world. An estimated 25% of these deaths are due to hemorrhage during delivery, the most common cause of maternal mortality, accounting for 21% of maternal deaths in Latin America and the Caribbean. If not addressed, this problem could compromise both the achievement of the Millennium Development Goal (MDG) 5 target of reducing maternal mortality and the enjoyment of the right to life, personal integrity, and the highest attainable standard of health, among other human rights. Maternal mortality from hemorrhage and the subsequent lack of blood for transfusion can be considered a human rights violation *(5)*. An inversely proportional relationship is observed between the maternal mortality ratio and the availability of blood; in countries where the availability of blood is low, maternal mortality is higher (Figures 1 and 2 available at: www.paho.org/figures-tables-regional-blood-plan).

7. To achieve universal access to safe blood for transfusions key strategies must be strengthened, among them: ensuring self-sufficiency in blood and blood products through voluntary non-remunerated blood donation; improving the quality of donated blood (from the donor's arm to the recipient's arm); maximizing appropriate blood use; strengthening human resources; adopting new advances; and establishing strategic partnerships with the different sectors involved in the area.

8. Since 1975, the World Health Assembly (WHA) and the WHO Executive Board have considered various documents and adopted numerous resolutions related to blood safety: WHA28.72 [1975], EB79.R1 [1987], WHA40.26 [1987], WHA45.35 [1992], WHA48.27 [1995], WHA53.14 [2000], WHA55.18 [2002], WHA56.30 [2003], WHA58.13 [2005], WHA63.12 [2010], WHA63.18 [2010], and WHA63.20 [2010] *(6 to 17)*.

9. Several resolutions on this matter have also been adopted in the Region of the Americas: CD41.R15 (1999), CD46.R5 (2005), CE142.R5 (2008), and CD48.R7 (2008). This issue is also related to the Strategy and Plan of Action for Chagas Disease Prevention, Control and Care (CD50/16 [2010]); the Plan of Action to Accelerate the Reduction of Maternal Mortality and Severe Maternal Morbidity [CE148/16 (2011)]; and the PAHO Regional Strategic Plan for HIV/AIDS/STI, 2006-2015 *(18-24)*.

10. Finally, in 2011, a group of external experts in transfusion medicine from different countries and organizations evaluated the Regional Plan of Action for Transfusion Safety 2006-2010. Their evaluation was presented to the 51st Directing Council in document CD51/INF/5 *(25)*, with the following recommendations: *a)* to continue the strengthening of blood collection, screening, and processing; *b)* to achieve the goal of 100% voluntary donation (mainly repeat donations); and *c)* to establish quality control systems. If these basic recommendations are followed, it will be possible for the Region to obtain sufficient quantities of safe blood in a timely fashion *(25-27)*.

Situation Analysis

11. In 2012 every country in Latin America had specific national blood legislation, but only four Caribbean countries did (Belize, Curaçao, Guyana, and Suriname). In that same year, 15 of the 41 countries and territories in Latin America and the Caribbean had an integrated, intersectoral, national strategic blood plan with resources for its implementation, monitoring, and evaluation. In 27 of the 41 countries and territories, a specific health ministry entity was responsible for planning, monitoring, and evaluating the national blood system; national intersectoral blood commissions were operating in only 14 countries *(28)*.

12. Furthermore, despite the demonstrated benefits of reducing the number of services that process blood—in terms of quality, safety, and lowering costs—the number of processing centers rose from 1,763 in 2010 to 1,772 in 2011. These benefits are demonstrated by considering the number of units produced per blood bank/year: Brazil, Colombia, Cuba, Ecuador, Nicaragua, and Paraguay have a higher production per bank, resulting from the reorganization of blood services and certain blood-related processes, and consolidation of blood banks. Production in the other countries is less than 5,000 units/bank/year, a figure that some studies have shown not to be cost-effective and that can compromise blood quality and safety *(29, 30)* (Table 1, available at: www.paho.org/figures-tables-regional-blood-plan). For the Caribbean countries, the number of units processed per blood bank/year shows that Curaçao, Guyana, Haiti, Jamaica, Suriname, and Trinidad and Tobago have the highest production, while the other countries are below 3,000 units/bank/year (Table 2, available at: www.paho.org/figures-tables-regional-blood-plan).

13. When reorganizing blood services networks, each country should give particular consideration to its specific needs, including its geographic and demographic characteristics, communication channels, and regional needs to ensure that blood is available and accessible where it is needed *(30)*. By 2011, only nine of the 19 countries in Latin America had reorganized their blood services networks *(28)*.

14. In 2011, 9,275,914 units of blood were collected in Latin America and the Caribbean, representing a 3.2% increase in the Region over 2010, with a more significant increase in the Caribbean countries (31%) than in Latin America (2.8%). This increase put the 2011 blood donation rate at 15 per 1000 population in Latin America and 18 per 1000 in the Caribbean (Table 3, available at: www.paho.org/figures-tables-regional-

blood-plan). When compared with global data, these figures put the Region at about average for middle-income countries and at the lower end for high-income countries *(30).*

15. The first studies estimating blood needs in Latin America and the Caribbean were conducted in 2010; to date, only four Latin American and two Caribbean countries have reported calculating these needs.[1]

16. The percentage of volunteer blood donors in Latin America and the Caribbean remained at around 41.4% in 2010-2011, meaning that the number of volunteer donors has not increased (Table 3, available at: www.paho.org/figures-tables-regional-blood-plan).

17. Thirty of 41 countries and territories in Latin America and the Caribbean reported having implemented some components of quality systems. However, certain aspects require greater development, for example, achieving 100% screening for transfusion-transmitted infections such as the human immunodeficiency virus (HIV), hepatitis B HBsAg, hepatitis C (HCV), and syphilis. In 2011, 99.7% of blood was screened in Latin America and the Caribbean, which indicates that 107,702 blood units are not being screened for some of these infectious agents. With regard to *T. cruzi,* 202,610 units were not screened for this marker in Latin America in 2011. (Table 3, available at: www.paho.org/figures-tables-regional-blood-plan). In that same year, the average prevalence of infectious markers in Latin America and the Caribbean did not differ significantly from 2010. (Table 4, available at: www.paho.org/figures-tables-regional-blood-plan). This situation can perhaps be explained by low growth in the number of repeat volunteer donors *(28).*

18. It should be pointed out that there is insufficient evidence in the Region to support the regulation of hepatitis E screening in high-risk groups, such as patients who undergo transplants and similar surgical interventions, patients on dialysis, and pregnant women who need surgery. As a result, research should be conducted in order to reach timely conclusions on this subject.

19. With regard to the separation of blood units into components, a figure of 92.9% was achieved for red blood cell concentrates in 2011 in Latin America and 67.04% in the Caribbean. As a result, Latin America and the Caribbean did not achieve 95% separation of units (the Plan 2006-2010 target).

20. When the increased availability of red blood cells is compared with the number of units of red blood cells discarded due to expiration, it is observed that (in 27 of 41 countries and territories in Latin America and the Caribbean) 10.3% was discarded in 2011—a slight improvement in this indicator over the 14.1% in 2009. This indicates that 799,738 units of red blood cells were no longer available for transfusion to patients because they had passed their expiration date (Tables 5 and 6, available at: www.paho.org/figures-tables-regional-blood-plan) *(28).* In 2011, discarded blood

[1] Information provided directly by the national blood programs to PAHO Headquarters in 2013.

represented a loss of US$44,785,328[2] (at an average cost of $56/unit), in addition to the cost in terms of blood availability, timely transfusions to patients, and the social value that this represents. This finding could reflect poor planning that does not allow for correlations between needs and the blood supply. This underscores the importance of prioritizing better management of the blood supply through organized networks and estimates of blood needs (Tables 5 and 6, available at: www.paho.org/figures-tables-regional-blood-plan) *(28).*

21. Concerning the rational use of blood and blood products, 20 of the 41 countries and territories in Latin America and the Caribbean reported having guidelines for the clinical use of blood, while only seven have transfusion committees in 75% of hospitals at the national level. From the information available in the countries, it is not possible to characterize blood recipients by age, sex, and pathology or determine the epidemiological factors that affect needs or the estimated number of units transfused by event.

22. Concerning the public health functions involved in health surveillance and hemovigilance, 20 of the 41 countries and territories (12 in Latin America and eight in the Caribbean) have programs for the inspection, monitoring, and oversight of blood services. Concerning the monitoring of adverse transfusion-related events, only two countries reported having information, research, and analysis mechanisms for timely decision-making *(28)* (Tables 7 and 8, available at: www.paho.org/figures-tables-regional-blood-plan). This situation underscores the need to integrate and harmonize blood and other public health indicators to improve hemovigilance and health surveillance. This would make it possible to determine whether the blood supply is self-sufficient, accessible, timely, and safe, and how it is affecting national morbidity and mortality. It would also make it possible to design risk management plans aimed at identifying and managing the risks associated with the transfusion chain in terms of blood safety and adverse events in donation and transfusion, which are related to blood supply, access, and availability, as well as emergencies and disasters *(30).*

Plan of Action (2014-2019)

Goal

23. The goal of this Plan is to promote universal access to safe blood through voluntary non-remunerated donations to help save lives and improve the health of patients who need them.

24. This Plan advocates appropriate blood use and greater leadership by health authorities, urging them to implement quality management programs in the transfusion chain (from promoting blood donation to monitoring patients) and to integrate the blood system into the national health system. Ultimately, this Plan calls for the restructuring of blood services, based on efficient and sustainable models.

[2] Unless otherwise indicated, all monetary figures in this report are expressed in United States dollars.

Strategic Lines of Action

25. Given this background and consistent with the progress made in the Region toward maintaining achievements and tackling new challenges, the regional Plan 2014-2019 focuses on the following critical areas:

a) effective and sustainable integration of national blood programs and services into the national health system to achieve blood self-sufficiency, safety, efficiency, availability, and universal access to blood and blood products;

b) self-sufficiency in safe blood and blood products through 100% voluntary non remunerated donations;

c) Quality management in the national blood system and screening for transfusion-transmitted infections;

d) Health surveillance, hemovigilance, risk management, monitoring, and evaluation.

Strategic Line of Action 1: Effective and sustainable integration of national blood programs and services into the national health system to achieve blood self-sufficiency, safety, efficiency, availability, and universal access to blood and blood products.

26. The intention is to guarantee, through greater political will and the participation of the ministries of health and other sectors, the countries' commitment to making it a national priority to achieve blood self-sufficiency, safety, availability, and universal access to blood and blood products, given that blood for transfusions is an indispensable cross-cutting health intervention and a basic requirement for guaranteeing the right to the enjoyment of the highest attainable standard of health and other related human rights.

Objective 1.1. Strengthen planning, implementation, monitoring, and evaluation processes in national blood programs.

Indicators:

1.1.1 Number of countries that have a specific functioning entity in the ministry of health that is responsible for planning, monitoring, and evaluation of the national blood system.
(Baseline: 27/41. Target: 36 countries)

1.1.2 Number of countries that have a functioning intersectoral national blood commission or advisory mechanism.
(Baseline: 14/41. Target: 21 countries)

1.1.3. Number of countries whose blood policy includes self-sufficiency, availability, and universal access to safe blood and blood products.
(Baseline: 18/41. Target: 26 countries)

Objective 1.2. Include the issue of safe blood in national health plans in order to ensure resources and intersectoral support.

Indicator:

1.2.1 Number of countries that have an integrated intersectoral national strategic blood plan that includes human resources training, monitoring and evaluation of the plan, and guaranteed resources for its implementation.
(Baseline: 13/41. Target: 21 countries)

Objective 1.3. Organize and consolidate an integrated blood services network within the health services network, tailored to the needs of each country.

Indicator:

1.3.1. Number of countries with more than one processing center that have increased the average number of units processed per blood bank/year (including screening) to over 5,000 units as a result of the restructuring of the blood services network.
(Baseline: 12/25. Target: 17 countries)

Strategic Line of Action 2: Self-sufficiency in safe blood and blood products through 100% voluntary non-remunerated donations.

27. The supply of blood and blood products should be based on voluntary non-remunerated donations to ensure blood self-sufficiency, availability, and safety; and on the promotion of healthy lifestyles, participation, and public solidarity.

Objective 2.1. Calculate the country's need for blood and blood products to achieve self-sufficiency in safe blood.

Indicator:

2.1.1 Number of countries that have calculated their blood needs at the national and regional level.
(Baseline: 6/41. Target: 12 countries)

Objective 2.2. Reach blood self-sufficiency through non-remunerated voluntary blood donations.

Indicator:

2.2.1 Number of countries that reach 100% non-remunerated voluntary blood donations.
(Baseline: 8/41. Target: 16 countries).

Strategic Line of Action 3: Quality management in the national blood system and screening for transfusion-transmitted infections.

28. This is aimed at fostering the countries' commitment to ensuring that their national blood system operates under a quality management framework and achieves 100% screening for the infections listed in PAHO/WHO recommendations, with a view to achieving blood self-sufficiency, safety, and availability, and universal access to blood and blood products.

Objective 3.1. Establish, monitor, and evaluate the quality management system in the blood services network, which includes screening for HIV, HBV, HCV, syphilis, and *T. cruzi* (the latter in endemic areas).

Indicators:

3.1.1 Number of countries that screen 100% of blood units for transfusion for HIV, HBV, HCV, syphilis, and *T. cruzi.*
(Baseline: 39/41. Target: 41 countries)

3.1.2 Number of countries that have a national program for external serology performance evaluations.
(Baseline: 22/41. Target: 27 countries)

3.1.3 Number of countries that have a national program for external immunohematology performance evaluations.
(Baseline: 12/41. Target: 18 countries)

Objective 3.2. Adopt the necessary mechanisms to increase the availability and appropriate use of blood and blood products.

Indicators:

3.2.1 Number of countries that have functioning transfusion committees in at least 75% of hospitals that perform daily transfusions.
(Baseline: 7/41. Target: 12 countries)

3.2.2 Number of countries that have national guidelines in place for the appropriate use of blood and blood products.
(Baseline: 20/41. Target: 30 countries)

3.2.3 Five percent (5%) reduction, in the Region, in the number of red blood cell units discarded due to expiration.
(Baseline 10.3%. Target: 5.3%)

Strategic Line of Action 4: Health surveillance, hemovigilance, risk management, monitoring, and evaluation.

29. The purpose of this strategic line is to strengthen the surveillance, evaluation, and monitoring system in order to obtain information to identify and implement timely and

appropriate interventions that will ensure sufficient supply, safety, and availability of blood, and universal access to blood and blood products.

Objective 4.1. Strengthen the national blood system so that health surveillance is included in blood services.

Indicator:

4.1.1 Number of countries that have a national model for inspection, surveillance, and oversight in blood services.
(Baseline: 20/41. Target: 30 countries)

Objective 4.2. Strengthen the national blood system to integrate hemovigilance in blood services.

Indicator:

4.2.1 Number of countries that have a national hemovigilance system
(Baseline: 2/41. Target: 7 countries)

Objective 4.3. Establish a mechanism to enable countries to monitor the implementation of their national plan.

Indicator:

4.3.1 Number of countries that annually report the indicators of their national plan in response to the implementation of the regional Plan 2014-2019.
(Baseline: 0/41. Target: 41 countries)

Objective 4.4. Draft risk management plans based on the information generated by the haemovigilance system.

Indicator:

4.4.1 Number of countries that have drafted risk management plans based on hemovigilance information.
(Baseline: 0/41. Target: 7 countries)

Monitoring and Evaluation

30. This Plan of Action will help achieve Category 4 of the PAHO Strategic Plan 2014-2019 and is directly related to program area 4.3 and outcomes 4.3.1, 4.3.3, and 4.3.4. Within that same category, it will also help achieve program areas 4.1, 4.2, 4.4. Annex C lists other outcomes to which this Plan contributes at the level of the Organization.

31. This Plan of Action 2014-2019 will help meet the global priorities set in the WHO Global Strategic Plan for Universal Access to Safe Blood Transfusion 2008-2015.

32. Monitoring and evaluation of this Plan is consistent with the Organization's results-based management framework and its performance, monitoring, and evaluation processes. Accordingly, PAHO/WHO plans to conduct a mid-term and final evaluation, and the countries are expected to prepare annual progress reports on the achievement of the indicators.

Financial Implications for the Organization

33. The estimated cost to the Organization of implementing the proposal over the five-year period includes $8 million in expenditures on technical and administrative staff and on cooperation activities. With regard both to budgetary implications and implementation of the interventions, the commitment and support of the Member States, as well as the collaborating centers and partners in this area, are essential. Since this regional plan cannot be undertaken by the Pan American Sanitary Bureau alone, it will be necessary for the more economically developed countries in the Region to invest in the blood safety through multilateral or bilateral cooperation. That investment—in addition to the support provided by the Bureau through its technical capacity to promote cooperation among countries and the creation and strengthening of networks in the Region—would provide the financial coverage needed to meet the Plan's targets and goals. (The financial and administrative aspects are described in Annex B).

Action by the Directing Council

34. The Directing Council is requested to review the information in this document and consider adopting the proposed resolution in Annex A.

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Pan American Health Organization
World Health Organization
REGIONAL OFFICE FOR THE Americas

53rd DIRECTING COUNCIL

66th SESSION OF THE REGIONAL COMMITTEE OF WHO FOR THE AMERICAS

Washington, D.C., USA, 29 September-3 October 2014

CD53/6
Annex A
Original: Spanish

PROPOSED RESOLUTION

PLAN OF ACTION FOR UNIVERSAL ACCESS TO SAFE BLOOD

THE 53rd DIRECTING COUNCIL,

Having reviewed the *Plan of Action for Universal Access to Safe Blood* (Document CD53/6);

Observing the importance of effectively and sustainably integrating national blood programs and services into national health systems to achieve blood self-sufficiency, safety, efficiency, and availability, and universal access to blood and blood products, when and where these are needed to help save lives and improve the health condition of all people who need them, including children with severe anemia, the chronically ill, patients with hemoglobin disorders, injuries, or cancer; pregnant women, and patients who undergo major surgery;

Considering blood transfusion to be one of the eight key interventions in emergency obstetric care;

Aware of the efforts made by the Pan American Sanitary Bureau and the national blood programs of the Member States to strengthen national blood systems to improve access to blood, and its availability and safety;

Taking into account the joint evaluation of the implementation of the Plan of Action for Transfusion Safety 2006-2010, conducted in 2011 and presented to the 51st PAHO Directing Council in Document CD51/INF/5; and the achievements and challenges identified in the evaluation, which serve as a starting point for drafting the Plan of Action for Universal Access to Safe Blood 2014-2019;

Recognizing the need to adjust current national approaches to achieve sufficient blood supply, appropriate quality, and safe transfusion;

Concerned that in order to achieve self-sufficiency in blood and blood products, it will be necessary to increase the number of volunteer donors in the Region of the Americas, and considering that the collected blood is routinely processed to be transformed into blood components;

Motivated by the spirit of Pan-Americanism, the internationally agreed development goals stated in the U.N. Millennium Declaration, binding universal and regional human rights instruments, and the challenge of achieving universal access to safe blood and blood products,

RESOLVES:

1. To approve the *Plan of Action for Universal Access to Safe Blood* and its implementation in the context of the particular conditions of each country.

2. To urge the Member States, taking into account their national context and priorities to:

a) renew their commitment to supporting the establishment of well-organized, nationally coordinated, and sustainable blood programs and services that are integrated into the health system with appropriate legal and regulatory framework necessary to advance toward ensuring universal access to blood and blood products through sufficient supply, quality and safety, and the appropriate use of blood and blood products;

b) allocate the necessary resources for the proper functioning and development of the system, including:

   i. financial resources to ensure the viability and transparent management of the system to prevent the sale of blood and resulting profiteering, except where national law so allows,

   ii. ensuring the availability of trained human resources by supporting educational efforts and measures to avoid high staff rotation in blood services;

c) promote only non-remunerated, preferably repeated, voluntary blood donations; and discourage remunerated and family/replacement donations, except where protected by the national regulatory system;

d) set up quality management systems that ensure: universal screening of blood for the markers that PAHO/WHO has stipulated for the Region; the implementation of national programs for external performance evaluation; and the appropriate use of blood and blood products to promote patient safety;

e) promote intersectoral participation (public and private sector, other ministries, civil society, among others) to strengthen resources and achieve synergies that benefit the national blood system;

f) establish a regulatory framework that strengthens the health surveillance system to ensure regulation and oversight of the transfusion chain;

g) ensure mechanisms to implement a non-punitive hemovigilance system in which transfusion reactions are reported in order to identify timely interventions and take corrective action to minimize risks;

h) allocate and use, as appropriate, resources to achieve the objectives of the Plan of Action for Universal Access to Safe Blood 2014-2019;

i) establish mechanisms to monitor and evaluate implementation of the Plan of Action for Universal Access to Safe Blood 2014-2019.

3. To request the Director to:

a) cooperate with the Member States, as needed, in the implementation of this Plan 2014-2019, taking a multidisciplinary approach and considering health promotion, human rights, gender equity, and the social determinants of health;

b) promote the implementation of this Plan of Action and guarantee its cross-cutting nature through the Organization's program areas and the different regional, subregional, and national contexts, and through collaboration with and among the countries in strategy design and the sharing of competencies and resources;

c) continue advocating for active resource mobilization and promote partnerships that support the implementation of this resolution;

d) monitor and evaluate the implementation of this Plan of Action and report periodically to the Governing Bodies on the progress made and the obstacles to the implementation of the Plan, and on any necessary adaptations to new contexts and needs.

Pan American Health Organization

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CD53/6
Annex B

Report on the Financial and Administrative Implications of the Proposed Resolution for PASB

1. Agenda item: 4.4 - Plan of Action for Universal Access to Safe Blood

2. Linkage to Program and Budget 2014-2015:

a) Category: 4. Health systems. Strengthening health systems based on primary care; focusing health governance and financing toward progressive realization of universal health coverage; organizing people-centered, integrated service delivery; promoting access to and rational use of health technologies; strengthening health information and research systems and the integration of evidence into health policies and health care; facilitating transfer of knowledge and technologies; and developing human resources for health (HSS).

Expected outcomes: Health Systems and Services/Medicines and Health Technologies (HSS/MT).

4.3. Improved access to and rational use of safe, effective, and quality medicines, medical products, and health technologies:

OPT:

4.3.1. Countries enabled to develop/update, implement, monitor, and evaluate national policies for better access to medicines and other health technologies.

4.3.3. Countries enabled to assess their national regulatory capacity for medicines and other health technologies.

4.3.4. Countries enabled to implement processes and mechanisms for health technologies assessment, incorporation, and management, and for rational use of medicines and other health technologies.

3. Financial implications:

a) Total estimated cost for implementation over the lifecycle of the resolution (estimated to the nearest US$ 10,000, including staff and activities):

For 2014-2019 quinquennium, approximately US$ 8 million would be needed, considering what has been invested in the past and what should be invested to achieve the proposed objectives.

b) Estimated cost for the 2014-2015 biennium (estimated to the nearest US$ 10,000, including staff and activities):

US$ 3.9 million.

c) Of the estimated cost noted in *b),* what can be subsumed under existing programmed activities?

All funds allocated for the present biennium (2014-2015) are to support products and services linked to the achievement of the Plan's objectives.

4. Administrative implications:

a) Indicate the levels of the Organization at which the work will be undertaken:
Since this regional plan cannot be implemented by the Pan American Sanitary Bureau alone, it will be necessary for the more economically developed countries of the Region to invest in the area of blood safety through multilateral or bilateral cooperation. That investment—in addition to the support provided by the Bureau through its technical capacity to promote cooperation among countries, as well as the creation and strengthening of networks in the Region—will provide the financial coverage needed to meet the Plan's targets and goals. (The financial and administrative aspects are described in Annex B).

The work will be undertaken with the countries and focus on the priority countries, based on the situation analysis. The same will be done at the subregional level and at Headquarters, with ongoing support from the collaborating centers and partners in the area.

There will be integration with other units of the Health Systems and Services department and with other departments, such as Family, Gender, and Life Course; Communicable Diseases and Health Analysis; Noncommunicable Diseases and Mental Health; and Emergency Preparedness and Disaster Relief.

b) Additional staffing requirements (indicate additional required staff full-time equivalents, noting necessary skills profile):

- One regional adviser for blood services
- Administrative support
- Four subregional advisers for blood services (one in the Caribbean, one in Central America, one in the Andean zone, and one in the Southern Cone).

c) Time frames (indicate broad time frames for the implementation and evaluation):

- 2014: Approval of Plan 2014-2019: Implementation of the Plan
- 2017-2018 Mid-term evaluation
- 2020 Final evaluation and presentation of results and recommendations

CD53/6
Annex C

ANALYTICAL FORM TO LINK AGENDA ITEM WITH ORGANIZATIONAL MANDATES

1. Agenda item: 4.4. Plan of Action for Universal Access to Safe Blood

2. Responsible unit: Health Systems and Services/Medicines and Health Technologies (HSS/MT)

3. Preparing officer: Dr. María Dolores Pérez-Rosales

4. List of collaborating centers and national institutions linked to this Agenda item:

- Advancing Transfusion and Cellular Therapies Worldwide (AABB)
- Health surveillance agencies of the member countries
- Spanish Association of Hematology and Hemotherapy
- National professional associations of the member countries
- Centers for Disease Control and Prevention (CDC)
- Blood Transfusion Center of Valencia (Spain)
- Blood Transfusion Center of Seville (Spain)
- International Federation of Red Cross and Red Crescent Societies
- World Federation of Hemophilia
- Thalassemia International Federation
- International Federation of Blood Donor Organizations (FIODS)
- Global Health Initiative (national health institutes of member countries)
- Ibero-American Collaborative Group on Transfusion Medicine (GCIAMT)
- ProSangue blood center/foundation, São Paulo, Brazil. PAHO/WHO Collaborating Center for Quality Control of Serology in Blood Banks
- International Hemovigilance Network
- International Society for Blood Transfusion (ISBT)
- National reference laboratories of member countries
- National programs of member countries
- National Red Cross societies of member countries

5. Link between Agenda item and Health Agenda for the Americas 2008-2017:

***Human rights, universal access, and inclusion*:** The Plan of Action for Universal Access to Safe Blood 2014-2019 seeks to guarantee the right to health and other related basic human rights through the availability of and access to blood for transfusions in the Region of the Americas, without distinction of age, gender, ethnicity, political ideology, economic or social condition, religion, or sexual orientation, or any other kind of discrimination that invalidates or undermines the enjoyment of the right to health or other related human rights (Resolution CD50.R8: "Health and Human Rights").

Pan American solidarity: The Plan promotes cooperation among countries in the Americas with the participation of PAHO collaborating centers and professional associations.

Equity in health: The Plan seeks to eliminate differences among and within countries in terms of availability, access, timeliness, and quality of blood for transfusions with a public health approach.

Social participation: An organized social network is essential for achieving 100% voluntary blood donations and blood self-sufficiency.

***Strengthening the health authority*:** The Plan of Action 2014-2019 includes four strategic lines. The first line directly refers to strengthening planning, implementation, monitoring, and evaluation processes in national blood programs, which requires strong leadership from the ministries of health.

***Health determinants approach: Reducing the risk and burden of disease*:** Blood safety depends mainly on the quality of the donated blood. National blood requirements depend on the overall health of the population. Health promotion, health education, and interventions to protect the population will result in safer blood donors and less need for blood products. Safe blood helps reduce HIV, HBV, HCV, *T. cruzi*, and other infections.

***Increasing social protection and access to quality health services; reducing health inequities among and within countries*:** Blood availability and access in the Region vary within and among countries. The overall objective of the Plan of Action 2014-2019 is to promote universal access to safe blood and blood products without distinction of age, gender, ethnicity, political ideology, economic or social condition, religion, or sexual orientation.

6. Link between Agenda item and the PAHO Strategic Plan 2014-2019:

This Plan of Action is directly linked to Category 4 (Health Systems) and outcome 4.3 (Improved access to and rational use of safe, effective, and quality medicines, medical products, and health technologies). Also within Category 4, it contributes to the achievement of outcomes 4.1, 4.2, 4.4, and 4.5. In categories 1, 2, and 3, it contributes to program areas and outcomes 1.1, 1.4, 2.3, 3.1, 3.2, 3.3, 3.4, and 3.5 of the PAHO Strategic Plan 2014-2019.

7. Best practices in this area and examples from countries within the Region of the Americas:

- Organization of blood services: Argentina, Bolivia, Brazil, Canada, Chile, Ecuador, Nicaragua.
- Blood self-sufficiency based on voluntary nonremunerated donation: Bermuda, Canada, Cayman Islands, Colombia, Monserrat, Netherlands Antilles, Nicaragua, Suriname, USA.
- Quality management: Brazil, Canada, Colombia, Netherlands Antilles, Nicaragua, USA.
- Health surveillance and hemovigilance: Brazil, Canada, and USA.

8. Financial implications of this Agenda item:

The estimated cost to the Organization of implementing the proposal over the five-year period includes $8 million in expenditures on technical and administrative staff and cooperation activities. With regard both to budgetary implications and the implementation of the interventions, it is essential that the member countries, as well as collaborating centers and partners in this area, provide their commitment and support. Since this regional plan cannot be undertaken by the Pan American Sanitary Bureau alone, it will be necessary for the more economically developed countries of the Region to invest in the area of blood safety through multilateral or bilateral cooperation. This investment—in addition to the support provided by the Bureau through its technical capacity to promote cooperation among countries and the creation and strengthening of networks in the Region—will provide the financial coverage needed to meet the Plan's targets and goals. (The financial and administrative aspects are described in Annex B).

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Health
Organization

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